

BONANZA CREEK ENERGY

WELD COUNTY

SEC 3-T4N-R62W

STATE SEVENTY HOLES Y-E-10HNXRL

OWB

Design: FINAL SURVEY

Standard Survey Report

12 February, 2024

Project: WELD COUNTY
Site: SEC 3-T4N-R62W
Well: STATE SEVENTY HOLES Y-E-10HNXRL
Wellbore: OWB
Design: FINAL SURVEY

PROJECT DETAILS: WELD COUNTY
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: Colorado Northern Zone
System Datum: Mean Sea Level



Azimuths to True North
Magnetic North: 7.33°
Magnetic Field
Strength: 51696.1nT
Dip Angle: 66.56°
Date: 2/7/2024
Model: IGRF2020

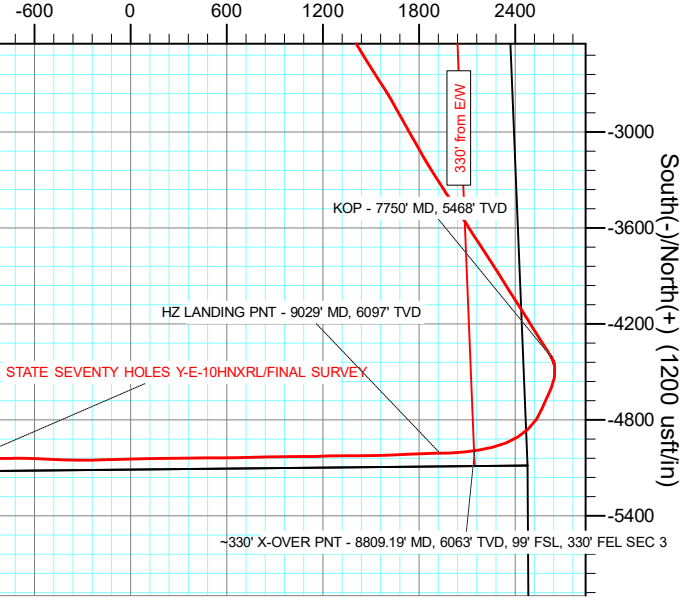
WELL DETAILS: STATE SEVENTY HOLES Y-E-10HNXRL

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	1371911.91	3331408.63	40.348200°N	104.310940°W	

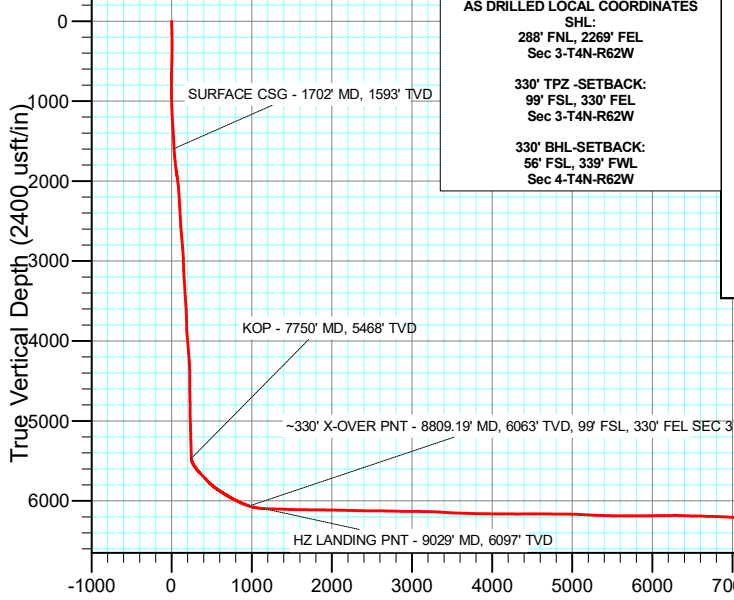
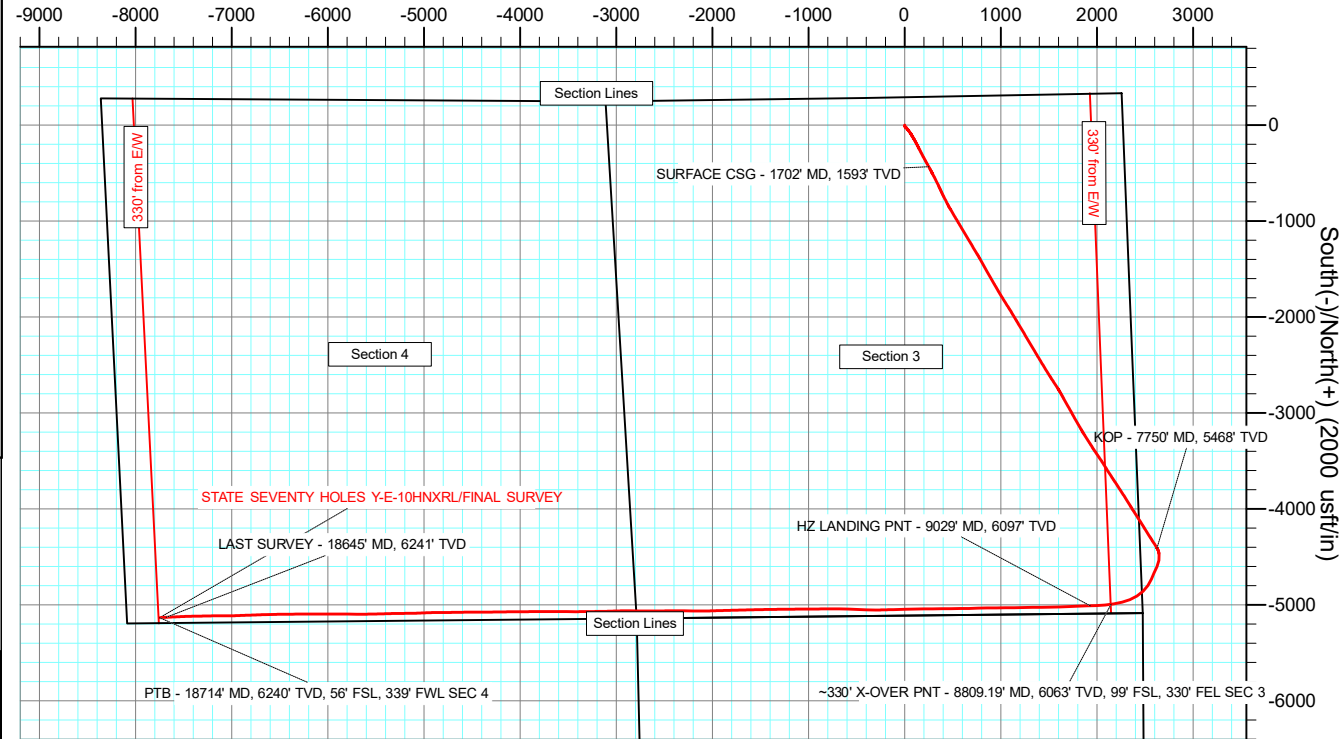
ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Vsect	Departure	Annotation
1702.00	35.37	151.29	1592.82	-432.89	250.92	29.84	503.89	SURFACE CSG - 1702' MD, 1593' TVD
7750.00	49.40	150.14	5467.80	-4407.72	2625.74	244.80	5136.00	KOP - 7750' MD, 5468' TVD
8809.19	74.01	261.76	6063.06	-4993.29	2146.70	967.53	6001.50	~330' X-OVER PNT - 8809.19' MD, 6063' TVD, 99' FSL, 330' FEL SEC 3
9029.00	87.15	268.64	6096.69	-5008.69	1930.75	1156.08	6217.94	HZ LANDING PNT - 9029' MD, 6097' TVD
18645.00	90.68	266.72	6240.91	-5128.94	-7680.85	9235.82	15831.66	LAST SURVEY - 18645' MD, 6241' TVD
18714.00	90.68	266.72	6240.09	-5132.89	-7749.73	9295.42	15900.66	PTB - 18714' MD, 6240' TVD, 56' FSL, 339' FWL SEC 4

West(-)/East(+) (1200 usft/in)



West(-)/East(+) (2000 usft/in)



Vertical Section at 236.48° (2400 usft/in)

Civitas Resources

Survey Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Well:	STATE SEVENTY HOLES Y-E-10HNXRL	North Reference:	True
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	FINAL SURVEY	Database:	EDM

Project	WELD COUNTY		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		Using geodetic scale factor

Site	SEC 3-T4N-R62W		
Site Position:		Northing:	1,372,270.09 usft
From:	Lat/Long	Easting:	3,333,658.88 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13.200 in
		Latitude:	40.349100°N
		Longitude:	104.302850°W
		Grid Convergence:	0.77 °

Well	STATE SEVENTY HOLES Y-E-10HNXRL					
Well Position	+N/-S	0.00 usft	Northing:	1,371,911.91 usft	Latitude:	40.348200°N
	+E/-W	0.00 usft	Easting:	3,331,408.64 usft	Longitude:	104.310940°W
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	4,549.00 usft

Wellbore	OWB				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	2/7/2024	7.33	66.56	51,696.11151472

Design	FINAL SURVEY				
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	236.48	

Survey Program	Date	2/12/2024			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
140.00	1,618.00	SURFACE SURVEY (OWB)	MWD OWSG	OWSG MWD - Standard	
1,761.00	18,714.00	FINAL SURVEY (OWB)	MWD OWSG	OWSG MWD - Standard	

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
140.00	2.08	196.38	139.97	-2.44	-0.72	1.94	1.49	1.49	0.00	
210.00	3.14	169.50	209.90	-5.54	-0.73	3.66	2.27	1.51	-38.40	
301.00	4.60	148.57	300.69	-11.11	1.63	4.77	2.21	1.60	-23.00	
391.00	6.50	134.87	390.27	-17.78	7.12	3.88	2.56	2.11	-15.22	
483.00	8.88	137.82	481.44	-26.72	15.58	1.76	2.62	2.59	3.21	
577.00	10.34	138.70	574.12	-38.43	26.02	-0.47	1.56	1.55	0.94	
672.00	12.99	143.77	667.15	-53.45	37.96	-2.13	2.99	2.79	5.34	
766.00	15.29	143.90	758.29	-71.99	51.51	-3.19	2.45	2.45	0.14	
862.00	17.54	147.16	850.38	-94.38	66.82	-3.59	2.53	2.34	3.40	

Civitas Resources

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Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Well:	STATE SEVENTY HOLES Y-E-10HNXRL	North Reference:	True
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	FINAL SURVEY	Database:	EDM

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
956.00	20.06	149.89	939.36	-120.23	82.59	-2.47	2.84	2.68	2.90
1,050.00	22.58	150.20	1,026.92	-149.84	99.65	-0.34	2.68	2.68	0.33
1,145.00	24.70	151.92	1,113.94	-183.18	118.06	2.73	2.35	2.23	1.81
1,240.00	26.91	152.67	1,199.46	-219.80	137.27	6.93	2.35	2.33	0.79
1,335.00	29.12	153.29	1,283.32	-259.55	157.54	11.98	2.35	2.33	0.65
1,430.00	31.20	152.85	1,365.46	-302.10	179.16	17.45	2.20	2.19	-0.46
1,524.00	32.66	151.48	1,445.24	-346.05	202.38	22.36	1.73	1.55	-1.46
1,618.00	34.03	150.20	1,523.76	-391.17	227.56	26.28	1.64	1.46	-1.36
1,702.00	35.37	151.29	1,592.82	-432.89	250.92	29.84	1.76	1.60	1.30
SURFACE CSG - 1702' MD, 1593' TVD									
1,761.00	36.32	152.01	1,640.64	-463.29	267.33	32.95	1.76	1.61	1.22
1,856.00	40.79	152.32	1,714.92	-515.64	294.96	38.82	4.71	4.71	0.33
1,951.00	42.51	153.42	1,785.90	-571.83	323.74	45.86	1.97	1.81	1.16
2,045.00	43.75	154.48	1,854.50	-629.57	351.95	54.22	1.53	1.32	1.13
2,140.00	46.80	155.40	1,921.35	-690.71	380.53	64.16	3.28	3.21	0.97
2,234.00	49.09	152.76	1,984.31	-753.46	411.05	73.35	3.21	2.44	-2.81
2,329.00	48.61	152.93	2,046.83	-817.10	443.70	81.28	0.52	-0.51	0.18
2,423.00	50.77	149.45	2,107.64	-879.87	478.26	87.13	3.64	2.30	-3.70
2,518.00	50.69	149.50	2,167.78	-943.23	515.62	90.97	0.09	-0.08	0.05
2,612.00	50.16	148.97	2,227.66	-1,005.49	552.68	94.45	0.71	-0.56	-0.56
2,706.00	49.49	149.19	2,288.30	-1,067.10	589.59	97.70	0.73	-0.71	0.23
2,826.00	51.44	149.23	2,364.69	-1,146.60	636.96	102.11	1.63	1.62	0.03
2,921.00	50.64	149.19	2,424.42	-1,210.06	674.77	105.62	0.84	-0.84	-0.04
3,015.00	50.02	149.06	2,484.43	-1,272.16	711.90	108.96	0.67	-0.66	-0.14
3,110.00	49.54	149.10	2,545.77	-1,334.39	749.18	112.25	0.51	-0.51	0.04
3,205.00	52.23	150.55	2,605.70	-1,398.11	786.20	116.56	3.07	2.83	1.53
3,395.00	51.39	150.47	2,723.17	-1,528.10	859.71	127.05	0.44	-0.44	-0.04
3,489.00	50.51	150.42	2,782.39	-1,591.60	895.72	132.10	0.94	-0.94	-0.05
3,584.00	49.71	150.38	2,843.31	-1,654.98	931.73	137.08	0.84	-0.84	-0.04
3,678.00	48.52	150.07	2,904.84	-1,716.66	967.02	141.72	1.29	-1.27	-0.33
3,773.00	50.07	148.35	2,966.80	-1,778.51	1,003.89	145.13	2.13	1.63	-1.81
3,868.00	49.40	147.87	3,028.20	-1,840.06	1,042.18	147.19	0.80	-0.71	-0.51
3,962.00	49.85	147.56	3,089.09	-1,900.60	1,080.43	148.73	0.54	0.48	-0.33
4,057.00	51.75	149.14	3,149.13	-1,963.27	1,119.05	151.14	2.38	2.00	1.66
4,152.00	50.55	149.50	3,208.72	-2,026.90	1,156.80	154.80	1.30	-1.26	0.38
4,246.00	52.54	149.06	3,267.18	-2,090.18	1,194.40	158.39	2.15	2.12	-0.47
4,339.00	52.54	149.01	3,323.74	-2,153.48	1,232.39	161.68	0.04	0.00	-0.05
4,434.00	52.72	149.32	3,381.40	-2,218.30	1,271.08	165.22	0.32	0.19	0.33
4,529.00	53.69	149.32	3,438.30	-2,283.73	1,309.90	168.98	1.02	1.02	0.00
4,623.00	53.96	149.41	3,493.79	-2,349.02	1,348.56	172.80	0.30	0.29	0.10
4,717.00	54.57	149.06	3,548.69	-2,414.58	1,387.60	176.46	0.72	0.65	-0.37
4,812.00	55.15	148.88	3,603.37	-2,481.15	1,427.64	179.83	0.63	0.61	-0.19
4,906.00	53.43	148.17	3,658.23	-2,546.25	1,467.49	182.56	1.93	-1.83	-0.76

Civitas Resources

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Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Well:	STATE SEVENTY HOLES Y-E-10HNXRL	North Reference:	True
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	FINAL SURVEY	Database:	EDM

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
5,000.00	53.12	147.82	3,714.44	-2,610.14	1,507.42	184.55	0.44	-0.33	-0.37	
5,094.00	50.99	147.12	3,772.24	-2,672.63	1,547.27	185.83	2.34	-2.27	-0.74	
5,188.00	49.98	147.16	3,832.05	-2,733.55	1,586.62	186.66	1.07	-1.07	0.04	
5,281.00	47.28	150.20	3,893.52	-2,793.13	1,622.92	189.30	3.80	-2.90	3.27	
5,376.00	50.07	150.95	3,956.24	-2,855.27	1,657.96	194.40	3.00	2.94	0.79	
5,470.00	49.76	150.95	4,016.77	-2,918.14	1,692.88	200.01	0.33	-0.33	0.00	
5,565.00	49.49	150.73	4,078.31	-2,981.34	1,728.14	205.51	0.33	-0.28	-0.23	
5,661.00	48.34	150.47	4,141.40	-3,044.38	1,763.66	210.70	1.22	-1.20	-0.27	
5,755.00	49.49	150.47	4,203.17	-3,106.03	1,798.58	215.63	1.22	1.22	0.00	
5,850.00	48.12	149.72	4,265.74	-3,167.99	1,834.21	220.14	1.56	-1.44	-0.79	
5,944.00	51.35	147.95	4,326.49	-3,229.34	1,871.35	223.06	3.72	3.44	-1.88	
6,039.00	50.11	147.25	4,386.62	-3,291.44	1,910.75	224.49	1.42	-1.31	-0.74	
6,134.00	48.74	147.60	4,448.41	-3,352.24	1,949.60	225.68	1.47	-1.44	0.37	
6,229.00	50.95	146.15	4,509.67	-3,413.04	1,989.29	226.16	2.60	2.33	-1.53	
6,323.00	49.45	145.57	4,569.84	-3,472.81	2,029.82	225.38	1.66	-1.60	-0.62	
6,418.00	50.51	148.00	4,630.93	-3,533.67	2,069.65	225.78	2.25	1.12	2.56	
6,512.00	48.87	147.51	4,691.74	-3,594.30	2,107.89	227.37	1.79	-1.74	-0.52	
6,606.00	49.76	147.47	4,753.02	-3,654.41	2,146.20	228.63	0.95	0.95	-0.04	
6,701.00	51.08	146.19	4,813.55	-3,715.69	2,186.27	229.06	1.73	1.39	-1.35	
6,796.00	52.76	147.38	4,872.14	-3,778.25	2,227.22	229.47	2.02	1.77	1.25	
6,890.00	51.26	146.76	4,930.00	-3,840.43	2,267.49	230.23	1.68	-1.60	-0.66	
6,984.00	52.36	148.62	4,988.12	-3,902.87	2,306.96	231.80	1.95	1.17	1.98	
7,079.00	50.51	147.73	5,047.34	-3,965.99	2,346.13	234.00	2.08	-1.95	-0.94	
7,174.00	52.94	147.47	5,106.18	-4,028.95	2,386.09	235.45	2.57	2.56	-0.27	
7,268.00	50.91	147.07	5,164.15	-4,091.20	2,426.09	236.47	2.19	-2.16	-0.43	
7,362.00	52.72	148.26	5,222.26	-4,153.63	2,465.60	238.01	2.17	1.93	1.27	
7,457.00	50.73	147.95	5,281.10	-4,216.94	2,505.00	240.12	2.11	-2.09	-0.33	
7,551.00	51.57	148.00	5,340.07	-4,279.01	2,543.82	242.03	0.89	0.89	0.05	
7,646.00	49.49	147.07	5,400.45	-4,340.88	2,583.17	243.39	2.32	-2.19	-0.98	
7,740.00	49.80	147.65	5,461.32	-4,401.20	2,621.81	244.48	0.57	0.33	0.62	
7,750.00	49.40	150.14	5,467.80	-4,407.72	2,625.74	244.80	19.37	-3.96	24.89	
KOP - 7750' MD, 5468' TVD										
7,834.00	48.30	171.75	5,523.45	-4,466.81	2,646.26	260.33	19.37	-1.31	25.73	
7,928.00	46.71	190.39	5,587.25	-4,535.52	2,645.12	299.22	14.69	-1.69	19.83	
8,022.00	48.96	204.32	5,650.52	-4,601.67	2,624.29	353.11	11.23	2.39	14.82	
8,117.00	46.80	203.92	5,714.23	-4,665.97	2,595.49	412.63	2.30	-2.27	-0.42	
8,211.00	50.91	202.86	5,776.06	-4,730.94	2,567.42	471.91	4.45	4.37	-1.13	
8,305.00	56.03	213.35	5,832.10	-4,797.27	2,531.73	538.29	10.48	5.45	11.16	
8,400.00	57.62	227.23	5,884.26	-4,857.63	2,480.45	614.37	12.33	1.67	14.61	
8,495.00	58.73	237.32	5,934.45	-4,906.88	2,416.71	694.71	9.10	1.17	10.62	
8,589.00	62.97	247.86	5,980.32	-4,944.45	2,343.92	776.14	10.77	4.51	11.21	
8,684.00	66.77	255.92	6,020.72	-4,971.06	2,262.25	858.92	8.66	4.00	8.48	
8,779.00	71.94	260.81	6,054.22	-4,988.91	2,175.23	941.33	7.27	5.44	5.15	
8,809.19	74.01	261.76	6,063.06	-4,993.29	2,146.70	967.53	7.49	6.85	3.16	

Civitas Resources

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Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
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Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	FINAL SURVEY	Database:	EDM

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~330' X-OVER PNT - 8809.19' MD, 6063' TVD, 99' FSL, 330' FEL SEC 3									
8,873.00	78.39	263.72	6,078.28	-5,001.10	2,085.24	1,023.09	7.49	6.87	3.07
8,968.00	84.62	268.70	6,092.31	-5,007.27	1,991.57	1,104.59	8.36	6.56	5.24
9,029.00	87.15	268.64	6,096.69	-5,008.69	1,930.75	1,156.08	4.15	4.15	-0.09
HZ LANDING PNT - 9029' MD, 6097' TVD									
9,063.00	88.56	268.61	6,097.96	-5,009.50	1,896.78	1,184.85	4.15	4.15	-0.09
9,158.00	88.69	268.04	6,100.24	-5,012.28	1,801.85	1,265.53	0.62	0.14	-0.60
9,253.00	89.17	266.67	6,102.01	-5,016.66	1,706.97	1,347.05	1.53	0.51	-1.44
9,348.00	87.50	268.48	6,104.78	-5,020.68	1,612.10	1,428.36	2.59	-1.76	1.91
9,441.00	88.86	268.17	6,107.73	-5,023.40	1,519.19	1,507.32	1.50	1.46	-0.33
9,536.00	89.66	270.81	6,108.96	-5,024.24	1,424.21	1,586.98	2.90	0.84	2.78
9,630.00	89.22	269.05	6,109.87	-5,024.36	1,330.22	1,665.40	1.93	-0.47	-1.87
9,724.00	89.09	268.52	6,111.26	-5,026.35	1,236.25	1,744.84	0.58	-0.14	-0.56
9,819.00	90.10	268.30	6,111.93	-5,028.98	1,141.29	1,825.47	1.09	1.06	-0.23
9,913.00	89.17	270.51	6,112.53	-5,029.96	1,047.31	1,904.37	2.55	-0.99	2.35
10,007.00	89.04	269.01	6,114.00	-5,030.35	953.32	1,982.94	1.60	-0.14	-1.60
10,102.00	89.44	269.62	6,115.26	-5,031.49	858.34	2,062.76	0.77	0.42	0.64
10,196.00	88.73	267.51	6,116.76	-5,033.84	764.38	2,142.39	2.37	-0.76	-2.24
10,290.00	88.95	269.40	6,118.66	-5,036.38	670.44	2,222.11	2.02	0.23	2.01
10,385.00	88.73	269.23	6,120.59	-5,037.51	575.47	2,301.91	0.29	-0.23	-0.18
10,480.00	89.22	269.71	6,122.29	-5,038.39	480.49	2,381.59	0.72	0.52	0.51
10,574.00	89.57	269.45	6,123.28	-5,039.08	386.50	2,460.33	0.46	0.37	-0.28
10,668.00	90.28	268.92	6,123.40	-5,040.42	292.51	2,539.43	0.94	0.76	-0.56
10,762.00	89.17	269.58	6,123.85	-5,041.65	198.52	2,618.47	1.37	-1.18	0.70
10,856.00	88.86	268.57	6,125.47	-5,043.16	104.54	2,697.65	1.12	-0.33	-1.07
10,951.00	88.47	268.70	6,127.68	-5,045.43	9.60	2,778.06	0.43	-0.41	0.14
11,075.00	89.53	268.70	6,129.85	-5,048.24	-114.35	2,882.95	0.85	0.85	0.00
11,170.00	89.62	267.99	6,130.55	-5,050.98	-209.31	2,963.63	0.75	0.09	-0.75
11,264.00	89.84	270.20	6,130.99	-5,052.47	-303.29	3,042.80	2.36	0.23	2.35
11,359.00	88.56	272.00	6,132.32	-5,050.64	-398.26	3,120.97	2.32	-1.35	1.89
11,453.00	88.95	272.14	6,134.36	-5,047.25	-492.17	3,197.40	0.44	0.41	0.15
11,548.00	89.04	272.89	6,136.03	-5,043.08	-587.07	3,274.21	0.80	0.09	0.79
11,643.00	86.88	270.02	6,139.41	-5,040.67	-681.96	3,351.99	3.78	-2.27	-3.02
11,738.00	86.61	269.49	6,144.81	-5,041.08	-776.80	3,431.29	0.63	-0.28	-0.56
11,832.00	88.07	269.45	6,149.17	-5,041.94	-870.70	3,510.05	1.55	1.55	-0.04
11,927.00	88.29	269.14	6,152.19	-5,043.11	-965.64	3,589.85	0.40	0.23	-0.33
12,021.00	88.64	270.33	6,154.70	-5,043.55	-1,059.60	3,668.43	1.32	0.37	1.27
12,116.00	88.11	268.79	6,157.40	-5,044.28	-1,154.56	3,748.00	1.71	-0.56	-1.62
12,210.00	89.93	269.85	6,159.01	-5,045.39	-1,248.53	3,826.96	2.24	1.94	1.13
12,304.00	89.31	269.18	6,159.63	-5,046.19	-1,342.53	3,905.77	0.97	-0.66	-0.71
12,399.00	89.13	269.18	6,160.92	-5,047.55	-1,437.51	3,985.70	0.19	-0.19	0.00
12,494.00	89.40	268.83	6,162.14	-5,049.20	-1,532.49	4,065.80	0.47	0.28	-0.37
12,589.00	89.70	268.30	6,162.89	-5,051.57	-1,627.45	4,146.29	0.64	0.32	-0.56

Civitas Resources

Survey Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Well:	STATE SEVENTY HOLES Y-E-10HNXRL	North Reference:	True
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	FINAL SURVEY	Database:	EDM

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
12,683.00	90.01	268.83	6,163.12	-5,053.93	-1,721.42	4,225.93	0.65	0.33	0.56	
12,779.00	89.79	268.30	6,163.29	-5,056.33	-1,817.39	4,307.27	0.60	-0.23	-0.55	
12,874.00	90.37	268.92	6,163.16	-5,058.64	-1,912.36	4,387.72	0.89	0.61	0.65	
12,968.00	90.50	267.73	6,162.45	-5,061.38	-2,006.32	4,467.57	1.27	0.14	-1.27	
13,063.00	90.19	269.23	6,161.87	-5,063.90	-2,101.28	4,548.13	1.61	-0.33	1.58	
13,158.00	90.10	271.21	6,161.63	-5,063.54	-2,196.28	4,627.13	2.09	-0.09	2.08	
13,252.00	89.26	271.34	6,162.16	-5,061.45	-2,290.25	4,704.32	0.90	-0.89	0.14	
13,344.00	89.35	270.33	6,163.27	-5,060.11	-2,382.23	4,780.27	1.10	0.10	-1.10	
13,438.00	89.44	268.13	6,164.27	-5,061.37	-2,476.21	4,859.32	2.34	0.10	-2.34	
13,532.00	89.53	269.40	6,165.11	-5,063.40	-2,570.19	4,938.79	1.35	0.10	1.35	
13,627.00	89.13	270.99	6,166.22	-5,063.07	-2,665.18	5,017.80	1.73	-0.42	1.67	
13,721.00	87.19	270.24	6,169.24	-5,062.06	-2,759.12	5,095.56	2.21	-2.06	-0.80	
13,817.00	87.36	270.42	6,173.81	-5,061.51	-2,855.01	5,175.20	0.26	0.18	0.19	
13,911.00	87.85	269.14	6,177.73	-5,061.87	-2,948.92	5,253.70	1.46	0.52	-1.36	
14,006.00	88.51	267.69	6,180.75	-5,064.50	-3,043.83	5,334.28	1.68	0.69	-1.53	
14,101.00	88.38	269.54	6,183.33	-5,066.80	-3,138.77	5,414.70	1.95	-0.14	1.95	
14,196.00	89.70	268.61	6,184.92	-5,068.33	-3,233.74	5,494.72	1.70	1.39	-0.98	
14,290.00	89.17	269.80	6,185.85	-5,069.63	-3,327.72	5,573.80	1.39	-0.56	1.27	
14,385.00	90.59	269.32	6,186.05	-5,070.36	-3,422.72	5,653.40	1.58	1.49	-0.51	
14,479.00	89.17	271.17	6,186.24	-5,069.96	-3,516.71	5,731.54	2.48	-1.51	1.97	
14,574.00	90.50	269.36	6,186.52	-5,069.52	-3,611.70	5,810.49	2.36	1.40	-1.91	
14,668.00	90.01	270.55	6,186.10	-5,069.60	-3,705.70	5,888.90	1.37	-0.52	1.27	
14,762.00	91.43	269.98	6,184.92	-5,069.16	-3,799.69	5,967.02	1.63	1.51	-0.61	
14,858.00	89.79	269.18	6,183.90	-5,069.86	-3,895.68	6,047.44	1.90	-1.71	-0.83	
14,952.00	89.31	270.02	6,184.63	-5,070.52	-3,989.67	6,126.16	1.03	-0.51	0.89	
15,047.00	91.47	269.23	6,183.99	-5,071.14	-4,084.66	6,205.70	2.42	2.27	-0.83	
15,142.00	90.46	269.05	6,182.39	-5,072.57	-4,179.63	6,285.67	1.08	-1.06	-0.19	
15,237.00	88.38	269.45	6,183.35	-5,073.81	-4,274.61	6,365.54	2.23	-2.19	0.42	
15,333.00	88.03	269.14	6,186.36	-5,074.99	-4,370.56	6,446.19	0.49	-0.36	-0.32	
15,428.00	90.15	270.37	6,187.86	-5,075.40	-4,465.54	6,525.60	2.58	2.23	1.29	
15,522.00	88.16	269.27	6,189.25	-5,075.69	-4,559.52	6,604.12	2.42	-2.12	-1.17	
15,618.00	88.07	268.88	6,192.41	-5,077.24	-4,655.46	6,684.95	0.42	-0.09	-0.41	
15,713.00	89.62	270.11	6,194.32	-5,078.08	-4,750.43	6,764.60	2.08	1.63	1.29	
15,808.00	87.67	269.45	6,196.57	-5,078.44	-4,845.40	6,843.97	2.17	-2.05	-0.69	
15,902.00	87.45	268.13	6,200.57	-5,080.43	-4,939.29	6,923.35	1.42	-0.23	-1.40	
15,998.00	87.41	267.16	6,204.88	-5,084.37	-5,035.11	7,005.41	1.01	-0.04	-1.01	
16,092.00	88.73	269.27	6,208.04	-5,087.29	-5,129.01	7,085.31	2.65	1.40	2.24	
16,187.00	88.42	269.71	6,210.41	-5,088.14	-5,223.97	7,164.95	0.57	-0.33	0.46	
16,282.00	89.09	268.61	6,212.47	-5,089.53	-5,318.94	7,244.89	1.36	0.71	-1.16	
16,377.00	90.54	268.39	6,212.78	-5,092.02	-5,413.90	7,325.44	1.54	1.53	-0.23	
16,472.00	89.57	268.70	6,212.69	-5,094.43	-5,508.87	7,405.95	1.07	-1.02	0.33	
16,567.00	90.32	268.88	6,212.78	-5,096.43	-5,603.85	7,486.24	0.81	0.79	0.19	
16,662.00	89.26	270.77	6,213.12	-5,096.72	-5,698.84	7,565.60	2.28	-1.12	1.99	
16,757.00	90.50	270.73	6,213.32	-5,095.48	-5,793.83	7,644.10	1.31	1.31	-0.04	

Civitas Resources

Survey Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Well:	STATE SEVENTY HOLES Y-E-10HNXRL	North Reference:	True
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	FINAL SURVEY	Database:	EDM

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
16,852.00	88.56	269.93	6,214.10	-5,094.93	-5,888.82	7,723.00	2.21	-2.04	-0.84
16,947.00	89.26	269.45	6,215.91	-5,095.45	-5,983.80	7,802.47	0.89	0.74	-0.51
17,042.00	90.90	270.37	6,215.78	-5,095.60	-6,078.80	7,881.75	1.98	1.73	0.97
17,137.00	89.84	270.07	6,215.16	-5,095.23	-6,173.79	7,960.75	1.16	-1.12	-0.32
17,232.00	87.63	269.58	6,217.26	-5,095.52	-6,268.76	8,040.08	2.38	-2.33	-0.52
17,328.00	87.85	269.71	6,221.05	-5,096.12	-6,364.69	8,120.38	0.27	0.23	0.14
17,422.00	88.60	269.36	6,223.96	-5,096.88	-6,458.64	8,199.13	0.88	0.80	-0.37
17,517.00	89.22	268.66	6,225.77	-5,098.52	-6,553.60	8,279.22	0.98	0.65	-0.74
17,613.00	90.54	268.66	6,225.97	-5,100.77	-6,649.58	8,360.47	1.37	1.37	0.00
17,708.00	88.38	267.42	6,226.86	-5,104.01	-6,744.51	8,441.41	2.62	-2.27	-1.31
17,802.00	89.31	268.43	6,228.76	-5,107.42	-6,838.43	8,521.59	1.46	0.99	1.07
17,897.00	90.94	267.42	6,228.55	-5,110.86	-6,933.36	8,602.63	2.02	1.72	-1.06
17,992.00	89.75	269.85	6,227.98	-5,113.12	-7,028.32	8,683.06	2.85	-1.25	2.56
18,088.00	88.60	269.93	6,229.36	-5,113.30	-7,124.31	8,763.18	1.20	-1.20	0.08
18,183.00	89.66	269.01	6,230.80	-5,114.18	-7,219.29	8,842.86	1.48	1.12	-0.97
18,278.00	87.94	268.61	6,232.79	-5,116.15	-7,314.25	8,923.11	1.86	-1.81	-0.42
18,373.00	87.80	269.27	6,236.32	-5,117.91	-7,409.16	9,003.22	0.71	-0.15	0.69
18,467.00	88.25	267.42	6,239.56	-5,120.62	-7,503.07	9,083.00	2.02	0.48	-1.97
18,562.00	89.75	267.55	6,241.22	-5,124.79	-7,597.96	9,164.41	1.58	1.58	0.14
18,645.00	90.68	266.72	6,240.91	-5,128.94	-7,680.85	9,235.82	1.50	1.12	-1.00
LAST SURVEY - 18645' MD, 6241' TVD									
18,714.00	90.68	266.72	6,240.09	-5,132.89	-7,749.73	9,295.42	0.00	0.00	0.00
PTB - 18714' MD, 6240' TVD, 56' FSL, 339' FWL SEC 4									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
LP-SSH Y-E-10HNXRL I - hit/miss target - Shape - Point	0.00	0.00	6,095.00	-5,081.99	2,146.70	1,366,859.37	3,333,623.19	40.334250°N	104.303240°W
- actual wellpath misses target center by 92.09usft at 8827.69usft MD (6067.95 TVD, -4995.75 N, 2129.04 E)									
PBHL-SSH Y-E-10HNXF - hit/miss target - Shape - Point	0.00	0.00	6,220.00	-5,179.23	-7,758.82	1,366,629.33	3,323,720.29	40.333980°N	104.338770°W
- actual wellpath misses target center by 51.32usft at 18714.00usft MD (6240.09 TVD, -5132.89 N, -7749.73 E)									

Civitas Resources

Survey Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNLRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Well:	STATE SEVENTY HOLES Y-E-10HNLRL	North Reference:	True
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	FINAL SURVEY	Database:	EDM

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
1,702.00	1,592.82	-432.89	250.92	SURFACE CSG - 1702' MD, 1593' TVD
7,750.00	5,467.80	-4,407.72	2,625.74	KOP - 7750' MD, 5468' TVD
8,809.19	6,063.06	-4,993.29	2,146.70	~330' X-OVER PNT - 8809.19' MD, 6063' TVD, 99' FSL, 330' FEL SEC 3
9,029.00	6,096.69	-5,008.69	1,930.75	HZ LANDING PNT - 9029' MD, 6097' TVD
18,645.00	6,240.91	-5,128.94	-7,680.85	LAST SURVEY - 18645' MD, 6241' TVD
18,714.00	6,240.09	-5,132.89	-7,749.73	PTB - 18714' MD, 6240' TVD, 56' FSL, 339' FWL SEC 4

Checked By: _____ Approved By: _____ Date: _____