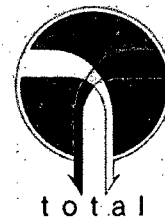


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CENTENNIAL RESOURCE DEVELOPMENT, LLC

**LEA COUNTY, NM (NAD 83 - UTM ZONE 13 - TRUE)
SW SW SEC. 13 T22S T34E
AIRSTREAM 24 STATE COM #502H
13 December, 2018**

Survey: FINAL SURVEYS



Survey Report



Company:	CENTENNIAL RESOURCE DEVELOPMENT	Local Co-ordinate Reference:	Well AIRSTREAM 24 STATE COM #502H
Project:	LEA COUNTY, NM (NAD 83 - UTM Zone 13N)	TVD Reference:	KB 25' @ 3523.30usft (H&P 650)
Site:	SW SW SEC. 13 T22S T34E	MD Reference:	KB 25' @ 3523.30usft (H&P 650)
Well:	AIRSTREAM 24 STATE COM #502H	North Reference:	True
Wellbore:	SIDETRACK - JOB #2018-627-650	Survey Calculation Method:	Minimum Curvature
Design:	FINAL SURVEYS	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 SW SEC. 13 T22S T34E			
Site Position:		Northing:	11,759,505.51 usft	Latitude:	32.385963°N
From:	Map	Easting:	2,125,485.31 usft	Longitude:	103.428183°W
Position Uncertainty:	0.00 usft	Slot Radius:	1.10ft	Grid Convergence:	0.84 °

Well	AIRSTREAM 24 STATE COM #502H					
Well Position	+N-S	0.00 usft	Northing:	11,759,505.94 usft	Latitude:	32.385963°N
	+E-W	0.00 usft	Easting:	2,125,515.30 usft	Longitude:	103.428086°W
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	3,498.30 usft

Wellbore	SIDETRACK - JOB #2018-627-650				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	24/11/2018	6.74	60.21	47,900

Design	FINAL SURVEYS			
Audit Notes:				
Version:	1.0	Phase:	ACTUAL	Tie On Depth: 0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	179.88

Survey Program	Date: 13/12/2018			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
25.00	21,177.00	FINAL SURVEYS (SIDETRACK - JOB #2018-627-650)	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	3,523.30	0.00	0.00	0.00	0.00	0.00	0.00
25.00	0.00	0.00	25.00	3,498.30	0.00	0.00	0.00	0.00	0.00	0.00
153.00	0.30	65.78	153.00	3,370.30	0.14	0.31	-0.14	0.23	0.23	0.00
241.00	0.40	326.78	241.00	3,282.30	0.49	0.35	-0.49	0.61	0.11	-112.50
390.00	0.90	35.78	389.99	3,133.31	1.87	0.75	-1.87	0.57	0.34	46.31
516.00	1.10	275.78	515.98	3,007.32	2.80	0.12	-2.80	1.38	0.16	-95.24
642.00	1.40	17.78	641.96	2,881.34	4.39	-0.61	-4.39	1.55	0.24	80.95
736.00	1.30	24.78	735.94	2,787.36	6.45	0.19	-6.45	0.20	-0.11	7.45
831.00	0.90	25.78	830.92	2,692.38	8.10	0.96	-8.10	0.42	-0.42	1.05
925.00	0.30	20.78	924.91	2,598.39	8.99	1.37	-8.99	0.64	-0.64	-5.32
1,020.00	0.20	56.78	1,019.91	2,503.39	9.32	1.60	-9.31	0.19	-0.11	37.89
1,114.00	0.20	78.78	1,113.91	2,409.39	9.44	1.90	-9.43	0.08	0.00	23.40
1,209.00	0.20	219.78	1,208.91	2,314.39	9.34	1.95	-9.34	0.40	0.00	148.42

Survey Report



Company:	CENTENNIAL RESOURCE DEVELO	Local Co-ordinate Reference:	Well AIRSTREAM 24 STATE COM #502H
Project:	LEA COUNTY, NM (NAD 83 - UTM Z	TVD Reference:	KB 25' @ 3523.30usft (H&P 650)
Site:	SW SW SEC. 13 T22S T34E	MD Reference:	KB 25' @ 3523.30usft (H&P 650)
Well:	AIRSTREAM 24 STATE COM #502H	North Reference:	True
Wellbore:	SIDETRACK - JOB #2018-627-650	Survey Calculation Method:	Minimum Curvature
Design:	FINAL SURVEYS	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)
1,303.00	0.40	241.78	1,302.91	2,220.39	9.06	1.56	-9.06	0.24	0.21	23.40
1,398.00	0.70	299.78	1,397.91	2,125.39	9.19	0.76	-9.19	0.63	0.32	61.05
1,492.00	0.70	257.78	1,491.90	2,031.40	9.36	-0.30	-9.36	0.53	0.00	-44.68
1,587.00	1.30	265.78	1,586.88	1,936.42	9.15	-1.94	-9.16	0.65	0.63	8.42
1,713.00	1.50	259.78	1,712.85	1,810.45	8.76	-4.99	-8.77	0.20	0.16	-4.76
1,807.00	1.20	263.78	1,806.82	1,716.48	8.43	-7.18	-8.45	0.33	-0.32	4.26
1,912.00	1.10	253.78	1,911.80	1,611.50	8.03	-9.24	-8.05	0.21	-0.10	-9.52
SURFACE CASING										
1,952.00	1.18	263.10	1,951.79	1,571.51	7.87	-10.02	-7.90	0.51	0.20	23.30
2,002.00	1.32	272.81	2,001.78	1,521.52	7.84	-11.10	-7.86	0.51	0.28	19.42
2,096.00	1.48	273.05	2,095.75	1,427.55	7.96	-13.40	-7.99	0.17	0.17	0.26
2,190.00	1.10	267.40	2,189.73	1,333.57	7.98	-15.51	-8.02	0.43	-0.40	-6.01
2,284.00	0.72	189.94	2,283.72	1,239.58	7.36	-16.51	-7.39	1.25	-0.40	-82.40
2,378.00	1.28	179.21	2,377.70	1,145.60	5.73	-16.60	-5.76	0.63	0.60	-11.41
2,472.00	0.85	129.37	2,471.69	1,051.61	4.24	-16.05	-4.27	1.04	-0.46	-53.02
2,566.00	1.03	93.57	2,565.68	957.62	3.74	-14.66	-3.77	0.64	0.19	-38.09
2,660.00	1.12	84.44	2,659.66	863.64	3.78	-12.91	-3.80	0.21	0.10	-9.71
2,754.00	1.18	75.43	2,753.64	769.66	4.11	-11.06	-4.13	0.20	0.06	-9.59
2,848.00	1.33	77.76	2,847.62	675.68	4.58	-9.05	-4.60	0.17	0.16	2.48
2,942.00	1.47	73.37	2,941.59	581.71	5.16	-6.83	-5.18	0.19	0.15	-4.67
3,036.00	0.83	102.88	3,035.57	487.73	5.35	-5.01	-5.36	0.91	-0.68	31.39
3,130.00	0.72	128.30	3,129.56	393.74	4.84	-3.89	-4.84	0.38	-0.12	27.04
3,224.00	0.73	120.80	3,223.56	299.74	4.16	-2.91	-4.17	0.10	0.01	-7.98
3,319.00	0.74	105.86	3,318.55	204.75	3.69	-1.80	-3.69	0.20	0.01	-15.73
3,413.00	0.46	29.96	3,412.55	110.75	3.85	-1.03	-3.85	0.82	-0.30	-80.74
3,507.00	1.06	348.31	3,506.54	16.76	5.03	-1.01	-5.03	0.83	0.64	-44.31
3,601.00	1.22	14.38	3,600.52	-77.22	6.85	-0.94	-6.85	0.57	0.17	27.73
3,695.00	1.53	26.46	3,694.49	-171.19	8.94	-0.13	-8.94	0.45	0.33	12.85
3,789.00	0.40	0.79	3,788.48	-265.18	10.39	0.43	-10.39	1.26	-1.20	-27.31
3,883.00	0.58	238.05	3,882.48	-359.18	10.47	0.03	-10.47	0.92	0.19	-130.57
3,977.00	0.62	243.22	3,976.47	-453.17	9.99	-0.83	-9.99	0.07	0.04	5.50
4,071.00	0.85	253.35	4,070.46	-547.16	9.56	-1.95	-9.56	0.28	0.24	10.78
4,165.00	1.04	268.59	4,164.45	-641.15	9.34	-3.47	-9.34	0.33	0.20	16.21
4,259.00	1.33	282.84	4,258.43	-735.13	9.56	-5.39	-9.57	0.44	0.31	15.16
4,353.00	1.58	285.51	4,352.40	-829.10	10.15	-7.70	-10.16	0.28	0.27	2.84
4,823.00	1.56	295.78	4,822.22	-1,298.92	14.66	-19.70	-14.70	0.06	0.00	2.19
4,917.00	0.21	238.64	4,916.21	-1,392.91	15.13	-21.00	-15.17	1.55	-1.44	-60.79
5,011.00	0.95	128.39	5,010.21	-1,486.91	14.55	-20.54	-14.60	1.11	0.79	-117.29
5,105.00	0.98	119.12	5,104.19	-1,580.89	13.68	-19.22	-13.72	0.17	0.03	-9.86
5,199.00	0.90	101.83	5,198.18	-1,674.88	13.14	-17.80	-13.18	0.31	-0.09	-18.39
5,293.00	0.71	105.19	5,292.17	-1,768.87	12.83	-16.52	-12.87	0.21	-0.20	3.57
5,387.00	0.71	119.17	5,386.17	-1,862.87	12.40	-15.44	-12.43	0.18	0.00	14.87
5,481.00	0.81	118.21	5,480.16	-1,956.86	11.80	-14.35	-11.83	0.11	0.11	-1.02
5,561.00	1.07	112.35	5,560.15	-2,036.85	11.25	-13.16	-11.28	0.35	0.32	-7.32
9 5/8" INT CASING										
5,611.00	1.16	109.92	5,610.14	-2,086.84	10.90	-12.25	-10.92	0.20	0.18	-4.85
5,655.00	1.24	108.08	5,654.13	-2,130.83	10.60	-11.38	-10.62	0.20	0.18	-4.19
5,749.00	1.22	108.04	5,748.11	-2,224.81	9.97	-9.46	-9.99	0.02	-0.02	-0.04
5,844.00	1.18	107.50	5,843.08	-2,319.78	9.37	-7.57	-9.38	0.04	-0.04	-0.57
5,938.00	1.59	83.90	5,937.06	-2,413.76	9.21	-5.35	-9.22	0.74	0.44	-25.11
6,032.00	3.64	73.28	6,030.96	-2,507.66	10.21	-1.20	-10.21	2.23	2.18	-11.30
6,126.00	4.21	73.84	6,124.73	-2,601.43	12.03	4.98	-12.02	0.61	0.61	0.60
6,221.00	4.30	74.12	6,219.47	-2,696.17	13.97	11.75	-13.95	0.10	0.09	0.29

Survey Report



Company:	CENTENNIAL RESOURCE DEVELOPMENT	Local Co-ordinate Reference:	Well AIRSTREAM 24 STATE COM #502H
Project:	LEA COUNTY, NM (NAD 83 - UTM Zone 12N)	TVD Reference:	KB 25' @ 3523.30usft (H&P 650)
Site:	SW SW SEC. 13 T22S T34E	MD Reference:	KB 25' @ 3523.30usft (H&P 650)
Well:	AIRSTREAM 24 STATE COM #502H	North Reference:	True
Wellbore:	SIDETRACK - JOB #2018-627-650	Survey Calculation Method:	Minimum Curvature
Design:	FINAL SURVEYS	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)
6,315.00	4.41	73.70	6,313.20	-2,789.90	15.95	18.61	-15.91	0.12	0.12	-0.45
6,409.00	4.20	77.59	6,406.94	-2,883.64	17.71	25.44	-17.65	0.38	-0.22	4.14
6,503.00	4.11	79.27	6,500.69	-2,977.39	19.07	32.11	-19.00	0.16	-0.10	1.79
6,597.00	3.75	89.98	6,594.47	-3,071.17	19.70	38.50	-19.62	0.87	-0.38	11.39
6,691.00	3.62	95.26	6,688.28	-3,164.98	19.43	44.52	-19.33	0.39	-0.14	5.62
6,785.00	3.66	96.91	6,782.09	-3,258.79	18.80	50.46	-18.69	0.12	0.04	1.76
6,880.00	2.03	114.72	6,876.97	-3,353.67	17.73	55.00	-17.61	1.93	-1.72	18.75
6,974.00	1.82	132.37	6,970.91	-3,447.61	16.03	57.61	-15.90	0.67	-0.22	18.78
7,068.00	1.14	134.30	7,064.88	-3,541.58	14.37	59.38	-14.24	0.73	-0.72	2.05
7,162.00	0.72	276.76	7,158.88	-3,635.58	13.78	59.47	-13.66	1.88	-0.45	151.55
7,256.00	0.58	256.53	7,252.87	-3,729.57	13.74	58.42	-13.62	0.28	-0.15	-21.52
7,351.00	0.40	280.40	7,347.87	-3,824.57	13.69	57.62	-13.57	0.28	-0.19	25.13
7,445.00	0.32	254.80	7,441.87	-3,918.57	13.68	57.05	-13.56	0.19	-0.09	-27.23
7,539.00	0.25	238.45	7,535.87	-4,012.57	13.50	56.62	-13.38	0.11	-0.07	-17.39
7,633.00	0.26	223.78	7,629.86	-4,106.56	13.24	56.30	-13.12	0.07	0.01	-15.61
7,727.00	0.22	196.07	7,723.86	-4,200.56	12.92	56.10	-12.80	0.13	-0.04	-29.48
7,821.00	0.17	159.58	7,817.86	-4,294.56	12.61	56.10	-12.49	0.14	-0.05	-38.82
7,916.00	0.14	100.60	7,912.86	-4,389.56	12.46	56.26	-12.34	0.16	-0.03	-62.08
TIE ON TO OH SURVEYS										
8,010.00	0.37	75.10	8,006.86	-4,483.56	12.52	56.67	-12.39	0.27	0.24	-27.13
SIDETRACK POINT										
8,015.00	0.86	328.47	8,011.86	-4,488.56	12.55	56.66	-12.43	20.65	9.87	-2,132.68
8,016.00	1.06	324.63	8,012.86	-4,489.56	12.57	56.65	-12.44	20.65	19.63	-383.58
8,079.00	3.87	320.00	8,075.80	-4,552.50	14.67	54.95	-14.55	4.47	4.46	-7.35
8,111.00	4.25	315.42	8,107.72	-4,584.42	16.34	53.42	-16.23	1.56	1.19	-14.31
8,205.00	5.35	309.19	8,201.39	-4,678.09	21.59	47.58	-21.49	1.29	1.17	-6.63
8,299.00	5.19	310.08	8,294.99	-4,771.69	27.10	40.93	-27.01	0.19	-0.17	0.95
8,393.00	3.90	314.69	8,388.69	-4,865.39	32.08	35.41	-32.01	1.43	-1.37	4.90
8,487.00	2.31	316.06	8,482.55	-4,959.25	35.70	31.82	-35.63	1.69	-1.69	1.46
8,582.00	1.08	0.09	8,577.51	-5,054.21	37.97	30.49	-37.91	1.80	-1.29	46.35
8,676.00	1.15	19.94	8,671.49	-5,148.19	39.74	30.82	-39.68	0.42	0.07	21.12
8,770.00	1.11	6.76	8,765.47	-5,242.17	41.53	31.24	-41.47	0.28	-0.04	-14.02
8,864.00	1.25	352.22	8,859.46	-5,336.16	43.45	31.21	-43.39	0.35	0.15	-15.47
8,958.00	1.54	344.83	8,953.43	-5,430.13	45.69	30.74	-45.62	0.36	0.31	-7.86
9,052.00	1.65	340.58	9,047.39	-5,524.09	48.18	29.96	-48.12	0.17	0.12	-4.52
9,146.00	2.12	338.24	9,141.34	-5,618.04	51.08	28.87	-51.01	0.51	0.50	-2.49
9,240.00	0.52	316.88	9,235.31	-5,712.01	53.00	27.93	-52.94	1.75	-1.70	-22.72
9,334.00	0.28	203.74	9,329.31	-5,806.01	53.10	27.55	-53.04	0.72	-0.26	-120.36
9,428.00	0.42	240.17	9,423.31	-5,900.01	52.72	27.16	-52.66	0.27	0.15	38.76
9,522.00	0.28	242.84	9,517.31	-5,994.01	52.45	26.65	-52.39	0.15	-0.15	2.84
9,594.00	0.30	234.86	9,589.31	-6,066.01	52.26	26.34	-52.20	0.06	0.03	-11.08
9,611.00	0.34	239.12	9,606.31	-6,083.01	52.21	26.26	-52.15	0.27	0.24	25.06
KOP										
9,659.00	2.40	184.15	9,654.29	-6,130.99	51.13	26.07	-51.07	4.63	4.29	-114.51
9,674.00	3.09	182.54	9,669.27	-6,145.97	50.41	26.03	-50.36	4.63	4.60	-10.76
9,705.00	6.95	183.30	9,700.15	-6,176.85	47.70	25.88	-47.65	12.45	12.45	2.45
9,736.00	9.97	178.05	9,730.81	-6,207.51	43.15	25.87	-43.09	10.05	9.74	-16.94
9,768.00	12.51	171.31	9,762.19	-6,238.89	36.95	26.48	-36.90	8.92	7.94	-21.06
9,799.00	15.28	171.01	9,792.28	-6,268.98	29.60	27.63	-29.54	8.94	8.94	-0.97
9,830.00	18.01	169.30	9,821.98	-6,298.68	20.85	29.16	-20.79	8.95	8.81	-5.52
9,862.00	19.93	171.84	9,852.24	-6,328.94	10.59	30.85	-10.53	6.53	6.00	7.94
9,893.00	21.04	175.33	9,881.28	-6,357.98	-0.19	32.05	0.25	5.32	3.58	11.26
9,925.00	22.40	176.55	9,911.01	-6,387.71	-12.00	32.89	12.07	4.48	4.25	3.81

Survey Report



Company:	CENTENNIAL RESOURCE DEVELO	Local Co-ordinate Reference:	Well AIRSTREAM 24 STATE COM #502H
Project:	LEA COUNTY, NM (NAD 83 - UTM Z	TVD Reference:	KB 25' @ 3523.30usft (H&P 650)
Site:	SW SW SEC. 13 T22S T34E	MD Reference:	KB 25' @ 3523.30usft (H&P 650)
Well:	AIRSTREAM 24 STATE COM #502H	North Reference:	True
Wellbore:	SIDETRACK - JOB #2018-627-650	Survey Calculation Method:	Minimum Curvature
Design:	FINAL SURVEYS	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)
9,956.00	23.85	175.62	9,939.52	-6,416.22	-24.14	33.72	24.22	4.82	4.68	-3.00
9,988.00	26.18	176.67	9,968.52	-6,445.22	-37.64	34.63	37.72	7.41	7.28	3.28
10,019.00	29.43	178.74	9,995.93	-6,472.63	-52.09	35.19	52.16	10.94	10.48	6.68
10,050.00	32.91	179.00	10,022.45	-6,499.15	-68.13	35.51	68.20	11.23	11.23	0.84
10,082.00	36.35	179.43	10,048.78	-6,525.48	-86.31	35.75	86.38	10.78	10.75	1.34
10,113.00	39.23	179.57	10,073.28	-6,549.98	-105.30	35.92	105.38	9.29	9.29	0.45
10,145.00	41.24	180.66	10,097.70	-6,574.40	-125.97	35.87	126.05	6.66	6.28	3.41
10,176.00	43.18	181.78	10,120.66	-6,597.36	-146.79	35.42	146.87	6.71	6.26	3.61
10,208.00	46.71	182.40	10,143.31	-6,620.01	-169.38	34.60	169.45	11.12	11.03	1.94
10,239.00	49.73	183.32	10,163.96	-6,640.66	-192.46	33.44	192.53	9.99	9.74	2.97
10,270.00	52.26	183.44	10,183.47	-6,660.17	-216.51	32.02	216.58	8.17	8.16	0.39
10,302.00	53.77	183.32	10,202.72	-6,679.42	-242.02	30.51	242.09	4.73	4.72	-0.37
10,333.00	55.18	182.60	10,220.74	-6,697.44	-267.22	29.21	267.28	4.93	4.55	-2.32
10,365.00	56.49	182.99	10,238.71	-6,715.41	-293.66	27.92	293.72	4.22	4.09	1.22
10,396.00	58.64	183.31	10,255.33	-6,732.03	-319.79	26.48	319.84	6.99	6.94	1.03
10,427.00	60.79	183.47	10,270.96	-6,747.66	-346.51	24.90	346.56	6.95	6.94	0.52
10,459.00	63.09	183.34	10,286.02	-6,762.72	-374.69	23.22	374.74	7.20	7.19	-0.41
10,490.00	64.88	183.64	10,299.61	-6,776.31	-402.50	21.52	402.55	5.84	5.77	0.97
10,521.00	67.46	183.78	10,312.14	-6,788.84	-430.80	19.69	430.84	8.33	8.32	0.45
10,553.00	70.09	184.07	10,323.72	-6,800.42	-460.55	17.65	460.59	8.26	8.22	0.91
10,584.00	72.11	184.54	10,333.76	-6,810.46	-489.80	15.44	489.83	6.67	6.52	1.52
10,616.00	75.05	184.55	10,342.80	-6,819.50	-520.39	13.01	520.42	9.19	9.19	0.03
10,647.00	77.75	185.83	10,350.09	-6,826.79	-550.40	10.28	550.42	9.59	8.71	4.13
10,678.00	80.32	186.59	10,355.99	-6,832.69	-580.65	6.99	580.66	8.63	8.29	2.45
10,710.00	82.11	186.76	10,360.88	-6,837.58	-612.06	3.32	612.06	5.62	5.59	0.53
10,741.00	83.73	185.65	10,364.70	-6,841.40	-642.64	-0.01	642.64	6.32	5.23	-3.58
10,772.00	86.26	183.90	10,367.40	-6,844.10	-673.41	-2.58	673.40	9.91	8.16	-5.65
HZ LANDING POINT										
10,804.00	87.90	182.85	10,369.03	-6,845.73	-705.31	-4.46	705.30	6.08	5.12	-3.28
10,835.00	88.15	182.93	10,370.10	-6,846.80	-736.25	-6.02	736.24	0.85	0.81	0.26
10,929.00	88.56	182.63	10,372.80	-6,849.50	-830.10	-10.58	830.08	0.54	0.44	-0.32
10,991.00	89.34	181.90	10,373.94	-6,850.64	-892.04	-13.03	892.01	1.72	1.26	-1.18
11,023.00	89.82	181.69	10,374.17	-6,850.87	-924.03	-14.03	923.99	1.64	1.50	-0.66
11,054.00	90.45	180.91	10,374.10	-6,850.80	-955.02	-14.73	954.98	3.23	2.03	-2.52
11,085.00	91.22	180.30	10,373.65	-6,850.35	-986.01	-15.06	985.98	3.17	2.48	-1.97
11,117.00	91.78	180.06	10,372.81	-6,849.51	-1,018.00	-15.16	1,017.97	1.90	1.75	-0.75
11,148.00	92.23	180.10	10,371.72	-6,848.42	-1,048.98	-15.20	1,048.95	1.46	1.45	0.13
11,179.00	91.57	180.18	10,370.70	-6,847.40	-1,079.97	-15.28	1,079.93	2.14	-2.13	0.26
11,273.00	91.47	180.43	10,368.20	-6,844.90	-1,173.93	-15.78	1,173.89	0.29	-0.11	0.27
11,365.00	90.29	180.03	10,366.79	-6,843.49	-1,265.92	-16.15	1,265.88	1.35	-1.28	-0.43
11,456.00	88.54	179.15	10,367.72	-6,844.42	-1,356.91	-15.50	1,356.87	2.15	-1.92	-0.97
11,547.00	89.75	178.67	10,369.08	-6,845.78	-1,447.88	-13.77	1,447.84	1.43	1.33	-0.53
11,638.00	88.39	178.13	10,370.55	-6,847.25	-1,538.83	-11.23	1,538.80	1.61	-1.49	-0.59
11,728.00	87.31	178.78	10,373.93	-6,850.63	-1,628.73	-8.80	1,628.71	1.40	-1.20	0.72
11,819.00	88.49	178.51	10,377.26	-6,853.96	-1,719.64	-6.65	1,719.62	1.33	1.30	-0.30
11,910.00	87.88	179.47	10,380.15	-6,856.85	-1,810.58	-5.05	1,810.57	1.25	-0.67	1.05
12,001.00	87.76	180.23	10,383.61	-6,860.31	-1,901.51	-4.81	1,901.50	0.84	-0.13	0.84
12,092.00	88.28	179.34	10,386.75	-6,863.45	-1,992.46	-4.47	1,992.44	1.13	0.57	-0.98
12,183.00	88.32	180.34	10,389.45	-6,866.15	-2,083.42	-4.22	2,083.40	1.10	0.04	1.10
12,278.00	88.77	179.71	10,391.86	-6,868.56	-2,178.38	-4.26	2,178.37	0.81	0.47	-0.66
12,372.00	87.56	180.64	10,394.87	-6,871.57	-2,272.33	-4.54	2,272.32	1.62	-1.29	0.99
12,466.00	87.27	180.25	10,399.11	-6,875.81	-2,366.23	-5.27	2,366.22	0.52	-0.31	-0.41
12,560.00	89.55	182.45	10,401.72	-6,878.42	-2,460.16	-7.49	2,460.14	3.37	2.43	2.34

Survey Report



Company:	CENTENNIAL RESOURCE DEVELO	Local Co-ordinate Reference:	Well AIRSTREAM 24 STATE COM #502H
Project:	LEA COUNTY, NM (NAD 83 - UTM Z)	TVD Reference:	KB 25' @ 3523.30usft (H&P 650)
Site:	SW SW SEC. 13 T22S T34E	MD Reference:	KB 25' @ 3523.30usft (H&P 650)
Well:	AIRSTREAM 24 STATE COM #502H	North Reference:	True
Wellbore:	SIDETRACK - JOB #2018-627-650	Survey Calculation Method:	Minimum Curvature
Design:	FINAL SURVEYS	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)
12,654.00	90.59	183.42	10,401.61	-6,878.31	-2,554.03	-12.30	2,554.00	1.51	1.11	1.03
12,685.00	90.52	183.00	10,401.31	-6,878.01	-2,584.98	-14.04	2,584.95	1.37	-0.23	-1.35
12,717.00	90.15	182.48	10,401.12	-6,877.82	-2,616.95	-15.57	2,616.91	1.99	-1.16	-1.62
12,748.00	88.22	181.99	10,401.56	-6,878.26	-2,647.92	-16.77	2,647.88	6.42	-6.23	-1.58
12,779.00	88.14	181.16	10,402.54	-6,879.24	-2,678.89	-17.63	2,678.85	2.69	-0.26	-2.68
12,811.00	87.88	180.65	10,403.66	-6,880.36	-2,710.87	-18.13	2,710.82	1.79	-0.81	-1.59
12,842.00	86.57	179.78	10,405.16	-6,881.86	-2,741.83	-18.25	2,741.78	5.07	-4.23	-2.81
12,873.00	86.62	179.42	10,407.00	-6,883.70	-2,772.77	-18.03	2,772.73	1.17	0.16	-1.16
12,905.00	86.86	179.56	10,408.82	-6,885.52	-2,804.72	-17.75	2,804.68	0.87	0.75	0.44
12,936.00	86.68	179.37	10,410.56	-6,887.26	-2,835.67	-17.46	2,835.63	0.84	-0.58	-0.61
13,031.00	85.64	180.25	10,416.93	-6,893.63	-2,930.45	-17.14	2,930.41	1.43	-1.09	0.93
13,125.00	87.73	180.20	10,422.36	-6,899.06	-3,024.29	-17.51	3,024.25	2.22	2.22	-0.05
13,219.00	87.53	180.19	10,426.25	-6,902.95	-3,118.21	-17.83	3,118.16	0.21	-0.21	-0.01
13,313.00	89.45	178.85	10,428.73	-6,905.43	-3,212.17	-17.04	3,212.12	2.49	2.04	-1.43
13,406.00	87.69	177.72	10,431.05	-6,907.75	-3,305.09	-14.26	3,305.05	2.25	-1.89	-1.22
13,500.00	88.58	178.37	10,434.11	-6,910.81	-3,398.99	-11.06	3,398.95	1.17	0.95	0.69
13,595.00	88.10	178.73	10,436.86	-6,913.56	-3,493.92	-8.65	3,493.89	0.63	-0.51	0.38
13,689.00	85.85	179.05	10,441.82	-6,918.52	-3,587.76	-6.84	3,587.74	2.42	-2.39	0.34
13,783.00	86.71	179.20	10,447.92	-6,924.62	-3,681.55	-5.40	3,681.53	0.93	0.91	0.16
13,877.00	87.37	179.27	10,452.77	-6,929.47	-3,775.42	-4.15	3,775.40	0.71	0.70	0.07
13,970.00	87.52	178.81	10,456.92	-6,933.62	-3,868.31	-2.59	3,868.30	0.52	0.16	-0.49
14,064.00	89.55	179.47	10,459.32	-6,936.02	-3,962.26	-1.18	3,962.25	2.27	2.16	0.70
14,158.00	89.27	180.22	10,460.29	-6,936.99	-4,056.26	-0.93	4,056.25	0.85	-0.30	0.80
14,252.00	89.02	180.71	10,461.69	-6,938.39	-4,150.24	-1.69	4,150.23	0.59	-0.27	0.52
14,346.00	89.48	181.52	10,462.92	-6,939.62	-4,244.22	-3.52	4,244.20	0.99	0.49	0.86
14,440.00	88.65	181.12	10,464.46	-6,941.16	-4,338.18	-5.69	4,338.16	0.98	-0.88	-0.43
14,534.00	87.76	180.42	10,467.40	-6,944.10	-4,432.12	-6.95	4,432.10	1.20	-0.95	-0.74
14,628.00	88.35	180.09	10,470.59	-6,947.29	-4,526.07	-7.37	4,526.04	0.72	0.63	-0.35
14,722.00	89.01	180.25	10,472.76	-6,949.46	-4,620.04	-7.65	4,620.01	0.72	0.70	0.17
14,816.00	88.52	179.95	10,474.78	-6,951.48	-4,714.02	-7.81	4,713.99	0.61	-0.52	-0.32
14,910.00	89.03	179.63	10,476.79	-6,953.49	-4,808.00	-7.46	4,807.97	0.64	0.54	-0.34
15,004.00	89.24	179.43	10,478.21	-6,954.91	-4,901.98	-6.69	4,901.96	0.31	0.22	-0.21
15,098.00	89.90	179.14	10,478.92	-6,955.62	-4,995.97	-5.52	4,995.95	0.77	0.70	-0.31
15,192.00	89.16	179.99	10,479.69	-6,956.39	-5,089.96	-4.81	5,089.94	1.20	-0.79	0.90
15,286.00	89.96	180.10	10,480.41	-6,957.11	-5,183.96	-4.88	5,183.94	0.86	0.85	0.12
15,380.00	89.62	180.19	10,480.75	-6,957.45	-5,277.96	-5.12	5,277.94	0.37	-0.36	0.10
15,474.00	88.38	180.97	10,482.39	-6,959.09	-5,371.94	-6.07	5,371.91	1.56	-1.32	0.83
15,569.00	87.17	180.47	10,486.08	-6,962.78	-5,466.86	-7.26	5,466.83	1.38	-1.27	-0.53
15,662.00	87.76	180.35	10,490.20	-6,966.90	-5,559.76	-7.93	5,559.73	0.65	0.63	-0.13
15,756.00	88.26	180.68	10,493.46	-6,970.16	-5,653.70	-8.77	5,653.67	0.64	0.53	0.35
15,850.00	87.80	181.09	10,496.69	-6,973.39	-5,747.63	-10.22	5,747.60	0.66	-0.49	0.44
15,944.00	88.18	181.25	10,499.99	-6,976.69	-5,841.56	-12.14	5,841.52	0.44	0.40	0.17
16,038.00	89.01	181.06	10,502.29	-6,978.99	-5,935.51	-14.04	5,935.46	0.91	0.88	-0.20
16,132.00	89.85	181.29	10,503.23	-6,979.93	-6,029.48	-15.96	6,029.43	0.93	0.89	0.24
16,195.00	90.08	180.88	10,503.27	-6,979.97	-6,092.47	-17.16	6,092.42	0.75	0.37	-0.65
16,226.00	88.78	179.99	10,503.57	-6,980.27	-6,123.47	-17.39	6,123.42	5.08	-4.19	-2.87
16,257.00	88.98	179.52	10,504.18	-6,980.88	-6,154.46	-17.26	6,154.41	1.65	0.65	-1.52
16,288.00	89.16	179.66	10,504.68	-6,981.38	-6,185.46	-17.04	6,185.41	0.74	0.58	0.45
16,320.00	89.24	179.18	10,505.13	-6,981.83	-6,217.45	-16.71	6,217.40	1.52	0.25	-1.50
16,351.00	89.62	178.67	10,505.44	-6,982.14	-6,248.45	-16.13	6,248.40	2.05	1.23	-1.65
16,382.00	90.15	178.29	10,505.50	-6,982.20	-6,279.43	-15.31	6,279.39	2.10	1.71	-1.23
16,414.00	90.81	177.88	10,505.23	-6,981.93	-6,311.41	-14.24	6,311.37	2.43	2.06	-1.28
16,445.00	91.01	177.85	10,504.74	-6,981.44	-6,342.39	-13.09	6,342.35	0.65	0.65	-0.10

Survey Report



Company:	CENTENNIAL RESOURCE DEVELO	Local Co-ordinate Reference:	Well AIRSTREAM 24 STATE COM #502H
Project:	LEA COUNTY, NM (NAD 83 - UTM Z	TVD Reference:	KB 25' @ 3523.30usft (H&P 650)
Site:	SW SW SEC. 13 T22S T34E	MD Reference:	KB 25' @ 3523.30usft (H&P 650)
Well:	AIRSTREAM 24 STATE COM #502H	North Reference:	True
Wellbore:	SIDETRACK - JOB #2018-627-650	Survey Calculation Method:	Minimum Curvature
Design:	FINAL SURVEYS	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)
16,477.00	91.04	177.88	10,504.17	-6,980.87	-6,374.36	-11.89	6,374.32	0.13	0.09	0.09
16,508.00	91.14	177.73	10,503.58	-6,980.28	-6,405.33	-10.71	6,405.30	0.58	0.32	-0.48
16,539.00	91.47	177.69	10,502.87	-6,979.57	-6,436.30	-9.47	6,436.27	1.07	1.06	-0.13
16,602.00	91.92	177.81	10,501.01	-6,977.71	-6,499.22	-7.00	6,499.19	0.74	0.71	0.19
16,696.00	89.48	177.19	10,499.86	-6,976.56	-6,593.12	-2.90	6,593.10	2.68	-2.60	-0.66
16,790.00	88.14	175.59	10,501.81	-6,978.51	-6,686.91	3.02	6,686.90	2.22	-1.43	-1.70
16,884.00	89.31	176.32	10,503.90	-6,980.60	-6,780.65	9.65	6,780.65	1.47	1.24	0.78
16,978.00	88.37	177.13	10,505.81	-6,982.51	-6,874.47	15.02	6,874.49	1.32	-1.00	0.86
17,072.00	88.09	178.27	10,508.71	-6,985.41	-6,968.35	18.79	6,968.38	1.25	-0.30	1.21
17,166.00	88.63	178.75	10,511.40	-6,988.10	-7,062.28	21.23	7,062.31	0.77	0.57	0.51
17,260.00	88.57	178.71	10,513.70	-6,990.40	-7,156.23	23.31	7,156.26	0.08	-0.06	-0.04
17,354.00	89.48	178.38	10,515.30	-6,992.00	-7,250.19	25.70	7,250.22	1.03	0.97	-0.35
17,448.00	87.14	176.56	10,518.07	-6,994.77	-7,344.04	29.85	7,344.09	3.15	-2.49	-1.94
17,510.00	87.73	176.24	10,520.84	-6,997.54	-7,405.86	33.74	7,405.91	1.08	0.95	-0.52
17,542.00	89.66	177.26	10,521.57	-6,998.27	-7,437.80	35.55	7,437.86	6.82	6.03	3.19
17,594.00	90.17	177.23	10,521.65	-6,998.35	-7,489.74	38.05	7,489.80	0.98	0.98	-0.06
17,636.00	91.46	178.47	10,521.05	-6,997.75	-7,531.70	39.63	7,531.77	4.26	3.07	2.95
17,681.00	90.81	178.32	10,520.16	-6,996.86	-7,576.67	40.89	7,576.74	1.48	-1.44	-0.33
17,730.00	91.16	180.67	10,519.32	-6,996.02	-7,625.66	41.32	7,625.73	4.85	0.71	4.80
17,776.00	91.76	180.96	10,518.15	-6,994.85	-7,671.64	40.66	7,671.71	1.45	1.30	0.63
17,824.00	92.28	180.93	10,516.45	-6,993.15	-7,719.60	39.87	7,719.67	1.09	1.08	-0.06
17,918.00	91.37	182.04	10,513.46	-6,990.16	-7,813.52	37.44	7,813.59	1.53	-0.97	1.18
18,012.00	90.17	181.41	10,512.20	-6,988.90	-7,907.47	34.61	7,907.53	1.44	-1.28	-0.67
18,106.00	88.00	181.34	10,513.70	-6,990.40	-8,001.42	32.35	8,001.48	2.31	-2.31	-0.07
18,151.00	87.86	181.52	10,515.32	-6,992.02	-8,046.38	31.23	8,046.43	0.51	-0.31	0.40
18,200.00	85.41	182.16	10,518.20	-6,994.90	-8,095.27	29.66	8,095.31	5.17	-5.00	1.31
18,245.00	83.45	182.56	10,522.57	-6,999.27	-8,140.01	27.82	8,140.06	4.44	-4.36	0.89
18,294.00	85.33	181.91	10,527.36	-7,004.06	-8,188.74	25.91	8,188.78	4.06	3.84	-1.33
18,339.00	87.14	181.10	10,530.31	-7,007.01	-8,233.63	24.74	8,233.66	4.41	4.02	-1.80
18,389.00	87.21	180.47	10,532.78	-7,009.48	-8,283.56	24.05	8,283.59	1.27	0.14	-1.26
18,483.00	87.24	179.74	10,537.33	-7,014.03	-8,377.45	23.88	8,377.48	0.78	0.03	-0.78
18,577.00	87.62	179.60	10,541.54	-7,018.24	-8,471.35	24.42	8,471.39	0.43	0.40	-0.15
18,670.00	87.96	178.80	10,545.13	-7,021.83	-8,564.27	25.72	8,564.31	0.93	0.37	-0.86
18,765.00	88.42	177.90	10,548.13	-7,024.83	-8,659.19	28.45	8,659.23	1.06	0.48	-0.95
18,859.00	88.43	177.20	10,550.71	-7,027.41	-8,753.06	32.47	8,753.11	0.74	0.01	-0.74
18,953.00	89.80	178.65	10,552.17	-7,028.87	-8,846.99	35.87	8,847.04	2.12	1.46	1.54
19,046.00	88.49	180.05	10,553.55	-7,030.25	-8,939.97	36.93	8,940.02	2.06	-1.41	1.51
19,141.00	88.52	179.34	10,556.03	-7,032.73	-9,034.93	37.43	9,034.99	0.75	0.03	-0.75
19,235.00	88.35	182.06	10,558.60	-7,035.30	-9,128.88	36.28	9,128.94	2.90	-0.18	2.89
19,329.00	89.01	182.47	10,560.76	-7,037.46	-9,222.78	32.57	9,222.83	0.83	0.70	0.44
19,423.00	89.79	182.86	10,561.75	-7,038.45	-9,316.67	28.20	9,316.71	0.93	0.83	0.41
19,516.00	88.67	181.15	10,563.00	-7,039.70	-9,409.60	24.95	9,409.63	2.20	-1.20	-1.84
19,610.00	89.66	180.15	10,564.37	-7,041.07	-9,503.58	23.88	9,503.61	1.50	1.05	-1.06
19,704.00	89.85	179.82	10,564.77	-7,041.47	-9,597.58	23.91	9,597.61	0.41	0.20	-0.35
19,799.00	89.85	180.86	10,565.02	-7,041.72	-9,692.58	23.34	9,692.61	1.09	0.00	1.09
19,893.00	89.33	181.29	10,565.69	-7,042.39	-9,786.56	21.58	9,786.58	0.72	-0.55	0.46
19,987.00	89.59	180.81	10,566.58	-7,043.28	-9,880.54	19.86	9,880.56	0.58	0.28	-0.51
20,082.00	87.62	180.58	10,568.89	-7,045.59	-9,975.50	18.70	9,975.52	2.09	-2.07	-0.24
20,176.00	87.59	180.30	10,572.82	-7,049.52	-10,069.42	17.98	10,069.43	0.30	-0.03	-0.30
20,270.00	88.21	180.89	10,576.26	-7,052.96	-10,163.35	17.01	10,163.36	0.91	0.66	0.63
20,364.00	88.80	180.89	10,578.72	-7,055.42	-10,257.30	15.55	10,257.31	0.63	0.63	0.00
20,458.00	90.18	177.72	10,579.55	-7,056.25	-10,351.28	16.69	10,351.29	3.68	1.47	-3.37
20,552.00	89.15	183.16	10,580.10	-7,056.80	-10,445.24	15.97	10,445.25	5.89	-1.10	5.79

Survey Report



Company:	CENTENNIAL RESOURCE DEVELO	Local Co-ordinate Reference:	Well AIRSTREAM 24 STATE COM #502H
Project:	LEA COUNTY, NM (NAD 83 - UTM Z	TVD Reference:	KB 25' @ 3523.30usft (H&P 650)
Site:	SW SW SEC. 13 T22S T34E	MD Reference:	KB 25' @ 3523.30usft (H&P 650)
Well:	AIRSTREAM 24 STATE COM #502H	North Reference:	True
Wellbore:	SIDETRACK - JOB #2018-627-650	Survey Calculation Method:	Minimum Curvature
Design:	FINAL SURVEYS	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)
20,647.00	89.57	183.35	10,581.16	-7,057.86	-10,540.08	10.57	10,540.08	0.49	0.44	0.20
20,741.00	88.24	182.26	10,582.96	-7,059.66	-10,633.94	5.97	10,633.93	1.83	-1.41	-1.16
20,835.00	88.43	182.04	10,585.69	-7,062.39	-10,727.84	2.45	10,727.82	0.31	0.20	-0.23
20,929.00	88.33	181.88	10,588.35	-7,065.05	-10,821.75	-0.77	10,821.72	0.20	-0.11	-0.17
21,023.00	89.01	181.99	10,590.53	-7,067.23	-10,915.67	-3.94	10,915.63	0.73	0.72	0.12
LAST SURVEY DEC 9, 2018										
21,117.00	89.05	181.92	10,592.12	-7,068.82	-11,009.60	-7.15	11,009.56	0.09	0.04	-0.07
EXTRAPOLATION TO TD										
21,177.00	89.05	181.92	10,593.12	-7,069.82	-11,069.56	-9.16	11,069.51	0.00	0.00	0.00

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
PP/FTP - AIRSTREA	0.00	0.00	10,370.00	-655.31	-1.30	11,758,850.77	2,125,523.63	32.384161°N	103.428090°W
- hit/miss target									
- Shape									
- survey misses target center by 4.01usft at 10754.15usft MD (10366.01 TVD, -655.67 N, -1.21 E)									
- Point									
LTP/BHL - AIRSTRE	0.00	0.00	10,551.00	-11,011.85	23.76	11,748,497.06	2,125,700.89	32.355695°N	103.428008°W
- survey misses target center by 51.49usft at 21117.00usft MD (10592.12 TVD, -11009.60 N, -7.15 E)									
- Point									

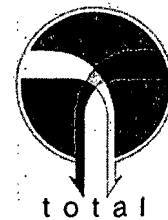
Survey Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
1,952.00	1,951.79	7.87	-10.02	SURFACE CASING
5,611.00	5,610.14	10.90	-12.25	9 5/8" INT CASING
8,010.00	8,006.86	12.52	56.67	TIE ON TO OH SURVEYS
8,015.00	8,011.86	12.55	56.66	SIDETRACK POINT
9,659.00	9,654.29	51.13	26.07	KOP
10,804.00	10,369.03	-705.31	-4.46	HZ LANDING POINT
21,117.00	10,592.12	-11,009.60	-7.15	LAST SURVEY DEC 9, 2018
21,177.00	10,593.12	-11,069.56	-9.16	EXTRAPOLATION TO TD

Checked By: _____ Approved By: _____ Date: _____

CENTENNIAL RESOURCE DEVELOPMENT, LLC

**LEA COUNTY, NM (NAD 83 - UTM ZONE 13 - TRUE)
SW SW SEC. 13 T22S T34E
AIRSTREAM 24 STATE COM #502H
13 December, 2018**

Survey: FINAL SURVEYS



Survey Report



Company:	CENTENNIAL RESOURCE DEVELOPMENT	Local Co-ordinate Reference:	Well AIRSTREAM 24 STATE COM #502H
Project:	LEA COUNTY, NM (NAD 83 - UTM Zone 13N)	TVD Reference:	KB 25' @ 3523.30usft (H&P 650)
Site:	SW SW SEC. 13 T22S T34E	MD Reference:	KB 25' @ 3523.30usft (H&P 650)
Well:	AIRSTREAM 24 STATE COM #502H	North Reference:	True
Wellbore:	ORIGINAL WELLBORE - JOB #2018-627-650	Survey Calculation Method:	Minimum Curvature
Design:	FINAL SURVEYS	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 SW SEC. 13 T22S T34E			
Site Position:		Northing:	11,759,505.51 usft	Latitude:	32.385963°N
From:	Map	Easting:	2,125,485.31 usft	Longitude:	103.428183°W
Position Uncertainty:	0.00 usft	Slot Radius:	1.10 ft	Grid Convergence:	0.84 °

Well	AIRSTREAM 24 STATE COM #502H					
Well Position	+N/-S	0.00 usft	Northing:	11,759,505.94 usft	Latitude:	32.385963°N
	+E/-W	0.00 usft	Easting:	2,125,515.30 usft	Longitude:	103.428086°W
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	3,498.30 usft

Wellbore:	ORIGINAL WELLBORE - JOB #2018-627-650				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	10/10/2018	6.76	60.22	47,913

Design		FINAL SURVEYS		
Audit Notes:				
Version:	1.0	Phase:	ACTUAL	Tie On Depth: 0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	179.88

Survey Program	Date 13/12/2018				
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
25.00	11,483.00	FINAL SURVEYS (ORIGINAL WELLBORE)	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	3,523.30	0.00	0.00	0.00	0.00	0.00	0.00
25.00	0.00	0.00	25.00	3,498.30	0.00	0.00	0.00	0.00	0.00	0.00
153.00	0.30	65.78	153.00	3,370.30	0.14	0.31	-0.14	0.23	0.23	0.00
241.00	0.40	326.78	241.00	3,282.30	0.49	0.35	-0.49	0.61	0.11	-112.50
390.00	0.90	35.78	389.99	3,133.31	1.87	0.75	-1.87	0.57	0.34	46.31
516.00	1.10	275.78	515.98	3,007.32	2.80	0.12	-2.80	1.38	0.16	-95.24
642.00	1.40	17.78	641.96	2,881.34	4.39	-0.61	-4.39	1.55	0.24	80.95
736.00	1.30	24.78	735.94	2,787.36	6.45	0.19	-6.45	0.20	-0.11	7.45
831.00	0.90	25.78	830.92	2,692.38	8.10	0.96	-8.10	0.42	-0.42	1.05
925.00	0.30	20.78	924.91	2,598.39	8.99	1.37	-8.99	0.64	-0.64	-5.32
1,020.00	0.20	56.78	1,019.91	2,503.39	9.32	1.60	-9.31	0.19	-0.11	37.89
1,114.00	0.20	78.78	1,113.91	2,409.39	9.44	1.90	-9.43	0.08	0.00	23.40
1,209.00	0.20	219.78	1,208.91	2,314.39	9.34	1.95	-9.34	0.40	0.00	148.42

Survey Report



Company:	CENTENNIAL RESOURCE DEVELO	Local Co-ordinate Reference:	Well AIRSTREAM 24 STATE COM #502H
Project:	LEA COUNTY, NM (NAD 83 - UTM Z	TVD Reference:	KB 25' @ 3523.30usft (H&P 650)
Site:	SW SW SEC. 13 T22S T34E	MD Reference:	KB 25' @ 3523.30usft (H&P 650)
Well:	AIRSTREAM 24 STATE COM #502H	North Reference:	True
Wellbore:	ORIGINAL WELLBORE - JOB #2018-	Survey Calculation Method:	Minimum Curvature
Design:	FINAL SURVEYS	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)	Buid Rate (°/100usft)	Turn Rate (°/100usft)
1,303.00	0.40	241.78	1,302.91	2,220.39	9.06	1.56	-9.06	0.24	0.21	23.40
1,398.00	0.70	299.78	1,397.91	2,125.39	9.19	0.76	-9.19	0.63	0.32	61.05
1,492.00	0.70	257.78	1,491.90	2,031.40	9.36	-0.30	-9.36	0.53	0.00	-44.68
1,587.00	1.30	265.78	1,586.88	1,936.42	9.15	-1.94	-9.16	0.65	0.63	8.42
1,713.00	1.50	259.78	1,712.85	1,810.45	8.76	-4.99	-8.77	0.20	0.16	-4.76
1,807.00	1.20	263.78	1,806.82	1,716.48	8.43	-7.18	-8.45	0.33	-0.32	4.26
TIE ON TO INVICTUS SURVEY										
1,912.00	1.10	253.78	1,911.80	1,611.50	8.03	-9.24	-8.05	0.21	-0.10	-9.52
SURFACE CASING										
1,952.00	1.18	263.10	1,951.79	1,571.51	7.87	-10.02	-7.90	0.51	0.20	23.30
2,002.00	1.32	272.81	2,001.78	1,521.52	7.84	-11.10	-7.86	0.51	0.28	19.42
2,096.00	1.48	273.05	2,095.75	1,427.55	7.96	-13.40	-7.99	0.17	0.17	0.26
2,190.00	1.10	267.40	2,189.73	1,333.57	7.98	-15.51	-8.02	0.43	-0.40	-6.01
2,284.00	0.72	189.94	2,283.72	1,239.58	7.36	-16.51	-7.39	1.25	-0.40	-82.40
2,378.00	1.28	179.21	2,377.70	1,145.60	5.73	-16.60	-5.76	0.63	0.60	-11.41
2,472.00	0.85	129.37	2,471.69	1,051.61	4.24	-16.05	-4.27	1.04	-0.46	-53.02
2,566.00	1.03	93.57	2,565.68	957.62	3.74	-14.66	-3.77	0.64	0.19	-38.09
2,660.00	1.12	84.44	2,659.66	863.64	3.78	-12.91	-3.80	0.21	0.10	-9.71
2,754.00	1.18	75.43	2,753.64	769.66	4.11	-11.06	-4.13	0.20	0.06	-9.59
2,848.00	1.33	77.76	2,847.62	675.68	4.58	-9.05	-4.60	0.17	0.16	2.48
2,942.00	1.47	73.37	2,941.59	581.71	5.16	-6.83	-5.18	0.19	0.15	-4.67
3,036.00	0.83	102.88	3,035.57	487.73	5.35	-5.01	-5.36	0.91	-0.68	31.39
3,130.00	0.72	128.30	3,129.56	393.74	4.84	-3.89	-4.84	0.38	-0.12	27.04
3,224.00	0.73	120.80	3,223.56	299.74	4.16	-2.91	-4.17	0.10	0.01	-7.98
3,319.00	0.74	105.86	3,318.55	204.75	3.69	-1.80	-3.69	0.20	0.01	-15.73
3,413.00	0.46	29.96	3,412.55	110.75	3.85	-1.03	-3.85	0.82	-0.30	-80.74
3,507.00	1.06	348.31	3,506.54	16.76	5.03	-1.01	-5.03	0.83	0.64	-44.31
3,601.00	1.22	14.38	3,600.52	-77.22	6.85	-0.94	-6.85	0.57	0.17	27.73
3,695.00	1.53	26.46	3,694.49	-171.19	8.94	-0.13	-8.94	0.45	0.33	12.85
3,789.00	0.40	0.79	3,788.48	-265.18	10.39	0.43	-10.39	1.26	-1.20	-27.31
3,883.00	0.58	238.05	3,882.48	-359.18	10.47	0.03	-10.47	0.92	0.19	-130.57
3,977.00	0.62	243.22	3,976.47	-453.17	9.99	-0.83	-9.99	0.07	0.04	5.50
4,071.00	0.85	253.35	4,070.46	-547.16	9.56	-1.95	-9.56	0.28	0.24	10.78
4,165.00	1.04	268.59	4,164.45	-641.15	9.34	-3.47	-9.34	0.33	0.20	16.21
4,259.00	1.33	282.84	4,258.43	-735.13	9.56	-5.39	-9.57	0.44	0.31	15.16
4,353.00	1.58	285.51	4,352.40	-829.10	10.15	-7.70	-10.16	0.28	0.27	2.84
4,823.00	1.56	295.78	4,822.22	-1,298.92	14.66	-19.70	-14.70	0.06	0.00	2.19
4,917.00	0.21	238.64	4,916.21	-1,392.91	15.13	-21.00	-15.17	1.55	-1.44	-60.79
5,011.00	0.95	128.39	5,010.21	-1,486.91	14.55	-20.54	-14.60	1.11	0.79	-117.29
5,105.00	0.98	119.12	5,104.19	-1,580.89	13.68	-19.22	-13.72	0.17	0.03	-9.86
5,199.00	0.90	101.83	5,198.18	-1,674.88	13.14	-17.80	-13.18	0.31	-0.09	-18.39
5,293.00	0.71	105.19	5,292.17	-1,768.87	12.83	-16.52	-12.87	0.21	-0.20	3.57
5,387.00	0.71	119.17	5,386.17	-1,862.87	12.40	-15.44	-12.43	0.18	0.00	14.87
5,481.00	0.81	118.21	5,480.16	-1,956.86	11.80	-14.35	-11.83	0.11	0.11	-1.02
5,561.00	1.07	112.35	5,560.15	-2,036.85	11.25	-13.16	-11.28	0.35	0.32	-7.32
9 5/8" CASING PT										
5,611.00	1.16	109.92	5,610.14	-2,086.84	10.90	-12.25	-10.92	0.20	0.18	-4.85
5,655.00	1.24	108.08	5,654.13	-2,130.83	10.60	-11.38	-10.62	0.20	0.18	-4.19
5,749.00	1.22	108.04	5,748.11	-2,224.81	9.97	-9.46	-9.99	0.02	-0.02	-0.04
5,844.00	1.18	107.50	5,843.08	-2,319.78	9.37	-7.57	-9.38	0.04	-0.04	-0.57
5,938.00	1.59	83.90	5,937.06	-2,413.76	9.21	-5.35	-9.22	0.74	0.44	-25.11
6,032.00	3.64	73.28	6,030.96	-2,507.66	10.21	-1.20	-10.21	2.23	2.18	-11.30
6,126.00	4.21	73.84	6,124.73	-2,601.43	12.03	4.98	-12.02	0.61	0.61	0.60

Survey Report



Company:	CENTENNIAL RESOURCE DEVELO	Local Co-ordinate Reference:	Well AIRSTREAM 24 STATE COM #502H
Project:	LEA COUNTY, NM (NAD 83 - UTM Z	TVD Reference:	KB 25' @ 3523.30usft (H&P 650)
Site:	SW SW SEC. 13 T22S T34E	MD Reference:	KB 25' @ 3523.30usft (H&P 650)
Well:	AIRSTREAM 24 STATE COM #502H	North Reference:	True
Wellbore:	ORIGINAL WELLBORE - JOB #2018-	Survey Calculation Method:	Minimum Curvature
Design:	FINAL SURVEYS	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)
6,221.00	4.30	74.12	6,219.47	-2,696.17	13.97	11.75	-13.95	0.10	0.09	0.29
6,315.00	4.41	73.70	6,313.20	-2,789.90	15.95	18.61	-15.91	0.12	0.12	-0.45
6,409.00	4.20	77.59	6,406.94	-2,883.64	17.71	25.44	-17.65	0.38	-0.22	4.14
6,503.00	4.11	79.27	6,500.69	-2,977.39	19.07	32.11	-19.00	0.16	-0.10	1.79
6,597.00	3.75	89.98	6,594.47	-3,071.17	19.70	38.50	-19.62	0.87	-0.38	11.39
6,691.00	3.62	95.26	6,688.28	-3,164.98	19.43	44.52	-19.33	0.39	-0.14	5.62
6,785.00	3.66	96.91	6,782.09	-3,258.79	18.80	50.46	-18.69	0.12	0.04	1.76
6,880.00	2.03	114.72	6,876.97	-3,353.67	17.73	55.00	-17.61	1.93	-1.72	18.75
6,974.00	1.82	132.37	6,970.91	-3,447.61	16.03	57.61	-15.90	0.67	-0.22	18.78
7,068.00	1.14	134.30	7,064.88	-3,541.58	14.37	59.38	-14.24	0.73	-0.72	2.05
7,162.00	0.72	276.76	7,158.88	-3,635.58	13.78	59.47	-13.66	1.88	-0.45	151.55
7,256.00	0.58	256.53	7,252.87	-3,729.57	13.74	58.42	-13.62	0.28	-0.15	-21.52
7,351.00	0.40	280.40	7,347.87	-3,824.57	13.69	57.62	-13.57	0.28	-0.19	25.13
7,445.00	0.32	254.80	7,441.87	-3,918.57	13.68	57.05	-13.56	0.19	-0.09	-27.23
7,539.00	0.25	238.45	7,535.87	-4,012.57	13.50	56.62	-13.38	0.11	-0.07	-17.39
7,633.00	0.26	223.78	7,629.86	-4,106.56	13.24	56.30	-13.12	0.07	0.01	-15.61
7,727.00	0.22	196.07	7,723.86	-4,200.56	12.92	56.10	-12.80	0.13	-0.04	-29.48
7,821.00	0.17	159.58	7,817.86	-4,294.56	12.61	56.10	-12.49	0.14	-0.05	-38.82
7,916.00	0.14	100.60	7,912.86	-4,389.56	12.46	56.26	-12.34	0.16	-0.03	-62.08
8,010.00	0.37	75.10	8,006.86	-4,483.56	12.52	56.67	-12.39	0.27	0.24	-27.13
8,104.00	0.55	65.35	8,100.86	-4,577.56	12.78	57.37	-12.66	0.21	0.19	-10.37
8,198.00	0.76	63.88	8,194.85	-4,671.55	13.24	58.34	-13.12	0.22	0.22	-1.56
8,292.00	0.82	66.89	8,288.84	-4,765.54	13.78	59.52	-13.65	0.08	0.06	3.20
8,387.00	0.84	62.86	8,383.83	-4,860.53	14.37	60.76	-14.24	0.06	0.02	-4.24
8,481.00	0.84	60.73	8,477.82	-4,954.52	15.02	61.98	-14.88	0.03	0.00	-2.27
8,575.00	0.89	58.99	8,571.81	-5,048.51	15.73	63.21	-15.60	0.06	0.05	-1.85
8,669.00	1.06	43.58	8,665.80	-5,142.50	16.74	64.43	-16.60	0.33	0.18	-16.39
8,764.00	1.18	26.64	8,760.78	-5,237.48	18.25	65.47	-18.11	0.37	0.13	-17.83
8,858.00	1.17	7.54	8,854.76	-5,331.46	20.07	66.03	-19.92	0.41	-0.01	-20.32
8,952.00	1.17	357.88	8,948.74	-5,425.44	21.98	66.13	-21.83	0.21	0.00	-10.28
9,046.00	1.86	324.20	9,042.71	-5,519.41	24.17	65.20	-24.03	1.17	0.73	-35.83
9,140.00	2.04	348.12	9,136.66	-5,613.36	27.05	63.96	-26.91	0.88	0.19	25.45
9,234.00	0.82	28.07	9,230.63	-5,707.33	29.28	63.93	-29.14	1.60	-1.30	42.50
9,328.00	0.69	93.42	9,324.62	-5,801.32	29.84	64.81	-29.70	0.88	-0.14	69.52
9,422.00	0.32	171.60	9,418.62	-5,895.32	29.54	65.42	-29.40	0.74	-0.39	83.17
9,516.00	0.26	161.13	9,512.62	-5,989.32	29.08	65.52	-28.94	0.08	-0.06	-11.14
9,610.00	1.13	130.08	9,606.61	-6,083.31	28.28	66.30	-28.14	0.98	0.93	-33.03
9,688.00	1.33	129.22	9,684.59	-6,161.29	27.22	67.59	-27.07	0.26	0.26	-1.10
9,706.00	1.31	129.49	9,702.59	-6,179.29	26.95	67.91	-26.81	0.12	-0.11	1.50
KOP										
9,759.00	3.60	159.85	9,755.54	-6,232.24	25.01	68.95	-24.86	4.82	4.32	57.28
9,800.00	5.53	165.17	9,796.41	-6,273.11	21.89	69.90	-21.74	4.82	4.71	12.98
9,831.00	9.18	169.57	9,827.15	-6,303.85	18.01	70.73	-17.86	11.91	11.77	14.19
9,862.00	13.02	169.25	9,857.56	-6,334.26	12.15	71.83	-11.99	12.39	12.39	-1.03
9,894.00	16.13	170.05	9,888.53	-6,365.23	4.22	73.27	-4.07	9.74	9.72	2.50
9,926.00	19.92	170.51	9,918.95	-6,395.65	-5.53	74.94	5.70	11.85	11.84	1.44
9,957.00	23.25	172.55	9,947.77	-6,424.47	-16.81	76.61	16.98	11.01	10.74	6.58
9,988.00	25.50	173.89	9,976.01	-6,452.71	-29.52	78.11	29.68	7.47	7.26	4.32
10,020.00	27.89	175.88	10,004.60	-6,481.30	-43.83	79.38	44.00	7.97	7.47	6.22
10,051.00	30.01	177.03	10,031.72	-6,508.42	-58.81	80.30	58.98	7.07	6.84	3.71
10,083.00	31.49	178.25	10,059.22	-6,535.92	-75.15	80.97	75.33	5.02	4.62	3.81
10,114.00	33.35	178.62	10,085.39	-6,562.09	-91.77	81.43	91.94	6.03	6.00	1.19
10,145.00	36.36	179.30	10,110.82	-6,587.52	-109.48	81.74	109.65	9.79	9.71	2.19

Survey Report



Company:	CENTENNIAL RESOURCE DEVELOPMENT	Local Co-ordinate Reference:	Well AIRSTREAM 24 STATE COM #502H
Project:	LEA COUNTY, NM (NAD 83 - UTM Zone 18N)	TVD Reference:	KB 25' @ 3523.30usft (H&P 650)
Site:	SW SW SEC. 13 T22S T34E	MD Reference:	KB 25' @ 3523.30usft (H&P 650)
Well:	AIRSTREAM 24 STATE COM #502H	North Reference:	True
Wellbore:	ORIGINAL WELLBORE - JOB #2018-001	Survey Calculation Method:	Minimum Curvature
Design:	FINAL SURVEYS	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)
10,177.00	39.32	180.62	10,136.09	-6,612.79	-129.11	81.75	129.28	9.59	9.25	4.12
10,208.00	41.43	182.42	10,159.71	-6,636.41	-149.18	81.21	149.35	7.78	6.81	5.81
10,240.00	44.33	182.68	10,183.16	-6,659.86	-170.93	80.24	171.10	9.08	9.06	0.81
10,271.00	45.90	183.19	10,205.03	-6,681.73	-192.86	79.11	193.03	5.20	5.06	1.65
10,302.00	46.64	182.74	10,226.46	-6,703.16	-215.23	77.96	215.40	2.61	2.39	-1.45
10,334.00	49.13	180.68	10,247.92	-6,724.62	-238.96	77.26	239.12	9.13	7.78	-6.44
10,365.00	52.36	179.41	10,267.53	-6,744.23	-262.96	77.24	263.12	10.89	10.42	-4.10
10,397.00	54.85	177.89	10,286.52	-6,763.22	-288.70	77.86	288.87	8.67	7.78	-4.75
10,428.00	57.54	177.60	10,303.77	-6,780.47	-314.44	78.87	314.61	8.71	8.68	-0.94
10,459.00	60.75	178.76	10,319.66	-6,796.36	-341.04	79.71	341.21	10.84	10.35	3.74
10,491.00	63.46	180.53	10,334.63	-6,811.33	-369.31	79.88	369.48	9.78	8.47	5.53
10,522.00	66.13	181.41	10,347.83	-6,824.53	-397.35	79.40	397.53	8.99	8.61	2.84
10,554.00	69.36	181.43	10,359.95	-6,836.65	-426.96	78.67	427.13	10.09	10.09	0.06
10,585.00	72.85	181.77	10,369.99	-6,846.69	-456.27	77.85	456.44	11.31	11.26	1.10
10,616.00	76.30	181.78	10,378.23	-6,854.93	-486.14	76.92	486.30	11.13	11.13	0.03
10,648.00	79.21	181.75	10,385.02	-6,861.72	-517.39	75.96	517.55	9.09	9.09	-0.09
10,679.00	81.18	182.26	10,390.30	-6,867.00	-547.92	74.89	548.08	6.56	6.35	1.65
10,710.00	81.23	182.40	10,395.04	-6,871.74	-578.53	73.65	578.68	0.47	0.16	0.45
10,742.00	81.69	182.42	10,399.79	-6,876.49	-610.14	72.32	610.30	1.44	1.44	0.06
10,773.00	83.61	182.96	10,403.76	-6,880.46	-640.85	70.87	641.01	6.43	6.19	1.74
10,804.00	86.64	183.44	10,406.39	-6,883.09	-671.69	69.15	671.84	9.90	9.77	1.55
10,835.00	88.60	184.06	10,407.68	-6,884.38	-702.60	67.12	702.74	6.63	6.32	2.00
10,867.00	86.89	183.97	10,408.94	-6,885.64	-734.49	64.88	734.63	5.35	-5.34	-0.28
10,898.00	84.51	184.01	10,411.26	-6,887.96	-765.33	62.73	765.46	7.68	-7.68	0.13
10,929.00	82.03	183.83	10,414.89	-6,891.59	-796.04	60.63	796.17	8.02	-8.00	-0.58
10,961.00	81.93	183.60	10,419.36	-6,896.06	-827.66	58.57	827.78	0.78	-0.31	-0.72
10,992.00	83.46	182.75	10,423.30	-6,900.00	-858.36	56.87	858.48	5.64	4.94	-2.74
11,023.00	85.96	181.08	10,426.16	-6,902.86	-889.21	55.84	889.32	9.69	8.06	-5.39
11,055.00	87.56	179.55	10,427.97	-6,904.67	-921.15	55.67	921.27	6.91	5.00	-4.78
11,086.00	87.90	178.90	10,429.19	-6,905.89	-952.12	56.09	952.24	2.36	1.10	-2.10
11,117.00	88.11	178.90	10,430.27	-6,906.97	-983.10	56.68	983.22	0.68	0.68	0.00
11,149.00	88.63	178.81	10,431.18	-6,907.88	-1,015.08	57.32	1,015.20	1.65	1.62	-0.28
11,180.00	87.45	178.68	10,432.24	-6,908.94	-1,046.05	58.00	1,046.18	3.83	-3.81	-0.42
11,211.00	86.76	178.24	10,433.81	-6,910.51	-1,077.00	58.83	1,077.13	2.64	-2.23	-1.42
11,243.00	86.50	179.61	10,435.69	-6,912.39	-1,108.94	59.43	1,109.07	4.35	-0.81	4.28
11,274.00	86.79	179.81	10,437.50	-6,914.20	-1,139.89	59.59	1,140.01	1.14	0.94	0.65
11,304.00	86.97	181.18	10,439.14	-6,915.84	-1,169.84	59.33	1,169.97	4.60	0.60	4.57
11,335.00	86.90	181.50	10,440.79	-6,917.49	-1,200.79	58.60	1,200.91	1.06	-0.23	1.03
11,365.00	86.93	181.21	10,442.41	-6,919.11	-1,230.74	57.89	1,230.86	0.97	0.10	-0.97
11,395.00	87.10	181.21	10,443.97	-6,920.67	-1,260.69	57.26	1,260.81	0.57	0.57	0.00
LAST SURVEY NOV 24, 2018										
11,426.00	87.11	181.34	10,445.54	-6,922.24	-1,291.64	56.57	1,291.76	0.42	0.03	0.42
PROJECTION TO TD - ORIGINAL WELLBORE										
11,483.00	87.20	181.34	10,448.37	-6,925.07	-1,348.56	55.24	1,348.67	0.16	0.16	0.00

Survey Report



Company:	CENTENNIAL RESOURCE DEVELOPMENT	Local Co-ordinate Reference:	Well AIRSTREAM 24 STATE COM #502H
Project:	LEA COUNTY, NM (NAD 83 - UTM Zone 18N)	TVD Reference:	KB 25' @ 3523.30usft (H&P 650)
Site:	SW SW SEC. 13 T22S T34E	MD Reference:	KB 25' @ 3523.30usft (H&P 650)
Well:	AIRSTREAM 24 STATE COM #502H	North Reference:	True
Wellbore:	ORIGINAL WELLBORE - JOB #2018-001	Survey Calculation Method:	Minimum Curvature
Design:	FINAL SURVEYS	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
LTP/BHL - AIRSTREAM 24			0.00	0.00	10,566.00	-11,011.85	23.76	11,748,497.06	2,125,700.89	32.355695°N	103.428008°W
- survey misses target center by 9664.06usft at 11483.00usft MD (10448.37 TVD, -1348.56 N, 55.24 E)											
- Point											
PP/FTP - AIRSTREAM 24			0.00	0.00	10,339.48	-649.93	48.48	11,758,856.88	2,125,573.32	32.384176°N	103.427928°W
- survey misses target center by 68.61usft at 10777.81usft MD (10404.27 TVD, -645.63 N, 70.62 E)											
- Point											
KOP - AIRSTREAM 24			0.00	0.00	9,665.57	9.43	50.09	11,759,516.10	2,125,565.24	32.385989°N	103.427923°W
- survey misses target center by 24.92usft at 9668.94usft MD (9665.53 TVD, 27.49 N, 67.26 E)											
- Point											

Survey Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
1,912.00	1,911.80	8.03	-9.24	TIE ON TO INVICTUS SURVEY
1,952.00	1,951.79	7.87	-10.02	SURFACE CASING
5,611.00	5,610.14	10.90	-12.25	9 5/8" CASING PT
9,759.00	9,755.54	25.01	68.95	KOP
11,426.00	10,445.54	-1,291.64	56.57	LAST SURVEY NOV 24, 2018
11,483.00	10,448.37	-1,348.56	55.24	PROJECTION TO TD - ORIGINAL WELLBORE

Checked By: _____ Approved By: _____ Date: _____

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	12/18/2018
Job End Date:	1/4/2019
State:	New Mexico
County:	Lea
API Number:	30-025-45181-00-00
Operator Name:	Centennial Resource Production, LLC
Well Name and Number:	Airstream 24 State Com 502H
Latitude:	32.38596100
Longitude:	-103.42808600
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	10,593
Total Base Water Volume (gal):	22,061,760
Total Base Non Water Volume:	0



Hydraulic Fracturing Fluid Composition:

Trade Name	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass)**	Maximum Ingredient Concentration in HF Fluid (% by mass)**	Comments
Water	Operator	Carrier/Base Fluid					
			Water	7732-18-5	100.00000	87.07574	None
Sand (100 Mesh Proppant)	ProFrac	Proppant					
			Crystalline Silica (quartz)	14808-60-7	100.00000	12.79527	None
HiRate 600W	Innospec	Friction Reducer					
			Petroleum distillates	64742-47-8	30.00000	0.01766	None
			Ammonium chloride	12125-02-9	15.00000	0.00883	None
			Ethoxylated alcohol	68439-50-9	5.00000	0.00294	None
			Ethoxylated alcohol	68002-97-1	5.00000	0.00294	None
			Ethoxylated alcohol	68551-12-2	5.00000	0.00294	None
ScaleCease 7103	Innospec	Scale Inhibitor					
			Mixture	00-00-0	100.00000	0.02251	None
Microbreak GQ 123	Innospec	Biocide					
			Water	7732-18-5	100.00000	0.01755	None
			Glutaral	111-30-8	15.00000	0.00263	None
			Quaternary Ammonium Compounds, benzyl-C12-16-alkyldimethyl, chlorides	68424-85-1	5.00000	0.00088	None

			Didecyldimethylammounium Chloride	7173-51-5	5.00000	0.00088	None
			Ethanol	64-17-5	1.00000	0.00017	None
PropShield	Hexion Inc	Flow-back control					
			Solvent naphtha (petroleum), heavy arom	64742-94-5	20.00000	0.00512	None
			Naphthalene	91-20-3	3.00000	0.00077	None
ASI-ULT110	A. Schulman	Fracking Diverting Agent					
			proprietary	proprietary	100.00000	0.00445	None
Ingredients shown above are subject to 29 CFR 1910.1200(i) and appear on Material Safety Data Sheets (MSDS). Ingredients shown below are Non-MSDS.							
Other Chemical(s)	Listed Above	See Trade Name(s) List					
			Ammonium chloride	12125-02-9	15.00000	0.00883	
			Ethoxylated alcohol	68551-12-2	5.00000	0.00294	
			Ethoxylated alcohol	68439-50-9	5.00000	0.00294	
			Ethoxylated alcohol	68002-97-1	5.00000	0.00294	
			Glutaral	111-30-8	15.00000	0.00263	
			Didecyldimethylammounium Chloride	7173-51-5	5.00000	0.00088	
			Quaternary Ammonium Compounds, benzyl-C12-16-alkyldimethyl, chlorides	68424-85-1	5.00000	0.00088	
			Naphthalene	91-20-3	3.00000	0.00077	
			Ethanol	64-17-5	1.00000	0.00017	

* Total Water Volume sources may include fresh water, produced water, and/or recycled water

** Information is based on the maximum potential for concentration and thus the total may be over 100%

Note: For Field Development Products (products that begin with FDP), MSDS level only information has been provided.

Ingredient information for chemicals subject to 29 CFR 1910.1200(i) and Appendix D are obtained from suppliers Material Safety Data Sheets (MSDS)