

REALLY SCARY FEDERAL COM #2H**30-015-41411****Sec 33-T24S-R28E**

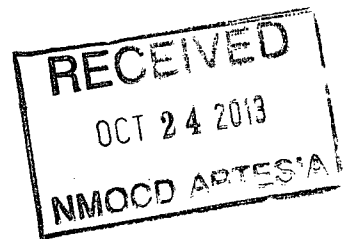
<u>Perfs</u>	<u>7 1/2% Acid (Gal)</u>	<u>Sand (#)</u>	<u>Fluid (Gal)</u>
12481-12800'	2856	301500	278292
12055-12375'	3023	302080	259854
11630-11950'	3088	302619	236292
11207-11529'	3095	303392	228228
10778-11099'	3010	299524	225750
10353-10673'	3028	296014	223986
9927-10242'	3151	309286	225246
9502-9822'	3151	303988	223062
9071-9398'	3000	309673	233352
8651-8970'	3528	305235	223272
8225-8544'	3108	553582	435246
Totals	34038	3586893	2792580



OPERATOR: COG Operating, LLC
WELL/LEASE: Really Scary Fed Com # 2 H
COUNTY: Eddy Co., New Mexico
Sec. 33, T24S, R28E

**STATE OF NEW MEXICO
DEVIATION REPORT**

<u>Depth</u>	<u>Deviation</u>	<u>Depth</u>	<u>Deviation</u>
250	1/2	2,844	1
457	1 1/4	3,121	1 1/4
513	1 1/4	3,436	1
599	1 1/4	3,751	1/2
685	3/4	4,133	1/2
780	3/4	4,448	1/4
875	1/4	4,735	1/4
969	1/4	5,200	3/4
1,046	1/2	5,674	1
1,255	1 1/4	6,154	1 1/2
1,540	1	6,586	1 3/4
1,635	1	6,826	1 1/2
1,918	2 1/4	6,939	2 1/2
2,109	2 1/2	7,033	1 1/4
2,299	2 1/4	7,221	1
2,428	1 1/2	7,319	3/4
2,520	1		

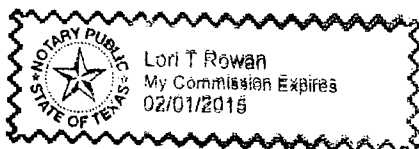


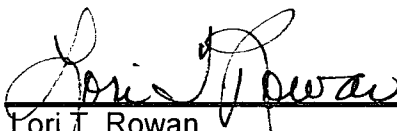
Patriot Drilling, LLC

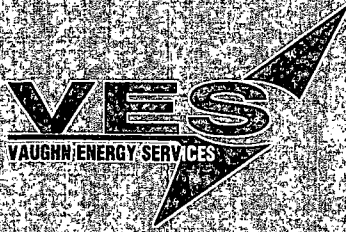

M. Leroy Peterson, Executive Vice-
President

The foregoing instrument was acknowledged before me on this 30th day of July, 2013 by M. Leroy Peterson, Executive Vice-President of Patriot Drilling, LLC.

My Commission Expires: 02/01/2015




Lori T. Rowan
Notary Public for Ector Co., Texas



A GYRO TECHNOLOGIES INC. COMPANY

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

July 2, 2013

COG Operating LLC (Concho)
One Concho Center
600 W. Illinois Avenue
Midland, TX 79701



Attn: Kanicia Castillo

Re: **Really Scary Federal Com No 002H**

Please find enclosed a copy of the survey from 0' to 7,390' ran on the above referenced well.

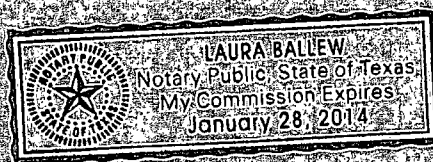
If I can be of any further service, please do not hesitate to call me at 800-606-4976.

Sincerely,


Keith Havelka
Operations

STATE OF TEXAS §
 §
COUNTY OF NUECES §

This instrument was acknowledged before me on the 2nd day of July, A.D. 2013, by Keith Havelka.




Laura Balley
Notary Public, State of Texas



Company: COG Operating (Concho) LLC
Lease/Well: Really Scary Federal Com/No 002H
Location: S33 T24s R28e
Rig Name: Patriot #2
State/County: New Mexico/Eddy
Latitude: 32.17, Longitude: -104.10
GRID North is 0.13 Degrees East of True North
VS-Azi: 0.00 Degrees



RKB : 17 Feet

DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: ...ederal com #2h gyro survey.ut

Minimum Curvature Method

Report Date/Time: 7/2/2013 / 12:36

Vaughn Energy Services

(432) 563-5444

Gardendale, TX 79758

Surveyor: Dustin Wedel

Really Scary Federal Com No 002H / API 30-015-41411



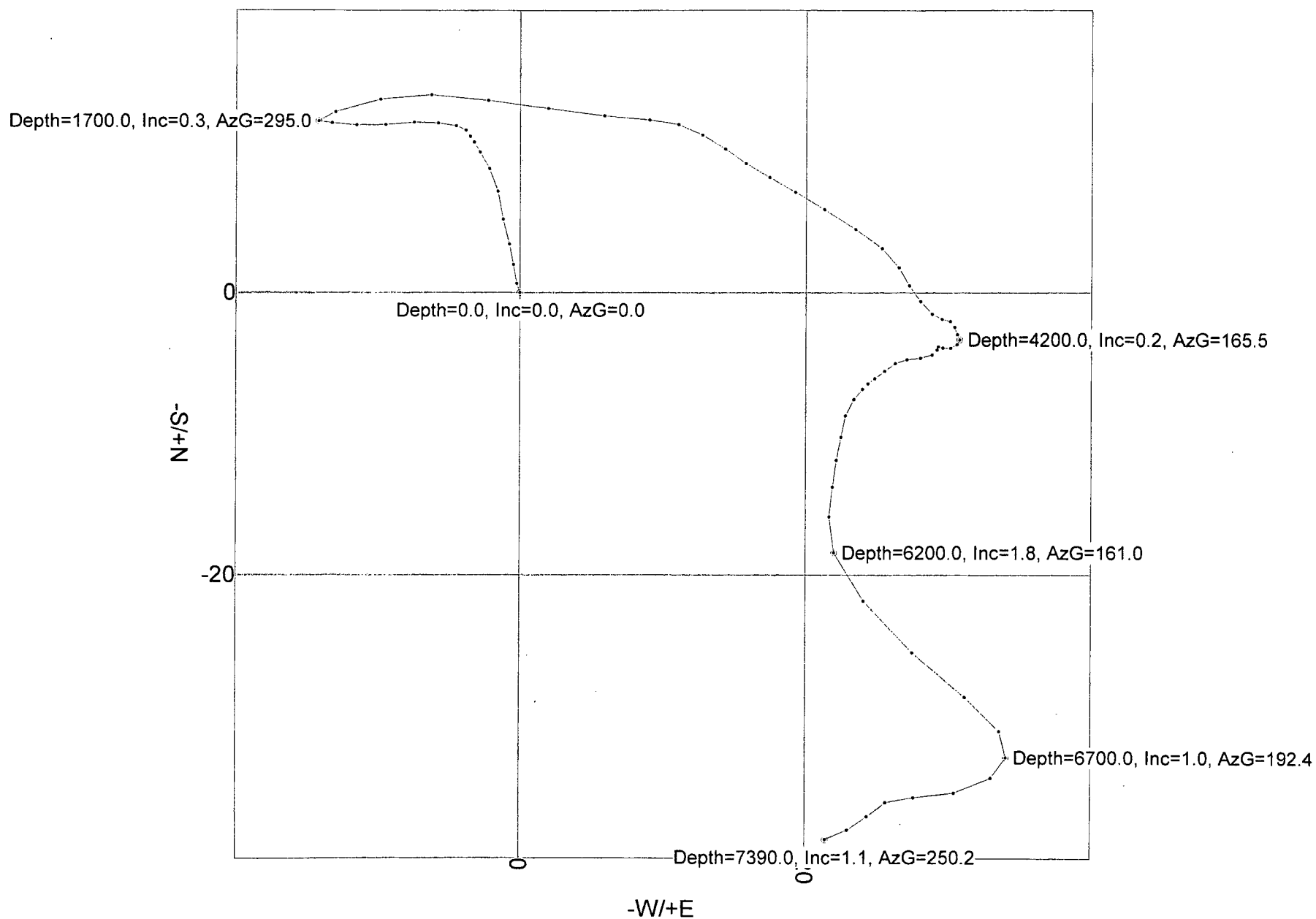
Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	****
100.00	0.78	340.66	100.00	0.64	-0.22	0.68	340.66	0.78
200.00	0.81	359.55	199.99	1.98	-0.45	2.04	347.10	0.26
300.00	0.91	339.18	299.98	3.43	-0.74	3.51	347.79	0.32
400.00	1.18	350.77	399.96	5.20	-1.19	5.33	347.08	0.34
500.00	1.12	348.51	499.94	7.17	-1.55	7.34	347.79	0.08
600.00	0.84	327.90	599.93	8.75	-2.14	9.01	346.27	0.44
700.00	0.72	332.82	699.92	9.93	-2.82	10.32	344.17	0.14
800.00	0.24	320.11	799.91	10.66	-3.24	11.14	343.09	0.49
900.00	0.32	330.68	899.91	11.06	-3.51	11.61	342.38	0.09
1000.00	0.30	316.81	999.91	11.49	-3.83	12.12	341.58	0.08
1100.00	0.58	283.67	1099.91	11.81	-4.50	12.63	339.15	0.36
1200.00	0.90	275.08	1199.90	11.99	-5.76	13.31	334.33	0.34
1300.00	1.06	268.84	1299.88	12.04	-7.47	14.17	328.20	0.19
1400.00	1.24	262.02	1399.86	11.87	-9.47	15.19	321.44	0.23
1500.00	1.15	277.25	1499.84	11.85	-11.54	16.54	315.76	0.33
1600.00	0.82	271.67	1599.83	12.00	-13.25	17.88	312.16	0.35
1700.00	0.29	295.05	1699.82	12.13	-14.20	18.67	310.50	0.56
1800.00	1.74	69.31	1799.81	12.77	-13.01	18.23	314.46	1.95

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
1900.00	2.07	77.66	1899.75	13.69	-9.83	16.85	324.34	0.44
2000.00	2.09	92.51	1999.69	14.00	-6.24	15.33	335.99	0.54
2100.00	2.53	98.48	2099.61	13.60	-2.24	13.78	350.66	0.50
2200.00	2.33	96.79	2199.52	13.03	1.96	13.18	8.56	0.21
2300.00	2.19	98.57	2299.44	12.50	5.87	13.82	25.16	0.15
2400.00	1.42	90.03	2399.39	12.22	9.00	15.18	36.38	0.82
2500.00	0.98	111.90	2499.37	11.90	11.03	16.22	42.82	0.62
2600.00	1.12	116.05	2599.35	11.15	12.70	16.90	48.70	0.16
2700.00	1.06	127.05	2699.33	10.17	14.31	17.55	54.59	0.22
2800.00	1.00	124.69	2799.32	9.12	15.76	18.21	59.94	0.07
2900.00	1.21	117.08	2899.30	8.14	17.42	19.23	64.94	0.26
3000.00	1.19	122.11	2999.28	7.11	19.23	20.51	69.71	0.11
3100.00	1.53	120.13	3099.25	5.89	21.26	22.07	74.52	0.34
3200.00	1.46	125.05	3199.21	4.49	23.46	23.89	79.17	0.15
3300.00	1.17	127.39	3299.19	3.14	25.32	25.51	82.94	0.29
3400.00	0.94	154.62	3399.17	1.77	26.49	26.55	86.18	0.55
3500.00	0.74	143.76	3499.16	0.50	27.22	27.22	88.94	0.26
3600.00	0.83	144.84	3599.15	-0.60	28.02	28.02	91.23	0.09
3700.00	0.59	128.84	3699.14	-1.52	28.84	28.88	93.01	0.30
3800.00	0.34	96.73	3799.14	-1.88	29.53	29.59	93.64	0.36
3900.00	0.34	113.03	3899.14	-2.03	30.10	30.16	93.85	0.10
4000.00	0.36	171.52	3999.14	-2.45	30.41	30.51	94.61	0.34
4100.00	0.30	148.21	4099.13	-2.98	30.59	30.74	95.56	0.14
4200.00	0.16	165.52	4199.13	-3.33	30.76	30.94	96.19	0.15
4300.00	0.33	228.13	4299.13	-3.66	30.59	30.81	96.83	0.29
4400.00	0.30	253.69	4399.13	-3.93	30.12	30.38	97.43	0.14
4500.00	0.36	289.98	4499.13	-3.89	29.58	29.83	97.50	0.21
4600.00	0.04	224.97	4599.13	-3.82	29.26	29.50	97.43	0.34
4700.00	0.24	194.39	4699.13	-4.05	29.18	29.46	97.90	0.21
4800.00	0.39	243.76	4799.13	-4.40	28.82	29.16	98.68	0.29
4900.00	0.59	261.46	4899.12	-4.63	28.01	28.39	99.38	0.25
5000.00	0.50	265.09	4999.12	-4.74	27.07	27.48	99.94	0.10
5100.00	0.51	237.71	5099.12	-5.02	26.25	26.73	100.82	0.24
5200.00	0.54	231.60	5199.11	-5.55	25.51	26.10	102.27	0.06
5300.00	0.47	232.56	5299.11	-6.09	24.82	25.55	103.78	0.07
5400.00	0.21	234.39	5399.11	-6.44	24.34	25.18	104.82	0.25
5500.00	0.41	218.40	5499.10	-6.83	23.97	24.92	105.91	0.21
5600.00	0.67	220.37	5599.10	-7.56	23.37	24.56	107.91	0.26
5700.00	0.86	196.12	5699.09	-8.72	22.79	24.40	110.94	0.37

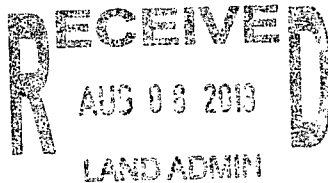
Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
5800.00	0.94	186.60	5799.08	-10.26	22.48	24.71	114.52	0.17
5900.00	0.96	195.21	5899.07	-11.88	22.17	25.15	118.19	0.15
6000.00	1.25	183.12	5999.05	-13.78	21.89	25.86	122.19	0.37
6100.00	1.19	189.61	6099.02	-15.89	21.66	26.86	126.26	0.15
6200.00	1.84	160.98	6198.99	-18.42	22.01	28.70	129.94	0.98
6300.00	2.82	141.25	6298.91	-21.86	24.07	32.51	132.24	1.26
6400.00	2.95	133.00	6398.78	-25.54	27.49	37.52	132.88	0.44
6500.00	2.61	128.29	6498.66	-28.71	31.17	42.37	132.64	0.41
6600.00	1.38	146.92	6598.60	-31.13	33.62	45.81	132.80	1.38
6700.00	1.00	192.43	6698.58	-32.99	34.09	47.44	134.06	0.99
6800.00	1.24	235.32	6798.56	-34.46	33.01	47.71	136.23	0.85
6900.00	1.98	256.28	6898.52	-35.48	30.44	46.75	139.37	0.93
7000.00	1.35	274.62	6998.48	-35.79	27.60	45.20	142.37	0.81
7100.00	1.00	241.93	7098.46	-36.11	25.65	44.29	144.61	0.74
7200.00	0.87	223.49	7198.45	-37.07	24.36	44.36	146.69	0.32
7300.00	1.07	244.92	7298.44	-38.02	22.99	44.43	148.84	0.41
7390.00	1.09	250.21	7388.42	-38.67	21.43	44.21	151.01	0.11



Vaughn Energy Services
(432) 563-5444
Gardendale, TX 79758
Surveyor: Dustin Wedel
Really Scary Federal Com No 002H / API 30-015-41411



-W/+E
VES Survey Date: 06/26/2013

**Archer**

Archer Directional Drilling Services.
12101 Cullen Road
Houston, Texas 77066
Tel: 281-301-2600
Fax: 281-301-2795

COG Operating, LLC
One Concho Center
600 W. Illinois Avenue
Midland, Texas 79701

August 5, 2013

Re: COG Operating, LLC
Really Scary Federal 2H
Field: Willow Lake
Rig: Patriot 2
Eddy County, New Mexico
API # 30-015-41411

Enclosed please find the original of the surveys performed on the referenced well by Archer Directional Drilling Services. Other information required by your office is as follows:

<u>Name & Title Of Surveyor</u>	<u>Wellhole Number</u>	<u>Survey Depths</u>	<u>Dates Performed</u>	<u>Type Survey</u>
Geo Davila Field Engineer	Original Hole	457-2475	06/18/13-07/02/13	MWD
	Curve-Lateral	7478-12711		
	SideTrack 1	6546-12914	07/12/13-07/20/13	

If additional information is required, please contact the undersigned at the letterhead address and phone number.

Amador Baggerly
MWD Coordinator



Archer Directional Drilling Services.
12101 Cutten Road
Houston, Texas 77066
Tel: 281-301-2600
Fax: 281-301-2795

MWD Survey Certification

State of New Mexico
County of Eddy

I, Amador Baggerly, certify that; I am employed by Archer Directional Drilling Services; that I did on the day(s) of 06/18/13 through 07/02/13 and 07/12/13 through 07/20/13, conduct or supervise the taking of MWD surveys: **Original Hole:** from a depth of 457 feet to a depth of 2475 feet; **Lateral:** from a depth of 7478 feet to a depth of 12711 feet; **ST1:** from a depth of 6546 feet to a depth of 12914 feet; that the data is true, correct, complete and within the limitations of the tool as set forth by Archer Directional Drilling Services; that I am authorized and qualified to make this report; that these surveys were conducted at the request of COG Operating, LLC for the Really Scary Federal 2H (API # 30-015-41411), Well located in Eddy County, New Mexico; and that I have reviewed this report and find that it conforms to the principles and procedures as set forth by Archer Directional Drilling Services

Amador Baggerly
MWD Coordinator

State of Texas
County of Harris

Before me, a notary public, on this day personally appeared Amador Baggerly, on this 5 day of Aug, 2013, known to me to be the person whose name is subscribed to the foregoing document and, being by me first duly sworn, declared that the statement therein contained are true and correct.

Notary Public's Signature





Company: COG Operating, LLC

Job Number: 04317-433-22

Calculation Method

Minimum Curvature

Well: Really Scary Fed_Com 2H-OH

Mag Decl.: 7.49

Proposed Azimuth

359.7

Location: Eddy County, New Mexico

Dir Driller: Levi Galvin

Depth Reference

KBG

Rig: Patriot 2

MWD Eng: Geo Davila

Tie Into: Assumed Vertical

Job Date: 06/18/13 - 07/02/13

Survey Number	Survey Depth (ft)	Inclination (deg)	Azimuth (deg)	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates		Closure		Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')
							N/S (ft)	E/W (ft)	Distance (ft)	Direction Azimuth			
Tie In	0.00	0	0	0	0	0	0.00 0	0.00 0					
1	457	1.1	346.0	457	456.97	4.26	4.26 N	1.06 W	4.39	346.00	0.24	0.24	-75.71
2	513	1.2	327.8	56	512.96	5.28	5.27 N	1.50 W	5.48	344.09	0.67	0.18	-32.50
3	598	1.1	331.1	85	597.94	6.75	6.74 N	2.37 W	7.15	340.61	0.14	-0.12	3.88
4	684	0.6	331.1	86	683.93	7.87	7.86 N	2.99 W	8.41	339.18	0.58	-0.58	0.00
5	779	0.6	328.0	95	778.93	8.73	8.72 N	3.49 W	9.39	338.16	0.03	0.00	-3.26
6	874	0.2	294.3	95	873.93	9.22	9.21 N	3.91 W	10.00	337.00	0.47	-0.42	-35.47
7	969	0.1	56.0	95	968.93	9.34	9.32 N	3.99 W	10.14	336.82	0.28	-0.11	-250.84
8	1064	0.4	279.1	95	1063.93	9.44	9.42 N	4.25 W	10.33	335.72	0.50	0.32	234.84
9	1159	0.8	274.2	95	1158.92	9.55	9.52 N	5.24 W	10.87	331.18	0.42	0.42	-5.16
10	1254	1.2	268.7	95	1253.91	9.58	9.55 N	6.89 W	11.78	324.17	0.43	0.42	-5.79
11	1349	1.4	274.8	95	1348.88	9.66	9.62 N	9.04 W	13.20	316.77	0.26	0.21	6.42
12	1445	1.3	277.9	96	1444.85	9.92	9.87 N	11.29 W	15.00	311.15	0.13	-0.10	3.23
13	1540	1.0	278.1	95	1539.83	10.20	10.13 N	13.18 W	16.63	307.56	0.32	-0.32	0.21
14	1635	0.9	282.8	95	1634.82	10.49	10.42 N	14.73 W	18.04	305.27	0.13	-0.11	4.95
15	1730	0.6	45.8	95	1729.82	11.00	10.93 N	15.10 W	18.64	305.89	1.40	-0.32	-249.47
16	1825	2.2	77.8	95	1824.79	11.72	11.66 N	12.96 W	17.43	311.98	1.81	1.68	33.68
17	1919	2.2	85.6	94	1918.72	12.23	12.18 N	9.40 W	15.38	322.35	0.32	0.00	8.30
18	2014	1.8	88.7	95	2013.66	12.38	12.35 N	6.09 W	13.77	333.76	0.44	-0.42	3.26
19	2109	2.5	102.0	95	2108.59	11.97	11.96 N	2.57 W	12.23	347.87	0.90	0.74	14.00
20	2204	2.4	103.8	95	2203.51	11.04	11.05 N	1.39 E	11.14	7.16	0.13	-0.11	1.89
21	2299	2.2	97.4	95	2298.43	10.32	10.34 N	5.13 E	11.54	26.38	0.34	-0.21	-6.74
22	2395	1.4	93.8	96	2394.38	9.99	10.03 N	8.13 E	12.91	39.02	0.84	-0.83	-3.75
23	2428	1.3	88.9	33	2427.37	9.96	10.01 N	8.90 E	13.39	41.66	0.46	-0.30	-14.85
Proj.	2475	1.3	88.9	47	2474.36	9.98	10.03 N	9.97 E	14.14	44.83	0.00	0.00	0.00



Company: COG Operating, LLC

Well: Really Scary Fed Com 2H -Lat

Location: Eddy County, New Mexico

Rig: Patriot 2

Job Date: 06/18/13 - 07/02/13

Job Number: 04317-433-22

Mag Decl.: 7.49

Dir Driller: Levi Galvin

MWD Eng: Geo Davila

Calculation Method

Proposed Azimuth

Depth Reference

Tie Into: Gyro Survey

Minimum Curvature

359.7

KBG

Survey Number	Survey Depth (ft)	Inclination (deg)	Azimuth (deg)	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates		Closure		Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')
							N/S (ft)	E/W (ft)	Distance (ft)	Direction Azimuth			
Tie In	7390.00	1.09	250.21	0	7388.42	38.78	38.68 S	21.44 E	0.00	0.00	0	0	0
1	7478	1.2	235.1	88	7476.40	-39.59	39.49 S	19.90 E	44.22	153.26	0.36	0.13	-17.17
2	7510	1.3	236.3	32	7508.39	-39.98	39.88 S	19.32 E	44.32	154.15	0.32	0.31	3.75
3	7541	2.3	344.4	31	7539.39	-39.57	39.48 S	18.86 E	43.75	154.47	9.59	3.23	348.71
4	7573	5.7	2.2	32	7571.30	-37.36	37.27 S	18.75 E	41.72	153.30	11.19	10.63	-1069.38
5	7605	10.5	7.9	32	7602.98	-32.89	32.79 S	19.21 E	38.01	149.64	15.19	15.00	17.81
6	7636	13.7	1.4	31	7633.28	-26.42	26.32 S	19.69 E	32.87	143.21	11.20	10.32	-20.97
7	7668	17.8	358.8	32	7664.08	-17.74	17.64 S	19.68 E	26.43	131.88	13.00	12.81	1116.88
8	7700	20.2	357.7	32	7694.33	-7.32	7.23 S	19.35 E	20.66	110.48	7.58	7.50	-3.44
9	7732	22.1	0.9	32	7724.18	4.22	4.31 N	19.23 E	19.70	77.36	6.95	5.94	-1115.00
10	7763	24.8	3.2	31	7752.61	16.54	16.64 N	19.68 E	25.77	49.79	9.19	8.71	7.42
11	7795	26.6	7.4	32	7781.45	30.34	30.44 N	20.98 E	36.97	34.57	8.00	5.63	13.13
12	7827	30.2	5.8	32	7809.59	45.45	45.56 N	22.72 E	50.91	26.50	11.50	11.25	-5.00
13	7858	32.8	5.2	31	7836.02	61.56	61.68 N	24.27 E	66.28	21.47	8.45	8.39	-1.94
14	7890	37.4	4.8	32	7862.20	79.88	80.01 N	25.86 E	84.08	17.92	14.39	14.38	-1.25
15	7922	41.4	4.1	32	7886.92	100.12	100.25 N	27.44 E	103.94	15.30	12.58	12.50	-2.19
16	7954	45.3	3.0	32	7910.18	122.03	122.17 N	28.79 E	125.52	13.26	12.41	12.19	-3.44
17	7985	47.8	2.6	31	7931.50	144.50	144.65 N	29.88 E	147.70	11.67	8.12	8.06	-1.29
18	8017	50.1	1.3	32	7952.52	168.61	168.77 N	30.70 E	171.54	10.31	7.81	7.19	-4.06
19	8049	53.1	0.2	32	7972.39	193.68	193.84 N	31.02 E	196.30	9.09	9.75	9.38	-3.44
20	8080	56.9	0.4	31	7990.17	219.07	219.23 N	31.16 E	221.43	8.09	12.27	12.26	0.65
21	8112	61.2	2.9	32	8006.62	246.49	246.65 N	31.96 E	248.71	7.38	15.01	13.44	7.81
22	8144	65.8	4.3	32	8020.90	275.05	275.22 N	33.77 E	277.28	6.99	14.90	14.38	4.38
23	8176	69.1	5.2	32	8033.17	304.49	304.67 N	36.22 E	306.81	6.78	10.63	10.31	2.81
24	8208	71.9	4.5	32	8043.85	334.53	334.72 N	38.76 E	336.96	6.61	8.99	8.75	-2.19
25	8239	74.5	3.2	31	8052.81	364.13	364.33 N	40.75 E	366.60	6.38	9.30	8.39	-4.19
26	8271	77.3	2.3	32	8060.61	395.11	395.33 N	42.24 E	397.58	6.10	9.17	8.75	-2.81
27	8303	79.6	2.4	32	8067.01	426.43	426.65 N	43.53 E	428.86	5.83	7.19	7.19	0.31
28	8334	82.6	1.6	31	8071.81	457.03	457.25 N	44.60 E	459.42	5.57	10.01	9.68	-2.58
29	8366	85.2	359.5	32	8075.21	488.84	489.07 N	44.90 E	491.12	5.25	10.42	8.13	1118.44
30	8398	87.5	0.3	32	8077.24	520.77	521.00 N	44.84 E	522.93	4.92	7.61	7.19	-1122.50
31	8429	90.2	0.8	31	8077.87	551.76	551.99 N	45.14 E	553.83	4.68	8.86	8.71	1.61
32	8461	93.3	359.5	32	8076.89	583.74	583.97 N	45.23 E	585.72	4.43	10.50	9.69	1120.94
33	8556	91.9	357.2	95	8072.58	678.61	678.82 N	42.49 E	680.15	3.58	2.83	-1.47	-2.42
34	8651	89.3	357.9	95	8071.59	773.52	773.72 N	38.43 E	774.68	2.84	2.83	-2.74	0.74
35	8746	90.5	359.6	95	8071.75	868.51	868.69 N	36.36 E	869.45	2.40	2.19	1.26	1.79
36	8841	91.0	360.0	95	8070.51	963.50	963.68 N	36.03 E	964.36	2.14	0.67	0.53	0.42
37	8936	91.3	359.3	95	8068.60	1058.48	1058.66 N	35.45 E	1059.26	1.92	0.80	0.32	-0.74



Company: COG Operating, LLC

Well: Really Scary Fed Com 2H -Lat

Location: Eddy County, New Mexico

Rig: Patriot 2

Job Date: 06/18/13 - 07/02/13

Job Number: 04317-433-22

Mag Decl.: 7.49

Dir Driller: Levi Galvin

MWD Eng: Geo Davila

Calculation Method

Proposed Azimuth

Depth Reference

Tie Into: Gyro Survey

Minimum Curvature

359.7

KBG

Survey Number	Survey Depth (ft)	Inclination (deg)	Azimuth (deg)	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates		Closure		Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')
							N/S (ft)	E/W (ft)	Distance (ft)	Direction Azimuth			
38	9031	91.3	357.4	95	8066.45	1153.42	1153.59 N	32.71 E	1154.06	1.62	2.00	0.00	-2.00
39	9126	88.7	356.4	95	8066.45	1248.30	1248.45 N	27.58 E	1248.75	1.27	2.93	-2.74	-1.05
40	9221	88.8	356.8	95	8068.52	1343.13	1343.26 N	21.94 E	1343.44	0.94	0.43	0.11	0.42
41	9316	91.2	357.3	95	8068.52	1438.02	1438.12 N	17.05 E	1438.22	0.68	2.58	2.53	0.53
42	9411	92.3	357.5	95	8065.62	1532.90	1532.98 N	12.75 E	1533.03	0.48	1.18	1.16	0.21
43	9506	91.9	357.3	95	8062.14	1627.76	1627.82 N	8.44 E	1627.84	0.30	0.47	-0.42	-0.21
44	9601	91.7	357.3	95	8059.15	1722.63	1722.67 N	3.97 E	1722.67	0.13	0.21	-0.21	0.00
45	9696	92.1	357.1	95	8056.00	1817.48	1817.50 N	0.67 W	1817.50	359.98	0.47	0.42	-0.21
46	9791	90.2	357.8	95	8054.10	1912.38	1912.38 N	4.90 W	1912.39	359.85	2.13	-2.00	0.74
47	9887	89.5	359.5	96	8054.35	2008.36	2008.35 N	7.16 W	2008.36	359.80	1.92	-0.73	1.77
48	9982	89.9	1.9	95	8054.84	2103.34	2103.33 N	6.00 W	2103.34	359.84	2.56	0.42	-376.42
49	10077	90.5	1.9	95	8054.51	2198.27	2198.28 N	2.85 W	2198.28	359.93	0.63	0.63	0.00
50	10172	91.0	1.6	95	8053.27	2293.20	2293.23 N	0.05 E	2293.23	0.00	0.61	0.53	-0.32
51	10267	91.3	1.2	95	8051.36	2388.14	2388.18 N	2.37 E	2388.18	0.06	0.53	0.32	-0.42
52	10362	91.9	0.7	95	8048.71	2483.08	2483.13 N	3.95 E	2483.13	0.09	0.82	0.63	-0.53
53	10457	91.9	359.2	95	8045.56	2578.03	2578.08 N	3.87 E	2578.08	0.09	1.58	0.00	377.37
54	10552	92.7	359.4	95	8041.75	2672.95	2672.99 N	2.71 E	2672.99	0.06	0.87	0.84	0.21
55	10647	91.9	359.7	95	8037.93	2767.87	2767.91 N	1.96 E	2767.91	0.04	0.90	-0.84	0.32
56	10742	91.7	0.1	95	8034.95	2862.82	2862.86 N	1.80 E	2862.86	0.04	0.47	-0.21	-378.53
57	10838	89.3	0.3	96	8034.11	2958.81	2958.85 N	2.13 E	2958.85	0.04	2.51	-2.50	0.21
58	10933	89.6	0.1	95	8035.02	3053.80	3053.85 N	2.46 E	3053.85	0.05	0.38	0.32	-0.21
59	11028	88.5	359.3	95	8036.60	3148.78	3148.83 N	1.96 E	3148.83	0.04	1.43	-1.16	378.11
60	11122	88.4	358.5	94	8039.14	3242.74	3242.78 N	0.16 E	3242.78	0.00	0.86	-0.11	-0.85
61	11217	89.1	358.2	95	8041.22	3337.69	3337.72 N	2.57 W	3337.72	359.96	0.80	0.74	-0.32
62	11312	89.5	358.0	95	8042.38	3432.64	3432.66 N	5.72 W	3432.66	359.90	0.47	0.42	-0.21
63	11407	91.0	357.7	95	8041.96	3527.59	3527.58 N	9.29 W	3527.60	359.85	1.61	1.58	-0.32
64	11502	91.6	357.5	95	8039.81	3622.50	3622.48 N	13.26 W	3622.50	359.79	0.67	0.63	-0.21
65	11597	89.9	357.6	95	8038.56	3717.42	3717.38 N	17.32 W	3717.42	359.73	1.79	-1.79	0.11
66	11693	88.4	357.6	96	8039.99	3813.34	3813.28 N	21.34 W	3813.34	359.68	1.56	-1.56	0.00
67	11788	89.5	359.5	95	8041.73	3908.30	3908.23 N	23.75 W	3908.30	359.65	2.31	1.16	2.00
68	11883	89.9	0.2	95	8042.23	4003.30	4003.23 N	24.00 W	4003.30	359.66	0.85	0.42	-378.21
69	11977	90.3	358.0	94	8042.06	4097.28	4097.21 N	25.47 W	4097.29	359.64	2.38	0.43	380.64
70	12073	90.6	359.4	96	8041.31	4193.26	4193.18 N	27.65 W	4193.27	359.62	1.49	0.31	1.46
71	12168	90.2	356.4	95	8040.64	4288.20	4288.10 N	31.13 W	4288.21	359.58	3.19	-0.42	-3.16
72	12263	92.4	357.2	95	8038.49	4383.05	4382.92 N	36.43 W	4383.07	359.52	2.46	2.32	0.84
73	12358	93.2	1.7	95	8033.85	4477.91	4477.78 N	37.34 W	4477.93	359.52	4.81	0.84	-374.21
74	12454	91.6	2.0	96	8029.83	4573.75	4573.64 N	34.25 W	4573.77	359.57	1.70	-1.67	0.31
75	12549	92.3	1.8	95	8026.59	4668.63	4668.53 N	31.10 W	4668.64	359.62	0.77	0.74	-0.21
76	12658	93.1	0.9	109	8021.46	4777.46	4777.38 N	28.53 W	4777.47	359.66	1.10	0.73	-0.83

ArcherCompany: COG Operating, LLCWell: Really Scary Fed Com 2H -LatLocation: Eddy County, New MexicoRig: Patriot 2Job Date: 06/18/13 - 07/02/13Job Number: 04317-433-22Mag Decl.: 7.49Dir Driller: Levi GalvinMWD Eng: Geo Davila

Calculation Method

Minimum Curvature

Proposed Azimuth

359.7

Depth Reference

KBGTie Into: Gyro Survey

Survey Number	Survey Depth (ft)	Inclina- tion (deg)	Azimuth (deg)	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates		Closure		Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')
							N/S (ft)	E/W (ft)	Distance (ft)	Direction Azimuth			
Proj.	12711	93.1	0.9	53	8018.59	4830.37	4830.30 N	27.70 W	4830.38	359.67	0.00	0.00	0.00



COG Operating, LLC

Eddy County(NM27E)

Sec.33-T24S-R28E

Really Scary Federal Com #2H

Wellbore #2-ST

Survey: Survey #1-Archer MWD

Standard Survey Report

21 July, 2013

Archer

Company:	COG Operating, LLC	Local Co-ordinate Reference:	Well Really Scary Federal Com #2H
Project:	Eddy County(NM27E)	TVD Reference:	WELL @ 3027.30usft
Site:	Sec 33-T24S-R28E	MD Reference:	WELL @ 3027.30usft
Well:	Really Scary Federal Com #2H	North Reference:	Grid
Wellbore:	Wellbore #2-ST	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #2-ST	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 33-T24S-R28E			
Site Position:		Northing:	424,523.100 usft	Latitude:	32° 10' 0.864 N
From:	Map	Easting:	573,720.000 usft	Longitude:	104° 5' 42.326 W
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16"	Grid Convergence:	0.13 °

Well:	Really Scary Federal Com #2H					
Well Position	+N/-S	0.00 usft	Northing:	424,523.100 usft	Latitude:	32° 10' 0.864 N
	+E/-W	0.00 usft	Easting:	573,720.000 usft	Longitude:	104° 5' 42.326 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	3,010.30 usft

Wellbore	Wellbore #2-ST				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	2013/07/12	7.57	59.99	48,320

Design:		Wellbore #2-ST			
Audit Notes:					
Version:		1.0	Phase:	ACTUAL	Tie On Depth: 6,500.00
Vertical Section:		Depth From (TVD)	+N/-S	+E/-W	Direction
		(usft)	(usft)	(usft)	(°)
		0.00	0.00	0.00	6.53

Survey Program		Date	2013/07/21		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
100.00	6,500.00	Survey #2-VES Gyro (Wellbore #1)	GYD_DP_MS	Gyrodata gyro-compassing and drop	
6,546.00	12,914.00	Survey #1-Archer MWD (Wellbore #2-ST)	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 / OH VES Gyro									
6,500.00	2.61	128.29	6,498.66	-28.73	31.19	-24.99	0.00	0.00	0.00
First Archer Survey-ST									
6,546.00	7.00	101.30	6,544.49	-29.92	34.76	-25.78	10.48	9.54	-58.67
6,577.00	11.50	95.40	6,575.08	-30.59	39.70	-25.87	14.82	14.52	-19.03
6,609.00	14.10	92.30	6,606.29	-31.04	46.77	-25.52	8.40	8.12	-9.69
6,641.00	11.30	90.20	6,637.50	-31.21	53.80	-24.89	8.87	-8.75	-6.56
6,673.00	7.90	78.30	6,669.05	-30.77	59.09	-23.85	12.25	-10.62	-37.19
6,704.00	6.90	79.90	6,699.79	-30.02	63.01	-22.65	3.29	-3.23	5.16
6,736.00	6.70	83.50	6,731.57	-29.47	66.76	-21.68	1.47	-0.62	11.25
6,768.00	4.40	85.70	6,763.42	-29.16	69.83	-21.03	7.22	-7.19	6.87
6,799.00	3.90	75.60	6,794.33	-28.81	72.04	-20.43	2.85	-1.61	-32.58

Company:	COG Operating, LLC	Local Co-ordinate Reference:	Well Really Scary Federal Com #2H
Project:	Eddy County(NM27E)	TVD Reference:	WELL @ 3027.30usft
Site:	Sec 33-T24S-R28E	MD Reference:	WELL @ 3027.30usft
Well:	Really Scary Federal Com #2H	North Reference:	Grid
Wellbore:	Wellbore #2-ST	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #2-ST	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)
6,894.00	3.40	83.50	6,889.14	-27.69	77.97	-18.64	0.75	-0.53	8.32
6,989.00	3.00	64.40	6,984.00	-26.30	83.01	-16.68	1.19	-0.42	-20.11
7,085.00	2.50	46.60	7,079.89	-23.77	86.80	-13.75	1.02	-0.52	-18.54
7,180.00	2.80	77.80	7,174.79	-21.86	90.57	-11.42	1.53	0.32	32.84
7,275.00	3.60	108.10	7,269.65	-22.30	95.67	-11.27	1.94	0.84	31.89
7,370.00	3.50	103.10	7,364.47	-23.88	101.33	-12.20	0.34	-0.11	-5.26
7,465.00	1.90	105.20	7,459.36	-24.95	105.68	-12.77	1.69	-1.68	2.21
7,559.00	1.00	107.50	7,553.33	-25.60	107.96	-13.16	0.96	-0.96	2.45
7,591.00	0.70	109.00	7,585.32	-25.75	108.42	-13.25	0.94	-0.94	4.69
7,623.00	3.40	77.40	7,617.30	-25.61	109.53	-12.99	8.84	8.44	-98.75
7,655.00	7.40	72.60	7,649.15	-24.79	112.42	-11.84	12.57	12.50	-15.00
7,686.00	11.30	68.20	7,679.73	-23.06	117.15	-9.59	12.78	12.58	-14.19
7,718.00	14.00	64.60	7,710.96	-20.23	123.56	-6.05	8.79	8.44	-11.25
7,750.00	17.30	63.80	7,741.76	-16.47	131.32	-1.43	10.33	10.31	-2.50
7,782.00	20.20	62.20	7,772.06	-11.79	140.48	4.26	9.20	9.06	-5.00
7,813.00	22.90	58.10	7,800.90	-6.11	150.34	11.03	9.97	8.71	-13.23
7,845.00	26.20	56.40	7,830.00	1.09	161.51	19.46	10.55	10.31	-5.31
7,877.00	29.80	54.50	7,858.25	9.62	173.87	29.34	11.59	11.25	-5.94
7,908.00	34.00	51.00	7,884.56	19.55	186.89	40.68	14.80	13.55	-11.29
7,940.00	38.30	49.10	7,910.40	31.68	201.34	54.38	13.89	13.44	-5.94
7,972.00	41.00	46.20	7,935.04	45.45	216.42	69.77	10.23	8.44	-9.06
8,004.00	43.50	42.30	7,958.73	60.86	231.41	86.79	11.32	7.81	-12.19
8,035.00	47.00	40.60	7,980.55	77.37	245.98	104.84	11.94	11.29	-5.48
8,067.00	51.10	40.30	8,001.52	95.76	261.65	124.90	12.83	12.81	-0.94
8,099.00	55.70	39.90	8,020.59	115.40	278.19	146.30	14.41	14.37	-1.25
8,130.00	60.20	39.10	8,037.04	135.68	294.90	168.34	14.68	14.52	-2.58
8,162.00	64.30	38.50	8,051.93	157.74	312.64	192.28	12.92	12.81	-1.87
8,193.00	67.60	37.60	8,064.56	180.03	330.08	216.41	10.97	10.65	-2.90
8,225.00	72.00	37.80	8,075.61	203.79	348.44	242.10	13.76	13.75	0.62
8,257.00	77.50	37.00	8,084.03	228.31	367.18	268.59	17.36	17.19	-2.50
8,289.00	82.60	36.10	8,089.55	253.62	385.95	295.87	16.18	15.94	-2.81
8,320.00	87.50	34.00	8,092.23	278.90	403.67	323.00	17.19	15.81	-6.77
8,352.00	89.60	29.50	8,093.04	306.09	420.50	351.93	15.51	6.56	-14.06
8,384.00	89.40	26.30	8,093.32	334.37	435.47	381.73	10.02	-0.62	-10.00
8,415.00	87.60	24.20	8,094.13	362.39	448.69	411.07	8.92	-5.81	-6.77
8,510.00	92.50	22.60	8,094.05	449.55	486.41	501.96	5.43	5.16	-1.68
8,606.00	91.40	16.60	8,090.78	539.89	518.58	595.37	6.35	-1.15	-6.25
8,701.00	91.80	11.30	8,088.12	632.02	541.46	689.50	5.59	0.42	-5.58
8,796.00	88.60	9.30	8,087.79	725.47	558.44	784.28	3.97	-3.37	-2.11
8,891.00	86.90	12.40	8,091.52	818.69	576.31	878.92	3.72	-1.79	3.26
8,986.00	83.60	9.70	8,099.39	911.58	594.45	973.28	4.48	-3.47	-2.84
9,110.00	92.80	6.30	8,103.28	1,034.17	611.67	1,097.03	7.91	7.42	-2.74
9,205.00	90.80	0.10	8,100.29	1,128.92	616.97	1,191.77	6.85	-2.11	-6.53
9,301.00	91.30	355.40	8,098.53	1,224.80	613.20	1,286.60	4.92	0.52	-4.90
9,395.00	91.60	354.80	8,096.15	1,318.43	605.17	1,378.71	0.71	0.32	-0.64
9,491.00	92.20	355.20	8,092.97	1,414.01	596.81	1,472.72	0.75	0.62	0.42
9,584.00	91.40	355.00	8,090.05	1,506.63	588.87	1,563.83	0.89	-0.86	-0.22
9,680.00	90.40	355.30	8,088.54	1,602.27	580.76	1,657.93	1.09	-1.04	0.31
9,775.00	90.80	357.50	8,087.55	1,697.07	574.79	1,751.43	2.35	0.42	2.32
9,870.00	89.20	359.20	8,087.55	1,792.02	572.06	1,845.46	2.46	-1.68	1.79
9,965.00	90.80	0.60	8,087.55	1,887.02	571.89	1,939.82	2.24	1.68	1.47
10,060.00	91.90	0.10	8,085.31	1,981.99	572.47	2,034.24	1.27	1.16	-0.53
10,155.00	89.20	358.70	8,084.40	2,076.97	571.48	2,128.49	3.20	-2.84	-1.47
10,250.00	90.50	359.90	8,084.65	2,171.96	570.32	2,222.73	1.86	1.37	1.26

Company:	COG Operating, LLC	Local Co-ordinate Reference:	Well Really Scary Federal Com #2H
Project:	Eddy County (NM27E)	TVD Reference:	WELL @ 3027.30usft
Site:	Sec.33-T24S-R28E	MD Reference:	WELL @ 3027.30usft
Well:	Really Scary Federal Com #2H	North Reference:	Grid
Wellbore:	Wellbore #2-ST	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #2-ST	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)	
10,345.00	91.40	359.60	8,083.07	2,266.94	569.90	2,317.05	1.00	0.95	-0.32	
10,440.00	93.40	359.40	8,079.09	2,361.85	569.07	2,411.25	2.12	2.11	-0.21	
10,535.00	93.40	359.10	8,073.46	2,456.67	567.83	2,505.32	0.32	0.00	-0.32	
10,629.00	92.30	359.60	8,068.78	2,550.55	566.77	2,598.46	1.29	-1.17	0.53	
10,724.00	90.20	359.30	8,066.71	2,645.52	565.86	2,692.71	2.23	-2.21	-0.32	
10,819.00	89.80	359.40	8,066.71	2,740.51	564.78	2,786.96	0.43	-0.42	0.11	
10,914.00	90.50	359.40	8,066.46	2,835.51	563.78	2,881.23	0.74	0.74	0.00	
11,010.00	90.20	359.40	8,065.88	2,931.50	562.78	2,976.48	0.31	-0.31	0.00	
11,105.00	89.50	359.30	8,066.13	3,026.49	561.70	3,070.74	0.74	-0.74	-0.11	
11,200.00	90.50	359.70	8,066.13	3,121.49	560.87	3,165.02	1.13	1.05	0.42	
11,295.00	90.90	359.10	8,064.97	3,216.47	559.88	3,259.28	0.76	0.42	-0.63	
11,389.00	90.50	358.90	8,063.82	3,310.45	558.24	3,352.46	0.48	-0.43	-0.21	
11,484.00	91.20	359.00	8,062.41	3,405.42	556.50	3,446.62	0.74	0.74	0.11	
11,579.00	90.10	358.20	8,061.33	3,500.39	554.17	3,540.70	1.43	-1.16	-0.84	
11,674.00	89.70	357.80	8,061.50	3,595.33	550.86	3,634.65	0.60	-0.42	-0.42	
11,769.00	91.00	358.40	8,060.92	3,690.27	547.71	3,728.62	1.51	1.37	0.63	
11,864.00	92.00	358.80	8,058.43	3,785.21	545.39	3,822.68	1.13	1.05	0.42	
11,958.00	91.90	358.60	8,055.23	3,879.13	543.26	3,915.75	0.24	-0.11	-0.21	
12,053.00	91.30	359.80	8,052.58	3,974.08	541.93	4,009.93	1.41	-0.63	1.26	
12,148.00	90.40	0.60	8,051.17	4,069.07	542.26	4,104.34	1.27	-0.95	0.84	
12,243.00	90.40	0.30	8,050.50	4,164.07	543.01	4,198.80	0.32	0.00	-0.32	
12,339.00	90.70	0.60	8,049.58	4,260.06	543.76	4,294.26	0.44	0.31	0.31	
12,434.00	90.00	359.40	8,049.00	4,355.05	543.76	4,388.64	1.46	-0.74	-1.26	
12,529.00	89.80	358.70	8,049.17	4,450.04	542.19	4,482.83	0.77	-0.21	-0.74	
12,625.00	90.20	359.30	8,049.17	4,546.02	540.51	4,578.00	0.75	0.42	0.62	
12,720.00	90.10	358.70	8,048.92	4,641.01	538.86	4,672.18	0.64	-0.11	-0.63	
12,815.00	90.70	359.10	8,048.26	4,735.99	537.03	4,766.34	0.76	0.63	0.42	
Last Archer Survey-ST										
12,863.00	90.30	358.70	8,047.84	4,783.98	536.11	4,813.91	1.18	-0.83	-0.83	
PTB										
12,914.00	90.30	358.70	8,047.57	4,834.96	534.95	4,864.43	0.00	0.00	0.00	

Survey Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
6,500.00	6,498.66	-28.73	31.19	Tie-In / OH VES Gyro	
6,546.00	6,544.49	-29.92	34.76	First Archer Survey-ST	
12,863.00	8,047.84	4,783.98	536.11	Last Archer Survey-ST	
12,914.00	8,047.57	4,834.96	534.95	PTB	

Checked By: _____ Approved By: _____ Date: _____



Project: Eddy County(NM27E)
Site: Sec.33-T24S-R28E
Well: Really Scary Federal Com #2H
Wellbore: Wellbore #2-ST
Design: Design #1-ST
Lat: 32° 10' 0.864 N
Long: 104° 5' 42.326 W
GL: 3010.30
KB: WELL @ 3027.30usft

Archer

SECTION DETAILS

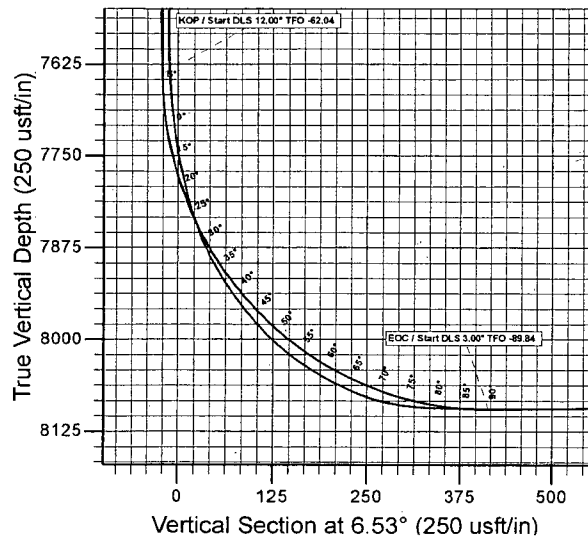
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Annotation
6700.00	1.00	192.43	6698.58	-33.01	34.10	0.00	0.00	-28.91	Tie-In / Start DLS 3.00° TFO -113.01
6876.86	5.00	90.00	6875.21	-34.51	41.48	3.00	-113.01	-29.57	Start 766.19' hold at 6876.86 MD
7643.05	5.00	90.00	7638.49	-34.51	108.26	0.00	0.00	-21.98	KOP / Start DLS 12.00° TFO -62.04
8378.78	90.63	28.00	8095.00	374.62	366.19	12.00	-62.04	413.84	EOC / Start DLS 3.00° TFO -89.84
9331.51	90.63	359.42	8084.23	1290.59	589.62	3.00	-89.84	1349.28	Start 3544.61' hold at 9331.51 MD
12876.12	90.63	359.42	8045.00	4834.80	553.50	0.00	0.00	4866.38	TD at 12876.12

WELL DETAILS: Really Scary Federal Com #2H

+N/-S	+E/-W	Northing	Ground Level:	3010.30	Longitude	Slot
0.00	0.00	424523.100	Easting	573720.000	32° 10' 0.864 N	104° 5' 42.326 W

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
RSFC #2H ST PBHL	8045.00	4834.80	553.50	429357.900	574273.500	32° 10' 48.699 N	104° 5' 35.761 W	Point

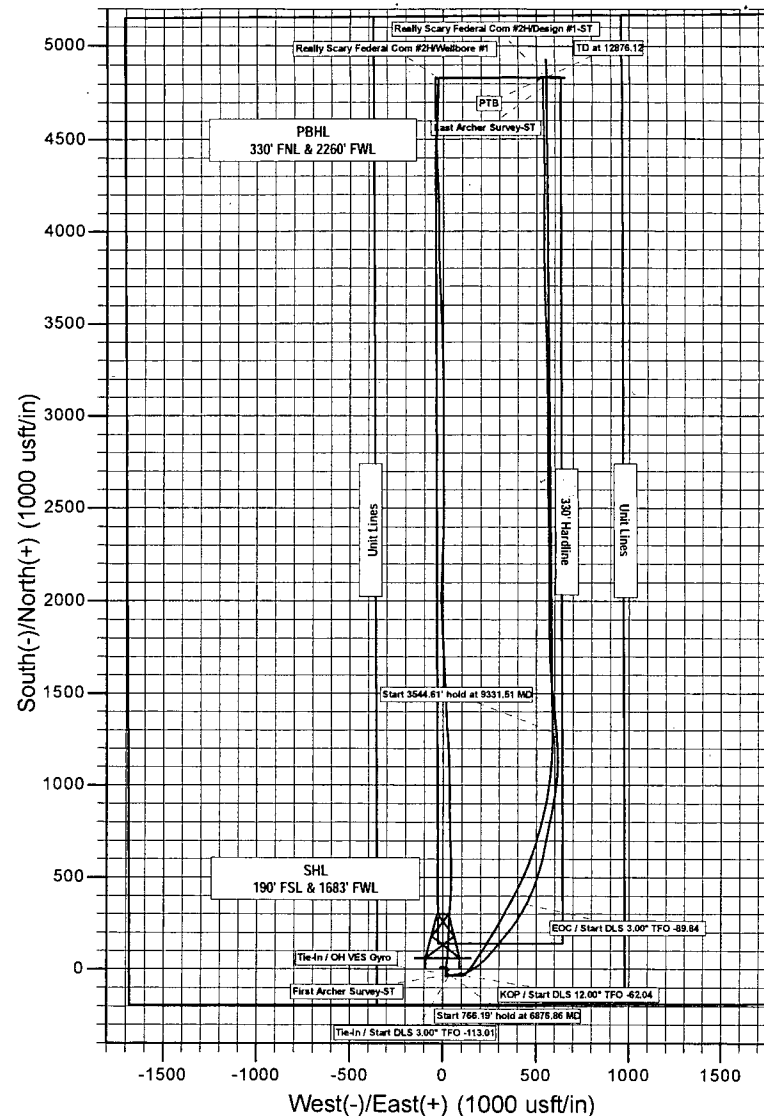
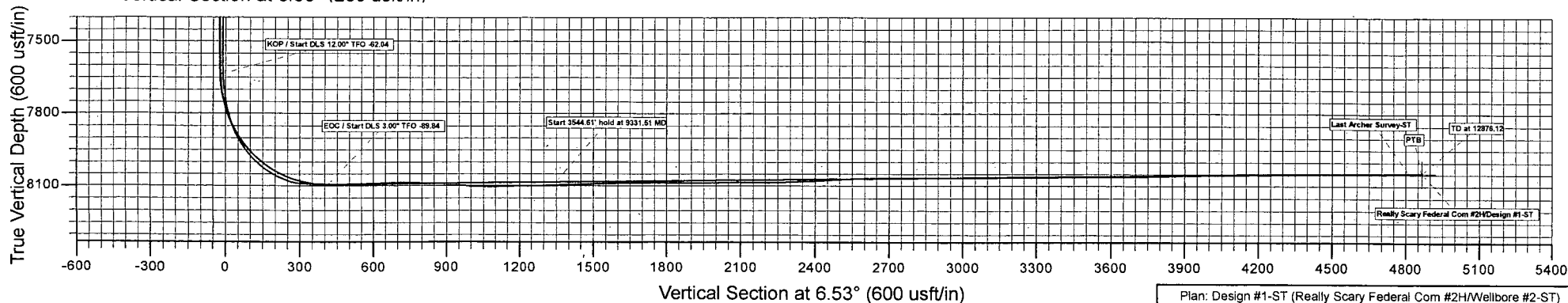
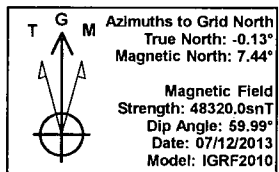


PROJECT DETAILS: Eddy County(NM27E)
Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001
System Datum: Mean Sea Level

SITE DETAILS: Sec.33-T24S-R28E

Site Centre Latitude: 32° 10' 0.864 N
Longitude: 104° 5' 42.326 W

Positional Uncertainty: 0.00
Convergence: 0.13
Local North: Grid



Plan: Design #1-ST (Really Scary Federal Com #2H/Wellbore #2-ST)

Created By: Bret Wolford Date: 8:12, July 21 2013