



OPERATOR: COG Operating, LLC
WELL/LEASE: Sitka BSI State Com # 1 H
COUNTY: Lea Co., New Mexico
Scetioin 4, T21S, R34E

PATRIOT DRILLING, LLC

HOBBS OCD

AUG 03 2016

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**STATE OF NEW MEXICO
DEVIATION REPORT**

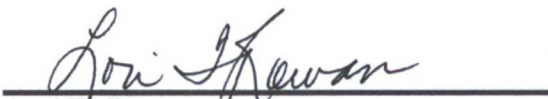
<u>Depth</u>	<u>Deviation</u>	<u>Depth</u>	<u>Deviation</u>
402	1	5,900	1/4
940	1/2	6,905	3/4
1,472	1/2	7,727	1 1/4
1,818	1/2	8,264	1
2,049	1/4	8,698	2
2,618	2	9,161	1 1/2
3,185	1 3/4	9,824	1 1/2
3,754	1	10,013	1 1/2
4,133	1 1/4	10,221	1 1/2
4,869	3/4	10,252	1 1/2
5,565	1 1/4		

Patriot Drilling, LLC


M. Leroy Peterson, Executive Vice-
President

The foregoing instrument was acknowledged before me on this 29th day of June, 2015 by M. Leroy Peterson, Executive Vice-President of Patriot Drilling, LLC.

My Commission Expires: 02/01/2019


Lori T. Rowan
Notary Public for Ector Co., Texas



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PHOENIX
TECHNOLOGY SERVICES

Company:	COG
Well:	Sitka BSI State Com #1H
Location:	Lea Co., New Mexico
Rig:	Patriot #2

Job Number:	
Grid Corr.:	-0.46
Lat:	32.51
Long:	-103.48

Date: 04-03-16
Calculation Method: Minimum Curvature
Proposed Azimuth: _____
RKB - MSL in feet: 20
Tie Into: Surface

Survey Tool Type	Survey Depth (ft)	Inclina- tion (deg)	Azimuth (deg)	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates		Closure		Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')
							N/S (ft)	E/W (ft)	Distance (ft)	Angle (deg)			
Enter Tie-In Survey on Line 10													
FIELD COPY, NON-DEFINITIVE													
TIE IN	0.00	0.00	0.00	0	0	0	0	0					
Gyro	100.00	0.13	56.73	100	100.00	0.06	0.06 N	0.09 E	0.11	56.73	0.13	0.13	56.73
	200.00	0.28	51.32	100	200.00	0.28	0.28 N	0.38 E	0.47	53.92	0.15	0.15	-5.41
	300.00	0.17	74.03	100	300.00	0.47	0.47 N	0.71 E	0.86	56.60	0.14	-0.11	22.71
	400.00	0.54	151.98	100	400.00	0.10	0.10 N	1.08 E	1.08	84.94	0.53	0.37	77.95
	500.00	0.31	167.62	100	499.99	-0.58	0.58 S	1.36 E	1.48	113.31	0.26	-0.23	15.64
	600.00	0.43	73.65	100	599.99	-0.74	0.74 S	1.78 E	1.92	112.72	0.55	0.12	-93.97
	700.00	0.18	40.48	100	699.99	-0.52	0.52 S	2.24 E	2.30	103.04	0.30	-0.25	-33.17
	800.00	0.30	309.23	100	799.99	-0.23	0.23 S	2.14 E	2.15	96.23	0.35	0.12	268.75
	900.00	0.46	254.13	100	899.99	-0.18	0.18 S	1.55 E	1.56	96.54	0.38	0.16	-55.10
	1000.00	0.47	261.95	100	999.99	-0.34	0.34 S	0.76 E	0.83	114.52	0.06	0.01	7.82
	1100.00	0.42	262.05	100	1099.98	-0.45	0.45 S	0.01 W	0.45	181.74	0.05	-0.05	0.10
	1200.00	0.60	241.64	100	1199.98	-0.75	0.75 S	0.84 W	1.13	228.08	0.25	0.18	-20.41
	1300.00	0.52	238.20	100	1299.97	-1.24	1.24 S	1.68 W	2.09	233.63	0.09	-0.08	-3.44
	1400.00	0.38	241.27	100	1399.97	-1.64	1.64 S	2.36 W	2.87	235.23	0.14	-0.14	3.07
	1500.00	0.55	153.66	100	1499.97	-2.23	2.23 S	2.44 W	3.30	227.58	0.66	0.17	-87.61
	1600.00	0.68	226.14	100	1599.96	-3.07	3.07 S	2.65 W	4.06	220.84	0.73	0.13	72.48
	1700.00	0.72	225.54	100	1699.96	-3.92	3.92 S	3.53 W	5.28	221.99	0.04	0.04	-0.60
	1800.00	0.78	226.77	100	1799.95	-4.83	4.83 S	4.47 W	6.58	222.83	0.06	0.06	1.23
	1900.00	0.60	210.45	100	1899.94	-5.74	5.74 S	5.24 W	7.77	222.34	0.26	-0.18	-16.32
	2000.00	0.27	193.27	100	1999.94	-6.43	6.43 S	5.55 W	8.49	220.84	0.35	-0.33	-17.18
	2100.00	0.38	63.64	100	2099.94	-6.51	6.51 S	5.31 W	8.40	219.22	0.59	0.11	-129.63
	2200.00	0.36	91.27	100	2199.93	-6.37	6.37 S	4.70 W	7.91	216.44	0.18	-0.02	27.63
	2300.00	0.56	100.08	100	2299.93	-6.46	6.46 S	3.91 W	7.55	211.16	0.21	0.20	8.81
	2400.00	0.85	93.92	100	2399.92	-6.60	6.60 S	2.68 W	7.12	202.14	0.30	0.29	-6.16
	2500.00	1.11	110.91	100	2499.91	-6.99	6.99 S	1.04 W	7.07	188.45	0.39	0.26	16.99
	2600.00	1.58	118.40	100	2599.88	-7.99	7.99 S	1.08 E	8.07	172.32	0.50	0.47	7.49
	2700.00	2.03	113.07	100	2699.83	-9.34	9.34 S	3.92 E	10.13	157.24	0.48	0.45	-5.33



Company: COG
 Well: Sitka BSI State Com #1H
 Location: Lea Co., New Mexico
 Rig: Patriot #2

Job Number:
 Grid Corr.: -0.46
 Lat: 32.51
 Long: -103.48

Calculation Method: Minimum Curvature
 Proposed Azimuth:
 RKB - MSL in feet: 20
 Tie Into: Surface

Survey Tool Type	Survey Depth (ft)	Inclination (deg)	Azimuth (deg)	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates		Closure		Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')
							N/S (ft)	E/W (ft)	Distance (ft)	Angle (deg)			
	2800.00	1.94	116.77	100	2799.77	-10.80	10.80 S	7.06 E	12.90	146.82	0.16	-0.09	3.70
	2900.00	1.56	123.11	100	2899.72	-12.31	12.31 S	9.71 E	15.68	141.72	0.43	-0.38	6.34
	3000.00	1.36	129.13	100	2999.69	-13.80	13.80 S	11.77 E	18.14	139.53	0.25	-0.20	6.02
	3100.00	1.47	119.83	100	3099.66	-15.18	15.18 S	13.81 E	20.52	137.72	0.25	0.11	-9.30
	3200.00	1.64	101.65	100	3199.63	-16.11	16.11 S	16.32 E	22.93	134.63	0.52	0.17	-18.18
	3300.00	1.91	103.64	100	3299.58	-16.79	16.79 S	19.34 E	25.62	130.97	0.28	0.27	1.99
	3400.00	1.58	86.58	100	3399.53	-17.10	17.10 S	22.34 E	28.13	127.44	0.61	-0.33	-17.06
	3500.00	1.41	80.01	100	3499.50	-16.81	16.81 S	24.93 E	30.06	123.99	0.24	-0.17	-6.57
	3600.00	1.36	78.14	100	3599.47	-16.35	16.35 S	27.30 E	31.82	120.92	0.07	-0.05	-1.87
	3700.00	1.13	82.53	100	3699.44	-15.98	15.98 S	29.44 E	33.50	118.49	0.25	-0.23	4.39
	3800.00	1.17	129.37	100	3799.43	-16.50	16.50 S	31.20 E	35.30	117.87	0.91	0.04	46.84
	3900.00	1.31	134.43	100	3899.40	-17.95	17.95 S	32.81 E	37.40	118.68	0.18	0.14	5.06
	4000.00	1.37	129.78	100	3999.38	-19.51	19.51 S	34.55 E	39.67	119.46	0.12	0.06	-4.65
	4100.00	1.17	134.24	100	4099.35	-20.99	20.99 S	36.20 E	41.84	120.11	0.22	-0.20	4.46
	4200.00	0.53	228.88	100	4199.34	-22.01	22.01 S	36.58 E	42.69	121.03	1.32	-0.64	94.64
	4300.00	0.47	165.99	100	4299.34	-22.71	22.71 S	36.33 E	42.84	122.01	0.52	-0.06	-62.89
	4400.00	0.16	187.47	100	4399.34	-23.24	23.24 S	36.41 E	43.20	122.55	0.33	-0.31	21.48
	4500.00	0.23	209.07	100	4499.34	-23.56	23.56 S	36.29 E	43.27	122.99	0.10	0.07	21.60
	4600.00	0.24	305.90	100	4599.34	-23.61	23.61 S	36.03 E	43.07	123.24	0.35	0.01	96.83
	4700.00	0.46	255.76	100	4699.34	-23.59	23.59 S	35.47 E	42.60	123.62	0.36	0.22	-50.14
	4800.00	0.58	220.00	100	4799.33	-24.07	24.07 S	34.75 E	42.28	124.71	0.34	0.12	-35.76
	4900.00	0.58	188.86	100	4899.33	-24.96	24.96 S	34.35 E	42.46	126.00	0.31	0.00	-31.14
	5000.00	0.69	193.20	100	4999.32	-26.05	26.05 S	34.14 E	42.94	127.35	0.12	0.11	4.34
	5100.00	0.88	188.83	100	5099.31	-27.39	27.39 S	33.88 E	43.57	128.96	0.20	0.19	-4.37
	5200.00	0.62	180.57	100	5199.30	-28.69	28.69 S	33.76 E	44.30	130.36	0.28	-0.26	-8.26
	5300.00	0.55	192.10	100	5299.30	-29.70	29.70 S	33.65 E	44.88	131.43	0.14	-0.07	11.53
	5400.00	0.60	219.41	100	5399.29	-30.58	30.58 S	33.22 E	45.15	132.63	0.28	0.05	27.31
	5500.00	0.79	215.02	100	5499.28	-31.55	31.55 S	32.49 E	45.28	134.15	0.20	0.19	-4.39
	5600.00	0.94	209.83	100	5599.27	-32.82	32.82 S	31.69 E	45.62	136.01	0.17	0.15	-5.19
	5700.00	0.89	207.59	100	5699.26	-34.22	34.22 S	30.92 E	46.12	137.90	0.06	-0.05	-2.24

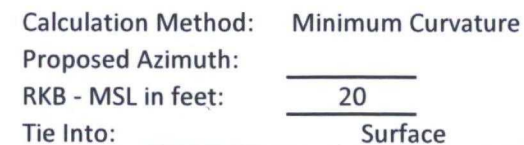


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							N/S (ft)	E/W (ft)	Distance (ft)	Angle (deg)			
	5800.00	0.86	208.97	100	5799.25	-35.57	35.57 S	30.20 E	46.66	139.67	0.04	-0.03	1.38
	5900.00	0.19	78.54	100	5899.25	-36.19	36.19 S	29.99 E	47.00	140.35	0.99	-0.67	-130.43
	6000.00	0.53	92.49	100	5999.24	-36.18	36.18 S	30.62 E	47.40	139.76	0.35	0.34	13.95
	6100.00	0.67	74.70	100	6099.24	-36.04	36.04 S	31.65 E	47.96	138.72	0.23	0.14	-17.79
	6200.00	0.63	97.51	100	6199.23	-35.96	35.96 S	32.75 E	48.64	137.67	0.26	-0.04	22.81
	6300.00	0.54	88.56	100	6299.23	-36.02	36.02 S	33.77 E	49.38	136.85	0.13	-0.09	-8.95
	6400.00	0.35	132.77	100	6399.22	-36.22	36.22 S	34.47 E	49.99	136.42	0.38	-0.19	44.21
	6500.00	0.22	163.09	100	6499.22	-36.61	36.61 S	34.75 E	50.47	136.49	0.19	-0.13	30.32
	6600.00	0.23	192.87	100	6599.22	-36.99	36.99 S	34.76 E	50.75	136.78	0.12	0.01	29.78
	6700.00	0.16	103.11	100	6699.22	-37.21	37.21 S	34.85 E	50.98	136.88	0.28	-0.07	-89.76
	6800.00	0.15	60.51	100	6799.22	-37.18	37.18 S	35.10 E	51.13	136.65	0.11	-0.01	-42.60
	6900.00	0.43	88.13	100	6899.22	-37.10	37.10 S	35.59 E	51.41	136.20	0.31	0.28	27.62
	7000.00	0.58	89.35	100	6999.21	-37.09	37.09 S	36.47 E	52.01	135.48	0.15	0.15	1.22
	7100.00	0.70	123.37	100	7099.21	-37.42	37.42 S	37.48 E	52.96	134.95	0.39	0.12	34.02
	7200.00	1.20	140.78	100	7199.20	-38.56	38.56 S	38.66 E	54.60	134.93	0.57	0.50	17.41
	7300.00	1.30	124.45	100	7299.17	-40.02	40.02 S	40.25 E	56.76	134.83	0.37	0.10	-16.33
	7400.00	1.29	140.05	100	7399.15	-41.52	41.52 S	41.91 E	59.00	134.73	0.35	-0.01	15.60
	7500.00	0.96	156.34	100	7499.13	-43.15	43.15 S	42.97 E	60.90	135.12	0.46	-0.33	16.29
	7600.00	1.02	150.40	100	7599.11	-44.69	44.69 S	43.75 E	62.54	135.61	0.12	0.06	-5.94
	7700.00	0.94	149.15	100	7699.10	-46.17	46.17 S	44.61 E	64.20	135.99	0.08	-0.08	-1.25
	7800.00	1.18	164.03	100	7799.08	-47.87	47.87 S	45.31 E	65.91	136.57	0.36	0.24	14.88
	7900.00	1.11	163.26	100	7899.06	-49.78	49.78 S	45.87 E	67.70	137.34	0.07	-0.07	-0.77
	8000.00	0.90	154.73	100	7999.05	-51.42	51.42 S	46.49 E	69.32	137.88	0.26	-0.21	-8.53
	8100.00	0.82	151.23	100	8099.03	-52.76	52.76 S	47.17 E	70.77	138.20	0.10	-0.08	-3.50
	8200.00	0.82	163.86	100	8199.02	-54.07	54.07 S	47.71 E	72.11	138.58	0.18	0.00	12.63
	8300.00	0.95	168.19	100	8299.01	-55.57	55.57 S	48.08 E	73.48	139.13	0.15	0.13	4.33
	8400.00	1.05	184.27	100	8399.00	-57.30	57.30 S	48.18 E	74.86	139.94	0.30	0.10	16.08
	8500.00	1.07	184.39	100	8498.98	-59.14	59.14 S	48.04 E	76.19	140.91	0.02	0.02	0.12
	8600.00	1.34	185.33	100	8598.96	-61.24	61.24 S	47.86 E	77.72	141.99	0.27	0.27	0.94
	8700.00	1.77	183.24	100	8698.92	-63.94	63.94 S	47.67 E	79.75	143.30	0.43	0.43	-2.09

[illegible]

COG Production LLC

Lea County, NM
Sec. 4, T 21S. , R 34 E
Sitka BSI St Com #1H

Wellbore #1

Design: Wellbore #1

HOBBS OCD
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Survey Report - Geographic

12 April, 2016

Integrity Directional Services, LLC

Survey Report - Geographic

Company:	COG Production LLC	Local Co-ordinate Reference:	Well Sitka BSI St Com #1H
Project:	Lea County, NM	TVD Reference:	KB=20' @ 3728.0usft (Patriot 2)
Site:	Sec. 4, T 21S. , R 34 E	MD Reference:	KB=20' @ 3728.0usft (Patriot 2)
Well:	Sitka BSI St Com #1H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Multi User Db

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. 4, T 21S. , R 34 E		
Site Position:		Northing:	549,612.03 usft
From:	Map	Easting:	804,969.55 usft
Position Uncertainty:	5.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 30' 25.574 N
		Longitude:	103° 20' 38.693 W
		Grid Convergence:	0.53 °

Well	Sitka BSI St Com #1H		
Well Position	+N/-S	0.0 usft	Northing:
	+E/-W	0.0 usft	Easting:
Position Uncertainty	5.0 usft	Wellhead Elevation:	0.0 usft
		Latitude:	32° 30' 28.488 N
		Longitude:	103° 28' 39.556 W
		Ground Level:	3,708.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	3/16/2016	7.07	60.36	48,244

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	175.72	

Survey Program	Date 4/12/2016				
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
100.0	9,965.0	GYRO (Wellbore #1)	NS-GYRO-MS	North sensing gyrocompassing m/s	
10,013.0	15,446.0	MWD (Wellbore #1)	MWD	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	549,550.15	763,787.51	32° 30' 28.488 N	103° 28' 39.556 W
100.0	0.13	56.73	100.0	0.1	0.1	549,550.21	763,787.60	32° 30' 28.489 N	103° 28' 39.555 W
First Gyro Survey									
200.0	0.28	51.32	200.0	0.3	0.4	549,550.43	763,787.89	32° 30' 28.491 N	103° 28' 39.551 W
300.0	0.17	74.03	300.0	0.5	0.7	549,550.62	763,788.22	32° 30' 28.493 N	103° 28' 39.547 W
400.0	0.54	151.98	400.0	0.1	1.1	549,550.25	763,788.59	32° 30' 28.489 N	103° 28' 39.543 W
500.0	0.31	167.62	500.0	-0.6	1.4	549,549.57	763,788.87	32° 30' 28.482 N	103° 28' 39.540 W
600.0	0.43	73.65	600.0	-0.7	1.8	549,549.41	763,789.28	32° 30' 28.481 N	103° 28' 39.535 W
700.0	0.18	40.48	700.0	-0.5	2.2	549,549.63	763,789.75	32° 30' 28.483 N	103° 28' 39.530 W
800.0	0.30	309.23	800.0	-0.2	2.1	549,549.92	763,789.64	32° 30' 28.486 N	103° 28' 39.531 W
900.0	0.46	254.13	900.0	-0.2	1.5	549,549.97	763,789.06	32° 30' 28.486 N	103° 28' 39.538 W

Integrity Directional Services, LLC

Survey Report - Geographic

Company:	COG Production LLC	Local Co-ordinate Reference:	Well Sitka BSI St Com #1H
Project:	Lea County, NM	TVD Reference:	KB=20' @ 3728.0usft (Patriot 2)
Site:	Sec. 4, T 21S. , R 34 E	MD Reference:	KB=20' @ 3728.0usft (Patriot 2)
Well:	Sitka BSI St Com #1H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Multi 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
1,000.0	0.47	261.95	1,000.0	-0.3	0.8	549,549.81	763,788.26	32° 30' 28.485 N	103° 28' 39.547 W
1,100.0	0.42	262.05	1,100.0	-0.5	0.0	549,549.70	763,787.49	32° 30' 28.484 N	103° 28' 39.556 W
1,200.0	0.60	241.64	1,200.0	-0.8	-0.8	549,549.40	763,786.67	32° 30' 28.481 N	103° 28' 39.566 W
1,300.0	0.52	238.20	1,300.0	-1.2	-1.7	549,548.91	763,785.82	32° 30' 28.476 N	103° 28' 39.576 W
1,400.0	0.38	241.27	1,400.0	-1.6	-2.4	549,548.51	763,785.15	32° 30' 28.472 N	103° 28' 39.584 W
1,500.0	0.55	153.66	1,500.0	-2.2	-2.4	549,547.92	763,785.07	32° 30' 28.466 N	103° 28' 39.584 W
1,600.0	0.68	226.14	1,600.0	-3.1	-2.7	549,547.08	763,784.85	32° 30' 28.458 N	103° 28' 39.587 W
1,700.0	0.72	225.54	1,700.0	-3.9	-3.5	549,546.23	763,783.98	32° 30' 28.450 N	103° 28' 39.597 W
1,800.0	0.78	226.77	1,799.9	-4.8	-4.5	549,545.33	763,783.03	32° 30' 28.441 N	103° 28' 39.608 W
1,900.0	0.60	210.45	1,899.9	-5.7	-5.2	549,544.41	763,782.27	32° 30' 28.432 N	103° 28' 39.617 W
2,000.0	0.27	193.27	1,999.9	-6.4	-5.6	549,543.73	763,781.95	32° 30' 28.425 N	103° 28' 39.621 W
2,100.0	0.38	63.64	2,099.9	-6.5	-5.3	549,543.65	763,782.20	32° 30' 28.424 N	103° 28' 39.618 W
2,200.0	0.36	91.27	2,199.9	-6.4	-4.7	549,543.79	763,782.81	32° 30' 28.425 N	103° 28' 39.611 W
2,300.0	0.56	100.08	2,299.9	-6.5	-3.9	549,543.69	763,783.60	32° 30' 28.424 N	103° 28' 39.602 W
2,400.0	0.85	93.92	2,399.9	-6.6	-2.7	549,543.56	763,784.82	32° 30' 28.423 N	103° 28' 39.588 W
2,500.0	1.11	110.91	2,499.9	-7.0	-1.0	549,543.16	763,786.47	32° 30' 28.419 N	103° 28' 39.569 W
2,600.0	1.58	118.40	2,599.9	-8.0	1.1	549,542.16	763,788.59	32° 30' 28.409 N	103° 28' 39.544 W
2,700.0	2.03	113.07	2,699.8	-9.3	3.9	549,540.81	763,791.43	32° 30' 28.395 N	103° 28' 39.511 W
2,800.0	1.94	116.77	2,799.8	-10.8	7.1	549,539.35	763,794.57	32° 30' 28.381 N	103° 28' 39.474 W
2,900.0	1.56	123.11	2,899.7	-12.3	9.7	549,537.85	763,797.22	32° 30' 28.366 N	103° 28' 39.444 W
3,000.0	1.36	129.13	2,999.7	-13.8	11.8	549,536.35	763,799.28	32° 30' 28.351 N	103° 28' 39.420 W
3,100.0	1.47	119.83	3,099.7	-15.2	13.8	549,534.97	763,801.31	32° 30' 28.337 N	103° 28' 39.396 W
3,200.0	1.64	101.65	3,199.6	-16.1	16.3	549,534.04	763,803.83	32° 30' 28.327 N	103° 28' 39.367 W
3,300.0	1.91	103.64	3,299.6	-16.8	19.3	549,533.36	763,806.85	32° 30' 28.320 N	103° 28' 39.332 W
3,400.0	1.58	86.58	3,399.5	-17.1	22.3	549,533.05	763,809.85	32° 30' 28.317 N	103° 28' 39.297 W
3,500.0	1.41	80.01	3,499.5	-16.8	24.9	549,533.34	763,812.43	32° 30' 28.320 N	103° 28' 39.266 W
3,600.0	1.36	78.14	3,599.5	-16.4	27.3	549,533.80	763,814.81	32° 30' 28.324 N	103° 28' 39.239 W
3,700.0	1.13	82.53	3,699.4	-16.0	29.4	549,534.17	763,816.95	32° 30' 28.328 N	103° 28' 39.214 W
3,800.0	1.17	129.37	3,799.4	-16.5	31.2	549,533.65	763,818.71	32° 30' 28.322 N	103° 28' 39.193 W
3,900.0	1.31	134.43	3,899.4	-17.9	32.8	549,532.21	763,820.32	32° 30' 28.308 N	103° 28' 39.174 W
4,000.0	1.37	129.78	3,999.4	-19.5	34.5	549,530.64	763,822.05	32° 30' 28.292 N	103° 28' 39.154 W
4,100.0	1.17	134.24	4,099.4	-21.0	36.2	549,529.16	763,823.70	32° 30' 28.277 N	103° 28' 39.135 W
4,200.0	0.53	228.88	4,199.3	-22.0	36.6	549,528.15	763,824.09	32° 30' 28.267 N	103° 28' 39.131 W
4,300.0	0.47	165.99	4,299.3	-22.7	36.3	549,527.44	763,823.84	32° 30' 28.260 N	103° 28' 39.134 W
4,400.0	0.16	187.47	4,399.3	-23.2	36.4	549,526.91	763,823.92	32° 30' 28.255 N	103° 28' 39.133 W
4,500.0	0.23	209.07	4,499.3	-23.6	36.3	549,526.59	763,823.80	32° 30' 28.252 N	103° 28' 39.134 W
4,600.0	0.24	305.90	4,599.3	-23.6	36.0	549,526.54	763,823.54	32° 30' 28.252 N	103° 28' 39.137 W
4,700.0	0.46	255.76	4,699.3	-23.6	35.5	549,526.57	763,822.98	32° 30' 28.252 N	103° 28' 39.144 W
4,800.0	0.58	220.00	4,799.3	-24.1	34.8	549,526.08	763,822.26	32° 30' 28.247 N	103° 28' 39.152 W
4,900.0	0.58	188.86	4,899.3	-25.0	34.4	549,525.19	763,821.86	32° 30' 28.238 N	103° 28' 39.157 W
5,000.0	0.69	193.20	4,999.3	-26.0	34.1	549,524.11	763,821.64	32° 30' 28.228 N	103° 28' 39.160 W
5,100.0	0.88	188.83	5,099.3	-27.4	33.9	549,522.76	763,821.39	32° 30' 28.214 N	103° 28' 39.163 W
5,200.0	0.62	180.57	5,199.3	-28.7	33.8	549,521.46	763,821.27	32° 30' 28.201 N	103° 28' 39.164 W
5,300.0	0.55	192.10	5,299.3	-29.7	33.7	549,520.45	763,821.16	32° 30' 28.191 N	103° 28' 39.166 W
5,400.0	0.60	219.41	5,399.3	-30.6	33.2	549,519.58	763,820.73	32° 30' 28.183 N	103° 28' 39.171 W
5,500.0	0.79	215.02	5,499.3	-31.5	32.5	549,518.61	763,820.00	32° 30' 28.173 N	103° 28' 39.179 W
5,600.0	0.94	209.83	5,599.3	-32.8	31.7	549,517.33	763,819.19	32° 30' 28.161 N	103° 28' 39.189 W
5,700.0	0.89	207.59	5,699.3	-34.2	30.9	549,515.93	763,818.43	32° 30' 28.147 N	103° 28' 39.198 W
5,800.0	0.86	208.97	5,799.2	-35.6	30.2	549,514.59	763,817.70	32° 30' 28.134 N	103° 28' 39.207 W
5,900.0	0.19	78.54	5,899.2	-36.2	30.0	549,513.96	763,817.50	32° 30' 28.128 N	103° 28' 39.209 W
6,000.0	0.53	92.49	5,999.2	-36.2	30.6	549,513.98	763,818.13	32° 30' 28.128 N	103° 28' 39.202 W
6,100.0	0.67	74.70	6,099.2	-36.0	31.6	549,514.11	763,819.15	32° 30' 28.129 N	103° 28' 39.190 W
6,200.0	0.63	97.51	6,199.2	-36.0	32.8	549,514.19	763,820.26	32° 30' 28.130 N	103° 28' 39.177 W
6,300.0	0.54	88.56	6,299.2	-36.0	33.8	549,514.13	763,821.28	32° 30' 28.129 N	103° 28' 39.165 W
6,400.0	0.35	132.77	6,399.2	-36.2	34.5	549,513.94	763,821.97	32° 30' 28.127 N	103° 28' 39.157 W

Integrity Directional Services, LLC

Survey Report - Geographic

Company:	COG Production LLC	Local Co-ordinate Reference:	Well Sitka BSI St Com #1H
Project:	Lea County, NM	TVD Reference:	KB=20' @ 3728.0usft (Patriot 2)
Site:	Sec. 4, T 21S. , R 34 E	MD Reference:	KB=20' @ 3728.0usft (Patriot 2)
Well:	Sitka BSI St Com #1H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Multi 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
6,500.0	0.22	163.09	6,499.2	-36.6	34.7	549,513.55	763,822.25	32° 30' 28.123 N	103° 28' 39.154 W
6,600.0	0.23	192.87	6,599.2	-37.0	34.8	549,513.17	763,822.26	32° 30' 28.119 N	103° 28' 39.153 W
6,700.0	0.16	103.11	6,699.2	-37.2	34.8	549,512.94	763,822.36	32° 30' 28.117 N	103° 28' 39.152 W
6,800.0	0.15	60.51	6,799.2	-37.2	35.1	549,512.97	763,822.61	32° 30' 28.117 N	103° 28' 39.149 W
6,900.0	0.43	88.13	6,899.2	-37.1	35.6	549,513.05	763,823.09	32° 30' 28.118 N	103° 28' 39.144 W
7,000.0	0.58	89.35	6,999.2	-37.1	36.5	549,513.07	763,823.98	32° 30' 28.118 N	103° 28' 39.133 W
7,100.0	0.70	123.37	7,099.2	-37.4	37.5	549,512.74	763,824.99	32° 30' 28.115 N	103° 28' 39.122 W
7,200.0	1.20	140.78	7,199.2	-38.6	38.7	549,511.59	763,826.16	32° 30' 28.103 N	103° 28' 39.108 W
7,300.0	1.30	124.45	7,299.2	-40.0	40.3	549,510.14	763,827.76	32° 30' 28.089 N	103° 28' 39.090 W
7,400.0	1.29	140.05	7,399.1	-41.5	41.9	549,508.63	763,829.42	32° 30' 28.074 N	103° 28' 39.070 W
7,500.0	0.96	156.34	7,499.1	-43.2	43.0	549,507.00	763,830.48	32° 30' 28.058 N	103° 28' 39.058 W
7,600.0	1.02	150.40	7,599.1	-44.7	43.7	549,505.46	763,831.26	32° 30' 28.042 N	103° 28' 39.049 W
7,700.0	0.94	149.15	7,699.1	-46.2	44.6	549,503.98	763,832.12	32° 30' 28.028 N	103° 28' 39.039 W
7,800.0	1.18	164.03	7,799.1	-47.9	45.3	549,502.29	763,832.82	32° 30' 28.011 N	103° 28' 39.031 W
7,900.0	1.11	163.26	7,899.1	-49.8	45.9	549,500.37	763,833.38	32° 30' 27.992 N	103° 28' 39.025 W
8,000.0	0.90	154.73	7,999.0	-51.4	46.5	549,498.73	763,834.00	32° 30' 27.976 N	103° 28' 39.018 W
8,100.0	0.82	151.23	8,099.0	-52.8	47.2	549,497.39	763,834.68	32° 30' 27.962 N	103° 28' 39.010 W
8,200.0	0.82	163.86	8,199.0	-54.1	47.7	549,496.08	763,835.22	32° 30' 27.949 N	103° 28' 39.004 W
8,300.0	0.95	168.19	8,299.0	-55.6	48.1	549,494.58	763,835.59	32° 30' 27.934 N	103° 28' 39.000 W
8,400.0	1.05	184.27	8,399.0	-57.3	48.2	549,492.86	763,835.69	32° 30' 27.917 N	103° 28' 38.999 W
8,500.0	1.07	184.39	8,499.0	-59.1	48.0	549,491.01	763,835.55	32° 30' 27.899 N	103° 28' 39.000 W
8,600.0	1.34	185.33	8,599.0	-61.2	47.9	549,488.92	763,835.37	32° 30' 27.878 N	103° 28' 39.003 W
8,700.0	1.77	183.24	8,698.9	-63.9	47.7	549,486.21	763,835.17	32° 30' 27.852 N	103° 28' 39.005 W
8,800.0	1.26	186.90	8,798.9	-66.6	47.4	549,483.58	763,834.95	32° 30' 27.826 N	103° 28' 39.008 W
8,900.0	1.31	191.82	8,898.9	-68.8	47.1	549,481.37	763,834.59	32° 30' 27.804 N	103° 28' 39.013 W
9,000.0	1.55	185.81	8,998.8	-71.3	46.7	549,478.90	763,834.22	32° 30' 27.779 N	103° 28' 39.017 W
9,100.0	1.55	178.45	9,098.8	-73.9	46.6	549,476.20	763,834.12	32° 30' 27.753 N	103° 28' 39.019 W
9,200.0	1.53	165.90	9,198.8	-76.6	47.0	549,473.56	763,834.48	32° 30' 27.726 N	103° 28' 39.015 W
9,300.0	1.63	167.59	9,298.7	-79.3	47.6	549,470.87	763,835.11	32° 30' 27.700 N	103° 28' 39.007 W
9,400.0	1.15	173.47	9,398.7	-81.7	48.0	549,468.49	763,835.53	32° 30' 27.676 N	103° 28' 39.003 W
9,500.0	1.13	164.75	9,498.7	-83.6	48.4	549,466.54	763,835.90	32° 30' 27.657 N	103° 28' 38.999 W
9,600.0	1.26	169.03	9,598.6	-85.6	48.9	549,464.51	763,836.37	32° 30' 27.637 N	103° 28' 38.993 W
9,700.0	1.30	162.81	9,698.6	-87.8	49.4	549,462.35	763,836.92	32° 30' 27.615 N	103° 28' 38.987 W
9,800.0	1.46	171.23	9,798.6	-90.1	49.9	549,460.00	763,837.44	32° 30' 27.592 N	103° 28' 38.981 W
9,900.0	1.39	177.62	9,898.6	-92.6	50.2	549,457.53	763,837.69	32° 30' 27.568 N	103° 28' 38.979 W
9,965.0	1.53	181.04	9,963.5	-94.3	50.2	549,455.88	763,837.71	32° 30' 27.551 N	103° 28' 38.978 W
Final Gyro Survey									
10,013.0	1.30	185.90	10,011.5	-95.5	50.1	549,454.69	763,837.64	32° 30' 27.540 N	103° 28' 38.979 W
First MWD Survey									
10,126.0	1.10	182.50	10,124.5	-97.8	50.0	549,452.34	763,837.46	32° 30' 27.516 N	103° 28' 38.982 W
10,221.0	1.40	189.60	10,219.5	-99.9	49.7	549,450.28	763,837.23	32° 30' 27.496 N	103° 28' 38.985 W
10,252.0	1.40	176.90	10,250.5	-100.6	49.7	549,449.53	763,837.18	32° 30' 27.488 N	103° 28' 38.985 W
10,284.0	4.50	161.90	10,282.4	-102.2	50.1	549,447.94	763,837.59	32° 30' 27.473 N	103° 28' 38.981 W
10,316.0	8.40	172.60	10,314.2	-105.7	50.8	549,444.43	763,838.29	32° 30' 27.438 N	103° 28' 38.973 W
10,347.0	10.20	184.90	10,344.8	-110.7	50.8	549,439.45	763,838.34	32° 30' 27.389 N	103° 28' 38.973 W
10,378.0	10.50	184.00	10,375.3	-116.3	50.4	549,433.90	763,837.91	32° 30' 27.334 N	103° 28' 38.978 W
10,410.0	12.90	182.70	10,406.6	-122.7	50.0	549,427.42	763,837.54	32° 30' 27.270 N	103° 28' 38.983 W
10,441.0	16.00	184.40	10,436.7	-130.4	49.5	549,419.70	763,837.05	32° 30' 27.193 N	103° 28' 38.990 W
10,472.0	19.00	187.00	10,466.2	-139.7	48.6	549,410.43	763,836.11	32° 30' 27.102 N	103° 28' 39.001 W
10,504.0	22.20	188.30	10,496.2	-150.9	47.1	549,399.28	763,834.60	32° 30' 26.991 N	103° 28' 39.020 W
10,535.0	25.10	189.20	10,524.6	-163.2	45.2	549,386.99	763,832.70	32° 30' 26.870 N	103° 28' 39.043 W
10,567.0	28.90	189.90	10,553.1	-177.5	42.8	549,372.67	763,830.29	32° 30' 26.728 N	103° 28' 39.073 W
10,599.0	33.30	190.60	10,580.5	-193.7	39.8	549,356.41	763,827.34	32° 30' 26.568 N	103° 28' 39.109 W
10,630.0	38.00	190.50	10,605.6	-211.5	36.5	549,338.65	763,824.03	32° 30' 26.392 N	103° 28' 39.149 W
10,662.0	42.80	189.60	10,630.0	-231.9	32.9	549,318.23	763,820.42	32° 30' 26.191 N	103° 28' 39.193 W

Integrity Directional Services, LLC

Survey Report - Geographic

Company:	COG Production LLC	Local Co-ordinate Reference:	Well Sitka BSI St Com #1H
Project:	Lea County, NM	TVD Reference:	KB=20' @ 3728.0usft (Patriot 2)
Site:	Sec. 4, T 21S. , R 34 E	MD Reference:	KB=20' @ 3728.0usft (Patriot 2)
Well:	Sitka BSI St Com #1H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Multi 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	
10,694.0	47.40	188.30	10,652.6	-254.3	29.4	549,295.85	763,816.91	32° 30' 25.969 N	103° 28' 39.236 W	
10,725.0	52.20	186.80	10,672.6	-277.8	26.3	549,272.38	763,813.81	32° 30' 25.737 N	103° 28' 39.275 W	
10,756.0	57.00	185.00	10,690.5	-302.9	23.7	549,247.25	763,811.22	32° 30' 25.489 N	103° 28' 39.307 W	
10,788.0	61.70	182.80	10,706.9	-330.4	21.9	549,219.80	763,809.36	32° 30' 25.217 N	103° 28' 39.332 W	
10,819.0	65.70	180.70	10,720.6	-358.1	21.0	549,192.03	763,808.53	32° 30' 24.943 N	103° 28' 39.344 W	
10,851.0	68.40	179.10	10,733.1	-387.6	21.1	549,162.56	763,808.58	32° 30' 24.651 N	103° 28' 39.346 W	
10,883.0	71.10	177.60	10,744.1	-417.6	21.9	549,132.56	763,809.45	32° 30' 24.354 N	103° 28' 39.339 W	
10,914.0	74.20	176.50	10,753.4	-447.1	23.5	549,103.01	763,810.97	32° 30' 24.062 N	103° 28' 39.324 W	
10,946.0	78.70	176.30	10,760.9	-478.2	25.4	549,071.97	763,812.93	32° 30' 23.755 N	103° 28' 39.304 W	
10,977.0	82.60	176.20	10,765.9	-508.7	27.4	549,041.45	763,814.93	32° 30' 23.452 N	103° 28' 39.283 W	
11,008.0	86.10	176.40	10,769.0	-539.5	29.4	549,010.67	763,816.92	32° 30' 23.148 N	103° 28' 39.263 W	
11,040.0	88.30	176.30	10,770.5	-571.4	31.4	548,978.78	763,818.95	32° 30' 22.832 N	103° 28' 39.242 W	
11,103.0	88.00	175.40	10,772.6	-634.2	36.0	548,915.98	763,823.51	32° 30' 22.210 N	103° 28' 39.195 W	
11,198.0	86.30	173.00	10,777.3	-728.6	45.6	548,821.59	763,833.09	32° 30' 21.275 N	103° 28' 39.092 W	
11,292.0	88.30	174.40	10,781.7	-821.9	55.9	548,728.27	763,843.40	32° 30' 20.351 N	103° 28' 38.980 W	
11,387.0	88.40	175.00	10,784.5	-916.4	64.7	548,633.72	763,852.17	32° 30' 19.415 N	103° 28' 38.887 W	
11,482.0	87.40	174.70	10,787.9	-1,011.0	73.2	548,539.16	763,860.69	32° 30' 18.479 N	103° 28' 38.796 W	
11,577.0	89.80	173.30	10,790.3	-1,105.4	83.1	548,444.72	763,870.62	32° 30' 17.543 N	103° 28' 38.689 W	
11,671.0	89.40	172.90	10,790.9	-1,198.7	94.4	548,351.41	763,881.91	32° 30' 16.619 N	103° 28' 38.566 W	
11,766.0	88.60	173.90	10,792.6	-1,293.1	105.3	548,257.05	763,892.83	32° 30' 15.685 N	103° 28' 38.447 W	
11,860.0	90.30	173.60	10,793.5	-1,386.5	115.6	548,163.62	763,903.06	32° 30' 14.759 N	103° 28' 38.337 W	
11,954.0	88.20	173.60	10,794.7	-1,479.9	126.0	548,070.22	763,913.54	32° 30' 13.834 N	103° 28' 38.223 W	
12,049.0	89.50	172.10	10,796.6	-1,574.2	137.8	547,975.98	763,925.36	32° 30' 12.901 N	103° 28' 38.094 W	
12,143.0	89.10	172.40	10,797.8	-1,667.3	150.5	547,882.85	763,938.03	32° 30' 11.978 N	103° 28' 37.955 W	
12,238.0	90.30	173.40	10,798.3	-1,761.6	162.3	547,788.58	763,949.77	32° 30' 11.045 N	103° 28' 37.826 W	
12,332.0	90.70	174.90	10,797.4	-1,855.1	171.8	547,695.07	763,959.35	32° 30' 10.119 N	103° 28' 37.723 W	
12,428.0	90.60	176.00	10,796.3	-1,950.8	179.5	547,599.38	763,966.97	32° 30' 9.171 N	103° 28' 37.643 W	
12,523.0	90.60	176.20	10,795.4	-2,045.5	185.9	547,504.61	763,973.43	32° 30' 8.233 N	103° 28' 37.577 W	
12,618.0	89.80	177.80	10,795.0	-2,140.4	190.9	547,409.74	763,978.40	32° 30' 7.294 N	103° 28' 37.528 W	
12,712.0	91.40	177.60	10,794.0	-2,234.3	194.7	547,315.83	763,982.17	32° 30' 6.364 N	103° 28' 37.492 W	
12,808.0	90.90	176.80	10,792.1	-2,330.2	199.4	547,219.96	763,986.86	32° 30' 5.415 N	103° 28' 37.447 W	
12,903.0	92.70	176.20	10,789.1	-2,425.0	205.2	547,125.19	763,992.66	32° 30' 4.477 N	103° 28' 37.388 W	
12,999.0	91.80	176.20	10,785.4	-2,520.7	211.5	547,029.48	763,999.02	32° 30' 3.530 N	103° 28' 37.323 W	
13,094.0	90.20	175.40	10,783.7	-2,615.4	218.5	546,934.75	764,005.97	32° 30' 2.592 N	103° 28' 37.250 W	
13,190.0	89.60	175.60	10,783.9	-2,711.1	226.0	546,839.05	764,013.50	32° 30' 1.644 N	103° 28' 37.171 W	
13,284.0	88.60	177.00	10,785.3	-2,804.9	232.1	546,745.26	764,019.57	32° 30' 0.716 N	103° 28' 37.109 W	
13,379.0	90.60	176.90	10,786.0	-2,899.8	237.1	546,650.40	764,024.62	32° 29' 59.777 N	103° 28' 37.059 W	
13,475.0	89.80	177.40	10,785.7	-2,995.6	241.9	546,554.52	764,029.40	32° 29' 58.828 N	103° 28' 37.012 W	
13,570.0	88.20	178.30	10,787.3	-3,090.5	245.5	546,459.61	764,032.96	32° 29' 57.888 N	103° 28' 36.980 W	
13,665.0	89.60	177.30	10,789.2	-3,185.5	249.1	546,364.70	764,036.61	32° 29' 56.949 N	103° 28' 36.946 W	
13,760.0	91.20	177.60	10,788.5	-3,280.4	253.3	546,269.80	764,040.83	32° 29' 56.009 N	103° 28' 36.905 W	
13,854.0	90.50	177.00	10,787.1	-3,374.2	257.8	546,175.91	764,045.26	32° 29' 55.080 N	103° 28' 36.863 W	
13,949.0	90.30	176.20	10,786.4	-3,469.1	263.4	546,081.08	764,050.89	32° 29' 54.141 N	103° 28' 36.806 W	
14,045.0	90.30	176.20	10,785.9	-3,564.9	269.7	545,985.29	764,057.26	32° 29' 53.193 N	103° 28' 36.740 W	
14,140.0	91.40	176.10	10,784.5	-3,659.6	276.1	545,890.52	764,063.63	32° 29' 52.255 N	103° 28' 36.675 W	
14,231.0	89.80	175.70	10,783.6	-3,750.4	282.6	545,799.76	764,070.14	32° 29' 51.356 N	103° 28' 36.607 W	
14,325.0	90.70	175.50	10,783.2	-3,844.1	289.8	545,706.04	764,077.35	32° 29' 50.428 N	103° 28' 36.532 W	
14,420.0	89.10	174.70	10,783.3	-3,938.8	298.0	545,611.39	764,085.47	32° 29' 49.491 N	103° 28' 36.446 W	
14,515.0	89.70	174.30	10,784.3	-4,033.3	307.1	545,516.84	764,094.57	32° 29' 48.555 N	103° 28' 36.349 W	
14,609.0	90.90	175.10	10,783.8	-4,126.9	315.7	545,423.24	764,103.25	32° 29' 47.628 N	103° 28' 36.256 W	
14,703.0	89.80	175.70	10,783.3	-4,220.6	323.3	545,329.55	764,110.79	32° 29' 46.700 N	103° 28' 36.177 W	
14,798.0	91.00	175.50	10,782.6	-4,315.3	330.6	545,234.83	764,118.08	32° 29' 45.762 N	103° 28' 36.101 W	
14,893.0	89.90	176.30	10,781.8	-4,410.1	337.4	545,140.08	764,124.87	32° 29' 44.824 N	103° 28' 36.030 W	
14,988.0	88.40	176.90	10,783.3	-4,504.9	343.0	545,045.26	764,130.51	32° 29' 43.886 N	103° 28' 35.973 W	
15,082.0	89.10	175.50	10,785.3	-4,598.7	349.2	544,951.49	764,136.73	32° 29' 42.957 N	103° 28' 35.909 W	

Integrity Directional Services, LLC

Survey Report - Geographic

Company:	COG Production LLC	Local Co-ordinate Reference:	Well Sitka BSI St Com #1H
Project:	Lea County, NM	TVD Reference:	KB=20' @ 3728.0usft (Patriot 2)
Site:	Sec. 4, T 21S. , R 34 E	MD Reference:	KB=20' @ 3728.0usft (Patriot 2)
Well:	Sitka BSI St Com #1H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Multi 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
15,176.0	90.60	175.40	10,785.5	-4,692.4	356.7	544,857.79	764,144.19	32° 29' 42.030 N	103° 28' 35.831 W
15,271.0	89.70	174.30	10,785.3	-4,787.0	365.2	544,763.18	764,152.72	32° 29' 41.093 N	103° 28' 35.741 W
15,394.0	90.70	174.00	10,784.9	-4,909.3	377.7	544,640.82	764,165.25	32° 29' 39.881 N	103° 28' 35.606 W
Final MWD Survey									
15,446.0	90.70	174.00	10,784.2	-4,961.0	383.2	544,589.11	764,170.69	32° 29' 39.369 N	103° 28' 35.547 W
Projection to TD									

Design Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
9,965.0	9,963.5	-94.3	50.2	Final Gyro Survey	
10,013.0	10,011.5	-95.5	50.1	First MWD Survey	
15,394.0	10,784.9	-4,909.3	377.7	Final MWD Survey	
15,446.0	10,784.2	-4,961.0	383.2	Projection to TD	

Checked By: _____	Approved By: _____	Date: _____
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