

County Line 0508-15H R2 mdv 01Mar24 Proposal Geodetic Report

Def Plan

Report Date: March 01, 2024 - 08:57 PM (UTC 0)
Client: Verdad Resources
Field: CO, Weld County (NAD 83 NZ) - 2019
Structure / Slot: Verdad Resources 31-01N-65W (County Line 0508-3229 Pad) / County
Well: County Line 0508-15H
Borehole: County Line 0508-15H
UBHI / API#: Unknown / Unknown
Survey Name: County Line 0508-15H R2 mdv 01Mar24
Survey Date: March 01, 2024
Tort / AHD / DOI / ERD Ratio: 142.190 ° / 13132.210 ft / 6.651 / 1.749
Coordinate Reference System: NAD83 Colorado State Plane, Northern Zone, US Feet
Location Lat / Long: 40°05.24356'N, 104°42'14.35028'W
Location Grid N/E Y/X: N 1244378.320 RUS, E 3222998.370 RUS
CRS Grid Convergence Angle: 0.514°
Grid Scale Factor: 0.99996626
Version / Patch: 2023.1.0.1

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 180.040 (TRUE North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: RKB
TVD Reference Elevation: 5058.000 ft above MSL
Seabed / Ground Elevation: 5037.000 ft above MSL
Magnetic Declination: 7.708°
Total Gravity Field Strength: 998.9825mgn (9.80665 Based)
Gravity Model: GARM
Total Magnetic Field Strength: 51393.148 nT
Magnetic Dip Angle: 55.774°
Declination Date: March 01, 2024
Magnetic Declination Model: HDGM 2023
North Reference: True North
Grid Convergence Used: 0°
Total Corr Mag North→True North: 7.708°
Local Coord Referenced To: Well Head

Comments	MD (ft)	Incl (°)	Azim (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (RUS)	Easting (RUS)	Latitude (°)	Longitude (°)
Surface	0.00	0.00	0.00	0.00	-5,058.00	0.00	0.00	0.00		1,244,378.32	3,222,998.37	40.00145654	-104.70398619
KB Adjusted	6.00		0.00	6.00	-5,052.00	0.00	0.00	0.00	0.00	1,244,378.32	3,222,998.37	40.00145654	-104.70398619
First Surface Survey	86.00	0.31	6.43	86.00	-4,972.00	-0.22	0.22	0.02	0.39	1,244,378.54	3,222,998.39	40.00145713	-104.70398610
	176.00	0.57	176.00	176.00	-4,882.00	-0.86	0.86	-0.04	0.33	1,244,379.21	3,222,998.32	40.00145902	-104.70398634
	269.00	0.88	44.75	268.99	-4,789.01	-1.86	1.85	0.36	0.80	1,244,380.18	3,222,998.72	40.00146163	-104.70398489
	360.00	1.49	82.02	359.97	-4,698.03	-2.53	2.52	2.03	1.05	1,244,380.85	3,223,000.38	40.00146345	-104.70397895
	450.00	3.30	87.03	449.89	-4,608.11	-2.86	2.81	5.77	2.02	1,244,381.18	3,223,004.12	40.00146426	-104.70396558
	539.00	5.98	87.12	538.59	-4,519.41	-3.28	3.18	12.96	3.01	1,244,381.61	3,223,011.30	40.00146527	-104.70393991
	629.00	8.39	100.21	627.88	-4,430.12	-2.43	2.25	24.11	3.22	1,244,380.79	3,223,022.46	40.00146672	-104.70390013
	718.00	10.81	95.20	715.63	-4,342.37	-0.64	0.34	38.82	2.87	1,244,379.01	3,223,037.18	40.00145748	-104.70384764
	808.00	10.94	94.15	804.01	-4,253.99	0.51	-1.04	55.74	0.26	1,244,377.78	3,223,054.11	40.00145368	-104.70378724
	897.00	13.01	91.60	891.07	-4,166.93	1.36	-1.93	74.18	2.40	1,244,377.08	3,223,072.56	40.00145124	-104.70371242
	986.00	15.42	89.58	977.34	-4,080.66	1.39	-2.13	96.03	2.76	1,244,377.06	3,223,094.41	40.00145071	-104.70364343
	1,075.00	18.81	90.81	1,062.39	-3,995.61	1.30	-2.24	122.21	3.83	1,244,377.18	3,223,120.59	40.00145039	-104.70354996
	1,165.00	18.81	93.00	1,147.58	-3,910.42	2.04	-3.21	151.21	0.78	1,244,376.47	3,223,149.60	40.00144774	-104.70344645
	1,255.00	19.86	94.06	1,232.51	-3,825.49	3.66	-5.05	180.95	1.23	1,244,374.90	3,223,179.35	40.00144268	-104.70334030
	1,344.00	20.39	89.40	1,316.08	-3,741.92	4.33	-5.96	211.54	1.90	1,244,374.26	3,223,209.94	40.00144019	-104.70323113
	1,434.00	22.28	88.70	1,399.91	-3,658.09	5.53	-5.40	244.27	2.12	1,244,375.11	3,223,242.67	40.00144081	-104.70311082
	1,523.00	24.79	89.75	1,481.50	-3,576.50	2.79	-4.94	279.80	2.86	1,244,375.89	3,223,278.20	40.00144298	-104.70298745
	1,612.00	26.28	89.93	1,561.80	-3,496.20	2.39	-4.84	318.17	1.68	1,244,376.34	3,223,316.56	40.00144327	-104.70285052
	1,702.00	28.17	91.07	1,641.83	-3,416.17	2.45	-5.21	359.34	2.18	1,244,376.34	3,223,357.73	40.00144224	-104.70270357
	1,791.00	26.50	90.98	1,720.89	-3,337.11	2.87	-5.94	400.20	1.88	1,244,375.97	3,223,398.59	40.00144023	-104.70255772
	1,881.00	27.82	90.72	1,800.96	-3,257.04	3.16	-6.55	441.27	1.47	1,244,375.73	3,223,439.67	40.00143856	-104.70241110
	1,970.00	30.15	90.81	1,878.81	-3,179.19	3.40	-7.12	484.39	2.62	1,244,375.54	3,223,482.79	40.00143698	-104.70225718
	2,059.00	29.93	93.97	1,955.86	-3,102.14	4.91	-8.98	528.90	1.79	1,244,374.09	3,223,527.31	40.00143189	-104.70209634
	2,148.00	27.47	93.62	2,033.92	-3,024.08	7.42	-11.81	571.54	2.77	1,244,371.64	3,223,569.97	40.00142410	-104.70194913
	2,238.00	26.28	92.13	2,114.20	-2,943.80	9.16	-13.86	612.17	1.52	1,244,369.95	3,223,610.61	40.00141847	-104.70180111
	2,327.00	28.74	91.42	2,193.13	-2,864.87	10.11	-15.12	653.25	2.79	1,244,369.06	3,223,651.71	40.00141500	-104.70165446
Tie In	2,417.00	26.10	92.74	2,273.01	-2,784.99	11.27	-16.61	694.67	3.01	1,244,367.95	3,223,693.13	40.00141093	-104.70150664
	2,475.00	25.84	91.60	2,325.16	-2,732.84	12.04	-17.57	720.04	0.97	1,244,367.21	3,223,718.52	40.00140828	-104.70141605
	2,500.00	25.84	91.60	2,347.66	-2,710.34	12.26	-17.87	730.94	0.00	1,244,367.01	3,223,729.41	40.00140745	-104.70137717
Build 2 DLS	2,520.00	25.84	91.60	2,365.66	-2,692.34	12.44	-18.12	739.65	0.00	1,244,366.84	3,223,738.13	40.00140678	-104.70134607
Hold	2,542.57	26.08	92.48	2,385.95	-2,672.02	13.61	-19.56	749.52	0.00	1,244,366.58	3,223,748.00	40.00140581	-104.70131082
	2,600.00	26.08	92.48	2,437.53	-2,620.47	13.61	-19.56	774.75	0.00	1,244,365.72	3,223,773.23	40.00140282	-104.70122079
	2,700.00	26.08	92.48	2,527.35	-2,530.65	15.17	-21.46	818.67	0.00	1,244,364.21	3,223,817.17	40.00139760	-104.70106403
	2,800.00	26.08	92.48	2,617.17	-2,440.83	16.73	-23.36	862.59	0.00	1,244,362.71	3,223,861.10	40.00139238	-104.70090726
	2,900.00	26.08	92.48	2,706.99	-2,351.01	18.29	-25.26	906.51	0.00	1,244,361.20	3,223,905.03	40.00138717	-104.70075049
	3,000.00	26.08	92.48	2,796.81	-2,261.19	19.85	-27.15	950.42	0.00	1,244,359.70	3,223,948.97	40.00138195	-104.70059373
	3,100.00	26.08	92.48	2,886.63	-2,171.37	21.42	-29.05	994.34	0.00	1,244,358.19	3,223,992.90	40.00137673	-104.70043643
	3,200.00	26.08	92.48	2,976.45	-2,081.55	22.98	-30.95	1,038.26	0.00	1,244,356.69	3,224,036.83	40.00137152	-104.70028199
	3,300.00	26.08	92.48	3,066.27	-1,991.73	24.54	-32.85	1,082.18	0.00	1,244,355.19	3,224,080.77	40.00136630	-104.70012343
	3,400.00	26.08	92.48	3,156.08	-1,901.92	26.10	-34.75	1,126.10	0.00	1,244,353.68	3,224,124.70	40.00136108	-104.69996666
	3,500.00	26.08	92.48	3,245.90	-1,812.10	27.66	-36.65	1,170.02	0.00	1,244,352.18	3,224,168.63	40.00135587	-104.69980990
	3,600.00	26.08	92.48	3,335.72	-1,722.28	29.22	-38.55	1,213.94	0.00	1,244,350.67	3,224,212.57	40.00135065	-104.69965313
	3,700.00	26.08	92.48	3,425.54	-1,632.46	30.78	-40.45	1,257.86	0.00	1,244,349.17	3,224,256.50	40.00134543	-104.69949636
	3,800.00	26.08	92.48	3,515.36	-1,542.64	32.34	-42.34	1,301.78	0.00	1,244,347.66	3,224,300.43	40.00134021	-104.69933906
	3,900.00	26.08	92.48	3,605.18	-1,452.82	33.91	-44.24	1,345.70	0.00	1,244,346.16	3,224,344.36	40.00133499	-104.69918238
	4,000.00	26.08	92.48	3,695.00	-1,363.00	35.47	-46.14	1,389.62	0.00	1,244,344.66	3,224,388.30	40.00132977	-104.69902506
	4,100.00	26.08	92.48	3,784.82	-1,273.18	37.03	-48.04	1,433.54	0.00	1,244,343.15	3,224,432.23	40.00132456	-104.69886890
	4,200.00	26.08	92.48	3,874.64	-1,183.36	38.59	-49.94	1,477.46	0.00	1,244,341.65	3,224,476.16	40.00131934	-104.69871253
	4,300.00	26.08	92.48	3,964.46	-1,093.54	40.15	-51.84	1,521.38	0.00	1,244,340.14	3,224,520.10	40.00131412	-104.69855575
	4,400.00	26.08	92.48	4,054.28	-1,003.72	41.71	-53.74	1,565.30	0.00	1,244,338.64	3,224,564.03	40.00130890	-104.69839900
	4,500.00	26.08	92.48	4,144.10	-913.90	43.27	-55.63	1,609.22	0.00	1,244,337.13	3,224,607.96	40.00130368	-104.69824223
	4,600.00	26.08	92.48	4,233.91	-824.09	44.83	-57.53	1,653.14	0.00	1,244,335.63	3,224,651.90	40.00129846	-104.69808546
	4,700.00	26.08	92.48	4,323.73	-734.27	46.40	-59.43	1,697.06	0.00	1,244,334.14	3,224,695.83	40.00129323	-104.69792870
	4,800.00	26.08	92.48	4,413.55	-644.45	47.96	-61.33	1,740.98	0.00	1,244,332.62	3,224,739.76	40.00128802	-104.69777157
	4,900.00	26.08	92.48	4,503.37	-554.63	49.52	-63.23	1,784.89	0.00	1,244,331.12	3,224,783.70	40.00128280	-104.69761517
	5,000.00	26.08	92.48	4,593.19	-464.81	51.08	-65.13	1,828.81	0.00	1,244,329.61	3,224,827.63	40.00127758	-104.69745840
	5,100.00	26.08	92.48	4,683.01	-374.99	52.64	-67.03	1,872.73	0.00	1,244,328.11	3,224,871.56	40.00127236	-104.69730163
	5,200.00	26.08	92.48	4,772.83	-285.17	54.20	-68.93	1,916.65	0.00	1,244,326.60	3,224,915.50	40.00126713	-104.69714487
	5,300.00	26.08	92.48	4,862.65	-195.35	55.76	-70.82	1,960.57	0.00	1,244,325.10	3,224,959.43	40.00126191	-104.69698807
	5,400.00	26.08	92.48	4,952.47	-105.53	57.33	-72.72	2,004.49	0.00	1,244,323.60	3,225,003.36	40.00125669	-104.69683131
	5,500.00	26.08	92.48	5,042.29	-15.71	58.89	-74.62	2,048.41	0.00	1,244,322.09	3,225,047.30	40.00125147	-104.69667457
	5,600.00	26.08	92.48	5,132.11	74.11	60.45	-76.52	2,092.33	0.00	1,244,320.59	3,225,091.23	40.00124625	-104.696517518

Comments	MD (ft)	Incl (°)	Azim (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (ft/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)
WP1, Build 2 DLS	9,200.00	88.24	180.66	7,488.80	2,430.80	1,385.29	-1,410.25	3,244.95	0.00	1,242,997.30	3,226,255.73	39.99758470	-104.69240427
	9,300.00	88.24	180.66	7,491.87	2,433.87	1,485.24	-1,510.20	3,243.80	0.00	1,242,897.35	3,226,255.48	39.99731034	-104.69240839
	9,400.00	88.24	180.66	7,494.94	2,436.94	1,585.19	-1,610.14	3,242.66	0.00	1,242,797.41	3,226,255.24	39.99703597	-104.69241252
	9,500.00	88.24	180.66	7,498.01	2,440.01	1,685.14	-1,710.09	3,241.52	0.00	1,242,697.46	3,226,254.99	39.99676161	-104.69241665
	9,600.00	88.24	180.66	7,501.08	2,443.08	1,785.10	-1,810.04	3,240.37	0.00	1,242,597.51	3,226,254.74	39.99648725	-104.69242078
	9,700.00	88.24	180.66	7,504.15	2,446.15	1,885.05	-1,909.98	3,239.23	0.00	1,242,497.56	3,226,254.50	39.99621289	-104.69242491
	9,727.68	88.24	180.66	7,505.00	2,447.00	1,912.72	-1,937.95	3,238.89	0.00	1,242,468.89	3,226,254.43	39.99613694	-104.69242605
	9,800.00	89.68	180.52	7,506.31	2,448.31	1,985.02	-2,009.95	3,238.17	2.00	1,242,397.59	3,226,254.34	39.99590347	-104.69242873
	9,845.84	89.59	180.43	7,506.20	2,448.20	2,030.86	-2,055.79	3,237.79	2.00	1,242,351.75	3,226,254.37	39.99581265	-104.69243010
	9,900.00	90.59	180.43	7,505.64	2,447.64	2,085.02	-2,109.94	3,237.39	0.00	1,242,297.60	3,226,254.45	39.99566398	-104.69243158
Hold	10,000.00	90.59	180.43	7,504.60	2,446.60	2,185.01	-2,209.94	3,236.63	0.00	1,242,197.61	3,226,254.59	39.99538949	-104.69243341
	10,100.00	90.59	180.43	7,503.57	2,445.57	2,285.01	-2,309.93	3,235.88	0.00	1,242,097.61	3,226,254.74	39.99511501	-104.69243704
	10,200.00	90.59	180.43	7,502.53	2,444.53	2,385.00	-2,409.92	3,235.13	0.00	1,241,997.62	3,226,254.89	39.99484052	-104.69243977
	10,300.00	90.59	180.43	7,501.50	2,443.50	2,484.99	-2,509.91	3,234.38	0.00	1,241,897.63	3,226,255.03	39.99458604	-104.69244251
	10,400.00	90.59	180.43	7,500.46	2,442.46	2,584.99	-2,609.90	3,233.63	0.00	1,241,797.64	3,226,255.18	39.99428155	-104.69244524
	10,500.00	90.59	180.43	7,499.42	2,441.42	2,684.98	-2,709.89	3,232.87	0.00	1,241,697.65	3,226,255.32	39.99401706	-104.69244797
	10,600.00	90.59	180.43	7,498.39	2,440.39	2,784.98	-2,809.89	3,232.12	0.00	1,241,597.66	3,226,255.47	39.99374258	-104.69245070
	10,700.00	90.59	180.43	7,497.35	2,439.35	2,884.97	-2,909.88	3,231.37	0.00	1,241,497.67	3,226,255.61	39.99346809	-104.69245343
	10,800.00	90.59	180.43	7,496.31	2,438.31	2,984.97	-3,009.87	3,230.62	0.00	1,241,397.68	3,226,255.76	39.99319360	-104.69245616
	10,900.00	90.59	180.43	7,495.28	2,437.28	3,084.96	-3,109.86	3,229.86	0.00	1,241,297.69	3,226,255.90	39.99291912	-104.69245889
WP2, Drop 2 DLS	11,000.00	90.59	180.43	7,494.24	2,436.24	3,184.96	-3,209.85	3,229.11	0.00	1,241,197.70	3,226,256.05	39.99264463	-104.69246162
	11,100.00	90.59	180.43	7,493.21	2,435.21	3,284.95	-3,309.85	3,228.36	0.00	1,241,097.71	3,226,256.19	39.99237014	-104.69246435
	11,200.00	90.59	180.43	7,492.17	2,434.17	3,384.95	-3,409.84	3,227.61	0.00	1,240,997.71	3,226,256.34	39.99209566	-104.69246708
	11,300.00	90.59	180.43	7,491.13	2,433.13	3,484.94	-3,509.83	3,226.86	0.00	1,240,897.72	3,226,256.49	39.99182117	-104.69246981
	11,400.00	90.59	180.43	7,490.10	2,432.10	3,584.94	-3,609.82	3,226.10	0.00	1,240,797.73	3,226,256.63	39.99154669	-104.69247254
	11,500.00	90.59	180.43	7,489.06	2,431.06	3,684.93	-3,709.81	3,225.35	0.00	1,240,697.74	3,226,256.78	39.99127220	-104.69247527
	11,600.00	90.59	180.43	7,488.03	2,430.03	3,784.93	-3,809.80	3,224.60	0.00	1,240,597.75	3,226,256.92	39.99099771	-104.69247801
	11,700.00	90.59	180.43	7,486.99	2,428.99	3,884.92	-3,909.80	3,223.85	0.00	1,240,497.76	3,226,257.07	39.99072323	-104.69248074
	11,800.00	90.59	180.43	7,485.95	2,427.95	3,984.91	-4,009.79	3,223.10	0.00	1,240,397.77	3,226,257.21	39.99044874	-104.69248347
	11,900.00	90.59	180.43	7,484.92	2,426.92	4,084.91	-4,109.78	3,222.34	0.00	1,240,297.78	3,226,257.36	39.99017425	-104.69248620
Hold	12,000.00	90.59	180.43	7,483.88	2,425.88	4,184.90	-4,209.77	3,221.59	0.00	1,240,197.79	3,226,257.50	39.98989977	-104.69248893
	12,100.00	90.59	180.43	7,482.84	2,424.84	4,284.90	-4,309.76	3,220.84	0.00	1,240,097.80	3,226,257.65	39.98962528	-104.69249166
	12,200.00	90.59	180.43	7,481.81	2,423.81	4,384.89	-4,409.76	3,220.09	0.00	1,239,997.80	3,226,257.80	39.98935079	-104.69249439
	12,300.00	90.59	180.43	7,480.77	2,422.77	4,484.89	-4,509.75	3,219.33	0.00	1,239,897.81	3,226,257.94	39.98907631	-104.69249712
	12,400.00	90.59	180.43	7,479.74	2,421.74	4,584.88	-4,609.74	3,218.58	0.00	1,239,797.82	3,226,258.09	39.98880182	-104.69249985
	12,500.00	90.59	180.43	7,478.70	2,420.70	4,684.88	-4,709.73	3,217.83	0.00	1,239,697.83	3,226,258.23	39.98852734	-104.69250258
	12,567.58	90.59	180.43	7,478.00	2,420.00	4,784.87	-4,777.30	3,217.32	0.00	1,239,630.26	3,226,258.37	39.98834184	-104.69250426
	12,597.64	89.99	180.44	7,477.85	2,419.85	4,782.51	-4,807.36	3,217.09	2.00	1,239,600.20	3,226,258.37	39.98825933	-104.69250525
	12,600.00	89.99	180.44	7,477.85	2,419.85	4,784.87	-4,809.72	3,217.08	0.00	1,239,597.84	3,226,258.38	39.98825285	-104.69250530
	12,700.00	89.99	180.44	7,477.86	2,419.86	4,884.87	-4,909.72	3,216.32	0.00	1,239,497.84	3,226,258.51	39.98797834	-104.69250808
WP3, Build 2 DLS	12,800.00	89.99	180.44	7,477.87	2,419.87	4,984.87	-5,009.72	3,215.55	0.00	1,239,397.85	3,226,258.65	39.98770384	-104.69251084
	12,900.00	89.99	180.44	7,477.89	2,419.89	5,084.87	-5,109.71	3,214.79	0.00	1,239,297.85	3,226,258.79	39.98742934	-104.69251360
	13,000.00	89.99	180.44	7,477.90	2,419.90	5,184.87	-5,209.71	3,214.03	0.00	1,239,197.85	3,226,258.92	39.98715484	-104.69251637
	13,100.00	89.99	180.44	7,477.91	2,419.91	5,284.87	-5,309.71	3,213.27	0.00	1,239,097.86	3,226,259.06	39.98688034	-104.69251913
	13,200.00	89.99	180.44	7,477.93	2,419.93	5,384.87	-5,409.71	3,212.51	0.00	1,238,997.86	3,226,259.19	39.98660584	-104.69252189
	13,300.00	89.99	180.44	7,477.94	2,419.94	5,484.87	-5,509.70	3,211.75	0.00	1,238,897.87	3,226,259.33	39.98633134	-104.69252465
	13,400.00	89.99	180.44	7,477.95	2,419.95	5,584.87	-5,609.70	3,210.99	0.00	1,238,797.87	3,226,259.47	39.98605684	-104.69252741
	13,500.00	89.99	180.44	7,477.96	2,419.96	5,684.87	-5,709.70	3,210.23	0.00	1,238,697.87	3,226,259.60	39.98578234	-104.69253018
	13,600.00	89.99	180.44	7,477.98	2,419.98	5,784.87	-5,809.69	3,209.47	0.00	1,238,597.88	3,226,259.74	39.98550784	-104.69253294
	13,700.00	89.99	180.44	7,477.99	2,419.99	5,884.87	-5,909.69	3,208.70	0.00	1,238,497.88	3,226,259.88	39.98523333	-104.69253570
Hold	13,767.56	89.99	180.44	7,478.00	2,420.00	5,984.87	-5,977.25	3,208.19	0.00	1,238,430.32	3,226,259.97	39.98504787	-104.69253757
	13,778.21	90.21	180.44	7,477.98	2,419.98	5,963.09	-5,987.90	3,208.11	2.00	1,238,419.67	3,226,259.98	39.98501864	-104.69253786
	13,800.00	90.21	180.44	7,477.90	2,419.90	5,984.87	-6,009.69	3,207.94	0.00	1,238,397.88	3,226,260.01	39.98495883	-104.69253834
	13,900.00	90.21	180.44	7,477.54	2,419.54	6,084.87	-6,109.69	3,207.18	0.00	1,238,297.89	3,226,260.15	39.98468433	-104.69254122
	14,000.00	90.21	180.44	7,477.19	2,419.19	6,184.87	-6,209.68	3,206.42	0.00	1,238,197.89	3,226,260.29	39.98440983	-104.69254398
	14,100.00	90.21	180.44	7,476.83	2,418.83	6,284.87	-6,309.68	3,205.66	0.00	1,238,097.90	3,226,260.43	39.98413534	-104.69254674
	14,200.00	90.21	180.44	7,476.47	2,418.47	6,384.87	-6,409.67	3,204.90	0.00	1,237,997.90	3,226,260.56	39.98386084	-104.69254950
	14,300.00	90.21	180.44	7,476.11	2,418.11	6,484.87	-6,509.67	3,204.14	0.00	1,237,897.91	3,226,260.70	39.98358634	-104.69255226
	14,400.00	90.21	180.44	7,475.75	2,417.75	6,584.87	-6,609.67	3,203.38	0.00	1,237,797.91	3,226,260.84	39.98331184	-104.69255502
	14,500.00	90.21	180.44	7,475.39	2,417.39	6,684.87	-6,709.66	3,202.62	0.00				

County Line 0508-15H R2 mdv 01Mar24 Proposal Geodetic Report

Report Date:	March 01, 2024 - 08:57 PM (UTC 0)
Client:	Verited Resources
Product:	Co. West County (NAD 83) NAD: 2019
Station:	Verited Resources 31 of 016000 County Line (0508-3220 Pad) / Count
Well:	County Line 0508-194
Rebar(s):	County Line 0508-194
DBE1 / API#:	Unknown / Unknown
Survey Name:	County Line 0508-194 R2 mid 01Mar24
Survey Date:	March 01, 2024
Turn / Angle / DCK / ERD Ratio:	142.59° / 13352.210 R / 6.651 / 1.749
Coordinate Reference System:	NAD83 Colorado State Plane, North American, US Feet
Horizontal / Vertical:	UTM 48T UTM Zone 18N
Grid Line NE TX:	N 144678.700 E 3.922 299.300 NUB
CRS Grid Conversion:	0.014°
Grid Scale Factor:	0.99999626
Version / Patch:	2023.5.0.1

Def Plan	
Survey / DLS Computation:	Minimum Curvature / Lubinski
Vertical Section Azimuth:	180.442 (TRUE North)
Vertical Section Origin:	0.000 ft, 0.000 ft
YTD Reference Datum:	969
YTD Reference Elevation:	958.000 ft above MSL
Sealed / Original Elevation:	957.923 ft above MSL
Magnetic Declination:	7.708°
Total Gravity Field Strength:	968.9923gms (3.80665 Bales)
Gravity Model:	QuSRA
Total Magnetic Field Strength:	51.993148 mT
Magnetic Dip Angle:	66.112°
Declination Date:	March 01, 2024
Magnetic Declination Model:	HOQM 2023
North Reference:	True North
Grid Convergence Used:	0°
Total Cor Mag North-True North:	7.708°

[illegible]

Comments	MD (in)	Incl (°)	Actm (°)	TVD (in)	TVSS (in)	VSEC (in)	AHD (in)	NS (in)	EW (in)	DetlMD (in)	DetlTVD (in)	DLS (ft/mile)	BR (ft/mile)	TR (ft/mile)	GTF (°)	MTF (°)	TF (°)	Northing (m)	Easting (m)	Latitude (°)	Longitude (°)	Latitude (°)	Longitude (°)	Closure (m)	Closure Adj (m)	Directional Index	Torsionity (°)	ESD Ratio	Exclosure Zone Aert	Geocling Tag (in)	Exclosure Zone Aert	Exclosure Zone Tolvrance (in)	Alert Zone Tolvrance (in)	
WP2, DOL 2 Hold	10.700	90.59	180.43	7.497.35	2.430.55	2.884.97	5.881.55	2.301.27	100.00	-1.04	0.00	0.00	0.00	0.00	HS	180.43	HS	1,241.497.67	3,226.255.61	39°59'35.46617"N	104°41'32.82434"E	39.9934969	-104.6924543	4,346.46	132.90	0.97	140.33	0.78			46.848.63	65.72	4,000.00	6,000.00
	10.800	90.59	180.43	7.496.31	2.438.31	2.893.97	5.933.54	2.303.62	100.00	-1.04	0.00	0.00	0.00	0.00	HS	180.43	HS	1,241.397.68	3,226.255.76	39°59'35.46674"N	104°41'32.84217"E	39.9931960	-104.6924616	4,415.45	132.97	0.08	140.33	0.79			46.848.63	65.72	4,000.00	6,000.00
	10.900	90.59	180.43	7.495.28	2.437.28	3.084.96	6.023.14	2.310.85	3,229.86	100.00	-1.04	0.00	0.00	0.00	HS	180.43	HS	1,241.297.69	3,226.255.90	39°59'34.50857"N	104°41'32.85200"E	39.9929112	-104.6924689	4,483.67	133.92	0.09	140.33	0.81			46.848.63	65.72	4,000.00	6,000.00
	11.000	90.59	180.43	7.494.24	2.436.24	3.184.96	6.153.33	2,320.85	3,229.11	100.00	-1.04	0.00	0.00	0.00	HS	180.43	HS	1,241.197.70	3,226.256.05	39°59'33.52677"N	104°41'32.86187"E	39.9924463	-104.6924762	4,553.96	134.83	0.10	140.33	0.82			46.848.63	65.72	4,000.00	6,000.00
	11.100	90.59	180.43	7.493.21	2.435.21	3.284.95	6.283.52	2,330.85	3,229.36	100.00	-1.04	0.00	0.00	0.00	HS	180.43	HS	1,241.097.71	3,226.256.19	39°59'32.53251"N	104°41'32.87167"E	39.9920714	-104.6924835	4,623.67	135.71	0.11	140.33	0.83			46.848.63	65.72	4,000.00	6,000.00
	11.200	90.59	180.43	7.492.17	2.434.17	3.384.95	6.393.52	2,340.84	3,227.61	100.00	-1.04	0.00	0.00	0.00	HS	180.43	HS	1,240.997.71	3,226.256.34	39°59'31.54437"N	104°41'32.88148"E	39.9916666	-104.6924908	4,695.15	136.67	0.12	140.33	0.84			46.848.63	65.72	4,000.00	6,000.00
	11.300	90.59	180.43	7.491.13	2.433.13	3.484.94	6.493.51	2,350.83	3,226.86	100.00	-1.04	0.00	0.00	0.00	HS	180.43	HS	1,240.897.72	3,226.256.49	39°59'30.55620"N	104°41'32.89132"E	39.9912817	-104.6924981	4,767.76	137.41	0.13	140.33	0.86			46.848.63	65.72	4,000.00	6,000.00
	11.400	90.59	180.43	7.490.10	2.432.10	3.584.93	6.593.50	2,360.82	3,227.61	100.00	-1.04	0.00	0.00	0.00	HS	180.43	HS	1,240.797.73	3,226.256.64	39°59'29.56873"N	104°41'32.90117"E	39.9908913	-104.6925054	4,841.34	138.27	0.14	140.33	0.87			46.848.63	65.72	4,000.00	6,000.00
	11.500	90.59	180.43	7.489.06	2.431.06	3.684.93	6.693.50	2,370.81	3,225.35	100.00	-1.04	0.00	0.00	0.00	HS	180.43	HS	1,240.697.74	3,226.256.78	39°59'28.57991"N	104°41'32.91098"E	39.9905122	-104.6925127	4,915.85	139.00	0.16	140.33	0.89			46.848.63	65.72	4,000.00	6,000.00
	11.600	90.59	180.43	7.488.03	2.430.03	3.784.93	6.793.50	2,380.80	3,224.06	100.00	-1.04	0.00	0.00	0.00	HS	180.43	HS	1,240.597.75	3,226.256.93	39°59'27.59177"N	104°41'32.92079"E	39.9901271	-104.6925200	4,990.85	139.76	0.17	140.33	0.91			46.848.63	65.72	4,000.00	6,000.00
County Line 0508-15H BPZ	11.700	90.59	180.43	7.486.99	2.428.99	3.884.92	6.893.49	2,390.79	3,222.85	100.00	-1.04	0.00	0.00	0.00	HS	180.43	HS	1,240.497.76	3,226.257.07	39°59'26.60371"N	104°41'32.93060"E	39.9897404	-104.6925273	5,067.51	140.52	0.18	140.33	0.92			46.848.63	65.72	4,000.00	6,000.00
	11.800	90.59	180.43	7.485.95	2.427.95	3.984.91	6.993.49	2,400.79	3,221.00	100.00	-1.04	0.00	0.00	0.00	HS	180.43	HS	1,240.397.77	3,226.257.21	39°59'25.61546"N	104°41'32.94047"E	39.9904474	-104.6925347	5,144.58	141.21	0.19	140.33	0.93			46.848.63	65.72	4,000.00	6,000.00
	11.900	90.59	180.43	7.484.92	2.426.92	4.084.91	7.093.48	2,410.78	3,219.16	100.00	-1.04	0.00	0.00	0.00	HS	180.43	HS	1,240.297.78	3,226.257.36	39°59'24.62771"N	104°41'32.95034"E	39.9901625	-104.6925420	5,222.43	141.90	0.20	140.33	0.94			46.848.63	65.72	4,000.00	6,000.00
	12.000	90.59	180.43	7.483.88	2.425.88	4.184.90	7.193.48	2,420.77	3,217.39	100.00	-1.04	0.00	0.00	0.00	HS	180.43	HS	1,240.197.79	3,226.257.50	39°59'23.63917"N	104°41'32.96019"E	39.9898977	-104.6925493	5,301.32	142.57	0.21	140.33	0.96			46.848.63	65.72	4,000.00	6,000.00
	12.100	90.59	180.43	7.482.84	2.424.84	4.284.89	7.293.47	2,430.76	3,215.64	100.00	-1.04	0.00	0.00	0.00	HS	180.43	HS	1,240.097.80	3,226.257.65	39°59'22.65057"N	104°41'32.97004"E	39.9896138	-104.6925566	5,380.32	143.27	0.22	140.33	0.97			46.848.63	65.72	4,000.00	6,000.00
	12.200	90.59	180.43	7.481.81	2.423.81	4.384.89	7.393.47	2,440.75	3,213.89	100.00	-1.04	0.00	0.00	0.00	HS	180.43	HS	1,239.997.81	3,226.257.80	39°59'21.66281"N	104°41'32.97978"E	39.9893279	-104.6925639	5,460.30	143.86	0.23	140.33	0.98			46.848.63	65.72	4,000.00	6,000.00
	12.300	90.59	180.43	7.480.77	2.422.77	4.484.88	7.493.46	2,450.74	3,212.13	100.00	-1.04	0.00	0.00	0.00	HS	180.43	HS	1,239.897.81	3,226.257.94	39°59'20.67470"N	104°41'32.98963"E	39.9890531	-104.6925712	5,540.33	144.48	0.23	140.33	0.99			46.848.63	65.72	4,000.00	6,000.00
	12.400	90.59	180.43	7.479.74	2.421.74	4.584.88	7.593.46	2,460.74	3,210.38	100.00	-1.04	0.00	0.00	0.00	HS	180.43	HS	1,239.797.82	3,226.258.09	39°59'19.68626"N	104°41'32.99945"E	39.9888012	-104.6925785	5,622.19	145.08	0.24	140.33	1.01			46.848.63	65.72	4,000.00	6,000.00
	12.500	90.59	180.43	7.478.70	2.420.70	4.684.88	7.693.45	2,470.73	3,217.63	100.00	-1.04	0.00	0.00	0.00	HS	180.43	HS	1,239.697.83	3,226.258.23	39°59'18.69847"N	104°41'33.00927"E	39.9885134	-104.6925858	5,704.03	145.66	0.25	140.33	1.02			46.848.63	65.72	4,000.00	6,000.00
	12.567.58	90.59	180.43	7.478.00	2.420.00	4.752.45	7.771.02	4.777.30	3,217.82	67.58	0.70	0.00	0.00	179.518	HS	180.44	179.518	1,239.600.74	3,226.258.33	39°59'18.00057"N	104°41'33.01920"E	39.9883164	-104.6925942	5,779.87	146.04	0.26	140.33	1.03			46.848.63	65.72	4,000.00	6,000.00
County Line 0508-15H BPZ	12.597.64	89.99	180.44	7.477.85	2.419.85	4.752.51	7.771.09	4.807.38	3,217.09	30.06	-0.15	2.00	-2.00	0.02	HS	180.44	HS	1,239.600.75	3,226.258.37	39°59'17.73357"N	104°41'33.01901"E	39.9882933	-104.6926025	5,784.50	146.21	0.26	140.33	1.04			47.067.31	66.32	4,000.00	6,000.00
	12.600	89.99	180.44	7.477.85	2.419.85	4.752.51	7.771.09	4.807.38	3,217.09	30.06	-0.15	2.00	-2.00	0.02	HS	180.44	HS	1,239.600.75	3,226.258.37	39°59'17.73357"N	104°41'33.01901"E	39.9882933	-104.6926025	5,784.50	146.21	0.26	140.33	1.04			47.067.31	66.32	4,000.00	6,000.00
	12.700	89.99	180.44	7.477.85	2.419.85	4.884.87	7.883.45	4.909.72	3,216.32	100.00	0.01	0.00	0.00	0.00	HS	180.44	HS	1,239.487.84	3,226.258.51	39°59'17.72208"N	104°41'33.02081"E	39.9879734	-104.6926098	5,869.42	146.77	0.27	140.33	1.05			47.067.31	66.32	4,000.00	6,000.00
	12.800	89.99	180.44	7.477.87	2.419.87	4.984.87	7.983.45	5.009.72	3,215.00	100.00	0.01	0.00	0.00	0.00	HS	180.44	HS	1,239.387.85	3,226.258.65	39°59'17.71057"N	104°41'33.03067"E	39.9876734	-104.6926170	5,950.30	147.31	0.28	140.33	1.06			47.067.31	66.32	4,000.00	6,000.00
	12.900	89.99	180.44	7.477.89	2.419.89	5.084.87	8.083.45	5.109.71	3,214.79	100.00	0.01	0.00	0.00	0.00	HS	180.44	HS	1,239.287.85	3,226.258.79	39°59'14.74653"N	104°41'33.04070"E	39.9874294	-104.6926130	6,036.89	147.82	0.29	140.33	1.08			47.067.31	66.32	4,000.00	6,000.00
	13.000	89.99	180.44	7.477.91	2.419.91	5.284.87	8.283.45	5.209.71	3,213.27	100.00	0.01	0.00	0.00	0.00	HS	180.44	HS	1,239.187.86	3,226.259.06	39°59'12.76026"N	104°41'33.05088"E	39.9869834	-104.6926193	6,206.30	148.82	0.31	140.33	1.09			47.067.31	66.32	4,000.00	6,000.00
	13.100	89.99	180.44	7.477.93	2.419.93	5.384.87	8.383.45	5.400.71	3,212.51	100.00	0.01	0.00	0.00	0.00	HS	180.44	HS	1,239.087.87	3,226.259.19	39°59'11.78122"N	104°41'33.07082"E	39.9866584	-104.6926219	6,291.67	149.30	0.32	140.33	1.12			47.067.31	66.32	4,000.00	6,000.00
	13.200	89.99	180.44	7.477.94	2.419.94	5.484.87	8.483.45	5.509.70	3,211.75	100.00	0.01	0.00	0.00	0.00	HS	180.44	HS	1,239.087.87	3,226.259.33	39°59'10.78318"N	104°41'33.08074"E	39.9863134	-104.6926246	6,377.47	149.76	0.32	140.33	1.13			46.900.39	66.11	4,000.00	6,000.00
	13.300	89.99	180.44	7.477.95	2.419.95	5.584.87	8.583.45	5.609.70	3,210.99	100.00	0.01	0.00	0.00	0.00	HS	180.44	HS	1,239.087.87	3,226.259.47	39°59'9.80481"N	104°41'33.09061"E	39.9859584	-104.6926274	6,463.68	150.21	0.33	140.33	1.14			47.067.31	66.32	4,000.00	6,000.00
	13.400	89.99	180.44	7.477.96	2.419.96	5.684.87	8.683.45	5.709.70	3,210.23	100.																								