

April 15, 2016

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

30.015.42825

Attn: Kanicia Castillo

RE: **Screech Owl Federal No 001H**

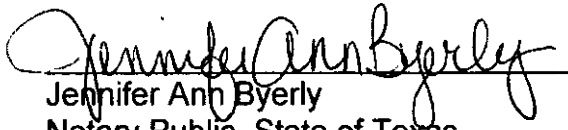
Please find enclosed a copy of the survey from 0' to 6885' ran on the above referenced well.

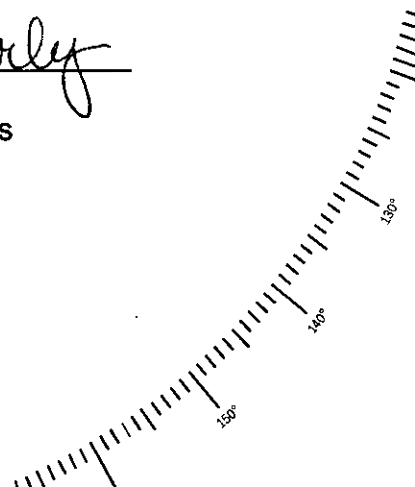
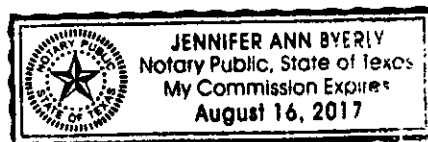
Sincerely,

Keith Havelka
Operations

STATE OF TEXAS §
 §
COUNTY OF NUECES §

This instrument was acknowledged before me on the 15th day of April,
A.D., 2016, by Keith Havelka.

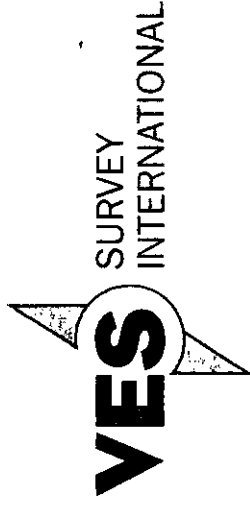

Jennifer Ann Byerly
Notary Public, State of Texas





Company: Concho

Lease/Well: Screech Owl Federal No/001H



Rig Name: Latshaw 44

State/County: New Mexico/Eddy

VS-Azi: 0.00 Degrees

Latitude: 32.03493, Longitude: -104.23518

Grid North = True North -0.05 degs (NAD 27)

Grid Correction Applied = -0.05 degs

Depth Reference : RKB = 25 Feet

DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: gyro survey.ut

Minimum Curvature Method

Report Date/Time: 4/15/2016 / 10:18

VES Survey International
Midland, TX

432-563-5444

Surveyor: Andrew Askew

Screech Owl Federal No 001H / API 30-015-42825

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	0.19	43.05	100.00	0.12	0.12	0.12	0.17	43.05	0.19
200.00	0.83	48.23	200.00	0.73	0.77	0.73	1.06	46.57	0.63
300.00	0.86	57.13	299.98	1.62	1.94	1.62	2.53	50.18	0.14
400.00	1.26	56.40	399.97	2.63	3.49	2.63	4.37	52.93	0.39
500.00	1.46	73.35	499.94	3.61	5.62	3.61	6.68	57.33	0.45
600.00	2.01	79.31	599.89	4.30	8.57	4.30	9.58	63.36	0.57
700.00	2.52	81.81	699.82	4.93	12.46	4.93	13.40	68.39	0.52
800.00	1.79	90.23	799.74	5.24	16.20	5.24	17.02	72.07	0.79
900.00	1.99	63.49	899.69	6.01	19.32	6.01	20.23	72.72	0.90
1000.00	1.44	35.97	999.65	7.80	21.61	7.80	22.98	70.15	0.98
1100.00	2.35	26.13	1099.59	10.66	23.25	10.66	25.58	65.37	0.96
1200.00	1.07	12.68	1199.55	13.41	24.36	13.41	27.80	61.17	1.34
1300.00	0.31	312.85	1299.54	14.50	24.36	14.50	28.35	59.24	0.95
1400.00	0.34	292.27	1399.54	14.80	23.89	14.80	28.10	58.22	0.12
1500.00	0.55	0.66	1499.53	15.39	23.62	15.39	28.19	56.91	0.53
1600.00	1.19	23.80	1599.52	16.82	24.04	16.82	29.34	55.03	0.72

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
1700.00	1.69	48.40	1699.49	18.75	25.56	18.75	31.70	53.74	0.79
1800.00	1.60	60.35	1799.45	20.42	27.88	20.42	34.56	53.78	0.35
1900.00	2.23	45.35	1899.40	22.48	30.49	22.48	37.88	53.59	0.80
2000.00	0.37	64.75	1999.37	23.99	32.16	23.99	40.12	53.28	1.89
2100.00	0.09	204.07	2099.36	24.05	32.42	24.05	40.37	53.43	0.43
2200.00	0.42	189.76	2199.36	23.62	32.33	23.62	40.04	53.84	0.34
2300.00	0.16	164.65	2299.36	23.12	32.30	23.12	39.72	54.41	0.29
2400.00	0.55	182.31	2399.36	22.50	32.32	22.50	39.38	55.15	0.40
2500.00	0.11	184.68	2499.36	21.93	32.29	21.93	39.04	55.82	0.44
2600.00	0.39	187.55	2599.36	21.50	32.24	21.50	38.75	56.30	0.28
2700.00	0.18	203.75	2699.36	21.02	32.13	21.02	38.39	56.81	0.22
2800.00	0.22	253.96	2799.36	20.82	31.88	20.82	38.07	56.86	0.18
2900.00	0.45	258.98	2899.35	20.69	31.31	20.69	37.53	56.55	0.23
3000.00	0.98	263.13	2999.35	20.51	30.07	20.51	36.40	55.71	0.53
3100.00	1.03	241.85	3099.33	19.98	28.43	19.98	34.75	54.90	0.38
3200.00	0.88	234.28	3199.32	19.11	27.01	19.11	33.08	54.72	0.20
3300.00	0.44	259.69	3299.31	18.59	26.01	18.59	31.97	54.44	0.52
3400.00	1.05	277.35	3399.30	18.64	24.72	18.64	30.96	52.98	0.65
3500.00	1.13	251.18	3499.28	18.44	22.87	18.44	29.38	51.13	0.50
3600.00	1.27	249.53	3599.26	17.73	20.90	17.73	27.41	49.69	0.15
3700.00	1.47	226.48	3699.23	16.46	18.93	16.46	25.08	48.99	0.58
3800.00	1.37	213.50	3799.20	14.58	17.33	14.58	22.65	49.94	0.34
3900.00	1.29	209.41	3899.18	12.60	16.12	12.60	20.46	51.99	0.13
4000.00	1.21	199.01	3999.15	10.62	15.22	10.62	18.56	55.11	0.24
4100.00	1.06	202.30	4099.13	8.76	14.53	8.76	16.96	58.92	0.16
4200.00	0.80	199.01	4199.12	7.24	13.95	7.24	15.71	62.58	0.27
4300.00	0.38	235.85	4299.11	6.39	13.45	6.39	14.89	64.59	0.55
4400.00	0.40	267.34	4399.11	6.19	12.82	6.19	14.24	64.25	0.21
4500.00	0.26	261.93	4499.11	6.14	12.25	6.14	13.70	63.39	0.15
4600.00	0.10	80.61	4599.11	6.12	12.11	6.12	13.57	63.19	0.36
4700.00	0.47	160.05	4699.11	5.75	12.33	5.75	13.61	64.99	0.46
4800.00	0.66	157.26	4799.10	4.84	12.69	4.84	13.58	69.12	0.19
4900.00	0.55	198.34	4899.10	3.86	12.76	3.86	13.33	73.19	0.44
5000.00	0.37	180.03	4999.10	3.07	12.61	3.07	12.98	76.31	0.23
5100.00	1.00	186.48	5099.09	1.88	12.51	1.88	12.65	81.44	0.63
5200.00	0.96	221.57	5199.07	0.39	11.86	0.39	11.86	88.09	0.59
5300.00	1.34	211.02	5299.05	-1.24	10.70	-1.24	10.77	96.59	0.44
5400.00	1.50	197.01	5399.02	-3.49	9.71	-3.49	10.32	109.76	0.38
5500.00	1.45	214.82	5498.99	-5.78	8.61	-5.78	10.37	123.88	0.46

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
5600.00	1.67	204.19	5598.95	-8.15	7.28	-8.15	10.93	138.21	0.36
5700.00	1.11	233.42	5698.92	-10.06	5.91	-10.06	11.66	149.56	0.89
5800.00	0.21	224.26	5798.92	-10.76	5.01	-10.76	11.87	155.06	0.91
5900.00	0.24	170.98	5898.92	-11.10	4.91	-11.10	12.14	156.13	0.20
6000.00	0.76	214.91	5998.91	-11.85	4.57	-11.85	12.70	158.93	0.61
6100.00	0.93	215.10	6098.90	-13.06	3.72	-13.06	13.58	164.10	0.17
6200.00	1.31	207.91	6198.88	-14.74	2.72	-14.74	14.98	169.55	0.40
6300.00	2.15	213.58	6298.84	-17.31	1.15	-17.31	17.35	176.21	0.86
6400.00	2.36	232.16	6398.76	-20.14	-1.52	-20.14	20.19	184.32	0.76
6500.00	1.61	250.20	6498.70	-21.88	-4.47	-21.88	22.33	191.55	0.97
6600.00	1.85	282.40	6598.66	-22.01	-7.37	-22.01	23.21	198.52	0.99
6700.00	0.60	339.49	6698.63	-21.17	-9.13	-21.17	23.06	203.33	1.61
6800.00	1.28	308.38	6798.62	-19.99	-10.19	-19.99	22.44	207.01	0.83
6885.00	1.87	290.90	6883.59	-18.90	-12.23	-18.90	22.52	212.90	0.88



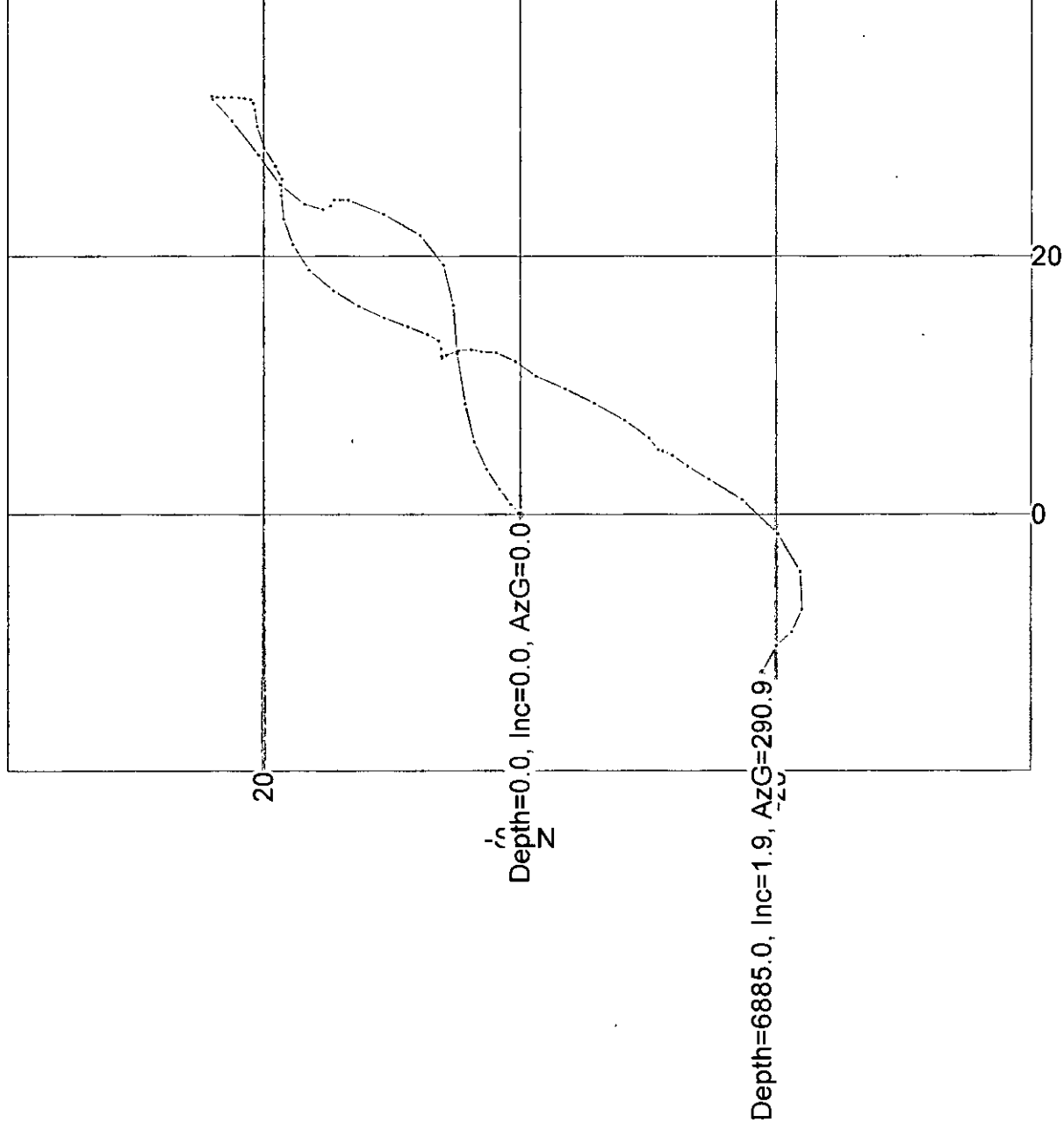
VES Survey International

Midland, TX

432-563-5444

Surveyor: Andrew Askew

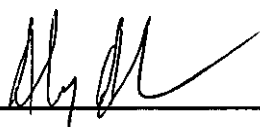
Screech Owl Federal No 001H / API 30-015-42825



V.E.S. Survey Date: 4/5/2016



I Andy Askew certify that I am employed by VES Survey International. That I did on the day(s) of 04/06/16 through 04/06/16 conduct or supervise the taking of a Rate Gyro survey from a depth of 0.00 feet to a depth of 6,885.00 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 Screech Owl Federal Well # 1H API # 30-015-42825 in Eddy 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 VES Survey International.



Andy Askew
Service Technician
VES Survey International



COG Operating LLC

Eddy County, NM (NAD-27 2015)

Screech Owl Federal #1H

Screech Owl Federal #1H

30-015-42825

Lateral #1

Design: Lateral #1

Survey Report - Geographic

28 April, 2016





TDS
Survey Report - Geographic



Company:	COG Operating LLC	Local Co-ordinate Reference:	Well Screech Owl Federal #1H
Project:	Eddy County, NM (NAD-27 2015)	TVD Reference:	KB @ 3367.50usft (Latshaw 44)
Site:	Screech Owl Federal #1H	MD Reference:	KB @ 3367.50usft (Latshaw 44)
Well:	Screech Owl Federal #1H	North Reference:	Grid
Wellbore:	Lateral #1	Survey Calculation Method:	Minimum Curvature
Design:	Lateral #1	Database:	EDM 5000.1 Single User Db

Project	Eddy County, NM (NAD-27 2015)		
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	Screech Owl Federal #1H		
Site Position:		Northing:	376,447.40 usft
From:	Map	Easting:	530,415.40 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13.20 in
		Latitude:	32° 2' 5.750 N
		Longitude:	104° 14' 6.649 W
		Grid Convergence:	0.05 °

Well:	Screech Owl Federal #1H		
Well Position	+N/-S	0.00 usft	Northing:
	+E/-W	0.00 usft	Easting:
Position Uncertainty	0.00 usft	Wellhead Elevation:	0.00 usft
		Latitude:	32° 2' 5.750 N
		Longitude:	104° 14' 6.649 W
		Ground Level:	3,342.50 usft

Wellbore	Lateral #1		
Magnetics	Model Name	Sample Date	Declination
	IGRF2015	3/10/2016	(°)
			7.38
			Dip Angle
			(°)
			59.79
			Field Strength
			(nT)
			47,884

Design	Lateral #1		
Audit Notes:			
Version:	1.0	Phase:	ACTUAL
		Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.00	0.00	0.00
			Direction
			(°)
			179.16

Survey Program	Date	4/20/2016		
From	To	Survey (Wellbore)	Tool Name	Description
(usft)	(usft)			
100.00	6,885.00	VES Gyro #1 (Lateral #1)	VES-ISCWSA-GYRO-3	Biaxial Semi-Cont. Gyro
6,936.00	17,555.00	TDS MWD #2 (Lateral #1)	MWD	MWD - Standard

Survey									
Measured			Vertical			Map	Map		
Depth	Inclination	Azimuth	Depth	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
0.00	0.00	0.00	0.00	0.00	0.00	376,447.40	530,415.40	32° 2' 5.750 N	104° 14' 6.649 W
100.00	0.19	43.05	100.00	0.12	0.11	376,447.52	530,415.52	32° 2' 5.751 N	104° 14' 6.648 W
200.00	0.83	48.23	200.00	0.72	0.77	376,448.12	530,416.17	32° 2' 5.757 N	104° 14' 6.640 W
300.00	0.86	57.13	299.98	1.61	1.94	376,449.01	530,417.34	32° 2' 5.766 N	104° 14' 6.626 W
400.00	1.26	56.40	399.97	2.63	3.48	376,450.03	530,418.89	32° 2' 5.776 N	104° 14' 6.608 W
500.00	1.46	73.35	499.94	3.60	5.62	376,451.00	530,421.02	32° 2' 5.785 N	104° 14' 6.584 W
600.00	2.01	79.31	599.89	4.29	8.56	376,451.69	530,423.97	32° 2' 5.792 N	104° 14' 6.549 W
700.00	2.52	81.81	699.81	4.93	12.46	376,452.33	530,427.86	32° 2' 5.798 N	104° 14' 6.504 W
800.00	1.79	90.23	799.74	5.24	16.20	376,452.64	530,431.60	32° 2' 5.801 N	104° 14' 6.461 W
900.00	1.99	63.49	899.69	6.01	19.32	376,453.41	530,434.72	32° 2' 5.809 N	104° 14' 6.424 W
1,000.00	1.44	35.97	999.65	7.80	21.61	376,455.20	530,437.01	32° 2' 5.827 N	104° 14' 6.398 W



TDS
Survey Report - Geographic



Company:	COG Operating LLC	Local Co-ordinate Reference:	Well Screech Owl Federal #1H
Project:	Eddy County, NM (NAD-27 2015)	TVD Reference:	KB @ 3367.50usft (Latshaw 44)
Site:	Screech Owl Federal #1H	MD Reference:	KB @ 3367.50usft (Latshaw 44)
Well:	Screech Owl Federal #1H	North Reference:	Grid
Wellbore:	Lateral #1	Survey Calculation Method:	Minimum Curvature
Design:	Lateral #1	Database:	EDM 5000.1 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
1,100.00	2.35	26.13	1,099.59	10.66	23.25	376,458.06	530,438.65	32° 2' 5.855 N	104° 14' 6.379 W	
1,200.00	1.07	12.68	1,199.55	13.41	24.36	376,460.81	530,439.76	32° 2' 5.882 N	104° 14' 6.366 W	
1,300.00	0.31	312.85	1,299.54	14.50	24.36	376,461.90	530,439.77	32° 2' 5.893 N	104° 14' 6.366 W	
1,400.00	0.34	292.27	1,399.54	14.80	23.89	376,462.20	530,439.29	32° 2' 5.896 N	104° 14' 6.371 W	
1,500.00	0.55	0.66	1,499.53	15.39	23.62	376,462.79	530,439.02	32° 2' 5.902 N	104° 14' 6.374 W	
1,600.00	1.19	23.80	1,599.52	16.82	24.05	376,464.22	530,439.45	32° 2' 5.916 N	104° 14' 6.369 W	
1,700.00	1.69	48.40	1,699.49	18.75	25.57	376,466.15	530,440.97	32° 2' 5.935 N	104° 14' 6.352 W	
1,800.00	1.60	60.35	1,799.45	20.42	27.88	376,467.82	530,443.29	32° 2' 5.952 N	104° 14' 6.325 W	
1,900.00	2.23	45.35	1,899.40	22.48	30.48	376,469.88	530,445.88	32° 2' 5.972 N	104° 14' 6.295 W	
2,000.00	0.37	64.75	1,999.37	23.99	32.16	376,471.38	530,447.56	32° 2' 5.987 N	104° 14' 6.275 W	
2,100.00	0.09	204.07	2,099.36	24.05	32.42	376,471.45	530,447.82	32° 2' 5.987 N	104° 14' 6.272 W	
2,200.00	0.42	189.76	2,199.36	23.62	32.32	376,471.02	530,447.73	32° 2' 5.983 N	104° 14' 6.273 W	
2,300.00	0.16	164.65	2,299.36	23.12	32.30	376,470.52	530,447.70	32° 2' 5.978 N	104° 14' 6.273 W	
2,400.00	0.55	182.31	2,399.36	22.51	32.32	376,469.91	530,447.72	32° 2' 5.972 N	104° 14' 6.273 W	
2,500.00	0.11	184.68	2,499.36	21.93	32.29	376,469.33	530,447.69	32° 2' 5.966 N	104° 14' 6.274 W	
2,600.00	0.39	187.55	2,599.36	21.50	32.24	376,468.90	530,447.64	32° 2' 5.962 N	104° 14' 6.274 W	
2,700.00	0.18	203.75	2,699.36	21.02	32.13	376,468.42	530,447.53	32° 2' 5.957 N	104° 14' 6.275 W	
2,800.00	0.22	253.96	2,799.36	20.82	31.88	376,468.22	530,447.28	32° 2' 5.955 N	104° 14' 6.278 W	
2,900.00	0.45	258.98	2,899.35	20.69	31.31	376,468.09	530,446.71	32° 2' 5.954 N	104° 14' 6.285 W	
3,000.00	0.98	263.13	2,999.35	20.52	30.08	376,467.91	530,445.48	32° 2' 5.952 N	104° 14' 6.299 W	
3,100.00	1.03	241.85	3,099.33	19.99	28.43	376,467.39	530,443.84	32° 2' 5.947 N	104° 14' 6.318 W	
3,200.00	0.88	234.28	3,199.32	19.12	27.02	376,466.52	530,442.42	32° 2' 5.939 N	104° 14' 6.335 W	
3,300.00	0.44	259.69	3,299.31	18.60	26.02	376,466.00	530,441.42	32° 2' 5.934 N	104° 14' 6.346 W	
3,400.00	1.05	277.35	3,399.30	18.65	24.73	376,466.05	530,440.13	32° 2' 5.934 N	104° 14' 6.361 W	
3,500.00	1.13	251.18	3,499.28	18.45	22.89	376,465.85	530,438.29	32° 2' 5.932 N	104° 14' 6.383 W	
3,600.00	1.27	249.53	3,599.26	17.74	20.92	376,465.14	530,436.32	32° 2' 5.925 N	104° 14' 6.406 W	
3,700.00	1.47	226.48	3,699.23	16.47	18.95	376,463.87	530,434.35	32° 2' 5.913 N	104° 14' 6.429 W	
3,800.00	1.37	213.50	3,799.20	14.59	17.36	376,461.99	530,432.76	32° 2' 5.894 N	104° 14' 6.447 W	
3,900.00	1.29	209.41	3,899.18	12.61	16.15	376,460.01	530,431.55	32° 2' 5.874 N	104° 14' 6.461 W	
4,000.00	1.21	199.01	3,999.15	10.64	15.25	376,458.03	530,430.65	32° 2' 5.855 N	104° 14' 6.472 W	
4,100.00	1.06	202.30	4,099.13	8.78	14.55	376,456.18	530,429.96	32° 2' 5.836 N	104° 14' 6.480 W	
4,200.00	0.80	199.01	4,199.12	7.27	13.98	376,454.66	530,429.38	32° 2' 5.821 N	104° 14' 6.486 W	
4,300.00	0.38	235.85	4,299.11	6.42	13.47	376,453.82	530,428.88	32° 2' 5.813 N	104° 14' 6.492 W	
4,400.00	0.40	267.34	4,399.11	6.22	12.85	376,453.62	530,428.25	32° 2' 5.811 N	104° 14' 6.500 W	
4,500.00	0.26	261.93	4,499.11	6.17	12.28	376,453.57	530,427.68	32° 2' 5.811 N	104° 14' 6.506 W	
4,600.00	0.10	80.61	4,599.11	6.15	12.14	376,453.55	530,427.54	32° 2' 5.810 N	104° 14' 6.508 W	
4,700.00	0.47	160.05	4,699.11	5.78	12.37	376,453.18	530,427.77	32° 2' 5.807 N	104° 14' 6.505 W	
4,800.00	0.66	157.26	4,799.10	4.86	12.73	376,452.26	530,428.13	32° 2' 5.798 N	104° 14' 6.501 W	
4,900.00	0.55	198.34	4,899.10	3.88	12.80	376,451.28	530,428.20	32° 2' 5.788 N	104° 14' 6.500 W	
5,000.00	0.37	180.03	4,999.10	3.10	12.65	376,450.50	530,428.05	32° 2' 5.780 N	104° 14' 6.502 W	
5,100.00	1.00	186.48	5,099.09	1.91	12.55	376,449.31	530,427.95	32° 2' 5.768 N	104° 14' 6.503 W	
5,200.00	0.96	221.57	5,199.07	0.41	11.90	376,447.81	530,427.30	32° 2' 5.754 N	104° 14' 6.511 W	
5,300.00	1.34	211.02	5,299.05	-1.21	10.74	376,446.18	530,426.14	32° 2' 5.738 N	104° 14' 6.524 W	
5,400.00	1.50	197.01	5,399.02	-3.47	9.75	376,443.93	530,425.15	32° 2' 5.715 N	104° 14' 6.536 W	
5,500.00	1.45	214.82	5,498.99	-5.76	8.65	376,441.64	530,424.05	32° 2' 5.693 N	104° 14' 6.549 W	
5,600.00	1.67	204.19	5,598.95	-8.13	7.33	376,439.27	530,422.73	32° 2' 5.669 N	104° 14' 6.564 W	
5,700.00	1.11	233.42	5,698.93	-10.03	5.95	376,437.37	530,421.35	32° 2' 5.650 N	104° 14' 6.580 W	
5,800.00	0.21	224.26	5,798.92	-10.74	5.05	376,436.66	530,420.45	32° 2' 5.643 N	104° 14' 6.590 W	
5,900.00	0.24	170.98	5,898.92	-11.08	4.95	376,436.32	530,420.35	32° 2' 5.640 N	104° 14' 6.591 W	
6,000.00	0.76	214.91	5,998.91	-11.83	4.60	376,435.57	530,420.01	32° 2' 5.633 N	104° 14' 6.596 W	
6,100.00	0.93	215.10	6,098.90	-13.04	3.76	376,434.36	530,419.16	32° 2' 5.621 N	104° 14' 6.605 W	
6,200.00	1.31	207.91	6,198.88	-14.71	2.76	376,432.69	530,418.16	32° 2' 5.604 N	104° 14' 6.617 W	
6,300.00	2.15	213.58	6,298.84	-17.28	1.18	376,430.11	530,416.59	32° 2' 5.579 N	104° 14' 6.635 W	
6,400.00	2.36	232.16	6,398.76	-20.11	-1.48	376,427.29	530,413.92	32° 2' 5.551 N	104° 14' 6.666 W	
6,500.00	1.61	250.20	6,498.70	-21.85	-4.43	376,425.55	530,410.97	32° 2' 5.533 N	104° 14' 6.701 W	



TDS
Survey Report - Geographic



Company:	COG Operating LLC	Local Co-ordinate Reference:	Well Screech Owl Federal #1H
Project:	Eddy County, NM (NAD-27 2015)	TVD Reference:	KB @ 3367.50usft (Latshaw 44)
Site:	Screech Owl Federal #1H	MD Reference:	KB @ 3367.50usft (Latshaw 44)
Well:	Screech Owl Federal #1H	North Reference:	Grid
Wellbore:	Lateral #1	Survey Calculation Method:	Minimum Curvature
Design:	Lateral #1	Database:	EDM 5000.1 Single User Db

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
6,600.00	1.85	282.40	6,598.66	-21.98	-7.33	376,425.42	530,408.08	32° 2' 5.532 N	104° 14' 6.734 W
6,700.00	0.60	339.49	6,698.64	-21.14	-9.09	376,426.26	530,406.32	32° 2' 5.541 N	104° 14' 6.755 W
6,800.00	1.28	308.38	6,798.62	-19.96	-10.15	376,427.44	530,405.26	32° 2' 5.552 N	104° 14' 6.767 W
6,885.00	1.87	290.90	6,883.59	-18.87	-12.18	376,428.52	530,403.22	32° 2' 5.563 N	104° 14' 6.791 W
6,936.00	1.60	291.20	6,934.57	-18.32	-13.63	376,429.08	530,401.78	32° 2' 5.568 N	104° 14' 6.807 W
First TDS MWD Survey									
6,966.00	1.70	287.70	6,964.55	-18.03	-14.44	376,429.37	530,400.96	32° 2' 5.571 N	104° 14' 6.817 W
6,997.00	2.20	232.00	6,995.54	-18.26	-15.35	376,429.14	530,400.05	32° 2' 5.569 N	104° 14' 6.827 W
7,028.00	5.10	202.50	7,026.47	-19.90	-16.34	376,427.50	530,399.06	32° 2' 5.553 N	104° 14' 6.839 W
7,059.00	8.70	194.60	7,057.25	-23.44	-17.46	376,423.96	530,397.94	32° 2' 5.518 N	104° 14' 6.852 W
7,090.00	13.00	188.60	7,087.69	-29.16	-18.58	376,418.24	530,396.83	32° 2' 5.461 N	104° 14' 6.865 W
7,121.00	17.30	186.30	7,117.60	-37.19	-19.60	376,410.20	530,395.80	32° 2' 5.382 N	104° 14' 6.877 W
7,151.00	21.40	184.10	7,145.90	-47.09	-20.48	376,400.31	530,394.92	32° 2' 5.284 N	104° 14' 6.887 W
7,182.00	25.30	183.40	7,174.36	-59.35	-21.28	376,388.05	530,394.12	32° 2' 5.162 N	104° 14' 6.897 W
7,213.00	29.00	183.20	7,201.94	-73.47	-22.09	376,373.93	530,393.31	32° 2' 5.023 N	104° 14' 6.906 W
7,243.00	32.40	183.00	7,227.73	-88.76	-22.92	376,358.64	530,392.48	32° 2' 4.871 N	104° 14' 6.916 W
7,274.00	36.10	182.60	7,253.35	-106.18	-23.77	376,341.21	530,391.63	32° 2' 4.699 N	104° 14' 6.926 W
7,305.00	39.50	181.70	7,277.84	-125.17	-24.48	376,322.23	530,390.92	32° 2' 4.511 N	104° 14' 6.935 W
7,336.00	41.90	181.90	7,301.34	-145.37	-25.11	376,302.03	530,390.29	32° 2' 4.311 N	104° 14' 6.942 W
7,367.00	44.80	182.20	7,323.88	-166.64	-25.88	376,280.76	530,389.53	32° 2' 4.101 N	104° 14' 6.951 W
7,398.00	47.60	182.80	7,345.33	-188.99	-26.85	376,258.41	530,388.55	32° 2' 3.880 N	104° 14' 6.963 W
7,429.00	51.30	183.60	7,365.48	-212.50	-28.17	376,234.90	530,387.23	32° 2' 3.647 N	104° 14' 6.978 W
7,460.00	55.30	184.30	7,384.01	-237.29	-29.89	376,210.11	530,385.51	32° 2' 3.402 N	104° 14' 6.999 W
7,492.00	58.50	184.40	7,401.48	-264.02	-31.92	376,183.38	530,383.48	32° 2' 3.137 N	104° 14' 7.023 W
7,524.00	61.70	183.90	7,417.43	-291.68	-33.93	376,155.72	530,381.47	32° 2' 2.863 N	104° 14' 7.046 W
7,555.00	64.60	182.60	7,431.43	-319.29	-35.49	376,128.11	530,379.91	32° 2' 2.590 N	104° 14' 7.065 W
7,587.00	67.60	181.90	7,444.39	-348.52	-36.64	376,098.88	530,378.76	32° 2' 2.301 N	104° 14' 7.078 W
7,619.00	70.40	181.20	7,455.86	-378.38	-37.44	376,069.02	530,377.96	32° 2' 2.005 N	104° 14' 7.088 W
7,650.00	73.30	180.70	7,465.52	-407.83	-37.93	376,039.57	530,377.47	32° 2' 1.714 N	104° 14' 7.094 W
7,682.00	76.00	180.10	7,473.99	-438.69	-38.15	376,008.71	530,377.26	32° 2' 1.408 N	104° 14' 7.097 W
7,713.00	78.10	179.40	7,480.93	-468.90	-38.01	375,978.50	530,377.39	32° 2' 1.109 N	104° 14' 7.095 W
7,745.00	80.40	178.60	7,486.90	-500.33	-37.46	375,947.07	530,377.94	32° 2' 0.798 N	104° 14' 7.089 W
7,776.00	83.00	178.00	7,491.38	-530.99	-36.55	375,916.41	530,378.85	32° 2' 0.495 N	104° 14' 7.079 W
7,808.00	85.80	177.70	7,494.50	-562.81	-35.36	375,884.59	530,380.04	32° 2' 0.180 N	104° 14' 7.066 W
7,840.00	88.40	177.30	7,496.12	-594.73	-33.96	375,852.66	530,381.44	32° 1' 59.864 N	104° 14' 7.050 W
7,871.00	89.80	176.90	7,496.60	-625.69	-32.40	375,821.71	530,383.01	32° 1' 59.558 N	104° 14' 7.032 W
7,903.00	90.80	176.20	7,496.44	-657.63	-30.47	375,789.77	530,384.93	32° 1' 59.242 N	104° 14' 7.010 W
7,998.00	93.40	174.30	7,492.96	-752.23	-22.61	375,695.17	530,392.79	32° 1' 58.305 N	104° 14' 6.920 W
8,093.00	92.50	175.70	7,488.07	-846.74	-14.34	375,600.66	530,401.06	32° 1' 57.370 N	104° 14' 6.824 W
8,188.00	91.80	178.60	7,484.50	-941.54	-9.62	375,505.86	530,405.78	32° 1' 56.432 N	104° 14' 6.771 W
8,283.00	89.80	179.70	7,483.17	-1,036.52	-8.22	375,410.88	530,407.19	32° 1' 55.492 N	104° 14' 6.755 W
8,378.00	90.60	179.40	7,482.84	-1,131.51	-7.47	375,315.89	530,407.93	32° 1' 54.552 N	104° 14' 6.748 W
8,473.00	88.20	179.20	7,483.84	-1,226.49	-6.31	375,220.91	530,409.09	32° 1' 53.612 N	104° 14' 6.735 W
8,568.00	88.70	178.60	7,486.41	-1,321.44	-4.49	375,125.96	530,410.92	32° 1' 52.672 N	104° 14' 6.715 W
8,663.00	89.60	178.30	7,487.82	-1,416.39	-1.92	375,031.00	530,413.48	32° 1' 51.732 N	104° 14' 6.686 W
8,758.00	90.00	177.40	7,488.15	-1,511.33	1.65	374,936.07	530,417.05	32° 1' 50.793 N	104° 14' 6.646 W
8,852.00	91.50	176.20	7,486.92	-1,605.17	6.89	374,842.23	530,422.30	32° 1' 49.864 N	104° 14' 6.588 W
8,947.00	90.10	177.00	7,485.59	-1,699.99	12.53	374,747.41	530,427.93	32° 1' 48.925 N	104° 14' 6.521 W
9,041.00	90.00	178.60	7,485.51	-1,793.91	16.13	374,653.48	530,431.54	32° 1' 47.996 N	104° 14' 6.480 W
9,136.00	90.20	177.70	7,485.34	-1,888.86	19.20	374,558.53	530,434.60	32° 1' 47.056 N	104° 14' 6.446 W
9,230.00	91.10	179.40	7,484.28	-1,982.82	21.58	374,464.58	530,436.98	32° 1' 46.126 N	104° 14' 6.419 W
9,325.00	93.00	179.40	7,480.88	-2,077.75	22.57	374,369.65	530,437.98	32° 1' 45.187 N	104° 14' 6.409 W
9,420.00	92.30	179.90	7,476.49	-2,172.65	23.15	374,274.75	530,438.56	32° 1' 44.247 N	104° 14' 6.403 W
9,515.00	89.60	179.40	7,474.91	-2,267.62	23.73	374,179.77	530,439.14	32° 1' 43.308 N	104° 14' 6.397 W
9,610.00	89.60	178.50	7,475.58	-2,362.61	25.48	374,084.79	530,440.88	32° 1' 42.367 N	104° 14' 6.378 W

Company:	COG Operating LLC	Local Co-ordinate Reference:	Well Screech Owl Federal #1H
Project:	Eddy County, NM (NAD-27 2015)	TVD Reference:	KB @ 3367.50usft (Latshaw 44)
Site:	Screech Owl Federal #1H	MD Reference:	KB @ 3367.50usft (Latshaw 44)
Well:	Screech Owl Federal #1H	North Reference:	Grid
Wellbore:	Lateral #1	Survey Calculation Method:	Minimum Curvature
Design:	Lateral #1	Database:	EDM 5000.1 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
9,704.00	91.30	177.30	7,474.84	-2,456.53	28.92	373,990.86	530,444.32	32° 1' 41.438 N	104° 14' 6.339 W	
9,799.00	93.50	175.60	7,470.86	-2,551.26	34.79	373,896.14	530,450.20	32° 1' 40.500 N	104° 14' 6.272 W	
9,894.00	92.80	177.50	7,465.64	-2,645.94	40.50	373,801.46	530,455.90	32° 1' 39.563 N	104° 14' 6.206 W	
9,989.00	92.30	181.00	7,461.41	-2,740.82	41.74	373,706.58	530,457.15	32° 1' 38.624 N	104° 14' 6.193 W	
10,084.00	91.20	182.60	7,458.51	-2,835.73	38.76	373,611.67	530,454.16	32° 1' 37.685 N	104° 14' 6.229 W	
10,179.00	92.50	183.50	7,455.44	-2,930.54	33.71	373,516.86	530,449.11	32° 1' 36.747 N	104° 14' 6.288 W	
10,273.00	91.00	183.90	7,452.57	-3,024.30	27.65	373,423.10	530,443.05	32° 1' 35.819 N	104° 14' 6.360 W	
10,368.00	89.00	183.70	7,452.57	-3,119.08	21.35	373,328.32	530,436.75	32° 1' 34.881 N	104° 14' 6.434 W	
10,462.00	89.80	183.50	7,453.56	-3,212.89	15.45	373,234.51	530,430.85	32° 1' 33.953 N	104° 14' 6.503 W	
10,558.00	91.60	182.60	7,452.38	-3,308.74	10.34	373,138.66	530,425.74	32° 1' 33.004 N	104° 14' 6.564 W	
10,711.00	89.50	181.90	7,450.91	-3,461.61	4.34	372,985.79	530,419.74	32° 1' 31.491 N	104° 14' 6.635 W	
10,804.00	89.20	181.20	7,451.97	-3,554.57	1.82	372,892.83	530,417.22	32° 1' 30.571 N	104° 14' 6.665 W	
10,896.00	88.50	180.00	7,453.82	-3,646.54	0.86	372,800.86	530,416.26	32° 1' 29.661 N	104° 14' 6.677 W	
10,988.00	88.40	178.60	7,456.30	-3,738.50	1.98	372,708.90	530,417.38	32° 1' 28.751 N	104° 14' 6.665 W	
11,080.00	88.40	178.50	7,458.87	-3,830.43	4.31	372,616.96	530,419.71	32° 1' 27.841 N	104° 14' 6.639 W	
11,172.00	89.20	177.60	7,460.80	-3,922.36	7.44	372,525.04	530,422.84	32° 1' 26.931 N	104° 14' 6.604 W	
11,264.00	90.30	177.40	7,461.20	-4,014.27	11.45	372,433.13	530,426.85	32° 1' 26.022 N	104° 14' 6.558 W	
11,356.00	91.60	177.40	7,459.68	-4,106.16	15.62	372,341.24	530,431.02	32° 1' 25.112 N	104° 14' 6.511 W	
11,448.00	92.10	178.30	7,456.71	-4,198.05	19.07	372,249.35	530,434.47	32° 1' 24.203 N	104° 14' 6.472 W	
11,541.00	92.90	179.10	7,452.65	-4,290.93	21.18	372,156.47	530,436.58	32° 1' 23.283 N	104° 14' 6.448 W	
11,633.00	92.20	178.40	7,448.56	-4,382.82	23.19	372,064.58	530,438.59	32° 1' 22.374 N	104° 14' 6.426 W	
11,725.00	92.10	178.30	7,445.10	-4,474.71	25.83	371,972.68	530,441.23	32° 1' 21.465 N	104° 14' 6.396 W	
11,817.00	90.90	176.70	7,442.70	-4,566.59	29.84	371,880.81	530,445.25	32° 1' 20.555 N	104° 14' 6.350 W	
11,910.00	90.70	176.50	7,441.40	-4,659.42	35.36	371,787.98	530,450.76	32° 1' 19.637 N	104° 14' 6.287 W	
12,005.00	91.20	176.50	7,439.82	-4,754.23	41.16	371,693.17	530,456.56	32° 1' 18.698 N	104° 14' 6.221 W	
12,100.00	91.90	176.50	7,437.25	-4,849.02	46.96	371,598.38	530,462.36	32° 1' 17.760 N	104° 14' 6.155 W	
12,195.00	92.40	177.00	7,433.69	-4,943.80	52.34	371,503.60	530,467.74	32° 1' 16.822 N	104° 14' 6.093 W	
12,290.00	91.30	177.20	7,430.62	-5,038.62	57.14	371,408.78	530,472.54	32° 1' 15.884 N	104° 14' 6.038 W	
12,385.00	91.70	178.20	7,428.14	-5,133.51	60.95	371,313.89	530,476.35	32° 1' 14.944 N	104° 14' 5.995 W	
12,480.00	90.50	178.80	7,426.31	-5,228.46	63.44	371,218.94	530,478.84	32° 1' 14.005 N	104° 14' 5.967 W	
12,575.00	90.90	179.90	7,425.15	-5,323.45	64.52	371,123.95	530,479.92	32° 1' 13.065 N	104° 14' 5.956 W	
12,669.00	88.60	179.20	7,425.56	-5,417.43	65.25	371,029.96	530,480.66	32° 1' 12.134 N	104° 14' 5.948 W	
12,764.00	88.20	179.40	7,428.21	-5,512.39	66.41	370,935.01	530,481.82	32° 1' 11.195 N	104° 14' 5.936 W	
12,859.00	87.80	179.90	7,431.53	-5,607.33	66.99	370,840.07	530,482.40	32° 1' 10.255 N	104° 14' 5.930 W	
12,954.00	88.00	178.70	7,435.01	-5,702.26	68.15	370,745.14	530,483.56	32° 1' 9.316 N	104° 14' 5.917 W	
13,049.00	89.10	177.40	7,437.41	-5,797.17	71.39	370,650.23	530,486.79	32° 1' 8.376 N	104° 14' 5.881 W	
13,142.00	89.50	176.90	7,438.55	-5,890.05	76.01	370,557.35	530,491.41	32° 1' 7.457 N	104° 14' 5.828 W	
13,237.00	90.20	176.50	7,438.80	-5,984.89	81.48	370,462.51	530,496.88	32° 1' 6.518 N	104° 14' 5.766 W	
13,332.00	92.00	176.90	7,436.98	-6,079.71	86.95	370,367.69	530,502.35	32° 1' 5.580 N	104° 14' 5.703 W	
13,427.00	93.50	177.30	7,432.42	-6,174.47	91.75	370,272.92	530,507.15	32° 1' 4.642 N	104° 14' 5.648 W	
13,521.00	93.10	176.70	7,427.01	-6,268.19	96.66	370,179.21	530,512.06	32° 1' 3.715 N	104° 14' 5.592 W	
13,617.00	92.50	177.30	7,422.32	-6,363.94	101.68	370,083.46	530,517.08	32° 1' 2.767 N	104° 14' 5.535 W	
13,711.00	92.00	176.70	7,418.63	-6,457.74	106.59	369,989.66	530,521.99	32° 1' 1.838 N	104° 14' 5.479 W	
13,806.00	91.90	178.00	7,415.39	-6,552.58	110.98	369,894.82	530,526.38	32° 1' 0.900 N	104° 14' 5.429 W	
13,901.00	91.60	177.60	7,412.49	-6,647.47	114.63	369,799.93	530,530.03	32° 0' 59.961 N	104° 14' 5.388 W	
13,995.00	89.90	178.80	7,411.26	-6,741.41	117.58	369,705.99	530,532.98	32° 0' 59.031 N	104° 14' 5.354 W	
14,090.00	89.90	181.00	7,411.43	-6,836.40	117.74	369,611.00	530,533.15	32° 0' 58.091 N	104° 14' 5.353 W	
14,185.00	89.50	182.60	7,411.93	-6,931.35	114.76	369,516.05	530,530.16	32° 0' 57.151 N	104° 14' 5.389 W	
14,280.00	89.80	183.90	7,412.51	-7,026.19	109.38	369,421.21	530,524.78	32° 0' 56.213 N	104° 14' 5.453 W	
14,375.00	90.10	184.40	7,412.59	-7,120.94	102.50	369,326.45	530,517.90	32° 0' 55.275 N	104° 14' 5.533 W	
14,469.00	89.60	183.20	7,412.84	-7,214.73	96.27	369,232.66	530,511.67	32° 0' 54.347 N	104° 14' 5.607 W	
14,564.00	89.80	183.10	7,413.33	-7,309.59	91.05	369,137.81	530,506.45	32° 0' 53.408 N	104° 14' 5.668 W	
14,659.00	89.70	183.30	7,413.75	-7,404.44	85.75	369,042.96	530,501.15	32° 0' 52.469 N	104° 14' 5.731 W	
14,753.00	89.30	182.20	7,414.57	-7,498.33	81.24	368,949.07	530,496.64	32° 0' 51.540 N	104° 14' 5.784 W	
14,848.00	91.50	182.00	7,413.90	-7,593.26	77.76	368,854.14	530,493.16	32° 0' 50.601 N	104° 14' 5.826 W	

Company:	COG Operating LLC	Local Co-ordinate Reference:	Well Screech Owl Federal #1H
Project:	Eddy County, NM (NAD-27 2015)	TVD Reference:	KB @ 3367.50usft (Latshaw 44)
Site:	Screech Owl Federal #1H	MD Reference:	KB @ 3367.50usft (Latshaw 44)
Well:	Screech Owl Federal #1H	North Reference:	Grid
Wellbore:	Lateral #1	Survey Calculation Method:	Minimum Curvature
Design:	Lateral #1	Database:	EDM 5000.1 Single User Db

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
14,943.00	92.10	180.90	7,410.92	-7,688.18	75.35	368,759.22	530,490.76	32° 0' 49.662 N	104° 14' 5.855 W
15,037.00	90.90	178.90	7,408.46	-7,782.14	75.52	368,665.26	530,490.92	32° 0' 48.732 N	104° 14' 5.854 W
15,132.00	91.10	177.80	7,406.80	-7,877.08	78.25	368,570.32	530,493.66	32° 0' 47.792 N	104° 14' 5.823 W
15,226.00	91.20	177.50	7,404.81	-7,970.98	82.11	368,476.41	530,497.51	32° 0' 46.863 N	104° 14' 5.779 W
15,320.00	91.90	177.80	7,402.37	-8,064.87	85.96	368,382.53	530,501.36	32° 0' 45.933 N	104° 14' 5.736 W
15,414.00	92.70	178.40	7,398.60	-8,158.74	89.07	368,288.66	530,504.48	32° 0' 45.004 N	104° 14' 5.700 W
15,507.00	91.50	177.60	7,395.19	-8,251.62	92.32	368,195.78	530,507.72	32° 0' 44.085 N	104° 14' 5.664 W
15,601.00	92.20	177.60	7,392.16	-8,345.49	96.25	368,101.91	530,511.65	32° 0' 43.156 N	104° 14' 5.619 W
15,695.00	92.70	178.30	7,388.14	-8,439.34	99.61	368,008.06	530,515.01	32° 0' 42.227 N	104° 14' 5.581 W
15,789.00	91.80	178.10	7,384.45	-8,533.22	102.56	367,914.18	530,517.96	32° 0' 41.298 N	104° 14' 5.548 W
15,876.00	92.40	178.20	7,381.26	-8,620.12	105.37	367,827.28	530,520.77	32° 0' 40.438 N	104° 14' 5.516 W
15,970.00	92.60	177.80	7,377.16	-8,713.97	108.65	367,733.43	530,524.05	32° 0' 39.509 N	104° 14' 5.479 W
16,064.00	94.00	178.70	7,371.75	-8,807.77	111.51	367,639.63	530,526.91	32° 0' 38.581 N	104° 14' 5.447 W
16,158.00	93.40	178.70	7,365.68	-8,901.55	113.64	367,545.85	530,529.04	32° 0' 37.653 N	104° 14' 5.423 W
16,252.00	92.00	178.50	7,361.26	-8,995.41	115.93	367,451.99	530,531.34	32° 0' 36.724 N	104° 14' 5.397 W
16,347.00	91.40	177.80	7,358.44	-9,090.32	119.00	367,357.08	530,534.40	32° 0' 35.785 N	104° 14' 5.363 W
16,440.00	91.30	177.70	7,356.25	-9,183.22	122.65	367,264.18	530,538.05	32° 0' 34.865 N	104° 14' 5.321 W
16,534.00	90.50	178.20	7,354.77	-9,277.15	126.01	367,170.25	530,541.41	32° 0' 33.935 N	104° 14' 5.283 W
16,628.00	89.40	177.10	7,354.85	-9,371.07	129.87	367,076.33	530,545.27	32° 0' 33.006 N	104° 14' 5.239 W
16,723.00	89.70	177.00	7,355.60	-9,465.94	134.76	366,981.46	530,550.16	32° 0' 32.067 N	104° 14' 5.184 W
16,817.00	89.50	177.00	7,356.25	-9,559.81	139.68	366,887.59	530,555.08	32° 0' 31.138 N	104° 14' 5.128 W
16,911.00	88.20	177.90	7,358.14	-9,653.69	143.86	366,793.71	530,559.26	32° 0' 30.209 N	104° 14' 5.080 W
17,005.00	88.20	178.30	7,361.09	-9,747.59	146.97	366,699.80	530,562.37	32° 0' 29.279 N	104° 14' 5.045 W
17,100.00	88.70	178.40	7,363.66	-9,842.52	149.71	366,604.88	530,565.11	32° 0' 28.340 N	104° 14' 5.014 W
17,194.00	88.90	178.20	7,365.63	-9,936.46	152.49	366,510.94	530,567.90	32° 0' 27.410 N	104° 14' 4.983 W
17,288.00	88.40	177.90	7,367.85	-10,030.38	155.69	366,417.02	530,571.09	32° 0' 26.481 N	104° 14' 4.947 W
17,382.00	88.90	177.60	7,370.06	-10,124.28	159.38	366,323.12	530,574.78	32° 0' 25.551 N	104° 14' 4.905 W
17,476.00	89.20	177.90	7,371.62	-10,218.19	163.07	366,229.21	530,578.47	32° 0' 24.622 N	104° 14' 4.863 W
17,495.00	89.70	177.70	7,371.80	-10,237.18	163.80	366,210.22	530,579.20	32° 0' 24.434 N	104° 14' 4.855 W
Final MWD Survey									
17,555.00	89.70	177.70	7,372.12	-10,297.13	166.21	366,150.27	530,581.61	32° 0' 23.841 N	104° 14' 4.827 W
Projection to Bit/TD									

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment
6,885.00	6,883.59	-18.87	-12.18	Tie-In to VES Gyro
6,936.00	6,934.57	-18.32	-13.63	First TDS MWD Survey
17,495.00	7,371.80	-10,237.18	163.80	Final MWD Survey
17,555.00	7,372.12	-10,297.13	166.21	Projection to Bit/TD

Checked By: _____ Approved By: _____ Date: _____