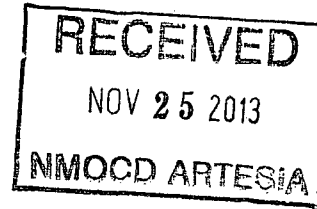




A GYRO TECHNOLOGIES INC. COMPANY

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

July 2, 2013



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

Attn: Kanicia Castillo

30-015-40624

RE: **Dodd Federal No. 902H**

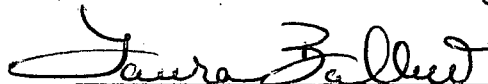
Please find enclosed a copy of the survey from 0.00' to 3974.00' ran on the above referenced well.

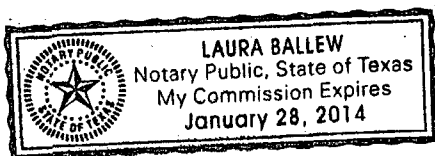
Sincerely,


Keith Havelka
Operations

STATE OF TEXAS §
COUNTY OF NUECES §

This instrument was acknowledged before me on the 2nd 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. 902H

Location: S-10 T17S R29E

Rig Name: United Rig #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=14.5 Feet

DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: final survey .ut

Minimum Curvature Method

Report Date/Time: 7/1/2013 / 14:50

Vaughn Energy Services

Fort Worth, Texas

817-741-3610

Surveyor: Tim Kaczor

Dodd Federal No. 902H / API 30-015-40624

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	0.24	274.75	100.00	0.02	-0.21	0.02	0.21	274.75	0.24
200.00	0.64	268.27	200.00	0.02	-0.98	0.02	0.98	271.06	0.40
300.00	1.09	237.87	299.99	-0.51	-2.35	-0.51	2.40	257.81	0.63
400.00	1.41	232.22	399.96	-1.77	-4.13	-1.77	4.49	246.80	0.34
500.00	0.99	221.33	499.94	-3.17	-5.67	-3.17	6.50	240.79	0.48
600.00	1.33	198.67	599.92	-4.91	-6.61	-4.91	8.24	233.37	0.56
700.00	0.45	186.68	699.91	-6.40	-7.03	-6.40	9.50	227.68	0.89
800.00	0.65	164.47	799.90	-7.33	-6.92	-7.33	10.08	223.35	0.29
900.00	0.39	160.30	899.90	-8.20	-6.65	-8.20	10.56	219.06	0.26
1000.00	0.50	154.67	999.89	-8.91	-6.35	-8.91	10.94	215.46	0.12
1100.00	0.45	124.58	1099.89	-9.53	-5.84	-9.53	11.18	211.47	0.25
1200.00	0.11	100.83	1199.89	-9.78	-5.42	-9.78	11.18	208.99	0.35
1300.00	0.26	153.14	1299.89	-9.99	-5.22	-9.99	11.27	207.57	0.21
1400.00	0.23	180.10	1399.89	-10.39	-5.12	-10.39	11.58	206.22	0.12
1500.00	0.22	294.45	1499.89	-10.51	-5.29	-10.51	11.77	206.72	0.37
1600.00	0.21	236.31	1599.89	-10.54	-5.62	-10.54	11.94	208.07	0.21
1700.00	0.28	145.60	1699.89	-10.84	-5.64	-10.84	12.22	207.47	0.35
1800.00	0.25	160.13	1799.89	-11.24	-5.43	-11.24	12.49	205.76	0.07

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	0.14	174.13	1899.89	-11.57	-5.34	-11.57	12.74	204.78	0.12
2000.00	0.21	132.54	1999.89	-11.81	-5.19	-11.81	12.90	203.74	0.14
2100.00	0.15	69.11	2099.88	-11.89	-4.94	-11.89	12.87	202.55	0.20
2200.00	0.19	38.64	2199.88	-11.71	-4.71	-11.71	12.62	201.90	0.09
2300.00	0.24	14.09	2299.88	-11.38	-4.56	-11.38	12.26	201.81	0.10
2400.00	0.18	11.59	2399.88	-11.03	-4.47	-11.03	11.90	202.08	0.06
2500.00	0.25	36.73	2499.88	-10.70	-4.31	-10.70	11.53	201.95	0.12
2600.00	0.32	58.07	2599.88	-10.37	-3.94	-10.37	11.09	200.80	0.13
2700.00	0.27	64.44	2699.88	-10.12	-3.49	-10.12	10.71	199.04	0.06
2800.00	0.27	40.00	2799.88	-9.84	-3.13	-9.84	10.32	197.65	0.11
2900.00	0.12	25.76	2899.88	-9.57	-2.93	-9.57	10.00	197.04	0.16
3000.00	0.20	45.51	2999.88	-9.35	-2.77	-9.35	9.75	196.47	0.10
3100.00	0.12	58.05	3099.88	-9.18	-2.56	-9.18	9.53	195.57	0.09
3200.00	0.14	23.88	3199.88	-9.01	-2.42	-9.01	9.33	195.04	0.08
3300.00	0.20	22.53	3299.88	-8.74	-2.31	-8.74	9.04	194.78	0.05
3400.00	0.17	20.13	3399.88	-8.45	-2.19	-8.45	8.73	194.54	0.03
3500.00	0.44	19.44	3499.87	-7.94	-2.01	-7.94	8.19	194.21	0.27
3600.00	0.50	34.09	3599.87	-7.21	-1.64	-7.21	7.40	192.78	0.13
3700.00	0.41	73.55	3699.87	-6.75	-1.05	-6.75	6.83	188.85	0.32
3800.00	0.39	80.45	3799.87	-6.59	-0.37	-6.59	6.60	183.24	0.05
3900.00	0.44	84.74	3899.86	-6.50	0.35	-6.50	6.51	176.93	0.06
3974.00	0.43	127.68	3973.86	-6.65	0.85	-6.65	6.70	172.68	0.43



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

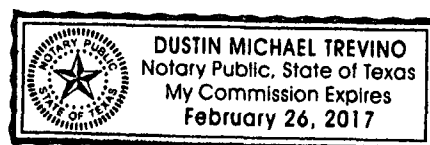
I, Amador Baggerly, certify that; I am employed by Archer Directional Drilling Services; that I did on the day(s) of 06/24/13 through 07/01/13, conduct or supervise the taking of MWD surveys from a depth of 4115 feet to a depth of 8007 feet; that the data is true, correct, complete and within the limitations 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 Dodd Federal #902H (API # 30-015-40624), 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 1 day of July, 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:

04308-433-22

Calculation Method

Minimum Curvature

Well: Dodd Federal #902H

Mag Decl.:

7.47

Proposed Azimuth

269.9

Location: Eddy County, New Mexico

Dir Driller:

Cody Styles

Depth Reference

KGB

Rig: UDI 40

MWD Eng:

Justin Warnack

Tie Into: Gyro Survey

Job Date: 06/24/13 -07/01/13

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	3974.00	0.43	127.68	0	3973.86	0.86	6.66 N	0.87 E	0.00	0.00	0	0	0
1	4115	0.5	151.3	141	4114.86	-1.60	5.80 N	1.58 E	6.01	15.28	0.14	0.05	16.75
2	4146	1.8	250.0	31	4145.85	-1.20	5.51 N	1.19 E	5.64	12.20	6.26	4.19	318.39
3	4178	4.4	260.5	32	4177.80	0.48	5.14 N	0.49 W	5.16	354.53	8.28	8.13	32.81
4	4210	7.3	265.3	32	4209.63	3.72	4.77 N	3.73 W	6.05	321.97	9.18	9.06	15.00
5	4241	9.6	266.9	31	4240.29	8.27	4.47 N	8.27 W	9.40	298.36	7.46	7.42	5.16
6	4273	11.8	263.5	32	4271.73	14.18	3.95 N	14.19 W	14.73	285.56	7.15	6.88	-10.62
7	4305	14.7	263.2	32	4302.88	21.47	3.10 N	21.47 W	21.70	278.22	9.07	9.06	-0.94
8	4337	17.8	263.1	32	4333.60	30.36	2.03 N	30.36 W	30.43	273.83	9.69	9.69	-0.31
9	4368	21.0	263.8	31	4362.83	40.59	0.86 N	40.59 W	40.60	271.22	10.35	10.32	2.26
10	4400	24.1	264.6	32	4392.38	52.80	0.37 S	52.80 W	52.80	269.60	9.73	9.69	2.50
11	4432	27.2	266.0	32	4421.23	66.61	1.50 S	66.60 W	66.62	268.71	9.87	9.69	4.37
12	4463	30.6	266.5	31	4448.36	81.56	2.47 S	81.55 W	81.59	268.26	11.00	10.97	1.61
13	4495	34.2	265.3	32	4475.38	98.66	3.71 S	98.65 W	98.72	267.85	11.43	11.25	-3.75
14	4527	37.4	264.2	32	4501.33	117.30	5.43 S	117.29 W	117.41	267.35	10.20	10.00	-3.44
15	4559	40.4	263.9	32	4526.23	137.28	7.51 S	137.27 W	137.48	266.87	9.39	9.38	-0.94
16	4590	43.6	265.3	31	4549.26	157.94	9.46 S	157.92 W	158.20	266.57	10.76	10.32	4.52
17	4622	47.2	267.2	32	4571.73	180.67	10.93 S	180.65 W	180.98	266.54	12.02	11.25	5.94
18	4654	50.5	268.6	32	4592.78	204.75	11.81 S	204.72 W	205.06	266.70	10.83	10.31	4.38
19	4686	53.3	269.7	32	4612.53	229.92	12.18 S	229.90 W	230.22	266.97	9.16	8.75	3.44
20	4717	56.6	269.9	31	4630.33	255.30	12.27 S	255.27 W	255.57	267.25	10.66	10.65	0.65
21	4749	59.8	270.7	32	4647.19	282.49	12.12 S	282.47 W	282.73	267.54	10.22	10.00	2.50
22	4781	63.4	268.9	32	4662.41	310.63	12.23 S	310.61 W	310.85	267.75	12.29	11.25	-5.63
23	4813	66.9	268.2	32	4675.85	339.66	12.96 S	339.63 W	339.88	267.81	11.12	10.94	-2.19
24	4844	69.9	268.4	31	4687.26	368.47	13.82 S	368.44 W	368.70	267.85	9.70	9.68	0.65
25	4876	72.9	269.3	32	4697.47	398.78	14.42 S	398.76 W	399.02	267.93	9.75	9.38	2.81
26	4908	76.3	270.2	32	4705.97	429.63	14.56 S	429.60 W	429.85	268.06	10.97	10.63	2.81
27	4939	80.3	271.3	31	4712.25	459.98	14.16 S	459.95 W	460.17	268.24	13.36	12.90	3.55
28	4971	84.2	271.9	32	4716.57	491.66	13.27 S	491.64 W	491.82	268.45	12.33	12.19	1.87
29	5003	87.5	272.4	32	4718.88	523.55	12.07 S	523.53 W	523.67	268.68	10.43	10.31	1.56
30	5035	89.8	272.7	32	4719.64	555.51	10.65 S	555.49 W	555.59	268.90	7.25	7.19	0.94
31	5130	89.8	272.9	95	4719.97	650.38	6.01 S	650.37 W	650.40	269.47	0.21	0.00	0.21
32	5226	90.7	272.2	96	4719.55	746.28	1.74 S	746.27 W	746.28	269.87	1.19	0.94	-0.73
33	5321	92.1	271.1	95	4717.23	841.20	1.00 N	841.20 W	841.20	270.07	1.87	1.47	-1.16
34	5416	92.0	271.1	95	4713.83	936.12	2.82 N	936.12 W	936.13	270.17	0.11	-0.11	0.00
35	5511	91.2	271.0	95	4711.18	1031.06	4.56 N	1031.07 W	1031.08	270.25	0.85	-0.84	-0.11
36	5606	90.9	270.1	95	4709.44	1126.04	5.47 N	1126.05 W	1126.06	270.28	1.00	-0.32	-0.95
37	5701	90.6	269.5	95	4708.19	1221.03	5.14 N	1221.04 W	1221.05	270.24	0.71	-0.32	-0.63



Company: COG Operating, LLC

Job Number: 04308-433-22

Calculation Method

Minimum Curvature

Well: Dodd Federal #902H

Mag Decl.: 7.47

Proposed Azimuth

269.9

Location: Eddy County, New Mexico

Dir Driller: Cody Styles

Depth Reference

KBG

Rig: UDI 40

MWD Eng: Justin Warnack

Tie Into: Gyro Survey

Job Date: 06/24/13 -07/01/13

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			
38	5796	91.3	269.0	95	4706.62	1316.01	3.90 N	1316.02 W	1316.02	270.17	0.91	0.74	-0.53
39	5892	92.3	269.4	96	4703.60	1411.95	2.56 N	1411.96 W	1411.96	270.10	1.12	1.04	0.42
40	5987	92.3	269.8	95	4699.79	1506.87	1.89 N	1506.88 W	1506.88	270.07	0.42	0.00	0.42
41	6081	92.0	269.4	94	4696.26	1600.81	1.24 N	1600.81 W	1600.81	270.04	0.53	-0.32	-0.43
42	6176	91.3	268.7	95	4693.53	1695.76	0.34 S	1695.76 W	1695.76	269.99	1.04	-0.74	-0.74
43	6272	90.8	269.1	96	4691.77	1791.72	2.18 S	1791.72 W	1791.73	269.93	0.67	-0.52	0.42
44	6367	89.9	269.8	95	4691.19	1886.72	3.09 S	1886.72 W	1886.72	269.91	1.20	-0.95	0.74
45	6462	90.8	270.6	95	4690.61	1981.71	2.76 S	1981.71 W	1981.71	269.92	1.27	0.95	0.84
46	6557	91.9	271.0	95	4688.37	2076.67	1.43 S	2076.67 W	2076.68	269.96	1.23	1.16	0.42
47	6652	91.8	270.1	95	4685.30	2171.62	0.52 S	2171.62 W	2171.62	269.99	0.95	-0.11	-0.95
48	6748	91.4	269.5	96	4682.62	2267.58	0.86 S	2267.58 W	2267.58	269.98	0.75	-0.42	-0.63
49	6843	91.0	269.6	95	4680.63	2362.56	1.60 S	2362.56 W	2362.56	269.96	0.43	-0.42	0.11
50	6938	91.9	270.0	95	4678.23	2457.52	1.94 S	2457.53 W	2457.53	269.95	1.04	0.95	0.42
51	7033	91.7	269.8	95	4675.24	2552.48	2.10 S	2552.48 W	2552.48	269.95	0.30	-0.21	-0.21
52	7128	91.4	268.8	95	4672.67	2647.44	3.26 S	2647.43 W	2647.44	269.93	1.10	-0.32	-1.05
53	7223	91.3	268.4	95	4670.44	2742.39	5.58 S	2742.38 W	2742.39	269.88	0.43	-0.11	-0.42
54	7319	91.6	269.9	96	4668.01	2838.34	7.01 S	2838.34 W	2838.34	269.86	1.59	0.31	1.56
55	7414	91.5	270.7	95	4665.44	2933.31	6.51 S	2933.30 W	2933.31	269.87	0.85	-0.11	0.84
56	7509	91.4	270.4	95	4663.03	3028.27	5.60 S	3028.26 W	3028.27	269.89	0.33	-0.11	-0.32
57	7604	91.4	270.6	95	4660.71	3123.24	4.77 S	3123.23 W	3123.24	269.91	0.21	0.00	0.21
58	7699	90.9	270.3	95	4658.80	3218.21	4.02 S	3218.21 W	3218.21	269.93	0.61	-0.53	-0.32
59	7794	90.3	269.6	95	4657.81	3313.20	4.10 S	3313.20 W	3313.21	269.93	0.97	-0.63	-0.74
60	7889	90.2	269.6	95	4657.40	3408.20	4.77 S	3408.20 W	3408.20	269.92	0.11	-0.11	0.00
61	7936	90.2	269.4	47	4657.23	3455.20	5.18 S	3455.20 W	3455.20	269.91	0.43	0.00	-0.43
Proj.	8007	90.2	269.4	71	4656.98	3526.20	5.92 S	3526.19 W	3526.20	269.90	0.00	0.00	0.00