NOTES REGARDING BLOWOUT PREVENTERS

Devon Energy Production Company, L.P.
BLUE KRAIT 23 FED 4H

1. Drilling Nipple will be constructed so it can be removed mechanically without the aid of a welder. The minimum internal diameter will equal BOP bore.

2. Wear ring will be properly installed in head.

3. Blowout preventer and all associated filings will be in operable condition to withstand a minimum of 5000psi working pressure.

4. All fittings will be flanged.

5. A fill bore safety valve tested to a minimum of 5000psi WP with proper thread connections will be available on the rotary rig floor at all times.

6. All choke lines will be anchored to prevent movement.

7. All BOP equipment will be equal to or larger in bore than the internal diameter of the last casing string.

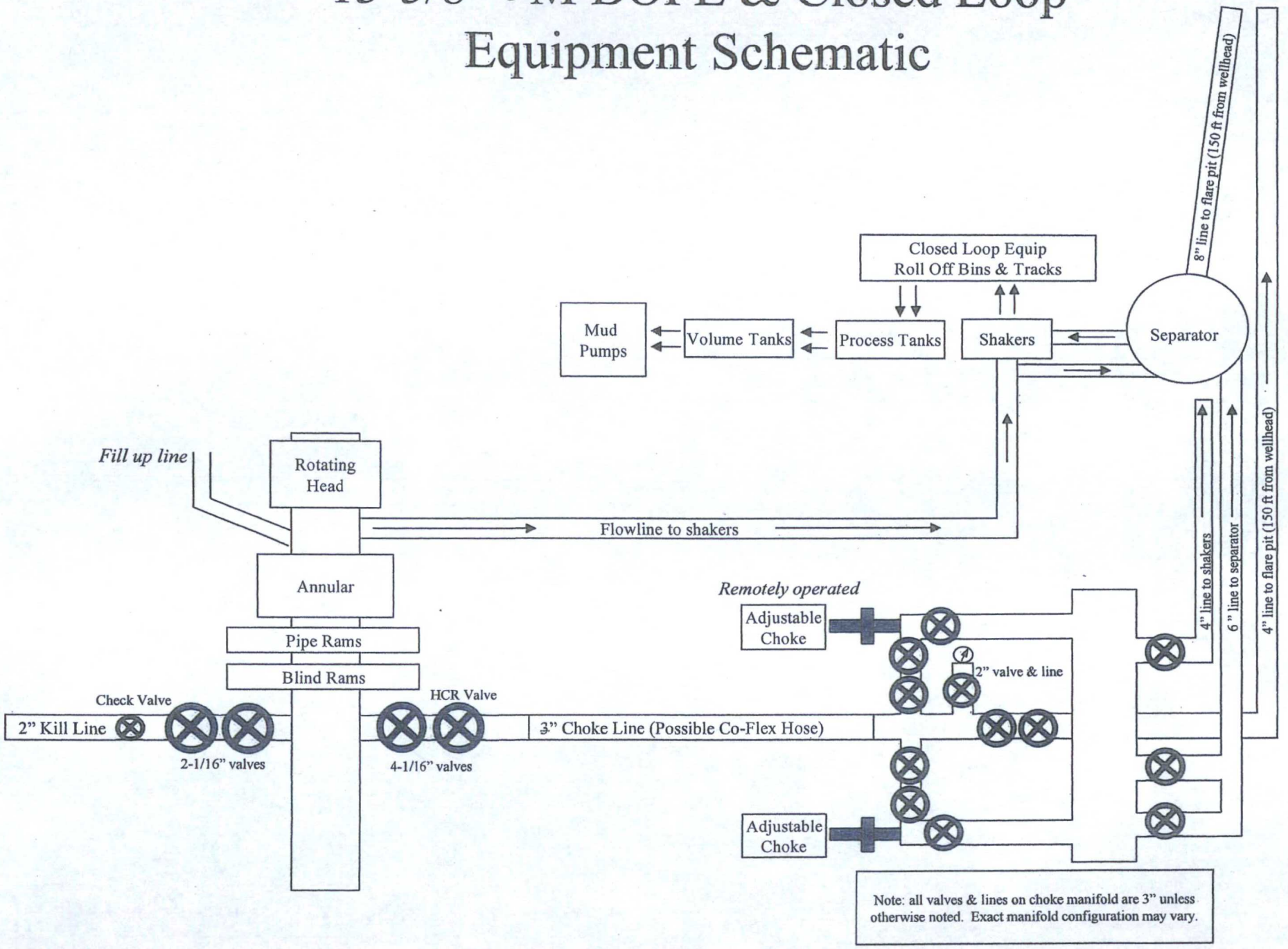
8. Will maintain a kelly cock attached to the kelly.

9. Hand wheels and wrenches will be properly installed and tested for safe operation.

10. Hydraulic floor control for blowout preventer will be located as near in proximity to driller's controls as possible.

11. All BOP equipment will meet API standards and include a minimum 40 gallon accumulator having two independent means of power to initiate closing operation.

13-5/8" 5M BOPE & Closed Loop Equipment Schematic



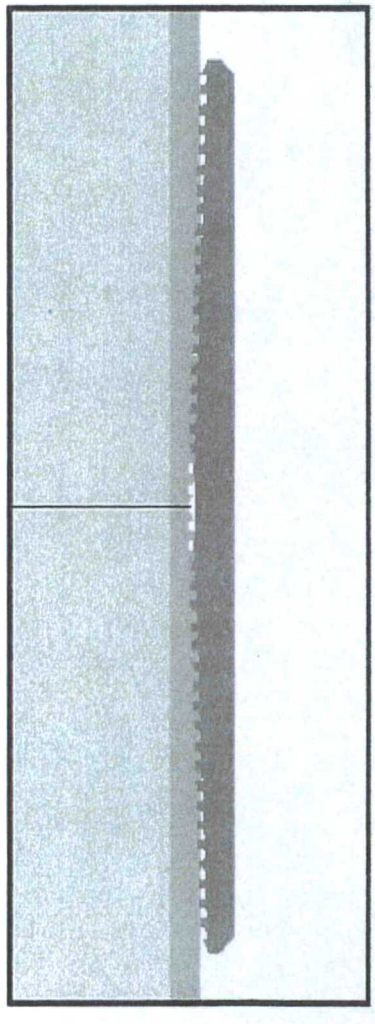
EXTRA COPY

Technical Specifications

Connection Type:	Size(O.D.):	Weight (Wall):	Grade:
DWC/C Casing	5-1/2 in	17.00 lb/ft (0.304 in)	P-110RY
standard			

	Material
P-110RY	Grade
110,000	Minimum Yield Strength (psi)
125,000	Minimum Ultimate Strength (psi)
	Pipe Dimensions
5.500	Nominal Pipe Body O.D. (in)
4.892	Nominal Pipe Body I.D.(in)
0.304	Nominal Wall Thickness (in)
17.00	Nominal Weight (lbs/ft)
16.89	Plain End Weight (lbs/ft)
4.962	Nominal Pipe Body Area (sq in)
	Pipe Body Performance Properties
546,000	Minimum Pipe Body Yield Strength (lbs)
7,480	Minimum Collapse Pressure (psi)
10,640	Minimum Internal Yield Pressure (psi)
9,700	Hydrostatic Test Pressure (psi)
	Connection Dimensions
6.050	Connection O.D. (in)
4.892	Connection I.D. (in)
4.767	Connection Drift Diameter (in)
4.13	Make-up Loss (in)
4.962	Critical Area (sq in)
100.0	Joint Efficiency (%)
	Connection Performance Properties
546,000	Joint Strength (lbs)
22,940	Reference String Length (ft) 1.4 Design Factor
568,000	API Joint Strength (lbs)
546,000	Compression Rating (lbs)
7,480	API Collapse Pressure Rating (psi)
10,640	API Internal Pressure Resistance (psi)
91.7	Maximum Uniaxial Bend Rating [degrees/100 ft]
	Appoximated Field End Torque Values
12,000	Minimum Final Torque (ft-lbs)
13,800	Maximum Final Torque (ft-lbs)
15,500	Connection Yield Torque (ft-lbs)

VAM-USA
4424 W. Sam Houston Pkwy. Suite 150
Houston, TX 77041
Phone: 713-479-3200
Fax: 713-479-3234
E-mail: VAMUSAsales@vam-usa.com



For detailed information on performance properties, refer to DWC Connection Data Notes on following page(s).

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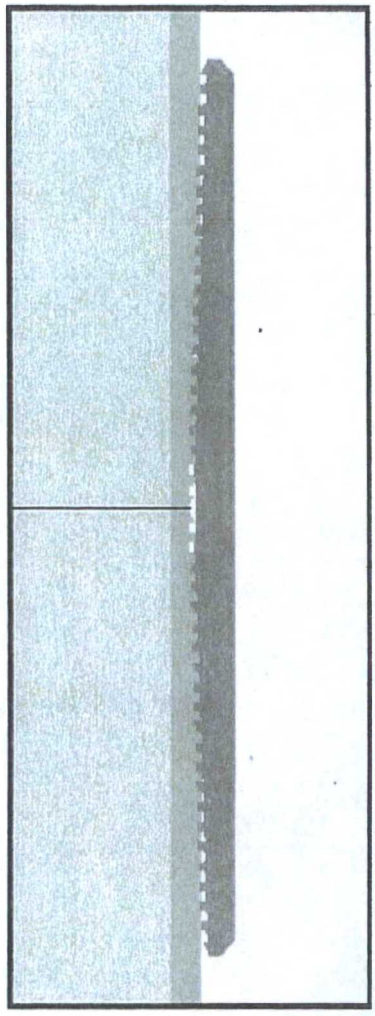
DWC Connection Data Notes:

1. DWC connections are available with a seal ring (SR) option.
2. All standard DWC/C connections are interchangeable for a give pipe OD. DWC connections are interchangeable with DWC/C-SR connections of the same OD and wall.
3. Connection performance properties are based on nominal pipe body and connection dimensions.
4. DWC connection internal and external pressure resistance is calculated using the API rating for buttress connections. API Internal pressure resistance is calculated from formulas 31, 32, and 35 in the API Bulletin 5C3.
5. DWC joint strength is the minimum pipe body yield strength multiplied by the connection critical area.
6. API joint strength is for reference only. It is calculated from formulas 42 and 43 in the API Bulletin 5C3.
7. Bending efficiency is equal to the compression efficiency.
8. The torque values listed are recommended. The actual torque required may be affected by field conditions such as temperature, thread compound, speed of make-up, weather conditions, etc.
9. Connection yield torque is not to be exceeded.
10. Reference string length is calculated by dividing the joint strength by both the nominal weight in air and a design factor (DF) of 1.4. These values are offered for reference only and do not include load factors such as bending, buoyancy, temperature, load dynamics, etc.
11. DWC connections will accommodate API standard drift diameters.



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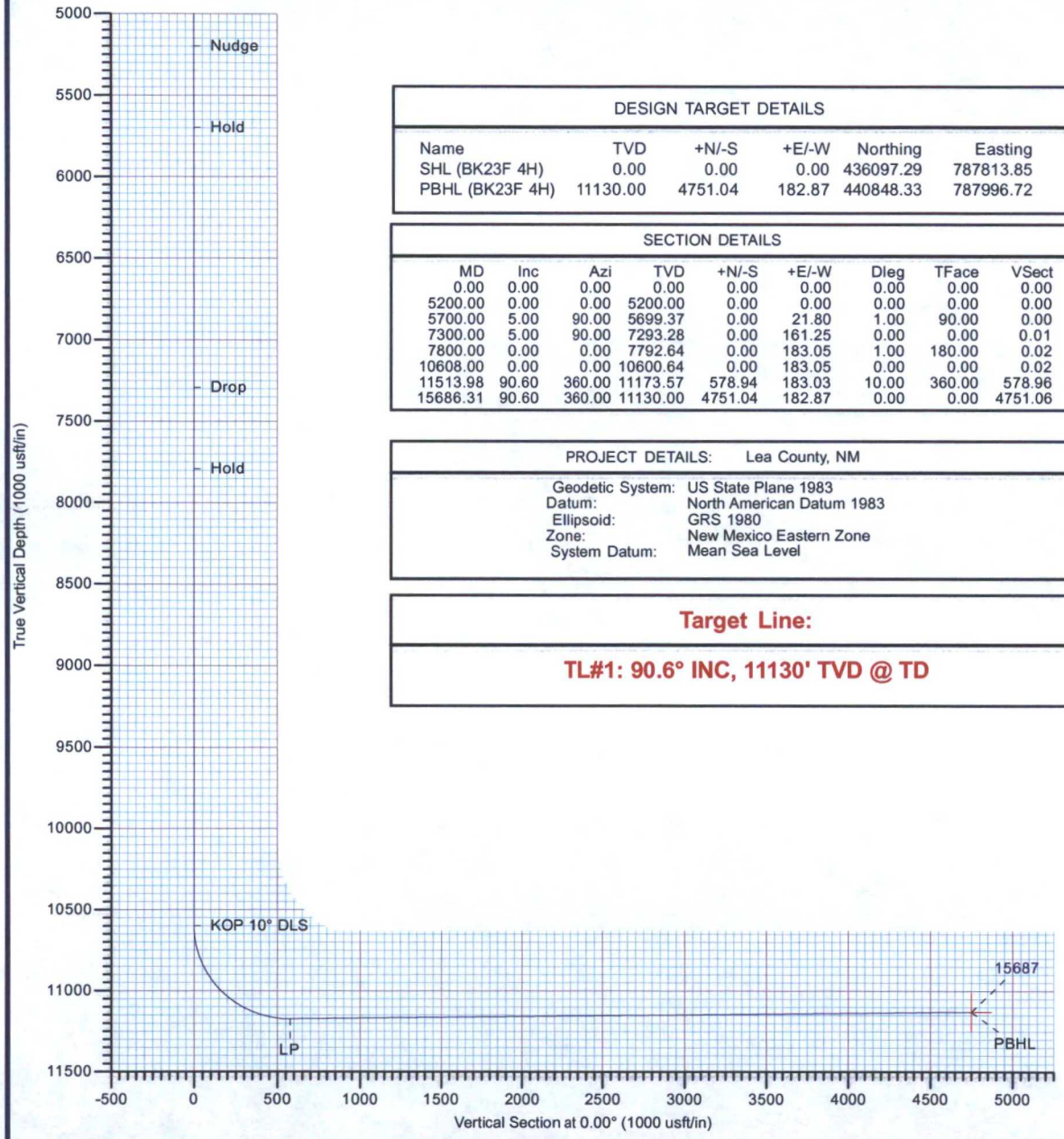
devon

Project: Lea County, NM (NAD-83)
Site: Blue Krait 23 Fed
Well: 4H
Wellbore: OH
Design: Plan #1

Azimuths to Grid North
True North: -0.42°
Magnetic North: 6.78°

Magnetic Field
Strength: 48172.9snT
Dip Angle: 60.12°
Date: 10/15/2015
Model: BGGM2015

LEAM Drilling Systems LLC



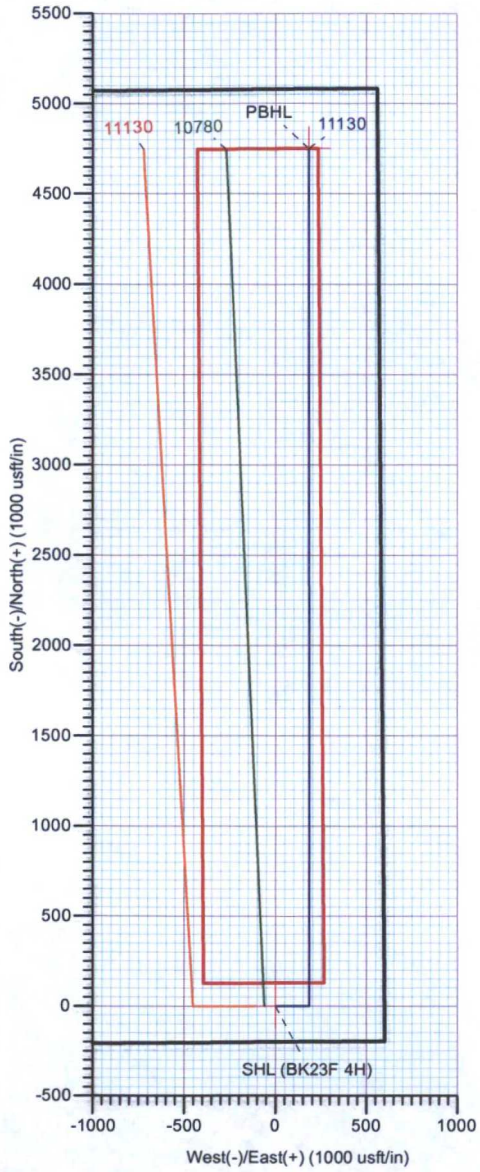
DESIGN TARGET DETAILS					
Name	TVD	+N/-S	+E/-W	Northing	Easting
SHL (BK23F 4H)	0.00	0.00	0.00	436097.29	787813.85
PBHL (BK23F 4H)	11130.00	4751.04	182.87	440848.33	787996.72

SECTION DETAILS								
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5200.00	0.00	0.00	5200.00	0.00	0.00	0.00	0.00	0.00
5700.00	5.00	90.00	5699.37	0.00	21.80	1.00	90.00	0.00
7300.00	5.00	90.00	7293.28	0.00	161.25	0.00	0.00	0.01
7800.00	0.00	0.00	7792.64	0.00	183.05	1.00	180.00	0.02
10608.00	0.00	0.00	10600.64	0.00	183.05	0.00	0.00	0.02
11513.98	90.60	360.00	11173.57	578.94	183.03	10.00	360.00	578.96
15686.31	90.60	360.00	11130.00	4751.04	182.87	0.00	0.00	4751.06

PROJECT DETAILS:	Lea County, NM
Geodetic System:	US State Plane 1983
Datum:	North American Datum 1983
Ellipsoid:	GRS 1980
Zone:	New Mexico Eastern Zone
System Datum:	Mean Sea Level

Target Line:

TL#1: 90.6° INC, 11130' TVD @ TD



devon

DEVON ENERGY

Lea County, NM (NAD-83)
Blue Krait 23 Fed
4H

OH

Plan: Plan #1

Standard Planning Report

16 October, 2015

LEAM
Drilling Systems LLC

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well 4H
Company:	DEVON ENERGY	**TVD Reference:**	3562.4' GL + 25' RKB @ 3587.40usft
Project:	Lea County, NM (NAD-83)	**MD Reference:**	3562.4' GL + 25' RKB @ 3587.40usft
Site:	Blue Krait 23 Fed	**North Reference:**	Grid
Well:	4H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Project	Lea County, NM (NAD-83)		
Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Blue Krait 23 Fed				
Site Position:		**Northing:**	436,068.33 usft	**Latitude:**	32° 11' 47.039 N
From:	Map	**Easting:**	783,797.48 usft	**Longitude:**	103° 32' 58.234 W
Position Uncertainty:	0.00 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.42 °

Well	4H					
Well Position	**+N/-S**	28.96 usft	**Northing:**	436,097.29 usft	**Latitude:**	32° 11' 47.034 N
	+E/-W	4,016.37 usft	**Easting:**	787,813.85 usft	**Longitude:**	103° 32' 11.493 W
Position Uncertainty		0.00 usft	**Wellhead Elevation:**	3,587.40 usft	**Ground Level:**	3,562.40 usft

Wellbore	OH			
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	BGGM2015	10/15/2015	7.21	60.12	48,173

Design	Plan #1				
Audit Notes:					
Version:		**Phase:**	PLAN	**Tie On Depth:**	0.00
Vertical Section:	**Depth From (TVD) (usft)**	**+N/-S (usft)**	**+E/-W (usft)**	**Direction (°)**	
	0.00	0.00	0.00	0.01	

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
5,200.00	0.00	0.00	5,200.00	0.00	0.00	0.00	0.00	0.00	0.00	
5,700.00	5.00	90.00	5,699.37	0.00	21.80	1.00	1.00	0.00	90.00	
7,300.00	5.00	90.00	7,293.28	0.00	161.25	0.00	0.00	0.00	0.00	
7,800.00	0.00	0.00	7,792.64	0.00	183.05	1.00	-1.00	0.00	180.00	
10,608.00	0.00	0.00	10,600.64	0.00	183.05	0.00	0.00	0.00	0.00	
11,513.98	90.60	360.00	11,173.57	578.94	183.03	10.00	10.00	0.00	360.00	
15,686.31	90.60	360.00	11,130.00	4,751.04	182.87	0.00	0.00	0.00	0.00	PBHL (BK23F 4H)

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well 4H
Company:	DEVON ENERGY	**TVD Reference:**	3562.4' GL + 25' RKB @ 3587.40usft
Project:	Lea County, NM (NAD-83)	**MD Reference:**	3562.4' GL + 25' RKB @ 3587.40usft
Site:	Blue Krait 23 Fed	**North Reference:**	Grid
Well:	4H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SHL (BK23F 4H)									
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00
4,100.00	0.00	0.00	4,100.00	0.00	0.00	0.00	0.00	0.00	0.00
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.00	0.00	0.00
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.00	0.00	0.00
4,400.00	0.00	0.00	4,400.00	0.00	0.00	0.00	0.00	0.00	0.00
4,500.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00	0.00
4,600.00	0.00	0.00	4,600.00	0.00	0.00	0.00	0.00	0.00	0.00
4,700.00	0.00	0.00	4,700.00	0.00	0.00	0.00	0.00	0.00	0.00
4,800.00	0.00	0.00	4,800.00	0.00	0.00	0.00	0.00	0.00	0.00
4,900.00	0.00	0.00	4,900.00	0.00	0.00	0.00	0.00	0.00	0.00
5,000.00	0.00	0.00	5,000.00	0.00	0.00	0.00	0.00	0.00	0.00
5,100.00	0.00	0.00	5,100.00	0.00	0.00	0.00	0.00	0.00	0.00
5,200.00	0.00	0.00	5,200.00	0.00	0.00	0.00	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well 4H
Company:	DEVON ENERGY	**TVD Reference:**	3562.4' GL + 25' RKB @ 3587.40usft
Project:	Lea County, NM (NAD-83)	**MD Reference:**	3562.4' GL + 25' RKB @ 3587.40usft
Site:	Blue Krait 23 Fed	**North Reference:**	Grid
Well:	4H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
Nudge									
5,300.00	1.00	90.00	5,300.00	0.00	0.87	0.00	1.00	1.00	0.00
5,400.00	2.00	90.00	5,399.96	0.00	3.49	0.00	1.00	1.00	0.00
5,500.00	3.00	90.00	5,499.86	0.00	7.85	0.00	1.00	1.00	0.00
5,600.00	4.00	90.00	5,599.68	0.00	13.96	0.00	1.00	1.00	0.00
5,700.00	5.00	90.00	5,699.37	0.00	21.80	0.00	1.00	1.00	0.00
Hold									
5,800.00	5.00	90.00	5,798.99	0.00	30.52	0.00	0.00	0.00	0.00
5,900.00	5.00	90.00	5,898.60	0.00	39.23	0.00	0.00	0.00	0.00
6,000.00	5.00	90.00	5,998.22	0.00	47.95	0.00	0.00	0.00	0.00
6,100.00	5.00	90.00	6,097.84	0.00	56.67	0.00	0.00	0.00	0.00
6,200.00	5.00	90.00	6,197.46	0.00	65.38	0.01	0.00	0.00	0.00
6,300.00	5.00	90.00	6,297.08	0.00	74.10	0.01	0.00	0.00	0.00
6,400.00	5.00	90.00	6,396.70	0.00	82.81	0.01	0.00	0.00	0.00
6,500.00	5.00	90.00	6,496.32	0.00	91.53	0.01	0.00	0.00	0.00
6,600.00	5.00	90.00	6,595.94	0.00	100.24	0.01	0.00	0.00	0.00
6,700.00	5.00	90.00	6,695.56	0.00	108.96	0.01	0.00	0.00	0.00
6,800.00	5.00	90.00	6,795.18	0.00	117.67	0.01	0.00	0.00	0.00
6,900.00	5.00	90.00	6,894.80	0.00	126.39	0.01	0.00	0.00	0.00
7,000.00	5.00	90.00	6,994.42	0.00	135.11	0.01	0.00	0.00	0.00
7,100.00	5.00	90.00	7,094.04	0.00	143.82	0.01	0.00	0.00	0.00
7,200.00	5.00	90.00	7,193.66	0.00	152.54	0.01	0.00	0.00	0.00
7,300.00	5.00	90.00	7,293.28	0.00	161.25	0.01	0.00	0.00	0.00
Drop									
7,400.00	4.00	90.00	7,392.97	0.00	169.10	0.01	1.00	-1.00	0.00
7,500.00	3.00	90.00	7,492.78	0.00	175.20	0.02	1.00	-1.00	0.00
7,600.00	2.00	90.00	7,592.68	0.00	179.56	0.02	1.00	-1.00	0.00
7,700.00	1.00	90.00	7,692.65	0.00	182.18	0.02	1.00	-1.00	0.00
7,800.00	0.00	0.00	7,792.64	0.00	183.05	0.02	1.00	-1.00	0.00
Hold									
7,900.00	0.00	0.00	7,892.64	0.00	183.05	0.02	0.00	0.00	0.00
8,000.00	0.00	0.00	7,992.64	0.00	183.05	0.02	0.00	0.00	0.00
8,100.00	0.00	0.00	8,092.64	0.00	183.05	0.02	0.00	0.00	0.00
8,200.00	0.00	0.00	8,192.64	0.00	183.05	0.02	0.00	0.00	0.00
8,300.00	0.00	0.00	8,292.64	0.00	183.05	0.02	0.00	0.00	0.00
8,400.00	0.00	0.00	8,392.64	0.00	183.05	0.02	0.00	0.00	0.00
8,500.00	0.00	0.00	8,492.64	0.00	183.05	0.02	0.00	0.00	0.00
8,600.00	0.00	0.00	8,592.64	0.00	183.05	0.02	0.00	0.00	0.00
8,700.00	0.00	0.00	8,692.64	0.00	183.05	0.02	0.00	0.00	0.00
8,800.00	0.00	0.00	8,792.64	0.00	183.05	0.02	0.00	0.00	0.00
8,900.00	0.00	0.00	8,892.64	0.00	183.05	0.02	0.00	0.00	0.00
9,000.00	0.00	0.00	8,992.64	0.00	183.05	0.02	0.00	0.00	0.00
9,100.00	0.00	0.00	9,092.64	0.00	183.05	0.02	0.00	0.00	0.00
9,200.00	0.00	0.00	9,192.64	0.00	183.05	0.02	0.00	0.00	0.00
9,300.00	0.00	0.00	9,292.64	0.00	183.05	0.02	0.00	0.00	0.00
9,400.00	0.00	0.00	9,392.64	0.00	183.05	0.02	0.00	0.00	0.00
9,500.00	0.00	0.00	9,492.64	0.00	183.05	0.02	0.00	0.00	0.00
9,600.00	0.00	0.00	9,592.64	0.00	183.05	0.02	0.00	0.00	0.00
9,700.00	0.00	0.00	9,692.64	0.00	183.05	0.02	0.00	0.00	0.00
9,800.00	0.00	0.00	9,792.64	0.00	183.05	0.02	0.00	0.00	0.00
9,900.00	0.00	0.00	9,892.64	0.00	183.05	0.02	0.00	0.00	0.00
10,000.00	0.00	0.00	9,992.64	0.00	183.05	0.02	0.00	0.00	0.00
10,100.00	0.00	0.00	10,092.64	0.00	183.05	0.02	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well 4H
Company:	DEVON ENERGY	**TVD Reference:**	3562.4' GL + 25' RKB @ 3587.40usft
Project:	Lea County, NM (NAD-83)	**MD Reference:**	3562.4' GL + 25' RKB @ 3587.40usft
Site:	Blue Krait 23 Fed	**North Reference:**	Grid
Well:	4H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,200.00	0.00	0.00	10,192.64	0.00	183.05	0.02	0.00	0.00	0.00
10,300.00	0.00	0.00	10,292.64	0.00	183.05	0.02	0.00	0.00	0.00
10,400.00	0.00	0.00	10,392.64	0.00	183.05	0.02	0.00	0.00	0.00
10,500.00	0.00	0.00	10,492.64	0.00	183.05	0.02	0.00	0.00	0.00
10,608.00	0.00	0.00	10,600.64	0.00	183.05	0.02	0.00	0.00	0.00
KOP 10° DLS									
10,650.00	4.20	360.00	10,642.61	1.54	183.05	1.55	10.00	10.00	0.00
10,700.00	9.20	360.00	10,692.25	7.37	183.05	7.39	10.00	10.00	0.00
10,750.00	14.20	360.00	10,741.19	17.51	183.05	17.52	10.00	10.00	0.00
10,800.00	19.20	360.00	10,789.07	31.87	183.05	31.89	10.00	10.00	0.00
10,850.00	24.20	360.00	10,835.51	50.35	183.05	50.37	10.00	10.00	0.00
10,900.00	29.20	360.00	10,880.17	72.81	183.05	72.83	10.00	10.00	0.00
10,950.00	34.20	360.00	10,922.69	99.08	183.05	99.09	10.00	10.00	0.00
11,000.00	39.20	360.00	10,962.77	128.95	183.05	128.96	10.00	10.00	0.00
11,050.00	44.20	360.00	11,000.09	162.20	183.05	162.21	10.00	10.00	0.00
11,100.00	49.20	360.00	11,034.37	198.58	183.05	198.59	10.00	10.00	0.00
11,150.00	54.20	360.00	11,065.35	237.80	183.05	237.82	10.00	10.00	0.00
11,200.00	59.20	360.00	11,092.79	279.58	183.04	279.59	10.00	10.00	0.00
11,250.00	64.20	360.00	11,116.49	323.59	183.04	323.60	10.00	10.00	0.00
11,300.00	69.20	360.00	11,136.26	369.50	183.04	369.51	10.00	10.00	0.00
11,350.00	74.20	360.00	11,151.95	416.95	183.04	416.97	10.00	10.00	0.00
11,400.00	79.20	360.00	11,163.45	465.60	183.04	465.61	10.00	10.00	0.00
11,450.00	84.20	360.00	11,170.67	515.06	183.03	515.07	10.00	10.00	0.00
11,500.00	89.20	360.00	11,173.54	564.96	183.03	564.97	10.00	10.00	0.00
11,513.98	90.60	360.00	11,173.57	578.94	183.03	578.95	10.00	10.00	0.00
LP									
11,600.00	90.60	360.00	11,172.67	664.95	183.03	664.97	0.00	0.00	0.00
11,700.00	90.60	360.00	11,171.63	764.95	183.02	764.96	0.00	0.00	0.00
11,800.00	90.60	360.00	11,170.58	864.94	183.02	864.96	0.00	0.00	0.00
11,900.00	90.60	360.00	11,169.54	964.94	183.02	964.95	0.00	0.00	0.00
12,000.00	90.60	360.00	11,168.49	1,064.93	183.01	1,064.95	0.00	0.00	0.00
12,100.00	90.60	360.00	11,167.45	1,164.93	183.01	1,164.94	0.00	0.00	0.00
12,200.00	90.60	360.00	11,166.41	1,264.92	183.01	1,264.94	0.00	0.00	0.00
12,300.00	90.60	360.00	11,165.36	1,364.91	183.00	1,364.93	0.00	0.00	0.00
12,400.00	90.60	360.00	11,164.32	1,464.91	183.00	1,464.93	0.00	0.00	0.00
12,500.00	90.60	360.00	11,163.27	1,564.90	182.99	1,564.92	0.00	0.00	0.00
12,600.00	90.60	360.00	11,162.23	1,664.90	182.99	1,664.91	0.00	0.00	0.00
12,700.00	90.60	360.00	11,161.18	1,764.89	182.99	1,764.91	0.00	0.00	0.00
12,800.00	90.60	360.00	11,160.14	1,864.89	182.98	1,864.90	0.00	0.00	0.00
12,900.00	90.60	360.00	11,159.10	1,964.88	182.98	1,964.90	0.00	0.00	0.00
13,000.00	90.60	360.00	11,158.05	2,064.88	182.97	2,064.89	0.00	0.00	0.00
13,100.00	90.60	360.00	11,157.01	2,164.87	182.97	2,164.89	0.00	0.00	0.00
13,200.00	90.60	360.00	11,155.96	2,264.87	182.97	2,264.88	0.00	0.00	0.00
13,300.00	90.60	360.00	11,154.92	2,364.86	182.96	2,364.88	0.00	0.00	0.00
13,400.00	90.60	360.00	11,153.87	2,464.85	182.96	2,464.87	0.00	0.00	0.00
13,500.00	90.60	360.00	11,152.83	2,564.85	182.96	2,564.87	0.00	0.00	0.00
13,600.00	90.60	360.00	11,151.79	2,664.84	182.95	2,664.86	0.00	0.00	0.00
13,700.00	90.60	360.00	11,150.74	2,764.84	182.95	2,764.85	0.00	0.00	0.00
13,800.00	90.60	360.00	11,149.70	2,864.83	182.94	2,864.85	0.00	0.00	0.00
13,900.00	90.60	360.00	11,148.65	2,964.83	182.94	2,964.84	0.00	0.00	0.00
14,000.00	90.60	360.00	11,147.61	3,064.82	182.94	3,064.84	0.00	0.00	0.00
14,100.00	90.60	360.00	11,146.57	3,164.82	182.93	3,164.83	0.00	0.00	0.00
14,200.00	90.60	360.00	11,145.52	3,264.81	182.93	3,264.83	0.00	0.00	0.00
14,300.00	90.60	360.00	11,144.48	3,364.81	182.92	3,364.82	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well 4H
Company:	DEVON ENERGY	**TVD Reference:**	3562.4' GL + 25' RKB @ 3587.40usft
Project:	Lea County, NM (NAD-83)	**MD Reference:**	3562.4' GL + 25' RKB @ 3587.40usft
Site:	Blue Krait 23 Fed	**North Reference:**	Grid
Well:	4H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
14,400.00	90.60	360.00	11,143.43	3,464.80	182.92	3,464.82	0.00	0.00	0.00
14,500.00	90.60	360.00	11,142.39	3,564.79	182.92	3,564.81	0.00	0.00	0.00
14,600.00	90.60	360.00	11,141.34	3,664.79	182.91	3,664.81	0.00	0.00	0.00
14,700.00	90.60	360.00	11,140.30	3,764.78	182.91	3,764.80	0.00	0.00	0.00
14,800.00	90.60	360.00	11,139.26	3,864.78	182.90	3,864.79	0.00	0.00	0.00
14,900.00	90.60	360.00	11,138.21	3,964.77	182.90	3,964.79	0.00	0.00	0.00
15,000.00	90.60	360.00	11,137.17	4,064.77	182.90	4,064.78	0.00	0.00	0.00
15,100.00	90.60	360.00	11,136.12	4,164.76	182.89	4,164.78	0.00	0.00	0.00
15,200.00	90.60	360.00	11,135.08	4,264.76	182.89	4,264.77	0.00	0.00	0.00
15,300.00	90.60	360.00	11,134.03	4,364.75	182.89	4,364.77	0.00	0.00	0.00
15,400.00	90.60	360.00	11,132.99	4,464.75	182.88	4,464.76	0.00	0.00	0.00
15,500.00	90.60	360.00	11,131.95	4,564.74	182.88	4,564.76	0.00	0.00	0.00
15,600.00	90.60	360.00	11,130.90	4,664.73	182.87	4,664.75	0.00	0.00	0.00
15,686.31	90.60	360.00	11,130.00	4,751.04	182.87	4,751.06	0.00	0.00	0.00
TD - PBHL (BK23F 4H)									

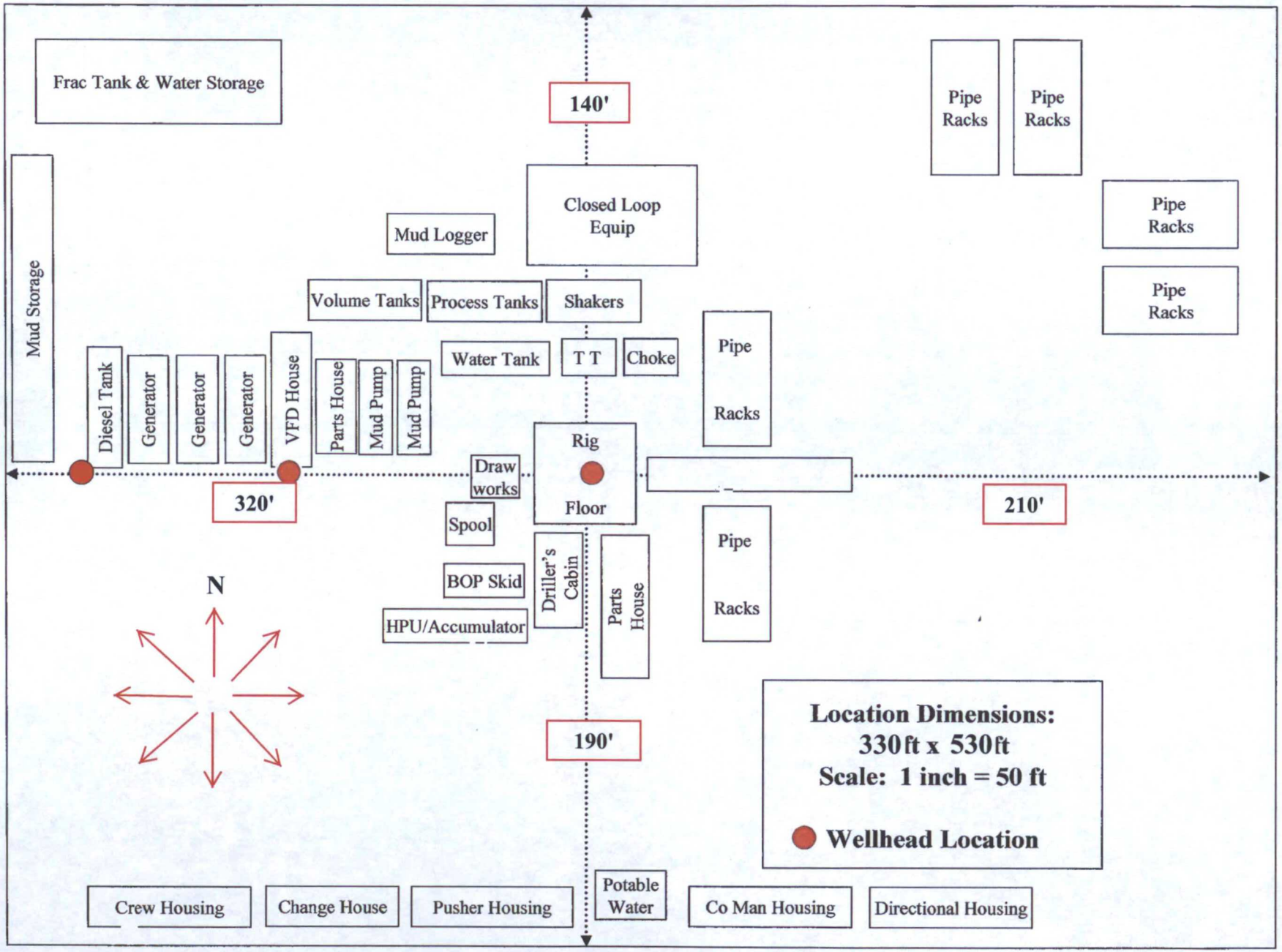
Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
SHL (BK23F 4H) - plan hits target center - Point	0.00	0.00	0.00	0.00	0.00	436,097.29	787,813.85	32° 11' 47.034 N	103° 32' 11.493 W
PBHL (BK23F 4H) - plan hits target center - Point	0.00	0.00	11,130.00	4,751.04	182.87	440,848.33	787,996.72	32° 12' 34.033 N	103° 32' 8.954 W

Plan Annotations

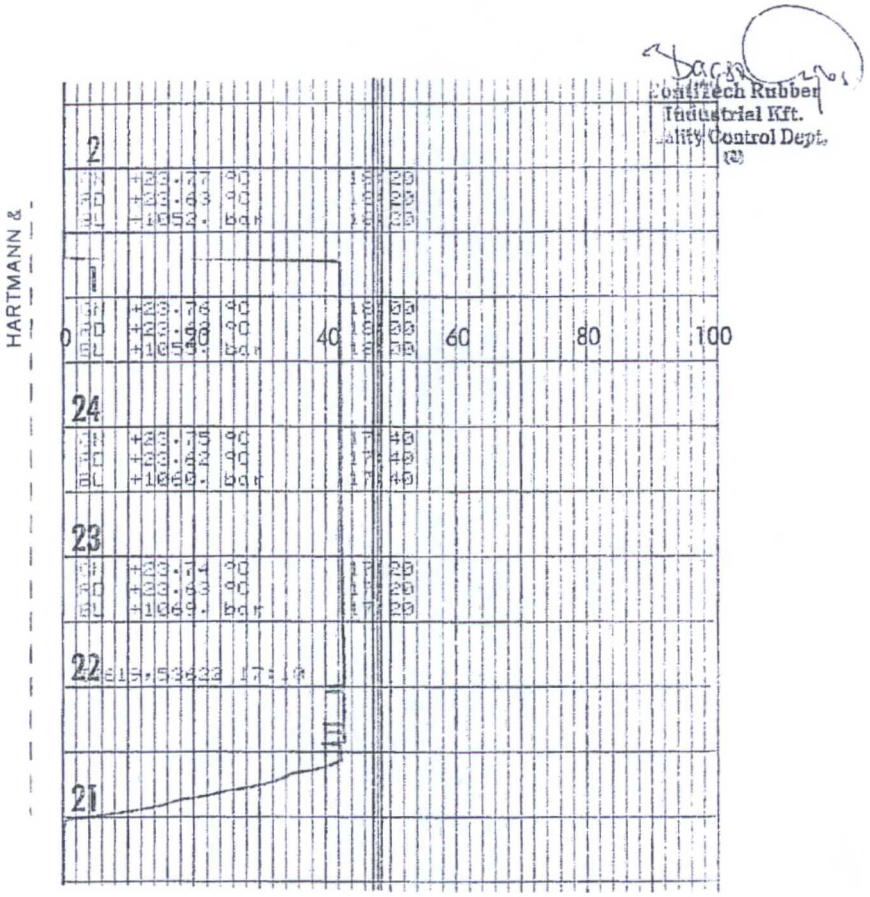
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
5,200.00	5,200.00	0.00	0.00	Nudge
5,700.00	5,699.37	0.00	21.80	Hold
7,300.00	7,293.28	0.00	161.25	Drop
7,800.00	7,792.64	0.00	183.05	Hold
10,608.00	10,600.64	0.00	183.05	KOP 10° DLS
11,513.98	11,173.57	578.94	183.03	LP
15,686.31	11,130.00	4,751.04	182.87	TD

H&P Flex Rig Location Layout
3 Well Pad



ATTACHMENT OF QUALITY CONTROL INSPECTION AND TEST CERTIFICATE *No 1711,1713*

Page: 1/1



Contitech Rubber
Industrial Kft.
Quality Control Dept.

Continental CONTITECH

Fluid Technology

Quality Document

QUALITY CONTROL INSPECTION AND TEST CERTIFICATE

CERT. N°: 1713

PURCHASER:	ContiTech Beattie Co.	P.O. N°:	002808
CONTITECH ORDER N°:	426127	HOSE TYPE: 3" ID	Choke and Kill Hose
HOSE SERIAL N°:	53622	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

See attachment. (1 page)

↑ 10 mm = 10 Min.

→ 10 mm = 25 MPa

COUPLINGS Type	Serial N°	Quality	Heat N°
3" coupling with	5503 2029	AISI 4130	N1590P
4 1/16" Flange end		AISI 4130	27566

INFOCHIP INSTALLED

API Spec 16 C
Temperature rate:"B"

All metal parts are flawless

Hose conform to NACE MR 01-75

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
25. August. 2008		ContiTech Rubber Industrial Kft. Quality Control Dept.

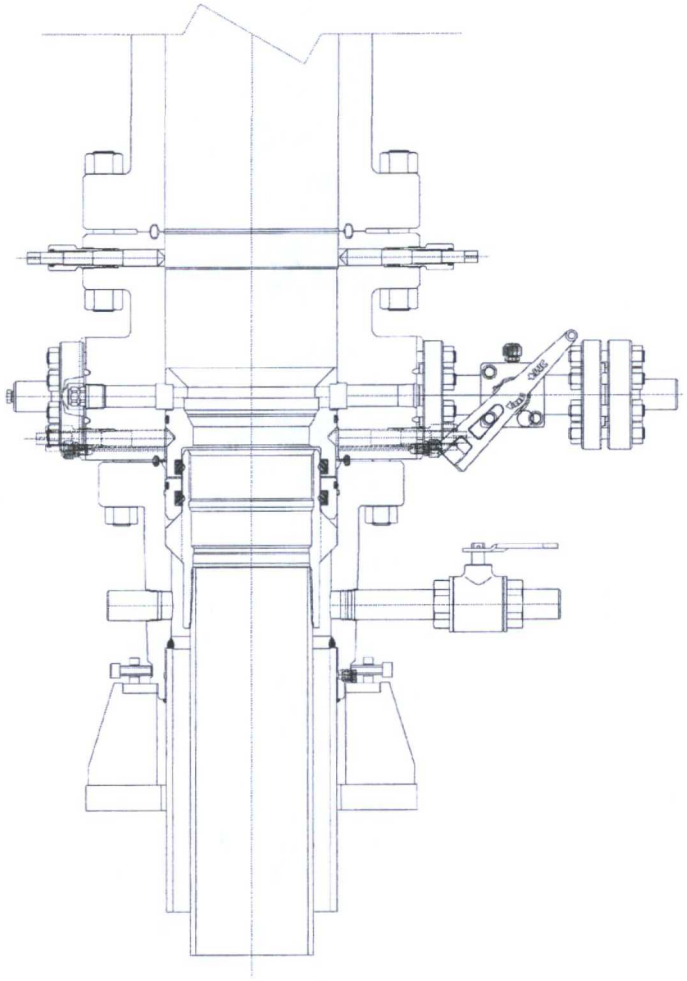
ContiTech Rubber Industrial Kft.
Budapesti út 10., Szeged H 6726
P.O.Box 152 Szeged H-6701
Hungary

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

The Court of Csongrád County as Registry Court
Registry Court No: HU 06-09-002502
EU VAT No: HU11087209

Bank data
Commerzbank Zrt.
Szeged
14220108-26830003-00000000

FMC Technologies



PRIMARY MODE

DEVON ENERGY

ARTESIA
S.E.N.M
13 3/8 X 9 5/8

QUOTE LAYOUT
F18648
REF: DM100161737
DM100151315

REVISIONS	
A	05-08-13
B	1-22-14
C	5-13-14

DESCRIPTION

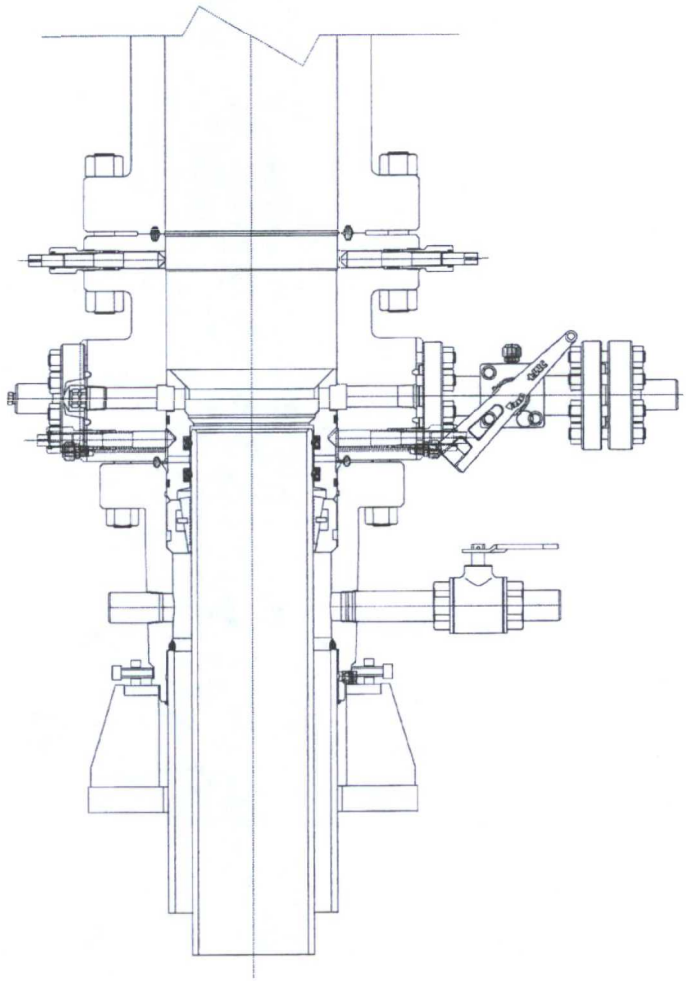
SURFACE WELLHEAD LAYOUT
UNIHEAD, UH-1, SOW,
DEVON ENERGY, ODESSA

DRAWN BY	K. VU	05-08-13
DRAFTING REVIEW	Z. MARQUEZ	05-08-13
DESIGN REVIEW	K. TAHA	05-08-13
APPROVED BY	R. HAMILTON	05-08-13

FMC Technologies

DRAWING NUMBER
DM100161771-2A

FMC Technologies



CONTINGENCY MODE

DEVON ENERGY

ARTESIA

S.E.N.M

13 3/8 X 9 5/8

QUOTE LAYOUT
F18648
REF: DM100161737
DM100151315

REVISIONS		DESCRIPTION
A	05-08-13	
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SURFACE WELLHEAD LAYOUT
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DESIGN REVIEW	K. TAHA	05-08-13
APPROVED BY	R. HAMILTON	05-08-13

FMC Technologies

DRAWING NUMBER
DM100161771-2B

devon

Commitment Runs Deep

Design Plan
Operation and Maintenance Plan
Closure Plan

SENM - Closed Loop Systems
February 2015

I. Design Plan

Devon uses MI SWACO closed loop system (CLS). The MI SWACO CLS is designed to maintain drill solids at or below 5%. The equipment is arranged to progressively remove solids from the largest to the smallest size. Drilling fluids can thus be reused and savings is realized on mud and disposal costs. Dewatering may be required with the centrifuges to insure removal of ultra fine solids.

The drilling location is constructed to allow storm water to flow to a central sump normally the cellar. This insures no contamination leaves the drilling pad in the event of a spill. Storm water is reused in the mud system or stored in a reserve fluid tank farm until it can be reused. All lubricants, oils, or chemicals are removed immediately from the ground to prevent the contamination of storm water. An oil trap is normally installed on the sump if an oil spill occurs during a storm.

A tank farm is utilized to store drilling fluids including fresh water and brine fluids. The tank farm is constructed on a 20 ml plastic lined, bermed pad to prevent the contamination of the drilling site during a spill. Fluids from other sites may be stored in these tanks for processing by the solids control equipment and reused in the mud system. At the end of the well the fluids are transported from the tank farm to an adjoining well or to the next well for the rig.

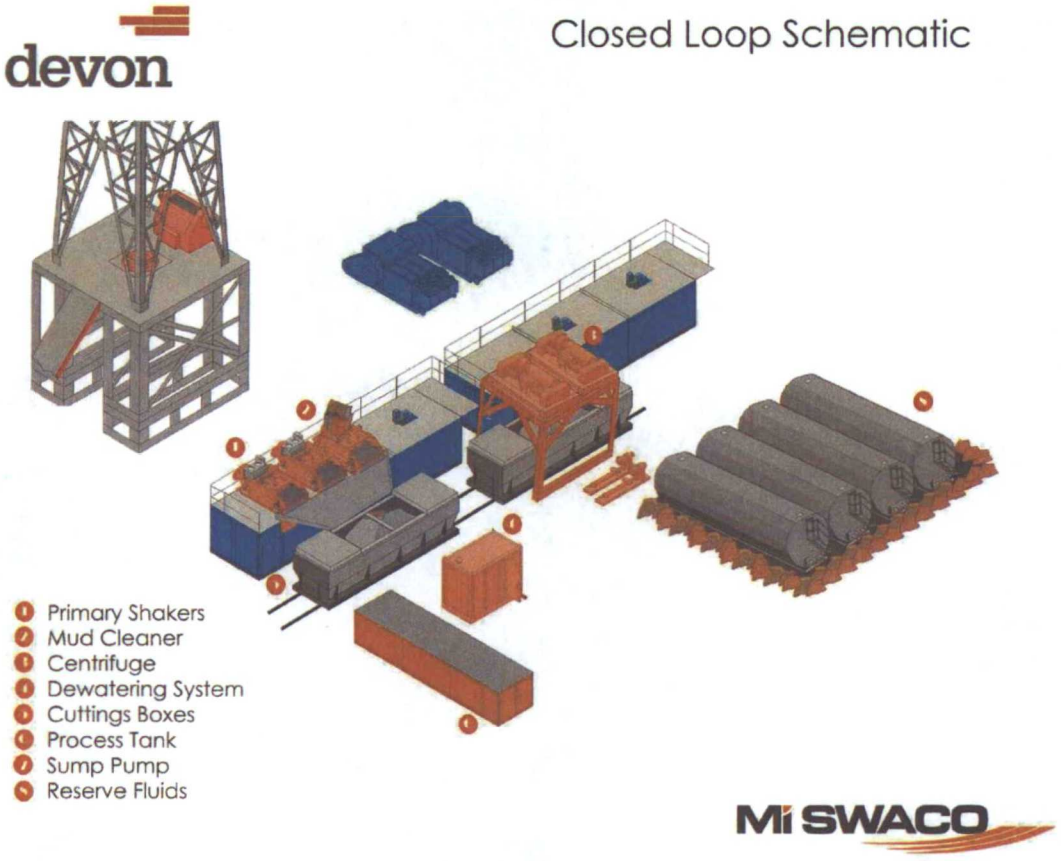
Prior to installing a closed-loop system on site, the topsoil, if present, will be stripped and stockpiled for use as the final cover or fill at the time of closure.

Signs will be posted on the fence surrounding the closed-loop system unless the closed-loop system is located on a site where there is an existing well, that is operated by Devon.

II. Operations and Maintenance Plan

Primary Shakers: The primary shakers make the first removal of drill solids from the drilling mud as it leaves the well bore. The shakers are sized to handle maximum drilling rate at optimal screen size. The shakers normally remove solids down to 74 microns.

Mud Cleaner: The Mud Cleaner cleans the fluid after it leaves the shakers. A set of hydrocyclones are sized to handle 1.25 to 1.5 times the maximum circulating rate. This ensures all the fluid is being processed to an average cut point of 25 microns. The wet discharged is dewatered on a shaker equipped with ultra fine mesh screens and generally cut at 40 microns.



Centrifuges: The centrifuges can be one or two in number depending on the well geometry or depth of well. The centrifuges are sized to maintain low gravity solids at 5% or below. They may or may not need a dewatering system to enhance the removal rates. The centrifuges can make a cut point of 8-10 microns depending on bowl speed, feed rate, solids loading and other factors.

The centrifuge system is designed to work on the active system and be flexible to process incoming fluids from other locations. This set-up is also dependant on well factors.

Dewatering System: The dewatering system is a chemical mixing and dosing system designed to enhance the solids removal of the centrifuge. Not commonly used in shallow wells. It may contain pH adjustment, coagulant mixing and dosing, and polymer mixing and dosing. Chemical flocculation binds ultra fine solids into a mass that is within the centrifuge operating design. The

dewatering system improves the centrifuge cut point to infinity or allows for the return of clear water or brine fluid. This ability allows for the ultimate control of low gravity solids.

Cuttings Boxes: Cuttings boxes are utilized to capture drill solids that are discarded from the solids control equipment. These boxes are set upon a rail system that allows for the removal and replacement of a full box of cuttings with an empty one. They are equipped with a cover that insures no product is spilled into the environment during the transportation phase.

Process Tank: (Optional) The process tank allows for the holding and process of fluids that are being transferred into the mud system. Additionally, during times of lost circulation the process tank may hold active fluids that are removed for additional treatment. It can further be used as a mixing tank during well control conditions.

Sump and Sump Pump: The sump is used to collect storm water and the pump is used to transfer this fluid to the active system or to the tank for to hold in reserve. It can also be used to collect fluids that may escape during spills. The location contains drainage ditches that allow the location fluids to drain to the sump.

Reserve Fluids (Tank Farm): A series of frac tanks are used to replace the reserve pit. These are steel tanks that are equipped with a manifold system and a transfer pump. These tanks can contain any number of fluids used during the drilling process. These can include fresh water, cut brine, and saturated salt fluid. The fluid can be from the active well or reclaimed fluid from other locations. A 20 ml liner and berm system is employed to ensure the fluids do not migrate to the environment during a spill.

If a leak develops, the appropriate division district office will be notified within 48 hours of the discovery and the leak will be addressed. Spill prevention is accomplished by maintaining pump packing, hoses, and pipe fittings to insure no leaks are occurring. During an upset condition the source of the spill is isolated and repaired as soon as it is discovered. Free liquid is removed by a diaphragm pump and returned to the mud system. Loose topsoil may be used to stabilize the spill and the contaminated soil is excavated and placed in the cuttings boxes. After the well is finished and the rig has moved, the entire location is scrapped and testing will be performed to determine if a release has occurred.

All trash is kept in a wire mesh enclosure and removed to an approved landfill when full. All spent motor oils are kept in separate containers and they are removed and sent to an approved recycling center. Any spilled lubricants, pipe

dope, or regulated chemicals are removed from soil and sent to landfills approved for these products.

These operations are monitored by Mi Swaco service technicians. Daily logs are maintained to ensure optimal equipment operation and maintenance. Screen and chemical use is logged to maintain inventory control. Fluid properties are monitored and recorded and drilling mud volumes are accounted for in the mud storage farm. This data is kept for end of well review to insure performance goals are met. Lessons learned are logged and used to help with continuous improvement.

A MI SWACO field supervisor manages from 3-5 wells. They are responsible for training personnel, supervising installations, and inspecting sites for compliance of MI SWACO safety and operational policy.

III. Closure Plan

A maximum 340' X 340' caliche pad is built per well. All of the trucks and steel tanks fit on this pad. All fluid cuttings go to the steel tanks to be hauled by various trucking companies to an agency approved disposal.