

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 12/2022
⁴ API Number 30 – 015-48308	⁵ Pool Name Empire; Glorieta - Yeso	
		⁶ Pool Code 96210
⁷ Property Code 330799	⁸ Property Name Prince Federal 19B	⁹ Well Number 002H

II. ¹⁰ Surface Location

Ul or lot no. G	Section 24	Township 17S	Range 28E	Lot Idn	Feet from the 2188	North/South Line North	Feet from the 1323	East/West line East	County Eddy
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¹¹ Bottom Hole Location

UL or lot no. H	Section 19	Township 17S	Range 29E	Lot Idn	Feet from the 1738	North/South line North	Feet from the 22	East/West line East	County Eddy
¹² Lse Code F	¹³ Producing Method Code P	¹⁴ Gas Connection Date 1/15/2023	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 11/17/2022	²² Ready Date 12/30/2022	²³ TD 4676'V/9855'M	²⁴ PBTd 4676'V/9802'M	²⁵ Perforations 5,124'-9,736'	²⁶ DHC, MC
²⁷ Hole Size	²⁸ Casing & Tubing Size	²⁹ Depth Set	³⁰ Sacks Cement		
17-1/2"	13-3/8"	360'	500		
12-1/4"	9-5/8"	1469'	750		
8-3/4"	7"	4922'	1410		
8-3/4	5-1/2"	9850'			
	2-7/8"				

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		
Printed name: David Cain			Approved by: PATRICIA MARTINEZ		
Title: Regulatory Analyst			Title: PETROLEUM SPECIALIST		
E-mail Address: David.cain@longfellowenergy.com			Approval Date: 1/19/2023		
Date: 12/21/2022		Phone: (972) 590-9900	RT EXPIRES 3/30/2023		

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
As-Drilled

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-48308	² Pool Code 96210	³ Pool Name EMPIRE; GLORIETA-YESO
⁴ Property Code 330799	⁵ Property Name PRINCE FEDERAL 19B	⁶ Well Number 002H
⁷ OGRID No. 372210	⁸ Operator Name LONGFELLOW ENERGY, LP	⁹ Elevation 3696.2

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
G	24	17 S	28 E		2188	NORTH	1323	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
H	19	17 S	29 E		1738	NORTH	22	EAST	EDDY

¹² Dedicated Acres 147.28	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.

NW CORNER SEC. 24 LAT. = 32.8285163°N LONG. = 104.1383286°W NMSP EAST (FT) N = 665202.37 E = 601236.81 NE CORNER SEC. 24 LAT. = 32.8285895°N LONG. = 104.1214098°W NMSP EAST (FT) N = 665238.99 E = 606433.68 N/4 CORNER SEC. 24 LAT. = 32.8285531°N LONG. = 104.1298694°W NMSP EAST (FT) N = 665220.65 E = 603835.19 W/4 CORNER SEC. 24 LAT. = 32.8211976°N LONG. = 104.1383705°W NMSP EAST (FT) N = 662539.66 E = 601228.84 E/4 CORNER SEC. 24 LAT. = 32.8212873°N LONG. = 104.1214299°W NMSP EAST (FT) N = 662582.33 E = 606432.84 SW CORNER SEC. 24 LAT. = 32.8138603°N LONG. = 104.1384647°W NMSP EAST (FT) N = 659870.21 E = 601204.84 SE CORNER SEC. 24 LAT. = 32.8140040°N LONG. = 104.1214570°W NMSP EAST (FT) N = 659932.51 E = 606429.84		NW CORNER SEC. 19 LAT. = 32.8273415°N LONG. = 104.1214155°W NMSP EAST (FT) N = 664784.94 E = 606432.86 NE CORNER SEC. 19 LAT. = 32.8273104°N LONG. = 104.1056041°W NMSP EAST (FT) N = 664783.74 E = 611289.69 N/4 CORNER SEC. 19 LAT. = 32.8273413°N LONG. = 104.1142272°W NMSP EAST (FT) N = 664789.39 E = 608640.89 W/4 CORNER SEC. 19 LAT. = 32.8200949°N LONG. = 104.1214373°W NMSP EAST (FT) N = 662148.50 E = 606431.45 E/4 CORNER SEC. 19 LAT. = 32.8200615°N LONG. = 104.1056102°W NMSP EAST (FT) N = 662146.48 E = 611293.51 SW CORNER SEC. 19 LAT. = 32.8128479°N LONG. = 104.1214627°W NMSP EAST (FT) N = 659511.90 E = 606428.92 SE CORNER SEC. 19 LAT. = 32.8128631°N LONG. = 104.1056019°W NMSP EAST (FT) N = 659527.59 E = 611301.71	
PRINCE FEDERAL 19B 002H ELEV. = 3696.2' LAT. = 32.8225566°N (NAD83) LONG. = 104.1257321°W NMSP EAST (FT) N = 663041.48 E = 605110.31 KICK OFF POINT 2182' FNL, 799' FEL LAT. = 32.8225796°N LONG. = 104.1240290°W SURFACE LOCATION KOP 1ST TAKE POINT 1735' FNL, 101' FWL LAT. = 32.8225715°N LONG. = 104.1210989°W BOTTOM OF HOLE LAT. = 32.8225343°N LONG. = 104.1056792°W NMSP EAST (FT) N = 663046.05 E = 611270.40 22' LTP BOTTOM OF HOLE LAST TAKE POINT 1738' FNL, 100' FEL LAT. = 32.8225341°N LONG. = 104.1059337°W SEC. 24 T17S, R28E SEC. 19 T17S, R29E SCALED			

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 12/21/2022
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.

DECEMBER 2, 2022
Date of Survey

THOMAS F. JARAMILLO
Signature and Seal of Professional Surveyor

Certificate Number: THOMAS F. JARAMILLO, PLS 12797
PROFESSIONAL SURVEYOR NO. 8436B

Intent ☐ As Drilled ☒

API # 30-015-48308		
Operator Name: LONGFELLOW ENERGY, LP	Property Name: PRINCE FEDERAL 19B	Well Number 002H

Kick Off Point (KOP)

UL H	Section 24	Township 17S	Range 28E	Lot	Feet	From N/S 2182	Feet NORTH	From E/W 799	County EAST
Latitude 32.8225796					Longitude 104.1240290			NAD 83	

First Take Point (FTP)

UL H	Section 19	Township 17S	Range 29E	Lot 2	Feet 1735	From N/S NORTH	Feet 101	From E/W WEST	County EDDY
Latitude 32.8225715					Longitude 104.1210989			NAD 83	

Last Take Point (LTP)

UL H	Section 19	Township 17S	Range 29E	Lot	Feet 1738	From N/S NORTH	Feet 100	From E/W EAST	County EDDY
Latitude 32.8225341					Longitude 104.1059337			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



Longfellow Energy

Eddy Co., NM (Nad-83)
PRINCE FEDERAL 19B
002H

Wellbore #1

Design: Wellbore #1

Standard Survey Report

28 November, 2022





Survey Report



Company:	Longfellow Energy	Local Co-ordinate Reference:	Well 002H
Project:	Eddy Co., NM (Nad-83)	TVD Reference:	RKB = 26.6' @ 3721.10usft (FRONTIER 26)
Site:	PRINCE FEDERAL 19B	MD Reference:	RKB = 26.6' @ 3721.10usft (FRONTIER 26)
Well:	002H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	WBDS_SQL_2

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	PRINCE FEDERAL 19B				
Site Position:		Northing:	663,061.48 usft	Latitude:	32.8226116
From:	Map	Easting:	605,110.33 usft	Longitude:	-104.1257319
Position Uncertainty:	0.00 usft	Slot Radius:	13.200 in	Grid Convergence:	0.113 °

Well	002H					
Well Position	+N/-S	0.00 usft	Northing:	663,041.48 usft	Latitude:	32.8225566
	+E/-W	0.00 usft	Easting:	605,110.31 usft	Longitude:	-104.1257321
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	3,694.50 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)	Direction (°)	
	0.00	0.00	0.00	89.87	

Survey Program	Date	11/28/22			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.00	9,855.00	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	
PRINCE #2: SHL										
196.00	0.55	157.62	196.00	-0.87	0.36	0.36	0.28	0.28	0.00	
226.00	0.52	148.02	226.00	-1.12	0.49	0.48	0.31	-0.10	-32.00	
298.00	1.55	118.41	297.98	-1.86	1.51	1.51	1.57	1.43	-41.12	
407.00	1.77	126.83	406.94	-3.57	4.16	4.15	0.30	0.20	7.72	
498.00	2.37	109.50	497.88	-5.04	7.06	7.05	0.95	0.66	-19.04	
588.00	4.51	96.88	587.71	-6.09	12.33	12.31	2.51	2.38	-14.02	
679.00	7.00	90.08	678.25	-6.52	21.42	21.41	2.83	2.74	-7.47	
769.00	8.86	94.34	767.38	-7.05	33.82	33.80	2.17	2.07	4.73	
860.00	9.35	91.58	857.24	-7.79	48.20	48.18	0.72	0.54	-3.03	
950.00	9.24	88.05	946.06	-7.74	62.73	62.71	0.65	-0.12	-3.92	
1,041.00	8.79	87.70	1,035.93	-7.22	76.98	76.96	0.50	-0.49	-0.38	
1,132.00	9.42	90.81	1,125.79	-7.04	91.37	91.35	0.88	0.69	3.42	
1,223.00	10.24	93.33	1,215.45	-7.62	106.89	106.87	1.02	0.90	2.77	
1,317.00	9.66	93.73	1,308.04	-8.62	123.10	123.08	0.62	-0.62	0.43	



Survey Report



Company:	Longfellow Energy	Local Co-ordinate Reference:	Well 002H
Project:	Eddy Co., NM (Nad-83)	TVD Reference:	RKB = 26.6' @ 3721.10usft (FRONTIER 26)
Site:	PRINCE FEDERAL 19B	MD Reference:	RKB = 26.6' @ 3721.10usft (FRONTIER 26)
Well:	002H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	WBDS_SQL_2

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	9.25	88.17	1,386.95	-8.85	136.23	136.21	1.25	-0.51	-6.95
1,490.00	9.15	84.25	1,478.75	-7.87	151.06	151.04	0.68	-0.11	-4.22
1,584.00	8.22	83.68	1,571.68	-6.38	165.17	165.16	0.99	-0.99	-0.61
1,677.00	8.78	84.14	1,663.65	-4.92	178.84	178.83	0.61	0.60	0.49
1,771.00	9.09	85.16	1,756.51	-3.56	193.38	193.37	0.37	0.33	1.09
1,866.00	8.27	82.81	1,850.42	-2.08	207.63	207.63	0.94	-0.86	-2.47
1,960.00	9.30	89.99	1,943.32	-1.23	221.94	221.93	1.60	1.10	7.64
2,055.00	9.96	94.56	2,036.99	-1.88	237.80	237.80	1.06	0.69	4.81
2,149.00	9.48	93.60	2,129.64	-3.01	253.63	253.62	0.54	-0.51	-1.02
2,242.00	9.12	92.92	2,221.41	-3.87	268.64	268.63	0.40	-0.39	-0.73
2,337.00	8.91	92.41	2,315.24	-4.56	283.50	283.49	0.24	-0.22	-0.54
2,432.00	8.77	92.01	2,409.11	-5.12	298.09	298.08	0.16	-0.15	-0.42
2,557.00	10.69	87.87	2,532.31	-5.03	319.20	319.19	1.63	1.54	-3.31
2,651.00	10.33	86.71	2,624.73	-4.22	336.33	336.32	0.44	-0.38	-1.23
2,745.00	9.89	86.09	2,717.27	-3.19	352.80	352.79	0.48	-0.47	-0.66
2,840.00	9.41	85.73	2,810.93	-2.05	368.68	368.68	0.51	-0.51	-0.38
2,934.00	9.01	85.20	2,903.72	-0.86	383.68	383.68	0.43	-0.43	-0.56
3,029.00	8.72	84.03	2,997.58	0.51	398.26	398.26	0.36	-0.31	-1.23
3,123.00	8.50	83.95	3,090.52	1.98	412.25	412.25	0.23	-0.23	-0.09
3,218.00	10.14	87.47	3,184.26	3.09	427.59	427.59	1.83	1.73	3.71
3,312.00	10.47	87.39	3,276.75	3.84	444.39	444.39	0.35	0.35	-0.09
3,407.00	10.13	86.72	3,370.22	4.72	461.35	461.36	0.38	-0.36	-0.71
3,502.00	9.61	86.13	3,463.81	5.73	477.60	477.61	0.56	-0.55	-0.62
3,596.00	9.26	84.70	3,556.54	6.96	492.96	492.98	0.45	-0.37	-1.52
3,690.00	9.04	83.83	3,649.34	8.45	507.83	507.85	0.28	-0.23	-0.93
3,785.00	9.58	88.91	3,743.09	9.40	523.16	523.18	1.03	0.57	5.35
3,880.00	16.47	88.01	3,835.59	10.02	544.55	544.57	7.26	7.25	-0.95
3,974.00	23.33	87.26	3,923.93	11.38	576.49	576.52	7.30	7.30	-0.80
4,068.00	28.46	88.24	4,008.46	12.95	617.50	617.53	5.48	5.46	1.04
4,162.00	30.55	97.03	4,090.31	10.72	663.63	663.65	5.11	2.22	9.35
4,257.00	35.28	97.90	4,170.03	3.99	714.79	714.80	5.00	4.98	0.92
4,352.00	39.60	95.39	4,245.45	-2.63	772.14	772.13	4.82	4.55	-2.64
4,445.00	44.34	89.50	4,314.60	-5.13	834.21	834.19	6.62	5.10	-6.33
4,538.00	51.92	86.56	4,376.64	-2.65	903.35	903.34	8.48	8.15	-3.16
4,631.00	59.71	90.37	4,428.86	-0.71	980.18	980.17	9.03	8.38	4.10
4,726.00	58.81	90.22	4,477.42	-1.13	1,061.83	1,061.82	0.96	-0.95	-0.16
4,820.00	57.62	90.54	4,526.93	-1.66	1,141.73	1,141.72	1.30	-1.27	0.34
4,915.00	68.18	88.47	4,570.15	-0.86	1,226.17	1,226.16	11.28	11.12	-2.18
5,009.00	80.47	86.43	4,595.50	3.21	1,316.40	1,316.40	13.24	13.07	-2.17
5,103.00	91.78	87.93	4,601.85	7.81	1,409.92	1,409.93	12.14	12.03	1.60
5,116.35	91.82	88.22	4,601.43	8.26	1,423.26	1,423.27	2.21	0.26	2.20
PRINCE #2: FTP									
5,198.00	92.03	90.02	4,598.69	9.51	1,504.84	1,504.86	2.21	0.26	2.20



Survey Report



Company:	Longfellow Energy	Local Co-ordinate Reference:	Well 002H
Project:	Eddy Co., NM (Nad-83)	TVD Reference:	RKB = 26.6' @ 3721.10usft (FRONTIER 26)
Site:	PRINCE FEDERAL 19B	MD Reference:	RKB = 26.6' @ 3721.10usft (FRONTIER 26)
Well:	002H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	WBDS_SQL_2

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)
5,292.00	91.77	91.04	4,595.57	8.64	1,598.79	1,598.80	1.12	-0.28	1.09
5,386.00	91.19	90.99	4,593.14	6.97	1,692.74	1,692.75	0.62	-0.62	-0.05
5,481.00	90.49	91.21	4,591.75	5.15	1,787.71	1,787.72	0.77	-0.74	0.23
5,576.00	89.62	91.09	4,591.66	3.24	1,882.69	1,882.69	0.92	-0.92	-0.13
5,670.00	88.78	90.92	4,592.97	1.59	1,976.67	1,976.67	0.91	-0.89	-0.18
5,764.00	88.89	90.23	4,594.88	0.65	2,070.64	2,070.64	0.74	0.12	-0.73
5,855.00	90.09	89.61	4,595.69	0.78	2,161.64	2,161.63	1.48	1.32	-0.68
5,945.00	89.17	89.54	4,596.27	1.45	2,251.63	2,251.63	1.03	-1.02	-0.08
6,036.00	88.30	89.20	4,598.28	2.45	2,342.60	2,342.60	1.03	-0.96	-0.37
6,127.00	87.51	88.83	4,601.61	4.01	2,433.53	2,433.53	0.96	-0.87	-0.41
6,218.00	89.50	88.78	4,603.98	5.91	2,524.47	2,524.48	2.19	2.19	-0.05
6,308.00	88.80	88.22	4,605.32	8.26	2,614.43	2,614.44	1.00	-0.78	-0.62
6,399.00	90.04	89.84	4,606.24	9.80	2,705.41	2,705.42	2.24	1.36	1.78
6,489.00	89.62	89.68	4,606.51	10.18	2,795.41	2,795.42	0.50	-0.47	-0.18
6,580.00	88.89	89.64	4,607.69	10.72	2,886.40	2,886.41	0.80	-0.80	-0.04
6,670.00	89.42	90.29	4,609.02	10.77	2,976.39	2,976.40	0.93	0.59	0.72
6,761.00	89.87	90.70	4,609.58	9.99	3,067.38	3,067.40	0.67	0.49	0.45
6,852.00	89.17	90.40	4,610.34	9.11	3,158.37	3,158.39	0.84	-0.77	-0.33
6,943.00	88.58	89.78	4,612.13	8.97	3,249.35	3,249.37	0.94	-0.65	-0.68
7,038.00	87.88	89.67	4,615.06	9.43	3,344.31	3,344.32	0.75	-0.74	-0.12
7,133.00	89.48	90.32	4,617.25	9.43	3,439.28	3,439.29	1.82	1.68	0.68
7,226.00	89.81	90.09	4,617.83	9.10	3,532.28	3,532.29	0.43	0.35	-0.25
7,319.00	89.34	89.74	4,618.52	9.24	3,625.27	3,625.28	0.63	-0.51	-0.38
7,413.00	89.06	89.36	4,619.83	9.98	3,719.26	3,719.27	0.50	-0.30	-0.40
7,506.00	89.31	89.29	4,621.15	11.07	3,812.24	3,812.26	0.28	0.27	-0.08
7,601.00	89.53	88.93	4,622.12	12.55	3,907.23	3,907.25	0.44	0.23	-0.38
7,696.00	89.76	89.50	4,622.70	13.85	4,002.22	4,002.24	0.65	0.24	0.60
7,789.00	87.65	90.31	4,624.81	14.01	4,095.19	4,095.21	2.43	-2.27	0.87
7,884.00	87.01	89.87	4,629.23	13.86	4,190.08	4,190.10	0.82	-0.67	-0.46
7,979.00	87.32	89.50	4,633.93	14.38	4,284.97	4,284.99	0.51	0.33	-0.39
8,073.00	87.60	88.93	4,638.10	15.66	4,378.86	4,378.89	0.68	0.30	-0.61
8,168.00	88.72	90.38	4,641.15	16.24	4,473.81	4,473.83	1.93	1.18	1.53
8,263.00	89.45	91.08	4,642.66	15.03	4,568.79	4,568.81	1.06	0.77	0.74
8,357.00	90.43	90.46	4,642.76	13.76	4,662.78	4,662.80	1.23	1.04	-0.66
8,452.00	89.06	91.10	4,643.18	12.47	4,757.77	4,757.78	1.59	-1.44	0.67
8,546.00	87.57	91.91	4,645.95	10.00	4,851.69	4,851.70	1.80	-1.59	0.86
8,641.00	87.82	91.76	4,649.77	6.96	4,946.56	4,946.57	0.31	0.26	-0.16
8,736.00	88.86	91.37	4,652.52	4.37	5,041.49	5,041.48	1.17	1.09	-0.41
8,829.00	88.44	90.84	4,654.71	2.58	5,134.44	5,134.44	0.73	-0.45	-0.57
8,924.00	88.47	90.35	4,657.27	1.59	5,229.40	5,229.39	0.52	0.03	-0.52
9,019.00	89.25	90.26	4,659.16	1.08	5,324.38	5,324.37	0.83	0.82	-0.09
9,114.00	90.35	89.90	4,659.50	0.95	5,419.38	5,419.37	1.22	1.16	-0.38
9,208.00	87.79	90.01	4,661.02	1.03	5,513.36	5,513.35	2.73	-2.72	0.12



Survey Report



Company:	Longfellow Energy	Local Co-ordinate Reference:	Well 002H
Project:	Eddy Co., NM (Nad-83)	TVD Reference:	RKB = 26.6' @ 3721.10usft (FRONTIER 26)
Site:	PRINCE FEDERAL 19B	MD Reference:	RKB = 26.6' @ 3721.10usft (FRONTIER 26)
Well:	002H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	WBDS_SQL_2

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)
9,303.00	88.80	89.98	4,663.85	1.03	5,608.32	5,608.30	1.06	1.06	-0.03
9,398.00	87.26	89.41	4,667.11	1.54	5,703.26	5,703.24	1.73	-1.62	-0.60
9,491.00	87.74	89.39	4,671.17	2.51	5,796.16	5,796.15	0.52	0.52	-0.02
9,586.00	88.61	89.52	4,674.20	3.41	5,891.11	5,891.10	0.93	0.92	0.14
9,680.00	89.34	89.78	4,675.88	3.99	5,985.09	5,985.08	0.82	0.78	0.28
9,776.82	90.31	89.82	4,676.17	4.33	6,081.91	6,081.90	1.00	1.00	0.04
PRINCE #2: LTP									
9,781.00	90.35	89.82	4,676.15	4.34	6,086.09	6,086.08	1.00	1.00	0.04
9,855.00	90.35	89.82	4,675.70	4.57	6,160.09	6,160.08	0.00	0.00	0.00
Projection to Bit: 9855.00' MD/ 4675.70' TVD - Final Station Closure Distance= 6160.09 /Direction= 89.96 - TD: Latitude=									

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
9,855.00	4,675.70	4.57	6,160.09	Projection to Bit: 9855.00' MD/ 4675.70' TVD
9,855.00	4,675.70	4.57	6,160.09	Final Station Closure Distance= 6160.09 /Direction= 89.96
9,855.00	4,675.70	4.57	6,160.09	TD: Latitude= 32.822534 / Longitude= -104.105679
9,855.00	4,675.70	4.57	6,160.09	TD: Y= 663046.05 / X= 611270.40

Checked By: _____ Approved By: _____ Date: _____



I **Larry Wright**, certify that I am employed by **Wellbenders Directional Services**. That I did on the day(s) of **11/17/22** thru **11/26/22** conduct or supervise the taking of a **MWD Survey** from a depth of **196'** to a depth of **9855'**; 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 **Prince Federal 19B 002H** API No. **30-015-48308** 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

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77301
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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 175742

ACKNOWLEDGMENTS

Operator: LONGFELLOW ENERGY, LP 8115 Preston Road Dallas, TX 75225	OGRID: 372210
	Action Number: 175742
	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 175742

CONDITIONS

Operator: LONGFELLOW ENERGY, LP 8115 Preston Road Dallas, TX 75225	OGRID: 372210
	Action Number: 175742
	Action Type: [C-104] Completion Packet (C-104C)

CONDITIONS

Created By	Condition	Condition Date
plmartinez	RT EXPIRES 3/30/2023.	1/19/2023