

HOBBS OCD

MAY 09 2019

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**CENTENNIAL RESOURCE
DEVELOPMENT, LLC**

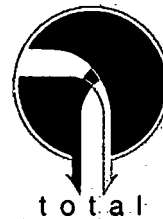
LEA COUNTY, NM (NAD 83 - UTM ZONE 13 - TRUE)

SW SE SEC. 22 T24S R34E

SHEBA FEDERAL COM #711H

06 February, 2019

Survey: FINAL SURVEYS - OH



Survey Report



Company:	CENTENNIAL RESOURCE DEVELOPMENT	Local Co-ordinate Reference:	Well SHEBA FEDERAL COM #711H
Project:	LEA COUNTY, NM (NAD 83 - UTM Zone 13N)	TVD Reference:	KB 25' @ 3519.10usft (H&P 650)
Site:	SW SE SEC. 22 T24S R34E	MD Reference:	KB 25' @ 3519.10usft (H&P 650)
Well:	SHEBA FEDERAL COM #711H	North Reference:	True
Wellbore:	JOB # 2018-744-650 - OH	Survey Calculation Method:	Minimum Curvature
Design:	FINAL SURVEYS - OH	Database:	Database 1

Project	LEA COUNTY, NM (NAD 83 - UTM ZONE 13 - TRUE)		
Map System:	Universal Transverse Mercator (US Survey Feet)	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Zone 13N (108 W to 102 W)	Using geodetic scale factor	

Site SW SE SEC. 22 T24S R34E

Site Position:		Northing:	11,690,513.90 usft	Latitude:	32.196605
From:	Map	Easting:	2,118,464.51 usft	Longitude:	-103.454148
Position Uncertainty:	0.00 usft	Slot Radius:	1.10 ft	Grid Convergence:	0.82 °

Well SHEBA FEDERAL COM #711H

Well Position	+N/-S	0.00 usft	Northing:	11,690,514.65 usft	Latitude:	32.196605
	+E/-W	0.00 usft	Easting:	2,118,524.54 usft	Longitude:	-103.453954
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	3,494.10 usft

Wellbore JOB # 2018-744-650 - OH

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	05/12/2018	6.74	60.04	47,783

Design FINAL SURVEYS - OH

Audit Notes:

Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
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Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(usft)	(usft)	(usft)	(°)
	0.00	0.00	0.00	5.35

Survey Program Date 06/02/2019

From	To	Survey (Wellbore)	Tool Name	Description
(usft)	(usft)			
217.00	15,334.00	FINAL SURVEYS - OH (JOB # 2018-744-650)	MWD+IFR1+MS	OWSG MWD + IFR1 + Multi-Station Correction

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	Subsea Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	3,519.10	0.00	0.00	0.00	0.00	0.00	0.00
217.00	0.80	249.77	216.99	3,302.11	-0.52	-1.42	-0.65	0.37	0.37	0.00
305.00	1.50	238.77	304.97	3,214.13	-1.33	-2.98	-1.61	0.83	0.80	-12.50
394.00	1.20	249.77	393.95	3,125.15	-2.26	-4.85	-2.70	0.44	-0.34	12.36
480.00	1.10	226.77	479.93	3,039.17	-3.14	-6.30	-3.71	0.55	-0.12	-26.74
565.00	1.20	224.77	564.92	2,954.18	-4.33	-7.52	-5.01	0.13	0.12	-2.35
649.00	1.10	218.77	648.90	2,870.20	-5.58	-8.65	-6.36	0.19	-0.12	-7.14
734.00	0.90	214.77	733.89	2,785.21	-6.76	-9.54	-7.62	0.25	-0.24	-4.71
815.00	0.70	193.77	814.88	2,704.22	-7.77	-10.02	-8.67	0.43	-0.25	-25.93
985.00	0.50	174.77	984.87	2,534.23	-9.52	-10.20	-10.42	0.16	-0.12	-11.18
1,070.00	0.60	183.77	1,069.87	2,449.23	-10.33	-10.19	-11.23	0.16	0.12	10.59
1,155.00	0.10	70.77	1,154.86	2,364.24	-10.75	-10.15	-11.65	0.76	-0.59	-132.94
1,239.00	0.60	167.77	1,238.86	2,280.24	-11.15	-9.99	-12.04	0.74	0.60	115.48

Survey Report



Company:	CENTENNIAL RESOURCE DEVELO	Local Co-ordinate Reference:	Well SHEBA FEDERAL COM #711H
Project:	LEA COUNTY, NM (NAD 83 - UTM Z)	TVD Reference:	KB 25' @ 3519.10usft (H&P 650)
Site:	SW SE SEC. 22 T24S R34E	MD Reference:	KB 25' @ 3519.10usft (H&P 650)
Well:	SHEBA FEDERAL COM #711H	North Reference:	True
Wellbore:	JOB # 2018-744-650 - OH	Survey Calculation Method:	Minimum Curvature
Design:	FINAL SURVEYS - OH	Database:	Database 1

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	Subsea Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
LAST INVICTUS SURVEY										
1,326.00	0.90	219.77	1,325.86	2,193.24	-12.12	-10.33	-13.03	0.82	0.34	59.77
1,391.00	0.85	222.65	1,390.85	2,128.25	-12.87	-10.98	-13.84	0.10	-0.08	4.43
1,441.00	0.85	224.12	1,440.84	2,078.26	-13.41	-11.49	-14.42	0.04	0.00	2.94
1,533.00	0.66	75.68	1,532.84	1,986.26	-13.77	-11.45	-14.78	1.58	-0.21	-161.35
1,627.00	0.70	65.16	1,626.83	1,892.27	-13.39	-10.41	-14.31	0.14	0.04	-11.19
1,721.00	2.31	88.48	1,720.80	1,798.30	-13.10	-7.99	-13.79	1.80	1.71	24.81
1,815.00	0.80	302.45	1,814.78	1,704.32	-12.70	-6.65	-13.27	3.20	-1.61	-155.35
1,910.00	0.97	291.66	1,909.77	1,609.33	-12.05	-7.96	-12.74	0.25	0.18	-11.36
2,004.00	1.07	292.22	2,003.75	1,515.35	-11.42	-9.51	-12.26	0.11	0.11	0.60
2,098.00	1.17	292.69	2,097.73	1,421.37	-10.72	-11.21	-11.72	0.11	0.11	0.50
2,192.00	1.10	2.73	2,191.72	1,327.38	-9.45	-12.05	-10.53	1.39	-0.07	74.51
2,286.00	1.35	1.85	2,285.70	1,233.40	-7.44	-11.97	-8.52	0.27	0.27	-0.94
2,380.00	1.40	5.83	2,379.67	1,139.43	-5.19	-11.82	-6.27	0.11	0.05	4.23
2,474.00	1.11	29.21	2,473.65	1,045.45	-3.25	-11.26	-4.29	0.62	-0.31	24.87
2,568.00	1.09	31.46	2,567.63	951.47	-1.70	-10.35	-2.65	0.05	-0.02	2.39
2,662.00	1.11	35.81	2,661.61	857.49	-0.20	-9.35	-1.07	0.09	0.02	4.63
2,756.00	1.05	36.30	2,755.60	763.50	1.24	-8.31	0.46	0.06	-0.06	0.52
2,850.00	1.15	39.51	2,849.58	669.52	2.66	-7.20	1.98	0.12	0.11	3.41
2,944.00	1.22	39.11	2,943.56	575.54	4.16	-5.97	3.59	0.07	0.07	-0.43
3,038.00	1.36	41.82	3,037.53	481.57	5.77	-4.59	5.32	0.16	0.15	2.88
3,132.00	1.42	42.07	3,131.51	387.59	7.47	-3.07	7.15	0.06	0.06	0.27
3,226.00	1.38	43.13	3,225.48	293.62	9.16	-1.51	8.98	0.05	-0.04	1.13
3,320.00	1.46	47.59	3,319.45	199.65	10.79	0.15	10.76	0.15	0.09	4.74
3,415.00	1.46	50.32	3,414.42	104.68	12.38	1.97	12.51	0.07	0.00	2.87
3,509.00	1.60	58.20	3,508.39	10.71	13.84	4.01	14.15	0.27	0.15	8.38
3,603.00	2.11	78.12	3,602.34	-83.24	14.88	6.82	15.45	0.87	0.54	21.19
3,697.00	3.05	97.70	3,696.24	-177.14	14.91	10.99	15.86	1.36	1.00	20.83
3,791.00	4.56	105.27	3,790.03	-270.93	13.59	17.07	15.12	1.69	1.61	8.05
3,886.00	5.58	106.27	3,884.66	-365.56	11.30	25.15	13.59	1.08	1.07	1.05
3,980.00	6.75	106.07	3,978.12	-459.02	8.49	34.84	11.70	1.24	1.24	-0.21
4,074.00	7.49	110.91	4,071.39	-552.29	4.77	45.88	9.03	1.01	0.79	5.15
4,168.00	8.53	116.18	4,164.47	-645.37	-0.49	57.86	4.91	1.35	1.11	5.61
4,262.00	8.52	114.99	4,257.44	-738.34	-6.51	70.42	0.09	0.19	-0.01	-1.27
4,356.00	7.82	116.31	4,350.48	-831.38	-12.28	82.47	-4.54	0.77	-0.74	1.40
4,450.00	7.68	115.25	4,443.62	-924.52	-17.80	93.88	-8.97	0.21	-0.15	-1.13
4,545.00	7.44	115.24	4,537.80	-1,018.70	-23.13	105.19	-13.22	0.25	-0.25	-0.01
4,638.00	7.53	112.26	4,630.00	-1,110.90	-28.00	116.27	-17.04	0.43	0.10	-3.20
4,732.00	7.82	112.69	4,723.16	-1,204.06	-32.80	127.87	-20.74	0.31	0.31	0.46
4,827.00	7.64	119.45	4,817.30	-1,298.20	-38.40	139.33	-25.24	0.98	-0.19	7.12
4,921.00	7.12	120.31	4,910.52	-1,391.42	-44.41	149.80	-30.25	0.57	-0.55	0.91
5,015.00	7.50	120.55	5,003.76	-1,484.66	-50.47	160.12	-35.32	0.41	0.40	0.26
5,109.00	7.89	120.78	5,096.91	-1,577.81	-56.89	170.94	-40.71	0.42	0.41	0.24
5,203.00	8.01	119.85	5,190.01	-1,670.91	-63.45	182.17	-46.19	0.19	0.13	-0.99
5,297.00	6.91	119.19	5,283.21	-1,764.11	-69.47	192.78	-51.19	1.17	-1.17	-0.70
5,391.00	6.23	118.34	5,376.59	-1,857.49	-74.65	202.21	-55.47	0.73	-0.72	-0.90
5,486.00	6.18	116.21	5,471.04	-1,951.94	-79.36	211.33	-59.31	0.25	-0.05	-2.24
5,580.00	6.53	110.73	5,564.46	-2,045.36	-83.48	220.87	-62.53	0.74	0.37	-5.83
5,674.00	6.78	107.56	5,657.83	-2,138.73	-87.05	231.16	-65.12	0.47	0.27	-3.37
5,768.00	7.79	107.76	5,751.07	-2,231.97	-90.67	242.52	-67.66	1.07	1.07	0.21
5,862.00	7.99	108.89	5,844.18	-2,325.08	-94.72	254.77	-70.56	0.27	0.21	1.20
5,956.00	8.04	107.73	5,937.26	-2,418.16	-98.84	267.21	-73.50	0.18	0.05	-1.23
6,051.00	7.64	105.92	6,031.37	-2,512.27	-102.60	279.61	-76.08	0.49	-0.42	-1.91

Survey Report



Company: CENTENNIAL RESOURCE DEVELO
Project: LEA COUNTY, NM (NAD 83 - UTM Z
Site: SW SE SEC. 22 T24S R34E
Well: SHEBA FEDERAL COM #711H
Wellbore: JOB # 2018-744-650 - OH
Design: FINAL SURVEYS - OH

Local Co-ordinate Reference: Well SHEBA FEDERAL COM #711H
TVD Reference: KB 25' @ 3519.10usft (H&P 650)
MD Reference: KB 25' @ 3519.10usft (H&P 650)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: Database 1

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	Subsea Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
6,145.00	7.73	106.71	6,124.53	-2,605.43	-106.13	291.67	-78.47	0.15	0.10	0.84
6,239.00	8.87	111.86	6,217.54	-2,698.44	-110.65	304.45	-81.78	1.45	1.21	5.48
6,333.00	9.68	120.78	6,310.32	-2,791.22	-117.39	317.97	-87.23	1.75	0.86	9.49
6,427.00	8.49	126.53	6,403.14	-2,884.04	-125.56	330.34	-94.22	1.59	-1.27	6.12
6,522.00	8.09	125.86	6,497.14	-2,978.04	-133.65	341.39	-101.24	0.43	-0.42	-0.71
6,616.00	8.19	124.10	6,590.20	-3,071.10	-141.28	352.29	-107.82	0.29	0.11	-1.87
6,710.00	7.82	124.01	6,683.28	-3,164.18	-148.61	363.14	-114.11	0.39	-0.39	-0.10
6,804.00	7.56	123.86	6,776.44	-3,257.34	-155.63	373.58	-120.12	0.28	-0.28	-0.16
6,898.00	7.45	123.14	6,869.63	-3,350.53	-162.41	383.81	-125.92	0.15	-0.12	-0.77
6,992.00	7.31	122.39	6,962.85	-3,443.75	-168.95	393.97	-131.48	0.18	-0.15	-0.80
7,086.00	6.98	121.71	7,056.12	-3,537.02	-175.15	403.87	-136.73	0.36	-0.35	-0.72
7,180.00	6.68	120.76	7,149.45	-3,630.35	-180.95	413.43	-141.61	0.34	-0.32	-1.01
7,274.00	5.68	124.24	7,242.91	-3,723.81	-186.36	421.98	-146.21	1.14	-1.06	3.70
7,368.00	5.17	117.86	7,336.49	-3,817.39	-190.96	429.57	-150.08	0.84	-0.54	-6.79
7,462.00	3.69	130.24	7,430.21	-3,911.11	-194.89	435.62	-153.43	1.87	-1.57	13.17
7,556.00	3.09	135.61	7,524.04	-4,004.94	-198.66	439.70	-156.80	0.72	-0.64	5.71
7,650.00	2.62	145.44	7,617.92	-4,098.82	-202.24	442.69	-160.08	0.72	-0.50	10.46
7,743.00	2.39	146.96	7,710.84	-4,191.74	-205.61	444.95	-163.23	0.26	-0.25	1.63
7,837.00	1.85	145.96	7,804.77	-4,285.67	-208.51	446.87	-165.94	0.58	-0.57	-1.06
7,931.00	1.24	172.81	7,898.74	-4,379.64	-210.78	447.85	-168.11	0.99	-0.65	28.56
8,025.00	1.10	184.47	7,992.72	-4,473.62	-212.69	447.91	-170.00	0.29	-0.15	12.40
8,119.00	0.98	187.39	8,086.70	-4,567.60	-214.39	447.73	-171.71	0.14	-0.13	3.11
8,213.00	0.77	199.58	8,180.69	-4,661.59	-215.78	447.42	-173.12	0.30	-0.22	12.97
8,307.00	0.70	205.49	8,274.68	-4,755.58	-216.89	446.96	-174.27	0.11	-0.07	6.29
8,401.00	0.69	213.98	8,368.68	-4,849.58	-217.88	446.40	-175.31	0.11	-0.01	9.03
8,496.00	0.67	228.48	8,463.67	-4,944.57	-218.72	445.66	-176.22	0.18	-0.02	15.26
8,590.00	0.69	250.21	8,557.66	-5,038.56	-219.28	444.72	-176.86	0.27	0.02	23.12
8,684.00	0.72	248.97	8,651.66	-5,132.56	-219.68	443.63	-177.36	0.04	0.03	-1.32
8,778.00	0.83	252.63	8,745.65	-5,226.55	-220.10	442.43	-177.89	0.13	0.12	3.89
8,872.00	0.76	254.43	8,839.64	-5,320.54	-220.47	441.18	-178.37	0.08	-0.07	1.91
8,966.00	0.82	262.32	8,933.63	-5,414.53	-220.72	439.91	-178.75	0.13	0.06	8.39
9,060.00	1.02	274.41	9,027.62	-5,508.52	-220.75	438.41	-178.91	0.30	0.21	12.86
9,154.00	1.17	283.18	9,121.60	-5,602.50	-220.47	436.64	-178.79	0.24	0.16	9.33
9,247.00	1.29	286.10	9,214.58	-5,695.48	-219.96	434.71	-178.47	0.15	0.13	3.14
9,341.00	1.62	290.29	9,308.55	-5,789.45	-219.21	432.45	-177.93	0.37	0.35	4.46
9,436.00	1.59	280.77	9,403.51	-5,884.41	-218.49	429.90	-177.46	0.28	-0.03	-10.02
9,530.00	1.80	288.74	9,497.47	-5,978.37	-217.78	427.22	-176.99	0.34	0.22	8.48
9,624.00	1.78	293.97	9,591.43	-6,072.33	-216.71	424.49	-176.19	0.18	-0.02	5.56
9,718.00	1.91	300.43	9,685.38	-6,166.28	-215.32	421.80	-175.06	0.26	0.14	6.87
9,812.00	2.30	296.13	9,779.31	-6,260.21	-213.70	418.76	-173.72	0.45	0.41	-4.57
9,905.00	2.24	301.66	9,872.24	-6,353.14	-211.92	415.53	-172.25	0.24	-0.06	5.95
9,999.00	2.11	302.94	9,966.17	-6,447.07	-210.02	412.52	-170.64	0.15	-0.14	1.36
10,094.00	2.00	298.78	10,061.11	-6,542.01	-208.27	409.60	-169.17	0.20	-0.12	-4.38
10,188.00	2.09	298.92	10,155.05	-6,635.95	-206.65	406.66	-167.83	0.10	0.10	0.15
10,282.00	2.25	294.16	10,248.98	-6,729.88	-205.07	403.48	-166.55	0.26	0.17	-5.06
10,376.00	2.16	284.80	10,342.91	-6,823.81	-203.86	400.08	-165.67	0.39	-0.10	-9.96
10,471.00	2.33	293.39	10,437.84	-6,918.74	-202.63	396.58	-164.77	0.40	0.18	9.04
10,565.00	2.86	300.09	10,531.75	-7,012.65	-200.70	392.79	-163.20	0.65	0.56	7.13
10,660.00	2.37	305.40	10,626.65	-7,107.55	-198.37	389.14	-161.23	0.57	-0.52	5.59
10,754.00	2.51	299.45	10,720.56	-7,201.46	-196.24	385.76	-159.41	0.31	0.15	-6.33
10,848.00	2.59	301.74	10,814.47	-7,295.37	-194.11	382.17	-157.63	0.14	0.09	2.44
10,942.00	2.28	297.90	10,908.38	-7,389.28	-192.11	378.71	-155.97	0.37	-0.33	-4.09
11,036.00	2.17	290.42	11,002.31	-7,483.21	-190.62	375.39	-154.79	0.33	-0.12	-7.96

Survey Report



Company:	CENTENNIAL RESOURCE DEVELO	Local Co-ordinate Reference:	Well SHEBA FEDERAL COM #711H
Project:	LEA COUNTY, NM (NAD 83 - UTM ZI	TVD Reference:	KB 25' @ 3519.10usft (H&P 650)
Site:	SW SE SEC. 22 T24S R34E	MD Reference:	KB 25' @ 3519.10usft (H&P 650)
Well:	SHEBA FEDERAL COM #711H	North Reference:	True
Wellbore:	JOB # 2018-744-650 - OH	Survey Calculation Method:	Minimum Curvature
Design:	FINAL SURVEYS - OH	Database:	Database 1

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	Subsea Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Bulld Rate (°/100usft)	Turn Rate (°/100usft)
11,131.00	2.25	296.72	11,097.24	-7,578.14	-189.15	372.04	-153.64	0.27	0.08	6.63
11,225.00	1.99	297.49	11,191.18	-7,672.08	-187.57	368.94	-152.35	0.28	-0.28	0.82
11,319.00	1.85	293.19	11,285.13	-7,766.03	-186.22	366.10	-151.27	0.21	-0.15	-4.57
11,413.00	2.00	298.97	11,379.07	-7,859.97	-184.83	363.27	-150.15	0.26	0.16	6.15
11,507.00	2.00	299.67	11,473.01	-7,953.91	-183.22	360.41	-148.82	0.03	0.00	0.74
11,601.00	2.32	304.70	11,566.95	-8,047.85	-181.32	357.42	-147.21	0.40	0.34	5.35
INT CASING POINT										
11,682.00	2.46	301.84	11,647.88	-8,128.78	-179.47	354.59	-145.63	0.23	0.17	-3.53
11,771.00	2.56	306.26	11,736.79	-8,217.69	-177.29	351.37	-143.76	0.24	0.11	4.97
KOP										
11,803.00	2.73	308.26	11,768.76	-8,249.66	-176.40	350.19	-142.98	0.60	0.53	6.25
11,867.00	3.53	321.84	11,832.66	-8,313.56	-173.90	347.78	-140.72	1.70	1.25	21.22
11,899.00	7.69	345.26	11,864.51	-8,345.41	-171.06	346.63	-137.99	14.58	13.00	73.19
11,931.00	12.54	351.77	11,896.00	-8,376.90	-165.54	345.58	-132.60	15.55	15.16	20.34
11,963.00	16.02	355.74	11,927.01	-8,407.91	-157.70	344.76	-124.87	11.29	10.87	12.41
11,995.00	18.34	358.42	11,957.58	-8,438.48	-148.26	344.29	-115.52	7.66	7.25	8.37
12,026.00	20.73	1.61	11,986.79	-8,467.69	-137.90	344.31	-105.20	8.44	7.71	10.29
12,059.00	21.94	0.21	12,017.53	-8,498.43	-125.90	344.50	-93.23	3.98	3.67	-4.24
12,091.00	25.66	357.96	12,046.80	-8,527.70	-112.99	344.27	-80.40	11.96	11.62	-7.03
12,122.00	28.91	359.25	12,074.35	-8,555.25	-98.79	343.93	-66.29	10.66	10.48	4.16
12,155.00	31.69	0.22	12,102.84	-8,583.74	-82.14	343.86	-49.72	8.55	8.42	2.94
12,187.00	36.42	1.82	12,129.35	-8,610.25	-64.23	344.20	-31.86	15.04	14.78	5.00
12,219.00	41.38	2.62	12,154.24	-8,635.14	-44.16	344.98	-11.80	15.58	15.50	2.50
12,250.00	45.17	2.96	12,176.81	-8,657.71	-22.94	346.02	9.43	12.25	12.23	1.10
12,282.00	49.08	4.20	12,198.58	-8,679.48	0.46	347.49	32.86	12.54	12.22	3.87
12,314.00	52.39	5.99	12,218.83	-8,699.73	25.13	349.70	57.63	11.21	10.34	5.59
12,346.00	54.99	7.74	12,237.78	-8,718.68	50.73	352.79	83.40	9.24	8.12	5.47
12,378.00	57.91	9.02	12,255.46	-8,736.36	77.11	356.68	110.03	9.71	9.12	4.00
12,410.00	58.96	9.41	12,272.21	-8,753.11	104.02	361.05	137.24	3.44	3.28	1.22
12,442.00	59.47	9.03	12,288.59	-8,769.49	131.16	365.45	164.66	1.89	1.59	-1.19
12,474.00	61.95	8.96	12,304.24	-8,785.14	158.72	369.81	192.51	7.75	7.75	-0.22
12,506.00	66.85	10.24	12,318.07	-8,798.97	187.17	374.63	221.28	15.73	15.31	4.00
12,538.00	68.98	9.27	12,330.10	-8,811.00	216.39	379.65	250.85	7.22	6.66	-3.03
12,585.00	73.62	6.49	12,345.17	-8,826.07	260.47	385.74	295.30	11.35	9.87	-5.91
12,634.00	75.29	5.36	12,358.30	-8,839.20	307.43	390.61	342.51	4.07	3.41	-2.31
12,666.00	76.96	3.88	12,365.97	-8,846.87	338.39	393.11	373.57	6.88	5.22	-4.62
12,698.00	80.82	3.15	12,372.14	-8,853.04	369.72	395.04	404.95	12.27	12.06	-2.28
HZ LANDING PT										
12,730.00	84.55	3.26	12,376.21	-8,857.11	401.41	396.81	436.66	11.66	11.66	0.34
12,761.00	90.27	5.13	12,377.61	-8,858.51	432.28	399.07	467.61	19.41	18.45	6.03
12,825.00	91.61	6.49	12,376.56	-8,857.46	495.94	405.55	531.59	2.98	2.09	2.12
12,921.00	90.66	6.32	12,374.66	-8,855.56	591.32	416.26	627.56	1.01	-0.99	-0.18
13,017.00	89.89	5.48	12,374.20	-8,855.10	686.81	426.13	723.55	1.19	-0.80	-0.87
13,112.00	87.29	4.77	12,376.54	-8,857.44	781.39	434.61	818.51	2.84	-2.74	-0.75
13,208.00	90.31	4.56	12,378.55	-8,859.45	877.04	442.42	914.47	3.15	3.15	-0.22
13,304.00	90.27	3.14	12,378.06	-8,858.96	972.82	448.86	1,010.44	1.48	-0.04	-1.48
13,399.00	90.45	2.42	12,377.46	-8,858.36	1,067.71	453.47	1,105.34	0.78	0.19	-0.76
13,495.00	90.73	0.92	12,376.47	-8,857.37	1,163.66	456.27	1,201.13	1.59	0.29	-1.56
13,591.00	90.84	358.55	12,375.16	-8,856.06	1,259.64	455.82	1,296.66	2.47	0.11	-2.47
13,687.00	90.45	359.30	12,374.08	-8,854.98	1,355.62	454.02	1,392.05	0.88	-0.41	0.78
13,782.00	88.10	358.84	12,375.28	-8,856.18	1,450.59	452.48	1,486.46	2.52	-2.47	-0.48
13,878.00	90.36	359.28	12,376.57	-8,857.47	1,546.56	450.90	1,581.87	2.40	2.35	0.46
13,973.00	91.50	359.24	12,375.03	-8,855.93	1,641.54	449.68	1,676.32	1.20	1.20	-0.04

Survey Report



Company:	CENTENNIAL RESOURCE DEVELO	Local Co-ordinate Reference:	Well SHEBA FEDERAL COM #711H
Project:	LEA COUNTY, NM (NAD 83 - UTM Z	TVD Reference:	KB 25' @ 3519.10usft (H&P 650)
Site:	SW SE SEC. 22 T24S R34E	MD Reference:	KB 25' @ 3519.10usft (H&P 650)
Well:	SHEBA FEDERAL COM #711H	North Reference:	True
Wellbore:	JOB # 2018-744-650 - OH	Survey Calculation Method:	Minimum Curvature
Design:	FINAL SURVEYS - OH	Database:	Database 1

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	Subsea Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
14,069.00	90.39	0.31	12,373.45	-8,854.35	1,737.52	449.30	1,771.85	1.61	-1.16	1.11
14,165.00	89.66	0.79	12,373.40	-8,854.30	1,833.52	450.22	1,867.51	0.91	-0.76	0.50
14,261.00	93.96	4.31	12,370.37	-8,851.27	1,929.34	454.49	1,963.31	5.79	4.48	3.67
14,308.00	91.41	4.08	12,368.17	-8,849.07	1,976.16	457.92	2,010.24	5.45	-5.43	-0.49
14,356.00	91.78	2.62	12,366.83	-8,847.73	2,024.05	460.72	2,058.20	3.14	0.77	-3.04
14,396.00	94.37	2.64	12,364.69	-8,845.59	2,063.95	462.56	2,098.09	6.48	6.47	0.05
14,428.00	91.32	2.90	12,363.10	-8,844.00	2,095.87	464.10	2,130.01	9.57	-9.53	0.81
14,460.00	88.36	2.48	12,363.19	-8,844.09	2,127.83	465.60	2,161.98	9.34	-9.25	-1.31
14,492.00	85.28	1.65	12,364.96	-8,845.86	2,159.76	466.75	2,193.87	9.97	-9.62	-2.59
14,524.00	84.04	1.67	12,367.94	-8,848.84	2,191.61	467.68	2,225.66	3.88	-3.87	0.06
14,556.00	86.04	0.59	12,370.71	-8,851.61	2,223.48	468.31	2,257.46	7.10	6.25	-3.37
14,587.00	89.54	359.29	12,371.90	-8,852.80	2,254.45	468.27	2,288.29	12.04	11.29	-4.19
14,619.00	90.22	358.70	12,371.97	-8,852.87	2,286.44	467.71	2,320.09	2.81	2.12	-1.84
14,651.00	89.68	358.83	12,372.00	-8,852.90	2,318.44	467.02	2,351.88	1.74	-1.69	0.41
14,683.00	89.62	358.45	12,372.19	-8,853.09	2,350.43	466.26	2,383.66	1.20	-0.19	-1.19
14,715.00	88.52	358.70	12,372.71	-8,853.61	2,382.41	465.47	2,415.43	3.53	-3.44	0.78
14,747.00	87.33	358.18	12,373.87	-8,854.77	2,414.38	464.60	2,447.18	4.06	-3.72	-1.62
14,779.00	86.47	357.76	12,375.60	-8,856.50	2,446.31	463.46	2,478.87	2.99	-2.69	-1.31
14,810.00	86.65	357.46	12,377.46	-8,858.36	2,477.23	462.17	2,509.53	1.13	0.58	-0.97
14,842.00	87.73	358.37	12,379.03	-8,859.93	2,509.17	461.01	2,541.22	4.41	3.37	2.84
14,938.00	89.82	357.83	12,381.08	-8,861.98	2,605.09	457.83	2,636.43	2.25	2.18	-0.56
14,957.00	93.56	357.76	12,380.52	-8,861.42	2,624.06	457.10	2,655.25	19.69	19.68	-0.37
15,033.00	89.75	357.89	12,378.33	-8,859.23	2,699.96	454.22	2,730.55	5.02	-5.01	0.17
15,129.00	91.65	358.04	12,377.16	-8,858.06	2,795.89	450.81	2,825.74	1.99	1.98	0.16
15,225.00	90.10	0.50	12,375.69	-8,856.59	2,891.86	449.59	2,921.18	3.03	-1.61	2.56
LAST SURVEY JAN 25, 2019										
15,257.00	90.14	359.85	12,375.62	-8,856.52	2,923.86	449.68	2,953.05	2.04	0.12	-2.03
EXTRAPOLATION TO TD - OH										
15,334.00	90.14	359.85	12,375.44	-8,856.34	3,000.86	449.48	3,029.70	0.00	0.00	0.00

Survey Report



Company:	CENTENNIAL RESOURCE DEVELO	Local Co-ordinate Reference:	Well SHEBA FEDERAL COM #711H
Project:	LEA COUNTY, NM (NAD 83 - UTM Z	TVD Reference:	KB 25' @ 3519.10usft (H&P 650)
Site:	SW SE SEC. 22 T24S R34E	MD Reference:	KB 25' @ 3519.10usft (H&P 650)
Well:	SHEBA FEDERAL COM #711H	North Reference:	True
Wellbore:	JOB # 2018-744-650 - OH	Survey Calculation Method:	Minimum Curvature
Design:	FINAL SURVEYS - OH	Database:	Database 1

Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
FTP/PP - SHEBA FEI - survey misses target center by 59.79usft at 12711.95usft MD (12374.17 TVD, 383.51 N, 395.80 E) - Point	0.00	0.00	12,379.94	379.44	455.17	11,690,900.54	2,118,974.14	32.197648	-103.452482
KOP - SHEBA FEDEF - survey misses target center by 614.19usft at 11820.82usft MD (11786.56 TVD, -175.82 N, 349.53 E) - Point	0.00	0.00	11,814.11	-780.32	454.64	11,689,741.06	2,118,990.29	32.194460	-103.452484
LTP/BHL - SHEBA FE - survey misses target center by 1875.33usft at 15334.00usft MD (12375.44 TVD, 3000.86 N, 449.48 E) - Point	0.00	0.00	12,325.00	4,875.49	456.58	11,695,395.53	2,118,910.91	32.210006	-103.452478
FTP/PP - SHEBA FEI - survey misses target center by 295.04usft at 12268.29usft MD (12189.45 TVD, -9.74 N, 346.79 E) - Point	0.00	0.00	12,387.03	-200.36	454.84	11,690,320.88	2,118,982.15	32.196054	-103.452483
FTP/PP - SHEBA FEI - survey misses target center by 59.79usft at 12711.95usft MD (12374.17 TVD, 383.51 N, 395.80 E) - Point	0.00	0.00	12,379.94	379.44	455.17	11,690,900.54	2,118,974.14	32.197648	-103.452482
LTP/BHL - SHEBA FE - survey misses target center by 1875.33usft at 15334.00usft MD (12375.44 TVD, 3000.86 N, 449.48 E) - Point	0.00	0.00	12,325.00	4,875.49	456.58	11,695,395.53	2,118,910.91	32.210006	-103.452478
KOP - SHEBA FEDEF - survey misses target center by 109.11usft at 11836.31usft MD (11802.03 TVD, -175.25 N, 348.94 E) - Point	0.00	0.00	11,807.02	-200.52	454.96	11,690,320.72	2,118,982.28	32.196054	-103.452483
KOP - SHEBA FEDEF - survey misses target center by 109.11usft at 11836.31usft MD (11802.03 TVD, -175.25 N, 348.94 E) - Point	0.00	0.00	11,807.02	-200.52	454.96	11,690,320.72	2,118,982.28	32.196054	-103.452483
ABDN VERT BUFF 2: - survey misses target center by 3900.85usft at 13973.67usft MD (12375.01 TVD, 1642.21 N, 449.67 E) - Circle (radius 30.00)	0.00	0.00	15,521.30	1,685.06	-1,855.90	11,692,172.62	2,116,644.86	32.201237	-103.459953
LTP/BHL - SHEBA FE - survey misses target center by 1875.33usft at 15334.00usft MD (12375.44 TVD, 3000.86 N, 449.48 E) - Point	0.00	0.00	12,325.00	4,875.49	456.58	11,695,395.53	2,118,910.91	32.210006	-103.452478
ABDN VERT MADRA - survey misses target center by 4043.03usft at 12730.00usft MD (12376.21 TVD, 401.41 N, 396.81 E) - Circle (radius 30.00)	0.00	0.00	15,488.10	363.86	-2,184.04	11,690,847.02	2,116,335.80	32.197605	-103.461014

Survey Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	+E/-W (usft)	Comment
1,326.00	1,325.86	-12.12	-10.33	LAST INVICTUS SURVEY
11,682.00	11,647.88	-179.47	354.59	INT CASING POINT
11,803.00	11,768.76	-176.40	350.19	KOP
12,730.00	12,376.21	401.41	396.81	HZ LANDING PT
15,257.00	12,375.62	2,923.86	449.68	LAST SURVEY JAN 25, 2019
15,334.00	12,375.44	3,000.86	449.48	EXTRAPOLATION TO TD - OH

Checked By: _____ Approved By: _____ Date: _____

**CENTENNIAL RESOURCE
DEVELOPMENT, LLC**

**LEA COUNTY, NM (NAD 83 - UTM ZONE 13 - TRUE)
SW SE SEC. 22 T24S R34E
SHEBA FEDERAL COM #711H
03 February, 2019**

Survey: SURVEYS SIDETRACK



Survey Report



Company:	CENTENNIAL RESOURCE DEVELO	Local Co-ordinate Reference:	Well SHEBA FEDERAL COM #711H
Project:	LEA COUNTY, NM (NAD 83 - UTM Z	TVD Reference:	KB 25' @ 3519.10usft (H&P 650)
Site:	SW SE SEC. 22 T24S R34E	MD Reference:	KB 25' @ 3519.10usft (H&P 650)
Well:	SHEBA FEDERAL COM #711H	North Reference:	True
Wellbore:	JOB # 2018-744-650 - SIDETRACK	Survey Calculation Method:	Minimum Curvature
Design:	SURVEYS SIDETRACK	Database:	Database 1

Project	LEA COUNTY, NM (NAD 83 - UTM ZONE 13 - TRUE)		
Map System:	Universal Transverse Mercator (US Survey Fee	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Zone 13N (108 W to 102 W)		
			Using geodetic scale factor

Site SW SE SEC. 22 T24S R34E

Site Position:		Northing:	11,690,513.90 usft	Latitude:	32.196605°N
From:	Map	Easting:	2,118,464.51 usft	Longitude:	103.454148°W
Position Uncertainty:	0.00 usft	Slot Radius:	1.10 ft	Grid Convergence:	0.82 °

Well SHEBA FEDERAL COM #711H

Well Position	+N/-S	0.00 usft	Northing:	11,690,514.65 usft	Latitude:	32.196605°N
	+E/-W	0.00 usft	Easting:	2,118,524.54 usft	Longitude:	103.453954°W
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	3,494.10 usft

Wellbore JOB # 2018-744-650 - SIDETRACK

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	28/01/2019	6.72	60.03	47,767

Design SURVEYS SIDETRACK

Audit Notes:

Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
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Vertical Section:	Depth From (TVD)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	10.24

Survey Program Date 03/02/2019

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
217.00	17,277.00	SURVEYS SIDETRACK (JOB # 2018-744	MWD+IFR1+MS	OWSG MWD + IFR1 + Multi-Station Correction

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	Subsea Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Buid Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	3,519.10	0.00	0.00	0.00	0.00	0.00	0.00
217.00	0.80	249.77	216.99	3,302.11	-0.52	-1.42	-0.77	0.37	0.37	0.00
305.00	1.50	238.77	304.97	3,214.13	-1.33	-2.98	-1.84	0.83	0.80	-12.50
394.00	1.20	249.77	393.95	3,125.15	-2.26	-4.85	-3.09	0.44	-0.34	12.36
480.00	1.10	226.77	479.93	3,039.17	-3.14	-6.30	-4.21	0.55	-0.12	-26.74
565.00	1.20	224.77	564.92	2,954.18	-4.33	-7.52	-5.60	0.13	0.12	-2.35
649.00	1.10	218.77	648.90	2,870.20	-5.58	-8.65	-7.03	0.19	-0.12	-7.14
734.00	0.90	214.77	733.89	2,785.21	-6.76	-9.54	-8.35	0.25	-0.24	-4.71
815.00	0.70	193.77	814.88	2,704.22	-7.77	-10.02	-9.42	0.43	-0.25	-25.93
985.00	0.50	174.77	984.87	2,534.23	-9.52	-10.20	-11.18	0.16	-0.12	-11.18
1,070.00	0.60	183.77	1,069.87	2,449.23	-10.33	-10.19	-11.98	0.16	0.12	10.59
1,155.00	0.10	70.77	1,154.86	2,364.24	-10.75	-10.15	-12.38	0.76	-0.59	-132.94
1,239.00	0.60	167.77	1,238.86	2,280.24	-11.15	-9.99	-12.75	0.74	0.60	115.48

Survey Report



Company: CENTENNIAL RESOURCE DEVELO
Project: LEA COUNTY, NM (NAD 83 - UTM Z
Site: SW SE SEC. 22 T24S R34E
Well: SHEBA FEDERAL COM #711H
Wellbore: JOB # 2018-744-650 - SIDETRACK
Design: SURVEYS SIDETRACK

Local Co-ordinate Reference: Well SHEBA FEDERAL COM #711H
TVD Reference: KB 25' @ 3519.10usft (H&P 650)
MD Reference: KB 25' @ 3519.10usft (H&P 650)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: Database 1

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	Subsea Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Bulld Rate (°/100usft)	Turn Rate (°/100usft)
LAST INVICTUS SURVEY										
1,326.00	0.90	219.77	1,325.86	2,193.24	-12.12	-10.33	-13.77	0.82	0.34	59.77
1,391.00	0.85	222.65	1,390.85	2,128.25	-12.87	-10.98	-14.62	0.10	-0.08	4.43
1,441.00	0.85	224.12	1,440.84	2,078.26	-13.41	-11.49	-15.24	0.04	0.00	2.94
1,533.00	0.66	75.68	1,532.84	1,986.26	-13.77	-11.45	-15.59	1.58	-0.21	-161.35
1,627.00	0.70	65.16	1,626.83	1,892.27	-13.39	-10.41	-15.03	0.14	0.04	-11.19
1,721.00	2.31	88.48	1,720.80	1,798.30	-13.10	-7.99	-14.31	1.80	1.71	24.81
1,815.00	0.80	302.45	1,814.78	1,704.32	-12.70	-6.65	-13.68	3.20	-1.61	-155.35
1,910.00	0.97	291.66	1,909.77	1,609.33	-12.05	-7.96	-13.27	0.25	0.18	-11.36
2,004.00	1.07	292.22	2,003.75	1,515.35	-11.42	-9.51	-12.93	0.11	0.11	0.60
2,098.00	1.17	292.69	2,097.73	1,421.37	-10.72	-11.21	-12.54	0.11	0.11	0.50
2,192.00	1.10	2.73	2,191.72	1,327.38	-9.45	-12.05	-11.44	1.39	-0.07	74.51
2,286.00	1.35	1.85	2,285.70	1,233.40	-7.44	-11.97	-9.45	0.27	0.27	-0.94
2,380.00	1.40	5.83	2,379.67	1,139.43	-5.19	-11.82	-7.21	0.11	0.05	4.23
2,474.00	1.11	29.21	2,473.65	1,045.45	-3.25	-11.26	-5.20	0.62	-0.31	24.87
2,568.00	1.09	31.46	2,567.63	951.47	-1.70	-10.35	-3.51	0.05	-0.02	2.39
2,662.00	1.11	35.81	2,661.61	857.49	-0.20	-9.35	-1.85	0.09	0.02	4.63
2,756.00	1.05	36.30	2,755.60	763.50	1.24	-8.31	-0.26	0.06	-0.06	0.52
2,850.00	1.15	39.51	2,849.58	669.52	2.66	-7.20	1.34	0.12	0.11	3.41
2,944.00	1.22	39.11	2,943.56	575.54	4.16	-5.97	3.04	0.07	0.07	-0.43
3,038.00	1.36	41.82	3,037.53	481.57	5.77	-4.59	4.86	0.16	0.15	2.88
3,132.00	1.42	42.07	3,131.51	387.59	7.47	-3.07	6.80	0.06	0.06	0.27
3,226.00	1.38	43.13	3,225.48	293.62	9.16	-1.51	8.74	0.05	-0.04	1.13
3,320.00	1.46	47.59	3,319.45	199.65	10.79	0.15	10.64	0.15	0.09	4.74
3,415.00	1.46	50.32	3,414.42	104.68	12.38	1.97	12.53	0.07	0.00	2.87
3,509.00	1.60	58.20	3,508.39	10.71	13.84	4.01	14.33	0.27	0.15	8.38
3,603.00	2.11	78.12	3,602.34	-83.24	14.88	6.82	15.86	0.87	0.54	21.19
3,697.00	3.05	97.70	3,696.24	-177.14	14.91	10.99	16.62	1.36	1.00	20.83
3,791.00	4.56	105.27	3,790.03	-270.93	13.59	17.07	16.40	1.69	1.61	8.05
3,886.00	5.58	106.27	3,884.66	-365.56	11.30	25.15	15.59	1.08	1.07	1.05
3,980.00	6.75	106.07	3,978.12	-459.02	8.49	34.84	14.55	1.24	1.24	-0.21
4,074.00	7.49	110.91	4,071.39	-552.29	4.77	45.88	12.85	1.01	0.79	5.15
4,168.00	8.53	116.18	4,164.47	-645.37	-0.49	57.86	9.80	1.35	1.11	5.61
4,262.00	8.52	114.99	4,257.44	-738.34	-6.51	70.42	6.11	0.19	-0.01	-1.27
4,356.00	7.82	116.31	4,350.48	-831.38	-12.28	82.47	2.57	0.77	-0.74	1.40
4,450.00	7.68	115.25	4,443.62	-924.52	-17.80	93.88	-0.83	0.21	-0.15	-1.13
4,545.00	7.44	115.24	4,537.80	-1,018.70	-23.13	105.19	-4.06	0.25	-0.25	-0.01
4,638.00	7.53	112.26	4,630.00	-1,110.90	-28.00	116.27	-6.89	0.43	0.10	-3.20
4,732.00	7.82	112.69	4,723.16	-1,204.06	-32.80	127.87	-9.55	0.31	0.31	0.46
4,827.00	7.64	119.45	4,817.30	-1,298.20	-38.40	139.33	-13.03	0.98	-0.19	7.12
4,921.00	7.12	120.31	4,910.52	-1,391.42	-44.41	149.80	-17.08	0.57	-0.55	0.91
5,015.00	7.50	120.55	5,003.76	-1,484.66	-50.47	160.12	-21.21	0.41	0.40	0.26
5,109.00	7.89	120.78	5,096.91	-1,577.81	-56.89	170.94	-25.60	0.42	0.41	0.24
5,203.00	8.01	119.85	5,190.01	-1,670.91	-63.45	182.17	-30.07	0.19	0.13	-0.99
5,297.00	6.91	119.19	5,283.21	-1,764.11	-69.47	192.78	-34.10	1.17	-1.17	-0.70
5,391.00	6.23	118.34	5,376.59	-1,857.49	-74.65	202.21	-37.52	0.73	-0.72	-0.90
5,486.00	6.18	116.21	5,471.04	-1,951.94	-79.36	211.33	-40.53	0.25	-0.05	-2.24
5,580.00	6.53	110.73	5,564.46	-2,045.36	-83.48	220.87	-42.90	0.74	0.37	-5.83
5,674.00	6.78	107.56	5,657.83	-2,138.73	-87.05	231.16	-44.58	0.47	0.27	-3.37
5,768.00	7.79	107.76	5,751.07	-2,231.97	-90.67	242.52	-46.12	1.07	1.07	0.21
5,862.00	7.99	108.89	5,844.18	-2,325.08	-94.72	254.77	-47.93	0.27	0.21	1.20
5,956.00	8.04	107.73	5,937.26	-2,418.16	-98.84	267.21	-49.77	0.18	0.05	-1.23
6,051.00	7.64	105.92	6,031.37	-2,512.27	-102.60	279.61	-51.27	0.49	-0.42	-1.91

Survey Report



Company:	CENTENNIAL RESOURCE DEVELO	Local Co-ordinate Reference:	Well SHEBA FEDERAL COM #711H
Project:	LEA COUNTY, NM (NAD 83 - UTM Z	TVD Reference:	KB 25' @ 3519.10usft (H&P 650)
Site:	SW SE SEC. 22 T24S R34E	MD Reference:	KB 25' @ 3519.10usft (H&P 650)
Well:	SHEBA FEDERAL COM #711H	North Reference:	True
Wellbore:	JOB # 2018-744-650 - SIDETRACK	Survey Calculation Method:	Minimum Curvature
Design:	SURVEYS SIDETRACK	Database:	Database 1

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	Subsea Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
6,145.00	7.73	106.71	6,124.53	-2,605.43	-106.13	291.67	-52.60	0.15	0.10	0.84
6,239.00	8.87	111.86	6,217.54	-2,698.44	-110.65	304.45	-54.77	1.45	1.21	5.48
6,333.00	9.68	120.78	6,310.32	-2,791.22	-117.39	317.97	-59.00	1.75	0.86	9.49
6,427.00	8.49	126.53	6,403.14	-2,884.04	-125.56	330.34	-64.85	1.59	-1.27	6.12
6,522.00	8.09	125.86	6,497.14	-2,978.04	-133.65	341.39	-70.85	0.43	-0.42	-0.71
6,616.00	8.19	124.10	6,590.20	-3,071.10	-141.28	352.29	-76.41	0.29	0.11	-1.87
6,710.00	7.82	124.01	6,683.28	-3,164.18	-148.61	363.14	-81.70	0.39	-0.39	-0.10
6,804.00	7.56	123.86	6,776.44	-3,257.34	-155.63	373.58	-86.76	0.28	-0.28	-0.16
6,898.00	7.45	123.14	6,869.63	-3,350.53	-162.41	383.81	-91.61	0.15	-0.12	-0.77
6,992.00	7.31	122.39	6,962.85	-3,443.75	-168.95	393.97	-96.23	0.18	-0.15	-0.80
7,086.00	6.98	121.71	7,056.12	-3,537.02	-175.15	403.87	-100.58	0.36	-0.35	-0.72
7,180.00	6.68	120.76	7,149.45	-3,630.35	-180.95	413.43	-104.59	0.34	-0.32	-1.01
7,274.00	5.68	124.24	7,242.91	-3,723.81	-186.36	421.98	-108.39	1.14	-1.06	3.70
7,368.00	5.17	117.86	7,336.49	-3,817.39	-190.96	429.57	-111.57	0.84	-0.54	-6.79
7,462.00	3.69	130.24	7,430.21	-3,911.11	-194.89	435.62	-114.36	1.87	-1.57	13.17
7,556.00	3.09	135.61	7,524.04	-4,004.94	-198.66	439.70	-117.34	0.72	-0.64	5.71
7,650.00	2.62	145.44	7,617.92	-4,098.82	-202.24	442.69	-120.33	0.72	-0.50	10.46
7,743.00	2.39	146.96	7,710.84	-4,191.74	-205.61	444.95	-123.25	0.26	-0.25	1.63
7,837.00	1.85	145.96	7,804.77	-4,285.67	-208.51	446.87	-125.77	0.58	-0.57	-1.06
7,931.00	1.24	172.81	7,898.74	-4,379.64	-210.78	447.85	-127.82	0.99	-0.65	28.56
8,025.00	1.10	184.47	7,992.72	-4,473.62	-212.69	447.91	-129.69	0.29	-0.15	12.40
8,119.00	0.98	187.39	8,086.70	-4,567.60	-214.39	447.73	-131.39	0.14	-0.13	3.11
8,213.00	0.77	199.58	8,180.69	-4,661.59	-215.78	447.42	-132.82	0.30	-0.22	12.97
8,307.00	0.70	205.49	8,274.68	-4,755.58	-216.89	446.96	-134.00	0.11	-0.07	6.29
8,401.00	0.69	213.98	8,368.68	-4,849.58	-217.88	446.40	-135.07	0.11	-0.01	9.03
8,496.00	0.67	228.48	8,463.67	-4,944.57	-218.72	445.66	-136.03	0.18	-0.02	15.26
8,590.00	0.69	250.21	8,557.66	-5,038.56	-219.28	444.72	-136.74	0.27	0.02	23.12
8,684.00	0.72	248.97	8,651.66	-5,132.56	-219.68	443.63	-137.33	0.04	0.03	-1.32
8,778.00	0.83	252.63	8,745.65	-5,226.55	-220.10	442.43	-137.95	0.13	0.12	3.89
8,872.00	0.76	254.43	8,839.64	-5,320.54	-220.47	441.18	-138.54	0.08	-0.07	1.91
8,966.00	0.82	262.32	8,933.63	-5,414.53	-220.72	439.91	-139.02	0.13	0.06	8.39
9,060.00	1.02	274.41	9,027.62	-5,508.52	-220.75	438.41	-139.31	0.30	0.21	12.86
9,154.00	1.17	283.18	9,121.60	-5,602.50	-220.47	436.64	-139.35	0.24	0.16	9.33
9,247.00	1.29	286.10	9,214.58	-5,695.48	-219.96	434.71	-139.19	0.15	0.13	3.14
9,341.00	1.62	290.29	9,308.55	-5,789.45	-219.21	432.45	-138.85	0.37	0.35	4.46
9,436.00	1.59	280.77	9,403.51	-5,884.41	-218.49	429.90	-138.60	0.28	-0.03	-10.02
9,530.00	1.80	288.74	9,497.47	-5,978.37	-217.78	427.22	-138.37	0.34	0.22	8.48
9,624.00	1.78	293.97	9,591.43	-6,072.33	-216.71	424.49	-137.81	0.18	-0.02	5.56
9,718.00	1.91	300.43	9,685.38	-6,166.28	-215.32	421.80	-136.92	0.26	0.14	6.87
9,812.00	2.30	296.13	9,779.31	-6,260.21	-213.70	418.76	-135.87	0.45	0.41	-4.57
9,905.00	2.24	301.66	9,872.24	-6,353.14	-211.92	415.53	-134.69	0.24	-0.06	5.95
9,999.00	2.11	302.94	9,966.17	-6,447.07	-210.02	412.52	-133.35	0.15	-0.14	1.36
10,094.00	2.00	298.78	10,061.11	-6,542.01	-208.27	409.60	-132.15	0.20	-0.12	-4.38
10,188.00	2.09	298.92	10,155.05	-6,635.95	-206.65	406.66	-131.08	0.10	0.10	0.15
10,282.00	2.25	294.16	10,248.98	-6,729.88	-205.07	403.48	-130.09	0.26	0.17	-5.06
10,376.00	2.16	284.80	10,342.91	-6,823.81	-203.86	400.08	-129.50	0.39	-0.10	-9.96
10,471.00	2.33	293.39	10,437.84	-6,918.74	-202.63	396.58	-128.92	0.40	0.18	9.04
10,565.00	2.86	300.09	10,531.75	-7,012.65	-200.70	392.79	-127.69	0.65	0.56	7.13
10,660.00	2.37	305.40	10,626.65	-7,107.55	-198.37	389.14	-126.05	0.57	-0.52	5.59
-100R SETBACK X-OVER POINT										
10,753.79	2.51	299.46	10,720.35	-7,201.25	-196.24	385.77	-124.55	0.31	0.15	-6.33
10,754.00	2.51	299.45	10,720.56	-7,201.46	-196.24	385.76	-124.54	0.31	0.16	-5.97
10,848.00	2.59	301.74	10,814.47	-7,295.37	-194.11	382.17	-123.09	0.14	0.09	2.44

Survey Report



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Project:	LEA COUNTY, NM (NAD 83 - UTM Z)	TVD Reference:	KB 25' @ 3519.10usft (H&P 650)
Site:	SW SE SEC. 22 T24S R34E	MD Reference:	KB 25' @ 3519.10usft (H&P 650)
Well:	SHEBA FEDERAL COM #711H	North Reference:	True
Wellbore:	JOB # 2018-744-650 - SIDETRACK	Survey Calculation Method:	Minimum Curvature
Design:	SURVEYS SIDETRACK	Database:	Database 1

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	Subsea Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,942.00	2.28	297.90	10,908.38	-7,389.28	-192.11	378.71	-121.74	0.37	-0.33	-4.09
11,036.00	2.17	290.42	11,002.31	-7,483.21	-190.62	375.39	-120.86	0.33	-0.12	-7.96
11,131.00	2.25	296.72	11,097.24	-7,578.14	-189.15	372.04	-120.01	0.27	0.08	6.63
11,225.00	1.99	297.49	11,191.18	-7,672.08	-187.57	368.94	-119.01	0.28	-0.28	0.82
11,319.00	1.85	293.19	11,285.13	-7,766.03	-186.22	366.10	-118.18	0.21	-0.15	-4.57
11,413.00	2.00	298.97	11,379.07	-7,859.97	-184.83	363.27	-117.32	0.26	0.16	6.15
11,507.00	2.00	299.67	11,473.01	-7,953.91	-183.22	360.41	-116.24	0.03	0.00	0.74
11,601.00	2.32	304.70	11,566.95	-8,047.85	-181.32	357.42	-114.91	0.40	0.34	5.35
ICP										
11,682.00	2.46	301.84	11,647.88	-8,128.78	-179.47	354.59	-113.59	0.23	0.17	-3.53
11,771.00	2.56	306.26	11,736.79	-8,217.69	-177.29	351.37	-112.02	0.24	0.11	4.97
KOP										
11,803.00	2.73	308.26	11,768.76	-8,249.66	-176.40	350.19	-111.34	0.60	0.53	6.25
11,867.00	3.53	321.84	11,832.66	-8,313.56	-173.90	347.78	-109.32	1.70	1.25	21.22
11,899.00	7.69	345.26	11,864.51	-8,345.41	-171.06	346.63	-106.72	14.58	13.00	73.19
11,931.00	12.54	351.77	11,896.00	-8,376.90	-165.54	345.58	-101.48	15.55	15.16	20.34
11,963.00	16.02	355.74	11,927.01	-8,407.91	-157.70	344.76	-93.91	11.29	10.87	12.41
11,995.00	18.34	358.42	11,957.58	-8,438.48	-148.26	344.29	-84.71	7.66	7.25	8.37
12,026.00	20.73	1.61	11,986.79	-8,467.69	-137.90	344.31	-74.51	8.44	7.71	10.29
12,059.00	21.94	0.21	12,017.53	-8,498.43	-125.90	344.50	-62.66	3.98	3.67	-4.24
12,091.00	25.66	357.96	12,046.80	-8,527.70	-112.99	344.27	-50.00	11.96	11.62	-7.03
12,122.00	28.91	359.25	12,074.35	-8,555.25	-98.79	343.93	-36.08	10.66	10.48	4.16
12,155.00	31.69	0.22	12,102.84	-8,583.74	-82.14	343.86	-19.71	8.55	8.42	2.94
12,187.00	36.42	1.82	12,129.35	-8,610.25	-64.23	344.20	-2.03	15.04	14.78	5.00
12,219.00	41.38	2.62	12,154.24	-8,635.14	-44.16	344.98	17.86	15.58	15.50	2.50
12,250.00	45.17	2.96	12,176.81	-8,657.71	-22.94	346.02	38.93	12.25	12.23	1.10
12,282.00	49.08	4.20	12,198.58	-8,679.48	0.46	347.49	62.22	12.54	12.22	3.87
12,314.00	52.39	5.99	12,218.83	-8,699.73	25.13	349.70	86.89	11.21	10.34	5.59
12,346.00	54.99	7.74	12,237.78	-8,718.68	50.73	352.79	112.63	9.24	8.12	5.47
12,378.00	57.91	9.02	12,255.46	-8,736.36	77.11	356.68	139.28	9.71	9.12	4.00
12,410.00	58.96	9.41	12,272.21	-8,753.11	104.02	361.05	166.54	3.44	3.28	1.22
12,442.00	59.47	9.03	12,288.59	-8,769.49	131.16	365.45	194.03	1.89	1.59	-1.19
12,474.00	61.95	8.96	12,304.24	-8,785.14	158.72	369.81	221.93	7.75	7.75	-0.22
12,506.00	66.85	10.24	12,318.07	-8,798.97	187.17	374.63	250.78	15.73	15.31	4.00
12,538.00	68.98	9.27	12,330.10	-8,811.00	216.39	379.65	280.42	7.22	6.66	-3.03
12,585.00	73.62	6.49	12,345.17	-8,826.07	260.47	385.74	324.89	11.35	9.87	-5.91
12,634.00	75.29	5.36	12,358.30	-8,839.20	307.43	390.61	371.96	4.07	3.41	-2.31
12,666.00	76.96	3.88	12,365.97	-8,846.87	338.39	393.11	402.87	6.88	5.22	-4.62
12,698.00	80.82	3.15	12,372.14	-8,853.04	369.72	395.04	434.05	12.27	12.06	-2.28
HZ LANDING										
12,730.00	84.55	3.26	12,376.21	-8,857.11	401.41	396.81	465.55	11.66	11.66	0.34
12,761.00	90.27	5.13	12,377.61	-8,858.51	432.28	399.07	496.33	19.41	18.45	6.03
12,825.00	91.61	6.49	12,376.56	-8,857.46	495.94	405.55	560.13	2.98	2.09	2.12
12,921.00	90.66	6.32	12,374.66	-8,855.56	591.32	416.26	655.89	1.01	-0.99	-0.18
13,017.00	89.89	5.48	12,374.20	-8,855.10	686.81	426.13	751.61	1.19	-0.80	-0.87
13,112.00	87.29	4.77	12,376.54	-8,857.44	781.39	434.61	846.20	2.84	-2.74	-0.75
13,208.00	90.31	4.56	12,378.55	-8,859.45	877.04	442.42	941.71	3.15	3.15	-0.22
13,304.00	90.27	3.14	12,378.06	-8,858.96	972.82	448.86	1,037.11	1.48	-0.04	-1.48
13,399.00	90.45	2.42	12,377.46	-8,858.36	1,067.71	453.47	1,131.31	0.78	0.19	-0.76
13,495.00	90.73	0.92	12,376.47	-8,857.37	1,163.66	456.27	1,226.23	1.59	0.29	-1.56
13,591.00	90.84	358.55	12,375.16	-8,856.06	1,259.64	455.82	1,320.60	2.47	0.11	-2.47
13,687.00	90.45	359.30	12,374.08	-8,854.98	1,355.62	454.02	1,414.73	0.88	-0.41	0.78
13,782.00	88.10	358.84	12,375.28	-8,856.18	1,450.59	452.48	1,507.92	2.52	-2.47	-0.48

Survey Report



Company: CENTENNIAL RESOURCE DEVELOPMENT
Project: LEA COUNTY, NM (NAD 83 - UTM Zone 18N)
Site: SW SE SEC. 22 T24S R34E
Well: SHEBA FEDERAL COM #711H
Wellbore: JOB # 2018-744-650 - SIDETRACK
Design: SURVEYS SIDETRACK

Local Co-ordinate Reference: Well SHEBA FEDERAL COM #711H
TVD Reference: KB 25' @ 3519.10usft (H&P 650)
MD Reference: KB 25' @ 3519.10usft (H&P 650)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: Database 1

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	Subsea Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
13,878.00	90.36	359.28	12,376.57	-8,857.47	1,546.56	450.90	1,602.08	2.40	2.35	0.46
13,973.00	91.50	359.24	12,375.03	-8,855.93	1,641.54	449.68	1,695.33	1.20	1.20	-0.04
14,069.00	90.39	0.31	12,373.45	-8,854.35	1,737.52	449.30	1,789.72	1.61	-1.16	1.11
SIDETRACK PT										
14,165.00	89.66	0.79	12,373.40	-8,854.30	1,833.52	450.22	1,884.35	0.91	-0.76	0.50
14,167.00	89.93	0.69	12,373.41	-8,854.31	1,835.52	450.25	1,886.32	14.40	13.50	-5.00
14,199.00	87.44	0.11	12,374.14	-8,855.04	1,867.51	450.47	1,917.84	7.99	-7.78	-1.81
14,231.00	86.92	359.60	12,375.72	-8,856.62	1,899.47	450.39	1,949.28	2.27	-1.62	-1.59
14,262.00	86.98	359.22	12,377.37	-8,858.27	1,930.42	450.07	1,979.68	1.24	0.19	-1.23
14,294.00	87.37	358.99	12,378.95	-8,859.85	1,962.38	449.57	2,011.04	1.41	1.22	-0.72
14,326.00	88.78	359.00	12,380.02	-8,860.92	1,994.35	449.01	2,042.41	4.41	4.41	0.03
14,358.00	89.45	359.11	12,380.51	-8,861.41	2,026.35	448.48	2,073.80	2.12	2.09	0.34
14,390.00	90.06	358.67	12,380.65	-8,861.55	2,058.34	447.86	2,105.17	2.35	1.91	-1.37
14,422.00	89.70	359.60	12,380.72	-8,861.62	2,090.34	447.38	2,136.57	3.12	-1.12	2.91
14,454.00	89.47	359.28	12,380.95	-8,861.85	2,122.33	447.07	2,168.00	1.23	-0.72	-1.00
14,485.00	88.21	359.49	12,381.58	-8,862.48	2,153.32	446.74	2,198.44	4.12	-4.06	0.68
14,549.00	88.14	359.75	12,383.62	-8,864.52	2,217.29	446.31	2,261.31	0.42	-0.11	0.41
14,645.00	90.35	358.98	12,384.88	-8,865.78	2,313.27	445.25	2,355.58	2.44	2.30	-0.80
14,740.00	89.83	0.62	12,384.73	-8,865.63	2,408.27	444.92	2,449.00	1.81	-0.55	1.73
14,836.00	90.88	0.87	12,384.14	-8,865.04	2,504.25	446.16	2,543.68	1.12	1.09	0.26
14,931.00	91.39	0.67	12,382.26	-8,863.16	2,599.23	447.44	2,637.37	0.58	0.54	-0.21
15,027.00	92.18	2.29	12,379.26	-8,860.16	2,695.14	449.92	2,732.20	1.88	0.82	1.69
15,123.00	88.66	359.92	12,378.56	-8,859.46	2,791.10	451.77	2,826.96	4.42	-3.67	-2.47
15,218.00	88.73	359.75	12,380.72	-8,861.62	2,886.08	451.50	2,920.37	0.19	0.07	-0.18
15,314.00	91.20	2.59	12,380.78	-8,861.68	2,982.04	453.46	3,015.15	3.92	2.57	2.96
15,410.00	90.20	359.23	12,379.61	-8,860.51	3,078.01	454.98	3,109.86	3.65	-1.04	-3.50
15,441.00	89.29	357.76	12,379.75	-8,860.65	3,108.99	454.17	3,140.21	5.58	-2.94	-4.74
15,473.00	91.50	357.88	12,379.53	-8,860.43	3,140.97	452.95	3,171.46	6.92	6.91	0.37
15,505.00	91.74	357.85	12,378.62	-8,859.52	3,172.93	451.76	3,202.71	0.76	0.75	-0.09
15,537.00	93.12	357.59	12,377.27	-8,858.17	3,204.88	450.49	3,233.92	4.39	4.31	-0.81
15,569.00	92.42	357.29	12,375.72	-8,856.62	3,236.81	449.06	3,265.08	2.38	-2.19	-0.94
15,601.00	92.80	357.48	12,374.26	-8,855.16	3,268.74	447.60	3,296.25	1.33	1.19	0.59
15,632.00	94.02	357.99	12,372.42	-8,853.32	3,299.66	446.38	3,326.46	4.26	3.94	1.65
15,664.00	95.21	359.18	12,369.84	-8,850.74	3,331.55	445.59	3,357.70	5.25	3.72	3.72
15,696.00	94.82	358.93	12,367.05	-8,847.95	3,363.42	445.06	3,388.97	1.45	-1.22	-0.78
15,792.00	94.84	357.58	12,358.96	-8,839.86	3,459.03	442.15	3,482.54	1.40	0.02	-1.41
15,887.00	95.09	359.13	12,350.74	-8,831.64	3,553.63	439.43	3,575.16	1.65	0.26	1.63
15,951.00	95.48	358.12	12,344.85	-8,825.75	3,617.34	437.90	3,637.58	1.69	0.61	-1.58
15,983.00	93.78	359.21	12,342.26	-8,823.16	3,649.23	437.16	3,668.82	6.30	-5.31	3.41
16,015.00	94.26	358.76	12,340.02	-8,820.92	3,681.14	436.60	3,700.13	2.05	1.50	-1.41
16,043.00	94.40	358.38	12,337.91	-8,818.81	3,709.06	435.90	3,727.47	1.44	0.50	-1.36
16,075.00	92.48	359.96	12,335.98	-8,816.88	3,740.99	435.44	3,758.82	7.76	-6.00	4.94
16,106.00	90.45	1.30	12,335.19	-8,816.09	3,771.98	435.78	3,789.37	7.85	-6.55	4.32
16,138.00	90.50	1.62	12,334.93	-8,815.83	3,803.97	436.59	3,821.00	1.01	0.16	1.00
16,171.00	90.77	1.32	12,334.56	-8,815.46	3,836.95	437.44	3,853.61	1.22	0.82	-0.91
16,202.00	91.18	1.39	12,334.03	-8,814.93	3,867.94	438.17	3,884.23	1.34	1.32	0.23
16,234.00	90.22	2.26	12,333.64	-8,814.54	3,899.92	439.19	3,915.89	4.05	-3.00	2.72
16,266.00	89.48	3.20	12,333.73	-8,814.63	3,931.88	440.71	3,947.61	3.74	-2.31	2.94
16,298.00	89.31	3.42	12,334.06	-8,814.96	3,963.83	442.56	3,979.37	0.87	-0.53	0.69
16,330.00	89.62	3.40	12,334.36	-8,815.26	3,995.77	444.47	4,011.15	0.97	0.97	-0.06
16,361.00	90.00	3.62	12,334.47	-8,815.37	4,026.71	446.36	4,041.93	1.42	1.23	0.71
16,393.00	89.03	3.25	12,334.74	-8,815.64	4,058.65	448.28	4,073.71	3.24	-3.03	-1.16
16,425.00	87.74	2.45	12,335.64	-8,816.54	4,090.60	449.87	4,105.43	4.74	-4.03	-2.50

Survey Report



Company: CENTENNIAL RESOURCE DEVELOPMENT
Project: LEA COUNTY, NM (NAD 83 - UTM Zone 18N)
Site: SW SE SEC. 22 T24S R34E
Well: SHEBA FEDERAL COM #711H
Wellbore: JOB # 2018-744-650 - SIDETRACK
Design: SURVEYS SIDETRACK

Local Co-ordinate Reference: Well SHEBA FEDERAL COM #711H
TVD Reference: KB 25' @ 3519.10usft (H&P 650)
MD Reference: KB 25' @ 3519.10usft (H&P 650)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: Database 1

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	Subsea Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Builde Rate (°/100usft)	Turn Rate (°/100usft)
16,457.00	88.50	2.77	12,336.69	-8,817.59	4,122.55	451.33	4,137.13	2.58	2.37	1.00
16,489.00	88.77	3.09	12,337.45	-8,818.35	4,154.50	452.96	4,168.86	1.31	0.84	1.00
16,584.00	91.81	2.31	12,336.97	-8,817.87	4,249.38	457.44	4,263.02	3.30	3.20	-0.82
16,680.00	92.14	1.88	12,333.66	-8,814.56	4,345.26	460.94	4,358.00	0.56	0.34	-0.45
16,776.00	90.41	1.38	12,331.53	-8,812.43	4,441.19	463.67	4,452.89	1.88	-1.80	-0.52
16,872.00	90.20	1.59	12,331.01	-8,811.91	4,537.16	466.16	4,547.77	0.31	-0.22	0.22
16,904.00	90.34	1.62	12,330.86	-8,811.76	4,569.14	467.06	4,579.41	0.45	0.44	0.09
16,935.00	89.57	1.02	12,330.89	-8,811.79	4,600.14	467.77	4,610.03	3.15	-2.48	-1.94
16,967.00	87.40	1.11	12,331.73	-8,812.63	4,632.12	468.37	4,641.61	6.79	-6.78	0.28
16,999.00	86.64	1.04	12,333.40	-8,814.30	4,664.07	468.97	4,673.16	2.39	-2.37	-0.22
17,031.00	86.93	1.42	12,335.19	-8,816.09	4,696.01	469.65	4,704.71	1.49	0.91	1.19
17,063.00	87.94	1.02	12,336.62	-8,817.52	4,727.97	470.33	4,736.29	3.39	3.16	-1.25
17,158.00	88.95	0.75	12,339.20	-8,820.10	4,822.92	471.80	4,829.99	1.10	1.06	-0.28
~100ft SETBACK X-OVER POINT										
17,216.02	90.86	2.46	12,339.30	-8,820.20	4,880.92	473.43	4,887.34	4.43	3.30	2.96
LAST SURVEY FEB 3, 2019										
17,225.00	91.16	2.73	12,339.14	-8,820.04	4,889.88	473.83	4,896.24	4.43	3.30	2.96
EXTRAPOLATION TO TD - SIDETRACK										
17,277.00	91.16	2.73	12,338.09	-8,818.99	4,941.81	476.31	4,947.79	0.00	0.00	0.00

Targets

Target Name

- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- Shape									
LTP/BHL - SHEBA FE	0.00	0.00	12,325.00	4,875.49	456.58	11,695,395.53	2,118,910.91	32.210006°N	103.452478°W
- survey misses target center by 21.96usft at 17210.10usft MD (12339.38 TVD, 4875.00 N, 473.18 E)									
- Point									

Survey Annotations

Measured Depth (usft)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment
1,326.00	1,325.86	-12.12	-10.33	LAST INVICTUS SURVEY
10,753.79	10,720.35	-196.24	385.77	~100ft SETBACK X-OVER POINT
11,682.00	11,647.88	-179.47	354.59	ICP
11,803.00	11,768.76	-176.40	350.19	KOP
12,730.00	12,376.21	401.41	396.81	HZ LANDING
14,165.00	12,373.40	1,833.52	450.22	SIDETRACK PT
17,216.02	12,339.30	4,880.92	473.43	~100ft SETBACK X-OVER POINT
17,225.00	12,339.14	4,889.88	473.83	LAST SURVEY FEB 3, 2019
17,277.00	12,338.09	4,941.81	476.31	EXTRAPOLATION TO TD - SIDETRACK

Checked By: _____ Approved By: _____ Date: _____

**CENTENNIAL RESOURCE
DEVELOPMENT, LLC**

**LEA COUNTY, NM (NAD 83 - UTM ZONE 13 - TRUE)
SW SE SEC. 22 T24S R34E
SHEBA FEDERAL COM #711H
12 February, 2019**

Survey: FINAL SURVEYS SIDETRACK 2



Survey Report



Company:	CENTENNIAL RESOURCE DEVELOPME	Local Co-ordinate Reference:	Well SHEBA FEDERAL COM #711H
Project:	LEA COUNTY, NM (NAD 83 - UTM ZONE	TVD Reference:	KB 25' @ 3519.10usft (H&P 650)
Site:	SW SE SEC. 22 T24S R34E	MD Reference:	KB 25' @ 3519.10usft (H&P 650)
Well:	SHEBA FEDERAL COM #711H	North Reference:	True
Wellbore:	JOB # 2018-744-650 - SIDETRACK 2	Survey Calculation Method:	Minimum Curvature
Design:	FINAL SURVEYS SIDETRACK 2	Database:	Database 1

Project LEA COUNTY, NM (NAD 83 - UTM ZONE 13 - TRUE)

Map System:	Universal Transverse Mercator (US Survey Feet)	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Zone 13N (108 W to 102 W)		Using geodetic scale factor

Site SW SE SEC. 22 T24S R34E

Site Position:		Northing:	11,690,513.90 usft	Latitude:	32.196605
From:	Map	Easting:	2,118,464.51 usft	Longitude:	-103.454148
Position Uncertainty:	0.00 usft	Slot Radius:	1.10 ft	Grid Convergence:	0.82 °

Well SHEBA FEDERAL COM #711H

Well Position	+N/-S	0.00 usft	Northing:	11,690,514.65 usft	Latitude:	32.196605
	+E/-W	0.00 usft	Easting:	2,118,524.54 usft	Longitude:	-103.453954
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	3,494.10 usft

Wellbore JOB # 2018-744-650 - SIDETRACK 2

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	04/02/2019	6.72	60.03	47,765

Design FINAL SURVEYS SIDETRACK 2

Audit Notes:

Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
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Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	6.16

Survey Program Date 12/02/2019

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
217.00	17,277.00	FINAL SURVEYS SIDETRACK 2 (JOB # 2	MWD+IFR1+MS	OWSG MWD + IFR1 + Multi-Station Correction

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	Subsea Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	3,519.10	0.00	0.00	0.00	0.00	0.00	0.00
217.00	0.80	249.77	216.99	3,302.11	-0.52	-1.42	-0.67	0.37	0.37	0.00
305.00	1.50	238.77	304.97	3,214.13	-1.33	-2.98	-1.65	0.83	0.80	-12.50
394.00	1.20	249.77	393.95	3,125.15	-2.26	-4.85	-2.77	0.44	-0.34	12.36
480.00	1.10	226.77	479.93	3,039.17	-3.14	-6.30	-3.79	0.55	-0.12	-26.74
565.00	1.20	224.77	564.92	2,954.18	-4.33	-7.52	-5.11	0.13	0.12	-2.35
649.00	1.10	218.77	648.90	2,870.20	-5.58	-8.65	-6.48	0.19	-0.12	-7.14
734.00	0.90	214.77	733.89	2,785.21	-6.76	-9.54	-7.75	0.25	-0.24	-4.71
815.00	0.70	193.77	814.88	2,704.22	-7.77	-10.02	-8.80	0.43	-0.25	-25.93
985.00	0.50	174.77	984.87	2,534.23	-9.52	-10.20	-10.55	0.16	-0.12	-11.18
1,070.00	0.60	183.77	1,069.87	2,449.23	-10.33	-10.19	-11.36	0.16	0.12	10.59
1,155.00	0.10	70.77	1,154.86	2,364.24	-10.75	-10.15	-11.78	0.76	-0.59	-132.94
1,239.00	0.60	167.77	1,238.86	2,280.24	-11.15	-9.99	-12.16	0.74	0.60	115.48

Survey Report



Company:	CENTENNIAL RESOURCE DEVELOPME	Local Co-ordinate Reference:	Well SHEBA FEDERAL COM #711H
Project:	LEA COUNTY, NM (NAD 83 - UTM ZONE	TVD Reference:	KB 25' @ 3519.10usft (H&P 650)
Site:	SW SE SEC. 22 T24S R34E	MD Reference:	KB 25' @ 3519.10usft (H&P 650)
Well:	SHEBA FEDERAL COM #711H	North Reference:	True
Wellbore:	JOB # 2018-744-650 - SIDETRACK 2	Survey Calculation Method:	Minimum Curvature
Design:	FINAL SURVEYS SIDETRACK 2	Database:	Database 1

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	Subsea Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
1,326.00	0.90	219.77	1,325.86	2,193.24	-12.12	-10.33	-13.16	0.82	0.34	59.77
1,391.00	0.85	222.65	1,390.85	2,128.25	-12.87	-10.98	-13.98	0.10	-0.08	4.43
1,441.00	0.85	224.12	1,440.84	2,078.26	-13.41	-11.49	-14.57	0.04	0.00	2.94
1,533.00	0.66	75.68	1,532.84	1,986.26	-13.77	-11.45	-14.92	1.58	-0.21	-161.35
1,627.00	0.70	65.16	1,626.83	1,892.27	-13.39	-10.41	-14.43	0.14	0.04	-11.19
1,721.00	2.31	88.48	1,720.80	1,798.30	-13.10	-7.99	-13.88	1.80	1.71	24.81
1,815.00	0.80	302.45	1,814.78	1,704.32	-12.70	-6.65	-13.34	3.20	-1.61	-155.35
1,910.00	0.97	291.66	1,909.77	1,609.33	-12.05	-7.96	-12.83	0.25	0.18	-11.36
2,004.00	1.07	292.22	2,003.75	1,515.35	-11.42	-9.51	-12.38	0.11	0.11	0.60
2,098.00	1.17	292.69	2,097.73	1,421.37	-10.72	-11.21	-11.86	0.11	0.11	0.50
2,192.00	1.10	2.73	2,191.72	1,327.38	-9.45	-12.05	-10.69	1.39	-0.07	74.51
2,286.00	1.35	1.85	2,285.70	1,233.40	-7.44	-11.97	-8.68	0.27	0.27	-0.94
2,380.00	1.40	5.83	2,379.67	1,139.43	-5.19	-11.82	-6.43	0.11	0.05	4.23
2,474.00	1.11	29.21	2,473.65	1,045.45	-3.25	-11.26	-4.44	0.62	-0.31	24.87
2,568.00	1.09	31.46	2,567.63	951.47	-1.70	-10.35	-2.80	0.05	-0.02	2.39
2,662.00	1.11	35.81	2,661.61	857.49	-0.20	-9.35	-1.20	0.09	0.02	4.63
2,756.00	1.05	36.30	2,755.60	763.50	1.24	-8.31	0.34	0.06	-0.06	0.52
2,850.00	1.15	39.51	2,849.58	669.52	2.66	-7.20	1.87	0.12	0.11	3.41
2,944.00	1.22	39.11	2,943.56	575.54	4.16	-5.97	3.50	0.07	0.07	-0.43
3,038.00	1.36	41.82	3,037.53	481.57	5.77	-4.59	5.24	0.16	0.15	2.88
3,132.00	1.42	42.07	3,131.51	387.59	7.47	-3.07	7.09	0.06	0.06	0.27
3,226.00	1.38	43.13	3,225.48	293.62	9.16	-1.51	8.94	0.05	-0.04	1.13
3,320.00	1.46	47.59	3,319.45	199.65	10.79	0.15	10.74	0.15	0.09	4.74
3,415.00	1.46	50.32	3,414.42	104.68	12.38	1.97	12.52	0.07	0.00	2.87
3,509.00	1.60	58.20	3,508.39	10.71	13.84	4.01	14.19	0.27	0.15	8.38
3,603.00	2.11	78.12	3,602.34	-83.24	14.88	6.82	15.53	0.87	0.54	21.19
3,697.00	3.05	97.70	3,696.24	-177.14	14.91	10.99	16.00	1.36	1.00	20.83
3,791.00	4.56	105.27	3,790.03	-270.93	13.59	17.07	15.34	1.69	1.61	8.05
3,886.00	5.58	106.27	3,884.66	-365.56	11.30	25.15	13.93	1.08	1.07	1.05
3,980.00	6.75	106.07	3,978.12	-459.02	8.49	34.84	12.18	1.24	1.24	-0.21
4,074.00	7.49	110.91	4,071.39	-552.29	4.77	45.88	9.67	1.01	0.79	5.15
4,168.00	8.53	116.18	4,164.47	-645.37	-0.49	57.86	5.72	1.35	1.11	5.61
4,262.00	8.52	114.99	4,257.44	-738.34	-6.51	70.42	1.09	0.19	-0.01	-1.27
4,356.00	7.82	116.31	4,350.48	-831.38	-12.28	82.47	-3.36	0.77	-0.74	1.40
4,450.00	7.68	115.25	4,443.62	-924.52	-17.80	93.88	-7.62	0.21	-0.15	-1.13
4,545.00	7.44	115.24	4,537.80	-1,018.70	-23.13	105.19	-11.71	0.25	-0.25	-0.01
4,638.00	7.53	112.26	4,630.00	-1,110.90	-28.00	116.27	-15.36	0.43	0.10	-3.20
4,732.00	7.82	112.69	4,723.16	-1,204.06	-32.80	127.87	-18.89	0.31	0.31	0.46
4,827.00	7.64	119.45	4,817.30	-1,298.20	-38.40	139.33	-23.23	0.98	-0.19	7.12
4,921.00	7.12	120.31	4,910.52	-1,391.42	-44.41	149.80	-28.08	0.57	-0.55	0.91
5,015.00	7.50	120.55	5,003.76	-1,484.66	-50.47	160.12	-33.00	0.41	0.40	0.26
5,109.00	7.89	120.78	5,096.91	-1,577.81	-56.89	170.94	-38.22	0.42	0.41	0.24
5,203.00	8.01	119.85	5,190.01	-1,670.91	-63.45	182.17	-43.54	0.19	0.13	-0.99
5,297.00	6.91	119.19	5,283.21	-1,764.11	-69.47	192.78	-48.38	1.17	-1.17	-0.70
5,391.00	6.23	118.34	5,376.59	-1,857.49	-74.65	202.21	-52.52	0.73	-0.72	-0.90
5,486.00	6.18	116.21	5,471.04	-1,951.94	-79.36	211.33	-56.22	0.25	-0.05	-2.24
5,580.00	6.53	110.73	5,564.46	-2,045.36	-83.48	220.87	-59.30	0.74	0.37	-5.83
5,674.00	6.78	107.56	5,657.83	-2,138.73	-87.05	231.16	-61.74	0.47	0.27	-3.37
5,768.00	7.79	107.76	5,751.07	-2,231.97	-90.67	242.52	-64.11	1.07	1.07	0.21
5,862.00	7.99	108.89	5,844.18	-2,325.08	-94.72	254.77	-66.83	0.27	0.21	1.20
5,956.00	8.04	107.73	5,937.26	-2,418.16	-98.84	267.21	-69.59	0.18	0.05	-1.23
6,051.00	7.64	105.92	6,031.37	-2,512.27	-102.60	279.61	-72.00	0.49	-0.42	-1.91
6,145.00	7.73	106.71	6,124.53	-2,605.43	-106.13	291.67	-74.21	0.15	0.10	0.84

Survey Report



Company:	CENTENNIAL RESOURCE DEVELOPME	Local Co-ordinate Reference:	Well SHEBA FEDERAL COM #711H
Project:	LEA COUNTY, NM (NAD 83 - UTM ZONE	TVD Reference:	KB 25' @ 3519.10usft (H&P 650)
Site:	SW SE SEC. 22 T24S R34E	MD Reference:	KB 25' @ 3519.10usft (H&P 650)
Well:	SHEBA FEDERAL COM #711H	North Reference:	True
Wellbore:	JOB # 2018-744-650 - SIDETRACK 2	Survey Calculation Method:	Minimum Curvature
Design:	FINAL SURVEYS SIDETRACK 2	Database:	Database 1

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	Subsea Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
6,239.00	8.87	111.86	6,217.54	-2,698.44	-110.65	304.45	-77.33	1.45	1.21	5.48
6,333.00	9.68	120.78	6,310.32	-2,791.22	-117.39	317.97	-82.58	1.75	0.86	9.49
6,427.00	8.49	126.53	6,403.14	-2,884.04	-125.56	330.34	-89.38	1.59	-1.27	6.12
6,522.00	8.09	125.86	6,497.14	-2,978.04	-133.65	341.39	-96.24	0.43	-0.42	-0.71
6,616.00	8.19	124.10	6,590.20	-3,071.10	-141.28	352.29	-102.66	0.29	0.11	-1.87
6,710.00	7.82	124.01	6,683.28	-3,164.18	-148.61	363.14	-108.78	0.39	-0.39	-0.10
6,804.00	7.58	123.86	6,776.44	-3,257.34	-155.63	373.58	-114.64	0.28	-0.28	-0.16
6,898.00	7.45	123.14	6,869.63	-3,350.53	-162.41	383.81	-120.28	0.15	-0.12	-0.77
6,992.00	7.31	122.39	6,962.85	-3,443.75	-168.95	393.97	-125.69	0.18	-0.15	-0.80
7,086.00	6.98	121.71	7,056.12	-3,537.02	-175.15	403.87	-130.79	0.36	-0.35	-0.72
7,180.00	6.68	120.76	7,149.45	-3,630.35	-180.95	413.43	-135.53	0.34	-0.32	-1.01
7,274.00	5.68	124.24	7,242.91	-3,723.81	-186.36	421.98	-140.00	1.14	-1.06	3.70
7,368.00	5.17	117.86	7,336.49	-3,817.39	-190.96	429.57	-143.75	0.84	-0.54	-6.79
7,462.00	3.69	130.24	7,430.21	-3,911.11	-194.89	435.62	-147.01	1.87	-1.57	13.17
7,556.00	3.09	135.61	7,524.04	-4,004.94	-198.66	439.70	-150.32	0.72	-0.64	5.71
7,650.00	2.62	145.44	7,617.92	-4,098.82	-202.24	442.69	-153.56	0.72	-0.50	10.46
7,743.00	2.39	146.96	7,710.84	-4,191.74	-205.61	444.95	-156.67	0.26	-0.25	1.63
7,837.00	1.85	145.96	7,804.77	-4,285.67	-208.51	446.87	-159.35	0.58	-0.57	-1.06
7,931.00	1.24	172.81	7,898.74	-4,379.64	-210.78	447.85	-161.50	0.99	-0.65	28.56
8,025.00	1.10	184.47	7,992.72	-4,473.62	-212.69	447.91	-163.39	0.29	-0.15	12.40
8,119.00	0.98	187.39	8,086.70	-4,567.60	-214.39	447.73	-165.09	0.14	-0.13	3.11
8,213.00	0.77	199.58	8,180.69	-4,661.59	-215.78	447.42	-166.51	0.30	-0.22	12.97
8,307.00	0.70	205.49	8,274.68	-4,755.58	-216.89	446.96	-167.67	0.11	-0.07	6.29
8,401.00	0.69	213.98	8,368.68	-4,849.58	-217.88	446.40	-168.71	0.11	-0.01	9.03
8,496.00	0.67	228.48	8,463.67	-4,944.57	-218.72	445.66	-169.63	0.18	-0.02	15.26
8,590.00	0.69	250.21	8,557.66	-5,038.56	-219.28	444.72	-170.28	0.27	0.02	23.12
8,684.00	0.72	248.97	8,651.66	-5,132.56	-219.68	443.63	-170.80	0.04	0.03	-1.32
8,778.00	0.83	252.63	8,745.65	-5,226.55	-220.10	442.43	-171.34	0.13	0.12	3.89
8,872.00	0.76	254.43	8,839.64	-5,320.54	-220.47	441.18	-171.84	0.08	-0.07	1.91
8,966.00	0.82	262.32	8,933.63	-5,414.53	-220.72	439.91	-172.24	0.13	0.06	8.39
9,060.00	1.02	274.41	9,027.62	-5,508.52	-220.75	438.41	-172.42	0.30	0.21	12.86
9,154.00	1.17	283.18	9,121.60	-5,602.50	-220.47	436.64	-172.33	0.24	0.16	9.33
9,247.00	1.29	286.10	9,214.58	-5,695.48	-219.96	434.71	-172.03	0.15	0.13	3.14
9,341.00	1.62	290.29	9,308.55	-5,789.45	-219.21	432.45	-171.53	0.37	0.35	4.46
9,436.00	1.59	280.77	9,403.51	-5,884.41	-218.49	429.90	-171.09	0.28	-0.03	-10.02
9,530.00	1.80	288.74	9,497.47	-5,978.37	-217.78	427.22	-170.67	0.34	0.22	8.48
9,624.00	1.78	293.97	9,591.43	-6,072.33	-216.71	424.49	-169.90	0.18	-0.02	5.56
9,718.00	1.91	300.43	9,685.38	-6,166.28	-215.32	421.80	-168.81	0.26	0.14	6.87
9,812.00	2.30	296.13	9,779.31	-6,260.21	-213.70	418.76	-167.52	0.45	0.41	-4.57
9,905.00	2.24	301.66	9,872.24	-6,353.14	-211.92	415.53	-166.10	0.24	-0.06	5.95
9,999.00	2.11	302.94	9,966.17	-6,447.07	-210.02	412.52	-164.53	0.15	-0.14	1.36
10,094.00	2.00	298.78	10,061.11	-6,542.01	-208.27	409.60	-163.10	0.20	-0.12	-4.38
10,188.00	2.09	298.92	10,155.05	-6,635.95	-206.65	406.66	-161.81	0.10	0.10	0.15
10,282.00	2.25	294.16	10,248.98	-6,729.88	-205.07	403.48	-160.58	0.26	0.17	-5.06
10,376.00	2.16	284.80	10,342.91	-6,823.81	-203.86	400.08	-159.74	0.39	-0.10	-9.96
10,471.00	2.33	293.39	10,437.84	-6,918.74	-202.63	396.58	-158.90	0.40	0.18	9.04
10,565.00	2.86	300.09	10,531.75	-7,012.65	-200.70	392.79	-157.38	0.65	0.56	7.13
10,660.00	2.37	305.40	10,626.65	-7,107.55	-198.37	389.14	-155.46	0.57	-0.52	5.59
10,754.00	2.51	299.45	10,720.56	-7,201.46	-196.24	385.76	-153.70	0.31	0.15	-6.33
10,848.00	2.59	301.74	10,814.47	-7,295.37	-194.11	382.17	-151.97	0.14	0.09	2.44
10,942.00	2.28	297.90	10,908.38	-7,389.28	-192.11	378.71	-150.36	0.37	-0.33	-4.09
11,036.00	2.17	290.42	11,002.31	-7,483.21	-190.62	375.39	-149.23	0.33	-0.12	-7.96
11,131.00	2.25	296.72	11,097.24	-7,578.14	-189.15	372.04	-148.13	0.27	0.08	6.63

Survey Report



Company:	CENTENNIAL RESOURCE DEVELOPME	Local Co-ordinate Reference:	Well SHEBA FEDERAL COM #711H
Project:	LEA COUNTY, NM (NAD 83 - UTM ZONE	TVD Reference:	KB 25' @ 3519.10usft (H&P 650)
Site:	SW SE SEC. 22 T24S R34E	MD Reference:	KB 25' @ 3519.10usft (H&P 650)
Well:	SHEBA FEDERAL COM #711H	North Reference:	True
Wellbore:	JOB # 2018-744-650 - SIDETRACK 2	Survey Calculation Method:	Minimum Curvature
Design:	FINAL SURVEYS SIDETRACK 2	Database:	Database 1

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	Subsea Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
11,225.00	1.99	297.49	11,191.18	-7,672.08	-187.57	368.94	-146.89	0.28	-0.28	0.82
11,319.00	1.85	293.19	11,285.13	-7,766.03	-186.22	366.10	-145.85	0.21	-0.15	-4.57
11,413.00	2.00	298.97	11,379.07	-7,859.97	-184.83	363.27	-144.77	0.26	0.16	6.15
11,507.00	2.00	299.67	11,473.01	-7,953.91	-183.22	360.41	-143.48	0.03	0.00	0.74
11,601.00	2.32	304.70	11,566.95	-8,047.85	-181.32	357.42	-141.92	0.40	0.34	5.35
11,682.00	2.46	301.84	11,647.88	-8,128.78	-179.47	354.59	-140.38	0.23	0.17	-3.53
11,771.00	2.56	306.26	11,736.79	-8,217.69	-177.29	351.37	-138.56	0.24	0.11	4.97
11,803.00	2.73	308.26	11,768.76	-8,249.66	-176.40	350.19	-137.79	0.60	0.53	6.25
11,867.00	3.53	321.84	11,832.66	-8,313.56	-173.90	347.78	-135.57	1.70	1.25	21.22
11,899.00	7.69	345.26	11,864.51	-8,345.41	-171.06	346.63	-132.87	14.58	13.00	73.19
11,931.00	12.54	351.77	11,896.00	-8,376.90	-165.54	345.58	-127.50	15.55	15.16	20.34
11,963.00	16.02	355.74	11,927.01	-8,407.91	-157.70	344.76	-119.79	11.29	10.87	12.41
11,995.00	18.34	358.42	11,957.58	-8,438.48	-148.26	344.29	-110.46	7.66	7.25	8.37
12,026.00	20.73	1.61	11,986.79	-8,467.69	-137.90	344.31	-100.15	8.44	7.71	10.29
12,059.00	21.94	0.21	12,017.53	-8,498.43	-125.90	344.50	-88.20	3.98	3.67	-4.24
12,091.00	25.66	357.96	12,046.80	-8,527.70	-112.99	344.27	-75.39	11.96	11.62	-7.03
12,122.00	28.91	359.25	12,074.35	-8,555.25	-98.79	343.93	-61.30	10.66	10.48	4.16
12,155.00	31.69	0.22	12,102.84	-8,583.74	-82.14	343.86	-44.76	8.55	8.42	2.94
12,187.00	36.42	1.82	12,129.35	-8,610.25	-64.23	344.20	-26.92	15.04	14.78	5.00
12,219.00	41.38	2.62	12,154.24	-8,635.14	-44.16	344.98	-6.88	15.58	15.50	2.50
12,250.00	45.17	2.96	12,176.81	-8,657.71	-22.94	346.02	14.33	12.25	12.23	1.10
12,282.00	49.08	4.20	12,198.58	-8,679.48	0.46	347.49	37.76	12.54	12.22	3.87
12,314.00	52.39	5.99	12,218.83	-8,699.73	25.13	349.70	62.52	11.21	10.34	5.59
12,346.00	54.99	7.74	12,237.78	-8,718.68	50.73	352.79	88.30	9.24	8.12	5.47
12,378.00	57.91	9.02	12,255.46	-8,736.36	77.11	356.68	114.95	9.71	9.12	4.00
12,410.00	58.96	9.41	12,272.21	-8,753.11	104.02	361.05	142.17	3.44	3.28	1.22
12,442.00	59.47	9.03	12,288.59	-8,769.49	131.16	365.45	169.63	1.89	1.59	-1.19
12,474.00	61.95	8.96	12,304.24	-8,785.14	158.72	369.81	197.50	7.75	7.75	-0.22
12,506.00	66.85	10.24	12,318.07	-8,798.97	187.17	374.63	226.29	15.73	15.31	4.00
12,538.00	68.98	9.27	12,330.10	-8,811.00	216.39	379.65	255.89	7.22	6.66	-3.03
12,585.00	73.62	6.49	12,345.17	-8,826.07	260.47	385.74	300.37	11.35	9.87	-5.91
12,634.00	75.29	5.36	12,358.30	-8,839.20	307.43	390.61	347.57	4.07	3.41	-2.31
12,666.00	76.96	3.88	12,365.97	-8,846.87	338.39	393.11	378.63	6.88	5.22	-4.62
12,698.00	80.82	3.15	12,372.14	-8,853.04	369.72	395.04	409.99	12.27	12.06	-2.28
12,730.00	84.55	3.26	12,376.21	-8,857.11	401.41	396.81	441.68	11.66	11.66	0.34
12,761.00	90.27	5.13	12,377.61	-8,858.51	432.28	399.07	472.61	19.41	18.45	6.03
12,825.00	91.61	6.49	12,376.56	-8,857.46	495.94	405.55	536.60	2.98	2.09	2.12
12,921.00	90.66	6.32	12,374.66	-8,855.56	591.32	416.26	632.58	1.01	-0.99	-0.18
13,017.00	89.89	5.48	12,374.20	-8,855.10	686.81	426.13	728.58	1.19	-0.80	-0.87
13,112.00	87.29	4.77	12,376.54	-8,857.44	781.39	434.61	823.52	2.84	-2.74	-0.75
13,208.00	90.31	4.56	12,378.55	-8,859.45	877.04	442.42	919.46	3.15	3.15	-0.22
13,304.00	90.27	3.14	12,378.06	-8,858.96	972.82	448.86	1,015.38	1.48	-0.04	-1.48
13,399.00	90.45	2.42	12,377.46	-8,858.36	1,067.71	453.47	1,110.21	0.78	0.19	-0.76
13,495.00	90.73	0.92	12,376.47	-8,857.37	1,163.66	456.27	1,205.91	1.59	0.29	-1.56
13,591.00	90.84	358.55	12,375.16	-8,856.06	1,259.64	455.82	1,301.29	2.47	0.11	-2.47
13,687.00	90.45	359.30	12,374.08	-8,854.98	1,355.62	454.02	1,396.52	0.88	-0.41	0.78
13,782.00	88.10	358.84	12,375.28	-8,856.18	1,450.59	452.48	1,490.77	2.52	-2.47	-0.48
SIDETRACK PT										
13,800.00	87.48	359.70	12,375.97	-8,856.87	1,468.58	452.25	1,508.63	5.89	-3.44	4.78
13,825.00	85.99	1.41	12,377.40	-8,858.30	1,493.53	452.49	1,533.47	9.06	-5.96	6.84
13,857.00	86.10	3.80	12,379.61	-8,860.51	1,525.42	453.94	1,565.33	7.46	0.34	7.47
13,889.00	86.51	5.92	12,381.67	-8,862.57	1,557.24	456.65	1,597.25	6.73	1.28	6.62
13,921.00	87.11	6.73	12,383.45	-8,864.35	1,588.99	460.17	1,629.20	3.15	1.87	2.53

Survey Report



Company:	CENTENNIAL RESOURCE DEVELOPME	Local Co-ordinate Reference:	Well SHEBA FEDERAL COM #711H
Project:	LEA COUNTY, NM (NAD 83 - UTM ZONE	TVD Reference:	KB 25' @ 3519.10usft (H&P 650)
Site:	SW SE SEC. 22 T24S R34E	MD Reference:	KB 25' @ 3519.10usft (H&P 650)
Well:	SHEBA FEDERAL COM #711H	North Reference:	True
Wellbore:	JOB # 2018-744-650 - SIDETRACK 2	Survey Calculation Method:	Minimum Curvature
Design:	FINAL SURVEYS SIDETRACK 2	Database:	Database 1

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	Subsea Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
13,985.00	90.52	8.85	12,384.77	-8,865.67	1,652.38	468.84	1,693.15	6.27	5.33	3.31
14,080.00	90.45	8.82	12,383.97	-8,864.87	1,746.24	483.43	1,788.04	0.08	-0.07	-0.03
14,176.00	87.59	6.81	12,385.61	-8,866.51	1,841.32	496.48	1,883.97	3.64	-2.98	-2.09
14,298.00	88.39	5.46	12,389.89	-8,870.79	1,962.55	509.51	2,005.90	1.29	0.66	-1.11
14,394.00	88.64	5.04	12,392.38	-8,873.28	2,058.11	518.29	2,101.85	0.51	0.26	-0.44
14,426.00	88.45	4.44	12,393.19	-8,874.09	2,089.99	520.93	2,133.83	1.97	-0.59	-1.87
14,458.00	89.90	4.35	12,393.65	-8,874.55	2,121.89	523.39	2,165.81	4.54	4.53	-0.28
14,490.00	91.20	2.84	12,393.34	-8,874.24	2,153.83	525.39	2,197.78	6.23	4.06	-4.72
14,521.00	91.44	1.35	12,392.63	-8,873.53	2,184.80	526.53	2,228.69	4.87	0.77	-4.81
14,553.00	92.49	0.25	12,391.53	-8,872.43	2,216.78	526.97	2,260.53	4.75	3.28	-3.44
14,585.00	93.81	359.36	12,389.77	-8,870.67	2,248.73	526.86	2,292.28	4.97	4.12	-2.78
14,617.00	95.20	358.74	12,387.26	-8,868.16	2,280.62	526.34	2,323.94	4.75	4.34	-1.94
14,649.00	95.64	358.33	12,384.24	-8,865.14	2,312.47	525.52	2,355.51	1.88	1.37	-1.28
14,681.00	96.17	357.68	12,380.95	-8,861.85	2,344.28	524.41	2,387.02	2.61	1.66	-2.03
14,713.00	96.06	357.79	12,377.54	-8,858.44	2,376.07	523.16	2,418.50	0.48	-0.34	0.34
14,776.00	93.07	0.30	12,372.52	-8,853.42	2,438.85	522.11	2,480.80	6.19	-4.75	3.98
14,872.00	92.60	1.47	12,367.77	-8,848.67	2,534.72	523.59	2,576.27	1.31	-0.49	1.22
14,967.00	91.13	358.95	12,364.68	-8,845.58	2,629.66	523.94	2,670.70	3.07	-1.55	-2.65
15,063.00	91.47	358.75	12,362.50	-8,843.40	2,725.61	522.01	2,765.90	0.41	0.35	-0.21
15,159.00	91.12	357.92	12,360.33	-8,841.23	2,821.55	519.23	2,860.98	0.94	-0.36	-0.86
15,254.00	90.42	356.57	12,359.06	-8,839.96	2,916.43	514.66	2,954.82	1.60	-0.74	-1.42
15,350.00	90.46	357.30	12,358.32	-8,839.22	3,012.29	509.53	3,049.57	0.76	0.04	0.76
15,446.00	91.43	356.96	12,356.74	-8,837.64	3,108.15	504.72	3,144.37	1.07	1.01	-0.35
15,541.00	90.22	358.09	12,355.37	-8,836.27	3,203.05	500.62	3,238.28	1.74	-1.27	1.19
15,637.00	90.45	0.93	12,354.81	-8,835.71	3,299.04	499.80	3,333.62	2.97	0.24	2.96
15,732.00	90.83	1.09	12,353.75	-8,834.65	3,394.01	501.47	3,428.23	0.43	0.40	0.17
15,828.00	90.39	0.98	12,352.72	-8,833.62	3,489.99	503.21	3,523.84	0.47	-0.46	-0.11
15,923.00	89.82	358.64	12,352.55	-8,833.45	3,584.99	502.89	3,618.25	2.54	-0.60	-2.46
16,019.00	89.06	358.95	12,353.49	-8,834.39	3,680.96	500.87	3,713.45	0.85	-0.79	0.32
16,115.00	88.29	358.98	12,355.71	-8,836.61	3,776.92	499.14	3,808.67	0.80	-0.80	0.03
16,211.00	90.64	359.93	12,356.60	-8,837.50	3,872.90	498.23	3,904.00	2.64	2.45	0.99
16,306.00	91.71	0.48	12,354.66	-8,835.56	3,967.88	498.57	3,998.47	1.27	1.13	0.58
16,401.00	89.27	358.27	12,353.84	-8,834.74	4,062.86	497.53	4,092.79	3.47	-2.57	-2.33
16,497.00	87.65	358.56	12,356.42	-8,837.32	4,158.78	494.88	4,187.87	1.71	-1.69	0.30
16,593.00	89.10	358.54	12,359.15	-8,840.05	4,254.71	492.45	4,282.99	1.51	1.51	-0.02
16,688.00	93.25	358.00	12,357.20	-8,838.10	4,349.62	489.58	4,377.05	4.41	4.37	-0.57
16,784.00	94.22	359.74	12,350.94	-8,831.84	4,445.40	487.69	4,472.06	2.07	1.01	1.81
16,880.00	93.33	2.99	12,344.62	-8,825.52	4,541.15	489.97	4,567.50	3.50	-0.93	3.39
16,975.00	92.20	3.00	12,340.04	-8,820.94	4,635.91	494.93	4,662.25	1.19	-1.19	0.01
17,008.00	92.17	3.10	12,338.78	-8,819.68	4,668.84	496.69	4,695.17	0.32	-0.09	0.30
17,039.00	92.44	3.24	12,337.54	-8,818.44	4,699.76	498.40	4,726.11	0.98	0.87	0.45
17,071.00	90.15	3.19	12,336.81	-8,817.71	4,731.70	500.19	4,758.06	7.16	-7.16	-0.16
17,103.00	89.50	2.95	12,336.91	-8,817.81	4,763.66	501.91	4,790.01	2.17	-2.03	-0.75
17,135.00	88.05	2.41	12,337.59	-8,818.49	4,795.61	503.40	4,821.94	4.84	-4.53	-1.69
17,167.00	88.64	2.46	12,338.52	-8,819.42	4,827.57	504.76	4,853.86	1.85	1.84	0.16
FINAL TAKE POINT										
17,203.00	88.90	2.57	12,339.29	-8,820.19	4,863.53	506.34	4,889.78	0.78	0.72	0.30
LAST SURVEY FEB 12, 2019										
17,221.00	89.03	2.62	12,339.62	-8,820.52	4,881.51	507.15	4,907.74	0.78	0.72	0.30
PROJECTION TO TD - ST2										
17,277.00	89.03	2.62	12,340.56	-8,821.46	4,937.44	509.71	4,963.63	0.00	0.00	0.00

Survey Report



Company:	CENTENNIAL RESOURCE DEVELOPME	Local Co-ordinate Reference:	Well SHEBA FEDERAL COM #711H
Project:	LEA COUNTY, NM (NAD 83 - UTM ZONE	TVD Reference:	KB 25' @ 3519.10usft (H&P 650)
Site:	SW SE SEC. 22 T24S R34E	MD Reference:	KB 25' @ 3519.10usft (H&P 650)
Well:	SHEBA FEDERAL COM #711H	North Reference:	True
Wellbore:	JOB # 2018-744-650 - SIDETRACK 2	Survey Calculation Method:	Minimum Curvature
Design:	FINAL SURVEYS SIDETRACK 2	Database:	Database 1

Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
FTP/PP - SHEBA FEDEI	0.00	0.00	12,379.94	379.44	455.17	11,690,900.54	2,118,974.14	32.197648	-103.452482
- survey misses target center by 59.79usft at 12711.95usft MD (12374.17 TVD, 383.51 N, 395.80 E)									
- Point									
LTP/BHL - SHEBA FEDEI	0.00	0.00	12,352.40	4,875.49	526.31	11,695,396.53	2,118,980.62	32.210006	-103.452252
- survey misses target center by 23.29usft at 17216.09usft MD (12339.53 TVD, 4876.60 N, 506.93 E)									
- Point									
LTP/BHL - SHEBA FEDEI	0.00	0.00	12,325.00	4,875.49	456.58	11,695,395.53	2,118,910.91	32.210006	-103.452478
- survey misses target center by 52.29usft at 17212.44usft MD (12339.47 TVD, 4872.96 N, 506.76 E)									
- Point									

Survey Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(usft)	(usft)	+N/-S (usft)	+E/-W (usft)	
13,800.00	12,375.97	1,468.58	452.25	SIDETRACK PT
17,203.00	12,339.29	4,863.53	506.34	FINAL TAKE POINT
17,221.00	12,339.62	4,881.51	507.15	LAST SURVEY FEB 12, 2019
17,277.00	12,340.56	4,937.44	509.71	PROJECTION TO TD - ST2

Checked By: _____ Approved By: _____ Date: _____