

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 Longfellow Energy LP 8115 Preston Road, Suite 800 Dallas, TX 75225		² OGRID Number 372210
		³ Reason for Filing Code/ Effective Date NW 2/2024
⁴ API Number 30 – 015-53817	⁵ Pool Name Red Lake; Glorieta – Yeso, Northeast	⁶ Pool Code 96836
⁷ Property Code 334079	⁸ Property Name Marley State Com 31 AB	⁹ Well Number 002H

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	36	17S	27E		1065	North	1210	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	31	17S	28E		878	North	23	East	Eddy

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
S	P	10/27/2023			

III. Oil and Gas Transporters

¹⁸ Transporter OGRID	¹⁹ Transporter Name and Address	²⁰ O/G/W
33479	Holly Frontier Refining and Marketing LLC 10 Desta Drive, Suite 350 W Midland, TX 79705	Oil
36785	DCP Operating Company LP	Gas

IV. Well Completion Data

²¹ Spud Date	²² Ready Date	²³ TD	²⁴ PBDT	²⁵ Perforations	²⁶ DHC, MC
6/30/2023	11/1/2023	4195'V/9758'M	4192'V/9675'M	9,642'-4,595'	
²⁷ Hole Size	²⁸ Casing & Tubing Size	²⁹ Depth Set	³⁰ Sacks Cement		
12-1/4"	9-5/8"	1313'	520		
8-3/4"	7"	4607'	1480		
8-3/4"	5-1/2"	9723'	1480		
	2-7/8"	4134'			

V. Well Test Data

³¹ Date New Oil	³² Gas Delivery Date	³³ Test Date	³⁴ Test Length	³⁵ Tbg. Pressure	³⁶ Csg. Pressure
11/17/2023	11/1/2023	2/22/2024	24	284	81
³⁷ Choke Size	³⁸ Oil	³⁹ Water	⁴⁰ Gas		⁴¹ Test Method
NA	377	413	1753		Pumping

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:



Printed name:
David Cain
Title:
Regulatory Analyst

E-mail Address:
David.cain@longfellowenergy.com

Date: 2/23/2024
Phone: (972) 590-9918

OIL CONSERVATION DIVISION

Approved by:
PATRICIA MARTINEZ

Title:
PETROLEUM SPECIALIST

Approval Date:
2/26/2024

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

Form C-102

Energy, Minerals & Natural Resources Department

Revised August 1, 2011

OIL CONSERVATION DIVISION

Submit one copy to appropriate

District Office

1220 South St. Francis Dr.

Santa Fe, NM 87505

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-53817	² Pool Code 96836	³ Pool Name RED LAKE; GLORIEYA-YESO, NORTHEAST
⁴ Property Code 334079	⁵ Property Name MARLEY STATE COM 31 AB	⁶ Well Number 002H
⁷ OGRID No. 372210	⁸ Operator Name LONGFELLOW ENERGY, LP	⁹ Elevation 3624.1

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
A	36	17 S	27 E		1065	NORTH	1210	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	31	17 S	28 E		878	NORTH	23	EAST	EDDY

¹² Dedicated Acres 327.09	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.

MARLEY STATE COM 31 AB 002H ELEV. = 3624.1' LAT. = 32.7948832°N (NAD83) LONG. = 104.2275102°W NMSP EAST (FT) N = 652927.13 E = 573855.26		KICK OFF POINT 869' FNL, 805' FEL LAT. = 32.7954135°N LONG. = 104.2261953°W		FIRST TAKE POINT 823' FNL, 100' FWL LAT. = 32.7955239°N LONG. = 104.2232509°W LAST TAKE POINT 874' FNL, 102' FEL LAT. = 32.7954571°N LONG. = 104.2067186°W		BOTTOM OF HOLE LAT. = 32.7954470°N LONG. = 104.2064620°W NMSP EAST (FT) N = 653139.38 E = 580322.78	
NW CORNER SEC. 36 LAT. = 32.7979021°N LONG. = 104.2408232°W NMSP EAST (FT) N = 654021.62 E = 569763.43	N/4 CORNER SEC. 36 LAT. = 32.7978419°N LONG. = 104.2322059°W NMSP EAST (FT) N = 654002.13 E = 572411.33	SECTION CORNER LAT. = 32.7977832°N LONG. = 104.2235908°W NMSP EAST (FT) N = 653983.43 E = 575058.52	N/4 CORNER SEC. 31 LAT. = 32.7978197°N LONG. = 104.2148231°W NMSP EAST (FT) N = 653998.63 E = 577752.59	NE CORNER SEC. 31 LAT. = 32.7978599°N LONG. = 104.2064288°W NMSP EAST (FT) N = 654017.25 E = 580331.94	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: <u>David Cain</u> Date: <u>10/20/2023</u> Printed Name: <u>David Cain</u> E-mail Address: <u>david.cain@longfellowenergy.com</u>		
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 26, 2023 Date of Survey: _____ Signature and Seal of Professional Surveyor: Certificate Number: <u>12797</u>							

Intent ☐ As Drilled ☒API #
30-015-53817

Operator Name: LONGFELLOW ENERGY, LP	Property Name: MARLEY STATE COM 31 AB	Well Number 002H
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Kick Off Point (KOP)

UL A	Section 36	Township 17S	Range 27E	Lot	Feet 869	From N/S NORTH	Feet 805	From E/W EAST	County EDDY
Latitude 32.7954135					Longitude 104.2261953			NAD 83	

First Take Point (FTP)

UL D	Section 31	Township 17S	Range 28E	Lot 1	Feet 823	From N/S NORTH	Feet 100	From E/W WEST	County EDDY
Latitude 32.7955239					Longitude 104.2232509			NAD 83	

Last Take Point (LTP)

UL A	Section 31	Township 17S	Range 28E	Lot	Feet 874	From N/S NORTH	Feet 102	From E/W EAST	County EDDY
Latitude 32.7954571					Longitude 104.2067186			NAD 83	

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
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KZ 06/29/2018



Longfellow Energy

Eddy Co., NM (Nad-83)
MARLEY STATE COM 31 AB
002H

Wellbore #1

Design: Wellbore #1

Standard Survey Report

09 July, 2023





Survey Report



Company:	Longfellow Energy	Local Co-ordinate Reference:	Well 002H
Project:	Eddy Co., NM (Nad-83)	TVD Reference:	RKB = 20.3' @ 3644.40usft (AKITA 519)
Site:	MARLEY STATE COM 31 AB	MD Reference:	RKB = 20.3' @ 3644.40usft (AKITA 519)
Well:	002H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	WBDS_SQL_3

Project	Eddy Co., NM (Nad-83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	MARLEY STATE COM 31 AB		
Site Position:		Northing:	652,447.99 usft
From:	Map	Easting:	580,846.39 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13.200 in
		Latitude:	32.793545
		Longitude:	-104.204761

Well	002H		
Well Position	+N/-S	0.00 usft	Northing: 652,927.13 usft
	+E/-W	0.00 usft	Easting: 573,855.26 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	usft
Grid Convergence:	0.057 °	Ground Level:	3,624.10 usft

Design	Wellbore #1		
Audit Notes:			
Version:	1.0	Phase:	ACTUAL
		Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)
	0.00	0.00	0.00
			89.42

Survey Program	Date 07/09/23		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name
193.00	9,758.00	Survey #1 (Wellbore #1)	MWD+IFR1+SAG+FDIR
			OWSG MWD + IFR1 + Sag + FDIR Correction

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
193.00	1.21	240.90	192.99	-0.99	-1.78	-1.79	0.63	0.63	0.00
311.00	0.17	143.14	310.98	-1.74	-2.76	-2.78	1.05	-0.88	-82.85
402.00	1.70	60.97	401.96	-1.19	-1.50	-1.51	1.85	1.68	-90.30
493.00	4.32	61.91	492.83	1.08	2.70	2.71	2.88	2.88	1.03
583.00	6.96	61.44	582.39	5.28	10.48	10.54	2.93	2.93	-0.52
674.00	9.00	63.40	672.50	11.11	21.69	21.80	2.26	2.24	2.15
765.00	9.27	61.95	762.35	17.74	34.52	34.70	0.39	0.30	-1.59
856.00	9.30	60.14	852.15	24.85	47.37	47.62	0.32	0.03	-1.99
946.00	9.48	58.11	940.95	32.38	59.97	60.29	0.42	0.20	-2.26
1,037.00	9.63	62.72	1,030.69	39.83	73.10	73.50	0.86	0.16	5.07
1,127.00	9.36	65.94	1,119.45	46.27	86.47	86.93	0.66	-0.30	3.58
1,218.00	9.21	65.28	1,209.26	52.33	99.84	100.37	0.20	-0.16	-0.73
1,245.00	9.16	64.34	1,235.92	54.16	103.74	104.29	0.59	-0.19	-3.48
1,397.00	8.43	62.87	1,386.13	64.48	124.56	125.21	0.50	-0.48	-0.97



Survey Report



Company:	Longfellow Energy	Local Co-ordinate Reference:	Well 002H
Project:	Eddy Co., NM (Nad-83)	TVD Reference:	RKB = 20.3' @ 3644.40usft (AKITA 519)
Site:	MARLEY STATE COM 31 AB	MD Reference:	RKB = 20.3' @ 3644.40usft (AKITA 519)
Well:	002H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	WBDS_SQL_3

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
1,492.00	9.51	62.24	1,479.97	71.31	137.71	138.42	1.14	1.14	-0.66
1,587.00	10.05	61.61	1,573.58	78.91	151.94	152.73	0.58	0.57	-0.66
1,681.00	9.58	60.45	1,666.21	86.67	165.96	166.83	0.54	-0.50	-1.23
1,776.00	9.38	60.74	1,759.91	94.35	179.59	180.54	0.22	-0.21	0.31
1,870.00	10.16	69.11	1,852.55	101.05	194.02	195.04	1.72	0.83	8.90
1,965.00	9.80	67.70	1,946.11	107.11	209.33	210.41	0.46	-0.38	-1.48
2,060.00	9.59	66.21	2,039.76	113.37	224.05	225.19	0.34	-0.22	-1.57
2,155.00	9.40	65.07	2,133.46	119.83	238.33	239.53	0.28	-0.20	-1.20
2,250.00	9.18	62.94	2,227.21	126.55	252.11	253.38	0.43	-0.23	-2.24
2,345.00	8.92	62.20	2,321.03	133.43	265.38	266.71	0.30	-0.27	-0.78
2,440.00	8.84	64.64	2,414.89	139.99	278.49	279.89	0.41	-0.08	2.57
2,534.00	8.92	68.35	2,507.76	145.77	291.79	293.25	0.62	0.09	3.95
2,629.00	8.72	67.43	2,601.64	151.25	305.28	306.80	0.26	-0.21	-0.97
2,722.00	8.46	66.59	2,693.60	156.68	318.07	319.64	0.31	-0.28	-0.90
2,815.00	8.26	65.95	2,785.61	162.12	330.45	332.07	0.24	-0.22	-0.69
2,909.00	9.31	66.59	2,878.50	167.89	343.59	345.28	1.12	1.12	0.68
3,003.00	9.82	66.09	2,971.20	174.16	357.90	359.64	0.55	0.54	-0.53
3,097.00	9.59	65.44	3,063.85	180.66	372.35	374.16	0.27	-0.24	-0.69
3,192.00	9.50	64.79	3,157.54	187.29	386.64	388.52	0.15	-0.09	-0.68
3,286.00	13.12	74.70	3,249.70	193.41	403.96	405.89	4.36	3.85	10.54
3,381.00	18.12	79.34	3,341.17	199.00	428.89	430.88	5.42	5.26	4.88
3,477.00	23.50	78.61	3,430.87	205.54	462.35	464.41	5.61	5.60	-0.76
3,572.00	28.51	79.69	3,516.23	213.35	503.25	505.38	5.30	5.27	1.14
3,666.00	34.40	85.15	3,596.40	219.61	551.83	554.03	6.95	6.27	5.81
3,761.00	39.23	85.85	3,672.43	224.06	608.57	610.80	5.10	5.08	0.74
3,856.00	43.92	86.50	3,743.48	228.25	671.45	673.73	4.96	4.94	0.68
3,951.00	49.54	87.42	3,808.57	231.89	740.50	742.81	5.96	5.92	0.97
4,045.00	53.55	89.05	3,867.02	234.12	814.06	816.39	4.48	4.27	1.73
4,105.00	56.72	89.70	3,901.31	234.66	863.28	865.61	5.36	5.28	1.08
4,139.00	56.93	89.82	3,919.92	234.77	891.74	894.07	0.68	0.62	0.35
4,233.00	57.29	89.68	3,970.96	235.12	970.67	973.00	0.40	0.38	-0.15
4,265.00	57.51	89.65	3,988.20	235.28	997.63	999.96	0.69	0.69	-0.09
4,327.00	63.69	89.65	4,018.63	235.61	1,051.61	1,053.94	9.97	9.97	0.00
4,421.00	72.28	90.23	4,053.83	235.68	1,138.68	1,141.01	9.16	9.14	0.62
4,515.00	82.07	90.28	4,074.67	235.28	1,230.22	1,232.54	10.42	10.41	0.05
4,609.00	88.49	90.84	4,082.40	234.36	1,323.85	1,326.15	6.86	6.83	0.60
4,703.00	88.89	90.73	4,084.55	233.07	1,417.81	1,420.10	0.44	0.43	-0.12
4,797.00	89.17	90.38	4,086.14	232.16	1,511.80	1,514.07	0.48	0.30	-0.37
4,892.00	89.53	89.05	4,087.22	232.63	1,606.79	1,609.06	1.45	0.38	-1.40
4,986.00	90.18	88.49	4,087.46	234.65	1,700.76	1,703.05	0.91	0.69	-0.60
5,081.00	90.68	88.00	4,086.74	237.56	1,795.72	1,798.03	0.74	0.53	-0.52
5,176.00	89.98	89.05	4,086.20	240.01	1,890.68	1,893.01	1.33	-0.74	1.11
5,269.00	90.37	89.71	4,085.91	241.01	1,983.67	1,986.01	0.82	0.42	0.71
5,364.00	90.09	89.41	4,085.53	241.74	2,078.67	2,081.01	0.43	-0.29	-0.32



Survey Report



Company:	Longfellow Energy	Local Co-ordinate Reference:	Well 002H
Project:	Eddy Co., NM (Nad-83)	TVD Reference:	RKB = 20.3' @ 3644.40usft (AKITA 519)
Site:	MARLEY STATE COM 31 AB	MD Reference:	RKB = 20.3' @ 3644.40usft (AKITA 519)
Well:	002H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	WBDS_SQL_3

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,458.00	89.42	88.92	4,085.93	243.11	2,172.66	2,175.01	0.88	-0.71	-0.52
5,552.00	84.84	88.09	4,090.64	245.56	2,266.48	2,268.85	4.95	-4.87	-0.88
5,647.00	86.13	88.08	4,098.12	248.72	2,361.13	2,363.53	1.36	1.36	-0.01
5,741.00	87.85	87.75	4,103.05	252.14	2,454.94	2,457.36	1.86	1.83	-0.35
5,836.00	89.22	88.76	4,105.48	255.03	2,549.86	2,552.31	1.79	1.44	1.06
5,931.00	89.62	89.32	4,106.44	256.62	2,644.84	2,647.30	0.72	0.42	0.59
6,024.00	89.76	90.60	4,106.94	256.69	2,737.84	2,740.30	1.38	0.15	1.38
6,119.00	90.29	90.77	4,106.90	255.55	2,832.83	2,835.27	0.59	0.56	0.18
6,214.00	90.79	90.36	4,106.01	254.61	2,927.82	2,930.25	0.68	0.53	-0.43
6,314.00	89.02	89.45	4,106.17	254.78	3,027.82	3,030.24	1.99	-1.77	-0.91
6,405.00	87.87	89.41	4,108.64	255.69	3,118.78	3,121.20	1.26	-1.26	-0.04
6,496.00	87.53	89.42	4,112.30	256.61	3,209.70	3,212.13	0.37	-0.37	0.01
6,586.00	88.40	89.06	4,115.49	257.81	3,299.63	3,302.07	1.05	0.97	-0.40
6,677.00	89.94	89.22	4,116.81	259.17	3,390.61	3,393.06	1.70	1.69	0.18
6,767.00	88.65	89.46	4,117.92	260.21	3,480.59	3,483.05	1.46	-1.43	0.27
6,858.00	89.72	89.41	4,119.21	261.11	3,571.58	3,574.04	1.18	1.18	-0.05
6,953.00	86.86	89.86	4,122.05	261.71	3,666.53	3,668.99	3.05	-3.01	0.47
7,048.00	88.34	90.02	4,126.02	261.81	3,761.44	3,763.90	1.57	1.56	0.17
7,142.00	88.15	89.85	4,128.90	261.92	3,855.40	3,857.85	0.27	-0.20	-0.18
7,236.00	88.51	89.59	4,131.64	262.38	3,949.35	3,951.81	0.47	0.38	-0.28
7,331.00	88.51	89.51	4,134.11	263.12	4,044.32	4,046.78	0.08	0.00	-0.08
7,426.00	87.81	89.27	4,137.16	264.13	4,139.26	4,141.73	0.78	-0.74	-0.25
7,520.00	88.93	89.60	4,139.84	265.06	4,233.22	4,235.69	1.24	1.19	0.35
7,615.00	89.94	89.41	4,140.77	265.88	4,328.21	4,330.68	1.08	1.06	-0.20
7,709.00	90.19	90.16	4,140.67	266.23	4,422.21	4,424.68	0.84	0.27	0.80
7,803.00	88.46	91.18	4,141.77	265.13	4,516.19	4,518.64	2.14	-1.84	1.09
7,897.00	87.81	91.16	4,144.83	263.22	4,610.12	4,612.55	0.69	-0.69	-0.02
7,993.00	88.26	91.98	4,148.12	260.59	4,706.03	4,708.42	0.97	0.47	0.85
8,088.00	88.26	91.44	4,151.01	257.75	4,800.94	4,803.30	0.57	0.00	-0.57
8,183.00	87.61	91.21	4,154.43	255.56	4,895.85	4,898.19	0.73	-0.68	-0.24
8,277.00	89.05	91.40	4,157.17	253.42	4,989.79	4,992.10	1.55	1.53	0.20
8,372.00	90.73	91.33	4,157.35	251.16	5,084.76	5,087.04	1.77	1.77	-0.07
8,466.00	87.84	91.30	4,158.53	249.00	5,178.71	5,180.97	3.07	-3.07	-0.03
8,560.00	89.07	91.48	4,161.06	246.72	5,272.65	5,274.88	1.32	1.31	0.19
8,654.00	87.48	91.46	4,163.89	244.31	5,366.57	5,368.77	1.69	-1.69	-0.02
8,749.00	86.27	91.10	4,169.07	242.19	5,461.41	5,463.58	1.33	-1.27	-0.38
8,843.00	90.31	91.90	4,171.87	239.73	5,555.31	5,557.45	4.38	4.30	0.85
8,937.00	90.90	91.59	4,170.88	236.87	5,649.26	5,651.37	0.71	0.63	-0.33
9,032.00	91.15	91.15	4,169.18	234.60	5,744.22	5,746.30	0.53	0.26	-0.46
9,126.00	89.69	90.49	4,168.49	233.25	5,838.21	5,840.27	1.70	-1.55	-0.70
9,221.00	87.95	90.74	4,170.45	232.23	5,933.18	5,935.22	1.85	-1.83	0.26
9,315.00	86.52	91.84	4,174.98	230.12	6,027.04	6,029.06	1.92	-1.52	1.17
9,409.00	88.12	91.79	4,179.38	227.15	6,120.89	6,122.87	1.70	1.70	-0.05



Survey Report



Company:	Longfellow Energy	Local Co-ordinate Reference:	Well 002H
Project:	Eddy Co., NM (Nad-83)	TVD Reference:	RKB = 20.3' @ 3644.40usft (AKITA 519)
Site:	MARLEY STATE COM 31 AB	MD Reference:	RKB = 20.3' @ 3644.40usft (AKITA 519)
Well:	002H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	WBDS_SQL_3

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
9,503.00	86.83	92.37	4,183.52	223.74	6,214.73	6,216.68	1.50	-1.37	0.62	
9,598.00	87.05	92.67	4,188.59	219.57	6,309.50	6,311.40	0.39	0.23	0.32	
9,682.00	87.87	92.58	4,192.31	215.72	6,393.33	6,395.19	0.98	0.98	-0.11	
9,758.00	87.87	92.58	4,195.14	212.30	6,469.20	6,471.02	0.00	0.00	0.00	

Design Targets										
Target Name	- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
2H SHL (PLAT)	- actual wellpath hits target center	0.00	0.00	0.00	0.00	0.00	652,927.13	573,855.26	32.794883	-104.227510
- Point										
2H FTP (PLAT)	- actual wellpath misses target center by 7.86usft at 4592.73usft MD (4081.81 TVD, 234.58 N, 1307.59 E)	0.00	0.01	4,074.00	235.13	1,308.23	653,162.27	575,163.50	32.795526	-104.223252
- Point										
2H LTP (PLAN)	- actual wellpath misses target center by 6.00usft at 9678.69usft MD (4192.19 TVD, 215.87 N, 6390.03 E)	0.00	0.00	4,186.20	216.04	6,390.30	653,143.18	580,245.56	32.795458	-104.206714
- Point										
2H LTP (PLAT)	- actual wellpath misses target center by 70.95usft at 9674.37usft MD (4192.03 TVD, 216.07 N, 6385.71 E)	0.00	0.00	4,186.20	286.69	6,389.21	653,213.83	580,244.47	32.795652	-104.206717
- Point										
2H BHL (PLAT)	- actual wellpath misses target center by 75.21usft at 9754.34usft MD (4195.00 TVD, 212.47 N, 6465.55 E)	0.00	0.01	4,188.00	287.26	6,469.18	653,214.39	580,324.44	32.795653	-104.206457
- Point										
2H BHL (PLAN)	- actual wellpath misses target center by 7.37usft at 9758.00usft MD (4195.14 TVD, 212.30 N, 6469.20 E)	0.00	0.00	4,188.00	213.78	6,470.32	653,140.91	580,325.58	32.795451	-104.206453
- Point										

Design Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
9,758.00	4,195.14	212.30	6,469.20	Projection to Bit: 9758.00' MD/ 4195.14' TVD	
9,758.00	4,195.14	212.30	6,469.20	Final Station Closure Distance= 6472.68 /Direction= 88.12	
9,758.00	4,195.14	212.30	6,469.20	TD: Latitude= 32.795447 / Longitude= -104.206457	
9,758.00	4,195.14	212.30	6,469.20	TD: Y= 653139.43 / X= 580324.46	

Checked By: _____ Approved By: _____ Date: _____

Energy, Minerals and Natural Resources

Revised April 3, 2017

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505Two 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 875051. WELL API NO.
30-015-53817

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

Marley State Com 31 AB

6. Well Number:

002H

7. Type of Completion:

☒ NEW WELL ☐ WORKOVER ☐ DEEPENING ☐ PLUGBACK ☐ DIFFERENT RESERVOIR ☐ OTHER

8. Name of Operator

Longfellow Energy, LP

9. OGRID

372210

10. Address of Operator

8115 Preston Rd, Suite 800, Dallas, TX 75225

11. Pool name or Wildcat

Red Lake; Glorieta-Yeso, Northeast

12. Location	Unit Ltr	Section	Township	Range	Lot	Feet from the	N/S Line	Feet from the	E/W Line	County
Surface:	A	36	17 S	27 E		1065	North	1210	East	Eddy
BH:	A	31	17 S	28 E		878	North	23	East	Eddy
13. Date Spudded 6/30/2023		14. Date T.D. Reached 7/8/2023		15. Date Rig Released 7/10/2023		16. Date Completed (Ready to Produce) 11/1/2023			17. Elevations (DF and RKB, RT, GR, etc.) 3623.5	
18. Total Measured Depth of Well 9758'				19. Plug Back Measured Depth 9675'		20. Was Directional Survey Made? Yes			21. Type Electric and Other Logs Run Mudlog	

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

4595'-9642' Yeso

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

CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
9-5/8"	36#	1313'	12-1/4"	520 sxs. cmt to surf	0
7"	32#	4607'	8-3/4"	1480 sxs. cmt to surf	0
5-1/2"	20#	9723'	8-3/4"	1480 sxs. cmt to surf	0

24. LINER RECORD

SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	25. TUBING RECORD	SIZE	DEPTH SET	PACKER SET
						2-7/8"	4134'	

26. Perforation record (interval, size, and number)

9642-9469, 9449-9266, 9246-9063, 9043-8862, 8840-8657, 8637-8454, 8434-8251, 8231-8048, 8028-7845, 7820-7642, 7622-7439, 7419-7236, 7136-6959, 6936-6762, 6742-6565, 6545-6368, 6348-6171, 6151-5974, 5951-5777, 5757-5580, 5560-5383, 5363-5186, 5166-4989, 4976-4792, 4773-4595.

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

DEPTH INTERVAL
4595'-9642'AMOUNT AND KIND MATERIAL USED
Frac is 25 stages w/ 378774bbls slickwater and 6005392# sand

28. PRODUCTION

Date First Production 11/17/2023		Production Method (Flowing, gas lift, pumping - Size and type pump) Electric Submersible Pump			Well Status (Prod. or Shut-in) Prod		
Date of Test 2/22/2024	Hours Tested 24	Choke Size NA	Prod'n For Test Period	Oil - Bbl 377	Gas - MCF 413	Water - Bbl. 1753	Gas - Oil Ratio
Flow Tubing Press. 284	Casing Pressure 81	Calculated 24-Hour Rate	Oil - Bbl. 377	Gas - MCF 413	Water - Bbl. 1753	Oil Gravity - API - (Corr.)	

29. Disposition of Gas (Sold, used for fuel, vented, etc.)

Sold

30. Test Witnessed By

Francisco Flores

31. List Attachments

32. If a temporary pit was used at the well, attach a plat with the location of the temporary pit.

33. Rig Release Date:

34. If an on-site burial was used at the well, report the exact location of the on-site burial:

Latitude

Longitude

NAD83

I 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  Printed Name **David Cain**Title **Regulatory Analyst**Date
2/23/2024E-mail Address **david.cain@longfellowenergy.com**

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	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 1444'	T. Montoya	T. Point Lookout	T. Elbert
T. San Andres 1793'	T. Simpson	T. Mancos	T. McCracken
T. Glorieta 3183'	T. McKee	T. Gallup	T. Ignacio Otzte
T. Paddock 3214'	T. Ellenburger	Base Greenhorn	T. Granite
T. Blinebry 3869'	T. Gr. Wash	T. Dakota	
T. Tubb	T. Delaware Sand	T. Morrison	
T. Drinkard	T. Bone Springs	T. Todilto	
T. Abo	T.	T. Entrada	
T. Wolfcamp	T.	T. Wingate	
T. Penn	T.	T. Chinle	
T. Cisco (Bough C)	T.	T. Permian	

OIL OR GAS SANDS OR ZONES

No. 1, from.....to.....

No. 2, from.....to.....

No. 3, from.....to.....

No. 4, from.....to.....

IMPORTANT WATER SANDS

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

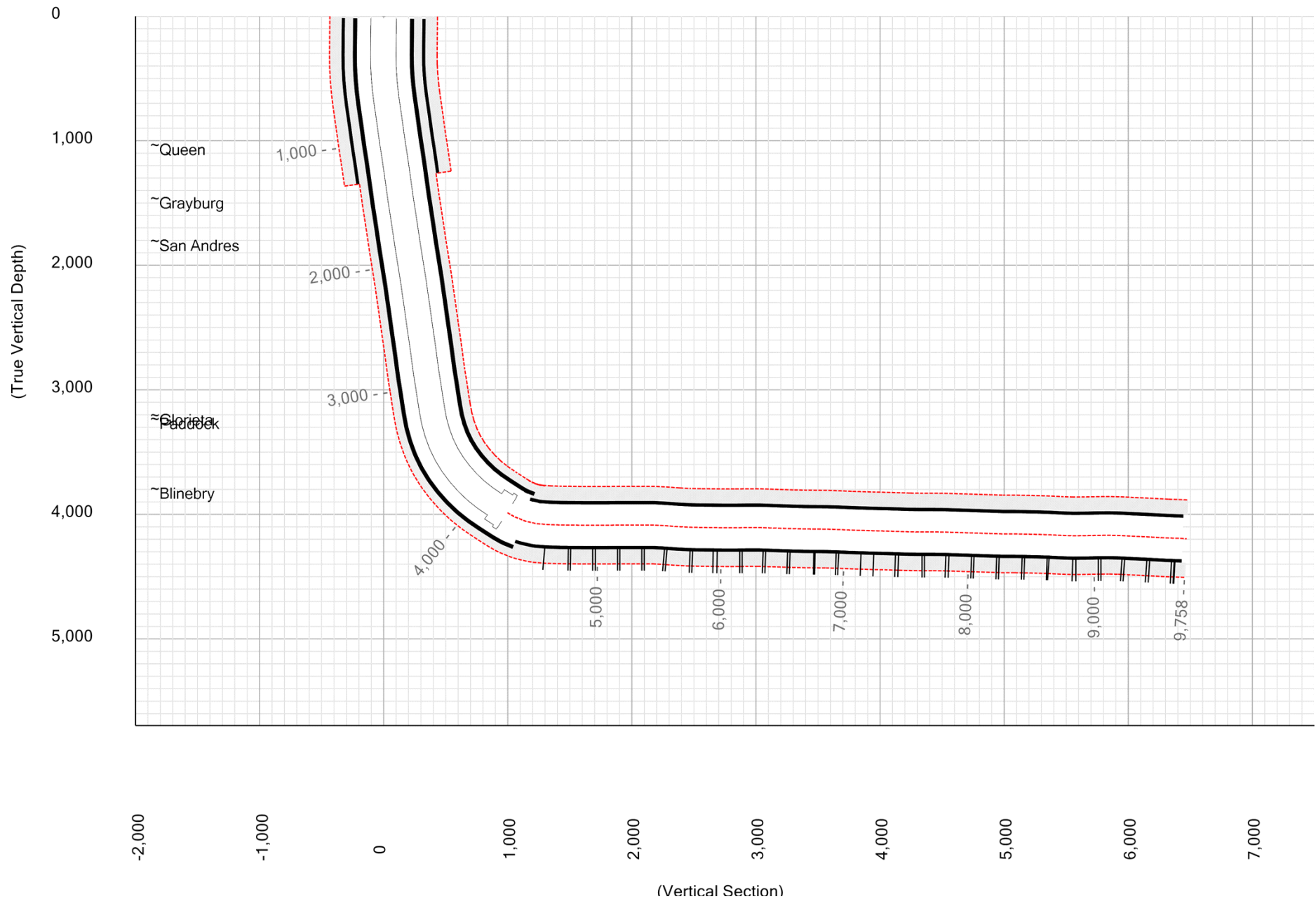
No. 1, from.....to.....feet.....
 No. 2, from.....to.....feet.....
 No. 3, from.....to.....feet.....

LITHOLOGY RECORD (Attach additional sheet if necessary)

From	To	Thickness In Feet	Lithology

From	To	Thickness In Feet	Lithology

Marley State Com 31 AB # 2H, 2/12/2024



Marley State Com 31 AB # 2H API # 30-015-53817			
1065 FNL & 1210 FEL	GL Elev:	3,624.00	KOP: 2,736
Section 36, Township 17S, Range 27E		EOC:	4,585
County, State: Eddy, NM		Fill Depth:	
Aux ID:		PBTD:	9,675.00
'KB' correction: 20; All Depths Corr To: KB		TD:	9,723.00
		BOP:	7 1/16 10M

Hole Size

Diameter	Top At	Btm At	Date Drilled
12.2500	0.00	1,315.00	6/23/2023
8.7500	1,315.00	9,758.00	6/29/2023

Surface Casing

Date Ran: 6/23/2023

Description	#	Diameter	Weight	Grade	Length	Top At	Btm At
Casing	33	9.6250	36.00	J55	1,293.00	20.00	1,313.00

Production Casing

Date Ran: 6/29/2023

Description	#	Diameter	Weight	Grade	Length	Top At	Btm At
Casing	81	7.0000	32.00	L80	3,205.31	20.00	3,225.31
Last 41 Jts, solid body every 3rd jt							
Marker Jt	1	7.0000	32.00	L80	18.99	3,225.31	3,244.30
Casing	29	7.0000	32.00	L80	1,162.34	3,244.30	4,406.64
Solid body every 3rd jt							
Crossover	1	5.5000	20.00	L80	2.73	4,406.64	4,409.37
Casing	9	5.5000	20.00	L80	354.69	4,409.37	4,764.06
Solid body every 2nd jt							
Float Insert	1	5.5000	20.00	L80	2.70	4,764.06	4,766.76
Casing	56	5.5000	20.00	L80	2,240.38	4,766.76	7,007.14
Solid body every 2nd jt							
Marker Jt	1	5.5000	20.00	L80	19.69	7,007.14	7,026.83
Casing	61	5.5000	20.00	L80	2,419.39	7,026.83	9,446.22
Solid body every 2nd jt							
Marker Jt	1	5.5000	20.00	L80	21.89	9,446.22	9,468.11
Casing	5	5.5000	20.00	L80	206.83	9,468.11	9,674.94
Solid body every jt							
Float Collar	1	5.5000	20.00	L80	1.25	9,674.94	9,676.19
Casing	1	5.5000	20.00	L80	44.77	9,676.19	9,720.96
Float Shoe	1	5.5000	20.00	L80	2.04	9,720.96	9,723.00

Cement

Top At	Btm At	I D	O D	TOC Per	# - Type	# Sx	Class	Wt.
0.00	1,315.00	9.625	12.250	Circ	1 - Lead	390	C	13.50
					2 - Tail	130	C	14.80
Circ 157 sx								
4,406.00	9,758.00	5.500	8.750	Circ				
0.00	4,406.00	7.000	8.750	Circ	1 - Lead	420	C 25/75	12.20
					2 - Tail	1060	C	14.50
Circ 121 sx								

Formation Tops / Bottoms

Top At	Bottom At	Formation
1,006		Queen
1,437		Grayburg
1,775		San Andres
3,172		Glorieta
3,207		Paddock
3,762		Blaine

Zone and Perfs**Comments / Completion Summary**

Dropped 3/8" x 1.75" coupling during ESP install.

Stg	Top	Btm	AIR	AIP	MIR	ISIP
1	9469	9642	111	6398	120	1565
2	9266	9449	133	6681	135	1893
3	9063	9246	130	6823	135	1773
4	8862	9043	121	5530	135	1869
5	8657	8840	134	6823	136	1744
6	8454	8637	134	6850	137	2175
7	8251	8434	135	6657	137	2111
8	8048	8231	134	6967	136	2166
9	7845	8028	128	7054	136	2144
10	7642	7820	129	7023	137	2031
11	7439	7622	134	6809	136	1967
12	7236	7419	134	6654	137	1633
13	6959	7136	133	6858	137	1593
14	6762	6936	134	6729	137	1638
15	6565	6742	136	6301	138	1568
16	6368	6545	135	6449	137	1520
17	6171	6348	135	6786	138	1602
18	5974	6151	132	6988	135	2054
19	5777	5951	134	6893	138	2283
20	5580	5757	133	7038	137	2979
21	5383	5560	135	6125	137	2472
22	5186	5363	135	6527	138	2204
23	4989	5166	137	5922	139	1403
24	4792	4976	136	4976	137	2011
25	4595	4773	136	5657	138	1860

Perforations

Top	Bottom	Formation	Status	Opened	Closed	# / Ft	Ttl #
4,595.00	4,773.00	Upper Blaine	A	9/26/2023		3	30
Stage 25 - (3,3,3,3,3,3,3,3,3) SWM Charges							
4,792.00	4,967.00	Upper Blaine	A	9/26/2023		3	30
Stage 24 - (3,3,3,3,3,3,3,3,3) SWM Charges							
4,989.00	5,166.00	Upper Blaine	A	9/25/2023		3	30
Stage 23 - (3,3,3,3,3,3,3,3,3) SWM Charges							
5,186.00	5,363.00	Upper Blaine	A	9/25/2023		3	30
Stage 22 - (3,3,3,3,3,3,3,3,3) SWM Charges							

Perforations

Top	Bottom	Formation	Status	Opened	Closed	# / Ft	Ttl #
5,383.00	5,560.00	Upper Blinebry	A	9/24/2023		3	30
Stage 21 - (3,3,3,3,3,3,3,3,3) SWM Charges							
5,580.00	5,757.00	Upper Blinebry	A	9/24/2023		3	30
Stage 20 - (3,3,3,3,3,3,3,3,3) SWM Charges							
5,777.00	5,941.00	Upper Blinebry	A	9/23/2023		3	30
Stage 19 - (3,3,3,3,3,3,3,3,3) SWM Charges							
5,974.00	6,151.00	Upper Blinebry	A	9/22/2023		3	30
Stage 18 - (3,3,3,3,3,3,3,3,3) SWM Charges							
6,171.00	6,348.00	Upper Blinebry	A	9/22/2023		3	30
Stage 17 - (3,3,3,3,3,3,3,3,3) SWM Charges							
6,368.00	6,545.00	Upper Blinebry	A	9/21/2023		3	30
Stage 16 - (3,3,3,3,3,3,3,3,3) SWM Charges							
6,565.00	6,752.00	Upper Blinebry	A	9/21/2023		3	30
Stage 15 - (3,3,3,3,3,3,3,3,3) SWM Charges							
6,762.00	6,936.00	Upper Blinebry	A	9/20/2023		3	30
Stage 14 - (3,3,3,3,3,3,3,3,3) SWM Charges							
6,959.00	7,136.00	Upper Blinebry	A	9/20/2023		3	30
Stage 13 - (3,3,3,3,3,3,3,3,3) SWM Charges							
7,237.00	7,414.00	Upper Blinebry	A	9/19/2023		3	30
Stage 12 - (3,3,3,3,3,3,3,3,3) SWM Charges							
7,439.00	7,622.00	Upper Blinebry	A	9/19/2023		3	30
Stage 11 - (3,3,3,3,3,3,3,3,3) SWM Charges							
7,642.00	7,820.00	Upper Blinebry	A	9/18/2023		3	30
Stage 10 - (3,3,3,3,3,3,3,3,3) SWM Charges							
7,845.00	8,028.00	Upper Blinebry	A	9/17/2023		3	30
Stage 9 - (3,3,3,3,3,3,3,3,3) SWM Charges							
8,048.00	8,231.00	Upper Blinebry	A	9/17/2023		3	30
Stage 8 - (3,3,3,3,3,3,3,3,3) SWM Charges							
8,251.00	8,434.00	Upper Blinebry	A	9/16/2023		3	30
Stage 7 - (3,3,3,3,3,3,3,3,3) SWM Charges USED GREEN ACID ON SPOT AND DISPLACED.							
8,454.00	8,637.00	Upper Blinebry	A	9/15/2023		3	30
Stage 6 - (3,3,3,3,3,3,3,3,3) SWM Charges							
8,657.00	8,840.00	Upper Blinebry	A	9/14/2023		3	30
Stage 5 - (3,3,3,3,3,3,3,3,3) SWM Charges							
8,862.00	9,043.00	Upper Blinebry	A	9/13/2023		3	30
Stage 4 - (3,3,3,3,3,3,3,3,3) SWM Charges							
9,064.00	9,246.00	Upper Blinebry	A	9/12/2023		3	30
Stage 3 - (3,3,3,3,3,3,3,3,3) SWM Charges							
9,267.00	9,446.00	Upper Blinebry	A	9/9/2023		3	30
Stage 2 - (3,3,3,3,3,3,3,3,3) SWM Charges							
9,469.00	9,642.00	Upper Blinebry	A	9/7/2023		3	30
Stage 1 - (3,3,3,3,3,3,3,3,3) Geo Charges							
9,664.00	9,670.00	Upper Blinebry	TA	8/11/2023		6	36
8-11-23 TOE PREP PERFS 6' GUN / 6 SPF / 36 HOLES.							

Wellbore Plugs and Junk

Top	Bottom	Type	Diameter	Solid	Date
-----	--------	------	----------	-------	------

Wellbore Plugs and Junk

Top	Bottom	Type	Diameter	Solid	Date
		Junk	0.375	Yes	10/17/2023
3/8" x 1.75" Coupling for cap string dropped into well					

Tubing

Date Ran: 10/17/2023

Description	#	Diameter	Weight	Grade	Length	Top At	Btm At
Tubing	131	2.8750	6.50	L80	4,113.85	20.00	4,133.85
Band 3 per jt. First JNT above pump every 3'. Jts ,3/8" poly CT string ran in well.							
Seat Nipple	1	2.8750			0.60	4,133.85	4,134.45
Tubing Sub	1	2.8750			3.60	4,134.45	4,138.05
ESP Sensor	1	4.0000			0.60	4,138.05	4,138.65
Discharge pressure sensor, 1/4" SS CT connected to the Zennith Sensor							
ESP Pump	1	4.0000			0.53	4,138.65	4,139.18
Discharge Pump							
ESP Pump	1	4.0000			23.50	4,139.18	4,162.68
E3000, 96 Stages							
ESP Pump	1	4.0000			23.50	4,162.68	4,186.18
E3000, 96 Stages							
ESP Pump	1	4.0000			13.00	4,186.18	4,199.18
G42, 41 Stages							
ESP Intake	1	4.0000			8.70	4,199.18	4,207.88
Double gas sep/intakes: MODEL 400							
ESP Seal	2	4.0000			12.20	4,207.88	4,220.08
Double seals							
ESP Motor	1	4.5000			34.90	4,220.08	4,254.98
NEW, 286 HP . 450 MODEL							
ESP Sensor	1	4.0000			2.70	4,254.98	4,257.68
NEW, Zenith E7							
Tubing Sub	1	2.3750			2.00	4,257.68	4,259.68
Band 3/8" CT to sub							

District I
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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

ACKNOWLEDGMENTS

Action 317128

ACKNOWLEDGMENTS

Operator: LONGFELLOW ENERGY, LP 8115 Preston Road Dallas, TX 75225	OGRID: 372210
	Action Number: 317128
	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

Action 317128

CONDITIONS

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CONDITIONS

Created By	Condition	Condition Date
plmartinez	None	2/26/2024