Form 3160-3
(June 2015)

FORM APPROVED
OMB No. 1004-0137
Expires: January 31, 2018

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.: NMLC028456

6. If Indian, Allotee or Tribe Name:

1a. Type of work: ☑ DRILL ☐ REENTER

1b. Type of Well: ☑ Oil Well ☐ Gas Well ☐ Other

1c. Type of Completion: ☐ Hydraulic Fracturing ☑ Single Zone ☐ Multiple Zone

7. If Unit or CA Agreement, Name and No.:

8. Lease Name and Well No.: BONZO FEDERAL COM 1924 CDX 004H

2. Name of Operator: LONGFELLOW ENERGY LP

9. API Well No.: 30-015-56734

3a. Address: 8115 PRESTON ROAD SUITE 800, DALLAS, TX 75225

3b. Phone No. *(include area code)*: (972) 590-9900

10. Field and Pool, or Exploratory: RED LAKE/GLORIETA YESO NE

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*

At surface: SWSW / 980 FSL / 835 FWL / LAT 32.815093 / LONG -104.20358

At proposed prod. zone: SWSE / 1020 FSL / 2612 FEL / LAT 32.815147 / LONG -104.2321962

11. Sec., T. R. M. or Blk. and Survey or Area: SEC 20/T17S/R28E/NMP

14. Distance in miles and direction from nearest town or post office*: 11 miles

12. County or Parish: EDDY

13. State: NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any): 835 feet

16. No of acres in lease:

17. Spacing Unit dedicated to this well: 486.05

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.: 20 feet

19. Proposed Depth: 3769 feet / 12258 feet

20. BLM/BIA Bond No. in file: FED: NMB001490

21. Elevations (Show whether DF, KDB, RT, GL, etc.): 3576 feet

22. Approximate date work will start*: 04/01/2025

23. Estimated duration: 60 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable)

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be requested by the BLM.

25. Signature	Name *(Printed/Typed)*	Date
(Electronic Submission)	BRIAN WOOD / Ph: (972) 590-9900	10/22/2024

Title: Permitting Agent

Approved by *(Signature)*	Name *(Printed/Typed)*	Date
(Electronic Submission)	CODY LAYTON / Ph: (575) 234-5959	04/25/2025

Title	Office
Assistant Field Manager Lands & Minerals	Carlsbad Field Office

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

APPROVED WITH CONDITIONS

(Continued on page 2)

*(Instructions on page 2)

Approval Date: 04/25/2025

C-102	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION	Revised July 9, 2024
Submit Electronically Via OCD Permitting		Submittal Type: ☑ Initial Submittal ☐ Amended Report ☐ As Drilled

WELL LOCATION INFORMATION

API Number	Pool Code	Pool Name	
30-015- 56734	96210 ~~96836~~	Empire; Glorieta-Yeso ~~RED LAKE; GLORIETA-YESO, NORTHEAST~~	
Property Code 337332	Property Name BONZO FEDERAL COM 1924 CDX		Well Number 004H
OGRID No. 372210	Operator Name LONGFELLOW ENERGY, LP		Ground Level Elevation 3577.5
Surface Owner: ☑State ☐Fee ☐Tribal ☐Federal		Mineral Owner: ☑State ☐Fee ☐Tribal ☑Federal	

Surface Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
M	20	17 S	28 E		980 SOUTH	835 WEST	32.8150930°N	104.2035800°W	EDDY

Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
O	24	17 S	27 E		1020 SOUTH	2612 EAST	32.8151470°N	104.2321962°W	EDDY

Dedicated Acres	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
486.05	INFILL	30-015-49776	N	C
Order Numbers.			Well setbacks are under Common Ownership: ☑Yes ☐No	

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
M	20	17 S	28 E		980 SOUTH	835 WEST	32.8150930°N	104.2035800°W	EDDY

First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
P	19	17 S	28 E		1020 SOUTH	100 EAST	32.8152085°N	104.2066231°W	EDDY

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
O	24	17 S	27 E		1020 SOUTH	2532 EAST	32.8151458°N	104.2319359°W	EDDY

Unitized Area or Area of Uniform Interest	Spacing Unit Type ☑Horizontal ☐Vertical	Ground Floor Elevation:

OPERATOR CERTIFICATIONS

I hereby certify that the information contained herein is true and complete to the best ofmy knowledge and belief, and, if the well is a vertical or directional well, 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 a working interest run leased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order here to fore entered by the division.

If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.

Signature — Date: 10-7-24

BRIAN WOOD
Printed Name

brian@permitswest.com
Email Address

SURVEYOR CERTIFICATIONS

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.

FILIMON F. JARAMILLO NEW MEXICO 12797 REGISTERED PROFESSIONAL SURVEYOR

Signature and Seal of Professional Surveyor

FILIMON F. JARAMILLO

CertificateNumber	Dateof Survey
PLS 12797	SEPTEMBER 5, 2024
	SURVEY NO. 8718A

Note: 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.

ACREAGE DEDICATION PLATS

This grid represents a standard section. You may superimpose a non-standard section, or larger area, over this grid. Operators must outline the dedicated acreage in a red box, clearly show the well surface location and bottom hole location, if it is directionally drilled, with the dimensions from the section lines in the cardinal directions. If this is a horizontal wellbore show on this plat the location of the First Take Point and Last Take Point, and the point within the Completed interval (other than the First Take Point or Last Take Point) that is closest to any outer boundary of the tract.

Surveyors shall use the latest United States government survey or dependent resurvey. Well locations will be in reference to the New Mexico Principal Meridian. If the land is not surveyed, contact the OCD Engineering Bureau. Independent subdivision surveys will not be acceptable.

BONZO FEDERAL COM 1924 CDX 004H

EL. = 3577.5

GEODETIC COORDINATES
NAD 83 NMSP EAST
SURFACE LOCATION
N.= 660287.95
E.= 581199.62
LAT. = 32.8150930°N
LONG. = 104.2035800°W

KICK OFF POINT
980' FSL, 835' FWL
N.= 660287.95
E.= 581199.62
LAT. = 32.8150930°N
LONG. = 104.2035800°W

FIRST TAKE POINT (PPP 1)
1020' FSL, 100' FEL
N.= 660328.83
E.= 580264.69
LAT. = 32.8152085°N
LONG. = 104.2066231°W

LAST TAKE POINT
1020' FSL, 2532' FEL
N.= 660297.66
E.= 572488.25
LAT. = 32.8151458°N
LONG. = 104.2319359°W

BOTTOM OF HOLE
1020' FSL, 2612 ' FEL
N.= 660298.02
E.= 572408.27
LAT. = 32.8151470°N
LONG. = 104.2321962°W

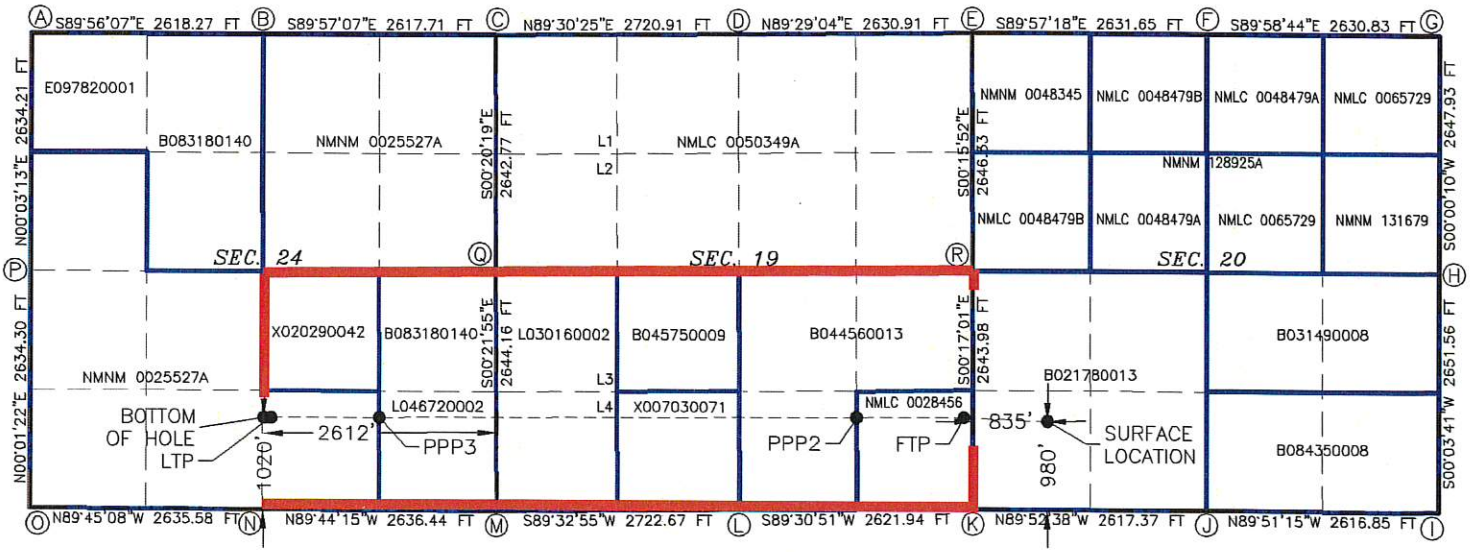
PPP 2
1025' FSL, 1312' FEL
N.= 660323.97
E.= 579053.35
LAT. = 32.8151990°N
LONG. = 104.2105660°W

PPP 3
1030' FSL, 1316' FEL
N.= 660302.53
E.= 573704.28
LAT. = 32.8151560°N
LONG. = 104.2279776°W

CORNER COORDINATES TABLE
NAD 83 NMSP EAST

A –	N.= 664556.89	E.= 569759.57
B –	N.= 664553.93	E.= 572377.16
C –	N.= 664551.74	E.= 574994.19
D –	N.= 664575.15	E.= 577714.30
E –	N.= 664598.82	E.= 580344.41
F –	N.= 664596.76	E.= 582975.37
G –	N.= 664595.79	E.= 585605.52
H –	N.= 661948.54	E.= 585605.39
I –	N.= 659297.68	E.= 585602.54
J –	N.= 659304.34	E.= 582986.39
K –	N.= 659309.95	E.= 580369.70
L –	N.= 659287.72	E.= 577748.54
M –	N.= 659266.28	E.= 575026.66
N –	N.= 659278.36	E.= 572390.93
O –	N.= 659289.75	E.= 569756.06
P –	N.= 661923.36	E.= 569757.11
Q –	N.= 661909.71	E.= 575009.81
R –	N.= 661953.21	E.= 580356.63

LEGEND
SECTION LINE
QUARTER LINE
LEASE LINE
WELL PATH



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

I. Operator: Longfellow Energy, LP **OGRID:** 372210 **Date:** 10-21-24

II. Type: ☒ Original ☐ Amendment due to ☐ 19.15.27.9.D(6)(a) NMAC ☐ 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 Federal Com 1924 CDX 004H	30-015-	M-20-17S-28E	980 FSL & 835 FWL	250	400	1750
Bonzo Federal Com 1924 CDX 005H	30-015-	M-20-17S-28E	960 FSL & 835 FWL	250	400	1750
Bonzo Federal Com 1924 CDX 006H	30-015-	M-20-17S-28E	940 FSL & 835 FWL	250	400	1750

IV. Central Delivery Point Name: DCP Midstream, LP (248749) 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 Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
Bonzo Federal Com 1924 CDX 004H	30-015-	3-15-25	3-23-25	7-15-25	9-1-25	9-15-25
Bonzo Federal Com 1924 CDX 005H	30-015-	3-24-25	4-1-25	7-15-25	9-1-25	9-15-25
Bonzo Federal Com 1924 CDX 006H	30-015-	4-2-25	4-10-25	7-15-25	9-1-25	9-15-25

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 – Enhanced Plan
EFFECTIVE APRIL 1, 2022

Beginning April 1, 2022, an operator that is not in compliance with its statewide natural gas capture requirement for the applicable reporting area must complete this section.

☑ Operator certifies that it is not required to complete this section because Operator is in compliance with its statewide natural gas capture requirement for the applicable reporting area.

IX. Anticipated Natural Gas Production:

Well	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF

X. Natural Gas Gathering System (NGGS):

Operator	System	ULSTR of Tie-in	Anticipated Gathering Start Date	Available Maximum Daily Capacity of System Segment Tie-in

XI. Map. ☐ Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of the segment or portion of the natural gas gathering system(s) to which the well(s) will be connected.

XII. Line Capacity. The natural gas gathering system ☐ will ☐ will not have capacity to gather 100% of the anticipated natural gas production volume from the well prior to the date of first production.

XIII. Line Pressure. Operator ☐ does ☐ does not anticipate that its existing well(s) connected to the same segment, or portion, of the natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the new well(s).

☐ Attach Operator's plan to manage production in response to the increased line pressure.

XIV. Confidentiality: ☐ Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provided in Section 2 as provided in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and attaches a full description of the specific information for which confidentiality is asserted and the basis for such assertion.

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: 10-21-24
Phone: 505 466-8120

OIL CONSERVATION DIVISION **(Only applicable when submitted as a standalone form)**
Approved By:
Title:
Approval Date:
Conditions of Approval:

AFMSS
U.S. Department of the Interior
BUREAU OF LAND MANAGEMENT

Drilling Plan Data Report
04/28/2025

APD ID: 10400101494
Submission Date: 10/22/2024
Operator Name: LONGFELLOW ENERGY LP
Well Name: BONZO FEDERAL COM 1924 CDX
Well Number: 004H
Well Type: OIL WELL
Well Work Type: Drill

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical	Measured Depth	Lithologies	Mineral Resources	Producing Formatio
15502200	QUATERNARY	3576	0	0	OTHER : Caliche	USEABLE WATER	N
15502201	RUSTLER ANHYDRITE	3362	214	214	ANHYDRITE	NONE	N
15502202	SEVEN RIVERS	3104	472	472	GYPSUM	NONE	N
15502203	QUEEN	2482	1094	1094	SANDSTONE	NATURAL GAS, OIL	N
15502204	GRAYBURG	2044	1532	1532	DOLOMITE	NATURAL GAS, OIL	N
15502205	SAN ANDRES	1731	1845	1845	DOLOMITE	NATURAL GAS, OIL	N
15502206	GLORIETA	333	3243	3251	DOLOMITE	NATURAL GAS, OIL	N
15502207	PADDOCK	301	3275	3287	DOLOMITE	NATURAL GAS, OIL	N
15502208	BLINEBRY	-168	3744	3943	DOLOMITE	NATURAL GAS, OIL	Y

Section 2 - Blowout Prevention

Pressure Rating (PSI): 3M
Rating Depth: 5000

Equipment: A 3000-psi BOP stack (rated to 5000) consisting of annular preventer and double (blind and pipe) ram will be used below surface casing to TD. Other accessories to the BOPE will include a speed head, Kelly cock and floor safety valve (inside BOP), and choke lines and choke manifold. BOP and choke diagrams are attached.

Requesting Variance? YES

Variance request: Variance is requested to use a flex-hose. Test certificate for a typical hose is attached. Certificate for the hose in use will be available on the rig before spud.
Testing Procedure: BOP/BOPE will be tested by an independent service company to 250-psi low and 3000-psi high per Onshore Order 2 requirements. The system may be upgraded to a higher pressure, but still tested as described above. If the system is upgraded, then all the installed components will be functional and tested.Pipe rams will be operationally checked each 24-hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets.
Choke Diagram Attachment:

Operator Name: LONGFELLOW ENERGY LP

Well Name: BONZO FEDERAL COM 1924 CDX **Well Number:** 004H

Bonzo_CDX_Choke_20241014114608.pdf

BOP Diagram Attachment:

Bonzo_CDX_BOP_20241014114615.pdf

Section 3 - Casing

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	SURFACE	17.5	13.375	NEW	API	N	0	375	0	375	3576	3201	375	J-55	54.5	LT&C	1.125	1.125	DRY	1.8	DRY	1.8
2	INTERMEDIATE	12.25	9.625	NEW	API	N	0	1325	0	1325	0	2251	1325	J-55	36	LT&C	1.125	1.125	DRY	1.8	DRY	1.8
3	PRODUCTION	8.75	7.0	NEW	API	N	0	4241	0	3877	3576	-301	4241	HCL-80	32	BUTT	1.125	1.125	DRY	1.8	DRY	1.8
4	PRODUCTION	8.75	5.5	NEW	API	N	4241	12258	3877	3769	-301	-193	8017	HCL-80	20	BUTT	1.125	1.125	DRY	1.8	DRY	1.8

Casing Attachments

Casing ID: 1 **String** SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Bonzo_CDX_4H_Casing_Design_Assumptions_20241014115258.pdf

Operator Name: LONGFELLOW ENERGY LP

Well Name: BONZO FEDERAL COM 1924 CDX **Well Number:** 004H

Casing Attachments

Casing ID: 2 **String** INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Bonzo_CDX_4H_Casing_Design_Assumptions_20241014115525.pdf

Casing ID: 3 **String** PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Bonzo_CDX_4H_Casing_Design_Assumptions_20241014150919.pdf

Casing ID: 4 **String** PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Bonzo_CDX_4H_Casing_Design_Assumptions_20241014151103.pdf

Section 4 - Cement

Operator Name: LONGFELLOW ENERGY LP

Well Name: BONZO FEDERAL COM 1924 CDX **Well Number:** 004H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	375	305	1.68	13.5	512	250	Class C	None
SURFACE	Tail		0	375	200	1.33	14.8	266	250	Class C	None
PRODUCTION	Lead		0	1125	340	2.08	12.2	707	10	25/75 Poz C	None
PRODUCTION	Tail		1125	12258	1600	1.4	14.5	2240	10	Class C	None
INTERMEDIATE	Lead		0	1325	575	1.42	12.8	816	130	50/50 Poz Class C	None
INTERMEDIATE	Tail		0	1325	195	1.33	14.8	259	130	Class C	None

Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

Description of the equipment for the circulating system in accordance with 43 CFR 3172:

Diagram of the equipment for the circulating system in accordance with 43 CFR 3172:

Describe what will be on location to control well or mitigate other conditions: All necessary mud products (LCM) will be on site to handle any abnormal hole condition that may be encountered while drilling this well.

Describe the mud monitoring system utilized: An electronic/mechanical mud monitor with a minimum pit volume totalizer, stroke counter, and flow sensor will be used.

Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	375	OTHER : Fresh water/Gel	8.4	9							
375	1325	OTHER : Salt Saturated	8.8	9.2							
1325	12258	OTHER : Cut Brine	8.8	9.2							

Operator Name: LONGFELLOW ENERGY LP

Well Name: BONZO FEDERAL COM 1924 CDX **Well Number:** 004H

Section 6 - Test, Logging, Coring

List of production tests including testing procedures, equipment and safety measures:

A mud logger will be used from GL to TD. Samples will be collected every 10 in the lateral pay zone. No electric logs are planned at this time.

List of open and cased hole logs run in the well:

MUD LOG/GEOLOGICAL LITHOLOGY LOG,

Coring operation description for the well:

No core or drill stem test is planned.

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 1771 **Anticipated Surface Pressure:** 914

Anticipated Bottom Hole Temperature(F): 75

Anticipated abnormal pressures, temperatures, or potential geologic hazards? NO

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations

Bonzo_CDX_H2S_Plan_20241014124835.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Bonzo_CDX_4H_Horizontal_Plan_20241014124847.pdf

Other proposed operations facets description:

Other proposed operations facets attachment:

CoFlex_Certs_20241014124916.pdf
Bonzo_CDX_4H_Anticollision_Report_20241014124927.pdf
Bonzo_CDX_4H_Drill_Plan_20241022145038.pdf
Bonzo_CDX_WMP_20250205114311.pdf

Other Variance attachment:

LONGFELLOW ENERGY, LP

Planning Report

WELLBENDERS DIRECTIONAL SERVICES LLC

Database:	WBDS_SQL_3	**Local Co-ordinate Reference:**	Well 004H
Company:	Longfellow Energy	**TVD Reference:**	RKB = 20.2' @ 3597.70usft (AKITA 523)
Project:	Eddy Co., NM (Nad-83)	**MD Reference:**	RKB = 20.2' @ 3597.70usft (AKITA 523)
Site:	BONZO FEDERAL COM 19-24 CDX	**North Reference:**	Grid
Well:	004H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

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 BONZO FEDERAL COM 19-24 CDX

Site Position:		**Northing:**	660,287.95 usft	**Latitude:**	32.815093
From:	Map	**Easting:**	581,199.62 usft	**Longitude:**	-104.203580
Position Uncertainty:	0.00 usft	**Slot Radius:**	13.200 in		

Well 004H

Well Position	**+N/-S**	0.00 usft	**Northing:**	660,287.95 usft	**Latitude:**	32.815093
	+E/-W	0.00 usft	**Easting:**	581,199.62 usft	**Longitude:**	-104.203580
Position Uncertainty		0.00 usft	**Wellhead Elevation:**	usft	**Ground Level:**	3,577.50 usft
Grid Convergence:		0.070 °				

Wellbore OH

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	9/15/2024	6.505	60.236	47,438.33814808

Design PLAN #1

Audit Notes:

Version:		**Phase:**	PLAN	**Tie On Depth:**	0.00

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	269.78

Plan Survey Tool Program **Date** 8/15/2024

	Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	12,257.84	PLAN #1 (OH)	MWD+IFR1+SAG+FDIR	
				OWSG MWD + IFR1 + Sag	

Plan Sections

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	
342.91	0.86	17.34	342.91	0.31	0.10	2.00	2.00	0.00	17.339	
2,886.79	0.86	17.34	2,886.50	36.68	11.45	0.00	0.00	0.00	0.000	
3,891.16	60.00	269.78	3,717.81	42.72	-466.06	6.00	5.89	-10.71	-108.033	
4,091.16	60.00	269.78	3,817.81	42.04	-639.27	0.00	0.00	0.00	0.000	
4,400.35	90.92	269.78	3,894.50	40.88	-934.93	10.00	10.00	0.00	0.000	BONZO 4H: FTP, P
12,257.84	90.92	269.78	3,768.50	10.07	-8,791.35	0.00	0.00	0.00	0.000	BONZO 4H: BHL

LONGFELLOW ENERGY, LP

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Site:	BONZO FEDERAL COM 19-24 CDX	**North Reference:**	Grid
Well:	004H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

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
BONZO 4H: SHL									
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
BONZO 4H: KOP									
342.91	0.86	17.34	342.91	0.31	0.10	-0.10	2.00	2.00	0.00
400.00	0.86	17.34	399.99	1.12	0.35	-0.35	0.00	0.00	0.00
500.00	0.86	17.34	499.98	2.55	0.80	-0.81	0.00	0.00	0.00
600.00	0.86	17.34	599.97	3.98	1.24	-1.26	0.00	0.00	0.00
700.00	0.86	17.34	699.96	5.41	1.69	-1.71	0.00	0.00	0.00
800.00	0.86	17.34	799.95	6.84	2.14	-2.16	0.00	0.00	0.00
900.00	0.86	17.34	899.94	8.27	2.58	-2.61	0.00	0.00	0.00
1,000.00	0.86	17.34	999.92	9.70	3.03	-3.07	0.00	0.00	0.00
1,093.59	0.86	17.34	1,093.50	11.04	3.45	-3.49	0.00	0.00	0.00
QUEEN									
1,100.00	0.86	17.34	1,099.91	11.13	3.48	-3.52	0.00	0.00	0.00
1,200.00	0.86	17.34	1,199.90	12.56	3.92	-3.97	0.00	0.00	0.00
1,300.00	0.86	17.34	1,299.89	13.99	4.37	-4.42	0.00	0.00	0.00
1,400.00	0.86	17.34	1,399.88	15.42	4.81	-4.87	0.00	0.00	0.00
1,500.00	0.86	17.34	1,499.87	16.85	5.26	-5.33	0.00	0.00	0.00
1,531.63	0.86	17.34	1,531.50	17.30	5.40	-5.47	0.00	0.00	0.00
GRAYBURG									
1,600.00	0.86	17.34	1,599.86	18.28	5.71	-5.78	0.00	0.00	0.00
1,700.00	0.86	17.34	1,699.85	19.71	6.15	-6.23	0.00	0.00	0.00
1,800.00	0.86	17.34	1,799.83	21.14	6.60	-6.68	0.00	0.00	0.00
1,848.67	0.86	17.34	1,848.50	21.83	6.82	-6.90	0.00	0.00	0.00
UPPER SAN ANDRES									
1,900.00	0.86	17.34	1,899.82	22.57	7.05	-7.13	0.00	0.00	0.00
2,000.00	0.86	17.34	1,999.81	24.00	7.49	-7.58	0.00	0.00	0.00
2,100.00	0.86	17.34	2,099.80	25.43	7.94	-8.04	0.00	0.00	0.00
2,200.00	0.86	17.34	2,199.79	26.86	8.39	-8.49	0.00	0.00	0.00
2,300.00	0.86	17.34	2,299.78	28.29	8.83	-8.94	0.00	0.00	0.00
2,400.00	0.86	17.34	2,399.77	29.72	9.28	-9.39	0.00	0.00	0.00
2,500.00	0.86	17.34	2,499.76	31.15	9.72	-9.84	0.00	0.00	0.00
2,600.00	0.86	17.34	2,599.75	32.58	10.17	-10.30	0.00	0.00	0.00
2,700.00	0.86	17.34	2,699.73	34.01	10.62	-10.75	0.00	0.00	0.00
2,800.00	0.86	17.34	2,799.72	35.44	11.06	-11.20	0.00	0.00	0.00
2,886.79	0.86	17.34	2,886.50	36.68	11.45	-11.59	0.00	0.00	0.00
2,900.00	0.97	326.46	2,899.71	36.86	11.42	-11.56	6.00	0.86	-385.23
2,950.00	3.62	282.32	2,949.67	37.55	9.64	-9.79	6.00	5.30	-88.28
3,000.00	6.58	276.40	2,999.47	38.21	5.25	-5.40	6.00	5.92	-11.83
3,050.00	9.56	274.15	3,048.97	38.83	-1.74	1.59	6.00	5.97	-4.49
3,100.00	12.55	272.97	3,098.03	39.41	-11.31	11.15	6.00	5.98	-2.37
3,150.00	15.55	272.24	3,146.53	39.96	-23.43	23.28	6.00	5.99	-1.47
3,200.00	18.54	271.74	3,194.33	40.46	-38.08	37.92	6.00	5.99	-1.00
3,250.00	21.54	271.37	3,241.30	40.92	-55.21	55.05	6.00	5.99	-0.73
3,251.30	21.62	271.36	3,242.50	40.93	-55.68	55.52	6.00	6.00	-0.63
GLORIETA									
3,287.07	23.76	271.16	3,275.50	41.24	-69.48	69.32	6.00	6.00	-0.58
TOP PADDOCK									
3,300.00	24.54	271.09	3,287.30	41.34	-74.77	74.61	6.00	6.00	-0.51
3,350.00	27.54	270.87	3,332.22	41.71	-96.71	96.55	6.00	6.00	-0.44

LONGFELLOW ENERGY, LP

Planning Report

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Project:	Eddy Co., NM (Nad-83)	**MD Reference:**	RKB = 20.2' @ 3597.70usft (AKITA 523)
Site:	BONZO FEDERAL COM 19-24 CDX	**North Reference:**	Grid
Well:	004H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

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)
3,400.00	30.54	270.69	3,375.93	42.04	-120.97	120.81	6.00	6.00	-0.36
3,450.00	33.54	270.54	3,418.31	42.32	-147.49	147.33	6.00	6.00	-0.30
3,500.00	36.53	270.41	3,459.25	42.56	-176.19	176.03	6.00	6.00	-0.26
3,550.00	39.53	270.29	3,498.63	42.74	-207.00	206.83	6.00	6.00	-0.23
3,600.00	42.53	270.19	3,536.34	42.88	-239.82	239.65	6.00	6.00	-0.20
3,615.26	43.45	270.17	3,547.50	42.91	-250.22	250.06	6.00	6.00	-0.18
BASAL PADDOCK									
3,650.00	45.53	270.11	3,572.28	42.97	-274.57	274.40	6.00	6.00	-0.17
3,700.00	48.53	270.03	3,606.36	43.01	-311.15	310.98	6.00	6.00	-0.16
3,750.00	51.53	269.95	3,638.47	43.00	-349.46	349.30	6.00	6.00	-0.15
3,800.00	54.53	269.89	3,668.54	42.95	-389.41	389.24	6.00	6.00	-0.13
3,850.00	57.53	269.82	3,696.47	42.84	-430.87	430.70	6.00	6.00	-0.12
3,891.16	60.00	269.78	3,717.81	42.72	-466.06	465.90	6.00	6.00	-0.12
3,900.00	60.00	269.78	3,722.23	42.69	-473.72	473.55	0.00	0.00	0.00
3,942.54	60.00	269.78	3,743.50	42.54	-510.55	510.39	0.00	0.00	0.00
UPPER LINEBRY									
4,000.00	60.00	269.78	3,772.23	42.35	-560.32	560.15	0.00	0.00	0.00
4,091.16	60.00	269.78	3,817.81	42.04	-639.27	639.10	0.00	0.00	0.00
4,100.00	60.88	269.78	3,822.17	42.01	-646.95	646.79	10.00	10.00	0.00
4,150.00	65.88	269.78	3,844.57	41.83	-691.64	691.48	10.00	10.00	0.00
4,200.00	70.88	269.78	3,862.98	41.65	-738.11	737.94	10.00	10.00	0.00
4,250.00	75.88	269.78	3,877.27	41.46	-786.01	785.84	10.00	10.00	0.00
4,300.00	80.88	269.78	3,887.34	41.27	-834.97	834.80	10.00	10.00	0.00
4,350.00	85.88	269.78	3,893.10	41.08	-884.62	884.45	10.00	10.00	0.00
4,400.35	90.92	269.78	3,894.50	40.88	-934.93	934.77	10.00	10.00	0.00
UPPER BLINEBRY TGT - BONZO 4H: FTP, PPP 1									
4,500.00	90.92	269.78	3,892.90	40.49	-1,034.57	1,034.40	0.00	0.00	0.00
4,600.00	90.92	269.78	3,891.30	40.10	-1,134.55	1,134.39	0.00	0.00	0.00
4,700.00	90.92	269.78	3,889.69	39.71	-1,234.54	1,234.38	0.00	0.00	0.00
4,800.00	90.92	269.78	3,888.09	39.31	-1,334.53	1,334.37	0.00	0.00	0.00
4,900.00	90.92	269.78	3,886.49	38.92	-1,434.51	1,434.35	0.00	0.00	0.00
5,000.00	90.92	269.78	3,884.88	38.53	-1,534.50	1,534.34	0.00	0.00	0.00
5,100.00	90.92	269.78	3,883.28	38.14	-1,634.49	1,634.33	0.00	0.00	0.00
5,200.00	90.92	269.78	3,881.68	37.74	-1,734.47	1,734.31	0.00	0.00	0.00
5,300.00	90.92	269.78	3,880.07	37.35	-1,834.46	1,834.30	0.00	0.00	0.00
5,400.00	90.92	269.78	3,878.47	36.96	-1,934.44	1,934.29	0.00	0.00	0.00
5,500.00	90.92	269.78	3,876.87	36.57	-2,034.43	2,034.28	0.00	0.00	0.00
5,600.00	90.92	269.78	3,875.26	36.18	-2,134.42	2,134.26	0.00	0.00	0.00
5,611.85	90.92	269.78	3,875.07	36.13	-2,146.27	2,146.12	0.00	0.00	0.00
BONZO 4H: PPP 2									
5,700.00	90.92	269.78	3,873.66	35.78	-2,234.40	2,234.25	0.00	0.00	0.00
5,800.00	90.92	269.78	3,872.06	35.39	-2,334.39	2,334.24	0.00	0.00	0.00
5,900.00	90.92	269.78	3,870.45	35.00	-2,434.38	2,434.22	0.00	0.00	0.00
6,000.00	90.92	269.78	3,868.85	34.61	-2,534.36	2,534.21	0.00	0.00	0.00
6,100.00	90.92	269.78	3,867.25	34.22	-2,634.35	2,634.20	0.00	0.00	0.00
6,200.00	90.92	269.78	3,865.64	33.82	-2,734.34	2,734.19	0.00	0.00	0.00
6,300.00	90.92	269.78	3,864.04	33.43	-2,834.32	2,834.17	0.00	0.00	0.00
6,400.00	90.92	269.78	3,862.43	33.04	-2,934.31	2,934.16	0.00	0.00	0.00
6,500.00	90.92	269.78	3,860.83	32.65	-3,034.29	3,034.15	0.00	0.00	0.00
6,600.00	90.92	269.78	3,859.23	32.25	-3,134.28	3,134.13	0.00	0.00	0.00
6,700.00	90.92	269.78	3,857.62	31.86	-3,234.27	3,234.12	0.00	0.00	0.00
6,800.00	90.92	269.78	3,856.02	31.47	-3,334.25	3,334.11	0.00	0.00	0.00
6,900.00	90.92	269.78	3,854.42	31.08	-3,434.24	3,434.10	0.00	0.00	0.00

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Wellbore:	OH		
Design:	PLAN #1		

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)
7,000.00	90.92	269.78	3,852.81	30.69	-3,534.23	3,534.08	0.00	0.00	0.00
7,100.00	90.92	269.78	3,851.21	30.29	-3,634.21	3,634.07	0.00	0.00	0.00
7,200.00	90.92	269.78	3,849.61	29.90	-3,734.20	3,734.06	0.00	0.00	0.00
7,300.00	90.92	269.78	3,848.00	29.51	-3,834.19	3,834.04	0.00	0.00	0.00
7,400.00	90.92	269.78	3,846.40	29.12	-3,934.17	3,934.03	0.00	0.00	0.00
7,500.00	90.92	269.78	3,844.80	28.73	-4,034.16	4,034.02	0.00	0.00	0.00
7,600.00	90.92	269.78	3,843.19	28.33	-4,134.14	4,134.01	0.00	0.00	0.00
7,700.00	90.92	269.78	3,841.59	27.94	-4,234.13	4,233.99	0.00	0.00	0.00
7,800.00	90.92	269.78	3,839.98	27.55	-4,334.12	4,333.98	0.00	0.00	0.00
7,900.00	90.92	269.78	3,838.38	27.16	-4,434.10	4,433.97	0.00	0.00	0.00
8,000.00	90.92	269.78	3,836.78	26.77	-4,534.09	4,533.95	0.00	0.00	0.00
8,100.00	90.92	269.78	3,835.17	26.37	-4,634.08	4,633.94	0.00	0.00	0.00
8,200.00	90.92	269.78	3,833.57	25.98	-4,734.06	4,733.93	0.00	0.00	0.00
8,300.00	90.92	269.78	3,831.97	25.59	-4,834.05	4,833.92	0.00	0.00	0.00
8,400.00	90.92	269.78	3,830.36	25.20	-4,934.04	4,933.90	0.00	0.00	0.00
8,500.00	90.92	269.78	3,828.76	24.80	-5,034.02	5,033.89	0.00	0.00	0.00
8,600.00	90.92	269.78	3,827.16	24.41	-5,134.01	5,133.88	0.00	0.00	0.00
8,700.00	90.92	269.78	3,825.55	24.02	-5,233.99	5,233.86	0.00	0.00	0.00
8,800.00	90.92	269.78	3,823.95	23.63	-5,333.98	5,333.85	0.00	0.00	0.00
8,900.00	90.92	269.78	3,822.35	23.24	-5,433.97	5,433.84	0.00	0.00	0.00
9,000.00	90.92	269.78	3,820.74	22.84	-5,533.95	5,533.83	0.00	0.00	0.00
9,100.00	90.92	269.78	3,819.14	22.45	-5,633.94	5,633.81	0.00	0.00	0.00
9,200.00	90.92	269.78	3,817.53	22.06	-5,733.93	5,733.80	0.00	0.00	0.00
9,300.00	90.92	269.78	3,815.93	21.67	-5,833.91	5,833.79	0.00	0.00	0.00
9,400.00	90.92	269.78	3,814.33	21.28	-5,933.90	5,933.77	0.00	0.00	0.00
9,500.00	90.92	269.78	3,812.72	20.88	-6,033.89	6,033.76	0.00	0.00	0.00
9,600.00	90.92	269.78	3,811.12	20.49	-6,133.87	6,133.75	0.00	0.00	0.00
9,700.00	90.92	269.78	3,809.52	20.10	-6,233.86	6,233.74	0.00	0.00	0.00
9,800.00	90.92	269.78	3,807.91	19.71	-6,333.85	6,333.72	0.00	0.00	0.00
9,900.00	90.92	269.78	3,806.31	19.32	-6,433.83	6,433.71	0.00	0.00	0.00
10,000.00	90.92	269.78	3,804.71	18.92	-6,533.82	6,533.70	0.00	0.00	0.00
10,100.00	90.92	269.78	3,803.10	18.53	-6,633.80	6,633.68	0.00	0.00	0.00
10,200.00	90.92	269.78	3,801.50	18.14	-6,733.79	6,733.67	0.00	0.00	0.00
10,300.00	90.92	269.78	3,799.90	17.75	-6,833.78	6,833.66	0.00	0.00	0.00
10,400.00	90.92	269.78	3,798.29	17.35	-6,933.76	6,933.65	0.00	0.00	0.00
10,500.00	90.92	269.78	3,796.69	16.96	-7,033.75	7,033.63	0.00	0.00	0.00
10,600.00	90.92	269.78	3,795.08	16.57	-7,133.74	7,133.62	0.00	0.00	0.00
10,700.00	90.92	269.78	3,793.48	16.18	-7,233.72	7,233.61	0.00	0.00	0.00
10,800.00	90.92	269.78	3,791.88	15.79	-7,333.71	7,333.59	0.00	0.00	0.00
10,900.00	90.92	269.78	3,790.27	15.39	-7,433.70	7,433.58	0.00	0.00	0.00
10,961.66	90.92	269.78	3,789.29	15.15	-7,495.34	7,495.23	0.00	0.00	0.00
BONZO 4H: PPP 3									
11,000.00	90.92	269.78	3,788.67	15.00	-7,533.68	7,533.57	0.00	0.00	0.00
11,100.00	90.92	269.78	3,787.07	14.61	-7,633.67	7,633.56	0.00	0.00	0.00
11,200.00	90.92	269.78	3,785.46	14.22	-7,733.65	7,733.54	0.00	0.00	0.00
11,300.00	90.92	269.78	3,783.86	13.83	-7,833.64	7,833.53	0.00	0.00	0.00
11,400.00	90.92	269.78	3,782.26	13.43	-7,933.63	7,933.52	0.00	0.00	0.00
11,500.00	90.92	269.78	3,780.65	13.04	-8,033.61	8,033.50	0.00	0.00	0.00
11,600.00	90.92	269.78	3,779.05	12.65	-8,133.60	8,133.49	0.00	0.00	0.00
11,700.00	90.92	269.78	3,777.45	12.26	-8,233.59	8,233.48	0.00	0.00	0.00
11,800.00	90.92	269.78	3,775.84	11.87	-8,333.57	8,333.47	0.00	0.00	0.00
11,900.00	90.92	269.78	3,774.24	11.47	-8,433.56	8,433.45	0.00	0.00	0.00
12,000.00	90.92	269.78	3,772.63	11.08	-8,533.55	8,533.44	0.00	0.00	0.00
12,100.00	90.92	269.78	3,771.03	10.69	-8,633.53	8,633.43	0.00	0.00	0.00

LONGFELLOW ENERGY, LP

Planning Report

WELLBENDERS DIRECTIONAL SERVICES LLC

Database:	WBDS_SQL_3	**Local Co-ordinate Reference:**	Well 004H
Company:	Longfellow Energy	**TVD Reference:**	RKB = 20.2' @ 3597.70usft (AKITA 523)
Project:	Eddy Co., NM (Nad-83)	**MD Reference:**	RKB = 20.2' @ 3597.70usft (AKITA 523)
Site:	BONZO FEDERAL COM 19-24 CDX	**North Reference:**	Grid
Well:	004H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

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)
12,177.85	90.92	269.78	3,769.78	10.38	-8,711.37	8,711.27	0.00	0.00	0.00
BONZO 4H: LTP									
12,200.00	90.92	269.78	3,769.43	10.30	-8,733.52	8,733.41	0.00	0.00	0.00
12,257.84	90.92	269.78	3,768.50	10.07	-8,791.35	8,791.25	0.00	0.00	0.00
BONZO 4H: BHL									

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
BONZO 4H: SHL - plan hits target center - Point	0.00	0.00	0.00	0.00	0.00	660,287.95	581,199.62	32.815093	-104.203580
BONZO 4H: KOP - plan hits target center - Point	0.00	0.00	300.00	0.00	0.00	660,287.95	581,199.62	32.815093	-104.203580
BONZO 4H: BHL - plan hits target center - Point	0.00	0.00	3,768.50	10.07	-8,791.35	660,298.02	572,408.27	32.815147	-104.232196
BONZO 4H: LTP - plan misses target center by 0.67usft at 12177.85usft MD (3769.78 TVD, 10.38 N, -8711.37 E) - Point	0.00	0.01	3,769.78	9.71	-8,711.37	660,297.66	572,488.25	32.815146	-104.231936
BONZO 4H: PPP 3 - plan misses target center by 0.57usft at 10961.66usft MD (3789.29 TVD, 15.15 N, -7495.34 E) - Point	0.00	0.00	3,789.29	14.58	-7,495.34	660,302.53	573,704.28	32.815156	-104.227978
BONZO 4H: PPP 2 - plan misses target center by 0.11usft at 5611.85usft MD (3875.07 TVD, 36.13 N, -2146.27 E) - Point	0.00	0.00	3,875.07	36.02	-2,146.27	660,323.97	579,053.35	32.815199	-104.210566
BONZO 4H: FTP, PPF - plan hits target center - Point	0.00	0.00	3,894.50	40.88	-934.93	660,328.83	580,264.69	32.815209	-104.206623

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,093.59	1,093.50	QUEEN			
1,531.63	1,531.50	GRAYBURG			
1,848.67	1,848.50	UPPER SAN ANDRES			
3,251.30	3,242.50	GLORIETA			
3,287.07	3,275.50	TOP PADDOCK			
3,615.26	3,547.50	BASAL PADDOCK			
3,942.54	3,743.50	UPPER LINEBRY			
4,400.35	3,894.50	UPPER BLINEBRY TGT			

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	**Longfellow Energy LP**
LOCATION:	Section 20, T.17 S., R.28 E., NMPM
COUNTY:	Eddy County, New Mexico

WELL NAME & NO.:	**Bonzo Federal Com 1924 CDX 004H**
ATS/API ID:	**ATS-25-134**
APD ID:	**10400101494**
Sundry ID:	**N/a**

WELL NAME & NO.:	**Bonzo Federal Com 1924 CDX 005H**
ATS/API ID:	**ATS-25-135**
APD ID:	**10400101507**
Sundry ID:	**N/a**

WELL NAME & NO.:	**Bonzo Federal Com 1924 CDX 006H**
ATS/API ID:	**ATS-25-136**
APD ID:	**10400101514**
Sundry ID:	**N/a**

COA

Approval Date: 04/25/2025

H2S	No		
Potash	None	None	
Cave/Karst Potential	Medium		
Cave/Karst Potential	☐ Critical		
Variance	☐ None	☒ Flex Hose	☐ Other
Wellhead	Conventional		
Other	☐ 4 String ☐ 5 String	Capitan Reef None	☐ WIPP
Other	Pilot Hole None	☐ Open Annulus	
Cementing	Contingency Squeeze None	Echo-Meter None	Primary Cement Squeeze None
Special Requirements	☐ Water Disposal/Injection	☑ COM	☐ Unit
Special Requirements	☐ Batch Sundry	Waste Prevention Waste MP	
Special Requirements Variance	☐ BOPE Break Testing ☐ Offline BOPE Testing	☐ Offline Cementing	☐ Casing Clearance

Approval Date: 04/25/2025

A. HYDROGEN SULFIDE

Hydrogen Sulfide (H2S) monitors shall be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet **43 CFR part 3170 Subpart 3176**, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

B. CASING

1. The **13-3/8** inch surface casing shall be set at approximately **375 feet** (a minimum of **70 feet (Eddy County)** into the Rustler Anhydrite and above the salt when present, and below usable fresh water) and cemented to the surface. The surface hole shall be **17 1/2** inch in diameter.

    a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
    b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8 hours** or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
    c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
    d. If cement falls back, remedial cementing will be done prior to drilling out that string.

2. The minimum required fill of cement behind the **9-5/8** inch intermediate casing is:

    - Cement to surface. If cement does not circulate see B.1.a, c-d above. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.**

    ❖ In Medium Cave/Karst Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.

3. The minimum required fill of cement behind the **5-1/2** inch production casing is:

    - Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.**

C. PRESSURE CONTROL

1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).'

2. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **3000 (3M)** psi.

3. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the **9-5/8** inch intermediate casing shoe shall be **3000 (3M)** psi.

D. SPECIAL REQUIREMENT (S)

Communitization Agreement

- The operator will submit a Communitization Agreement to the Santa Fe Office, 301 Dinosaur Trail Santa Fe, New Mexico 87508, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.
- The operator will submit an as-drilled survey well plat of the well completion, but are not limited to, those specified in **43 CFR part 3170 Subpart 3171**
- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

GENERAL REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

a. Spudding well (minimum of 24 hours)
b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
c. BOPE tests (minimum of 4 hours)

☑ Eddy County
EMAIL or call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,
BLM_NM_CFO_DrillingNotifications@BLM.GOV
(575) 361-2822

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

   a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
   b. When the operator proposes to set surface casing with Spudder Rig
      - Notify the BLM when moving in and removing the Spudder Rig.
      - Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
      - BOP/BOPE test to be conducted per **43 CFR part 3170 Subpart 3172** as soon as 2nd Rig is rigged up on well.

2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or

if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.

2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends of both lead and tail cement, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.

3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.

4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.

5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.

7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in **43 CFR part 3170 Subpart 3172** and **API STD 53 Sec. 5.3**.

2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.

3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.

4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:

    a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
    b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
    c. Manufacturer representative shall install the test plug for the initial BOP test.
    d. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172.6(b)(9) must be followed.
    e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.

5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.

    a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead cement), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).

    b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been

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done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the cement plug. The BOPE test can be initiated after bumping the cement plug with the casing valve open. (only applies to single stage cement jobs, prior to the cement setting up.)

c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to **43 CFR part 3170 Subpart 3172** with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for 8 hours or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.

e. The results of the test shall be reported to the appropriate BLM office.

f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.

g. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.

h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per **43 CFR part 3170 Subpart 3172**.

C. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.

D. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

Long Vo (LVO) 2/20/2025

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H_2S Drilling Operations Plan

a. All personnel will be trained in H_2S working conditions as required by Onshore Order 6 before drilling out of the surface casing.

b. Two briefing areas will be established. Each will be ≥150' from the wellhead, perpendicular from one another, and easily entered and exited. See H_2S page 5 for more details.

c. H_2S Safety Equipment/Systems:

i. Well Control Equipment

- Flare line will be ≥150' from the wellhead and ignited by a pilot light.
- Beware of SO_2 created by flaring.
- Choke manifold will include a remotely operated choke.
- Mud gas separator

ii. Protective Equipment for Essential Personnel

- Every person on site will be required to wear a personal H_2S and SO_2 monitor at all times while on site. Monitors will not be worn on hard hats. Monitors will be worn on the front of the chest – not on the belt.
- One self-contained breathing apparatus (SCBA) 30-minute rescue pack will be at each briefing area. Two 30-minute SCBA packs will be stored in the safety trailer.
- Four work/escape packs will be on the rig floor. Each pack will have a long enough hose to allow unimpaired work activity.
- Four emergency escape packs will be in the doghouse for emergency evacuation.
- Hand signals will be used when wearing protective breathing apparatus.
- Stokes litter or stretcher
- Two full OSHA compliant body harnesses
- A 100' long x 5/8" OSHA compliant rope
- One 20-pound ABC fire extinguisher

iii. H_2S Detection & Monitoring Equipment

- Every person on site will be required to wear a personal H_2S and SO_2 monitor at all times while on site. Monitors will not be worn on hard hats. Monitors will be worn on the front of the chest.

LONGFELLOW ENERGY, LP

- A stationary detector with 3 sensors will be in the doghouse.
- Sensors will be installed on the rig floor, bell nipple, and at the end of the flow line or where drilling fluids are discharged.
- Visual alarm will be triggered at 10 ppm.
- Audible alarm will be triggered at 10 ppm.
- Calibration will occur at least every 30 days. Gas sample tubes will be kept in the safety trailer.

iv. Visual Warning System

- Color-coded H_2S condition sign will be set at the entrance to the pad.
- Color-coded condition flag will be installed to indicate current H_2S conditions.
- Two wind socks will be installed that will be visible from all sides.

v. Mud Program

- A water based mud with a pH of $\geq$10 will be maintained to control corrosion, H_2S gas returns to the surface, and minimize sulfide stress cracking and embrittlement.
- Drilling mud containing H_2S gas will be degassed at an optimum location for the rig configuration.
- This gas will be piped into the flare system.
- Enough mud additives will be on location to scavenge and/or neutralize H_2S where formation pressures are unknown.

vi. Metallurgy

- All equipment that has the potential to be exposed to H_2S will be suitable for H_2S service.
- Equipment that will meet the metallurgical standards include the drill string, casing, wellhead, BOP assembly, casing head & spool, rotating head, kill lines, choke, choke manifold & lines, valves, mud-gas separators, DST tools, test units, tubing, flanges, and other related equipment (elastomer packings and seals).

vii. Communication from well site

- Cell phones and/or two-way radios will be used to communicate from the well site.

d. A remote-controlled choke, mud-gas separator, and a rotating head will be installed before drilling or testing any formation expected to contain H_2S.

LONGFELLOW ENERGY, LP

Company Personnel to be Notified

James Follis	Office: (972) 590-9905
	Mobile: (405) 306-6169

Local & County Agencies

Riverside Fire Department	911 or (575) 746-2597
Artesia Fire Department	911 or (575) 746-5051
Loco Hills Fire Department	911 or (575) 628-5450
Eddy County Sheriff (Carlsbad)	911 or (575) 887-7551
Eddy County Sheriff sub-office (Artesia)	911 or (575) 746-9888
Eddy County Emergency Management (Carlsbad)	(575) 887-9511
Artesia General Hospital	(575) 748-3333
Eddy County North Road Department (Artesia)	(575) 746-9540

State Agencies

NM State Police (Artesia)	(575) 748-9718
NM Oil Conservation (Artesia)	(575) 748-1283
NM Oil Conservation (Santa Fe)	(505) 476-3440
NM Dept. of Transportation (Roswell)	(575) 637-7201

Federal Agencies

BLM Carlsbad Field Office	(575) 234-5972
National Response Center	(800) 424-8802
US EPA Region 6 (Dallas)	(800) 887-6063

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(214) 665-6444

Residents within 2 miles (none)

Air Evacuation

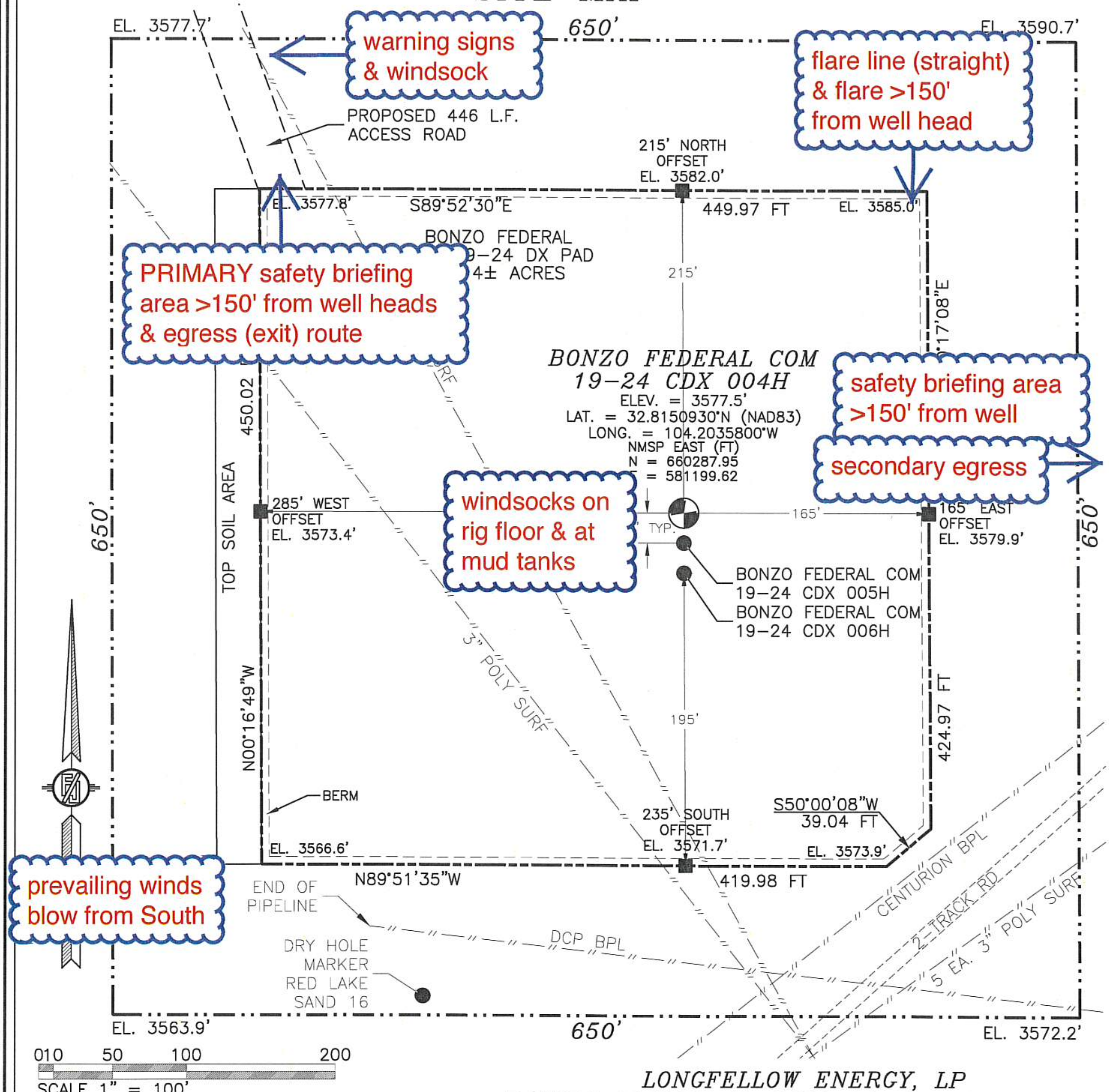
Med Flight Air Ambulance (Albuquerque)	(800) 842-4431
Lifeguard (Albuquerque)	(888) 866-7256

Veterinarian

Artesia Animal Clinic	(575) 748=2042

SECTION 20, TOWNSHIP 17 SOUTH, RANGE 28 EAST
EDDY COUNTY, STATE OF NEW MEXICO
SITE MAP

highest ground to the Northeast



DIRECTIONS TO LOCATION
FROM THE INTERSECTION OF CR. 206 & STATE HIGHWAY 82 GO EAST ON STATE HIGHWAY 82 APPROX. 0.5 OF A MILE TO A LEASE ROAD ON LEFT (NORTH) OF STATE HIGHWAY 82, TURN LEFT GO NORTH APPROX. 1.4 MILES TO A "T" INTERSECTION, CONTINUE NORTH APPROX. 0.48 OF A MILE, TURN LEFT GO WEST-SOUTH APPROX. 0.78 OF A MILE, TURN LEFT AND GO SOUTHWEST APPROX. 1200', CONTINUE SOUTHEAST (AROUND BONZO FED COM 19-24 CX PAD) APPROX. 300' TO BEGIN ROAD SURVEY, FOLLOW ROAD SURVEY SOUTHEAST APPROX. 446' TO THE NORTHWEST PAD CORNER FOR THIS LOCATION.

I, FILIMON F. JARAMILLO, A NEW MEXICO REGISTERED PROFESSIONAL SURVEYOR CERTIFY THAT I DIRECTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO.

FILIMON F. JARAMILLO PLS 12797

LONGFELLOW ENERGY, LP
BONZO FEDERAL COM 19-24 CDX 004H
LOCATED 980 FT. FROM THE SOUTH LINE AND 835 FT. FROM THE WEST LINE OF SECTION 20, TOWNSHIP 17 SOUTH, RANGE 28 EAST, N.M.P.M. EDDY COUNTY, STATE OF NEW MEXICO

JUNE 26, 2024

SURVEY NO. 8718

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3327 CARLSBAD, NEW MEXICO

Longfellow Energy, L.P.

Bonzo Federal Com
1924 CDX Pad
H_2S Contingency Plan:
Radius Map

Section 20, Township 17S, Range 28E
Eddy County, New Mexico

Well Pad Location

1:27,000

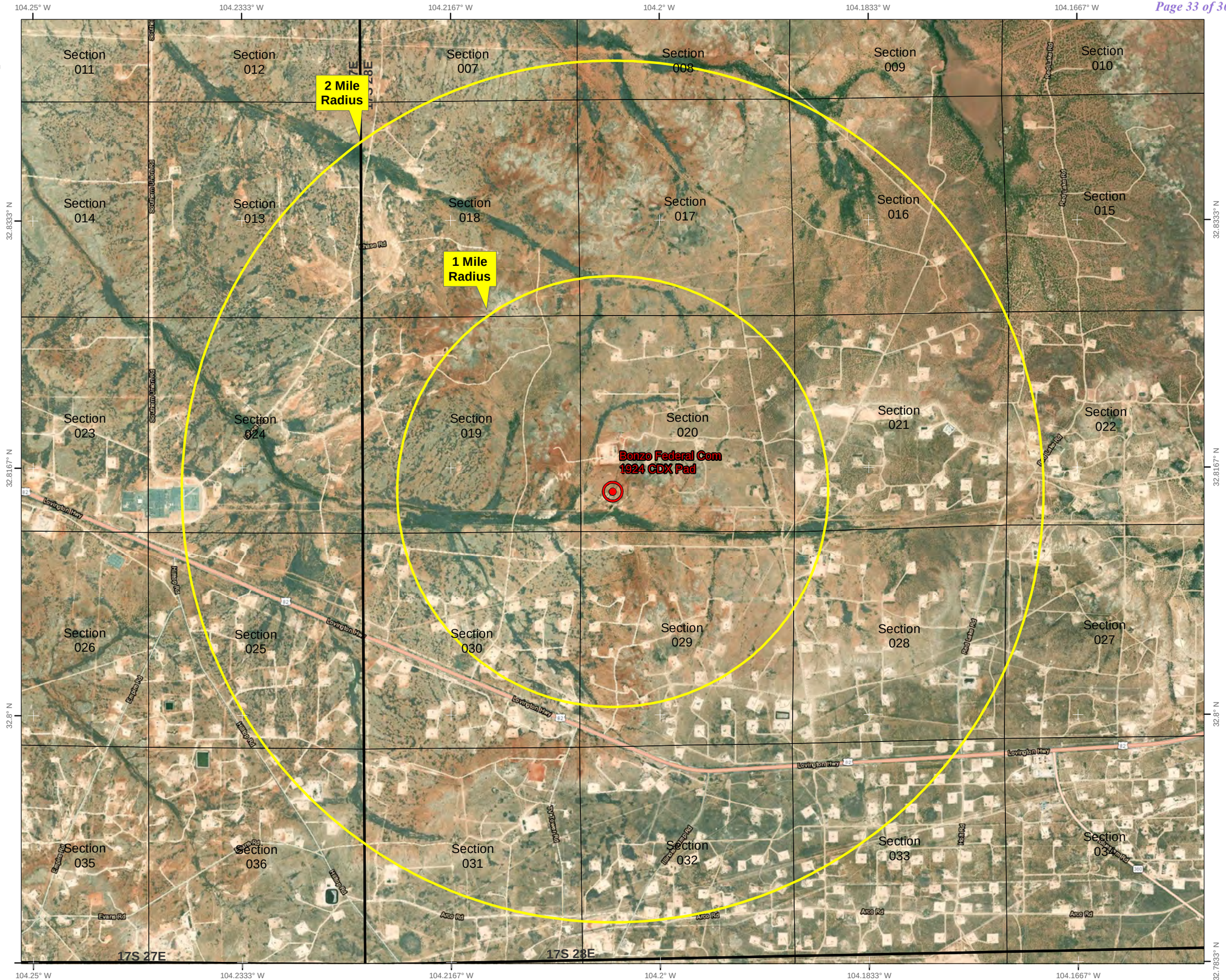
0 0.25 0.5 1

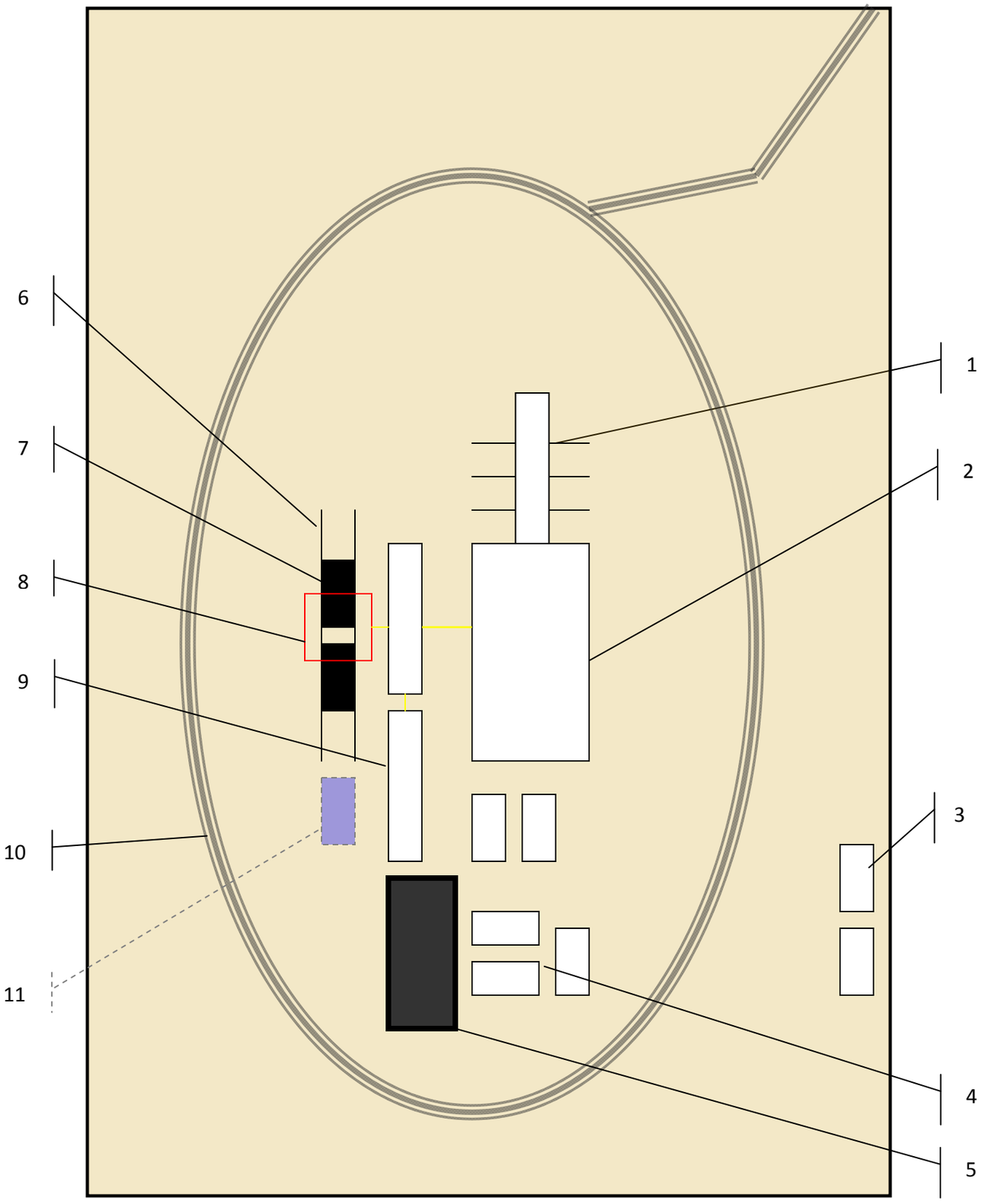
Miles

NAD 1983 New Mexico State Plane East
FIPS 3001 Feet

PERMITS WEST

Prepared by Permits West, Inc., August 29, 2023
for Longfellow Energy, L.P.





Schematic Closed Loop Drilling Rig*

1. **Pipe Rack**
2. **Drill Rig**
3. **House Trailers/ Offices**
4. **Generator/Fuel/Storage**
5. **Overflow-Frac Tank**
6. **Skids**
7. **Roll Offs**
8. **Hopper or Centrifuge**
9. **Mud Tanks**
10. **Loop Drive**
11. **Generator (only for use with centrifuge)**

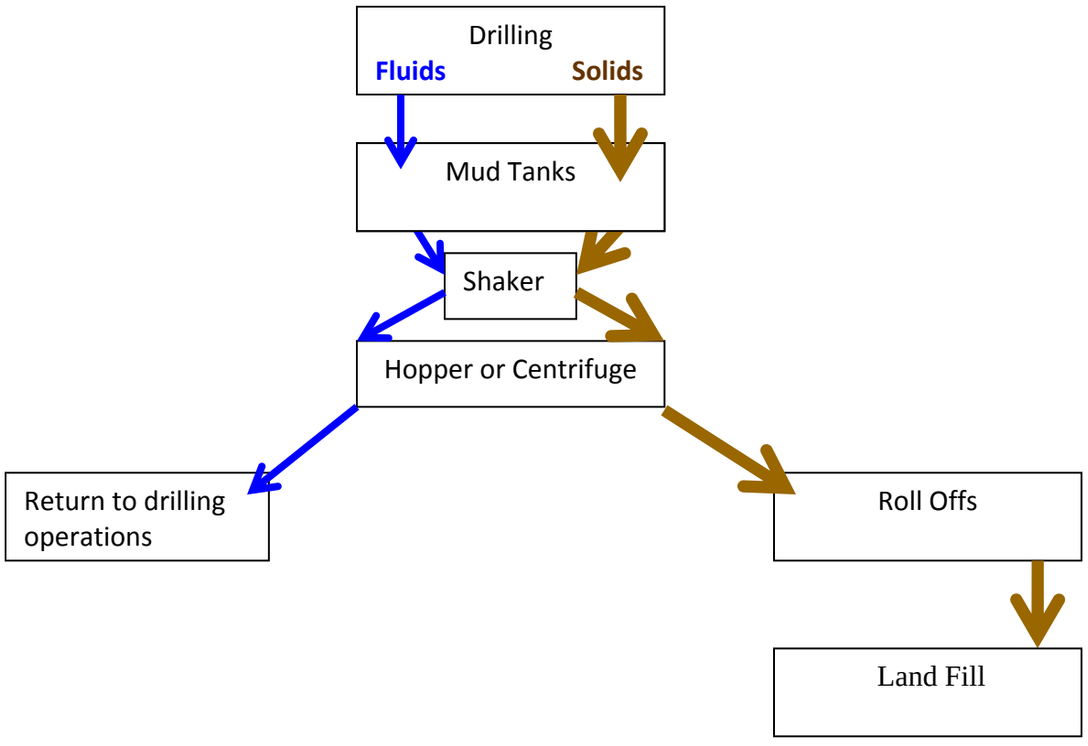
***Not drawn to scale: Closed loop system requires at least 30 feet beyond mud tanks. Ideally 60 feet would be available**

Above: Centrifugal Closed Loop System

PERMITS WEST, INC.
PROVIDING PERMITS for LAND USERS
37Verano Loop, Santa Fe, New Mexico 87508 (505) 466-8120

Closed Loop Drilling System: Mud tanks to right (1)
Hopper in air to settle out solids (2)
Water return pipe (3)
Shaker between hopper and mud tanks (4)
Roll offs on skids (5)

Flow Chart for Drilling Fluids and Solids



Photos Courtesy of Gandy Corporation Oil Field Service

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

CONDITIONS

Operator: LONGFELLOW ENERGY, LP 8115 Preston Road Dallas, TX 75225	OGRID: 372210
	Action Number: 456098
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
bwood	Cement is required to circulate on both surface and intermediate1 strings of casing.	4/28/2025
bwood	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.	4/28/2025
ward.rikala	Notify the OCD 24 hours prior to casing & cement.	6/12/2025
ward.rikala	File As Drilled C-102 and a directional Survey with C-104 completion packet.	6/12/2025
ward.rikala	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 water zone or zones and shall immediately set in cement the water protection string.	6/12/2025
ward.rikala	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, drilling fluids and solids must be contained in a steel closed loop system.	6/12/2025