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.: NMLC029406B

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 32-5-28 1H

2. Name of Operator: COLEMAN OIL & GAS INCORPORATED

9. API Well No.: 30-039-31436

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: SWSE / 475 FSL / 2640 FEL / LAT 36.9453464 / LONG -107.3677562

At proposed prod. zone: NWNE / 660 FNL / 1978 FEL / LAT 36.9567086 / LONG -107.3654991

11. Sec., T. R. M. or Blk. and Survey or Area: SEC 28/T32N/R5W/NMP

14. Distance in miles and direction from nearest town or post office*: 17 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): 1 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.: 2764 feet

19. Proposed Depth: 3667 feet / 8085 feet

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

21. Elevations (Show whether DF, KDB, RT, GL, etc.): 6951 feet

22. Approximate date work will start*: 09/01/2022

23. Estimated duration: 30 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: (505) 330-2903	05/18/2022

Title: President

Approved by *(Signature)*	Name *(Printed/Typed)*	Date
(Electronic Submission)	DAVE J MANKIEWICZ / Ph: (505) 564-7761	09/22/2023

Title	Office
AFM-Minerals	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: 09/22/2023

DISTRICT I
1625 N. French Dr., Hobbs, N.M. 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
DISTRICT II
811 S. First St., Artesia, N.M. 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, N.M. 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, N.M. 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-039-31436	71629	Basin Fruitland Coal

[4] Property Code	[5] Property Name	[6] Well Number
327144	CARSON 32-5-28	1

[7] OGRID No.	[8] Operator Name	[9] Elevation
4838	COLEMAN OIL & GAS, INC.	6951

[10] Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	28	32 N	5 W		475	SOUTH	2640	EAST	RIO ARRIBA

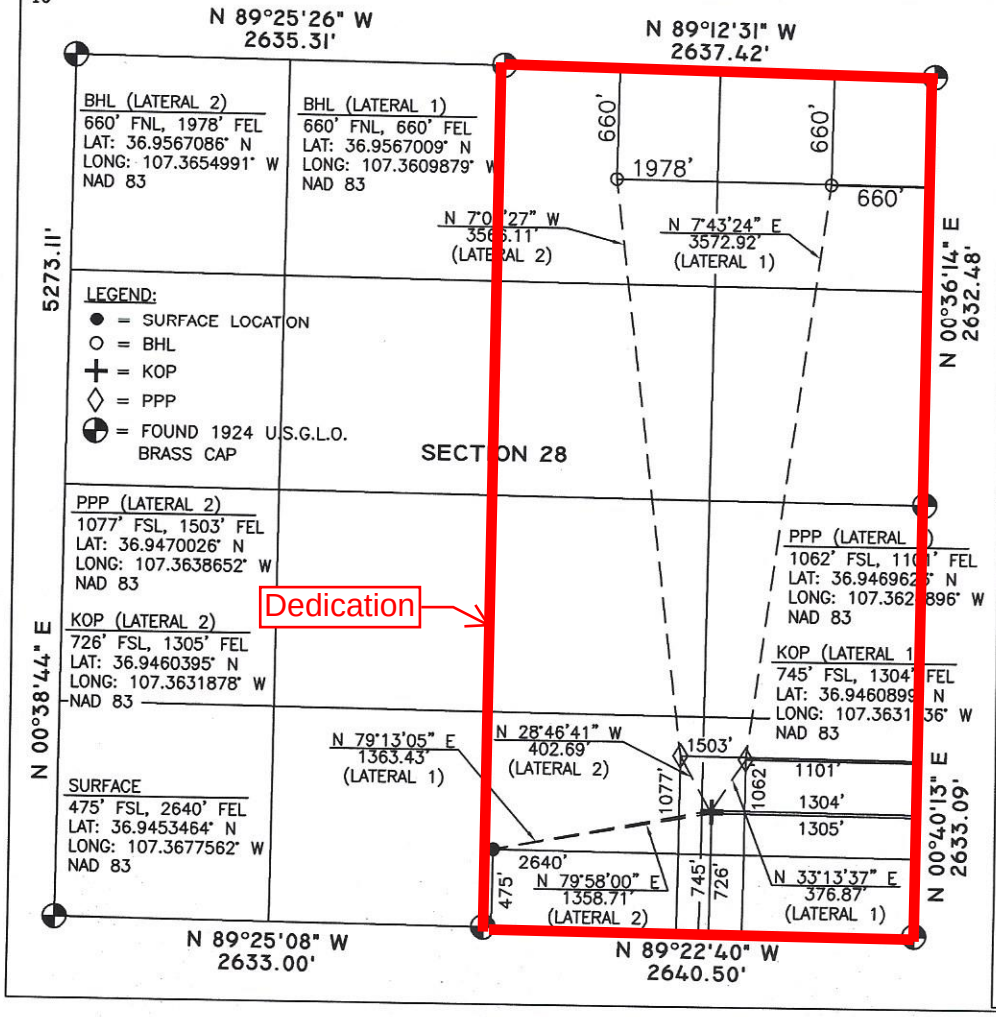
[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	28	32 N	5 W		660	NORTH	660	EAST	RIO ARRIBA
B	28	32 N	5 W		660	NORTH	1978	EAST	RIO ARRIBA

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
320			

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

16



[17] OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

8/9/19
Signature Date

Mike Deutsch
Printed Name

mike@permitswest.com
E-mail Address

[18] SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

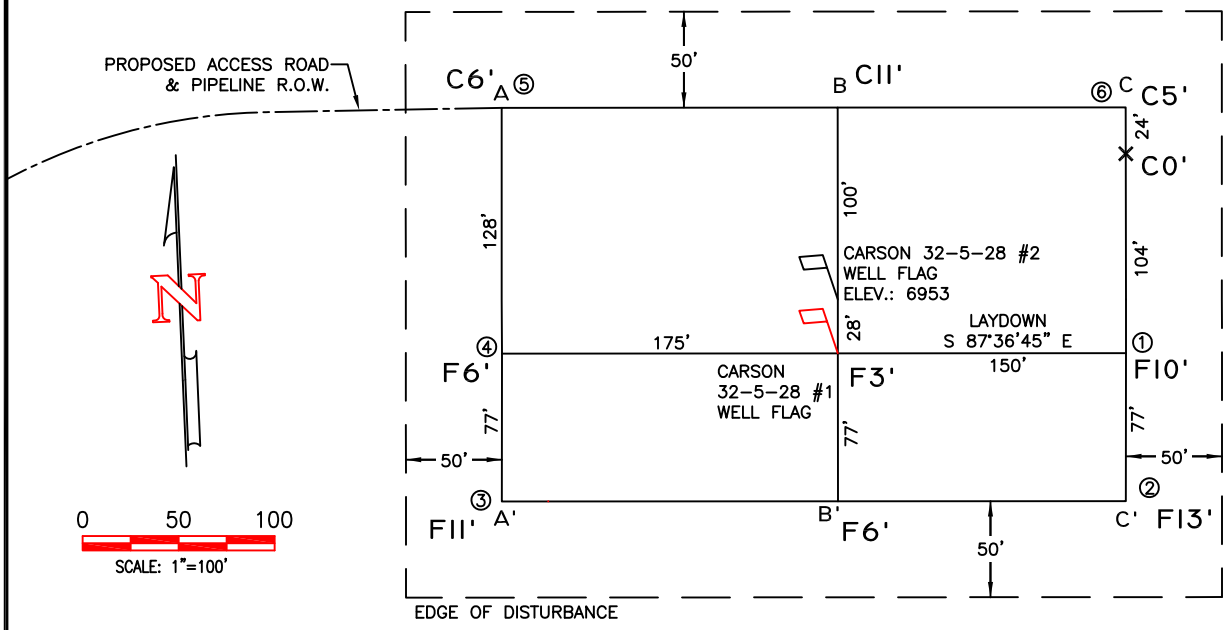
1/19/18
Date of Survey

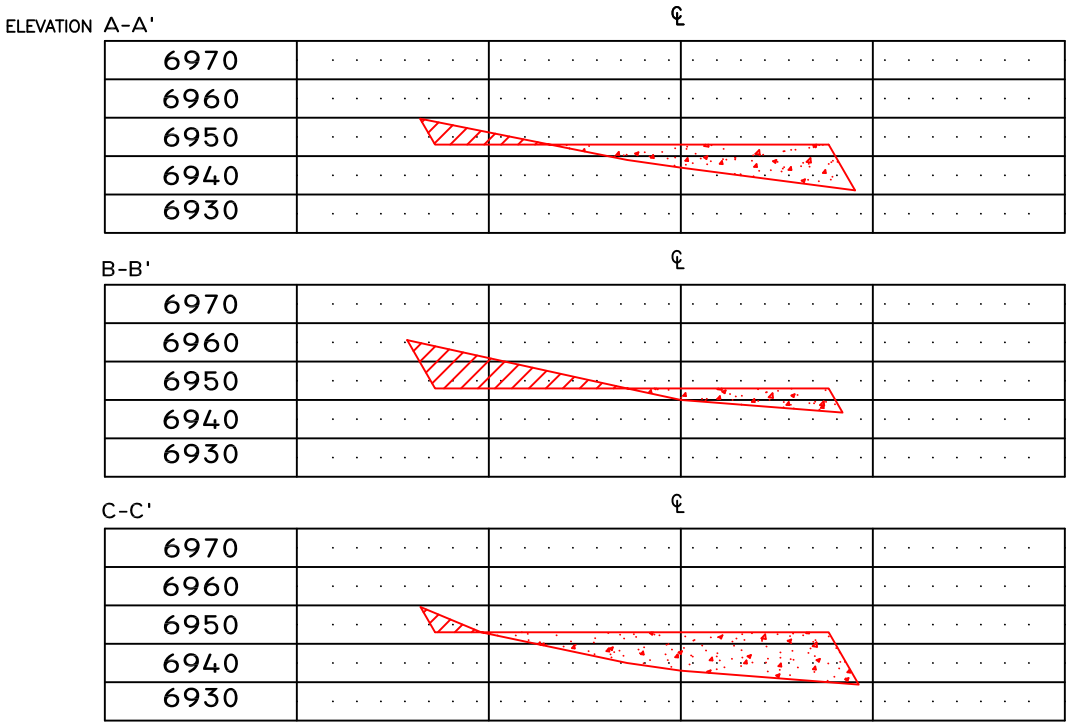
Signature and Seal of Professional Surveyor:

MARSHALL W. LINDEEN
NEW MEXICO
17078
PROFESSIONAL SURVEYOR
7-18-19

17078
Certificate Number

¡BEFORE DIGGING CALL FOR UTILITY LINE LOCATION!





CROSS SECTIONS
HORIZONTAL: 1"=100'
VERTICAL: 1"=50'

LEASE: CARSON 32-5-28 #1

FOOTAGES: 475' FSL, 2640' FEL (SURFACE)

SEC. 28 TWN. 32 N RNG. 5 W N.M.P.M.

LAT: 36.9453464° N LONG: 107.3677562° W (NAD83)

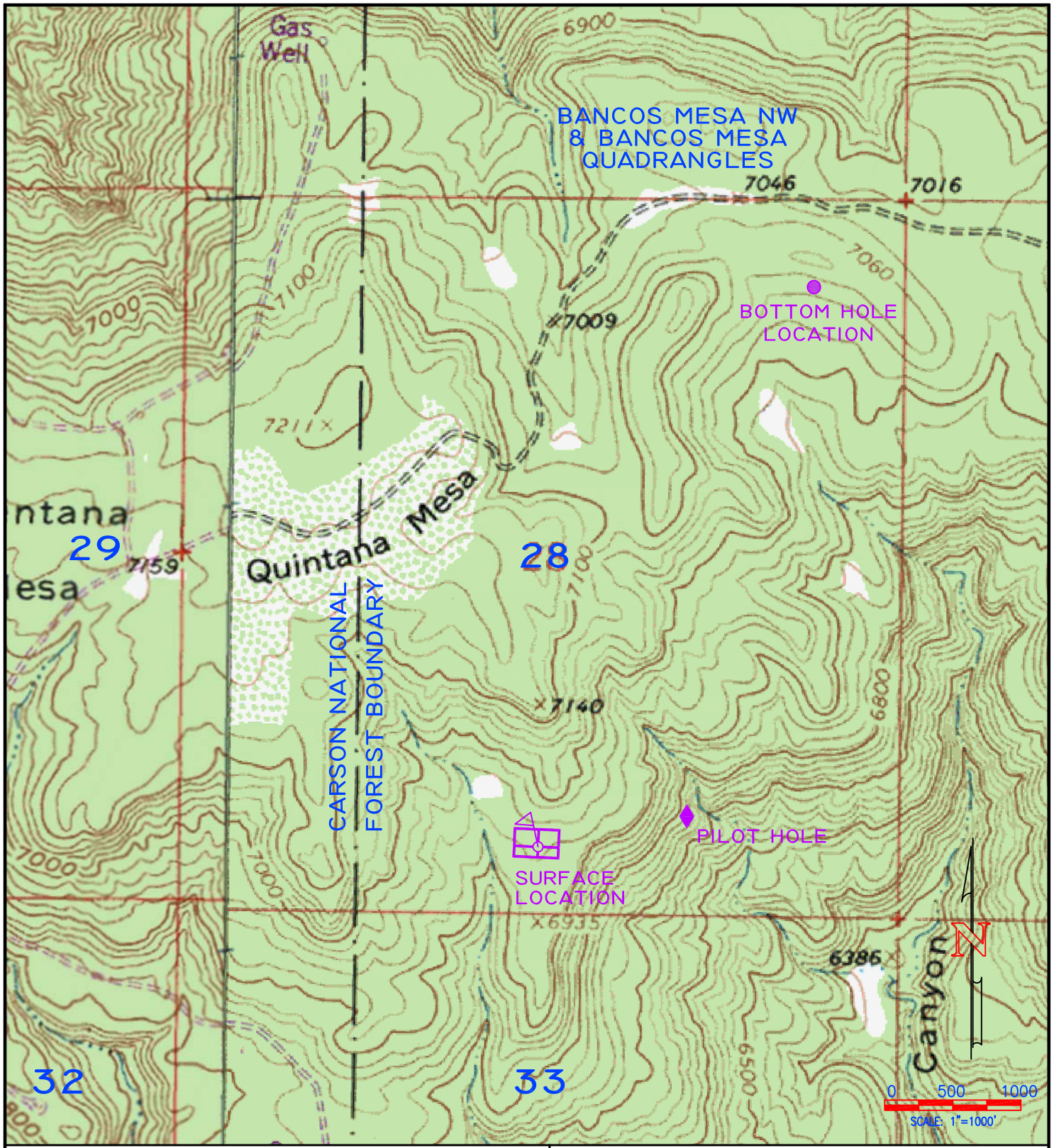
PROPOSED ELEVATION: 6953

COLEMAN OIL & GAS, INC.
FARMINGTON, NEW MEXICO

SURVEYED: 01/19/18 & 04/23/18	REV. DATE: 05/08/18	APP. BY: M.W.L.
DRAWN BY: C.B.	DATE DRAWN: 03/29/18	FILE NAME: 32528-CSP1

UNITED FIELD SERVICES INC.

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



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FARMINGTON, NEW MEXICO

SURVEYED:	01/19/18 04/23/18	REV. DATE:	05/08/18	APP. BY:	M.W.L.
DRAWN BY:	C.B.	DATE DRAWN:	03/28/18	FILE NAME:	325281-TOPO

UNITED FIELD SERVICES INC.

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

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 & Gas Inc.____**OGRID:** ____4838_____ **Date:** __09__/__27__/___23__

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 32-5-28 1H	Pending	O-28-32N-05W	475 FSL 2640 FEL	0	2000	150

IV. Central Delivery Point Name: Harvest Pipeline, E SEC 33, T32N R05W. MSO Well Pad Bullridge 101 & 101S [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 32-5-28 1H	Pending	Early 2024	RT 15-20 Days	RDRT	RDCT	RDFB
		04/01/2024	04/20/2024	04/29/2024	05/01/2024	05/06/2024

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: Michael T. Hanson
Printed Name: Michael T Hanson
Title: Operations Engineer
E-mail Address: mhanson@catamountep.com
Date: 09/27/2024
Phone: (505) 330-2903 Coleman Office (505) 327-0356 Catamount Office (970) 442-6629

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.

AFMSS

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

Drilling Plan Data Report

09/23/2023

APD ID: 10400085277 **Submission Date:** 05/18/2022

Operator Name: COLEMAN OIL & GAS INCORPORATED

Well Name: CARSON 32-5-28 **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
12176950	SAN JOSE	6951	0	0	OTHER : Unconsolidated gravels	USEABLE WATER	N
12176951	NACIMIENTO	5806	1145	1176	SANDSTONE, SHALE, SILTSTONE	USEABLE WATER	N
12176952	OJO ALAMAO	4026	2925	3293	SANDSTONE, SILTSTONE	NATURAL GAS, USEABLE WATER	N
12176953	KIRTLAND	3906	3045	3429	OTHER, SANDSTONE : Claystone	OTHER, USEABLE WATER : Clay	N
12176954	FRUITLAND	3376	3575	4069	MUDSTONE, SANDSTONE, SHALE, SILTSTONE	NATURAL GAS, USEABLE WATER	N
12176955	FRUITLAND COAL	3261	3690	4224	COAL	COAL	N
12176956	PICTURED CLIFFS	3206	3745	4291	SANDSTONE	NATURAL GAS, USEABLE WATER	Y

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 3900' = 1689 psi, which is less than 2,000 psi working pressure. Maximum anticipated surface pressure will be 1689 psi (3900' x .22 psi/ft) = 831 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 (refer to diagram in Attachment 1) 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 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

Operator Name: COLEMAN OIL & GAS INCORPORATED

Well Name: CARSON 32-5-28 **Well Number:** 1H

least once per week. Rams preventers will be activated each trip, not to exceed once per day.

Choke Diagram Attachment:

Carson28_Choke_manifold_diagram_20220511085119.pdf

BOP Diagram Attachment:

Carson28_BOP_stack_20220511085129.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	6951	6651	300	J-55	36	LT&C	1.1	1.1	DRY	1.4	DRY	1.4
2	PRODUCTION	8.75	7.0	NEW	API	N	0	4424	0	4424	6951	2527	4424	J-55	26	LT&C	1.1	1.1	DRY	1.4	DRY	1.4
3	PRODUCTION	6.125	4.5	NEW	API	N	3967	8084	3967	8084	2984	-1133	4117	J-55	11.6	LT&C	1.1	1.1	DRY	1.4	DRY	1.4
4	PRODUCTION	6.125	4.5	NEW	API	N	3937	8085	3937	8085	3014	-1134	4148	J-55	11.6	LT&C	1.1	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):

Carson28_Casing_Design_Assumptions_20220511094945.pdf

Operator Name: COLEMAN OIL & GAS INCORPORATED

Well Name: CARSON 32-5-28 **Well Number:** 1H

Casing Attachments

Casing ID: 2 **String** PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Carson28_Casing_Design_Assumptions_20220511095313.pdf

Casing ID: 3 **String** PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Carson28_Casing_Design_Assumptions_20220511095627.pdf

Casing ID: 4 **String** PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Carson28_Casing_Design_Assumptions_20220511095812.pdf

Section 4 - Cement

Operator Name: COLEMAN OIL & GAS INCORPORATED

Well Name: CARSON 32-5-28 **Well Number:** 1H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
PRODUCTION	Lead		0	0	0	0	0	0	0	None	None
PRODUCTION	Lead		0	0	0	0	0	0	0	None	None
SURFACE	Lead		0	300	94	1.17	15.8	177	100	Premium	Calcium Chloride - 2%; Poly-E-Flake – Lost Circulation Control Agent – 0.125 lbs/sx
PRODUCTION	Lead		0	3300	246	2.4	12.3	590	30	Varicem	0.3% FE-2 + 5 lbs/sx Kol-Seal + 0.125 lbs/sx Poly-E-Flake
PRODUCTION	Tail		3300	4424	150	1.84	13.5	276	30	Varicem	0.3% Super CBL + 0.3% FE-2 + 5 lbs/sx Kol-Seal + 0.125 lbs/sx Poly-E-Flake

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: 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.
Describe the mud monitoring system utilized: Pit Volume Totalizer (PVT) equipment (or equivalent) will be on each pit to monitor pit levels.

Circulating Medium Table

Operator Name: COLEMAN OIL & GAS INCORPORATED

Well Name: CARSON 32-5-28 **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	4424	LSND/GEL	8.4	9							
3937	8085	OTHER : Brine	8.6	9.8							
3967	8084	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:

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

Coring operation description for the well:

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.

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 1689 **Anticipated Surface Pressure:** 877

Anticipated Bottom Hole Temperature(F): 135

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

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards

Operator Name: COLEMAN OIL & GAS INCORPORATED

Well Name: CARSON 32-5-28 **Well Number:** 1H

Hydrogen Sulfide drilling operations plan required? NO

Hydrogen sulfide drilling operations

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Carson28_Lateral1_Horizontal_Plan_20220511100525.pdf
Carson28_Lateral2_Horizontal_Plan_20220511100546.pdf

Other proposed operations facets description:

Other proposed operations facets attachment:

Carson28_Lateral1_Anticollision_report_20220511100603.pdf
Carson28_Lateral2_Anticollision_report_20220511100614.pdf
Carson28_Drill_Plan_071619_20220511100628.pdf
Carson28_Wellhead_Diagram_20220511100637.pdf

Other Variance attachment:

Company: Coleman Oil & Gas Inc.
Project: Rio Arriba County, NM
Site: Carson Pad
Well: Carson 32-5-28 (1 WB/2 Whip)
Wellbore: Lateral 1
Design: Plan #2

PROJECT DETAILS: Rio Arriba County, NM

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

Scientific Drilling

Azimuths to True North
Magnetic North: 8.[illegible]

Magnetic Field
Strength: 49882.6[illegible]
Dip Angle: 63.[illegible]
Date: 3/4/2[illegible]
Model: HD[illegible]

WELL DETAILS: Carson 32-5-28 (1 WB/2 Whip)

GL 6951' @ 6951.00usft

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	2165314.33	1313788.96	36.9453464	-107.3677562

Plan: Plan #2 (Carson 32-5-28 (1 WB/2 Whip)/Lateral 1)

Created By: Janie Collins Date: 14:03, March 05 2019

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
arson #1 Lat 1 BHL	3667.00	4134.29	1977.73	2169425.14	1315815.03	36.9567009	-107.3609879

SECTION DETAILS

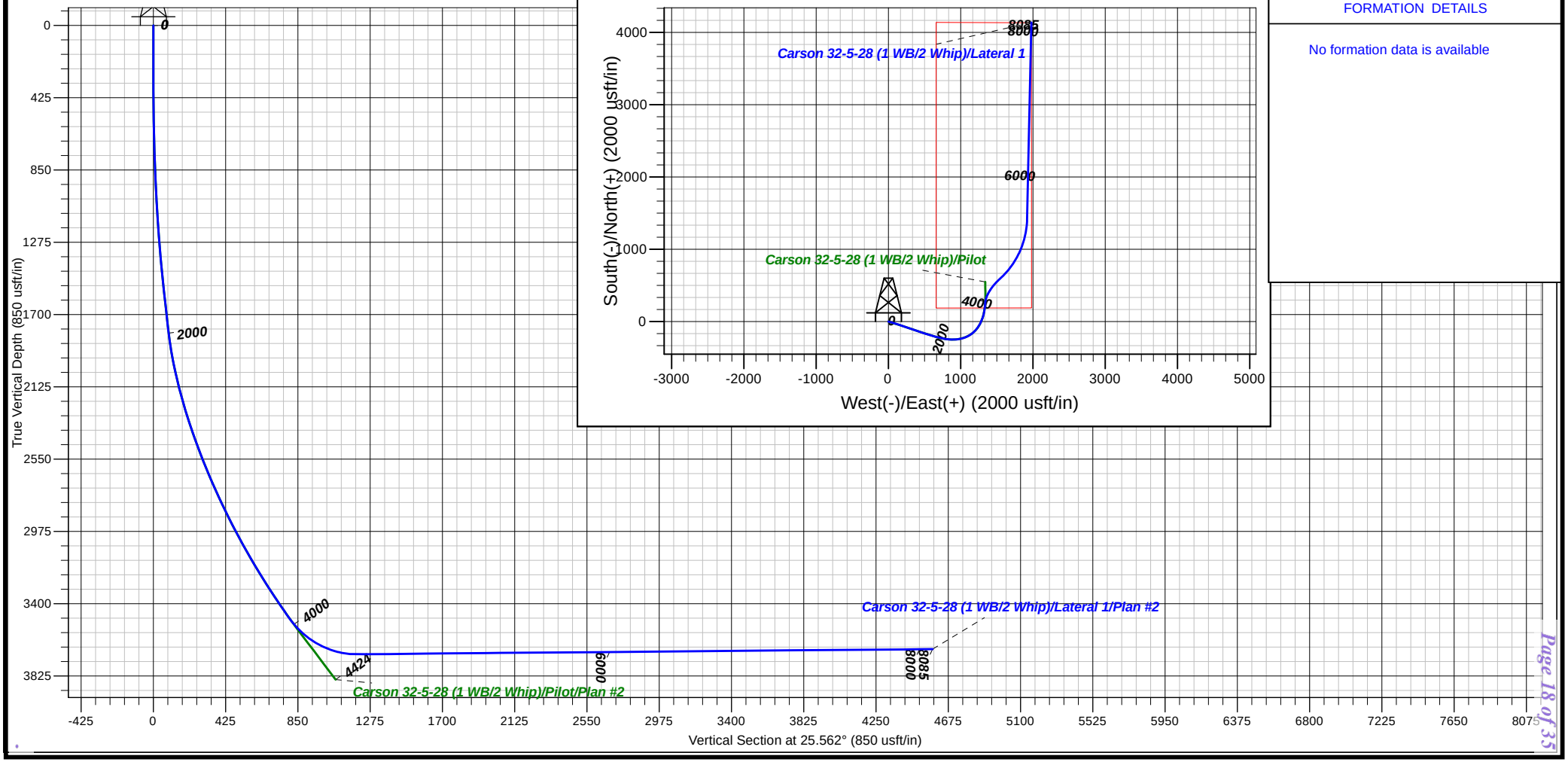
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
3967.05	38.07	3.020	3495.64	255.05	1339.11	0.00	0.00	807.90	
4428.05	90.46	48.000	3697.00	587.10	1539.55	14.00	51.52	1193.94	
5363.03	90.46	1.249	3689.02	1413.64	1918.40	5.00	-89.80	2103.04	
8084.42	90.46	1.249	3667.00	4134.29	1977.73	0.00	0.00	4582.98	Carson #1 Lat 1 BHL

CASING DETAILS

No casing data is available

FORMATION DETAILS

No formation data is available



Coleman Oil & Gas Inc.

Rio Arriba County, NM
Carson Pad
Carson 32-5-28 (1 WB/2 Whip)

Lateral 1

Plan: Plan #2

Standard Planning Report

05 March, 2019

Scientific Drilling

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Planning Report

Scientific Drilling

Database:	Grand Junction District	**Local Co-ordinate Reference:**	Well Carson 32-5-28 (1 WB/2 Whip)
Company:	Coleman Oil & Gas Inc.	**TVD Reference:**	GL 6951' @ 6951.00usft
Project:	Rio Arriba County, NM	**MD Reference:**	GL 6951' @ 6951.00usft
Site:	Carson Pad	**North Reference:**	True
Well:	Carson 32-5-28 (1 WB/2 Whip)	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Lateral 1		
Design:	Plan #2		

Project Rio Arriba County, NM

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

Site Carson Pad

Site Position:		**Northing:**	2,165,314.33 usft	**Latitude:**	36.9453464
From:	Lat/Long	**Easting:**	1,313,788.95 usft	**Longitude:**	-107.3677562
Position Uncertainty:	0.00 usft	**Slot Radius:**	13.20 in	**Grid Convergence:**	-0.67 °

Well Carson 32-5-28 (1 WB/2 Whip)

Well Position	**+N/-S**	0.00 usft	**Northing:**	2,165,314.33 usft	**Latitude:**	36.9453464
	+E/-W	0.00 usft	**Easting:**	1,313,788.95 usft	**Longitude:**	-107.3677562
Position Uncertainty		0.00 usft	**Wellhead Elevation:**	0.00 usft	**Ground Level:**	6,951.00 usft

Wellbore Lateral 1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	3/4/2019	8.92	63.47	49,883

Design Plan #2

Audit Notes:

Version:		**Phase:**	PLAN	**Tie On Depth:**	3,967.05

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	25.562

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
3,967.05	38.07	3.020	3,495.64	255.05	1,339.11	0.00	0.00	0.00	0.00	
4,428.05	90.46	48.000	3,697.00	587.10	1,539.55	14.00	11.36	9.76	51.52	
5,363.03	90.46	1.249	3,689.02	1,413.64	1,918.40	5.00	0.00	-5.00	-89.80	
8,084.42	90.46	1.249	3,667.00	4,134.29	1,977.73	0.00	0.00	0.00	0.00	Carson #1 Lat 1 BHL

Scientific Drilling, Intl

Planning Report

Scientific Drilling

Database:	Grand Junction District	**Local Co-ordinate Reference:**	Well Carson 32-5-28 (1 WB/2 Whip)
Company:	Coleman Oil & Gas Inc.	**TVD Reference:**	GL 6951' @ 6951.00usft
Project:	Rio Arriba County, NM	**MD Reference:**	GL 6951' @ 6951.00usft
Site:	Carson Pad	**North Reference:**	True
Well:	Carson 32-5-28 (1 WB/2 Whip)	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Lateral 1		
Design:	Plan #2		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
3,967.05	38.07	3.020	3,495.64	255.05	1,339.11	807.90	0.00	0.00	0.00
4,000.00	41.08	8.519	3,521.04	275.91	1,341.25	827.65	14.00	9.12	16.69
4,100.00	51.42	21.660	3,590.26	345.07	1,360.64	898.41	14.00	10.34	13.14
4,200.00	62.85	31.326	3,644.52	419.78	1,398.39	982.09	14.00	11.43	9.67
4,300.00	74.82	39.142	3,680.61	495.59	1,452.25	1,073.72	14.00	11.96	7.82
4,400.00	87.02	46.103	3,696.38	568.00	1,519.02	1,167.85	14.00	12.20	6.96
4,428.05	90.46	48.000	3,697.00	587.10	1,539.55	1,193.94	14.00	12.26	6.76
4,500.00	90.47	44.402	3,696.41	636.89	1,591.47	1,261.26	5.00	0.02	-5.00
4,600.00	90.49	39.402	3,695.58	711.29	1,658.23	1,357.19	5.00	0.01	-5.00
4,700.00	90.49	34.402	3,694.72	791.23	1,718.26	1,455.20	5.00	0.01	-5.00
4,800.00	90.50	29.402	3,693.85	876.09	1,771.08	1,554.55	5.00	0.01	-5.00
4,900.00	90.50	24.402	3,692.98	965.24	1,816.31	1,654.49	5.00	0.00	-5.00
5,000.00	90.50	19.401	3,692.10	1,057.99	1,853.60	1,754.25	5.00	0.00	-5.00
5,100.00	90.50	14.401	3,691.23	1,153.64	1,882.66	1,853.07	5.00	-0.01	-5.00
5,200.00	90.49	9.401	3,690.37	1,251.45	1,903.28	1,950.21	5.00	-0.01	-5.00
5,300.00	90.47	4.401	3,689.53	1,350.69	1,915.29	2,044.92	5.00	-0.01	-5.00
5,363.03	90.46	1.249	3,689.02	1,413.64	1,918.40	2,103.04	5.00	-0.02	-5.00
5,400.00	90.46	1.249	3,688.72	1,450.60	1,919.20	2,136.73	0.00	0.00	0.00
5,500.00	90.46	1.249	3,687.91	1,550.57	1,921.38	2,227.86	0.00	0.00	0.00
5,600.00	90.46	1.249	3,687.10	1,650.54	1,923.56	2,318.99	0.00	0.00	0.00
5,700.00	90.46	1.249	3,686.29	1,750.52	1,925.74	2,410.12	0.00	0.00	0.00
5,800.00	90.46	1.249	3,685.48	1,850.49	1,927.92	2,501.24	0.00	0.00	0.00
5,900.00	90.46	1.249	3,684.67	1,950.46	1,930.10	2,592.37	0.00	0.00	0.00
6,000.00	90.46	1.249	3,683.86	2,050.43	1,932.28	2,683.50	0.00	0.00	0.00
6,100.00	90.46	1.249	3,683.05	2,150.41	1,934.46	2,774.63	0.00	0.00	0.00
6,200.00	90.46	1.249	3,682.24	2,250.38	1,936.64	2,865.76	0.00	0.00	0.00
6,300.00	90.46	1.249	3,681.44	2,350.35	1,938.82	2,956.88	0.00	0.00	0.00
6,400.00	90.46	1.249	3,680.63	2,450.33	1,941.00	3,048.01	0.00	0.00	0.00
6,500.00	90.46	1.249	3,679.82	2,550.30	1,943.18	3,139.14	0.00	0.00	0.00
6,600.00	90.46	1.249	3,679.01	2,650.27	1,945.37	3,230.27	0.00	0.00	0.00
6,700.00	90.46	1.249	3,678.20	2,750.25	1,947.55	3,321.39	0.00	0.00	0.00
6,800.00	90.46	1.249	3,677.39	2,850.22	1,949.73	3,412.52	0.00	0.00	0.00
6,900.00	90.46	1.249	3,676.58	2,950.19	1,951.91	3,503.65	0.00	0.00	0.00
7,000.00	90.46	1.249	3,675.77	3,050.16	1,954.09	3,594.78	0.00	0.00	0.00
7,100.00	90.46	1.249	3,674.96	3,150.14	1,956.27	3,685.91	0.00	0.00	0.00
7,200.00	90.46	1.249	3,674.15	3,250.11	1,958.45	3,777.03	0.00	0.00	0.00
7,300.00	90.46	1.249	3,673.35	3,350.08	1,960.63	3,868.16	0.00	0.00	0.00
7,400.00	90.46	1.249	3,672.54	3,450.06	1,962.81	3,959.29	0.00	0.00	0.00
7,500.00	90.46	1.249	3,671.73	3,550.03	1,964.99	4,050.42	0.00	0.00	0.00
7,600.00	90.46	1.249	3,670.92	3,650.00	1,967.17	4,141.55	0.00	0.00	0.00
7,700.00	90.46	1.249	3,670.11	3,749.97	1,969.35	4,232.67	0.00	0.00	0.00
7,800.00	90.46	1.249	3,669.30	3,849.95	1,971.53	4,323.80	0.00	0.00	0.00
7,900.00	90.46	1.249	3,668.49	3,949.92	1,973.71	4,414.93	0.00	0.00	0.00
8,000.00	90.46	1.249	3,667.68	4,049.89	1,975.89	4,506.06	0.00	0.00	0.00
8,084.42	90.46	1.249	3,667.00	4,134.29	1,977.73	4,582.98	0.00	0.00	0.00

Scientific Drilling, Intl

Planning Report

Scientific Drilling

Database:	Grand Junction District	**Local Co-ordinate Reference:**	Well Carson 32-5-28 (1 WB/2 Whip)
Company:	Coleman Oil & Gas Inc.	**TVD Reference:**	GL 6951' @ 6951.00usft
Project:	Rio Arriba County, NM	**MD Reference:**	GL 6951' @ 6951.00usft
Site:	Carson Pad	**North Reference:**	True
Well:	Carson 32-5-28 (1 WB/2 Whip)	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Lateral 1		
Design:	Plan #2		

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Carson #1 Lat 1 BHL - plan hits target center - Point	0.00	0.000	3,667.00	4,134.29	1,977.73	2,169,425.14	1,315,815.03	36.9567009	-107.3609879

Company: Coleman Oil & Gas Inc.
Project: Rio Arriba County, NM
Site: Carson Pad
Well: Carson 32-5-28 (1 WB/2 Whip)
Wellbore: Lateral 2
Design: Plan #2

PROJECT DETAILS: Rio Arriba County, NM

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

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Azimuths to True North
Magnetic North: 8.[illegible]

Magnetic Field
Strength: 49882.6[illegible]
Dip Angle: 63.[illegible]
Date: 3/4/2[illegible]
Model: HD[illegible]

WELL DETAILS: Carson 32-5-28 (1 WB/2 Whip)

GL 6951' @ 6951.00usft

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	2165314.33	1313788.96	36.9453464	-107.3677562

Plan: Plan #2 (Carson 32-5-28 (1 WB/2 Whip)/Lateral 2)

Created By: Janie Collins Date: 14:07, March 05 2019

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
arson #2 Lat 1 BHL	3667.00	4137.03	659.54	2169443.34	1314496.96	36.9567086	-107.3654991

SECTION DETAILS

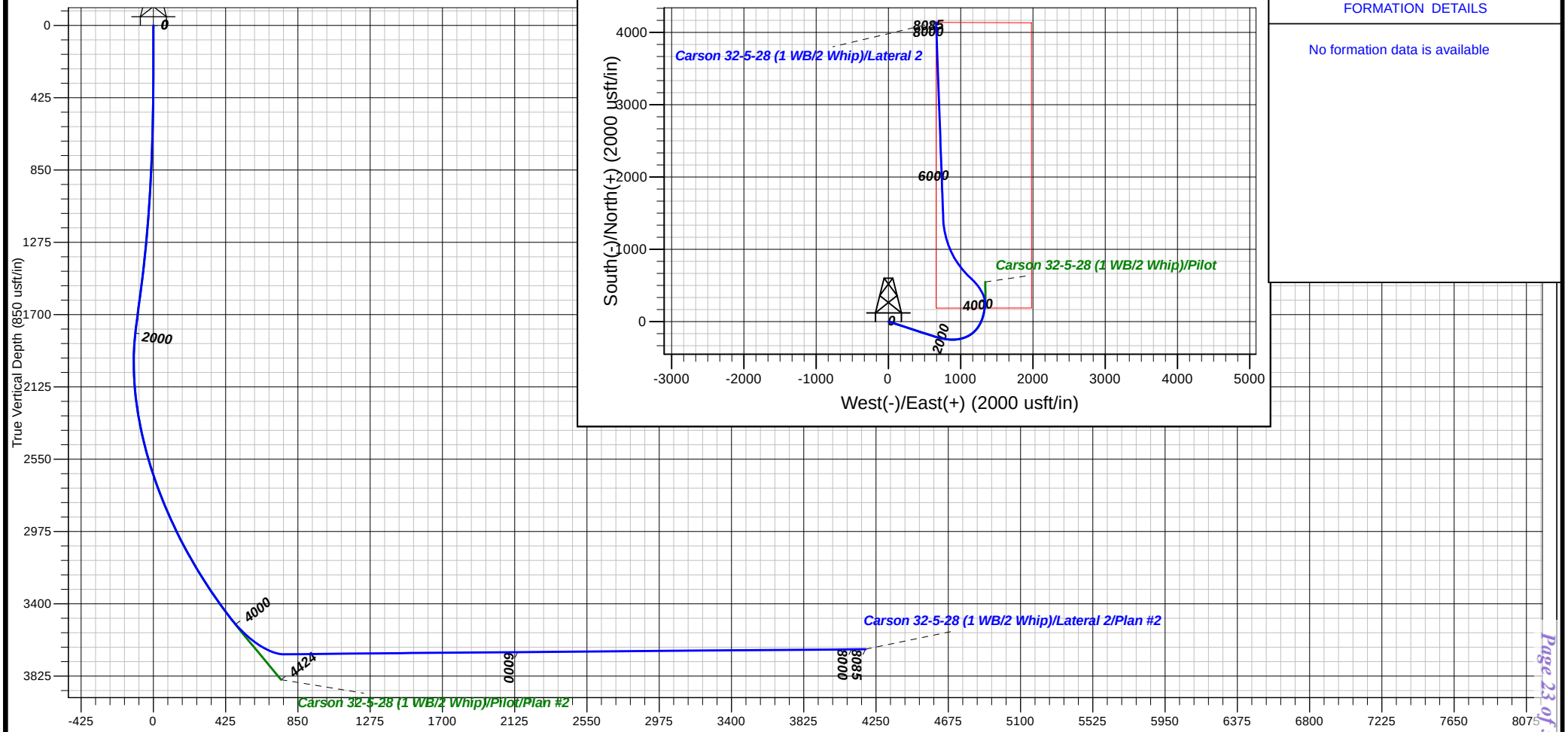
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
3937.05	37.45	4.082	3471.92	236.71	1337.98	0.00	0.00	444.40	
4440.42	90.47	312.000	3697.12	602.35	1137.38	13.60	-58.01	773.90	
5358.57	90.47	357.909	3689.19	1412.06	759.03	5.00	89.81	1513.95	
8085.45	90.47	357.909	3667.00	4137.03	659.54	0.00	0.00	4189.27	Carson #2 Lat 1 BHL

CASING DETAILS

No casing data is available

FORMATION DETAILS

No formation data is available



Coleman Oil & Gas Inc.

Rio Arriba County, NM
Carson Pad
Carson 32-5-28 (1 WB/2 Whip)

Lateral 2

Plan: Plan #2

Standard Planning Report

05 March, 2019

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Planning Report

Scientific Drilling

Database:	Grand Junction District	**Local Co-ordinate Reference:**	Well Carson 32-5-28 (1 WB/2 Whip)
Company:	Coleman Oil & Gas Inc.	**TVD Reference:**	GL 6951' @ 6951.00usft
Project:	Rio Arriba County, NM	**MD Reference:**	GL 6951' @ 6951.00usft
Site:	Carson Pad	**North Reference:**	True
Well:	Carson 32-5-28 (1 WB/2 Whip)	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Lateral 2		
Design:	Plan #2		

Project Rio Arriba County, NM

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

Site Carson Pad

Site Position:		**Northing:**	2,165,314.33 usft	**Latitude:**	36.9453464
From:	Lat/Long	**Easting:**	1,313,788.95 usft	**Longitude:**	-107.3677562
Position Uncertainty:	0.00 usft	**Slot Radius:**	13.20 in	**Grid Convergence:**	-0.67 °

Well Carson 32-5-28 (1 WB/2 Whip)

Well Position	**+N/-S**	0.00 usft	**Northing:**	2,165,314.33 usft	**Latitude:**	36.9453464
	+E/-W	0.00 usft	**Easting:**	1,313,788.95 usft	**Longitude:**	-107.3677562
Position Uncertainty		0.00 usft	**Wellhead Elevation:**	0.00 usft	**Ground Level:**	6,951.00 usft

Wellbore Lateral 2

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	3/4/2019	8.92	63.47	49,883

Design Plan #2

Audit Notes:

Version:		**Phase:**	PLAN	**Tie On Depth:**	3,937.05

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	9.058

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
3,937.05	37.45	4.082	3,471.92	236.71	1,337.98	0.00	0.00	0.00	0.00	
4,440.42	90.47	312.000	3,697.12	602.35	1,137.38	13.60	10.53	-10.35	-58.01	
5,358.57	90.47	357.909	3,689.19	1,412.06	759.03	5.00	0.00	5.00	89.81	
8,085.45	90.47	357.909	3,667.00	4,137.03	659.54	0.00	0.00	0.00	0.00	Carson #2 Lat 1 BHL

Scientific Drilling, Intl

Planning Report

Scientific Drilling

Database:	Grand Junction District	**Local Co-ordinate Reference:**	Well Carson 32-5-28 (1 WB/2 Whip)
Company:	Coleman Oil & Gas Inc.	**TVD Reference:**	GL 6951' @ 6951.00usft
Project:	Rio Arriba County, NM	**MD Reference:**	GL 6951' @ 6951.00usft
Site:	Carson Pad	**North Reference:**	True
Well:	Carson 32-5-28 (1 WB/2 Whip)	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Lateral 2		
Design:	Plan #2		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
3,937.05	37.45	4.082	3,471.92	236.71	1,337.98	444.40	0.00	0.00	0.00
4,000.00	42.52	353.315	3,520.20	277.00	1,336.86	484.02	13.60	8.05	-17.10
4,100.00	52.14	340.179	3,588.06	348.04	1,319.46	551.43	13.60	9.62	-13.14
4,200.00	62.88	330.242	3,641.79	424.17	1,283.82	621.00	13.60	10.73	-9.94
4,300.00	74.18	322.101	3,678.38	501.12	1,231.93	688.82	13.60	11.31	-8.14
4,400.00	85.76	314.840	3,695.79	574.59	1,166.72	751.11	13.60	11.58	-7.26
4,440.42	90.47	312.000	3,697.12	602.35	1,137.38	773.90	13.60	11.65	-7.03
4,500.00	90.48	314.979	3,696.62	643.34	1,094.17	807.58	5.00	0.02	5.00
4,600.00	90.49	319.979	3,695.77	717.02	1,026.61	869.70	5.00	0.01	5.00
4,700.00	90.50	324.979	3,694.91	796.31	965.72	938.41	5.00	0.01	5.00
4,800.00	90.51	329.979	3,694.03	880.60	911.98	1,013.19	5.00	0.01	5.00
4,900.00	90.51	334.980	3,693.14	969.25	865.79	1,093.47	5.00	0.00	5.00
5,000.00	90.51	339.980	3,692.25	1,061.59	827.50	1,178.63	5.00	0.00	5.00
5,100.00	90.50	344.980	3,691.38	1,156.92	797.41	1,268.03	5.00	-0.01	5.00
5,200.00	90.49	349.980	3,690.51	1,254.50	775.74	1,360.99	5.00	-0.01	5.00
5,300.00	90.48	354.980	3,689.67	1,353.61	762.66	1,456.80	5.00	-0.01	5.00
5,358.57	90.47	357.909	3,689.19	1,412.06	759.03	1,513.95	5.00	-0.02	5.00
5,400.00	90.47	357.909	3,688.85	1,453.46	757.52	1,554.59	0.00	0.00	0.00
5,500.00	90.47	357.909	3,688.04	1,553.39	753.87	1,652.70	0.00	0.00	0.00
5,600.00	90.47	357.909	3,687.22	1,653.32	750.22	1,750.81	0.00	0.00	0.00
5,700.00	90.47	357.909	3,686.41	1,753.25	746.57	1,848.92	0.00	0.00	0.00
5,800.00	90.47	357.909	3,685.59	1,853.18	742.92	1,947.03	0.00	0.00	0.00
5,900.00	90.47	357.909	3,684.78	1,953.11	739.27	2,045.14	0.00	0.00	0.00
6,000.00	90.47	357.909	3,683.97	2,053.04	735.62	2,143.25	0.00	0.00	0.00
6,100.00	90.47	357.909	3,683.15	2,152.97	731.98	2,241.36	0.00	0.00	0.00
6,200.00	90.47	357.909	3,682.34	2,252.90	728.33	2,339.47	0.00	0.00	0.00
6,300.00	90.47	357.909	3,681.53	2,352.83	724.68	2,437.58	0.00	0.00	0.00
6,400.00	90.47	357.909	3,680.71	2,452.76	721.03	2,535.69	0.00	0.00	0.00
6,500.00	90.47	357.909	3,679.90	2,552.69	717.38	2,633.80	0.00	0.00	0.00
6,600.00	90.47	357.909	3,679.09	2,652.62	713.73	2,731.91	0.00	0.00	0.00
6,700.00	90.47	357.909	3,678.27	2,752.55	710.09	2,830.02	0.00	0.00	0.00
6,800.00	90.47	357.909	3,677.46	2,852.48	706.44	2,928.13	0.00	0.00	0.00
6,900.00	90.47	357.909	3,676.65	2,952.41	702.79	3,026.24	0.00	0.00	0.00
7,000.00	90.47	357.909	3,675.83	3,052.34	699.14	3,124.35	0.00	0.00	0.00
7,100.00	90.47	357.909	3,675.02	3,152.27	695.49	3,222.46	0.00	0.00	0.00
7,200.00	90.47	357.909	3,674.20	3,252.20	691.84	3,320.56	0.00	0.00	0.00
7,300.00	90.47	357.909	3,673.39	3,352.13	688.19	3,418.67	0.00	0.00	0.00
7,400.00	90.47	357.909	3,672.58	3,452.06	684.55	3,516.78	0.00	0.00	0.00
7,500.00	90.47	357.909	3,671.76	3,551.99	680.90	3,614.89	0.00	0.00	0.00
7,600.00	90.47	357.909	3,670.95	3,651.92	677.25	3,713.00	0.00	0.00	0.00
7,700.00	90.47	357.909	3,670.14	3,751.85	673.60	3,811.11	0.00	0.00	0.00
7,800.00	90.47	357.909	3,669.32	3,851.78	669.95	3,909.22	0.00	0.00	0.00
7,900.00	90.47	357.909	3,668.51	3,951.71	666.30	4,007.33	0.00	0.00	0.00
8,000.00	90.47	357.909	3,667.70	4,051.64	662.66	4,105.44	0.00	0.00	0.00
8,085.45	90.47	357.909	3,667.00	4,137.03	659.54	4,189.27	0.00	0.00	0.00

Scientific Drilling, Intl

Planning Report

Scientific Drilling

Database:	Grand Junction District	**Local Co-ordinate Reference:**	Well Carson 32-5-28 (1 WB/2 Whip)
Company:	Coleman Oil & Gas Inc.	**TVD Reference:**	GL 6951' @ 6951.00usft
Project:	Rio Arriba County, NM	**MD Reference:**	GL 6951' @ 6951.00usft
Site:	Carson Pad	**North Reference:**	True
Well:	Carson 32-5-28 (1 WB/2 Whip)	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Lateral 2		
Design:	Plan #2		

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Carson #2 Lat 1 BHL - plan hits target center - Point	0.00	0.000	3,667.00	4,137.03	659.54	2,169,443.34	1,314,496.96	36.9567086	-107.3654991

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Farmington District Office
6251 College Blvd, Suite A
Farmington, New Mexico 87402

In Reply Refer To:
3162.3-1(NMF0110)

* DJR OPERATING LLC

#1H CARSON 32-4-32

Lease: NMNM130338
SH: SE¼SE¼ Section 32, T. 32 N., R. 4 W.
Rio Arriba County, New Mexico
BH: NW¼SW¼ Section 32, T. 32 N., R. 4 W.
Rio Arriba County, New Mexico
***Above Data Required on Well Sign**

GENERAL REQUIREMENTS FOR OIL AND GAS OPERATIONS ON FEDERAL AND INDIAN LEASES

The following special requirements apply and are effective when **checked**:

A. ☒ Note all surface/drilling conditions of approval attached.

B. ☒ The required wait on cement (WOC) time will be a minimum of 500 psi compressive strength at 60 degrees. Blowout preventor (BOP) nipple-up operations may then be initiated

C. ☒ Test all casing strings below the conductor casing to .22 psi/ft. of casing string length or 1500 psi, whichever is greater, but not to exceed 70% of the minimum internal yield (burst) for a minimum of 30 minutes. If pressure declines more than 10 percent in 30 minutes, corrective action shall be taken.

D. ☐ Communitization Agreement covering the acreage dedicated to this well must be filed for approval with the Bureau of Land Management, New Mexico State Office, Reservoir Management Group, 301 Dinosaur Trail, Santa Fe, New Mexico 87508.
The effective date of the agreement must be **prior** to any sales.

E. ☐ The use of co-flex hose is authorized contingent upon the following:
1. From the BOP to the choke manifold: the co-flex hose must be hobbled on both ends and saddle to prevent whip.
2. From the choke manifold to the discharge tank: the co-flex hoses must be as straight as practical, hobbled on both ends and anchored to prevent whip.
3. The co-flex hose pressure rating must be at least commensurate with approved BOPE.

I. GENERAL

A. Full compliance with all applicable laws and regulations, with the approved Permit to drill, and with the approved Surface Use and Operations Plan is required. Lessees and/or operators are fully accountable for the actions of their contractors and subcontractors. Failure to comply with these requirements and the filing of required reports will result in strict enforcement pursuant to 43 CFR 3163.1 or 3163.2.

B. Each well shall have a well sign in legible condition from spud date to final abandonment. The sign should show the operator's name, lease serial number, or unit name, well number, location of the well, and whether lease is Tribal or Allotted, (See 43 CFR 3162.6(b)).

C. A complete copy of the approved Application for Permit to Drill, along with any conditions of approval, shall be available to authorized personnel at the drill site whenever active drilling operations are under way.

D. For Wildcat wells only, a drilling operations progress report is to be submitted, to the BLM-Field Office, weekly from the spud date until the well is completed and the Well Completion Report is filed. The report should be on 8-1/2 x 11 inch paper, and each page should identify the well by; operator's name, well number, location and lease number.

E. As soon as practical, notice is required of all blowouts, fires and accidents involving life-threatening injuries or loss of life. (See NTL-3A).

F. BOP equipment (except the annular preventer) shall be tested utilizing a test plug to full working pressure for 10 minutes. No bleed-off of pressure is acceptable.

G. The operator shall have sufficient weighting materials and lost circulation materials on location in the event of a pressure kick or in the event of lost circulation

H. The flare line(s) discharge shall be located not less than 100 feet from the well head, having straight lines unless turns are targeted with running tees, and shall be positioned downwind of the prevailing wind direction and shall be anchored. The flare system shall have an effective method for ignition. Where noncombustible gas is likely or expected to be vented, the system shall be provided supplemental fuel for ignition and to maintain a continuous flare.

I. Prior approval by the BLM-Authorized Office (Drilling and Production Section) is required for variance from the approved drilling program and before commencing plugging operations, plug back work, casing repair work, corrective cementing operations, or suspending drilling operations indefinitely. Emergency approval may be obtained orally, but such approval is contingent upon filing of a Notice of Intent sundry within three business days. **Any changes to the approved plan or any questions regarding drilling operations should be directed to BLM during regular business hours at 505-564-7600. Emergency program changes after hours should be directed to Virgil Lucero at 505-793-1836.**

J. The Inspection and Enforcement Section (I&E), phone number (505-564-7750) is to be notified at least 24 hours in advance of BOP test, spudding, cementing, or plugging operations so that a BLM representative may witness the operations.

K. Unless drilling operations are commenced within two years, approval of the Application for Permit to Drill will expire. A written request for a two-year extension may be granted if submitted prior to expiration.

L. From the time drilling operations are initiated and until drilling operations are completed, a member of the drilling crew or the tool pusher shall always maintain rig surveillance, unless the well is secured with blowout preventers or cement plugs.

M. If for any reason, drilling operations are suspended for more than 90 days, a written notice must be provided to this office outlining your plans for this well.

N. **Commingling**: No production (oil, gas, and water) from the subject well should start until Sundry Notices (if necessary) granting variances from applicable regulations as related to commingling and off-lease measurement are approved by this office.

II. REPORTING REQUIREMENTS

A. For reporting purposes, all well Sundry notices, well completion and other well actions shall be referenced by the appropriate lease, communitization agreement and/or unit agreement numbers.

B. The following reports shall be filed with the BLM-Authorized Officer within 30 days after the work is completed.

1. Provide complete information concerning.

   a. Setting of each string of casing. Show size and depth of hole, grade and weight of casing, depth set, depth of all cementing tools that are used, amount (in cubic feet) and types of cement used, whether cement circulated to surface and all cement tops in the casing annulus, casing test method and results, and the date work was done. Show spud date on first report submitted.

   b. Intervals tested, perforated (include size, number and location of perforations), acidized, or fractured; and results obtained. Provide date work was done on well completion report and completion sundry notice.

   c. Subsequent Report of Abandonment, show the way the well was plugged, including depths where casing was cut and pulled, intervals (by depths) where cement plugs were replaced, and dates of the operations.

2. Well Completion Report will be submitted with 30 days after well has been completed.

   a. Initial Bottom Hole Pressure (BHP) for the producing formations. Show the BHP on the completion report. The pressure may be: 1) measured with a bottom hole bomb, or; 2) calculated based on shut in surface pressures (minimum seven day buildup) and fluid level shot.

3. Submit a cement evaluation log if cement is not circulated to surface.

C. Production Startup Notification is required no later than the 5th business day after any well begins production on which royalty is due anywhere on a lease site or allocated to a lease site or resumes production in the case of a well which has been off production for more than 90 days. The operator shall notify the Authorized Officer by letter or Sundry Notice, Form 3160-5, or orally to be followed by a letter or Sundry Notice, of the date on which such production has begun or resumed. CFR 43 3162.4-1(c).

III. DRILLER'S LOG

The following shall be entered in the daily driller's log: 1) Blowout preventer pressures tests, including test pressures and results, 2) Blowout preventer tests for proper functioning, 3) Blowout prevention drills conducted, 4) Casing run, including size, grade, weight, and depth set, 5) How pipe was cemented, including amount of cement, type, whether cement circulated to surface, location of cementing tools, etc., 6) Waiting on cement time for each casing string, 7) Casing pressure tests after cementing, including test pressure and results, and 8) Estimated amounts of oil and gas recovered and/or produced during drill stem test.

IV. GAS FLARING

Gas produced from this well may not be vented or flared beyond an initial, authorized test period of * Days or 50 MMCF following its (completion)(recompletion), whichever first occurs, without the prior, written approval of the authorized officer. Should gas be vented or flared without approval beyond the test period authorized above, you may be directed to shut-in the well until the gas can be captured or approval to continue venting or flaring as uneconomic is granted. You shall be required to compensate the lessor for the portion of the gas vented or flared without approval which is determined to have been avoidably lost.

*30 days, unless a longer test period is specifically approved by the authorized officer. The 30-day period will commence upon the first gas to surface.

V. SAFETY

A. All rig heating stoves are to be of the explosion-proof type.

B. Rig safety lines are to be installed.

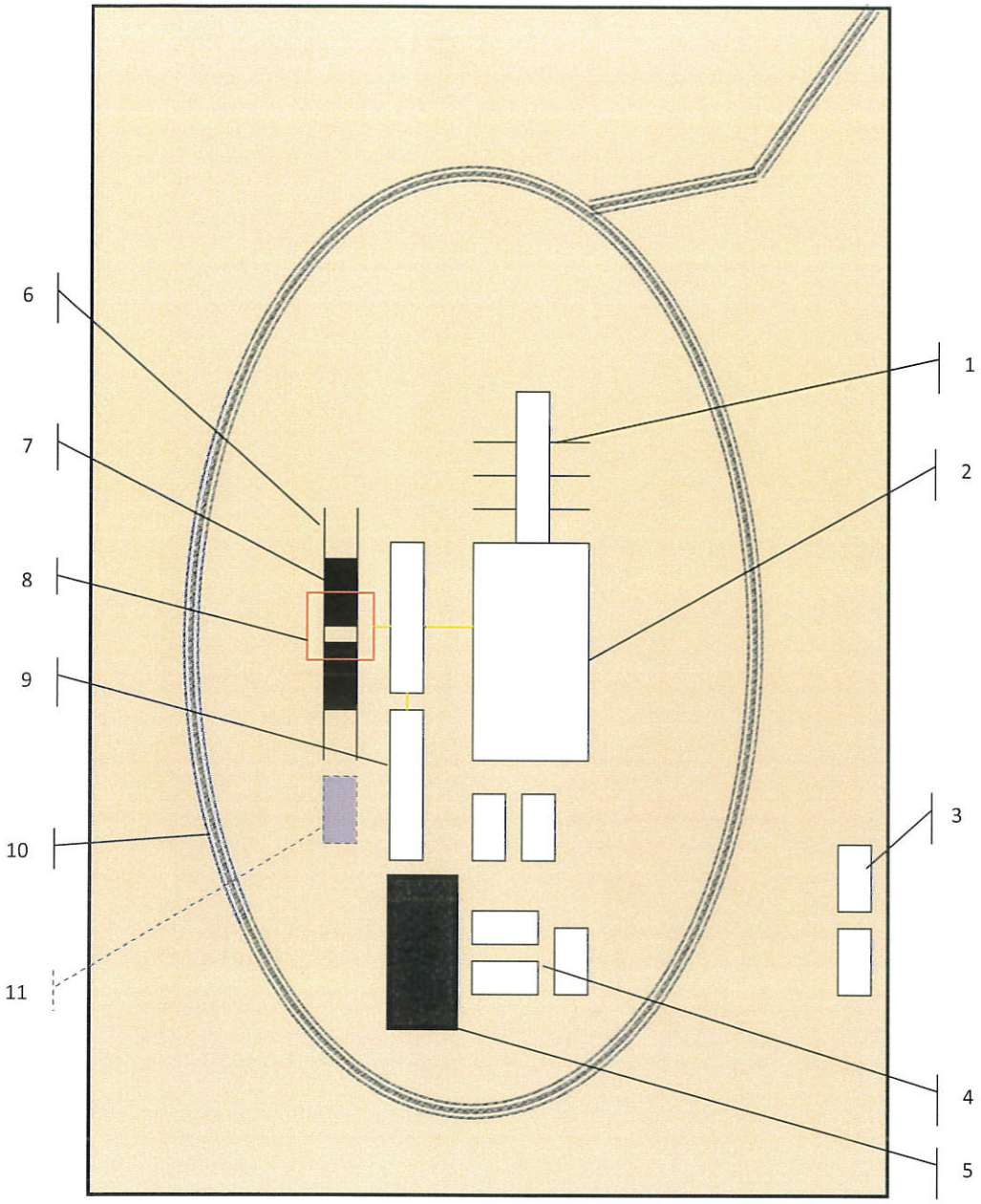
C. Hard hats and other Personal Protective Equipment (PPE) must be utilized.

VI. CHANGE OF PLANS OR ABANDONMENT

A. Any changes of plans required to mitigate unanticipated conditions encountered during drilling operations, will require approval as set forth in Section 1.F.

B. If the well is dry, it is to be plugged in accordance with 43 CFR 3162.3-4, approval of the proposed plugging program is required as set forth in Section 1.F. The report should show the total depth reached, the reason for plugging, and the proposed intervals, by depths, where cement plugs are to be placed, type of plugging mud, etc. A Subsequent Report of Abandonment is required as set forth in Section II.B.1c.

C. Unless a well has been properly cased and cemented, or properly plugged, the drilling rig must not be moved from the drill site without prior approval from the BLM-Authorized Officer.



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)

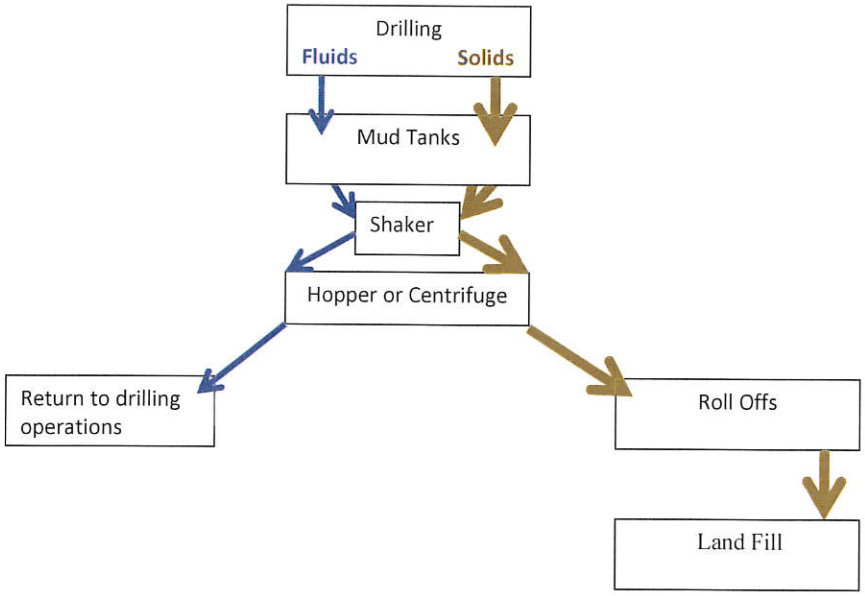
*Not drawn to scale: Closed loop system requires at least 30 feet beyond mud tanks. Ideally 60 feet would be available

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

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 269540

CONDITIONS

Operator: COLEMAN OIL & GAS INC P.O. Drawer 3337 Farmington, NM 87499	OGRID: 4838
	Action Number: 269540
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	Notify OCD 24 hours prior to casing & cement	10/13/2023
ward.rikala	Will require a File As Drilled C-102 and a Directional Survey with the C-104	10/13/2023
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	10/13/2023
ward.rikala	Cement is required to circulate on both surface and intermediate1 strings of casing	10/13/2023
ward.rikala	If cement does not circulate on any string, a CBL is required for that string of casing	10/13/2023