District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-104
Revised August 1, 2011

Submit one copy to appropriate District Office

☐ AMENDED REPORT

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

[1] Operator name and Address	[2] OGRID Number
Cimarex Energy Company 600 N Marienfeld St, Suite 600 Midland, TX 79701	215099
	[3] Reason for Filing Code/ Effective Date NW - 3/13/23

[4] API Number	[5] Pool Name	[6] Pool Code
30 - 0 025-50143	WC-025 G-08 S253235G;LWR BONE SPRING	97903

[7] Property Code	[8] Property Name	[9] Well Number
319775	VACA DRAW 20 17 FEDERAL	46H

II. [10] Surface Location

Ul or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South Line	Feet from the	East/West line	County
O	20	25S	33E		330	South	2060	East	Lea

[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
B	17	25S	33E		101	North	1898	East	Lea

[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
F	F	3/13/23			

III. Oil and Gas Transporters

[18] Transporter OGRID	[19] Transporter Name and Address	[20] O/G/W
320009	Enlink Midstream Operating, LP	G
267255	Energy Transfer Partners, LP	O

IV. Well Completion Data

[21] Spud Date	[22] Ready Date	[23] TD	[24] PBTD	[25] Perforations	[26] DHC, MC
8/25/22	3/13/23	20557	20528	10713 - 20498	

[27] Hole Size	[28] Casing & Tubing Size	[29] Depth Set	[30] Sacks Cement
17 1/2	13 3/8	1026	1024 sx; TOC 0
12 1/4	9 5/8	4947	2536 sx; TOC 0
8 3/4 6	7 4 1/2	10540 8777-20547	800 sx; TOC 2491 709 sx; TOC 9971
	3 1/2	8730	

V. Well Test Data

[31] Date New Oil	[32] Gas Delivery Date	[33] Test Date	[34] Test Length	[35] Tbg. Pressure	[36] Csg. Pressure
3/13/23	3/13/23	3/31/23	24	236	
[37] Choke Size	**[38] Oil**	**[39] Water**	**[40] Gas**		**[41] Test Method**
	695	2842	1165		Flowing

[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: Sarah Jordan

Printed name: Sarah Jordan

Title: Regulatory Analyst

E-mail Address: sarah.jordan@coterra.com

Date: 5/2/23 Phone: 432/620-1909

OIL CONSERVATION DIVISION

Approved by:

Title:

Approval Date:

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	[2] Pool Code	[3] Pool Name

[4] Property Code	[5] Property Name	[6] Well Number
	VACA DRAW 20-17 FEDERAL	46H
[7] OGRID No.	[8] Operator Name	[9] Elevation
	CIMAREX ENERGY CO.	3406.1'

[10] Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	20	25S	33E		330	SOUTH	2060	EAST	LEA

[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	17	25S	33E		101	NORTH	1898	EAST	LEA

[12] Dedicated Acres	[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.

[16]

● = SURFACE HOLE LOCATION
◇ = AS-DRILLED KOP/FTP/LTP
○ = AS-DRILLED BOTTOM HOLE LOCATION
▲ = SECTION CORNER LOCATED

2000' 1000' 0' 2000'

SCALE
DRAWN BY: Z.L. 02-08-23

NAD 83 (SURFACE HOLE LOCATION)
LATITUDE = 32°06'35.06" (32.109738°)
LONGITUDE = 103°35'32.72" (103.592422°)
NAD 27 (SURFACE HOLE LOCATION)
LATITUDE = 32°06'34.61" (32.109613°)
LONGITUDE = 103°35'31.02" (103.591950°)
STATE PLANE NAD 83 (N.M. EAST)
N: 404447.51' E: 770740.15'
STATE PLANE NAD 27 (N.M. EAST)
N: 404389.73' E: 729553.98'

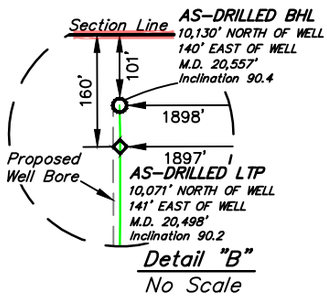
NAD 83 (AS-DRILLED KOP)
LATITUDE = 32°06'32.19" (32.108941°)
LONGITUDE = 103°35'31.12" (103.591977°)
NAD 27 (AS-DRILLED KOP)
LATITUDE = 32°06'31.74" (32.108817°)
LONGITUDE = 103°35'29.42" (103.591505°)
STATE PLANE NAD 83 (N.M. EAST)
N: 404158.66' E: 770879.88'
STATE PLANE NAD 27 (N.M. EAST)
N: 404100.89' E: 729693.69'

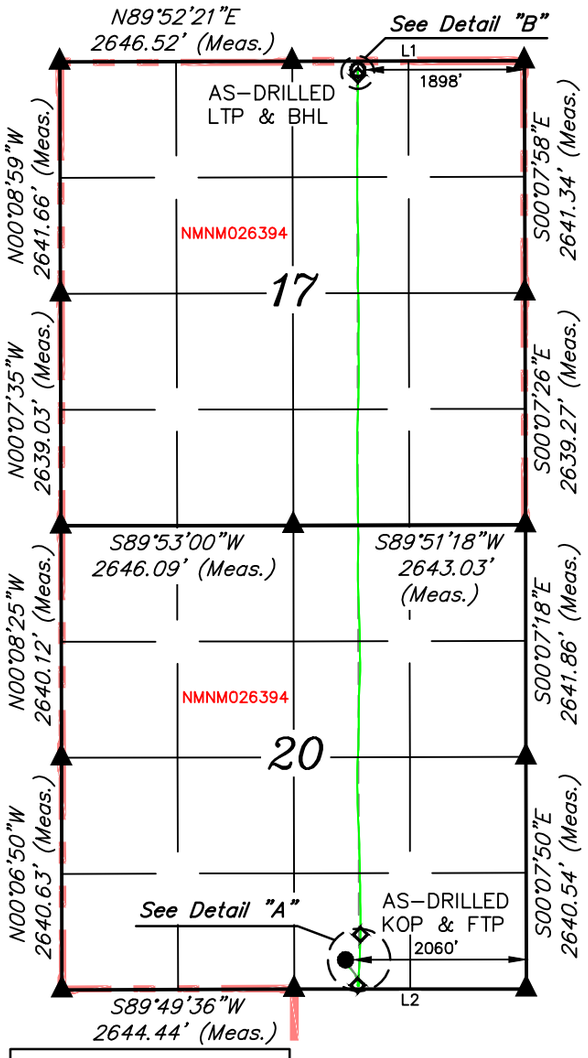
NAD 83 (AS-DRILLED FTP)
LATITUDE = 32°06'37.92" (32.110533°)
LONGITUDE = 103°35'30.73" (103.591870°)
NAD 27 (AS-DRILLED FTP)
LATITUDE = 32°06'37.47" (32.110408°)
LONGITUDE = 103°35'29.03" (103.591398°)
STATE PLANE NAD 83 (N.M. EAST)
N: 404737.73' E: 770909.02'
STATE PLANE NAD 27 (N.M. EAST)
N: 404679.94' E: 729722.86'

NAD 83 (AS-DRILLED LTP)
LATITUDE = 32°08'14.69" (32.137415°)
LONGITUDE = 103°35'30.77" (103.591880°)
NAD 27 (AS-DRILLED LTP)
LATITUDE = 32°08'14.25" (32.137291°)
LONGITUDE = 103°35'29.06" (103.591406°)
STATE PLANE NAD 83 (N.M. EAST)
N: 414517.26' E: 770838.57'
STATE PLANE NAD 27 (N.M. EAST)
N: 414459.23' E: 729652.87'

NAD 83 (AS-DRILLED BOTTOM HOLE)
LATITUDE = 32°08'15.28" (32.137577°)
LONGITUDE = 103°35'30.77" (103.591881°)
NAD 27 (AS-DRILLED BOTTOM HOLE)
LATITUDE = 32°08'14.83" (32.137453°)
LONGITUDE = 103°35'29.07" (103.591407°)
STATE PLANE NAD 83 (N.M. EAST)
N: 414576.26' E: 770837.85'
STATE PLANE NAD 27 (N.M. EAST)
N: 414518.22' E: 729652.15'

NOTE:
- Distances referenced on plat to section lines are perpendicular.
- Basis of Bearing is a Transverse Mercator Projection with a Central Meridian of W103°53'00"
- As-Drilled well head ha not been field verified.
- Well Bore data provided by Cimarex Energy, Co.





LINE TABLE		
LINE	DIRECTION	LENGTH
L1	N89°52'03"E	2643.50'
L2	S89°56'49"W	2644.60'

[17] OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature Date

Printed Name

E-mail Address

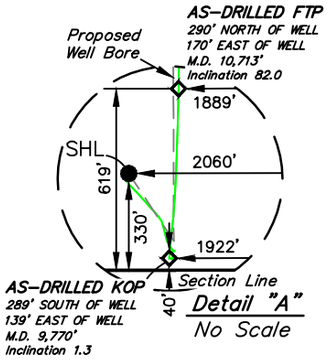
[18] SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

July 25, 2018
Date of Survey
Signature and Seal of Professional Surveyor:



Certificate Number:



Received by OCD: 5/2/2023 3:28:24 PM
Released to Imaging: 7/7/2026 1:14:45 PM

COMPANY	Coterra Energy
FIELD	Lea County, NM (NAD 83)
SITE	Vaca Draw 20-17 Federal Pad
WELL	Vaca Draw 20-17 Federal #46H
WELLPATH	Wellbore #1
DESIGN	Surveys
DEPTHUNT	(usft)

WELL INFO	
MAP DATUM	North American Datum 1983
MAP SYSTEM	US State Plane 1983
MAP ZONE	New Mexico Eastern Zone
WELL LAT	32.109738
WELL LON	-103.592422
WELL EW MAI	770740.15
WELL NS MAP	404447.5
CONVERGENC	0.39
MAGMODEL	HDGM2022
DECLINATION	6.3
NORTH REF	Grid
GROUND ELEV	3406.1
KB ELEVN	3428.1
VS AZI	359.63

SURVEY PROGRAM

1 217.00 - 20557.00 SURVEY #1 : MWD+IFR1+MS

SURVEY LIST

Measured Dep	Inclination	Azimuth	Course Length	True Vertical D	SubSea TVD	Local N/-S
MD	INC	AZI	CL	TVD	SSTVD	NS
0.00	0.00	0.00	0.00	0.00	3428.10	0.00
217.00	0.69	294.88	217.00	217.00	3211.11	0.55
397.00	0.56	283.46	180.00	396.98	3031.12	1.21
488.00	0.46	256.41	91.00	487.98	2940.12	1.23
579.00	0.45	257.21	91.00	578.98	2849.12	1.06
669.00	0.47	259.97	90.00	668.98	2759.13	0.92
760.00	0.55	255.88	91.00	759.97	2668.13	0.75
943.00	0.73	259.37	183.00	942.96	2485.14	0.32
970.00	0.66	265.20	27.00	969.96	2458.14	0.28
1137.00	1.21	256.20	167.00	1136.94	2291.17	-0.23
1232.00	1.20	248.91	95.00	1231.91	2196.19	-0.82
1326.00	1.37	248.17	94.00	1325.89	2102.21	-1.60
1420.00	1.53	251.39	94.00	1419.86	2008.24	-2.41
1514.00	1.57	248.78	94.00	1513.83	1914.27	-3.28

1608.00	1.17	235.65	94.00	1607.80	1820.30	-4.29
1702.00	1.53	170.21	94.00	1701.78	1726.32	-6.07
1796.00	3.24	147.90	94.00	1795.70	1632.41	-9.55
1890.00	5.21	141.78	94.00	1889.44	1538.67	-15.16
1984.00	6.28	140.85	94.00	1982.96	1445.14	-22.50
2078.00	6.30	139.12	94.00	2076.40	1351.70	-30.38
2172.00	6.41	138.47	94.00	2169.82	1258.28	-38.21
2267.00	6.58	137.82	95.00	2264.21	1163.89	-46.22
2361.00	6.73	136.13	94.00	2357.58	1070.53	-54.18
2455.00	6.92	134.43	94.00	2450.91	977.19	-62.11
2549.00	7.35	136.93	94.00	2544.18	883.92	-70.47
2643.00	7.69	137.39	94.00	2637.37	790.73	-79.49
2737.00	7.80	136.21	94.00	2730.52	697.59	-88.72
2832.00	7.30	138.75	95.00	2824.69	603.41	-97.91
2926.00	6.55	141.24	94.00	2918.01	510.10	-106.59
3020.00	6.66	137.60	94.00	3011.38	416.72	-114.79
3114.00	6.80	135.05	94.00	3104.73	323.37	-122.76
3208.00	6.83	135.69	94.00	3198.07	230.03	-130.69
3303.00	6.60	142.65	95.00	3292.42	135.68	-139.08
3397.00	6.53	140.13	94.00	3385.80	42.30	-147.47
3491.00	6.08	145.34	94.00	3479.24	-51.14	-155.67
3585.00	5.62	161.34	94.00	3572.75	-144.65	-164.13
3679.00	5.71	161.43	94.00	3666.29	-238.19	-172.92
3773.00	5.12	165.04	94.00	3759.87	-331.77	-181.40
3867.00	4.71	162.53	94.00	3853.53	-425.43	-189.14
4056.00	4.91	167.22	189.00	4041.86	-613.76	-204.43
4151.00	4.92	169.64	95.00	4136.51	-708.41	-212.40
4245.00	5.16	164.83	94.00	4230.15	-802.05	-220.44
4340.00	4.78	156.89	95.00	4324.79	-896.69	-228.21
4434.00	3.89	151.55	94.00	4418.53	-990.43	-234.61
4528.00	4.63	152.33	94.00	4512.26	-1084.16	-240.78
4621.00	5.00	150.42	93.00	4604.94	-1176.84	-247.63
4715.00	3.59	144.28	94.00	4698.67	-1270.57	-253.58
4810.00	2.19	129.62	95.00	4793.55	-1365.45	-257.15
4880.00	2.24	128.68	70.00	4863.50	-1435.40	-258.86
4972.00	2.18	127.31	92.00	4955.43	-1527.33	-261.04
5065.00	1.84	125.81	93.00	5048.37	-1620.27	-262.99
5159.00	0.08	27.45	94.00	5142.35	-1714.25	-263.81
5253.00	0.21	0.02	94.00	5236.35	-1808.25	-263.58
5348.00	0.21	352.16	95.00	5331.35	-1903.25	-263.24
5442.00	0.16	337.10	94.00	5425.35	-1997.25	-262.95
5535.00	0.09	248.27	93.00	5518.35	-2090.25	-262.85
5629.00	0.06	261.63	94.00	5612.35	-2184.25	-262.89
5724.00	0.20	21.77	95.00	5707.35	-2279.25	-262.74

5818.00	0.15	52.77	94.00	5801.35	-2373.25	-262.51
5912.00	0.19	350.27	94.00	5895.35	-2467.25	-262.29
6006.00	0.09	249.84	94.00	5989.35	-2561.25	-262.16
6100.00	0.23	248.27	94.00	6083.35	-2655.25	-262.25
6194.00	0.28	249.94	94.00	6177.35	-2749.25	-262.40
6288.00	0.32	266.82	94.00	6271.35	-2843.25	-262.49
6382.00	0.34	281.13	94.00	6365.35	-2937.25	-262.46
6476.00	0.28	258.74	94.00	6459.35	-3031.25	-262.45
6570.00	0.32	286.85	94.00	6553.34	-3125.24	-262.42
6665.00	0.38	266.15	95.00	6648.34	-3220.24	-262.36
6759.00	0.34	271.28	94.00	6742.34	-3314.24	-262.37
6853.00	0.34	239.28	94.00	6836.34	-3408.24	-262.51
6948.00	0.45	236.91	95.00	6931.34	-3503.24	-262.86
7042.00	0.62	201.53	94.00	7025.33	-3597.23	-263.53
7137.00	0.79	195.50	95.00	7120.33	-3692.23	-264.64
7232.00	1.04	179.53	95.00	7215.31	-3787.21	-266.13
7326.00	1.28	183.06	94.00	7309.30	-3881.20	-268.04
7420.00	1.22	175.39	94.00	7403.27	-3975.17	-270.08
7515.00	1.44	181.36	95.00	7498.25	-4070.15	-272.28
7609.00	1.76	190.01	94.00	7592.21	-4164.11	-274.89
7703.00	1.85	181.81	94.00	7686.16	-4258.06	-277.82
7798.00	1.71	179.14	95.00	7781.12	-4353.02	-280.77
7892.00	1.71	189.37	94.00	7875.08	-4446.98	-283.56
7987.00	1.75	188.24	95.00	7970.03	-4541.93	-286.39
8081.00	0.47	189.59	94.00	8064.01	-4635.91	-288.20
8176.00	0.56	161.37	95.00	8159.01	-4730.91	-289.02
8270.00	0.74	169.76	94.00	8253.00	-4824.90	-290.05
8364.00	0.48	17.15	94.00	8347.00	-4918.90	-290.27
8458.00	0.47	42.69	94.00	8441.00	-5012.90	-289.61
8552.00	0.29	78.46	94.00	8535.00	-5106.90	-289.28
8647.00	0.58	129.72	95.00	8629.99	-5201.89	-289.54
8741.00	0.74	169.59	94.00	8723.99	-5295.89	-290.44
8835.00	0.36	297.77	94.00	8817.99	-5389.89	-290.90
8929.00	0.46	313.52	94.00	8911.98	-5483.88	-290.50
9023.00	0.49	262.54	94.00	9005.98	-5577.88	-290.30
9117.00	0.83	236.02	94.00	9099.97	-5671.87	-290.73
9212.00	1.22	251.62	95.00	9194.96	-5766.86	-291.43
9306.00	0.93	285.39	94.00	9288.94	-5860.84	-291.55
9400.00	1.29	326.40	94.00	9382.93	-5954.83	-290.46
9493.00	1.21	316.00	93.00	9475.91	-6047.81	-288.88
9587.00	0.83	302.91	94.00	9569.89	-6141.79	-287.80
9681.00	1.26	240.52	94.00	9663.88	-6235.78	-287.94
9705.00	1.35	232.23	24.00	9687.87	-6259.77	-288.24
9741.00	1.55	224.56	36.00	9723.86	-6295.76	-288.85

9788.00	1.20	338.56	47.00	9770.85	-6342.75	-288.84
9835.00	5.89	0.70	47.00	9817.75	-6389.65	-285.97
9883.00	10.68	5.04	48.00	9865.24	-6437.14	-279.07
9929.00	14.23	4.23	46.00	9910.15	-6482.05	-269.19
9976.00	17.97	5.11	47.00	9955.29	-6527.19	-256.20
10022.00	21.49	5.71	46.00	9998.59	-6570.49	-240.74
10070.00	25.57	6.24	48.00	10042.59	-6614.49	-221.69
10116.00	29.94	5.73	46.00	10083.28	-6655.18	-200.39
10163.00	34.51	5.08	47.00	10123.03	-6694.93	-175.44
10210.00	38.89	5.14	47.00	10160.71	-6732.61	-147.47
10257.00	43.65	4.03	47.00	10196.02	-6767.92	-116.58
10304.00	48.64	3.99	47.00	10228.58	-6800.48	-82.78
10397.00	57.50	2.18	93.00	10284.40	-6856.30	-8.63
10491.00	68.90	1.56	94.00	10326.72	-6898.62	75.10
10619.00	78.16	1.37	128.00	10362.97	-6934.87	197.67
10713.00	81.98	1.23	94.00	10379.17	-6951.07	290.22
10807.00	86.10	0.30	94.00	10388.93	-6960.83	383.68
10901.00	87.56	359.14	94.00	10394.13	-6966.03	477.53
10994.00	87.52	357.95	93.00	10398.12	-6970.02	570.42
11087.00	86.93	359.44	93.00	10402.62	-6974.52	663.28
11181.00	86.57	359.35	94.00	10407.95	-6979.85	757.12
11275.00	87.63	358.22	94.00	10412.71	-6984.61	850.98
11368.00	88.01	359.69	93.00	10416.25	-6988.15	943.89
11462.00	88.52	358.42	94.00	10419.09	-6990.99	1037.84
11555.00	89.03	358.54	93.00	10421.08	-6992.98	1130.78
11650.00	90.81	357.87	95.00	10421.21	-6993.11	1225.73
11745.00	91.43	359.32	95.00	10419.36	-6991.26	1320.68
11840.00	90.18	356.90	95.00	10418.02	-6989.92	1415.61
11933.00	89.41	357.26	93.00	10418.35	-6990.25	1508.49
12027.00	87.67	355.53	94.00	10420.75	-6992.65	1602.27
12121.00	90.21	358.65	94.00	10422.49	-6994.39	1696.11
12214.00	90.55	359.25	93.00	10421.87	-6993.77	1789.09
12308.00	88.39	358.10	94.00	10422.74	-6994.64	1883.05
12403.00	90.07	359.68	95.00	10424.02	-6995.92	1978.02
12497.00	90.87	359.60	94.00	10423.25	-6995.15	2072.02
12591.00	89.93	359.90	94.00	10422.59	-6994.49	2166.01
12685.00	90.70	2.92	94.00	10422.07	-6993.97	2259.97
12779.00	90.63	2.30	94.00	10420.98	-6992.88	2353.87
12873.00	91.23	1.61	94.00	10419.46	-6991.36	2447.80
12966.00	91.11	1.39	93.00	10417.56	-6989.46	2540.75
13060.00	89.71	359.84	94.00	10416.89	-6988.79	2634.73
13154.00	88.04	0.02	94.00	10418.73	-6990.63	2728.71
13247.00	89.87	0.91	93.00	10420.43	-6992.33	2821.69
13341.00	90.35	0.85	94.00	10420.25	-6992.15	2915.68

13435.00	89.54	359.61	94.00	10420.34	-6992.24	3009.67
13529.00	91.30	3.49	94.00	10419.65	-6991.55	3103.62
13623.00	90.08	2.54	94.00	10418.52	-6990.42	3197.48
13717.00	88.95	1.16	94.00	10419.31	-6991.21	3291.42
13811.00	88.73	359.10	94.00	10421.22	-6993.12	3385.39
13905.00	88.15	359.14	94.00	10423.77	-6995.67	3479.35
13999.00	89.66	358.49	94.00	10425.57	-6997.47	3573.31
14093.00	89.83	359.41	94.00	10425.99	-6997.89	3667.29
14187.00	89.54	358.16	94.00	10426.51	-6998.41	3761.27
14281.00	90.15	357.42	94.00	10426.76	-6998.66	3855.19
14375.00	90.49	357.91	94.00	10426.23	-6998.13	3949.11
14469.00	89.92	357.42	94.00	10425.90	-6997.80	4043.03
14564.00	88.16	357.15	95.00	10427.49	-6999.39	4137.91
14658.00	87.89	357.48	94.00	10430.73	-7002.63	4231.75
14752.00	88.78	359.24	94.00	10433.46	-7005.36	4325.67
14847.00	89.64	0.17	95.00	10434.77	-7006.67	4420.66
14942.00	90.32	0.86	95.00	10434.80	-7006.70	4515.65
15035.00	90.27	0.67	93.00	10434.33	-7006.23	4608.64
15129.00	92.14	0.83	94.00	10432.35	-7004.25	4702.61
15223.00	90.14	359.93	94.00	10430.48	-7002.38	4796.58
15317.00	89.85	358.67	94.00	10430.49	-7002.39	4890.57
15411.00	88.52	358.43	94.00	10431.82	-7003.72	4984.53
15504.00	92.09	359.05	93.00	10431.33	-7003.23	5077.49
15598.00	90.13	359.60	94.00	10429.51	-7001.41	5171.46
15692.00	89.47	358.84	94.00	10429.84	-7001.74	5265.45
15785.00	88.70	358.50	93.00	10431.32	-7003.22	5358.42
15972.00	89.50	358.72	187.00	10434.26	-7006.16	5545.34
16066.00	88.43	359.77	94.00	10435.96	-7007.86	5639.31
16160.00	90.94	0.22	94.00	10436.47	-7008.37	5733.30
16255.00	89.66	359.73	95.00	10435.98	-7007.88	5828.30
16349.00	90.34	0.06	94.00	10435.98	-7007.88	5922.30
16443.00	89.66	0.50	94.00	10435.98	-7007.88	6016.29
16537.00	89.58	0.66	94.00	10436.60	-7008.50	6110.29
16631.00	91.13	2.39	94.00	10436.02	-7007.92	6204.25
16725.00	89.37	1.94	94.00	10435.61	-7007.51	6298.17
16819.00	89.76	0.84	94.00	10436.32	-7008.22	6392.14
16913.00	90.32	0.51	94.00	10436.25	-7008.15	6486.13
17006.00	90.69	1.15	93.00	10435.43	-7007.33	6579.12
17100.00	88.82	359.34	94.00	10435.84	-7007.74	6673.11
17195.00	89.21	359.28	95.00	10437.47	-7009.37	6768.09
17384.00	87.84	359.51	189.00	10442.33	-7014.23	6957.01
17478.00	85.92	359.91	94.00	10447.45	-7019.35	7050.87
17573.00	88.07	0.20	95.00	10452.43	-7024.33	7145.73
17667.00	90.60	0.53	94.00	10453.52	-7025.42	7239.71

17760.00	90.10	358.96	93.00	10452.95	-7024.85	7332.71
17949.00	90.97	358.71	189.00	10451.19	-7023.09	7521.66
18043.00	88.67	358.01	94.00	10451.48	-7023.38	7615.61
18138.00	89.59	358.42	95.00	10452.93	-7024.83	7710.56
18232.00	90.81	0.54	94.00	10452.60	-7024.50	7804.54
18326.00	91.19	1.43	94.00	10450.96	-7022.86	7898.51
18420.00	90.67	0.80	94.00	10449.43	-7021.33	7992.48
18514.00	91.27	359.69	94.00	10447.84	-7019.74	8086.47
18702.00	90.53	358.44	188.00	10444.89	-7016.79	8274.41
18796.00	91.22	358.07	94.00	10443.45	-7015.35	8368.36
18890.00	89.41	358.06	94.00	10442.94	-7014.84	8462.30
18984.00	89.26	358.50	94.00	10444.03	-7015.93	8556.25
19079.00	90.36	359.04	95.00	10444.34	-7016.24	8651.23
19172.00	88.50	359.63	93.00	10445.27	-7017.17	8744.21
19266.00	87.68	0.02	94.00	10448.40	-7020.30	8838.16
19360.00	89.13	359.47	94.00	10451.02	-7022.92	8932.12
19454.00	88.77	359.60	94.00	10452.74	-7024.64	9026.10
19642.00	88.95	0.55	188.00	10456.48	-7028.38	9214.06
19736.00	88.29	0.48	94.00	10458.74	-7030.64	9308.03
19831.00	91.68	1.37	95.00	10458.77	-7030.67	9403.00
19924.00	93.22	359.74	93.00	10454.79	-7026.69	9495.90
20018.00	91.34	0.71	94.00	10451.05	-7022.95	9589.82
20112.00	89.68	358.09	94.00	10450.22	-7022.12	9683.80
20206.00	91.37	0.72	94.00	10449.35	-7021.25	9777.78
20301.00	90.52	0.08	95.00	10447.79	-7019.69	9872.77
20395.00	89.20	0.34	94.00	10448.02	-7019.92	9966.76
20517.00	90.42	359.10	122.00	10448.42	-7020.32	10088.76
20557.00	90.42	359.10	40.00	10448.13	-7020.03	10128.75

Local E/-W	Easting	Northing	Latitude	Longitude	Dogleg Severit	Build Rate
EW	X	Y	LAT	LON	DLS	BLD
0.00	770740.15	404447.50	32.109738	-103.592422	0.00	0.00
-1.19	770738.97	404448.05	32.109740	-103.592425	0.32	0.32
-3.02	770737.13	404448.71	32.109741	-103.592431	0.10	-0.07
-3.81	770736.34	404448.73	32.109741	-103.592434	0.28	-0.11
-4.52	770735.64	404448.57	32.109741	-103.592436	0.01	-0.01
-5.22	770734.93	404448.42	32.109741	-103.592438	0.03	0.02
-6.01	770734.14	404448.25	32.109740	-103.592441	0.10	0.09
-8.01	770732.14	404447.82	32.109739	-103.592447	0.10	0.10
-8.34	770731.81	404447.78	32.109739	-103.592448	0.37	-0.26
-11.01	770729.14	404447.28	32.109738	-103.592457	0.34	0.33
-12.91	770727.24	404446.68	32.109736	-103.592463	0.16	-0.01
-14.87	770725.28	404445.91	32.109734	-103.592470	0.18	0.18
-17.10	770723.05	404445.09	32.109732	-103.592477	0.19	0.17
-19.49	770720.66	404444.22	32.109729	-103.592485	0.09	0.04

-21.49	770718.67	404443.22	32.109727	-103.592491	0.54	-0.43
-22.06	770718.09	404441.44	32.109722	-103.592493	1.59	0.38
-20.44	770719.71	404437.95	32.109712	-103.592488	2.04	1.82
-16.39	770723.76	404432.35	32.109697	-103.592475	2.15	2.10
-10.50	770729.65	404425.01	32.109676	-103.592456	1.14	1.14
-3.88	770736.27	404417.12	32.109655	-103.592435	0.20	0.02
2.98	770743.13	404409.29	32.109633	-103.592413	0.14	0.12
10.15	770750.30	404401.29	32.109611	-103.592390	0.20	0.18
17.58	770757.73	404393.33	32.109589	-103.592366	0.26	0.16
25.44	770765.59	404385.39	32.109567	-103.592341	0.30	0.20
33.59	770773.74	404377.03	32.109544	-103.592315	0.56	0.46
41.96	770782.11	404368.01	32.109519	-103.592288	0.37	0.36
50.63	770790.78	404358.78	32.109493	-103.592260	0.21	0.12
59.07	770799.22	404349.59	32.109468	-103.592233	0.63	-0.53
66.36	770806.51	404340.92	32.109444	-103.592210	0.86	-0.80
73.39	770813.54	404332.71	32.109421	-103.592187	0.46	0.12
81.00	770821.15	404324.75	32.109399	-103.592163	0.35	0.15
88.84	770828.99	404316.81	32.109377	-103.592138	0.09	0.03
96.10	770836.25	404308.43	32.109354	-103.592114	0.89	-0.24
102.80	770842.95	404300.03	32.109331	-103.592093	0.32	-0.07
109.06	770849.21	404291.83	32.109308	-103.592073	0.77	-0.48
113.36	770853.51	404283.38	32.109285	-103.592059	1.80	-0.49
116.32	770856.47	404274.58	32.109261	-103.592050	0.10	0.10
118.89	770859.04	404266.10	32.109237	-103.592042	0.72	-0.63
121.14	770861.29	404258.37	32.109216	-103.592035	0.49	-0.44
125.25	770865.40	404243.08	32.109174	-103.592022	0.23	0.11
126.89	770867.04	404235.10	32.109152	-103.592016	0.22	0.01
128.72	770868.87	404227.06	32.109130	-103.592011	0.52	0.26
131.39	770871.54	404219.30	32.109108	-103.592002	0.83	-0.40
134.45	770874.60	404212.89	32.109091	-103.591993	1.04	-0.95
137.73	770877.88	404206.73	32.109074	-103.591982	0.79	0.79
141.47	770881.62	404199.88	32.109055	-103.591970	0.43	0.40
145.21	770885.36	404193.93	32.109038	-103.591958	1.58	-1.50
148.35	770888.50	404190.35	32.109028	-103.591948	1.66	-1.47
150.44	770890.59	404188.64	32.109024	-103.591941	0.09	0.07
153.24	770893.39	404186.46	32.109018	-103.591932	0.09	-0.07
155.86	770896.01	404184.51	32.109012	-103.591924	0.37	-0.37
157.11	770897.26	404183.69	32.109010	-103.591920	1.97	-1.87
157.14	770897.29	404183.92	32.109011	-103.591920	0.15	0.14
157.12	770897.27	404184.27	32.109011	-103.591920	0.03	0.00
157.04	770897.19	404184.56	32.109012	-103.591920	0.07	-0.05
156.92	770897.07	404184.65	32.109013	-103.591921	0.20	-0.08
156.81	770896.96	404184.62	32.109012	-103.591921	0.04	-0.03
156.82	770896.97	404184.76	32.109013	-103.591921	0.25	0.15

156.98	770897.13	404184.99	32.109013	-103.591920	0.11	-0.05
157.05	770897.20	404185.22	32.109014	-103.591920	0.19	0.04
156.95	770897.10	404185.35	32.109014	-103.591920	0.24	-0.11
156.71	770896.86	404185.25	32.109014	-103.591921	0.15	0.15
156.32	770896.47	404185.10	32.109014	-103.591923	0.05	0.05
155.84	770895.99	404185.01	32.109014	-103.591924	0.10	0.04
155.31	770895.46	404185.05	32.109014	-103.591926	0.09	0.02
154.81	770894.96	404185.06	32.109014	-103.591927	0.14	-0.06
154.33	770894.48	404185.09	32.109014	-103.591929	0.16	0.04
153.76	770893.91	404185.14	32.109014	-103.591931	0.15	0.06
153.17	770893.32	404185.13	32.109014	-103.591933	0.06	-0.04
152.65	770892.80	404184.99	32.109014	-103.591934	0.20	0.00
152.10	770892.25	404184.65	32.109013	-103.591936	0.12	0.12
151.60	770891.75	404183.97	32.109011	-103.591938	0.39	0.18
151.24	770891.39	404182.86	32.109008	-103.591939	0.20	0.18
151.07	770891.22	404181.37	32.109004	-103.591940	0.37	0.26
151.02	770891.17	404179.47	32.108998	-103.591940	0.27	0.26
151.05	770891.20	404177.42	32.108993	-103.591940	0.19	-0.06
151.10	770891.25	404175.22	32.108987	-103.591940	0.27	0.23
150.82	770890.97	404172.62	32.108980	-103.591941	0.43	0.34
150.52	770890.67	404169.68	32.108972	-103.591942	0.29	0.10
150.49	770890.64	404166.73	32.108963	-103.591942	0.17	-0.15
150.29	770890.44	404163.94	32.108956	-103.591942	0.32	0.00
149.85	770890.00	404161.11	32.108948	-103.591944	0.06	0.04
149.58	770889.73	404159.31	32.108943	-103.591945	1.36	-1.36
149.66	770889.81	404158.48	32.108941	-103.591945	0.28	0.09
149.92	770890.07	404157.45	32.108938	-103.591944	0.22	0.19
150.14	770890.29	404157.23	32.108937	-103.591943	1.26	-0.28
150.52	770890.67	404157.89	32.108939	-103.591942	0.22	-0.01
151.01	770891.16	404158.22	32.108940	-103.591940	0.31	-0.19
151.62	770891.77	404157.96	32.108939	-103.591938	0.48	0.31
152.09	770892.24	404157.06	32.108937	-103.591937	0.51	0.17
151.94	770892.09	404156.60	32.108936	-103.591937	1.07	-0.40
151.41	770891.56	404157.00	32.108937	-103.591939	0.16	0.11
150.73	770890.88	404157.21	32.108937	-103.591941	0.44	0.03
149.77	770889.92	404156.77	32.108936	-103.591944	0.48	0.36
148.24	770888.39	404156.07	32.108934	-103.591949	0.50	0.41
146.56	770886.71	404155.96	32.108934	-103.591955	0.73	-0.31
145.23	770885.38	404157.04	32.108937	-103.591959	0.90	0.38
143.97	770884.12	404158.62	32.108941	-103.591963	0.26	-0.09
142.71	770882.86	404159.70	32.108944	-103.591967	0.47	-0.40
141.24	770881.39	404159.56	32.108944	-103.591972	1.22	0.46
140.79	770880.94	404159.26	32.108943	-103.591973	0.87	0.37
140.11	770880.26	404158.66	32.108941	-103.591975	0.77	0.56

139.49	770879.64	404158.66	32.108941	-103.591977	4.92	-0.74
139.33	770879.48	404161.53	32.108949	-103.591978	10.21	9.98
139.76	770879.91	404168.43	32.108968	-103.591976	10.06	9.98
140.55	770880.70	404178.32	32.108995	-103.591974	7.73	7.72
141.62	770881.77	404191.30	32.109031	-103.591970	7.97	7.96
143.09	770883.24	404206.76	32.109074	-103.591965	7.67	7.65
145.09	770885.24	404225.81	32.109126	-103.591958	8.51	8.50
147.32	770887.47	404247.11	32.109184	-103.591950	9.51	9.50
149.67	770889.82	404272.06	32.109253	-103.591942	9.75	9.72
152.17	770892.32	404300.03	32.109330	-103.591933	9.32	9.32
154.63	770894.78	404330.92	32.109415	-103.591925	10.25	10.13
157.00	770897.15	404364.72	32.109508	-103.591916	10.62	10.62
160.93	770901.08	404438.88	32.109711	-103.591902	9.65	9.53
163.64	770903.79	404522.60	32.109941	-103.591891	12.14	12.13
166.77	770906.92	404645.17	32.110278	-103.591879	7.24	7.23
168.87	770909.02	404737.72	32.110533	-103.591870	4.07	4.06
170.12	770910.27	404831.19	32.110789	-103.591864	4.49	4.38
169.66	770909.81	404925.04	32.111047	-103.591863	1.98	1.55
167.30	770907.45	405017.92	32.111303	-103.591869	1.28	-0.04
165.18	770905.33	405110.78	32.111558	-103.591873	1.72	-0.63
164.19	770904.34	405204.63	32.111816	-103.591874	0.40	-0.38
162.20	770902.35	405298.48	32.112074	-103.591879	1.65	1.13
160.51	770900.66	405391.40	32.112330	-103.591882	1.63	0.41
158.96	770899.11	405485.34	32.112588	-103.591885	1.46	0.54
156.49	770896.64	405578.28	32.112843	-103.591891	0.56	0.55
153.51	770893.66	405673.23	32.113104	-103.591899	2.00	1.87
151.19	770891.34	405768.18	32.113365	-103.591904	1.66	0.65
148.05	770888.20	405863.11	32.113626	-103.591912	2.87	-1.32
143.31	770883.46	405955.99	32.113882	-103.591925	0.91	-0.83
137.41	770877.56	406049.77	32.114140	-103.591942	2.61	-1.85
132.64	770872.79	406143.61	32.114398	-103.591955	4.28	2.70
130.93	770871.08	406236.59	32.114653	-103.591959	0.74	0.37
128.76	770868.91	406330.56	32.114912	-103.591964	2.60	-2.30
126.92	770867.07	406425.52	32.115173	-103.591968	2.43	1.77
126.33	770866.48	406519.52	32.115431	-103.591968	0.86	0.85
125.92	770866.07	406613.51	32.115689	-103.591967	1.05	-1.00
128.23	770868.38	406707.47	32.115948	-103.591957	3.32	0.82
132.51	770872.66	406801.37	32.116206	-103.591941	0.66	-0.07
135.72	770875.87	406895.30	32.116464	-103.591929	0.97	0.64
138.15	770878.30	406988.25	32.116719	-103.591919	0.27	-0.13
139.16	770879.31	407082.24	32.116978	-103.591914	2.22	-1.49
139.05	770879.20	407176.21	32.117236	-103.591912	1.79	-1.78
139.80	770879.95	407269.19	32.117491	-103.591907	2.19	1.97
141.25	770881.40	407363.18	32.117750	-103.591901	0.52	0.51

141.62	770881.77	407457.18	32.118008	-103.591897	1.58	-0.86
144.16	770884.31	407551.12	32.118266	-103.591887	4.53	1.87
149.11	770889.26	407644.98	32.118524	-103.591869	1.65	-1.30
152.14	770892.29	407738.92	32.118782	-103.591857	1.90	-1.20
152.36	770892.51	407832.90	32.119041	-103.591854	2.20	-0.23
150.91	770891.06	407926.85	32.119299	-103.591857	0.62	-0.62
148.97	770889.12	408020.81	32.119557	-103.591861	1.75	1.61
147.25	770887.40	408114.79	32.119816	-103.591865	1.00	0.18
145.25	770885.40	408208.77	32.120074	-103.591869	1.37	-0.31
141.63	770881.78	408302.70	32.120332	-103.591878	1.02	0.65
137.80	770877.95	408396.62	32.120590	-103.591889	0.63	0.36
133.97	770874.12	408490.54	32.120849	-103.591899	0.80	-0.61
129.47	770869.62	408585.41	32.121110	-103.591911	1.87	-1.85
125.07	770865.22	408679.25	32.121368	-103.591924	0.45	-0.29
122.38	770862.53	408773.17	32.121626	-103.591930	2.10	0.95
121.89	770862.04	408868.16	32.121887	-103.591930	1.33	0.91
122.75	770862.90	408963.15	32.122148	-103.591925	1.02	0.72
123.99	770864.14	409056.14	32.122404	-103.591919	0.21	-0.05
125.22	770865.37	409150.11	32.122662	-103.591913	2.00	1.99
125.84	770865.99	409244.09	32.122920	-103.591909	2.33	-2.13
124.69	770864.84	409338.08	32.123179	-103.591910	1.38	-0.31
122.31	770862.46	409432.03	32.123437	-103.591916	1.44	-1.41
120.27	770860.42	409525.00	32.123692	-103.591920	3.90	3.84
119.16	770859.31	409618.97	32.123951	-103.591922	2.17	-2.09
117.88	770858.03	409712.96	32.124209	-103.591924	1.07	-0.70
115.72	770855.87	409805.92	32.124465	-103.591929	0.91	-0.83
111.19	770851.34	409992.84	32.124979	-103.591939	0.44	0.43
109.95	770850.10	410086.81	32.125237	-103.591941	1.60	-1.14
109.94	770850.09	410180.80	32.125495	-103.591939	2.71	2.67
109.90	770850.05	410275.80	32.125756	-103.591937	1.44	-1.35
109.73	770849.88	410369.80	32.126015	-103.591936	0.80	0.72
110.19	770850.34	410463.80	32.126273	-103.591932	0.86	-0.72
111.14	770851.29	410557.79	32.126531	-103.591927	0.19	-0.09
113.64	770853.79	410651.75	32.126790	-103.591917	2.47	1.65
117.19	770857.34	410745.68	32.127048	-103.591903	1.93	-1.87
119.47	770859.62	410839.64	32.127306	-103.591894	1.24	0.41
120.58	770860.73	410933.64	32.127564	-103.591888	0.69	0.60
121.93	770862.08	411026.62	32.127820	-103.591882	0.80	0.40
122.33	770862.48	411120.61	32.128078	-103.591878	2.77	-1.99
121.18	770861.33	411215.59	32.128339	-103.591880	0.42	0.41
119.19	770859.34	411404.51	32.128859	-103.591882	0.74	-0.72
118.71	770858.86	411498.37	32.129117	-103.591881	2.09	-2.04
118.80	770858.95	411593.23	32.129377	-103.591879	2.28	2.26
119.40	770859.55	411687.22	32.129636	-103.591875	2.71	2.69

118.99	770859.14	411780.21	32.129891	-103.591874	1.77	-0.54
115.15	770855.30	411969.16	32.130411	-103.591883	0.48	0.46
112.46	770852.61	412063.12	32.130669	-103.591889	2.56	-2.45
109.50	770849.65	412158.06	32.130930	-103.591897	1.06	0.97
108.65	770848.80	412252.05	32.131188	-103.591897	2.60	1.30
110.26	770850.41	412346.02	32.131447	-103.591890	1.03	0.40
112.09	770852.24	412439.99	32.131705	-103.591882	0.87	-0.55
112.49	770852.64	412533.97	32.131963	-103.591879	1.34	0.64
109.42	770849.57	412721.92	32.132480	-103.591884	0.77	-0.39
106.56	770846.71	412815.86	32.132738	-103.591891	0.83	0.73
103.39	770843.54	412909.80	32.132997	-103.591900	1.93	-1.93
100.57	770840.72	413003.75	32.133255	-103.591907	0.50	-0.16
98.53	770838.68	413098.73	32.133516	-103.591911	1.29	1.16
97.45	770837.60	413191.71	32.133772	-103.591913	2.10	-2.00
97.16	770837.31	413285.66	32.134030	-103.591911	0.97	-0.87
96.74	770836.89	413379.62	32.134288	-103.591911	1.65	1.54
95.98	770836.13	413473.60	32.134546	-103.591911	0.41	-0.38
96.23	770836.38	413661.56	32.135063	-103.591906	0.51	0.10
97.07	770837.22	413755.53	32.135321	-103.591901	0.71	-0.70
98.60	770838.75	413850.50	32.135582	-103.591894	3.69	3.57
99.51	770839.66	413943.41	32.135838	-103.591889	2.41	1.66
99.87	770840.02	414037.33	32.136096	-103.591886	2.25	-2.00
98.89	770839.04	414131.31	32.136354	-103.591887	3.30	-1.77
97.91	770838.06	414225.29	32.136613	-103.591888	3.33	1.80
98.58	770838.73	414320.27	32.136874	-103.591884	1.12	-0.89
98.92	770839.07	414414.27	32.137132	-103.591881	1.43	-1.40
98.33	770838.48	414536.26	32.137467	-103.591880	1.43	1.00
97.70	770837.85	414576.25	32.137577	-103.591881	0.00	0.00

Turn Rate TRN	Vertical Section VS
0.00	0.00
0.00	0.56
-6.34	1.23
-29.73	1.25
0.88	1.09
3.07	0.95
-4.49	0.79
1.91	0.37
21.59	0.33
-5.39	-0.16
-7.67	-0.74
-0.79	-1.50
3.43	-2.30
-2.78	-3.15

-13.97	-4.15
-69.62	-5.92
-23.73	-9.42
-6.51	-15.05
-0.99	-22.43
-1.84	-30.36
-0.69	-38.23
-0.68	-46.28
-1.80	-54.29
-1.81	-62.28
2.66	-70.68
0.49	-79.76
-1.26	-89.05
2.67	-98.29
2.65	-107.01
-3.87	-115.26
-2.71	-123.28
0.68	-131.26
7.33	-139.69
-2.68	-148.13
5.54	-156.37
17.02	-164.85
0.10	-173.67
3.84	-182.17
-2.67	-189.92
2.48	-205.23
2.55	-213.21
-5.12	-221.27
-8.36	-229.05
-5.68	-235.48
0.83	-241.66
-2.05	-248.53
-6.53	-254.51
-15.43	-258.10
-1.34	-259.83
-1.49	-262.03
-1.61	-263.99
-104.64	-264.82
-29.18	-264.59
-8.27	-264.25
-16.02	-263.95
-95.52	-263.86
14.21	-263.89
126.46	-263.75

32.98	-263.52
-66.49	-263.29
-106.84	-263.17
-1.67	-263.26
1.78	-263.41
17.96	-263.50
15.22	-263.45
-23.82	-263.44
29.90	-263.41
-21.79	-263.35
5.46	-263.36
-34.04	-263.49
-2.49	-263.83
-37.64	-264.51
-6.35	-265.61
-16.81	-267.10
3.76	-269.01
-8.16	-271.05
6.28	-273.25
9.20	-275.85
-8.72	-278.79
-2.81	-281.74
10.88	-284.52
-1.19	-287.36
1.44	-289.15
-29.71	-289.98
8.93	-291.01
-162.35	-291.24
27.17	-290.58
38.05	-290.25
53.96	-290.51
42.41	-291.42
136.36	-291.88
16.76	-291.48
-54.23	-291.26
-28.21	-291.69
16.42	-292.38
35.93	-292.49
43.63	-291.39
-11.18	-289.81
-13.93	-288.72
-66.37	-288.85
-34.54	-289.15
-21.31	-289.75

242.55	-289.74
47.11	-286.87
9.04	-279.97
-1.76	-270.09
1.87	-257.11
1.30	-241.66
1.10	-222.62
-1.11	-201.34
-1.38	-176.41
0.13	-148.45
-2.36	-117.58
-0.09	-83.80
-1.95	-9.66
-0.66	74.04
-0.15	196.59
-0.15	289.12
-0.99	382.58
-1.23	476.43
-1.28	569.33
1.60	662.20
-0.10	756.05
-1.20	849.91
1.58	942.84
-1.35	1036.79
0.13	1129.75
-0.71	1224.71
1.53	1319.68
-2.55	1414.63
0.39	1507.53
-1.84	1601.34
3.32	1695.22
0.65	1788.21
-1.22	1882.18
1.66	1977.16
-0.09	2071.16
0.32	2165.15
3.21	2259.10
-0.66	2352.96
-0.73	2446.87
-0.24	2539.80
-1.65	2633.78
0.19	2727.76
0.96	2820.73
-0.06	2914.70

-1.32	3008.70
4.13	3102.62
-1.01	3196.45
-1.47	3290.37
-2.19	3384.34
0.04	3478.30
-0.69	3572.27
0.98	3666.26
-1.33	3760.25
-0.79	3854.20
0.52	3948.14
-0.52	4042.09
-0.28	4136.99
0.35	4230.86
1.87	4324.79
0.98	4419.78
0.73	4514.76
-0.20	4607.75
0.17	4701.70
-0.96	4795.67
-1.34	4889.67
-0.26	4983.64
0.67	5076.61
0.59	5170.59
-0.81	5264.58
-0.37	5357.56
0.12	5544.50
1.12	5638.48
0.48	5732.47
-0.52	5827.47
0.35	5921.46
0.47	6015.46
0.17	6109.44
1.84	6203.38
-0.48	6297.29
-1.17	6391.24
-0.35	6485.22
0.69	6578.20
-1.93	6672.18
-0.06	6767.17
0.12	6956.10
0.43	7049.95
0.31	7144.81
0.35	7238.79

-1.69	7331.79
-0.13	7520.76
-0.74	7614.73
0.43	7709.69
2.26	7803.68
0.95	7897.64
-0.67	7991.59
-1.18	8085.57
-0.66	8273.53
-0.39	8367.50
-0.01	8461.46
0.47	8555.42
0.57	8650.41
0.63	8743.40
0.41	8837.35
-0.59	8931.31
0.14	9025.29
0.51	9213.24
-0.07	9307.21
0.94	9402.17
-1.75	9495.06
1.03	9588.98
-2.79	9682.96
2.80	9776.95
-0.67	9871.92
0.28	9965.92
-1.02	10087.91
0.00	10127.91

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

Estimated Formation Tops

Formation:	Top:	Formation:	Top:

Received by OCD: 3/2/2023 3:28:24 PM

Well Name: VACA DRAW 20-17 FEDERAL

Well Location: T25S / R33E / SEC 20 / SWSW /

County or Parish/State:

Well Number: 46H

Type of Well: CONVENTIONAL GAS WELL

Allottee or Tribe Name:

Lease Number:

Unit or CA Name:

Unit or CA Number:

US Well Number: 3002550143

Well Status: Approved Application for Permit to Drill

Operator: CIMAREX ENERGY COMPANY

Subsequent Report

Sundry ID: 2722087

Type of Submission: Subsequent Report

Type of Action: Hydraulic Fracturing

Date Sundry Submitted: 03/22/2023

Time Sundry Submitted: 08:56

Date Operation Actually Began: 01/05/2023

Actual Procedure: 1/5/23 Test csg to 11,790 psi for 30 min. Good test. 1/5/23 – 2/24 Perf & Frac 39 stages, 10713 - 20498 w/ 14,248,922 gals slick wtr, 20,762,326# 100 mesh sand, 1053 holes. 3/3/23 Finish DO plugs. PBTD @ 20528'. 3/7/23 RIH and ran 3-1/2" 9.3# L80 8rd EUE tbg and 7" AS-1X pkr. Set @ 8730'. 3/13/23 Turn to production. 1st production.

CONFIDENTIAL

Released to Imaging: 7/7/2026 1:14:45 PM

Well Name: VACA DRAW 20-17 FEDERAL

Well Location: T25S / R33E / SEC 20 / SWSW /

County or Parish/State:

Well Number: 46H

Type of Well: CONVENTIONAL GAS WELL

Allottee or Tribe Name:

Lease Number:

Unit or CA Name:

Unit or CA Number:

US Well Number: 3002550143

Well Status: Approved Application for Permit to Drill

Operator: CIMAREX ENERGY COMPANY

Operator

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

Operator Electronic Signature: SARAH JORDAN

Signed on: MAR 22, 2023 08:56 AM

Name: CIMAREX ENERGY COMPANY

Title: Regulatory Analyst

Street Address: 600 N MARRIENFELD STREET

City: MIDLAND **State:** TX

Phone: (432) 620-1909

Email address: SARAH.JORDAN@COTERRA.COM

Field

Representative Name:

Street Address:

City: **State:** **Zip:**

Phone:

Email address:

BLM Point of Contact

BLM POC Name: JONATHON W SHEPARD

BLM POC Title: Petroleum Engineer

BLM POC Phone: 5752345972

BLM POC Email Address: jshepard@blm.gov

Disposition: Accepted

Disposition Date: 03/31/2023

Signature: Jonathon Shepard

Released to Imaging: 7/7/2026 1:14:45 PM

Submit To Appropriate District Office
Two Copies
District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
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

1. WELL API NO. 30-025-50143
2. Type of Lease ☐ STATE ☐ FEE ☒ FED/INDIAN
3. State Oil & Gas Lease No.

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)

5. Lease Name or Unit Agreement Name: VACA DRAW 20-17 FEDERAL
6. Well Number: 46H

7. Type of Completion: ☒ NEW WELL ☐ WORKOVER ☐ DEEPENING ☐ PLUGBACK ☐ DIFFERENT RESERVOIR ☐ OTHER _____

8. Name of Operator: Cimarex Energy Co
9. OGRID: 215099
10. Address of Operator: 600 N Marienfeld St, Ste 600, Midland, TX 79701
11. Pool name or Wildcat: WC-025 G-08 S253235G;LWR BONE SPRING

12. Location	Unit Ltr	Section	Township	Range	Lot	Feet from the	N/S Line	Feet from the	E/W Line	County
Surface:	O	20	25S	33E		330	SOUTH	2060	EAST	Lea
BH:	B	17	25S	33E		101	South	1898	EAST	Lea

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.)
8/25/22	9/25/22	9/28/22	3/13/23	3406 GR

18. Total Measured Depth of Well	19. Plug Back Measured Depth	20. Was Directional Survey Made?	21. Type Electric and Other Logs Run
20557	20528	YES	Gamma

22. Producing Interval(s), of this completion - Top, Bottom, Name: 10713-20498

23. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13 3/8	48#	1026	17 1/2	1024 sx	513 sx
9 5/8	40#	4947	12 1/4	2536 sx	1168 sx
7	32#	10540	8 3/4	800 SX	toc @ 2491

24. LINER RECORD

SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN
4 1/2	8777	20547	709	TOC @ 9971

25. TUBING RECORD

SIZE	DEPTH SET	PACKER SET
3 1/2	9730	8730

26. Perforation record (interval, size, and number)
10713-20498 .42, 1053 holes

27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED
10713-20498	20762326# MESH SAND

28. PRODUCTION

Date First Production	Production Method *(Flowing, gas lift, pumping - Size and type pump)*	Well Status *(Prod. or Shut-in)*
3/13/23	Flowing	Producing

Date of Test	Hours Tested	Choke Size	Prod'n For Test Period	Oil - Bbl	Gas - MCF	Water - Bbl.	Gas - Oil Ratio
3/31/23	24			695	1165	2842	1499

Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API - *(Corr.)*
236			695	1165	2842	42.4

29. Disposition of Gas *(Sold, used for fuel, vented, etc.)*: SOLD
30. Test Witnessed By: Coterra Rep
31. List Attachments: 102, Log, Surveys, Extra Point
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 hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief

Signature Sarah Jordan Printed Name Sarah Jordan Title Regulatory Analyst Date 5/2/23

E-mail Address sarah.jordan@coterra.com

INSTRUCTIONS

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.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

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 44920	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 10060	T.Todilto	
T. Abo	T.	T. Entrada	
T. Wolfcamp 12118	T.	T. Wingate	
T. Penn	T.	T. Chinle	
T. Cisco (Bough C)	T.	T. Permian	

OIL OR GAS SANDS OR ZONES

No. 1, from……..……..….to……. No. 3, from……to…….……

No. 2, from……to…… No. 4, from……to……..

IMPORTANT WATER SANDS

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……

LITHOLOGY RECORD (Attach additional sheet if necessary)

From	To	Thickness In Feet	Lithology		From	To	Thickness In Feet	Lithology

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

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

ACKNOWLEDGMENTS

Operator: Coterra Energy Operating Co. 6001 Deauville Blvd Midland, TX 79706	OGRID: 215099
	Action Number: 212851
	Action Type: [C-104] Completion Packet (C-104C)

ACKNOWLEDGMENTS

☑	I hereby certify that the required Water Use Report has been, or will be, submitted for this wells completion.
☑	I hereby certify that the required FracFocus disclosure has been, or will be, submitted for this wells completion.

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CONDITIONS

Operator: Coterra Energy Operating Co. 6001 Deauville Blvd Midland, TX 79706	OGRID: 215099
	Action Number: 212851
	Action Type: [C-104] Completion Packet (C-104C)

CONDITIONS

Created By	Condition	Condition Date
raul.robles	File 3160-4 Completion Report within 10 days of BLM Approval.	7/7/2026