

Naquss 30 State Com #501H

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: #501H

Ground Level:		3745.0	
KB = 25' @ 3770.0usft			
Northing	Easting	Latitude	Longitude
530715.00	752183.00	32° 27' 23.016 N	103° 30' 56.744 W



Azimuths to Grid North
 True North: -0.44°
 Magnetic North: 8.55°

Magnetic Field
 Strength: 46120.0snT
 Dip Angle: 60.29°
 Date: 1/26/2017
 Model: IGRF2015

To convert a Magnetic Direction to a Grid Direction, Add 6.55°
To convert a Magnetic Direction to a True Direction, Add 6.99° East
To convert a True Direction to a Grid Direction, Subtract 0.44°

SECTION DETAILS

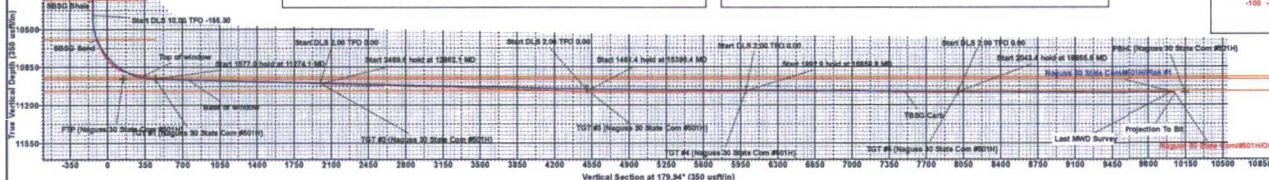
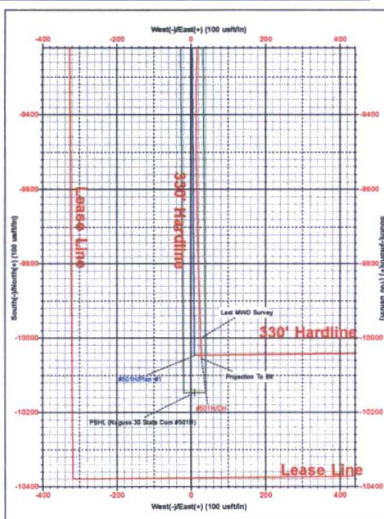
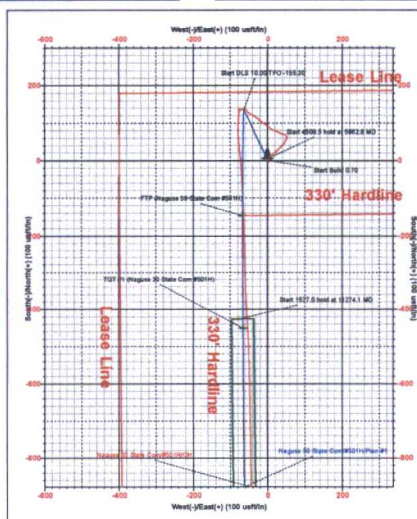
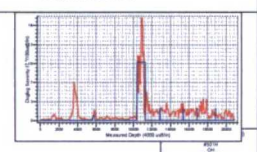
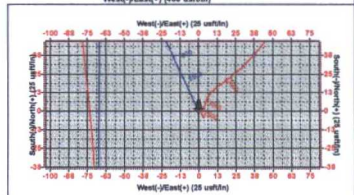
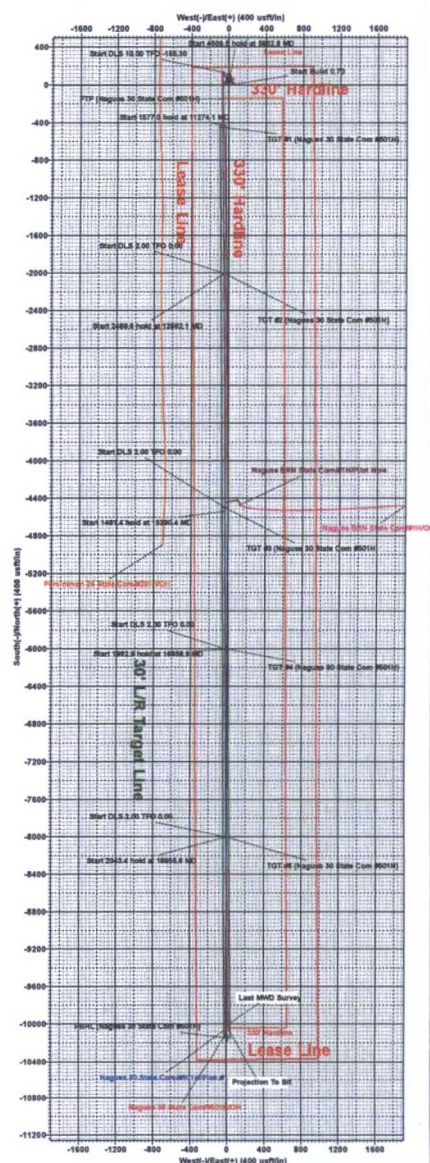
Sec	MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	5600.0	0.00	0.00	5600.0	0.0	0.0	0.00	0.00	0.0	
3	5862.8	1.83	334.84	5862.8	3.8	-1.8	0.70	334.84	-3.8	
4	10372.3	1.83	334.84	10369.9	134.3	-63.1	0.00	0.00	-134.3	
5	11274.1	88.52	179.55	10959.3	-423.7	-66.4	10.00	-155.30	423.6	
6	12851.1	88.52	179.55	11000.0	-2000.1	-54.0	0.00	0.00	2000.0	TGT #2 (Naguss 30 State Com #501H)
7	12862.1	88.74	179.55	11000.3	-2011.1	-53.9	2.00	0.00	2011.1	
8	15351.7	88.74	179.55	11055.0	-4500.0	-34.4	0.00	0.00	4500.0	TGT #3 (Naguss 30 State Com #501H)
9	15390.4	89.51	179.55	11055.6	-4538.7	-34.0	2.00	0.00	4538.6	
10	16851.8	89.51	179.55	11068.0	-6000.0	-22.6	0.00	0.00	6000.0	TGT #4 (Naguss 30 State Com #501H)
11	16858.9	89.66	179.55	11068.1	-6007.2	-22.5	2.00	0.00	6007.1	
12	18851.9	89.66	179.55	11080.0	-8000.0	-6.9	0.00	0.00	8000.0	TGT #5 (Naguss 30 State Com #501H)
13	18855.6	89.73	179.55	11080.0	-8003.7	-6.8	2.00	0.00	8003.7	
14	20899.0	89.73	179.55	11089.6	-10047.0	9.2	0.00	0.00	10047.0	

CASING DETAILS

No casing data is available

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N+S	+E+W	Nothing	Easting
TGT #2 (Nagusa 30 State Com #501H)	1090.0	-2000.1	-64.4	528714.9	752129.0
TGT #1 (Nagusa 30 State Com #501H)	1090.0	-4810.0	-34.4	528214.0	752148.0
TGT #3 (Nagusa 30 State Com #501H)	1088.0	-4000.0	-22.8	524715.0	752160.4
TGT #5 (Nagusa 30 State Com #501H)	1090.0	-4000.0	-4.9	522871.2	752176.1
FTP (Nagusa 30 State Com #501H)	1090.0	-147.0	-48.0	530568.0	752115.0
PBHL (Nagusa 30 State Com #501H)	1090.0	-10147.0	-1.0	520668.0	752193.0
TGT #1 (Nagusa 30 State Com #501H)	1090.0	-4810.0	-46.2	530264.0	752186.4





EOG Resources - Midland

Lea County, NM (NAD 27 NME)

Naguss 30 State Com

#501H

OH

Design: OH

PVA

30 May, 2017

HOBBS OCD
AUG 09 2017
RECEIVED



EOG Resources, Inc.

PVA

Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 27 NME)
 Site: Naguss 30 State Com
 Well: #501H
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well #501H
 TVD Reference: KB = 25' @ 3770.0usft
 MD Reference: KB = 25' @ 3770.0usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: EDM 5000.14 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	Naguss 30 State Com		
Site Position:		Northing:	530,715.00 usft
From: Map		Easting:	752,183.00 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 27' 23.016 N
		Longitude:	103° 30' 56.744 W
		Grid Convergence:	0.44 °

Well	#501H					
Well Position	+N/-S	0.0 usft	Northing:	530,715.00 usft	Latitude:	32° 27' 23.016 N
	+E/-W	0.0 usft	Easting:	752,183.00 usft	Longitude:	103° 30' 56.744 W
Position Uncertainty	0.0 usft		Wellhead Elevation:	0.0 usft	Ground Level:	3,745.0 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	1/26/2017	6.99	60.29	48,119.97730167

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	179.94

Survey Program		Date: 5/30/2017		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
208.0	20,925.0	Intrepid MWD #1 (OH)	MWD	MWD - Standard



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Survey											
MD (usft)	Inc (°)	Azi (grid_north_azim)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0
208.0	0.20	217.70	208.0	-0.3	-0.2	0.10	0.10	0.00	-0.4	0.0	
408.0	0.20	302.70	408.0	-0.4	-0.7	0.14	0.00	42.50	-0.4	0.7	
594.0	0.20	68.20	594.0	-0.1	-0.7	0.19	0.00	67.47	0.7	0.2	
779.0	0.00	153.90	779.0	0.0	-0.4	0.11	-0.11	0.00	0.0	0.4	
963.0	0.40	87.50	963.0	0.1	0.2	0.22	0.22	0.00	-0.2	0.1	
1,148.0	0.30	109.40	1,148.0	-0.1	1.3	0.09	-0.05	11.84	-1.3	0.4	
1,332.0	1.60	168.20	1,332.0	-2.7	2.3	0.80	0.71	31.96	-3.2	1.7	
1,518.0	0.40	43.70	1,517.9	-4.8	3.3	1.00	-0.65	-66.94	1.2	-5.7	
1,706.0	0.10	13.40	1,705.9	-4.2	3.8	0.17	-0.16	-16.12	3.2	-4.7	
1,855.0	0.60	314.10	1,854.9	-3.5	3.3	0.37	0.34	-39.80	4.8	0.2	
2,022.0	0.40	290.10	2,021.9	-2.7	2.1	0.17	-0.12	-14.37	2.9	1.8	
2,210.0	0.60	22.00	2,209.9	-1.6	1.8	0.39	0.11	48.88	0.8	-2.3	
2,396.0	0.80	23.90	2,395.9	0.5	2.7	0.11	0.11	1.02	-1.6	-2.3	
2,584.0	0.70	27.90	2,583.9	2.7	3.8	0.06	-0.05	2.13	-4.2	-2.1	
2,772.0	0.80	15.30	2,771.9	5.0	4.7	0.10	0.05	-6.70	-6.1	-3.2	
2,959.0	0.90	18.80	2,958.9	7.7	5.5	0.06	0.05	1.87	-9.0	-2.7	
3,147.0	1.30	35.60	3,146.8	10.8	7.2	0.27	0.21	8.94	-13.0	0.4	
3,335.0	2.70	52.40	3,334.7	15.2	12.0	0.80	0.74	8.94	-18.8	4.8	
3,523.0	6.40	51.80	3,522.1	24.4	23.7	1.97	1.97	-0.32	-33.7	4.6	
3,618.0	12.40	44.10	3,615.8	35.0	35.0	6.44	6.32	-8.11	-49.5	-0.8	
3,712.0	8.00	32.80	3,708.3	47.8	45.6	5.12	-4.68	-12.02	-64.8	-12.5	
3,900.0	0.90	10.90	3,895.6	60.3	52.9	3.82	-3.78	-11.65	-69.2	-40.6	
4,088.0	1.70	317.40	4,083.5	63.8	51.3	0.73	0.43	-28.46	-12.2	-80.9	
4,275.0	1.00	317.00	4,270.5	67.0	48.3	0.37	-0.37	-0.21	-16.0	-81.0	
4,463.0	0.80	326.70	4,458.5	69.3	46.5	0.13	-0.11	5.16	-32.4	-76.9	
4,651.0	0.10	40.00	4,646.5	70.5	45.9	0.41	-0.37	38.99	-83.5	10.2	



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4,838.0	0.10	187.30	4,833.5	70.5	46.0	0.10	0.00	78.77	75.7	36.6	
5,026.0	0.20	249.70	5,021.5	70.2	45.6	0.09	0.05	33.19	67.2	-50.0	
5,214.0	0.30	262.10	5,209.5	70.0	44.8	0.06	0.05	6.60	54.0	-63.2	
5,401.0	0.40	230.70	5,396.5	69.5	43.9	0.11	0.05	-16.79	78.0	-26.0	
5,517.0	0.20	268.70	5,512.5	69.3	43.3	0.23	-0.17	32.76	44.9	-68.3	
5,637.0	0.60	261.80	5,632.5	69.2	42.5	0.34	0.33	-5.75	52.0	-62.3	
5,824.0	3.60	293.20	5,819.3	71.4	36.1	1.66	1.60	16.79	7.2	-77.9	
6,011.0	3.20	294.00	6,006.0	75.8	26.0	0.22	-0.21	0.43	-0.5	-74.0	
6,200.0	3.10	293.20	6,194.7	79.9	16.5	0.06	-0.05	-0.42	-5.3	-70.1	
6,386.0	3.30	305.70	6,380.4	85.1	7.5	0.39	0.11	6.72	-25.4	-63.3	
6,573.0	2.60	308.10	6,567.2	90.8	-0.2	0.38	-0.37	1.28	-32.3	-59.3	
6,761.0	2.30	304.50	6,755.0	95.6	-6.7	0.18	-0.16	-1.91	-31.4	-58.4	
6,948.0	2.00	301.10	6,941.9	99.4	-12.6	0.17	-0.16	-1.82	-29.9	-57.1	
7,136.0	3.30	311.70	7,129.6	104.7	-19.4	0.74	0.69	5.64	-43.0	-47.6	
7,322.0	2.60	308.40	7,315.4	110.9	-26.7	0.39	-0.38	-1.77	-44.4	-47.7	
7,509.0	2.90	304.30	7,502.2	116.2	-34.0	0.19	0.16	-2.19	-44.7	-48.0	
7,696.0	2.50	294.30	7,689.0	120.5	-41.6	0.33	-0.21	-5.35	-39.9	-52.0	
7,883.0	2.00	299.10	7,875.8	123.8	-48.2	0.29	-0.27	2.57	-46.6	-44.6	
8,071.0	1.80	328.50	8,063.7	127.9	-52.6	0.52	-0.11	15.64	-62.3	-13.8	
8,258.0	1.40	325.20	8,250.7	132.3	-55.4	0.22	-0.21	-1.76	-60.8	-16.5	
8,446.0	1.10	314.90	8,438.6	135.4	-58.0	0.20	-0.16	-5.48	-55.2	-25.4	
8,633.0	1.10	295.60	8,625.6	137.5	-60.9	0.20	0.00	-10.32	-42.6	-39.1	
8,821.0	0.70	251.20	8,813.6	137.9	-63.6	0.41	-0.21	-23.62	-4.9	-53.0	
9,008.0	0.80	266.10	9,000.5	137.4	-66.0	0.12	0.05	7.97	-18.6	-44.1	
9,196.0	0.90	248.10	9,188.5	136.8	-68.7	0.15	0.05	-9.57	-6.4	-42.1	
9,383.0	0.90	231.50	9,375.5	135.3	-71.2	0.14	0.00	-8.88	1.6	-36.8	
9,571.0	0.40	185.90	9,563.5	133.7	-72.4	0.36	-0.27	-24.26	20.6	-22.5	



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PVA

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 Design: OH

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 MD Reference: KB = 25' @ 3770.0usft
 North Reference: Grid
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Survey											
MD (usft)	Inc (°)	Azi (grid_north_azim)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
9,759.0	0.70	299.50	9,751.5	133.7	-73.5	0.50	0.16	60.43	-24.9	-5.8	
9,946.0	1.30	311.10	9,938.5	135.6	-76.1	0.34	0.32	6.20	-23.3	2.0	
10,134.0	0.50	36.70	10,126.4	137.7	-77.2	0.72	-0.43	45.53	2.0	20.2	
10,321.0	0.40	338.20	10,313.4	138.9	-76.9	0.24	-0.05	-31.28	-11.3	11.2	
10,437.0	5.30	176.50	10,429.3	134.0	-76.7	4.90	4.22	-139.40	1.8	-12.8	
10,483.0	10.30	183.60	10,474.8	127.7	-76.9	11.05	10.87	15.43	-0.7	-12.4	
10,531.0	12.50	186.30	10,521.9	118.3	-77.7	4.72	4.58	5.62	-1.4	-12.7	
10,577.0	15.60	186.60	10,566.5	107.2	-79.0	6.74	6.74	0.65	0.1	-13.6	
10,624.0	20.60	182.90	10,611.2	92.6	-80.1	10.91	10.64	-7.87	3.0	-14.4	
10,670.0	24.20	177.80	10,653.7	75.1	-80.2	8.89	7.83	-11.09	6.4	-13.7	
10,718.0	27.00	175.50	10,697.0	54.4	-78.9	6.19	5.83	-4.79	10.4	-11.6	
10,763.0	30.80	173.20	10,736.4	32.8	-76.8	8.80	8.44	-5.11	14.9	-8.4	
10,811.0	37.30	174.50	10,776.1	6.1	-73.9	13.63	13.54	2.71	18.6	-5.4	
10,857.0	44.70	175.40	10,810.8	-23.9	-71.3	16.14	16.09	1.96	20.4	-2.8	
10,904.0	52.80	176.80	10,841.8	-59.2	-68.9	17.38	17.23	2.98	19.6	-0.7	
10,936.0	58.40	177.10	10,859.8	-85.5	-67.5	17.52	17.50	0.94	17.5	0.6	
10,990.0	67.00	178.10	10,884.6	-133.4	-65.5	16.01	15.93	1.85	11.1	2.3	
11,036.0	72.00	177.90	10,900.7	-176.5	-64.0	10.88	10.87	-0.43	4.1	3.6	
11,082.0	77.40	178.70	10,912.8	-220.8	-62.7	11.86	11.74	1.74	-3.4	4.8	
11,128.0	80.70	178.60	10,921.6	-265.9	-61.6	7.18	7.17	-0.22	-10.8	5.7	
11,174.0	81.10	178.10	10,928.8	-311.3	-60.3	1.38	0.87	-1.09	-16.0	6.7	
11,220.0	81.10	177.70	10,936.0	-356.8	-58.7	0.86	0.00	-0.87	-17.5	8.1	
11,266.0	82.70	176.80	10,942.4	-402.3	-56.5	3.98	3.48	-1.96	-15.9	10.0	
11,312.0	82.70	176.30	10,948.3	-447.8	-53.7	1.08	0.00	-1.09	-11.6	12.4	
11,358.0	84.10	177.10	10,953.6	-493.4	-51.1	3.50	3.04	1.74	-7.5	14.7	
11,405.0	85.80	178.60	10,957.7	-540.2	-49.3	4.82	3.62	3.19	-4.6	16.1	
11,499.0	88.70	179.30	10,962.2	-634.1	-47.6	3.17	3.09	0.74	-2.5	17.1	



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11,593.0	90.00	178.80	10,963.3	-728.0	-46.1	1.48	1.38	-0.53	-3.8	17.9
11,687.0	87.80	180.10	10,965.1	-822.0	-45.2	2.72	-2.34	1.38	-4.5	18.1
11,780.0	87.10	179.30	10,969.2	-914.9	-44.7	1.14	-0.75	-0.86	-2.7	17.8
11,874.0	88.10	178.30	10,973.2	-1,008.8	-42.7	1.50	1.06	-1.06	-1.2	19.1
11,967.0	88.80	179.60	10,975.7	-1,101.8	-41.0	1.59	0.75	1.40	-1.1	20.0
12,061.0	87.20	180.40	10,979.0	-1,195.7	-41.0	1.90	-1.70	0.85	-0.2	19.3
12,155.0	86.90	179.90	10,983.8	-1,289.6	-41.2	0.62	-0.32	-0.53	2.2	18.3
12,250.0	88.20	179.30	10,987.9	-1,384.5	-40.6	1.51	1.37	-0.63	3.8	18.2
12,344.0	89.40	179.60	10,989.8	-1,478.5	-39.7	1.32	1.28	0.32	3.3	18.4
12,437.0	90.00	180.70	10,990.3	-1,571.4	-39.9	1.35	0.65	1.18	1.4	17.4
12,531.0	88.40	181.30	10,991.6	-1,665.4	-41.6	1.82	-1.70	0.64	0.3	15.1
12,625.0	87.60	181.90	10,994.9	-1,759.3	-44.2	1.06	-0.85	0.64	1.1	11.7
12,719.0	88.50	181.00	10,998.1	-1,853.2	-46.6	1.35	0.96	-0.96	1.9	8.6
12,812.0	87.60	179.90	11,001.3	-1,946.2	-47.3	1.53	-0.97	-1.18	2.7	7.1
12,906.0	88.00	178.20	11,004.9	-2,040.1	-45.7	1.86	0.43	-1.81	4.0	7.9
13,000.0	87.60	176.20	11,008.5	-2,133.9	-41.1	2.17	-0.43	-2.13	5.5	11.8
13,094.0	88.80	176.90	11,011.4	-2,227.7	-35.5	1.48	1.28	0.74	6.4	16.7
13,187.0	89.50	178.20	11,012.8	-2,320.6	-31.5	1.59	0.75	1.40	5.7	19.9
13,281.0	88.40	179.40	11,014.5	-2,414.6	-29.6	1.73	-1.17	1.28	5.4	21.2
13,375.0	87.30	179.30	11,018.1	-2,508.5	-28.5	1.18	-1.17	-0.11	6.9	21.5
13,469.0	87.70	180.60	11,022.2	-2,602.4	-28.4	1.45	0.43	1.38	8.9	20.8
13,563.0	87.50	177.90	11,026.1	-2,696.3	-27.2	2.88	-0.21	-2.87	10.7	21.4
13,656.0	87.90	179.50	11,029.8	-2,789.2	-25.1	1.77	0.43	1.72	12.5	22.7
13,749.0	88.30	181.20	11,032.9	-2,882.1	-25.6	1.88	0.43	1.83	13.5	21.4
13,843.0	89.30	181.20	11,034.9	-2,976.1	-27.6	1.06	1.06	0.00	13.4	18.7
13,937.0	89.70	180.80	11,035.7	-3,070.1	-29.2	0.60	0.43	-0.43	12.2	16.3
14,031.0	88.80	180.80	11,036.9	-3,164.1	-30.6	0.96	-0.96	0.00	11.3	14.3



EOG Resources, Inc.

PVA

Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 27 NME)
 Site: Naguss 30 State Corn
 Well: #501H
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well #501H
 TVD Reference: KB = 25' @ 3770.0usft
 MD Reference: KB = 25' @ 3770.0usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: EDM 5000.14 Single User Db

Survey										
MD (usft)	Inc (°)	Azi (grid_north_azim)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
14,124.0	87.90	180.90	11,039.6	-3,257.0	-31.9	0.97	-0.97	0.11	12.0	12.2
14,218.0	87.00	179.90	11,043.8	-3,350.9	-32.6	1.43	-0.96	-1.06	14.1	10.8
14,312.0	87.50	178.60	11,048.3	-3,444.8	-31.4	1.48	0.53	-1.38	16.5	11.3
14,406.0	87.30	180.00	11,052.6	-3,538.7	-30.2	1.50	-0.21	1.49	18.7	11.7
14,500.0	87.30	179.30	11,057.0	-3,632.6	-29.6	0.74	0.00	-0.74	21.1	11.5
14,594.0	88.00	180.40	11,060.9	-3,726.5	-29.4	1.39	0.74	1.17	22.9	11.0
14,688.0	89.50	180.70	11,062.9	-3,820.5	-30.3	1.63	1.60	0.32	22.9	9.4
14,782.0	87.90	180.70	11,065.0	-3,914.4	-31.4	1.70	-1.70	0.00	22.9	7.5
14,876.0	88.20	180.50	11,068.2	-4,008.4	-32.4	0.38	0.32	-0.21	24.0	5.8
14,970.0	89.80	179.70	11,069.9	-4,102.3	-32.6	1.90	1.70	-0.85	23.6	4.9
15,063.0	88.70	180.20	11,071.1	-4,195.3	-32.5	1.30	-1.18	0.54	22.8	4.2
15,157.0	86.30	181.30	11,075.2	-4,289.2	-33.7	2.81	-2.55	1.17	24.8	2.3
15,251.0	87.20	180.70	11,080.5	-4,383.1	-35.4	1.15	0.96	-0.64	28.1	-0.1
15,345.0	89.80	180.00	11,083.0	-4,477.0	-36.0	2.86	2.77	-0.74	28.5	-1.4
15,439.0	90.90	179.20	11,082.4	-4,571.0	-35.3	1.45	1.17	-0.85	26.5	-1.5
15,533.0	89.50	178.20	11,082.1	-4,665.0	-33.2	1.83	-1.49	-1.06	25.4	-0.1
15,627.0	89.60	179.30	11,082.8	-4,759.0	-31.1	1.18	0.11	1.17	25.4	1.2
15,721.0	90.30	179.30	11,082.9	-4,853.0	-30.0	0.74	0.74	0.00	24.6	1.6
15,814.0	89.10	180.60	11,083.4	-4,945.9	-29.9	1.90	-1.29	1.40	24.3	1.0
15,908.0	89.20	181.40	11,084.8	-5,039.9	-31.5	0.86	0.11	0.85	24.9	-1.4
16,002.0	88.90	180.50	11,086.3	-5,133.9	-33.1	1.01	-0.32	-0.96	25.7	-3.7
16,096.0	90.30	179.80	11,087.0	-5,227.9	-33.3	1.67	1.49	-0.74	25.6	-4.7
16,190.0	92.00	179.00	11,085.1	-5,321.9	-32.3	2.00	1.81	-0.85	22.9	-4.4
16,284.0	90.90	179.70	11,082.7	-5,415.8	-31.3	1.39	-1.17	0.74	19.7	-4.1
16,378.0	89.20	180.30	11,082.7	-5,509.8	-31.3	1.92	-1.81	0.64	18.8	-4.9
16,472.0	90.80	180.20	11,082.7	-5,603.8	-31.7	1.71	1.70	-0.11	18.0	-6.0
16,566.0	89.80	179.80	11,082.2	-5,697.8	-31.7	1.15	-1.06	-0.43	16.7	-6.7



EOG Resources, Inc.

PVA

Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 27 NME)
 Site: Naguss 30 State Com
 Well: #501H
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well #501H
 TVD Reference: KB = 25' @ 3770.0usft
 MD Reference: KB = 25' @ 3770.0usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: EDM 5000.14 Single User Db

Survey											
MD (usft)	Inc (°)	Azi (grid_north_azim)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
16,659.0	90.30	179.30	11,082.1	-5,790.8	-31.0	0.76	0.54	-0.54	15.9	-6.7	
16,754.0	92.20	178.70	11,080.0	-5,885.8	-29.3	2.10	2.00	-0.63	13.0	-5.8	
16,847.0	91.30	180.00	11,077.2	-5,978.7	-28.2	1.70	-0.97	1.40	9.3	-5.5	
16,941.0	91.80	180.10	11,074.6	-6,072.7	-28.3	0.54	0.53	0.11	6.2	-6.3	
17,035.0	91.00	180.20	11,072.3	-6,166.7	-28.6	0.86	-0.85	0.11	3.3	-7.3	
17,129.0	88.70	180.20	11,072.6	-6,260.6	-28.9	2.45	-2.45	0.00	3.0	-8.4	
17,223.0	89.90	179.50	11,073.7	-6,354.6	-28.7	1.48	1.28	-0.74	3.6	-8.9	
17,316.0	87.40	178.00	11,075.9	-6,447.6	-26.6	3.13	-2.69	-1.61	5.2	-7.6	
17,410.0	88.40	177.80	11,079.4	-6,541.5	-23.2	1.08	1.06	-0.21	8.1	-4.9	
17,504.0	91.70	178.20	11,079.3	-6,635.4	-19.9	3.54	3.51	0.43	7.5	-2.3	
17,598.0	93.30	178.20	11,075.2	-6,729.2	-17.0	1.70	1.70	0.00	2.8	-0.1	
17,692.0	92.30	178.00	11,070.6	-6,823.1	-13.8	1.08	-1.06	-0.21	-2.4	2.3	
17,786.0	91.20	178.60	11,067.7	-6,917.0	-11.1	1.33	-1.17	0.64	-5.8	4.3	
17,880.0	88.00	179.60	11,068.4	-7,011.0	-9.6	3.57	-3.40	1.06	-5.7	5.1	
17,974.0	87.30	179.70	11,072.2	-7,104.9	-9.0	0.75	-0.74	0.11	-2.4	4.9	
18,067.0	88.00	179.70	11,076.0	-7,197.8	-8.5	0.75	0.75	0.00	0.8	4.6	
18,161.0	87.80	179.50	11,079.5	-7,291.7	-7.9	0.30	-0.21	-0.21	3.7	4.6	
18,256.0	88.30	179.80	11,082.7	-7,386.7	-7.3	0.61	0.53	0.32	6.4	4.4	
18,350.0	89.10	179.80	11,084.8	-7,480.7	-7.0	0.85	0.85	0.00	8.0	4.0	
18,444.0	88.90	179.50	11,086.5	-7,574.6	-6.4	0.38	-0.21	-0.32	9.0	3.8	
18,538.0	90.50	179.90	11,087.0	-7,668.6	-5.9	1.75	1.70	0.43	9.0	3.6	
18,632.0	89.70	179.70	11,086.8	-7,762.6	-5.6	0.88	-0.85	-0.21	8.2	3.2	
18,725.0	89.00	179.90	11,087.9	-7,855.6	-5.2	0.78	-0.75	0.22	8.7	2.8	
18,818.0	90.30	179.30	11,088.4	-7,948.6	-4.6	1.54	1.40	-0.65	8.7	2.7	
18,912.0	90.90	178.50	11,087.5	-8,042.6	-2.8	1.06	0.64	-0.85	7.3	3.7	
19,006.0	90.80	179.10	11,086.1	-8,136.6	-0.8	0.65	-0.11	0.64	5.4	5.0	
19,100.0	91.10	179.10	11,084.5	-8,230.5	0.7	0.32	0.32	0.00	3.4	5.7	



EOG Resources, Inc.

PVA

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 Project: Lea County, NM (NAD 27 NME)
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 Design: OH

Local Co-ordinate Reference: Well #501H
 TVD Reference: KB = 25' @ 3770.0usft
 MD Reference: KB = 25' @ 3770.0usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: EDM 5000.14 Single User Db

Survey											
MD (usft)	Inc (°)	Azi (grid_north_azim)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
19,194.0	90.20	178.80	11,083.4	-8,324.5	2.4	1.01	-0.96	-0.32	1.9	6.7	
19,288.0	89.80	178.00	11,083.4	-8,418.5	5.0	0.95	-0.43	-0.85	1.5	8.6	
19,382.0	90.10	178.90	11,083.5	-8,512.4	7.6	1.01	0.32	0.96	1.1	10.4	
19,476.0	90.20	178.70	11,083.3	-8,606.4	9.5	0.24	0.11	-0.21	0.4	11.6	
19,569.0	89.80	179.00	11,083.3	-8,699.4	11.4	0.54	-0.43	0.32	0.0	12.8	
19,663.0	89.50	178.90	11,083.8	-8,793.4	13.1	0.34	-0.32	-0.11	0.1	13.7	
19,757.0	89.50	178.70	11,084.7	-8,887.4	15.1	0.21	0.00	-0.21	0.5	15.0	
19,851.0	88.40	178.70	11,086.4	-8,981.3	17.2	1.17	-1.17	0.00	1.8	16.4	
19,945.0	89.40	180.00	11,088.2	-9,075.3	18.3	1.74	1.06	1.38	3.1	16.7	
20,039.0	88.90	181.30	11,089.6	-9,169.3	17.2	1.48	-0.53	1.38	4.1	14.9	
20,133.0	89.80	181.20	11,090.7	-9,263.2	15.2	0.96	0.96	-0.11	4.7	12.1	
20,227.0	90.00	180.60	11,090.8	-9,357.2	13.7	0.67	0.21	-0.64	4.4	9.9	
20,320.0	89.00	179.40	11,091.6	-9,450.2	13.7	1.68	-1.08	-1.29	4.8	9.2	
20,414.0	90.30	179.30	11,092.2	-9,544.2	14.7	1.39	1.38	-0.11	4.9	9.5	
20,508.0	90.50	179.10	11,091.5	-9,638.2	16.1	0.30	0.21	-0.21	3.8	10.1	
20,602.0	89.80	178.70	11,091.3	-9,732.2	17.9	0.86	-0.74	-0.43	3.1	11.1	
20,696.0	88.90	178.20	11,092.4	-9,826.1	20.4	1.10	-0.96	-0.53	3.8	12.9	
20,789.0	88.90	178.00	11,094.2	-9,919.1	23.5	0.22	0.00	-0.22	5.1	15.3	
20,870.0	88.80	178.10	11,095.8	-10,000.0	26.2	0.17	-0.12	0.12	6.3	17.4	
Last MWD Survey 20,925.0	88.80	178.10	11,096.9	-10,055.0	28.1	0.00	0.00	0.00	7.2	18.8	
Projection To Bit											



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PVA

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Local Co-ordinate Reference: Well #501H
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North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.14 Single User Db

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
20,870.0	11,095.8	-10,000.0	26.2	Last MWD Survey
20,925.0	11,096.9	-10,055.0	28.1	Projection To Bit

Checked By: _____ Approved By: _____ Date: _____