

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 RT 10/2023
⁴ API Number 30 – 015-53818	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 001H

II. ¹⁰ Surface Location

UI 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		1045	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		388	North	48	East	Eddy
¹² Lse Code S	¹³ Producing Method Code P	¹⁴ Gas Connection Date 10/27/2023	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
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 7/10/2023	²² Ready Date 11/1/2023	²³ TD 3571'V/9180'M	²⁴ PBDT 3572'V/9126'M	²⁵ Perforations 9,105'-4,059'	²⁶ DHC, MC
²⁷ Hole Size	²⁸ Casing & Tubing Size	²⁹ Depth Set	³⁰ Sacks Cement		
12-1/4"	9-5/8"	1317'	515		
8-3/4"	7"	3931'	1480		
8-3/4"	5-1/2"	9169'	1480		

V. Well Test Data

³¹ Date New Oil	³² Gas Delivery Date	³³ Test Date	³⁴ Test Length	³⁵ Tbg. Pressure	³⁶ Csg. Pressure
³⁷ Choke Size	³⁸ Oil	³⁹ Water	⁴⁰ Gas		⁴¹ Test Method
⁴² I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief. Signature: 			OIL CONSERVATION DIVISION Approved by: PATRICIA MARTINEZ		
Printed name: David Cain			Title: PETROLEUM SPECIALIST		
Title: Regulatory Analyst			Approval Date: 11/6/2023		
E-mail Address: David.cain@longfellowenergy.com					
Date: 10/24/2023		Phone: (972) 590-9918	RT EXPIRES 2/1/2024		



October 24, 2023

NMOCD
1220 South St Francis Drive
Santa Fe, NM 87505

Re: Marley State Com 31 AB 001H Tight Hole Status 30-015-53818

Hello,

Pursuant to NMOCD rule 19.15.7.16(C) request is herein made to keep all data and accompanying attachments contained in form C-105 confidential.

Best Regards,

A handwritten signature in blue ink, appearing to read 'David Cain'.

David Cain
Engineering Technologist & Regulatory Specialist
Longfellow Energy, LP
972-590-9918
david.cain@longfellowenergy.com

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

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

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

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

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

Form C-102

Revised August 1, 2011

Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-53818	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 001H
⁷ OGRID No. 372210	⁸ Operator Name LONGFELLOW ENERGY, LP	⁹ Elevation 3623.5

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		1045	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		388	NORTH	48	EAST	EDDY
¹² Dedicated Acres 327.09	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.

MARLEY STATE COM 31 AB 001H ELEV. = 3623.5' LAT. = 32.7949382°N (NAD83) LONG. = 104.2275106°W NMSP EAST (FT) N = 652947.14 E = 573855.11		KICK OFF POINT 537' FNL, 820' FEL LAT. = 32.7963250°N LONG. = 104.2262515°W		FIRST TAKE POINT 409' FNL, 100' FWL LAT. = 32.7966604°N LONG. = 104.2232577°W LAST TAKE POINT 388' FNL, 102' FEL LAT. = 32.7967918°N LONG. = 104.2067415°W		BOTTOM OF HOLE LAT. = 32.7967919°N LONG. = 104.2065659°W NMSP EAST (FT) N = 653628.61 E = 580290.28	
NW CORNER SEC. 36 LAT. = 32.7979021°N LONG. = 104.2408232°W NMSP EAST (FT) N = 654002.13 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 = 653999.63 E = 577752.59	
NE CORNER SEC. 31 LAT. = 32.7978599°N LONG. = 104.2064288°W NMSP EAST (FT) N = 654017.25 E = 580331.94		NW CORNER SEC. 36 LAT. = 32.7906662°N LONG. = 104.2408127°W NMSP EAST (FT) N = 651389.10 E = 569768.96		SECTION CORNER LAT. = 32.7905221°N LONG. = 104.2235473°W NMSP EAST (FT) N = 651341.75 E = 575074.64		E/4 CORNER SEC. 31 LAT. = 32.7906985°N LONG. = 104.2063070°W NMSP EAST (FT) N = 651411.86 E = 580372.51	

AS-DRILLED

QUARTER CORNER
LAT. = 32.7905221°N
LONG. = 104.2235473°W
NMSP EAST (FT)
N = 651341.75
E = 575074.64

SCALED

SECTION CORNER
LAT. = 32.7832607°N
LONG. = 104.2235070°W
NMSP EAST (FT)
N = 648699.98
E = 575089.78

SW CORNER SEC. 36
LAT. = 32.7834265°N
LONG. = 104.2408028°W
NMSP EAST (FT)
N = 648755.20
E = 569774.30

S/4 CORNER SEC. 36
LAT. = 32.7833994°N
LONG. = 104.2146438°W
NMSP EAST (FT)
N = 648753.36
E = 577813.59

SE CORNER SEC. 31
LAT. = 32.7833994°N
LONG. = 104.2061844°W
NMSP EAST (FT)
N = 648805.73
E = 580413.30

SW CORNER SEC. 31
LAT. = 32.7833994°N
LONG. = 104.2061844°W
NMSP EAST (FT)
N = 648805.73
E = 580413.30

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.

David Cain 10/20/2023
Signature Date

David Cain

Printed Name

david.cain@longfellowenergy.com

E-mail Address

¹⁸ SURVEYOR CERTIFICATION

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

JULY 26, 2023

Date of Survey

Signature and Seal of Professional Surveyor:

Certificate Number: 12797

Professional Surveyor No. 8806E

Intent ☐ As Drilled ☒API #
30-015-53818

Operator Name: LONGFELLOW ENERGY, LP	Property Name: MARLEY STATE COM 31 AB	Well Number 001H
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Kick Off Point (KOP)

UL A	Section 36	Township 17S	Range 27E	Lot	Feet 537	From N/S NORTH	Feet 820	From E/W EAST	County EDDY
Latitude 32.7963250					Longitude 104.2262515			NAD 83	

First Take Point (FTP)

UL A	Section 31	Township 17S	Range 28E	Lot 1	Feet 409	From N/S NORTH	Feet 100	From E/W WEST	County EDDY
Latitude 32.7966604					Longitude 104.2232577			NAD 83	

Last Take Point (LTP)

UL A	Section 31	Township 17S	Range 28E	Lot	Feet 388	From N/S NORTH	Feet 102	From E/W EAST	County EDDY
Latitude 32.7967918					Longitude 104.2067415			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



I **Larry Wright**, certify that I am employed by **Wellbenders Directional Services**. That I did on the day(s) of **07/10/23** thru **07/16/23** conduct or supervise the taking of a **MWD Survey** from a depth of **163'** to a depth of **9180'**; that the data is true, correct, complete and within the limitations of the tool as set forth by **Wellbenders Directional Services**; that I am authorized and qualified to make this report; that this survey was conducted at the request of **Longfellow Energy** for the **Marley State Com 31 AB 1H** API No. **30-015-53818** in **Eddy County, New Mexico**; and that I have reviewed this report and find that it conforms to the principles and procedures as set forth by **Wellbenders Directional Services**.

Larry Wright

1125 Beach Airport Rd, Conroe, Texas
77301



Longfellow Energy

Eddy Co., NM (Nad-83)
MARLEY STATE COM 31 AB
001H

Wellbore #1

Design: Wellbore #1

Standard Survey Report

17 July, 2023





Survey Report



Company:	Longfellow Energy	Local Co-ordinate Reference:	Well 001H
Project:	Eddy Co., NM (Nad-83)	TVD Reference:	RKB = 20.3' @ 3643.80usft (AKITA 519)
Site:	MARLEY STATE COM 31 AB	MD Reference:	RKB = 20.3' @ 3643.80usft (AKITA 519)
Well:	001H	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	001H		
Well Position	+N/-S	0.00 usft	Northing: 652,947.14 usft
	+E/-W	0.00 usft	Easting: 573,855.11 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	usft
Grid Convergence:	0.057 °	Ground Level:	3,623.50 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 07/17/23		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name
163.00	9,180.00	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
163.00	0.55	237.97	163.00	-0.41	-0.66	-0.67	0.34	0.34	0.00
222.00	0.26	280.85	222.00	-0.54	-1.03	-1.04	0.68	-0.49	72.68
311.00	1.63	14.57	310.98	0.72	-0.91	-0.91	1.87	1.54	105.30
402.00	2.88	24.55	401.91	4.06	0.36	0.40	1.43	1.37	10.97
493.00	3.87	30.54	492.75	8.78	2.87	2.96	1.15	1.09	6.58
583.00	6.40	37.88	582.39	15.36	7.50	7.65	2.90	2.81	8.16
674.00	7.63	39.62	672.70	24.01	14.46	14.70	1.37	1.35	1.91
765.00	9.09	40.30	762.73	34.15	22.96	23.31	1.61	1.60	0.75
855.00	11.78	41.85	851.24	46.42	33.69	34.16	3.00	2.99	1.72
946.00	12.65	40.97	940.18	60.86	46.43	47.04	0.98	0.96	-0.97
1,037.00	14.50	42.99	1,028.63	76.72	60.73	61.50	2.10	2.03	2.22
1,127.00	16.53	40.90	1,115.35	94.64	76.79	77.75	2.34	2.26	-2.32
1,218.00	17.92	38.23	1,202.26	115.42	93.94	95.10	1.76	1.53	-2.93
1,249.00	18.19	37.72	1,231.74	123.00	99.85	101.09	1.01	0.87	-1.65



Survey Report



Company:	Longfellow Energy	Local Co-ordinate Reference:	Well 001H
Project:	Eddy Co., NM (Nad-83)	TVD Reference:	RKB = 20.3' @ 3643.80usft (AKITA 519)
Site:	MARLEY STATE COM 31 AB	MD Reference:	RKB = 20.3' @ 3643.80usft (AKITA 519)
Well:	001H	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)
1,397.00	17.30	37.51	1,372.70	158.73	127.38	128.98	0.60	-0.60	-0.14
1,492.00	17.91	37.43	1,463.25	181.53	144.86	146.69	0.64	0.64	-0.08
1,586.00	18.89	38.08	1,552.44	204.99	163.03	165.10	1.07	1.04	0.69
1,681.00	19.62	33.88	1,642.13	230.33	181.41	183.73	1.65	0.77	-4.42
1,775.00	20.34	31.22	1,730.47	257.41	198.67	201.27	1.23	0.77	-2.83
1,870.00	19.87	30.55	1,819.68	285.43	215.44	218.31	0.55	-0.49	-0.71
1,965.00	20.48	33.92	1,908.86	313.13	232.92	236.08	1.38	0.64	3.55
2,060.00	20.41	37.50	1,997.88	340.06	252.28	255.71	1.32	-0.07	3.77
2,155.00	19.73	38.81	2,087.11	365.70	272.41	276.10	0.86	-0.72	1.38
2,250.00	19.06	39.09	2,176.72	390.23	292.24	296.18	0.71	-0.71	0.29
2,344.00	17.37	39.28	2,266.00	413.01	310.80	314.97	1.80	-1.80	0.20
2,439.00	17.24	39.30	2,356.70	434.88	328.70	333.08	0.14	-0.14	0.02
2,534.00	18.71	39.44	2,447.06	457.54	347.30	351.91	1.55	1.55	0.15
2,628.00	19.24	39.40	2,535.95	481.15	366.70	371.56	0.56	0.56	-0.04
2,722.00	19.32	39.80	2,624.68	505.07	386.49	391.58	0.16	0.09	0.43
2,815.00	23.07	49.90	2,711.41	528.64	410.29	415.62	5.61	4.03	10.86
2,909.00	27.30	58.40	2,796.48	551.82	442.76	448.33	5.91	4.50	9.04
3,002.00	30.96	66.72	2,877.74	572.46	482.93	488.70	5.86	3.94	8.95
3,097.00	33.53	73.60	2,958.10	589.54	530.57	536.51	4.71	2.71	7.24
3,191.00	38.56	78.38	3,034.10	602.78	584.22	590.29	6.13	5.35	5.09
3,286.00	43.55	80.46	3,105.72	614.17	645.54	651.72	5.45	5.25	2.19
3,380.00	48.96	81.84	3,170.69	624.58	712.61	718.90	5.85	5.76	1.47
3,476.00	54.11	85.96	3,230.40	632.47	787.31	793.67	6.33	5.36	4.29
3,562.00	60.99	90.36	3,276.54	634.69	859.78	866.16	9.09	8.00	5.12
3,571.00	61.22	90.20	3,280.88	634.65	867.66	874.04	2.99	2.56	-1.78
3,666.00	61.72	89.95	3,326.26	634.54	951.12	957.50	0.57	0.53	-0.26
3,761.00	62.58	89.68	3,370.64	634.81	1,035.12	1,041.49	0.94	0.91	-0.28
3,855.00	69.84	91.85	3,408.53	633.62	1,121.06	1,127.41	8.01	7.72	2.31
3,951.00	77.37	91.68	3,435.61	630.79	1,213.04	1,219.37	7.85	7.84	-0.18
4,045.00	82.55	91.65	3,451.99	628.10	1,305.53	1,311.83	5.51	5.51	-0.03
4,138.00	88.72	90.22	3,459.07	626.59	1,398.20	1,404.48	6.81	6.63	-1.54
4,232.00	88.91	89.70	3,461.01	626.66	1,492.18	1,498.45	0.59	0.20	-0.55
4,327.00	89.25	89.17	3,462.54	627.59	1,587.17	1,593.44	0.66	0.36	-0.56
4,421.00	89.70	88.64	3,463.40	629.39	1,681.15	1,687.43	0.74	0.48	-0.56
4,515.00	87.98	89.64	3,465.30	630.80	1,775.11	1,781.41	2.12	-1.83	1.06
4,608.00	87.90	89.59	3,468.65	631.43	1,868.05	1,874.34	0.10	-0.09	-0.05
4,703.00	88.26	89.31	3,471.83	632.34	1,962.99	1,969.29	0.48	0.38	-0.29
4,797.00	88.35	88.52	3,474.61	634.12	2,056.93	2,063.25	0.85	0.10	-0.84
4,892.00	87.90	89.43	3,477.72	635.82	2,151.86	2,158.19	1.07	-0.47	0.96
4,986.00	88.52	91.13	3,480.65	635.36	2,245.81	2,252.13	1.92	0.66	1.81
5,081.00	89.08	91.40	3,482.64	633.26	2,340.77	2,347.06	0.65	0.59	0.28
5,175.00	89.36	91.07	3,483.92	631.23	2,434.74	2,441.00	0.46	0.30	-0.35
5,269.00	89.81	90.84	3,484.60	629.67	2,528.72	2,534.97	0.54	0.48	-0.24
5,363.00	89.05	89.71	3,485.54	629.22	2,622.71	2,628.95	1.45	-0.81	-1.20



Survey Report



Company:	Longfellow Energy	Local Co-ordinate Reference:	Well 001H
Project:	Eddy Co., NM (Nad-83)	TVD Reference:	RKB = 20.3' @ 3643.80usft (AKITA 519)
Site:	MARLEY STATE COM 31 AB	MD Reference:	RKB = 20.3' @ 3643.80usft (AKITA 519)
Well:	001H	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)
5,457.00	88.88	88.83	3,487.24	630.41	2,716.69	2,722.93	0.95	-0.18	-0.94
5,551.00	88.88	88.41	3,489.07	632.68	2,810.65	2,816.91	0.45	0.00	-0.45
5,646.00	88.94	87.69	3,490.88	635.91	2,905.57	2,911.86	0.76	0.06	-0.76
5,741.00	88.86	87.66	3,492.71	639.76	3,000.48	3,006.80	0.09	-0.08	-0.03
5,836.00	88.07	87.84	3,495.25	643.49	3,095.37	3,101.72	0.85	-0.83	0.19
5,931.00	88.24	89.28	3,498.31	645.88	3,190.29	3,196.66	1.53	0.18	1.52
6,024.00	88.63	89.74	3,500.85	646.67	3,283.25	3,289.63	0.65	0.42	0.49
6,119.00	88.91	91.22	3,502.89	645.88	3,378.22	3,384.59	1.59	0.29	1.56
6,214.00	89.05	91.68	3,504.58	643.47	3,473.17	3,479.51	0.51	0.15	0.48
6,308.00	89.42	91.18	3,505.83	641.13	3,567.14	3,573.44	0.66	0.39	-0.53
6,403.00	87.90	90.15	3,508.06	640.02	3,662.10	3,668.39	1.93	-1.60	-1.08
6,497.00	87.82	89.91	3,511.57	639.97	3,756.03	3,762.32	0.27	-0.09	-0.26
6,531.00	88.16	89.52	3,512.76	640.14	3,790.01	3,796.30	1.52	1.00	-1.15
6,619.00	88.53	89.56	3,515.30	640.85	3,877.97	3,884.26	0.42	0.42	0.05
6,709.00	89.43	89.56	3,516.90	641.54	3,967.96	3,974.25	1.00	1.00	0.00
6,800.00	90.49	88.38	3,516.97	643.18	4,058.94	4,065.24	1.74	1.16	-1.30
6,891.00	88.89	89.20	3,517.46	645.10	4,149.91	4,156.23	1.98	-1.76	0.90
6,981.00	87.69	88.52	3,520.14	646.89	4,239.85	4,246.18	1.53	-1.33	-0.76
7,072.00	88.02	87.74	3,523.55	649.86	4,330.74	4,337.10	0.93	0.36	-0.86
7,163.00	88.81	87.96	3,526.07	653.27	4,421.64	4,428.03	0.90	0.87	0.24
7,253.00	90.21	88.00	3,526.84	656.44	4,511.58	4,517.99	1.56	1.56	0.04
7,344.00	89.17	89.37	3,527.33	658.53	4,602.55	4,608.98	1.89	-1.14	1.51
7,435.00	86.76	90.75	3,530.56	658.43	4,693.48	4,699.91	3.05	-2.65	1.52
7,525.00	87.10	91.44	3,535.38	656.72	4,783.34	4,789.74	0.85	0.38	0.77
7,616.00	87.99	91.73	3,539.28	654.20	4,874.22	4,880.59	1.03	0.98	0.32
7,709.00	88.86	90.49	3,541.83	652.40	4,967.16	4,973.51	1.63	0.94	-1.33
7,804.00	89.06	89.96	3,543.56	652.03	5,062.15	5,068.49	0.60	0.21	-0.56
7,898.00	89.03	90.26	3,545.13	651.85	5,156.13	5,162.47	0.32	-0.03	0.32
7,994.00	87.24	88.93	3,548.25	652.53	5,252.07	5,258.41	2.32	-1.86	-1.39
8,089.00	86.84	87.75	3,553.16	655.27	5,346.90	5,353.26	1.31	-0.42	-1.24
8,184.00	87.85	87.78	3,557.56	658.97	5,441.73	5,448.12	1.06	1.06	0.03
8,278.00	88.98	87.94	3,560.16	662.48	5,535.63	5,542.05	1.21	1.20	0.17
8,373.00	90.55	87.88	3,560.55	665.95	5,630.56	5,637.01	1.65	1.65	-0.06
8,467.00	88.08	87.79	3,561.67	669.50	5,724.48	5,730.96	2.63	-2.63	-0.10
8,561.00	86.79	87.18	3,565.88	673.62	5,818.29	5,824.81	1.52	-1.37	-0.65
8,655.00	87.49	88.49	3,570.57	677.16	5,912.10	5,918.66	1.58	0.74	1.39
8,750.00	87.91	89.60	3,574.38	678.75	6,007.01	6,013.58	1.25	0.44	1.17
8,844.00	88.81	89.51	3,577.07	679.48	6,100.97	6,107.54	0.96	0.96	-0.10
8,938.00	90.49	89.30	3,577.64	680.45	6,194.96	6,201.53	1.80	1.79	-0.22
9,033.00	91.44	89.67	3,576.04	681.31	6,289.94	6,296.52	1.07	1.00	0.39
9,104.00	92.26	89.93	3,573.75	681.55	6,360.90	6,367.48	1.21	1.15	0.37
9,180.00	92.26	89.93	3,570.75	681.65	6,436.84	6,443.41	0.00	0.00	0.00



Survey Report



Company:	Longfellow Energy	Local Co-ordinate Reference:	Well 001H
Project:	Eddy Co., NM (Nad-83)	TVD Reference:	RKB = 20.3' @ 3643.80usft (AKITA 519)
Site:	MARLEY STATE COM 31 AB	MD Reference:	RKB = 20.3' @ 3643.80usft (AKITA 519)
Well:	001H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	WBDS_SQL_3

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
1H SHL (PLAT) - actual wellpath hits target center - Point	0.00	0.00	0.00	0.00	0.00	652,947.14	573,855.11	32.794938	-104.227511
1H FTP (PLAT) - actual wellpath misses target center by 3.94usft at 4045.64usft MD (3452.08 TVD, 628.08 N, 1306.16 E) - Point	0.00	0.00	3,456.00	628.01	1,305.86	653,575.16	575,160.98	32.796661	-104.223259
1H LTP (PLAT) - actual wellpath misses target center by 22.37usft at 9104.00usft MD (3573.75 TVD, 681.55 N, 6360.90 E) - Point	0.00	0.00	3,577.09	679.64	6,382.94	653,626.79	580,238.05	32.796787	-104.206736
1H LTP (PLAN) - actual wellpath misses target center by 22.62usft at 9104.00usft MD (3573.75 TVD, 681.55 N, 6360.90 E) - Point	0.00	0.00	3,577.09	685.40	6,382.94	653,632.55	580,238.05	32.796803	-104.206736
1H BHL (PLAT) - actual wellpath misses target center by 27.37usft at 9180.00usft MD (3570.75 TVD, 681.65 N, 6436.84 E) - Point	0.00	0.00	3,579.00	680.10	6,462.90	653,627.24	580,318.01	32.796788	-104.206476
1H BHL (PLAN) - actual wellpath misses target center by 27.70usft at 9180.00usft MD (3570.75 TVD, 681.65 N, 6436.84 E) - Point	0.00	0.00	3,579.00	686.69	6,462.80	653,633.83	580,317.91	32.796806	-104.206476

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
9,180.00	3,570.75	681.65	6,436.84	Projection to Bit: 9180.00' MD/ 3570.75' TVD
9,180.00	3,570.75	681.65	6,436.84	Final Station Closure Distance= 6472.84 /Direction= 83.96
9,180.00	3,570.75	681.65	6,436.84	TD: Latitude= 32.796792 / Longitude= -104.206560
9,180.00	3,570.75	681.65	6,436.84	TD: Y= 653628.79 / X= 580291.95

Checked By: _____ Approved By: _____ Date: _____

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

Form C-102

Revised August 1, 2011

Submit one copy to appropriate
District Office

☐ AMENDED REPORT**WELL LOCATION AND ACREAGE DEDICATION PLAT**

¹ API Number 30-015-53818	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 001H
⁷ OGRID No. 372210	⁸ Operator Name LONGFELLOW ENERGY, LP	⁹ Elevation 3623.5

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		1045	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		388	NORTH	48	EAST	EDDY
¹² Dedicated Acres 327.09	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.

MARLEY STATE COM 31 AB 001H ELEV. = 3623.5' LAT. = 32.7949382°N (NAD83) LONG. = 104.2275106°W NMSP EAST (FT) N = 652947.14 E = 573855.11		KICK OFF POINT 537' FNL, 820' FEL LAT. = 32.7963250°N LONG. = 104.2262515°W		FIRST TAKE POINT 409' FNL, 100' FWL LAT. = 32.7966604°N LONG. = 104.2232577°W LAST TAKE POINT 388' FNL, 102' FEL LAT. = 32.7967918°N LONG. = 104.2067415°W		BOTTOM OF HOLE LAT. = 32.7967919°N LONG. = 104.2065659°W NMSP EAST (FT) N = 653628.61 E = 580290.28			
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 = 653999.63 E = 577752.59		NE CORNER SEC. 31 LAT. = 32.7978599°N LONG. = 104.2064288°W NMSP EAST (FT) N = 654017.25 E = 580331.94	

AS-DRILLED

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: David Cain Date: 10/20/2023
 Printed Name: David Cain
 E-mail Address: david.cain@longfellowenergy.com

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: [Signature]
 Certificate Number: 12797
 PROFESSIONAL SURVEYOR NO. 8806E

Intent ☐ As Drilled ☒API #
30-015-53818

Operator Name: LONGFELLOW ENERGY, LP	Property Name: MARLEY STATE COM 31 AB	Well Number 001H
---	--	---------------------

Kick Off Point (KOP)

UL A	Section 36	Township 17S	Range 27E	Lot	Feet 537	From N/S NORTH	Feet 820	From E/W EAST	County EDDY
Latitude 32.7963250					Longitude 104.2262515			NAD 83	

First Take Point (FTP)

UL A	Section 31	Township 17S	Range 28E	Lot 1	Feet 409	From N/S NORTH	Feet 100	From E/W WEST	County EDDY
Latitude 32.7966604					Longitude 104.2232577			NAD 83	

Last Take Point (LTP)

UL A	Section 31	Township 17S	Range 28E	Lot	Feet 388	From N/S NORTH	Feet 102	From E/W EAST	County EDDY
Latitude 32.7967918					Longitude 104.2067415			NAD 83	

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

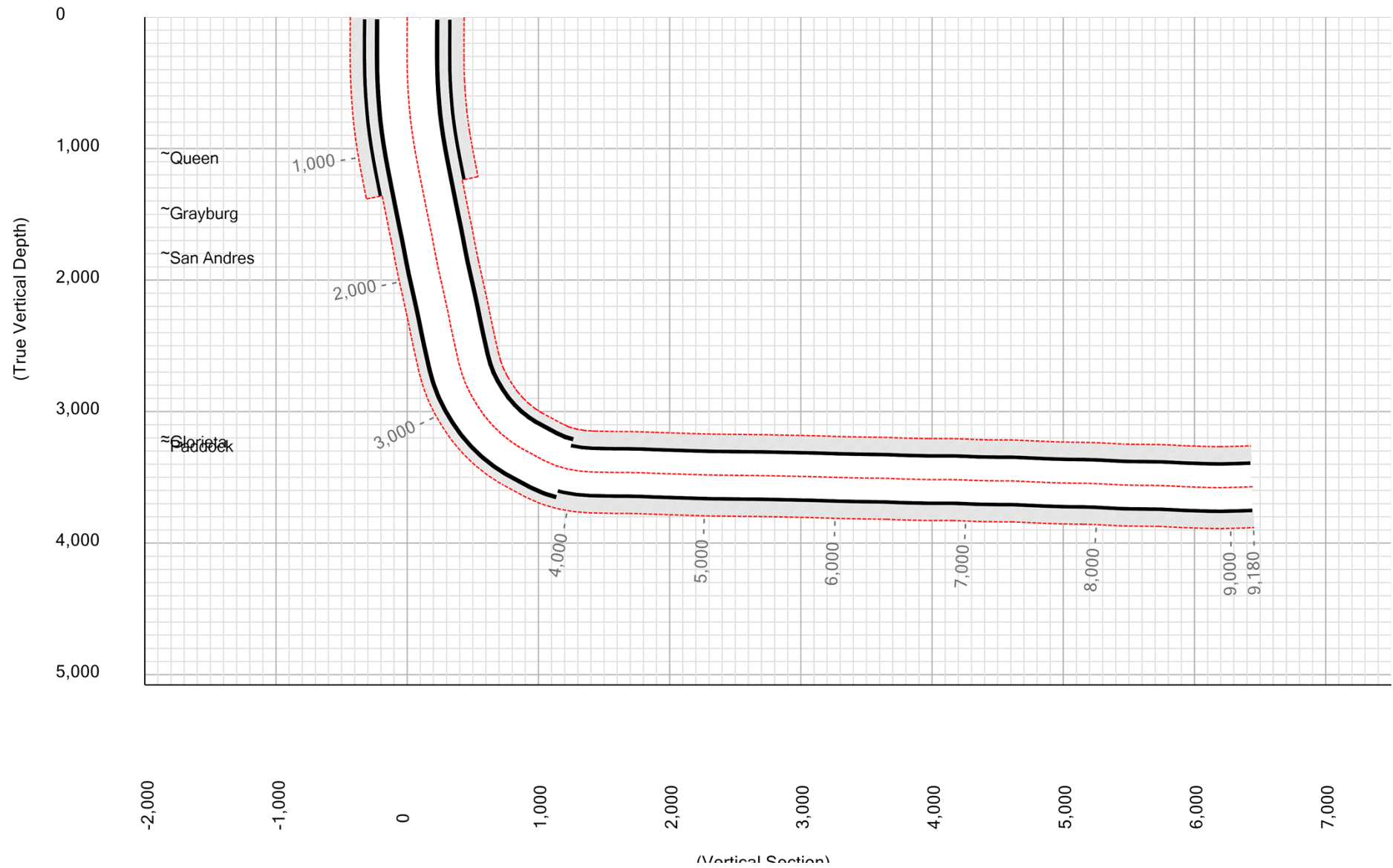
If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API #

Operator Name:	Property Name:	Well Number
----------------	----------------	-------------

KZ 06/29/2018

Marley State Com 31 AB # 1H, 7/25/2023



Marley State Com 31 AB # 1H API # 30-015-53818			
1045 FNL & 1210 FEL	GL Elev:	3,623.00	KOP: 2,734
Section 36, Township 17S, Range 27E			EOC: 4,120
County, State: Eddy, NM			Fill Depth:
Aux ID:			PBTD: 9,126.00
'KB' correction: 20; All Depths Corr To: KB			TD: 9,169.00
			BOP: 7 1/16 10M

Hole Size

Diameter	Top At	Btm At	Date Drilled
12.2500	0.00	1,320.00	7/10/2023
8.7500	1,320.00	9,180.00	7/16/2023

Surface Casing

Date Ran: 7/10/2023

Description	#	Diameter	Weight	Grade	Length	Top At	Btm At
Casing	33	9.6250	36.00	J55	1,297.00	20.00	1,317.00

Production Casing

Date Ran: 7/16/2023

Description	#	Diameter	Weight	Grade	Length	Top At	Btm At
Casing	68	7.0000	32.00	L80	2,693.64	20.00	2,713.64
Last 27 jts had solid body centraizler ever 3rd jt							
Marker Jt	1	7.0000	32.00	L80	18.74	2,713.64	2,732.38
Casing	30	7.0000	32.00	L80	1,199.02	2,732.38	3,931.40
Solid body every 3rd jt							
Crossover	1	5.5000	20.00	L80	2.77	3,931.40	3,934.17
Casing	10	5.5000	20.00	L80	396.34	3,934.17	4,330.51
Solid body every 2nd jt							
Float Insert	1	5.5000	20.00	L80	2.70	4,330.51	4,333.21
Casing	57	5.5000	20.00	L80	2,254.56	4,333.21	6,587.77
Solid body every 2nd jt							
Marker Jt	1	5.5000	20.00	L80	19.64	6,587.77	6,607.41
Casing	58	5.5000	20.00	L80	2,301.51	6,607.41	8,908.92
Solid body every 2nd jt							
Marker Jt	1	5.5000	20.00	L80	19.65	8,908.92	8,928.57
Casing	5	5.5000	20.00	L80	197.92	8,928.57	9,126.49
Float Collar	1	5.5000	20.00	L80	1.25	9,126.49	9,127.74
Casing	1	5.5000	20.00	L80	39.22	9,127.74	9,166.96
Float Shoe	1	5.5000	20.00	L80	2.04	9,166.96	9,169.00

Cement

Top At	Btm At	I D	O D	TOC Per	# - Type	# Sx	Class	Wt.
0.00	1,320.00	9.625	12.250	Circ	1 - Lead	385	C	13.50
					2 - Tail	130	C	14.80
Circ 157 sxs to surf								
3,931.00	9,180.00	5.500	8.750	Circ				
0.00	3,931.00	7.000	8.750	Circ	1 - Lead	420	C 25/75	12.20
					2 - Tail	1060	C	14.50
Circ 121 sxs to surf								

Formation Tops / Bottoms

Top At	Bottom At	Formation
1,006		Queen
1,426		Grayburg
1,769		San Andres
3,164		Glorieta
3,196		Paddock

Zone and Perfs

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State of New Mexico
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Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

ACKNOWLEDGMENTS

Action 279027

ACKNOWLEDGMENTS

Operator: LONGFELLOW ENERGY, LP 8115 Preston Road Dallas, TX 75225	OGRID: 372210
	Action Number: 279027
	Action Type: [C-104] Tight Hole Completion Packet (C-104CT)

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 279027

CONDITIONS

Operator: LONGFELLOW ENERGY, LP 8115 Preston Road Dallas, TX 75225	OGRID: 372210
	Action Number: 279027
	Action Type: [C-104] Tight Hole Completion Packet (C-104CT)

CONDITIONS

Created By	Condition	Condition Date
plmartinez	CONFIDENTIAL UNTIL 2/1/2024.	11/15/2023