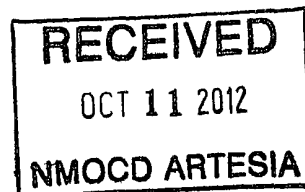




PO Box 1370
Artesia, NM 88211-1370
(575) 748-1288

15-40095



May 22, 2012

COG, LLC
Fasken Center, Tower II
550 West Texas Ave, Suite 1300
Midland, TX 79701

RE: Skelly Unit #737
786' FNL & 865' FWL
Sec. 22, T17S, R31E
Eddy County, New Mexico

Dear Sir,

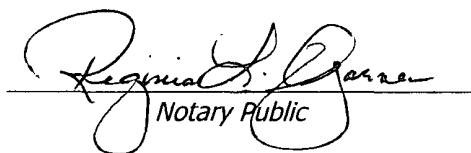
The attached is the Deviation Survey for the above captioned well.

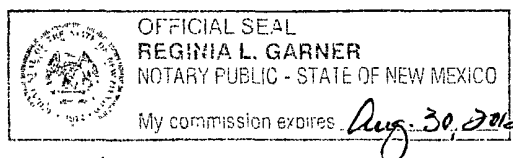
Very truly yours,


Eddie C. LaRue
Operations Manager

State of New Mexico }
County of Eddy }

The foregoing was acknowledged before me this 22nd day of May, 2012.


Notary Public



Skelly Unit #737

Date	Depth	Deviation	Direction
5/12/2012	144	0.7	0
5/13/2012	144	0.3	0
5/13/2012	230	0.5	0
5/13/2012	317	0.8	0
5/13/2012	404	0.7	0
5/14/2012	691	0.1	0
5/14/2012	1157	0.4	0
5/15/2012	1628	2.0	0
5/16/2012	1849	1.1	47.4
5/16/2012	1912	0.6	104.9
5/16/2012	2006	1.7	149.5
5/16/2012	2100	2.7	169.4
5/16/2012	2194	3.4	156.9
5/16/2012	2289	4.4	163.1
5/16/2012	2384	5.5	159.4
5/17/2012	2479	4.7	159.0
5/17/2012	2572	5.2	160.2
5/17/2012	2666	4.5	159.4
5/17/2012	2760	5.4	162.5
5/17/2012	2853	4.7	163.4
5/17/2012	3041	5.0	166.6
5/17/2012	3135	4.7	169.6
5/17/2012	3239	5.2	149.7
5/17/2012	3323	5.8	153.0
5/17/2012	3417	5.3	151.1
5/17/2012	3518	5.2	151.1
5/17/2012	3612	4.9	150.0
5/17/2012	3706	5.3	149.2
5/17/2012	3800	4.9	149.3
5/17/2012	3894	5.2	150.7
5/18/2012	3977	5.0	152.5
5/18/2012	4081	4.9	149.5
5/18/2012	4175	5.3	150.9
5/18/2012	4269	5.3	152.2
5/18/2012	4363	4.9	153.9
5/18/2012	4551	4.1	150.2
5/18/2012	4645	3.2	149.7
5/18/2012	1738	2.6	145.1
5/18/2012	4833	1.6	175.2
5/18/2012	4927	0.7	224.0
5/19/2012	5156	0.8	0
5/19/2012	5656	1.8	0
5/19/2012	5843	1.6	0

Date	Depth	Deviation	Direction
5/20/2012	6095	0.7	0
5/20/2012	5345	1.8	0
5/20/2012	6691	1.8	0

0

Company: COG OPERATING LLC (CONCHO)

Lease/Well: SKELLY UNIT /No. 737



Rig Name: SILVER OAK #1

State/County: NEW MEXICO/EDDY

Latitude: 32.83

GRID North is 0.25 Degrees East of True North

VS-Azi: 0.00 Degrees



Depth Reference : RKB= 12'

DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: e-line gyro_ed.ut

Minimum Curvature Method

Report Date/Time: 5/22/2012 / 14:50

Vaughn Energy Services

Conway, Arkansas

501-730-0602

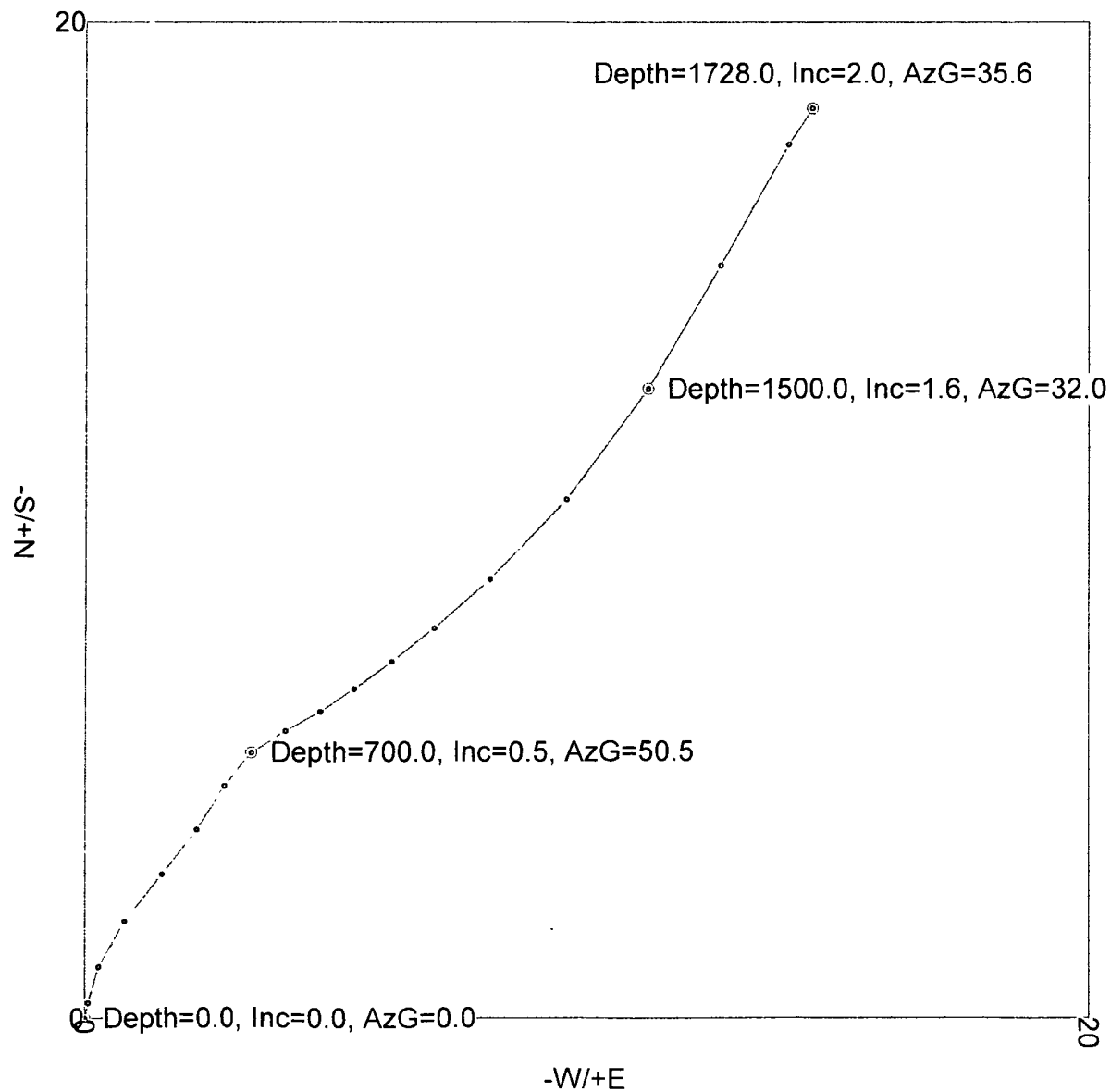
Surveyor: Andy Jackson

Skelly Unit No. 737 / API 30-015-40095

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	0.36	12.64	100.00	0.31	0.07	0.32	12.64	0.36
200.00	0.50	18.58	200.00	1.03	0.28	1.07	15.05	0.14
300.00	0.74	36.27	299.99	1.96	0.80	2.12	22.12	0.31
400.00	0.66	40.85	399.98	2.92	1.56	3.31	28.08	0.10
500.00	0.66	33.33	499.98	3.84	2.25	4.45	30.40	0.09
600.00	0.54	30.97	599.97	4.72	2.81	5.50	30.76	0.13
700.00	0.47	50.45	699.97	5.38	3.37	6.35	32.02	0.18
800.00	0.45	64.17	799.96	5.82	4.03	7.08	34.75	0.11
900.00	0.46	58.13	899.96	6.20	4.73	7.80	37.33	0.05
1000.00	0.47	53.72	999.96	6.65	5.40	8.57	39.06	0.04
1100.00	0.58	53.65	1099.95	7.20	6.14	9.46	40.46	0.10
1200.00	0.67	50.25	1199.95	7.87	6.99	10.53	41.63	0.10
1300.00	1.03	47.25	1299.94	8.86	8.11	12.01	42.47	0.37
1400.00	1.50	40.87	1399.91	10.46	9.62	14.21	42.63	0.48
1500.00	1.65	31.99	1499.87	12.66	11.24	16.93	41.59	0.28
1600.00	1.63	28.72	1599.83	15.12	12.68	19.74	39.98	0.10
1700.00	1.55	29.82	1699.79	17.55	14.04	22.47	38.66	0.08
1728.00	1.99	35.62	1727.78	18.27	14.51	23.33	38.46	1.68



Vaughn Energy Services
Conway, Arkansas
501-730-0602
Surveyor: Andy Jackson
Skelly Unit No. 737 / API 30-015-40095



VES Survey Date: 05/15/2012



COG Operating, LLC

EDDY COUNTY, NEW MEXICO

SKELLY UNIT

SKELLY UNIT # 737

SKELLY UNIT # 737

Plan: PLAN1REV1

SHL = 786' FNL & 865' FWL

BHL = 980' FNL & 980' FWL

Top of Paddock = 980' FWL & 980' FWL @ 4850' TVD

Final Survey Report

22 May, 2012



Childress Directional Drilling Survey Report

Company:	COG Operating, LLC	Local Co-ordinate Reference:	Well SKELLY UNIT # 737
Project:	EDDY COUNTY, NEW MEXICO	TVD Reference:	RKB @ 3855.00usft (Original Well Elev)
Site:	SKELLY UNIT	MD Reference:	RKB @ 3855.00usft (Original Well Elev)
Well:	SKELLY UNIT # 737	North Reference:	Grid
Wellbore:	SKELLY UNIT # 737	Survey Calculation Method:	Minimum Curvature
Design:	SKELLY UNIT # 737	Database:	EDM 5000.1 Single User Db

Project	EDDY COUNTY, NEW MEXICO,		
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	SKELLY UNIT				
Site Position:		Northing:	664,191.80 usft	Latitude:	32° 49' 30.236 N
From:	Map	Easting:	644,560.00 usft	Longitude:	103° 51' 45.873 W
Position Uncertainty:	0 00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0 26 °

Well	SKELLY UNIT # 737					
Well Position	+N/-S	0 00 usft	Northing:	664,191.80 usf	Latitude:	32° 49' 30 236 N
	+E/-W	0.00 usft	Easting:	644,560 00 usf	Longitude:	103° 51' 45 873 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	usf	Ground Level:	3,843.00 usf

Wellbore	SKELLY UNIT # 737				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	4/25/2012	7 66	60.67	48,857

Design	SKELLY UNIT # 737				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0 00	0 00	148.91	

Survey Program	Date 5/22/2012				
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
100 00	1,728 00	GYRO SURVEYS (SKELLY UNIT # 737)	NS-GYRO-MS	North sensing gyrocompassing m/s	
1,728.00	4,363.00	MWD SURVEYS (SKELLY UNIT # 737)	MWD	MWD - Standard	

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)
1,728.00	1 99	35 62	1,727.78	18.28	14.52	-8.16	0 00	0.00	0 00
1,849.00	1 10	47 40	1,848 74	20 77	16 60	-9.22	0 78	-0.74	9.74
1,912.00	0 60	104 90	1,911 73	21.10	17 36	-9.10	1 47	-0 79	91 27
2,006 00	1.70	149.50	2,005.71	19 77	18 54	-7 35	1.43	1.17	47.45
2,100 00	2 70	169 40	2,099.64	16.39	19.66	-3.89	1 32	1 06	21 17
2,194.00	3 40	156 90	2,193.51	11.65	21.16	0.95	1 02	0 74	-13.30
2,289.00	4.40	163 10	2,288 29	5 57	23 32	7.27	1.14	1.05	6.53
2,384.00	5.50	159.40	2,382 93	-2.18	25.98	15.28	1.21	1.16	-3.89
2,479 00	4.70	159.00	2,477.56	-10.07	28 98	23 59	0 84	-0 84	-0.42
2,572.00	5.20	160.20	2,570 21	-17 59	31.77	31.47	0.55	0 54	1.29



Childress Directional Drilling Survey Report

Company:	COG Operating, LLC	Local Co-ordinate Reference:	Well SKELLY UNIT # 737
Project:	EDDY COUNTY, NEW MEXICO	TVD Reference:	RKB @ 3855 00usft (Original Well Elev)
Site:	SKELLY UNIT	MD Reference:	RKB @ 3855 00usft (Original Well Elev)
Well:	SKELLY UNIT # 737	North Reference:	Grid
Wellbore:	SKELLY UNIT # 737	Survey Calculation Method:	Minimum Curvature
Design:	SKELLY UNIT # 737	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)
2,666.00	4.50	159.40	2,663.87	-25.05	34.51	39.28	0.75	-0.74	-0.85
2,760.00	5.40	162.50	2,757.52	-32.72	37.14	47.20	1.00	0.96	3.30
2,853.00	4.70	163.40	2,850.16	-40.55	39.55	55.15	0.76	-0.75	0.97
2,947.00	5.40	166.90	2,943.79	-48.55	41.65	63.08	0.81	0.74	3.72
3,041.00	5.00	166.60	3,037.41	-56.84	43.60	71.19	0.43	-0.43	-0.32
3,135.00	4.70	169.60	3,131.07	-64.61	45.25	78.70	0.42	-0.32	3.19
3,229.00	5.20	149.70	3,224.73	-72.08	48.09	86.56	1.89	0.53	-21.17
3,323.00	5.80	153.00	3,318.29	-79.99	52.40	95.56	0.72	0.64	3.51
3,417.00	5.30	151.10	3,411.85	-88.02	56.65	104.63	0.57	-0.53	-2.02
3,518.00	5.20	151.10	3,512.43	-96.11	61.12	113.87	0.10	-0.10	0.00
3,612.00	4.90	150.00	3,606.06	-103.32	65.18	122.14	0.34	-0.32	-1.17
3,706.00	5.30	149.20	3,699.69	-110.52	69.41	130.49	0.43	0.43	-0.85
3,800.00	4.90	149.30	3,793.32	-117.71	73.69	138.85	0.43	-0.43	0.11
3,894.00	5.20	150.70	3,886.95	-124.87	77.82	147.12	0.35	0.32	1.49
3,987.00	5.00	152.50	3,979.59	-132.14	81.75	155.38	0.28	-0.22	1.94
4,081.00	4.90	149.50	4,073.24	-139.23	85.68	163.48	0.30	-0.11	-3.19
4,175.00	5.30	150.90	4,166.86	-146.49	89.83	171.83	0.45	0.43	1.49
4,269.00	5.30	152.20	4,260.46	-154.12	93.97	180.51	0.13	0.00	1.38
4,363.00	4.90	153.90	4,354.09	-161.57	97.76	188.84	0.45	-0.43	1.81
4,457.00	5.80	151.80	4,447.68	-169.36	101.77	197.58	0.98	0.96	-2.23
4,550.00	4.10	150.20	4,540.33	-176.38	105.64	205.60	1.83	-1.83	-1.72
4,644.00	3.20	149.70	4,634.14	-181.57	108.64	211.58	0.96	-0.96	-0.53
4,738.00	2.60	145.10	4,728.02	-185.58	111.18	216.33	0.68	-0.64	-4.89
SURVEY 4738' MD 2.60° INC 145.10° AZM									
4,832.00	1.60	175.20	4,821.95	-188.64	112.51	219.64	1.55	-1.06	32.02
SURVEY 4832' MD 1.60° INC 175.20° AZM									
4,860.10	1.27	182.33	4,850.05	-189.34	112.53	220.25	1.33	-1.18	25.36
TARGET 1									
4,926.00	0.70	224.00	4,915.94	-190.36	112.22	220.96	1.33	-0.86	63.24
SURVEY 4926' MD 0.70° INC 224.0° AZM									
4,976.00	0.70	224.00	4,965.93	-190.80	111.80	221.12	0.00	0.00	0.00
SURVEY 4976' MD 0.70° INC 224.0° AZM - PBHL - SKELLY UNIT # 737									

Survey Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
4,738.00	4,728.02	-185.58	111.18	SURVEY 4738' MD 2.60° INC 145.10° AZM
4,832.00	4,821.95	-188.64	112.51	SURVEY 4832' MD 1.60° INC 175.20° AZM
4,926.00	4,915.94	-190.36	112.22	SURVEY 4926' MD 0.70° INC 224.0° AZM
4,976.00	4,965.93	-190.80	111.80	SURVEY 4976' MD 0.70° INC 224.0° AZM