



CONCHO

NM OIL CONSERVATION
ARTESIA DISTRICT

FEB 09 2018

RECEIVED

COG OPERATING, LLC

Eddy /Lea County, NM (NAD27) NMEZ

Bone Yard 11 Fee 16H

16H : Slot 2373' FSL, 2311'FWL Sec2/T20S/R25E

PP: 1868'FSL, 2309'FWL Sec2/T20S/R25E

30-015-43999

Lateral

PLANNED BHL: 10'FSL, 2310'FWL Sec11/T20S/R25E

Actual BHL - 38'FSL,2305'FWL, Sec11/T20S/R25E



DIRECTIONAL SERVICES, LLC.



Survey Report

Company: COG OPERATING, LLC
Project: Eddy /Lea County, NM (NAD27) NMEZ
Site: Bone Yard 11 Fee 16H
Well: 16H
Wellbore: Lateral
Design: Lateral

Local Co-ordinate Reference: Well 16H - Slot BY16H
TVD Reference: 3425+18 @ 3443.00ft (Planning)
MD Reference: 3425+18 @ 3443.00ft (Planning)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: VON_EDM

Project	Eddy /Lea County, NM (NAD27) NMEZ		
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	Bone Yard 11 Fee 16H		
Site Position:		Northing:	582,630.50 ft
From:	Map	Easting:	462,005.30 ft
Position Uncertainty:	0.00 ft	Slot Radius:	13.20 in
		Latitude:	32° 36' 6.093 N
		Longitude:	104° 27' 24.172 W
		Grid Convergence:	-0.07 °

Well	16H - Slot BY16H		
Well Position	+N/-S	0.00 ft	Northing: 582,630.50 ft
	+E/-W	0.00 ft	Easting: 462,005.30 ft
Position Uncertainty	0.00 ft	Wellhead Elevation:	ft
		Latitude:	32° 36' 6.093 N
		Longitude:	104° 27' 24.172 W
		Ground Level:	3,425.00 ft

Wellbore	Lateral		
Magnetics	Model Name	Sample Date	Declination
	IGRF2015	09/19/17	(°)
			7.36
			Dip Angle
			(°)
			60.26
			Field Strength
			(nT)
			48,040

Design	Lateral		
Audit Notes:			
Version:	1.0	Phase:	ACTUAL
		Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(ft)	(ft)	(ft)
	0.00	0.00	0.00
			Direction
			(°)
			180.31

Survey Program	Date 10/16/17		
From	To	Survey (Wellbore)	Tool Name
(ft)	(ft)		
143.00	10,331.00	Survey #1 (Lateral)	MWD
10,430.00	10,430.00	Survey #2 (Lateral)	Projection
			Description
			MWD v3:standard declination
			Projection

Survey									
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Vertical	Dogleg	Build	Turn
Depth	(°)	(°)	Depth	(ft)	(ft)	Section	Rate	Rate	Rate
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	(°/100ft)	(°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BoneYard11Fee#16H SL									
143.00	0.46	359.00	143.00	0.57	-0.01	-0.57	0.32	0.32	0.00
174.00	0.84	359.20	174.00	0.93	-0.02	-0.93	1.23	1.23	0.65
264.00	1.38	355.50	263.98	2.67	-0.11	-2.67	0.60	0.60	-4.11
352.00	2.03	2.08	351.94	5.28	-0.14	-5.28	0.77	0.74	7.48
443.00	3.08	3.93	442.85	9.33	0.09	-9.33	1.16	1.15	2.03
531.00	4.57	3.36	530.65	15.19	0.46	-15.19	1.69	1.69	-0.65
619.00	6.19	3.45	618.26	23.42	0.95	-23.43	1.84	1.84	0.10
708.00	7.96	3.50	706.58	34.37	1.61	-34.37	1.99	1.99	0.06



Survey Report

Company: COG OPERATING, LLC
Project: Eddy /Lea County, NM (NAD27) NMEZ
Site: Bone Yard 11 Fee 16H
Well: 16H
Wellbore: Lateral
Design: Lateral

Local Co-ordinate Reference: Well 16H - Slot BY16H
TVD Reference: 3425+18 @ 3443.00ft (Planning)
MD Reference: 3425+18 @ 3443.00ft (Planning)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: VON_EDM

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
796.00	8.68	1.26	793.65	47.09	2.13	-47.10	0.90	0.82	-2.55
894.00	7.66	357.14	890.66	61.00	1.97	-61.01	1.20	-1.04	-4.20
988.00	6.70	351.84	983.92	72.69	0.88	-72.69	1.24	-1.02	-5.64
1,083.00	5.54	348.48	1,078.38	82.67	-0.83	-82.66	1.28	-1.22	-3.54
1,178.00	4.30	348.12	1,173.02	90.65	-2.47	-90.63	1.31	-1.31	-0.38
1,288.00	4.22	346.15	1,282.72	98.61	-4.29	-98.59	0.15	-0.07	-1.79
1,320.00	4.22	347.88	1,314.63	100.91	-4.82	-100.88	0.40	0.00	5.41
1,415.00	4.53	1.94	1,409.36	108.07	-5.43	-108.04	1.17	0.33	14.80
1,509.00	4.81	5.00	1,503.05	115.71	-4.96	-115.68	0.40	0.30	3.26
1,605.00	3.99	9.63	1,598.76	123.01	-4.05	-122.99	0.93	-0.85	4.82
1,699.00	2.97	1.40	1,692.59	128.67	-3.44	-128.65	1.21	-1.09	-8.76
1,794.00	1.83	356.79	1,787.51	132.65	-3.47	-132.63	1.22	-1.20	-4.85
1,888.00	0.77	27.29	1,881.48	134.71	-3.26	-134.69	1.31	-1.13	32.45
1,983.00	0.82	142.12	1,976.48	134.74	-2.55	-134.72	1.41	0.05	120.87
2,050.88	0.95	156.27	2,044.34	133.84	-2.03	-133.82	0.38	0.20	20.84
BoneYard11Fee#16H Tgt									
2,078.00	1.02	160.77	2,071.46	133.40	-1.86	-133.39	0.38	0.24	16.60
2,173.00	1.11	167.93	2,166.45	131.70	-1.39	-131.69	0.17	0.09	7.54
2,204.00	1.23	171.43	2,197.44	131.08	-1.27	-131.07	0.45	0.39	11.29
2,236.00	2.14	174.37	2,229.43	130.15	-1.16	-130.14	2.86	2.84	9.19
2,268.00	3.87	178.66	2,261.38	128.47	-1.08	-128.46	5.45	5.41	13.41
2,299.00	6.07	176.78	2,292.26	125.79	-0.96	-125.78	7.12	7.10	-6.06
2,330.00	8.53	176.23	2,323.01	121.86	-0.72	-121.85	7.94	7.94	-1.77
2,362.00	11.24	176.90	2,354.53	116.38	-0.39	-116.37	8.48	8.47	2.09
2,393.00	14.04	176.05	2,384.78	109.61	0.03	-109.60	9.05	9.03	-2.74
2,425.00	16.62	176.38	2,415.64	101.16	0.58	-101.17	8.07	8.06	1.03
2,457.00	19.61	176.48	2,446.05	91.24	1.20	-91.24	9.34	9.34	0.31
2,487.00	22.32	176.73	2,474.06	80.52	1.84	-80.53	9.04	9.03	0.83
2,518.00	25.82	177.45	2,502.36	67.90	2.47	-67.91	11.33	11.29	2.32
2,550.00	30.13	178.03	2,530.61	52.90	3.06	-52.92	13.50	13.47	1.81
2,581.00	34.58	178.73	2,556.79	36.32	3.52	-36.34	14.41	14.35	2.26
2,613.00	39.16	178.50	2,582.39	17.13	3.99	-17.15	14.32	14.31	-0.72
2,644.00	43.04	177.69	2,605.74	-3.23	4.67	3.21	12.63	12.52	-2.61
2,675.00	44.05	178.05	2,628.21	-24.57	5.46	24.54	3.35	3.26	1.16
2,707.00	43.89	177.62	2,651.24	-46.77	6.30	46.74	1.06	-0.50	-1.34
2,739.00	43.90	178.01	2,674.30	-68.94	7.15	68.90	0.85	0.03	1.22
2,770.00	45.74	178.66	2,696.29	-90.79	7.78	90.74	6.12	5.94	2.10
2,802.00	46.60	178.76	2,718.45	-113.86	8.30	113.82	2.70	2.69	0.31
2,834.00	46.62	178.59	2,740.43	-137.11	8.84	137.06	0.39	0.06	-0.53
2,865.29	48.87	179.58	2,761.47	-160.27	9.21	160.21	7.56	7.19	3.16
2,896.00	52.40	180.00	2,780.95	-184.00	9.29	183.95	11.54	11.49	1.37
2,928.00	55.69	179.45	2,799.73	-209.90	9.42	209.85	10.37	10.28	-1.72
2,960.00	59.11	179.22	2,816.97	-236.86	9.73	236.80	10.70	10.69	-0.72



Survey Report

Company: COG OPERATING, LLC
Project: Eddy /Lea County, NM (NAD27) NMEZ
Site: Bone Yard 11 Fee 16H
Well: 16H
Wellbore: Lateral
Design: Lateral

Local Co-ordinate Reference: Well 16H - Slot BY16H
TVD Reference: 3425+18 @ 3443.00ft (Planning)
MD Reference: 3425+18 @ 3443.00ft (Planning)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: VON_EDM

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
2,991.00	62.19	179.73	2,832.17	-263.87	9.98	263.82	10.04	9.94	1.65
3,023.00	65.02	180.42	2,846.39	-292.53	9.94	292.48	9.05	8.84	2.16
3,054.00	67.10	180.11	2,858.97	-320.87	9.81	320.81	6.77	6.71	-1.00
3,086.00	70.17	181.03	2,870.62	-350.66	9.51	350.60	9.96	9.59	2.88
3,118.00	73.71	182.06	2,880.54	-381.07	8.69	381.02	11.48	11.06	3.22
3,150.00	76.93	182.34	2,888.65	-412.00	7.50	411.95	10.10	10.06	0.88
3,182.00	79.56	181.56	2,895.17	-443.30	6.43	443.26	8.56	8.22	-2.44
3,213.00	82.03	180.87	2,900.13	-473.90	5.78	473.86	8.27	7.97	-2.23
3,245.00	85.57	180.68	2,903.59	-505.70	5.35	505.66	11.08	11.06	-0.59
3,262.01	86.48	180.44	2,904.76	-522.67	5.19	522.63	5.52	5.34	-1.41
BoneYard11Fee#16H LP p5									
3,277.00	87.28	180.23	2,905.58	-537.64	5.10	537.60	5.52	5.34	-1.40
3,309.00	87.46	180.39	2,907.05	-569.60	4.93	569.57	0.75	0.56	0.50
3,351.00	89.78	180.56	2,908.06	-611.58	4.58	611.55	5.54	5.52	0.40
3,415.00	90.47	180.88	2,907.92	-675.58	3.78	675.55	1.19	1.08	0.50
3,510.00	89.64	180.84	2,907.83	-770.57	2.35	770.54	0.87	-0.87	-0.04
3,604.00	89.03	180.42	2,908.92	-864.56	1.32	864.54	0.79	-0.65	-0.45
3,699.00	88.72	181.34	2,910.79	-959.52	-0.14	959.51	1.02	-0.33	0.97
3,795.00	87.77	179.95	2,913.73	-1,055.47	-1.22	1,055.46	1.75	-0.99	-1.45
3,889.00	88.29	180.35	2,916.96	-1,149.41	-1.47	1,149.40	0.70	0.55	0.43
3,984.00	87.79	180.95	2,920.21	-1,244.35	-2.55	1,244.35	0.82	-0.53	0.63
4,080.00	88.21	179.99	2,923.56	-1,340.29	-3.33	1,340.29	1.09	0.44	-1.00
4,175.00	87.98	181.03	2,926.72	-1,435.23	-4.18	1,435.23	1.12	-0.24	1.09
4,270.00	87.27	179.46	2,930.65	-1,530.14	-4.58	1,530.15	1.81	-0.75	-1.65
4,365.00	88.71	177.14	2,933.98	-1,625.03	-1.77	1,625.02	2.87	1.52	-2.44
4,460.00	88.74	174.57	2,936.10	-1,719.76	5.10	1,719.70	2.70	0.03	-2.71
4,555.00	87.80	172.28	2,938.97	-1,814.08	15.97	1,813.97	2.60	-0.99	-2.41
4,649.00	88.65	170.10	2,941.88	-1,906.92	30.36	1,906.73	2.49	0.90	-2.32
4,745.00	90.08	169.10	2,942.94	-2,001.33	47.69	2,001.05	1.82	1.49	-1.04
4,838.00	89.99	170.02	2,942.89	-2,092.79	64.54	2,092.41	0.99	-0.10	0.99
4,933.00	89.24	170.71	2,943.52	-2,186.45	80.44	2,185.98	1.07	-0.79	0.73
5,028.00	88.90	169.58	2,945.07	-2,280.03	96.70	2,279.48	1.24	-0.36	-1.19
5,123.00	88.89	169.94	2,946.90	-2,373.50	113.58	2,372.85	0.38	-0.01	0.38
5,218.00	89.39	170.82	2,948.32	-2,467.15	129.45	2,466.42	1.07	0.53	0.93
5,314.00	88.64	171.63	2,949.97	-2,562.02	144.10	2,561.20	1.15	-0.78	0.84
5,409.00	87.64	172.24	2,953.06	-2,656.03	157.42	2,655.13	1.23	-1.05	0.64
5,504.00	86.88	173.70	2,957.60	-2,750.20	169.03	2,749.24	1.73	-0.80	1.54
5,599.00	86.86	176.09	2,962.79	-2,844.67	177.47	2,843.67	2.51	-0.02	2.52
5,694.00	86.88	178.16	2,967.98	-2,939.41	182.23	2,938.38	2.18	0.02	2.18
5,789.00	87.54	180.18	2,972.60	-3,034.28	183.60	3,033.24	2.23	0.69	2.13
5,884.00	88.17	181.85	2,976.16	-3,129.20	181.92	3,128.17	1.88	0.66	1.76
5,979.00	88.03	182.83	2,979.31	-3,224.06	178.04	3,223.05	1.04	-0.15	1.03
6,076.00	87.33	181.77	2,983.23	-3,320.90	174.15	3,319.91	1.31	-0.72	-1.09
6,107.00	87.32	181.65	2,984.68	-3,351.86	173.23	3,350.87	0.39	-0.03	-0.39



Survey Report

Company: COG OPERATING, LLC
Project: Eddy /Lea County, NM (NAD27) NMEZ
Site: Bone Yard 11 Fee 16H
Well: 16H
Wellbore: Lateral
Design: Lateral

Local Co-ordinate Reference: Well 16H - Slot BY16H
TVD Reference: 3425+18 @ 3443.00ft (Planning)
MD Reference: 3425+18 @ 3443.00ft (Planning)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: VON_EDM

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
6,202.00	87.19	180.55	2,989.23	-3,446.73	171.41	3,445.75	1.16	-0.14	-1.16
6,296.00	87.25	181.87	2,993.79	-3,540.59	169.43	3,539.63	1.40	0.06	1.40
6,390.00	87.53	180.56	2,998.07	-3,634.47	167.44	3,633.51	1.42	0.30	-1.39
6,485.00	88.43	179.95	3,001.42	-3,729.41	167.01	3,728.45	1.14	0.95	-0.64
6,580.00	87.88	180.13	3,004.48	-3,824.36	166.95	3,823.40	0.61	-0.58	0.19
6,675.00	87.32	181.17	3,008.45	-3,919.27	165.87	3,918.32	1.24	-0.59	1.09
6,769.00	87.05	180.91	3,013.07	-4,013.14	164.17	4,012.19	0.40	-0.29	-0.28
6,864.00	86.79	179.51	3,018.18	-4,108.00	163.82	4,107.06	1.50	-0.27	-1.47
6,959.00	86.38	179.89	3,023.83	-4,202.83	164.31	4,201.88	0.59	-0.43	0.40
7,053.00	87.26	179.68	3,029.05	-4,296.68	164.67	4,295.73	0.96	0.94	-0.22
7,148.00	87.36	180.42	3,033.51	-4,391.58	164.58	4,390.62	0.79	0.11	0.78
7,243.00	87.57	181.48	3,037.71	-4,486.47	163.01	4,485.52	1.14	0.22	1.12
7,337.00	87.35	180.48	3,041.88	-4,580.36	161.40	4,579.42	1.09	-0.23	-1.06
7,432.00	87.64	181.34	3,046.03	-4,675.26	159.90	4,674.33	0.95	0.31	0.91
7,526.00	86.43	180.65	3,050.89	-4,769.12	158.27	4,768.19	1.48	-1.29	-0.73
7,622.00	87.42	178.45	3,056.04	-4,864.97	159.02	4,864.04	2.51	1.03	-2.29
7,716.00	88.40	178.85	3,059.47	-4,958.88	161.23	4,957.94	1.13	1.04	0.43
7,811.00	89.02	179.01	3,061.61	-5,053.84	163.01	5,052.88	0.67	0.65	0.17
7,905.00	89.36	179.23	3,062.94	-5,147.82	164.45	5,146.85	0.43	0.36	0.23
8,000.00	89.21	181.04	3,064.12	-5,242.81	164.23	5,241.84	1.91	-0.16	1.91
8,095.00	88.86	180.03	3,065.72	-5,337.79	163.34	5,336.83	1.13	-0.37	-1.06
8,189.00	89.21	180.17	3,067.30	-5,431.77	163.18	5,430.81	0.40	0.37	0.15
8,284.00	88.94	181.62	3,068.84	-5,526.75	161.69	5,525.79	1.55	-0.28	1.53
8,379.00	88.71	179.60	3,070.79	-5,621.72	160.68	5,620.77	2.14	-0.24	-2.13
8,474.00	88.98	180.31	3,072.70	-5,716.70	160.76	5,715.74	0.80	0.28	0.75
8,568.00	88.85	181.04	3,074.48	-5,810.67	159.65	5,809.72	0.79	-0.14	0.78
8,663.00	86.88	180.14	3,078.02	-5,905.60	158.67	5,904.65	2.28	-2.07	-0.95
8,757.00	86.57	181.12	3,083.39	-5,999.44	157.64	5,998.50	1.09	-0.33	1.04
8,851.00	86.39	180.22	3,089.16	-6,093.25	156.54	6,092.32	0.97	-0.19	-0.96
8,945.00	87.61	179.73	3,094.08	-6,187.12	156.58	6,186.18	1.40	1.30	-0.52
9,039.00	87.46	179.89	3,098.12	-6,281.03	156.89	6,280.09	0.23	-0.16	0.17
9,134.00	88.22	180.66	3,101.70	-6,375.96	156.44	6,375.02	1.14	0.80	0.81
9,192.00	88.23	181.43	3,103.50	-6,433.93	155.38	6,432.99	1.33	0.02	1.33
9,287.00	88.86	180.39	3,105.91	-6,528.88	153.87	6,527.95	1.28	0.66	-1.09
9,383.00	89.52	180.69	3,107.27	-6,624.87	152.97	6,623.94	0.76	0.69	0.31
9,478.00	89.39	181.29	3,108.17	-6,719.85	151.33	6,718.93	0.65	-0.14	0.63
9,573.00	89.98	180.23	3,108.70	-6,814.84	150.07	6,813.92	1.28	0.62	-1.12
9,668.00	89.83	180.78	3,108.85	-6,909.83	149.23	6,908.92	0.60	-0.16	0.58
9,762.00	89.45	181.87	3,109.44	-7,003.80	147.06	7,002.90	1.23	-0.40	1.16
9,857.00	89.76	180.55	3,110.10	-7,098.78	145.05	7,097.89	1.43	0.33	-1.39
9,951.00	89.26	181.24	3,110.90	-7,192.76	143.58	7,191.88	0.91	-0.53	0.73
10,046.00	89.43	179.89	3,111.99	-7,287.75	142.65	7,286.87	1.43	0.18	-1.42
10,141.00	89.38	181.03	3,112.98	-7,382.74	141.88	7,381.86	1.20	-0.05	1.20



Survey Report

Company: COG OPERATING, LLC
Project: Eddy /Lea County, NM (NAD27) NMEZ
Site: Bone Yard 11 Fee 16H
Well: 16H
Wellbore: Lateral
Design: Lateral

Local Co-ordinate Reference: Well 16H - Slot BY16H
TVD Reference: 3425+18 @ 3443.00ft (Planning)
MD Reference: 3425+18 @ 3443.00ft (Planning)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: VON_EDM

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
10,236.00	89.13	179.16	3,114.21	-7,477.73	141.72	7,476.85	1.99	-0.26	-1.97
10,331.00	88.70	179.56	3,116.01	-7,572.70	142.79	7,571.82	0.62	-0.45	0.42
10,430.00	88.70	179.56	3,118.26	-7,671.67	143.55	7,670.79	0.00	0.00	0.00

BoneYard11Fee#16H PBHL p5

Design Targets

Target Name

- hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
BoneYard11Fee#16H SL - actual wellpath hits target center - Point	0.00	0.00	0.00	0.00	0.00	582,630.50	462,005.30	32° 36' 6.093 N	104° 27' 24.172 W
BoneYard11Fee#16H BT - actual wellpath misses target center by 0.01ft at 10430.00ft MD (3118.26 TVD, -7671.67 N, 143.55 E) - Point	0.00	360.00	3,118.26	-7,671.67	143.55	574,958.83	462,148.85	32° 34' 50.177 N	104° 27' 22.390 W

Design Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	+E/-W (ft)	Comment
2,756.00	2,686.45	-80.83	7.53	Wellpath Crosses 330'HL @ Heel
10,139.00	3,112.95	-7,380.74	141.92	Wellpath Crosses 330'HL @ Toe
10,430.00	3,118.26	-7,671.67	143.55	TD @ 38.4'FSL, 2305.1'FWL

Checked By: _____ Approved By: _____ Date: _____

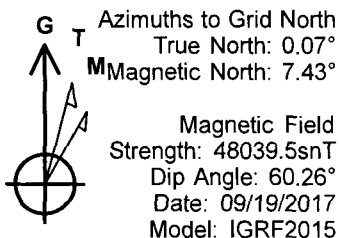
COG OPERATING, LLC

Project: Eddy /Lea County, NM (NAD27) NMEZ
Site: Bone Yard 11 Fee 16H
Well: 16H
Wellbore: Lateral
Design: Lateral

3425+18 @ 3443.00ft (Planning)
NAD 1927 (NADCON CONUS)

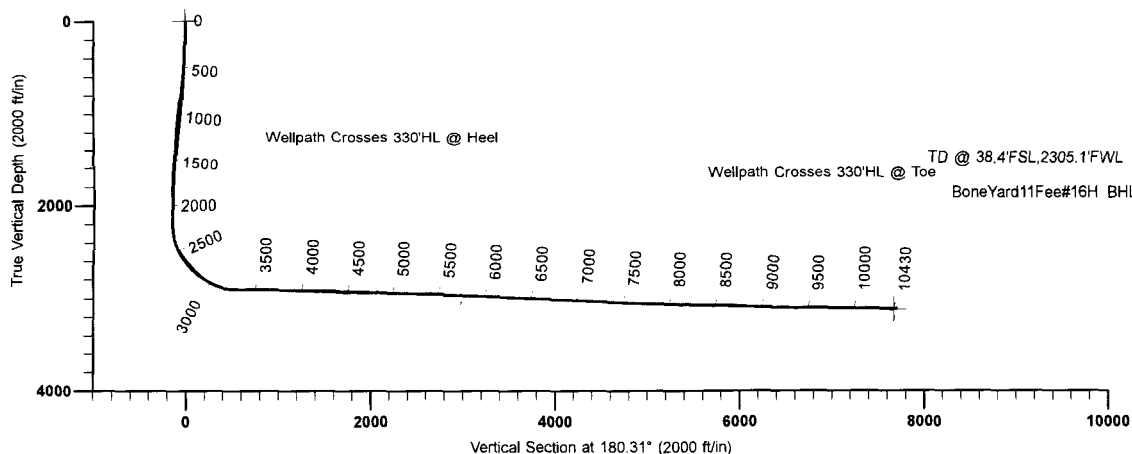
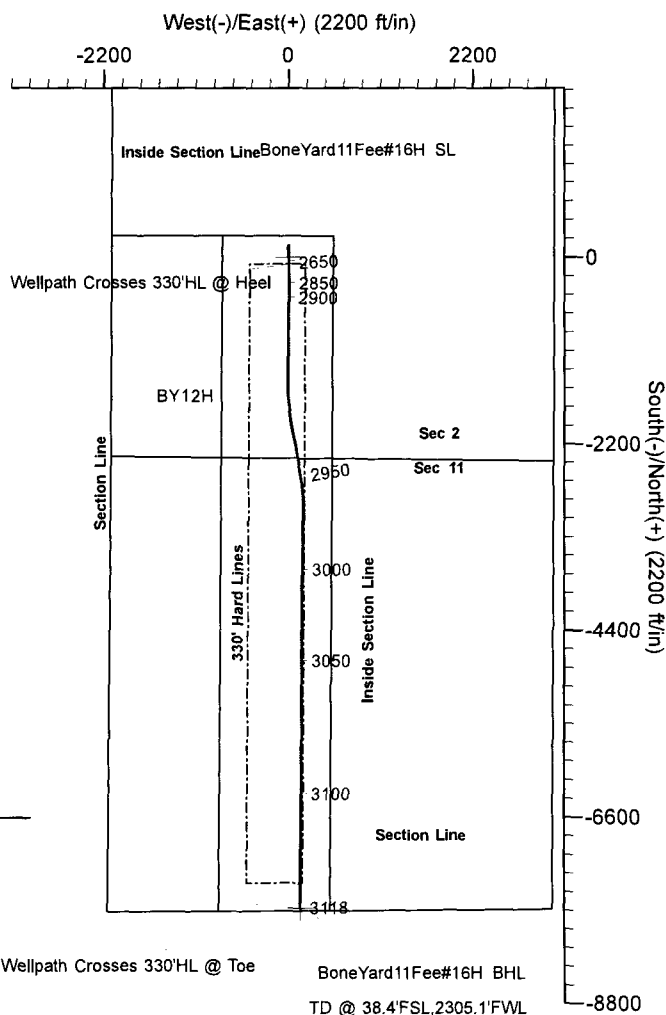


To convert a Magnetic Direction to a Grid Direction, Add 7.43°



ANNOTATIONS

MD	TVD	+N/-S	+E/-W	Annotation
2756.00	2686.45	-80.83	7.53	Wellpath Crosses 330'HL @ Heel
10139.00	3112.95	-7380.74	141.92	Wellpath Crosses 330'HL @ Toe
10430.00	3118.26	-7671.67	143.55	TD @ 38.4'FSL,2305.1'FWL



TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
BoneYard11Fee#16H SL	0.00	0.00	0.00	582630.50	462005.30	Point
BoneYard11Fee#16H BHL	3118.26	-7671.67	143.55	574958.83	462148.85	Point

Design: Lateral (16H/Lateral)
Created By: Mekka Williams
eSomina Well Design
mekka@esominawelldesign.com
9/10, October 16 2017

VON DIRECTIONAL
12074 FM 3083 Conroe, Texas 77301
936-756-2400

