

DRILLING INC. Oil Well Drilling Contractor

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

January 14, 2013

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

30 015 40213
Re: Burkett 16 St. # 16 H
Sec. 16, T-17-S, R-31-E
Eddy County, New Mexico

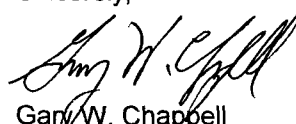
Attn: Jim Evans

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

320' - 0.75°	2017' - 0.5°	3641' - 1.75°
712' - 1°	2487' - 1.25°	4109' - 0.75°
1197' - 0.25°	2830' - 0.75°	4484' - 0.5°
1436' - 1°	3079' - 1°	4861' - 0.25°
1738' - 0.5°	3331' - 1°	5360' - 1.25°



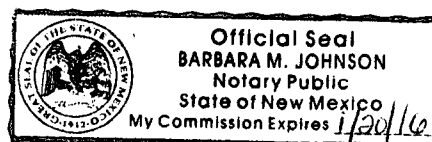
Sincerely,


Gary W. Chappell
Contracts Manager

STATE OF NEW MEXICO)
COUNTY OF EDDY)

The foregoing was acknowledged before me this 14th day of January , 2013 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.

January 15, 2013

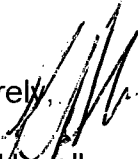
Concho Resources, Inc.
One Concho Center
600 W. Illinois Avenue
Midland, Texas 79701

Attn: Kanicia Castillo

RE: **Burkett 16 State Com No. 016H**

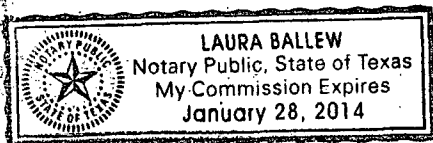
Please find enclosed a copy of the survey from 0.00' to 5390.00' ran on the above referenced well.

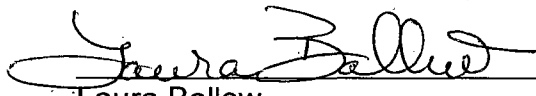
Sincerely,

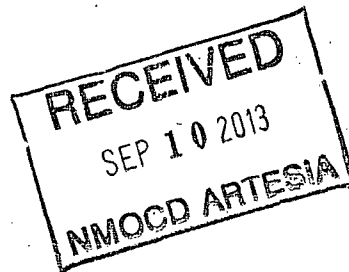
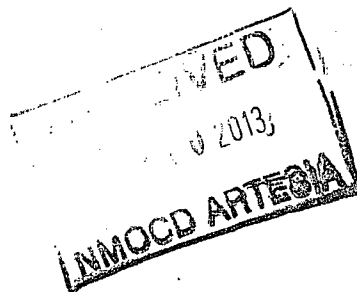

Keith Havelka
Operations

STATE OF TEXAS §
COUNTY OF NUECES §

This instrument was acknowledged before me on the 15th day of January, A.D., 2013, by Keith Havelka.




Laura Ballew
Notary Public, State of Texas



Company: COG Operating LLC (Concho)
Lease/Well: Burkett 16 State Com / No. 016H



Rig Name: JW #2
State/County: New Mexico / Eddy
Latitude: 32.84, Longitude: -103.87
GRID North is 0.25 Degrees East of True North
VS-Azi: 0.00 Degrees



Depth Reference : 18'

DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: burkett 16 state com 016_ed.ut

Minimum Curvature Method

Report Date/Time: 1/15/2013 / 07:51

Vaughn Energy Services

Fort Worth, Texas

817-741-3610

Surveyor: Jason Wilson

Burkett 16 State Com No. 016H / API 30-015-39950



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	0.87	227.08	100.00	-0.52	-0.56	0.76	227.08	0.87
200.00	1.05	225.46	199.98	-1.68	-1.77	2.44	226.47	0.18
300.00	1.25	215.94	299.96	-3.21	-3.07	4.44	223.68	0.27
400.00	1.08	208.02	399.94	-4.92	-4.15	6.44	220.11	0.24
500.00	0.87	199.47	499.93	-6.47	-4.84	8.08	216.81	0.26
600.00	0.95	198.94	599.91	-7.97	-5.37	9.61	213.95	0.08
700.00	1.03	179.28	699.90	-9.66	-5.62	11.17	210.22	0.35
800.00	0.55	208.29	799.89	-10.98	-5.84	12.44	208.02	0.61
900.00	0.53	212.47	899.89	-11.80	-6.32	13.38	208.18	0.05
1000.00	0.42	219.49	999.88	-12.47	-6.81	14.21	208.61	0.12
1100.00	0.19	171.42	1099.88	-12.92	-7.02	14.70	208.50	0.33
1200.00	0.24	14.40	1199.88	-12.88	-6.94	14.63	208.32	0.42
1300.00	0.52	22.89	1299.88	-12.25	-6.71	13.97	208.71	0.28
1400.00	0.83	31.16	1399.87	-11.21	-6.16	12.79	208.77	0.33
1500.00	0.77	41.40	1499.86	-10.09	-5.34	11.42	207.89	0.16
1600.00	0.46	32.41	1599.86	-9.25	-4.68	10.37	206.85	0.32
1700.00	0.60	10.30	1699.85	-8.39	-4.37	9.47	207.52	0.25
1800.00	0.36	19.01	1799.85	-7.58	-4.18	8.66	208.86	0.25

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	0.24	29.99	1899.85	-7.10	-3.97	8.14	209.21	0.13
2000.00	0.20	275.42	1999.85	-6.90	-4.04	8.00	210.30	0.37
2100.00	0.40	271.61	2099.84	-6.88	-4.55	8.25	213.51	0.21
2200.00	0.24	265.65	2199.84	-6.88	-5.11	8.58	216.60	0.16
2300.00	0.35	262.79	2299.84	-6.94	-5.62	8.93	219.03	0.11
2400.00	0.47	267.55	2399.84	-6.99	-6.34	9.44	222.18	0.13
2500.00	0.29	269.63	2499.84	-7.01	-7.00	9.91	224.93	0.19
2600.00	0.48	253.15	2599.83	-7.14	-7.64	10.46	226.97	0.22
2700.00	0.37	280.38	2699.83	-7.20	-8.36	11.03	229.28	0.22
2800.00	0.47	282.71	2799.83	-7.05	-9.08	11.50	232.19	0.10
2900.00	0.26	284.02	2899.83	-6.90	-9.71	11.91	234.59	0.21
3000.00	0.45	245.49	2999.83	-7.01	-10.29	12.45	235.73	0.30
3100.00	0.37	242.45	3099.82	-7.33	-10.94	13.16	236.19	0.09
3200.00	0.40	249.00	3199.82	-7.60	-11.54	13.82	236.65	0.05
3300.00	0.32	253.39	3299.82	-7.80	-12.14	14.43	237.26	0.08
3400.00	0.40	257.83	3399.82	-7.96	-12.75	15.03	238.03	0.09
3500.00	0.27	261.20	3499.81	-8.07	-13.33	15.58	238.81	0.13
3600.00	0.37	267.35	3599.81	-8.12	-13.89	16.09	239.69	0.11
3700.00	0.33	217.33	3699.81	-8.36	-14.39	16.64	239.83	0.30
3800.00	0.16	207.78	3799.81	-8.72	-14.63	17.03	239.21	0.17
3900.00	0.21	204.26	3899.81	-9.01	-14.77	17.30	238.61	0.05
4000.00	0.16	157.95	3999.81	-9.31	-14.79	17.48	237.81	0.16
4100.00	0.14	162.29	4099.81	-9.56	-14.70	17.54	236.96	0.03
4200.00	0.19	175.70	4199.81	-9.84	-14.65	17.65	236.11	0.06
4300.00	0.33	192.95	4299.81	-10.29	-14.71	17.95	235.01	0.16
4400.00	0.17	245.87	4399.81	-10.64	-14.91	18.31	234.48	0.27
4500.00	0.25	224.59	4499.81	-10.85	-15.20	18.67	234.46	0.11
4600.00	0.24	220.67	4599.81	-11.17	-15.48	19.09	234.20	0.02
4700.00	0.29	210.08	4699.80	-11.54	-15.74	19.52	233.76	0.07
4800.00	0.12	207.32	4799.80	-11.85	-15.91	19.84	233.34	0.17
4900.00	0.25	186.10	4899.80	-12.16	-15.99	20.08	232.74	0.15
5000.00	0.34	172.39	4999.80	-12.67	-15.97	20.39	231.57	0.11
5100.00	0.25	153.74	5099.80	-13.16	-15.84	20.59	230.28	0.13
5200.00	0.33	160.38	5199.80	-13.63	-15.64	20.74	228.94	0.09
5300.00	0.53	162.11	5299.80	-14.34	-15.40	21.05	227.04	0.20
5390.00	0.47	175.34	5389.79	-15.11	-15.24	21.46	225.25	0.15



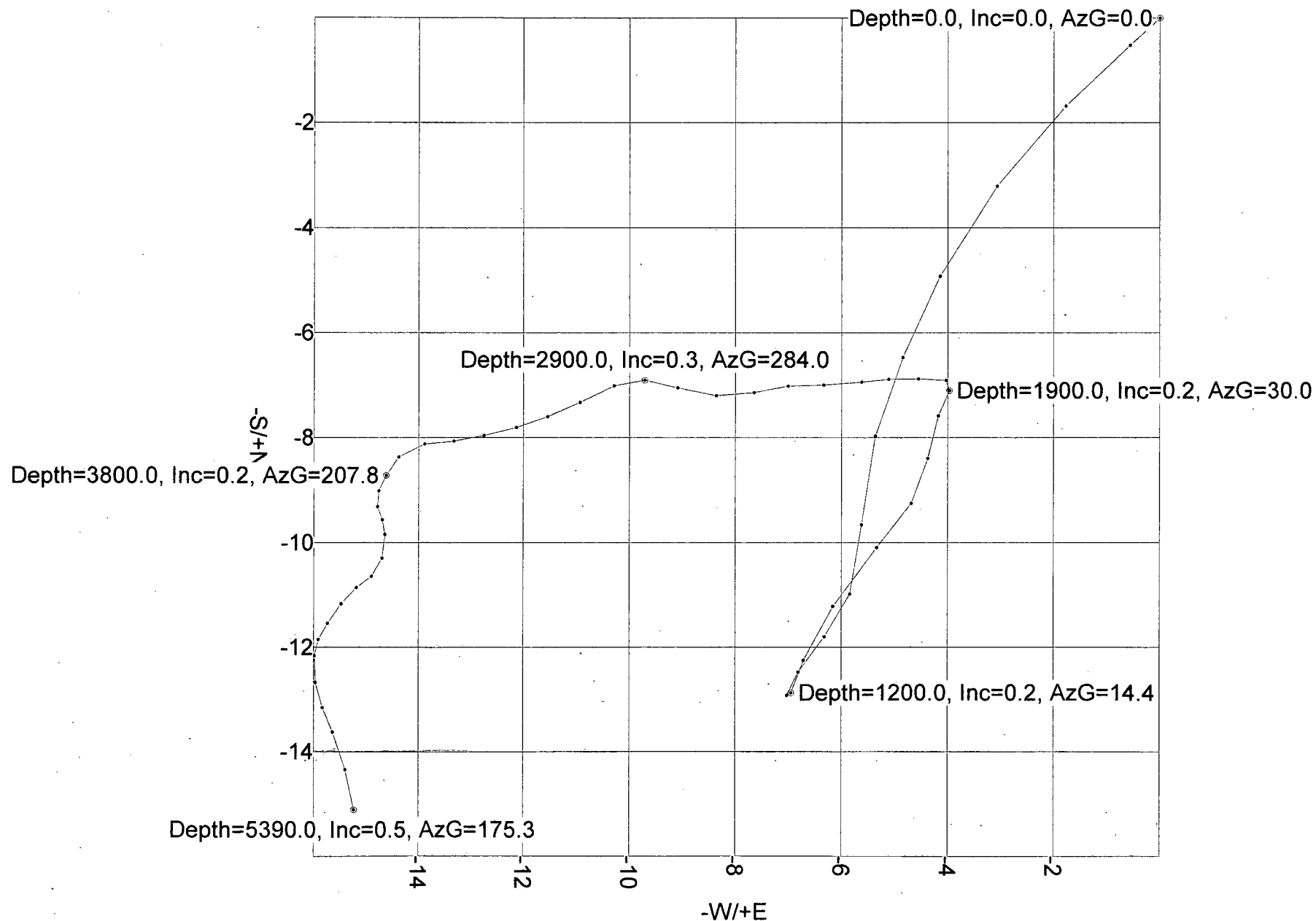
Vaughn Energy Services

Fort Worth, Texas

817-741-3610

Surveyor: Jason Wilson

Burkett 16 State Com No. 016H / API 30-015-39950



Depth=5390.0, Inc=0.5, AzG=175.3

VES Survey Date: 01/05/2013