<u>District I</u> 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**

Form C-101 August 1, 2011

Permit 322130

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A Z	ONE
---	-----

	APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE											
1. Operator Name and Address									2. OGRID Number			
LONG	FELLOW ENERG	Y, LP						372210				
8115 Preston Road						3	3. API Number					
Dallas, TX 75225								30-015-49775				
4. Property Code	4. Property Code 5. Property Name						6	6. Well No.				
33308	39		Bonzo State Com	1924 CDX				002H				
	7. Surface Location											
UL - Lot	Section	Township Range Lot Idn Feet From N/S Line Feet From					Feet From	E/	W Line	County		
L	L 20 17S 28E 1854 S								W		Eddy	

8. Proposed Bottom Hole Location UL - Lot Section Township Range Lot Idn Feet From N/S Line Feet From E/W Line County 24 17S 27E 1846 2609 Eddy

9 Pool Information

_	5. Fooi information	
ſ	RED LAKE: GLORIETA-YESO. NORTHEAST	96836

Additional	well	Inforr	natior

11. Work Type	12. Well Type	13. Cable/Rotary	14. Lease Type	15. Ground Level Elevation	
New Well	OIL		State	3600	
16. Multiple	17. Proposed Depth	18. Formation	19. Contractor	20. Spud Date	
N	12392	Yeso		8/15/2022	
Depth to Ground water		Distance from nearest fresh water	vell	Distance to nearest surface water	

☑ We will be using a closed-loop system in lieu of lined pits

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	12.25	9.625	36	1250	0	
Prod	8.75	7	32	4350	1013	1050
Prod	8.75	5.5	20	12392	1013	1050

Casing/Cement Program: Additional Comments

22. Proposed Blowout Prevention Program

22. Floposed Blowout Flevention Flogram									
Туре	Working Pressure	Test Pressure	Manufacturer						
Double Ram	3000	3000	TBD						
Blind	3000	3000	TRD						

knowledge and b	elief.	true and complete to the best of my NMAC ⊠ and/or 19.15.14.9 (B) NMAC		OIL CONSERVATION	ON DIVISION	
Printed Name:	Electronically filed by Ryan Culpe	pper	Approved By:	Katherine Pickford		
Title:			Title:	Geoscientist		
Email Address: ryan.culpepper@longfellowenergy.com			Approved Date:	7/28/2022	Expiration Date: 7/28/2024	
Date:	7/26/2022	Phone: 972-590-9933	Conditions of Approval Attached			

<u>District I</u>
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
<u>District II</u>
811 S. First St., Artesia, NM 88210

Phone: (575) 748-1283 Fax: (575) 748-9720 <u>District III</u> 1000 Rio Brazos Road, Aztec, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170

<u>District IV</u> 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

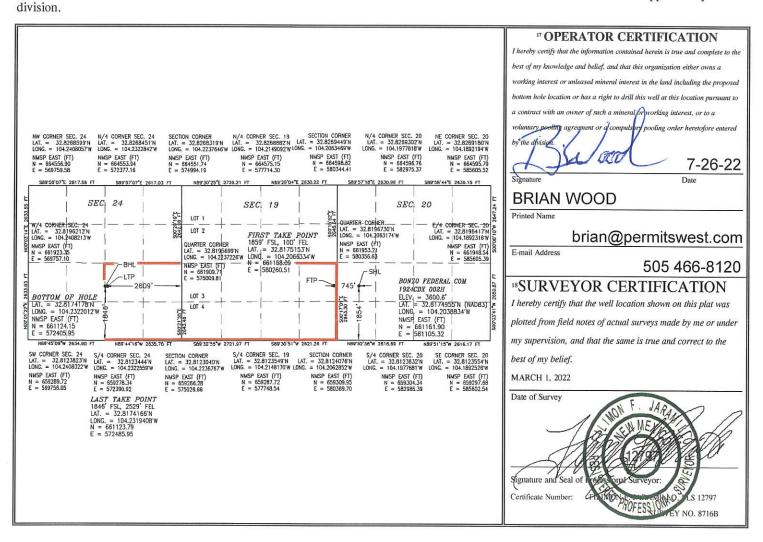
API Number	² Pool Code	³ Pool Name				
30-015- 49775	96836	96836 RED LAKE; GLORIETA-YESO,				
¹ Property Code		⁵ Property Name BONZO STATE COM 1924CDX				
333089	BONZO STAT					
OGRID No.	⁸ Op	8 Operator Name				
372210	LONGFELL	LONGFELLOW ENERGY, LP				

Surface Location

	UL or lot no. L	Section 20	Township 17 S	Range 28 E	Lot Idn	Feet from the 1854	North/South line SOUTH	Feet from the 745	East/West line WEST	County EDDY
411				пB	Bottom H	ole Location	If Different Fr	om Surface		
ì	UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
	J	24	17 S	27 E		1846	SOUTH	2609	EAST	EDDY

¹² Dedicated Acres | ¹³ Joint or Infill | ¹⁴ Consolidation Code | C | 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



Inten		S As Drill	led											
Ope	Operator Name: Property Name: Well Number													
LON	LONGFELLOW ENERGY, LP						ВО	NZO	FEDE	RAL C	OM:	19240	DX	002H
	Off Point (<u> </u>			
UL L	Section 20	Township 17S	Range 28E	Lot	Feet 1854		From N SOU		Feet 745		From WE	n E/W ST	County EDDY	
Latitu		74955	•		Longitu		4.203	3883	4				NAD 83	
First T	ake Poin	t (FTP)												
UL 	Section 19	Township 17S	Range 28E	Lot	Feet 1859		From N SOUT		Feet 100		From	n E/W S T	County EDDY	
Latitu	de 32.817	5153			Longitu	gitude 104.2066334					NAD 83			
Last T	ake Point	(LTP)								a'				
UL j	Section 24	Township 17S	Range 27E	Lot	Feet 1846		m N/S OUTH	Feet 252		From E EAST		Count EDD'		
Latitu		174166			Longitu	Longitude NAD 104.2319408					83			
Is this	Is this well the defining well for the Horizontal Spacing Unit?													
Is this	Is this well an infill well?													
Spacir	l is yes p ng Unit.	lease prov	ide API if	availa	ble, Ope	erato	r Name	e and	well	numb	er fo	r Defir	ning well	for Horizontal
API#	11/200-01	Name (No. of Street, S												
Oper	ator Nam	ne:				Pro	perty N	ame:						Well Number
LON	NGFELL	OW EN	ERGY, L	-P		ВС	NZO	FED	ERA	L CC)M 1	9240	DX	003H

KZ 06/29/2018

Form APD Conditions

Permit 322130

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

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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**

PERMIT CONDITIONS OF APPROVAL

Operator N	lame and Address:	API Number:				
	LONGFELLOW ENERGY, LP [372210]	30-015-49775				
	8115 Preston Road	Well:				
	Dallas, TX 75225	Bonzo State	e Com 1924 CDX #002H			
OCD	Condition					
Reviewer						
kpickford	Notify OCD 24 hours prior to casing & cement					
kpickford	Will require a File As Drilled C-102 and a Directional Survey with the C-104					
kpickford	The Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud					

kpickford Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh

kpickford Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud,

water zone or zones and shall immediately set in cement the water protection string kpickford Cement is required to circulate on both surface and intermediate1 strings of casing

drilling fluids and solids must be contained in a steel closed loop system

West(-)/East(+) (300 usft/in) Company: Longfellow Energy -9000-8700-8400-8100-7800-7500-7200-6900-6600-6300-6000-5700-5400-5100-4800-4500-3900-3600-3300-3000-2700-2400-2100-1800-1500-1200 -900 -600 -300 0 WELLBENDERS Project: Eddy Co., NM (Nad-83) Site: BONZO FEDERAL COM 1924CDX DIRECTIONAL SERVICES LLC LONGFELLOW ENERGY, LP Well: 002H Wellbore: Wellbore #1 Rig: AKITA 527 Design: PLAN #2 15:59, July 07 2022 WELL DETAILS: 002H PLAT LTP #2H: 1846' FSL & 2529' FEL PLAT LP/ FTP #2H: 1859' FSL & 100' FEL PROJECT DETAILS: Eddy Co., NM (Nad-83) RKB = 17' @ 3617.60usft (AKITA 527) Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980 Longitude -104.203883 **Easting** PLAT SHL #2H: 1372' FSL & 415' FWL PLAT BHL #2H: 1846' FSL & 2609' FEL Zone: New Mexico Eastern Zone 581105.32 32.817495 System Datum: Mean Sea Level **DESIGN TARGET DETAILS** Longitude Name **Easting** Sec 24 -104.232201 PLAT BHL #2H: 1846' FSL & 2609' FEL 3929.00 661124.15 572405.95 Sec 19 4031.00 -104.206633 661168.09 580260.51 32.817515 PLAT LP/ FTP #2H: 1859' FSL & 100' FEL PLAT LTP #2H: 1846' FSL & 2529' FEL 3930.04 572485.95 32.817417 -104.231941 23.60 661161.90 581105.32 32.817495 -104.203883 PLAT SHL #2H: 1372' FSL & 415' FWL West(-)/East(+) (20 usft/in) -40 -20 0 20 40 60 80 100 120 West(-)/East(+) (100 usft/in) -2000-1900-1800-1700-1600-1500-1400-1300-1200-1100-1000 -900 -800 -700 -600 -500 -400 -300 -200 -100 **SECTION DETAILS Target** Start Build 2.00 Sec 19 2993.29 2.16 84.51 2991.42 4029.17 60.00 269.68 3854.29 -377.70 6.00 4229.17 60.00 269.68 3954.29 -550.90 0.00 PLAT SHL #2H: 1372' FSL & 415' FWL 4536.61 90.74 269.68 4031.00 -844.81 10.00 PLAT LP/ FTP #2H: 1859' FSL & 100' FEL 12311.95 90.74 269.68 3930.04 PLAT LTP #2H: 1846' FSL & 2529' FEL 12391.95 90.74 269.68 3929.00 8699.45 PLAT BHL #2H: 1846' FSL & 2609' FEL PLAT SHL #1H: 1874' FSL & 743' FWL PLAT LP/ FTP #2H: 1859' FSL & 100' FEL Azimuths to Grid North True North: -0.07° Magnetic North: 6.68° PLAT SHL #2H: 1372' FSL & 415' FWL Magnetic Field Strength: 47660.9snT Dip Angle: 60.31° Date: 7/28/2022 Model: IGRF2020 West(-)/East(+) (50 usft/in) PLAT SHL #3H: 1834' FSL & 747' FWL **CORRECTION REFERENCE DATA:** PLAT BHL #2H: 1846' FSL & 2609' FEL To convert a Magnetic Direction to a Grid Direction, Add 6.685° To convert a True Direction to a Grid Direction, Subtract 0.070° To convert a Magnetic Direction to a True Direction, Add 6.755° East Magnetic Declination: 6.755°

Magnetic Dip Angle: 60.308°

Magnetic Field Strength: 47660.91062218nT -100 PLAT LTP #2H: 1846' FSL & 2529' FEL Start DLS 6.00 Start 200.00 hold at 4029.17 MD PLAT BHL #2H: 1846' FSL & 2609' FEL Start Build 10.00 TD at 12391.95 LP at 4536.61 MD lines and offset well location/ survey data is provided by customer and subject to customer approval. PLAT LTP #2H: 1846' FSL & 2529' FEL PLAT LP/ FTP #2H: 1859' FSL & 100' FEL 200 400 600 800 1000 1200 1400 1600 1800 2000 2200 2400 8600 8800 5000 5200 5400 6600 6800 7000 7200 7400 7600 7800 8000 8200 8400 8600 8800 Plan: PLAN #2 (002H/Wellbore #1) AKITA 527 Vertical Section at 269.68° (200 usft/in)

Created By: Matthew May Date: 15:59, July 07 2022





Database: Company: Project:

WBDS SQL 2 Longfellow Energy Eddy Co., NM (Nad-83)

002H

Well: Wellbore: Wellbore #1 Design: PLAN #2

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well 002H

RKB = 17' @ 3617.60usft (AKITA 527) RKB = 17' @ 3617.60usft (AKITA 527)

Minimum Curvature

Project

Site:

Eddy Co., NM (Nad-83)

Map System: Geo Datum:

US State Plane 1983 North American Datum 1983 New Mexico Eastern Zone

System Datum:

Mean Sea Level

Map Zone: Site

BONZO FEDERAL COM 1924CDX

BONZO FEDERAL COM 1924CDX

Site Position: From:

Мар **Position Uncertainty:**

Northing: Easting: Slot Radius: 660,705.77 usft 580,777.68 usft

Latitude: Longitude: 13.200 in **Grid Convergence:**

32.816243 -104.204952 0.070°

Well

002H

Well Position +N/-S +E/-W 456.13 usft 327.64 usft

0.00 usft

Northing: Easting:

661,161.90 usft 581,105.32 usft

Latitude: Longitude:

32.817496 -104.203884

Position Uncertainty

0.00 usft

Wellhead Elevation:

Ground Level:

3,600.60 usft

Wellbore

Wellbore #1

Declination **Magnetics Model Name** Sample Date **Dip Angle** Field Strength (°) (°) (nT) 60.308 47.660.91062217 IGRF2020 7/28/2022 6.755

Design

PLAN #2

Audit Notes:

Version:

Phase: Depth From (TVD) **PLAN**

Tie On Depth:

0.00

Vertical Section:

(usft)

0.00

+N/-S (usft) 0.00

+E/-W (usft) 0.00

Direction (°) 269.68

Plan Survey Tool Program

Date 7/7/2022

Depth From (usft)

Depth To (usft)

Survey (Wellbore)

Tool Name

Remarks

0.00

12,391.95 PLAN #2 (Wellbore #1)

MWD+IGRF

OWSG MWD + IGRF or WN

Plan Section	ıs									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.000	
408.09	9 2.16	84.51	408.06	0.19	2.03	2.00	2.00	0.00	84.515	
2,993.29	9 2.16	84.51	2,991.42	9.52	99.10	0.00	0.00	0.00	0.000	
4,029.17	7 60.00	269.68	3,854.29	8.80	-377.70	6.00	5.58	-16.88	-174.942	
4,229.17	7 60.00	269.68	3,954.29	7.83	-550.90	0.00	0.00	0.00	0.000	
4,536.61	1 90.74	269.68	4,031.00	6.19	-844.81	10.00	10.00	0.00	0.000	PLAT LP/ FTP #2H:
12,311.95	90.74	269.68	3,930.04	-37.30	-8,619.38	0.00	0.00	0.00	0.000	PLAT LTP #2H: 184
12,391.95	90.74	269.68	3,929.00	-37.75	-8,699.37	0.00	0.00	0.00	0.000	PLAT BHL #2H: 184





Database: Company: Project:

Site:

WBDS_SQL_2 Longfellow Energy Eddy Co., NM (Nad-83)

BONZO FEDERAL COM 1924CDX

 Well:
 002H

 Wellbore:
 Wellbore #1

 Design:
 PLAN #2

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well 002H

RKB = 17' @ 3617.60usft (AKITA 527)

RKB = 17' @ 3617.60usft (AKITA 527)

Grid

_									
Planned 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
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
408.09	2.16	84.51	408.06	0.19	2.03	-2.03	2.00	2.00	0.00
500.00	2.16	84.51	499.91	0.53	5.48	-5.48	0.00	0.00	0.00
600.00	2.16	84.51	599.84	0.89	9.24	-9.24	0.00	0.00	0.00
700.00	2.16	84.51	699.77	1.25	12.99	-13.00	0.00	0.00	0.00
800.00	2.16	84.51	799.70	1.61	16.74	-16.75	0.00	0.00	0.00
900.00	2.16	84.51	899.62	1.97	20.50	-20.51	0.00	0.00	0.00
1,000.00	2.16	84.51	999.55	2.33	24.25	-24.27	0.00	0.00	0.00
1,100.00	2.16	84.51	1,099.48	2.69	28.01	-28.02	0.00	0.00	0.00
1,200.00	2.16	84.51	1,199.41	3.05	31.76	-31.78	0.00	0.00	0.00
1,300.00	2.16	84.51	1,299.34	3.41	35.52	-35.54	0.00	0.00	0.00
1,400.00	2.16	84.51	1,399.27	3.77	39.27	-39.29	0.00	0.00	0.00
1,500.00	2.16	84.51	1,499.20	4.13	43.03	-43.05	0.00	0.00	0.00
1,600.00	2.16	84.51	1,599.13	4.49	46.78	-46.81	0.00	0.00	0.00
1,700.00	2.16	84.51	1,699.06	4.85	50.54	-50.56	0.00	0.00	0.00
1,800.00	2.16	84.51	1,798.98	5.21	54.29	-54.32	0.00	0.00	0.00
1,900.00	2.16	84.51	1,898.91	5.57	58.05	-58.08	0.00	0.00	0.00
2,000.00	2.16	84.51	1,998.84	5.93	61.80	-61.83	0.00	0.00	0.00
2,100.00	2.16	84.51	2,098.77	6.30	65.56	-65.59	0.00	0.00	0.00
2,200.00	2.16	84.51	2,198.70	6.66	69.31	-69.35	0.00	0.00	0.00
2,300.00	2.16	84.51	2,298.63	7.02	73.07	-73.10	0.00	0.00	0.00
2,400.00	2.16	84.51	2,398.56	7.38	76.82	-76.86	0.00	0.00	0.00
2,500.00	2.16	84.51	2,498.49	7.74	80.58	-80.62	0.00	0.00	0.00
2,600.00	2.16	84.51	2,598.41	8.10	84.33	-84.37	0.00	0.00	0.00
2,700.00	2.16	84.51	2,698.34	8.46	88.08	-88.13	0.00	0.00	0.00
2,800.00	2.16	84.51	2,798.27	8.82	91.84	-91.89	0.00	0.00	0.00
2,900.00	2.16	84.51	2,898.20	9.18	95.59	-95.64	0.00	0.00	0.00
2,993.29	2.16	84.51	2,991.42	9.52	99.10	-99.15	0.00	0.00	0.00
3,000.00	1.76	83.36	2,998.13	9.54	99.33	-99.38	6.00	-5.97	-17.22
3,050.00	1.26	278.24	3,048.12	9.71	99.54	-99.60	6.00	-0.99	-330.24
3,100.00	4.25	272.13	3,098.06	9.86	97.14	-97.20	6.00	5.98	-12.21
3,150.00	7.25	271.07	3,147.80	9.98	92.13	-92.19	6.00	6.00	-2.13
3,200.00	10.25	270.62	3,197.22	10.09	84.53	-84.58	6.00	6.00	-0.89
3,250.00	13.25	270.38	3,246.16	10.18	74.35	-74.40	6.00	6.00	-0.49
3,300.00	16.25	270.22	3,294.51	10.24	61.62	-61.67	6.00	6.00	-0.31
3,350.00	19.25	270.12	3,342.12	10.29	46.38	-46.43	6.00	6.00	-0.22
3,400.00	22.25	270.04	3,388.87	10.31	28.66	-28.72	6.00	6.00	-0.16
3,450.00 3,500.00 3,550.00 3,600.00 3,650.00	25.25 28.25 31.25 34.25 37.25	269.97 269.92 269.88 269.85 269.82	3,434.63 3,479.28 3,522.68 3,564.73 3,605.30	10.31 10.29 10.25 10.18 10.10	8.53 -13.98 -38.78 -65.83 -95.04	-8.58 13.92 38.73 65.77 94.98	6.00 6.00 6.00 6.00	6.00 6.00 6.00 6.00	-0.12 -0.10 -0.08 -0.07 -0.06
3,700.00	40.25	269.79	3,644.29	9.99	-126.33	126.27	6.00	6.00	-0.05
3,750.00	43.25	269.77	3,681.59	9.87	-159.62	159.56	6.00	6.00	-0.05
3,800.00	46.25	269.75	3,717.10	9.72	-194.82	194.76	6.00	6.00	-0.04
3,850.00	49.25	269.73	3,750.71	9.55	-231.82	231.77	6.00	6.00	-0.04
3,900.00	52.25	269.72	3,782.34	9.37	-270.54	270.48	6.00	6.00	-0.03
3,950.00	55.25	269.70	3,811.91	9.16	-310.85	310.80	6.00	6.00	-0.03
4,000.00	58.25	269.69	3,839.32	8.94	-352.66	352.61	6.00	6.00	-0.03
4,029.17	60.00	269.68	3,854.29	8.80	-377.70	377.64	6.00	6.00	-0.03
4,100.00	60.00	269.68	3,889.70	8.46	-439.04	438.98	0.00	0.00	0.00





Database: Company: Project: Site: WBDS_SQL_2 Longfellow Energy Eddy Co., NM (Nad-83)

BONZO FEDERAL COM 1924CDX 002H

 Well:
 002H

 Wellbore:
 Wellbore #1

 Design:
 PLAN #2

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well 002H

RKB = 17' @ 3617.60usft (AKITA 527)

RKB = 17' @ 3617.60usft (AKITA 527)

Grid

Planned 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)
4,200.00	60.00	269.68	3,939.70	7.98	-525.64	525.59	0.00	0.00	0.00
4,229.17		269.68	3,954.29	7.83	-550.90	550.85	0.00	0.00	0.00
4,250.00	62.08	269.68	3,964.37	7.73	-569.12	569.07	10.00	10.00	0.00
4,300.00 4,350.00		269.68 269.68	3,985.82 4,003.26	7.48 7.22	-614.27 -661.11	614.22 661.06	10.00 10.00	10.00 10.00	0.00 0.00
4,400.00		269.68	4,003.20	6.95	-709.30	709.25	10.00	10.00	0.00
4,450.00		269.68	4,025.59	6.67	-758.46	758.41	10.00	10.00	0.00
4,500.00		269.68	4,030.31	6.39	-808.22	808.17	10.00	10.00	0.00
4,536.61		269.68	4,031.00	6.19	-844.81	844.77	10.00	10.00	0.00
4,600.00		269.68	4,030.18	5.84	-908.20	908.15	0.00	0.00	0.00
4,700.00		269.68	4,028.88	5.28	-1,008.19	1,008.14	0.00	0.00	0.00
4,800.00		269.68	4,027.58	4.72	-1,108.18	1,108.13	0.00	0.00	0.00
4,900.00		269.68 269.68	4,026.28	4.16	-1,208.17	1,208.13	0.00	0.00 0.00	0.00
5,000.00 5,100.00		269.68	4,024.98 4,023.68	3.60 3.04	-1,308.16 -1,408.15	1,308.12 1,408.11	0.00 0.00	0.00	0.00 0.00
5,200.00		269.68	4,022.39	2.48	-1,508.14	1,508.10	0.00	0.00	0.00
5,300.00		269.68	4,021.09	1.92	-1,608.13	1,608.09	0.00	0.00	0.00
5,400.00		269.68	4,019.79	1.36	-1,708.12	1,708.08	0.00	0.00	0.00
5,500.00		269.68	4,018.49	0.80	-1,808.11	1,808.08	0.00	0.00	0.00
5,600.00		269.68	4,017.19	0.24	-1,908.10	1,908.07	0.00	0.00	0.00
5,700.00	90.74	269.68	4,015.89	-0.32	-2,008.09	2,008.06	0.00	0.00	0.00
5,800.00		269.68	4,014.60	-0.88	-2,108.08	2,108.05	0.00	0.00	0.00
5,900.00		269.68	4,013.30	-1.44	-2,208.07	2,208.04	0.00	0.00	0.00
6,000.00		269.68	4,012.00	-2.00	-2,308.06	2,308.03	0.00	0.00	0.00
6,100.00 6,200.00		269.68 269.68	4,010.70 4,009.40	-2.56 -3.11	-2,408.05 -2,508.04	2,408.03 2,508.02	0.00 0.00	0.00 0.00	0.00 0.00
6,300.00		269.68	4,008.10	-3.67	-2,608.03	2,608.01	0.00	0.00	0.00
6,400.00		269.68	4,006.10	-3.07 -4.23	-2,708.02	2,708.00	0.00	0.00	0.00
6,500.00		269.68	4,005.51	-4.79	-2,808.01	2,807.99	0.00	0.00	0.00
6,600.00		269.68	4,004.21	-5.35	-2,908.00	2,907.98	0.00	0.00	0.00
6,700.00	90.74	269.68	4,002.91	-5.91	-3,007.99	3,007.97	0.00	0.00	0.00
6,800.00		269.68	4,001.61	-6.47	-3,107.98	3,107.97	0.00	0.00	0.00
6,900.00		269.68	4,000.31	-7.03	-3,207.97	3,207.96	0.00	0.00	0.00
7,000.00		269.68	3,999.01	-7.59	-3,307.96	3,307.95	0.00	0.00	0.00
7,100.00 7,200.00		269.68 269.68	3,997.71 3,996.42	-8.15 -8.71	-3,407.95 -3,507.94	3,407.94 3,507.93	0.00 0.00	0.00 0.00	0.00 0.00
7,300.00		269.68	3,995.12		·	3,607.92	0.00		
7,300.00		269.68	3,993.82	-9.27 -9.83	-3,607.93 -3,707.92	3,707.92	0.00	0.00 0.00	0.00 0.00
7,500.00		269.68	3,992.52	-10.39	-3,807.91	3,807.91	0.00	0.00	0.00
7,600.00		269.68	3,991.22	-10.95	-3,907.90	3,907.90	0.00	0.00	0.00
7,700.00	90.74	269.68	3,989.92	-11.51	-4,007.89	4,007.89	0.00	0.00	0.00
7,800.00		269.68	3,988.63	-12.06	-4,107.88	4,107.88	0.00	0.00	0.00
7,900.00		269.68	3,987.33	-12.62	-4,207.87	4,207.87	0.00	0.00	0.00
8,000.00 8,100.00		269.68 269.68	3,986.03 3,984.73	-13.18 -13.74	-4,307.86 -4,407.85	4,307.86	0.00 0.00	0.00 0.00	0.00 0.00
8,100.00		269.68	3,984.73	-13.74 -14.30	-4,407.85 -4,507.84	4,407.86 4,507.85	0.00	0.00	0.00
8,300.00		269.68	3,982.13	-14.86	-4,607.83	4,607.84	0.00	0.00	0.00
8,400.00		269.68	3,980.83	-15.42	-4,707.82	4,707.83	0.00	0.00	0.00
8,500.00		269.68	3,979.54	-15.98	-4,807.81	4,807.82	0.00	0.00	0.00
8,600.00		269.68	3,978.24	-16.54	-4,907.80	4,907.81	0.00	0.00	0.00
8,700.00	90.74	269.68	3,976.94	-17.10	-5,007.79	5,007.81	0.00	0.00	0.00
8,800.00		269.68	3,975.64	-17.66	-5,107.78	5,107.80	0.00	0.00	0.00
8,900.00		269.68	3,974.34	-18.22	-5,207.77 5,207.76	5,207.79	0.00	0.00	0.00
9,000.00	90.74	269.68	3,973.04	-18.78	-5,307.76	5,307.78	0.00	0.00	0.00





Database: WBDS_SQL_2 Company: Project: Site:

Longfellow Energy Eddy Co., NM (Nad-83)

BONZO FEDERAL COM 1924CDX

Well: 002H Wellbore: Wellbore #1 PLAN #2 Design:

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well 002H

RKB = 17' @ 3617.60usft (AKITA 527)

RKB = 17' @ 3617.60usft (AKITA 527)

Jesigii.									
Planned 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)
9,100.00	90.74	269.68	3,971.75	-19.34	-5,407.75	5,407.77	0.00	0.00	0.00
9,200.00	90.74	269.68	3,970.45	-19.90	-5,507.74	5,507.76	0.00	0.00	0.00
9,300.00	90.74	269.68	3,969.15	-20.45	-5,607.73	5,607.76	0.00	0.00	0.00
9,400.00	90.74	269.68	3,967.85	-21.01	-5,707.72	5,707.75	0.00	0.00	0.00
9.500.00	90.74	269.68	3,966.55	-21.57	-5.807.71	5,807.74	0.00	0.00	0.00
9,600.00	90.74	269.68	3,965.25	-22.13	-5,907.70	5,907.73	0.00	0.00	0.00
9,700.00	90.74	269.68	3,963.95	-22.69	-6,007.69	6,007.72	0.00	0.00	0.00
9,800.00	90.74	269.68	3,962.66	-23.25	-6,107.68	6,107.71	0.00	0.00	0.00
9.900.00	90.74	269.68	3,961.36	-23.81	-6,207.67	6.207.70	0.00	0.00	0.00
10,000.00	90.74	269.68	3,960.06	-24.37	-6,307.66	6,307.70	0.00	0.00	0.00
10,100.00	90.74	269.68	3,958.76	-24.37 -24.93	-6,407.65	6,407.69	0.00	0.00	0.00
10,200.00	90.74	269.68	3,957.46	-25.49	-6,507.64	6,507.68	0.00	0.00	0.00
10,300.00	90.74	269.68	3,956.16	-26.05	-6,607.63	6,607.67	0.00	0.00	0.00
10,400.00	90.74	269.68	3,954.87	-26.61	-6,707.62	6,707.66	0.00	0.00	0.00
10,500.00	90.74	269.68	3,953.57	-27.17	-6,807.61	6,807.65	0.00	0.00	0.00
10,600.00	90.74	269.68	3,952.27	-27.73	-6,907.60	6,907.65	0.00	0.00	0.00
10,700.00	90.74	269.68	3,950.97	-28.29	-7,007.59	7,007.64	0.00	0.00	0.00
10.800.00	90.74	269.68	3.949.67	-28.85	-7.107.58	7,107.63	0.00	0.00	0.00
10,900.00	90.74	269.68	3,948.37	-29.40	-7,207.57	7,207.62	0.00	0.00	0.00
11,000.00	90.74	269.68	3,947.07	-29.96	-7,307.56	7,307.61	0.00	0.00	0.00
11,100.00	90.74	269.68	3,945.78	-30.52	-7,407.55	7,407.60	0.00	0.00	0.00
11,200.00	90.74	269.68	3,944.48	-31.08	-7,507.54	7,507.60	0.00	0.00	0.00
11,300.00	90.74	269.68	3,943.18	-31.64	-7,607.53	7,607.59	0.00	0.00	0.00
11,400.00	90.74	269.68	3,941.88	-32.20	-7,707.52	7,707.58	0.00	0.00	0.00
11,500.00	90.74	269.68	3,940.58	-32.76	-7,707.52 -7,807.51	7,807.57	0.00	0.00	0.00
11,600.00	90.74	269.68	3,939.28	-33.32	-7.907.50	7,907.56	0.00	0.00	0.00
	90.74	269.68			,		0.00	0.00	0.00
11,700.00			3,937.98	-33.88	-8,007.49	8,007.55			
11,800.00	90.74	269.68	3,936.69	-34.44	-8,107.48	8,107.54	0.00	0.00	0.00
11,900.00	90.74	269.68	3,935.39	-35.00	-8,207.47	8,207.54	0.00	0.00	0.00
12,000.00	90.74	269.68	3,934.09	-35.56	-8,307.46	8,307.53	0.00	0.00	0.00
12,100.00	90.74	269.68	3,932.79	-36.12	-8,407.45	8,407.52	0.00	0.00	0.00
12,200.00	90.74	269.68	3,931.49	-36.68	-8,507.44	8,507.51	0.00	0.00	0.00
12,300.00	90.74	269.68	3.930.19	-37.24	-8,607.43	8,607.50	0.00	0.00	0.00
12,311.95	90.74	269.68	3,930.04	-37.30	-8,619.38	8,619.45	0.00	0.00	0.00
12,391.95	90.74	269.68	3,929.00	-37.75	-8,699.37	8,699.45	0.00	0.00	0.00
12,001.80	30.74	203.00	3,323.00	-51.15	-0,033.37	0,000.40	0.00	0.00	0.00





Database: WBDS_SQL_2
Company: Longfellow Energy
Project: Eddy Co., NM (Nad-83)

BONZO FEDERAL COM 1924CDX

 Site:
 BONZO FEE

 Well:
 002H

 Wellbore:
 Wellbore #1

 Design:
 PLAN #2

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well 002H

RKB = 17' @ 3617.60usft (AKITA 527)

RKB = 17' @ 3617.60usft (AKITA 527)

Grid

Design Targets									
Target Name - hit/miss target E - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
PLAT SHL #2H: 1372' - plan hits target cer - Point	0.00 nter	0.00	23.60	0.00	0.00	661,161.90	581,105.32	32.817496	-104.203884
PLAT BHL #2H: 1846' - plan hits target cer - Point	0.00 nter	0.00	3,929.00	-37.75	-8,699.37	661,124.15	572,405.95	32.817418	-104.232201
PLAT LTP #2H: 1846' - plan misses target - Point	0.00 center by		3,930.04 12311.95us	-38.11 oft MD (3930	-8,619.37 .04 TVD, -37	661,123.80 7.30 N, -8619.38 E	572,485.95 Ē)	32.817417	-104.231941
PLAT LP/ FTP #2H: 1 - plan hits target cer - Point	0.00 nter	0.00	4,031.00	6.19	-844.81	661,168.09	580,260.51	32.817515	-104.206634

State of New Mexico Energy, Minerals and Natural Resources Department

Submit Electronically Via E-permitting

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

NATURAL GAS MANAGEMENT PLAN

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.

Section 1 – Plan Description Effective May 25, 2021

1. Operator: Longienow Energy, LLC	OGRID: <u>372210</u>	Date: <u>07-26-22</u>	
II. Type: ⊠ Original □ Amendment due to	D □ 19.15.27.9.D(6)(a) NN	AAC □ 19.15.27.9.D(6)(b) NMAC □ Other.	
If Other, please describe:			

III. Well(s): Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
Bonzo State Com 1924CDX 001H	30-015-	L-20-17S-28E	1874 FSL & 743 FWL	500	500	5000
Bonzo State Com 1924CDX 002H	30-015-	L-20-17S-28E	1854 FSL & 745 FWL	500	500	5000
Bonzo State Com 1924CDX 003H	30-015-	L-20-17S-28E	1834 FSL & 747 FWL	500	500	5000

- IV. Central Delivery Point Name: DCP Midstream, LP (248749) @ Elvis tie in P-19-17s-28e) [See 19.15.27.9(D)(1) NMAC]
- **V. Anticipated Schedule:** Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	Spud Date	TD Reached	Completion	Initial Flow	First Production
			Date	Commencement Date	Back Date	Date
Bonzo State Com 1924CDX 001H	30-015-	8-15-22	8-25-22	10-1-22	11-1-22	11-15-22
Bonzo State Com 1924CDX 002H	30-015-	9-1-22	9-10-22	10-25-22	11-25-22	12-10-22
Bonzo State Com 1924CDX 003H	30-015-	9-15-22	9-25-22	11-5-22	12-5-22	12-20-22

- VI. Separation Equipment:

 Attach a complete description of how Operator will size separation equipment to optimize gas capture.
- VII. Operational Practices:

 Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.
- VIII. Best Management Practices:

 Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

Section 2	<u>, –]</u>	Enha	nced	Plan
EFFEC	ΓΙVΙ	E APR	IL 1, 20)22

ø			VE APRIL 1, 2022		
reporting area must Operator certif	st complete this section	on. iired to complete this se			pture requirement for the applicable
IX. Anticipated N	Natural Gas Produc	tion:			
,	Well	API	Anticipated Average Natural Gas Rate MCF		Anticipated Volume of Natural Gas for the First Year MCF
X. Natural Gas G	athering System (N	GGS):			
Operator	System	ULSTR of Tie-in	Anticipated Gathering Start Date	Ava	ilable Maximum Daily Capacity of System Segment Tie-in
production operation of the segment or part of the segment or part of the segment or production volumes the natural gas gas well(s). Attach Operator XIV. Confidentia Section 2 as provention of the segment of the seg	ons to the existing of portion of the natural sty. The natural gas get from the well prior of the comparison of the comp	r planned interconnect of gas gathering system(s) athering system will to the date of first products does not anticipate scribed above will continuously to duction in response to serts confidentiality pur	of the natural gas gathering is to which the well(s) will be will not have capacity to ction. that its existing well(s) continue to meet anticipated incomplete the increased line pressure. Suant to Section 71-2-8 NM F 19.15.27.9 NMAC, and a	gather nected creases	ated pipeline route(s) connecting the (s), and the maximum daily capacity eted. 100% of the anticipated natural gas to the same segment, or portion, of in line pressure caused by the new 278 for the information provided in a full description of the specific

Section 3 - Certifications Effective May 25, 2021

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal:

- ☑ Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or
- □ Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system. *If Operator checks this box, Operator will select one of the following:*

Well Shut-In. □ Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or

Venting and Flaring Plan.
☐ Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including:

- (a) power generation on lease;
- (b) power generation for grid;
- (c) compression on lease;
- (d) liquids removal on lease;
- (e) reinjection for underground storage;
- (f) reinjection for temporary storage;
- (g) reinjection for enhanced oil recovery;
- (h) fuel cell production; and
- (i) other alternative beneficial uses approved by the division.

Section 4 - Notices

- 1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:
- (a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or
- (b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.
- 2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.

Signature:
Printed Name: Brian Wood
Title: Consultant
E-mail Address: brian@permitswest.com
Date: 7-26-22
Phone: 505 466-8120
OIL CONSERVATION DIVISION
(Only applicable when submitted as a standalone form)
Approved By:
Title:
Approval Date:
Conditions of Approval:



Attachment VI. Separation Equipment:

Longfellow Energy (LFE) production facilities include separation equipment designed to efficiently separate gas from liquid phases to optimize gas capture based on projected and estimated volumes from the completion project. LFE will utilize flowback separation equipment and production separation equipment designed and built to industry specifications after the completion to optimize gas capture and send gas to sales or flare based on analytical composition. LFE operates facilities that are typically multiwell facilities. Production separation equipment is upgraded or installed before new wells are completed. This equipment is on-site and tied into sales gas lines prior to flowback.

Attachment VII. Operational Practices:

19.15.27.8 Subsection A: Venting and Flaring of Natural Gas

Longfellow Energy (LFE) understands the requirements of NMAC 19.15.27.8 which states that the venting and flaring of natural gas during drilling, completion, or production operations that constitutes waste as defined in 19.15.2 are prohibited.

19.15.27.8 Subsection B: Venting and flaring during drilling operations

- 1. LFE shall capture or combust natural gas if technically feasible using best industry practices
- 2. A properly-sized flare stack shall be located at a minimum of 100 feet from the nearest surface hole location unless otherwise approved by the division.
- 3. In an emergency or malfunction, LFE may vent natural gas to avoid a risk of an immediate and substantial adverse impact on safety, public health, or the environment. LFE will report natural gas vented or flared during an emergency or malfunction to the NMOCD.

19.15.27.8 Subsection C: Venting and flaring during completion or recompletion operations

- 1. During initial flowback, LFE shall route flowback fluids into a completion or storage tank and, if technically feasible under the applicable well conditions, flare rather than vent and commence operation of a separator as soon as it is technically feasible for a separator to function
- 2. During separation flowback, LFE shall capture and route natural gas from the separation equipment:
 - a. to a gas flowline or collection system, reinject into the well, or use on-site as a fuel source or other purpose that a purchased fuel or raw material would serve; or
 - b. to a flare if routing the natural gas to a gas flowline or collection system, reinjecting it into the well, or using it on-site as a fuel source or other purpose that a purchased fuel or raw material would serve would pose a risk to safe operation or personnel safety.
- 3. If natural gas does not meet gathering pipeline quality specifications, LFE may flare the natural gas for 60 days or until the natural gas meets the pipeline quality specifications, whichever is sooner, provided that:

19.15.27.8 Subsection D: Venting and flaring during production operations

LFE shall not vent or flare natural gas except:

- 1. during an emergency or malfunction;
- 2. to unload or clean-up liquid holdup in a well to atmospheric pressure, provided
 - a. LFE does not vent after the well achieves a stabilized rate and pressure;
 - b. for liquids unloading by manual purging, LFE remains present on-site until the end of unloading or posts at the well site the contact information of the personnel conducting the liquids unloading operation and ensures that personnel remains within 30 minutes' drive time of the well being unloaded until the end of unloading, takes all reasonable actions to achieve a stabilized rate and pressure at the earliest practical time and takes reasonable actions to minimize venting to the maximum extent practicable;
 - c. during downhole well maintenance, only when LFE uses a workover rig, swabbing rig, coiled tubing unit or similar specialty equipment and minimizes the venting of natural gas to the extent that it does not pose a risk to safe operations and personnel safety
- 3. during the following activities unless prohibited by applicable state or federal law, rule, or regulation for the emission of hydrocarbons and volatile organic compounds:
 - a. gauging or sampling a storage tank or other low-pressure production vessel;
 - b. loading out liquids from a storage tank or other low-pressure production vessel to a transport vehicle;
 - c. repair and maintenance, including blowing down and depressurizing production equipment to perform repair and maintenance;
 - d. normal operation of a gas-activated pneumatic controller or pump;
 - e. normal operation of a storage tank or other low-pressure production vessel, but not including venting from a thief hatch that is not properly closed or maintained
 - f. normal operations of valves, flanges and connectors that is not the result of inadequate equipment design or maintenance;
 - g. a packer leakage test;
 - h. a production test lasting less than 24 hours unless the division requires or approves a longer test period;
 - i. when natural gas does not meet the gathering pipeline specifications, provided LFE analyzes natural gas samples twice per week to determine whether the specifications have been achieved, routes the natural gas into a gathering pipeline as soon as the pipeline specifications are met and provides the pipeline specifications and natural gas analyses to the division upon request; or
 - j. Commissioning of pipelines, equipment, or facilities only for as long as necessary to purge introduced impurities from the pipeline or equipment.

19.15.27.8 Subsection E: Performance Standards

- 1. LFE designed completion and production separation equipment and storage tanks for maximum anticipated throughput and pressure to minimize waste.
- 2. LFE permanent storage tanks associated with production operations that is routed to a flare or control device are equipped with automatic gauging system that reduces the venting of natural gas.
- 3. LFE shall combust natural gas in a flare stack that is properly sized and designed to ensure proper combustion efficiency.
 - a. The flare stack shall be equipped with an automatic ignitor or continuous pilot.
- 4. The flare stack shall be securely anchored and located at least 100 feet from the well and storage tanks unless otherwise approved by the division.
- 5. LFE shall conduct an AVO inspection weekly to confirm that all production equipment is operating properly and there are no leaks or releases except as allowed in Subsection D of 19.15.27.8 NMAC.

- a. During an AVO inspection the LFE shall inspect all components, including flare stacks, thief hatches, closed vent systems, pumps, compressors, pressure relief devices, valves, lines, flanges, connectors, and associated piping to identify defects, leaks, and releases by:
 - i. a comprehensive external visual inspection;
 - ii. listening for pressure and liquid leaks; and
 - iii. smelling for unusual and strong odors.
- b. LFE shall make and keep a record of an AVO inspection for not less than five years and make such record available for inspection by the division upon request.
- 6. facilities shall be designed to minimize waste;
- 7. LFE has an obligation to minimize waste and shall resolve emergencies as quickly and safely as is feasible.

19.15.27.8 Subsection F: Measurement or estimation of vented and flared natural gas

- 1. LFE shall measure or estimate the volume of natural gas that it vents, flares, or beneficially uses during drilling, completion, and production operations regardless of the reason or authorization for such venting or flaring.
- 2. LFE shall install equipment to measure the volume of natural gas flared from existing process piping or a flowline piped from equipment such as high pressure separators, heater treaters, or vapor recovery units associated with a well or facility associated with a well authorized by the APD

Attachment VIII. Best Management Practices:

Longfellow Energy (LFE) utilizes the following best management practices to minimize venting during active and planned maintenance

- 1. LFE has a closed vent capture system to route emissions from the heater treater, tanks and vapor to the VRU with a flare for backup. The system is designed such that if the VRU is taken out of service for any reason, the vapors will be routed to the flare for combustion.
- 2. LFE will isolate and attempt to route all vapors to the VRU or flare prior to opening any lines for maintenance to minimize venting from the equipment when technically feasible
- 3. LFE will shut in wells in the event of a takeaway disruption, emergency situations, or other operations where venting or flaring may occur due to equipment failures.
- 4. Lease operators will be visiting the location daily to check and maintain all equipment ensuring all scrubbers, flame arrestors, and the flare ignitor is functioning properly.