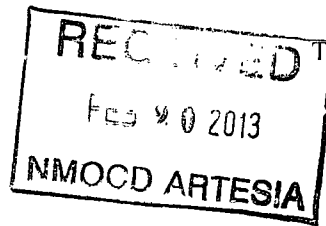




Weatherford®

Evaluation, Drilling & Intervention
10000 West County Rd. 116
P.O. Box 61028
Midland, TX USA 79711
Tel. (432) 561-8892 Fax (432) 561-8895



COG Operating LLC.
600 W. Illinois Ave.
Midland, TX 79701

Date: January 28, 2013

Attention: Braxton Minor

30-015-39578

Re: COG Operating LLC
Well: Burch Keely Unit #945H
Eddy County, New Mexico

Enclosed, please find the original survey performed on the referenced well by Precision Energy Services, Inc. (P-5 No. 676004), a Weatherford company. Other information required by your office is as follows:

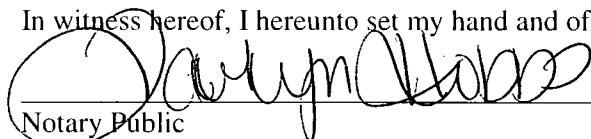
<u>Name & Title Of Surveyor</u>	<u>Well Number</u>	<u>Surveyed Depths</u>	<u>Dates Performed</u>	<u>Type of Survey</u>
Chris Hinterlach MWD Supervisor	945H	4289' MD 9028' MD	12/13/2012 12/22/2012	Measurement While Drilling

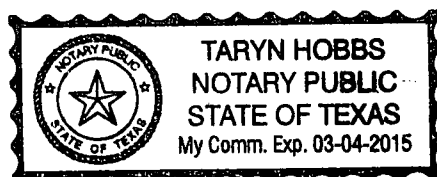
A notarized plan vs. actual is attached to the survey report. If any other information is required, please contact the undersigned at the letterhead address and phone number.

Jesus Aguilar
MWD Coordinator

On this, the 28th day of January, 2013, before me a notary public, the undersigned officer, personally appeared Jesus Aguilar, known to me (or satisfactorily proven) to be the person whose name is subscribed to the within instrument, and acknowledged that he executed the same for the purposes therein contained.

In witness hereof, I hereunto set my hand and official seal.


Notary Public





Weatherford

Wft Survey Report X Y's.



Weatherford

Company: COG Operating		Date: 12/23/2012		Time: 07:54:51		Page: 1	
Field: Eddy Co, NM (Nad27)		Co-ordinate(NE) Reference:		Well: Burch Keely Unit #945H, Grid North			
Site: Burch Keely Unit #945H		Vertical (TVD) Reference:		SITE 3649.5			
Well: Burch Keely Unit #945H		Section (VS) Reference:		Well (0.00N,0.00E,92.97Azi)			
Wellpath: 1		Survey Calculation Method:		Minimum Curvature		Db: Sybase	

Survey: Wft Svy		Start Date: 12/15/2012	
Company: Weatherford		Engineer: Russell W. Joyner	
Tool: MWD;MWD - Standard		Tied-to: User Defined	

Site: Burch Keely Unit #945H			
Site Position:	Northing: 665363.40 ft	Latitude: 32 49 43.581 N	
From: Map	Easting: 596971.00 ft	Longitude: 104 1 3.528 W	
Position Uncertainty: 0.00 ft		North Reference: Grid	
Ground Level: 3631.00 ft		Grid Convergence: 0.17 deg	

Well: Burch Keely Unit #945H		Slot Name:	
Well Position: +N/-S 0.00 ft	Northing: 665363.40 ft	Latitude: 32 49 43.581 N	
+E/-W 0.00 ft	Easting: 596971.00 ft	Longitude: 104 1 3.528 W	
Position Uncertainty: 0.00 ft			

Wellpath: 1		Drilled From: Surface	
Current Datum: SITE	Height 3649.50 ft	Tie-on Depth: 0.00 ft	
Magnetic Data: 12/31/2012		Above System Datum: Mean Sea Level	
Field Strength: 48802 nT		Declination: 7.65 deg	
Vertical Section: Depth From (TVD)	+N/-S	Mag Dip Angle: 60.63 deg	
ft	ft	+E/-W	Direction
		ft	deg
0.00	0.00	0.00	92.97

Survey										
MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	DLS deg/100ft	VS ft	MapN ft	MapE ft	Comment
4260.00	0.64	10.26	4259.91	14.32	1.28	0.00	0.54	665377.72	596972.28	Tie On Ves
4289.00	0.36	22.44	4288.91	14.57	1.34	1.03	0.59	665377.97	596972.34	First Wft Svy
4320.00	0.31	18.44	4319.91	14.74	1.41	0.18	0.64	665378.14	596972.41	
4351.00	1.84	91.56	4350.90	14.80	1.93	5.73	1.16	665378.20	596972.93	
4382.00	4.70	94.85	4381.85	14.68	3.69	9.24	2.93	665378.08	596974.69	
4413.00	7.61	94.76	4412.67	14.40	7.01	9.39	6.25	665377.80	596978.01	
4444.00	9.72	96.51	4443.31	13.94	11.65	6.86	10.91	665377.34	596982.65	
4476.00	11.03	99.62	4474.79	13.12	17.36	4.45	16.65	665376.52	596988.36	
4507.00	13.07	97.70	4505.10	12.15	23.75	6.71	23.09	665375.55	596994.75	
4538.00	15.69	95.35	4535.13	11.29	31.40	8.66	30.77	665374.69	597002.40	
4569.00	18.73	94.82	4564.74	10.48	40.54	9.82	39.94	665373.88	597011.54	
4600.00	21.91	95.24	4593.80	9.54	51.26	10.27	50.70	665372.94	597022.26	
4631.00	25.24	96.65	4622.21	8.24	63.59	10.89	63.07	665371.64	597034.59	
4663.00	28.22	97.55	4650.79	6.46	77.87	9.40	77.43	665369.86	597048.87	
4694.00	30.55	97.57	4677.80	4.46	92.94	7.52	92.59	665367.86	597063.94	
4725.00	33.11	96.76	4704.14	2.42	109.17	8.37	108.89	665365.82	597080.17	
4756.00	36.22	95.69	4729.63	0.52	126.69	10.22	126.49	665363.92	597097.69	
4787.00	39.37	94.21	4754.12	-1.11	145.62	10.57	145.48	665362.29	597116.62	
4819.00	42.32	93.24	4778.33	-2.47	166.50	9.43	166.40	665360.93	597137.50	
4851.00	45.57	92.79	4801.37	-3.63	188.67	10.20	188.61	665359.77	597159.67	
4882.00	48.85	92.61	4822.42	-4.70	211.39	10.59	211.35	665358.70	597182.39	
4913.00	51.65	91.93	4842.24	-5.64	235.20	9.19	235.18	665357.76	597206.20	
4941.00	54.81	91.26	4859.00	-6.26	257.62	11.45	257.60	665357.14	597228.62	
4972.00	57.92	91.11	4876.17	-6.80	283.42	10.04	283.39	665356.60	597254.42	
5003.00	61.09	91.04	4891.90	-7.30	310.13	10.23	310.09	665356.10	597281.13	
5034.00	64.08	91.00	4906.17	-7.79	337.64	9.65	337.59	665355.61	597308.64	
5066.00	67.46	91.58	4919.30	-8.45	366.81	10.69	366.75	665354.95	597337.81	
5097.00	71.13	91.96	4930.26	-9.34	395.79	11.89	395.74	665354.06	597366.79	
5129.00	73.98	93.03	4939.85	-10.68	426.28	9.46	426.26	665352.72	597397.28	
5160.00	76.95	92.78	4947.63	-12.20	456.25	9.61	456.27	665351.20	597427.25	



Weatherford

Wft Survey Report X Y's.



Weatherford

Company: COG Operating
Field: Eddy Co, NM (Nad27)
Site: Burch Keely Unit #945H
Well: Burch Keely Unit #945H
Wellpath: 1

Date: 12/23/2012 Time: 07:54:51 Page: 2
Co-ordinate(NE) Reference: Well: Burch Keely Unit #945H, Grid North
Vertical (TVD) Reference: SITE 3649.5
Section (VS) Reference: Well (0.00N,0.00E,92.97Azi)
Survey Calculation Method: Minimum Curvature Db: Sybase

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	DLS deg/100ft	VS ft	MapN ft	MapE ft	Comment
5191.00	80.45	93.42	4953.71	-13.84	486.60	11.47	486.66	665349.56	597457.60	
5220.00	83.41	94.04	4957.78	-15.71	515.25	10.42	515.37	665347.69	597486.25	
5252.00	87.55	93.89	4960.30	-17.91	547.06	12.95	547.26	665345.49	597518.06	
5283.00	90.70	94.13	4960.77	-20.08	577.98	10.19	578.24	665343.32	597548.98	
5314.00	91.47	94.10	4960.18	-22.30	608.89	2.49	609.23	665341.10	597579.89	
5346.00	92.24	93.90	4959.15	-24.54	640.80	2.49	641.21	665338.86	597611.80	
5377.00	93.01	93.70	4957.73	-26.59	671.70	2.57	672.17	665336.81	597642.70	
5408.00	93.79	93.33	4955.89	-28.49	702.59	2.78	703.12	665334.91	597673.59	
5501.00	94.35	92.32	4949.29	-33.06	795.24	1.24	795.88	665330.34	597766.24	
5563.00	94.06	92.16	4944.74	-35.47	857.02	0.53	857.71	665327.93	597828.02	
5656.00	92.80	91.38	4939.18	-38.34	949.81	1.59	950.52	665325.06	597920.81	
5750.00	93.64	90.72	4933.90	-40.06	1043.64	1.14	1044.32	665323.34	598014.64	
5812.00	93.08	91.56	4930.27	-41.29	1105.52	1.63	1106.18	665322.11	598076.52	
5874.00	90.35	93.09	4928.41	-43.81	1167.44	5.05	1168.14	665319.59	598138.44	
5937.00	89.37	93.50	4928.56	-47.43	1230.33	1.69	1231.14	665315.97	598201.33	
5999.00	90.42	93.12	4928.68	-51.01	1292.23	1.80	1293.13	665312.39	598263.23	
6061.00	90.77	92.66	4928.03	-54.13	1354.14	0.93	1355.13	665309.27	598325.14	
6124.00	90.63	92.59	4927.26	-57.02	1417.07	0.25	1418.12	665306.38	598388.07	
6186.00	90.91	92.58	4926.43	-59.81	1479.01	0.45	1480.12	665303.59	598450.01	
6248.00	91.96	92.39	4924.88	-62.50	1540.93	1.72	1542.10	665300.90	598511.93	
6310.00	91.75	92.40	4922.87	-65.09	1602.84	0.34	1604.06	665298.31	598573.84	
6404.00	91.12	93.39	4920.52	-69.84	1696.69	1.25	1698.03	665293.56	598667.69	
6497.00	91.33	93.84	4918.53	-75.70	1789.48	0.53	1791.00	665287.70	598760.48	
6591.00	91.05	93.18	4916.58	-81.45	1883.29	0.76	1884.98	665281.95	598854.29	
6685.00	90.70	93.13	4915.14	-86.63	1977.13	0.38	1978.96	665276.77	598948.13	
6778.00	90.07	92.92	4914.52	-91.53	2070.00	0.71	2071.96	665271.87	599041.00	
6872.00	90.84	92.55	4913.77	-96.02	2163.89	0.91	2165.96	665267.38	599134.89	
6966.00	90.49	92.66	4912.68	-100.29	2257.78	0.39	2259.95	665263.11	599228.78	
7060.00	90.98	92.12	4911.47	-104.21	2351.69	0.78	2353.94	665259.19	599322.69	
7154.00	91.19	92.41	4909.69	-107.93	2445.60	0.38	2447.91	665255.47	599416.60	
7248.00	92.17	92.33	4906.94	-111.81	2539.48	1.05	2541.86	665251.59	599510.48	
7342.00	92.94	92.65	4902.75	-115.89	2633.30	0.89	2635.77	665247.51	599604.30	
7436.00	91.12	92.72	4899.42	-120.29	2727.13	1.94	2729.70	665243.11	599698.13	
7528.00	90.35	93.08	4898.24	-124.95	2819.01	0.92	2821.69	665238.45	599790.01	
7622.00	90.14	93.30	4897.84	-130.18	2912.86	0.32	2915.69	665233.22	599883.86	
7716.00	90.07	93.58	4897.66	-135.82	3006.69	0.31	3009.69	665227.58	599977.69	
7810.00	89.44	93.88	4898.06	-141.93	3100.49	0.74	3103.68	665221.47	600071.49	
7903.00	89.09	93.50	4899.26	-147.92	3193.29	0.56	3196.66	665215.48	600164.29	
7997.00	89.79	93.75	4900.18	-153.86	3287.10	0.79	3290.65	665209.54	600258.10	
8091.00	90.84	93.72	4899.66	-159.98	3380.89	1.12	3384.64	665203.42	600351.89	
8184.00	91.75	93.59	4897.56	-165.91	3473.68	0.99	3477.61	665197.49	600444.68	
8278.00	91.26	93.47	4895.09	-171.70	3567.47	0.54	3571.57	665191.70	600538.47	
8372.00	90.14	92.78	4893.94	-176.82	3661.32	1.40	3665.56	665186.58	600632.32	
8465.00	91.19	92.43	4892.86	-181.05	3754.22	1.19	3758.55	665182.35	600725.22	
8559.00	91.47	92.43	4890.68	-185.03	3848.11	0.30	3852.52	665178.37	600819.11	
8653.00	92.45	92.17	4887.46	-188.80	3941.97	1.08	3946.46	665174.60	600912.97	
8747.00	91.89	92.34	4883.91	-192.50	4035.83	0.62	4040.39	665170.90	601006.83	
8841.00	92.94	92.32	4879.94	-196.31	4129.67	1.12	4134.30	665167.09	601100.67	
8934.00	92.31	92.08	4875.69	-199.88	4222.50	0.72	4227.19	665163.52	601193.50	
9028.00	92.87	91.94	4871.44	-203.17	4316.35	0.61	4321.08	665160.23	601287.35	Last Wft Svy
9102.00	92.87	91.94	4867.73	-205.68	4390.22	0.00	4394.98	665157.72	601361.22	Proj. To Bit



Weatherford

Wft Survey Report X Y's.



Weatherford

Company: COG Operating
Field: Eddy Co, NM (Nad27)
Site: Burch Keely Unit #945H
Well: Burch Keely Unit #945H
Wellpath: 1

Date: 12/23/2012 Time: 07:54:51 Page: 3
Co-ordinate(NE) Reference: Well: Burch Keely Unit #945H, Grid North
Vertical (TVD) Reference: SITE 3649.5
Section (VS) Reference: Well (0.00N,0.00E,92.97Azi)
Survey Calculation Method: Minimum Curvature Db: Sybase

Annotation

MD ft	TVD ft	
4260.00	4259.91	Tie On Ves
4289.00	4288.91	First Wft Svy
9028.00	4871.44	Last Wft Svy
9102.00	4867.73	Proj. To Bit



Burch Keely Unit #945H Eddy Co., NM

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	4260.00	0.64	10.26	4259.91	14.32	1.28	0.00	0.00	0.54	
2	4430.05	0.64	10.26	4429.95	16.19	1.62	0.00	0.00	0.78	
3	5256.62	91.00	93.26	4950.00	-8.12	531.06	11.00	82.99	530.76	
4	9125.66	91.00	93.26	4882.46	-228.31	4393.24	0.00	0.00	4399.17	PBHL

FIELD DETAILS

Eddy Co. NM (Nad27)

Geodetic System: US State Plane Coordinate System 1927

Ellipsoid: NAD27 (Clarke 1866)

Zone: New Mexico, Eastern Zone

Magnetic Model: IGRF2010

System Datum: Mean Sea Level

Local North: Grid North

WELL DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
Burch Keely Unit #945H	0.00	0.00	665363.40	596971.00	32°49'43.581N	104°01'03.528W	N/A

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
PBHL	4882.46	-228.31	4393.24	665135.09	601364.24	Point

SITE DETAILS

Burch Keely Unit #945H

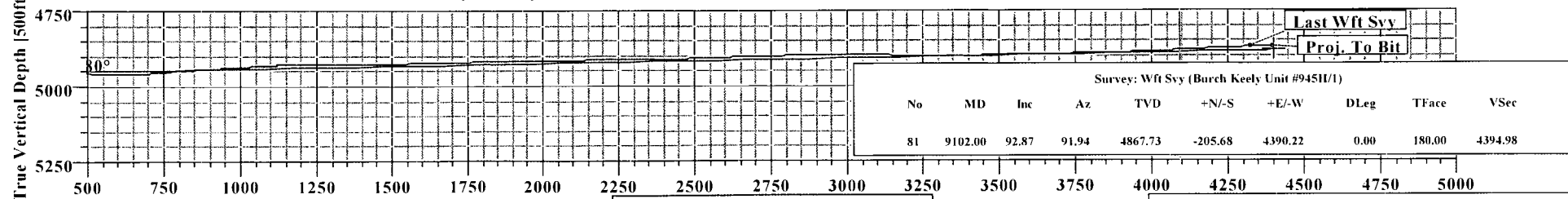
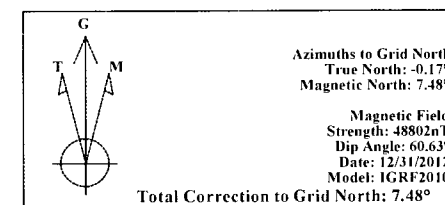
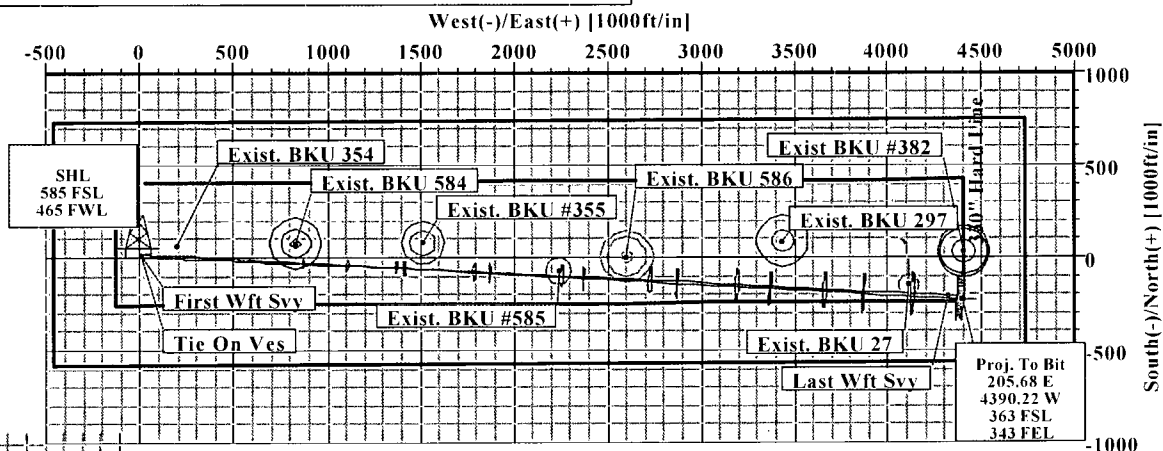
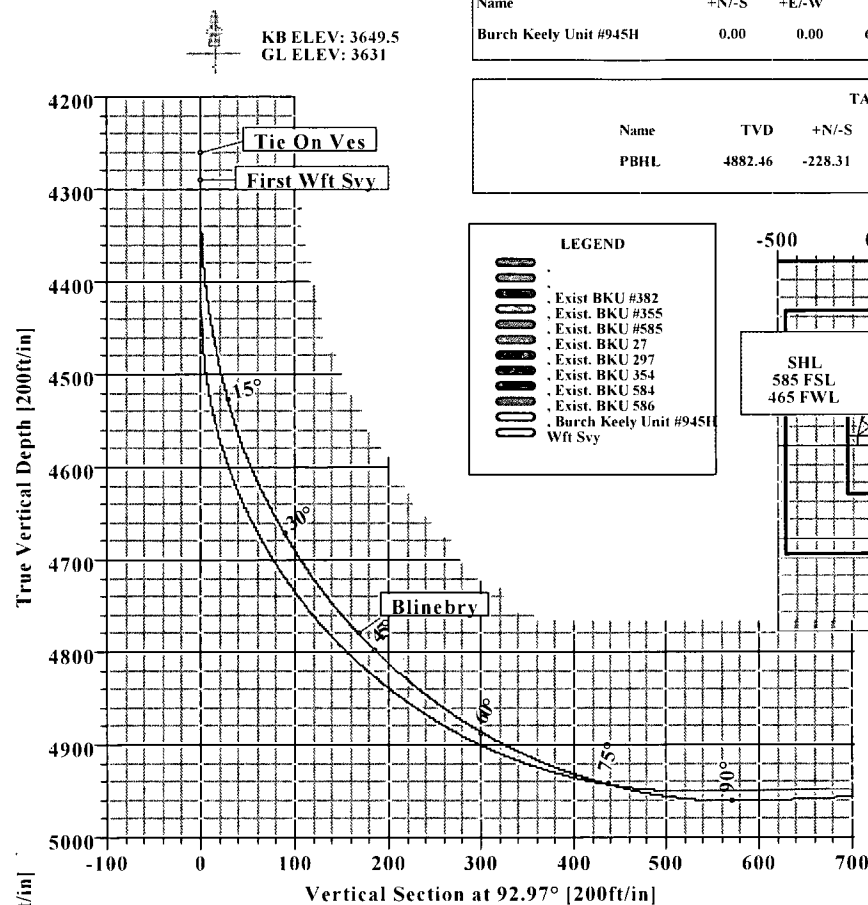
Site Centre Northing: 665363.40

Easting: 596971.00

Ground Level: 3631.00

Positional Uncertainty: 0.00

Convergence: 0.17



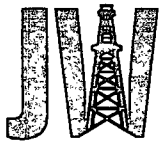
Survey: Wft Svy (Burch Keely Unit #945H/1)

No	MD	Inc	Az	TVD	+N/-S	+E/-W	DLeg	TFace	VSec
81	9102.00	92.87	91.94	4867.73	-205.68	4390.22	0.00	180.00	4394.98

Survey: Wft Svy (Burch Keely Unit #945H/1)

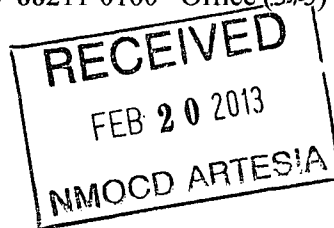
Created By: Russell W. Joyner

Date: 12/23/2012



DRILLING INC. Oil Well Drilling Contractor

Post Office Box 160 Artesia, New Mexico 88211-0160 Office (575) 748-8704 Fax (575) 748-8719



December 17, 2012

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

Re: Burch Keely Unit # 945H
Sec. 18, T-17-S, R-30-E
Eddy County, New Mexico

Attn: Jim Evans

The following is a Deviation Survey on the referenced well in Eddy County, New Mexico:

240' - 1°	1127' - 1°	2484' - 1°	3950' - 0.5°
469' - 0.5°	1548' - 1°	2981' - 0.5°	
707' - 0.75°	2044' - 1°	3453' - 1°	

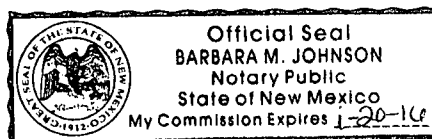
Sincerely,

Gary W. Chappell
Contracts Manager

STATE OF NEW MEXICO)
COUNTY OF EDDY)

The foregoing was acknowledged before me this 17th day of December, 2012 by Gary W. Chappell.

NOTARY PUBLIC



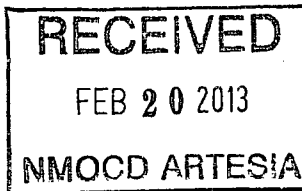


A GYRO TECHNOLOGIES INC. COMPANY

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

December 20, 2012

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



Attn: Kanicia Castillo

RE: **Burch Keely Unit No. 945H**

Please find enclosed a copy of the survey from 0.00' to 4260.00' ran on the above referenced well.

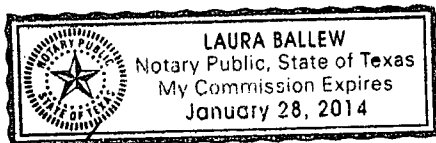
If I can be of any further service please do not hesitate to call me at 800-606-4976.

Sincerely,


Keith Havelka
Operations

STATE OF TEXAS §
 §
COUNTY OF NUECES §

This instrument was acknowledged before me on the 28th day of December, A.D., 2012, by Keith Havelka.




Laura Ballew
Notary Public, State of Texas

Sincerely,


Keith Havelka
Operations

Company: COG Operating LLC (Concho)
Lease/Well: Burch Keely Unit / No. 945H



Rig Name: JW2
State/County: New Mexico/ Eddy
Latitude: 32.83, Longitude: -104.02
GRID North is 0.17 Degrees East of True North
VS-Azi: 0.00 Degrees



Depth Reference : RKB 18.5'

DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: gyro survey.ut
Minimum Curvature Method
Report Date/Time: 12/20/2012 / 14:43

Vaughn Energy Services
Midland, Texas
432-563-5444
Surveyor: Tim Dillon
Burch Keely Unit No. 945H / API 30-015-39578

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	0.19	260.75	100.00	-0.03	-0.17	0.17	260.75	0.19
200.00	0.04	257.29	200.00	-0.06	-0.36	0.37	260.45	0.16
300.00	0.24	261.82	300.00	-0.10	-0.60	0.61	260.76	0.21
400.00	0.45	270.15	400.00	-0.13	-1.21	1.21	263.98	0.21
500.00	0.36	254.94	499.99	-0.21	-1.90	1.91	263.77	0.14
600.00	0.27	239.73	599.99	-0.41	-2.41	2.44	260.41	0.12
700.00	0.43	152.47	699.99	-0.85	-2.43	2.58	250.70	0.49
800.00	0.58	65.21	799.99	-0.97	-1.80	2.04	241.72	0.71
900.00	0.67	42.61	899.98	-0.32	-0.94	1.00	250.99	0.26
1000.00	0.75	40.01	999.98	0.61	-0.12	0.62	348.67	0.09
1100.00	0.60	24.26	1099.97	1.59	0.52	1.68	17.97	0.24
1200.00	0.45	30.50	1199.96	2.41	0.93	2.58	21.13	0.16
1300.00	0.31	49.69	1299.96	2.92	1.34	3.21	24.57	0.19
1400.00	0.17	88.87	1399.96	3.10	1.69	3.53	28.55	0.21
1500.00	0.26	71.08	1499.96	3.18	2.05	3.78	32.80	0.11
1600.00	0.35	95.29	1599.96	3.22	2.57	4.12	38.56	0.16
1700.00	0.25	75.28	1699.96	3.25	3.08	4.48	43.51	0.15
1800.00	0.14	77.28	1799.96	3.33	3.41	4.77	45.72	0.10

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	0.21	41.04	1899.96	3.49	3.66	5.06	46.29	0.12
2000.00	0.27	4.81	1999.96	3.87	3.79	5.42	44.46	0.16
2100.00	0.26	149.31	2099.96	3.91	3.93	5.54	45.12	0.50
2200.00	0.24	293.81	2199.96	3.80	3.85	5.41	45.35	0.47
2300.00	0.31	310.41	2299.95	4.06	3.46	5.33	40.39	0.10
2400.00	0.38	327.02	2399.95	4.51	3.07	5.46	34.27	0.12
2500.00	0.58	318.82	2499.95	5.17	2.56	5.77	26.39	0.21
2600.00	0.78	316.63	2599.94	6.04	1.76	6.29	16.26	0.20
2700.00	0.58	334.37	2699.94	6.99	1.08	7.07	8.76	0.29
2800.00	0.37	352.11	2799.93	7.76	0.81	7.81	5.99	0.25
2900.00	0.34	10.83	2899.93	8.37	0.83	8.41	5.63	0.12
3000.00	0.30	29.55	2999.93	8.89	1.01	8.94	6.48	0.11
3100.00	0.29	28.69	3099.93	9.34	1.26	9.42	7.69	0.01
3200.00	0.28	27.44	3199.93	9.78	1.50	9.89	8.70	0.01
3300.00	0.24	58.38	3299.92	10.11	1.79	10.26	10.02	0.15
3400.00	0.19	89.33	3399.92	10.22	2.13	10.44	11.79	0.12
3500.00	0.28	322.24	3499.92	10.41	2.15	10.63	11.69	0.42
3600.00	0.36	315.14	3599.92	10.82	1.79	10.97	9.38	0.09
3700.00	0.26	319.43	3699.92	11.22	1.42	11.30	7.21	0.10
3800.00	0.17	321.71	3799.92	11.50	1.18	11.56	5.86	0.10
3900.00	0.18	351.77	3899.92	11.78	1.07	11.82	5.18	0.09
4000.00	0.20	21.83	3999.92	12.10	1.11	12.15	5.25	0.10
4100.00	0.45	8.78	4099.92	12.65	1.24	12.71	5.58	0.25
4200.00	0.69	355.73	4199.91	13.63	1.25	13.69	5.24	0.27
4260.00	0.64	10.26	4259.91	14.32	1.28	14.38	5.12	0.29