



CONCHO

NM OIL CONSERVATION
ARTESIA DISTRICT
JUL 31 2017

RECEIVED

COG Operating LLC

Eddy County, NM (NAD-27 2015)

Burch Keely Unit #944H

API #: 30-015-44079

SHL: 1035' FSL, 149' FEL, Sec 13, T17S, R29E, Unit P

PP: 964' FSL, 330' FWL, Sec 18, T17S, R30E, Unit M

BHL: 967' FSL, 232' FEL, Sec 18, T17S, R30E, Unit P

Design: BHL: 970' FSL, 220' FEL, Sec 18, T17S, R30E, Unit P

Standard Survey Report

01 May, 2017





TDS
Survey Report



Company:	COG Operating LLC	Local Co-ordinate Reference:	Well SHL: 1035' FSL, 149' FEL, Sec 13, T17S, R29E, Unit P
Project:	Eddy County, NM (NAD-27 2015)	TVD Reference:	KB @ 3649.00usft (Silver Oak 3)
Site:	Burch Keely Unit #944H	MD Reference:	KB @ 3649.00usft (Silver Oak 3)
Well:	SHL: 1035' FSL, 149' FEL, Sec 13, T17S, R29E, Unit P	North Reference:	Grid
Wellbore:	BHL: 970' FSL, 220' FEL, Sec 18, T17S, R30E, Unit P	Survey Calculation Method:	Minimum Curvature
Design:	BHL: 970' FSL, 220' FEL, Sec 18, T17S, R30E, Unit P	Database:	EDM 5000.1 Single User Db

Project	Eddy County, NM (NAD-27 2015)		
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	Burch Keely Unit #944H			
Site Position:		Northing:	665,811.50 usft	Latitude: 32° 49' 48.033 N
From:	Map	Easting:	596,356.50 usft	Longitude: 104° 1' 10.714 W
Position Uncertainty:	0.00 usft	Slot Radius:	13.20 in	Grid Convergence: 0.17 °

Well	SHL: 1035' FSL, 149' FEL, Sec 13, T17S, R29E, Unit P			
Well Position	+N/-S	0.00 usft	Northing:	665,811.50 usft
	+E/-W	0.00 usft	Easting:	596,356.50 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level: 3,631.00 usft

Wellbore	BHL: 970' FSL, 220' FEL, Sec 18, T17S, R30E, Unit P				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	4/10/2017	7.23	60.55	48,267

Design	BHL: 970' FSL, 220' FEL, Sec 18, T17S, R30E, Unit P			
Audit Notes:				
Version:	1.0	Phase:	ACTUAL	Tie On Depth: 0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	90.52

Survey Program	Date	5/1/2017		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
25.00	1,086.00	VES Gyro #1 (BHL: 970' FSL, 220' FEL, S	VES-ISCWSA-GYRO-3	Biaxial Semi-Cont. Gyro
1,133.00	9,940.00	TDS MWD #2 (BHL: 970' FSL, 220' FEL, S	MWD	MWD - Standard

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
25.00	0.17	61.75	25.00	0.02	0.03	0.03	0.68	0.68	0.00
50.00	0.18	333.60	50.00	0.07	0.05	0.05	0.97	0.04	-352.60
75.00	0.16	326.10	75.00	0.13	0.01	0.01	0.12	-0.08	-30.00
100.00	0.34	323.53	100.00	0.22	-0.05	-0.05	0.72	0.72	-10.28
125.00	0.46	314.58	125.00	0.35	-0.17	-0.17	0.54	0.48	-35.80
150.00	0.33	329.16	150.00	0.49	-0.28	-0.28	0.65	-0.52	58.32



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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)
175.00	0.27	337.58	175.00	0.60	-0.34	-0.34	0.30	-0.24	33.68
200.00	0.21	17.36	200.00	0.70	-0.34	-0.35	0.69	-0.24	159.12
225.00	0.22	20.00	225.00	0.79	-0.31	-0.32	0.06	0.04	10.56
250.00	0.29	343.03	250.00	0.89	-0.32	-0.32	0.70	0.28	-147.88
275.00	0.38	314.07	275.00	1.01	-0.39	-0.40	0.76	0.36	-115.84
300.00	0.29	298.15	300.00	1.10	-0.51	-0.52	0.51	-0.36	-63.68
325.00	0.29	280.32	325.00	1.14	-0.63	-0.64	0.36	0.00	-71.32
350.00	0.35	255.61	350.00	1.13	-0.76	-0.77	0.60	0.24	-98.84
375.00	0.46	227.25	375.00	1.05	-0.91	-0.92	0.90	0.44	-113.44
400.00	0.39	202.00	399.99	0.90	-1.02	-1.03	0.79	-0.28	-101.00
425.00	0.33	178.44	424.99	0.75	-1.05	-1.05	0.63	-0.24	-94.24
450.00	0.33	187.39	449.99	0.61	-1.05	-1.06	0.21	0.00	35.80
475.00	0.32	162.99	474.99	0.47	-1.04	-1.05	0.55	-0.04	-97.60
500.00	0.33	149.19	499.99	0.34	-0.99	-0.99	0.31	0.04	-55.20
525.00	0.36	131.36	524.99	0.22	-0.89	-0.89	0.44	0.12	-71.32
550.00	0.28	101.14	549.99	0.16	-0.77	-0.77	0.74	-0.32	-120.88
575.00	0.46	87.68	574.99	0.15	-0.61	-0.61	0.79	0.72	-53.84
600.00	0.52	80.01	599.99	0.18	-0.40	-0.40	0.36	0.24	-30.68
625.00	0.58	60.00	624.99	0.26	-0.18	-0.18	0.80	0.24	-80.04
650.00	0.73	57.76	649.99	0.41	0.07	0.06	0.61	0.60	-8.96
675.00	0.94	56.91	674.99	0.61	0.37	0.37	0.84	0.84	-3.40
700.00	1.00	58.54	699.98	0.83	0.73	0.72	0.26	0.24	6.52
725.00	1.21	60.44	724.98	1.07	1.15	1.14	0.85	0.84	7.60
750.00	1.40	62.14	749.97	1.35	1.65	1.63	0.78	0.76	6.80
775.00	1.46	60.05	774.96	1.65	2.19	2.18	0.32	0.24	-8.36
800.00	1.58	58.79	799.95	1.99	2.76	2.74	0.50	0.48	-5.04
825.00	1.61	54.40	824.94	2.37	3.34	3.32	0.50	0.12	-17.56
850.00	1.73	53.13	849.93	2.80	3.93	3.90	0.50	0.48	-5.08
875.00	1.67	51.61	874.92	3.25	4.52	4.49	0.30	-0.24	-6.08
900.00	1.70	50.49	899.91	3.72	5.09	5.06	0.18	0.12	-4.48
925.00	1.70	57.83	924.90	4.15	5.69	5.65	0.87	0.00	29.36
950.00	1.53	61.98	949.89	4.50	6.30	6.26	0.82	-0.68	16.60
975.00	1.36	68.73	974.88	4.77	6.87	6.83	0.96	-0.68	27.00
1,000.00	1.32	79.07	999.88	4.93	7.43	7.38	0.98	-0.16	41.36
1,025.00	1.23	88.95	1,024.87	4.99	7.98	7.93	0.95	-0.36	39.52
1,050.00	1.00	87.51	1,049.87	5.00	8.47	8.42	0.93	-0.92	-5.76
1,075.00	1.04	84.24	1,074.86	5.04	8.91	8.86	0.28	0.16	-13.08
1,086.00	0.99	82.27	1,085.86	5.06	9.10	9.06	0.55	-0.45	-17.91
Tie-In to VES Gyro									
1,133.00	1.20	71.60	1,132.85	5.27	9.97	9.92	0.62	0.45	-22.70
First TDS MWD Survey									



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Grid

Survey Calculation Method:

Minimum Curvature

Database:

EDM 5000.1 Single User Db

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)
1,227.00	1.10	278.90	1,226.84	5.72	10.01	9.96	2.38	-0.11	-162.45
1,322.00	3.90	267.80	1,321.74	5.74	5.88	5.83	2.98	2.95	-11.68
1,417.00	4.60	270.40	1,416.48	5.64	-1.15	-1.20	0.76	0.74	2.74
1,511.00	4.60	272.90	1,510.18	5.86	-8.69	-8.74	0.21	0.00	2.66
1,606.00	4.40	247.40	1,604.90	4.65	-15.86	-15.90	2.10	-0.21	-26.84
1,701.00	4.50	242.40	1,699.61	1.52	-22.52	-22.54	0.42	0.11	-5.26
1,796.00	4.40	242.10	1,794.32	-1.91	-29.05	-29.03	0.11	-0.11	-0.32
1,890.00	4.10	241.20	1,888.07	-5.22	-35.18	-35.13	0.33	-0.32	-0.96
1,984.00	3.80	243.00	1,981.84	-8.25	-40.90	-40.82	0.35	-0.32	1.91
2,079.00	3.70	241.00	2,076.64	-11.17	-46.38	-46.28	0.17	-0.11	-2.11
2,173.00	3.60	244.20	2,170.45	-13.92	-51.69	-51.57	0.24	-0.11	3.40
2,268.00	3.30	244.50	2,265.28	-16.40	-56.85	-56.70	0.32	-0.32	0.32
2,363.00	3.20	248.00	2,360.12	-18.57	-61.77	-61.60	0.23	-0.11	3.68
2,457.00	3.10	247.90	2,453.98	-20.50	-66.56	-66.37	0.11	-0.11	-0.11
2,552.00	4.90	252.50	2,548.75	-22.69	-72.81	-72.60	1.92	1.89	4.84
2,647.00	5.60	256.20	2,643.35	-25.02	-81.18	-80.95	0.82	0.74	3.89
2,741.00	5.80	257.70	2,736.88	-27.12	-90.28	-90.03	0.27	0.21	1.60
2,836.00	5.90	257.50	2,831.39	-29.20	-99.73	-99.46	0.11	0.11	-0.21
2,931.00	6.20	260.20	2,925.86	-31.13	-109.56	-109.27	0.44	0.32	2.84
3,025.00	5.80	254.20	3,019.34	-33.29	-119.13	-118.82	0.79	-0.43	-6.38
3,120.00	4.70	245.20	3,113.95	-36.23	-127.28	-126.95	1.44	-1.16	-9.47
3,215.00	4.70	244.60	3,208.63	-39.53	-134.33	-133.97	0.05	0.00	-0.63
3,309.00	4.70	247.30	3,302.31	-42.67	-141.36	-140.97	0.24	0.00	2.87
3,404.00	4.80	252.50	3,396.98	-45.37	-148.74	-148.32	0.47	0.11	5.47
3,498.00	4.80	254.80	3,490.66	-47.58	-156.29	-155.85	0.20	0.00	2.45
3,593.00	4.60	244.40	3,585.34	-50.27	-163.56	-163.10	0.92	-0.21	-10.95
3,688.00	4.80	242.90	3,680.02	-53.73	-170.53	-170.04	0.25	0.21	-1.58
3,783.00	5.00	245.20	3,774.67	-57.27	-177.83	-177.30	0.30	0.21	2.42
3,878.00	3.90	235.00	3,869.38	-60.86	-184.24	-183.68	1.42	-1.16	-10.74
3,972.00	4.10	234.10	3,963.16	-64.67	-189.58	-188.98	0.22	0.21	-0.96
4,067.00	2.20	214.80	4,058.01	-68.15	-193.37	-192.74	2.26	-2.00	-20.32
4,162.00	2.20	166.70	4,152.95	-71.43	-193.99	-193.33	1.89	0.00	-50.63
4,193.00	2.10	162.70	4,183.93	-72.55	-193.68	-193.02	0.58	-0.32	-12.90
4,225.00	1.60	151.90	4,215.91	-73.50	-193.30	-192.62	1.90	-1.56	-33.75
4,256.00	2.20	106.10	4,246.89	-74.05	-192.52	-191.84	5.09	1.94	-147.74
4,288.00	4.50	105.90	4,278.84	-74.56	-190.73	-190.04	7.19	7.19	-0.63
4,319.00	7.10	107.00	4,309.68	-75.46	-187.72	-187.03	8.39	8.39	3.55
4,351.00	10.00	98.50	4,341.32	-76.45	-183.08	-182.38	9.86	9.06	-26.56
4,382.00	13.30	90.90	4,371.68	-76.90	-176.85	-176.15	11.72	10.65	-24.52
4,414.00	17.10	86.70	4,402.55	-76.69	-168.47	-167.77	12.36	11.88	-13.13
4,445.00	21.10	85.80	4,431.84	-76.02	-158.35	-157.66	12.94	12.90	-2.90



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4,477.00	24.90	85.70	4,461.29	-75.09	-145.89	-145.20	11.88	11.88	-0.31
4,509.00	28.00	86.00	4,489.94	-74.06	-131.67	-131.00	9.70	9.69	0.94
4,540.00	30.30	86.50	4,517.01	-73.07	-116.61	-115.94	7.46	7.42	1.61
4,572.00	32.40	87.00	4,544.34	-72.13	-99.99	-99.33	6.61	6.56	1.56
4,603.00	34.90	87.70	4,570.14	-71.34	-82.83	-82.18	8.16	8.06	2.26
4,635.00	36.80	89.00	4,596.08	-70.81	-64.10	-63.45	6.40	5.94	4.06
4,666.00	40.30	89.90	4,620.32	-70.63	-44.78	-44.14	11.43	11.29	2.90
4,698.00	43.00	90.10	4,644.23	-70.63	-23.52	-22.87	8.45	8.44	0.63
4,730.00	43.80	89.90	4,667.48	-70.63	-1.53	-0.89	2.54	2.50	-0.63
4,761.00	44.10	89.90	4,689.79	-70.59	19.99	20.63	0.97	0.97	0.00
4,793.00	44.70	89.80	4,712.66	-70.53	42.37	43.01	1.89	1.88	-0.31
4,825.00	45.20	89.50	4,735.30	-70.39	64.98	65.62	1.70	1.56	-0.94
4,856.00	45.70	89.40	4,757.05	-70.18	87.07	87.71	1.63	1.61	-0.32
4,888.00	46.20	89.50	4,779.30	-69.96	110.07	110.70	1.58	1.56	0.31
4,919.00	47.40	89.70	4,800.52	-69.80	132.67	133.30	3.90	3.87	0.65
4,950.00	50.50	90.20	4,820.88	-69.79	156.04	156.67	10.07	10.00	1.61
4,982.00	53.70	90.80	4,840.53	-70.01	181.29	181.92	10.11	10.00	1.88
5,013.00	56.20	91.10	4,858.33	-70.43	206.66	207.29	8.10	8.06	0.97
5,045.00	59.10	90.60	4,875.46	-70.83	233.69	234.32	9.16	9.06	-1.56
5,076.00	61.40	89.90	4,890.84	-70.94	260.60	261.23	7.67	7.42	-2.26
5,108.00	64.50	89.20	4,905.39	-70.72	289.10	289.73	9.88	9.69	-2.19
5,140.00	68.30	88.10	4,918.20	-70.02	318.41	319.03	12.29	11.88	-3.44
5,171.00	72.10	89.00	4,928.70	-69.29	347.56	348.17	12.56	12.26	2.90
5,203.00	77.20	90.50	4,937.16	-69.16	378.40	379.02	16.57	15.94	4.69
5,234.00	82.60	90.00	4,942.60	-69.29	408.91	409.52	17.49	17.42	-1.61
5,266.00	86.90	90.00	4,945.53	-69.29	440.77	441.38	13.44	13.44	0.00
5,298.00	88.90	89.90	4,946.70	-69.26	472.75	473.36	6.26	6.25	-0.31
5,304.31	88.96	89.92	4,946.82	-69.25	479.06	479.67	0.96	0.91	0.30
As-Drilled PP									
5,397.00	89.80	90.20	4,947.82	-69.35	571.74	572.35	0.96	0.91	0.30
5,491.00	90.20	90.10	4,947.82	-69.60	665.74	666.34	0.44	0.43	-0.11
5,587.00	90.20	90.00	4,947.49	-69.68	761.74	762.34	0.10	0.00	-0.10
5,681.00	90.70	90.00	4,946.75	-69.68	855.74	856.33	0.53	0.53	0.00
5,776.00	91.10	88.90	4,945.26	-68.77	950.72	951.30	1.23	0.42	-1.16
5,871.00	91.60	89.00	4,943.02	-67.03	1,045.68	1,046.24	0.54	0.53	0.11
5,966.00	91.80	89.00	4,940.20	-65.37	1,140.62	1,141.17	0.21	0.21	0.00
6,060.00	91.90	89.20	4,937.17	-63.89	1,234.56	1,235.09	0.24	0.11	0.21
6,155.00	90.10	89.60	4,935.51	-62.90	1,329.53	1,330.05	1.94	-1.89	0.42
6,249.00	89.80	89.90	4,935.59	-62.49	1,423.53	1,424.04	0.45	-0.32	0.32
6,344.00	90.00	90.10	4,935.76	-62.49	1,518.53	1,519.04	0.30	0.21	0.21
6,439.00	90.10	90.60	4,935.67	-63.07	1,613.53	1,614.04	0.54	0.11	0.53



TDS Survey Report



Company: COG Operating LLC
Project: Eddy County, NM (NAD-27 2015)
Site: Burch Keely Unit #944H
Well: SHL: 1035' FSL, 149' FEL, Sec 13, T17S, R29E, Unit P
Wellbore: BHL: 970' FSL, 220' FEL, Sec 18, T17S, R30E, Unit P
Design: BHL: 970' FSL, 220' FEL, Sec 18, T17S, R30E, Unit P

Local Co-ordinate Reference: Well SHL: 1035' FSL, 149' FEL, Sec 13, T17S, R29E, Unit P
TVD Reference: KB @ 3649.00usft (Silver Oak 3)
MD Reference: KB @ 3649.00usft (Silver Oak 3)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

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)
6,534.00	90.70	91.20	4,935.01	-64.56	1,708.52	1,709.03	0.89	0.63	0.63
6,628.00	90.50	89.40	4,934.02	-65.05	1,802.51	1,803.02	1.93	-0.21	-1.91
6,723.00	90.50	89.20	4,933.20	-63.89	1,897.50	1,898.00	0.21	0.00	-0.21
6,817.00	90.60	90.00	4,932.29	-63.24	1,991.49	1,991.98	0.86	0.11	0.85
6,912.00	91.10	89.40	4,930.88	-62.74	2,086.48	2,086.96	0.82	0.53	-0.63
7,006.00	91.60	89.70	4,928.67	-62.00	2,180.45	2,180.92	0.62	0.53	0.32
7,101.00	91.80	89.90	4,925.85	-61.67	2,275.40	2,275.87	0.30	0.21	0.21
7,195.00	92.00	90.30	4,922.73	-61.83	2,369.35	2,369.81	0.48	0.21	0.43
7,290.00	90.90	89.50	4,920.33	-61.67	2,464.32	2,464.78	1.43	-1.16	-0.84
7,385.00	91.40	89.60	4,918.42	-60.92	2,559.30	2,559.74	0.54	0.53	0.11
7,479.00	91.40	89.80	4,916.13	-60.43	2,653.27	2,653.71	0.21	0.00	0.21
7,574.00	91.60	89.90	4,913.64	-60.18	2,748.23	2,748.67	0.24	0.21	0.11
7,669.00	91.80	90.40	4,910.82	-60.43	2,843.19	2,843.62	0.57	0.21	0.53
7,764.00	92.30	90.70	4,907.42	-61.34	2,938.13	2,938.56	0.61	0.53	0.32
7,858.00	91.20	89.90	4,904.55	-61.83	3,032.08	3,032.51	1.45	-1.17	-0.85
7,953.00	90.10	89.00	4,903.48	-60.92	3,127.07	3,127.49	1.50	-1.16	-0.95
8,048.00	90.50	89.70	4,902.98	-59.84	3,222.06	3,222.47	0.85	0.42	0.74
8,142.00	90.50	89.90	4,902.16	-59.52	3,316.05	3,316.46	0.21	0.00	0.21
8,237.00	90.80	89.90	4,901.08	-59.35	3,411.05	3,411.44	0.32	0.32	0.00
8,332.00	91.20	90.10	4,899.42	-59.35	3,506.03	3,506.43	0.47	0.42	0.21
8,426.00	90.90	88.70	4,897.70	-58.37	3,600.01	3,600.39	1.52	-0.32	-1.49
8,521.00	91.00	88.70	4,896.12	-56.21	3,694.97	3,695.33	0.11	0.11	0.00
8,616.00	90.80	89.10	4,894.63	-54.39	3,789.94	3,790.28	0.47	-0.21	0.42
8,710.00	90.90	89.40	4,893.24	-53.16	3,883.92	3,884.25	0.34	0.11	0.32
8,804.00	91.40	89.50	4,891.35	-52.25	3,977.90	3,978.21	0.54	0.53	0.11
8,899.00	91.60	90.00	4,888.86	-51.84	4,072.87	4,073.17	0.57	0.21	0.53
8,993.00	91.70	90.60	4,886.16	-52.33	4,166.83	4,167.13	0.65	0.11	0.64
9,088.00	90.20	89.90	4,884.58	-52.75	4,261.81	4,262.11	1.74	-1.58	-0.74
9,182.00	90.60	90.00	4,883.93	-52.66	4,355.81	4,356.10	0.44	0.43	0.11
9,277.00	90.90	90.30	4,882.68	-52.91	4,450.80	4,451.09	0.45	0.32	0.32
9,371.00	91.20	90.60	4,880.96	-53.65	4,544.78	4,545.08	0.45	0.32	0.32
9,465.00	90.70	89.80	4,879.40	-53.98	4,638.76	4,639.06	1.00	-0.53	-0.85
9,559.00	90.80	90.20	4,878.17	-53.98	4,732.75	4,733.05	0.44	0.11	0.43
9,656.00	90.40	89.10	4,877.16	-53.39	4,829.75	4,830.03	1.21	-0.41	-1.13
9,750.00	90.70	89.10	4,876.25	-51.91	4,923.73	4,924.00	0.32	0.32	0.00
9,845.00	90.90	89.20	4,874.93	-50.50	5,018.71	5,018.96	0.24	0.21	0.11
Last TDS MWD Survey									
9,940.00	90.90	89.20	4,873.43	-49.17	5,113.69	5,113.93	0.00	0.00	0.00
Projection to Bit/TD									



TDS
Survey Report



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MD Reference: KB @ 3649.00usft (Silver Oak 3)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
1,086.00	1,085.86	5.06	9.10	Tie-In to VES Gyro
1,133.00	1,132.85	5.27	9.97	First TDS MWD Survey
5,304.31	4,946.82	-69.25	479.06	As-Drilled PP
9,845.00	4,874.93	-50.50	5,018.71	Last TDS MWD Survey
9,940.00	4,873.43	-49.17	5,113.69	Projection to Bit/TD

Checked By: _____ Approved By: _____ Date: _____