

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 8/2022
⁴ API Number 30 – 015-49529	⁵ Pool Name Artesia; Glorieta – Yeso (O)	⁶ Pool Code 96830
⁷ Property Code 332861	⁸ Property Name Santana State Com 20CD	⁹ Well Number 005H

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
M	21	17S	28E		1180	South	200	West	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
M	20	17S	28E		815	South	17	West	Eddy
¹² Lse Code S	¹³ Producing Method Code P	¹⁴ Gas Connection Date 8/12/2022	¹⁵ C-129 Permit Number	¹⁶ C-129 Effective Date	¹⁷ C-129 Expiration Date				

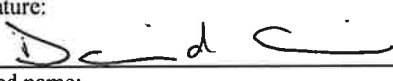
III. Oil and Gas Transporters

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 6/24/2022	²² Ready Date 8/12/2022	²³ TD 3646'V/9464'M	²⁴ PBTB 3647'V/9418'M	²⁵ Perforations 4341'-9382'	²⁶ DHC, MC
²⁷ Hole Size	²⁸ Casing & Tubing Size	²⁹ Depth Set	³⁰ Sacks Cement		
12-1/4"	9-5/8"	1253'	580		
8-3/4"	7"	4172'	1365		
8-3/4"	5-1/2"	9464'	1365		

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:		
Title: Regulatory Analyst			Title:		
E-mail Address: David.cain@longfellowenergy.com			Approval Date:		
Date: 8/8/2022		Phone: (972) 590-9900			

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 30-015-49529		² Pool Code 96830		³ Pool Name ARTESIA; GLORIETA-YESO (O)	
⁴ Property Code 332861		⁵ Property Name SANTANA STATE COM 20 CD			⁶ Well Number 005H
⁷ OGRID No. 372210		⁸ Operator Name LONGFELLOW ENERGY, LP			⁹ Elevation 3612.5

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
M	21	17 S	28 E		1180	SOUTH	200	WEST	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
M	20	17 S	28 E		815	SOUTH	17	WEST	EDDY

¹² Dedicated Acres	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.

17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. <i>David Cain</i> 8/8/2022 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. JULY 13, 2022 Date of Survey <i>William F. Jaramila</i> Signature and Seal of Professional Surveyor Certificate Number: 12797 Professional Surveyor No. 8618B			
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AS-DRILLED

W/4 CORNER SEC. 20
LAT. = 32.8269449°N
LONG. = 104.2063469°W
NMSP EAST (FT)
N = 664598.82
E = 580344.41

N/4 CORNER SEC. 20
LAT. = 32.8269302°N
LONG. = 104.1977818°W
NMSP EAST (FT)
N = 664596.76
E = 582975.37

SECTION CORNER
LAT. = 32.8269180°N
LONG. = 104.1892195°W
NMSP EAST (FT)
N = 664595.79
E = 585603.52

N/4 CORNER SEC. 21
LAT. = 32.8270231°N
LONG. = 104.1806697°W
NMSP EAST (FT)
N = 664637.73
E = 588231.72

NE CORNER SEC. 21
LAT. = 32.8271200°N
LONG. = 104.1721225°W
NMSP EAST (FT)
N = 664676.86
E = 590857.15

S89°57'18"E 2630.96 FT S89°58'44"E 2630.15 FT N89°05'06"E 2626.54 FT N89°08'46"E 2625.71 FT

W/4 CORNER SEC. 20
LAT. = 32.8196730°N
LONG. = 104.2063174°W
NMSP EAST (FT)
N = 661953.21
E = 580356.83

822' FSL 100' FEL
LAT. = 32.8146153°N
LONG. = 104.1895716°W

QUARTER CORNER
LAT. = 32.8196417°N
LONG. = 104.1892316°W
NMSP EAST (FT)
N = 661948.54
E = 585605.39

E/4 CORNER SEC. 21
LAT. = 32.8199456°N
LONG. = 104.1722373°W
NMSP EAST (FT)
N = 662066.66
E = 590825.85

SEC. 20 SEC. 21

LAST TAKE POINT
815' FSL 100' FWL
LAT. = 32.8146473°N
LONG. = 104.2059696°W

BOTTOM OF HOLE
LAT. = 32.8146483°N
LONG. = 104.2062407°W
NMSP EAST (FT)
N = 660125.17
E = 580382.39

200' 1180'

SURFACE LOCATION
SANTANA STATE COM 20 CD 005H
ELEV. = 3612.5'
LAT. = 32.8156174°N (NAD83)
LONG. = 104.1885923°W
NMSP EAST (FT)
N = 660484.71
E = 585803.79

KICK OFF POINT
830' FSL 831' FWL
LAT. = 32.8147051°N
LONG. = 104.1865405°W

SW CORNER SEC. 20
LAT. = 32.8124076°N
LONG. = 104.2062852°W
NMSP EAST (FT)
N = 659309.95
E = 580369.70

S/4 CORNER SEC. 20
LAT. = 32.8123832°N
LONG. = 104.1977681°W
NMSP EAST (FT)
N = 659304.34
E = 582986.39

SECTION CORNER
LAT. = 32.8123554°N
LONG. = 104.1892526°W
NMSP EAST (FT)
N = 659297.68
E = 585602.54

S/4 CORNER SEC. 21
LAT. = 32.8125646°N
LONG. = 104.1808012°W
NMSP EAST (FT)
N = 659377.42
E = 588198.94

SE CORNER SEC. 21
LAT. = 32.8127748°N
LONG. = 104.1723506°W
NMSP EAST (FT)
N = 659457.75
E = 590795.03

N89°52'38"W 2616.69 FT N89°51'16"W 2616.20 FT S88°14'28"W 2597.58 FT S88°13'39"W 2597.34 FT

N00°15'52"W 2645.64 FT N00°15'52"W 2645.64 FT N00°15'52"W 2645.64 FT N00°15'52"W 2645.64 FT

N00°17'01"W 2643.30 FT N00°17'01"W 2643.30 FT N00°17'01"W 2643.30 FT N00°17'01"W 2643.30 FT

815' 17'

FTP KOP

Intent ☐ As Drilled ☒ XX

API #		
Operator Name: LONGFELLOW ENERGY, LP	Property Name: SANTANA STATE COM 20 CD	Well Number 005H

Kick Off Point (KOP)

UL M	Section 21	Township 17S	Range 28E	Lot	Feet 830	From N/S SOUTH	Feet 831	From E/W WEST	County EDDY
Latitude 32.8147051					Longitude 104.1865405			NAD 83	

First Take Point (FTP)

UL P	Section 20	Township 17S	Range 28E	Lot	Feet 822	From N/S SOUTH	Feet 100	From E/W EAST	County EDDY
Latitude 32.8146153					Longitude 104.1895716			NAD 83	

Last Take Point (LTP)

UL M	Section 20	Township 17S	Range 28E	Lot	Feet 815	From N/S SOUTH	Feet 100	From E/W WEST	County EDDY
Latitude 32.8146473					Longitude 104.2059696			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)
SANTANA STATE COM 20 CD
#005H

Wellbore #1

Design: Wellbore #1

Standard Survey Report

05 July, 2022





Survey Report



Company:	Longfellow Energy	Local Co-ordinate Reference:	Well #005H
Project:	Eddy Co., NM (Nad-83)	TVD Reference:	RKB = 16' @ 3628.50usft (TBD)
Site:	SANTANA STATE COM 20 CD	MD Reference:	RKB = 16' @ 3628.50usft (TBD)
Well:	#005H	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	SANTANA STATE COM 20 CD				
Site Position:		Northing:	660,599.54 usft	Latitude:	32.815933
From:	Lat/Long	Easting:	585,804.04 usft	Longitude:	-104.188591
Position Uncertainty:	0.00 usft	Slot Radius:	13.200 in	Grid Convergence:	0.078 °

Well	#005H					
Well Position	+N/-S	0.00 usft	Northing:	660,484.71 usft	Latitude:	32.815617
	+E/-W	0.00 usft	Easting:	585,803.79 usft	Longitude:	-104.188593
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	3,612.50 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	06/13/22	6.763	60.313	47,674.15858256

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	270.00	

Survey Program	Date	07/05/22			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
158.00	9,464.00	Survey #1 (Wellbore #1)	MWD+IGRF	OWSG MWD + IGRF or WMM	

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
PLAT #5H: SHL (1180' FSL & 200' FWL)									
158.00	0.70	275.27	158.00	0.09	-0.96	0.96	0.44	0.44	0.00
218.00	0.88	270.18	217.99	0.12	-1.79	1.79	0.32	0.30	-8.48
310.00	1.06	123.57	309.99	-0.34	-1.78	1.78	2.02	0.20	-159.36
400.00	2.82	116.72	399.93	-1.80	0.89	-0.89	1.97	1.96	-7.61
491.00	4.75	114.61	490.73	-4.38	6.31	-6.31	2.13	2.12	-2.32
581.00	5.10	129.20	580.40	-8.46	12.80	-12.80	1.44	0.39	16.21
673.00	6.51	126.04	671.92	-14.11	20.19	-20.19	1.57	1.53	-3.43
765.00	9.50	116.19	763.02	-20.53	31.22	-31.22	3.56	3.25	-10.71
857.00	12.84	109.16	853.27	-27.24	47.69	-47.69	3.91	3.63	-7.64



Survey Report



Company:	Longfellow Energy	Local Co-ordinate Reference:	Well #005H
Project:	Eddy Co., NM (Nad-83)	TVD Reference:	RKB = 16' @ 3628.50usft (TBD)
Site:	SANTANA STATE COM 20 CD	MD Reference:	RKB = 16' @ 3628.50usft (TBD)
Well:	#005H	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)
946.00	15.13	109.34	939.63	-34.33	68.00	-68.00	2.57	2.57	0.20
1,035.00	16.72	108.46	1,025.21	-42.23	91.10	-91.10	1.81	1.79	-0.99
1,124.00	18.48	109.16	1,110.04	-50.92	116.57	-116.57	1.99	1.98	0.79
1,191.00	19.88	109.34	1,173.32	-58.18	137.35	-137.35	2.09	2.09	0.27
1,285.00	20.41	109.69	1,261.57	-68.99	167.87	-167.87	0.58	0.56	0.37
1,371.00	18.83	107.75	1,342.57	-78.27	195.20	-195.20	1.99	-1.84	-2.26
1,457.00	19.53	106.17	1,423.80	-86.51	222.23	-222.23	1.01	0.81	-1.84
1,545.00	22.70	110.22	1,505.88	-96.48	252.30	-252.30	3.96	3.60	4.60
1,633.00	21.82	110.22	1,587.33	-108.00	283.58	-283.58	1.00	-1.00	0.00
1,718.00	21.99	113.56	1,666.19	-119.82	312.99	-312.99	1.48	0.20	3.93
1,804.00	21.82	114.08	1,745.98	-132.78	342.34	-342.34	0.30	-0.20	0.60
1,892.00	22.52	112.68	1,827.48	-145.95	372.82	-372.82	1.00	0.80	-1.59
1,979.00	23.23	115.84	1,907.64	-159.85	403.64	-403.64	1.63	0.82	3.63
2,064.00	23.23	115.31	1,985.75	-174.32	433.88	-433.88	0.25	0.00	-0.62
2,154.00	22.52	115.31	2,068.67	-189.28	465.51	-465.51	0.79	-0.79	0.00
2,242.00	23.58	115.84	2,149.64	-204.16	496.58	-496.58	1.23	1.20	0.60
2,332.00	23.58	115.84	2,232.13	-219.85	528.99	-528.99	0.00	0.00	0.00
2,420.00	21.99	115.84	2,313.26	-234.70	559.66	-559.66	1.81	-1.81	0.00
2,507.00	18.65	119.36	2,394.83	-248.63	586.45	-586.45	4.09	-3.84	4.05
2,596.00	13.72	129.73	2,480.30	-262.36	606.99	-606.99	6.40	-5.54	11.65
2,682.00	12.84	130.43	2,564.00	-275.08	622.11	-622.11	1.04	-1.02	0.81
2,769.00	10.21	144.32	2,649.25	-287.61	633.97	-633.97	4.37	-3.02	15.97
2,858.00	11.79	185.45	2,736.75	-303.10	637.71	-637.71	8.80	1.78	46.21
2,903.00	12.84	186.50	2,780.71	-312.64	636.71	-636.71	2.39	2.33	2.33
2,946.00	12.84	195.64	2,822.64	-321.99	634.88	-634.88	4.72	0.00	21.26
2,989.00	14.08	212.34	2,864.47	-331.02	630.79	-630.79	9.45	2.88	38.84
3,032.00	17.07	227.46	2,905.91	-339.71	623.34	-623.34	11.67	6.95	35.16
3,074.00	20.06	235.02	2,945.72	-348.01	612.89	-612.89	9.13	7.12	18.00
3,117.00	21.99	241.17	2,985.86	-356.12	599.79	-599.79	6.81	4.49	14.30
3,160.00	22.87	252.25	3,025.63	-362.55	584.77	-584.77	10.03	2.05	25.77
3,203.00	24.81	262.44	3,064.97	-366.29	567.86	-567.86	10.57	4.51	23.70
3,246.00	28.33	266.31	3,103.43	-368.13	548.73	-548.73	9.12	8.19	9.00
3,289.00	31.32	266.66	3,140.73	-369.44	527.39	-527.39	6.97	6.95	0.81
3,332.00	32.20	267.72	3,177.29	-370.55	504.78	-504.78	2.42	2.05	2.47
3,376.00	32.20	266.84	3,214.52	-371.66	481.36	-481.36	1.07	0.00	-2.00
3,418.00	33.08	270.18	3,249.89	-372.24	458.72	-458.72	4.77	2.10	7.95
3,461.00	35.72	270.70	3,285.37	-372.05	434.43	-434.43	6.18	6.14	1.21
3,504.00	38.36	270.70	3,319.69	-371.73	408.54	-408.54	6.14	6.14	0.00
3,546.00	41.00	270.88	3,352.01	-371.36	381.72	-381.72	6.29	6.29	0.43
3,589.00	44.34	270.88	3,383.62	-370.92	352.59	-352.59	7.77	7.77	0.00
3,634.00	46.98	270.70	3,415.07	-370.47	320.41	-320.41	5.87	5.87	-0.40
3,677.00	49.09	270.35	3,443.82	-370.18	288.44	-288.44	4.94	4.91	-0.81
3,721.00	50.85	270.00	3,472.12	-370.08	254.75	-254.75	4.05	4.00	-0.80



Survey Report



Company:	Longfellow Energy	Local Co-ordinate Reference:	Well #005H
Project:	Eddy Co., NM (Nad-83)	TVD Reference:	RKB = 16' @ 3628.50usft (TBD)
Site:	SANTANA STATE COM 20 CD	MD Reference:	RKB = 16' @ 3628.50usft (TBD)
Well:	#005H	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)
3,765.00	53.49	269.65	3,499.11	-370.19	220.00	-220.00	6.03	6.00	-0.80
3,809.00	56.13	269.30	3,524.46	-370.52	184.05	-184.05	6.04	6.00	-0.80
3,894.00	59.65	270.70	3,569.64	-370.50	112.06	-112.06	4.37	4.14	1.65
3,983.00	59.47	270.00	3,614.73	-370.03	35.33	-35.33	0.71	-0.20	-0.79
4,071.00	61.94	270.18	3,657.78	-369.91	-41.41	41.41	2.81	2.81	0.20
4,115.00	66.86	270.88	3,676.79	-369.54	-81.07	81.07	11.27	11.18	1.59
4,158.00	70.56	270.70	3,692.40	-368.99	-121.13	121.13	8.61	8.60	-0.42
4,202.00	74.43	271.41	3,705.63	-368.21	-163.08	163.08	8.93	8.80	1.61
4,245.00	78.65	271.23	3,715.64	-367.25	-204.87	204.87	9.82	9.81	-0.42
4,288.00	82.87	271.41	3,722.54	-366.27	-247.30	247.30	9.82	9.81	0.42
4,333.00	86.39	271.41	3,726.75	-365.17	-292.08	292.08	7.82	7.82	0.00
4,341.30	86.68	271.39	3,727.25	-364.97	-300.36	300.36	3.44	3.44	-0.21
FINAL FTP/100' FEL @ 4341.30' MD									
4,341.57	86.68	271.39	3,727.27	-364.96	-300.63	300.63	3.44	3.44	-0.21
PLAT #5H: FTP (832' FSL & 100' FEL)									
4,420.00	89.38	271.23	3,729.96	-363.17	-378.98	378.98	3.44	3.44	-0.21
4,508.00	90.97	271.41	3,729.69	-361.14	-466.96	466.96	1.82	1.81	0.20
4,596.00	92.02	271.41	3,727.40	-358.98	-554.90	554.90	1.19	1.19	0.00
4,682.00	91.85	271.41	3,724.49	-356.86	-640.83	640.83	0.20	-0.20	0.00
4,769.00	91.50	271.58	3,721.95	-354.59	-727.76	727.76	0.45	-0.40	0.20
4,854.00	91.32	270.88	3,719.86	-352.77	-812.71	812.71	0.85	-0.21	-0.82
4,941.00	90.79	270.88	3,718.26	-351.43	-899.69	899.69	0.61	-0.61	0.00
5,027.00	90.09	270.53	3,717.60	-350.37	-985.68	985.68	0.91	-0.81	-0.41
5,117.00	90.97	270.88	3,716.76	-349.27	-1,075.67	1,075.67	1.05	0.98	0.39
5,204.00	90.97	270.18	3,715.29	-348.46	-1,162.65	1,162.65	0.80	0.00	-0.80
5,292.00	90.09	269.65	3,714.48	-348.59	-1,250.64	1,250.64	1.17	-1.00	-0.60
5,381.00	90.97	269.82	3,713.65	-349.00	-1,339.64	1,339.64	1.01	0.99	0.19
5,468.00	90.79	269.47	3,712.32	-349.54	-1,426.63	1,426.63	0.45	-0.21	-0.40
5,505.00	90.62	269.47	3,711.86	-349.89	-1,463.62	1,463.62	0.46	-0.46	0.00
5,592.00	90.97	269.47	3,710.66	-350.69	-1,550.61	1,550.61	0.40	0.40	0.00
5,678.00	92.38	269.82	3,708.14	-351.22	-1,636.57	1,636.57	1.69	1.64	0.41
5,766.00	90.44	270.88	3,705.98	-350.69	-1,724.54	1,724.54	2.51	-2.20	1.20
5,853.00	91.85	271.23	3,704.24	-349.08	-1,811.50	1,811.50	1.67	1.62	0.40
5,942.00	90.79	270.53	3,702.19	-347.72	-1,900.46	1,900.46	1.43	-1.19	-0.79
6,029.00	91.50	271.05	3,700.45	-346.52	-1,987.44	1,987.44	1.01	0.82	0.60
6,116.00	90.79	269.82	3,698.71	-345.86	-2,074.42	2,074.42	1.63	-0.82	-1.41
6,204.00	90.09	268.24	3,698.03	-347.35	-2,162.40	2,162.40	1.96	-0.80	-1.80
6,293.00	90.62	267.89	3,697.48	-350.35	-2,251.34	2,251.34	0.71	0.60	-0.39
6,378.00	91.85	268.24	3,695.65	-353.22	-2,336.27	2,336.27	1.50	1.45	0.41
6,467.00	89.74	268.77	3,694.42	-355.54	-2,425.23	2,425.23	2.44	-2.37	0.60
6,553.00	89.91	268.95	3,694.68	-357.25	-2,511.21	2,511.21	0.29	0.20	0.21
6,638.00	91.32	269.30	3,693.77	-358.55	-2,596.20	2,596.20	1.71	1.66	0.41
6,723.00	90.09	269.47	3,692.72	-359.46	-2,681.18	2,681.18	1.46	-1.45	0.20
6,815.00	90.26	269.82	3,692.44	-360.03	-2,773.18	2,773.18	0.42	0.18	0.38



Survey Report



Company:	Longfellow Energy	Local Co-ordinate Reference:	Well #005H
Project:	Eddy Co., NM (Nad-83)	TVD Reference:	RKB = 16' @ 3628.50usft (TBD)
Site:	SANTANA STATE COM 20 CD	MD Reference:	RKB = 16' @ 3628.50usft (TBD)
Well:	#005H	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)
6,905.00	90.97	270.35	3,691.47	-359.90	-2,863.17	2,863.17	0.98	0.79	0.59
6,997.00	91.67	270.35	3,689.35	-359.34	-2,955.15	2,955.15	0.76	0.76	0.00
7,087.00	90.09	270.18	3,687.97	-358.92	-3,045.13	3,045.13	1.77	-1.76	-0.19
7,179.00	90.26	270.88	3,687.69	-358.07	-3,137.13	3,137.13	0.78	0.18	0.76
7,269.00	90.79	271.41	3,686.87	-356.27	-3,227.11	3,227.11	0.83	0.59	0.59
7,360.00	91.14	270.18	3,685.33	-355.01	-3,318.08	3,318.08	1.41	0.38	-1.35
7,452.00	92.02	270.00	3,682.80	-354.87	-3,410.05	3,410.05	0.98	0.96	-0.20
7,544.00	90.44	270.35	3,680.82	-354.59	-3,502.02	3,502.02	1.76	-1.72	0.38
7,633.00	90.97	270.70	3,679.73	-353.77	-3,591.01	3,591.01	0.71	0.60	0.39
7,722.00	91.50	271.23	3,677.81	-352.27	-3,679.98	3,679.98	0.84	0.60	0.60
7,812.00	91.32	270.70	3,675.59	-350.76	-3,769.94	3,769.94	0.62	-0.20	-0.59
7,901.00	90.97	269.47	3,673.82	-350.62	-3,858.92	3,858.92	1.44	-0.39	-1.38
7,989.00	91.50	269.47	3,671.92	-351.44	-3,946.89	3,946.89	0.60	0.60	0.00
8,075.00	92.20	271.05	3,669.14	-351.05	-4,032.84	4,032.84	2.01	0.81	1.84
8,162.00	91.85	269.82	3,666.07	-350.39	-4,119.78	4,119.78	1.47	-0.40	-1.41
8,249.00	90.44	268.59	3,664.33	-351.60	-4,206.75	4,206.75	2.15	-1.62	-1.41
8,338.00	90.62	268.77	3,663.51	-353.65	-4,295.73	4,295.73	0.29	0.20	0.20
8,425.00	91.14	268.95	3,662.17	-355.38	-4,382.70	4,382.70	0.63	0.60	0.21
8,513.00	89.38	268.59	3,661.77	-357.27	-4,470.67	4,470.67	2.04	-2.00	-0.41
8,600.00	89.74	268.77	3,662.44	-359.27	-4,557.65	4,557.65	0.46	0.41	0.21
8,687.00	90.97	269.65	3,661.90	-360.47	-4,644.64	4,644.64	1.74	1.41	1.01
8,775.00	91.50	270.18	3,660.00	-360.60	-4,732.62	4,732.62	0.85	0.60	0.60
8,863.00	92.20	270.35	3,657.16	-360.19	-4,820.57	4,820.57	0.82	0.80	0.19
8,950.00	90.44	270.00	3,655.16	-359.93	-4,907.54	4,907.54	2.06	-2.02	-0.40
9,039.00	89.74	269.47	3,655.02	-360.34	-4,996.54	4,996.54	0.99	-0.79	-0.60
9,126.00	90.44	270.18	3,654.88	-360.60	-5,083.54	5,083.54	1.15	0.80	0.82
9,213.00	90.79	270.18	3,653.95	-360.33	-5,170.53	5,170.53	0.40	0.40	0.00
9,302.00	91.50	270.18	3,652.17	-360.05	-5,259.51	5,259.51	0.80	0.80	0.00
9,380.65	92.24	270.18	3,649.60	-359.81	-5,338.12	5,338.12	0.95	0.95	0.00
FINAL LTP/100' FWL @ 9380.65' MD									
9,380.74	92.24	270.18	3,649.60	-359.80	-5,338.21	5,338.21	0.00	0.00	0.00
PLAT #5H: LTP (820' FSL & 100' FWL)									
9,395.00	92.38	270.18	3,649.02	-359.76	-5,352.46	5,352.46	0.95	0.95	0.00
9,460.72	92.38	270.18	3,646.29	-359.55	-5,418.13	5,418.13	0.00	0.00	0.00
PLAT #5H: BHL (820' FSL & 20' FWL)									
9,464.00	92.38	270.18	3,646.16	-359.54	-5,421.40	5,421.40	0.00	0.00	0.00
Projection to Bit: 9464.00' MD/ 3646.16' TVD - Final Station Closure Distance= 5433.31 /Direction= 266.21 - TD: Latitude:									



Survey Report



Company:	Longfellow Energy	Local Co-ordinate Reference:	Well #005H
Project:	Eddy Co., NM (Nad-83)	TVD Reference:	RKB = 16' @ 3628.50usft (TBD)
Site:	SANTANA STATE COM 20 CD	MD Reference:	RKB = 16' @ 3628.50usft (TBD)
Well:	#005H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	WBDS_SQL_2

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
FINAL BIT PROJ @ 9 - actual wellpath hits target center - Point	0.00	0.00	3,646.16	-359.54	-5,421.40	660,125.17	580,382.39	32.814648	-104.206241
FINAL LTP/100' FWL - actual wellpath hits target center - Point	0.00	0.00	3,649.60	-359.81	-5,338.12	660,124.91	580,465.67	32.814647	-104.205970
FINAL FTP/100' FEL (- actual wellpath hits target center - Point	0.00	0.00	3,727.25	-364.97	-300.36	660,119.75	585,503.43	32.814615	-104.189572

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
4,341.30	3,727.25	-364.97	-300.36	FINAL FTP/100' FEL @ 4341.30' MD
9,380.65	3,649.60	-359.81	-5,338.12	FINAL LTP/100' FWL @ 9380.65' MD
9,464.00	3,646.16	-359.54	-5,421.40	Projection to Bit: 9464.00' MD/ 3646.16' TVD
9,464.00	3,646.16	-359.54	-5,421.40	Final Station Closure Distance= 5433.31 /Direction= 266.21
9,464.00	3,646.16	-359.54	-5,421.40	TD: Latitude= 32.814648 / Longitude= -104.206241
9,464.00	3,646.16	-359.54	-5,421.40	TD: Y= 660125.17 / X= 580382.39

Checked By: _____ Approved By: _____ Date: _____

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 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 132650

ACKNOWLEDGMENTS

Operator: LONGFELLOW ENERGY, LP 8115 Preston Road Dallas, TX 75225	OGRID: 372210
	Action Number: 132650
	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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State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 132650

CONDITIONS

Operator: LONGFELLOW ENERGY, LP 8115 Preston Road Dallas, TX 75225	OGRID: 372210
	Action Number: 132650
	Action Type: [C-104] Completion Packet (C-104C)

CONDITIONS

Created By	Condition	Condition Date
llowe	COA: RT Expires on 11/10/22	8/17/2022