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.: NMNM130338

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.: CARSON 32-4-32 1H

2. Name of Operator: COLEMAN OIL & GAS INCORPORATED

9. API Well No.:

3a. Address: P.O. BOX 3337, FARMINGTON, NM 87499

3b. Phone No. *(include area code)*: (505) 327-0356

10. Field and Pool, or Exploratory: Basin Fruitland Coal/FRUITLAND COAL

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

At surface: SESE / 1182 FSL / 740 FEL / LAT 36.9393242 / LONG -107.271542

At proposed prod. zone: NWSW / 1968 FSL / 660 FWL / LAT 36.9414709 / LONG -107.2847222

11. Sec., T. R. M. or Blk. and Survey or Area: SEC 32/T32N/R4W/NMP

14. Distance in miles and direction from nearest town or post office*: 21 miles

12. County or Parish: RIO ARRIBA

13. State: NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any): 740 feet

16. No of acres in lease:

17. Spacing Unit dedicated to this well: 320.0

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.: 3390 feet

19. Proposed Depth: 3970 feet / 7776 feet

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

21. Elevations (Show whether DF, KDB, RT, GL, etc.): 7147 feet

22. Approximate date work will start*: 10/01/2021

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: (Electronic Submission)

Name *(Printed/Typed)*: BRIAN WOOD / Ph: (505) 330-2903

Date: 07/22/2021

Title: Permitting Agent

Approved by *(Signature)*: (Electronic Submission)

Name *(Printed/Typed)*: DAVE J MANKIEWICZ / Ph: (505) 564-7761

Date: 12/12/2024

Title: AFM-Minerals

Office: Farmington 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: 12/12/2024

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
	71629	BASIN FRUITLAND COAL

Property Code	Property Name	Well Number
	CARSON 32-4-32	1H

OGRID No.	Operator Name	Ground Level Elevation
4838	COLEMAN OIL & GAS, INC.	7147

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
P	32	32 N	4 W		1182 FSL	740 FEL	36.9393242° N	107.2715420° W	RIO ARRIBA

Lateral #2 Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
L	32	32 N	4 W		1968 FSL	660 FWL	36.9414709° N	107.2847222° W	RIO ARRIBA

Dedicated Acres	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
320 (S/2)				

Order Numbers. | Well setbacks are under Common Ownership: ☐ Yes ☐ No

Lateral #2 Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
P	32	32 N	4 W		1182 FSL	740 FEL	36.9393242° N	107.2715420° W	RIO ARRIBA

Lateral #2 First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
I	32	32 N	4 W		1541 FSL	1246 FEL	36.9403098° N	107.2732737° W	RIO ARRIBA

Lateral #2 Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
L	32	32 N	4 W		1968 FSL	660 FWL	36.9414709° N	107.2847222° W	RIO ARRIBA

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 of my knowledge and belief, and, if the well is 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 or unleased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore 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: Michael Hanson Date: 2/28/2025

Printed Name: Michael T. Hanson

E-mail Address: mhanson@catamountep.com

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. I further certify that United Field Services, Inc., located at 21 Road 3520 in Flora Vista, New Mexico is the company providing this information.

JOHN A VUKONICH NEW MEXICO 14831 PROFESSIONAL SURVEYOR

Signature and Seal of Professional Surveyor

Certificate Number	Date of Field Survey	Date of Certification
14831	04/07/20	2/27/2025

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.

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

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4838	COLEMAN OIL & GAS, INC.	7147

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
P	32	32 N	4 W		1182 FSL	740 FEL	36.9393242° N	107.2715420° W	RIO ARRIBA

Lateral #1 Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
M	32	32 N	4 W		660 FSL	660 FWL	36.9378773° N	107.2847036° W	RIO ARRIBA

Dedicated Acres	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
320 (S/2)				

Order Numbers.

Well setbacks are under Common Ownership: ☐ Yes ☐ No

Lateral #1 Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
P	32	32 N	4 W		1182 FSL	740 FEL	36.9393242° N	107.2715420° W	RIO ARRIBA

Lateral #1 First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
P	32	32 N	4 W		885 FSL	1265 FEL	36.9385063° N	107.2733309° W	RIO ARRIBA

Lateral #1 Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
M	32	32 N	4 W		660 FSL	660 FWL	36.9378773° N	107.2847036° W	RIO ARRIBA

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

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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

Michael T. Hanson — 2/28/2025

Signature — Date

Michael T. Hanson

Printed Name

mhanson@Catamountep.com

E-mail 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. I further certify that United Field Services, Inc., located at 21 Road 3520 in Flora Vista, New Mexico is the company providing this information.

JOHN A VUKONICH — NEW MEXICO — 14831 — PROFESSIONAL SURVEYOR

Signature and Seal of Professional Surveyor

14831	04/07/20	2/27/2025
Certificate Number	Date of Field Survey	Date of Certification

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 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.

United Field Services, Inc., located at 21 Road 3520, Flora Vista, New Mexico, is the company providing this plat.

Plat Revised: 02/21/25

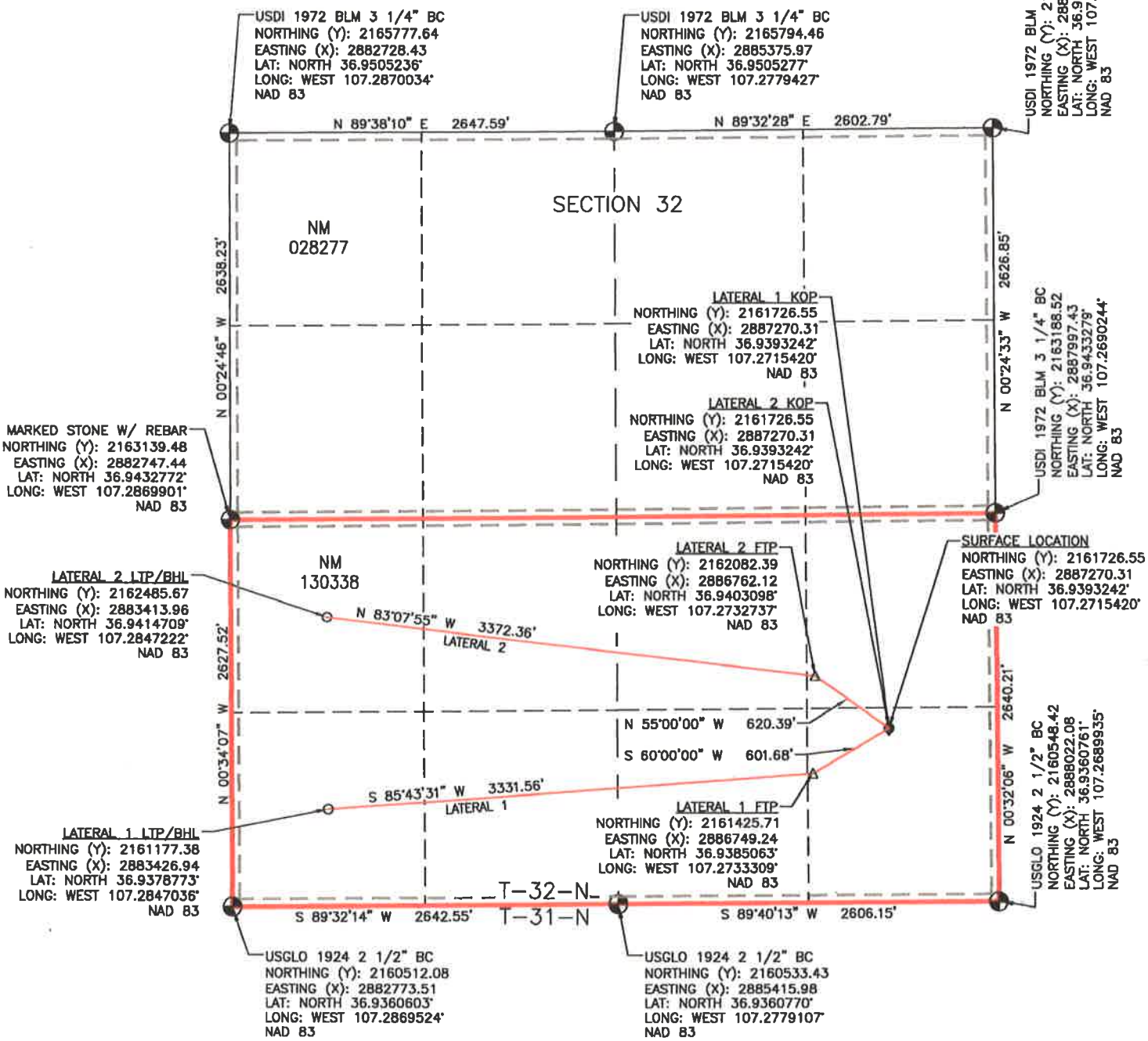
NOTE: BEARINGS AND DISTANCES SHOWN ARE REFERENCED TO THE NEW MEXICO COORDINATE SYSTEM, WEST ZONE, NAD 83, UNLESS OTHERWISE NOTED

UFSI PROJECT NO. 11337

Legend:
- ● = SURFACE LOCATION
- ◊ = KICK OFF POINT (KOP)
- △ = FIRST TAKE POINT (FTP)
- ○ = LAST TAKE POINT (LTP)/ BOTTOM HOLE LOCATION (BHL)
- ◒ = FOUND MONUMENT AS NOTED

COLEMAN OIL & GAS, INC.			
CARSON 32-4-32 1H LATERAL 1			
	FOOTAGES		SEC
SHL	1182' FSL	740' FEL	32
KOP	1182' FSL	740' FEL	32
FTP	885' FSL	1265' FEL	32
LTP/BHL	660' FSL	660' FWL	32

COLEMAN OIL & GAS, INC.			
CARSON 32-4-32 1H LATERAL 2			
	FOOTAGES		SEC
SHL	1182' FSL	740' FEL	32
KOP	1182' FSL	740' FEL	32
FTP	1541' FSL	1246' FEL	32
LTP/BHL	1968' FSL	660' FWL	32



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: _Coleman Oil and Gas, Inc. **OGRID:** 4838 **Date:** 10/12/2021

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
Carson 32-4-32 1H	Pending	P 32 32N R4W, SESE	SHL 1157'FSL728' FEL	0 BBL/D	2000	150

IV. Central Delivery Point Name: MorningStar Operating, LLC Carracas CDP Meter ID 6009A [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
Carson 32-4-32 1H	Pending	Early 2025	RT 15-20 Days	RDRT	RDCT	RDFB Equip
		04/01/2025	04/20/2025	04/25/2025	05/05/2025	05/15/2025

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. Coleman plans to have natural gas produced water pipeline/gathering system in place prior to initial production. This should minimize lost gas by venting/flaring.

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
Carson 32-4-32 1H	Pending	1,000 – 2,000 MCF/D	300,000 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
Morningstar	Surface Gathering	Sec32, T32N R4W	05/15/2025	1,000 – 2,000 MCFPD
Harvest	Transporter	Sec12, T29N R11W	05/15/2025	1,000 – 2,000 MCFPD

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

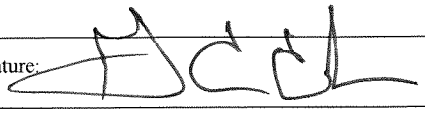
1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

(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: G. Chris Coleman
Title: President
E-mail Address: ccoleman@cog-fmn.com
Date: 01/30/2025
Phone: (505) 327-0356

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

Attachments:

Separation Equipment: Below is a complete description of how Operator will size separation equipment to optimize gas capture.

Description of how separation equipment will be sized to optimize gas capture:
Well separation equipment is sized to have appropriate residence time and vapor pace to remove gas particles on the micron scale per typical engineering calculations and/or operational experience.. All gas is routed to end uses or the sales pipeline under normal operating conditions.

Operational & Best Management Practices: Below is a complete description of the actions the Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC. Additionally, below is a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

Drilling Operations:
Coleman Oil and Gas will minimize venting by:

- Gas will only be vented to the atmosphere to avoid risk of immediate substantial adverse impact to employee safety, public health and the environment.
- If utilized, flare stacks shall be located at a minimum of 100 feet from the nearest surface hole location.

Completion Operations:
Coleman Oil and Gas will minimize venting by:

- Separator operations will commence as soon as technically feasible.
- Gas will route immediately to a collection system applied to other beneficial use, such as a fuel source for onsite equipment.
- During initial flowback and if technically feasible, flaring shall occur rather than venting.
- If natural gas does not meet pipeline standards, gas will be vented or flared. A gas analysis will be performed twice weekly until standards are met (for up to 60 days). This is not anticipated to occur.
- If required, all venting and flaring of natural gas during flowback operations shall be performed in compliance with Subsections B, C and D of 19.15.27.8 NMAC.

Production Operations:

Coleman Oil and Gas will minimize venting by:

- Shutting in the wells if the pipeline is not available. No flaring of high pressure gas will occur.
- Utilizing gas for equipment fuel, heater fuel, and artificial lift when allowable.
- Capturing low pressure gas via a gas capture system when allowable.
-

In General:

- All venting and flaring from drilling, flowback and operation phases shall be reported in compliance with Subsection G of 19.15.27.8 NMAC.
- If utilized, flare stacks shall be located at a minimum of 100 feet from the nearest surface hold location and 100 feet from the permanent facility storage tanks.

Flowback Strategy:

After the fracture treatment/completion operations, well(s) will be produced to temporary tanks and gas will be flared or vented. During flowback, the fluids and solid content will be monitored. When the produced fluids contain minimal solids, the wells will be turned to production facilities. Gas sales should start as soon as the wells start flowing through the production facilities, unless, there are operational issues on Gas Transporter system at that time. Based on current information, it is Operator's belief the system can take this gas upon completion of the well(s).

Safety requirements during cleanout operations from the use of underbalanced air cleanout systems may necessitate that solids and non-pipeline quality gas be vented and/or flared rather than sold on a temporary basis.

Alternatives to Reduce Flaring:

Below are alternatives considered from a conceptual standpoint to reduce the amount of gas flared.

- Power Generation – On lease
  - ♦ Only a portion of gas is consumed operating generator remainder of gas will be flared
- Compressed Natural Gas – On lease, No initial plans to compress gas on lease, however it may be necessary later in life of well.
  - ♦ Gas flared would be minimal, but might be uneconomical to operate when gas volume declines.
- NGL Removal – On lease
  - ♦ Plants are expensive, residue gas is still flared, and uneconomical to operate when gas volume declines.
- Power generation for grid; Not Planned.
- Liquids removal on lease; Produced Water will be removed and transferred VIA truck or gathering system to produced water disposal.

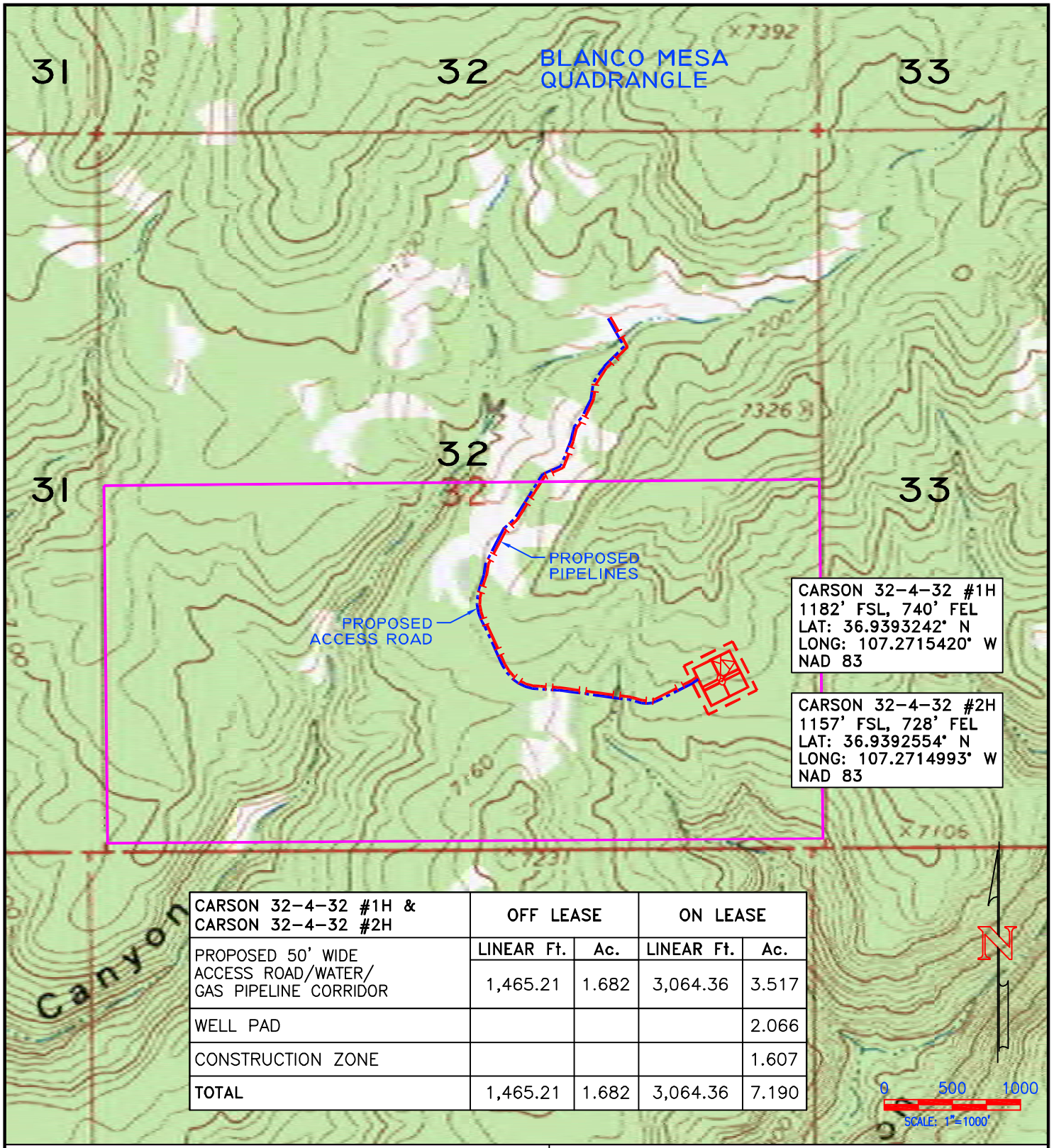
- Reinjection for underground storage; Not Planned.
- Reinjection for temporary storage; Not Planned at this time.
- Reinjection for enhanced recovery; Not Planned at this time.
- Fuel cell production; and
- Other alternative beneficial uses approved by the division. Not Planned at this time.

Coleman Oil &Gas, Inc.: Carson 32-4-32 1H

Gas Capture Plan: Gas Transporter & Processing Plant Information

Gas from this location will be gathered and transported by Coleman through flowline to the Harvest Energy Sales Meter.

1. **Coleman Oil & Gas, Inc.**
   Gas from the wellsite / pad into the MSO Gathering system:
   SESE Section 32, T32N, R4W
   Rio Arriba, New Mexico
2. **Harvest Energy VIA**
   Morningstar Operating Gathering System
   Caracas Gathering System
   SWNE Section 32, T32N, R4W
   Rio Arriba, New Mexico
3. **Harvest Energy VIA**
   MSO Caracas Sales Meter:
   Sec 33, T32N, R5W
   Rio Arriba County, New Mexico
4. **Harvest Energy**
   Harvest will deliver the gas to the **Harvest Processing Milargo Plant** located:
   Sec 12, T 29 N, R 11 W
   San Juan County, New Mexico



CARSON 32-4-32 #1H & CARSON 32-4-32 #2H	OFF LEASE		ON LEASE	
	LINEAR Ft.	Ac.	LINEAR Ft.	Ac.
PROPOSED 50' WIDE ACCESS ROAD/WATER/ GAS PIPELINE CORRIDOR	1,465.21	1.682	3,064.36	3.517
WELL PAD				2.066
CONSTRUCTION ZONE				1.607
TOTAL	1,465.21	1.682	3,064.36	7.190

LEGEND

- WELL FLAG
- WELL PAD
- CONSTRUCTION ZONE
- LEASE
- ROAD
- PIPELINE

COLEMAN OIL & GAS, INC.

FARMINGTON, NEW MEXICO

SURVEYED: 04/07-04/15/20	REV. DATE:	APP. BY: M.W.L.
DRAWN BY: K.S.	DATE DRAWN: 7/28/20	FILE NAME: 11337-TOPO

UNITED FIELD SERVICES INC.

P.O. BOX 3651
FARMINGTON, NM 87499
OFFICE: (505) 334-0408

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

Drilling Plan Data Report
12/13/2024

APD ID: 10400077762 **Submission Date:** 07/22/2021

Operator Name: COLEMAN OIL & GAS INCORPORATED

Well Name: CARSON 32-4-32 **Well Number:** 1H

Well Type: CONVENTIONAL GAS 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
14671660	SAN JOSE	7147	0	0	OTHER : Unconsolidated gravels	USEABLE WATER	N
14671661	NACIMIENTO	4876	2271	2271	SANDSTONE, SHALE, SILTSTONE	USEABLE WATER	N
14671662	OJO ALAMO	3668	3479	3479	SANDSTONE, SILTSTONE	NATURAL GAS, USEABLE WATER	N
14671663	KIRTLAND	3545	3602	3602	OTHER, SANDSTONE : Claystone	OTHER, USEABLE WATER : Clay	N
14671664	FRUITLAND	3395	3752	3752	COAL, MUDSTONE, SANDSTONE, SHALE, SILTSTONE	NATURAL GAS, USEABLE WATER	N
14671665	FRUITLAND COAL	3147	4000	4000	COAL	NATURAL GAS, USEABLE WATER	Y
14671666	UNKNOWN	3127	4020	4020	OTHER : Bottom Coal	NATURAL GAS, USEABLE WATER	N
14671667	PICTURED CLIFFS	3119	4028	4028	SANDSTONE	NATURAL GAS, USEABLE WATER	N

Section 2 - Blowout Prevention

Pressure Rating (PSI): 2M **Rating Depth:** 10000

Equipment: BOP equipment and accessories will meet or exceed BLM requirements outlined in 43 CFR Part 3160. The working pressure of all BOPE shall exceed the anticipated surface pressure to which it may be subjected, assuming a partially evacuated hole with a pressure gradient of 0.22 psi/ft. Expected Maximum Bottom Hole pressure = 0.433 psi/ft. x 4203 = 1820 psi, which is less than 2,000 psi working pressure. Maximum anticipated surface pressure will be 1820 psi (4203 x .22 psi/ft) = 895 psi. Therefore, a 2000 psi Class 2 BOPE system is required that consists of the following: 2 preventers with either double ram (blind and pipe) or annular preventer and blind rams. Kill line (2 minimum). 1 Kill line valve (2 minimum). 1 choke line valve. 2 chokes. Upper Kelly cock valve with handle available. Safety valve and subs to fit all drill strings in use. Pressure gauge on choke manifold. 2 minimum choke manifold. Fill-up line above the uppermost preventer. See attached diagram for the proposed BOP systems. Stack #1 will be nippled-up on the 11 3,000 psi top flange of the wellhead A section for the pilot hole and the dual lateral re-entry. The BOP will be hydraulically operated.

Requesting Variance? NO

Variance request:

Testing Procedure: All ram preventers and related equipment will be tested to 2,000 psi for 10 minutes. Annular preventers will be tested to 70% of rated working pressure for 10 minutes. Surface casing will be

Operator Name: COLEMAN OIL & GAS INCORPORATED

Well Name: CARSON 32-4-32 **Well Number:** 1H

tested to 1500 psi. All preventers and surface casing will be tested before drilling out of surface casing. BOP equipment will be tested when initially installed, whenever any seal subject to test pressure is broken, following related repairs and at least once every 30 days. Annular preventers will be functionally operated at least once per week. Rams preventers will be activated each trip, not to exceed once per day.

Choke Diagram Attachment:

Carson32_Choke_manifold_diagram_20210720103409.pdf

BOP Diagram Attachment:

Carson32_BOP_stack_20210720100905.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	12.25	9.625	NEW	API	N	0	300	0	300	7147	6847	300	J-55	36	LT&C	1	1.1	DRY	1.4	DRY	1.4
2	PRODUCTION	8.75	7.0	NEW	API	N	0	4203	0	4203	7147	2944	4203	J-55	26	LT&C	1	1.1	DRY	1.4	DRY	1.4
3	LINER	6.125	4.5	NEW	API	N	3405	7694	3405	3991	3742	3156	4289	J-55	11.6	LT&C	1	1.1	DRY	1.4	DRY	1.4
4	LINER	6.125	4.5	NEW	API	N	3390	7771	3390	3970	3757	3177	4381	J-55	11.6	LT&C	1	1.1	DRY	1.4	DRY	1.4

Casing Attachments

Casing ID: 1 **String** SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Carson32_Casing_Design_Assumptions_20210720101135.pdf

Operator Name: COLEMAN OIL & GAS INCORPORATED

Well Name: CARSON 32-4-32 **Well Number:** 1H

Casing Attachments

Casing ID: 2 **String** PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Carson32_Casing_Design_Assumptions_20210720101243.pdf

Casing ID: 3 **String** LINER

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Carson32_Casing_Design_Assumptions_20210720101414.pdf

Casing ID: 4 **String** LINER

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Carson32_Casing_Design_Assumptions_20210720101529.pdf

Section 4 - Cement

Operator Name: COLEMAN OIL & GAS INCORPORATED

Well Name: CARSON 32-4-32 **Well Number:** 1H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	0	0	0	0	0	0	None	None
SURFACE	Tail		0	300	177	1.17	15.8	208	100	Premium	Calcium Chloride - 2% Poly-E-Flake – Lost Circulation Control Agent – 0.125 lbs/sx
PRODUCTION	Lead		0	3300	228	2.4	12.3	547	30	VARICEM TM	FE-2 – Controls Gel Thickening – 0.30% Kol-Seal – Lost Circulation Control Agent – 5 lbs/sx Poly-E-Flake – Lost Circulation Control Agent – 0.125 lbs/sx
PRODUCTION	Tail		3300	4203	150	1.84	13.5	277	30	VARICEM TM	Super CBL - Gas Block Additive - 0.30% FE-2 – Controls Gel Thickening – 0.30% Kol-Seal – Lost Circulation Control Agent – 5 lbs/sx Poly-E-Flake – Lost Circulation Control Agent – 0.125 lbs/sx

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 Onshore Order #2:

Diagram of the equipment for the circulating system in accordance with Onshore Order #2:

Describe what will be on location to control well or mitigate other conditions: There will not be a reserve pit for this well. A closed-loop system will be used to recover drilling fluid and dry cuttings during both the pilot hole and laterals hole sections of the well. Above-ground tanks will be utilized to hold cuttings and fluids for rig operations. Frac tanks will be on location to store fresh water, produced water, drilling mud and brine.

Describe the mud monitoring system utilized: Pit Volume Totalizer (PVT) equipment (or equivalent) will be on each pit to monitor pit levels. A trip tank equipped with a PVT sensor will be used to monitor trip volumes. Possible lost circulation in the Fruitland Coal and Pictured Cliffs Sand. Lost circulation has been successfully mitigated with lost circulation materials.

Circulating Medium Table

Operator Name: COLEMAN OIL & GAS INCORPORATED

Well Name: CARSON 32-4-32 **Well Number:** 1H

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	300	OTHER : Fresh Water Gel	8.4	9							
300	4203	OTHER : LSND	8.4	9							
3405	7694	OTHER : Brine	8.6	9.8							
3390	7771	OTHER : Brine	8.6	9.8							

Section 6 - Test, Logging, Coring

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

Open Hole Logging: LWD gamma ray for all lateral hole sections (from casing exit to TD). Mud Logging: All lateral hole sections. Samples taken every 90'.

Cased Hole Logging: If cement is not brought to surface on the surface casing string, then a cement bond log (CBL) will be run to determine the quality of the job prior to drilling ahead. A Cement Bond Log (CBL) will be run after the drilling of the well has been completed and as the start of the completion process. The CBL will confirm the quality of the cement bond and the actual TOC. Gamma ray and density logs may be obtained with the CBL to describe the stratigraphy of the wellbore.

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

GAMMA RAY LOG,CEMENT BOND LOG,MUD LOG/GEOLOGICAL LITHOLOGY LOG,

Coring operation description for the well:

None

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 1820 **Anticipated Surface Pressure:** 941

Anticipated Bottom Hole Temperature(F): 140

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

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards

Hydrogen Sulfide drilling operations plan required? NO

Operator Name: COLEMAN OIL & GAS INCORPORATED

Well Name: CARSON 32-4-32 **Well Number:** 1H

Hydrogen sulfide drilling operations

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Carson32_Lateral1_Horizontal_Plan_20210720102809.pdf

Carson32_Lateral2_Horizontal_Plan_20210720102821.pdf

Other proposed operations facets description:

Timing: The operation is expected to start September 2021. The pilot hole drilling operations will last approximately 7 days. After the pilot hole has been perforated and acid stimulated the drilling rig will re-enter the 7" production casing, set whipstock(s), sidetrack and drill the 6-1/8" lateral hole sections. The pilot hole and laterals may be drilled in one drilling rig event. Upon completion of the drilling and completion events, the completion rig will be on location approximately two to three weeks to run tubing and set artificial lift.

Directional Plans: Pilot hole, Lateral #1, Lateral #2 directional plans and proposed wellbore schematic attached.

Completion: The vertical pilot hole well will be perforated, and acid stimulated to the economic coal seams, identified by cased hole logs, within the Fruitland coal interval estimated from 4000'-4028' MD. It will be cased and cementing with 7" production casing and stimulated with a small volume of acid to ensure perforations are open. The laterals will be cased with 4-1/2" pre-perforated un-cemented tubing to maintain hole stability for natural open hole completion.

Horizontal Re-entry Procedure:
Drill vertical pilot hole.
Completed with 7" production casing and cement to surface.
Pilot hole will be perforated and may be stimulated with a light acid treatment in the Fruitland Coal.
Run gyro survey, orient and set whipstock for casing exit #1 @ +/-3400' MD
Mill window and TOOH for curve BHA.
Planned KOP #1 @ 3400' MD / 3400' TVD.
Drill 6-1/8" curve from 3400' MD / 3400' TVD to landing point @ 4344' MD / 4000 'TVD at 90.16o.
TOOH and PU lateral BHA.
Drill from 4344' MD / 4000' TVD to 7699' MD / 3991' TVD.
TOOH and run 4-1/2" pre-perforated liner from 3405' MD to TD @ 7699' MD.
Run gyro survey, orient and set whipstock for casing exit #2 @ +/-3385' MD
Mill window and TOOH for curve BHA.
Planned KOP #2 @ 3385' MD / 3385' TVD.
Drill 6-1/8 curve from 3385' MD / 3385' TVD to landing point @ 4356' MD / 4000' TVD at 90.50o.
TOOH and PU lateral BHA.
Drill from 4356' MD / 4000' TVD to 7776' MD / 3970' TVD.
TOOH and run 4-1/2" pre-perforated liner from 3390' MD to TD @ 7776' MD.
TIH and Set Retrievable Kill Plug.
Test Plug.
Secure well, rig down and move off location.

NOTE: Depths and directional plans are based on estimated formation tops. Corrections for KOP and landing points will be made based on actual formation tops from logs and BHA selection.

Other proposed operations facets attachment:

Carson32_Lateral1_Anticollision_Report_20210720102844.pdf

Carson32_Lateral2_Anticollision_Report_20210720102858.pdf

Operator Name: COLEMAN OIL & GAS INCORPORATED

Well Name: CARSON 32-4-32 **Well Number:** 1H

Carson32_Wellhead_Diagram_20210720102927.pdf

Carson32_Additional_Attachment_20210720102939.pdf

Carson32_Drill_Plan_v2_20210720103530.pdf

Other Variance attachment:

Company: Coleman Oil & Gas Inc.
Project: Rio Arriba County, NMW NAD83
Site: Carson 32-4-32 Pad
Well: Carson 32-4-32 1H
Wellbore: Lateral 1
Design: Plan #1

PROJECT DETAILS: Rio Arriba County, NMW NAD83

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Western Zone
System Datum: Mean Sea Level
Local North: True

LONESTAR CONSULTING

WELL DETAILS: Carson 32-4-32 1H

GL 7147' @ 7147.00ft

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	2161726.54	2887270.30	36.9393242	-107.2715420

Plan: Plan #1 (Carson 32-4-32 1H/Lateral 1)

Created By: Janie Collins Date: 8:00, June 18 2021

Azimuths to True North
Magnetic North: 8.00°
Magnetic Field
Strength: 49704.2nT
Dip Angle: 63.41°
Date: 6/7/2021
Model: HDGM2021

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
Carson 32 1H Lat 1 BHL	3991.00	-520.00	-3842.00	2161183.91	2883431.43	36.9378952	-107.2846881

SECTION DETAILS

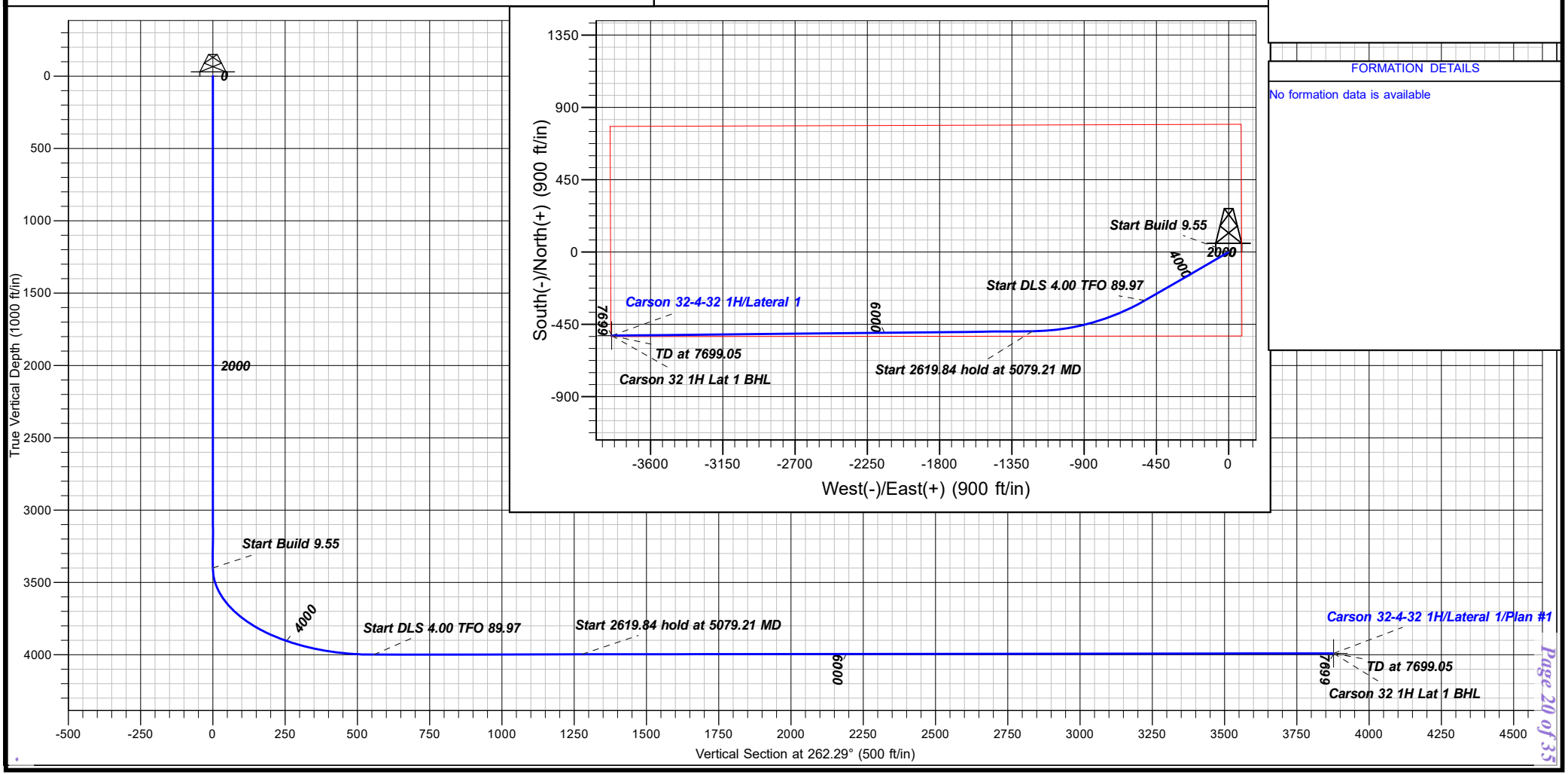
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
3400.00	0.00	0.00	3400.00	0.00	0.00	0.00	0.00	0.00	
4344.16	90.16	240.00	4000.00	-300.84	-521.07	9.55	240.00	556.71	
5079.21	90.15	269.40	3997.95	-492.66	-1222.31	4.00	89.97	1277.35	
7699.05	90.15	269.40	3991.00	-520.00	-3842.00	0.00	0.00	3877.03	Carson 32 1H Lat 1 BHL

CASING DETAILS

No casing data is available

FORMATION DETAILS

No formation data is available



Coleman Oil & Gas Inc.

Rio Arriba County, NMW NAD83
Carson 32-4-32 Pad
Carson 32-4-32 1H

Lateral 1

Plan: Plan #1

Standard Planning Report

18 June, 2021

Lonestar Consulting
Planning Report

Database:	EDM _16.0	**Local Co-ordinate Reference:**	Well Carson 32-4-32 1H
Company:	Coleman Oil & Gas Inc.	**TVD Reference:**	GL 7147' @ 7147.00ft
Project:	Rio Arriba County, NMW NAD83	**MD Reference:**	GL 7147' @ 7147.00ft
Site:	Carson 32-4-32 Pad	**North Reference:**	True
Well:	Carson 32-4-32 1H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Lateral 1		
Design:	Plan #1		

Project Rio Arriba County, NMW NAD83

Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Western Zone		

Site Carson 32-4-32 Pad

Site Position:		**Northing:**	2,161,726.54 usft	**Latitude:**	36.9393242
From:	Lat/Long	**Easting:**	2,887,270.30 usft	**Longitude:**	-107.2715420
Position Uncertainty:	0.00 ft	**Slot Radius:**	13.200 in		

Well Carson 32-4-32 1H

Well Position	**+N/-S**	0.00 ft	**Northing:**	2,161,726.54 usft	**Latitude:**	36.9393242
	+E/-W	0.00 ft	**Easting:**	2,887,270.30 usft	**Longitude:**	-107.2715420
Position Uncertainty		0.00 ft	**Wellhead Elevation:**	ft	**Ground Level:**	7,147.00 ft
Grid Convergence:		0.34 °				

Wellbore Lateral 1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM2021_FILE	6/7/2021	8.60	63.42	49,704.20000000

Design Plan #1

Audit Notes:

Version:	**Phase:**	PLAN	**Tie On Depth:**	3,400.00

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	262.29

Plan Survey Tool Program **Date** 6/18/2021

	Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	3,400.00	7,698.83	Plan #1 (Lateral 1)	MWD-SDI	

Plan Sections

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00	
4,344.16	90.16	240.00	4,000.00	-300.84	-521.07	9.55	9.55	0.00	240.00	
5,079.21	90.15	269.40	3,997.95	-492.66	-1,222.31	4.00	0.00	4.00	89.97	
7,699.05	90.15	269.40	3,991.00	-520.00	-3,842.00	0.00	0.00	0.00	0.00	Carson 32-4-32 1H La

Lonestar Consulting

Planning Report

Database:	EDM _16.0	**Local Co-ordinate Reference:**	Well Carson 32-4-32 1H
Company:	Coleman Oil & Gas Inc.	**TVD Reference:**	GL 7147' @ 7147.00ft
Project:	Rio Arriba County, NMW NAD83	**MD Reference:**	GL 7147' @ 7147.00ft
Site:	Carson 32-4-32 Pad	**North Reference:**	True
Well:	Carson 32-4-32 1H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Lateral 1		
Design:	Plan #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500.00	9.55	240.00	3,499.54	-4.16	-7.20	7.69	9.55	9.55	0.00
3,600.00	19.10	240.00	3,596.32	-16.51	-28.60	30.56	9.55	9.55	0.00
3,700.00	28.65	240.00	3,687.66	-36.73	-63.61	67.96	9.55	9.55	0.00
3,800.00	38.20	240.00	3,771.02	-64.23	-111.26	118.87	9.55	9.55	0.00
3,900.00	47.75	240.00	3,844.11	-98.28	-170.22	181.86	9.55	9.55	0.00
4,000.00	57.30	240.00	3,904.88	-137.91	-238.87	255.20	9.55	9.55	0.00
4,100.00	66.84	240.00	3,951.67	-182.03	-315.29	336.86	9.55	9.55	0.00
4,200.00	76.39	240.00	3,983.16	-229.43	-397.38	424.56	9.55	9.55	0.00
4,300.00	85.94	240.00	3,998.50	-278.78	-482.86	515.89	9.55	9.55	0.00
4,344.16	90.16	240.00	4,000.00	-300.84	-521.07	556.71	9.55	9.55	0.00
4,400.00	90.16	242.23	3,999.84	-327.81	-569.96	608.78	4.00	0.00	4.00
4,500.00	90.16	246.23	3,999.56	-371.27	-660.00	703.83	4.00	0.00	4.00
4,600.00	90.16	250.23	3,999.28	-408.35	-752.85	800.82	4.00	0.00	4.00
4,700.00	90.16	254.23	3,999.00	-438.85	-848.06	899.26	4.00	0.00	4.00
4,800.00	90.16	258.23	3,998.72	-462.64	-945.17	998.68	4.00	0.00	4.00
4,900.00	90.16	262.23	3,998.44	-479.60	-1,043.70	1,098.60	4.00	0.00	4.00
5,000.00	90.15	266.23	3,998.17	-489.65	-1,143.17	1,198.52	4.00	0.00	4.00
5,079.21	90.15	269.40	3,997.95	-492.66	-1,222.31	1,277.35	4.00	0.00	4.00
5,100.00	90.15	269.40	3,997.90	-492.88	-1,243.11	1,297.98	0.00	0.00	0.00
5,200.00	90.15	269.40	3,997.63	-493.92	-1,343.10	1,397.21	0.00	0.00	0.00
5,300.00	90.15	269.40	3,997.37	-494.97	-1,443.09	1,496.44	0.00	0.00	0.00
5,400.00	90.15	269.40	3,997.10	-496.01	-1,543.09	1,595.67	0.00	0.00	0.00
5,500.00	90.15	269.40	3,996.84	-497.05	-1,643.08	1,694.90	0.00	0.00	0.00
5,600.00	90.15	269.40	3,996.57	-498.10	-1,743.08	1,794.13	0.00	0.00	0.00
5,700.00	90.15	269.40	3,996.31	-499.14	-1,843.07	1,893.36	0.00	0.00	0.00
5,800.00	90.15	269.40	3,996.04	-500.18	-1,943.06	1,992.59	0.00	0.00	0.00
5,900.00	90.15	269.40	3,995.77	-501.23	-2,043.06	2,091.83	0.00	0.00	0.00
6,000.00	90.15	269.40	3,995.51	-502.27	-2,143.05	2,191.06	0.00	0.00	0.00
6,100.00	90.15	269.40	3,995.24	-503.32	-2,243.05	2,290.29	0.00	0.00	0.00
6,200.00	90.15	269.40	3,994.98	-504.36	-2,343.04	2,389.52	0.00	0.00	0.00
6,300.00	90.15	269.40	3,994.71	-505.40	-2,443.04	2,488.75	0.00	0.00	0.00
6,400.00	90.15	269.40	3,994.45	-506.45	-2,543.03	2,587.98	0.00	0.00	0.00
6,500.00	90.15	269.40	3,994.18	-507.49	-2,643.02	2,687.21	0.00	0.00	0.00
6,600.00	90.15	269.40	3,993.92	-508.53	-2,743.02	2,786.44	0.00	0.00	0.00
6,700.00	90.15	269.40	3,993.65	-509.58	-2,843.01	2,885.67	0.00	0.00	0.00
6,800.00	90.15	269.40	3,993.39	-510.62	-2,943.01	2,984.90	0.00	0.00	0.00
6,900.00	90.15	269.40	3,993.12	-511.66	-3,043.00	3,084.13	0.00	0.00	0.00
7,000.00	90.15	269.40	3,992.86	-512.71	-3,142.99	3,183.36	0.00	0.00	0.00
7,100.00	90.15	269.40	3,992.59	-513.75	-3,242.99	3,282.59	0.00	0.00	0.00
7,200.00	90.15	269.40	3,992.32	-514.79	-3,342.98	3,381.82	0.00	0.00	0.00
7,300.00	90.15	269.40	3,992.06	-515.84	-3,442.98	3,481.05	0.00	0.00	0.00
7,400.00	90.15	269.40	3,991.79	-516.88	-3,542.97	3,580.29	0.00	0.00	0.00
7,500.00	90.15	269.40	3,991.53	-517.92	-3,642.97	3,679.52	0.00	0.00	0.00
7,600.00	90.15	269.40	3,991.26	-518.97	-3,742.96	3,778.75	0.00	0.00	0.00
7,699.05	90.15	269.40	3,991.00	-520.00	-3,842.00	3,877.03	0.00	0.00	0.00

Lonestar Consulting
Planning Report

Database:	EDM _16.0	**Local Co-ordinate Reference:**	Well Carson 32-4-32 1H
Company:	Coleman Oil & Gas Inc.	**TVD Reference:**	GL 7147' @ 7147.00ft
Project:	Rio Arriba County, NMW NAD83	**MD Reference:**	GL 7147' @ 7147.00ft
Site:	Carson 32-4-32 Pad	**North Reference:**	True
Well:	Carson 32-4-32 1H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Lateral 1		
Design:	Plan #1		

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Carson 32-4-32 1H Lat 2	0.00	0.00	3,970.00	745.00	-3,842.00	2,162,448.89	2,883,423.98	36.9413697	-107.2846887
- plan misses target center by 1265.11ft at 7685.90ft MD (3991.03 TVD, -519.86 N, -3828.86 E) - Point									
Carson 32-4-32 1H Lat 1	0.00	0.00	3,991.00	-520.00	-3,842.00	2,161,183.91	2,883,431.44	36.9378952	-107.2846881
- plan hits target center - Point									

Company: Coleman Oil & Gas Inc.
Project: Rio Arriba County, NMW NAD83
Site: Carson 32-4-32 Pad
Well: Carson 32-4-32 1H
Wellbore: Lateral 2
Design: Plan #1

PROJECT DETAILS: Rio Arriba County, NMW NAD83

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Western Zone
System Datum: Mean Sea Level
Local North: True

LONESTAR CONSULTING

WELL DETAILS: Carson 32-4-32 1H

GL 7147' @ 7147.00ft

+N/-S	+E/-W	Northing	Easting	Latittude	Longitude
0.00	0.00	2161726.54	2887270.30	36.9393242	-107.2715420

Plan: Plan #1 (Carson 32-4-32 1H/Lateral 2)

Created By: Janie Collins Date: 8:02, June 18 2021

Azimuths to True North
Magnetic North: 8.99°
Magnetic Field
Strength: 49704.2nT
Dip Angle: 63.44°
Date: 6/7/2021
Model: HDGM2021_ETF

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
Carson 32 1H Lat 2 BHL	3970.00	745.00	-3842.00	2162448.89	2883423.98	36.9413697	-107.2846887

SECTION DETAILS

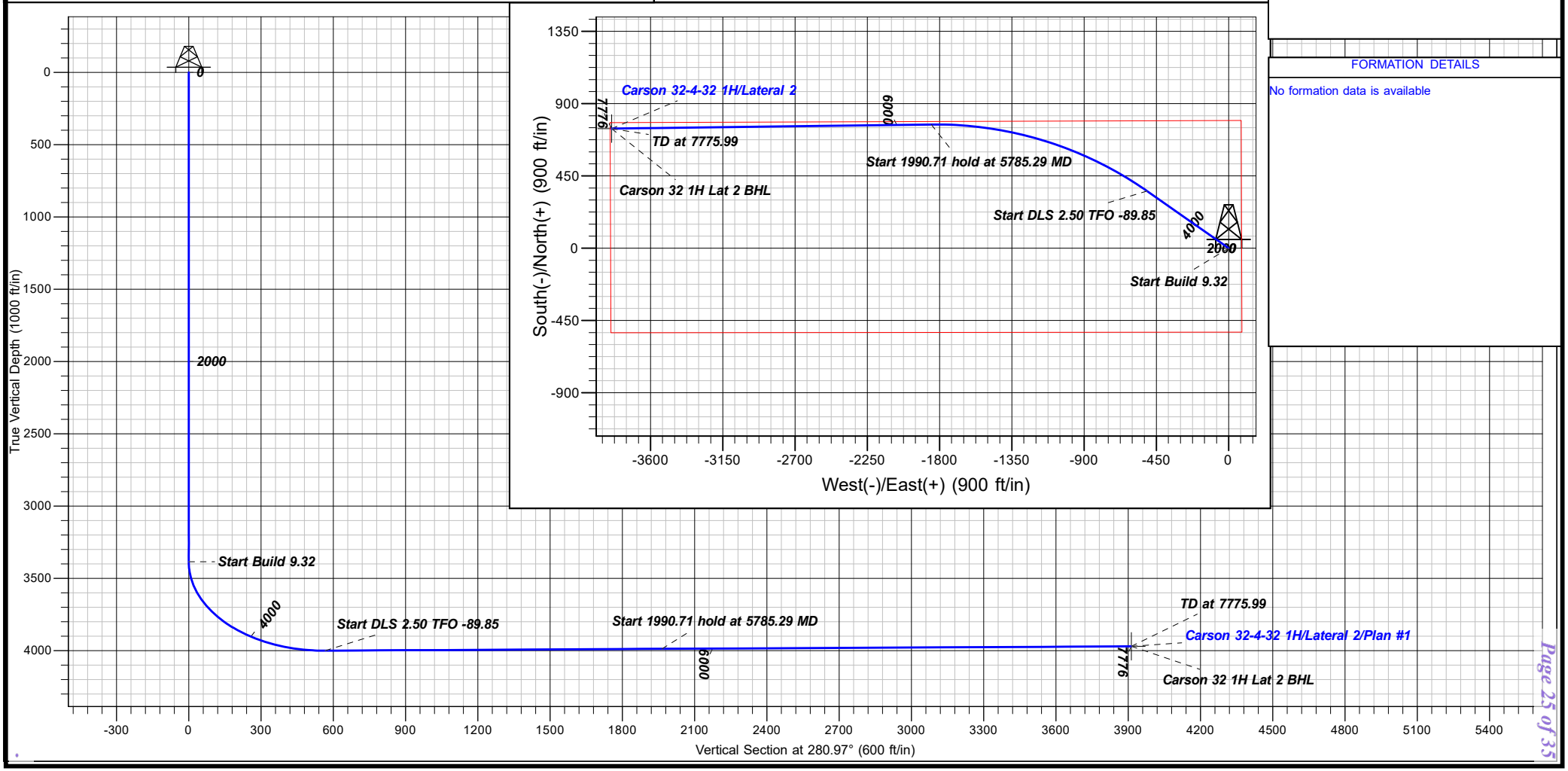
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
3385.00	0.00	0.00	3385.00	0.00	0.00	0.00	0.00	0.00	
4356.44	90.50	305.00	4000.00	355.84	-508.19	9.32	305.00	566.64	
5785.29	90.49	269.28	3987.18	770.10	-1851.52	2.50	-89.85	1964.27	
7775.99	90.49	269.28	3970.00	745.00	-3842.00	0.00	0.00	3913.56	Carson 32 1H Lat 2 BHL

CASING DETAILS

No casing data is available

FORMATION DETAILS

No formation data is available



Coleman Oil & Gas Inc.

Rio Arriba County, NMW NAD83
Carson 32-4-32 Pad
Carson 32-4-32 1H

Lateral 2

Plan: Plan #1

Standard Planning Report

18 June, 2021

Lonestar Consulting
Planning Report

Database:	EDM _16.0	**Local Co-ordinate Reference:**	Well Carson 32-4-32 1H
Company:	Coleman Oil & Gas Inc.	**TVD Reference:**	GL 7147' @ 7147.00ft
Project:	Rio Arriba County, NMW NAD83	**MD Reference:**	GL 7147' @ 7147.00ft
Site:	Carson 32-4-32 Pad	**North Reference:**	True
Well:	Carson 32-4-32 1H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Lateral 2		
Design:	Plan #1		

Project Rio Arriba County, NMW NAD83

Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Western Zone		

Site Carson 32-4-32 Pad

Site Position:		**Northing:**	2,161,726.54 usft	**Latitude:**	36.9393242
From:	Lat/Long	**Easting:**	2,887,270.30 usft	**Longitude:**	-107.2715420
Position Uncertainty:	0.00 ft	**Slot Radius:**	13.200 in		

Well Carson 32-4-32 1H

Well Position	**+N/-S**	0.00 ft	**Northing:**	2,161,726.54 usft	**Latitude:**	36.9393242
	+E/-W	0.00 ft	**Easting:**	2,887,270.30 usft	**Longitude:**	-107.2715420
Position Uncertainty		0.00 ft	**Wellhead Elevation:**	ft	**Ground Level:**	7,147.00 ft
Grid Convergence:		0.34 °				

Wellbore Lateral 2

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM2021_FILE	6/7/2021	8.60	63.42	49,704.20000000

Design Plan #1

Audit Notes:

Version:	**Phase:**	PLAN	**Tie On Depth:**	3,385.00

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	280.97

Plan Survey Tool Program **Date** 6/18/2021

	Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	3,385.00	7,775.93	Plan #1 (Lateral 2)	MWD-SDI	

Plan Sections

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
3,385.00	0.00	0.00	3,385.00	0.00	0.00	0.00	0.00	0.00	0.00	
4,356.44	90.50	305.00	4,000.00	355.84	-508.19	9.32	9.32	0.00	305.00	
5,785.29	90.49	269.28	3,987.18	770.10	-1,851.52	2.50	0.00	-2.50	-89.85	
7,775.99	90.49	269.28	3,970.00	745.00	-3,842.00	0.00	0.00	0.00	0.00	Carson 32 1H Lat 2 B

Lonestar Consulting

Planning Report

Database:	EDM _16.0	**Local Co-ordinate Reference:**	Well Carson 32-4-32 1H
Company:	Coleman Oil & Gas Inc.	**TVD Reference:**	GL 7147' @ 7147.00ft
Project:	Rio Arriba County, NMW NAD83	**MD Reference:**	GL 7147' @ 7147.00ft
Site:	Carson 32-4-32 Pad	**North Reference:**	True
Well:	Carson 32-4-32 1H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Lateral 2		
Design:	Plan #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
3,385.00	0.00	0.00	3,385.00	0.00	0.00	0.00	0.00	0.00	0.00
3,400.00	1.40	305.00	3,400.00	0.10	-0.15	0.17	9.32	9.32	0.00
3,500.00	10.71	305.00	3,499.33	6.15	-8.78	9.79	9.32	9.32	0.00
3,600.00	20.03	305.00	3,595.65	21.34	-30.47	33.98	9.32	9.32	0.00
3,700.00	29.35	305.00	3,686.41	45.27	-64.65	72.08	9.32	9.32	0.00
3,800.00	38.66	305.00	3,769.22	77.31	-110.41	123.10	9.32	9.32	0.00
3,900.00	47.98	305.00	3,841.89	116.62	-166.54	185.70	9.32	9.32	0.00
4,000.00	57.29	305.00	3,902.51	162.15	-231.58	258.21	9.32	9.32	0.00
4,100.00	66.61	305.00	3,949.48	212.72	-303.79	338.73	9.32	9.32	0.00
4,200.00	75.93	305.00	3,981.56	266.98	-381.28	425.13	9.32	9.32	0.00
4,300.00	85.24	305.00	3,997.90	323.50	-462.01	515.14	9.32	9.32	0.00
4,356.44	90.50	305.00	4,000.00	355.84	-508.19	566.64	9.32	9.32	0.00
4,400.00	90.50	303.91	3,999.62	380.48	-544.11	606.59	2.50	0.01	-2.50
4,500.00	90.51	301.41	3,998.74	434.44	-628.29	699.50	2.50	0.01	-2.50
4,600.00	90.51	298.91	3,997.84	484.68	-714.74	793.93	2.50	0.00	-2.50
4,700.00	90.52	296.41	3,996.95	531.10	-803.30	889.71	2.50	0.00	-2.50
4,800.00	90.52	293.91	3,996.04	573.61	-893.80	986.65	2.50	0.00	-2.50
4,900.00	90.52	291.41	3,995.13	612.13	-986.07	1,084.56	2.50	0.00	-2.50
5,000.00	90.52	288.91	3,994.22	646.59	-1,079.93	1,183.27	2.50	0.00	-2.50
5,100.00	90.52	286.41	3,993.31	676.93	-1,175.20	1,282.58	2.50	0.00	-2.50
5,200.00	90.52	283.91	3,992.40	703.08	-1,271.71	1,382.30	2.50	0.00	-2.50
5,300.00	90.52	281.41	3,991.49	724.99	-1,369.27	1,482.24	2.50	0.00	-2.50
5,400.00	90.52	278.91	3,990.59	742.63	-1,467.69	1,582.22	2.50	0.00	-2.50
5,500.00	90.51	276.41	3,989.69	755.96	-1,566.79	1,682.04	2.50	0.00	-2.50
5,600.00	90.51	273.91	3,988.80	764.95	-1,666.37	1,781.51	2.50	-0.01	-2.50
5,700.00	90.50	271.41	3,987.92	769.59	-1,766.25	1,880.45	2.50	-0.01	-2.50
5,785.29	90.49	269.28	3,987.18	770.10	-1,851.52	1,964.27	2.50	-0.01	-2.50
5,800.00	90.49	269.28	3,987.05	769.91	-1,866.24	1,978.67	0.00	0.00	0.00
5,900.00	90.49	269.28	3,986.19	768.65	-1,966.23	2,076.59	0.00	0.00	0.00
6,000.00	90.49	269.28	3,985.33	767.39	-2,066.21	2,174.51	0.00	0.00	0.00
6,100.00	90.49	269.28	3,984.47	766.13	-2,166.20	2,272.43	0.00	0.00	0.00
6,200.00	90.49	269.28	3,983.60	764.87	-2,266.19	2,370.35	0.00	0.00	0.00
6,300.00	90.49	269.28	3,982.74	763.61	-2,366.18	2,468.27	0.00	0.00	0.00
6,400.00	90.49	269.28	3,981.88	762.35	-2,466.17	2,566.19	0.00	0.00	0.00
6,500.00	90.49	269.28	3,981.01	761.09	-2,566.16	2,664.11	0.00	0.00	0.00
6,600.00	90.49	269.28	3,980.15	759.83	-2,666.14	2,762.03	0.00	0.00	0.00
6,700.00	90.49	269.28	3,979.29	758.57	-2,766.13	2,859.95	0.00	0.00	0.00
6,800.00	90.49	269.28	3,978.42	757.31	-2,866.12	2,957.87	0.00	0.00	0.00
6,900.00	90.49	269.28	3,977.56	756.04	-2,966.11	3,055.79	0.00	0.00	0.00
7,000.00	90.49	269.28	3,976.70	754.78	-3,066.10	3,153.71	0.00	0.00	0.00
7,100.00	90.49	269.28	3,975.83	753.52	-3,166.09	3,251.63	0.00	0.00	0.00
7,200.00	90.49	269.28	3,974.97	752.26	-3,266.07	3,349.55	0.00	0.00	0.00
7,300.00	90.49	269.28	3,974.11	751.00	-3,366.06	3,447.47	0.00	0.00	0.00
7,400.00	90.49	269.28	3,973.25	749.74	-3,466.05	3,545.39	0.00	0.00	0.00
7,500.00	90.49	269.28	3,972.38	748.48	-3,566.04	3,643.31	0.00	0.00	0.00
7,600.00	90.49	269.28	3,971.52	747.22	-3,666.03	3,741.23	0.00	0.00	0.00
7,700.00	90.49	269.28	3,970.66	745.96	-3,766.02	3,839.15	0.00	0.00	0.00
7,775.99	90.49	269.28	3,970.00	745.00	-3,842.00	3,913.56	0.00	0.00	0.00

Lonestar Consulting
Planning Report

Database:	EDM _16.0	**Local Co-ordinate Reference:**	Well Carson 32-4-32 1H
Company:	Coleman Oil & Gas Inc.	**TVD Reference:**	GL 7147' @ 7147.00ft
Project:	Rio Arriba County, NMW NAD83	**MD Reference:**	GL 7147' @ 7147.00ft
Site:	Carson 32-4-32 Pad	**North Reference:**	True
Well:	Carson 32-4-32 1H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Lateral 2		
Design:	Plan #1		

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Carson 32 1H Lat 2 BHL - plan hits target center - Point	0.00	0.00	3,970.00	745.00	-3,842.00	2,162,448.89	2,883,423.98	36.9413697	-107.2846887

CARSON NATIONAL FOREST
JICARILLA RANGER DISTRICT

CONDITIONS OF APPROVAL

☒ **Application for Permit to Drill (APD)** AFMSSII APD ID: 10400077762
☐ Sundry Notice

Date:	**07/10/2023**
Operator:	**Coleman Oil & Gas, Inc.**
Well Name:	**Carson 32-4-32 #1H**
API Number:	

Legal Description:

Surface Location:
Section: **32** Township: **32N** Range: **4W**, NMPM.
Footages: **1,182 FSL, 740 FEL**

Bottom Hole Location (If different):
Section: **32** Township: **32N** Range: **4W**, NMPM.
Footages: **660 FSL, 660 FWL**

The following conditions of approval (COAs) will apply to this location and all associated activities and facilities on National Forest System (NFS) lands. COAs remain in effect until final abandonment and reclamation is accepted by the Forest Service Authorized Officer.

SITE SPECIFIC CONDITIONS OF APPROVAL

A. Pre-Construction

☒ **The operator or their representative will contact and schedule an on-site pre-construction meeting with the Authorized Officer, (505) 632-2956. At the time of the pre-construction meeting all access/pipeline route stakes, location stakes, well bore stake, and any archeological protective barrier(s), if applicable, will be properly located and easily identifiable. It is recommended that, at a minimum, the operator representative and the construction contractor attend the pre-construction meeting.**

☒ **The operator will ensure that a complete copy of the APD, including the surface use plan of operations (SUPO) with COAs, is readily available to all persons at all times at the project area.**

B. Cultural Resources

☐ No archeological monitoring or fencing is required; refer to the attached Record of Review (ROR) in the event of an inadvertent discovery.

☒ **Archeological stipulations apply. Follow the protective measures provided in the attached ROR. Disclosure of site location information to unauthorized personnel is prohibited under 36 CFR 296.18.**

C. Wildlife Resources

☒ **Migratory Bird: A bird nest survey is required between May 15-July 31 for any projects that would remove 4.0 or more acres of vegetation. The proposed project is estimated to disturb more than four acres of vegetation, a survey will be required.**

☐ Current Mexico Spotted Owl (MSO) Protocol states “If habitat modifying or potentially disruptive activities are scheduled for a particular year, the second year of surveys should be conducted either the year before or the year of (but prior to) project implementation. In other words, no more than one year should intervene between the surveys and project implementation. An additional year of surveys is recommended prior to project implementation if more than one breeding season has elapsed since the last complete survey and no owls have been detected. If more than 4 years have elapsed between the end of two years of survey and the initiation of the proposed action, another complete inventory is recommended prior to project implementation.” (U.S. Fish and Wildlife Service 2003) MSO surveys are required.

☐ For all construction activities (includes re-drills, re-completions, etc), a pre-construction field inspection will be required to check for nesting activity by goshawks within the project area.

1. If no nesting activity by goshawks is observed within the project area, construction may proceed, with notification by the Authorized Officer.

2. If nesting activity is observed in the project area, Forest Service protocol surveys will be initiated immediately, with seasonal restrictions on construction imposed if nesting is confirmed. This would delay construction activities until late July-August. Construction activities would be authorized after approval of the Authorized Officer.

D. Gates

☐ A locked gate will be required in a location on the access road to this well as determined by the Authorized Officer. Refer to the Roads/Access section for gate design and construction specifications.

☒ **The existing gate on Forest Road 218C will be in functioning condition when drilling and completion are done. Refer to the Roads/Access section for existing gate requirements.**

E. Required Seed Mixture

Seed Mixture: See attached BLM-FFO pinyon-juniper community guidelines for seed mixture and specifications. Mulching and the sterile cover crop option is required. These requirements apply to pad and pipeline seeding.

F. Other

1. See attached location, pipeline, and road drawings for approved project areas. Amendment #2, Figure 1 amends JIC46, Appendix A, as it pertains to designated roads.

2. The holder will provide the Authorized Officer a surety bond or other acceptable security, in the amount of $400,000.00, prior to any ground disturbing activities.

3. All road segments, as identified in the attached road drawings, greater then ±8% will have a geo-grid and no less than 8 inches of surfacing placed on the geo-grid. The geo-grid and surfacing will extend 50 feet beyond the ±8% sections on both sides. Also, the portions of road corridor indentified as 40 ft. wide (27+63.99 – 30+56.00) will have geo-grid and no less than 8 inches of surfacing placed on the geo-grid. The geo-grid and surfacing will extend 50 feet beyond the 40 ft. corridor on both sides.The geo-grid and surfacing will be maintained for the life of the well. Surfacing materials and geo-grid must be approved in advance by the Authorized Officer.

4. All road sections constructed on minimal grade or side slope will be elevated above natural grade to facilitate proper drainage.

5. The existing gate on the 218C road**:** The operator will have routine maintenance responsibility for this gate for the life of the wells. This operator will ensure that the gate and any associated wing fencing is functional, all authorized users have access, and all required road closed and reflective/safety signage is present.

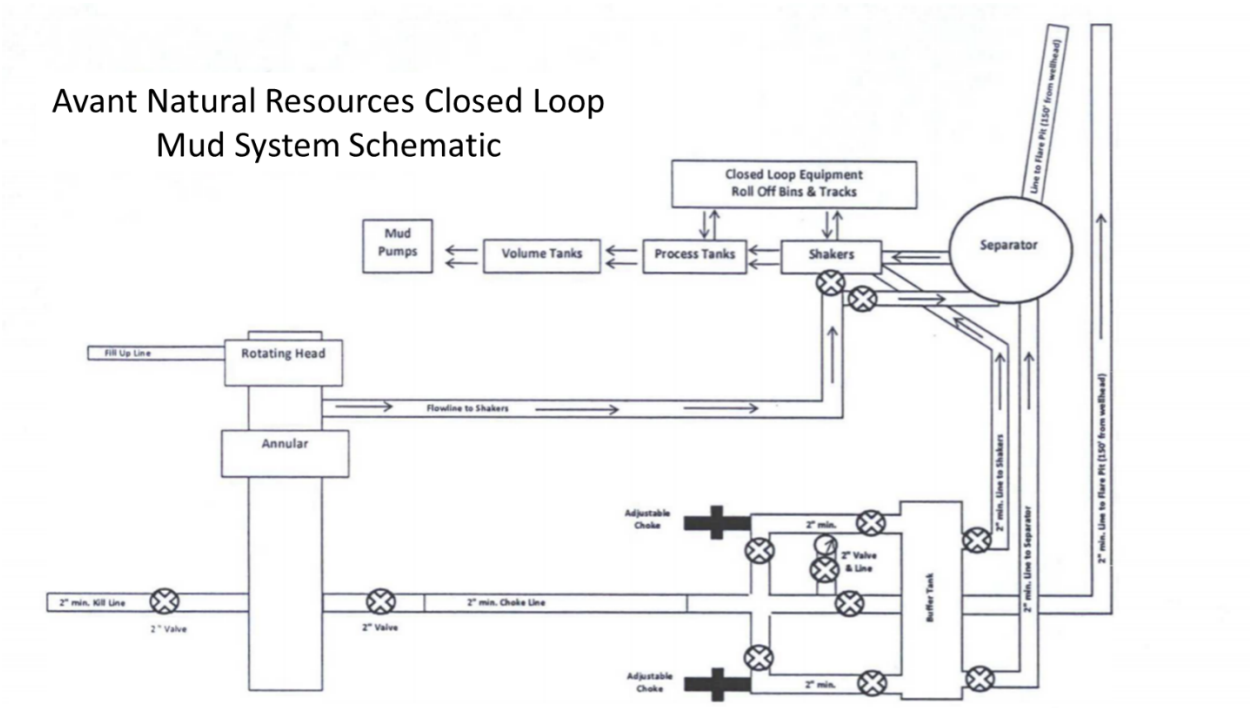
6. As a mitigation requirement, a 213-acre archeological survey will be conducted in an area specified by the Authorized Officer. The survey and report is to be completed and submitted to the Authorized Officer by the end of the calendar year in which any ground disturbing activities are initiated unless otherwise approved by the Authorized Officer.

7. Excessive amounts of wood from project construction will be removed by the holder under commercial wood permit.

8. Unless otherwise approved by the Authorized Officer all facilities will be low profile, less than 10 ft. in height, to minimize visual impacts.

9. On the Carson 32-4-32 #1H well location the construction zone from B – 6 – E’ is reduced. Around corner #6 the construction zone is limited so no cut may exceed 15 feet. The road/pipeline corridor width is limited to a maximum of 50 feet, unless corridor width is otherwise reduced.

10. Interim reclamation, as approved by the Authorized Officer, for all ground disturbing activities associated with JIC46 must be completed during the calender year in which construction was initiated, unless otherwise approved by the Authorized Officer.


Avant Natural Resources Closed Loop
Mud System Schematic
Closed Loop Equipment
Roll Off Bins & Tracks
Mud
Pumps
Volume Tanks
Process Tanks
Shakers
Separator
Line to Flare Pit (150' from wellhead)
Fill Up Line
Rotating Head
Flowline to Shakers
Annular
Adjustable
Choke
2" min.
2" Valve
& Line
Buffer Tank
2" min. Line to Shakers
2" min. Line to Separator
2" min. Line to Flare Pit (150' from wellhead)
2" min. Kill Line
2" Valve
2" Valve
2" min. Choke Line
Adjustable
Choke
2" min.

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

Action 437994

CONDITIONS

Operator: COLEMAN OIL & GAS INC P.O. Drawer 3337 Farmington, NM 87499	OGRID: 4838
	Action Number: 437994
	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.	3/1/2025
bwood	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.	3/1/2025
ward.rikala	Notify the OCD 24 hours prior to casing & cement.	3/24/2025
ward.rikala	File As Drilled C-102 and a directional Survey with C-104 completion packet.	3/24/2025
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.	3/24/2025
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.	3/24/2025