

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

January 30, 2014

30-015-41723

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

Attn: Kanicia Castillo

NM OIL CONSERVATION
ARTESIA DISTRICT

JUL 07 2014

RECEIVED

RE: **Patton 5 Fee No. 003H**

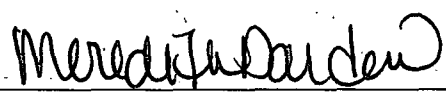
Please find enclosed a copy of the survey from 0.00' to 2216.00' ran on the above referenced well.

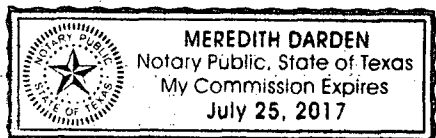
Sincerely,


Keith Havelka
Operations

STATE OF TEXAS §
 §
COUNTY OF NUECES §

This instrument was acknowledged before me on the 30th day of January A.D., 2014, by Keith Havelka.


Meredith Darden
Notary Public, State of Texas





Company: COG Operating, LLC (Concho)
 Lease/Well: Patton 5 Fee /No. 003H
 Location: Sec 5 T19S R26E
 Rig Name: Silver Oak #3
 State/County: New Mexico/Eddy
 Latitude: 32.69, Longitude: -104.41
 GRID North is 0.04 Degrees West of True North
 VS-Azi: 0.00 Degrees



Depth Reference : RKB = 17 Feet

DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: patton 5 fee #3h-de_01.ut

Minimum Curvature Method

Report Date/Time: 1/30/2014 / 11:53

Vaughn Energy Services

West, Texas

432-563-5444

Surveyor: Chris Bankson

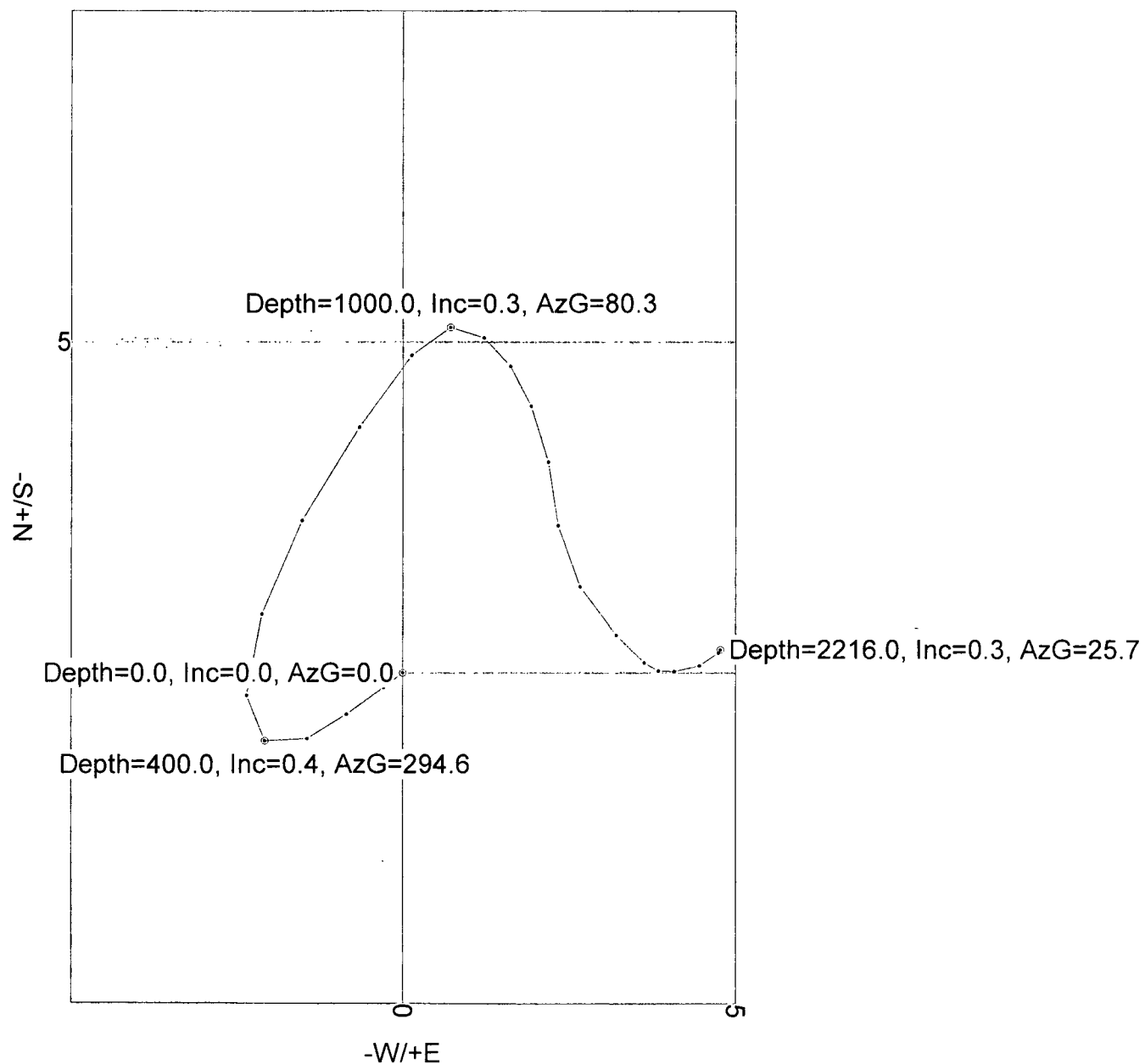
Patton 5 Fee No. 003H / API 30-015-41723

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	0.41	232.65	100.00	-0.22	-0.28	-0.22	0.36	232.65	0.41
200.00	0.39	235.46	200.00	-0.63	-0.85	-0.63	1.05	233.55	0.03
300.00	0.42	240.63	299.99	-1.00	-1.44	-1.00	1.75	235.39	0.05
400.00	0.40	294.62	399.99	-1.03	-2.08	-1.03	2.32	243.65	0.37
500.00	0.62	4.58	499.99	-0.34	-2.35	-0.34	2.38	261.75	0.61
600.00	0.82	14.96	599.98	0.89	-2.12	0.89	2.30	292.80	0.24
700.00	0.95	30.29	699.97	2.30	-1.52	2.30	2.76	326.55	0.27
800.00	0.95	32.51	799.96	3.72	-0.66	3.72	3.77	349.98	0.04
900.00	0.59	41.91	899.95	4.80	0.13	4.80	4.80	1.58	0.38
1000.00	0.28	80.27	999.94	5.22	0.72	5.22	5.27	7.87	0.41
1100.00	0.37	128.50	1099.94	5.06	1.22	5.06	5.21	13.56	0.28
1200.00	0.30	148.43	1199.94	4.64	1.61	4.64	4.91	19.21	0.14
1300.00	0.47	155.86	1299.94	4.03	1.92	4.03	4.47	25.48	0.18
1400.00	0.55	169.09	1399.93	3.19	2.18	3.19	3.86	34.37	0.14
1500.00	0.57	173.53	1499.93	2.23	2.33	2.23	3.22	46.23	0.05
1600.00	0.59	147.52	1599.92	1.31	2.66	1.31	2.96	63.82	0.26
1700.00	0.47	138.12	1699.92	0.57	3.20	0.57	3.25	79.86	0.15
1800.00	0.22	127.60	1799.92	0.16	3.62	0.16	3.63	87.55	0.26

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	0.07	95.97	1899.92	0.03	3.83	0.03	3.83	89.49	0.16
2000.00	0.21	90.00	1999.92	0.03	4.07	0.03	4.07	89.61	0.14
2100.00	0.24	66.69	2099.92	0.11	4.45	0.11	4.45	88.56	0.10
2200.00	0.16	40.95	2199.92	0.30	4.74	0.30	4.75	86.32	0.12
2216.00	0.26	25.69	2215.92	0.35	4.77	0.35	4.78	85.75	0.70



Vaughn Energy Services
West, Texas
432-563-5444
Surveyor: Chris Bankson
Patton 5 Fee No. 003H / API 30-015-41723



VES Survey Date: 01/11/2014



PO Box 1370
Artesia, NM 88211-1370
(575) 748-1288

January 20, 2014

COG, LLC
One Concho Center
600 W. Illinois Ave.
Midland, TX 79701

RE: Patton 5 Fee #3H
1410' FNL & 230' FWL
Sec. 5, T19S, R26E
Eddy County, New Mexico

Dear Sir,

The attached is the Deviation Survey for the above captioned well.

Very truly yours,

A handwritten signature in black ink, appearing to read "Chris Graham".

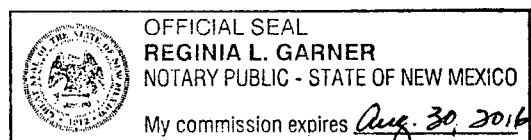
Chris Graham
Drilling Superintendent

State of New Mexico }
County of Eddy }

The foregoing was acknowledged before me this 20th day of January, 2014.

A handwritten signature in black ink, appearing to read "Regina L. Garner".

Notary Public



PATTON 5 FEE 3H

Date	Depth	Deviation	Direction
1/9/2014	81	0.20	0.00
1/9/2014	263	0.10	0.00
1/9/2014	696	0.90	0.00
1/9/2014	1195	0.40	0.00
1/11/2014	1372	0.20	0.00
1/11/2014	1841	0.20	0.00
1/13/2014	2311	8.80	92.40
1/13/2014	2405	13.00	89.40
1/13/2014	2437	16.30	84.10
1/13/2014	2468	19.80	81.90
1/13/2014	2499	23.20	81.40
1/13/2014	2531	26.20	83.20
1/13/2014	2562	29.10	84.70
1/13/2014	2593	31.40	85.50
1/13/2014	2625	34.60	87.10
1/13/2014	2656	37.80	89.50
1/13/2014	2687	41.20	90.10
1/13/2014	2718	45.30	90.70
1/13/2014	2812	55.10	93.50
1/13/2014	2844	57.10	93.80
1/13/2014	2875	59.50	92.90
1/13/2014	2906	62.50	92.00
1/13/2014	2937	65.20	91.30
1/13/2014	2968	67.10	90.70
1/13/2014	2999	68.80	90.10
1/14/2014	3155	81.60	89.10
1/14/2014	3206	84.90	89.80
1/14/2014	3237	85.40	89.40
1/14/2014	3268	87.10	90.00
1/14/2014	3299	87.70	90.00
1/14/2014	3332	88.00	89.50
1/14/2014	3363	89.10	90.10
1/14/2014	3457	90.90	89.70
1/14/2014	3486	84.00	89.70
1/14/2014	3551	89.20	89.30
1/14/2014	3644	88.20	89.20
1/14/2014	3738	88.40	88.90
1/15/2014	3832	88.30	89.50
1/15/2014	3926	89.80	89.40
1/15/2014	4020	90.80	90.00
1/15/2014	4113	90.70	89.20
1/15/2014	4300	91.30	90.10

Date	Depth	Deviation	Direction
1/15/2014	4395	90.20	90.30
1/15/2014	4489	89.10	90.30
1/15/2014	4582	89.10	89.90
1/15/2014	4676	89.10	90.60
1/15/2014	4770	89.60	90.10
1/15/2014	4863	90.60	89.60
1/15/2014	4957	91.00	89.30
1/15/2014	5050	91.00	89.10
1/16/2014	5332	90.50	88.70
1/16/2014	5425	90.20	89.30
1/16/2014	5518	89.80	90.10
1/16/2014	5611	90.10	90.00
1/16/2014	5704	89.70	90.70
1/16/2014	5798	89.90	90.60
1/16/2014	5892	89.90	90.50
1/16/2014	5986	89.90	89.70
1/16/2014	6080	90.30	90.80
1/17/2014	6454	89.50	89.00
1/17/2014	6548	89.80	88.90
1/17/2014	6641	90.10	88.50
1/17/2014	6735	89.90	88.70
1/17/2014	6829	90.00	88.60
1/17/2014	6923	90.20	89.10
1/17/2014	7017	90.10	90.00
1/17/2014	7206	90.20	90.50



PHOENIX TECHNOLOGY SERVICES

Survey Calculation Sheet

Company	COG Operating LLC	North Reference	Grid	Datum	MSL
Well	Patton 5 Fee #3H	Magnetic Delineation	7.74	Target TVD	2859
Field	Eddy County, NM	Convergence Angle	0.04	VS Direction	89.64
Rig	Silver Oak #3	Total Correction	7.70	Ground Level	3380
Phoenix Rep.	Anthony Rogers				

Date	No.	DEPTH	INC.	AZM	C.L.	T.V.D.	V.S.	N/S	E/W	DLS	B./D.	Source
Tie - In	0	2216	0.26	25.69	0	2215.92	4.77	0.35 N	4.77 E	0.00	0.00	Surface
12-Jan	1	2249	0.20	73.40	33	2248.92	4.86	0.43 N	4.86 E	0.59	-0.18	BHA 1
	2	2280	0.3	311.0	31	2279.92	4.85	0.50 N	4.85 E	1.42	0.32	
13-Jan	3	2311	0.4	346.8	31	2310.92	4.77	0.66 N	4.76 E	10.76	0.32	
	4	2343	4.1	79.2	32	2342.89	5.87	0.98 N	5.86 E	12.93	11.56	
	5	2374	8.8	92.4	31	2373.69	9.33	1.09 N	9.32 E	15.80	15.16	
	6	2405	13.0	89.4	31	2404.12	15.18	1.03 N	15.18 E	13.67	13.55	
	7	2437	16.3	84.1	32	2435.08	23.25	1.53 N	23.24 E	11.12	10.31	
	8	2468	19.8	81.9	31	2464.55	32.79	2.72 N	32.77 E	11.50	11.29	
	9	2499	23.2	81.4	31	2493.39	44.03	4.37 N	44.01 E	10.98	10.97	
	10	2531	26.2	83.2	32	2522.46	57.29	6.15 N	57.25 E	9.66	9.38	
	11	2562	29.1	84.7	31	2549.91	71.60	7.66 N	71.56 E	9.62	9.35	
	12	2593	31.4	85.5	31	2576.69	87.17	8.99 N	87.12 E	7.53	7.42	
	13	2625	34.6	87.1	32	2603.53	104.56	10.10 N	104.50 E	10.36	10.00	
	14	2656	37.8	89.5	31	2628.54	122.86	10.63 N	122.79 E	11.29	10.32	
	15	2687	41.2	90.1	31	2652.46	142.57	10.69 N	142.51 E	11.04	10.97	
	16	2718	45.3	90.7	31	2675.03	163.80	10.54 N	163.74 E	13.29	13.23	
	17	2750	49.2	91.4	32	2696.75	187.28	10.11 N	187.22 E	12.29	12.19	
	18	2781	52.4	92.4	31	2716.34	211.28	9.31 N	211.22 E	10.62	10.32	
	19	2813	55.1	93.5	32	2735.26	237.04	7.97 N	236.99 E	8.88	8.44	
	20	2844	57.1	93.8	31	2752.55	262.70	6.33 N	262.67 E	12.65	6.45	
	21	2875	59.5	92.9	31	2768.84	289.02	4.80 N	288.99 E	8.13	7.74	
	22	2906	62.5	92.0	31	2783.87	316.09	3.64 N	316.07 E	10.00	9.68	
	23	2937	65.2	91.3	31	2797.53	343.89	2.84 N	343.88 E	8.94	8.71	
	24	2968	67.1	90.7	31	2810.06	372.24	2.35 N	372.23 E	6.38	6.13	
	25	2999	68.8	90.1	31	2821.70	400.96	2.15 N	400.96 E	5.77	5.48	
	26	3031	70.1	89.5	32	2832.93	430.93	2.25 N	430.92 E	4.43	4.06	
	27	3062	72.4	88.8	31	2842.90	460.28	2.69 N	460.27 E	7.72	7.42	
	28	3093	75.1	89.1	31	2851.57	490.03	3.23 N	490.02 E	8.76	8.71	
	29	3124	78.6	88.9	31	2858.62	520.21	3.76 N	520.19 E	11.31	11.29	
	30	3155	81.6	89.1	31	2863.95	550.73	4.29 N	550.72 E	9.70	9.68	
	31	3186	84.0	89.7	31	2867.84	581.49	4.62 N	581.47 E	7.98	7.74	
14-Jan	32	3206	84.9	89.8	20	2869.77	601.39	4.70 N	601.37 E	4.53	4.50	2
	33	3237	85.4	89.4	31	2872.39	632.28	4.92 N	632.26 E	2.06	1.61	
	34	3269	87.1	90.0	32	2874.48	664.21	5.09 N	664.19 E	5.63	5.31	
	35	3301	87.7	90.0	32	2875.94	696.17	5.09 N	696.16 E	1.87	1.88	
	36	3332	88.0	89.5	31	2877.10	727.15	5.22 N	727.13 E	1.88	0.97	
	37	3363	89.1	90.1	31	2877.88	758.14	5.33 N	758.12 E	4.04	3.55	
	38	3394	90.5	90.5	31	2877.99	789.14	5.17 N	789.12 E	4.70	4.52	
	39	3457	90.9	89.7	63	2877.22	852.13	5.06 N	852.11 E	1.42	0.63	

	40	3551	89.2	89.3	94	2877.14	946.12	5.88 N	946.10 E	1.86	1.81
	41	3644	88.2	89.2	93	2879.25	1039.09	7.09 N	1039.07 E	1.08	1.08
	42	3738	88.4	88.9	94	2882.04	1133.05	8.65 N	1133.01 E	0.38	0.21
	43	3832	88.3	89.5	94	2884.74	1227.00	9.96 N	1226.97 E	0.65	0.11
	44	3926	89.8	89.4	94	2886.30	1320.99	10.87 N	1320.94 E	1.60	1.60
15-Jan	45	4020	90.8	90.0	94	2885.81	1414.98	11.36 N	1414.94 E	1.24	1.06
	46	4113	90.7	89.2	93	2884.59	1507.97	12.01 N	1507.93 E	0.87	0.11
	47	4206	91.4	89.3	93	2882.89	1600.95	13.22 N	1600.90 E	0.76	0.75
	48	4300	91.3	90.1	94	2880.67	1694.92	13.72 N	1694.87 E	0.86	0.11
	49	4395	90.2	90.3	95	2879.43	1789.91	13.38 N	1789.86 E	1.18	1.16
	50	4489	89.1	90.3	94	2880.00	1883.90	12.89 N	1883.85 E	1.17	1.17
	51	4582	89.1	89.9	93	2881.47	1976.88	12.73 N	1976.84 E	0.43	0.00
	52	4676	89.1	90.6	94	2882.94	2070.87	12.32 N	2070.83 E	0.74	0.00
	53	4770	89.6	90.1	94	2884.01	2164.85	11.75 N	2164.82 E	0.75	0.53
	54	4863	90.6	89.6	93	2883.85	2257.85	11.99 N	2257.82 E	1.20	1.08
	55	4957	91.0	89.3	94	2882.53	2351.84	12.89 N	2351.80 E	0.53	0.43
	56	5051	91.0	89.1	94	2880.89	2445.82	14.20 N	2445.78 E	0.21	0.00
	57	5145	89.7	88.9	94	2880.32	2539.81	15.84 N	2539.76 E	1.40	1.38
16-Jan	58	5238	89.9	88.2	93	2880.64	2632.79	18.20 N	2632.73 E	0.78	0.22
	59	5332	90.5	88.7	94	2880.32	2726.77	20.74 N	2726.69 E	0.83	0.64
	60	5425	90.2	89.3	93	2879.75	2819.76	22.36 N	2819.67 E	0.72	0.32
	61	5518	89.8	90.1	93	2879.75	2912.76	22.85 N	2912.67 E	0.96	0.43
	62	5612	90.1	90.0	94	2879.83	3006.75	22.77 N	3006.67 E	0.34	0.32
	63	5705	89.7	90.7	93	2879.99	3099.74	22.20 N	3099.67 E	0.87	0.43
	64	5798	89.9	90.6	93	2880.32	3192.73	21.14 N	3192.66 E	0.24	0.22
	65	5893	89.9	90.5	95	2880.48	3287.72	20.23 N	3287.66 E	0.11	0.00
	66	5986	89.9	89.7	93	2880.64	3380.71	20.07 N	3380.65 E	0.86	0.00
	67	6080	90.3	90.8	94	2880.48	3474.70	19.66 N	3474.65 E	1.25	0.43
	68	6173	90.7	90.9	93	2879.67	3567.68	18.28 N	3567.63 E	0.44	0.43
17-Jan	69	6268	89.9	90.6	95	2879.17	3662.66	17.04 N	3662.62 E	0.90	0.84
	70	6361	89.1	89.3	93	2879.98	3755.65	17.12 N	3755.61 E	1.64	0.86
	71	6454	89.5	89.0	93	2881.12	3848.64	18.50 N	3848.60 E	0.54	0.43
	72	6548	89.8	88.9	94	2881.69	3942.63	20.22 N	3942.58 E	0.34	0.32
	73	6642	90.1	88.5	94	2881.78	4036.62	22.35 N	4036.55 E	0.53	0.32
	74	6736	89.9	88.7	94	2881.78	4130.60	24.65 N	4130.53 E	0.30	0.21
	75	6830	90.0	88.6	94	2881.86	4224.59	26.86 N	4224.50 E	0.15	0.11
	76	6924	90.2	89.1	94	2881.69	4318.58	28.75 N	4318.48 E	0.57	0.21
	77	7018	90.1	90.0	94	2881.45	4412.57	29.49 N	4412.47 E	0.96	0.11
	78	7111	90.5	89.8	93	2880.96	4505.57	29.65 N	4505.47 E	0.48	0.43
	79	7206	90.2	90.5	95	2880.38	4600.56	29.40 N	4600.47 E	0.80	0.32
	80	7230	90.2	90.7	24	2880.30	4624.56	29.15 N	4624.47 E	0.83	0.00
	PTB	7304	90.2	90.7	74	2880.04	4698.55	28.25 N	4698.46 E	0.00	0.00
					0	0.00	0.00	0.00 N	0.00 E	0.00	0.00
					0	0.00	0.00	0.00 N	0.00 E	0.00	0.00
					0	0.00	0.00	0.00 N	0.00 E	0.00	0.00
					0	0.00	0.00	0.00 N	0.00 E	0.00	0.00
					0	0.00	0.00	0.00 N	0.00 E	0.00	0.00
					0	0.00	0.00	0.00 N	0.00 E	0.00	0.00
	87				0	0.00	0.00	0.00 N	0.00 E	0.00	0.00
	88				0	0.00	0.00	0.00 N	0.00 E	0.00	0.00
	89				0	0.00	0.00	0.00 N	0.00 E	0.00	0.00
	90				0	0.00	0.00	0.00 N	0.00 E	0.00	0.00
	91				0	0.00	0.00	0.00 N	0.00 E	0.00	0.00
	92				0	0.00	0.00	0.00 N	0.00 E	0.00	0.00
	93				0	0.00	0.00	0.00 N	0.00 E	0.00	0.00
	94				0	0.00	0.00	0.00 N	0.00 E	0.00	0.00



PHOENIX

TECHNOLOGY SERVICES

Job Number: 1311670
 Company: COG Operating L.L.C.
 Lease/Well: Patton 5 Fee #3H
 Location: Lakewood, Eddy County
 Rig Name: Silver Oak #3
 RKB: 18
 G.L. or M.S.L.: MSL

State/Country: New Mexico
 Declination: 7.69
 Grid: -0.04
 File name: C:\WINSERVE\1311670.SVY
 Date/Time: 17-Jan-14 / 17:48
 Curve Name: Patton 5 Fee #3H - Actual Surveys

Phoenix Technology Services

WINSERVE SURVEY CALCULATIONS
Minimum Curvature Method
Vertical Section Plane 89.64
Vertical Section Referenced to Wellhead
Rectangular Coordinates Referenced to Wellhead

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE Distance FT	Direction Deg	Dogleg Severity Deg/100
VES Gyro Survey Tie-In									
2216.00	.26	25.69	2215.92	.35	4.77	4.77	4.78	85.80	.00
First Phoenix Survey									
2249.00	.20	73.40	2248.92	.43	4.86	4.86	4.88	84.90	.59
2280.00	.30	311.00	2279.92	.50	4.85	4.85	4.87	84.08	1.42
2311.00	.40	346.80	2310.92	.66	4.76	4.77	4.81	82.10	.76
Top Of Curve									
2343.00	4.10	79.20	2342.89	.98	5.86	5.87	5.94	80.46	12.93
2374.00	8.80	92.40	2373.69	1.09	9.32	9.33	9.38	83.31	15.80
2405.00	13.00	89.40	2404.12	1.03	15.18	15.19	15.21	86.12	13.67
2437.00	16.30	84.10	2435.08	1.53	23.25	23.26	23.30	86.24	11.12
2468.00	19.80	81.90	2464.55	2.72	32.78	32.79	32.89	85.26	11.50
2499.00	23.20	81.40	2493.39	4.37	44.01	44.04	44.23	84.33	10.98

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
2531.00	26.20	83.20	2522.46	6.15	57.26	57.30	57.59	83.87	9.66
2562.00	29.10	84.70	2549.91	7.66	71.57	71.62	71.98	83.89	9.62
2593.00	31.40	85.50	2576.69	8.99	87.13	87.18	87.59	84.11	7.53
2625.00	34.60	87.10	2603.53	10.10	104.52	104.58	105.00	84.48	10.36
2656.00	37.80	89.50	2628.54	10.63	122.81	122.88	123.27	85.05	11.29
2687.00	41.20	90.10	2652.46	10.69	142.53	142.59	142.93	85.71	11.04
2718.00	45.30	90.70	2675.03	10.54	163.76	163.83	164.10	86.32	13.29
2750.00	49.20	91.40	2696.75	10.11	187.25	187.31	187.53	86.91	12.29
2781.00	52.40	92.40	2716.34	9.31	211.26	211.31	211.46	87.48	10.62
2813.00	55.10	93.50	2735.26	7.97	237.03	237.07	237.16	88.07	8.88
2844.00	57.10	93.80	2752.55	6.33	262.70	262.74	262.78	88.62	6.50
2875.00	59.50	92.90	2768.84	4.80	289.03	289.06	289.07	89.05	8.13
2906.00	62.50	92.00	2783.87	3.64	316.12	316.13	316.14	89.34	10.00
2937.00	65.20	91.30	2797.53	2.84	343.93	343.94	343.94	89.53	8.94
2968.00	67.10	90.70	2810.06	2.35	372.28	372.28	372.28	89.64	6.38
2999.00	68.80	90.10	2821.70	2.15	401.01	401.01	401.01	89.69	5.77
3031.00	70.10	89.50	2832.93	2.25	430.97	430.98	430.98	89.70	4.43
3062.00	72.40	88.80	2842.90	2.69	460.32	460.33	460.33	89.67	7.72
3093.00	75.10	89.10	2851.57	3.23	490.07	490.08	490.08	89.62	8.76
3124.00	78.60	88.90	2858.62	3.76	520.25	520.27	520.27	89.59	11.31
3155.00	81.60	89.10	2863.95	4.29	550.78	550.80	550.80	89.55	9.70
3186.00	84.00	89.70	2867.84	4.62	581.53	581.55	581.55	89.55	7.98
3206.00	84.90	89.80	2869.77	4.70	601.44	601.46	601.46	89.55	4.53
3237.00	85.40	89.40	2872.39	4.92	632.33	632.35	632.35	89.55	2.06
3269.00	87.10	90.00	2874.48	5.09	664.26	664.28	664.28	89.56	5.63
3301.00	87.70	90.00	2875.94	5.09	696.22	696.24	696.24	89.58	1.87
3332.00	88.00	89.50	2877.10	5.22	727.20	727.22	727.22	89.59	1.88
3363.00	89.10	90.10	2877.88	5.33	758.19	758.21	758.21	89.60	4.04
End Of Curve									
3394.00	90.50	90.50	2877.99	5.17	789.19	789.21	789.21	89.62	4.70
3457.00	90.90	89.70	2877.22	5.06	852.18	852.20	852.20	89.66	1.42
3551.00	89.20	89.30	2877.14	5.88	946.18	946.20	946.20	89.64	1.86
3644.00	88.20	89.20	2879.25	7.09	1039.14	1039.17	1039.17	89.61	1.08
3738.00	88.40	88.90	2882.04	8.65	1133.09	1133.12	1133.12	89.56	.38

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
3832.00	88.30	89.50	2884.74	9.96	1227.04	1227.08	1227.08	89.53	.65
3926.00	89.80	89.40	2886.30	10.87	1321.02	1321.06	1321.07	89.53	1.60
4020.00	90.80	90.00	2885.81	11.36	1415.02	1415.06	1415.06	89.54	1.24
4113.00	90.70	89.20	2884.59	12.01	1508.01	1508.05	1508.05	89.54	.87
4206.00	91.40	89.30	2882.89	13.22	1600.98	1601.03	1601.04	89.53	.76
4300.00	91.30	90.10	2880.67	13.72	1694.95	1695.01	1695.01	89.54	.86
4395.00	90.20	90.30	2879.43	13.38	1789.94	1789.99	1789.99	89.57	1.18
4489.00	89.10	90.30	2880.00	12.89	1883.94	1883.98	1883.98	89.61	1.17
4582.00	89.10	89.90	2881.47	12.73	1976.93	1976.97	1976.97	89.63	.43
4676.00	89.10	90.60	2882.94	12.32	2070.91	2070.95	2070.95	89.66	.74
4770.00	89.60	90.10	2884.01	11.75	2164.91	2164.94	2164.94	89.69	.75
4863.00	90.60	89.60	2883.85	11.99	2257.90	2257.93	2257.94	89.70	1.20
4957.00	91.00	89.30	2882.53	12.89	2351.89	2351.92	2351.92	89.69	.53
5051.00	91.00	89.10	2880.89	14.20	2445.87	2445.91	2445.91	89.67	.21
5145.00	89.70	88.90	2880.32	15.84	2539.85	2539.90	2539.90	89.64	1.40
5238.00	89.90	88.20	2880.64	18.20	2632.82	2632.88	2632.88	89.60	.78
5332.00	90.50	88.70	2880.32	20.74	2726.78	2726.86	2726.86	89.56	.83
5425.00	90.20	89.30	2879.75	22.36	2819.76	2819.85	2819.85	89.55	.72
5518.00	89.80	90.10	2879.75	22.85	2912.76	2912.85	2912.85	89.55	.96
5612.00	90.10	90.00	2879.83	22.77	3006.76	3006.85	3006.85	89.57	.34
5705.00	89.70	90.70	2879.99	22.20	3099.76	3099.84	3099.84	89.59	.87
5798.00	89.90	90.60	2880.32	21.14	3192.75	3192.82	3192.82	89.62	.24
5893.00	89.90	90.50	2880.48	20.23	3287.75	3287.81	3287.81	89.65	.11
5986.00	89.90	89.70	2880.64	20.07	3380.75	3380.81	3380.81	89.66	.86
6080.00	90.30	90.80	2880.48	19.66	3474.74	3474.80	3474.80	89.68	1.25
6173.00	90.70	90.90	2879.67	18.28	3567.73	3567.78	3567.78	89.71	.44
6268.00	89.90	90.60	2879.17	17.04	3662.72	3662.76	3662.76	89.73	.90
6361.00	89.10	89.30	2879.98	17.12	3755.71	3755.75	3755.75	89.74	1.64
6454.00	89.50	89.00	2881.12	18.50	3848.70	3848.74	3848.74	89.72	.54
6548.00	89.80	88.90	2881.69	20.22	3942.68	3942.73	3942.73	89.71	.34
6642.00	90.10	88.50	2881.78	22.35	4036.65	4036.72	4036.72	89.68	.53
6736.00	89.90	88.70	2881.78	24.65	4130.63	4130.70	4130.70	89.66	.30
6830.00	90.00	88.60	2881.86	26.86	4224.60	4224.69	4224.69	89.64	.15
6924.00	90.20	89.10	2881.69	28.75	4318.58	4318.68	4318.68	89.62	.57

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	C L O S U R E		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
7018.00	90.10	90.00	2881.45	29.49	4412.58	4412.67	4412.68	89.62	.96
7111.00	90.50	89.80	2880.96	29.65	4505.58	4505.67	4505.67	89.62	.48
7206.00	90.20	90.50	2880.38	29.40	4600.57	4600.67	4600.67	89.63	.80
7230.00	90.20	90.70	2880.30	29.15	4624.57	4624.66	4624.66	89.64	.83
PTB @ TD									
7304.00	90.20	90.70	2880.04	28.25	4698.56	4698.65	4698.65	89.66	.00