



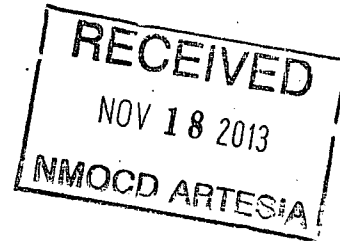
PO Box 261021
Corpus Christi, Texas 78426
(361) 767-0602 • (800) 606-GYRO • Fax (361) 767-0612

A GYRO TECHNOLOGIES INC. COMPANY

30-015-40625

July 11, 2013

Concho Resources, Inc.
One Concho Center
600 W. Illinois Avenue
Midland, Texas 79701



Attn: Kanicia Castillo

RE: **Dodd Federal Unit No. 910H**

Please find enclosed a copy of the survey from 0.00' to 3955.00' ran on the above referenced well.

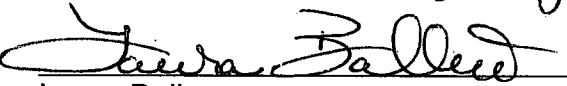
Sincerely,


Keith Havelka
Operations

STATE OF TEXAS §
 §
COUNTY OF NUECES §

This instrument was acknowledged before me on the 11th day of July,
A.D., 2013, by Keith Havelka.




Laura Ballew
Notary Public, State of Texas



Company: COG Operating LLC (Concho)

Lease/Well: Dodd Federal Unit /No. 910H

Location: Sec 11 T17S R29E

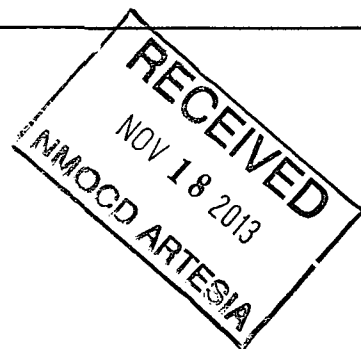
Rig Name: UDI 40

State/County: New Mexico/Eddy

Latitude: 32.85, Longitude: -104.05

GRID North is 0.15 Degrees East of True North

VS-Azi: 0.00 Degrees



Depth Reference : RKB 14 Feet

DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: dodd federal unit #910h-de_01.ut

Minimum Curvature Method

Report Date/Time: 7/11/2013 / 11:55

Vaughn Energy Services

West, Texas

432-563-5444

Surveyor: Chris Bankson

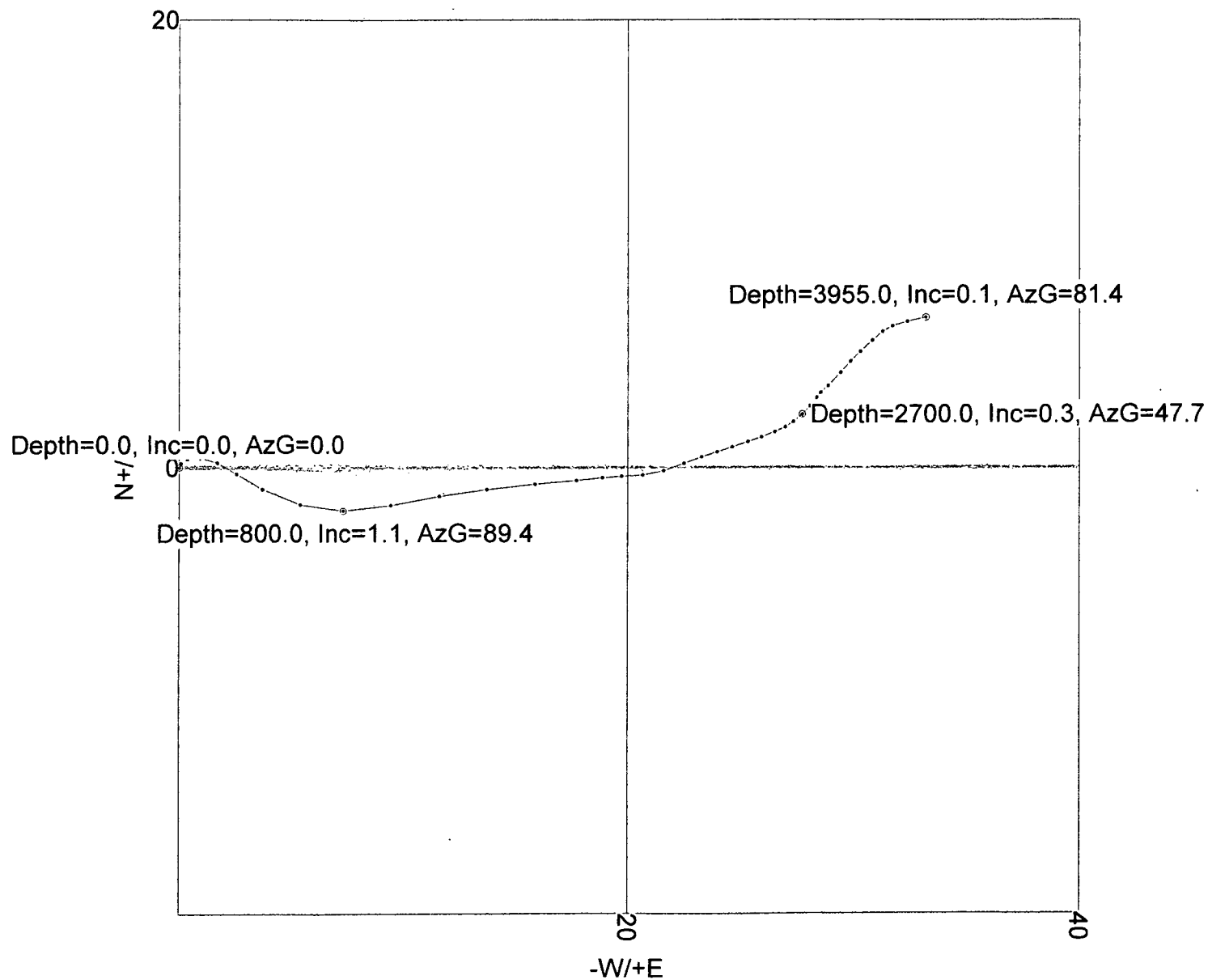
Dodd Federal Unit No. 910H / API 30-015-40625

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	****
100.00	0.22	26.72	100.00	0.17	0.09	0.17	0.19	26.72	0.22
200.00	0.24	80.10	200.00	0.38	0.38	0.38	0.54	44.85	0.21
300.00	0.41	89.01	300.00	0.42	0.94	0.42	1.03	65.84	0.18
400.00	0.54	118.66	399.99	0.20	1.72	0.20	1.73	83.26	0.27
500.00	0.59	121.57	499.99	-0.30	2.57	-0.30	2.59	96.55	0.06
600.00	0.95	119.79	599.98	-0.98	3.73	-0.98	3.86	104.67	0.35
700.00	1.19	106.15	699.96	-1.68	5.44	-1.68	5.70	107.11	0.35
800.00	1.12	89.41	799.94	-1.95	7.41	-1.95	7.67	104.76	0.34
900.00	1.30	77.97	899.92	-1.71	9.50	-1.71	9.65	100.18	0.30
1000.00	1.20	81.34	999.90	-1.31	11.65	-1.31	11.73	96.42	0.12
1100.00	1.23	81.55	1099.87	-0.99	13.75	-0.99	13.79	94.13	0.03
1200.00	1.22	85.58	1199.85	-0.75	15.87	-0.75	15.89	92.72	0.09
1300.00	0.92	84.21	1299.83	-0.59	17.73	-0.59	17.74	91.91	0.29
1400.00	0.41	84.68	1399.83	-0.48	18.89	-0.48	18.90	91.45	0.52
1500.00	0.56	86.03	1499.82	-0.41	19.73	-0.41	19.73	91.19	0.15
1600.00	0.52	87.88	1599.82	-0.36	20.67	-0.36	20.67	91.00	0.04
1700.00	0.60	70.23	1699.81	-0.17	21.61	-0.17	21.61	90.44	0.19
1800.00	0.49	69.34	1799.81	0.16	22.50	0.16	22.50	89.60	0.11

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
1900.00	0.49	70.31	1899.81	0.45	23.30	0.45	23.30	88.89	0.01
2000.00	0.33	72.18	1999.80	0.69	23.98	0.69	23.99	88.36	0.16
2100.00	0.47	71.72	2099.80	0.90	24.64	0.90	24.66	87.90	0.13
2200.00	0.37	70.84	2199.80	1.13	25.33	1.13	25.35	87.44	0.10
2300.00	0.37	69.57	2299.80	1.35	25.93	1.35	25.96	87.02	0.01
2400.00	0.35	66.58	2399.79	1.58	26.51	1.58	26.56	86.58	0.02
2500.00	0.22	64.52	2499.79	1.79	26.97	1.79	27.03	86.20	0.13
2600.00	0.29	51.65	2599.79	2.03	27.33	2.03	27.41	85.76	0.09
2700.00	0.30	47.74	2699.79	2.35	27.72	2.35	27.82	85.15	0.02
2800.00	0.31	38.52	2799.79	2.74	28.08	2.74	28.21	84.43	0.05
2900.00	0.23	37.59	2899.79	3.11	28.37	3.11	28.54	83.75	0.09
3000.00	0.09	45.66	2999.79	3.32	28.55	3.32	28.74	83.37	0.13
3100.00	0.44	47.70	3099.79	3.64	28.89	3.64	29.12	82.82	0.35
3200.00	0.48	39.80	3199.78	4.22	29.45	4.22	29.75	81.84	0.08
3300.00	0.29	42.52	3299.78	4.73	29.89	4.73	30.26	81.00	0.20
3400.00	0.41	47.59	3399.78	5.16	30.32	5.16	30.76	80.35	0.13
3500.00	0.42	45.57	3499.78	5.65	30.85	5.65	31.36	79.61	0.02
3600.00	0.27	53.91	3599.77	6.05	31.30	6.05	31.88	79.06	0.16
3700.00	0.30	67.19	3699.77	6.29	31.74	6.29	32.35	78.78	0.07
3800.00	0.49	76.18	3799.77	6.50	32.39	6.50	33.04	78.66	0.20
3955.00	0.13	81.43	3954.77	6.68	33.21	6.68	33.88	78.62	0.23



Vaughn Energy Services
West, Texas
432-563-5444
Surveyor: Chris Bankson
Dodd Federal Unit No. 910H / API 30-015-40625



VES Survey Date: 07/09/2013

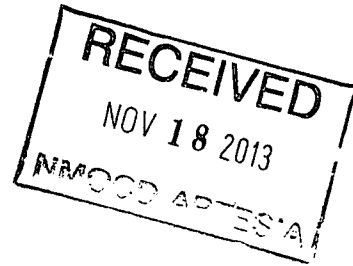


COG Operating, LLC

Eddy County(NM27E)

Sec.11-T17S-R29E

Dodd Federal Unit #910H



Wellbore #1

Survey: Survey #2-Archer MWD

Standard Survey Report

18 July, 2013

Archer

Company:	COG Operating, LLC	Local Co-ordinate Reference:	Well Dodd Federal Unit #910H
Project:	Eddy County(NM27E)	TVD Reference:	WELL @ 3641.00usft
Site:	Sec.11-T17S-R29E	MD Reference:	WELL @ 3641.00usft
Well:	Dodd Federal Unit #910H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

Project:	Eddy County(NM27E)		
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		Sec.11-T17S-R29E			
Site Position:		Northing:	670,959.200 usft	Latitude:	32° 50' 39.251 N
From:	Map	Easting:	586,327.900 usft	Longitude:	104° 3' 8.086 W
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16"	Grid Convergence:	0.15 °

Well:	Dodd Federal Unit #910H					
Well Position	+N/-S	0.00 usft	Northing:	673,555.100 usft	Latitude:	32° 51' 4.946 N
	+E/-W	0.00 usft	Easting:	586,002.500 usft	Longitude:	104° 3' 11.819 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	3,627.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	2013/06/20	7.61	60.63	48,737

Design:	Wellbore #1				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction	
	(usft)	(usft)	(usft)	(°)	
	0.00	0.00	0.00	90.08	

Survey Program		Date	2013/07/18		
From	To	Survey (Wellbore)	Tool Name	Description	
(usft)	(usft)				
100.00	3,955.00	Survey #1-VES Gyro (Wellbore #1)	GYD_DP_MS	Gyrodata gyro-compassing and drop	
4,085.00	9,276.00	Survey #2-Archer MWD (Wellbore #1)	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)
Tie-In / VES Gyro									
3,955.00	0.13	81.43	3,954.77	6.69	33.23	33.22	0.00	0.00	0.00
First Archer Survey									
4,085.00	0.30	84.10	4,084.77	6.75	33.72	33.71	0.13	0.13	2.05
4,117.00	0.90	82.30	4,116.77	6.79	34.05	34.04	1.88	1.87	-5.62
4,149.00	3.10	77.90	4,148.74	7.00	35.15	35.14	6.89	6.87	-13.75
4,180.00	5.70	74.50	4,179.65	7.59	37.45	37.44	8.43	8.39	-10.97
4,212.00	8.80	75.80	4,211.39	8.62	41.35	41.34	9.70	9.69	4.06
4,244.00	12.30	76.50	4,242.84	10.01	47.04	47.03	10.94	10.94	2.19
4,275.00	15.60	77.80	4,272.93	11.66	54.33	54.31	10.69	10.65	4.19
4,307.00	18.60	80.10	4,303.51	13.45	63.57	63.55	9.61	9.37	7.19
4,339.00	21.80	82.90	4,333.54	15.06	74.49	74.47	10.44	10.00	8.75

Company:	COG Operating, LLC	Local Co-ordinate Reference:	Well, Dodd Federal Unit #910H
Project:	Eddy County (NM27E)	TVD Reference:	WELL @ 3641.00usft
Site:	Sec.11-T17S-R29E	MD Reference:	WELL @ 3641.00usft
Well:	Dodd Federal Unit #910H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

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)
4,371.00	25.30	84.60	4,362.87	16.44	87.20	87.18	11.14	10.94	5.31
4,402.00	28.30	85.80	4,390.53	17.60	101.13	101.10	9.83	9.68	3.87
4,434.00	31.60	86.80	4,418.26	18.63	117.07	117.04	10.43	10.31	3.12
4,466.00	34.60	87.50	4,445.06	19.49	134.52	134.49	9.45	9.37	2.19
4,497.00	37.70	87.70	4,470.09	20.26	152.79	152.76	10.01	10.00	0.65
4,529.00	41.10	88.10	4,494.81	21.00	173.08	173.05	10.65	10.62	1.25
4,561.00	44.10	89.00	4,518.37	21.54	194.73	194.70	9.57	9.37	2.81
4,592.00	47.60	89.90	4,539.96	21.75	216.97	216.94	11.48	11.29	2.90
4,624.00	50.60	90.00	4,560.91	21.77	241.16	241.12	9.38	9.37	0.31
4,656.00	53.60	89.30	4,580.56	21.93	266.40	266.37	9.53	9.37	-2.19
4,688.00	56.60	88.60	4,598.87	22.41	292.64	292.61	9.55	9.37	-2.19
4,719.00	59.20	88.80	4,615.34	23.01	318.89	318.86	8.40	8.39	0.65
4,751.00	61.70	89.70	4,631.12	23.37	346.72	346.69	8.19	7.81	2.81
4,783.00	64.20	90.80	4,645.67	23.24	375.22	375.19	8.39	7.81	3.44
4,815.00	67.40	92.00	4,658.79	22.52	404.39	404.36	10.57	10.00	3.75
4,846.00	70.60	92.20	4,669.90	21.46	433.31	433.28	10.34	10.32	0.65
4,878.00	74.50	91.50	4,679.49	20.48	463.82	463.79	12.36	12.19	-2.19
4,910.00	78.20	90.90	4,687.04	19.83	494.90	494.87	11.71	11.56	-1.87
4,942.00	81.60	90.30	4,692.65	19.50	526.40	526.37	10.78	10.62	-1.87
4,973.00	84.20	90.30	4,696.48	19.34	557.16	557.13	8.39	8.39	0.00
5,005.00	86.60	90.60	4,699.05	19.09	589.05	589.02	7.56	7.50	0.94
5,037.00	89.10	92.10	4,700.25	18.34	621.02	620.99	9.11	7.81	4.69
5,069.00	91.00	92.80	4,700.22	16.97	652.99	652.96	6.33	5.94	2.19
5,132.00	91.50	93.50	4,698.85	13.51	715.88	715.85	1.37	0.79	1.11
5,227.00	90.90	91.70	4,696.86	9.20	810.75	810.74	2.00	-0.63	-1.89
5,322.00	90.90	91.90	4,695.37	6.22	905.69	905.68	0.21	0.00	0.21
5,417.00	91.10	90.20	4,693.71	4.47	1,000.66	1,000.65	1.80	0.21	-1.79
5,513.00	91.00	90.00	4,691.95	4.31	1,096.64	1,096.64	0.23	-0.10	-0.21
5,608.00	90.40	90.30	4,690.79	4.06	1,191.64	1,191.63	0.71	-0.63	0.32
5,703.00	91.10	90.30	4,689.54	3.56	1,286.63	1,286.62	0.74	0.74	0.00
5,798.00	90.50	90.00	4,688.22	3.31	1,381.62	1,381.61	0.71	-0.63	-0.32
5,893.00	91.30	90.20	4,686.73	3.15	1,476.60	1,476.60	0.87	0.84	0.21
5,988.00	90.90	89.30	4,684.90	3.56	1,571.58	1,571.58	1.04	-0.42	-0.95
6,083.00	92.00	90.20	4,682.50	3.98	1,666.55	1,666.54	1.50	1.16	0.95
6,179.00	91.70	89.90	4,679.40	3.89	1,762.50	1,762.49	0.44	-0.31	-0.31
6,273.00	91.10	89.50	4,677.10	4.38	1,856.47	1,856.46	0.77	-0.64	-0.43
6,368.00	90.80	88.80	4,675.53	5.79	1,951.44	1,951.43	0.80	-0.32	-0.74
6,463.00	89.80	88.40	4,675.03	8.11	2,046.41	2,046.40	1.13	-1.05	-0.42
6,559.00	91.10	89.20	4,674.28	10.12	2,142.39	2,142.37	1.59	1.35	0.83
6,654.00	91.20	90.90	4,672.37	10.04	2,237.36	2,237.35	1.79	0.11	1.79
6,749.00	90.40	90.40	4,671.04	8.96	2,332.35	2,332.33	0.99	-0.84	-0.53
6,844.00	91.50	91.00	4,669.47	7.80	2,427.33	2,427.31	1.32	1.16	0.63
6,940.00	90.90	90.60	4,667.46	6.46	2,523.29	2,523.28	0.75	-0.62	-0.42
7,035.00	90.70	90.60	4,666.13	5.47	2,618.28	2,618.27	0.21	-0.21	0.00
7,130.00	90.00	90.00	4,665.55	4.97	2,713.28	2,713.27	0.97	-0.74	-0.63
7,225.00	90.10	89.50	4,665.47	5.39	2,808.27	2,808.26	0.54	0.11	-0.53
7,320.00	90.10	89.40	4,665.30	6.30	2,903.27	2,903.26	0.11	0.00	-0.11
7,415.00	91.80	89.50	4,663.73	7.21	2,998.25	2,998.24	1.79	1.79	0.11
7,510.00	92.10	89.20	4,660.49	8.29	3,093.19	3,093.17	0.45	0.32	-0.32
7,606.00	90.70	90.20	4,658.15	8.79	3,189.15	3,189.14	1.79	-1.46	1.04
7,701.00	90.50	89.90	4,657.15	8.71	3,284.15	3,284.13	0.38	-0.21	-0.32
7,796.00	90.40	89.60	4,656.41	9.12	3,379.15	3,379.13	0.33	-0.11	-0.32
7,891.00	91.50	90.80	4,654.83	8.79	3,474.13	3,474.11	1.71	1.16	1.26
7,986.00	91.60	90.90	4,652.26	7.38	3,569.08	3,569.07	0.15	0.11	0.11

Company:	COG Operating, LLC	Local Co-ordinate Reference:	Well/Dodd Federal Unit #910H
Project:	Eddy County(NM27E)	TVD Reference:	WELL @ 3641.00usft
Site:	Sec.11-T17S-R29E	MD Reference:	WELL @ 3641.00usft
Well:	Dodd Federal Unit #910H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	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)	
8,081.00	92.10	90.50	4,649.20	6.22	3,664.03	3,664.01	0.67	0.53	-0.42	
8,176.00	91.10	91.00	4,646.54	4.98	3,758.98	3,758.97	1.18	-1.05	0.53	
8,272.00	91.00	91.20	4,644.78	3.14	3,854.95	3,854.94	0.23	-0.10	0.21	
8,367.00	91.30	90.90	4,642.88	1.39	3,949.91	3,949.90	0.45	0.32	-0.32	
8,462.00	91.40	90.50	4,640.64	0.23	4,044.88	4,044.87	0.43	0.11	-0.42	
8,557.00	91.20	90.30	4,638.48	-0.43	4,139.85	4,139.85	0.30	-0.21	-0.21	
8,652.00	91.40	90.50	4,636.33	-1.09	4,234.82	4,234.82	0.30	0.21	0.21	
8,747.00	91.90	90.60	4,633.59	-2.00	4,329.78	4,329.78	0.54	0.53	0.11	
8,843.00	92.00	90.70	4,630.33	-3.09	4,425.72	4,425.72	0.15	0.10	0.10	
8,938.00	91.70	90.40	4,627.26	-4.00	4,520.66	4,520.66	0.45	-0.32	-0.32	
9,033.00	84.80	89.50	4,630.16	-3.92	4,615.56	4,615.56	7.32	-7.26	-0.95	
9,128.00	77.90	85.80	4,644.44	-0.10	4,709.33	4,709.32	8.22	-7.26	-3.89	
Last Archer Survey										
9,207.00	77.30	84.50	4,661.41	6.42	4,786.21	4,786.19	1.78	-0.76	-1.65	
PTB										
9,276.00	77.30	84.50	4,676.58	12.87	4,853.21	4,853.18	0.00	0.00	0.00	

Survey Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
3,955.00	3,954.77	6.69	33.23	Tie-In / VES Gyro	
4,085.00	4,084.77	6.75	33.72	First Archer Survey	
9,207.00	4,661.41	6.42	4,786.21	Last Archer Survey	
9,276.00	4,676.58	12.87	4,853.21	PTB	

Checked By: _____ Approved By: _____ Date: _____