



February 4, 2015

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

Attn: Kanicia Castillo

RE: Fez Fee 11H

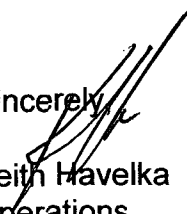
HOBBS OCD
JUN 02 2015

RECEIVED

30-025-42347

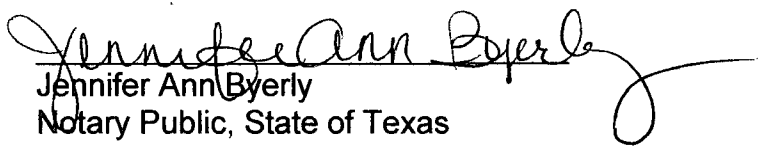
Please find enclosed a copy of the survey from 0' to 9000' ran on the above referenced well.

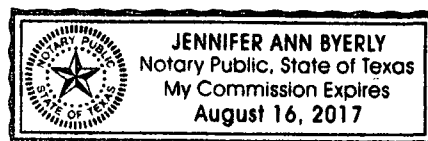
Sincerely,


Keith Havelka
Operations

STATE OF TEXAS §
 §
COUNTY OF NUECES §

This instrument was acknowledged before me on the 4 day of Feb,
A.D., 2015, by Keith Havelka.


Jennifer Ann Byerly
Notary Public, State of Texas



JUN 08 2015



Company: Concho
Lease/Well: Fez Fee/11H

Rig Name: Ensign 772
State/County: New Mexico/Lea
Latitude: 32.15, Longitude: -103.38
GRID North is 0.51 Degrees East of True North
VS-Azi: 0.00 Degrees



Depth Reference : RKB= 31 Feet

DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: gyro survey.ut
Minimum Curvature Method
Report Date/Time: 2/4/2015 / 15:56

VES Survey International
West Texas
(432) 563-5444
Surveyor: Bryan Massey
Fez Fee 11H / API 30-025-42347

HOBBS OCD

JUN 02 2015

RECEIVED

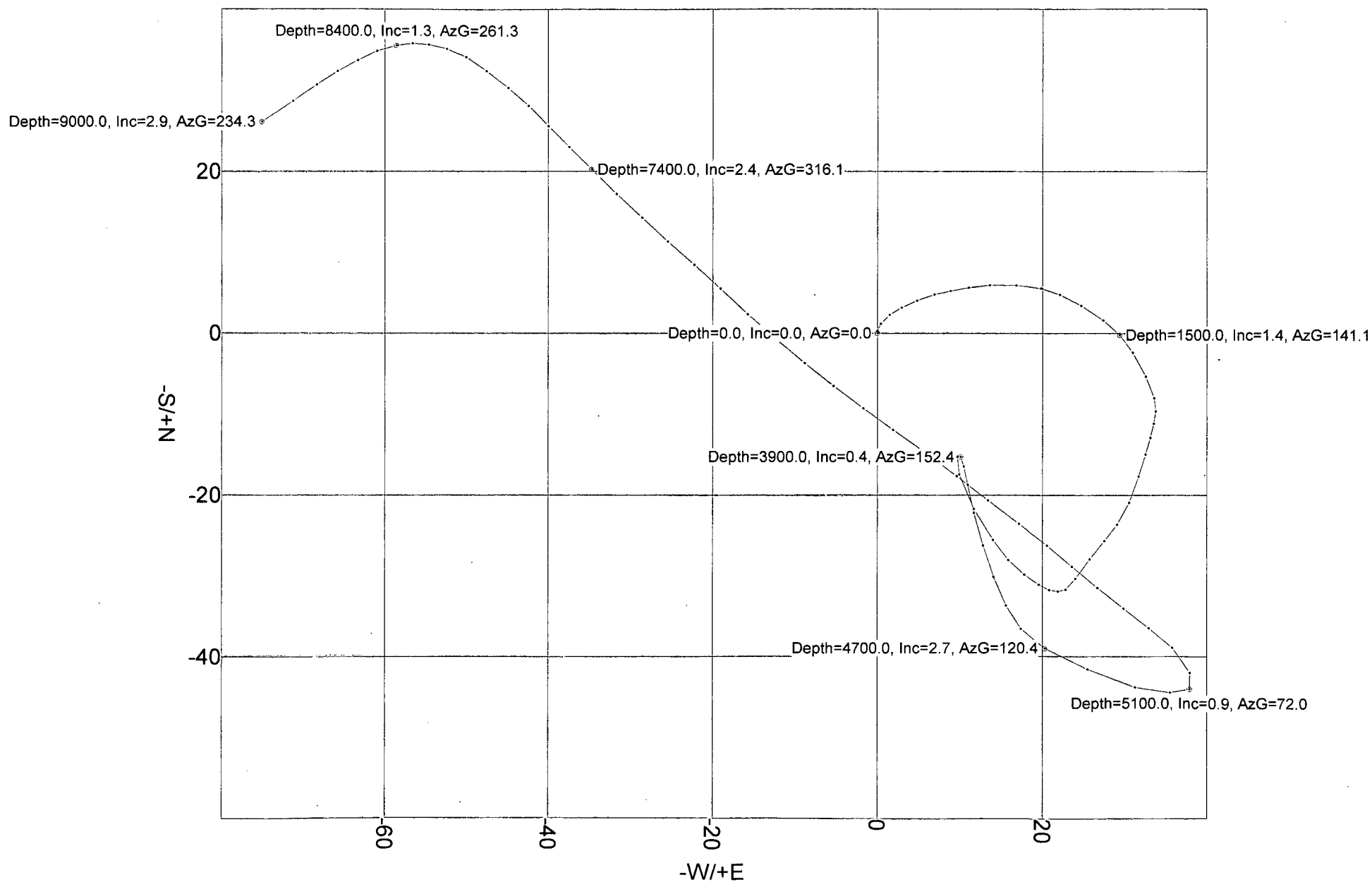
Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	****
100.00	0.34	354.41	100.00	0.30	-0.03	0.30	0.30	354.41	0.34
200.00	0.85	36.58	199.99	1.19	0.38	1.19	1.25	17.86	0.64
300.00	0.96	53.09	299.98	2.28	1.49	2.28	2.73	33.18	0.28
400.00	1.00	62.61	399.97	3.19	2.94	3.19	4.34	42.68	0.17
500.00	1.37	66.88	499.95	4.06	4.82	4.06	6.30	49.87	0.38
600.00	1.19	74.29	599.92	4.81	6.91	4.81	8.42	55.17	0.25
700.00	1.11	80.58	699.90	5.25	8.87	5.25	10.30	59.37	0.15
800.00	1.46	79.23	799.88	5.65	11.08	5.65	12.43	62.99	0.35
900.00	1.48	86.47	899.84	5.96	13.62	5.96	14.87	66.35	0.19
1000.00	2.19	92.88	999.79	5.95	16.82	5.95	17.84	70.52	0.74
1100.00	1.27	104.86	1099.74	5.57	19.80	5.57	20.56	74.29	0.98
1200.00	1.49	112.47	1199.72	4.79	22.07	4.79	22.58	77.77	0.29
1300.00	1.88	122.27	1299.67	3.41	24.66	3.41	24.90	82.12	0.49
1400.00	1.80	125.10	1399.62	1.63	27.33	1.63	27.38	86.58	0.13
1500.00	1.37	141.07	1499.58	-0.20	29.37	-0.20	29.37	90.39	0.61
1600.00	1.72	146.75	1599.55	-2.39	30.94	-2.39	31.03	94.41	0.38
1700.00	2.14	155.51	1699.49	-5.34	32.54	-5.34	32.97	99.31	0.51
1800.00	1.14	165.02	1799.45	-8.00	33.57	-8.00	34.51	103.40	1.02

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	0.80	186.88	1899.43	-9.65	33.74	-9.65	35.09	105.96	0.50
2000.00	0.95	191.02	1999.42	-11.15	33.50	-11.15	35.31	108.41	0.16
2100.00	1.10	194.94	2099.41	-12.89	33.09	-12.89	35.52	111.29	0.17
2200.00	1.37	196.30	2199.38	-14.97	32.51	-14.97	35.79	114.72	0.27
2300.00	1.88	197.99	2299.34	-17.67	31.67	-17.67	36.27	119.16	0.51
2400.00	2.08	201.60	2399.28	-20.92	30.50	-20.92	36.98	124.44	0.24
2500.00	1.44	217.54	2499.23	-23.60	29.06	-23.60	37.44	129.08	0.80
2600.00	1.51	217.49	2599.20	-25.65	27.49	-25.65	37.60	133.02	0.07
2700.00	1.80	218.62	2699.16	-27.93	25.70	-27.93	37.95	137.37	0.29
2800.00	1.60	212.77	2799.12	-30.33	23.97	-30.33	38.66	141.68	0.26
2900.00	0.52	248.61	2899.10	-31.67	22.78	-31.67	39.02	144.27	1.22
3000.00	0.59	263.85	2999.09	-31.89	21.85	-31.89	38.66	145.58	0.16
3100.00	0.66	292.40	3099.09	-31.73	20.81	-31.73	37.94	146.74	0.32
3200.00	0.98	301.67	3199.08	-31.06	19.55	-31.06	36.70	147.81	0.34
3300.00	1.47	308.22	3299.05	-29.82	17.82	-29.82	34.74	149.14	0.51
3400.00	1.56	317.55	3399.02	-28.02	15.90	-28.02	32.22	150.44	0.26
3500.00	2.03	327.14	3498.97	-25.53	14.02	-25.53	29.13	151.23	0.55
3600.00	3.13	330.44	3598.87	-21.68	11.71	-21.68	24.64	151.61	1.11
3700.00	2.21	347.12	3698.76	-17.43	9.94	-17.43	20.06	150.30	1.19
3800.00	0.43	33.07	3798.73	-15.24	9.71	-15.24	18.07	147.49	1.93
3900.00	0.45	152.43	3898.73	-15.28	10.10	-15.28	18.31	146.53	0.76
4000.00	0.97	166.98	3998.72	-16.44	10.47	-16.44	19.50	147.51	0.54
4100.00	1.71	168.50	4098.69	-18.73	10.96	-18.73	21.70	149.67	0.75
4200.00	2.34	167.53	4198.63	-22.18	11.70	-22.18	25.08	152.20	0.63
4300.00	2.45	161.13	4298.54	-26.20	12.83	-26.20	29.17	153.91	0.29
4400.00	2.25	163.08	4398.46	-30.10	14.09	-30.10	33.24	154.91	0.22
4500.00	2.21	150.91	4498.38	-33.66	15.60	-33.66	37.10	155.14	0.47
4600.00	1.71	144.78	4598.33	-36.56	17.40	-36.56	40.49	154.55	0.53
4700.00	2.69	120.37	4698.25	-38.97	20.28	-38.97	43.93	152.51	1.33
4800.00	3.95	114.16	4798.08	-41.56	25.45	-41.56	48.74	148.52	1.31
4900.00	3.18	107.37	4897.89	-43.80	31.24	-43.80	53.80	144.50	0.88
5000.00	1.86	83.90	4997.79	-44.46	35.50	-44.46	56.89	141.39	1.65
5100.00	0.95	71.97	5097.76	-44.03	37.90	-44.03	58.09	139.28	0.95
5200.00	2.23	336.77	5197.73	-41.98	37.92	-41.98	56.57	137.91	2.50
5300.00	2.19	313.10	5297.66	-38.89	35.76	-38.89	52.83	137.40	0.91
5400.00	2.12	307.89	5397.59	-36.45	32.90	-36.45	49.10	137.93	0.21
5500.00	2.35	308.76	5497.51	-34.03	29.84	-34.03	45.26	138.75	0.24
5600.00	2.34	308.63	5597.43	-31.47	26.65	-31.47	41.23	139.74	0.02
5700.00	2.31	312.01	5697.35	-28.84	23.55	-28.84	37.24	140.76	0.14

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	2.29	309.67	5797.27	-26.22	20.52	-26.22	33.29	141.95	0.10
5900.00	2.64	308.19	5897.17	-23.52	17.17	-23.52	29.11	143.87	0.36
6000.00	2.77	306.95	5997.06	-20.64	13.42	-20.64	24.62	146.96	0.14
6100.00	2.76	309.36	6096.95	-17.66	9.63	-17.66	20.11	151.39	0.12
6200.00	2.83	305.59	6196.83	-14.70	5.77	-14.70	15.79	158.58	0.20
6300.00	2.57	305.68	6296.72	-11.95	1.94	-11.95	12.11	170.80	0.25
6400.00	2.63	306.36	6396.61	-9.28	-1.74	-9.28	9.44	190.61	0.07
6500.00	2.59	308.16	6496.51	-6.52	-5.36	-6.52	8.44	219.41	0.09
6600.00	2.58	309.59	6596.41	-3.70	-8.87	-3.70	9.61	247.38	0.07
6700.00	2.65	311.78	6696.30	-0.72	-12.33	-0.72	12.35	266.64	0.12
6800.00	2.65	312.24	6796.20	2.37	-15.76	2.37	15.94	278.55	0.02
6900.00	2.58	315.12	6896.09	5.52	-19.06	5.52	19.84	286.15	0.15
7000.00	2.39	311.09	6996.00	8.48	-22.22	8.48	23.78	290.90	0.26
7100.00	2.54	312.55	7095.91	11.35	-25.42	11.35	27.84	294.06	0.17
7200.00	2.39	312.87	7195.81	14.27	-28.59	14.27	31.95	296.53	0.15
7300.00	2.53	313.69	7295.72	17.22	-31.71	17.22	36.08	298.50	0.14
7400.00	2.37	316.06	7395.63	20.23	-34.74	20.23	40.20	300.21	0.18
7500.00	2.07	314.08	7495.56	22.98	-37.47	22.98	43.96	301.51	0.31
7600.00	2.09	317.71	7595.49	25.58	-40.00	25.58	47.48	302.60	0.13
7700.00	1.89	314.67	7695.43	28.09	-42.40	28.09	50.86	303.53	0.22
7800.00	1.93	308.50	7795.37	30.30	-44.89	30.30	54.16	304.02	0.21
7900.00	1.92	308.75	7895.32	32.40	-47.51	32.40	57.51	304.29	0.01
8000.00	1.52	300.62	7995.27	34.12	-49.96	34.12	60.50	304.33	0.46
8100.00	1.43	284.71	8095.24	35.11	-52.31	35.11	63.00	303.87	0.42
8200.00	1.27	279.77	8195.21	35.62	-54.61	35.62	65.20	303.11	0.20
8300.00	1.00	266.70	8295.19	35.76	-56.58	35.76	66.93	302.29	0.37
8400.00	1.31	261.25	8395.17	35.53	-58.58	35.53	68.51	301.24	0.32
8500.00	1.56	248.02	8495.14	34.85	-60.97	34.85	70.23	299.75	0.41
8600.00	1.46	239.77	8595.11	33.70	-63.33	33.70	71.74	298.02	0.24
8700.00	1.79	243.52	8695.07	32.36	-65.83	32.36	73.35	296.18	0.34
8800.00	1.78	231.19	8795.02	30.69	-68.43	30.69	75.00	294.16	0.38
8900.00	2.30	238.55	8894.95	28.67	-71.36	28.67	76.90	291.89	0.59
9000.00	2.95	234.33	8994.85	26.12	-75.16	26.12	79.57	289.17	0.67



VES Survey International
West Texas
(432) 563-5444
Surveyor: Bryan Massey
Fez Fee 11H / API 30-025-42347



VES Survey Date: 1/27/2015



COG Operating, LLC

Lea County, NM
Sec 9, T25-S, R35-E
Fez Fee #11H

Wellbore #1

Design: Wellbore #1

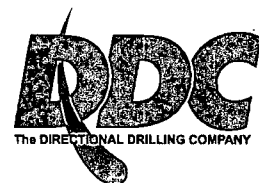
Survey Report - Geographic

23 February, 2015

HOBBS OCD

JUN 02 2015

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Survey Report - Geographic



Company:	COG Operating, LLC	Local Co-ordinate Reference:	Well Fez Fee #11H
Project:	Lea County, NM	TVD Reference:	Well @ 3288.0usft (Ensign #772)
Site:	Sec 9, T25-S, R35-E	MD Reference:	Well @ 3288.0usft (Ensign #772)
Well:	Fez Fee #11H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Compass

Project	Lea County, NM		
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		Sec 9, T25-S, R35-E			
Site Position:		Northing:	419,852.10 usft	Latitude:	32° 9' 2.515 N
From:	Map	Easting:	795,067.30 usft	Longitude:	103° 22' 47.797 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.51 °

Well	Fez Fee #11H					
Well Position	+N/-S	0.0 usft	Northing:	419,852.10 usft	Latitude:	32° 9' 2.515 N
	+E/-W	0.0 usft	Easting:	795,067.30 usft	Longitude:	103° 22' 47.797 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	0.0 usft	Ground Level:	3,257.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	1/14/2015	7.05	60.06	48,235

Design	Wellbore #1				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.0	0.0	0.0	88.27	

Survey Program	Date 2/23/2015			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
100.0	9,000.0	Gyro (Wellbore #1)	Good_gyro	Good Gyro
8,700.0	13,874.0	MWD (Wellbore #1)	MWD default	MWD - Standard

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.0	0.00	0.00	0.0	0.0	0.0	419,852.10	795,067.30	32° 9' 2.515 N	103° 22' 47.797 W
100.0	0.34	354.41	100.0	0.3	0.0	419,852.39	795,067.27	32° 9' 2.518 N	103° 22' 47.797 W
200.0	0.85	36.58	200.0	1.2	0.4	419,853.29	795,067.68	32° 9' 2.527 N	103° 22' 47.792 W
300.0	0.96	53.09	300.0	2.3	1.5	419,854.38	795,068.79	32° 9' 2.538 N	103° 22' 47.779 W
400.0	1.00	62.61	400.0	3.2	2.9	419,855.29	795,070.24	32° 9' 2.547 N	103° 22' 47.762 W
500.0	1.37	66.88	499.9	4.1	4.8	419,856.16	795,072.11	32° 9' 2.555 N	103° 22' 47.741 W
600.0	1.19	74.29	599.9	4.8	6.9	419,856.91	795,074.21	32° 9' 2.562 N	103° 22' 47.716 W
700.0	1.11	80.58	699.9	5.3	8.9	419,857.35	795,076.17	32° 9' 2.567 N	103° 22' 47.693 W
800.0	1.46	79.23	799.9	5.6	11.1	419,857.75	795,078.37	32° 9' 2.570 N	103° 22' 47.668 W
900.0	1.48	86.47	899.8	6.0	13.6	419,858.06	795,080.91	32° 9' 2.573 N	103° 22' 47.638 W
1,000.0	2.19	92.88	999.8	5.9	16.8	419,858.05	795,084.11	32° 9' 2.573 N	103° 22' 47.601 W

Company:	COG Operating, LLC	Local Co-ordinate Reference:	Well Fez Fee #11H
Project:	Lea County, NM	TVD Reference:	Well @ 3288.0usft (Ensign #772)
Site:	Sec 9, T25-S, R35-E	MD Reference:	Well @ 3288.0usft (Ensign #772)
Well:	Fez Fee #11H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Compass

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
1,100.0	1.27	104.86	1,099.7	5.6	19.8	419,857.67	795,087.09	32° 9' 2.569 N	103° 22' 47.566 W
1,200.0	1.49	112.47	1,199.7	4.8	22.1	419,856.89	795,089.36	32° 9' 2.561 N	103° 22' 47.540 W
1,300.0	1.88	122.27	1,299.7	3.4	24.7	419,855.51	795,091.95	32° 9' 2.547 N	103° 22' 47.510 W
1,400.0	1.80	125.10	1,399.6	1.6	27.3	419,853.73	795,094.62	32° 9' 2.529 N	103° 22' 47.479 W
1,500.0	1.37	141.07	1,499.6	-0.2	29.4	419,851.90	795,096.66	32° 9' 2.511 N	103° 22' 47.456 W
1,600.0	1.72	146.75	1,599.5	-2.4	30.9	419,849.72	795,098.23	32° 9' 2.489 N	103° 22' 47.437 W
1,700.0	2.14	155.51	1,699.5	-5.3	32.5	419,846.76	795,099.83	32° 9' 2.460 N	103° 22' 47.419 W
1,800.0	1.14	165.02	1,799.4	-8.0	33.6	419,844.10	795,100.86	32° 9' 2.433 N	103° 22' 47.407 W
1,900.0	0.80	186.88	1,899.4	-9.7	33.7	419,842.45	795,101.04	32° 9' 2.417 N	103° 22' 47.406 W
2,000.0	0.95	191.02	1,999.4	-11.2	33.5	419,840.94	795,100.79	32° 9' 2.402 N	103° 22' 47.409 W
2,100.0	1.10	194.94	2,099.4	-12.9	33.1	419,839.20	795,100.39	32° 9' 2.385 N	103° 22' 47.413 W
2,200.0	1.37	196.30	2,199.4	-15.0	32.5	419,837.13	795,099.80	32° 9' 2.364 N	103° 22' 47.420 W
2,300.0	1.88	197.99	2,299.3	-17.7	31.7	419,834.42	795,098.96	32° 9' 2.338 N	103° 22' 47.431 W
2,400.0	2.08	201.60	2,399.3	-20.9	30.5	419,831.17	795,097.79	32° 9' 2.306 N	103° 22' 47.445 W
2,500.0	1.44	217.54	2,499.2	-23.6	29.1	419,828.49	795,096.35	32° 9' 2.279 N	103° 22' 47.462 W
2,600.0	1.51	217.49	2,599.2	-25.7	27.5	419,826.45	795,094.79	32° 9' 2.259 N	103° 22' 47.480 W
2,700.0	1.80	218.62	2,699.2	-27.9	25.7	419,824.17	795,093.00	32° 9' 2.237 N	103° 22' 47.501 W
2,800.0	1.60	212.77	2,799.1	-30.3	24.0	419,821.77	795,091.27	32° 9' 2.213 N	103° 22' 47.521 W
2,900.0	0.52	248.61	2,899.1	-31.7	22.8	419,820.43	795,090.09	32° 9' 2.200 N	103° 22' 47.535 W
3,000.0	0.59	263.85	2,999.1	-31.9	21.9	419,820.21	795,089.16	32° 9' 2.198 N	103° 22' 47.546 W
3,100.0	0.66	292.40	3,099.1	-31.7	20.8	419,820.38	795,088.11	32° 9' 2.200 N	103° 22' 47.558 W
3,200.0	0.98	301.67	3,199.1	-31.1	19.6	419,821.04	795,086.85	32° 9' 2.206 N	103° 22' 47.573 W
3,300.0	1.47	308.22	3,299.1	-29.8	17.8	419,822.29	795,085.12	32° 9' 2.219 N	103° 22' 47.593 W
3,400.0	1.56	317.55	3,399.0	-28.0	15.9	419,824.08	795,083.19	32° 9' 2.237 N	103° 22' 47.615 W
3,500.0	2.03	327.14	3,499.0	-25.5	14.0	419,826.58	795,081.31	32° 9' 2.262 N	103° 22' 47.637 W
3,600.0	3.13	330.44	3,598.9	-21.7	11.7	419,830.44	795,079.00	32° 9' 2.300 N	103° 22' 47.663 W
3,700.0	2.21	347.12	3,698.8	-17.4	9.9	419,834.69	795,077.22	32° 9' 2.342 N	103° 22' 47.683 W
3,800.0	0.43	33.07	3,798.7	-15.2	9.7	419,836.89	795,077.00	32° 9' 2.364 N	103° 22' 47.686 W
3,900.0	0.45	152.43	3,898.7	-15.2	10.1	419,836.85	795,077.39	32° 9' 2.364 N	103° 22' 47.681 W
4,000.0	0.97	166.98	3,998.7	-16.4	10.5	419,835.68	795,077.76	32° 9' 2.352 N	103° 22' 47.677 W
4,100.0	1.71	168.50	4,098.7	-18.7	10.9	419,833.40	795,078.25	32° 9' 2.329 N	103° 22' 47.672 W
4,200.0	2.34	167.53	4,198.6	-22.2	11.7	419,829.94	795,078.99	32° 9' 2.295 N	103° 22' 47.663 W
4,300.0	2.45	161.13	4,298.5	-26.2	12.8	419,825.92	795,080.12	32° 9' 2.255 N	103° 22' 47.651 W
4,400.0	2.25	163.08	4,398.5	-30.1	14.1	419,822.02	795,081.38	32° 9' 2.217 N	103° 22' 47.636 W
4,500.0	2.21	150.91	4,498.4	-33.6	15.6	419,818.46	795,082.89	32° 9' 2.181 N	103° 22' 47.619 W
4,600.0	1.71	144.78	4,598.3	-36.5	17.4	419,815.56	795,084.69	32° 9' 2.152 N	103° 22' 47.599 W
4,700.0	2.69	120.37	4,698.3	-38.9	20.3	419,813.15	795,087.57	32° 9' 2.128 N	103° 22' 47.565 W
4,800.0	3.95	114.16	4,798.1	-41.5	25.4	419,810.56	795,092.74	32° 9' 2.102 N	103° 22' 47.505 W
4,900.0	3.18	107.37	4,897.9	-43.8	31.2	419,808.32	795,098.53	32° 9' 2.080 N	103° 22' 47.438 W
5,000.0	1.86	83.90	4,997.8	-44.4	35.5	419,807.66	795,102.79	32° 9' 2.073 N	103° 22' 47.389 W
5,100.0	0.95	71.97	5,097.8	-44.0	37.9	419,808.09	795,105.19	32° 9' 2.077 N	103° 22' 47.361 W
5,200.0	2.23	336.77	5,197.7	-42.0	37.9	419,810.14	795,105.21	32° 9' 2.097 N	103° 22' 47.360 W
5,300.0	2.19	313.10	5,297.7	-38.9	35.8	419,813.23	795,103.05	32° 9' 2.128 N	103° 22' 47.385 W
5,400.0	2.12	307.89	5,397.6	-36.4	32.9	419,815.67	795,100.20	32° 9' 2.152 N	103° 22' 47.418 W
5,500.0	2.35	308.76	5,497.5	-34.0	29.8	419,818.09	795,097.14	32° 9' 2.176 N	103° 22' 47.453 W
5,600.0	2.34	308.63	5,597.4	-31.5	26.6	419,820.65	795,093.94	32° 9' 2.202 N	103° 22' 47.490 W
5,700.0	2.31	312.01	5,697.3	-28.8	23.6	419,823.27	795,090.85	32° 9' 2.228 N	103° 22' 47.526 W
5,800.0	2.29	309.67	5,797.3	-26.2	20.5	419,825.90	795,087.82	32° 9' 2.254 N	103° 22' 47.561 W
5,900.0	2.64	308.19	5,897.2	-23.5	17.2	419,828.59	795,084.47	32° 9' 2.281 N	103° 22' 47.600 W
6,000.0	2.77	306.95	5,997.1	-20.6	13.4	419,831.47	795,080.73	32° 9' 2.310 N	103° 22' 47.643 W
6,100.0	2.76	309.36	6,096.9	-17.6	9.6	419,834.45	795,076.93	32° 9' 2.340 N	103° 22' 47.687 W
6,200.0	2.83	305.59	6,196.8	-14.7	5.8	419,837.41	795,073.07	32° 9' 2.370 N	103° 22' 47.731 W
6,300.0	2.57	305.68	6,296.7	-11.9	1.9	419,840.16	795,069.24	32° 9' 2.397 N	103° 22' 47.776 W
6,400.0	2.63	306.36	6,396.6	-9.3	-1.7	419,842.83	795,065.57	32° 9' 2.424 N	103° 22' 47.818 W
6,500.0	2.59	308.16	6,496.5	-6.5	-5.4	419,845.58	795,061.94	32° 9' 2.451 N	103° 22' 47.860 W

Company:	COG Operating, LLC	Local Co-ordinate Reference:	Well Fez Fee #11H
Project:	Lea County, NM	TVD Reference:	Well @ 3288.0usft (Ensign #772)
Site:	Sec 9, T25-S, R35-E	MD Reference:	Well @ 3288.0usft (Ensign #772)
Well:	Fez Fee #11H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Compass

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
6,600.0	2.58	309.59	6,596.4	-3.7	-8.9	419,848.41	795,058.43	32° 9' 2.480 N	103° 22' 47.901 W
6,700.0	2.65	311.78	6,696.3	-0.7	-12.3	419,851.39	795,054.97	32° 9' 2.510 N	103° 22' 47.940 W
6,800.0	2.65	312.24	6,796.2	2.4	-15.8	419,854.48	795,051.54	32° 9' 2.540 N	103° 22' 47.980 W
6,900.0	2.58	315.12	6,896.1	5.5	-19.1	419,857.63	795,048.24	32° 9' 2.572 N	103° 22' 48.018 W
7,000.0	2.39	311.09	6,996.0	8.5	-22.2	419,860.60	795,045.08	32° 9' 2.602 N	103° 22' 48.055 W
7,100.0	2.54	312.55	7,095.9	11.4	-25.4	419,863.46	795,041.88	32° 9' 2.630 N	103° 22' 48.092 W
7,200.0	2.39	312.87	7,195.8	14.3	-28.6	419,866.38	795,038.72	32° 9' 2.659 N	103° 22' 48.128 W
7,300.0	2.53	313.69	7,295.7	17.2	-31.7	419,869.32	795,035.59	32° 9' 2.689 N	103° 22' 48.164 W
7,400.0	2.37	316.06	7,395.6	20.2	-34.7	419,872.34	795,032.56	32° 9' 2.719 N	103° 22' 48.199 W
7,500.0	2.07	314.08	7,495.6	23.0	-37.5	419,875.08	795,029.83	32° 9' 2.746 N	103° 22' 48.230 W
7,600.0	2.09	317.71	7,595.5	25.6	-40.0	419,877.69	795,027.30	32° 9' 2.772 N	103° 22' 48.260 W
7,700.0	1.89	314.67	7,695.4	28.1	-42.4	419,880.20	795,024.90	32° 9' 2.797 N	103° 22' 48.287 W
7,800.0	1.93	308.50	7,795.4	30.3	-44.9	419,882.40	795,022.41	32° 9' 2.819 N	103° 22' 48.316 W
7,900.0	1.92	308.75	7,895.3	32.4	-47.5	419,884.50	795,019.79	32° 9' 2.840 N	103° 22' 48.346 W
8,000.0	1.52	300.62	7,995.3	34.1	-50.0	419,886.23	795,017.34	32° 9' 2.858 N	103° 22' 48.375 W
8,100.0	1.43	284.71	8,095.2	35.1	-52.3	419,887.22	795,014.99	32° 9' 2.868 N	103° 22' 48.402 W
8,200.0	1.27	279.77	8,195.2	35.6	-54.6	419,887.72	795,012.69	32° 9' 2.873 N	103° 22' 48.428 W
8,300.0	1.00	266.70	8,295.2	35.8	-56.6	419,887.86	795,010.73	32° 9' 2.874 N	103° 22' 48.451 W
8,400.0	1.31	261.25	8,395.2	35.5	-58.6	419,887.64	795,008.73	32° 9' 2.872 N	103° 22' 48.475 W
8,500.0	1.56	248.02	8,495.1	34.9	-61.0	419,886.95	795,006.34	32° 9' 2.866 N	103° 22' 48.502 W
8,600.0	1.46	239.77	8,595.1	33.7	-63.3	419,885.80	795,003.98	32° 9' 2.855 N	103° 22' 48.530 W
8,700.0	1.79	243.52	8,695.1	32.4	-65.8	419,884.46	795,001.48	32° 9' 2.842 N	103° 22' 48.559 W
Tie In @ 8700' MD / 8695' TVD									
8,718.0	1.40	187.00	8,713.1	32.0	-66.1	419,884.12	795,001.20	32° 9' 2.838 N	103° 22' 48.562 W
8,750.0	6.60	116.60	8,745.0	30.8	-64.5	419,882.91	795,002.80	32° 9' 2.826 N	103° 22' 48.544 W
8,781.0	11.80	106.10	8,775.6	29.1	-59.9	419,881.23	795,007.44	32° 9' 2.809 N	103° 22' 48.490 W
8,813.0	16.30	103.60	8,806.6	27.2	-52.3	419,879.27	795,014.95	32° 9' 2.789 N	103° 22' 48.403 W
8,845.0	19.70	100.30	8,837.0	25.1	-42.7	419,877.24	795,024.63	32° 9' 2.768 N	103° 22' 48.291 W
8,876.0	22.20	97.30	8,866.0	23.5	-31.7	419,875.57	795,035.58	32° 9' 2.750 N	103° 22' 48.164 W
8,907.0	24.70	93.00	8,894.4	22.4	-19.4	419,874.48	795,047.86	32° 9' 2.739 N	103° 22' 48.021 W
8,939.0	27.30	89.60	8,923.2	22.1	-5.4	419,874.18	795,061.88	32° 9' 2.734 N	103° 22' 47.858 W
8,970.0	28.70	89.50	8,950.6	22.2	9.1	419,874.30	795,076.43	32° 9' 2.734 N	103° 22' 47.689 W
9,001.0	30.50	89.80	8,977.5	22.3	24.4	419,874.39	795,091.74	32° 9' 2.734 N	103° 22' 47.510 W
9,033.0	32.90	89.90	9,004.7	22.3	41.3	419,874.43	795,108.55	32° 9' 2.733 N	103° 22' 47.315 W
9,065.0	34.30	90.80	9,031.4	22.2	59.0	419,874.32	795,126.26	32° 9' 2.730 N	103° 22' 47.109 W
9,096.0	34.00	92.60	9,057.0	21.7	76.4	419,873.81	795,143.65	32° 9' 2.724 N	103° 22' 46.907 W
9,127.0	35.70	95.50	9,082.5	20.4	94.0	419,872.55	795,161.32	32° 9' 2.710 N	103° 22' 46.701 W
9,159.0	38.30	95.70	9,108.0	18.6	113.2	419,870.67	795,180.48	32° 9' 2.689 N	103° 22' 46.479 W
9,190.0	41.80	95.20	9,131.8	16.7	133.0	419,868.78	795,200.34	32° 9' 2.669 N	103° 22' 46.248 W
9,200.1	42.87	94.89	9,139.2	16.1	139.8	419,868.18	795,207.11	32° 9' 2.662 N	103° 22' 46.169 W
FTP / Crossed 330' Hard Line @ 9200' MD / 9139' TVD									
9,221.0	45.10	94.30	9,154.3	14.9	154.3	419,867.02	795,221.58	32° 9' 2.650 N	103° 22' 46.001 W
9,253.0	48.20	92.70	9,176.2	13.5	177.5	419,865.60	795,244.80	32° 9' 2.634 N	103° 22' 45.731 W
9,284.0	52.00	91.30	9,196.1	12.7	201.3	419,864.78	795,268.56	32° 9' 2.623 N	103° 22' 45.455 W
9,316.0	56.00	89.40	9,214.9	12.5	227.1	419,864.64	795,294.44	32° 9' 2.620 N	103° 22' 45.154 W
9,347.0	60.40	88.00	9,231.3	13.1	253.5	419,865.24	795,320.78	32° 9' 2.623 N	103° 22' 44.848 W
9,378.0	63.70	87.50	9,245.8	14.2	280.8	419,866.32	795,348.14	32° 9' 2.632 N	103° 22' 44.529 W
9,410.0	67.50	87.30	9,259.0	15.5	309.9	419,867.64	795,377.24	32° 9' 2.642 N	103° 22' 44.191 W
9,442.0	71.40	88.00	9,270.2	16.8	339.9	419,868.87	795,407.18	32° 9' 2.652 N	103° 22' 43.842 W
9,473.0	75.60	88.00	9,279.0	17.8	369.6	419,869.90	795,436.87	32° 9' 2.659 N	103° 22' 43.497 W
9,504.0	78.80	88.40	9,285.9	18.8	399.8	419,870.85	795,466.08	32° 9' 2.666 N	103° 22' 43.145 W
9,536.0	80.30	88.40	9,291.7	19.6	431.2	419,871.73	795,496.54	32° 9' 2.672 N	103° 22' 42.779 W
9,564.0	80.00	89.30	9,296.5	20.2	458.8	419,872.28	795,526.12	32° 9' 2.675 N	103° 22' 42.459 W
9,595.0	81.70	90.20	9,301.4	20.3	489.4	419,872.42	795,556.73	32° 9' 2.674 N	103° 22' 42.103 W
9,626.0	85.30	90.60	9,304.9	20.1	520.2	419,872.20	795,587.52	32° 9' 2.669 N	103° 22' 41.744 W



Survey Report - Geographic



Company:	COG Operating, LLC	Local Co-ordinate Reference:	Well Fez Fee #11H
Project:	Lea County, NM	TVD Reference:	Well @ 3288.0usft (Ensign #772)
Site:	Sec 9, T25-S, R35-E	MD Reference:	Well @ 3288.0usft (Ensign #772)
Well:	Fez Fee #11H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Compass

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
9,658.0	86.10	90.60	9,307.3	19.8	552.1	419,871.87	795,619.43	32° 9' 2.663 N	103° 22' 41.373 W
9,689.0	87.80	90.70	9,309.0	19.4	583.1	419,871.52	795,650.38	32° 9' 2.656 N	103° 22' 41.013 W
9,752.0	88.40	90.40	9,311.1	18.8	646.0	419,870.91	795,713.34	32° 9' 2.645 N	103° 22' 40.281 W
9,846.0	90.90	89.40	9,311.6	19.0	740.0	419,871.08	795,807.33	32° 9' 2.638 N	103° 22' 39.188 W
9,940.0	92.20	89.30	9,309.1	20.0	834.0	419,872.14	795,901.29	32° 9' 2.641 N	103° 22' 38.095 W
10,035.0	91.70	86.10	9,305.9	23.9	928.8	419,875.95	795,996.15	32° 9' 2.670 N	103° 22' 36.992 W
10,130.0	89.80	85.40	9,304.6	30.9	1,023.6	419,882.99	796,090.87	32° 9' 2.731 N	103° 22' 35.889 W
10,225.0	89.10	86.20	9,305.5	37.9	1,118.3	419,889.95	796,185.61	32° 9' 2.792 N	103° 22' 34.787 W
10,315.0	89.00	88.10	9,307.0	42.3	1,208.2	419,894.42	796,275.48	32° 9' 2.828 N	103° 22' 33.741 W
10,412.0	90.20	90.00	9,307.7	43.9	1,305.2	419,896.03	796,372.46	32° 9' 2.836 N	103° 22' 32.613 W
10,507.0	90.80	89.80	9,306.9	44.1	1,400.2	419,896.20	796,467.46	32° 9' 2.829 N	103° 22' 31.508 W
10,601.0	90.80	89.80	9,305.6	44.4	1,494.1	419,896.53	796,561.45	32° 9' 2.824 N	103° 22' 30.415 W
10,696.0	91.80	90.10	9,303.4	44.5	1,589.1	419,896.61	796,656.42	32° 9' 2.816 N	103° 22' 29.310 W
10,791.0	92.80	89.00	9,299.6	45.3	1,684.0	419,897.35	796,751.34	32° 9' 2.815 N	103° 22' 28.206 W
10,885.0	92.30	87.40	9,295.4	48.2	1,777.9	419,900.30	796,845.20	32° 9' 2.836 N	103° 22' 27.114 W
10,979.0	91.50	86.90	9,292.3	52.9	1,871.7	419,904.97	796,939.03	32° 9' 2.874 N	103° 22' 26.022 W
11,074.0	90.30	86.30	9,290.8	58.5	1,966.5	419,910.61	797,033.85	32° 9' 2.922 N	103° 22' 24.919 W
11,169.0	91.20	86.20	9,289.6	64.7	2,061.3	419,916.82	797,128.63	32° 9' 2.975 N	103° 22' 23.816 W
11,264.0	87.70	85.10	9,290.5	71.9	2,156.0	419,924.02	797,223.34	32° 9' 3.038 N	103° 22' 22.714 W
11,358.0	86.90	86.70	9,294.9	78.6	2,249.7	419,930.74	797,316.99	32° 9' 3.096 N	103° 22' 21.624 W
11,452.0	88.30	89.30	9,298.8	81.9	2,343.5	419,934.01	797,410.84	32° 9' 3.120 N	103° 22' 20.532 W
11,547.0	90.00	89.90	9,300.2	82.6	2,438.5	419,934.68	797,505.82	32° 9' 3.118 N	103° 22' 19.427 W
11,641.0	90.90	91.30	9,299.5	81.6	2,532.5	419,933.69	797,599.81	32° 9' 3.100 N	103° 22' 18.334 W
11,736.0	93.20	92.20	9,296.1	78.7	2,627.4	419,930.79	797,694.70	32° 9' 3.063 N	103° 22' 17.231 W
11,831.0	91.80	90.40	9,292.0	76.5	2,722.3	419,928.64	797,789.58	32° 9' 3.033 N	103° 22' 16.127 W
11,924.0	93.10	90.10	9,288.0	76.1	2,815.2	419,928.24	797,882.49	32° 9' 3.021 N	103° 22' 15.047 W
12,019.0	92.70	89.10	9,283.2	76.8	2,910.1	419,928.90	797,977.37	32° 9' 3.019 N	103° 22' 13.943 W
12,112.0	92.00	87.30	9,279.4	79.7	3,002.9	419,931.82	798,070.24	32° 9' 3.040 N	103° 22' 12.863 W
12,206.0	90.70	87.50	9,277.2	84.0	3,096.8	419,936.08	798,164.11	32° 9' 3.074 N	103° 22' 11.771 W
12,301.0	91.30	88.00	9,275.5	87.7	3,191.7	419,939.81	798,259.02	32° 9' 3.102 N	103° 22' 10.666 W
12,396.0	90.10	85.90	9,274.3	92.8	3,286.6	419,944.86	798,353.88	32° 9' 3.144 N	103° 22' 9.563 W
12,490.0	91.40	86.20	9,273.1	99.2	3,380.3	419,951.34	798,447.64	32° 9' 3.200 N	103° 22' 8.471 W
12,585.0	89.90	84.80	9,272.0	106.7	3,475.0	419,958.79	798,542.34	32° 9' 3.265 N	103° 22' 7.369 W
12,679.0	90.60	84.80	9,271.6	115.2	3,568.7	419,967.31	798,635.95	32° 9' 3.341 N	103° 22' 6.280 W
12,773.0	89.70	83.20	9,271.4	125.0	3,662.1	419,977.14	798,729.43	32° 9' 3.430 N	103° 22' 5.191 W
12,867.0	91.30	83.00	9,270.6	136.3	3,755.4	419,988.43	798,822.74	32° 9' 3.533 N	103° 22' 4.105 W
12,962.0	90.80	84.90	9,268.8	146.3	3,849.9	419,998.44	798,917.19	32° 9' 3.624 N	103° 22' 3.005 W
13,056.0	89.30	84.80	9,268.7	154.8	3,943.5	420,006.88	799,010.81	32° 9' 3.699 N	103° 22' 1.916 W
13,152.0	90.20	85.00	9,269.1	163.3	4,039.1	420,015.41	799,106.43	32° 9' 3.775 N	103° 22' 0.803 W
13,183.0	90.50	84.90	9,269.0	166.0	4,070.0	420,018.14	799,137.31	32° 9' 3.799 N	103° 22' 0.443 W
13,214.0	91.20	87.00	9,268.5	168.2	4,100.9	420,020.33	799,168.23	32° 9' 3.818 N	103° 22' 0.084 W
13,246.0	91.70	88.30	9,267.7	169.5	4,132.9	420,021.64	799,200.19	32° 9' 3.828 N	103° 21' 59.712 W
13,340.0	91.70	91.50	9,264.9	169.7	4,226.8	420,021.80	799,294.13	32° 9' 3.822 N	103° 21' 58.619 W
13,434.0	90.70	93.50	9,262.9	165.6	4,320.7	420,017.70	799,388.02	32° 9' 3.773 N	103° 21' 57.527 W
13,466.0	91.80	93.50	9,262.2	163.7	4,352.7	420,015.75	799,419.95	32° 9' 3.751 N	103° 21' 57.156 W
13,529.0	92.10	92.90	9,260.1	160.1	4,415.5	420,012.24	799,482.82	32° 9' 3.710 N	103° 21' 56.426 W
13,653.0	93.10	92.60	9,254.5	154.2	4,539.2	420,006.29	799,606.54	32° 9' 3.640 N	103° 21' 54.987 W
13,717.0	93.50	92.10	9,250.8	151.6	4,603.1	420,003.67	799,670.38	32° 9' 3.609 N	103° 21' 54.245 W
13,812.0	93.10	90.70	9,245.3	149.3	4,697.9	420,001.36	799,765.20	32° 9' 3.577 N	103° 21' 53.142 W
13,874.0	93.10	90.70	9,242.0	148.5	4,759.8	420,000.60	799,827.10	32° 9' 3.564 N	103° 21' 52.423 W

TD @ 13874' MD / 9242' TVD



Survey Report - Geographic



Company:	COG Operating, LLC	Local Co-ordinate Reference:	Well Fez Fee #11H
Project:	Lea County, NM	TVD Reference:	Well @ 3288.0usft (Ensign #772)
Site:	Sec 9, T25-S, R35-E	MD Reference:	Well @ 3288.0usft (Ensign #772)
Well:	Fez Fee #11H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Compass

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
8,700.0	8,695.1	32.4	-65.8	Tie In @ 8700' MD / 8695' TVD
9,200.1	9,139.2	16.1	139.8	FTP / Crossed 330' Hard Line @ 9200' MD / 9139' TVD
13,874.0	9,242.0	148.5	4,759.8	TD @ 13874' MD / 9242' TVD

Checked By: _____	Approved By: _____	Date: _____
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