

State of New Mexico
Energy, Minerals & Natural ResourcesForm C-104
Revised August 1, 2011Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit one copy to appropriate District Office

☐ AMENDED REPORT**I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT**

¹ Operator name and Address Marathon Oil Permian LLC 5555 San Felipe St., Houston, TX 77056		² OGRID Number 372098
		³ Reason for Filing Code/ Effective Date New Well
⁴ API Number 30 - 015-45899	⁵ Pool Name Purple Sage; Wolfcamp (Gas)	⁶ Pool Code 98220
⁷ Property Code 325399	⁸ Property Name Blue Steel 21 WA Federal Com	⁹ Well Number 15H

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
A	28	23S	29E		1219	North	967	East	Eddy

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
A	16	23S	29E		330	North	981	East	Eddy
¹² Lse Code F	¹³ Producing Method Code F	¹⁴ Gas Connection Date	¹⁵ C-129 Permit Number	¹⁶ C-129 Effective Date	¹⁷ C-129 Expiration Date				

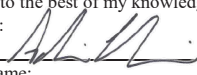
III. Oil and Gas Transporters

¹⁸ Transporter OGRID	¹⁹ Transporter Name and Address	²⁰ O/G/W
16587	Oryx Energy Co	O
327139	Sendero Midstream	G

IV. Well Completion Data

²¹ Spud Date 1/2/2020	²² Ready Date 12/18/2020	²³ TD 20323' / 10262'	²⁴ PBTB 20277' / 10262'	²⁵ Perforations 10293' - 20105'	²⁶ DHC, MC
²⁷ Hole Size	²⁸ Casing & Tubing Size	²⁹ Depth Set	³⁰ Sacks Cement		
17 1/2"	13 3/8", J55, STC, 54.5#	310'	747'		
12 1/4"	9 5/8", J55, LTC, 40#	3020'	990		
8 3/4"	7", P110, VA Roughneck, 29#	10320'	875		
6 1/8"	4 1/2", P110, VA Roughneck, 13.5#	9618' - 20322'	975		

V. Well Test Data

³¹ Date New Oil 12/22/2020	³² Gas Delivery Date 12/21/2020	³³ Test Date 1/2/2021	³⁴ Test Length 24 HRS	³⁵ Tbg. Pressure 0	³⁶ Csg. Pressure 1734
³⁷ Choke Size 64/64	³⁸ Oil 2928	³⁹ Water 10604	⁴⁰ Gas 5985		⁴¹ Test Method 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: 			OIL CONSERVATION DIVISION		
Printed name: Adrian Covarrubias			Approved by: KURT SIMMONS		
Title: Regulatory Professional			Title: NMOC, SANTA FE		
E-mail Address: acovarrubias@marathonoil.com			Approval Date: 02/26/2021		
Date: 2/8/2021		Phone: 713-296-3368			

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

Revised August 1, 2011
 Submit one copy to appropriate
 District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION AS-DRILLED PLAT

¹ API Number 30-015-45899	² Pool Code 98220	³ Pool Name PURPLE SAGE; WOLFCAMP
⁴ Property Code 325399	Property Name BLUE STEEL 21 WA FED COM	⁶ Well Number 15H
⁷ OGRID No. 372098	⁸ Operator Name MARATHON OIL PERMIAN LLC	⁹ Elevation 2998'

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
A	28	23S	29E		1219	NORTH	967	EAST	EDDY

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
A	16	23S	29E		330	NORTH	981	EAST	EDDY

¹² Dedicated Acres 640.0	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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.

	CORNER COORDINATES NAD 83, SPCS NM EAST A - X: 650146.73' / Y: 477587.62' B - X: 650138.65' / Y: 472269.84' C - X: 650153.81' / Y: 466951.26' D - X: 647475.03' / Y: 466934.71' E - X: 647481.28' / Y: 472260.27' F - X: 647506.95' / Y: 477578.03'	CORNER COORDINATES NAD 27, SPCS NM EAST A - X: 608963.74' / Y: 477527.94' B - X: 608955.51' / Y: 472210.29' C - X: 608970.52' / Y: 466891.83' D - X: 606291.75' / Y: 466875.28' E - X: 606298.14' / Y: 472200.73' F - X: 606323.97' / Y: 477518.36'	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. <i>[Signature]</i> 2/8/2021 Signature Date Adrian Covarrubias Printed Name E-mail Address
	LAST TAKE POINT/BOTTOM HOLE LOCATION 330' FNL 981' FEL, SECTION 16 20,323' MEASURED DEPTH IN FEET NAD 83, SPCS NM EAST X: 649164.75' / Y: 477253.67' LAT: 32.31156059N / LON: 103.98430563W NAD 27, SPCS NM EAST X: 607981.76' / Y: 477194.00' LAT: 32.31143868N / LON: 103.98381351W		
	FIRST TAKE POINT 330' FSL 1004' FEL, SECTION 21 10,257' MEASURED DEPTH IN FEET NAD 83, SPCS NM EAST X: 649147.25' / Y: 467275.04' LAT: 32.28413127N / LON: 103.98446736W NAD 27, SPCS NM EAST X: 607963.97' / Y: 467215.61' LAT: 32.28400911N / LON: 103.98397629W		
	KICK OFF POINT 70' FSL 998' FEL, SECTION 21 9,661' MEASURED DEPTH IN FEET NAD 83, SPCS NM EAST X: 649155.30' / Y: 467015.25' LAT: 32.28341706N / LON: 103.98444404W NAD 27, SPCS NM EAST X: 607972.02' / Y: 466955.82' LAT: 32.28329492N / LON: 103.98395301W		
SURFACE HOLE LOCATION 1219' FNL 967' FEL, SECTION 28 NAD 83, SPCS NM EAST X: 649192.32' / Y: 465726.29' LAT: 32.27987361N / LON: 103.98433784W NAD 27, SPCS NM EAST X: 608009.00' / Y: 465666.90' LAT: 32.27975143N / LON: 103.98384693W			¹⁸ SURVEYOR CERTIFICATION I hereby certify that the well surface location shown on this plat was plotted from field notes of the as-staked surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. Data used for underground measurements were provided by others for reference only and does not constitute field measurements performed by R-Squared Global. OCTOBER 22, 2020 Date of Survey <i>[Signature]</i> Signature and Seal of Professional Surveyor DAVID W. MYERS 11403 Certificate Number

Distances/areas relative to NAD 83 Combined Scale Factor: 0.9997823 Convergence Angle: 00°11'10.61002"



Marathon Oil Permian LLC

RKB (PD 582) 27 + GL @ 3025.00usft
2998.00

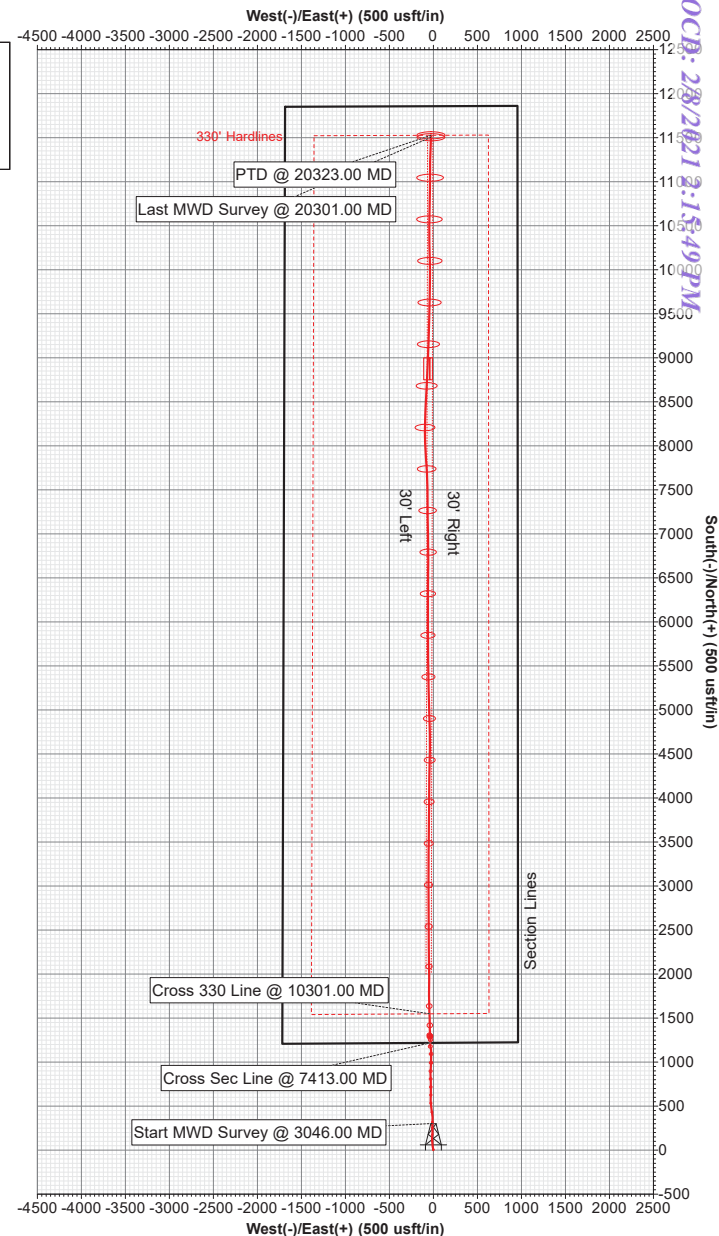
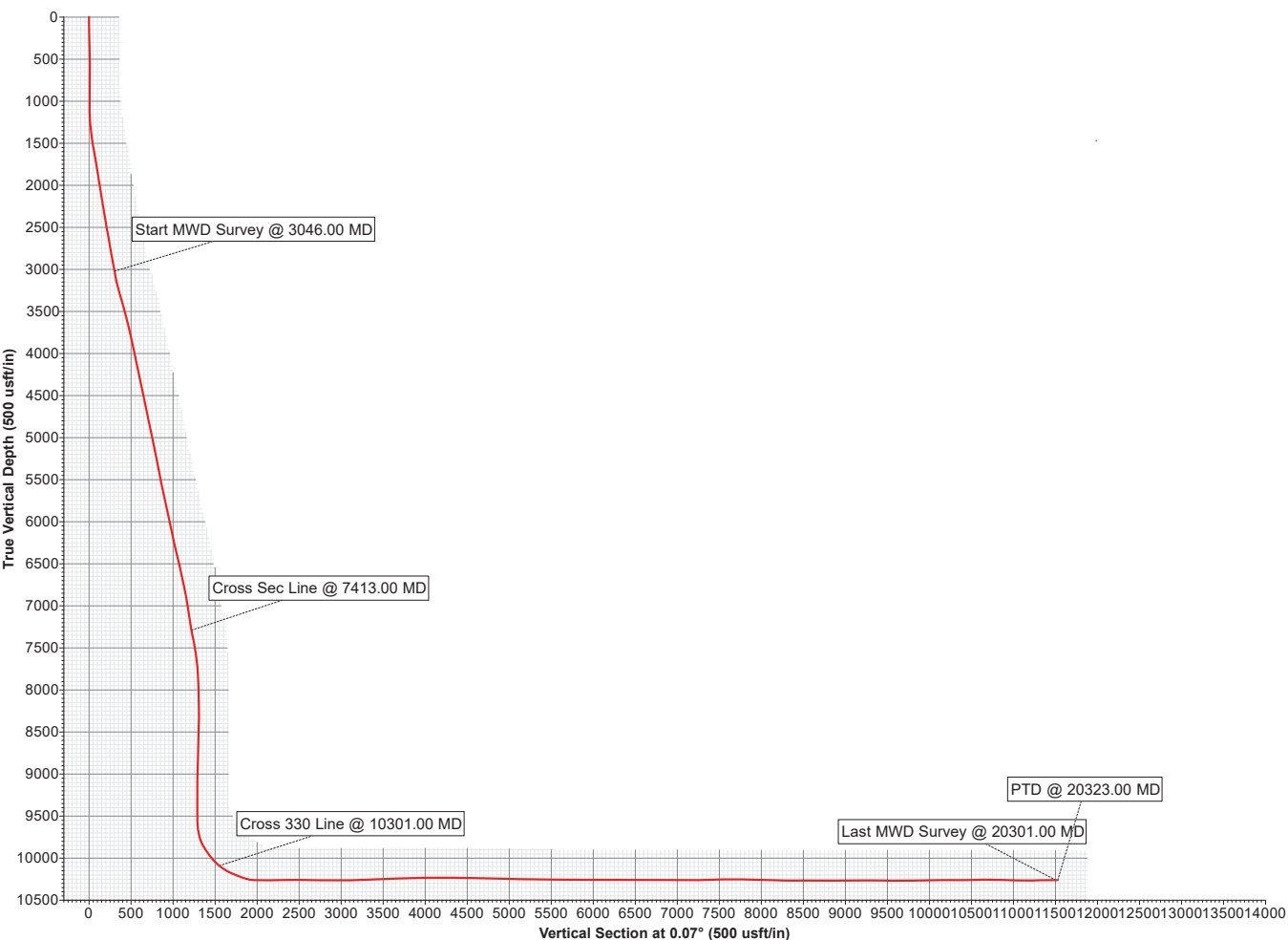
Project: Eddy County, New Mexico (NAD27)
Site: Blue Steel Pad (Grid)
Well: Blue Steel Fed Com WA #15H
Wellbore: Wellbore #1
Design: Final Survey
Rig: PD 582

Map System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone Name: New Mexico East 3001



Azimuths to Grid North
True North: -0.19°
Magnetic North: 6.76°
Magnetic Field
Strength: 47856.9nT
Dip Angle: 60.00°
Date: 12/31/2019
Model: HDGM 2019

WELL DETAILS 2998.00					
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	465666.90	608009.00	32.27975144	-103.98384692



Marathon Oil Permian LLC

Eddy County, New Mexico (NAD27) Blue Steel Pad (Grid)

API#

Blue Steel Fed Com WA #15H

Wellbore #1

Design: Final Survey

Sperry Drilling Services

Combo Report

12 May, 2020

Well Coordinates: 32.27975143
-103.98384692

NAD 1927 (NADCON CONUS)
New Mexico East 3001
465,666.90 N
608,009.00 E

Ground Level: 2,998.00 usft

Local Coordinate Origin:

Centered on Well Blue Steel Fed Com WA #15H

Viewing Datum:

RKB (PD 582) 27 + GL @ 3025.00usft

TVDs to System:

N

North Reference:

Grid

Unit System:

Midcon (2 decimal)

Version: 5000.15 Build: 91E

Report Version: Midcon Combo v1.15

HALLIBURTON

HALLIBURTON

Eddy County, New Mexico (NAD27)

Design Report for Blue Steel Fed Com WA #15H - Final Survey

Measured		Grid	Vertical	Local Coordinates		Map Coordinates		Dogleg	Vertical	Toolface	
Depth	Inclination	Azimuth	Depth	Northing	Easting	Northing	Easting	Rate	Section	Angle	Comments
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)	(°/100usft)	(usft)	(°)	
0.00	0.00	0.00	0.00	0.00 N	0.00 E	465,666.90	608,009.00	0.00	0.00	0.00	
30.00	0.90	43.11	30.00	0.17 N	0.16 E	465,667.07	608,009.16	3.00	0.17	43.11	
80.00	1.10	262.31	80.00	0.39 N	0.05 W	465,667.29	608,008.95	3.77	0.39	-158.36	
105.00	1.30	327.21	104.99	0.60 N	0.44 W	465,667.50	608,008.56	5.19	0.60	114.98	
135.00	1.40	324.51	134.98	1.19 N	0.83 W	465,668.09	608,008.17	0.39	1.18	-33.82	
163.00	0.70	336.01	162.98	1.62 N	1.10 W	465,668.52	608,007.90	2.60	1.62	168.94	
191.00	0.90	323.21	190.98	1.95 N	1.30 W	465,668.85	608,007.70	0.95	1.95	-48.30	
217.00	1.10	332.21	216.97	2.34 N	1.54 W	465,669.24	608,007.46	0.98	2.33	42.70	
260.00	1.20	337.11	259.96	3.12 N	1.91 W	465,670.02	608,007.09	0.33	3.11	46.99	
417.00	2.02	335.98	416.90	7.16 N	3.68 W	465,674.06	608,005.32	0.52	7.15	-2.78	
510.00	0.48	20.63	509.88	9.02 N	4.21 W	465,675.92	608,004.79	1.84	9.02	168.63	
604.00	0.88	117.31	603.87	9.06 N	3.43 W	465,675.96	608,005.57	1.12	9.05	123.67	
698.00	0.66	119.15	697.86	8.46 N	2.31 W	465,675.36	608,006.69	0.24	8.46	174.51	
790.00	0.44	134.27	789.86	7.96 N	1.60 W	465,674.86	608,007.40	0.28	7.96	153.99	
883.00	0.35	151.06	882.86	7.46 N	1.20 W	465,674.36	608,007.80	0.16	7.46	136.06	
973.00	0.26	172.06	972.85	7.02 N	1.04 W	465,673.92	608,007.96	0.16	7.02	139.02	
1,062.00	0.26	219.79	1,061.85	6.66 N	1.14 W	465,673.56	608,007.86	0.24	6.66	113.86	
1,152.00	1.45	339.93	1,151.85	7.58 N	1.66 W	465,674.48	608,007.34	1.77	7.57	128.23	
1,241.00	4.84	349.51	1,240.70	12.33 N	2.73 W	465,679.23	608,006.27	3.84	12.32	13.62	
1,331.00	6.42	349.51	1,330.26	21.01 N	4.34 W	465,687.91	608,004.66	1.76	21.00	0.00	
1,421.00	7.03	347.76	1,419.64	31.34 N	6.43 W	465,698.24	608,002.57	0.71	31.33	-19.44	
1,510.00	9.41	352.24	1,507.72	43.87 N	8.56 W	465,710.77	608,000.44	2.77	43.86	17.29	
1,600.00	10.68	355.40	1,596.34	59.47 N	10.23 W	465,726.37	607,998.77	1.54	59.46	25.02	
1,690.00	9.85	355.05	1,684.90	75.46 N	11.56 W	465,742.36	607,997.44	0.92	75.44	-175.87	
1,780.00	9.45	355.67	1,773.63	90.49 N	12.78 W	465,757.39	607,996.22	0.46	90.48	165.74	
1,870.00	9.14	356.02	1,862.44	104.99 N	13.83 W	465,771.89	607,995.17	0.35	104.98	169.84	
1,959.00	8.53	356.46	1,950.39	118.63 N	14.73 W	465,785.53	607,994.27	0.69	118.61	173.90	
2,048.00	9.10	358.83	2,038.34	132.26 N	15.28 W	465,799.16	607,993.72	0.76	132.24	33.68	
2,138.00	10.11	3.40	2,127.08	147.26 N	14.96 W	465,814.16	607,994.04	1.41	147.24	39.32	
2,228.00	9.36	5.60	2,215.78	162.43 N	13.78 W	465,829.33	607,995.22	0.93	162.41	154.70	
2,318.00	9.05	6.12	2,304.62	176.75 N	12.31 W	465,843.65	607,996.69	0.36	176.73	165.24	
2,407.00	9.41	4.72	2,392.47	190.96 N	10.96 W	465,857.86	607,998.04	0.48	190.95	-32.65	
2,497.00	9.93	0.06	2,481.19	206.05 N	10.35 W	465,872.95	607,998.65	1.04	206.04	-58.71	
2,586.00	11.12	355.49	2,568.69	222.28 N	11.02 W	465,889.18	607,997.98	1.63	222.27	-37.31	
2,676.00	9.58	357.69	2,657.23	238.42 N	12.00 W	465,905.32	607,997.00	1.77	238.40	166.69	
2,765.00	9.27	0.68	2,745.02	252.99 N	12.22 W	465,919.89	607,996.78	0.65	252.97	123.81	

Design Report for Blue Steel Fed Com WA #15H - Final Survey

Measured		Grid	Vertical	Local Coordinates		Map Coordinates		Dogleg	Vertical	Toolface	Comments
Depth (usft)	Inclination (°)	Azimuth (°)	Depth (usft)	Northing (usft)	Easting (usft)	Northing (usft)	Easting (usft)	Rate (°/100usft)	Section (usft)	Angle (°)	
2,855.00	11.25	1.47	2,833.58	269.01 N	11.90 W	465,935.91	607,997.10	2.21	269.00	4.45	
2,945.00	10.33	0.68	2,921.99	285.86 N	11.58 W	465,952.76	607,997.42	1.04	285.84	-171.26	
2,961.00	10.15	1.12	2,937.73	288.70 N	11.54 W	465,955.60	607,997.46	1.23	288.69	156.73	
3,046.00	9.49	0.15	3,021.49	303.20 N	11.37 W	465,970.10	607,997.63	0.80	303.18	-166.41	Start MWD Survey @ 3046.00 MD
3,120.00	10.68	0.15	3,094.34	316.16 N	11.34 W	465,983.06	607,997.66	1.61	316.14	0.00	
3,209.00	14.64	5.16	3,181.17	335.61 N	10.31 W	466,002.51	607,998.69	4.61	335.60	17.96	
3,299.00	15.69	358.04	3,268.04	359.11 N	9.70 W	466,026.01	607,999.30	2.37	359.09	-64.06	
3,388.00	16.84	354.17	3,353.48	383.96 N	11.42 W	466,050.86	607,997.58	1.77	383.94	-45.17	
3,478.00	14.77	353.56	3,440.07	408.33 N	14.03 W	466,075.23	607,994.97	2.31	408.31	-175.70	
3,568.00	15.21	352.15	3,527.01	431.43 N	16.93 W	466,098.33	607,992.07	0.63	431.41	-40.34	
3,657.00	13.98	351.97	3,613.13	453.64 N	20.03 W	466,120.54	607,988.97	1.38	453.61	-177.98	
3,747.00	13.93	351.45	3,700.48	475.12 N	23.16 W	466,142.02	607,985.84	0.15	475.09	-111.99	
3,836.00	12.88	355.67	3,787.05	495.60 N	25.50 W	466,162.50	607,983.50	1.61	495.57	139.06	
3,927.00	12.18	354.70	3,875.89	515.27 N	27.15 W	466,182.17	607,981.85	0.80	515.24	-163.74	
4,017.00	11.96	354.35	3,963.90	534.01 N	28.95 W	466,200.91	607,980.05	0.26	533.97	-161.77	
4,106.00	11.91	354.44	4,050.97	552.32 N	30.74 W	466,219.22	607,978.26	0.06	552.29	159.63	
4,196.00	11.87	1.82	4,139.05	570.82 N	31.35 W	466,237.72	607,977.65	1.69	570.78	95.12	
4,285.00	12.09	2.61	4,226.11	589.28 N	30.64 W	466,256.18	607,978.36	0.31	589.24	37.09	
4,375.00	12.09	1.82	4,314.11	608.12 N	29.91 W	466,275.02	607,979.09	0.18	608.08	-90.39	
4,464.00	11.96	1.03	4,401.16	626.65 N	29.44 W	466,293.55	607,979.56	0.24	626.61	-128.69	
4,554.00	11.74	0.68	4,489.24	645.13 N	29.17 W	466,312.03	607,979.83	0.26	645.09	-162.08	
4,643.00	11.65	359.53	4,576.39	663.17 N	29.13 W	466,330.07	607,979.87	0.28	663.13	-111.67	
4,733.00	11.69	359.71	4,664.53	681.37 N	29.26 W	466,348.27	607,979.74	0.06	681.34	42.40	
4,823.00	11.56	359.36	4,752.69	699.51 N	29.40 W	466,366.41	607,979.60	0.16	699.47	-151.69	
4,913.00	11.87	0.32	4,840.81	717.78 N	29.45 W	466,384.68	607,979.55	0.41	717.75	32.63	
5,002.00	12.13	0.85	4,927.87	736.29 N	29.26 W	466,403.19	607,979.74	0.32	736.25	23.23	
5,092.00	12.00	359.80	5,015.88	755.10 N	29.15 W	466,422.00	607,979.85	0.28	755.06	-121.15	
5,182.00	11.38	358.21	5,104.01	773.33 N	29.46 W	466,440.23	607,979.54	0.78	773.29	-153.32	
5,271.00	11.52	357.69	5,191.24	790.98 N	30.10 W	466,457.88	607,978.90	0.20	790.95	-36.66	
5,361.00	11.34	355.49	5,279.46	808.78 N	31.15 W	466,475.68	607,977.85	0.52	808.75	-113.51	
5,450.00	11.34	356.37	5,366.72	826.24 N	32.40 W	466,493.14	607,976.60	0.19	826.20	90.43	
5,539.00	10.81	358.30	5,454.06	843.31 N	33.20 W	466,510.21	607,975.80	0.73	843.27	145.97	
5,629.00	11.12	359.97	5,542.42	860.43 N	33.45 W	466,527.33	607,975.55	0.49	860.39	46.52	
5,718.00	12.22	2.70	5,629.58	878.42 N	33.01 W	466,545.32	607,975.99	1.38	878.38	28.00	
5,808.00	12.66	3.84	5,717.46	897.78 N	31.90 W	466,564.68	607,977.10	0.56	897.74	29.72	
5,898.00	12.09	3.49	5,805.37	917.02 N	30.67 W	466,583.92	607,978.33	0.64	916.99	-172.67	
5,987.00	12.09	3.14	5,892.40	935.63 N	29.59 W	466,602.53	607,979.41	0.08	935.60	-90.17	

Design Report for Blue Steel Fed Com WA #15H - Final Survey

Measured		Grid	Vertical	Local Coordinates		Map Coordinates		Dogleg	Vertical	Toolface	
Depth	Inclination	Azimuth	Depth	Northing	Easting	Northing	Easting	Rate	Section	Angle	Comments
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)	(°/100usft)	(usft)	(°)	
6,077.00	12.57	2.52	5,980.32	954.83 N	28.65 W	466,621.73	607,980.35	0.55	954.79	-15.72	
6,166.00	12.18	1.64	6,067.26	973.89 N	27.95 W	466,640.79	607,981.05	0.49	973.85	-154.62	
6,256.00	12.09	2.26	6,155.24	992.80 N	27.31 W	466,659.70	607,981.69	0.18	992.76	124.93	
6,346.00	11.30	2.70	6,243.38	1,011.02 N	26.52 W	466,677.92	607,982.48	0.88	1,010.99	173.77	
6,435.00	13.93	0.50	6,330.22	1,030.45 N	26.02 W	466,697.35	607,982.98	3.00	1,030.42	-11.43	
6,525.00	13.58	359.88	6,417.64	1,051.85 N	25.94 W	466,718.75	607,983.06	0.42	1,051.82	-157.46	
6,615.00	13.14	359.01	6,505.20	1,072.64 N	26.14 W	466,739.54	607,982.86	0.54	1,072.61	-155.87	
6,704.00	12.62	0.68	6,591.96	1,092.48 N	26.20 W	466,759.38	607,982.80	0.72	1,092.45	145.21	
6,793.00	12.22	1.47	6,678.88	1,111.62 N	25.85 W	466,778.52	607,983.15	0.49	1,111.59	157.37	
6,883.00	11.78	353.82	6,766.92	1,130.27 N	26.59 W	466,797.17	607,982.41	1.83	1,130.24	-109.18	
6,973.00	10.99	351.27	6,855.15	1,147.89 N	28.88 W	466,814.79	607,980.12	1.04	1,147.85	-148.74	
7,062.00	9.93	348.11	6,942.67	1,163.78 N	31.75 W	466,830.68	607,977.25	1.35	1,163.74	-153.12	
7,152.00	8.88	344.77	7,031.46	1,178.08 N	35.17 W	466,844.98	607,973.83	1.31	1,178.04	-154.17	
7,241.00	8.26	351.27	7,119.47	1,191.03 N	37.95 W	466,857.93	607,971.05	1.29	1,190.98	125.81	
7,331.00	9.23	6.74	7,208.43	1,204.59 N	38.08 W	466,871.49	607,970.92	2.82	1,204.54	75.36	
7,413.00	10.95	9.10	7,289.16	1,218.81 N	36.08 W	466,885.71	607,972.92	2.16	1,218.76	14.66	Cross Sec Line @ 7413.00 MD
7,421.00	11.12	9.29	7,297.01	1,220.32 N	35.83 W	466,887.22	607,973.17	2.16	1,220.28	12.34	
7,510.00	11.87	4.45	7,384.23	1,237.92 N	33.74 W	466,904.82	607,975.26	1.37	1,237.88	-54.52	
7,600.00	9.89	1.55	7,472.61	1,254.87 N	32.81 W	466,921.77	607,976.19	2.28	1,254.83	-165.97	
7,689.00	8.35	1.12	7,560.48	1,268.98 N	32.48 W	466,935.88	607,976.52	1.73	1,268.94	-177.68	
7,779.00	7.08	0.32	7,649.66	1,281.06 N	32.32 W	466,947.96	607,976.68	1.42	1,281.02	-175.56	
7,868.00	4.57	346.09	7,738.20	1,289.99 N	33.14 W	466,956.89	607,975.86	3.23	1,289.94	-157.04	
7,958.00	3.52	334.92	7,827.98	1,295.97 N	35.17 W	466,962.87	607,973.83	1.45	1,295.92	-148.60	
8,047.00	2.64	329.30	7,916.85	1,300.21 N	37.38 W	466,967.11	607,971.62	1.04	1,300.16	-163.85	
8,137.00	2.11	321.04	8,006.77	1,303.28 N	39.48 W	466,970.18	607,969.52	0.70	1,303.23	-151.23	
8,149.00	2.15	316.73	8,018.76	1,303.61 N	39.77 W	466,970.51	607,969.23	1.38	1,303.56	-78.14	
8,227.00	1.98	309.26	8,096.71	1,305.53 N	41.82 W	466,972.43	607,967.18	0.41	1,305.48	-125.97	
8,317.00	2.02	302.23	8,186.66	1,307.36 N	44.36 W	466,974.26	607,964.64	0.28	1,307.30	-84.26	
8,406.00	0.84	296.25	8,275.63	1,308.48 N	46.28 W	466,975.38	607,962.72	1.33	1,308.43	-175.77	
8,496.00	1.54	160.11	8,365.62	1,307.64 N	46.46 W	466,974.54	607,962.54	2.47	1,307.58	-151.31	
8,586.00	1.80	149.03	8,455.58	1,305.29 N	45.32 W	466,972.19	607,963.68	0.46	1,305.23	-56.78	
8,675.00	1.58	154.22	8,544.54	1,302.99 N	44.06 W	466,969.89	607,964.94	0.30	1,302.93	147.75	
8,765.00	1.71	150.79	8,634.50	1,300.70 N	42.87 W	466,967.60	607,966.13	0.18	1,300.64	-38.86	
8,855.00	2.11	137.43	8,724.45	1,298.30 N	41.09 W	466,965.20	607,967.91	0.66	1,298.25	-54.87	
8,944.00	1.63	213.11	8,813.42	1,296.04 N	40.68 W	466,962.94	607,968.32	2.61	1,295.99	137.21	
9,034.00	2.02	214.78	8,903.37	1,293.66 N	42.28 W	466,960.56	607,966.72	0.44	1,293.61	8.60	
9,123.00	1.98	204.49	8,992.32	1,290.98 N	43.81 W	466,957.88	607,965.19	0.41	1,290.92	-101.48	

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Measured		Grid	Vertical	Local Coordinates		Map Coordinates		Dogleg	Vertical	Toolface	Comments
Depth	Inclination	Azimuth	Depth	Northing	Easting	Northing	Easting	Rate	Section	Angle	
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)	(°/100usft)	(usft)	(°)	
9,213.00	1.23	165.29	9,082.28	1,288.63 N	44.21 W	466,955.53	607,964.79	1.43	1,288.57	-142.87	
9,303.00	1.45	65.80	9,172.27	1,288.16 N	42.93 W	466,955.06	607,966.07	2.28	1,288.10	-135.76	
9,392.00	1.05	70.28	9,261.25	1,288.90 N	41.13 W	466,955.80	607,967.87	0.46	1,288.84	168.50	
9,482.00	1.36	129.70	9,351.23	1,288.49 N	39.53 W	466,955.39	607,969.47	1.36	1,288.44	107.00	
9,571.00	0.97	67.38	9,440.22	1,288.11 N	38.03 W	466,955.01	607,970.97	1.41	1,288.06	-136.63	
9,661.00	0.88	29.86	9,530.20	1,289.00 N	36.98 W	466,955.90	607,972.02	0.67	1,288.95	-116.91	
9,751.00	4.66	3.14	9,620.09	1,293.25 N	36.43 W	466,960.15	607,972.57	4.33	1,293.20	-32.54	
9,835.72	10.77	356.94	9,704.00	1,304.60 N	36.67 W	466,971.50	607,972.33	7.27	1,304.56	-10.84	
9,840.00	11.08	356.81	9,708.20	1,305.41 N	36.71 W	466,972.31	607,972.29	7.27	1,305.37	-4.61	
9,930.00	21.32	354.52	9,794.51	1,330.40 N	38.76 W	466,997.30	607,970.24	11.40	1,330.35	-4.68	
10,020.00	32.22	359.97	9,874.76	1,370.81 N	40.34 W	467,037.71	607,968.66	12.40	1,370.76	15.16	
10,105.60	35.10	359.13	9,946.00	1,418.24 N	40.73 W	467,085.14	607,968.27	3.41	1,418.19	-9.53	
10,110.00	35.25	359.09	9,949.60	1,420.78 N	40.77 W	467,087.68	607,968.23	3.45	1,420.73	-8.75	
10,153.01	38.49	358.82	9,984.00	1,446.58 N	41.24 W	467,113.48	607,967.76	7.54	1,446.52	-2.97	
10,200.00	42.02	358.57	10,019.86	1,476.93 N	41.93 W	467,143.83	607,967.07	7.52	1,476.88	-2.72	
10,274.00	47.43	356.98	10,072.42	1,528.94 N	43.99 W	467,195.84	607,965.01	7.47	1,528.88	-12.26	
10,301.00	50.18	357.33	10,090.20	1,549.23 N	45.00 W	467,216.13	607,964.00	10.21	1,549.17	5.52	Cross 330 Line @ 10301.00 MD
10,407.00	60.96	358.46	10,150.05	1,636.47 N	48.15 W	467,303.37	607,960.85	10.21	1,636.41	5.29	
10,501.00	68.06	0.00	10,190.48	1,721.25 N	49.26 W	467,388.15	607,959.74	7.70	1,721.19	11.42	
10,596.00	68.38	0.21	10,225.72	1,809.47 N	49.10 W	467,476.37	607,959.90	0.39	1,809.41	31.40	
10,690.00	78.33	0.47	10,252.62	1,899.42 N	48.56 W	467,566.32	607,960.44	10.59	1,899.36	1.47	
10,785.00	89.48	359.10	10,262.69	1,993.73 N	48.92 W	467,660.63	607,960.08	11.82	1,993.67	-7.05	
10,878.00	90.18	359.13	10,262.96	2,086.72 N	50.36 W	467,753.62	607,958.64	0.75	2,086.65	2.45	
10,952.00	90.46	359.28	10,262.55	2,160.71 N	51.39 W	467,827.61	607,957.61	0.43	2,160.64	28.18	
11,048.00	90.99	359.41	10,261.34	2,256.69 N	52.48 W	467,923.59	607,956.52	0.57	2,256.63	13.78	
11,142.00	91.07	0.00	10,259.65	2,350.68 N	52.97 W	468,017.58	607,956.03	0.63	2,350.61	82.27	
11,237.00	90.09	359.71	10,258.68	2,445.67 N	53.21 W	468,112.57	607,955.79	1.08	2,445.60	-163.51	
11,332.00	89.17	359.60	10,259.30	2,540.67 N	53.78 W	468,207.57	607,955.22	0.98	2,540.60	-173.18	
11,426.00	88.93	359.67	10,260.86	2,634.65 N	54.38 W	468,301.55	607,954.62	0.27	2,634.58	163.74	
11,521.00	88.99	359.86	10,262.58	2,729.63 N	54.77 W	468,396.53	607,954.23	0.21	2,729.56	72.47	
11,615.00	89.63	359.82	10,263.71	2,823.63 N	55.03 W	468,490.53	607,953.97	0.68	2,823.56	-3.58	
11,710.00	89.58	359.52	10,264.37	2,918.62 N	55.58 W	468,585.52	607,953.42	0.32	2,918.55	-99.46	
11,804.00	90.60	359.74	10,264.22	3,012.62 N	56.18 W	468,679.52	607,952.82	1.11	3,012.55	12.17	
11,899.00	91.34	0.06	10,262.61	3,107.60 N	56.35 W	468,774.50	607,952.65	0.85	3,107.53	23.38	
11,993.00	91.76	0.48	10,260.07	3,201.57 N	55.91 W	468,868.47	607,953.09	0.63	3,201.50	44.98	
12,088.00	91.77	0.19	10,257.14	3,296.52 N	55.35 W	468,963.42	607,953.65	0.31	3,296.45	-88.02	

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Measured		Grid	Vertical	Local Coordinates		Map Coordinates		Dogleg	Vertical	Toolface	Comments
Depth (usft)	Inclination (°)	Azimuth (°)	Depth (usft)	Northing (usft)	Easting (usft)	Northing (usft)	Easting (usft)	Rate (°/100usft)	Section (usft)	Angle (°)	
12,182.00	93.02	0.82	10,253.21	3,390.43 N	54.52 W	469,057.33	607,954.48	1.49	3,390.36	26.72	
12,277.00	92.48	0.61	10,248.66	3,485.32 N	53.34 W	469,152.22	607,955.66	0.61	3,485.25	-158.77	
12,371.00	91.68	0.59	10,245.25	3,579.25 N	52.36 W	469,246.15	607,956.64	0.85	3,579.18	-178.57	
12,465.00	91.03	0.40	10,243.02	3,673.22 N	51.54 W	469,340.12	607,957.46	0.72	3,673.15	-163.71	
12,559.00	92.32	0.83	10,240.27	3,767.17 N	50.54 W	469,434.07	607,958.46	1.45	3,767.11	18.42	
12,654.00	92.06	0.52	10,236.64	3,862.09 N	49.42 W	469,528.99	607,959.58	0.43	3,862.03	-130.00	
12,749.00	91.00	0.35	10,234.11	3,957.06 N	48.70 W	469,623.96	607,960.30	1.13	3,956.99	-170.89	
12,843.00	90.23	0.21	10,233.10	4,051.05 N	48.24 W	469,717.95	607,960.76	0.83	4,050.99	-169.69	
12,938.00	89.92	0.54	10,232.97	4,146.05 N	47.62 W	469,812.95	607,961.38	0.48	4,145.99	133.21	
13,034.00	90.08	1.14	10,232.97	4,242.04 N	46.21 W	469,908.94	607,962.79	0.65	4,241.98	75.07	
13,128.00	89.20	1.22	10,233.57	4,336.01 N	44.27 W	470,002.91	607,964.73	0.94	4,335.96	174.81	
13,223.00	88.81	1.29	10,235.22	4,430.98 N	42.19 W	470,097.88	607,966.81	0.42	4,430.92	169.83	
13,316.00	89.61	0.84	10,236.50	4,523.95 N	40.46 W	470,190.85	607,968.54	0.99	4,523.90	-29.36	
13,411.00	88.61	0.20	10,237.97	4,618.93 N	39.60 W	470,285.83	607,969.40	1.25	4,618.88	-147.39	
13,506.00	89.30	359.01	10,239.71	4,713.91 N	40.26 W	470,380.81	607,968.74	1.45	4,713.86	-59.90	
13,600.00	88.99	358.52	10,241.11	4,807.88 N	42.28 W	470,474.78	607,966.72	0.62	4,807.82	-122.33	
13,695.00	87.88	357.84	10,243.70	4,902.79 N	45.30 W	470,569.69	607,963.70	1.37	4,902.74	-148.53	
13,789.00	87.84	357.99	10,247.21	4,996.67 N	48.72 W	470,663.57	607,960.28	0.17	4,996.60	104.94	
13,884.00	89.67	358.70	10,249.28	5,091.60 N	51.46 W	470,758.50	607,957.54	2.07	5,091.53	21.21	
13,978.00	89.07	358.69	10,250.31	5,185.57 N	53.60 W	470,852.47	607,955.40	0.64	5,185.50	-179.05	
14,072.00	89.29	359.31	10,251.66	5,279.54 N	55.24 W	470,946.44	607,953.76	0.70	5,279.47	70.47	
14,168.00	89.30	358.98	10,252.84	5,375.53 N	56.67 W	471,042.43	607,952.33	0.34	5,375.45	-88.27	
14,262.00	88.69	358.48	10,254.49	5,469.49 N	58.76 W	471,136.39	607,950.24	0.84	5,469.41	-140.67	
14,357.00	89.78	359.61	10,255.75	5,564.46 N	60.34 W	471,231.36	607,948.66	1.65	5,564.39	46.04	
14,452.00	89.71	359.35	10,256.18	5,659.46 N	61.20 W	471,326.36	607,947.80	0.28	5,659.38	-105.07	
14,546.00	90.09	359.74	10,256.34	5,753.46 N	61.95 W	471,420.36	607,947.05	0.58	5,753.38	45.74	
14,641.00	89.59	359.89	10,256.61	5,848.45 N	62.25 W	471,515.35	607,946.75	0.55	5,848.37	163.30	
14,735.00	89.75	359.84	10,257.15	5,942.45 N	62.48 W	471,609.35	607,946.52	0.18	5,942.37	-17.35	
14,829.00	89.12	359.81	10,258.07	6,036.45 N	62.76 W	471,703.35	607,946.24	0.67	6,036.37	-177.27	
14,924.00	90.01	359.68	10,258.80	6,131.44 N	63.19 W	471,798.34	607,945.81	0.95	6,131.36	-8.31	
15,018.00	90.48	0.14	10,258.39	6,225.44 N	63.33 W	471,892.34	607,945.67	0.70	6,225.36	44.38	
15,113.00	89.60	0.83	10,258.33	6,320.44 N	62.53 W	471,987.34	607,946.47	1.18	6,320.35	141.90	
15,207.00	89.05	0.60	10,259.43	6,414.42 N	61.36 W	472,081.32	607,947.64	0.63	6,414.34	-157.31	
15,302.00	89.63	0.54	10,260.53	6,509.41 N	60.41 W	472,176.31	607,948.59	0.61	6,509.33	-5.91	
15,396.00	90.19	0.68	10,260.68	6,603.40 N	59.41 W	472,270.30	607,949.59	0.61	6,603.33	14.04	
15,491.00	90.41	359.65	10,260.18	6,698.40 N	59.14 W	472,365.30	607,949.86	1.11	6,698.32	-77.94	
15,585.00	90.76	359.50	10,259.22	6,792.39 N	59.83 W	472,459.29	607,949.17	0.41	6,792.32	-23.20	

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Measured Depth (usft)	Inclination (°)	Grid Azimuth (°)	Vertical Depth (usft)	Local Coordinates		Map Coordinates		Dogleg Rate (°/100usft)	Vertical Section (usft)	Toolface Angle (°)	Comments
15,680.00	89.50	359.29	10,259.00	6,887.39 N	60.84 W	472,554.29	607,948.16	1.34	6,887.31	-170.54	
15,774.00	89.32	359.79	10,259.97	6,981.38 N	61.59 W	472,648.28	607,947.41	0.57	6,981.30	109.80	
15,869.00	89.33	358.71	10,261.09	7,076.36 N	62.83 W	472,743.26	607,946.17	1.14	7,076.28	-89.48	
15,963.00	89.44	358.66	10,262.10	7,170.33 N	64.99 W	472,837.23	607,944.01	0.13	7,170.25	-24.44	
16,058.00	91.75	0.11	10,261.11	7,265.31 N	66.01 W	472,932.21	607,942.99	2.87	7,265.23	32.11	
16,153.00	91.66	359.62	10,258.29	7,360.27 N	66.24 W	473,027.17	607,942.76	0.52	7,360.18	-100.40	
16,247.00	91.65	359.11	10,255.57	7,454.22 N	67.28 W	473,121.12	607,941.72	0.54	7,454.14	-91.12	
16,341.00	91.63	358.97	10,252.88	7,548.17 N	68.85 W	473,215.07	607,940.15	0.15	7,548.08	-98.13	
16,436.00	89.64	357.77	10,251.83	7,643.12 N	71.55 W	473,310.02	607,937.45	2.45	7,643.03	-148.90	
16,531.00	88.73	356.67	10,253.18	7,738.00 N	76.16 W	473,404.90	607,932.84	1.50	7,737.90	-129.61	
16,625.00	88.86	355.60	10,255.16	7,831.76 N	82.49 W	473,498.66	607,926.51	1.15	7,831.66	-83.08	
16,720.00	89.44	356.42	10,256.57	7,926.52 N	89.10 W	473,593.42	607,919.90	1.06	7,926.40	54.73	
16,814.00	88.30	357.86	10,258.42	8,020.38 N	93.79 W	473,687.28	607,915.21	1.95	8,020.26	128.39	
16,908.00	87.88	359.72	10,261.55	8,114.30 N	95.78 W	473,781.20	607,913.22	2.03	8,114.18	102.76	
17,002.00	88.45	0.39	10,264.56	8,208.25 N	95.69 W	473,875.15	607,913.31	0.94	8,208.13	49.61	
17,096.00	88.61	1.71	10,266.98	8,302.20 N	93.97 W	473,969.10	607,915.03	1.41	8,302.08	83.10	
17,192.00	91.04	2.42	10,267.27	8,398.13 N	90.51 W	474,065.03	607,918.49	2.64	8,398.02	16.29	
17,287.00	90.37	2.86	10,266.10	8,493.03 N	86.13 W	474,159.93	607,922.87	0.84	8,492.91	146.71	
17,381.00	89.61	2.69	10,266.12	8,586.91 N	81.58 W	474,253.81	607,927.42	0.83	8,586.81	-167.39	
17,476.00	89.29	3.21	10,267.03	8,681.78 N	76.69 W	474,348.68	607,932.31	0.64	8,681.68	121.61	
17,571.00	89.95	2.40	10,267.66	8,776.67 N	72.04 W	474,443.57	607,936.96	1.10	8,776.57	-50.83	
17,665.00	89.97	2.56	10,267.72	8,870.58 N	67.97 W	474,537.48	607,941.03	0.17	8,870.49	82.88	
17,760.00	90.87	3.02	10,267.03	8,965.46 N	63.35 W	474,632.36	607,945.65	1.06	8,965.38	27.07	
17,855.00	90.46	1.80	10,265.92	9,060.37 N	59.36 W	474,727.27	607,949.64	1.35	9,060.29	-108.57	
17,949.00	90.24	1.74	10,265.35	9,154.32 N	56.45 W	474,821.22	607,952.55	0.24	9,154.25	-164.74	
18,044.00	90.04	2.02	10,265.12	9,249.27 N	53.34 W	474,916.17	607,955.66	0.36	9,249.20	125.54	
18,139.00	89.60	1.62	10,265.42	9,344.22 N	50.32 W	475,011.12	607,958.68	0.63	9,344.15	-137.73	
18,234.00	89.10	1.28	10,266.49	9,439.19 N	47.92 W	475,106.09	607,961.08	0.64	9,439.12	-145.79	
18,329.00	89.00	1.17	10,268.07	9,534.15 N	45.88 W	475,201.05	607,963.12	0.16	9,534.09	-132.28	
18,423.00	90.80	1.32	10,268.23	9,628.12 N	43.84 W	475,295.02	607,965.16	1.92	9,628.06	4.76	
18,517.00	90.44	1.44	10,267.22	9,722.09 N	41.58 W	475,388.99	607,967.42	0.40	9,722.03	161.57	
18,612.00	89.77	0.62	10,267.04	9,817.07 N	39.87 W	475,483.97	607,969.13	1.11	9,817.02	-129.25	
18,706.00	90.59	359.95	10,266.75	9,911.07 N	39.40 W	475,577.97	607,969.60	1.13	9,911.02	-39.25	
18,802.00	92.32	0.06	10,264.31	10,007.04 N	39.40 W	475,673.94	607,969.60	1.81	10,006.98	3.64	
18,896.00	90.98	358.55	10,261.60	10,100.99 N	40.54 W	475,767.89	607,968.46	2.15	10,100.93	-131.57	
18,991.00	89.96	358.15	10,260.82	10,195.94 N	43.27 W	475,862.84	607,965.73	1.15	10,195.88	-158.59	
19,085.00	89.91	359.08	10,260.93	10,289.91 N	45.54 W	475,956.81	607,963.46	0.99	10,289.85	93.08	

HALLIBURTON

Eddy County, New Mexico (NAD27)

Design Report for Blue Steel Fed Com WA #15H - Final Survey

Measured Depth (usft)	Inclination (°)	Grid Azimuth (°)	Vertical Depth (usft)	Local Coordinates		Map Coordinates		Dogleg Rate (°/100usft)	Vertical Section (usft)	Toolface Angle (°)	Comments
				Northing (usft)	Easting (usft)	Northing (usft)	Easting (usft)				
19,180.00	89.61	359.85	10,261.33	10,384.91 N	46.43 W	476,051.81	607,962.57	0.87	10,384.84	111.29	
19,274.00	91.03	0.54	10,260.80	10,478.90 N	46.11 W	476,145.80	607,962.89	1.68	10,478.84	25.91	
19,368.00	91.78	0.55	10,258.50	10,572.87 N	45.22 W	476,239.77	607,963.78	0.80	10,572.81	0.76	
19,463.00	90.48	0.75	10,256.62	10,667.84 N	44.14 W	476,334.74	607,964.86	1.38	10,667.78	171.25	
19,557.00	89.24	1.19	10,256.85	10,761.83 N	42.55 W	476,428.73	607,966.45	1.40	10,761.77	160.46	
19,651.00	88.29	1.10	10,258.88	10,855.79 N	40.67 W	476,522.69	607,968.33	1.02	10,855.73	-174.59	
19,746.00	87.52	0.89	10,262.35	10,950.71 N	39.02 W	476,617.61	607,969.98	0.84	10,950.65	-164.76	
19,841.00	89.17	0.64	10,265.10	11,045.66 N	37.75 W	476,712.56	607,971.25	1.76	11,045.60	-8.62	
19,933.00	89.61	359.34	10,266.08	11,137.65 N	37.77 W	476,804.55	607,971.23	1.49	11,137.59	-71.31	
20,025.00	91.63	1.18	10,265.08	11,229.63 N	37.35 W	476,896.53	607,971.65	2.97	11,229.58	42.32	
20,116.00	91.19	2.61	10,262.84	11,320.55 N	34.34 W	476,987.45	607,974.66	1.64	11,320.50	107.09	
20,209.00	90.05	1.56	10,261.84	11,413.48 N	30.96 W	477,080.38	607,978.04	1.67	11,413.44	-137.35	
20,301.00	89.87	1.83	10,261.90	11,505.44 N	28.24 W	477,172.34	607,980.76	0.35	11,505.40	123.69	Last MWD Survey @ 20301.00 MD
20,323.00	89.87	1.83	10,261.95	11,527.43 N	27.54 W	477,194.33	607,981.46	0.00	11,527.39	0.00	PTD @ 20323.00 MD

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
3,046.00	3,021.49	303.20	-11.37	Start MWD Survey @ 3046.00 MD
7,413.00	7,289.16	1,218.81	-36.08	Cross Sec Line @ 7413.00 MD
10,301.00	10,090.20	1,549.23	-45.00	Cross 330 Line @ 10301.00 MD
20,301.00	10,261.90	11,505.44	-28.24	Last MWD Survey @ 20301.00 MD
20,323.00	10,261.95	11,527.43	-27.54	PTD @ 20323.00 MD

Vertical Section Information

Angle Type	Target	Azimuth (°)	Origin Type	Origin		Start TVD (usft)
				+N/_S (usft)	+E/-W (usft)	
User	No Target (Freehand)	0.07	Slot	0.00	0.00	0.00

HALLIBURTON**Design Report for Blue Steel Fed Com WA #15H - Final Survey****Survey tool program**

From (usft)	To (usft)	Survey/Plan	Survey Tool
30.00	260.00	Gyro	3_Unknown Gyro
417.00	2,961.00	MWD	3_MWD+HRGM
3,046.00	9,835.72	Intermediate	3_MWD+HRGM+AX
9,840.00	10,952.00	Curve	3_MWD+HRGM+AX
11,048.00	20,301.00	Lateral	3_MWD+HRGM+AX
20,323.00	20,323.00	Projection to Bit	3_Blind

Design Targets

Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	()	()	()	()	()	()	()		
- Shape									
()									

Directional Difficulty Index

Average Dogleg over Survey:	1.41 °/100usft	Maximum Dogleg over Survey:	12.40 °/100usft at 10,020.00 usft
Net Tortousity applicable to Plans:	0.76 °/100usft	Directional Difficulty Index:	6.818

Audit Info

HALLIBURTON**Marathon Oil Permian LLC**

Eddy County, New Mexico (NAD27)

North Reference Sheet for Blue Steel Pad (Grid) - Blue Steel Fed Com WA #15H - Wellbore #1

All data is in US Feet unless otherwise stated. Directions and Coordinates are relative to Grid North Reference.

Vertical Depths are relative to RKB (PD 582) 27 + GL @ 3025.00usft. Northing and Easting are relative to Blue Steel Fed Com WA #15H

Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 3001 using datum NAD 1927 (NADCON CONUS), ellipsoid Clarke 1866

Projection method is Transverse Mercator (Gauss-Kruger)

Central Meridian is -104.33333333°, Longitude Origin:0.00000000°, Latitude Origin:0.00000000°

False Easting: 500,000.00usft, False Northing: 0.00usft, Scale Reduction: 0.99992245

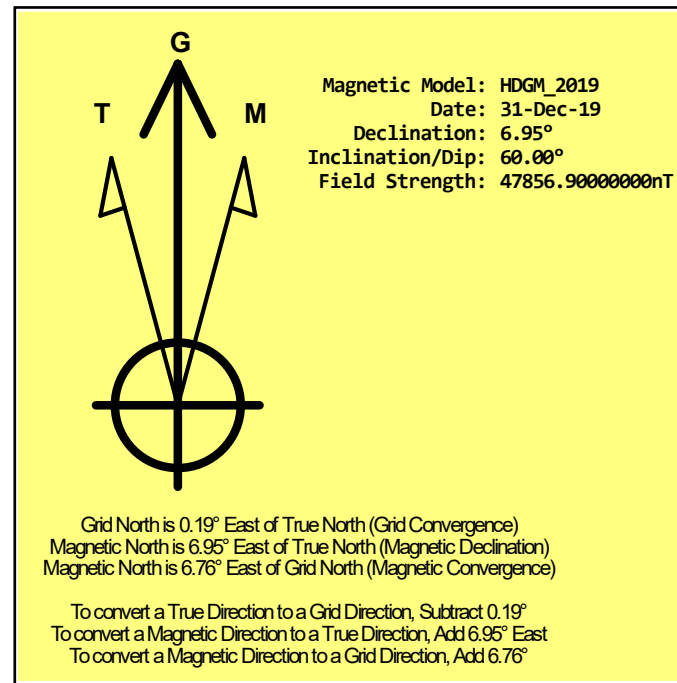
Grid Coordinates of Well: 465,666.90 usft N, 608,009.00 usft E

Geographical Coordinates of Well: 32.27975143, -103.98384692

Grid Convergence at Surface is: 0.19°

Based upon Minimum Curvature type calculations, at a Measured Depth of 20,323.00usft
the Bottom Hole Displacement is 11,527.46usft in the Direction of 359.86° (Grid).

Magnetic Convergence at surface is: -6.76° (31 December 2019, , HDGM_2019)



Well Name: BLUE STEEL 21 WA FED COM	Well Location: T23S / R29E / SEC 28 / NENE / 32.279872 / -103.9842404	County or Parish/State: EDDY / NM
Well Number: 15H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM119272	Unit or CA Name:	Unit or CA Number:
US Well Number: 3001545899	Well Status: Approved Application for Permit to Drill	Operator: MARATHON OIL PERMIAN LLC

Subsequent Report

Type of Submission: Subsequent Report	Type of Action: Hydraulic Fracturing
Date Sundry Submitted: 02/01/2021	Time Sundry Submitted: 08:44
Date Operation Actually Began: 11/04/2020	

Actual Procedure: 11/04/2020 Started Frac Prep operations. PBDT at 20,277'. 11/09/2020 Start frac stages 1-33 with 2 shots per foot for a total of 1,122 shots, 0.36-in. in size using 24,775,740 lbs of 40/70; 100 Mesh. Stimulated with 1,196 bbls of 15% HCL acid. Total interval from 10,293 to 20,105. 12/18/2020 - Turned to flowback, first production. Marathon Oil Permian LLC request tubing exception and request for OCD extension of time to file BLM approved Form 3160-4.

SR Attachments

Actual Procedure

Formation_Tops__Blue_Steel_21_WA_Fed_Com_15H_20210201084328.pdf

Well Name: BLUE STEEL 21 WA FED COM	Well Location: T23S / R29E / SEC 28 / NENE / 32.279872 / -103.9842404	County or Parish/State: EDDY / NM
Well Number: 15H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM119272	Unit or CA Name:	Unit or CA Number:
US Well Number: 3001545899	Well Status: Approved Application for Permit to Drill	Operator: MARATHON OIL PERMIAN LLC

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: COVARRUBIAS	Signed on: FEB 01, 2021 08:44 AM
Name: MARATHON OIL PERMIAN LLC	
Title: regulatory Compliance Representative	
Street Address: 5555 SAN FELIPE STREET	
City: HOUSTON	State: TX
Phone: (713) 296-2423	
Email address: NOT ENTERED	

Field Representative

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: 02/04/2021
Signature: Jonathon Shepard	

Geological Tops	
BLUE STEEL 21 WA FED COM 15H	
Base Salt	3006
Lamar	3059
Delaware Sands (Bell Canyon)	3088
Cherry Canyon	3920
Brushy Canyon	5118
Bone Spring	6849
Wolfcamp	10138

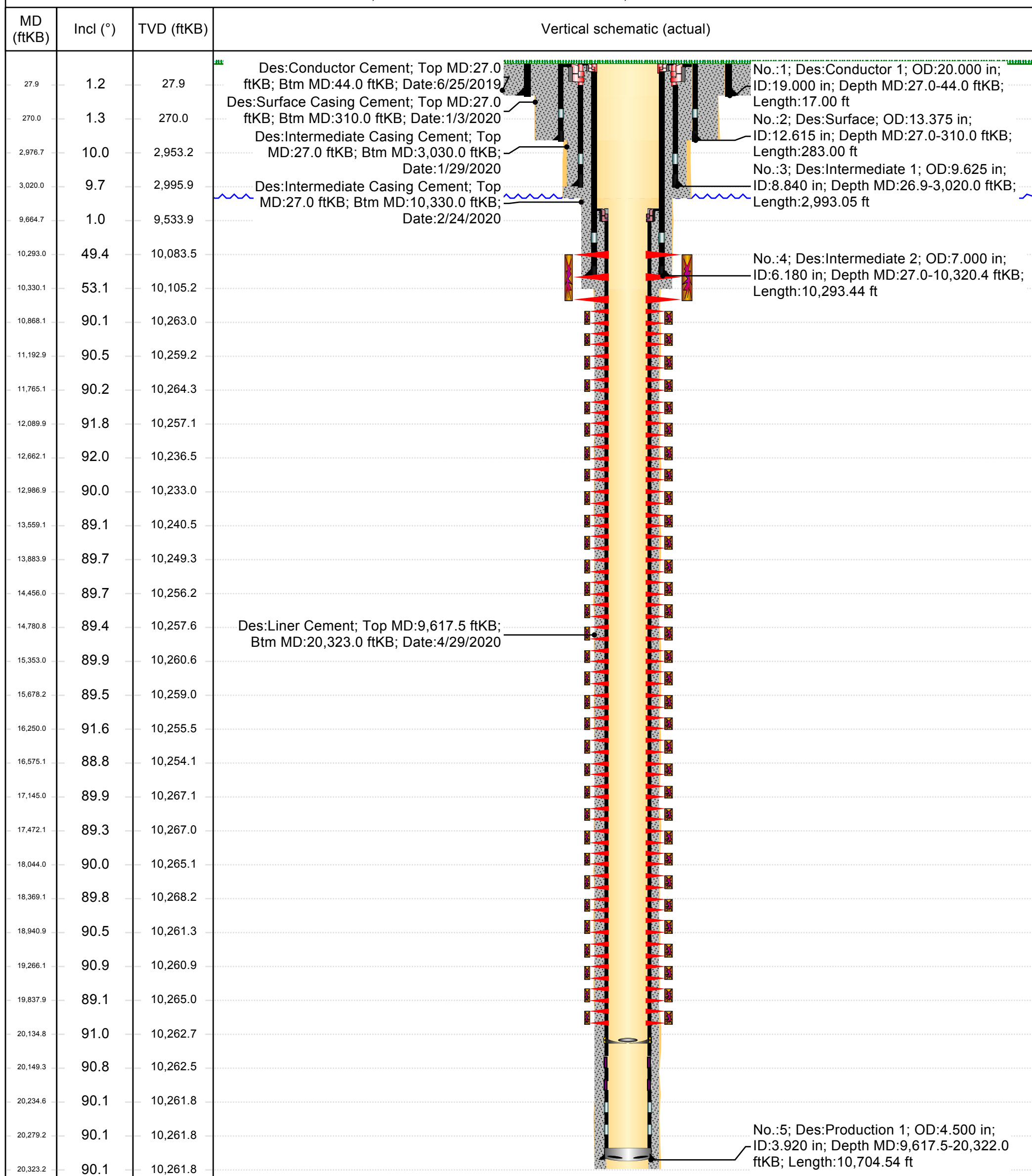


Wellbore Schematic

Well Name: BLUE STEEL 21 WA FED COM 015H

State/Province NEW MEXICO	Country UNITED STATES	Field Name MALAGA	Latitude (°) 32.27951430	Longitude (°) -103.98384690	North/South Distance (ft) 1,219.0	North/South Reference FNL
API/ IPO UWI 3001545899	KB-Ground Distance (ft) 27.00	KB-Mud Line Distance (ft)	Ground Elevation (ft) 2,995.00	Drilling Rig Spud Date 1/26/2020	Well Original Completion Date	Well First Production Date 12/20/2020

HORIZONTAL, BLUE STEEL 21 WA FED COM 015H, 1/8/2021 1:57:02 PM



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 17437

CONDITIONS OF APPROVAL

Operator: MARATHON OIL PERMIAN LLC 5555 San Felipe St. Permian Regulatory Team Houston, TX77056		OGRID: 372098	Action Number: 17437	Action Type: C-104C
OCD Reviewer	Condition			
ksimmons	Submit 3160-4 Completion Report when approved copy rec'd from BLM.			