



U.S. Department of the Interior
BUREAU OF LAND MANAGEMENT

Well Completion Print

07/18/2022

Operator Name MARATHON OIL PERMIAN LLC SHL NENE Sec 6 26S 35E	Well Name CHARLIE MURPHY 6 WXY FC County LEA	Well Number 18H State NM	US Well Number 3002546487 Lease Number(s) NMNM013647, NMNM13647, NMNM13647 Agreement Number(s)
Well Type CONVENTIONAL GAS WELL	Well Status Drilling Well	Agreement Name	
Allottee/Tribe Name	Well Pad Name CHARLIE MURPHY 6 FC	Well Pad Number 299-10	ID 10400040493

Section 1 - General

Well Completion Report Id: 81172**Submission Date:** N/A until DB**BLM Office:** Carlsbad Field Office**User:** ADRIAN COVARRUBIAS**Title:** regulatory Compliance**Federal/Indian:** FEDERAL**Lease Number:** NMNM013647**Lease Acres:** 1281.31**Agreement in place?:** NO**Federal or Indian Agreement:****Agreement Number:****Agreement Name:****Keep this Well Completion Report confidential?:****APD Operator:** MARATHON OIL
PERMIAN LLC

Section 2 - Well

Field/Pool or Exploratory:**Pool Name:** WOLFCAMP**Field Name:** WC 025 G 09**Well Type:** CONVENTIONAL GAS**Spud Date:** 12-20-2019**Date Total Measured Depth Reached:** 02-04-2020**Drill & Abandon or Ready To Produce:** READY TO**Well Class:** HORIZONTAL

Section 3 - Geologic

Formation Name	Lithology	Describe Lithology	Elevation	TVD	MD	Mineral Resources	Describe Mineral
RUSTLER	ANHYDRITE, DOLOMITE		3270	1021	1021	OTHER	Brine
SALADO	ANHYDRITE, SALT		1810	1460	1460	OTHER	Brine

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CASTILE	SALT		-291	3586	3599	OTHER	Brine
LAMAR	SALT, SHALE		-2113	5408	5431	OIL	
BELL CANYON	SANDSTONE, SHALE		-2141	5436	5480	OIL	
BRUSHY CANYON	OTHER, SANDSTONE	Carbonate	-4618	7913	7962	OIL	
BONE SPRING	OTHER, SANDSTONE	Carbonate	-6052	9347	9397	OIL	
WOLFCAMP	OTHER, SANDSTONE	Carbonate	-9166	12461	12536	NATURAL GAS, OIL	

Completion and Completed

Completion Data

Wellbore Code	Completion Code	Interval Number	Case Number	Lease Number	Well Completion Type	Describe Well Completion Type	Completion Status	Date Completed	Date First Produced	Formation	Interval Top (MD)	Interval Bottom (MD)	Interval Perforated?	Perforation Size	Number of Holes	Status of Interval
00	S1	1	NMNM13647	NMNM13647	NEW		PGW	09-13-2021	09-20-2021	WOLFCA MP	12546	22778	Y	.36	1020	OPEN

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Treatment Data

Wellbore Code	Completion Code	Interval Number	Interval Treated?	Treatment Type	Total Fluid (bbls)	Total Proppant (lbs)	Treatment Remarks
00	S1	1	Y	FRAC	503895		4914 gal 15%HCL Acid; 203,739 bbls Brackish Water 26,621,391 lbs 100 Mesh

Production Data

Wellbore Code	Completion Code	Interval Number	API Oil Gravity	Gas Gravity	Production Method	Describe Production	Disposition of Gas	Describe Disposition
00	S1	1			FLOWS FROM WELL		SOLD	

Test Data

Wellbore Code	Completion Code	Interval Number	Test Date	Hours Tested	24-Hour Rate Oil (bbls)	24-Hour Rate Gas (MCF)	24-Hour Rate Water(BWPD)	Gas-Oil Ratio (SCF/Bbl)	Choke Size	Tubing Pressure	Tubing Pressure Shut-In (psi)	Casing Pressure (psi)
00	S1	1	09/21/2021	24	230	206	2731	895	18/64			3339

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Well Location

Survey Type: RECTANGULAR

Survey Number: 3954

Datum: NAD83

Vertical Datum: NAVD88

Reference Datum:

	State	Meridian	County	Latitude	Longitude	Elevation (MSL)	Lease Type	Lease Number	Plug TVD (ft)	Plug MD (ft)	Plug Type	NS-Foot	NS-Indicator	EW-Foot	EW-Indicator	Township	Range	Section	Aliquot/Lot/Tract
SHL	NEW MEXICO	NEW MEXICO PRINCIPAL	LEA	32.0788792	-103.4016294	3270	FEDERAL	NMNM13647				272	FNL	1111	FEL	26S	35E	6	NENE
KOP Well bore 00	NEW MEXICO	NEW MEXICO PRINCIPAL	LEA	32.0793511	-103.3997677	-9002	FEDERAL	NMNM13647				100	FNL	534	FEL	26S	35E	6	NENE
PPP Well bore 00	NEW MEXICO	NEW MEXICO PRINCIPAL	LEA	32.0578355	-103.3990687	-9345	FEDERAL	NMNM115000				2642	FSL	330	FEL	26S	35E	7	NESE
EXIT Well bore 00	NEW MEXICO	NEW MEXICO PRINCIPAL	LEA	32.0508514	-103.3992614	-9394	FEDERAL	NMNM115000				101	FSL	394	FEL	26S	35E	7	SESE
BHL Well bore 00	NEW MEXICO	NEW MEXICO PRINCIPAL	LEA	32.0508514	-103.3992614	-9394	FEDERAL	NMNM115000				101	FSL	394	FEL	26S	35E	7	SESE

Casing, Liner and Tubing

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Casing and Liner

Wellbore Code	Casing String Type	Hole Size	Top Setting Depth (MD)	Bottom Setting Depth (MD)	Casing Size	Wt(lbs/ft)	Casing Grade	Describe Other Casing Grade	Joint	Other Joint	Amount Pulled (ft)
00	SURFACE	17.5	1	1070	13.375	54.5	J-55		ST&C		
00	INTERMEDIATE	9.875	0	11875	9.875	29.7	P-110		BUTT	P110	
00	PRODUCTION	6.75	0	22967	5.5	23	P-110		OTHER	TLW	

Cementing

Wellbore Code	Casing String Type	Stage Tool Depth	Cement Lead Type	Cement Lead Qty (sks)	Cement Lead Yield (cu.ft/sks)	Cement Lead Top (MD)	Cement Tail Type	Cement Tail Qty (sks)	Cement Tail Yield(cu.ft/sks)	Cement Tail Top (MD)	Total (Lead + Tail) Cement Slurry Volume
00	SURFACE		Class C	830	1.55	0	Class C	345	1.32	0	310.2
00	INTERMEDIATE		Class C	860	5.54	0	Class C	335	1.38		930.9
00	PRODUCTION		Class H	575	1.61	13100	CLASS H	1015	1.4		418

Logs

Wellbore Code	Log Upload	Was Well Cored?	Was DST Run?	Directional Survey?	Geologic Report	Wellbore Diagram
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Logs

Wellbore Code	Log Upload	Was Well Cored?	Was DST Run?	Directional Survey?	Geologic Report	Wellbore Diagram
00	YES	NO	NO	YES	NO	YES

Operator

I hereby certify that the foregoing and attached information is complete and correct as determined from all available records. 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 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 Well Completion Reports through this system satisfies regulations requiring a submission of Form 3160-4 or a Well Completion Report.

Name: MARATHON OIL PERMIAN LLC**Signed By:** ADRIAN COVARRUBIAS**Title:** regulatory Compliance
Representative**Signed on:** 05/13/2022**Street Address:** 990 TOWN & COUNTRY BLVD**City:** HOUSTON**State:** TX**Zip:** 77024**Phone:** (713)296-3368**Email address:** acovarrubias@marathonoil.com**Field****Representative Name:****Street Address:****City:****State:****Zip:****Phone:****Extension:****Email address:****Attachments**

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WD_CharlieMurphy6WXYFedCom18HMDFinal_2020_03_26_15.55.51_20210916131717.pdf

20210813_R3954_001_CHARLIE_MURPHY_6_WA_FEDERAL_COM_18H_REV0_CERT_AS_DRILLED_20210916131736.pdf

Charlie_Murphy_6_WXY_Fed_Com_18H_Final_Surveys_20210916131806.pdf

Wellbore_Schematic___CHARLIE_MURPHY_6_WXY_FEDERAL_COM_018H___2021_09_16_20210916132015.pdf

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
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 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 30-025-46487	² Pool Code 98117	³ Pool Name WC-025 G-09 S263504N; WOLFCAMP
⁴ Property Code 326320	Property Name CHARLIE MURPHY 6 WA FEDERAL COM	
⁷ OGRID No. 372098	⁸ Operator Name MARATHON OIL PERMIAN LLC	⁶ Well Number 18H
		⁹ Elevation 3270'

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	6	26S	35E		272	NORTH	1111	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
P	7	26S	35E		101	SOUTH	394	EAST	LEA
¹² Dedicated Acres 640.0	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.

CORNER COORDINATES NAD 83, SPCS NM EAST A - X: 831020.60' / Y: 393959.45' B - X: 831048.36' / Y: 391316.79' C - X: 831074.50' / Y: 388675.34' D - X: 831129.70' / Y: 383390.47' E - X: 828491.21' / Y: 383378.93' F - X: 828462.97' / Y: 386016.82' G - X: 828434.68' / Y: 388658.54' H - X: 828405.91' / Y: 391299.52' I - X: 828377.14' / Y: 393941.11' CORNER COORDINATES NAD 27, SPCS NM EAST A - X: 789833.21' / Y: 393901.73' B - X: 789860.85' / Y: 391259.15' C - X: 789886.87' / Y: 388617.77' D - X: 789941.84' / Y: 383333.04' E - X: 787303.38' / Y: 383321.52' F - X: 787275.25' / Y: 385959.34' G - X: 787247.09' / Y: 388600.99' H - X: 787218.44' / Y: 391241.90' I - X: 787189.78' / Y: 393883.42' SURFACE HOLE LOCATION 272' FNL 1111' FEL, SECTION 6 NAD 83, SPCS NM EAST X: 829912.65' / Y: 393679.61' LAT: 32.07887921N / LON: 103.40162941W NAD 27, SPCS NM EAST X: 788725.26' / Y: 393621.91' LAT: 32.07875311N / LON: 103.40116598W KICK OFF POINT 100' FNL 534' FEL, SECTION 6 12376' MEASURED DEPTH IN FEET NAD 83, SPCS NM EAST X: 830487.79' / Y: 393856.28' LAT: 32.07935117N / LON: 103.39976777W NAD 27, SPCS NM EAST X: 789300.40' / Y: 393798.58' LAT: 32.07922504N / LON: 103.39930438W FIRST TAKE POINT 159' FNL 562' FEL, SECTION 6 12536' MEASURED DEPTH IN FEET NAD 83, SPCS NM EAST X: 830460.17' / Y: 393798.62' LAT: 32.07918783N / LON: 103.39985862W NAD 27, SPCS NM EAST X: 789272.78' / Y: 393738.92' LAT: 32.07906171N / LON: 103.39939523W LAST TAKE POINT/BHL 101' FSL 394' FEL, SECTION 7 22979' MEASURED DEPTH IN FEET NAD 83, SPCS NM EAST X: 830734.35' / Y: 383489.66' LAT: 32.05085148N / LON: 103.39926148W NAD 27, SPCS NM EAST X: 789546.50' / Y: 383432.22' LAT: 32.05072520N / LON: 103.39879974W	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> 8/17/2021 Signature Date Adrian Covarrubias Printed Name E-mail Address 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. AUGUST 13, 2021 Date of Survey Signature and Seal of Professional Surveyor DAVID W. MYERS 11403 Certificate Number
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Distances/areas relative to NAD 83 Combined Scale Factor: 0.99985058 Convergence Angle: 00°29'34.804752"

☐ Horizontal Spacing Unit



Marathon Oil Permian LLC

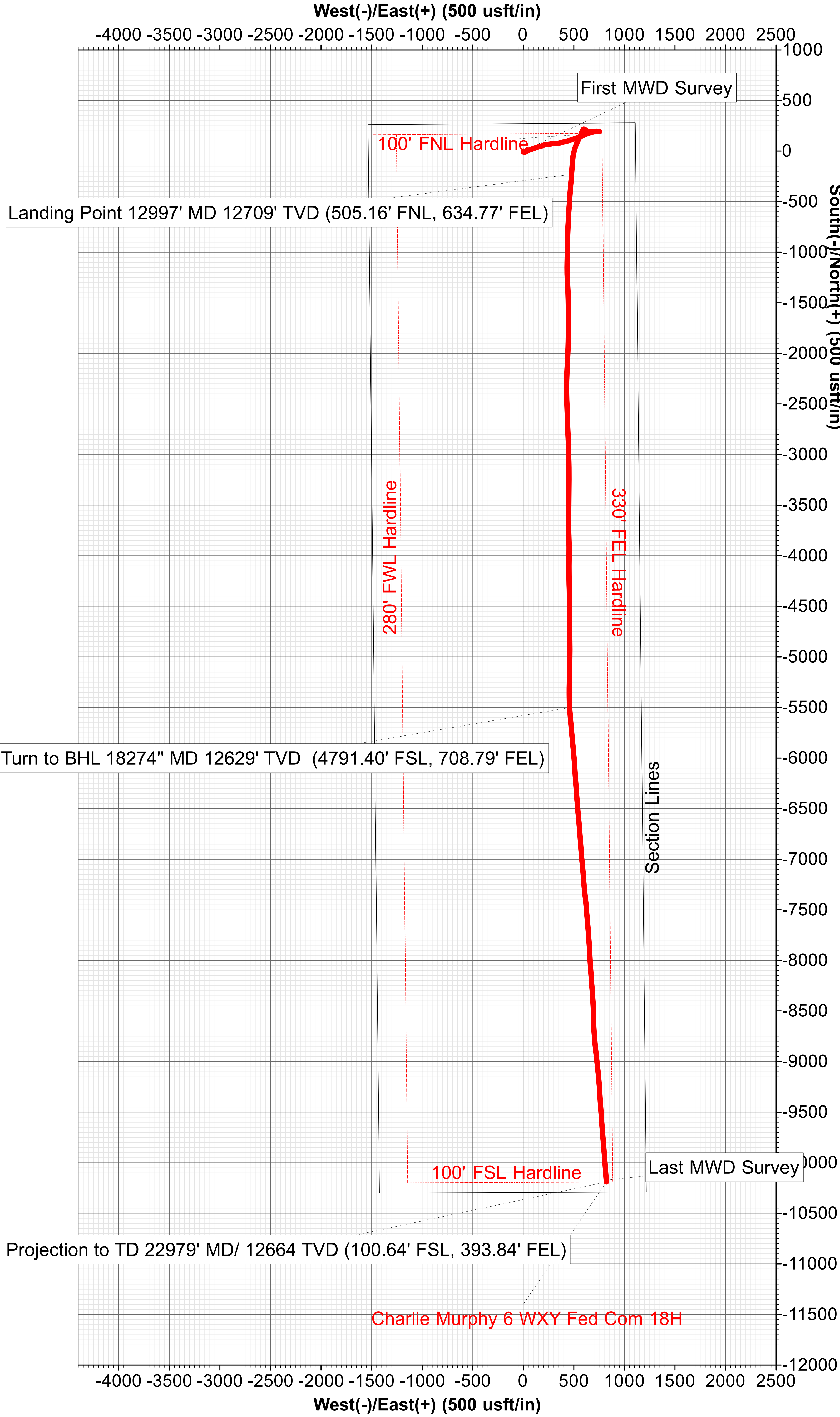
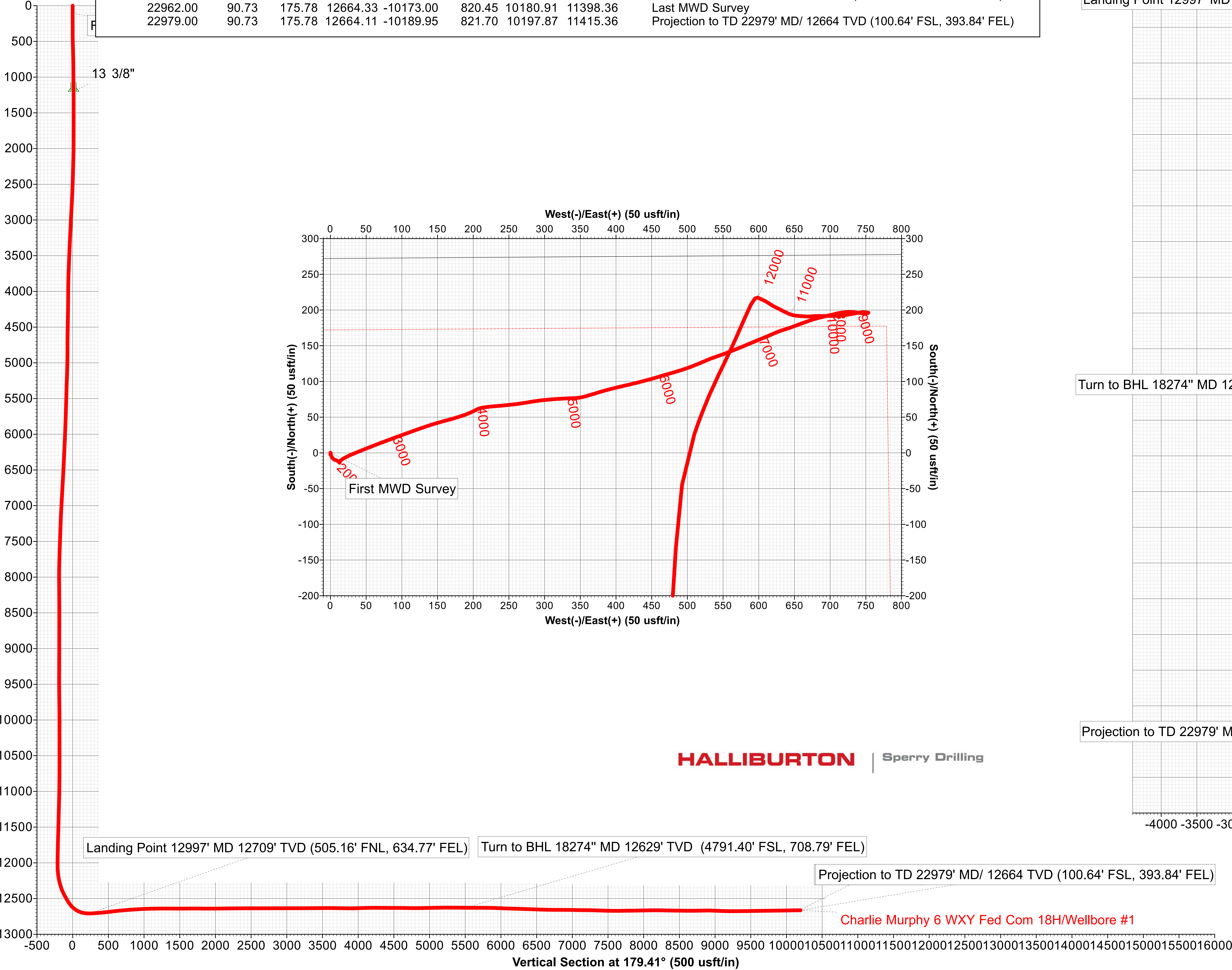
RKB (Precision 601) 25' + GL(3270') @ 3295.00usft
3270.00

Project: Lea County, New Mexico (NAD27)
Site: Charlie Murphy 6 Pad (Grid)
Well: Charlie Murphy 6 WXY Fed Com 18H
Wellbore: Wellbore #1
Design: Actual Drilled
Rig:

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: -0.50°
Magnetic North: 6.04°
Magnetic Field
Strength: 47671.0nT
Dip Angle: 59.67°
Date: 12/1/2019
Model: HDGM_2019

WELL DETAILS								
3270.00								
	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude		
	0.00	0.00	393621.91	788725.26	32.07875311	-103.40116599		
SECTION DETAILS								
MD	Inc	Azi	TVD	+N/-S	+E/-W	VSect	Departure	Annotation
107.00	0.30	359.80	107.00	0.23	0.00	-0.23	0.23	First MWD Survey
12997.00	90.05	184.91	12709.40	-229.71	478.38	234.63	1437.81	Landing Point 12997' MD 12709' TVD (505.16' FNL, 634.77' FEL)
18274.00	89.31	176.53	12629.74	-5500.73	458.53	5505.16	6711.41	Turn to BHL 18274" MD 12629' TVD (4791.40' FSL, 708.79' FEL)
22962.00	90.73	175.78	12664.33	-10173.00	820.45	10180.91	11398.36	Last MWD Survey
22979.00	90.73	175.78	12664.11	-10189.95	821.70	10197.87	11415.36	Projection to TD 22979' MD/ 12664 TVD (100.64' FSL, 393.84' FEL)



HALLIBURTON | Sperry Drilling

Marathon Oil Permian LLC

Lea County, New Mexico (NAD27) Charlie Murphy 6 Pad (Grid)

API#

Charlie Murphy 6 WXY Fed Com 18H

SHL: (272' FNL, 1111' FEL)

Wellbore #1

Design: Actual Drilled

Sperry Drilling Services

Combo Report

24 February, 2020

Well Coordinates: 32.07875312
-103.40116599

NAD 1927 (NADCON CONUS)
New Mexico East 3001
393,621.91 N
788,725.26 E

Ground Level: 3,270.00 usft

Local Coordinate Origin:

Centered on Well Charlie Murphy 6 WXY Fed Com 18H

Viewing Datum:

RKB (Precision 601) 25' + GL(3270') @ 3295.00usft

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

Lea County, New Mexico (NAD27)

Design Report for Charlie Murphy 6 WXY Fed Com 18H - Actual Drilled

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)				
0.00	0.00	0.00	0.00	0.00 N	0.00 E	393,621.91	788,725.26	0.00	0.00	0.00	LP WP6 - 18H KOP/FTP (100' FNL - 380' FEL) - 18H LTP/BHL (100' FSL - 380' FEL)
20.00	0.00	0.00	20.00	0.00 N	0.00 E	393,621.91	788,725.26	0.00	0.00	0.00	
107.00	0.30	359.80	107.00	0.23 N	0.00 W	393,622.14	788,725.26	0.34	-0.23	359.80	First MWD Survey
191.00	0.40	148.60	191.00	0.20 N	0.15 E	393,622.11	788,725.41	0.80	-0.20	162.12	
292.00	0.80	161.00	291.99	0.77 S	0.56 E	393,621.14	788,725.82	0.41	0.78	24.25	
379.00	1.00	302.00	378.99	0.94 S	0.12 E	393,620.97	788,725.38	1.95	0.94	158.24	
466.00	1.30	161.90	465.98	1.48 S	0.22 W	393,620.43	788,725.04	2.49	1.48	-157.34	
511.00	1.50	154.30	510.97	2.49 S	0.20 E	393,619.42	788,725.46	0.61	2.50	-46.72	
552.00	1.50	151.38	551.95	3.45 S	0.68 E	393,618.46	788,725.94	0.19	3.46	-91.46	
597.00	1.63	149.71	596.94	4.52 S	1.29 E	393,617.39	788,726.55	0.31	4.53	-20.17	
641.00	1.67	149.19	640.92	5.61 S	1.93 E	393,616.30	788,727.19	0.10	5.63	-20.78	
686.00	1.80	146.50	685.90	6.76 S	2.66 E	393,615.15	788,727.92	0.34	6.79	-33.42	
732.00	1.60	145.40	731.88	7.89 S	3.42 E	393,614.02	788,728.68	0.44	7.93	-171.28	
822.00	1.10	113.10	821.85	9.27 S	4.93 E	393,612.64	788,730.19	0.99	9.32	-138.75	
866.00	1.10	108.80	865.85	9.57 S	5.72 E	393,612.34	788,730.98	0.19	9.63	-92.15	
956.00	1.60	107.61	955.82	10.23 S	7.73 E	393,611.68	788,732.99	0.56	10.31	-3.80	
1,001.00	1.10	111.48	1,000.81	10.57 S	8.74 E	393,611.34	788,734.00	1.13	10.66	171.60	
1,046.00	1.10	122.20	1,045.80	10.96 S	9.50 E	393,610.95	788,734.76	0.46	11.06	95.36	
1,080.00	1.00	134.86	1,079.79	11.35 S	9.99 E	393,610.56	788,735.25	0.74	11.45	119.56	
1,200.00	1.19	130.37	1,199.77	12.89 S	11.68 E	393,609.02	788,736.94	0.18	13.01	-26.32	13 3/8"
1,223.00	1.23	129.67	1,222.77	13.21 S	12.06 E	393,608.70	788,737.32	0.18	13.33	-21.83	
1,313.00	0.10	74.68	1,312.76	13.80 S	12.87 E	393,608.11	788,738.13	1.31	13.93	-176.00	
1,403.00	0.03	263.30	1,402.76	13.78 S	12.93 E	393,608.13	788,738.19	0.14	13.92	-178.01	
1,492.00	0.06	88.01	1,491.76	13.79 S	12.95 E	393,608.12	788,738.21	0.10	13.92	-176.86	
1,581.00	0.06	308.00	1,580.76	13.75 S	12.96 E	393,608.16	788,738.22	0.13	13.89	-160.00	
1,671.00	0.28	312.40	1,670.76	13.58 S	12.76 E	393,608.33	788,738.02	0.24	13.71	5.60	
1,760.00	0.35	322.91	1,759.76	13.21 S	12.44 E	393,608.70	788,737.70	0.10	13.34	44.87	
1,850.00	0.28	309.55	1,849.76	12.85 S	12.10 E	393,609.06	788,737.36	0.11	12.98	-140.17	
1,939.00	0.21	308.07	1,938.76	12.62 S	11.80 E	393,609.29	788,737.06	0.08	12.74	-175.57	
2,029.00	1.10	50.32	2,028.75	11.96 S	12.34 E	393,609.95	788,737.60	1.29	12.09	112.41	
2,118.00	2.26	55.24	2,117.71	10.42 S	14.44 E	393,611.49	788,739.70	1.31	10.56	9.55	
2,208.00	2.79	54.80	2,207.62	8.14 S	17.69 E	393,613.77	788,742.95	0.59	8.32	-2.31	
2,387.00	4.47	67.70	2,386.26	2.98 S	27.70 E	393,618.93	788,752.96	1.04	3.27	32.46	
2,477.00	4.72	68.14	2,475.97	0.27 S	34.38 E	393,621.64	788,759.64	0.28	0.63	8.24	
2,566.00	5.72	68.42	2,564.60	2.72 N	41.91 E	393,624.63	788,767.17	1.12	-2.29	1.60	

HALLIBURTON

Lea County, New Mexico (NAD27)

Design Report for Charlie Murphy 6 WXY Fed Com 18H - Actual Drilled

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)								
2,656.00	7.78	67.94	2,653.97	6.66 N	51.72 E	393,628.57	788,776.98	2.29	-6.13	-1.81	
2,746.00	8.09	68.73	2,743.11	11.24 N	63.27 E	393,633.15	788,788.53	0.37	-10.59	19.77	
2,835.00	8.52	69.67	2,831.18	15.81 N	75.29 E	393,637.72	788,800.55	0.51	-15.03	17.99	
2,925.00	8.78	69.52	2,920.15	20.53 N	87.97 E	393,642.44	788,813.23	0.29	-19.62	-5.03	
3,014.00	8.89	70.34	3,008.10	25.22 N	100.81 E	393,647.13	788,826.07	0.19	-24.18	49.27	
3,104.00	9.21	70.26	3,096.98	29.99 N	114.14 E	393,651.90	788,839.40	0.36	-28.81	-2.29	
3,194.00	9.60	70.23	3,185.77	34.96 N	127.98 E	393,656.87	788,853.24	0.43	-33.64	-0.73	
3,283.00	9.13	72.86	3,273.58	39.55 N	141.71 E	393,661.46	788,866.97	0.71	-38.09	138.97	
3,373.00	8.90	74.21	3,362.47	43.55 N	155.24 E	393,665.46	788,880.50	0.35	-41.95	138.06	
3,462.00	9.42	75.58	3,450.33	47.24 N	168.92 E	393,669.15	788,894.18	0.63	-45.49	23.43	
3,552.00	8.96	71.20	3,539.18	51.33 N	182.68 E	393,673.24	788,907.94	0.93	-49.45	-125.48	
3,641.00	5.37	67.42	3,627.47	55.16 N	193.09 E	393,677.07	788,918.35	4.07	-53.17	-174.39	
3,731.00	4.39	64.31	3,717.14	58.27 N	200.09 E	393,680.18	788,925.35	1.13	-56.21	-166.44	
3,820.00	4.43	63.77	3,805.88	61.27 N	206.24 E	393,683.18	788,931.50	0.06	-59.14	-46.34	
3,910.00	5.25	80.68	3,895.56	63.47 N	213.42 E	393,685.38	788,938.68	1.82	-61.27	68.72	
3,999.00	5.49	84.38	3,984.17	64.55 N	221.68 E	393,686.46	788,946.94	0.47	-62.26	57.13	
4,089.00	5.11	84.89	4,073.79	65.33 N	229.95 E	393,687.24	788,955.21	0.43	-62.96	173.19	
4,178.00	7.04	85.12	4,162.28	66.14 N	239.34 E	393,688.05	788,964.60	2.17	-63.68	0.84	
4,268.00	7.57	84.21	4,251.55	67.21 N	250.73 E	393,689.12	788,975.99	0.60	-64.63	-12.77	
4,357.00	7.44	82.39	4,339.79	68.57 N	262.27 E	393,690.48	788,987.53	0.30	-65.86	-119.57	
4,447.00	7.07	80.92	4,429.07	70.21 N	273.52 E	393,692.12	788,998.78	0.46	-67.39	-154.08	
4,536.00	6.85	79.89	4,517.41	72.01 N	284.15 E	393,693.92	789,009.41	0.28	-69.08	-150.94	
4,626.00	7.32	83.56	4,606.73	73.59 N	295.13 E	393,695.50	789,020.39	0.72	-70.55	45.75	
4,716.00	7.78	85.95	4,695.95	74.67 N	306.91 E	393,696.58	789,032.17	0.62	-71.50	35.51	
4,805.00	7.44	84.72	4,784.16	75.62 N	318.65 E	393,697.53	789,043.91	0.42	-72.34	-155.01	
4,894.00	7.97	89.55	4,872.36	76.20 N	330.56 E	393,698.11	789,055.82	0.94	-72.79	53.11	
4,984.00	7.94	86.26	4,961.49	76.66 N	343.00 E	393,698.57	789,068.26	0.51	-73.12	-95.40	
5,073.00	8.03	75.34	5,049.64	78.63 N	355.15 E	393,700.54	789,080.41	1.70	-74.97	-92.02	
5,163.00	7.45	72.75	5,138.82	81.95 N	366.81 E	393,703.86	789,092.07	0.75	-78.17	-150.26	
5,252.00	6.77	72.71	5,227.13	85.22 N	377.33 E	393,707.13	789,102.59	0.76	-81.33	-179.60	
5,342.00	6.21	75.38	5,316.55	88.03 N	387.10 E	393,709.94	789,112.36	0.71	-84.04	153.00	
5,431.00	7.09	75.73	5,404.95	90.60 N	397.08 E	393,712.51	789,122.34	0.99	-86.50	2.81	
5,521.00	7.68	77.30	5,494.21	93.29 N	408.33 E	393,715.20	789,133.59	0.69	-89.08	19.66	
5,610.00	8.04	76.96	5,582.37	96.00 N	420.20 E	393,717.91	789,145.46	0.41	-91.67	-7.53	
5,700.00	7.91	75.45	5,671.50	98.97 N	432.32 E	393,720.88	789,157.58	0.27	-94.52	-122.57	
5,789.00	7.72	75.18	5,759.67	102.04 N	444.03 E	393,723.95	789,169.29	0.22	-97.46	-169.20	
5,879.00	7.36	73.51	5,848.90	105.22 N	455.40 E	393,727.13	789,180.66	0.47	-100.53	-149.50	

HALLIBURTON

Lea County, New Mexico (NAD27)

Design Report for Charlie Murphy 6 WXY Fed Com 18H - Actual Drilled

Measured Depth (usft)	Inclination (°)	Grid Azimuth (°)	Vertical Depth (usft)	Local Coordinates		Map Coordinates		Dogleg Rate (°/100usft)	Vertical Section (usft)	Toolface Angle (°)	Comments
Depth (usft)	Inclination (°)	Azimuth (°)	Depth (usft)	Northing (usft)	Easting (usft)	Northing (usft)	Easting (usft)	Rate (°/100usft)	Section (usft)	Angle (°)	
5,968.00	7.30	73.33	5,937.17	108.46 N	466.28 E	393,730.37	789,191.54	0.07	-103.66	-159.14	
6,058.00	8.66	74.47	6,026.29	111.92 N	478.29 E	393,733.83	789,203.55	1.52	-106.99	7.20	
6,147.00	8.67	72.22	6,114.28	115.76 N	491.13 E	393,737.67	789,216.39	0.38	-110.70	-89.42	
6,237.00	8.29	69.80	6,203.30	120.07 N	503.68 E	393,741.98	789,228.94	0.58	-114.88	-137.99	
6,326.00	7.78	67.64	6,291.42	124.58 N	515.27 E	393,746.49	789,240.53	0.67	-119.27	-150.44	
6,416.00	7.17	65.65	6,380.66	129.21 N	526.03 E	393,751.12	789,251.29	0.74	-123.79	-157.99	
6,505.00	8.56	71.11	6,468.82	133.65 N	537.35 E	393,755.56	789,262.61	1.77	-128.11	30.98	
6,595.00	8.71	70.09	6,557.80	138.14 N	550.10 E	393,760.05	789,275.36	0.24	-132.47	-46.10	
6,684.00	8.45	68.58	6,645.80	142.82 N	562.52 E	393,764.73	789,287.78	0.39	-137.02	-139.84	
6,774.00	8.52	67.45	6,734.82	147.79 N	574.83 E	393,769.70	789,300.09	0.20	-141.87	-67.79	
6,863.00	8.48	66.97	6,822.84	152.89 N	586.96 E	393,774.80	789,312.22	0.09	-146.84	-119.65	
6,953.00	8.62	68.35	6,911.84	157.97 N	599.34 E	393,779.88	789,324.60	0.28	-151.79	56.38	
7,042.00	8.43	67.05	6,999.86	162.98 N	611.54 E	393,784.89	789,336.80	0.30	-156.67	-135.24	
7,132.00	7.81	65.98	7,088.95	168.04 N	623.20 E	393,789.95	789,348.46	0.71	-161.61	-166.83	
7,221.00	7.10	73.66	7,177.20	172.05 N	634.01 E	393,793.96	789,359.27	1.37	-165.51	129.24	
7,311.00	6.60	69.91	7,266.56	175.39 N	644.20 E	393,797.30	789,369.46	0.75	-168.75	-140.04	
7,401.00	6.32	70.01	7,355.99	178.86 N	653.71 E	393,800.77	789,378.97	0.31	-172.12	177.75	
7,490.00	6.20	70.15	7,444.46	182.17 N	662.84 E	393,804.08	789,388.10	0.14	-175.33	172.82	
7,580.00	6.26	70.18	7,533.93	185.48 N	672.03 E	393,807.39	789,397.29	0.07	-178.55	3.12	
7,669.00	7.83	75.77	7,622.25	188.61 N	682.47 E	393,810.52	789,407.73	1.92	-181.58	26.38	
7,758.00	7.90	77.06	7,710.42	191.47 N	694.31 E	393,813.38	789,419.57	0.21	-184.32	69.01	
7,848.00	7.56	75.47	7,799.60	194.35 N	706.06 E	393,816.26	789,431.32	0.45	-187.06	-148.62	
7,938.00	6.23	82.88	7,888.95	196.44 N	716.64 E	393,818.35	789,441.90	1.77	-189.05	149.86	
8,027.00	5.15	88.24	7,977.51	197.16 N	725.43 E	393,819.07	789,450.69	1.35	-189.68	156.45	
8,117.00	3.75	94.26	8,067.23	197.06 N	732.40 E	393,818.97	789,457.66	1.64	-189.51	164.53	
8,206.00	2.86	100.32	8,156.09	196.45 N	737.49 E	393,818.36	789,462.75	1.07	-188.84	161.57	
8,296.00	2.76	94.81	8,245.98	195.86 N	741.85 E	393,817.77	789,467.11	0.32	-188.22	-113.05	
8,385.00	1.37	101.27	8,334.92	195.48 N	745.03 E	393,817.39	789,470.29	1.58	-187.79	173.71	
8,475.00	0.80	98.29	8,424.90	195.18 N	746.71 E	393,817.09	789,471.97	0.64	-187.48	-175.83	
8,565.00	0.86	96.91	8,514.89	195.00 N	748.00 E	393,816.91	789,473.26	0.07	-187.29	-19.12	
8,654.00	0.64	90.36	8,603.88	194.92 N	749.16 E	393,816.83	789,474.42	0.26	-187.20	-161.96	
8,744.00	0.62	77.31	8,693.88	195.02 N	750.14 E	393,816.93	789,475.40	0.16	-187.29	-104.43	
8,833.00	0.62	71.64	8,782.87	195.28 N	751.07 E	393,817.19	789,476.33	0.07	-187.54	-92.83	
8,923.00	0.52	72.18	8,872.87	195.56 N	751.92 E	393,817.47	789,477.18	0.11	-187.81	177.19	
9,012.00	0.44	78.00	8,961.87	195.76 N	752.64 E	393,817.67	789,477.90	0.11	-187.99	151.53	
9,102.00	0.38	68.05	9,051.86	195.94 N	753.25 E	393,817.85	789,478.51	0.10	-188.17	-135.02	
9,191.00	0.29	44.90	9,140.86	196.21 N	753.68 E	393,818.12	789,478.94	0.18	-188.44	-134.83	

HALLIBURTON

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Design Report for Charlie Murphy 6 WXY Fed Com 18H - Actual Drilled

Measured Depth (usft)	Inclination (°)	Grid Azimuth (°)	Vertical Depth (usft)	Local Coordinates		Map Coordinates		Dogleg Rate (°/100usft)	Vertical Section (usft)	Toolface Angle (°)	Comments
Depth (usft)	Inclination (°)	Azimuth (°)	Depth (usft)	Northing (usft)	Easting (usft)	Northing (usft)	Easting (usft)	Rate (°/100usft)	Section (usft)	Angle (°)	
9,281.00	1.39	272.72	9,230.85	196.42 N	752.75 E	393,818.33	789,478.01	1.78	-188.66	-139.90	
9,370.00	1.60	280.11	9,319.82	196.69 N	750.45 E	393,818.60	789,475.71	0.32	-188.95	46.29	
9,460.00	1.85	270.17	9,409.78	196.92 N	747.76 E	393,818.83	789,473.02	0.43	-189.21	-55.16	
9,549.00	2.24	268.68	9,498.73	196.88 N	744.59 E	393,818.79	789,469.85	0.44	-189.20	-8.51	
9,728.00	4.02	257.45	9,677.45	195.44 N	734.97 E	393,817.35	789,460.23	1.05	-187.86	-24.67	
9,818.00	4.10	259.48	9,767.23	194.16 N	728.72 E	393,816.07	789,453.98	0.18	-186.65	61.91	
9,907.00	3.84	262.93	9,856.02	193.22 N	722.64 E	393,815.13	789,447.90	0.40	-185.76	139.14	
9,997.00	3.87	260.33	9,945.81	192.33 N	716.65 E	393,814.24	789,441.91	0.20	-184.94	-81.56	
10,086.00	3.80	268.02	10,034.61	191.73 N	710.74 E	393,813.64	789,436.00	0.58	-184.40	101.58	
10,176.00	4.57	272.69	10,124.37	191.79 N	704.18 E	393,813.70	789,429.44	0.93	-184.53	26.21	
10,265.00	4.98	267.18	10,213.06	191.77 N	696.78 E	393,813.68	789,422.04	0.69	-184.58	-50.97	
10,355.00	4.31	270.12	10,302.77	191.58 N	689.50 E	393,813.49	789,414.76	0.79	-184.47	161.90	
10,444.00	3.74	270.68	10,391.55	191.63 N	683.25 E	393,813.54	789,408.51	0.64	-184.58	176.33	
10,534.00	3.79	266.15	10,481.35	191.46 N	677.35 E	393,813.37	789,402.61	0.34	-184.48	-82.72	
10,623.00	3.88	264.93	10,570.15	191.00 N	671.41 E	393,812.91	789,396.67	0.14	-184.07	-42.81	
10,713.00	4.08	275.39	10,659.94	191.03 N	665.19 E	393,812.94	789,390.45	0.84	-184.17	79.86	
10,802.00	3.88	273.36	10,748.72	191.50 N	659.04 E	393,813.41	789,384.30	0.27	-184.71	-145.85	
10,892.00	3.47	275.06	10,838.54	191.92 N	653.28 E	393,813.83	789,378.54	0.47	-185.18	165.96	
10,982.00	3.19	284.13	10,928.39	192.77 N	648.14 E	393,814.68	789,373.40	0.66	-186.09	122.47	
11,071.00	3.20	292.14	11,017.25	194.31 N	643.44 E	393,816.22	789,368.70	0.50	-187.68	92.72	
11,161.00	3.25	294.11	11,107.11	196.30 N	638.78 E	393,818.21	789,364.04	0.14	-189.71	66.70	
11,250.00	3.03	297.39	11,195.97	198.42 N	634.39 E	393,820.33	789,359.65	0.32	-191.87	142.39	
11,340.00	3.12	298.53	11,285.84	200.68 N	630.13 E	393,822.59	789,355.39	0.12	-194.18	34.77	
11,429.00	3.40	294.08	11,374.70	202.91 N	625.59 E	393,824.82	789,350.85	0.42	-196.46	-44.34	
11,519.00	2.99	298.34	11,464.56	205.12 N	621.09 E	393,827.03	789,346.35	0.53	-198.71	152.04	
11,608.00	2.73	302.99	11,553.45	207.37 N	617.27 E	393,829.28	789,342.53	0.39	-201.00	140.56	
11,698.00	3.17	304.26	11,643.33	209.94 N	613.41 E	393,831.85	789,338.67	0.49	-203.61	9.08	
11,787.00	3.18	297.58	11,732.19	212.47 N	609.19 E	393,834.38	789,334.45	0.42	-206.18	-91.79	
11,838.00	2.92	293.90	11,783.12	213.65 N	606.75 E	393,835.56	789,332.01	0.64	-207.39	-144.84	
11,953.00	2.39	296.02	11,898.00	215.89 N	601.92 E	393,837.80	789,327.18	0.47	-209.68	170.56	
12,048.00	1.89	298.09	11,992.93	217.49 N	598.76 E	393,839.40	789,324.02	0.53	-211.32	172.25	
12,141.00	4.03	230.99	12,085.82	216.16 N	594.86 E	393,838.07	789,320.12	4.01	-210.02	-94.91	
12,235.00	8.68	206.93	12,179.23	207.75 N	589.08 E	393,829.66	789,314.34	5.60	-201.67	-42.14	
12,330.00	15.45	202.92	12,272.08	189.68 N	580.89 E	393,811.59	789,306.15	7.18	-183.69	-9.03	
12,424.00	20.58	204.58	12,361.45	163.11 N	569.14 E	393,785.02	789,294.40	5.48	-157.24	6.51	
12,456.00	25.15	204.12	12,390.92	151.78 N	564.02 E	393,773.69	789,289.28	14.29	-145.97	-2.45	

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Design Report for Charlie Murphy 6 WXY Fed Com 18H - Actual Drilled

Measured Depth (usft)	Inclination (°)	Grid Azimuth (°)	Vertical Depth (usft)	Local Coordinates		Map Coordinates		Dogleg Rate (°/100usft)	Vertical Section (usft)	Toolface Angle (°)	Comments
Depth (usft)	Inclination (°)	Azimuth (°)	Depth (usft)	Northing (usft)	Easting (usft)	Northing (usft)	Easting (usft)	Rate (°/100usft)	Section (usft)	Angle (°)	
12,519.00	31.00	206.07	12,446.49	124.97 N	551.41 E	393,746.88	789,276.67	9.40	-119.28	9.78	
12,550.00	31.75	206.07	12,472.95	110.47 N	544.31 E	393,732.38	789,269.57	2.42	-104.86	0.00	
12,612.00	32.62	203.16	12,525.43	80.45 N	530.57 E	393,702.36	789,255.83	2.87	-74.98	-61.93	
12,643.00	36.37	201.51	12,550.98	64.21 N	523.91 E	393,686.12	789,249.17	12.47	-58.81	-14.68	
12,675.00	39.31	201.05	12,576.24	45.92 N	516.79 E	393,667.83	789,242.05	9.23	-40.60	-5.66	
12,707.00	41.41	198.23	12,600.63	26.40 N	509.84 E	393,648.31	789,235.10	8.70	-21.15	-42.09	
12,803.00	58.71	190.08	12,662.08	44.75 S	492.58 E	393,577.16	789,217.84	19.13	49.82	-22.61	
12,898.00	76.72	181.67	12,698.02	131.77 S	484.04 E	393,490.14	789,209.30	20.63	136.75	-25.11	
12,997.00	90.05	184.91	12,709.40	229.71 S	478.38 E	393,392.20	789,203.64	13.85	234.63	13.79	Landing Point 12997' MD 12709' TVD (505.16' FNL, 634.77' FEL)
13,021.00	93.28	185.68	12,708.70	253.60 S	476.16 E	393,368.31	789,201.42	13.85	258.49	13.41	
13,115.00	94.57	184.34	12,702.27	347.02 S	467.97 E	393,274.89	789,193.23	1.98	351.82	-45.98	
13,210.00	95.57	183.71	12,693.87	441.41 S	461.33 E	393,180.50	789,186.59	1.24	446.14	-32.08	
13,231.00	95.85	183.93	12,691.79	462.26 S	459.94 E	393,159.65	789,185.20	1.69	466.97	38.01	
13,308.00	97.56	184.37	12,682.80	538.53 S	454.40 E	393,083.38	789,179.66	2.29	543.18	14.31	
13,402.00	95.79	183.38	12,671.87	631.67 S	448.10 E	392,990.24	789,173.36	2.15	636.25	-150.89	
13,497.00	95.03	182.69	12,662.91	726.12 S	443.09 E	392,895.79	789,168.35	1.08	730.64	-137.86	
13,591.00	93.61	181.49	12,655.83	819.78 S	439.67 E	392,802.13	789,164.93	1.98	824.27	-139.83	
13,685.00	93.04	181.34	12,650.38	913.60 S	437.36 E	392,708.31	789,162.62	0.63	918.05	-165.28	
13,780.00	92.88	181.25	12,645.47	1,008.44 S	435.21 E	392,613.47	789,160.47	0.19	1,012.87	-150.67	
13,873.00	91.64	180.71	12,641.81	1,101.36 S	433.62 E	392,520.55	789,158.88	1.45	1,105.76	-156.47	
13,967.00	90.22	179.69	12,640.28	1,195.34 S	433.29 E	392,426.57	789,158.55	1.86	1,199.74	-144.30	
14,059.00	89.96	175.94	12,640.14	1,287.26 S	436.80 E	392,334.65	789,162.06	4.09	1,291.69	-93.96	
14,152.00	89.29	177.80	12,640.74	1,380.11 S	441.88 E	392,241.80	789,167.14	2.13	1,384.59	109.81	
14,246.00	90.40	179.41	12,641.00	1,474.08 S	444.17 E	392,147.83	789,169.43	2.08	1,478.57	55.42	
14,339.00	90.20	178.57	12,640.51	1,567.06 S	445.81 E	392,054.85	789,171.07	0.93	1,571.57	-103.39	
14,433.00	90.80	180.90	12,639.69	1,661.05 S	446.24 E	391,960.86	789,171.50	2.56	1,665.56	75.55	
14,526.00	89.20	179.99	12,639.69	1,754.04 S	445.52 E	391,867.87	789,170.78	1.98	1,758.54	-150.37	
14,620.00	89.07	180.51	12,641.11	1,848.03 S	445.11 E	391,773.88	789,170.37	0.57	1,852.52	104.04	
14,713.00	90.68	181.78	12,641.31	1,941.01 S	443.25 E	391,680.90	789,168.51	2.20	1,945.47	38.27	
14,807.00	90.81	183.05	12,640.09	2,034.91 S	439.29 E	391,587.00	789,164.55	1.36	2,039.33	84.15	
14,902.00	90.56	182.79	12,638.96	2,129.78 S	434.45 E	391,492.13	789,159.71	0.38	2,134.14	-133.88	
14,997.00	90.42	181.69	12,638.14	2,224.71 S	430.74 E	391,397.20	789,156.00	1.17	2,229.02	-97.25	
15,091.00	90.55	180.72	12,637.35	2,318.68 S	428.76 E	391,303.23	789,154.02	1.04	2,322.97	-82.36	
15,185.00	89.95	178.61	12,636.94	2,412.67 S	429.31 E	391,209.24	789,154.57	2.33	2,416.97	-105.87	
15,279.00	90.08	178.38	12,636.91	2,506.64 S	431.78 E	391,115.27	789,157.04	0.28	2,510.95	-60.52	
15,372.00	90.14	178.08	12,636.73	2,599.60 S	434.65 E	391,022.31	789,159.91	0.33	2,603.93	-78.69	

HALLIBURTON

Lea County, New Mexico (NAD27)

Design Report for Charlie Murphy 6 WXY Fed Com 18H - Actual Drilled

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)	(°)	
15,467.00	90.16	177.86	12,636.49	2,694.54 S	438.02 E	390,927.37	789,163.28	0.23	2,698.90	-84.81	
15,561.00	90.23	177.51	12,636.17	2,788.46 S	441.81 E	390,833.45	789,167.07	0.38	2,792.86	-78.69	
15,655.00	90.02	177.98	12,635.96	2,882.38 S	445.51 E	390,739.53	789,170.77	0.55	2,886.82	114.07	
15,749.00	90.05	178.46	12,635.90	2,976.34 S	448.43 E	390,645.57	789,173.69	0.51	2,980.80	86.42	
15,843.00	90.09	179.00	12,635.79	3,070.32 S	450.52 E	390,551.59	789,175.78	0.58	3,074.79	85.76	
15,938.00	90.05	179.72	12,635.67	3,165.31 S	451.58 E	390,456.60	789,176.84	0.76	3,169.79	93.18	
16,032.00	90.26	180.22	12,635.42	3,259.31 S	451.63 E	390,362.60	789,176.89	0.58	3,263.79	67.22	
16,126.00	90.36	180.24	12,634.91	3,353.31 S	451.25 E	390,268.60	789,176.51	0.11	3,357.77	11.31	
16,217.00	90.42	180.40	12,634.29	3,444.30 S	450.74 E	390,177.61	789,176.00	0.19	3,448.76	69.44	
16,310.00	90.73	180.83	12,633.36	3,537.29 S	449.74 E	390,084.62	789,175.00	0.57	3,541.74	54.21	
16,405.00	89.24	179.73	12,633.38	3,632.29 S	449.28 E	389,989.62	789,174.54	1.95	3,636.72	-143.56	
16,499.00	89.24	180.02	12,634.63	3,726.28 S	449.48 E	389,895.63	789,174.74	0.31	3,730.71	90.00	
16,593.00	88.75	178.06	12,636.28	3,820.25 S	451.06 E	389,801.66	789,176.32	2.15	3,824.69	-104.05	
16,687.00	90.33	179.19	12,637.03	3,914.21 S	453.31 E	389,707.70	789,178.57	2.07	3,918.67	35.58	
16,781.00	92.37	181.21	12,634.82	4,008.17 S	452.99 E	389,613.74	789,178.25	3.05	4,012.63	44.69	
16,874.00	91.61	180.22	12,631.59	4,101.11 S	451.83 E	389,520.80	789,177.09	1.34	4,105.54	-127.51	
16,967.00	90.32	179.29	12,630.02	4,194.09 S	452.22 E	389,427.82	789,177.48	1.71	4,198.53	-144.21	
17,060.00	89.47	178.65	12,630.19	4,287.08 S	453.90 E	389,334.83	789,179.16	1.14	4,291.52	-143.02	
17,151.00	89.54	179.30	12,630.98	4,378.06 S	455.52 E	389,243.85	789,180.78	0.72	4,382.52	83.86	
17,245.00	89.68	179.80	12,631.62	4,472.05 S	456.26 E	389,149.86	789,181.52	0.55	4,476.51	74.36	
17,337.00	90.09	180.80	12,631.80	4,564.05 S	455.78 E	389,057.86	789,181.04	1.17	4,568.50	67.71	
17,431.00	88.86	178.75	12,632.66	4,658.04 S	456.15 E	388,963.87	789,181.41	2.54	4,662.49	-120.97	
17,524.00	89.42	178.27	12,634.06	4,751.00 S	458.57 E	388,870.91	789,183.83	0.79	4,755.47	-40.60	
17,616.00	90.76	179.10	12,633.92	4,842.97 S	460.68 E	388,778.94	789,185.94	1.71	4,847.46	31.77	
17,709.00	91.50	180.30	12,632.08	4,935.95 S	461.17 E	388,685.96	789,186.43	1.52	4,940.43	58.32	
17,802.00	90.63	180.53	12,630.35	5,028.93 S	460.49 E	388,592.98	789,185.75	0.97	5,033.40	165.19	
17,896.00	90.86	181.33	12,629.13	5,122.91 S	458.97 E	388,499.00	789,184.23	0.89	5,127.36	73.95	
17,991.00	90.59	181.67	12,627.93	5,217.87 S	456.48 E	388,404.04	789,181.74	0.46	5,222.29	128.45	
18,085.00	89.84	180.99	12,627.58	5,311.84 S	454.30 E	388,310.07	789,179.56	1.08	5,316.23	-137.80	
18,179.00	89.12	178.69	12,628.43	5,405.83 S	454.56 E	388,216.08	789,179.82	2.56	5,410.22	-107.39	
18,273.00	89.30	176.54	12,629.73	5,499.73 S	458.47 E	388,122.18	789,183.73	2.30	5,504.16	-85.23	
18,274.00	89.31	176.53	12,629.74	5,500.73 S	458.53 E	388,121.18	789,183.79	1.54	5,505.16	-51.10	Turn to BHL 18274" MD 12629' TVD (4791.40' FSL, 708.79' FEL)
18,368.00	90.22	175.40	12,630.12	5,594.49 S	465.15 E	388,027.42	789,190.41	1.54	5,598.99	-51.10	
18,462.00	89.69	174.75	12,630.20	5,688.14 S	473.22 E	387,933.77	789,198.48	0.89	5,692.72	-129.19	
18,557.00	89.98	174.59	12,630.47	5,782.73 S	482.04 E	387,839.18	789,207.30	0.35	5,787.39	-28.89	
18,651.00	88.86	174.83	12,631.42	5,876.33 S	490.71 E	387,745.58	789,215.97	1.22	5,881.07	167.91	

HALLIBURTON

Lea County, New Mexico (NAD27)

Design Report for Charlie Murphy 6 WXY Fed Com 18H - Actual Drilled

Measured Depth (usft)	Inclination (°)	Grid Azimuth (°)	Vertical Depth (usft)	Local Coordinates		Map Coordinates		Dogleg Rate (°/100usft)	Vertical Section (usft)	Toolface Angle (°)	Comments
Northings	Easting	Northings	Easting								
18,745.00	87.08	174.41	12,634.75	5,969.85 S	499.52 E	387,652.06	789,224.78	1.95	5,974.68	-166.74	
18,839.00	88.25	176.19	12,638.58	6,063.45 S	507.21 E	387,558.46	789,232.47	2.26	6,068.35	56.70	
18,933.00	88.77	176.59	12,641.03	6,157.23 S	513.13 E	387,464.68	789,238.39	0.70	6,162.19	37.56	
19,027.00	87.98	176.05	12,643.69	6,251.00 S	519.16 E	387,370.91	789,244.42	1.02	6,256.01	-145.66	
19,122.00	87.62	175.29	12,647.34	6,345.66 S	526.33 E	387,276.25	789,251.59	0.88	6,350.74	-115.38	
19,215.00	87.96	175.78	12,650.92	6,438.31 S	533.56 E	387,183.60	789,258.82	0.64	6,443.46	55.23	
19,310.00	88.11	174.98	12,654.18	6,532.94 S	541.21 E	387,088.97	789,266.47	0.86	6,538.17	-79.39	
19,403.00	88.45	174.66	12,656.97	6,625.52 S	549.60 E	386,996.39	789,274.86	0.50	6,630.83	-43.26	
19,497.00	89.95	175.60	12,658.29	6,719.17 S	557.58 E	386,902.74	789,282.84	1.88	6,724.55	32.08	
19,592.00	89.95	175.95	12,658.37	6,813.91 S	564.58 E	386,808.00	789,289.84	0.37	6,819.36	90.00	
19,686.00	89.48	175.92	12,658.84	6,907.67 S	571.24 E	386,714.24	789,296.50	0.50	6,913.19	-176.35	
19,781.00	89.02	174.63	12,660.08	7,002.34 S	579.07 E	386,619.57	789,304.33	1.44	7,007.93	-109.63	
19,875.00	89.02	174.37	12,661.69	7,095.89 S	588.07 E	386,526.02	789,313.33	0.28	7,101.57	-90.00	
19,969.00	89.83	176.18	12,662.63	7,189.56 S	595.82 E	386,432.35	789,321.08	2.11	7,195.32	65.90	
20,064.00	88.49	174.65	12,664.02	7,284.24 S	603.41 E	386,337.67	789,328.67	2.14	7,290.07	-131.22	
20,158.00	87.64	173.40	12,667.20	7,377.68 S	613.19 E	386,244.23	789,338.45	1.61	7,383.60	-124.25	
20,251.00	88.97	175.52	12,669.95	7,470.19 S	622.16 E	386,151.72	789,347.42	2.69	7,476.20	57.92	
20,345.00	88.74	174.48	12,671.83	7,563.82 S	630.35 E	386,058.09	789,355.61	1.13	7,569.91	-102.48	
20,440.00	90.97	175.46	12,672.07	7,658.44 S	638.68 E	385,963.47	789,363.94	2.56	7,664.61	23.73	
20,534.00	90.97	175.91	12,670.48	7,752.16 S	645.75 E	385,869.75	789,371.01	0.48	7,758.40	90.00	
20,629.00	90.70	176.46	12,669.09	7,846.94 S	652.07 E	385,774.97	789,377.33	0.64	7,853.24	116.15	
20,724.00	90.90	176.58	12,667.77	7,941.76 S	657.84 E	385,680.15	789,383.10	0.25	7,948.11	30.96	
20,819.00	91.45	177.16	12,665.82	8,036.59 S	663.02 E	385,585.32	789,388.28	0.84	8,043.00	46.51	
20,913.00	90.24	175.38	12,664.43	8,130.38 S	669.14 E	385,491.53	789,394.40	2.29	8,136.84	-124.19	
21,006.00	89.20	175.71	12,664.89	8,223.10 S	676.36 E	385,398.81	789,401.62	1.17	8,229.63	162.40	
21,099.00	88.80	175.92	12,666.51	8,315.83 S	683.15 E	385,306.08	789,408.41	0.49	8,322.43	152.31	
21,193.00	89.20	176.79	12,668.15	8,409.63 S	689.12 E	385,212.28	789,414.38	1.02	8,416.28	65.31	
21,288.00	88.90	178.03	12,669.72	8,504.52 S	693.41 E	385,117.39	789,418.67	1.34	8,511.21	103.61	
21,382.00	89.65	179.11	12,670.91	8,598.48 S	695.76 E	385,023.43	789,421.02	1.40	8,605.19	55.23	
21,476.00	90.58	176.40	12,670.73	8,692.40 S	699.44 E	384,929.51	789,424.70	3.05	8,699.14	-71.06	
21,571.00	91.30	174.86	12,669.17	8,787.10 S	706.68 E	384,834.81	789,431.94	1.79	8,793.91	-64.93	
21,664.00	90.36	174.33	12,667.82	8,879.68 S	715.44 E	384,742.23	789,440.70	1.16	8,886.57	-150.58	
21,758.00	87.54	173.35	12,669.54	8,973.11 S	725.52 E	384,648.80	789,450.78	3.18	8,980.10	-160.85	
21,853.00	87.82	173.89	12,673.39	9,067.44 S	736.07 E	384,554.47	789,461.33	0.64	9,074.54	62.58	
21,948.00	88.52	174.66	12,676.42	9,161.92 S	745.54 E	384,459.99	789,470.80	1.10	9,169.11	47.72	
22,042.00	90.05	176.03	12,677.59	9,255.60 S	753.17 E	384,366.31	789,478.43	2.18	9,262.86	41.85	
22,135.00	90.82	176.72	12,676.89	9,348.41 S	759.05 E	384,273.50	789,484.31	1.11	9,355.73	41.86	

HALLIBURTON

Lea County, New Mexico (NAD27)

Design Report for Charlie Murphy 6 WXY Fed Com 18H - Actual Drilled

Measured Depth (usft)	Inclination (°)	Grid Azimuth (°)	Vertical Depth (usft)	Local Coordinates Northing (usft)	Local Coordinates Easting (usft)	Map Coordinates Northing (usft)	Map Coordinates Easting (usft)	Dogleg Rate (°/100usft)	Vertical Section (usft)	Toolface Angle (°)	Comments
22,226.00	91.07	176.47	12,675.39	9,439.23 S	764.45 E	384,182.68	789,489.71	0.39	9,446.61	-44.99	
22,321.00	91.48	175.83	12,673.27	9,534.00 S	770.83 E	384,087.91	789,496.09	0.80	9,541.43	-57.34	
22,415.00	90.40	175.34	12,671.73	9,627.70 S	778.07 E	383,994.21	789,503.33	1.26	9,635.20	-155.59	
22,508.00	90.43	175.33	12,671.06	9,720.39 S	785.63 E	383,901.52	789,510.89	0.03	9,727.97	-18.43	
22,601.00	90.94	175.14	12,669.95	9,813.06 S	793.35 E	383,808.85	789,518.61	0.59	9,820.71	-20.43	
22,695.00	91.04	175.71	12,668.32	9,906.75 S	800.85 E	383,715.16	789,526.11	0.62	9,914.47	80.04	
22,789.00	90.78	175.55	12,666.83	10,000.46 S	808.01 E	383,621.45	789,533.27	0.32	10,008.25	-148.39	
22,883.00	90.90	176.10	12,665.45	10,094.20 S	814.85 E	383,527.71	789,540.11	0.60	10,102.06	77.69	
22,962.00	90.73	175.78	12,664.33	10,173.00 S	820.45 E	383,448.91	789,545.71	0.46	10,180.91	-117.98	Last MWD Survey
22,979.00	90.73	175.78	12,664.11	10,189.95 S	821.70 E	383,431.96	789,546.96	0.00	10,197.87	0.00	Projection to TD 22979' MD/ 12664 TVD (100.64' FSL, 393.84' FEL)

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
107.00	107.00	0.23	0.00	First MWD Survey
12,997.00	12,709.40	-229.71	478.38	Landing Point 12997' MD 12709' TVD (505.16' FNL, 634.77' FEL)
18,274.00	12,629.74	-5,500.73	458.53	Turn to BHL 18274" MD 12629' TVD (4791.40' FSL, 708.79' FEL)
22,962.00	12,664.33	-10,173.00	820.45	Last MWD Survey
22,979.00	12,664.11	-10,189.95	821.70	Projection to TD 22979' MD/ 12664 TVD (100.64' FSL, 393.84' FEL)

Vertical Section Information

Angle Type	Target	Azimuth (°)	Origin Type	Origin +N/_S (usft)	Origin +E/-W (usft)	Start TVD (usft)
User	No Target (Freehand)	179.41	Slot	0.00	0.00	0.00

Survey tool program

From (usft)	To (usft)	Survey/Plan	Survey Tool
20.00	22,962.00	MWD	3_MWD+HRGM+AX
22,979.00	22,979.00	Projection to TD	3_Blind

HALLIBURTON**Design Report for Charlie Murphy 6 WXY Fed Com 18H - Actual Drilled****Casing Details**

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
1,200.00	1,199.77	13 3/8"	13-3/8	17-1/2

Design Targets

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

Directional Difficulty Index

Average Dogleg over Survey:	1.31 °/100usft	Maximum Dogleg over Survey:	20.63 °/100usft at 12,898.00 usft
Net Tortousity applicable to Plans:	0.06 °/100usft	Directional Difficulty Index:	6.793

Audit Info

HALLIBURTON**North Reference Sheet for Charlie Murphy 6 Pad (Grid) - Charlie Murphy 6 WXY Fed Com 18H - 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 (Precision 601) 25' + GL(3270') @ 3295.00usft. Northing and Easting are relative to Charlie Murphy 6 WXY Fed Com 18H

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: 1.00000457

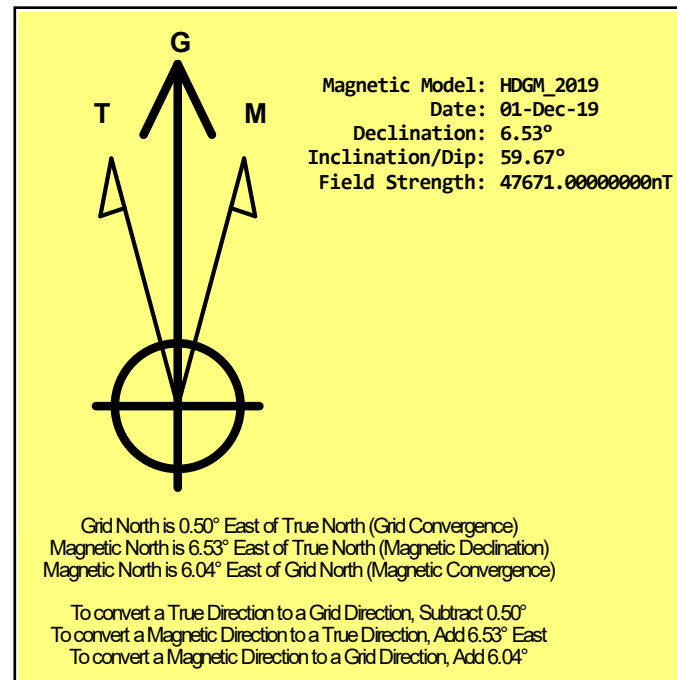
Grid Coordinates of Well: 393,621.91 usft N, 788,725.26 usft E

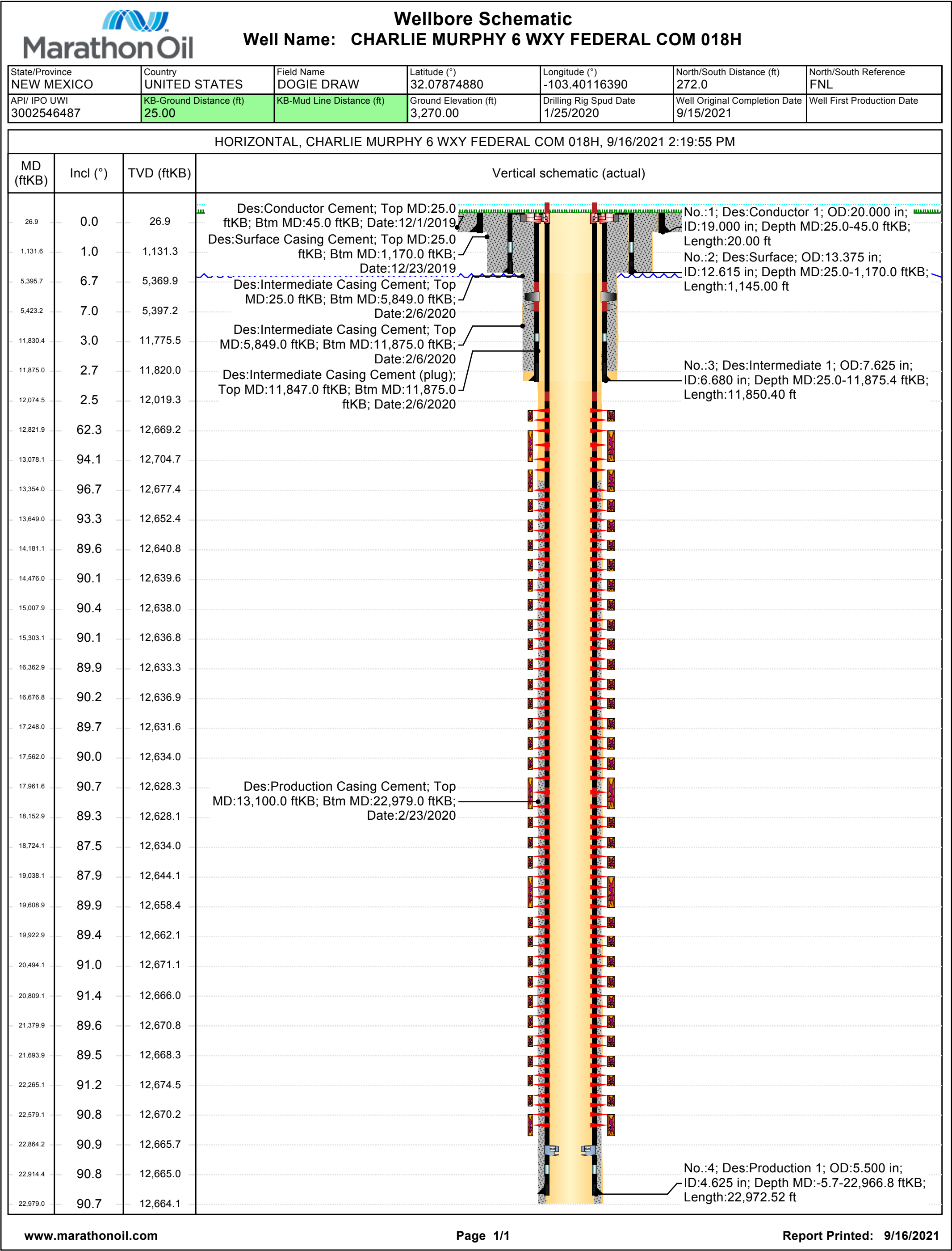
Geographical Coordinates of Well: 32.07875312, -103.40116599

Grid Convergence at Surface is: 0.50°

Based upon Minimum Curvature type calculations, at a Measured Depth of 22,979.00usft
the Bottom Hole Displacement is 10,223.03usft in the Direction of 175.39° (Grid).

Magnetic Convergence at surface is: -6.04° (1 December 2019, , HDGM_2019)





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Report Printed: 9/16/2021

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

Action 126079

ACKNOWLEDGMENTS

Operator: MARATHON OIL PERMIAN LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 372098
	Action Number: 126079
	Action Type: [C-105] Well (Re)Completion (C-105)

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.
☐	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.
☐	I hereby certify that no additives containing PFAS chemicals were added to the fluid used in the completion or recompletion of this well.

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CONDITIONS

Action 126079

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CONDITIONS

Created By	Condition	Condition Date
plmartinez	None	1/8/2026