



EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Cobalt 32 State

#202H

OH

Plan: Plan #0.2

Standard Planning Report

19 June, 2018



Planning Report

Database: EDM 5000.14
Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Cobalt 32 State
Well: #202H
Wellbore: OH
Design: Plan #0.2

Local Co-ordinate Reference: Well #202H
TVD Reference: Kb = 25 @ 3443.0usft
MD Reference: Kb = 25 @ 3443.0usft
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	Cobalt 32 State		
Site Position:	Northing:	425,645.00 usft	Latitude: 32° 10' 2.406 N
From: Map	Easting:	803,691.00 usft	Longitude: 103° 29' 7.689 W
Position Uncertainty:	0.0 usft	Slot Radius: 13-3/16 "	Grid Convergence: 0.45 °

Well	#202H		
Well Position	+N/-S	26.0 usft	Northing: 425,671.00 usft
	+E/-W	-490.0 usft	Easting: 803,201.00 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	Ground Level: 3,418.0 usft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination
	IGRF2015	6/13/2018	6.80
			Dip Angle
			60.01
			Field Strength
			47,811.72507146

Design	Plan #0.2		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth: 0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.0	0.0	0.0
			Direction
			350.81

Plan Survey Tool Program	Date 6/18/2018		
Depth From	Depth To	Survey (Wellbore)	Tool Name
(usft)	(usft)		
1	0.0	14,914.5 Plan #0.2 (OH)	MWD
			OWSG MWD - Standard

Plan Sections										
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Dogleg	Build	Turn	TFO	Target
Depth	(°)	(°)	Depth	(usft)	(usft)	Rate	Rate	Rate	(°)	
(usft)			(usft)			(°/100usft)	(°/100usft)	(°/100usft)		
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,641.8	6.42	254.98	3,640.5	-9.3	-34.7	1.00	1.00	0.00	254.98	
9,631.9	6.42	254.98	9,593.0	-182.8	-681.4	0.00	0.00	0.00	0.00	
10,395.3	90.00	359.49	10,081.0	294.0	-738.8	12.00	10.95	13.69	104.42	
14,914.5	90.00	359.49	10,081.0	4,813.0	-779.0	0.00	0.00	0.00	0.00	PBHL(Cobalt 32 ST 2



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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)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0	1.00	254.98	3,100.0	-0.2	-0.8	-0.1	1.00	1.00	0.00
3,200.0	2.00	254.98	3,200.0	-0.9	-3.4	-0.4	1.00	1.00	0.00
3,300.0	3.00	254.98	3,299.9	-2.0	-7.6	-0.8	1.00	1.00	0.00
3,400.0	4.00	254.98	3,399.7	-3.6	-13.5	-1.4	1.00	1.00	0.00
3,500.0	5.00	254.98	3,499.4	-5.6	-21.1	-2.2	1.00	1.00	0.00
3,600.0	6.00	254.98	3,598.9	-8.1	-30.3	-3.2	1.00	1.00	0.00
3,641.8	6.42	254.98	3,640.5	-9.3	-34.7	-3.6	1.00	1.00	0.00
3,700.0	6.42	254.98	3,698.3	-11.0	-41.0	-4.3	0.00	0.00	0.00
3,800.0	6.42	254.98	3,797.7	-13.9	-51.8	-5.4	0.00	0.00	0.00
3,900.0	6.42	254.98	3,897.0	-16.8	-62.6	-6.6	0.00	0.00	0.00
4,000.0	6.42	254.98	3,996.4	-19.7	-73.4	-7.7	0.00	0.00	0.00
4,100.0	6.42	254.98	4,095.8	-22.6	-84.2	-8.8	0.00	0.00	0.00
4,200.0	6.42	254.98	4,195.2	-25.5	-94.9	-10.0	0.00	0.00	0.00
4,300.0	6.42	254.98	4,294.5	-28.4	-105.7	-11.1	0.00	0.00	0.00
4,400.0	6.42	254.98	4,393.9	-31.3	-116.5	-12.2	0.00	0.00	0.00
4,500.0	6.42	254.98	4,493.3	-34.2	-127.3	-13.4	0.00	0.00	0.00
4,600.0	6.42	254.98	4,592.7	-37.1	-138.1	-14.5	0.00	0.00	0.00
4,700.0	6.42	254.98	4,692.0	-40.0	-148.9	-15.6	0.00	0.00	0.00
4,800.0	6.42	254.98	4,791.4	-42.9	-159.7	-16.8	0.00	0.00	0.00
4,900.0	6.42	254.98	4,890.8	-45.7	-170.5	-17.9	0.00	0.00	0.00
5,000.0	6.42	254.98	4,990.1	-48.6	-181.3	-19.0	0.00	0.00	0.00
5,100.0	6.42	254.98	5,089.5	-51.5	-192.1	-20.2	0.00	0.00	0.00
5,200.0	6.42	254.98	5,188.9	-54.4	-202.9	-21.3	0.00	0.00	0.00



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5,300.0	6.42	254.98	5,288.3	-57.3	-213.7	-22.5	0.00	0.00	0.00
5,400.0	6.42	254.98	5,387.6	-60.2	-224.5	-23.6	0.00	0.00	0.00
5,500.0	6.42	254.98	5,487.0	-63.1	-235.3	-24.7	0.00	0.00	0.00
5,600.0	6.42	254.98	5,586.4	-66.0	-246.1	-25.9	0.00	0.00	0.00
5,700.0	6.42	254.98	5,685.8	-68.9	-256.9	-27.0	0.00	0.00	0.00
5,800.0	6.42	254.98	5,785.1	-71.8	-267.7	-28.1	0.00	0.00	0.00
5,900.0	6.42	254.98	5,884.5	-74.7	-278.5	-29.3	0.00	0.00	0.00
6,000.0	6.42	254.98	5,983.9	-77.6	-289.3	-30.4	0.00	0.00	0.00
6,100.0	6.42	254.98	6,083.3	-80.5	-300.1	-31.5	0.00	0.00	0.00
6,200.0	6.42	254.98	6,182.6	-83.4	-310.9	-32.7	0.00	0.00	0.00
6,300.0	6.42	254.98	6,282.0	-86.3	-321.7	-33.8	0.00	0.00	0.00
6,400.0	6.42	254.98	6,381.4	-89.2	-332.5	-34.9	0.00	0.00	0.00
6,500.0	6.42	254.98	6,480.7	-92.1	-343.3	-36.1	0.00	0.00	0.00
6,600.0	6.42	254.98	6,580.1	-95.0	-354.1	-37.2	0.00	0.00	0.00
6,700.0	6.42	254.98	6,679.5	-97.9	-364.9	-38.3	0.00	0.00	0.00
6,800.0	6.42	254.98	6,778.9	-100.8	-375.7	-39.5	0.00	0.00	0.00
6,900.0	6.42	254.98	6,878.2	-103.7	-386.4	-40.6	0.00	0.00	0.00
7,000.0	6.42	254.98	6,977.6	-106.6	-397.2	-41.7	0.00	0.00	0.00
7,100.0	6.42	254.98	7,077.0	-109.5	-408.0	-42.9	0.00	0.00	0.00
7,200.0	6.42	254.98	7,176.4	-112.4	-418.8	-44.0	0.00	0.00	0.00
7,300.0	6.42	254.98	7,275.7	-115.3	-429.6	-45.1	0.00	0.00	0.00
7,400.0	6.42	254.98	7,375.1	-118.2	-440.4	-46.3	0.00	0.00	0.00
7,500.0	6.42	254.98	7,474.5	-121.1	-451.2	-47.4	0.00	0.00	0.00
7,600.0	6.42	254.98	7,573.9	-124.0	-462.0	-48.5	0.00	0.00	0.00
7,700.0	6.42	254.98	7,673.2	-126.8	-472.8	-49.7	0.00	0.00	0.00
7,800.0	6.42	254.98	7,772.6	-129.7	-483.6	-50.8	0.00	0.00	0.00
7,900.0	6.42	254.98	7,872.0	-132.6	-494.4	-51.9	0.00	0.00	0.00
8,000.0	6.42	254.98	7,971.3	-135.5	-505.2	-53.1	0.00	0.00	0.00
8,100.0	6.42	254.98	8,070.7	-138.4	-516.0	-54.2	0.00	0.00	0.00
8,200.0	6.42	254.98	8,170.1	-141.3	-526.8	-55.3	0.00	0.00	0.00
8,300.0	6.42	254.98	8,269.5	-144.2	-537.6	-56.5	0.00	0.00	0.00
8,400.0	6.42	254.98	8,368.8	-147.1	-548.4	-57.6	0.00	0.00	0.00
8,500.0	6.42	254.98	8,468.2	-150.0	-559.2	-58.7	0.00	0.00	0.00
8,600.0	6.42	254.98	8,567.6	-152.9	-570.0	-59.9	0.00	0.00	0.00
8,700.0	6.42	254.98	8,667.0	-155.8	-580.8	-61.0	0.00	0.00	0.00
8,800.0	6.42	254.98	8,766.3	-158.7	-591.6	-62.2	0.00	0.00	0.00
8,900.0	6.42	254.98	8,865.7	-161.6	-602.4	-63.3	0.00	0.00	0.00
9,000.0	6.42	254.98	8,965.1	-164.5	-613.2	-64.4	0.00	0.00	0.00
9,100.0	6.42	254.98	9,064.5	-167.4	-624.0	-65.6	0.00	0.00	0.00
9,200.0	6.42	254.98	9,163.8	-170.3	-634.8	-66.7	0.00	0.00	0.00
9,300.0	6.42	254.98	9,263.2	-173.2	-645.6	-67.8	0.00	0.00	0.00
9,400.0	6.42	254.98	9,362.6	-176.1	-656.4	-69.0	0.00	0.00	0.00
9,500.0	6.42	254.98	9,461.9	-179.0	-667.2	-70.1	0.00	0.00	0.00
9,600.0	6.42	254.98	9,561.3	-181.9	-677.9	-71.2	0.00	0.00	0.00
9,631.9	6.42	254.98	9,593.0	-182.8	-681.4	-71.6	0.00	0.00	0.00
9,650.0	6.24	274.68	9,611.0	-183.0	-683.4	-71.5	12.00	-0.98	109.03
9,675.0	7.16	299.40	9,635.8	-182.1	-686.1	-70.2	12.00	3.68	98.87
9,700.0	9.03	316.23	9,660.6	-179.9	-688.8	-67.6	12.00	7.48	67.34
9,725.0	11.39	326.77	9,685.2	-176.4	-691.5	-63.7	12.00	9.44	42.13
9,750.0	13.99	333.58	9,709.6	-171.7	-694.2	-58.6	12.00	10.42	27.25
9,775.0	16.73	338.25	9,733.7	-165.6	-696.9	-52.2	12.00	10.94	18.67
9,800.0	19.54	341.62	9,757.5	-158.3	-699.5	-44.5	12.00	11.25	13.49
9,825.0	22.40	344.17	9,780.8	-149.8	-702.1	-35.7	12.00	11.44	10.19
9,850.0	25.29	346.16	9,803.7	-140.0	-704.7	-25.6	12.00	11.56	7.98



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9,875.0	28.20	347.77	9,826.0	-129.0	-707.2	-14.4	12.00	11.65	6.43
9,900.0	31.13	349.10	9,847.7	-116.9	-709.7	-2.0	12.00	11.71	5.32
9,925.0	34.07	350.22	9,868.8	-103.7	-712.1	11.5	12.00	11.75	4.48
9,950.0	37.02	351.19	9,889.1	-89.3	-714.5	26.0	12.00	11.79	3.85
9,975.0	39.97	352.02	9,908.7	-73.9	-716.7	41.5	12.00	11.82	3.36
10,000.0	42.93	352.77	9,927.4	-57.5	-718.9	58.1	12.00	11.84	2.97
10,025.0	45.89	353.43	9,945.3	-40.2	-721.0	75.6	12.00	11.86	2.66
10,050.0	48.86	354.03	9,962.2	-21.9	-723.0	93.9	12.00	11.87	2.40
10,075.0	51.83	354.58	9,978.1	-2.7	-724.9	113.1	12.00	11.88	2.19
10,100.0	54.80	355.08	9,993.1	17.2	-726.7	133.1	12.00	11.89	2.02
10,125.0	57.78	355.55	10,006.9	38.0	-728.4	153.9	12.00	11.90	1.88
10,150.0	60.75	355.99	10,019.7	59.4	-730.0	175.3	12.00	11.90	1.76
10,175.0	63.73	356.41	10,031.4	81.5	-731.5	197.3	12.00	11.91	1.66
10,200.0	66.71	356.80	10,041.8	104.1	-732.8	219.9	12.00	11.91	1.58
10,205.4	67.35	356.89	10,043.9	109.1	-733.1	224.8	12.00	11.92	1.53
FTP(Cobalt 32 ST 202H)									
10,225.0	69.69	357.18	10,051.1	127.3	-734.0	242.9	12.00	11.92	1.50
10,250.0	72.67	357.54	10,059.2	150.9	-735.1	266.5	12.00	11.92	1.45
10,275.0	75.65	357.89	10,066.0	175.0	-736.1	290.3	12.00	11.92	1.40
10,300.0	78.63	358.24	10,071.6	199.3	-736.9	314.5	12.00	11.93	1.37
10,325.0	81.61	358.57	10,075.9	223.9	-737.6	338.9	12.00	11.93	1.34
10,350.0	84.60	358.90	10,078.9	248.7	-738.1	363.5	12.00	11.93	1.32
10,375.0	87.58	359.23	10,080.6	273.7	-738.6	388.2	12.00	11.93	1.31
10,395.3	90.00	359.49	10,081.0	294.0	-738.8	408.2	12.00	11.93	1.30
10,400.0	90.00	359.49	10,081.0	298.7	-738.8	412.9	0.00	0.00	0.00
10,500.0	90.00	359.49	10,081.0	398.7	-739.7	511.7	0.00	0.00	0.00
10,600.0	90.00	359.49	10,081.0	498.7	-740.6	610.6	0.00	0.00	0.00
10,700.0	90.00	359.49	10,081.0	598.7	-741.5	709.4	0.00	0.00	0.00
10,800.0	90.00	359.49	10,081.0	698.7	-742.4	808.3	0.00	0.00	0.00
10,900.0	90.00	359.49	10,081.0	798.7	-743.3	907.2	0.00	0.00	0.00
11,000.0	90.00	359.49	10,081.0	898.7	-744.2	1,006.0	0.00	0.00	0.00
11,100.0	90.00	359.49	10,081.0	998.6	-745.1	1,104.9	0.00	0.00	0.00
11,200.0	90.00	359.49	10,081.0	1,098.6	-745.9	1,203.7	0.00	0.00	0.00
11,300.0	90.00	359.49	10,081.0	1,198.6	-746.8	1,302.6	0.00	0.00	0.00
11,400.0	90.00	359.49	10,081.0	1,298.6	-747.7	1,401.4	0.00	0.00	0.00
11,500.0	90.00	359.49	10,081.0	1,398.6	-748.6	1,500.3	0.00	0.00	0.00
11,600.0	90.00	359.49	10,081.0	1,498.6	-749.5	1,599.1	0.00	0.00	0.00
11,700.0	90.00	359.49	10,081.0	1,598.6	-750.4	1,698.0	0.00	0.00	0.00
11,800.0	90.00	359.49	10,081.0	1,698.6	-751.3	1,796.8	0.00	0.00	0.00
11,900.0	90.00	359.49	10,081.0	1,798.6	-752.2	1,895.7	0.00	0.00	0.00
12,000.0	90.00	359.49	10,081.0	1,898.6	-753.1	1,994.5	0.00	0.00	0.00
12,100.0	90.00	359.49	10,081.0	1,998.6	-754.0	2,093.4	0.00	0.00	0.00
12,200.0	90.00	359.49	10,081.0	2,098.6	-754.8	2,192.2	0.00	0.00	0.00
12,300.0	90.00	359.49	10,081.0	2,198.6	-755.7	2,291.1	0.00	0.00	0.00
12,400.0	90.00	359.49	10,081.0	2,298.6	-756.6	2,390.0	0.00	0.00	0.00
12,500.0	90.00	359.49	10,081.0	2,398.6	-757.5	2,488.8	0.00	0.00	0.00
12,600.0	90.00	359.49	10,081.0	2,498.6	-758.4	2,587.7	0.00	0.00	0.00
12,700.0	90.00	359.49	10,081.0	2,598.6	-759.3	2,686.5	0.00	0.00	0.00
12,800.0	90.00	359.49	10,081.0	2,698.6	-760.2	2,785.4	0.00	0.00	0.00
12,900.0	90.00	359.49	10,081.0	2,798.6	-761.1	2,884.2	0.00	0.00	0.00
13,000.0	90.00	359.49	10,081.0	2,898.6	-762.0	2,983.1	0.00	0.00	0.00
13,100.0	90.00	359.49	10,081.0	2,998.6	-762.9	3,081.9	0.00	0.00	0.00
13,200.0	90.00	359.49	10,081.0	3,098.6	-763.7	3,180.8	0.00	0.00	0.00



Planning Report

Database: EDM 5000.14
Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Cobalt 32 State
Well: #202H
Wellbore: OH
Design: Plan #0.2

Local Co-ordinate Reference: Well #202H
TVD Reference: Kb = 25 @ 3443.0usft
MD Reference: Kb = 25 @ 3443.0usft
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)
13,300.0	90.00	359.49	10,081.0	3,198.6	-764.6	3,279.6	0.00	0.00	0.00
13,400.0	90.00	359.49	10,081.0	3,298.6	-765.5	3,378.5	0.00	0.00	0.00
13,500.0	90.00	359.49	10,081.0	3,398.6	-766.4	3,477.3	0.00	0.00	0.00
13,600.0	90.00	359.49	10,081.0	3,498.5	-767.3	3,576.2	0.00	0.00	0.00
13,700.0	90.00	359.49	10,081.0	3,598.5	-768.2	3,675.1	0.00	0.00	0.00
13,800.0	90.00	359.49	10,081.0	3,698.5	-769.1	3,773.9	0.00	0.00	0.00
13,900.0	90.00	359.49	10,081.0	3,798.5	-770.0	3,872.8	0.00	0.00	0.00
14,000.0	90.00	359.49	10,081.0	3,898.5	-770.9	3,971.6	0.00	0.00	0.00
14,100.0	90.00	359.49	10,081.0	3,998.5	-771.8	4,070.5	0.00	0.00	0.00
14,200.0	90.00	359.49	10,081.0	4,098.5	-772.6	4,169.3	0.00	0.00	0.00
14,300.0	90.00	359.49	10,081.0	4,198.5	-773.5	4,268.2	0.00	0.00	0.00
14,400.0	90.00	359.49	10,081.0	4,298.5	-774.4	4,367.0	0.00	0.00	0.00
14,500.0	90.00	359.49	10,081.0	4,398.5	-775.3	4,465.9	0.00	0.00	0.00
14,600.0	90.00	359.49	10,081.0	4,498.5	-776.2	4,564.7	0.00	0.00	0.00
14,700.0	90.00	359.49	10,081.0	4,598.5	-777.1	4,663.6	0.00	0.00	0.00
14,800.0	90.00	359.49	10,081.0	4,698.5	-778.0	4,762.4	0.00	0.00	0.00
14,900.0	90.00	359.49	10,081.0	4,798.5	-778.9	4,861.3	0.00	0.00	0.00
14,914.5	90.00	359.49	10,081.0	4,813.0	-779.0	4,875.6	0.00	0.00	0.00

PBHL(Cobalt 32 ST 202H)

Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
FTP(Cobalt 32 ST 202H)	0.00	0.00	10,081.0	94.0	-737.0	425,765.00	802,464.00	32° 10' 3.689 N	103° 29' 21.952 W
- hit/miss target									
- plan misses target center by 40.2usft at 10205.4usft MD (10043.9 TVD, 109.1 N, -733.1 E)									
- Point									
PBHL(Cobalt 32 ST 202)	0.00	0.00	10,081.0	4,813.0	-779.0	430,484.00	802,422.00	32° 10' 50.387 N	103° 29' 22.010 W
- plan hits target center									
- Point									

HOBBS OCD

JUN 19 2018

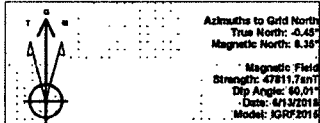
RECEIVED



Lea County, NM (NAD 83 NME)

Cobalt 32 State #202H

Plan #0.2



To convert a Magnetic Direction to a Grid Direction, Add 6.25°
To convert a Magnetic Direction to a True Direction, Add 6.80° East
To convert a True Direction to a Grid Direction, Subtract 0.45°

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

WELL DETAILS: 6202H

Ka = 26 @ 3443.0usR
Northing: 428671.00 Easting: 803201.00
Latitude: 32° 10' 2.702 N Longitude: 103° 29' 13.357 W

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N-S	+E-W	Diag	TFace	VSeal	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	3000.0	0.00	0.00	3000.0	0.0	0.0	0.00	0.00	0.0	
3	3641.8	6.42	254.98	3640.5	-0.3	-34.7	1.00	254.98	-3.8	
4	9631.9	6.42	254.98	9593.0	-182.8	-681.4	0.00	0.00	-71.6	
5	10395.3	90.00	359.49	10081.0	294.0	-738.8	12.00	104.42	408.2	
6	14914.5	90.00	359.49	10081.0	4813.0	-779.0	0.00	0.00	4875.6	PBHL(Cobalt 32 ST 202H)

CASING DETAILS

No casing data is available

WELLSHORE TARGET DETAILS (MAP COORDINATES)

Name	TVD	+N-S	+E-W	Northing	Easting
PTN(Cobalt 32 ST 202H)	10081.0	94.0	-717.0	428785.00	803464.00
PBHL(Cobalt 32 ST 202H)	10081.0	4813.0	-779.0	430484.00	803422.00

