VES SURVEY INTERNATIONAL

HOBBS OCD

NOV 24 2015

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October 1, 2015

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

Attn: Kanicia Castillo

RE: **North Lusk 32 State SWD No 001**

Please find enclosed a copy of the survey from 0' to 15,084' ran on the above referenced well.

Sincerely,

Keith Havelka
Operations

STATE OF TEXAS §
§
COUNTY OF NUECES §

This instrument was acknowledged before me on the 1 day of October, A.D., 2015, by Keith Havelka.

Jennifer Ann Byerly
Notary Public, State of Texas

JENNIFER ANN BYERLY
Notary Public, State of Texas
My Commission Expires
August 16, 2017

VES Survey International
P.O. Box 261021, Corpus Christi, Texas 78426
T (361) 767-0602 F (361) 767-0612
www.vessurvey.com

DEC 14 2015

Company: Concho
Lease/Well: North Lusk 32 State SWD No/001
Location: K-32-18-S-32-E-1550-S1800 -W-LEA
Rig Name: Precision 590
State/County: New Mexico/Lea
VS-Azi: 0.00 Degrees
Latitude: 32.70091, Longitude: -103.79071
Grid North = True North -0.29 degs

RKB : 25 Feet

DRILLOG HA GYRO SURVEY CALCULATIONS
Filename: gyro survey.ut
Minimum Curvature Method
Report Date/Time: 10/1/2015 / 12:29

VES Survey International
Fort Worth Tx
Surveyor: Jason Wilson
(817) 718-1320
North Lusk 32 State SWD No 001 / API 30-025-41525

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	****
200.00	0.13	275.42	200.00	0.02	-0.23	0.02	0.23	275.42	0.07
400.00	0.14	257.83	400.00	-0.01	-0.71	-0.01	0.71	269.24	0.02
600.00	0.29	226.24	600.00	-0.41	-1.32	-0.41	1.38	252.57	0.09
800.00	0.81	278.43	799.99	-0.56	-3.08	-0.56	3.13	259.70	0.33
1000.00	0.98	281.98	999.96	0.00	-6.14	0.00	6.14	270.02	0.09
1200.00	0.93	278.70	1199.94	0.60	-9.41	0.60	9.43	273.66	0.04
1400.00	0.23	321.12	1399.93	1.16	-11.26	1.16	11.32	275.86	0.39
1600.00	0.26	75.23	1599.93	1.58	-11.07	1.58	11.18	278.13	0.21
1800.00	0.49	61.94	1799.92	2.10	-9.86	2.10	10.08	282.04	0.12
2000.00	0.41	33.49	1999.91	3.10	-8.71	3.10	9.25	289.60	0.12
2200.00	0.59	33.95	2199.91	4.54	-7.75	4.54	8.98	300.40	0.09
2400.00	0.52	31.83	2399.90	6.17	-6.69	6.17	9.10	312.69	0.03
2600.00	0.62	18.14	2599.89	7.98	-5.87	7.98	9.91	323.65	0.08
2800.00	0.41	15.40	2799.88	9.69	-5.35	9.69	11.07	331.13	0.11
3000.00	0.70	6.80	2999.87	11.60	-5.01	11.60	12.63	336.63	0.15
3200.00	0.83	357.03	3199.85	14.27	-4.94	14.27	15.10	340.90	0.09
3400.00	0.71	353.05	3399.83	16.96	-5.17	16.96	17.73	343.05	0.07
3600.00	0.74	359.47	3599.82	19.48	-5.33	19.48	20.20	344.70	0.04

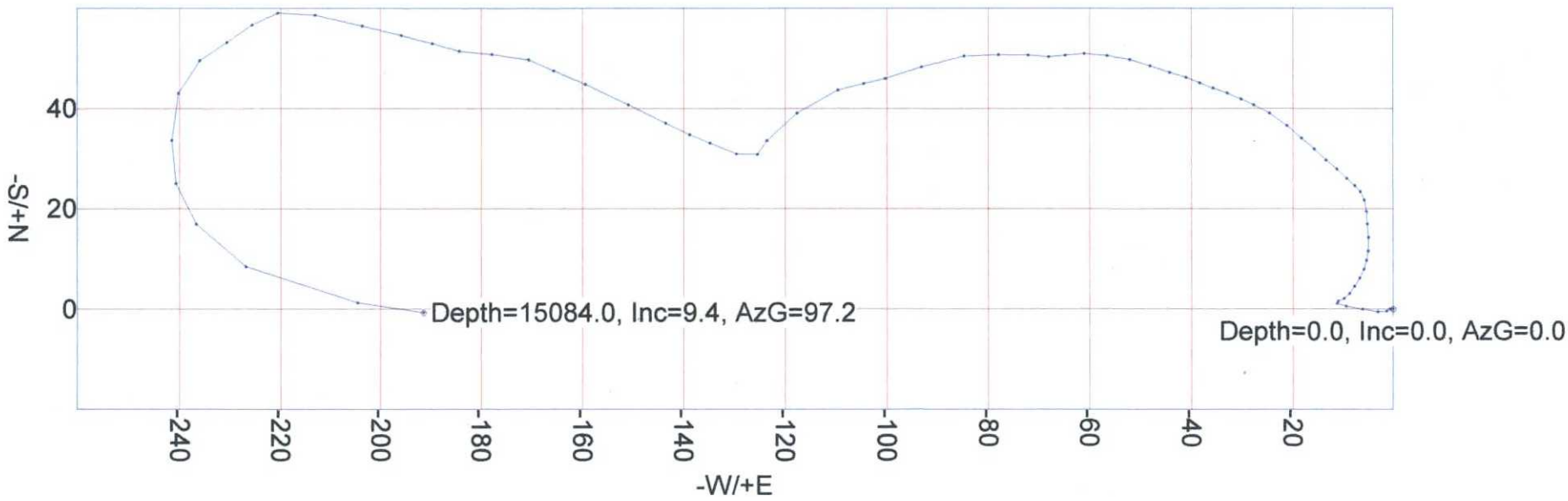
VES Survey Date: 9/24/2015

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
3800.00	0.59	336.29	3799.80	21.71	-5.76	21.71	22.46	345.15	0.15
4000.00	0.51	332.17	3999.80	23.44	-6.59	23.44	24.34	344.30	0.05
4200.00	0.47	300.31	4199.79	24.63	-7.70	24.63	25.81	342.63	0.13
4400.00	0.79	318.51	4399.78	26.07	-9.32	26.07	27.69	340.33	0.19
4600.00	0.78	307.36	4599.76	27.94	-11.32	27.94	30.14	337.94	0.08
4800.00	0.84	311.62	4799.74	29.73	-13.50	29.73	32.65	335.59	0.04
5000.00	0.97	316.49	4999.71	31.92	-15.75	31.92	35.60	333.75	0.08
5200.00	0.97	305.44	5199.68	34.12	-18.28	34.12	38.71	331.82	0.09
5400.00	1.21	314.02	5399.65	36.57	-21.17	36.57	42.26	329.93	0.15
5600.00	1.26	298.26	5599.60	39.08	-24.63	39.08	46.19	327.78	0.17
5800.00	0.74	296.16	5799.57	40.69	-27.72	40.69	49.23	325.73	0.26
6000.00	0.86	294.60	5999.55	41.88	-30.24	41.88	51.65	324.17	0.06
6200.00	0.85	292.28	6199.53	43.06	-32.97	43.06	54.23	322.56	0.02
6400.00	0.82	288.08	6399.51	44.07	-35.70	44.07	56.72	320.99	0.03
6600.00	0.81	294.49	6599.49	45.10	-38.35	45.10	59.20	319.62	0.05
6800.00	0.86	289.40	6799.47	46.18	-41.04	46.18	61.78	318.37	0.04
7000.00	1.09	286.01	6999.44	47.20	-44.28	47.20	64.72	316.83	0.12
7200.00	1.24	290.43	7199.40	48.48	-48.13	48.48	68.32	315.21	0.09
7400.00	1.17	284.97	7399.35	49.76	-52.14	49.76	72.07	313.67	0.07
7600.00	1.41	275.23	7599.30	50.52	-56.57	50.52	75.84	311.77	0.16
7800.00	1.18	276.13	7799.25	50.96	-61.08	50.96	79.54	309.84	0.12
8000.00	1.01	251.14	7999.22	50.61	-64.80	50.61	82.22	307.99	0.25
8200.00	0.95	279.38	8199.19	50.31	-68.11	50.31	84.68	306.45	0.24
8400.00	1.37	272.09	8399.15	50.67	-72.14	50.67	88.16	305.08	0.22
8600.00	1.98	269.13	8599.06	50.70	-77.99	50.70	93.02	303.03	0.31
8800.00	1.93	266.10	8798.94	50.42	-84.80	50.42	98.66	300.73	0.06
9000.00	3.12	249.35	8998.75	48.27	-93.26	48.27	105.01	297.37	0.70
9200.00	1.16	258.67	9198.60	45.95	-100.34	45.95	110.36	294.61	0.99
9400.00	1.36	254.96	9398.55	44.94	-104.62	44.94	113.86	293.24	0.11
9600.00	1.61	256.98	9598.48	43.68	-109.66	43.68	118.05	291.72	0.13
9800.00	3.79	232.98	9798.25	39.06	-117.69	39.06	124.01	288.36	1.21
10000.00	0.94	202.50	9998.07	33.57	-123.60	33.57	128.08	285.19	1.51
10200.00	0.99	225.81	10198.04	30.84	-125.48	30.84	129.21	283.81	0.20
10400.00	1.84	294.03	10397.99	30.94	-129.65	30.94	133.29	283.42	0.87
10600.00	1.39	290.37	10597.91	33.09	-134.85	33.09	138.85	283.79	0.23
10800.00	1.11	295.21	10797.86	34.76	-138.88	34.76	143.16	284.05	0.15
11000.00	1.91	296.63	10997.79	37.07	-143.60	37.07	148.31	284.48	0.40
11200.00	2.80	296.46	11197.62	40.74	-150.95	40.74	156.35	285.10	0.45
11400.00	2.60	294.52	11397.40	44.80	-159.45	44.80	165.63	285.69	0.11

VES Survey Date: 9/24/2015

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
11600.00	1.31	291.53	11597.28	47.52	-165.71	47.52	172.39	286.00	0.65
11800.00	1.79	295.40	11797.20	49.70	-170.65	49.70	177.74	286.24	0.25
12000.00	2.51	266.78	11997.07	50.79	-177.85	50.79	184.96	285.94	0.64
12200.00	1.29	292.63	12196.96	51.41	-184.30	51.41	191.34	285.59	0.73
12400.00	1.89	281.95	12396.88	52.96	-189.60	52.96	196.85	285.61	0.33
12600.00	1.88	286.84	12596.77	54.59	-195.97	54.59	203.43	285.57	0.08
12800.00	2.72	281.02	12796.61	56.45	-203.78	56.45	211.45	285.48	0.43
13000.00	2.80	284.81	12996.37	58.61	-213.16	58.61	221.07	285.37	0.10
13200.00	1.63	253.29	13196.23	59.04	-220.60	59.04	228.37	284.98	0.83
13400.00	1.65	237.29	13396.15	56.67	-225.74	56.67	232.74	284.09	0.23
13600.00	1.86	233.32	13596.05	53.18	-230.76	53.18	236.81	282.98	0.12
13800.00	1.89	238.79	13795.95	49.54	-236.18	49.54	241.32	281.85	0.09
14000.00	2.85	194.78	13995.79	43.02	-240.27	43.02	244.09	280.15	0.99
14200.00	2.62	180.36	14195.56	33.65	-241.57	33.65	243.90	277.93	0.36
14400.00	2.37	168.09	14395.38	25.04	-240.74	25.04	242.04	275.94	0.29
14600.00	2.88	143.26	14595.17	16.96	-236.88	16.96	237.48	274.09	0.62
14800.00	4.73	122.67	14794.73	8.48	-226.93	8.48	227.09	272.14	1.14
15000.00	8.99	100.13	14993.29	1.27	-204.60	1.27	204.60	270.36	2.48
15084.00	9.41	97.19	15076.21	-0.74	-191.33	-0.74	191.33	269.78	0.76

VES Survey International
Fort Worth Tx
Surveyor: Jason Wilson
(817) 718-1320
North Lusk 32 State SWD No 001 / API 30-025-41525



VES Survey Date: 9/24/2015

VES SURVEY INTERNATIONAL

I Jason Wilson certify that I am employed by Vaughn Energy Services. That I did on the day(s) of 09/25/15 through 09/25/15 conduct or supervise the taking of a Ha Gyro survey from a depth of 0 feet to a depth of 15084 feet; that the data is true, correct, complete and within the limitations of the tool as set forth by Vaughn Energy Services, that I am authorized and qualified to make this report; that this survey was conducted at the request of Concho for the North Lusk 32 State SWD Well # 1 API # 30-025-41525 in Lea County / Parish New Mexico ; and that I have reviewed this report and find that it conforms to the principles and procedures as set forth by Vaughn Energy Services

Jason Wilson
Service Technician
Vaughn Energy Services