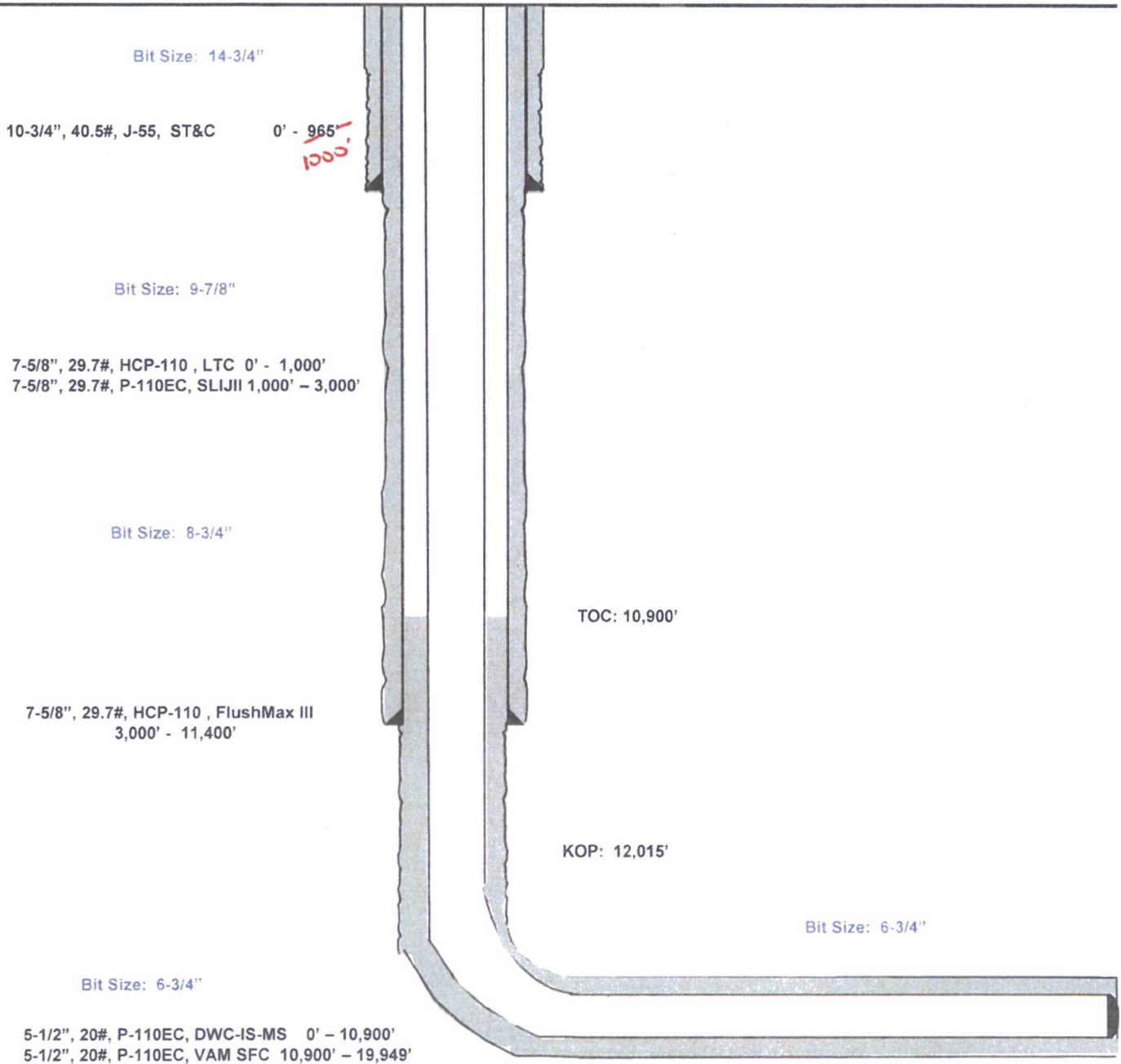


Fox 30 Fed Com #704H

2190' FSL
1013' FEL
Section 30
T-25-S, R-34-E

Lea County, New Mexico
Proposed Wellbore
Revised 8/3/17
API: 30-025-*****

KB: 3,347'
GL: 3,322'



Lateral: 19,949' MD, 12,500' TVD
Upper Most Perf:
2311' FSL & 660' FEL Sec. 30
Lower Most Perf:
330' FSL & 661' FEL Sec. 31
BH Location: 230' FSL & 661' FEL
Section 31
T-25-S, R-34-E



Lea County, NM (NAD 83 NME)

Fox 30 Fed Com #704H

Plan #0.2

PROJECT DETAILS: Lea County, NM (NAD 83 NME)

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone
System Datum: Mean Sea Level



Azimuths to Grid North
True North: -0.44°
Magnetic North: 6.46°
Magnetic Field
Strength: 47859.2 uT
Dip Angle: 99.98°
Date: 8/3/2017
Model: IGRF2015

To convert a Magnetic Direction to a Grid Direction: Add 0.44°
To convert a Magnetic Direction to a True Direction: Add 6.90°
To convert a True Direction to a Grid Direction: Subtract 0.44°

WELL DETAILS: #704H

KB = 25' @ 3347.00 uft
Northing 401198.00 Easting 796220.00
Latitude 32.10025866 Longitude -103.50375693

SECTION DETAILS

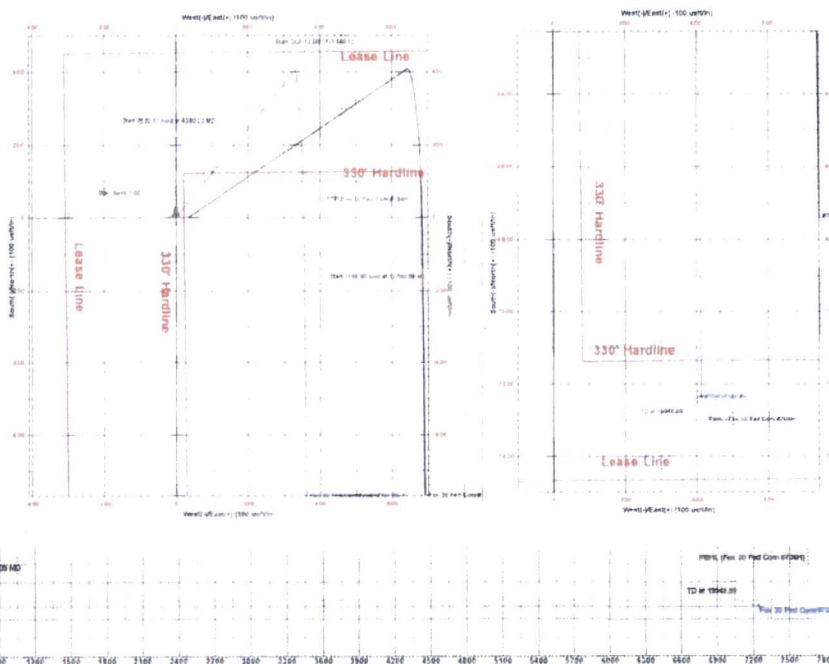
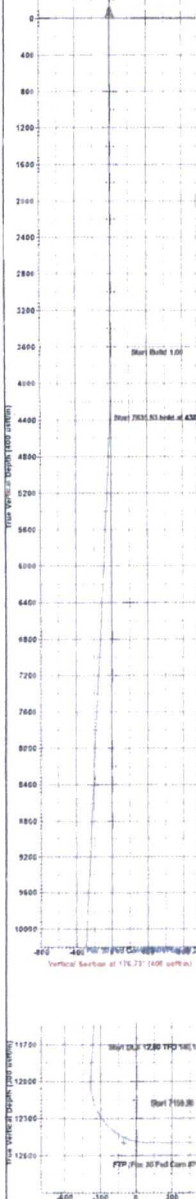
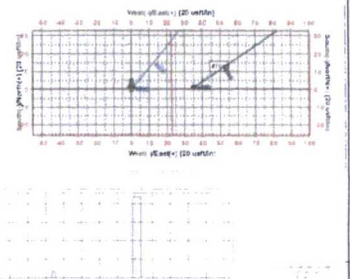
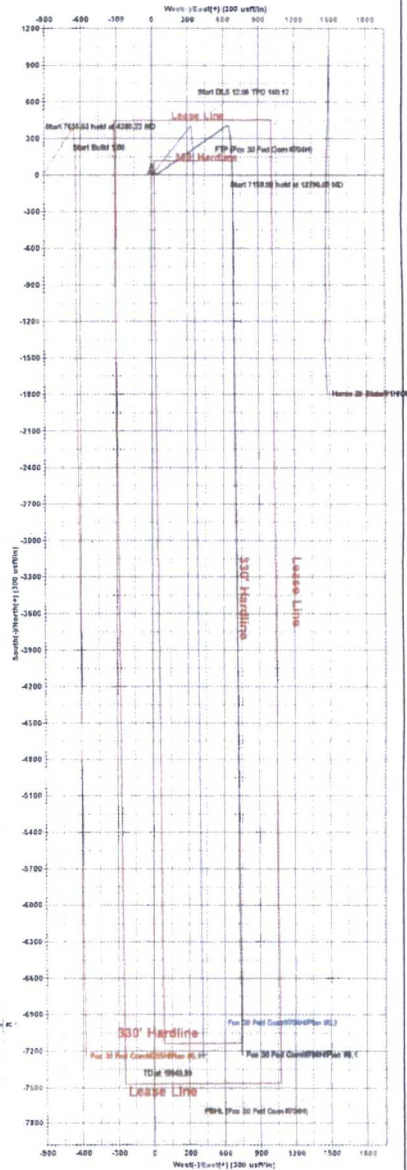
Sec	MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	4000.00	0.00	0.00	4000.00	0.00	0.00	0.00	0.00	0.00	
3	4380.23	3.80	39.35	4379.95	9.75	8.00	1.00	39.35	-9.28	
4	12015.76	3.80	39.35	11998.67	401.31	329.02	0.00	0.00	-381.91	
5	12790.09	90.00	179.53	12500.00	-75.34	354.27	12.00	140.12	95.41	
6	19949.99	90.00	179.53	12500.00	-7235.00	413.00	0.00	0.00	7246.78	PBHL (Fox 30 Fed Com #704H)

CASING DETAILS

No casing data is available

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N-S	+E-W	Northing	Easting
FTP (Fox 30 Fed Com #704H)	12500.00	124.00	352.00	401323.00	796572.00
PBHL (Fox 30 Fed Com #704H)	12500.00	-7235.00	413.00	393964.00	796633.00





EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Fox 30 Fed Com

#704H

OH

Plan: Plan #0.2

Standard Planning Report

03 August, 2017

HOBBS OCD

DEC 04 2017

RECEIVED



EOG Resources, Inc.
Planning Report

Database: EDM 5000.14 Single User Db
Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Fox 30 Fed Com
Well: #704H
Wellbore: OH
Design: Plan #0.2

Local Co-ordinate Reference: Well #704H
TVD Reference: KB = 25' @ 3347.00usft
MD Reference: KB = 25' @ 3347.00usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

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

Site	Fox 30 Fed Com			
Site Position:		Northing:	401,193.00 usft	Latitude: 32.10026220
From: Map		Easting:	797,271.00 usft	Longitude: -103.50682151
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence: 0.44 "

Well	#704H			
Well Position	+N/-S	6.00 usft	Northing:	401,199.00 usft
	+E/-W	949.00 usft	Easting:	798,220.00 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:		Ground Level: 3,322.00 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	8/3/2017	6.90	59.96	47,859.19739329

Design	Plan #0.2			
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	176.73

Plan Survey Tool Program	Date	8/3/2017		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	19,949.99 Plan #0.2 (OH)	MWD	
			MWD - Standard	

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	
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
4,380.23	3.80	39.35	4,379.95	9.75	8.00	1.00	1.00	0.00	39.35	
12,015.76	3.80	39.35	11,998.67	401.31	329.02	0.00	0.00	0.00	0.00	
12,790.09	90.00	179.53	12,500.00	-75.34	354.27	12.00	11.13	18.10	140.12	
19,949.99	90.00	179.53	12,500.00	-7,235.00	413.00	0.00	0.00	0.00	0.00	PBHL (Fox 30 Fed Co



EOG Resources, Inc.
Planning Report

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Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Fox 30 Fed Com
Well: #704H
Wellbore: OH
Design: Plan #0 2

Local Co-ordinate Reference: Well #704H
TVD Reference: KB = 25' @ 3347.00usft
MD Reference: KB = 25' @ 3347.00usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

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
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	1.00	39.35	4,100.00	0.67	0.55	-0.64	1.00	1.00	0.00
4,200.00	2.00	39.35	4,199.96	2.70	2.21	-2.57	1.00	1.00	0.00
4,300.00	3.00	39.35	4,299.86	6.07	4.98	-5.78	1.00	1.00	0.00
4,380.23	3.80	39.35	4,379.95	9.75	8.00	-9.28	1.00	1.00	0.00
4,400.00	3.80	39.35	4,399.68	10.77	8.83	-10.25	0.00	0.00	0.00
4,500.00	3.80	39.35	4,499.46	15.90	13.03	-15.13	0.00	0.00	0.00
4,600.00	3.80	39.35	4,599.24	21.02	17.24	-20.01	0.00	0.00	0.00
4,700.00	3.80	39.35	4,699.02	26.15	21.44	-24.89	0.00	0.00	0.00
4,800.00	3.80	39.35	4,798.80	31.28	25.64	-29.77	0.00	0.00	0.00
4,900.00	3.80	39.35	4,898.58	36.41	29.85	-34.65	0.00	0.00	0.00
5,000.00	3.80	39.35	4,998.36	41.54	34.05	-39.53	0.00	0.00	0.00
5,100.00	3.80	39.35	5,098.14	46.66	38.26	-44.41	0.00	0.00	0.00
5,200.00	3.80	39.35	5,197.92	51.79	42.46	-49.29	0.00	0.00	0.00



EOG Resources, Inc.

Planning Report

Database: EDM 5000.14 Single User Db
 Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Fox 30 Fed Com
 Well: #704H
 Wellbore: OH
 Design: Plan #0.2

Local Co-ordinate Reference: Well #704H
 TVD Reference: KB = 25' @ 3347.00usft
 MD Reference: KB = 25' @ 3347.00usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature

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)
5,300.00	3.80	39.35	5,297.70	56.92	46.67	-54.17	0.00	0.00	0.00
5,400.00	3.80	39.35	5,397.48	62.05	50.87	-59.05	0.00	0.00	0.00
5,500.00	3.80	39.35	5,497.26	67.18	55.08	-63.93	0.00	0.00	0.00
5,600.00	3.80	39.35	5,597.04	72.30	59.28	-68.81	0.00	0.00	0.00
5,700.00	3.80	39.35	5,696.82	77.43	63.48	-73.69	0.00	0.00	0.00
5,800.00	3.80	39.35	5,796.60	82.56	67.69	-78.57	0.00	0.00	0.00
5,900.00	3.80	39.35	5,896.38	87.69	71.89	-83.45	0.00	0.00	0.00
6,000.00	3.80	39.35	5,996.16	92.82	76.10	-88.33	0.00	0.00	0.00
6,100.00	3.80	39.35	6,095.94	97.95	80.30	-93.21	0.00	0.00	0.00
6,200.00	3.80	39.35	6,195.72	103.07	84.51	-98.09	0.00	0.00	0.00
6,300.00	3.80	39.35	6,295.50	108.20	88.71	-102.97	0.00	0.00	0.00
6,400.00	3.80	39.35	6,395.28	113.33	92.91	-107.85	0.00	0.00	0.00
6,500.00	3.80	39.35	6,495.06	118.46	97.12	-112.73	0.00	0.00	0.00
6,600.00	3.80	39.35	6,594.84	123.59	101.32	-117.61	0.00	0.00	0.00
6,700.00	3.80	39.35	6,694.61	128.71	105.53	-122.49	0.00	0.00	0.00
6,800.00	3.80	39.35	6,794.39	133.84	109.73	-127.37	0.00	0.00	0.00
6,900.00	3.80	39.35	6,894.17	138.97	113.94	-132.25	0.00	0.00	0.00
7,000.00	3.80	39.35	6,993.95	144.10	118.14	-137.13	0.00	0.00	0.00
7,100.00	3.80	39.35	7,093.73	149.23	122.35	-142.01	0.00	0.00	0.00
7,200.00	3.80	39.35	7,193.51	154.35	126.55	-146.89	0.00	0.00	0.00
7,300.00	3.80	39.35	7,293.29	159.48	130.75	-151.77	0.00	0.00	0.00
7,400.00	3.80	39.35	7,393.07	164.61	134.96	-156.65	0.00	0.00	0.00
7,500.00	3.80	39.35	7,492.85	169.74	139.16	-161.53	0.00	0.00	0.00
7,600.00	3.80	39.35	7,592.63	174.87	143.37	-166.41	0.00	0.00	0.00
7,700.00	3.80	39.35	7,692.41	180.00	147.57	-171.29	0.00	0.00	0.00
7,800.00	3.80	39.35	7,792.19	185.12	151.78	-176.17	0.00	0.00	0.00
7,900.00	3.80	39.35	7,891.97	190.25	155.98	-181.05	0.00	0.00	0.00
8,000.00	3.80	39.35	7,991.75	195.38	160.18	-185.93	0.00	0.00	0.00
8,100.00	3.80	39.35	8,091.53	200.51	164.39	-190.81	0.00	0.00	0.00
8,200.00	3.80	39.35	8,191.31	205.64	168.59	-195.69	0.00	0.00	0.00
8,300.00	3.80	39.35	8,291.09	210.76	172.80	-200.57	0.00	0.00	0.00
8,400.00	3.80	39.35	8,390.87	215.89	177.00	-205.45	0.00	0.00	0.00
8,500.00	3.80	39.35	8,490.65	221.02	181.21	-210.33	0.00	0.00	0.00
8,600.00	3.80	39.35	8,590.43	226.15	185.41	-215.21	0.00	0.00	0.00
8,700.00	3.80	39.35	8,690.21	231.28	189.62	-220.09	0.00	0.00	0.00
8,800.00	3.80	39.35	8,789.99	236.40	193.82	-224.97	0.00	0.00	0.00
8,900.00	3.80	39.35	8,889.77	241.53	198.02	-229.85	0.00	0.00	0.00
9,000.00	3.80	39.35	8,989.55	246.66	202.23	-234.74	0.00	0.00	0.00
9,100.00	3.80	39.35	9,089.33	251.79	206.43	-239.62	0.00	0.00	0.00
9,200.00	3.80	39.35	9,189.11	256.92	210.64	-244.50	0.00	0.00	0.00
9,300.00	3.80	39.35	9,288.89	262.05	214.84	-249.38	0.00	0.00	0.00
9,400.00	3.80	39.35	9,388.67	267.17	219.05	-254.26	0.00	0.00	0.00
9,500.00	3.80	39.35	9,488.45	272.30	223.25	-259.14	0.00	0.00	0.00
9,600.00	3.80	39.35	9,588.23	277.43	227.45	-264.02	0.00	0.00	0.00
9,700.00	3.80	39.35	9,688.01	282.56	231.66	-268.90	0.00	0.00	0.00
9,800.00	3.80	39.35	9,787.79	287.69	235.86	-273.78	0.00	0.00	0.00
9,900.00	3.80	39.35	9,887.57	292.81	240.07	-278.66	0.00	0.00	0.00
10,000.00	3.80	39.35	9,987.35	297.94	244.27	-283.54	0.00	0.00	0.00
10,100.00	3.80	39.35	10,087.13	303.07	248.48	-288.42	0.00	0.00	0.00
10,200.00	3.80	39.35	10,186.91	308.20	252.68	-293.30	0.00	0.00	0.00
10,300.00	3.80	39.35	10,286.69	313.33	256.89	-298.18	0.00	0.00	0.00
10,400.00	3.80	39.35	10,386.47	318.46	261.09	-303.06	0.00	0.00	0.00
10,500.00	3.80	39.35	10,486.25	323.58	265.29	-307.94	0.00	0.00	0.00
10,600.00	3.80	39.35	10,586.03	328.71	269.50	-312.82	0.00	0.00	0.00



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 Survey Calculation Method: Minimum Curvature

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)
10,700.00	3.80	39.35	10,685.81	333.84	273.70	-317.70	0.00	0.00	0.00
10,800.00	3.80	39.35	10,785.59	338.97	277.91	-322.58	0.00	0.00	0.00
10,900.00	3.80	39.35	10,885.37	344.10	282.11	-327.46	0.00	0.00	0.00
11,000.00	3.80	39.35	10,985.15	349.22	286.32	-332.34	0.00	0.00	0.00
11,100.00	3.80	39.35	11,084.93	354.35	290.52	-337.22	0.00	0.00	0.00
11,200.00	3.80	39.35	11,184.71	359.48	294.72	-342.10	0.00	0.00	0.00
11,300.00	3.80	39.35	11,284.49	364.61	298.93	-346.98	0.00	0.00	0.00
11,400.00	3.80	39.35	11,384.27	369.74	303.13	-351.86	0.00	0.00	0.00
11,500.00	3.80	39.35	11,484.05	374.86	307.34	-356.74	0.00	0.00	0.00
11,600.00	3.80	39.35	11,583.83	379.99	311.54	-361.62	0.00	0.00	0.00
11,700.00	3.80	39.35	11,683.61	385.12	315.75	-366.50	0.00	0.00	0.00
11,800.00	3.80	39.35	11,783.39	390.25	319.95	-371.38	0.00	0.00	0.00
11,900.00	3.80	39.35	11,883.17	395.38	324.16	-376.26	0.00	0.00	0.00
12,000.00	3.80	39.35	11,982.95	400.51	328.36	-381.14	0.00	0.00	0.00
12,015.76	3.80	39.35	11,998.67	401.31	329.02	-381.91	0.00	0.00	0.00
12,025.00	3.04	52.91	12,007.90	401.70	329.41	-382.27	12.00	-8.30	146.66
12,050.00	2.71	115.56	12,032.87	401.84	330.47	-382.35	12.00	-1.29	250.63
12,075.00	4.85	149.40	12,057.82	400.68	331.54	-381.13	12.00	8.54	135.34
12,100.00	7.59	160.90	12,082.67	398.21	332.62	-378.60	12.00	10.97	46.02
12,125.00	10.47	166.22	12,107.36	394.44	333.70	-374.78	12.00	11.54	21.27
12,150.00	13.41	169.25	12,131.82	389.38	334.79	-369.67	12.00	11.74	12.10
12,175.00	16.37	171.20	12,155.97	383.05	335.87	-363.29	12.00	11.83	7.81
12,200.00	19.34	172.56	12,179.77	375.47	336.94	-355.65	12.00	11.88	5.47
12,225.00	22.32	173.58	12,203.13	366.64	338.01	-346.78	12.00	11.91	4.06
12,250.00	25.30	174.36	12,226.00	356.61	339.06	-336.71	12.00	11.93	3.14
12,275.00	28.29	174.99	12,248.31	345.39	340.11	-325.44	12.00	11.95	2.52
12,300.00	31.28	175.51	12,270.01	333.02	341.13	-313.03	12.00	11.96	2.07
12,325.00	34.27	175.95	12,291.03	319.52	342.14	-299.50	12.00	11.96	1.74
12,350.00	37.26	176.32	12,311.31	304.95	343.12	-284.90	12.00	11.97	1.50
12,375.00	40.25	176.65	12,330.81	289.33	344.08	-269.25	12.00	11.97	1.30
12,400.00	43.24	176.94	12,349.46	272.71	345.01	-252.60	12.00	11.98	1.15
12,425.00	46.24	177.19	12,367.21	255.14	345.91	-235.01	12.00	11.98	1.03
12,450.00	49.23	177.43	12,384.02	236.66	346.77	-216.51	12.00	11.98	0.93
12,475.00	52.23	177.64	12,399.84	217.32	347.60	-197.16	12.00	11.98	0.85
12,500.00	55.23	177.84	12,414.63	197.19	348.40	-177.01	12.00	11.98	0.79
12,525.00	58.22	178.02	12,428.35	176.30	349.15	-156.12	12.00	11.98	0.73
12,550.00	61.22	178.19	12,440.95	154.73	349.87	-134.54	12.00	11.99	0.68
12,575.00	64.21	178.35	12,452.41	132.52	350.54	-112.33	12.00	11.99	0.65
12,600.00	67.21	178.51	12,462.69	109.74	351.16	-89.55	12.00	11.99	0.61
12,600.29	67.25	178.51	12,462.80	109.46	351.17	-89.29	12.00	11.99	0.60
FTP (Fox 30 Fed Com #704H)									
12,625.00	70.21	178.65	12,471.77	86.46	351.74	-66.27	12.00	11.99	0.59
12,650.00	73.21	178.79	12,479.62	62.73	352.27	-42.55	12.00	11.99	0.57
12,675.00	76.20	178.93	12,486.21	38.62	352.75	-18.46	12.00	11.99	0.55
12,700.00	79.20	179.06	12,491.53	14.21	353.17	5.95	12.00	11.99	0.53
12,725.00	82.20	179.20	12,495.58	-10.46	353.55	30.59	12.00	11.99	0.52
12,750.00	85.19	179.33	12,498.32	-35.30	353.87	55.41	12.00	11.99	0.52
12,775.00	88.19	179.45	12,499.76	-60.26	354.13	80.34	12.00	11.99	0.51
12,790.09	90.00	179.53	12,500.00	-75.34	354.27	95.41	12.00	11.99	0.51
12,800.00	90.00	179.53	12,500.00	-85.26	354.35	105.31	0.00	0.00	0.00
12,900.00	90.00	179.53	12,500.00	-185.25	355.17	205.19	0.00	0.00	0.00
13,000.00	90.00	179.53	12,500.00	-285.25	355.99	305.07	0.00	0.00	0.00
13,100.00	90.00	179.53	12,500.00	-385.25	356.81	404.95	0.00	0.00	0.00



EOG Resources, Inc.
Planning Report

Database: EDM 5000.14 Single User Db
Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Fox 30 Fed Com
Well: #704H
Wellbore: OH
Design: Plan #0 2

Local Co-ordinate Reference: Well #704H
TVD Reference: KB = 25' @ 3347.00usft
MD Reference: KB = 25' @ 3347.00usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

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)
13,200.00	90.00	179.53	12,500.00	-485.24	357.63	504.83	0.00	0.00	0.00
13,300.00	90.00	179.53	12,500.00	-585.24	358.45	604.72	0.00	0.00	0.00
13,400.00	90.00	179.53	12,500.00	-685.23	359.27	704.60	0.00	0.00	0.00
13,500.00	90.00	179.53	12,500.00	-785.23	360.09	804.48	0.00	0.00	0.00
13,600.00	90.00	179.53	12,500.00	-885.23	360.91	904.36	0.00	0.00	0.00
13,700.00	90.00	179.53	12,500.00	-985.22	361.73	1,004.24	0.00	0.00	0.00
13,800.00	90.00	179.53	12,500.00	-1,085.22	362.55	1,104.12	0.00	0.00	0.00
13,900.00	90.00	179.53	12,500.00	-1,185.22	363.37	1,204.00	0.00	0.00	0.00
14,000.00	90.00	179.53	12,500.00	-1,285.21	364.19	1,303.88	0.00	0.00	0.00
14,100.00	90.00	179.53	12,500.00	-1,385.21	365.01	1,403.76	0.00	0.00	0.00
14,200.00	90.00	179.53	12,500.00	-1,485.21	365.83	1,503.64	0.00	0.00	0.00
14,300.00	90.00	179.53	12,500.00	-1,585.20	366.65	1,603.52	0.00	0.00	0.00
14,400.00	90.00	179.53	12,500.00	-1,685.20	367.47	1,703.41	0.00	0.00	0.00
14,500.00	90.00	179.53	12,500.00	-1,785.20	368.29	1,803.29	0.00	0.00	0.00
14,600.00	90.00	179.53	12,500.00	-1,885.19	369.11	1,903.17	0.00	0.00	0.00
14,700.00	90.00	179.53	12,500.00	-1,985.19	369.93	2,003.05	0.00	0.00	0.00
14,800.00	90.00	179.53	12,500.00	-2,085.19	370.75	2,102.93	0.00	0.00	0.00
14,900.00	90.00	179.53	12,500.00	-2,185.18	371.58	2,202.81	0.00	0.00	0.00
15,000.00	90.00	179.53	12,500.00	-2,285.18	372.40	2,302.69	0.00	0.00	0.00
15,100.00	90.00	179.53	12,500.00	-2,385.18	373.22	2,402.57	0.00	0.00	0.00
15,200.00	90.00	179.53	12,500.00	-2,485.17	374.04	2,502.45	0.00	0.00	0.00
15,300.00	90.00	179.53	12,500.00	-2,585.17	374.86	2,602.33	0.00	0.00	0.00
15,400.00	90.00	179.53	12,500.00	-2,685.17	375.68	2,702.21	0.00	0.00	0.00
15,500.00	90.00	179.53	12,500.00	-2,785.16	376.50	2,802.09	0.00	0.00	0.00
15,600.00	90.00	179.53	12,500.00	-2,885.16	377.32	2,901.98	0.00	0.00	0.00
15,700.00	90.00	179.53	12,500.00	-2,985.16	378.14	3,001.86	0.00	0.00	0.00
15,800.00	90.00	179.53	12,500.00	-3,085.15	378.96	3,101.74	0.00	0.00	0.00
15,900.00	90.00	179.53	12,500.00	-3,185.15	379.78	3,201.62	0.00	0.00	0.00
16,000.00	90.00	179.53	12,500.00	-3,285.15	380.60	3,301.50	0.00	0.00	0.00
16,100.00	90.00	179.53	12,500.00	-3,385.14	381.42	3,401.38	0.00	0.00	0.00
16,200.00	90.00	179.53	12,500.00	-3,485.14	382.24	3,501.26	0.00	0.00	0.00
16,300.00	90.00	179.53	12,500.00	-3,585.14	383.06	3,601.14	0.00	0.00	0.00
16,400.00	90.00	179.53	12,500.00	-3,685.13	383.88	3,701.02	0.00	0.00	0.00
16,500.00	90.00	179.53	12,500.00	-3,785.13	384.70	3,800.90	0.00	0.00	0.00
16,600.00	90.00	179.53	12,500.00	-3,885.13	385.52	3,900.78	0.00	0.00	0.00
16,700.00	90.00	179.53	12,500.00	-3,985.12	386.34	4,000.66	0.00	0.00	0.00
16,800.00	90.00	179.53	12,500.00	-4,085.12	387.16	4,100.55	0.00	0.00	0.00
16,900.00	90.00	179.53	12,500.00	-4,185.12	387.98	4,200.43	0.00	0.00	0.00
17,000.00	90.00	179.53	12,500.00	-4,285.11	388.80	4,300.31	0.00	0.00	0.00
17,100.00	90.00	179.53	12,500.00	-4,385.11	389.62	4,400.19	0.00	0.00	0.00
17,200.00	90.00	179.53	12,500.00	-4,485.11	390.44	4,500.07	0.00	0.00	0.00
17,300.00	90.00	179.53	12,500.00	-4,585.10	391.26	4,599.95	0.00	0.00	0.00
17,400.00	90.00	179.53	12,500.00	-4,685.10	392.08	4,699.83	0.00	0.00	0.00
17,500.00	90.00	179.53	12,500.00	-4,785.10	392.90	4,799.71	0.00	0.00	0.00
17,600.00	90.00	179.53	12,500.00	-4,885.09	393.72	4,899.59	0.00	0.00	0.00
17,700.00	90.00	179.53	12,500.00	-4,985.09	394.54	4,999.47	0.00	0.00	0.00
17,800.00	90.00	179.53	12,500.00	-5,085.09	395.36	5,099.35	0.00	0.00	0.00
17,900.00	90.00	179.53	12,500.00	-5,185.08	396.18	5,199.24	0.00	0.00	0.00
18,000.00	90.00	179.53	12,500.00	-5,285.08	397.00	5,299.12	0.00	0.00	0.00
18,100.00	90.00	179.53	12,500.00	-5,385.08	397.82	5,399.00	0.00	0.00	0.00
18,200.00	90.00	179.53	12,500.00	-5,485.07	398.64	5,498.88	0.00	0.00	0.00
18,300.00	90.00	179.53	12,500.00	-5,585.07	399.47	5,598.76	0.00	0.00	0.00
18,400.00	90.00	179.53	12,500.00	-5,685.07	400.29	5,698.64	0.00	0.00	0.00
18,500.00	90.00	179.53	12,500.00	-5,785.06	401.11	5,798.52	0.00	0.00	0.00



EOG Resources, Inc.

Planning Report

Database: EDM 5000.14 Single User Db
 Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Fox 30 Fed Com
 Well: #704H
 Wellbore: OH
 Design: Plan #0.2

Local Co-ordinate Reference: Well #704H
 TVD Reference: KB = 25' @ 3347.00usft
 MD Reference: KB = 25' @ 3347.00usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature

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)
18,600.00	90.00	179.53	12,500.00	-5,885.06	401.93	5,898.40	0.00	0.00	0.00
18,700.00	90.00	179.53	12,500.00	-5,985.06	402.75	5,998.28	0.00	0.00	0.00
18,800.00	90.00	179.53	12,500.00	-6,085.05	403.57	6,098.16	0.00	0.00	0.00
18,900.00	90.00	179.53	12,500.00	-6,185.05	404.39	6,198.04	0.00	0.00	0.00
19,000.00	90.00	179.53	12,500.00	-6,285.05	405.21	6,297.92	0.00	0.00	0.00
19,100.00	90.00	179.53	12,500.00	-6,385.04	406.03	6,397.81	0.00	0.00	0.00
19,200.00	90.00	179.53	12,500.00	-6,485.04	406.85	6,497.69	0.00	0.00	0.00
19,300.00	90.00	179.53	12,500.00	-6,585.04	407.67	6,597.57	0.00	0.00	0.00
19,400.00	90.00	179.53	12,500.00	-6,685.03	408.49	6,697.45	0.00	0.00	0.00
19,500.00	90.00	179.53	12,500.00	-6,785.03	409.31	6,797.33	0.00	0.00	0.00
19,600.00	90.00	179.53	12,500.00	-6,885.03	410.13	6,897.21	0.00	0.00	0.00
19,700.00	90.00	179.53	12,500.00	-6,985.02	410.95	6,997.09	0.00	0.00	0.00
19,800.00	90.00	179.53	12,500.00	-7,085.02	411.77	7,096.97	0.00	0.00	0.00
19,900.00	90.00	179.53	12,500.00	-7,185.02	412.59	7,196.85	0.00	0.00	0.00
19,949.99	90.00	179.53	12,500.00	-7,235.00	413.00	7,246.76	0.00	0.00	0.00

PBHL (Fox 30 Fed Com #704H)

Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
PBHL (Fox 30 Fed Com	0.00	0.00	12,500.00	-7,235.00	413.00	393,964.00	798,633.00	32.08036326	-103.50260328
- plan hits target center									
- Point									
FTP (Fox 30 Fed Com #	0.00	0.00	12,500.00	124.00	352.00	401,323.00	798,572.00	32.10059204	-103.50261720
- plan misses target center by 39.94usft at 12600.29usft MD (12462.80 TVD, 109.48 N, 351 17 E)									
- Point									

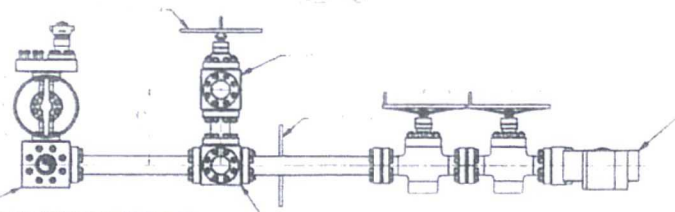
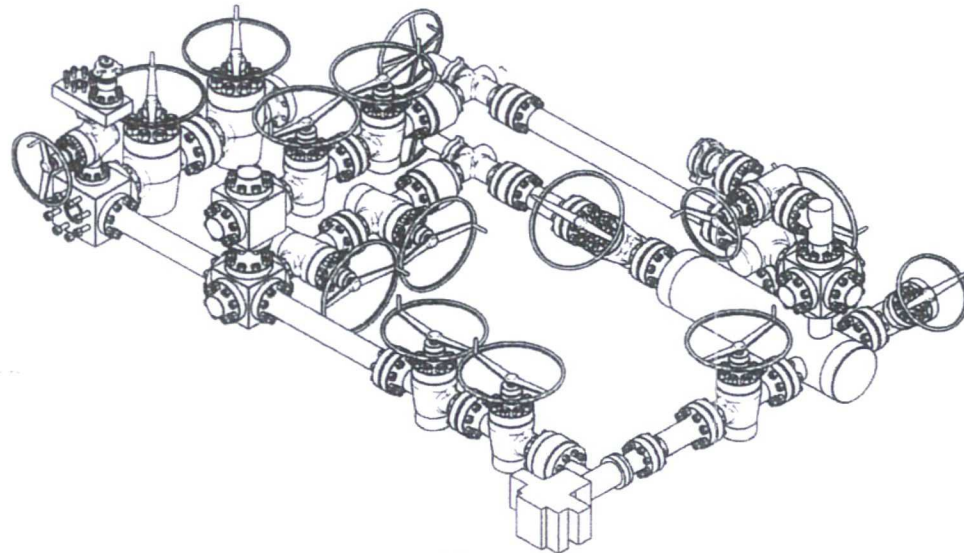
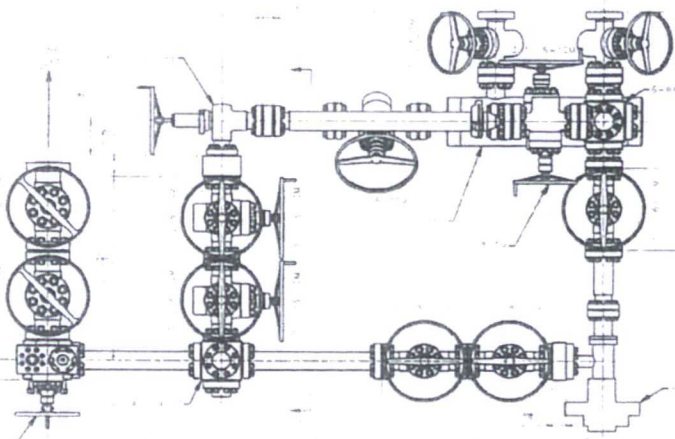
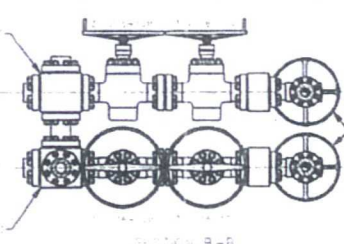
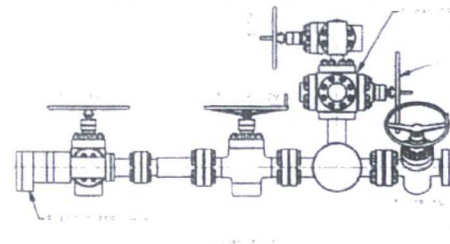
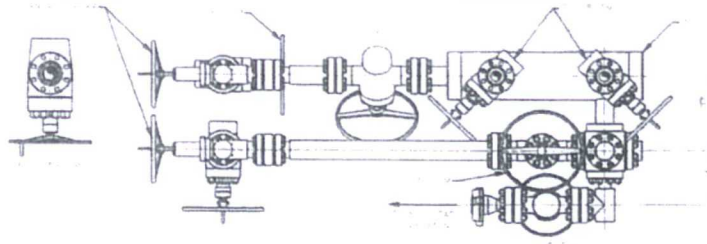
Exhibit 1 EOG Resources 10M BOPE

Rig Floor



- 1 13 5/8" Rotating Head
- 2 Hydril 13 5/8" 10,000 PSI WP GK Annular Preventor
- 3 13 5/8" Cameron Type "U" 10,000 PSI WP Ram Preventors
- 4 2 1/16" 10,000 PSI WP Check Valve
- 5 10,000 PSI WP - 1502 Union to kill line
- 6 2 1/16" 10,000 PSI WP Manual Valves
- 7 13 5/8" 3,000 PSI WP x 13 5/8" 5,000 PSI WP Spacer Spool
- 8 4 1/16" 10,000 PSI WP HCR Valve
- 9 4 1/16" 10,000 PSI WP Manual Valve
- 10 6" OD x 3" ID 10,000 PSI WP Steel Armoured Flex Choke Line
- 11 DSA - 13 5/8" 10,000 PSI WP x 13 5/8" 5,000 PSI WP
- 12 Mud Cross 13 5/8" 10,000 PSI WP
- 13 Blind Rams
- 14 Pipe Rams
- 15 13 5/8" Cameron Type "U" 10,000 PSI WP Pipe Rams
- 16 Flow Line
- 17 2" Fill Line





PROPRIETARY
THIS DRAWING AND THE IDEAS AND INFORMATION INCULCATED IN THIS
DRAWING ARE PROPRIETARY AND ARE NOT TO BE REPRODUCED
DISTRIBUTED OR DISCLOSED IN ANY MANNER WITHOUT THE PRIOR
WRITTEN CONSENT OF A QUALIFIED OFFICER
OF HELMERICH & PAYNE INTERNATIONAL DRILLING CO.

**ISSUED FOR
FABRICATION**
February-10-2014
DRAFTSMAN *[Signature]*
ENGINEER *[Signature]*

STANDARD TO FRANGES		HELMERICH & PAYNE INTERNATIONAL DRILLING CO.	
FABRICATION DIMENSIONS 1. MAX. DIMENSIONS		FILE	
AP TO 24"		3 CHOKE, 3 LEVEL, 10M	
8 IN TO 12"		CHOKE MANIFOLD G.A.	
12 IN TO 18"		CUSTOMER H&P	
18 IN TO 24"		PROJECT	
24 IN TO 30"		DRAWN MWM	
30 IN TO 36"		DATE 2/10/14	
36 IN TO 42"		DWS NO	
42 IN TO 48"		SCALE 3/4" = 1'-0"	
48 IN TO 54"		SHEET 01 OF 01	
54 IN TO 60"		HP-D1254	
60 IN TO 66"		REV	
66 IN TO 72"			
72 IN TO 78"			
78 IN TO 84"			
84 IN TO 90"			
90 IN TO 96"			
96 IN TO 102"			
102 IN TO 108"			
108 IN TO 114"			
114 IN TO 120"			
120 IN TO 126"			
126 IN TO 132"			
132 IN TO 138"			
138 IN TO 144"			
144 IN TO 150"			
150 IN TO 156"			
156 IN TO 162"			
162 IN TO 168"			
168 IN TO 174"			
174 IN TO 180"			
180 IN TO 186"			
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210 IN TO 216"			
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222 IN TO 228"			
228 IN TO 234"			
234 IN TO 240"			
240 IN TO 246"			
246 IN TO 252"			
252 IN TO 258"			
258 IN TO 264"			
264 IN TO 270"			
270 IN TO 276"			
276 IN TO 282"			
282 IN TO 288"			
288 IN TO 294"			
294 IN TO 300"			
300 IN TO 306"			
306 IN TO 312"			
312 IN TO 318"			
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342 IN TO 348"			
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354 IN TO 360"			
360 IN TO 366"			
366 IN TO 372"			
372 IN TO 378"			
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OD	Weight	Wall Th.	Grade	API Drift	Connection
7 5/8 in.	29.70 lb/ft	0.375 in.	VM 110 HC	6.750 in.	VAM® SLIJ-II

PIPE PROPERTIES

Nominal OD	7.625 in.
Nominal ID	6.875 in.
Nominal Cross Section Area	8.541 sqin.
Grade Type	High Collapse
Min. Yield Strength	110 ksi
Max. Yield Strength	140 ksi
Min. Ultimate Tensile Strength	125 ksi

CONNECTION PROPERTIES

Connection Type	Premium integral semi-flush
Connection OD (nom)	7.711 in.
Connection ID (nom)	6.820 in.
Make-up Loss	4.822 in.
Critical Cross Section	5.912 sqin.
Tension Efficiency	69.2 % of pipe
Compression Efficiency	48.5 % of pipe
Internal Pressure Efficiency	100 % of pipe
External Pressure Efficiency	100 % of pipe

CONNECTION PERFORMANCES

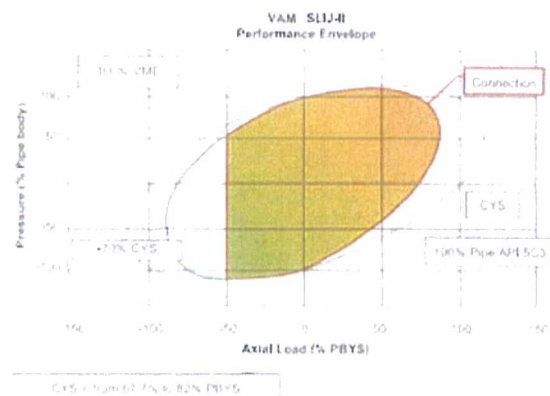
Tensile Yield Strength	651 klb
Compression Resistance	455 klb
Internal Yield Pressure	9470 psi
Uniaxial Collapse Pressure	7890 psi
Max. Bending Capacity	TDB
Max Bending with Sealability	20 °/100 ft

FIELD TORQUE VALUES

Min. Make-up torque	11300 ft.lb
Opt. Make-up torque	12600 ft.lb
Max. Make-up torque	13900 ft.lb

VAM® SLIJ-II is a semi-flush integral premium connection for all casing applications. It combines a near flush design with high performances in tension, compression and gas sealability.

VAM® SLIJ-II has been validated according to the most stringent tests protocols and has an excellent performance history in the world's most prolific HPHT wells.



Do you need help on this product? - Remember no one knows VAM® like VAM

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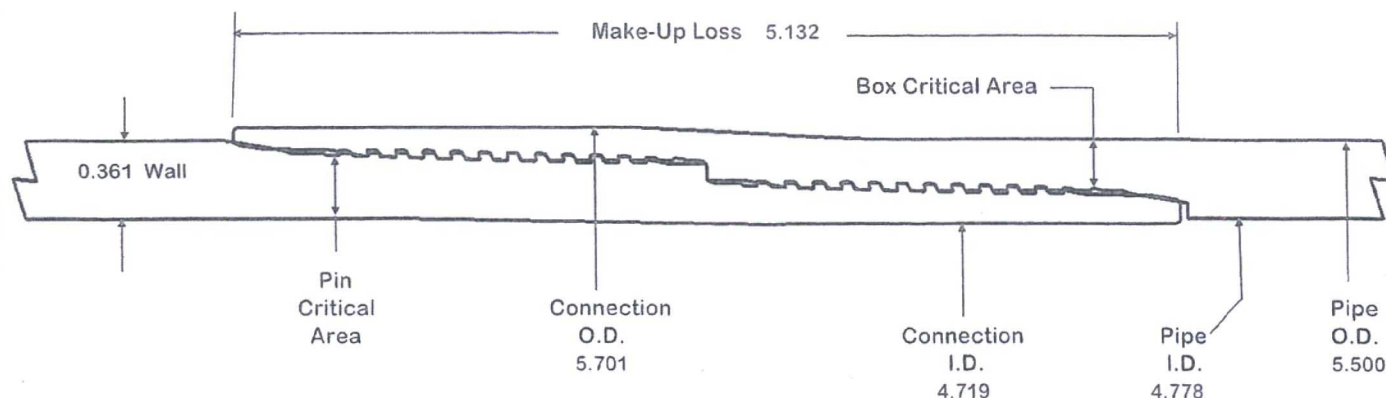
Over 140 VAM® Specialists available worldwide 24/7 for Rig Site Assistance

Other Connection Data Sheets are available at www.vamservices.com

Vallourec Group



VAM® SFC



O.D.
5.500

WEIGHT
20.00

WALL
0.361

GRADE
VST P110EC

DRIFT
4.653

PIPE BODY PROPERTIES

Material Grade	VST P110EC
Min. Yield Strength	125 ksi
Min. Tensile Strength	135 ksi
Outside Diameter	5.500 in
Inside Diameter	4.778 in
Nominal Area	5.828 sq.in.
Yield Strength	729 kips
Ultimate Strength	787 kips
Min Internal Yield	14,360 psi
*High Collapse	12,090 psi

CONNECTION PROPERTIES

Connection OD	5.701 in
Connection ID	4.719 in
Make up Loss	5.132 in
Box Critical Area	4.083 sq.in.
%PB Section Area	70.1%
Pin Critical Area	4.123 sq.in.
%PB Section Area	70.7%
Yield Strength	510 kips
Parting Load	551 kips
Min Internal Yield	14,360 psi
*High Collapse	12,090 psi
Wk Compression	357 kips
Max Pure Bending	20 °/100 ft

Contact: tech.support@vam-usa.com
 Ref. Drawing: SI-PD 100414 Rev.B
 Date: 14-Jun-16
 Time: 2:31 PM

TORQUE DATA ft-lb

min	opt	max
8,700	9,700	10,700



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TECHNICAL SPECIFICATIONS

These specifications are furnished for general information only and are not intended for design purposes. This information is preliminary and may change subject to a final design by VAM-USA Engineering. This is not a controlled document.

DWC/C-IS MS
standard

Casing

5.500" O.D. 20.00 lb./ft.

VST P-110EC

VST P-110EC
125,000
135,000

Material

Grade
Minimum Yield Strength (psi.)
Minimum Ultimate Strength (psi.)



Pipe Dimensions

5.500	Nominal Pipe Body OD (in.)
4.778	Nominal Pipe Body ID (in.)
0.361	Nominal Wall Thickness (in.)
20.00	Nominal Weight (lbs./ft.)
19.83	Plain End Weight (lbs./ft.)
5.828	Nominal Pipe Body Area (sq. in.)

VAM-USA
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Houston, TX 77041
Phone: (713) 479-3200
Fax: (713) 479-3234
E-mail: VAMUSAsales@na.vallourec.com

Pipe Body Performance Properties

729,000	Minimum Pipe Body Yield Strength (lbs.)
12,090	Minimum Collapse Pressure (psi.)
14,360	Minimum Internal Yield Pressure (psi.)
13,100	Hydrostatic Test Pressure (psi.)

Connection Dimensions

6.115	Connection OD (in.)
4.778	Connection ID (in.)
4.653	Connection Drift Diameter (in.)
4.13	Make-up Loss (in.)
5.828	Critical Area (sq. in.)
100.0	Joint Efficiency (%)

Connection Performance Properties

729,000	(1)	Joint Strength (lbs.)
26,040	(2)	Reference String Length (ft.) 1.4 Design Factor
728,000	(3)	API Joint Strength (lbs.)
729,000		Compression Rating (lbs.)
12,090		API Collapse Pressure Rating (psi.)
14,360	(4)	API Internal Pressure Resistance (psi.)
104.2		Maximum Uniaxial Bend Rating (degrees/100 ft.)

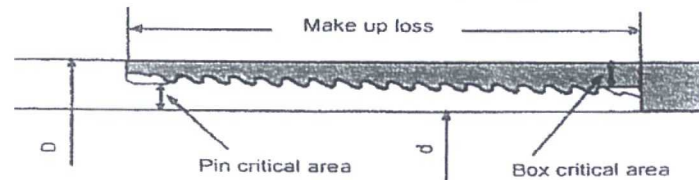
Approximated Field End Torque Values

16,600	(5)	Minimum Final Torque (ft.-lbs.)
19,100	(5)	Maximum Final Torque (ft.-lbs.)
21,600	(6)	Connection Yield Torque (ft.-lbs.)

- (1) Joint Strength is the minimum pipe body yield strength multiplied by the connection critical area.
 (2) Reference String Length is the joint strength divided by both the weight in air and the design factor.
 (3) API Joint Strength is for reference only. It is calculated from Formulas 42 and 43 in the API Bulletin 5C3.
 (4) API Internal Pressure Resistance is calculated from Formulas 31, 32, and 35 in the API Bulletin 5C3.
 (5) Torque values are approximated and may be affected by field conditions.
 (6) Connection yield torque is not to be exceeded.

Connection specifications within the control of VAM-USA were correct as of the date printed. Specifications are subject to change without notice. Certain connection specifications are dependent on the mechanical properties of the pipe. Mechanical properties of mill proprietary pipe grades are obtained from mill publications and are subject to change. Properties of mill proprietary grades should be confirmed with the mill. Users are advised to obtain current connection specifications and verify pipe mechanical properties for each application.

FLUSHMAX-III Connection Data Sheet



Pipe Body	Imperial		S.I.	
Grade	P110		P110	
Pipe OD (D)	7 5/8	in	193.68	mm
Weight	29.7	lb/ft	44.25	kg/m
Actual weight	29.0	lb/ft	43.26	kg/m
Wall thickness (t)	0.375	in	9.53	mm
Pipe ID (d)	6.875	in	174.63	mm
Pipe body cross section	8.537	in ²	5,508	mm ²
Drift Dia.	6.750	in	171.45	mm

Connection				
Box OD (W)	7.625	in	193.68	mm
PIN ID	6.875	in	174.63	mm
Pin critical area	4.420	in ²	2,852	mm ²
Box critical area	4.424	in ²	2,854	mm ²
Joint load efficiency	60	%	60	%
Make up loss	3.040	in	77.22	mm
Thread taper	1/16 (3/4 in per ft)			
Number of threads	5 thread per in.			

Connection Performance Properties

Tensile Yield load	563.4	kips	2,506	kN
M.I.Y.P.	7,574	psi	52.2	MPa
Collapse strength	5,350	psi	36.9	MPa

Note

M.I.Y.P. = Minimum Internal Yield Pressure of the connection

Torque Recommended

Min.	8,700	ft-lb	11,700	N-m
Opti.	9,700	ft-lb	13,100	N-m
Max.	10,700	ft-lb	14,500	N-m
Operational Max.	23,600	ft-lb	32,000	N-m

Note : Operational Max. torque can be applied for high torque application