

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

¹ Operator name and Address		² OGRID Number	
		³ Reason for Filing Code/ Effective Date	
⁴ API Number	⁵ Pool Name		⁶ Pool Code
⁷ Property Code	⁸ Property Name		⁹ Well Number

II. ¹⁰Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South Line	Feet from the	East/West line	County
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¹¹ Bottom Hole Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
¹² Lse Code	¹³ Producing Method Code		¹⁴ Gas Connection Date		¹⁵ C-129 Permit Number		¹⁶ C-129 Effective Date		¹⁷ C-129 Expiration Date

III. Oil and Gas Transporters

¹⁸ Transporter OGRID	¹⁹ Transporter Name and Address	²⁰ O/G/W

IV. Well Completion Data

²¹ Spud Date	²² Ready Date	²³ TD	²⁴ PBDT	²⁵ Perforations	²⁶ DHC, MC
²⁷ Hole Size		²⁸ Casing & Tubing Size	²⁹ Depth Set		³⁰ Sacks Cement

V. Well Test Data

³¹ Date New Oil	³² Gas Delivery Date	³³ Test Date	³⁴ Test Length	³⁵ Tbg. Pressure	³⁶ Csg. Pressure
³⁷ Choke Size	³⁸ Oil	³⁹ Water	⁴⁰ Gas		⁴¹ Test Method
⁴² I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief. Signature: <i>Fatima Vasquez</i>			OIL CONSERVATION DIVISION		
Printed name:			Approved by: Kurt Simmons		
Title:			Title: NMOCD, Santa Fe		
E-mail Address:			Approval Date: 04/12/2021		
Date:		Phone:			

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720

District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☒ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-46326		² Pool Code 97903		³ Pool Name WC-025 G08 S253235G; LWR Bone Spring	
⁴ Property Code 326032		⁵ Property Name RED HILLS 32-5 FED COM			⁶ Well Number 157H
⁷ OGRID No. 162683		⁸ Operator Name CIMAREX ENERGY CO. of Colorado			⁹ Elevation 3409.6'

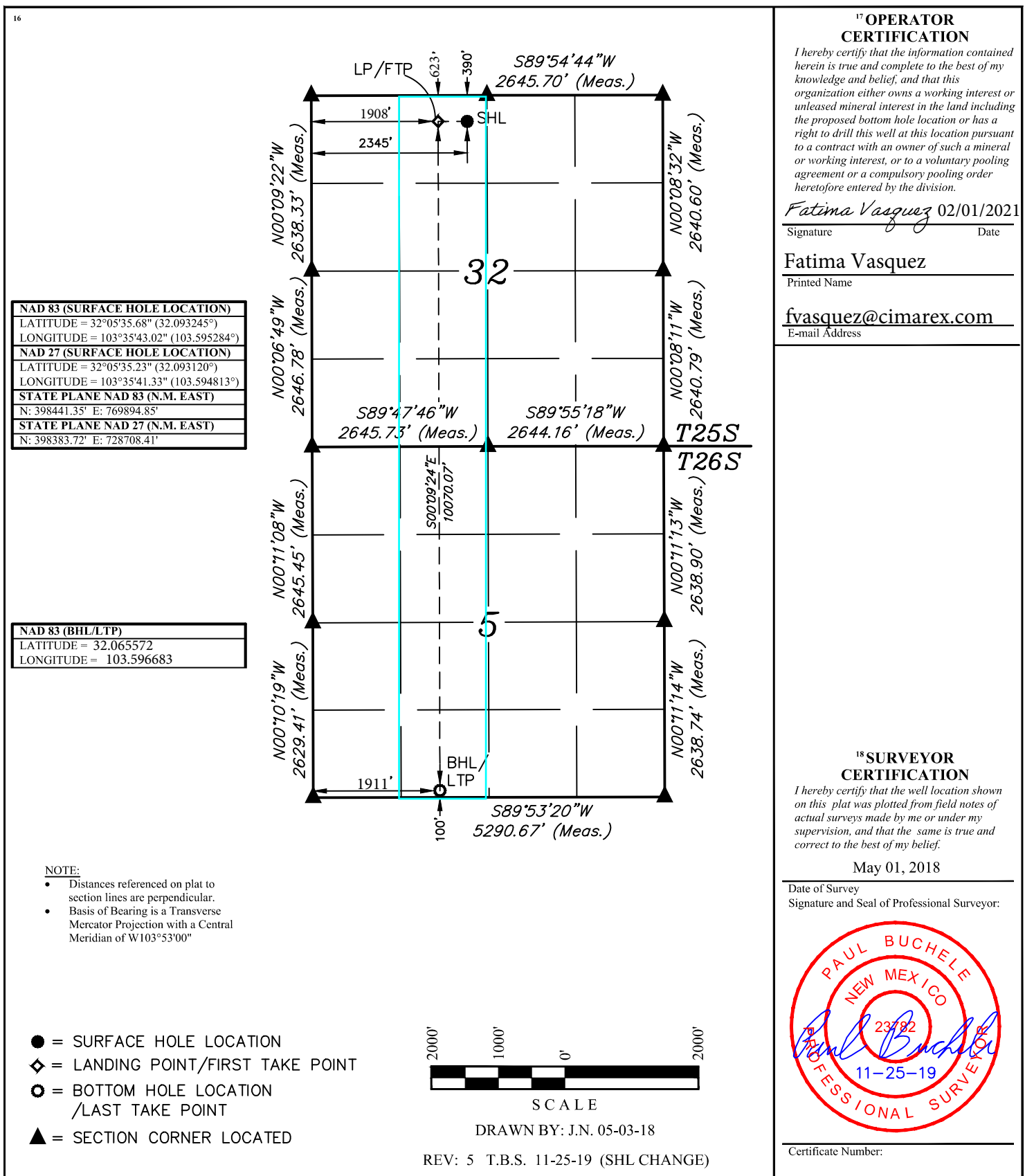
¹⁰Surface Location

UL or lot no. C	Section 32	Township 25S	Range 33E	Lot Idn	Feet from the 390	North/South line NORTH	Feet from the 2345	East/West line WEST	County LEA
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¹¹ Bottom Hole Location If Different From Surface

UL or lot no. N	Section 5	Township 26S	Range 33E	Lot Idn	Feet from the 100	North/South line SOUTH	Feet from the 1911	East/West line WEST	County LEA
¹² Dedicated Acres 320		¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ Order No.			

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.





Final Surveys - Cimarex Red Hills 32-5 Fed Com #157H MWD 0ft-20220ft (Surcon Corrected) Survey Geodetic Report (Def Survey)



Report Date:	December 17, 2020 - 08:52 AM	Survey / DLS Computation:	Minimum Curvature / Lubinski
Client:	Cimarex Energy	Vertical Section Azimuth:	179.604 ° (Grid North)
Field:	NM Lea County (NAD 83)	Vertical Section Origin:	0.000 ft, 0.000 ft
Structure / Slot:	Cimarex Red Hills 32-5 Fed Com #157H / New Slot	TVD Reference Datum:	RKB
Well:	Red Hills 32-5 Fed Com #157H	TVD Reference Elevation:	3435.600 ft above MSL
Borehole:	Red Hills 32-5 Fed Com #157H	Seabed / Ground Elevation:	3409.600 ft above MSL
UWI / API#:	Unknown / Unknown	Magnetic Declination:	6.574 °
Survey Name:	Final Surveys - Cimarex Red Hills 32-5 Fed Com #157H MWD 0ft-20220ft (Surcon Corrected)	Total Gravity Field Strength:	998.4285mgn (9.80665 Based)
Survey Date:	February 09, 2020	Gravity Model:	GARM
Tort / AHD / DDI / ERD Ratio:	256.064 ° / 10564.506 ft / 6.722 / 1.018	Total Magnetic Field Strength:	47678.315 nT
Coordinate Reference System:	NAD83 New Mexico State Plane, Eastern Zone, US Feet	Magnetic Dip Angle:	59.671 °
Location Lat / Long:	N 32° 5' 35.68082", W 103° 35' 43.02321"	Declination Date:	February 19, 2020
Location Grid N/E Y/X:	N 398441.350 ftUS, E 769894.850 ftUS	Magnetic Declination Model:	HDGM 2019
CRS Grid Convergence Angle:	0.3921 °	North Reference:	Grid North
Grid Scale Factor:	0.99996892	Grid Convergence Used:	0.3921 °
Version / Patch:	2.10.824.0	Total Corr Mag North->Grid North:	6.1817 °
		Local Coord Referenced To:	Well Head

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")	Closure Azimuth (°)	Closure (ft)
SHL [390' FNL, 2345' FWL]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	398441.35	769894.85	N 32 5 35.68	W 103 35 43.02	0.00	0.00
	195.00	0.74	106.54	194.99	0.37	-0.36	1.21	0.38	398440.99	769896.06	N 32 5 35.68	W 103 35 43.01	106.54	1.26
	294.00	0.42	49.72	293.99	0.32	-0.31	2.10	0.63	398441.04	769896.95	N 32 5 35.68	W 103 35 43.00	98.30	2.12
	385.00	1.03	336.63	384.98	-0.65	0.66	2.03	1.09	398442.01	769896.88	N 32 5 35.69	W 103 35 43.00	71.95	2.13
	476.00	1.11	338.57	475.97	-2.22	2.23	1.38	0.10	398443.58	769896.23	N 32 5 35.70	W 103 35 43.01	31.74	2.62
	566.00	1.19	326.32	565.95	-3.82	3.82	0.54	0.29	398445.17	769895.39	N 32 5 35.72	W 103 35 43.02	8.10	3.86
	656.00	1.13	318.35	655.93	-5.27	5.26	-0.56	0.19	398446.61	769894.29	N 32 5 35.73	W 103 35 43.03	353.88	5.29
	746.00	1.13	322.34	745.91	-6.64	6.63	-1.70	0.09	398447.98	769893.15	N 32 5 35.75	W 103 35 43.04	345.64	6.84
	837.00	1.26	311.68	836.89	-8.02	8.00	-2.99	0.28	398449.35	769891.86	N 32 5 35.76	W 103 35 43.06	339.50	8.54
	929.00	1.41	311.36	928.87	-9.46	9.42	-4.60	0.16	398450.77	769890.25	N 32 5 35.77	W 103 35 43.08	334.00	10.49
	975.00	1.36	305.07	974.86	-10.15	10.11	-5.47	0.35	398451.46	769889.38	N 32 5 35.78	W 103 35 43.09	331.59	11.50
	1120.00	1.48	312.57	1119.81	-12.42	12.37	-8.26	0.15	398453.72	769886.59	N 32 5 35.80	W 103 35 43.12	326.27	14.87
	1214.00	1.58	300.98	1213.78	-13.93	13.86	-10.26	0.35	398455.20	769884.59	N 32 5 35.82	W 103 35 43.14	323.48	17.24
	1309.00	1.63	301.45	1308.74	-15.32	15.23	-12.54	0.05	398456.58	769882.31	N 32 5 35.83	W 103 35 43.17	320.55	19.73
	1403.00	1.86	305.69	1402.70	-16.92	16.82	-14.92	0.28	398458.17	769879.93	N 32 5 35.85	W 103 35 43.20	318.44	22.48
	1591.00	1.79	306.92	1590.60	-20.50	20.37	-19.74	0.04	398461.71	769875.11	N 32 5 35.88	W 103 35 43.25	315.89	28.36
	1686.00	1.86	299.12	1685.55	-22.16	22.01	-22.27	0.27	398463.36	769872.58	N 32 5 35.90	W 103 35 43.28	314.65	31.31
	1780.00	2.92	290.86	1779.47	-23.78	23.60	-25.84	1.18	398464.95	769869.01	N 32 5 35.92	W 103 35 43.32	312.40	35.00
	1874.00	4.20	286.25	1873.29	-25.63	25.42	-31.39	1.39	398466.77	769863.46	N 32 5 35.93	W 103 35 43.39	309.00	40.39
	1969.00	5.15	274.77	1967.97	-27.01	26.75	-38.98	1.40	398468.10	769855.88	N 32 5 35.95	W 103 35 43.47	304.46	47.27
	2063.00	6.47	266.98	2061.49	-27.15	26.82	-48.47	1.63	398468.17	769846.38	N 32 5 35.95	W 103 35 43.58	298.96	55.39
	2158.00	7.17	265.43	2155.82	-26.48	26.06	-59.72	0.76	398467.41	769835.13	N 32 5 35.94	W 103 35 43.72	293.58	65.16
	2252.00	7.01	265.47	2249.10	-25.64	25.14	-71.29	0.17	398466.49	769823.56	N 32 5 35.93	W 103 35 43.85	289.43	75.59
	2346.00	6.94	264.78	2342.40	-24.74	24.17	-82.66	0.12	398465.52	769812.19	N 32 5 35.93	W 103 35 43.98	286.30	86.13
	2441.00	7.02	266.42	2436.70	-23.94	23.29	-94.17	0.23	398464.64	769800.68	N 32 5 35.92	W 103 35 44.12	283.89	97.01
	2535.00	7.26	266.09	2529.97	-23.26	22.52	-105.83	0.26	398463.87	769789.02	N 32 5 35.91	W 103 35 44.25	282.02	108.20
	2630.00	7.06	265.31	2624.23	-22.45	21.64	-117.64	0.23	398462.99	769777.21	N 32 5 35.90	W 103 35 44.39	280.42	119.61
	2724.00	7.23	266.06	2717.50	-21.65	20.76	-129.30	0.21	398462.11	769765.56	N 32 5 35.89	W 103 35 44.52	279.12	130.95
	2819.00	7.21	266.77	2811.75	-20.99	20.01	-141.21	0.10	398461.36	769753.64	N 32 5 35.89	W 103 35 44.66	278.07	142.62
	2913.00	7.04	266.34	2905.02	-20.37	19.31	-152.85	0.19	398460.66	769742.00	N 32 5 35.88	W 103 35 44.80	277.20	154.07
	3008.00	6.84	269.17	2999.32	-19.99	18.86	-164.32	0.42	398460.21	769730.54	N 32 5 35.88	W 103 35 44.93	276.55	165.40
	3102.00	6.63	269.73	3092.67	-19.96	18.75	-175.34	0.23	398460.10	769719.51	N 32 5 35.88	W 103 35 45.06	276.10	176.34
	3197.00	7.13	268.76	3186.99	-19.89	18.60	-186.72	0.54	398459.95	769708.14	N 32 5 35.88	W 103 35 45.19	275.69	187.64
	3292.00	7.05	268.47	3281.26	-19.69	18.32	-198.44	0.09	398459.67	769696.41	N 32 5 35.88	W 103 35 45.33	275.27	199.29

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")	Closure Azimuth (°)	Closure (ft)
	3386.00	7.09	268.32	3374.55	-19.44	17.99	-210.01	0.05	398459.34	769684.85	N 32 5 35.87	W 103 35 45.46	274.90	210.78
	3481.00	7.21	268.83	3468.81	-19.23	17.70	-221.83	0.14	398459.05	769673.03	N 32 5 35.87	W 103 35 45.60	274.56	222.53
	3575.00	7.53	270.12	3562.03	-19.21	17.59	-233.88	0.38	398458.94	769660.97	N 32 5 35.87	W 103 35 45.74	274.30	234.55
	3670.00	7.04	271.00	3656.27	-19.40	17.71	-245.93	0.53	398459.05	769648.93	N 32 5 35.87	W 103 35 45.88	274.12	246.57
	3765.00	7.07	272.28	3750.55	-19.82	18.04	-257.59	0.17	398459.39	769637.27	N 32 5 35.88	W 103 35 46.02	274.01	258.22
	3859.00	6.78	269.63	3843.86	-20.09	18.23	-268.92	0.46	398459.58	769625.94	N 32 5 35.88	W 103 35 46.15	273.88	269.54
	3954.00	6.83	263.26	3938.19	-19.47	17.53	-280.14	0.80	398458.88	769614.72	N 32 5 35.87	W 103 35 46.28	273.58	280.69
	4048.00	6.67	262.03	4031.54	-18.13	16.12	-291.10	0.23	398457.47	769603.76	N 32 5 35.86	W 103 35 46.41	273.17	291.54
	4143.00	6.75	261.72	4125.89	-16.64	14.55	-302.09	0.09	398455.90	769592.77	N 32 5 35.85	W 103 35 46.53	272.76	302.44
	4237.00	6.17	261.00	4219.29	-15.13	12.97	-312.54	0.62	398454.32	769582.32	N 32 5 35.83	W 103 35 46.66	272.38	312.81
	4331.00	5.67	258.84	4312.79	-13.50	11.28	-322.09	0.58	398452.63	769572.77	N 32 5 35.81	W 103 35 46.77	272.01	322.28
	4426.00	6.40	262.61	4407.27	-11.98	9.69	-331.94	0.87	398451.04	769562.92	N 32 5 35.80	W 103 35 46.88	271.67	332.08
	4520.00	6.60	261.10	4500.66	-10.55	8.18	-342.47	0.28	398449.53	769552.39	N 32 5 35.78	W 103 35 47.00	271.37	342.57
	4615.00	6.36	256.30	4595.06	-8.53	6.09	-352.98	0.62	398447.44	769541.88	N 32 5 35.76	W 103 35 47.13	270.99	353.03
	4709.00	6.10	264.40	4688.50	-6.88	4.37	-363.01	0.97	398445.72	769531.85	N 32 5 35.75	W 103 35 47.24	270.69	363.04
	4803.00	6.23	267.41	4781.96	-6.23	3.65	-373.08	0.37	398445.00	769521.79	N 32 5 35.74	W 103 35 47.36	270.56	373.09
	4825.00	6.17	267.03	4803.83	-6.13	3.53	-375.45	0.33	398444.88	769519.41	N 32 5 35.74	W 103 35 47.39	270.54	375.47
	5006.00	6.08	267.09	4983.80	-5.27	2.54	-394.74	0.05	398443.89	769500.13	N 32 5 35.73	W 103 35 47.61	270.37	394.74
	5100.00	6.26	268.91	5077.25	-4.99	2.19	-404.83	0.28	398443.54	769490.03	N 32 5 35.73	W 103 35 47.73	270.31	404.84
	5195.00	7.27	272.77	5171.59	-5.26	2.39	-416.01	1.17	398443.74	769478.85	N 32 5 35.73	W 103 35 47.86	270.33	416.02
	5289.00	6.49	271.76	5264.91	-5.79	2.84	-427.26	0.84	398444.19	769467.60	N 32 5 35.74	W 103 35 47.99	270.38	427.27
	5384.00	4.28	273.56	5359.49	-6.24	3.22	-436.17	2.33	398444.57	769458.69	N 32 5 35.74	W 103 35 48.09	270.42	436.18
	5478.00	2.52	262.39	5453.32	-6.22	3.17	-441.72	1.99	398444.52	769453.14	N 32 5 35.74	W 103 35 48.16	270.41	441.73
	5572.00	2.27	228.25	5547.24	-4.73	1.65	-445.16	1.52	398443.00	769449.71	N 32 5 35.73	W 103 35 48.20	270.21	445.16
	5667.00	2.32	214.90	5642.17	-1.92	-1.18	-447.66	0.56	398440.17	769447.20	N 32 5 35.70	W 103 35 48.23	269.85	447.66
	5761.00	2.48	215.54	5736.08	1.28	-4.39	-449.93	0.17	398436.96	769444.93	N 32 5 35.67	W 103 35 48.25	269.44	449.95
	5856.00	2.40	213.16	5831.00	4.61	-7.73	-452.21	0.14	398433.62	769442.65	N 32 5 35.63	W 103 35 48.28	269.02	452.28
	6044.00	2.20	215.06	6018.85	10.82	-13.98	-456.44	0.11	398427.37	769438.42	N 32 5 35.57	W 103 35 48.33	268.25	456.65
	6138.00	2.22	215.01	6112.78	13.78	-16.95	-458.52	0.02	398424.40	769436.34	N 32 5 35.54	W 103 35 48.35	267.88	458.83
	6233.00	1.85	203.60	6207.72	16.68	-19.86	-460.19	0.58	398421.49	769434.67	N 32 5 35.52	W 103 35 48.37	267.53	460.62
	6327.00	1.66	187.79	6301.67	19.41	-22.60	-460.98	0.55	398418.75	769433.88	N 32 5 35.49	W 103 35 48.38	267.19	461.54
	6421.00	1.64	188.82	6395.63	22.09	-25.28	-461.37	0.04	398416.07	769433.49	N 32 5 35.46	W 103 35 48.39	266.86	462.07
	6515.00	0.81	205.25	6489.61	24.02	-27.21	-461.86	0.95	398414.14	769433.00	N 32 5 35.44	W 103 35 48.39	266.63	462.66
	6610.00	0.26	214.28	6584.61	24.80	-27.99	-462.27	0.58	398413.36	769432.59	N 32 5 35.44	W 103 35 48.40	266.53	463.12
	6704.00	0.17	214.93	6678.61	25.09	-28.28	-462.47	0.10	398413.07	769432.39	N 32 5 35.43	W 103 35 48.40	266.50	463.34
	6798.00	0.39	190.11	6772.61	25.52	-28.71	-462.61	0.26	398412.64	769432.26	N 32 5 35.43	W 103 35 48.40	266.45	463.50
	6893.00	0.38	183.07	6867.60	26.15	-29.35	-462.68	0.05	398412.00	769432.18	N 32 5 35.42	W 103 35 48.40	266.37	463.61
	6987.00	0.50	173.32	6961.60	26.87	-30.06	-462.65	0.15	398411.29	769432.22	N 32 5 35.41	W 103 35 48.40	266.28	463.63
	7081.00	0.56	166.94	7055.60	27.72	-30.92	-462.50	0.09	398410.43	769432.37	N 32 5 35.41	W 103 35 48.40	266.18	463.53
	7176.00	0.38	171.58	7150.59	28.49	-31.68	-462.35	0.19	398409.67	769432.52	N 32 5 35.40	W 103 35 48.40	266.08	463.43
	7270.00	0.61	69.81	7244.59	28.63	-31.82	-461.83	0.83	398409.53	769433.03	N 32 5 35.40	W 103 35 48.39	266.06	462.93
	7364.00	1.07	57.78	7338.58	27.99	-31.18	-460.62	0.52	398410.17	769434.25	N 32 5 35.40	W 103 35 48.38	266.13	461.67
	7459.00	1.13	46.48	7433.56	26.89	-30.06	-459.19	0.24	398411.29	769435.68	N 32 5 35.41	W 103 35 48.36	266.25	460.17
	7553.00	0.91	51.44	7527.55	25.79	-28.96	-457.93	0.25	398412.39	769436.93	N 32 5 35.43	W 103 35 48.35	266.38	458.85
	7648.00	0.72	81.58	7622.54	25.24	-28.40	-456.75	0.49	398412.95	769438.11	N 32 5 35.43	W 103 35 48.33	266.44	457.64
	7742.00	0.76	91.58	7716.53	25.18	-28.33	-455.55	0.14	398413.02	769439.32	N 32 5 35.43	W 103 35 48.32	266.44	456.43
	7836.00	0.60	91.70	7810.53	25.22	-28.36	-454.43	0.17	398412.99	769440.43	N 32 5 35.43	W 103 35 48.31	266.43	455.32
	7930.00	0.61	107.21	7904.52	25.39	-28.52	-453.46	0.17	398412.83	769441.40	N 32 5 35.43	W 103 35 48.30	266.40	454.36
	8025.00	0.63	103.36	7999.51	25.67	-28.79	-452.47	0.05	398412.56	769442.39	N 32 5 35.43	W 103 35 48.28	266.36	453.39
	8119.00	0.76	109.80	8093.51	26.00	-29.13	-451.38	0.16	398412.23	769443.48	N 32 5 35.42	W 103 35 48.27	266.31	452.32
	8213.00	1.11	122.61	8187.49	26.72	-29.83	-450.03	0.43	398411.52	769444.84	N 32 5 35.42	W 103 35 48.26	266.21	451.01
	8307.00	0.81	126.05	8281.48	27.61	-30.71	-448.72	0.32	398410.64	769446.14	N 32 5 35.41	W 103 35 48.24	266.09	449.77
	8402.00	0.78	129.87	8376.47	28.42	-31.52	-447.68	0.06	398409.83	769447.18	N 32 5 35.40	W 103 35 48.23	265.97	448.79
	8496.00	1.07	137.14	8470.46	29.48	-32.57	-446.60	0.33	398408.78	769448.27	N 32 5 35.39	W 103 35 48.22	265.83	447.78
	8591.00	1.12	141.41	8565.44	30.87	-33.95	-445.41	0.10	398407.40	769449.45	N 32 5 35.38	W 103 35 48.20	265.64	446.71
	8685.00	1.20	138.73	8659.42	32.33	-35.41	-444.19	0.10	398405.95	769450.67	N 32 5 35.36	W 103 35 48.19	265.44	445.60
	8780.00	0.99	140.45	8754.41	33.72	-36.79	-443.01	0.22	398404.57	769451.85	N 32 5 35.35	W 103 35 48.18	265.25	444.54
	8874.00	1.05	151.19	8848.39	35.11	-38.17	-442.08	0.21	398403.18	769452.78	N 32 5 35.33	W 103 35 48.16	265.07	443.72
	8969.00	1.18	155.22	8943.37	36.77	-39.82	-441.25	0.16	398401.53	769453.61	N 32 5 35.32	W 103 35 48.16	264.84	443.04
	9063.00	1.04	161.78	9037.36	38.46	-41.51	-440.58	0.20	398399.84	769454.29	N 32 5 35.30	W 103 35 48.15	264.62	442.53
	9158.00	0.95	167.70	9132.34	40.05	-43.10	-440.14	0.14	398398.26	769454.72	N 32 5 35.28	W 103 35 48.14	264.41	442.25
	9252.00	0.87	177.86	9226.33	41.53	-44.57	-439.95	0.19	398396.78	769454.92	N 32 5 35.27	W 103 35 48.14	264.22	442.20
	9347.00	1.11	157.44	9321.32	43.10	-46.14	-439.57	0.45	398395.21	769455.30	N 32 5 35.25	W 103 35 48.14	264.01	441.98
	9441.00	0.81	159.15	9415.30	44.57	-47.60	-438.98	0.32	398393.75	769455.88	N 32 5 35.24	W 103 35 48.13	263.81	441.56
	9536.00	0.42	151.85	9510.30	45.50	-48.54	-438.58	0.42	398392.82	769456.29	N 32 5 35.23	W 103 35 48.13	263.68	441.26
	9630.00	0.66	246.90	9604.29	46.02	-49.05	-438.91	0.86	398392.30	769455.95	N 32 5 35.23	W 103 35 48.13	263.62	441.65
	9724.00	1.12	243.40	9698.28	46.63	-49.68	-440.23	0.49	398391.68	769454.63	N 32 5 35.22	W 103 35 48.14	263.56	443.03

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")	Closure Azimuth (°)	Closure (ft)
KOP [438' FNL, 1902' FWL] First SLB Survey	9819.00	1.16	245.84	9793.26	47.43	-50.49	-441.94	0.07	398390.87	769452.92	N 32 5 35.21	W 103 35 48.16	263.48	444.82
	9840.00	1.19	241.43	9814.26	47.62	-50.68	-442.33	0.45	398390.67	769452.54	N 32 5 35.21	W 103 35 48.17	263.46	445.22
	9935.00	6.18	179.93	9909.05	53.20	-56.27	-443.19	6.01	398385.08	769451.68	N 32 5 35.15	W 103 35 48.18	262.76	446.75
	9981.00	13.37	175.40	9954.35	60.99	-64.05	-442.76	15.71	398377.30	769452.11	N 32 5 35.08	W 103 35 48.17	261.77	447.37
	10029.00	18.28	175.56	10000.52	74.04	-77.10	-441.73	10.23	398364.25	769453.14	N 32 5 34.95	W 103 35 48.16	260.10	448.41
	10076.00	19.96	174.69	10044.93	89.39	-92.44	-440.42	3.63	398348.92	769454.45	N 32 5 34.80	W 103 35 48.15	258.15	450.01
	10123.00	23.65	180.06	10088.56	106.82	-109.86	-439.68	8.92	398331.49	769455.18	N 32 5 34.62	W 103 35 48.14	255.97	453.20
	10169.00	27.85	179.08	10129.98	126.80	-129.84	-439.52	9.18	398311.52	769455.34	N 32 5 34.43	W 103 35 48.14	253.54	458.30
	10217.00	29.74	177.15	10172.05	149.91	-152.94	-438.75	4.39	398288.41	769456.12	N 32 5 34.20	W 103 35 48.14	250.78	464.64
	10260.00	33.50	176.22	10208.66	172.42	-175.44	-437.44	8.82	398265.91	769457.43	N 32 5 33.97	W 103 35 48.12	248.15	471.31
	10312.00	37.28	178.14	10251.04	202.50	-205.51	-435.98	7.58	398235.84	769458.89	N 32 5 33.68	W 103 35 48.11	244.76	481.99
First Take Point [623' FNL, 1908' FWL]	10358.00	45.40	179.46	10285.55	232.85	-235.87	-435.37	17.75	398205.49	769459.49	N 32 5 33.38	W 103 35 48.10	241.55	495.16
	10406.00	54.22	182.13	10316.50	269.47	-272.49	-435.93	18.86	398168.87	769458.93	N 32 5 33.01	W 103 35 48.11	237.99	514.09
	10453.00	64.42	181.66	10340.45	309.80	-312.83	-437.26	21.72	398128.53	769457.60	N 32 5 32.61	W 103 35 48.13	234.42	537.64
	10500.00	74.19	180.16	10357.04	353.71	-356.74	-437.94	21.00	398084.62	769456.93	N 32 5 32.18	W 103 35 48.14	230.83	564.85
	10513.00	77.02	180.12	10360.27	366.30	-369.33	-437.97	21.77	398072.03	769456.89	N 32 5 32.06	W 103 35 48.14	229.86	572.91
	10595.00	88.69	178.78	10370.45	447.52	-450.55	-437.18	14.32	397990.82	769457.69	N 32 5 31.25	W 103 35 48.14	224.14	627.79
	10613.00	88.56	179.29	10370.89	465.51	-468.54	-436.87	2.92	397972.83	769457.99	N 32 5 31.07	W 103 35 48.14	223.00	640.62
	10635.00	88.67	179.13	10371.42	487.50	-490.53	-436.57	0.88	397950.83	769458.29	N 32 5 30.86	W 103 35 48.14	221.67	656.67
	10729.00	88.94	179.29	10373.38	581.48	-584.50	-435.28	0.33	397856.87	769459.59	N 32 5 29.93	W 103 35 48.13	216.67	728.77
	10824.00	90.55	179.24	10373.80	676.47	-679.49	-434.06	1.70	397761.88	769460.81	N 32 5 28.99	W 103 35 48.12	212.57	806.30
	10918.00	90.68	178.82	10372.79	770.46	-773.47	-432.47	0.47	397667.90	769462.40	N 32 5 28.06	W 103 35 48.11	209.21	886.16
	11012.00	91.46	178.59	10371.04	864.43	-867.43	-430.34	0.87	397573.95	769464.52	N 32 5 27.13	W 103 35 48.09	206.39	968.31
	11107.00	92.35	178.76	10367.88	959.37	-962.35	-428.15	0.95	397479.03	769466.72	N 32 5 26.19	W 103 35 48.08	203.98	1053.29
	11202.00	90.03	178.40	10365.91	1054.33	-1057.29	-425.79	2.47	397384.09	769469.07	N 32 5 25.25	W 103 35 48.06	201.94	1139.81
	11296.00	90.34	178.65	10365.60	1148.31	-1151.26	-423.37	0.42	397290.13	769471.49	N 32 5 24.32	W 103 35 48.04	200.19	1226.64
	11391.00	90.35	177.78	10365.03	1243.28	-1246.21	-420.41	0.92	397195.18	769474.45	N 32 5 23.38	W 103 35 48.01	198.64	1315.22
	11485.00	90.73	179.19	10364.14	1337.25	-1340.17	-417.93	1.55	397101.22	769476.93	N 32 5 22.45	W 103 35 47.99	197.32	1403.83
	11579.00	91.75	179.78	10362.11	1431.23	-1434.15	-417.08	1.25	397007.25	769477.78	N 32 5 21.52	W 103 35 47.99	196.22	1493.57
	11768.00	89.18	179.52	10360.58	1620.21	-1623.12	-415.93	1.37	396818.28	769478.93	N 32 5 19.65	W 103 35 47.99	194.37	1675.57
	11862.00	88.62	178.90	10362.38	1714.19	-1717.09	-414.63	0.89	396724.31	769480.23	N 32 5 18.72	W 103 35 47.98	193.58	1766.45
	12050.00	89.66	179.80	10365.20	1902.16	-1905.06	-412.50	0.73	396536.36	769482.36	N 32 5 16.86	W 103 35 47.97	192.22	1949.20
	12145.00	86.82	177.67	10368.12	1997.09	-1999.97	-410.41	3.74	396441.44	769484.46	N 32 5 15.92	W 103 35 47.95	191.60	2041.65
	12239.00	89.86	177.37	10370.84	2090.98	-2093.83	-406.34	3.25	396347.58	769488.52	N 32 5 14.99	W 103 35 47.91	190.98	2132.90
	12333.00	93.35	180.29	10368.21	2184.91	-2187.75	-404.42	4.84	396253.67	769490.44	N 32 5 14.06	W 103 35 47.90	190.47	2224.82
	12428.00	93.64	181.72	10362.42	2279.70	-2282.56	-406.08	1.53	396158.87	769488.78	N 32 5 13.12	W 103 35 47.92	190.09	2318.40
	12522.00	91.58	181.99	10358.14	2373.52	-2376.41	-409.12	2.21	396065.02	769485.74	N 32 5 12.19	W 103 35 47.97	189.77	2411.37
	12616.00	93.13	181.93	10354.28	2467.36	-2470.27	-412.34	1.65	395971.16	769482.53	N 32 5 11.27	W 103 35 48.01	189.48	2504.45
	12711.00	90.12	180.29	10351.58	2562.28	-2565.20	-414.17	3.61	395876.23	769480.69	N 32 5 10.33	W 103 35 48.04	189.17	2598.42
	12805.00	92.35	182.14	10349.56	2656.21	-2659.15	-416.17	3.08	395782.29	769478.70	N 32 5 9.40	W 103 35 48.07	188.89	2691.52
	12900.00	90.24	181.54	10347.41	2751.11	-2754.07	-419.22	2.31	395687.37	769475.65	N 32 5 8.46	W 103 35 48.11	188.65	2785.79
	12994.00	88.67	180.88	10348.30	2845.06	-2848.04	-421.20	1.81	395593.40	769473.66	N 32 5 7.53	W 103 35 48.15	188.41	2879.02
	13088.00	88.85	180.33	10350.34	2939.02	-2942.01	-422.19	0.62	395499.44	769472.67	N 32 5 6.60	W 103 35 48.16	188.17	2972.15
	13183.00	88.82	179.65	10352.27	3034.00	-3036.99	-422.18	0.72	395404.46	769472.69	N 32 5 5.66	W 103 35 48.17	187.91	3066.20
	13277.00	89.77	178.07	10353.43	3127.98	-3130.96	-420.31	1.96	395310.49	769474.56	N 32 5 4.73	W 103 35 48.16	187.65	3159.05
	13371.00	90.57	177.72	10353.15	3221.94	-3224.90	-416.85	0.93	395216.56	769478.01	N 32 5 3.80	W 103 35 48.12	187.37	3251.73
	13466.00	90.27	176.61	10352.45	3316.85	-3319.78	-412.15	1.21	395121.68	769482.71	N 32 5 2.86	W 103 35 48.08	187.08	3345.26
	13560.00	90.67	177.64	10351.68	3410.76	-3413.65	-407.44	1.18	395027.81	769487.42	N 32 5 1.93	W 103 35 48.03	186.81	3437.88
	13654.00	91.70	178.42	10349.73	3504.70	-3507.58	-404.21	1.37	394933.89	769490.65	N 32 5 1.00	W 103 35 48.00	186.57	3530.79
	13749.00	90.55	179.03	10347.87	3599.67	-3602.53	-402.10	1.37	394838.94	769492.77	N 32 5 0.06	W 103 35 47.98	186.37	3624.90
	13843.00	90.15	179.16	10347.30	3693.66	-3696.52	-400.61	0.45	394744.95	769494.25	N 32 4 59.13	W 103 35 47.97	186.19	3718.16
	13937.00	89.86	179.97	10347.29	3787.66	-3790.52	-399.90	0.92	394650.96	769494.97	N 32 4 58.20	W 103 35 47.97	186.02	3811.55
	14032.00	92.02	182.97	10345.73	3882.58	-3885.45	-402.33	3.89	394556.02	769492.53	N 32 4 57.26	W 103 35 48.01	185.91	3906.23
	14126.00	92.37	182.68	10342.13	3976.36	-3979.27	-406.96	0.48	394462.21	769487.90	N 32 4 56.33	W 103 35 48.07	185.84	4000.03
	14220.00	90.71	180.61	10339.60	4070.26	-4073.19	-409.66	2.82	394368.29	769485.20	N 32 4 55.40	W 103 35 48.11	185.74	4093.74
	14315.00	89.76	179.14	10339.21	4165.26	-4168.19	-409.45	1.84	394273.30	769485.41	N 32 4 54.46	W 103 35 48.11	185.61	4188.25
	14409.00	91.94	179.76	10337.82	4259.24	-4262.16	-408.55	2.41	394179.33	769486.31	N 32 4 53.53	W 103 35 48.11	185.48	4281.70
	14504.00	92.19	179.18	10334.39	4354.18	-4357.10	-407.67	0.66	394084.40	769487.19	N 32 4 52.59	W 103 35 48.11	185.35	4376.13
	14598.00	89.69	178.54	10332.85	4448.15	-4451.06	-405.80	2.75	393990.44	769489.06	N 32 4 51.66	W 103 35 48.09	185.21	4469.52
	14692.00	91.78	179.24	10331.65	4542.13	-4545.03	-403.98	2.34	393896.47	769490.88	N 32 4 50.73	W 103 35 48.08	185.08	4562.95
	14787.00	92.93	179.18	10327.74	4637.04	-4639.94	-402.67	1.21	393801.57	769492.19	N 32 4 49.80	W 103 35 48.07	184.96	4657.38
	14881.00	91.54	178.99	10324.08	4730.97	-4733.85	-401.17	1.49	393707.66	769493.69	N 32 4 48.87	W 103 35 48.06	184.84	4750.82

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")	Closure Azimuth (°)	Closure (ft)
Private Leaseline Crossing [1911' FWL]	14976.00	87.75	180.85	10324.67	4825.94	-4828.83	-401.04	4.44	393612.68	769493.82	N 32 4 47.93	W 103 35 48.07	184.75	4845.45
	15041.20	88.96	181.06	10326.54	4891.09	-4893.99	-402.12	1.88	393547.52	769492.74	N 32 4 47.28	W 103 35 48.09	184.70	4910.48
	15071.00	89.51	181.15	10326.94	4920.88	-4923.78	-402.70	1.88	393517.73	769492.17	N 32 4 46.99	W 103 35 48.09	184.68	4940.22
	15165.00	89.99	181.31	10327.35	5014.84	-5017.76	-404.71	0.54	393423.76	769490.15	N 32 4 46.06	W 103 35 48.13	184.61	5034.05
	15260.00	90.11	181.78	10327.26	5109.79	-5112.72	-407.28	0.51	393328.79	769487.59	N 32 4 45.12	W 103 35 48.16	184.55	5128.92
	15354.00	88.98	181.63	10328.01	5203.72	-5206.68	-410.07	1.21	393234.84	769484.79	N 32 4 44.19	W 103 35 48.20	184.50	5222.80
	15448.00	88.84	181.20	10329.80	5297.66	-5300.63	-412.39	0.48	393140.89	769482.47	N 32 4 43.26	W 103 35 48.24	184.45	5316.65
	15543.00	88.92	180.99	10331.66	5392.61	-5395.60	-414.21	0.24	393045.93	769480.65	N 32 4 42.32	W 103 35 48.27	184.39	5411.47
	15637.00	92.06	182.28	10330.85	5486.53	-5489.54	-416.89	3.61	392951.99	769477.97	N 32 4 41.39	W 103 35 48.30	184.34	5505.35
	15677.00	92.12	182.21	10329.39	5526.46	-5529.48	-418.46	0.23	392912.05	769476.41	N 32 4 40.99	W 103 35 48.33	184.33	5545.30
	15775.00	90.78	180.44	10326.91	5624.38	-5627.42	-420.72	2.26	392814.12	769474.14	N 32 4 40.03	W 103 35 48.36	184.28	5643.13
	15870.00	91.54	180.59	10324.99	5719.35	-5722.40	-421.57	0.82	392719.14	769473.29	N 32 4 39.09	W 103 35 48.38	184.21	5737.90
	15964.00	91.63	179.91	10322.39	5813.30	-5816.36	-421.98	0.73	392625.18	769472.88	N 32 4 38.16	W 103 35 48.39	184.15	5831.65
	16055.00	92.00	180.00	10319.51	5904.26	-5907.31	-421.91	0.42	392534.23	769472.95	N 32 4 37.26	W 103 35 48.40	184.09	5922.36
	16149.00	89.59	176.62	10318.20	5998.20	-6001.24	-419.14	4.42	392440.31	769475.72	N 32 4 36.33	W 103 35 48.37	184.00	6015.86
	16244.00	89.23	176.08	10319.18	6093.04	-6096.04	-413.09	0.68	392345.51	769481.77	N 32 4 35.39	W 103 35 48.31	183.88	6110.03
	16338.00	88.74	177.69	10320.85	6186.92	-6189.89	-407.99	1.79	392251.67	769486.88	N 32 4 34.46	W 103 35 48.26	183.77	6203.32
Private - NMNM0106040 4 Crossing [1896' FWL]	16364.60	88.76	178.14	10321.43	6213.50	-6216.46	-407.02	1.71	392225.09	769487.84	N 32 4 34.20	W 103 35 48.25	183.75	6229.77
	16433.00	88.80	179.31	10322.89	6281.88	-6284.83	-405.50	1.71	392156.73	769489.36	N 32 4 33.52	W 103 35 48.24	183.69	6297.90
	16527.00	88.76	178.29	10324.89	6375.85	-6378.79	-403.53	1.09	392062.77	769491.33	N 32 4 32.59	W 103 35 48.22	183.62	6391.54
	16621.00	88.74	178.60	10326.94	6469.80	-6472.73	-400.98	0.33	391968.83	769493.88	N 32 4 31.66	W 103 35 48.20	183.54	6485.14
	16716.00	88.64	179.41	10329.11	6564.77	-6567.69	-399.33	0.86	391873.88	769495.53	N 32 4 30.72	W 103 35 48.19	183.48	6579.82
	16810.00	89.29	178.32	10330.81	6658.75	-6661.65	-397.47	1.35	391779.92	769497.39	N 32 4 29.79	W 103 35 48.17	183.41	6673.50
	16905.00	89.11	178.58	10332.13	6753.72	-6756.61	-394.90	0.33	391684.96	769499.96	N 32 4 28.85	W 103 35 48.15	183.34	6768.14
	16999.00	89.05	178.70	10333.64	6847.69	-6850.57	-392.67	0.14	391591.01	769502.19	N 32 4 27.92	W 103 35 48.13	183.28	6861.82
	17093.00	89.23	178.69	10335.05	6941.67	-6944.54	-390.53	0.19	391497.04	769504.33	N 32 4 26.99	W 103 35 48.11	183.22	6955.51
	17188.00	89.41	179.37	10336.18	7036.66	-7039.52	-388.92	0.74	391402.07	769505.94	N 32 4 26.05	W 103 35 48.10	183.16	7050.25
	17282.00	89.72	178.91	10336.90	7130.65	-7133.50	-387.51	0.59	391308.08	769507.35	N 32 4 25.12	W 103 35 48.09	183.11	7144.02
	17376.00	89.61	179.28	10337.45	7224.65	-7227.49	-386.03	0.41	391214.10	769508.84	N 32 4 24.19	W 103 35 48.08	183.06	7237.79
	17471.00	89.76	178.74	10337.97	7319.64	-7322.47	-384.39	0.59	391119.12	769510.48	N 32 4 23.25	W 103 35 48.07	183.00	7332.55
	17565.00	89.75	178.39	10338.37	7413.62	-7416.44	-382.03	0.37	391025.15	769512.83	N 32 4 22.32	W 103 35 48.05	182.95	7426.27
	17660.00	89.79	179.02	10338.75	7508.61	-7511.42	-379.88	0.66	390930.18	769514.98	N 32 4 21.38	W 103 35 48.04	182.90	7521.02
NMNM0106040 4 - NMNM0160973 Crossing [1914' FWL]	17687.30	90.30	179.21	10338.73	7535.91	-7538.71	-379.46	2.01	390902.89	769515.40	N 32 4 21.11	W 103 35 48.03	182.88	7548.26
	17754.00	91.56	179.67	10337.64	7602.60	-7605.40	-378.81	2.01	390836.20	769516.05	N 32 4 20.45	W 103 35 48.03	182.85	7614.83
	17849.00	89.97	179.26	10336.38	7697.59	-7700.38	-377.92	1.73	390741.22	769516.94	N 32 4 19.51	W 103 35 48.03	182.81	7709.65
	17943.00	89.74	179.10	10336.61	7791.58	-7794.37	-376.58	0.30	390647.23	769518.29	N 32 4 18.58	W 103 35 48.02	182.77	7803.47
	18037.00	89.91	178.41	10336.90	7885.57	-7888.35	-374.53	0.76	390553.26	769520.33	N 32 4 17.65	W 103 35 48.00	182.72	7897.24
	18132.00	89.62	178.39	10337.29	7980.55	-7983.31	-371.88	0.31	390458.30	769522.98	N 32 4 16.71	W 103 35 47.98	182.67	7991.97
	18226.00	90.47	178.44	10337.22	8074.53	-8077.28	-369.28	0.91	390364.34	769525.58	N 32 4 15.78	W 103 35 47.96	182.62	8085.71
	18321.00	90.13	178.82	10336.72	8169.52	-8172.25	-367.01	0.54	390269.37	769527.85	N 32 4 14.84	W 103 35 47.94	182.57	8180.48
	18415.00	90.13	181.13	10336.51	8263.51	-8266.24	-366.97	2.46	390175.38	769527.89	N 32 4 13.91	W 103 35 47.94	182.54	8274.38
	18509.00	90.17	180.54	10336.26	8357.48	-8360.23	-368.34	0.63	390081.40	769526.52	N 32 4 12.98	W 103 35 47.97	182.52	8368.34
	18604.00	89.59	180.89	10336.46	8452.47	-8455.22	-369.53	0.71	389986.41	769525.34	N 32 4 12.04	W 103 35 47.99	182.50	8463.29
	18699.00	90.03	181.27	10336.77	8547.43	-8550.20	-371.32	0.61	389891.43	769523.55	N 32 4 11.10	W 103 35 48.02	182.49	8558.26
	18793.00	89.65	181.78	10337.04	8641.38	-8644.17	-373.82	0.68	389797.47	769521.04	N 32 4 10.17	W 103 35 48.05	182.48	8652.25
	18887.00	88.36	181.65	10338.67	8735.30	-8738.11	-376.63	1.38	389703.53	769518.23	N 32 4 9.24	W 103 35 48.09	182.47	8746.22
	18982.00	89.74	180.36	10340.24	8830.25	-8833.08	-378.30	1.99	389608.56	769516.57	N 32 4 8.30	W 103 35 48.12	182.45	8841.18
	19076.00	89.84	180.47	10340.59	8924.24	-8927.08	-378.98	0.16	389514.57	769515.89	N 32 4 7.37	W 103 35 48.14	182.43	8935.12
	19170.00	89.53	182.00	10341.10	9018.20	-9021.05	-381.00	1.66	389420.60	769513.86	N 32 4 6.44	W 103 35 48.17	182.42	9029.09
	19265.00	90.07	182.23	10341.44	9113.11	-9115.98	-384.51	0.62	389325.67	769510.35	N 32 4 5.50	W 103 35 48.22	182.42	9124.09
	19359.00	90.43	179.43	10341.03	9207.08	-9209.96	-385.87	3.00	389231.69	769508.99	N 32 4 4.57	W 103 35 48.24	182.40	9218.04
	19453.00	91.18	178.91	10339.71	9301.06	-9303.94	-384.51	0.97	389137.71	769510.35	N 32 4 3.64	W 103 35 48.23	182.37	9311.89
	19548.00	90.43	178.99	10338.37	9396.05	-9398.92	-382.77	0.79	389042.74	769512.09	N 32 4 2.70	W 103 35 48.22	182.33	9406.71
	19642.00	90.36	178.93	10337.72	9490.04	-9492.90	-381.06	0.10	388948.76	769513.80	N 32 4 1.77	W 103 35 48.21	182.30	9500.55
	19736.00	90.29	178.86	10337.19	9584.03	-9586.88	-379.25	0.11	388854.79	769515.61	N 32 4 0.84	W 103 35 48.19	182.27	9594.38
	19830.00	90.14	178.07	10336.84	9678.01	-9680.85	-376.73	0.86	388760.82	769518.13	N 32 3 59.91	W 103 35 48.17	182.23	9688.17
	19924.00	90.32	178.08	10336.46	9771.98	-9774.79	-373.57	0.19	388666.88	769521.29	N 32 3 58.98	W 103 35 48.14	182.19	9781.93

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")	Closure Azimuth (°)	Closure (ft)
	20017.00	90.58	178.18	10335.73	9864.94	-9867.74	-370.54	0.30	388573.94	769524.32	N 32 3 58.06	W 103 35 48.11	182.15	9874.69
	20108.00	90.34	178.00	10335.00	9955.91	-9958.69	-367.51	0.33	388482.99	769527.36	N 32 3 57.16	W 103 35 48.09	182.11	9965.46
Last Take Point [145' FSL, 1910' FWL]	20175.00	90.25	178.52	10334.66	10022.89	-10025.65	-365.47	0.79	388416.03	769529.39	N 32 3 56.50	W 103 35 48.07	182.09	10032.31
Final Survey	20193.00	90.22	178.66	10334.58	10040.89	-10043.65	-365.03	0.79	388398.03	769529.83	N 32 3 56.32	W 103 35 48.06	182.08	10050.28
TD, PTB [100' FSL, 1911' FWL]	20220.00	90.22	178.66	10334.48	10067.88	-10070.64	-364.40	0.00	388371.04	769530.46	N 32 3 56.06	W 103 35 48.06	182.07	10077.23

Survey Type: Def Survey

Survey Error Model: ISCWSA Rev 0 *** 3-D 95.000% Confidence 2.7955 sigma
Survey Program:

Description	Part	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size (in)	Casing Diameter (in)	Survey Tool Type	Borehole / Survey
	1	0.000	26.000	1/98.425	17.500	13.375	NAL_MWD_IFR1+MS-Depth Only	Red Hills 32-5 Fed Com #157H / Final Surveys - Cimarex Red Hills 32-5 Fed Com #157H MWD 0ft- Red Hills 32-5 Fed Com #157H / Final Surveys - Cimarex Red Hills 32-5 Fed Com #157H MWD 0ft- Red Hills 32-5 Fed Com #157H / Final Surveys - Cimarex Red Hills
	1	26.000	26.000	Act Stns	17.500	13.375	NAL_MWD_IFR1+MS-Depth Only	Red Hills 32-5 Fed Com #157H / Final Surveys - Cimarex Red Hills 32-5 Fed Com #157H MWD 0ft- Red Hills 32-5 Fed Com #157H / Final Surveys - Cimarex Red Hills
	1	26.000	1047.000	Act Stns	17.500	13.375	NAL_MWD_IFR1+MS	Red Hills 32-5 Fed Com #157H / Final Surveys - Cimarex Red Hills Red Hills 32-5 Fed Com #157H / Final Surveys - Cimarex Red Hills
	1	1047.000	4895.000	Act Stns	12.250	9.625	NAL_MWD_IFR1+MS	Red Hills 32-5 Fed Com #157H / Final Surveys - Cimarex Red Hills Red Hills 32-5 Fed Com #157H / Final Surveys - Cimarex Red Hills
	1	4895.000	10675.000	Act Stns	8.750	7.000	NAL_MWD_IFR1+MS	Red Hills 32-5 Fed Com #157H / Final Surveys - Cimarex Red Hills Red Hills 32-5 Fed Com #157H / Final Surveys - Cimarex Red Hills
	1	10675.000	20220.000	Act Stns	8.500	7.000	NAL_MWD_IFR1+MS	Red Hills 32-5 Fed Com #157H / Final Surveys - Cimarex Red Hills



Grid



True Mag

CONTROLLED

D E C

Plan ref	Final Surveys - Cimarosa Road Hills 33-3 Fed Com #157H
Drawing ref	MWD DR-202209 (Surcon Corrected)
Copy number	_____ of 3
Date	17-Dec-2020

Grid North

Tot Corr (M->G 6.182°)

Mag Dec (6.574°)

Grid Conv (0.392°)

1	Client	
2	Client	
3	Office	
4	Office	
Copy number _____ for _____		



Intent ☐ As Drilled ☐

API #		
Operator Name:	Property Name:	Well Number

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Latitude					Longitude				NAD

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Latitude					Longitude				NAD

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Latitude					Longitude				NAD

Is this well the defining well for the Horizontal Spacing Unit? ☐Is this well an infill well? ☐

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API #		
Operator Name:	Property Name:	Well Number

KZ 06/29/2018

Well Name: RED HILLS 32-5 FEDERAL COM	Well Location: T25S / R33E / SEC 32 / NENW / 32.093245 / -103.595284	County or Parish/State: LEA / NM
Well Number: 157H	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMNM0106040A	Unit or CA Name:	Unit or CA Number:
US Well Number: 300254632600X1	Well Status: Approved Application for Permit to Drill	Operator: CIMAREX ENERGY COMPANY OF COLORADO

Subsequent Report

Type of Submission: Subsequent Report	Type of Action: Hydraulic Fracturing
Date Sundry Submitted: 02/08/2021	Time Sundry Submitted: 12:56
Date Operation Actually Began: 10/05/2020	

Actual Procedure: Cimarex completed this well as follows: 09/16/2020 Squeeze 869 sxs of Class C cmt, 8.3 ppg, 3.1 yld. 09/18/2020 Run logs, TOC @ 4000'. 09/20/2020 Test csg to 9500 psi for 30 min. Good test. 10/05/2020 to 10/23/2020 Perf Bone Spring @ 10,358'-20,175', 1026 holes, .42". Frac w/ 416,506 bbls total fluid & 20,985,399# sand. 11/23/2020 DO plugs. 11/24/2020 Finish DO plugs & CO to PBTD @ 20,206'. SI well. 11/30/2020 Turn to production.

Operator Certification

I certify that the foregoing is true and correct. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction. Electronic submission of Sundry Notices through this system satisfies regulations requiring a submission of Form 3160-5 or a Sundry Notice.

Operator Electronic Signature: VASQUEZ	Signed on: FEB 08, 2021 12:52 PM
Name: CIMAREX ENERGY COMPANY OF COLORADO	
Title: Regulatory Analyst	
Street Address: 600 N MARIENFELD STREET SUITE 600	
City: MIDLAND	State: TX
Phone: (432) 571-7800	
Email address: TSTATHEM@CIMAREX.COM	

Field Representative

Representative Name: Fatima Vasquez		
Street Address: 600 N Marienfeld St., Suite 600		
City: Midland	State: TX	Zip: 79701
Phone: (432)620-1933		
Email address: fvasquez@cimarex.com		

Received by OCD: 3/11/2021 6:39:17 PM

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Well Name: RED HILLS 32-5 FEDERAL COM	Well Location: T25S / R33E / SEC 32 / NENW / 32.093245 / -103.595284	County or Parish/State: LEA / NM
Well Number: 157H	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMNM0106040A	Unit or CA Name:	Unit or CA Number:
US Well Number: 300254632600X1	Well Status: Approved Application for Permit to Drill	Operator: CIMAREX ENERGY COMPANY OF COLORADO

BLM Point of Contact

BLM POC Name: Jonathon W Shepard

BLM POC Phone: 5752345972

Disposition: Accepted

Signature: Jonathon Shepard

BLM POC Title: Petroleum Engineer

BLM POC Email Address: jshepard@blm.gov

Disposition Date: 02/11/2021

Submit To Appropriate District Office Two Copies <u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 <u>District II</u> 811 S. First St., Artesia, NM 88210 <u>District III</u> 1000 Rio Brazos Rd., Aztec, NM 87410 <u>District IV</u> 1220 S. St. Francis Dr., Santa Fe, NM 87505		State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505				Form C-105 Revised April 3, 2017														
WELL COMPLETION OR RECOMPLETION REPORT AND LOG																				
4. Reason for filing: ☐ COMPLETION REPORT (Fill in boxes #1 through #31 for State and Fee wells only) ☐ C-144 CLOSURE ATTACHMENT (Fill in boxes #1 through #9, #15 Date Rig Released and #32 and/or #33; attach this and the plat to the C-144 closure report in accordance with 19.15.17.13.K NMAC)								1. WELL API NO. 2. Type of Lease ☐ STATE ☐ FEE ☐ FED/INDIAN 3. State Oil & Gas Lease No.												
7. Type of Completion: ☐ NEW WELL ☐ WORKOVER ☐ DEEPENING ☐ PLUGBACK ☐ DIFFERENT RESERVOIR ☐ OTHER _____								5. Lease Name or Unit Agreement Name 6. Well Number:												
8. Name of Operator						9. OGRID														
10. Address of Operator						11. Pool name or Wildcat														
12. Location	Unit Ltr	Section	Township	Range	Lot	Feet from the	N/S Line	Feet from the	E/W Line	County										
Surface:																				
BH:																				
13. Date Spudded		14. Date T.D. Reached		15. Date Rig Released		16. Date Completed (Ready to Produce)		17. Elevations (DF and RKB, RT, GR, etc.)												
18. Total Measured Depth of Well				19. Plug Back Measured Depth		20. Was Directional Survey Made?		21. Type Electric and Other Logs Run												
22. Producing Interval(s), of this completion - Top, Bottom, Name																				
23. CASING RECORD (Report all strings set in well)																				
CASING SIZE		WEIGHT LB./FT.		DEPTH SET		HOLE SIZE		CEMENTING RECORD		AMOUNT PULLED										
24. LINER RECORD						25. TUBING RECORD														
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET	PACKER SET													
26. Perforation record (interval, size, and number)					27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC. <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th style="width:50%;">DEPTH INTERVAL</th> <th style="width:50%;">AMOUNT AND KIND MATERIAL USED</th> </tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </table>						DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED								
DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED																			
28. PRODUCTION																				
Date First Production		Production Method (<i>Flowing, gas lift, pumping - Size and type pump</i>)				Well Status (<i>Prod. or Shut-in</i>)														
Date of Test	Hours Tested	Choke Size	Prod'n For Test Period	Oil - Bbl	Gas - MCF	Water - Bbl.	Gas - Oil Ratio													
Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API - (<i>Corr.</i>)														
29. Disposition of Gas (<i>Sold, used for fuel, vented, etc.</i>)							30. Test Witnessed By													
31. List Attachments																				
32. If a temporary pit was used at the well, attach a plat with the location of the temporary pit.								33. Rig Release Date:												
34. If an on-site burial was used at the well, report the exact location of the on-site burial:																				
Latitude _____ Longitude _____ NAD83																				
<i>I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief</i>																				
Signature <i>Fatima Vasquez</i>			Printed Name			Title			Date											
E-mail Address																				

This form is to be filed with the appropriate District Office of the Division not later than 20 days after the completion of any newly-drilled or deepened well and not later than 60 days after completion of closure. When submitted as a completion report, this shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, items 11, 12 and 26-31 shall be reported for each zone.

Southeastern New Mexico		Northwestern New Mexico	
T. Anhy	T. Canyon	T. Ojo Alamo	T. Penn A "
T. Salt	T. Strawn	T. Kirtland	T. Penn. "B"
B. Salt	T. Atoka	T. Fruitland	T. Penn. "C"
T. Yates	T. Miss	T. Pictured Cliffs	T. Penn. "D"
T. 7 Rivers	T. Devonian	T. Cliff House	T. Leadville
T. Queen	T. Silurian	T. Menefee	T. Madison
T. Grayburg	T. Montoya	T. Point Lookout	T. Elbert
T. San Andres	T. Simpson	T. Mancos	T. McCracken
T. Glorieta	T. McKee	T. Gallup	T. Ignacio Otzte
T. Paddock	T. Ellenburger	Base Greenhorn	T.Granite
T. Blinebry	T. Gr. Wash	T. Dakota	
T.Tubb	T. Delaware Sand	T. Morrison	
T. Drinkard	T. Bone Springs	T.Todilto	
T. Abo	T.	T. Entrada	
T. Wolfcamp	T.	T. Wingate	
T. Penn	T.	T. Chinle	
T. Cisco (Bough C)	T.	T. Permian	

No. 1, from.....to.....
No. 2, from.....to.....
No. 3, from.....to.....
No. 4, from.....to.....

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from.....to.....feet.....
 No. 2, from.....to.....feet.....
 No. 3, from.....to.....feet.....

From	To	Thickness In Feet	Lithology

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 20611

CONDITIONS OF APPROVAL

Operator:		OGRID:	Action Number:	Action Type:
CIMAREX ENERGY CO. OF COLORADO	600 N. Marienfeld Street	162683	20611	C-104C
Suite 600	Midland, TX79701			

OCD Reviewer	Condition
ksimmons	None