



NM OIL CONSERVATION
ARTESIA DISTRICT

JUN 19 2015

RECEIVED

January 23, 2015

30 015 42736

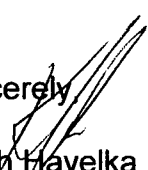
Concho Resources, Inc.
One Concho Center
600 W. Illinois Avenue
Midland, Texas 79701

Attn: Kanicia Castillo

RE: Mossy Federal 2H

Please find enclosed a copy of the survey from 0' to 7272' ran on the above referenced well.

Sincerely,

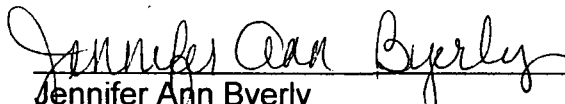

Keith Havelka
Operations

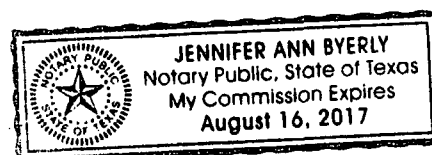
STATE OF TEXAS §

§

COUNTY OF NUECES §

This instrument was acknowledged before me on the 23 day of Jan,
A.D., 2015, by Keith Havelka.


Jennifer Ann Byerly
Notary Public, State of Texas





Company: Concho
Lease/Well: Mossy Federal/2H

Rig Name: McVay 6
State/County: New Mexico/Eddy
Latitude: 32.59, Longitude: -104.02
GRID North is 0.17 Degrees East of True North
VS-Azi: 0.00 Degrees



Depth Reference : RKB = 19 Foot

DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: mossy federal 2h_gyro survey.ut

Minimum Curvature Method

Report Date/Time: 1/23/2015 / 12:51

VES Survey International

West Texas

(432) 563-5444

Surveyor: Gene Heiss

Mossy Federal 2H /API 30-015-42736

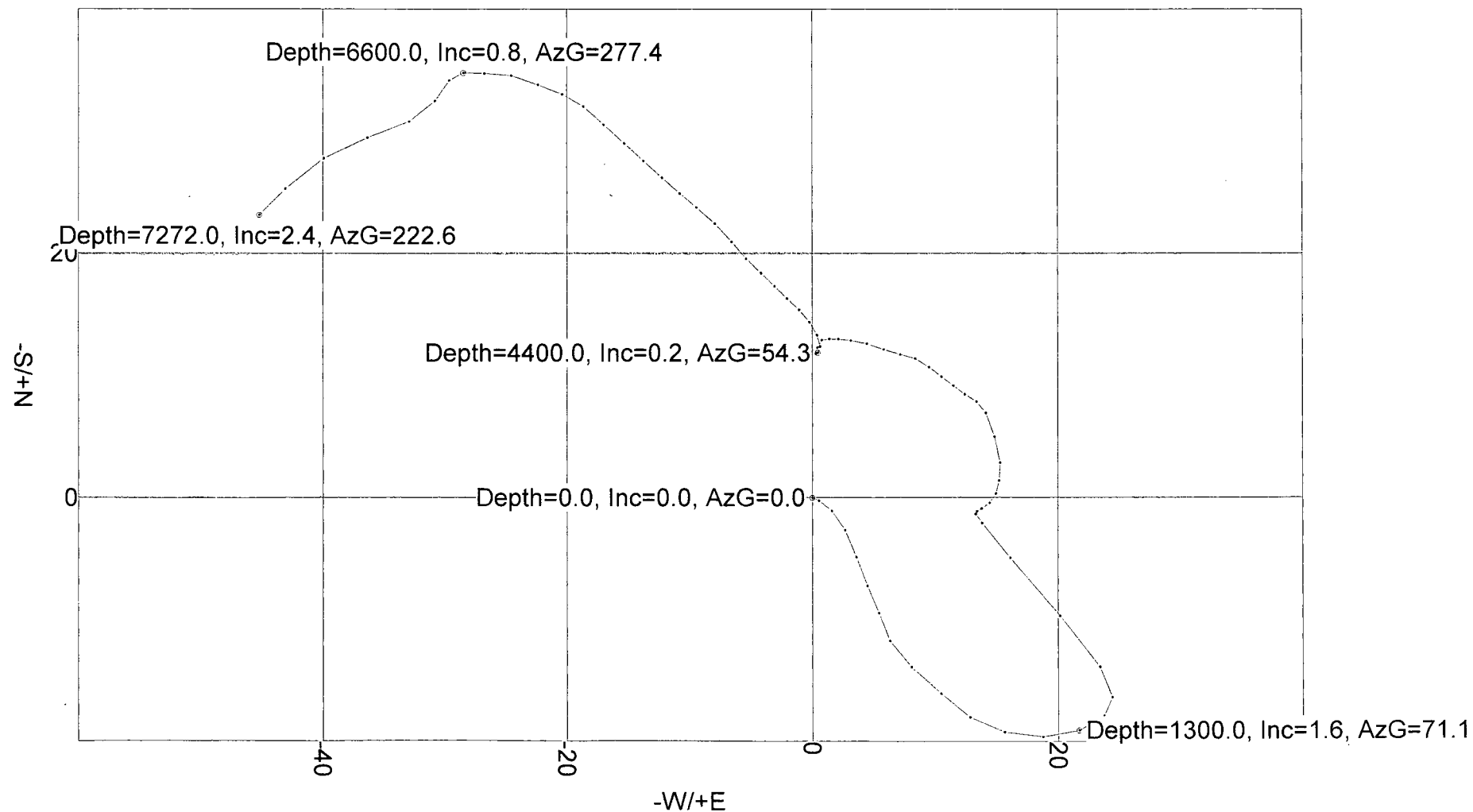
Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	****
100.00	0.66	114.39	100.00	-0.24	0.52	-0.24	0.57	114.39	0.66
200.00	0.91	138.57	199.99	-1.07	1.57	-1.07	1.90	124.26	0.41
300.00	1.31	151.26	299.97	-2.67	2.65	-2.67	3.76	135.21	0.46
400.00	1.44	162.82	399.94	-4.87	3.57	-4.87	6.03	143.75	0.31
500.00	1.47	155.56	499.91	-7.23	4.47	-7.23	8.50	148.28	0.19
600.00	1.33	158.25	599.88	-9.47	5.43	-9.47	10.92	150.19	0.15
700.00	1.47	158.68	699.85	-11.75	6.32	-11.75	13.34	151.70	0.14
800.00	1.86	126.28	799.81	-13.90	8.10	-13.90	16.09	149.77	1.00
900.00	1.84	138.25	899.76	-16.06	10.48	-16.06	19.18	146.87	0.39
1000.00	1.72	120.27	999.71	-18.02	12.85	-18.02	22.13	144.51	0.57
1100.00	1.81	106.80	1099.66	-19.23	15.66	-19.23	24.80	140.85	0.42
1200.00	1.83	87.49	1199.61	-19.62	18.77	-19.62	27.15	136.27	0.61
1300.00	1.62	71.14	1299.57	-19.09	21.71	-19.09	28.90	131.33	0.53
1400.00	1.14	42.23	1399.54	-17.89	23.72	-17.89	29.71	127.03	0.83
1500.00	0.91	358.58	1499.53	-16.36	24.37	-16.36	29.35	123.88	0.79
1600.00	2.26	330.51	1599.49	-13.86	23.38	-13.86	27.18	120.66	1.52
1700.00	3.83	317.62	1699.34	-9.68	20.16	-9.68	22.36	115.65	1.71
1800.00	3.33	322.01	1799.15	-4.93	16.12	-4.93	16.86	106.99	0.57

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	0.87	317.92	1899.07	-2.08	13.83	-2.08	13.98	98.54	2.45
2000.00	0.19	1.31	1999.07	-1.35	13.32	-1.35	13.39	95.77	0.75
2100.00	0.12	57.88	2099.07	-1.13	13.42	-1.13	13.46	94.80	0.16
2200.00	0.40	60.25	2199.07	-0.90	13.81	-0.90	13.84	93.72	0.27
2300.00	0.52	48.80	2299.06	-0.43	14.45	-0.43	14.45	91.69	0.15
2400.00	0.56	20.96	2399.06	0.33	14.97	0.33	14.97	88.73	0.26
2500.00	0.70	7.26	2499.05	1.40	15.22	1.40	15.28	84.74	0.20
2600.00	0.96	0.38	2599.04	2.85	15.30	2.85	15.57	79.45	0.28
2700.00	1.55	340.40	2699.02	4.97	14.85	4.97	15.66	71.52	0.73
2800.00	0.83	339.59	2799.00	6.92	14.15	6.92	15.75	63.95	0.72
2900.00	0.65	298.22	2898.99	7.86	13.40	7.86	15.53	59.60	0.55
3000.00	0.65	306.11	2998.98	8.47	12.44	8.47	15.04	55.76	0.09
3100.00	0.69	307.09	3098.98	9.16	11.50	9.16	14.70	51.45	0.04
3200.00	0.71	308.80	3198.97	9.91	10.54	9.91	14.47	46.75	0.03
3300.00	0.76	305.84	3298.96	10.69	9.52	10.69	14.31	41.70	0.06
3400.00	0.76	298.91	3398.95	11.39	8.40	11.39	14.16	36.41	0.09
3500.00	0.73	273.14	3498.94	11.75	7.18	11.75	13.77	31.44	0.33
3600.00	0.93	296.58	3598.93	12.15	5.82	12.15	13.47	25.58	0.39
3700.00	0.75	277.97	3698.92	12.60	4.44	12.60	13.36	19.40	0.32
3800.00	0.79	284.84	3798.91	12.87	3.12	12.87	13.24	13.63	0.10
3900.00	0.40	260.50	3898.91	12.99	2.12	12.99	13.16	9.25	0.46
4000.00	0.47	279.45	3998.91	13.00	1.37	13.00	13.07	6.01	0.16
4100.00	0.29	229.68	4098.90	12.91	0.77	12.91	12.93	3.40	0.36
4200.00	0.53	200.42	4198.90	12.31	0.41	12.31	12.32	1.91	0.31
4300.00	0.07	165.24	4298.90	11.81	0.27	11.81	11.82	1.29	0.47
4400.00	0.25	54.33	4398.90	11.88	0.46	11.88	11.89	2.21	0.28
4500.00	0.43	359.48	4498.90	12.38	0.63	12.38	12.40	2.92	0.36
4600.00	0.70	335.36	4598.89	13.32	0.38	13.32	13.32	1.61	0.35
4700.00	0.73	325.27	4698.88	14.39	-0.24	14.39	14.39	359.04	0.13
4800.00	0.76	315.69	4798.88	15.39	-1.07	15.39	15.43	356.04	0.13
4900.00	0.79	310.93	4898.87	16.31	-2.05	16.31	16.44	352.84	0.07
5000.00	0.86	317.78	4998.86	17.32	-3.08	17.32	17.59	349.93	0.12
5100.00	0.89	310.57	5098.85	18.38	-4.17	18.38	18.85	347.22	0.11
5200.00	1.06	317.47	5198.83	19.57	-5.38	19.57	20.30	344.62	0.21
5300.00	1.04	321.73	5298.81	20.96	-6.57	20.96	21.97	342.60	0.08
5400.00	1.26	314.88	5398.79	22.44	-7.90	22.44	23.79	340.60	0.26
5500.00	1.05	306.42	5498.77	23.76	-9.42	23.76	25.56	338.38	0.27
5600.00	1.01	314.34	5598.76	24.92	-10.78	24.92	27.15	336.60	0.15
5700.00	1.20	310.19	5698.74	26.21	-12.21	26.21	28.92	335.02	0.21

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
5800.00	1.16	312.82	5798.72	27.58	-13.76	27.58	30.82	333.49	0.07
5900.00	1.28	312.13	5898.70	29.01	-15.33	29.01	32.81	332.15	0.13
6000.00	1.31	311.83	5998.67	30.53	-17.01	30.53	34.95	330.87	0.03
6100.00	1.25	312.56	6098.64	32.03	-18.67	32.03	37.08	329.76	0.06
6200.00	1.09	285.25	6198.62	33.02	-20.39	33.02	38.81	328.30	0.58
6300.00	1.32	297.11	6298.60	33.80	-22.33	33.80	40.51	326.54	0.34
6400.00	1.36	280.77	6398.58	34.54	-24.53	34.54	42.36	324.62	0.38
6500.00	1.17	267.80	6498.55	34.73	-26.71	34.73	43.81	322.43	0.35
6600.00	0.77	277.45	6598.54	34.77	-28.40	34.77	44.90	320.76	0.42
6700.00	0.99	214.70	6698.53	34.15	-29.56	34.15	45.17	319.12	0.94
6800.00	1.33	214.48	6798.51	32.48	-30.71	32.48	44.70	316.60	0.34
6900.00	1.86	243.29	6898.47	30.79	-32.82	30.79	45.00	313.18	0.94
7000.00	2.43	253.94	6998.40	29.48	-36.30	29.48	46.76	309.08	0.70
7100.00	2.21	235.25	7098.32	27.80	-39.92	27.80	48.64	304.85	0.78
7200.00	2.42	228.55	7198.24	25.30	-43.09	25.30	49.96	300.42	0.34
7272.00	2.41	222.55	7270.17	23.18	-45.25	23.18	50.84	297.12	0.35



VES Survey International
West Texas
(432) 563-5444
Surveyor: Gene Heiss
Mossy Federal 2H /API 30-015-42736



VES Survey Date: 1/19/2015