

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 – 015-53816	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 003H

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		1085	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		1242	North	46	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
6/22/2023	11/1/2023	3617'V/9190'M	3617'V/9145'M	9,122'-4,060'	
²⁷ Hole Size	²⁸ Casing & Tubing Size	²⁹ Depth Set	³⁰ Sacks Cement		
12-1/4"	9-5/8"	1314'	575		
8-3/4"	7"	3882 3881'	1410		
8-3/4"	5-1/2"	9188'	1410		

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:



Printed name:
David Cain

Title:
Regulatory Analyst

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

Date:
10/24/2023

Phone:
(972) 590-9918

OIL CONSERVATION DIVISION

Approved by:

PATRICIA MARTINEZ

Title:

PETROLEUM SPECIALIST

Approval Date:

11/14/2023

RT EXPIRES 2/1/2024



October 24, 2023

NMOCD
1220 South St Francis Drive
Santa Fe, NM 87505

Re: Marley State Com 31 AB 003H Tight Hole Status 30-015-53816

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', is positioned above the printed name.

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

Form C-102

Energy, Minerals & Natural Resources Department

Revised August 1, 2011

OIL CONSERVATION DIVISION

Submit one copy to appropriate

1220 South St. Francis Dr.

District Office

Santa Fe, NM 87505

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-53816	² Pool Code 96836	³ Pool Name RED LAKE; GLORIEYA-YESO, NORTHEAST
⁴ Property Code 334079	⁵ Property Name MARLEY STATE COM 31 AB	
⁷ OGRID No. 372210	⁸ Operator Name LONGFELLOW ENERGY, LP	
	⁶ Well Number 003H	⁹ Elevation 3624.5

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		1085	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		1242	NORTH	46	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 003H ELEV. = 3624.5' LAT. = 32.7948282°N (NAD83) LONG. = 104.2275099°W NMSP EAST (FT) N = 652907.12 E = 573855.36				KICK OFF POINT 1222' FNL, 786' FEL LAT. = 32.7944422°N LONG. = 104.2261269°W				FIRST TAKE POINT 1234' FNL, 100' FWL LAT. = 32.7943933°N LONG. = 104.2232442°W				BOTTOM OF HOLE LAT. = 32.7944464°N LONG. = 104.2065218°W NMSP EAST (FT) N = 652775.32 E = 580304.87			
LAST TAKE POINT 1241' FNL, 101' FEL LAT. = 32.7944486°N LONG. = 104.2067007°W															

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
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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: *James F. Jaramila*

Certificate Number: 12797

NO. 8808G

Intent ☐ As Drilled ☒API #
30-015-53816

Operator Name: LONGFELLOW ENERGY, LP	Property Name: MARLEY STATE COM 31 AB	Well Number 003H
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Kick Off Point (KOP)

UL A	Section 36	Township 17S	Range 27E	Lot	Feet 1222	From N/S NORTH	Feet 786	From E/W EAST	County EDDY
Latitude 32.7944422					Longitude 104.2261269			NAD 83	

First Take Point (FTP)

UL A	Section 31	Township 17S	Range 28E	Lot 1	Feet 1234	From N/S NORTH	Feet 100	From E/W WEST	County EDDY
Latitude 32.7943933					Longitude 104.2232442			NAD 83	

Last Take Point (LTP)

UL A	Section 31	Township 17S	Range 28E	Lot	Feet 1241	From N/S NORTH	Feet 101	From E/W EAST	County EDDY
Latitude 32.7944486					Longitude 104.2067007			NAD 83	

Is this well the defining well for the Horizontal Spacing Unit?

☒ Yes

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 **06/22/23** thru **06/29/23** conduct or supervise the taking of a **MWD Survey** from a depth of **191'** to a depth of **9190'**; 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 3H** API No. **30-015-53816** 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
003H

Wellbore #1

Design: Wellbore #1

Standard Survey Report

29 June, 2023





Survey Report



Company:	Longfellow Energy	Local Co-ordinate Reference:	Well 003H
Project:	Eddy Co., NM (Nad-83)	TVD Reference:	RKB = 20.3' @ 3644.80usft (AKITA 519)
Site:	MARLEY STATE COM 31 AB	MD Reference:	RKB = 20.3' @ 3644.80usft (AKITA 519)
Well:	003H	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	003H		
Well Position	+N/-S	0.00 usft	Northing: 652,907.12 usft
	+E/-W	0.00 usft	Easting: 573,855.36 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	usft
Grid Convergence:	0.057 °	Ground Level:	3,624.50 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
			89.63

Survey Program	Date 06/29/23		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name
191.00	9,190.00	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
191.00	0.32	302.98	191.00	0.29	-0.45	-0.45	0.17	0.17	0.00
310.00	0.90	98.78	310.00	0.33	0.20	0.20	1.01	0.49	130.92
402.00	3.07	111.43	401.93	-0.68	3.21	3.20	2.39	2.36	13.75
492.00	4.92	111.11	491.71	-2.95	9.05	9.03	2.06	2.06	-0.36
582.00	6.92	108.05	581.23	-6.02	17.81	17.77	2.25	2.22	-3.40
673.00	7.57	107.60	671.50	-9.53	28.73	28.67	0.72	0.71	-0.49
764.00	7.37	109.09	761.73	-13.26	39.96	39.87	0.31	-0.22	1.64
855.00	8.40	111.86	851.87	-17.64	51.65	51.53	1.21	1.13	3.04
945.00	10.51	109.43	940.64	-22.82	65.49	65.34	2.39	2.34	-2.70
1,036.00	12.78	106.40	1,029.76	-28.42	82.97	82.79	2.58	2.49	-3.33
1,126.00	12.89	106.32	1,117.51	-34.05	102.16	101.94	0.12	0.12	-0.09
1,217.00	12.13	107.45	1,206.35	-39.77	121.02	120.76	0.88	-0.84	1.24
1,249.00	11.84	107.74	1,237.65	-41.78	127.35	127.08	0.93	-0.91	0.91
1,398.00	10.92	107.35	1,383.72	-50.65	155.38	155.05	0.62	-0.62	-0.26



Survey Report



Company:	Longfellow Energy	Local Co-ordinate Reference:	Well 003H
Project:	Eddy Co., NM (Nad-83)	TVD Reference:	RKB = 20.3' @ 3644.80usft (AKITA 519)
Site:	MARLEY STATE COM 31 AB	MD Reference:	RKB = 20.3' @ 3644.80usft (AKITA 519)
Well:	003H	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)
1,493.00	10.09	107.02	1,477.13	-55.77	171.93	171.57	0.88	-0.87	-0.35
1,588.00	11.34	109.38	1,570.47	-61.30	188.70	188.30	1.39	1.32	2.48
1,682.00	11.65	109.61	1,662.59	-67.55	206.36	205.92	0.33	0.33	0.24
1,871.00	12.52	108.67	1,847.40	-80.52	243.74	243.22	0.47	0.46	-0.50
1,966.00	13.20	109.27	1,940.01	-87.39	263.74	263.17	0.73	0.72	0.63
2,061.00	11.39	111.56	2,032.83	-94.42	282.70	282.09	1.97	-1.91	2.41
2,156.00	11.21	111.21	2,125.99	-101.21	300.03	299.37	0.20	-0.19	-0.37
2,251.00	10.97	110.99	2,219.22	-107.79	317.08	316.38	0.26	-0.25	-0.23
2,346.00	10.61	109.53	2,312.54	-113.95	333.76	333.02	0.48	-0.38	-1.54
2,441.00	10.45	108.47	2,405.94	-119.60	350.18	349.40	0.26	-0.17	-1.12
2,535.00	10.46	107.21	2,498.38	-124.83	366.42	365.60	0.24	0.01	-1.34
2,630.00	11.67	106.83	2,591.61	-130.16	383.85	383.00	1.28	1.27	-0.40
2,723.00	12.23	104.77	2,682.59	-135.39	402.38	401.50	0.76	0.60	-2.22
2,816.00	16.85	99.11	2,772.59	-140.04	425.23	424.31	5.19	4.97	-6.09
2,910.00	21.60	96.66	2,861.33	-144.21	455.88	454.94	5.12	5.05	-2.61
3,004.00	26.41	95.27	2,947.17	-148.14	493.90	492.94	5.15	5.12	-1.48
3,098.00	31.65	92.83	3,029.34	-151.28	539.39	538.40	5.71	5.57	-2.60
3,192.00	37.45	89.75	3,106.73	-152.37	592.65	591.65	6.44	6.17	-3.28
3,287.00	42.62	88.65	3,179.45	-151.49	653.73	652.74	5.49	5.44	-1.16
3,382.00	47.70	88.95	3,246.41	-150.08	721.05	720.07	5.35	5.35	0.32
3,477.00	53.61	89.51	3,306.61	-149.11	794.48	793.50	6.24	6.22	0.59
3,563.00	59.43	91.60	3,354.04	-149.85	866.17	865.19	7.06	6.77	2.43
3,573.00	59.50	91.66	3,359.12	-150.10	874.78	873.79	0.87	0.70	0.60
3,667.00	59.79	91.39	3,406.62	-152.26	955.87	954.86	0.40	0.31	-0.29
3,762.00	59.99	91.28	3,454.28	-154.17	1,038.02	1,037.01	0.23	0.21	-0.12
3,857.00	70.15	90.38	3,494.27	-155.39	1,124.05	1,123.02	10.73	10.69	-0.95
3,952.00	80.25	90.23	3,518.51	-155.87	1,215.78	1,214.75	10.63	10.63	-0.16
4,046.00	89.72	91.00	3,526.72	-156.88	1,309.31	1,308.27	10.11	10.07	0.82
4,139.00	90.45	90.74	3,526.58	-158.29	1,402.29	1,401.24	0.83	0.78	-0.28
4,233.00	90.76	90.60	3,525.59	-159.39	1,496.28	1,495.22	0.36	0.33	-0.15
4,328.00	87.59	91.65	3,526.95	-161.26	1,591.24	1,590.17	3.52	-3.34	1.11
4,422.00	86.35	89.02	3,531.92	-161.81	1,685.10	1,684.02	3.09	-1.32	-2.80
4,516.00	86.21	87.55	3,538.02	-159.00	1,778.85	1,777.79	1.57	-0.15	-1.56
4,610.00	87.73	87.23	3,542.99	-154.73	1,872.62	1,871.59	1.65	1.62	-0.34
4,704.00	88.74	88.13	3,545.89	-150.92	1,966.50	1,965.48	1.44	1.07	0.96
4,798.00	89.44	89.36	3,547.38	-148.86	2,060.46	2,059.46	1.51	0.74	1.31
4,893.00	89.97	89.69	3,547.87	-148.08	2,155.46	2,154.46	0.66	0.56	0.35
4,987.00	90.00	89.22	3,547.89	-147.18	2,249.45	2,248.46	0.50	0.03	-0.50
5,082.00	89.94	88.95	3,547.94	-145.67	2,344.44	2,343.45	0.29	-0.06	-0.28
5,176.00	89.22	90.47	3,548.63	-145.19	2,438.43	2,437.45	1.79	-0.77	1.62
5,270.00	89.24	89.88	3,549.89	-145.48	2,532.42	2,531.43	0.63	0.02	-0.63
5,365.00	89.50	89.44	3,550.94	-144.91	2,627.42	2,626.43	0.54	0.27	-0.46
5,459.00	90.17	88.82	3,551.21	-143.49	2,721.40	2,720.42	0.97	0.71	-0.66
5,553.00	89.19	89.56	3,551.73	-142.16	2,815.39	2,814.42	1.31	-1.04	0.79



Survey Report



Company:	Longfellow Energy	Local Co-ordinate Reference:	Well 003H
Project:	Eddy Co., NM (Nad-83)	TVD Reference:	RKB = 20.3' @ 3644.80usft (AKITA 519)
Site:	MARLEY STATE COM 31 AB	MD Reference:	RKB = 20.3' @ 3644.80usft (AKITA 519)
Well:	003H	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)
5,648.00	89.41	89.14	3,552.90	-141.08	2,910.38	2,909.41	0.50	0.23	-0.44
5,742.00	88.15	89.72	3,554.90	-140.14	3,004.35	3,003.38	1.48	-1.34	0.62
5,837.00	88.01	89.93	3,558.08	-139.85	3,099.30	3,098.33	0.27	-0.15	0.22
5,932.00	88.57	90.55	3,560.91	-140.25	3,194.25	3,193.28	0.88	0.59	0.65
6,025.00	89.08	90.40	3,562.82	-141.02	3,287.23	3,286.25	0.57	0.55	-0.16
6,120.00	89.58	90.10	3,563.93	-141.44	3,382.22	3,381.24	0.61	0.53	-0.32
6,215.00	87.76	90.38	3,566.14	-141.84	3,477.19	3,476.20	1.94	-1.92	0.29
6,310.00	87.62	90.22	3,569.97	-142.33	3,572.11	3,571.12	0.22	-0.15	-0.17
6,405.00	88.12	89.66	3,573.50	-142.23	3,667.05	3,666.05	0.79	0.53	-0.59
6,498.00	88.46	88.78	3,576.27	-140.97	3,759.99	3,759.01	1.01	0.37	-0.95
6,592.00	88.71	87.90	3,578.59	-138.25	3,853.93	3,852.95	0.97	0.27	-0.94
6,681.00	89.49	89.42	3,579.99	-136.16	3,942.89	3,941.93	1.92	0.88	1.71
6,771.00	90.25	90.09	3,580.20	-135.78	4,032.89	4,031.92	1.13	0.84	0.74
6,862.00	91.40	90.65	3,578.89	-136.37	4,123.87	4,122.91	1.41	1.26	0.62
6,956.00	89.74	90.50	3,577.95	-137.31	4,217.86	4,216.88	1.77	-1.77	-0.16
7,051.00	88.40	91.00	3,579.49	-138.55	4,312.84	4,311.85	1.51	-1.41	0.53
7,146.00	87.67	90.59	3,582.75	-139.87	4,407.77	4,406.78	0.88	-0.77	-0.43
7,239.00	87.28	89.09	3,586.85	-139.61	4,500.68	4,499.68	1.67	-0.42	-1.61
7,334.00	87.86	88.61	3,590.88	-137.71	4,595.57	4,594.59	0.79	0.61	-0.51
7,429.00	88.96	88.92	3,593.51	-135.66	4,690.51	4,689.54	1.20	1.16	0.33
7,524.00	89.69	89.20	3,594.63	-134.10	4,785.49	4,784.53	0.82	0.77	0.29
7,618.00	88.65	89.93	3,595.99	-133.39	4,879.48	4,878.51	1.35	-1.11	0.78
7,712.00	88.79	90.85	3,598.09	-134.03	4,973.45	4,972.48	0.99	0.15	0.98
7,807.00	89.15	90.65	3,599.80	-135.27	5,068.43	5,067.45	0.43	0.38	-0.21
7,901.00	89.04	89.44	3,601.28	-135.34	5,162.41	5,161.43	1.29	-0.12	-1.29
7,996.00	89.55	88.62	3,602.45	-133.74	5,257.39	5,256.42	1.02	0.54	-0.86
8,091.00	88.59	88.97	3,604.00	-131.74	5,352.36	5,351.39	1.08	-1.01	0.37
8,186.00	88.43	89.44	3,606.47	-130.42	5,447.31	5,446.36	0.52	-0.17	0.49
8,281.00	89.41	89.68	3,608.26	-129.69	5,542.29	5,541.34	1.06	1.03	0.25
8,375.00	89.27	89.73	3,609.34	-129.21	5,636.29	5,635.33	0.16	-0.15	0.05
8,470.00	88.90	89.76	3,610.86	-128.79	5,731.27	5,730.32	0.39	-0.39	0.03
8,564.00	89.88	89.82	3,611.86	-128.44	5,825.27	5,824.31	1.04	1.04	0.06
8,658.00	89.18	90.35	3,612.63	-128.58	5,919.26	5,918.31	0.93	-0.74	0.56
8,753.00	89.52	90.02	3,613.71	-128.89	6,014.25	6,013.30	0.50	0.36	-0.35
8,847.00	88.62	90.43	3,615.23	-129.26	6,108.24	6,107.28	1.05	-0.96	0.44
8,941.00	88.62	90.09	3,617.49	-129.68	6,202.21	6,201.25	0.36	0.00	-0.36
9,035.00	89.83	90.36	3,618.77	-130.05	6,296.20	6,295.23	1.32	1.29	0.29
9,118.00	90.98	90.77	3,618.18	-130.87	6,379.19	6,378.22	1.47	1.39	0.49
9,190.00	90.98	90.77	3,616.95	-131.84	6,451.18	6,450.19	0.00	0.00	0.00



Survey Report



Company:	Longfellow Energy	Local Co-ordinate Reference:	Well 003H
Project:	Eddy Co., NM (Nad-83)	TVD Reference:	RKB = 20.3' @ 3644.80usft (AKITA 519)
Site:	MARLEY STATE COM 31 AB	MD Reference:	RKB = 20.3' @ 3644.80usft (AKITA 519)
Well:	003H	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
3H SHL (PLAT) - actual wellpath hits target center - Point	0.00	0.00	0.00	0.00	0.00	652,907.12	573,855.36	32.794828	-104.227510
3H FTP (PLAT) - actual wellpath misses target center by 3.73usft at 4047.43usft MD (3526.72 TVD, -156.91 N, 1310.74 E) - Point	0.00	0.00	3,523.00	-157.09	1,310.73	652,750.03	575,166.09	32.794393	-104.223245
3H LTP (PLAT) - actual wellpath misses target center by 19.22usft at 9118.00usft MD (3618.18 TVD, -130.87 N, 6379.19 E) - Point	0.00	0.00	3,625.39	-124.44	6,395.81	652,782.68	580,251.17	32.794467	-104.206697
3H BHL (PLAT) - actual wellpath misses target center by 27.84usft at 9190.00usft MD (3616.95 TVD, -131.84 N, 6451.18 E) - Point	0.00	0.00	3,627.00	-123.59	6,475.79	652,783.53	580,331.15	32.794469	-104.206436

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
9,190.00	3,616.95	-131.84	6,451.18	Projection to Bit: 9190.00' MD/ 3616.95' TVD
9,190.00	3,616.95	-131.84	6,451.18	Final Station Closure Distance= 6452.52 /Direction= 91.17
9,190.00	3,616.95	-131.84	6,451.18	TD: Latitude= 32.794446 / Longitude= -104.206516
9,190.00	3,616.95	-131.84	6,451.18	TD: Y= 652775.28 / X= 580306.54

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-53816	² Pool Code 96836	³ Pool Name RED LAKE; GLORIEYA-YESO, NORTHEAST
⁴ Property Code 334079	⁵ Property Name MARLEY STATE COM 31 AB	
⁷ OGRID No. 372210	⁸ Operator Name LONGFELLOW ENERGY, LP	⁶ Well Number 003H ⁹ Elevation 3624.5

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		1085	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		1242	NORTH	46	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 003H ELEV. = 3624.5' LAT. = 32.7948282°N (NAD83) LONG. = 104.2275099°W NMSP EAST (FT) N = 652907.12 E = 573855.36				KICK OFF POINT 1222' FNL, 786' FEL LAT. = 32.7944422°N LONG. = 104.2261269°W				FIRST TAKE POINT 1234' FNL, 100' FWL LAT. = 32.7943933°N LONG. = 104.2232442°W				BOTTOM OF HOLE LAT. = 32.7944464°N LONG. = 104.2065218°W NMSP EAST (FT) N = 652775.32 E = 580304.87			
LAST TAKE POINT 1241' FNL, 101' FEL LAT. = 32.7944486°N LONG. = 104.2067007°W															

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
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The map shows a grid of sections. Section 36 is on the left, and Section 31 is on the right. A well location is marked with a dot and labeled 'SURFACE LOCATION' and 'BOTTOM OF HOLE'. Various corner points are labeled with their coordinates. The map is oriented with North at the top.

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: *James F. Jaramila*
 Certificate Number: 12797
 NO. 8808G

Intent ☐ As Drilled ☒API #
30-015-53816

Operator Name: LONGFELLOW ENERGY, LP	Property Name: MARLEY STATE COM 31 AB	Well Number 003H
---	--	---------------------

Kick Off Point (KOP)

UL A	Section 36	Township 17S	Range 27E	Lot	Feet 1222	From N/S NORTH	Feet 786	From E/W EAST	County EDDY
Latitude 32.7944422					Longitude 104.2261269			NAD 83	

First Take Point (FTP)

UL A	Section 31	Township 17S	Range 28E	Lot 1	Feet 1234	From N/S NORTH	Feet 100	From E/W WEST	County EDDY
Latitude 32.7943933					Longitude 104.2232442			NAD 83	

Last Take Point (LTP)

UL A	Section 31	Township 17S	Range 28E	Lot	Feet 1241	From N/S NORTH	Feet 101	From E/W EAST	County EDDY
Latitude 32.7944486					Longitude 104.2067007			NAD 83	

Is this well the defining well for the Horizontal Spacing Unit?

☒ Yes

Is this well an infill well?

☐

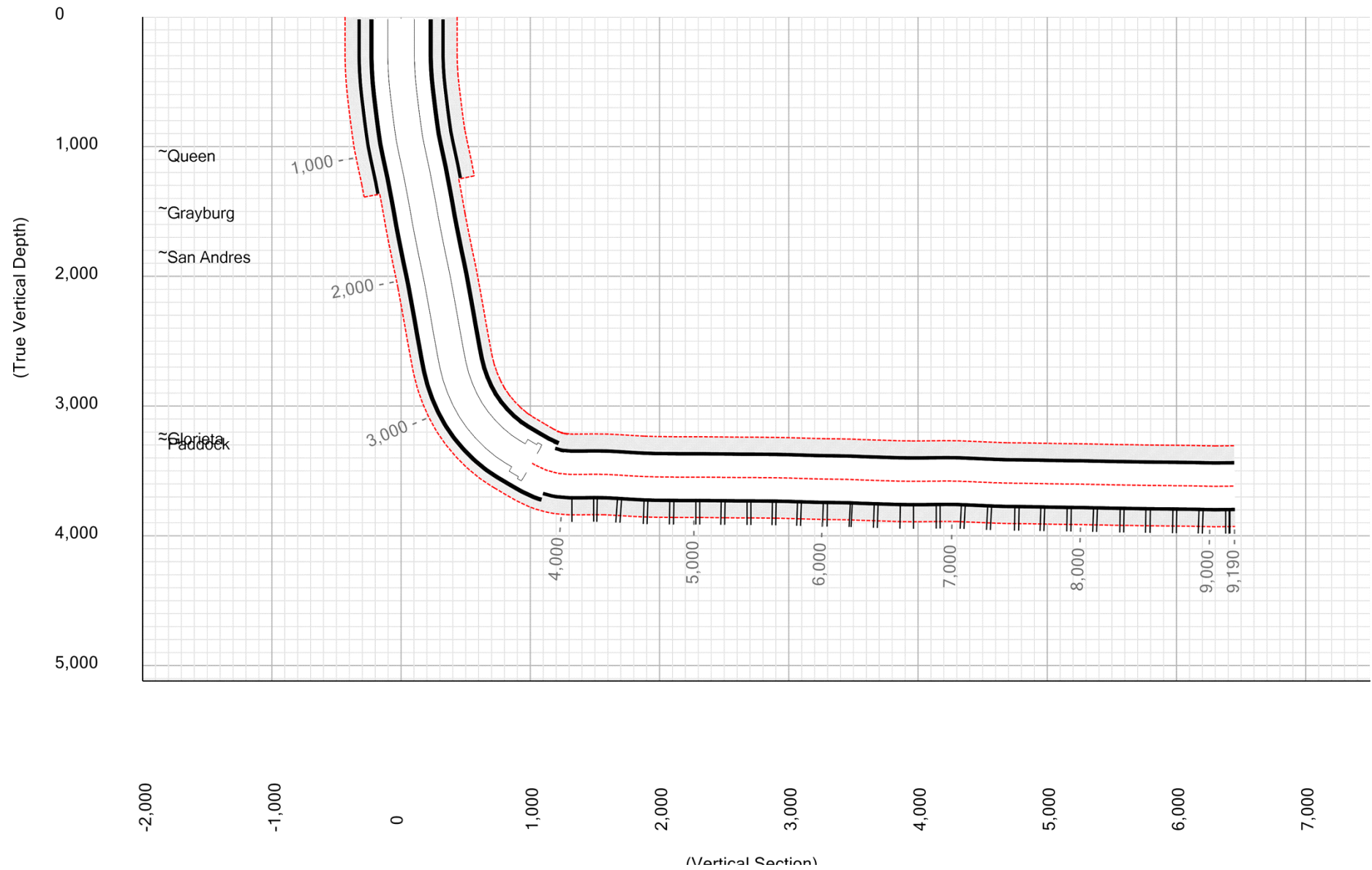
If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API #

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

KZ 06/29/2018

Marley State Com 31 AB # 3H, 10/23/2023



Marley State Com 31 AB # 3H API # 30-015-53816			
1085 FNL & 1210 FEL	GL Elev:	3,624.00	KOP: 2,736
Section 36, Township 17S, Range 27E			EOC: 4,046
County, State: Eddy, NM			Fill Depth:
Aux ID:			PBTD: 9,145.00
'KB' correction: 20; All Depths Corr To: KB			TD: 9,188.00
			BOP: 7 1/16 10M

Hole Size

Diameter	Top At	Btm At	Date Drilled
12.2500	0.00	1,321.00	6/23/2023
8.7500	1,321.00	9,190.00	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	1,294.00	20.00	1,314.00

Production Casing

Date Ran: 6/29/2023

Description	#	Diameter	Weight	Grade	Length	Top At	Btm At
Casing	68	7.0000	32.00	L80	2,685.95	20.00	2,705.95
Last 26 Jts, solid body every 3rd jt							
Marker Jt	1	7.0000	32.00	L80	19.68	2,705.95	2,725.63
Casing	29	7.0000	32.00	L80	1,155.18	2,725.63	3,880.81
Solid body every 3rd jt							
Crossover	1	5.5000	20.00	L80	1.63	3,880.81	3,882.44
Casing	8	5.5000	20.00	L80	316.97	3,882.44	4,199.41
Solid body every 2nd jt							
Float Insert	1	5.5000	20.00	L80	2.70	4,199.41	4,202.11
Casing	60	5.5000	20.00	L80	2,374.19	4,202.11	6,576.30
Solid body every 2nd jt							
Marker Jt	1	5.5000	20.00	L80	19.68	6,576.30	6,595.98
Casing	59	5.5000	20.00	L80	2,330.80	6,595.98	8,926.78
Solid body every 2nd jt							
Marker Jt	1	5.5000	20.00	L80	19.66	8,926.78	8,946.44
Casing	5	5.5000	20.00	L80	198.52	8,946.44	9,144.96
Solid body every jt							
Float Collar	1	5.5000	20.00	L80	1.25	9,144.96	9,146.21
Casing	1	5.5000	20.00	L80	39.75	9,146.21	9,185.96
Float Shoe	1	5.5000	20.00	L80	2.04	9,185.96	9,188.00

Cement

Top At	Btm At	I D	O D	TOC Per	# - Type	# Sx	Class	Wt.
0.00	1,321.00	9.625	12.250	Circ	1 - Lead	445	C	13.50
					2 - Tail	130	C	14.80
Circ 157 sx to surf								
3,880.00	9,190.00	5.500	8.750	Circ				
0.00	3,880.00	7.000	8.750	Circ	1 - Lead	350	C 25/75	12.20
					2 - Tail	1060	C	14.50
Circ 121 sx to surf								

Formation Tops / Bottoms

Top At	Bottom At	Formation
1,007		Queen
1,440		Grayburg
1,785		San Andres
3,183		Glorieta
3,221		Paddock

Zone and Perfs**Comments / Completion Summary**

Stg	Top	Btm	AIR	AIP	MIR	ISIP
1	8948	9122	120	6338	122	1509
2	8744	8918	134	6892	135	1878
3	8540	8714	121	6908	124	1987
4	8336	8510	135	6682	138	1980
5	8132	8306	135	6403	137	2075
6	7928	8102	136	6668	137	2314
7	7724	7896	125	5933	136	2402
8	7520	7694	135	6754	138	2215
9	7316	7490	135	6362	137	2655
10	7112	7286	135	7017	139	2600
11	6908	7082	135	6936	137	2458
12	6704	6878	135	6506	137	2202
13	6436	6604	135	6673	138	2443
14	6238	6406	135	6705	137	2203
15	6040	6208	137	6707	138	2475
16	5842	6010	136	6913	137	2723
17	5644	5812	135	7014	138	2655
18	5446	5614	133	6895	140	2832
19	5248	5416	135	6068	139	2385
20	5050	5218	135	5739	140	1697
21	4852	5020	136	5605	138	2140
22	4654	4820	135	5117	138	1978
23	4456	4624	136	4997	137	1648
24	4258	4424	136	5035	138	2000
25	4060	4228	135	4920	137	1828

Perforations

Top	Bottom	Formation	Status	Opened	Closed	# / Ft	Ttl #
4,060.00	4,228.00	Paddock	A	9/26/2023		4	28
Stage 25 - (4,4,4,4,4,4,4) SWM Charges							
4,258.00	4,424.00	Paddock	A	9/26/2023		4	28
Stage 24 - (4,4,4,4,4,4,4) SWM Charges							
4,456.00	4,624.00	Paddock	A	9/25/2023		4	28
Stage 23 - (4,4,4,4,4,4,4) SWM Charges							
4,654.00	4,820.00	Paddock	A	9/25/2023		4	28
Stage 22 - (4,4,4,4,4,4,4) SWM Charges							
4,852.00	5,020.00	Paddock	A	9/24/2023		4	28
Stage 21 - (4,4,4,4,4,4,4) SWM Charges							

Perforations

Top	Bottom	Formation	Status	Opened	Closed	# / Ft	Ttl #
5,050.00	5,218.00	Paddock	A	9/24/2023		4	28
Stage 20 - (4,4,4,4,4,4,4) SWM Charges							
5,248.00	5,416.00	Paddock	A	9/23/2023		4	28
Stage 19 - (4,4,4,4,4,4,4) SWM Charges							
5,446.00	5,614.00	Paddock	A	9/23/2023		4	28
Stage 18 - (4,4,4,4,4,4,4) SWM Charges							
5,644.00	5,812.00	Paddock	A	9/22/2023		4	28
Stage 17 - (4,4,4,4,4,4,4) SWM Charges							
5,842.00	6,010.00	Paddock	A	9/21/2023		4	28
Stage 16 - (4,4,4,4,4,4,4) SWM Charges							
6,040.00	6,223.00	Paddock	A	9/21/2023		4	28
Stage 15 - (4,4,4,4,4,4,4) SWM Charges							
6,238.00	6,406.00	Paddock	A	9/20/2023		4	28
Stage 14 - (4,4,4,4,4,4,4) SWM Charges							
6,436.00	6,604.00	Paddock	A	9/20/2023		4	28
Stage 13 - (4,4,4,4,4,4,4) SWM Charges							
6,704.00	6,878.00	Paddock	A	9/19/2023		4	28
Stage 12 - (4,4,4,4,4,4,4) SWM Charges							
6,908.00	7,082.00	Paddock	A	9/19/2023		4	28
Stage 11 - (4,4,4,4,4,4,4) SWM Charges							
7,112.00	7,286.00	Paddock	A	9/18/2023		4	28
Stage 10 - (4,4,4,4,4,4,4) SWM Charges							
7,316.00	7,490.00	Paddock	A	9/17/2023		4	28
Stage 9 - (4,4,4,4,4,4,4) SWM Charges							
7,523.00	7,694.00	Paddock	A	9/17/2023		4	28
Stage 8 - (4,4,4,4,4,4,4) SWM Charges							
7,724.00	7,896.00	Paddock	A	9/16/2023		4	28
Stage 7 - (4,4,4,4,4,4,4) SWM Charges							
7,928.00	8,102.00	Paddock	A	9/16/2023		4	28
Stage 6 - (4,4,4,4,4,4,4) SWM Charges							
8,132.00	8,306.00	Paddock	A	9/15/2023		4	28
Stage 5 - (4,4,4,4,4,4,4) SWM Charges							
8,336.00	8,505.00	Paddock	A	9/13/2023		4	28
Stage 4 - (4,4,4,4,4,4,4) SWM Charges							
8,540.00	8,714.00	Paddock	A	9/12/2023		4	28
Stage 3 - (4,4,4,4,4,4,4) SWM Charges							
8,744.00	8,918.00	Paddock	A	9/11/2023		4	28
Stage 2 - (4,4,4,4,4,4,4) SWM Charges							
8,950.00	9,118.00	Paddock	A	9/11/2023		4	28
Stage 1 - (4,4,4,4,4,4,4) SWM Charges							
9,145.00	9,151.00	Paddock	TA	8/16/2023	9/11/2023	6	36
8-16-23 TOE PREP PERFS.							

Tubing

Date Ran: 10/18/2023

Description	#	Diameter	Weight	Grade	Length	Top At	Btm At
Tubing	114	2.8750	6.50	L80	3,588.50	20.00	3,608.50
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	3,608.50	3,609.10

Tubing Sub	1	2.8750			3.60	3,609.10	3,612.70
ESP Sensor	1	4.0000			0.60	3,612.70	3,613.30
Discharge pressure sensor, 1/4" SS CT connected to the Zennith Sensor							
ESP Pump	1	4.0000			0.53	3,613.30	3,613.83
Discharge Pump							
ESP Pump	1	4.0000			23.50	3,613.83	3,637.33
E3000, 96 Stages							
ESP Pump	1	4.0000			23.50	3,637.33	3,660.83
E3000, 96 Stages							
ESP Pump	1	4.0000			13.00	3,660.83	3,673.83
G42, 41 Stages							
ESP Intake	1	4.0000			8.70	3,673.83	3,682.53
Double gas sep/intakes: MODEL 400							
ESP Seal	2	4.0000			12.20	3,682.53	3,694.73
Double seals							
ESP Motor	1	4.5000			34.90	3,694.73	3,729.63
NEW, 286 HP . 450 MODEL							
ESP Sensor	1	4.0000			2.70	3,729.63	3,732.33
NEW, Zenith E7							
Tubing Sub	1	2.3750			2.00	3,732.33	3,734.33
Band 3/8" CT to sub							

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

ACKNOWLEDGMENTS

Action 284391

ACKNOWLEDGMENTS

Operator: LONGFELLOW ENERGY, LP 8115 Preston Road Dallas, TX 75225	OGRID: 372210
	Action Number: 284391
	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 284391

CONDITIONS

Operator: LONGFELLOW ENERGY, LP 8115 Preston Road Dallas, TX 75225	OGRID: 372210
	Action Number: 284391
	Action Type: [C-104] Tight Hole Completion Packet (C-104CT)

CONDITIONS

Created By	Condition	Condition Date
plmartinez	CONFIDENTIAL UNTIL 2/1/2024.	11/14/2023