



June 4, 2014

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

NM OIL CONSERVATION
ARTESIA DISTRICT

AUG 25 2014

RECEIVED

Attn: Kanicia Castillo

15-42205

RE: **Sherman 4 Fee No. 005H**

Please find enclosed a copy of the survey from 0.00' to 2,935.00' ran on the above referenced well.

Sincerely,

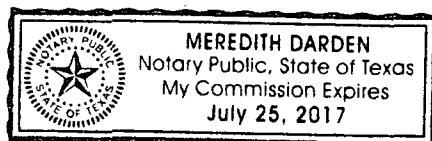

Keith Havelka
Operations

STATE OF TEXAS §

§

COUNTY OF NUECES §

This instrument was acknowledged before me on the 4th day of June,
A.D., 2014, by Keith Havelka.




Meredith Darden
Notary Public, State of Texas

Company: COG Operating LLC (Concho)

Lease/Well: Sherman 4 FEE/No. 005H



Rig Name: Silver Oak 3

State/County: New Mexico/Eddy

Latitude: 32.68, Longitude: -104.39

GRID North is 0.03 Degrees West of True North

VS-Azi: 0.00 Degrees



RECEIVED
AUG 25 2014
ARTESIA DISTRICT
NM OIL CONSERVATION

Depth Reference : RKB=17 Feet

DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: gyro survey.ut

Minimum Curvature Method

Report Date/Time: 6/2/2014 / 08:14

VES Survey International

West, Texas

(432) 563-5444

Surveyor: Adam Gathright

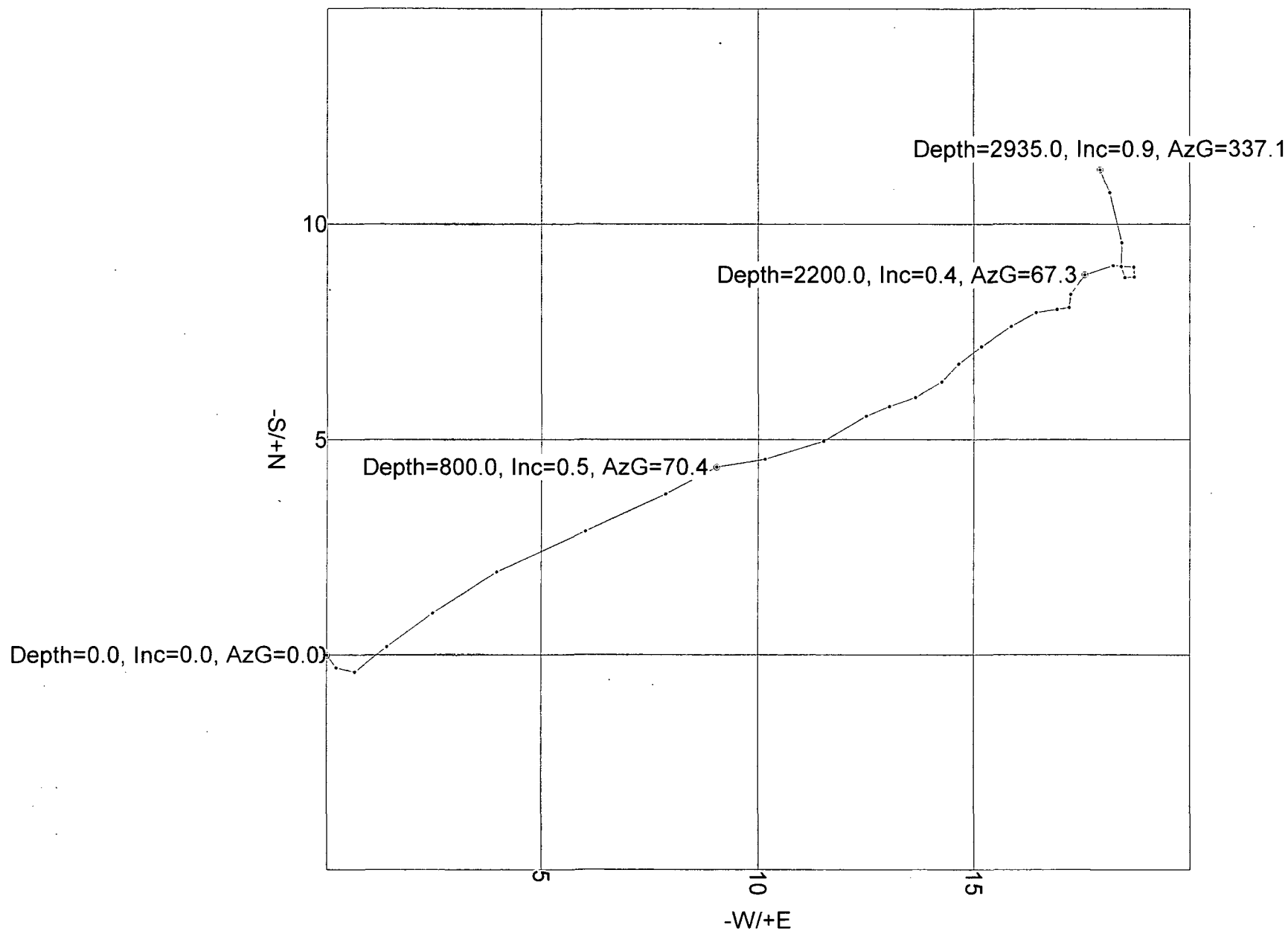
Sherman 4 FEE No. 005H / API 30-015-42205

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	0.43	143.57	100.00	-0.30	0.22	-0.30	0.37	143.57	0.43
200.00	0.33	45.94	200.00	-0.40	0.65	-0.40	0.77	121.51	0.58
300.00	0.76	53.89	299.99	0.19	1.40	0.19	1.41	82.11	0.44
400.00	0.75	53.81	399.98	0.97	2.46	0.97	2.65	68.49	0.02
500.00	1.29	59.57	499.97	1.93	3.96	1.93	4.41	64.07	0.56
600.00	1.31	71.05	599.94	2.87	6.02	2.87	6.67	64.50	0.26
700.00	1.04	57.63	699.92	3.73	7.87	3.73	8.71	64.65	0.39
800.00	0.50	70.41	799.91	4.36	9.04	4.36	10.03	64.27	0.56
900.00	0.82	86.81	899.91	4.54	10.16	4.54	11.13	65.91	0.37
1000.00	0.86	59.76	999.90	4.96	11.52	4.96	12.54	66.70	0.39
1100.00	0.45	58.80	1099.89	5.54	12.51	5.54	13.68	66.10	0.41
1200.00	0.23	84.34	1199.89	5.77	13.05	5.77	14.27	66.15	0.27
1300.00	0.50	64.72	1299.88	5.98	13.64	5.98	14.90	66.35	0.30
1400.00	0.33	51.21	1399.88	6.34	14.26	6.34	15.61	66.02	0.20
1500.00	0.33	35.60	1499.88	6.76	14.66	6.76	16.14	65.25	0.09
1600.00	0.46	65.33	1599.88	7.15	15.19	7.15	16.79	64.77	0.24
1700.00	0.51	46.25	1699.87	7.63	15.87	7.63	17.61	64.33	0.17
1800.00	0.29	85.95	1799.87	7.95	16.44	7.95	18.26	64.20	0.34

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	0.27	76.58	1899.87	8.02	16.93	8.02	18.73	64.64	0.05
2000.00	0.06	101.92	1999.87	8.07	17.20	8.07	19.00	64.88	0.22
2100.00	0.36	357.20	2099.87	8.37	17.24	8.37	19.16	64.10	0.38
2200.00	0.42	67.27	2199.87	8.82	17.56	8.82	19.65	63.32	0.45
2300.00	0.38	77.03	2299.87	9.04	18.22	9.04	20.34	63.61	0.08
2400.00	0.22	125.25	2399.86	9.00	18.70	9.00	20.76	64.29	0.28
2500.00	0.21	230.70	2499.86	8.78	18.72	8.78	20.67	64.88	0.34
2600.00	0.15	321.94	2599.86	8.76	18.50	8.76	20.47	64.66	0.26
2700.00	0.18	357.89	2699.86	9.02	18.41	9.02	20.50	63.91	0.10
2800.00	0.46	2.82	2799.86	9.57	18.43	9.57	20.76	62.56	0.28
2900.00	0.94	338.38	2899.85	10.73	18.14	10.73	21.08	59.40	0.56
2935.00	0.93	337.10	2934.85	11.26	17.93	11.26	21.17	57.87	0.07



VES Survey International
West, Texas
(432) 563-5444
Surveyor: Adam Gathright
Sherman 4 FEE No. 005H / API 30-015-42205



V.E.S. Survey Date: 05/27/2014



COG Operating LLC

Eddy County, NM (NAD27 NME)

Sherman 4 Fee

#5H

WB1/Job #1410708

Survey: Phoenix MWD Surveys

Survey Report

08 June, 2014





Phoenix Technology Services
Survey Report



Company:	COG Operating LLC	Local Co-ordinate Reference:	Well: #5H
Project:	Eddy County, NM (NAD27 NME)	TVD Reference:	KB @ 3368.00usft (Silver Oak 3)
Site:	Sherman 4 Fee	MD Reference:	KB @ 3368.00usft (Silver Oak 3)
Well:	#5H	North Reference:	Grid
Wellbore:	WB1/Job #1410708	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Silver Oak 3)	Database:	Compass 5000 GCR DB

Project		Eddy County, NM (NAD27 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:		Sherman 4 Fee			
Site Position:		Northing:		612,151.80	usft
From:	Map	Easting:		485,212.40	usft
Position Uncertainty:		0.00	usft	Slot Radius:	
				13-3/16	"
				Grid Convergence:	-0.03 °

Well	#5H					
Well Position	+N/-S	0.00 usft	Northing:	612,132.20 usft	Latitude:	32° 40' 58.21483 N
	+E/-W	0.00 usft	Easting:	482,173.10 usft	Longitude:	104° 23' 28.58617 W
Position Uncertainty	0.00 usft		Wellhead Elevation:	usft	Ground Level:	3,350.00 usft

Wellbore		WB1/Job #1410708			
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	IGRF2010_14	04/24/14	7.65	60.40	48,517

Design: Surveys (Silver Oak 3)				
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	357.38



Phoenix Technology Services
Survey Report



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Site:	Sherman 4 Fee	MD Reference:	KB @ 3368.00usft (Silver Oak 3)
Well:	#5H	North Reference:	Grid
Wellbore:	WB1/Job #1410708	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Silver Oak 3)	Database:	Compass 5000 GCR.DB

Survey Program		Date	06/08/14		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
100.00	2,935.00	Gyros (WB1/Job #1410708)	NS-GYRO-MS	North sensing gyrocompassing m/s	
2,969.00	8,216.75	Phoenix MWD Surveys (WB1/Job #14107	MWD	MWD - Standard	

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVDSS (usft)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)
2,935.00	0.93	337.10	-433.15	2,934.85	11.26	17.93	10.43	0.00	612,143.46	482,191.03
Tie In to Gyro Survey										
2,969.00	1.00	354.20	-399.16	2,968.84	11.81	17.79	10.98	0.87	612,144.01	482,190.89
First Phoenix MWD Survey										
3,000.00	1.00	348.70	-368.16	2,999.84	12.34	17.71	11.52	0.31	612,144.54	482,190.81
3,031.00	1.10	349.80	-337.17	3,030.83	12.90	17.61	12.08	0.33	612,145.10	482,190.71
3,062.00	2.80	338.40	-306.18	3,061.82	13.90	17.28	13.09	5.60	612,146.10	482,190.38
3,093.00	5.30	334.30	-275.26	3,092.74	15.89	16.38	15.13	8.11	612,148.09	482,189.48
3,124.00	7.80	333.20	-244.47	3,123.53	19.06	14.81	18.36	8.07	612,151.26	482,187.91
3,155.00	10.50	332.30	-213.87	3,154.13	23.44	12.54	22.84	8.72	612,155.64	482,185.64
3,186.00	13.40	332.10	-183.54	3,184.46	29.12	9.55	28.65	9.36	612,161.32	482,182.65
3,217.00	16.20	333.40	-153.57	3,214.43	36.16	5.93	35.85	9.10	612,168.36	482,179.03
3,249.00	19.10	334.20	-123.08	3,244.92	44.87	1.65	44.74	9.09	612,177.07	482,174.75
3,280.00	21.90	334.40	-94.05	3,273.95	54.65	-3.05	54.73	9.04	612,186.85	482,170.05
3,311.00	25.00	333.70	-65.61	3,302.39	65.74	-8.45	66.06	10.04	612,197.94	482,164.65
3,342.00	28.20	333.90	-37.90	3,330.10	78.19	-14.58	78.78	10.33	612,210.39	482,158.52
3,373.00	31.30	334.50	-10.99	3,357.01	92.04	-21.27	92.92	10.05	612,224.24	482,151.83
3,404.00	34.30	335.70	15.07	3,383.07	107.27	-28.33	108.46	9.90	612,239.47	482,144.77
3,435.00	38.30	336.00	40.05	3,408.05	124.02	-35.84	125.53	12.92	612,256.22	482,137.26
3,466.00	41.90	336.20	63.76	3,431.76	142.27	-43.93	144.13	11.62	612,274.47	482,129.17
3,498.00	45.30	336.20	86.93	3,454.93	162.46	-52.83	164.70	10.62	612,294.66	482,120.27
3,529.00	48.90	336.50	108.03	3,476.03	183.26	-61.94	185.90	11.63	612,315.46	482,111.16



Phoenix Technology Services
Survey Report



Company:	COG Operating LLC	Local Co-ordinate Reference:	Well #5H
Project:	Eddy County, NM (NAD27 NME)	TVD Reference:	KB @ 3368.00usft (Silver Oak 3)
Site:	Sherman 4 Fee	MD Reference:	KB @ 3368.00usft (Silver Oak 3)
Well:	#5H	North Reference:	Grid
Wellbore:	WB1/Job #1410708	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Silver Oak 3)	Database:	Compass 5000 GCR DB

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVDSS (usft)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)	
3,560.00	51.60	336.70	127.85	3,495.85	205.13	-71.40	208.18	8.72	612,337.33	482,101.70	
3,591.00	54.80	336.10	146.41	3,514.41	227.87	-81.34	231.35	10.44	612,360.07	482,091.76	
3,623.00	58.10	334.70	164.10	3,532.10	252.11	-92.45	256.08	10.94	612,384.31	482,080.65	
3,654.00	60.40	334.00	179.95	3,547.95	276.13	-103.98	280.59	7.67	612,408.33	482,069.12	
3,685.00	62.50	334.00	194.76	3,562.76	300.60	-115.92	305.58	6.77	612,432.80	482,057.18	
3,717.00	65.70	334.50	208.74	3,576.74	326.52	-128.42	332.05	10.10	612,458.72	482,044.68	
3,748.00	68.80	334.50	220.72	3,588.72	352.32	-140.72	358.39	10.00	612,484.52	482,032.38	
3,780.00	70.80	334.70	231.77	3,599.77	379.45	-153.60	386.08	6.28	612,511.65	482,019.50	
3,811.00	72.90	334.80	241.43	3,609.43	406.09	-166.17	413.26	6.78	612,538.29	482,006.93	
3,842.00	77.50	335.20	249.35	3,617.35	433.25	-178.83	440.97	14.89	612,565.45	481,994.27	
3,873.00	79.90	335.60	255.42	3,623.42	460.89	-191.48	469.16	7.84	612,593.09	481,981.62	
3,904.00	82.80	337.70	260.08	3,628.08	489.02	-203.63	497.82	11.50	612,621.22	481,969.47	
3,935.00	86.40	339.00	263.00	3,631.00	517.70	-215.01	526.99	12.34	612,649.90	481,958.09	
3,985.00	90.10	341.20	264.53	3,632.53	564.68	-232.02	574.70	8.61	612,696.88	481,941.08	
4,016.00	90.20	343.20	264.44	3,632.44	594.20	-241.49	604.62	6.46	612,726.40	481,931.61	
4,048.00	90.50	344.40	264.25	3,632.25	624.93	-250.42	635.72	3.87	612,757.13	481,922.68	
4,079.00	90.90	343.70	263.87	3,631.87	654.73	-258.94	665.88	2.60	612,786.93	481,914.16	
4,110.00	90.50	342.20	263.49	3,631.49	684.36	-268.03	695.90	5.01	612,816.56	481,905.07	
4,141.00	90.40	340.50	263.25	3,631.25	713.74	-277.94	725.69	5.49	612,845.94	481,895.16	
4,173.00	90.50	340.40	263.00	3,631.00	743.89	-288.65	756.31	0.44	612,876.09	481,884.45	
4,204.00	90.60	341.10	262.70	3,630.70	773.15	-298.87	786.01	2.28	612,905.35	481,874.23	
4,236.00	91.30	342.00	262.17	3,630.17	803.51	-308.99	816.79	3.56	612,935.71	481,864.11	
4,267.00	91.70	343.20	261.36	3,629.36	833.08	-318.26	846.75	4.08	612,965.28	481,854.84	
4,298.00	91.50	344.70	260.49	3,628.49	862.85	-326.83	876.89	4.88	612,995.05	481,846.27	
4,329.00	91.40	345.40	259.71	3,627.71	892.80	-334.82	907.17	2.28	613,025.00	481,838.28	
4,360.00	91.30	345.60	258.98	3,626.98	922.80	-342.58	937.50	0.72	613,055.00	481,830.52	
4,391.00	91.10	345.80	258.33	3,626.33	952.83	-350.24	967.85	0.91	613,085.03	481,822.86	



Phoenix Technology Services
Survey Report



Company:	COG Operating LLC	Local Co-ordinate Reference:	Well #5H
Project:	Eddy County, NM (NAD27 NME)	TVD Reference:	KB @ 3368.00usft (Silver Oak 3)
Site:	Sherman 4 Fee	MD Reference:	KB @ 3368.00usft (Silver Oak 3)
Well:	#5H	North Reference:	Grid
Wellbore:	WB1/Job #1410708	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Silver Oak 3)	Database:	Compass 5000 GCR DB

Survey										
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVDSS (usft)	TVD (usft)	N/S (usft)	E/W (usft)	V-Sec (usft)	DLeg (%/100usft)	Northing (usft)	Easting (usft)
4,423.00	90.80	346.60	257.80	3,625.80	983.90	-357.87	999.23	2.67	613,116.10	481,815.23
4,454.00	90.40	347.80	257.47	3,625.47	1,014.13	-364.74	1,029.74	4.08	613,146.33	481,808.36
4,485.00	90.00	348.70	257.36	3,625.36	1,044.48	-371.05	1,060.35	3.18	613,176.68	481,802.05
4,517.00	89.60	349.00	257.48	3,625.48	1,075.88	-377.24	1,092.00	1.56	613,208.08	481,795.86
4,548.00	89.90	349.10	257.61	3,625.61	1,106.31	-383.13	1,122.67	1.02	613,238.51	481,789.97
4,579.00	90.20	349.60	257.58	3,625.58	1,136.78	-388.85	1,153.37	1.88	613,268.98	481,784.25
4,610.00	90.60	350.50	257.37	3,625.37	1,167.31	-394.21	1,184.11	3.18	613,299.51	481,778.89
4,641.00	91.30	351.90	256.85	3,624.85	1,197.94	-398.95	1,214.93	5.05	613,330.14	481,774.15
4,672.00	91.60	353.40	256.07	3,624.07	1,228.68	-402.92	1,245.81	4.93	613,360.88	481,770.18
4,704.00	91.60	354.10	255.18	3,623.18	1,260.47	-406.40	1,277.73	2.19	613,392.67	481,766.70
4,735.00	91.50	355.00	254.34	3,622.34	1,291.32	-409.34	1,308.68	2.92	613,423.52	481,763.76
4,766.00	91.60	356.30	253.50	3,621.50	1,322.22	-411.69	1,339.66	4.20	613,454.42	481,761.41
4,797.00	91.60	357.70	252.63	3,620.63	1,353.16	-413.31	1,370.64	4.51	613,485.36	481,759.79
4,828.00	91.20	359.00	251.88	3,619.88	1,384.14	-414.21	1,401.63	4.39	613,516.34	481,758.89
4,860.00	90.90	359.90	251.29	3,619.29	1,416.13	-414.51	1,433.60	2.96	613,548.33	481,758.59
4,891.00	89.90	0.60	251.07	3,619.07	1,447.13	-414.38	1,464.56	3.94	613,579.33	481,758.72
4,922.00	88.60	1.40	251.48	3,619.48	1,478.12	-413.84	1,495.50	4.92	613,610.32	481,759.26
4,954.00	88.20	2.30	252.37	3,620.37	1,510.10	-412.81	1,527.39	3.08	613,642.30	481,760.29
4,985.00	88.00	3.70	253.40	3,621.40	1,541.03	-411.18	1,558.22	4.56	613,673.23	481,761.92
5,079.00	88.50	6.20	256.27	3,624.27	1,634.63	-403.08	1,651.35	2.71	613,766.83	481,770.02
5,173.00	89.00	5.80	258.32	3,626.32	1,728.10	-393.25	1,744.26	0.68	613,860.30	481,779.85
5,266.00	89.20	4.50	259.78	3,627.78	1,820.71	-384.91	1,836.40	1.41	613,952.91	481,788.19
5,360.00	89.80	3.70	260.60	3,628.60	1,914.46	-378.19	1,929.75	1.06	614,046.66	481,794.91
5,453.00	90.20	3.70	260.60	3,628.60	2,007.27	-372.19	2,022.18	0.43	614,139.47	481,800.91
5,546.00	90.10	3.50	260.36	3,628.36	2,100.08	-366.35	2,114.63	0.24	614,232.28	481,806.75
5,640.00	90.30	3.00	260.03	3,628.03	2,193.93	-361.02	2,208.14	0.57	614,326.13	481,812.08
5,734.00	90.60	2.90	259.29	3,627.29	2,287.80	-356.18	2,301.69	0.34	614,420.00	481,816.92



Phoenix Technology Services
Survey Report



Company:	COG Operating LLC	Local Co-ordinate Reference:	Well #5H
Project:	Eddy County, NM (NAD27 NME)	TVD Reference:	KB @ 3368.00usft (Silver Oak 3)
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Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVDSS (usft)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)	
5,828.00	90.50	2.70	258.39	3,626.39	2,381.69	-351.59	2,395.27	0.24	614,513.89	481,821.51	
5,921.00	90.50	2.40	257.58	3,625.58	2,474.59	-347.45	2,487.89	0.32	614,606.79	481,825.65	
6,015.00	90.90	2.50	256.43	3,624.43	2,568.50	-343.43	2,581.51	0.44	614,700.70	481,829.67	
6,110.00	90.80	3.00	255.02	3,623.02	2,663.38	-338.87	2,676.08	0.54	614,795.58	481,834.23	
6,204.00	90.30	3.50	254.12	3,622.12	2,757.22	-333.55	2,769.59	0.75	614,889.42	481,839.55	
6,297.00	90.30	3.50	253.63	3,621.63	2,850.05	-327.87	2,862.05	0.00	614,982.25	481,845.23	
6,391.00	90.40	3.20	253.06	3,621.06	2,943.88	-322.38	2,955.54	0.34	615,076.08	481,850.72	
6,484.00	90.80	2.90	252.08	3,620.08	3,036.75	-317.43	3,048.08	0.54	615,168.95	481,855.67	
6,578.00	91.40	3.50	250.28	3,618.28	3,130.58	-312.18	3,141.58	0.90	615,262.78	481,860.92	
6,671.00	92.10	3.40	247.44	3,615.44	3,223.37	-306.59	3,234.02	0.76	615,355.57	481,866.51	
6,765.00	92.40	3.00	243.75	3,611.75	3,317.15	-301.34	3,327.46	0.53	615,449.35	481,871.76	
6,858.00	92.30	3.20	239.94	3,607.94	3,409.94	-296.32	3,419.92	0.24	615,542.14	481,876.78	
6,952.00	92.30	3.20	236.16	3,604.16	3,503.71	-291.08	3,513.36	0.00	615,635.91	481,882.02	
7,046.00	90.50	3.50	233.87	3,601.87	3,597.52	-285.59	3,606.82	1.94	615,729.72	481,887.51	
7,140.00	90.30	3.10	233.21	3,601.21	3,691.36	-280.17	3,700.31	0.48	615,823.56	481,892.93	
7,234.00	90.20	3.20	232.80	3,600.80	3,785.22	-275.01	3,793.83	0.15	615,917.42	481,898.09	
7,327.00	90.00	2.70	232.64	3,600.64	3,878.10	-270.22	3,886.40	0.58	616,010.30	481,902.88	
7,408.00	89.90	2.70	232.71	3,600.71	3,959.01	-266.41	3,967.05	0.12	616,091.21	481,906.69	
7,501.00	90.00	2.60	232.79	3,600.79	4,051.91	-262.11	4,059.65	0.15	616,184.11	481,910.99	
7,594.00	89.80	2.60	232.95	3,600.95	4,144.81	-257.89	4,152.27	0.22	616,277.01	481,915.21	
7,688.00	89.70	3.40	233.36	3,601.36	4,238.68	-252.97	4,245.81	0.86	616,370.88	481,920.13	
7,781.00	90.20	2.90	233.44	3,601.44	4,331.54	-247.86	4,338.34	0.76	616,463.74	481,925.24	
7,875.00	89.80	4.00	233.44	3,601.44	4,425.37	-242.20	4,431.81	1.25	616,557.57	481,930.90	
7,968.00	89.70	3.80	233.85	3,601.85	4,518.15	-235.88	4,524.21	0.24	616,650.35	481,937.22	
8,062.00	88.20	4.00	235.57	3,603.57	4,611.92	-229.48	4,617.58	1.61	616,744.12	481,943.62	
8,156.00	87.30	4.10	239.26	3,607.26	4,705.61	-222.85	4,710.88	0.96	616,837.81	481,950.25	

Final Phoenix MWD Survey



Phoenix Technology Services
Survey Report



Company:	COG Operating LLC	Local Co-ordinate Reference:	Well #5H
Project:	Eddy County, NM (NAD27-NME)	TVD Reference:	KB @ 3368.00usft (Silver Oak 3)
Site:	Sherman 4 Fee	MD Reference:	KB @ 3368.00usft (Silver Oak 3)
Well:	#5H	North Reference:	Grid
Wellbore:	WB1/Job #1410708	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Silver Oak 3)	Database:	Compass 5000 GCR:DB

Survey										
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVDSS (usft)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)
8,216.75	87.30	4.10	242.12	3,610.12	4,766.13	-218.51	4,771.14	0.00	616,898.33	481,954.59
Projectio to TD										

Survey Annotations:				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
2,935.00	2,934.85	11.26	17.93	Tie In to Gyro Survey
2,969.00	2,968.84	11.81	17.79	First Phoenix MWD Survey
8,156.00	3,608.24	4,705.60	-222.85	Final Phoenix MWD Survey
8,216.75	3,611.10	4,766.13	-218.51	Projectio to TD

Checked By: _____ Approved By: _____ Date: _____