

South Formations				North Formations			
Formation/Zone	MD	TVD	W/O/G	Formation/Zone	MD	TVD	W/O/G
T. Anhy				T. San Jose			
T. Salt				T. Nacimiento			
B. Salt				T. Ojo Alamo			
T. Yates	860'			T. Kirtland			
T. 7 Rivers	1114'			T. Fruitland			
T. Queen	1683'			T. Pictured Cliffs			
T. Grayburg	2083'			T. Lewis Shale			
T. San Andres	2385'			T. Chacra			
T. Glorieta	3191'			T. Cliff House			
T. Yeso	3838'			T. Menefee			
T. Paddock	3838'			T. Point Lookout			
T. Blinebry				T. Mancos			
T.Tubb	5274'			T. Gallup			
T. Drinkard				T. Greenhorn			
T. Abo	5898'			T. Graneros			
T. Wolfcamp	7236'			T. Dakota			
T. Penn				T. Morrison			
T. Cisco	8226'			T. Bluff			
T. Canyon	8795'			T.Todilto			
T. Strawn				T. Entrada			
T. Atoka				T. Wingate			
T. Morrow				T. Chinle			
T. Barnett Shale				T. Permian			
T. Miss				T. Penn A"			
T. Woodford Shale				T. Penn. "B"			
T. Devonian				T. Penn. "C"			
T. Silurian				T. Penn. "D"			
T. Fusselman				T. Leadville			
T. Montoya				T. Madison			
T. Simpson				T. Elbert			
T. McKee				T. McCracken			
T. Waddell				T. Ignacio Otzte			
T. Connel				T. Granite			
T. Ellenburger				T. Hermosa			
T. Gr. Wash				T. De Chelly			
T. Delaware Sand				T. Pinkerton			
T. Lamar Lime							
T. Bell Canyon							
T. Cherry Canyon							
T. Brushy Canyon							
T. Bone Springs							
T. 1st BS Sand							
T. 2nd BS Carbonate							
T. 2nd BS Sand							
T. 3rd BS Carbonate							
T. 3rd BS Sand							



Longfellow Energy

Eddy Co., NM (Nad-83)

OZZY STATE 18 SWD

1

OH

Design: OH

Standard Survey Report

12 June, 2024



Survey Report

Company:	Longfellow Energy	Local Co-ordinate Reference:	Well 1
Project:	Eddy Co., NM (Nad-83)	TVD Reference:	RKB = 20.2' @ 3674.20usft (AKITA 523)
Site:	OZZY STATE 18 SWD	MD Reference:	RKB = 20.2' @ 3674.20usft (AKITA 523)
Well:	1	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	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		OZZY STATE 18 SWD			
Site Position:		Northing:	667,067.40 usft	Latitude:	32.833599
From:	Map	Easting:	609,313.60 usft	Longitude:	-104.112022
Position Uncertainty:	0.00 usft	Slot Radius:	13.200 in		

Well	1					
Well Position	+N/-S	0.00 usft	Northing:	667,067.40 usft	Latitude:	32.833599
	+E/-W	0.00 usft	Easting:	609,313.60 usft	Longitude:	-104.112022
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	3,654.00 usft
Grid Convergence:		0.120 °				

Design	OH				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction	
	(usft)	(usft)	(usft)	(°)	
	0.00	0.00	0.00	0.00	

Survey Program	Date	06/12/24			
From	To	Survey (Wellbore)	Tool Name	Description	
(usft)	(usft)				
146.00	9,484.00	Survey #1 (OH)	MWD+IGRF	OWSG MWD + IGRF or WMM	

Survey										
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Vertical	Dogleg	Build	Turn	
Depth	(°)	(°)	Depth	(usft)	(usft)	Section	Rate	Rate	Rate	
(usft)			(usft)			(usft)	(°/100ft)	(°/100ft)	(°/100ft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
146.00	0.44	276.91	146.00	0.07	-0.56	0.07	0.30	0.30	0.00	
236.00	0.57	271.81	236.00	0.12	-1.35	0.12	0.15	0.14	-5.67	
317.00	0.66	272.60	316.99	0.16	-2.22	0.16	0.11	0.11	0.98	
418.00	1.10	264.25	417.98	0.09	-3.76	0.09	0.45	0.44	-8.27	
508.00	1.01	261.26	507.96	-0.12	-5.41	-0.12	0.12	-0.10	-3.32	
597.00	1.23	274.01	596.95	-0.17	-7.13	-0.17	0.37	0.25	14.33	
688.00	1.23	263.55	687.93	-0.21	-9.08	-0.21	0.25	0.00	-11.49	
778.00	1.01	264.34	777.91	-0.40	-10.83	-0.40	0.25	-0.24	0.88	
869.00	1.10	269.79	868.89	-0.48	-12.50	-0.48	0.15	0.10	5.99	
959.00	1.19	272.69	958.87	-0.44	-14.30	-0.44	0.12	0.10	3.22	
1,046.00	0.26	235.86	1,045.87	-0.51	-15.36	-0.51	1.14	-1.07	-42.33	
1,134.00	1.10	108.33	1,133.86	-0.89	-14.73	-0.89	1.45	0.95	-144.92	
1,221.00	1.27	118.62	1,220.84	-1.61	-13.09	-1.61	0.31	0.20	11.83	
1,307.00	1.10	108.16	1,306.83	-2.33	-11.47	-2.33	0.32	-0.20	-12.16	



Survey Report

Company:	Longfellow Energy	Local Co-ordinate Reference:	Well 1
Project:	Eddy Co., NM (Nad-83)	TVD Reference:	RKB = 20.2' @ 3674.20usft (AKITA 523)
Site:	OZZY STATE 18 SWD	MD Reference:	RKB = 20.2' @ 3674.20usft (AKITA 523)
Well:	1	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	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	1.23	114.84	1,396.81	-3.00	-9.77	-3.00	0.21	0.14	7.42
1,484.00	1.14	109.92	1,483.79	-3.69	-8.11	-3.69	0.16	-0.10	-5.66
1,571.00	0.92	120.73	1,570.77	-4.34	-6.69	-4.34	0.34	-0.25	12.43
1,658.00	0.84	122.92	1,657.76	-5.04	-5.56	-5.04	0.10	-0.09	2.52
1,746.00	0.84	121.96	1,745.75	-5.74	-4.47	-5.74	0.02	0.00	-1.09
1,835.00	0.57	131.36	1,834.75	-6.37	-3.58	-6.37	0.33	-0.30	10.56
1,920.00	0.62	115.36	1,919.74	-6.85	-2.85	-6.85	0.20	0.06	-18.82
2,007.00	0.35	110.71	2,006.74	-7.15	-2.18	-7.15	0.31	-0.31	-5.34
2,095.00	0.53	128.46	2,094.74	-7.49	-1.61	-7.49	0.25	0.20	20.17
2,183.00	0.31	157.55	2,182.73	-7.97	-1.20	-7.97	0.34	-0.25	33.06
2,272.00	0.40	171.70	2,271.73	-8.50	-1.06	-8.50	0.14	0.10	15.90
2,359.00	0.53	175.75	2,358.73	-9.20	-0.99	-9.20	0.15	0.15	4.66
2,446.00	0.26	149.47	2,445.73	-9.77	-0.86	-9.77	0.37	-0.31	-30.21
2,534.00	0.22	156.23	2,533.73	-10.10	-0.69	-10.10	0.06	-0.05	7.68
2,695.00	0.13	177.59	2,694.73	-10.56	-0.55	-10.56	0.07	-0.06	13.27
2,784.00	0.13	174.51	2,783.73	-10.76	-0.54	-10.76	0.01	0.00	-3.46
2,871.00	0.92	317.42	2,870.72	-10.35	-1.00	-10.35	1.18	0.91	164.26
2,957.00	1.49	330.26	2,956.70	-8.87	-2.02	-8.87	0.73	0.66	14.93
3,044.00	1.27	326.57	3,043.68	-7.08	-3.12	-7.08	0.27	-0.25	-4.24
3,132.00	1.58	328.24	3,131.65	-5.24	-4.29	-5.24	0.36	0.35	1.90
3,220.00	1.54	324.98	3,219.62	-3.24	-5.61	-3.24	0.11	-0.05	-3.70
3,309.00	1.49	327.09	3,308.59	-1.29	-6.93	-1.29	0.08	-0.06	2.37
3,397.00	1.32	8.31	3,396.56	0.68	-7.40	0.68	1.14	-0.19	46.84
3,485.00	1.49	30.64	3,484.54	2.66	-6.67	2.66	0.65	0.19	25.37
3,574.00	1.67	26.16	3,573.50	4.82	-5.51	4.82	0.25	0.20	-5.03
3,663.00	0.97	86.71	3,662.48	6.03	-4.19	6.03	1.64	-0.79	68.03
3,751.00	1.32	124.59	3,750.47	5.50	-2.61	5.50	0.92	0.40	43.05
3,839.00	1.05	120.55	3,838.45	4.51	-1.08	4.51	0.32	-0.31	-4.59
3,927.00	1.27	116.86	3,926.43	3.66	0.49	3.66	0.26	0.25	-4.19
4,015.00	1.19	112.46	4,014.41	2.87	2.20	2.87	0.14	-0.09	-5.00
4,104.00	1.32	112.20	4,103.39	2.13	4.00	2.13	0.15	0.15	-0.29
4,192.00	0.92	168.89	4,191.37	1.06	5.08	1.06	1.27	-0.45	64.42
4,280.00	1.10	202.20	4,279.36	-0.42	4.90	-0.42	0.69	0.20	37.85
4,368.00	1.01	201.76	4,367.35	-1.92	4.29	-1.92	0.10	-0.10	-0.50
4,456.00	1.01	204.66	4,455.33	-3.35	3.68	-3.35	0.06	0.00	3.30
4,545.00	0.97	210.64	4,544.32	-4.71	2.97	-4.71	0.12	-0.04	6.72
4,634.00	0.79	288.33	4,633.31	-5.16	2.00	-5.16	1.25	-0.20	87.29
4,723.00	1.27	310.57	4,722.30	-4.33	0.67	-4.33	0.69	0.54	24.99
4,811.00	1.36	306.79	4,810.27	-3.07	-0.91	-3.07	0.14	0.10	-4.30
4,900.00	1.63	314.44	4,899.24	-1.55	-2.66	-1.55	0.38	0.30	8.60
4,988.00	0.75	3.04	4,987.23	-0.10	-3.52	-0.10	1.44	-1.00	55.23
5,076.00	0.70	67.73	5,075.22	0.68	-2.99	0.68	0.88	-0.06	73.51
5,164.00	0.62	76.25	5,163.21	1.00	-2.03	1.00	0.14	-0.09	9.68
5,253.00	0.66	76.43	5,252.21	1.23	-1.07	1.23	0.05	0.04	0.20



Survey Report

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Site:	OZZY STATE 18 SWD	MD Reference:	RKB = 20.2' @ 3674.20usft (AKITA 523)
Well:	1	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	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)	
5,341.00	0.48	46.37	5,340.20	1.61	-0.31	1.61	0.39	-0.20	-34.16	
5,430.00	0.53	60.17	5,429.20	2.07	0.32	2.07	0.15	0.06	15.51	
5,518.00	0.26	76.52	5,517.20	2.32	0.87	2.32	0.33	-0.31	18.58	
5,607.00	0.40	54.37	5,606.20	2.55	1.31	2.55	0.21	0.16	-24.89	
5,696.00	0.22	350.47	5,695.20	2.89	1.54	2.89	0.41	-0.20	-71.80	
5,784.00	0.22	79.59	5,783.20	3.09	1.68	3.09	0.35	0.00	101.27	
5,873.00	0.18	17.45	5,872.19	3.26	1.89	3.26	0.24	-0.04	-69.82	
5,961.00	0.18	223.73	5,960.19	3.29	1.83	3.29	0.40	0.00	-174.68	
6,050.00	0.09	100.86	6,049.19	3.17	1.81	3.17	0.27	-0.10	-138.06	
6,139.00	0.31	219.16	6,138.19	2.97	1.72	2.97	0.41	0.25	132.92	
6,228.00	0.31	233.40	6,227.19	2.64	1.38	2.64	0.09	0.00	16.00	
6,316.00	0.13	155.35	6,315.19	2.41	1.23	2.41	0.35	-0.20	-88.69	
6,405.00	0.26	262.58	6,404.19	2.29	1.07	2.29	0.36	0.15	120.48	
6,494.00	0.22	277.35	6,493.19	2.29	0.70	2.29	0.08	-0.04	16.60	
6,583.00	0.31	216.09	6,582.19	2.12	0.39	2.12	0.32	0.10	-68.83	
6,672.00	0.09	166.78	6,671.19	1.85	0.26	1.85	0.29	-0.25	-55.40	
6,760.00	0.04	97.96	6,759.19	1.78	0.31	1.78	0.10	-0.06	-78.20	
6,849.00	0.22	205.10	6,848.19	1.62	0.27	1.62	0.26	0.20	120.38	
6,938.00	0.18	301.96	6,937.19	1.54	0.08	1.54	0.34	-0.04	108.83	
7,025.00	0.13	271.46	7,024.19	1.62	-0.14	1.62	0.11	-0.06	-35.06	
7,113.00	0.22	328.06	7,112.19	1.76	-0.33	1.76	0.21	0.10	64.32	
7,289.00	0.22	13.15	7,288.19	2.38	-0.43	2.38	0.10	0.00	25.62	
7,377.00	0.31	55.51	7,376.19	2.68	-0.20	2.68	0.24	0.10	48.14	
7,466.00	0.31	55.42	7,465.19	2.95	0.20	2.95	0.00	0.00	-0.10	
7,555.00	0.31	40.04	7,554.18	3.27	0.55	3.27	0.09	0.00	-17.28	
7,643.00	0.35	83.64	7,642.18	3.48	0.97	3.48	0.28	0.05	49.55	
7,732.00	0.57	62.01	7,731.18	3.72	1.64	3.72	0.31	0.25	-24.30	
7,820.00	0.75	58.15	7,819.17	4.23	2.51	4.23	0.21	0.20	-4.39	
7,908.00	0.75	40.22	7,907.17	4.98	3.37	4.98	0.27	0.00	-20.37	
7,996.00	1.14	49.53	7,995.15	5.98	4.41	5.98	0.47	0.44	10.58	
8,084.00	1.14	56.92	8,083.14	7.03	5.81	7.03	0.17	0.00	8.40	
8,173.00	0.44	111.41	8,172.13	7.39	6.87	7.39	1.07	-0.79	61.22	
8,262.00	0.84	136.63	8,261.12	6.79	7.64	6.79	0.54	0.45	28.34	
8,350.00	0.70	137.95	8,349.12	5.92	8.44	5.92	0.16	-0.16	1.50	
8,439.00	0.92	147.80	8,438.11	4.91	9.18	4.91	0.29	0.25	11.07	
8,526.00	0.79	174.16	8,525.10	3.72	9.62	3.72	0.47	-0.15	30.30	
8,615.00	1.32	200.44	8,614.08	2.15	9.32	2.15	0.79	0.60	29.53	
8,704.00	1.19	199.74	8,703.06	0.32	8.65	0.32	0.15	-0.15	-0.79	
8,792.00	1.36	205.19	8,791.04	-1.48	7.90	-1.48	0.24	0.19	6.19	
8,880.00	1.45	197.98	8,879.01	-3.49	7.11	-3.49	0.23	0.10	-8.19	
8,967.00	1.67	203.26	8,965.98	-5.70	6.27	-5.70	0.30	0.25	6.07	
9,056.00	1.54	226.37	9,054.95	-7.71	4.89	-7.71	0.74	-0.15	25.97	
9,145.00	0.92	254.76	9,143.93	-8.73	3.34	-8.73	0.96	-0.70	31.90	



Survey Report

Company:	Longfellow Energy	Local Co-ordinate Reference:	Well 1
Project:	Eddy Co., NM (Nad-83)	TVD Reference:	RKB = 20.2' @ 3674.20usft (AKITA 523)
Site:	OZZY STATE 18 SWD	MD Reference:	RKB = 20.2' @ 3674.20usft (AKITA 523)
Well:	1	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	WBDS_SQL_3

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
9,233.00	0.97	301.87	9,231.92	-8.52	2.02	-8.52	0.86	0.06		53.53
9,322.00	0.75	297.39	9,320.91	-7.85	0.87	-7.85	0.26	-0.25		-5.03
9,409.00	0.84	272.60	9,407.90	-7.56	-0.28	-7.56	0.41	0.10		-28.49
9,421.00	0.79	271.19	9,419.90	-7.56	-0.45	-7.56	0.45	-0.42		-11.75
9,484.00	0.79	271.19	9,482.89	-7.54	-1.32	-7.54	0.00	0.00		0.00
Projection to Bit: 9484.00' MD/ 9482.89' TVD - TD: Y= 667059.86 / X= 609312.28 - Final Station Closure Distance= 7.65 /D										

Design Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
9,484.00	9,482.89	-7.54	-1.32	Projection to Bit: 9484.00' MD/ 9482.89' TVD	
9,484.00	9,482.89	-7.54	-1.32	TD: Y= 667059.86 / X= 609312.28	
9,484.00	9,482.89	-7.54	-1.32	Final Station Closure Distance= 7.65 /Direction= 189.90	
9,484.00	9,482.89	-7.54	-1.32	TD: Latitude= 32.833578 / Longitude= -104.112026	

Checked By: _____ Approved By: _____ Date: _____

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/ocd/contact-us>

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

ACKNOWLEDGMENTS

Action 441839

ACKNOWLEDGMENTS

Operator: LONGFELLOW ENERGY, LP 8115 Preston Road Dallas, TX 75225	OGRID: 372210
	Action Number: 441839
	Action Type: [C-105] Well (Re)Completion (C-105)

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.
☒	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.

Sante Fe Main Office
Phone: (505) 476-3441

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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 441839

CONDITIONS

Operator: LONGFELLOW ENERGY, LP 8115 Preston Road Dallas, TX 75225	OGRID: 372210
	Action Number: 441839
	Action Type: [C-105] Well (Re)Completion (C-105)

CONDITIONS

Created By	Condition	Condition Date
anthony.harris	None	4/25/2025