



HOEBS OCD

APR 14 2017

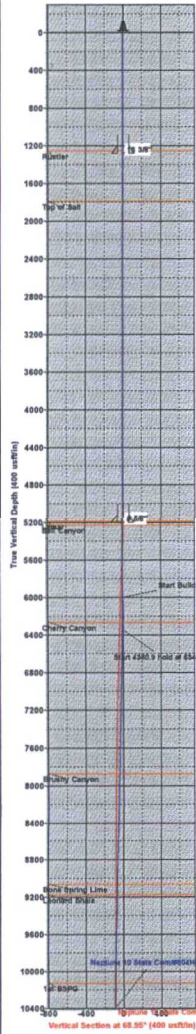
RECEIVED

Lea County, NM (NAD 27 NME)
Neptune 10 State Com #504H
Plan #1

PROJECT DETAILS: Lea County, NM (NAD 27 NME)
Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001
System Datum: Mean Sea Level

WELL DETAILS: #504H
Ground Level: 3610.0
KB = 25' @ 3635.0usft
Northing: 446666.00
Easting: 738077.00
Latitude: 32° 13' 32.365 N
Longitude: 103° 33' 48.414 W

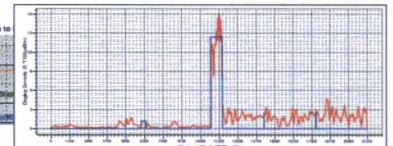
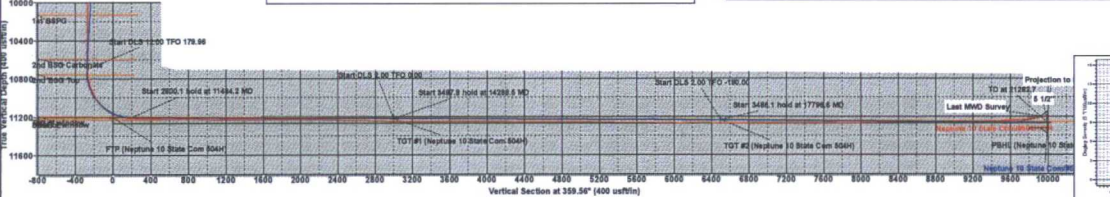
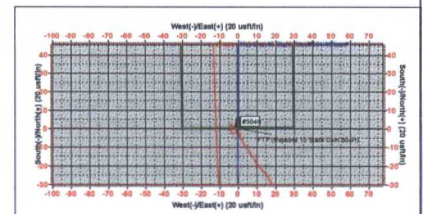
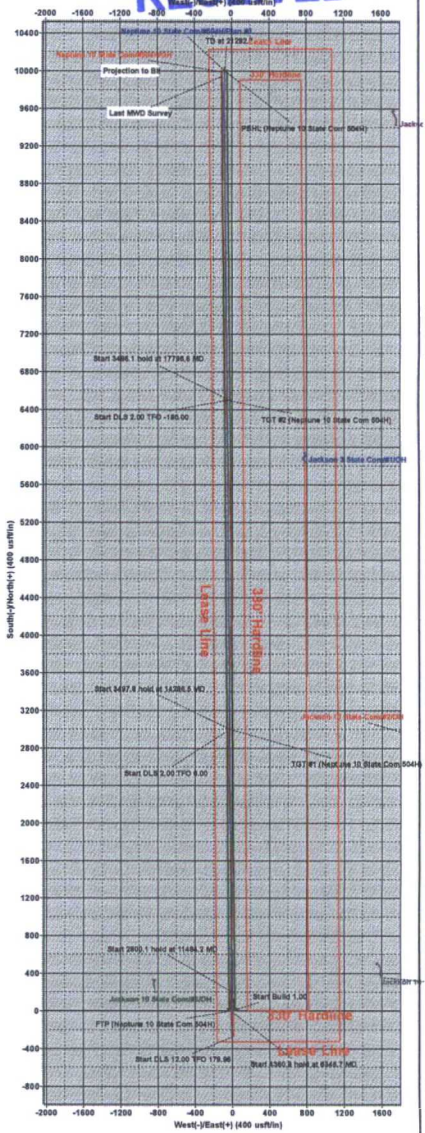
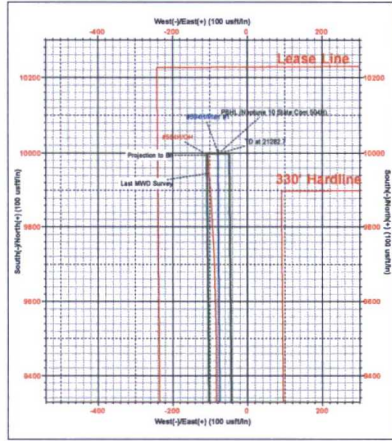
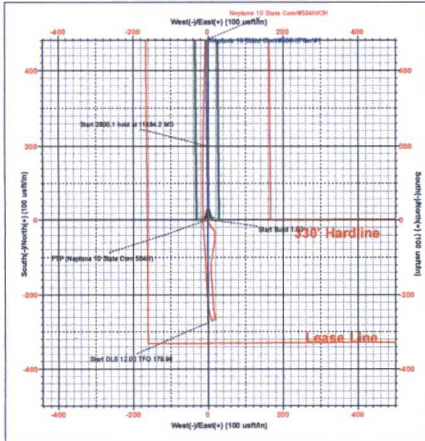
Azimuths to Grid North
True North: -0.41°
Magnetic North: 6.61°
Magnetic Field
Strength: 48008.3nT
Dip Angle: 60.07°
Date: 10/13/2016
Model: IGRF2015
To convert a Magnetic Direction to a Grid Direction, Add 6.61°
To convert a Magnetic Direction to a True Direction, Add 7.02° East
To convert a True Direction to a Grid Direction, Subtract 0.41°



SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	6000.0	0.00	0.00	6000.0	0.0	0.0	0.00	0.00	0.0	
3	6346.7	3.47	179.60	6346.5	-10.5	0.1	1.00	179.60	-10.5	
4	10707.7	3.47	179.60	10699.5	-274.2	1.9	0.00	0.00	-274.2	
5	11484.2	89.71	359.56	11205.8	199.9	-1.8	12.00	179.96	199.9	TGT #1 (Neptune 10 State Com 504H)
6	14284.3	89.71	359.56	11220.0	2999.9	-23.3	0.00	0.00	3000.0	TGT #2 (Neptune 10 State Com 504H)
7	14286.5	89.75	359.56	11220.0	3002.1	-23.3	2.00	0.00	3002.2	
8	17784.3	89.75	359.56	11235.0	6499.8	-50.1	0.00	0.00	6500.0	
9	17786.6	89.51	359.56	11235.1	6512.1	-50.2	2.00	-180.00	6512.3	PBHL (Neptune 10 State Com 504H)
10	21282.7	89.51	359.56	11265.0	9998.0	-77.0	0.00	0.00	9998.3	

CASING DETAILS			
TVD	MD	Name	Size
1280.0	1280.0	13 3/8"	13-3/8
5200.0	5200.0	9 5/8"	9-5/8
11265.021282.7		5 1/2"	5-1/2

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)					
Name	TVD	+N/-S	+E/-W	Northing	Easting
FTP (Neptune 10 State Com 504H)	11205.0	0.0	0.0	446666.00	738077.00
TGT #1 (Neptune 10 State Com 504H)	11220.0	2999.9	-23.3	446666.90	738053.74
TGT #2 (Neptune 10 State Com 504H)	11235.0	6499.8	-50.1	453165.80	738026.86
PBHL (Neptune 10 State Com 504H)	11265.0	9998.0	-77.0	456664.00	738000.00



Lea County, NM (NAD 27 NME)
Neptune 10 State Com #504H
Plan #1
7/11/2016 10:10:00



EOG Resources - Midland

Lea County, NM (NAD 27 NME)

Neptune 10 State Com

#504H

OH

Survey: Leam MWD #1

EOG PVA

21 December, 2016

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EOG Resources, Inc.
EOG PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #504H
Project:	Lea County, NM (NAD 27 NME)	TVD Reference:	KB = 25' @ 3635.0usft
Site:	Neptune 10 State Com	MD Reference:	KB = 25' @ 3635.0usft
Well:	#504H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.1 Single User Db

Project	Lea County, NM (NAD 27 NME)		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site	Neptune 10 State Com		
Site Position:		Northing:	446,603.00 usft
From:	Map	Easting:	740,781.00 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 13' 31.549 N
		Longitude:	103° 33' 16.943 W
		Grid Convergence:	0.42 °

Well	#504H		
Well Position	+N/-S	0.0 usft	Northing:
	+E/-W	0.0 usft	Easting:
Position Uncertainty	0.0 usft	Wellhead Elevation:	0.0 usft
		Latitude:	32° 13' 32.365 N
		Longitude:	103° 33' 48.414 W
		Ground Level:	3,610.0 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	10/13/2016	7.02	60.07	48,008

Design	OH			
Audit Notes:				
Version:	1.0	Phase:	ACTUAL	Tie On Depth:
				0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	359.56



EOG Resources, Inc.

EOG PVA

Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 27 NME)
 Site: Neptune 10 State Com
 Well: #504H
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well #504H
 TVD Reference: KB = 25' @ 3635.0usft
 MD Reference: KB = 25' @ 3635.0usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: EDM 5000.1 Single User Db

Survey Program Date 12/21/2016

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
121.0	1,287.0	gyro (OH)	NSG-CT_D/P	Continuous north-seeking gyro in drillpipe
1,438.0	21,282.0	Lean MWD #1 (OH)	MWD	MWD - Standard

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
1,287.0	0.50	135.00	1,287.0	-2.7	1.2	0.00	0.00	0.00	-2.8	-1.1
1,438.0	0.40	231.80	1,438.0	-3.5	1.2	0.45	-0.07	64.11	-1.2	3.5
1,626.0	0.30	310.50	1,626.0	-3.6	0.3	0.24	-0.05	41.86	2.6	2.5
1,814.0	0.30	353.30	1,814.0	-2.8	-0.1	0.12	0.00	22.77	2.8	0.4
2,002.0	0.20	240.20	2,002.0	-2.5	-0.4	0.22	-0.05	-60.16	-1.6	1.9
2,191.0	0.30	309.00	2,191.0	-2.3	-1.1	0.16	0.05	36.40	0.6	2.5
2,379.0	0.30	227.00	2,379.0	-2.4	-1.8	0.21	0.00	-43.62	-3.0	0.5
2,566.0	0.30	261.80	2,566.0	-2.8	-2.7	0.10	0.00	18.61	-3.1	2.3
2,754.0	0.20	327.20	2,754.0	-2.6	-3.4	0.15	-0.05	34.79	0.3	4.2
2,942.0	0.30	351.80	2,942.0	-1.8	-3.6	0.08	0.05	13.09	1.3	3.8
3,130.0	0.40	328.60	3,130.0	-0.7	-4.0	0.09	0.05	-12.34	-1.5	3.8
3,318.0	0.10	271.70	3,318.0	-0.2	-4.5	0.19	-0.16	-30.27	-4.5	0.3
3,506.0	0.30	68.10	3,506.0	0.0	-4.2	0.21	0.11	83.19	3.9	1.6
3,694.0	0.20	52.30	3,694.0	0.4	-3.5	0.06	-0.05	-8.40	2.5	2.5
3,882.0	0.40	343.20	3,882.0	1.2	-3.4	0.20	0.11	-36.76	-2.2	2.9
4,070.0	0.30	312.10	4,070.0	2.2	-4.0	0.11	-0.05	-16.54	-4.4	1.1
4,258.0	0.10	307.00	4,258.0	2.6	-4.5	0.11	-0.11	-2.71	-5.2	0.6
4,446.0	0.50	109.40	4,446.0	2.4	-3.8	0.32	0.21	86.38	4.4	1.0
4,634.0	2.30	147.40	4,633.9	-1.0	-1.0	1.03	0.96	20.21	-0.3	-1.4
4,822.0	3.50	150.00	4,821.6	-9.2	3.9	0.64	0.64	1.38	-9.9	-1.2
5,009.0	3.50	143.20	5,008.3	-18.7	10.1	0.22	0.00	-3.64	-21.0	-3.1



EOG Resources, Inc.
EOG PVA

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 27 NME)
Site: Neptune 10 State Com
Well: #504H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #504H
TVD Reference: KB = 25' @ 3635.0usft
MD Reference: KB = 25' @ 3635.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
5,078.0	2.60	139.30	5,077.2	-21.5	12.4	1.34	-1.30	-5.65	-24.4	-4.6	
5,199.0	2.00	136.30	5,198.1	-25.2	15.7	0.51	-0.50	-2.48	-29.0	-6.1	
5,387.0	4.10	172.70	5,385.8	-34.2	18.8	1.47	1.12	19.36	-36.3	14.3	
5,576.0	4.40	184.10	5,574.3	-48.1	19.1	0.47	0.16	6.03	-46.6	22.6	
5,764.0	5.30	187.70	5,761.6	-63.9	17.4	0.51	0.48	1.91	-61.0	26.0	
5,952.0	5.20	188.70	5,948.9	-81.0	15.0	0.07	-0.05	0.53	-77.7	27.2	
6,140.0	5.00	188.90	6,136.1	-97.5	12.4	0.11	-0.11	0.11	-92.7	27.1	
6,329.0	4.70	190.10	6,324.4	-113.2	9.8	0.17	-0.16	0.63	-100.6	27.8	
6,517.0	5.40	176.40	6,511.7	-129.6	9.0	0.74	0.37	-7.29	-109.3	2.0	
6,704.0	5.30	176.20	6,697.9	-147.0	10.1	0.05	-0.05	-0.11	-115.5	2.3	
6,893.0	5.00	176.20	6,886.1	-164.0	11.3	0.16	-0.16	0.00	-121.0	3.0	
7,081.0	4.60	176.60	7,073.5	-179.7	12.3	0.21	-0.21	0.21	-125.4	4.5	
7,269.0	4.60	175.90	7,260.9	-194.7	13.2	0.03	0.00	-0.37	-129.2	3.6	
7,457.0	4.50	175.90	7,448.3	-209.6	14.3	0.05	-0.05	0.00	-132.7	4.3	
7,645.0	4.20	176.10	7,635.7	-223.8	15.3	0.16	-0.16	0.11	-135.6	5.5	
7,833.0	3.70	176.40	7,823.3	-236.7	16.1	0.27	-0.27	0.16	-137.2	6.9	
8,023.0	3.40	171.50	8,012.9	-248.4	17.4	0.22	-0.16	-2.58	-137.7	-3.8	
8,213.0	1.80	159.90	8,202.7	-256.8	19.2	0.88	-0.84	-6.11	-131.8	-28.6	
8,404.0	0.30	125.60	8,393.7	-259.9	20.7	0.82	-0.79	-17.96	-88.9	-90.2	
8,594.0	0.50	142.30	8,583.7	-260.9	21.6	0.12	0.11	8.79	-103.3	-53.8	
8,783.0	0.50	200.80	8,772.7	-262.3	21.8	0.26	0.00	30.95	-90.4	56.5	
8,973.0	0.40	176.60	8,962.7	-263.7	21.5	0.11	-0.05	-12.74	-95.6	14.7	
9,162.0	0.60	230.20	9,151.7	-265.0	20.8	0.26	0.11	28.36	-39.0	77.3	
9,352.0	0.30	204.90	9,341.7	-266.1	19.8	0.19	-0.16	-13.32	-59.3	47.9	
9,541.0	0.60	325.70	9,530.7	-265.7	19.1	0.42	0.16	63.92	61.3	20.4	
9,732.0	0.20	349.60	9,721.7	-264.6	18.4	0.22	-0.21	12.51	51.7	-7.8	
9,921.0	0.40	239.90	9,910.7	-264.6	17.8	0.27	0.11	-58.04	-5.0	41.1	



EOG Resources, Inc.

EOG PVA

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 27 NME)
Site: Neptune 10 State Com
Well: #504H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #504H
TVD Reference: KB = 25' @ 3635.0usft
MD Reference: KB = 25' @ 3635.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
10,111.0	0.70	253.90	10,100.6	-265.2	16.1	0.17	0.16	7.37	6.4	30.2
10,300.0	0.90	211.00	10,289.6	-266.8	14.3	0.32	0.11	-22.70	-8.5	19.7
10,490.0	0.40	217.00	10,479.6	-268.6	13.1	0.27	-0.26	3.16	0.6	13.6
10,648.0	0.60	232.80	10,637.6	-269.6	12.1	0.15	0.13	10.00	8.7	5.4
10,688.0	0.50	218.40	10,677.6	-269.8	11.8	0.42	-0.25	-36.00	8.6	5.9
10,782.0	9.20	342.00	10,771.2	-263.0	9.2	10.09	9.26	131.49	-7.4	-10.1
10,829.0	14.40	343.60	10,817.2	-253.8	6.4	11.08	11.06	3.40	-11.0	-7.9
10,878.0	18.90	349.20	10,864.1	-240.2	3.2	9.74	9.18	11.43	-14.1	-4.1
10,925.0	21.50	354.80	10,908.2	-224.1	1.0	6.89	5.53	11.91	-14.6	-0.6
10,973.0	26.40	356.20	10,952.1	-204.7	-0.5	10.28	10.21	2.92	-13.1	1.2
11,020.0	31.60	357.50	10,993.2	-181.9	-1.7	11.14	11.06	2.77	-10.9	2.6
11,068.0	36.80	356.60	11,032.9	-155.0	-3.1	10.88	10.83	-1.87	-8.1	3.8
11,115.0	42.80	357.30	11,069.0	-125.0	-4.7	12.80	12.77	1.49	-5.3	5.3
11,163.0	48.30	356.20	11,102.6	-90.8	-6.7	11.57	11.46	-2.29	-2.4	7.1
11,210.0	55.10	356.60	11,131.7	-54.0	-9.0	14.48	14.47	0.85	0.1	9.2
11,259.0	61.60	357.50	11,157.4	-12.4	-11.1	13.36	13.27	1.84	2.1	11.0
11,289.9	66.20	358.04	11,171.0	15.4	-12.2	14.97	14.89	1.73	2.9	11.9
FTP (Neptune 10 State Com 504H)										
11,306.0	68.60	358.30	11,177.2	30.2	-12.7	14.97	14.90	1.64	3.1	12.2
11,354.0	74.00	359.40	11,192.5	75.7	-13.6	11.46	11.25	2.29	3.7	12.8
11,401.0	80.60	0.60	11,202.9	121.5	-13.6	14.26	14.04	2.55	3.9	12.4
11,456.0	86.50	1.30	11,209.1	176.1	-12.7	10.80	10.73	1.27	4.0	11.1
11,505.0	87.90	1.00	11,211.4	225.0	-11.7	2.92	2.86	-0.61	5.5	9.7
11,600.0	89.50	1.20	11,213.6	320.0	-9.9	1.70	1.68	0.21	7.2	7.2
11,695.0	89.10	1.70	11,214.8	414.9	-7.5	0.67	-0.42	0.53	7.8	4.0
11,790.0	88.30	1.50	11,216.9	509.9	-4.8	0.87	-0.84	-0.21	9.5	0.7
11,886.0	90.70	2.40	11,217.8	605.8	-1.5	2.67	2.50	0.94	9.9	-3.3



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EOG PVA

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Well: #504H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #504H
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Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
11,980.0	88.90	2.20	11,218.1	699.7	2.2	1.93	-1.91	-0.21	9.7	-7.8
12,076.0	89.00	0.10	11,219.8	795.7	4.2	2.19	0.10	-2.19	11.0	-10.5
12,171.0	89.40	0.30	11,221.2	890.7	4.5	0.47	0.42	0.21	11.8	-11.6
12,266.0	88.20	359.80	11,223.2	985.7	4.6	1.37	-1.26	-0.53	13.4	-12.4
12,361.0	90.50	0.50	11,224.2	1,080.7	4.8	2.53	2.42	0.74	14.0	-13.3
12,456.0	89.80	359.90	11,224.0	1,175.6	5.2	0.97	-0.74	-0.63	13.2	-14.4
12,551.0	89.40	358.90	11,224.7	1,270.6	4.2	1.13	-0.42	-1.05	13.4	-14.1
12,646.0	90.70	359.10	11,224.6	1,365.6	2.5	1.38	1.37	0.21	12.8	-13.2
12,741.0	89.30	358.30	11,224.6	1,460.6	0.3	1.70	-1.47	-0.84	12.4	-11.8
12,836.0	91.30	359.10	11,224.1	1,555.6	-1.8	2.27	2.11	0.84	11.4	-10.4
12,931.0	89.70	358.50	11,223.2	1,650.5	-3.8	1.80	-1.68	-0.63	10.1	-9.1
13,026.0	89.30	357.50	11,224.1	1,745.5	-7.1	1.13	-0.42	-1.05	10.4	-6.5
13,120.0	90.90	357.80	11,223.9	1,839.4	-11.0	1.73	1.70	0.32	9.8	-3.4
13,214.0	89.20	357.50	11,223.8	1,933.3	-14.8	1.84	-1.81	-0.32	9.2	-0.2
13,308.0	90.70	357.50	11,223.9	2,027.2	-18.9	1.60	1.60	0.00	8.8	3.1
13,402.0	88.90	357.80	11,224.2	2,121.1	-22.8	1.94	-1.91	0.32	8.7	6.3
13,497.0	88.70	358.70	11,226.2	2,216.1	-25.7	0.97	-0.21	0.95	10.2	8.4
13,591.0	87.40	359.10	11,229.4	2,310.0	-27.5	1.45	-1.38	0.43	12.9	9.5
13,685.0	88.50	358.90	11,232.8	2,403.9	-29.1	1.19	1.17	-0.21	15.8	10.4
13,779.0	90.20	358.90	11,233.9	2,497.9	-30.9	1.81	1.81	0.00	16.4	11.5
13,873.0	88.90	358.70	11,234.6	2,591.9	-32.9	1.40	-1.38	-0.21	16.7	12.8
13,967.0	87.70	359.80	11,237.4	2,685.8	-34.1	1.73	-1.28	1.17	19.0	13.3
14,061.0	89.40	359.90	11,239.8	2,779.8	-34.4	1.81	1.81	0.11	20.9	12.8
14,155.0	88.10	0.10	11,241.8	2,873.8	-34.4	1.40	-1.38	0.21	22.4	12.1
14,249.0	86.70	0.80	11,246.1	2,967.7	-33.6	1.66	-1.49	0.74	26.2	10.6
14,280.3	87.30	0.87	11,247.7	2,998.9	-33.2	1.93	1.91	0.21	27.7	9.9

TGT #1 (Neptune 10 State Com 504H)



EOG Resources, Inc.

EOG PVA

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 27 NME)
Site: Neptune 10 State Com
Well: #504H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #504H
TVD Reference: KB = 25' @ 3635.0usft
MD Reference: KB = 25' @ 3635.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
14,343.0	88.50	1.00	11,250.0	3,061.6	-32.2	1.93	1.91	0.21	29.7	8.4
14,436.0	91.00	0.60	11,250.4	3,154.5	-30.9	2.72	2.69	-0.43	29.7	6.4
14,530.0	91.10	1.30	11,248.7	3,248.5	-29.3	0.75	0.11	0.74	27.6	4.1
14,624.0	88.80	1.50	11,248.8	3,342.5	-27.0	2.46	-2.45	0.21	27.3	1.1
14,718.0	89.90	1.90	11,249.8	3,436.4	-24.2	1.25	1.17	0.43	28.0	-2.4
14,812.0	90.70	1.30	11,249.3	3,530.4	-21.6	1.06	0.85	-0.64	27.1	-5.7
14,906.0	92.10	1.70	11,247.1	3,624.3	-19.1	1.55	1.49	0.43	24.4	-8.9
14,999.0	90.70	1.00	11,244.8	3,717.3	-16.9	1.68	-1.51	-0.75	21.7	-11.8
15,093.0	89.40	0.80	11,244.7	3,811.3	-15.5	1.40	-1.38	-0.21	21.2	-14.0
15,187.0	88.30	0.80	11,246.6	3,905.2	-14.1	1.17	-1.17	0.00	22.7	-16.1
15,281.0	88.40	1.00	11,249.3	3,999.2	-12.7	0.24	0.11	0.21	25.0	-18.3
15,375.0	88.50	1.30	11,251.8	4,093.1	-10.8	0.34	0.11	0.32	27.1	-20.9
15,469.0	89.30	0.30	11,253.6	4,187.1	-9.5	1.36	0.85	-1.06	28.5	-22.9
15,563.0	90.30	0.60	11,254.0	4,281.1	-8.7	1.11	1.06	0.32	28.5	-24.4
15,657.0	89.80	359.20	11,253.9	4,375.1	-8.9	1.58	-0.53	-1.49	28.0	-24.9
15,751.0	90.10	359.80	11,254.0	4,469.1	-9.7	0.71	0.32	0.64	27.7	-24.8
15,845.0	90.50	359.90	11,253.5	4,563.1	-10.0	0.44	0.43	0.11	26.8	-25.3
15,939.0	90.30	359.60	11,252.8	4,657.1	-10.4	0.38	-0.21	-0.32	25.7	-25.6
16,034.0	91.10	359.60	11,251.7	4,752.1	-11.0	0.84	0.84	0.00	24.1	-25.7
16,128.0	90.00	359.80	11,250.8	4,846.1	-11.5	1.19	-1.17	0.21	22.8	-25.9
16,223.0	88.00	358.30	11,252.4	4,941.0	-13.1	2.63	-2.11	-1.58	24.1	-25.0
16,317.0	88.70	358.30	11,255.1	5,034.9	-15.9	0.74	0.74	0.00	26.4	-23.0
16,411.0	90.70	359.60	11,255.6	5,128.9	-17.6	2.54	2.13	1.38	26.5	-22.0
16,506.0	88.80	359.10	11,256.2	5,223.9	-18.7	2.27	-2.21	-0.53	26.7	-21.6
16,649.0	88.80	358.30	11,259.4	5,366.8	-21.9	0.58	0.14	-0.56	29.3	-19.5
16,744.0	89.90	357.30	11,260.5	5,461.7	-25.6	1.56	1.16	-1.05	30.0	-16.6
16,838.0	90.80	358.50	11,259.9	5,555.7	-29.0	1.60	0.96	1.28	29.0	-13.9



EOG Resources, Inc.
EOG PVA

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 27 NME)
Site: Neptune 10 State Com
Well: #504H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #504H
TVD Reference: KB = 25' @ 3635.0usft
MD Reference: KB = 25' @ 3635.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
16,933.0	90.20	359.10	11,259.1	5,650.7	-31.0	0.89	-0.63	0.63	27.7	-12.6
17,028.0	88.50	358.50	11,260.2	5,745.6	-33.0	1.90	-1.79	-0.63	28.4	-11.3
17,123.0	89.50	357.30	11,261.8	5,840.5	-36.5	1.64	1.05	-1.26	29.7	-8.6
17,217.0	88.50	357.80	11,263.5	5,934.4	-40.5	1.19	-1.06	0.53	30.9	-5.3
17,312.0	89.30	357.10	11,265.3	6,029.3	-44.7	1.12	0.84	-0.74	32.3	-1.8
17,407.0	91.50	356.90	11,264.6	6,124.2	-49.7	2.33	2.32	-0.21	31.3	2.5
17,502.0	90.00	358.00	11,263.4	6,219.1	-53.9	1.96	-1.58	1.16	29.6	6.0
17,596.0	89.20	356.10	11,264.1	6,313.0	-58.8	2.19	-0.85	-2.02	29.9	10.1
17,691.0	89.50	357.60	11,265.1	6,407.8	-64.0	1.61	0.32	1.58	30.5	14.6
17,782.6	90.96	358.28	11,264.8	6,499.3	-67.3	1.76	1.60	0.74	29.8	17.1
TGT #2 (Neptune 10 State Com 504H)										
17,785.0	91.00	358.30	11,264.7	6,501.7	-67.3	1.76	1.60	0.74	29.7	17.2
17,879.0	88.80	358.70	11,264.9	6,595.7	-69.8	2.38	-2.34	0.43	29.1	18.9
17,973.0	88.90	0.30	11,266.8	6,689.7	-70.6	1.71	0.11	1.70	30.2	19.0
18,066.0	89.70	359.90	11,267.9	6,782.7	-70.5	0.96	0.86	-0.43	30.5	18.2
18,161.0	89.10	1.00	11,268.9	6,877.7	-69.7	1.32	-0.63	1.16	30.7	16.7
18,255.0	89.80	0.50	11,269.8	6,971.6	-68.5	0.92	0.74	-0.53	30.8	14.7
18,349.0	90.40	359.20	11,269.6	7,065.6	-68.7	1.52	0.64	-1.38	29.8	14.3
18,443.0	88.90	0.30	11,270.2	7,159.6	-69.1	1.98	-1.60	1.17	29.6	13.9
18,537.0	92.30	1.70	11,269.2	7,253.6	-67.5	3.91	3.62	1.49	27.8	11.6
18,631.0	88.90	1.50	11,268.3	7,347.5	-64.9	3.62	-3.62	-0.21	26.0	8.2
18,725.0	88.30	0.60	11,270.5	7,441.5	-63.2	1.15	-0.64	-0.96	27.5	5.8
18,819.0	89.80	0.80	11,272.1	7,535.5	-62.0	1.61	1.60	0.21	28.2	3.9
18,913.0	91.30	358.50	11,271.2	7,629.5	-62.6	2.92	1.60	-2.45	26.5	3.8
19,007.0	90.70	358.30	11,269.6	7,723.4	-65.2	0.67	-0.64	-0.21	24.1	5.7
19,100.0	91.70	357.60	11,267.6	7,816.3	-68.5	1.31	1.08	-0.75	21.3	8.3
19,194.0	90.80	359.90	11,265.6	7,910.3	-70.6	2.63	-0.96	2.45	18.5	9.6



EOG Resources, Inc.

EOG PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #504H
Project:	Lea County, NM (NAD 27 NME)	TVD Reference:	KB = 25' @ 3635.0usft
Site:	Neptune 10 State Com	MD Reference:	KB = 25' @ 3635.0usft
Well:	#504H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.1 Single User Db

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
19,288.0	90.50	358.50	11,264.5	8,004.3	-71.9	1.52	-0.32	-1.49	16.6	10.2	
19,382.0	91.50	357.50	11,262.9	8,098.2	-75.2	1.50	1.06	-1.06	14.2	12.8	
19,476.0	90.90	358.00	11,260.9	8,192.1	-78.9	0.83	-0.64	0.53	11.4	15.7	
19,570.0	91.10	356.90	11,259.2	8,286.0	-83.0	1.19	0.21	-1.17	9.0	19.2	
19,664.0	92.90	357.50	11,256.0	8,379.8	-87.6	2.02	1.91	0.64	4.9	23.1	
19,757.0	90.60	359.20	11,253.1	8,472.7	-90.3	3.07	-2.47	1.83	1.2	25.0	
19,851.0	89.80	0.60	11,252.8	8,566.7	-90.5	1.72	-0.85	1.49	0.1	24.5	
19,945.0	90.30	359.60	11,252.7	8,660.7	-90.3	1.19	0.53	-1.06	-0.8	23.6	
20,039.0	90.50	359.60	11,252.1	8,754.7	-91.0	0.21	0.21	0.00	-2.3	23.5	
20,133.0	89.80	1.20	11,251.8	8,848.7	-90.3	1.86	-0.74	1.70	-3.3	22.1	
20,227.0	91.30	1.30	11,250.9	8,942.7	-88.3	1.60	1.60	0.11	-5.0	19.4	
20,321.0	89.50	1.70	11,250.3	9,036.6	-85.8	1.96	-1.91	0.43	-6.5	16.2	
20,415.0	90.00	1.00	11,250.7	9,130.6	-83.6	0.92	0.53	-0.74	-6.9	13.2	
20,509.0	88.90	0.10	11,251.6	9,224.6	-82.7	1.51	-1.17	-0.96	-6.8	11.6	
20,604.0	90.20	0.10	11,252.3	9,319.6	-82.5	1.37	1.37	0.00	-6.9	10.7	
20,699.0	92.90	0.50	11,249.7	9,414.5	-82.0	2.87	2.84	0.42	-10.2	9.5	
20,794.0	93.10	359.10	11,244.8	9,509.4	-82.4	1.49	0.21	-1.47	-16.0	9.1	
20,888.0	92.90	358.90	11,239.9	9,603.3	-84.0	0.30	-0.21	-0.21	-21.7	10.0	
20,983.0	94.40	358.20	11,233.8	9,698.0	-86.4	1.74	1.58	-0.74	-28.6	11.7	
21,076.0	96.60	356.90	11,224.9	9,790.5	-90.3	2.74	2.37	-1.40	-38.3	15.0	
21,171.0	98.50	356.20	11,212.4	9,884.5	-96.0	2.13	2.00	-0.74	-51.5	20.1	
21,233.0	99.90	355.90	11,202.5	9,945.6	-100.2	2.31	2.26	-0.48	-61.9	24.0	
Last MWD Survey											
21,272.1	99.90	355.90	11,195.8	9,984.0	-103.0	0.00	0.00	0.00	-69.0	26.5	
PBHL (Neptune 10 State Com 504H)											
21,282.0	99.90	355.90	11,194.1	9,993.7	-103.7	0.00	0.00	0.00	-70.7	27.1	
Projection to Bit											



EOG Resources, Inc.
EOG PVA

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 27 NME)
Site: Neptune 10 State Com
Well: #504H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #504H
TVD Reference: KB = 25' @ 3635.0usft
MD Reference: KB = 25' @ 3635.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

Survey Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
21,233.0	11,202.5	9,945.6	-100.2	Last MWD Survey
21,282.0	11,194.1	9,993.7	-103.7	Projection to Bit

Checked By: _____ Approved By: _____ Date: _____