

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources

Form C-104
Revised August 1, 2011

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

Submit one copy to appropriate District Office

☐ AMENDED REPORT

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

¹ Operator name and Address Coleman Oil and Gas Inc Po Drawer 3337 Farmington NM 87499		4838
		³ Reason for Filing Code/ Effective Date RT
⁴ API Number 30 - 039-31398	⁵ Pool Name Basin Fruitland Coal	⁶ Pool Code 71629
⁷ Property Code 329873	⁸ Property Name Carson 32-5-9	⁹ Well Number 1H

II. 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
B	16	32N	5W		121	N	2620	E	Rio Arriba

¹¹ Bottom Hole Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	9	32N	5W		677	N	685	E	Rio Arriba
¹² Lse Code F	¹³ Producing Method Code F	¹⁴ Gas Connection Date 10/5/2023	¹⁵ C-129 Permit Number		¹⁶ C-129 Effective Date		¹⁷ C-129 Expiration Date		

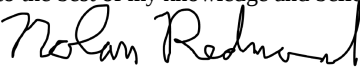
III. Oil and Gas Transporters

¹⁸ Transporter OGRID	¹⁹ Transporter Name and Address	²⁰ O/G/W
330132	Morningstar Operating LLC 400 W 7th St Fort Worth TX 73102	G, W

IV. Well Completion Data

²¹ Spud Date 9/11/2023	²² Ready Date 10/5/2023	²³ TD 7779 MD/3707 TVD	²⁴ PBTD 7761 MD/3707 TVD	²⁵ Perforations 4277-7731, 4320-	²⁶ DHC, MC 7038, 4361-7761
²⁷ Hole Size		²⁸ Casing & Tubing Size	²⁹ Depth Set		³⁰ Sacks Cement
12.25		9.625	334		157 sx, circ to surface
8.75		7	4335		506 sx, circ to surface
6.125		4.5	3853-7731		
6.125		4.5	3813-7038		
6.125		4.5	3769-7761		

V. Well Test Data

³¹ Date New Oil	³² Gas Delivery Date	³³ Test Date	³⁴ Test Length	³⁵ Tbg. Pressure	³⁶ Csg. Pressure
³⁷ Choke Size	³⁸ Oil	³⁹ Water	⁴⁰ Gas		⁴¹ Test Method
⁴² I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief. Signature: 			OIL CONSERVATION DIVISION		
Printed name: Nolan Redmond			Approved by: Sarah McGrath		
Title: Geo/Eng Tech			Title: Petroleum Specialist - A		
E-mail Address: nredmond@catamountep.com			Approval Date: 10/20/2023		
Date: 10/12/2023		Phone: 720-484-2347	RT Expires 01/03/2024		

DISTRICT I1625 N. French Dr., Hobbs, N.M. 88240
Phone: (575) 393-6161 Fax: (575) 393-0720State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102

Revised August 1, 2011

DISTRICT II811 S. First St., Artesia, N.M. 88210
Phone: (575) 748-1283 Fax: (575) 748-9720**OIL CONSERVATION DIVISION**1220 South St. Francis Dr.
Santa Fe, N.M. 87505Submit one copy to appropriate
District Office**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**AS-DRILLED**☒ AMENDED REPORT**WELL LOCATION AND ACREAGE DEDICATION PLAT**

¹ API Number 30-039-31398	² Pool Code 71629	³ Pool Name BASIN FRUITLAND COAL (GAS)
⁴ Property Code 329873	⁵ Property Name CARSON 32-5-9	⁶ Well Number 1H
⁷ GRID No. 4838	⁸ Operator Name COLEMAN OIL & GAS, INC.	⁹ Elevation 7226

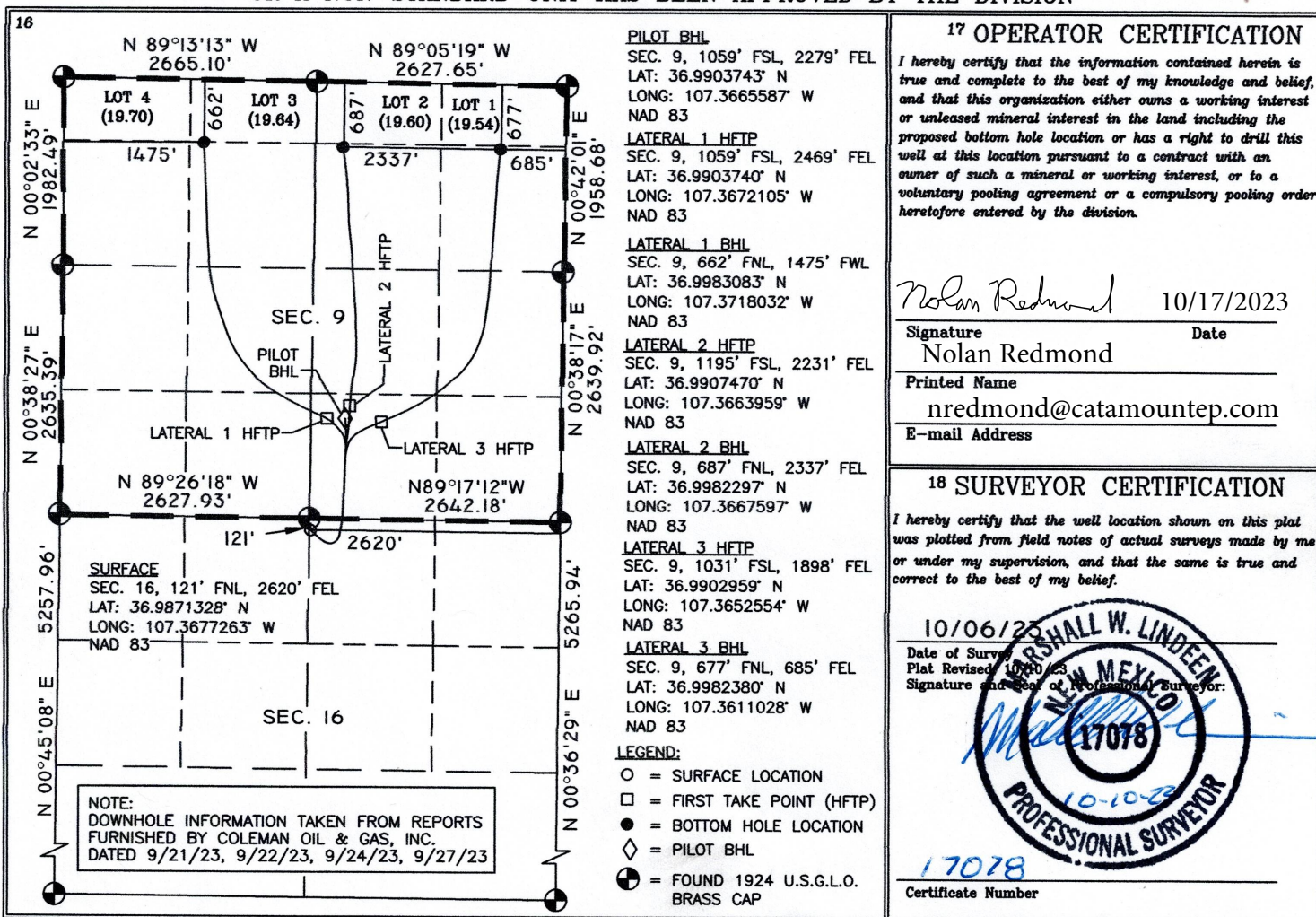
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	16	32 N	5 W		121	NORTH	2620	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
O	9	32 N	5 W		1059	SOUTH	2279	EAST	RIO ARRIBA
F	9	32 N	5 W		662	NORTH	1475	WEST	RIO ARRIBA
G	9	32 N	5 W		687	NORTH	2337	EAST	RIO ARRIBA
H	9	32 N	5 W		677	NORTH	685	EAST	RIO ARRIBA

¹² Dedicated Acres SEC. 9 (558.48)	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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

**Directional Survey Certification**

7327 West Barton Road
Casper, WY 82604
(307)-472-6621 Fax (307) 472-5439

Operator	Coleman Oil & Gas
Well Name & No.	Carson 32-5-9 1 Lateral 2
County & State	Rio Arriba County, NM
SDI Job No.	OP.041484
Rig	Aztec 920

I, Janie Collins, having personal knowledge of all the facts, hereby certify that the attached directional survey run from a measured depth of 3,803 feet to a measured depth of 7,058 feet is true and correct as determined from all available records.

A handwritten signature in blue ink, appearing to read 'Janie Collins', written over a horizontal line.

Signature

24-Sep-23

Date

Janie Collins

Rockies Region Well Planner
Scientific Drilling - Rocky Mountain District



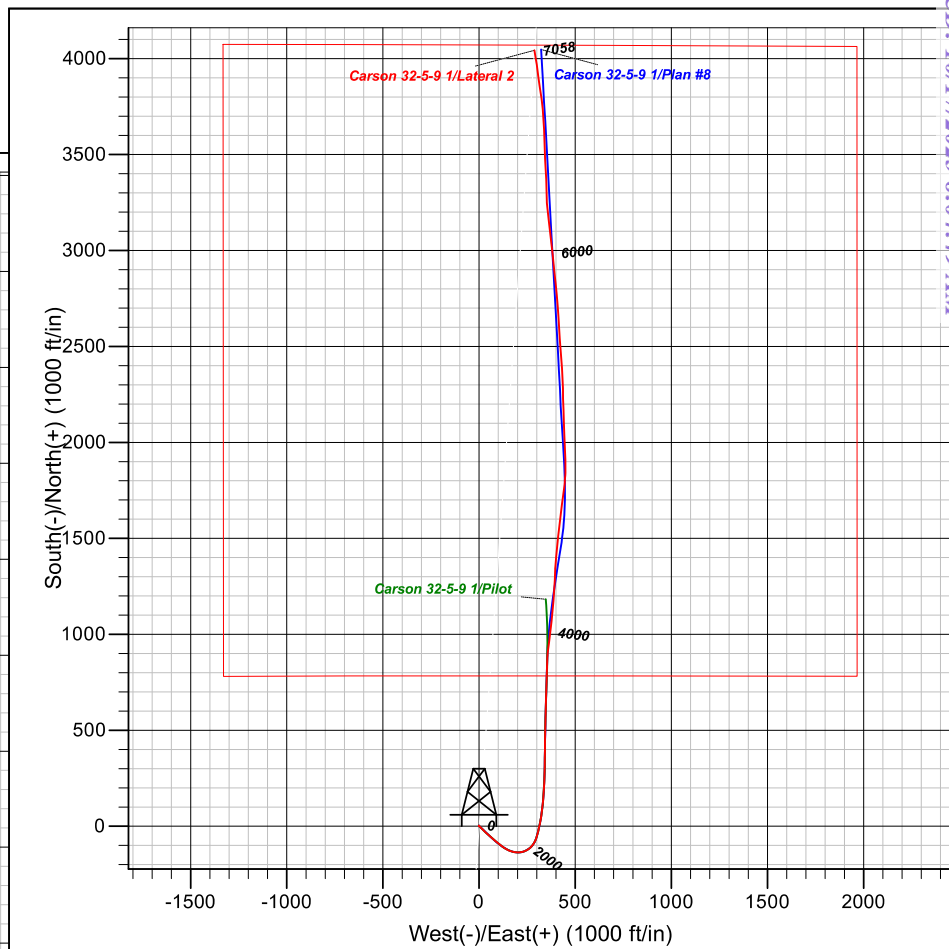
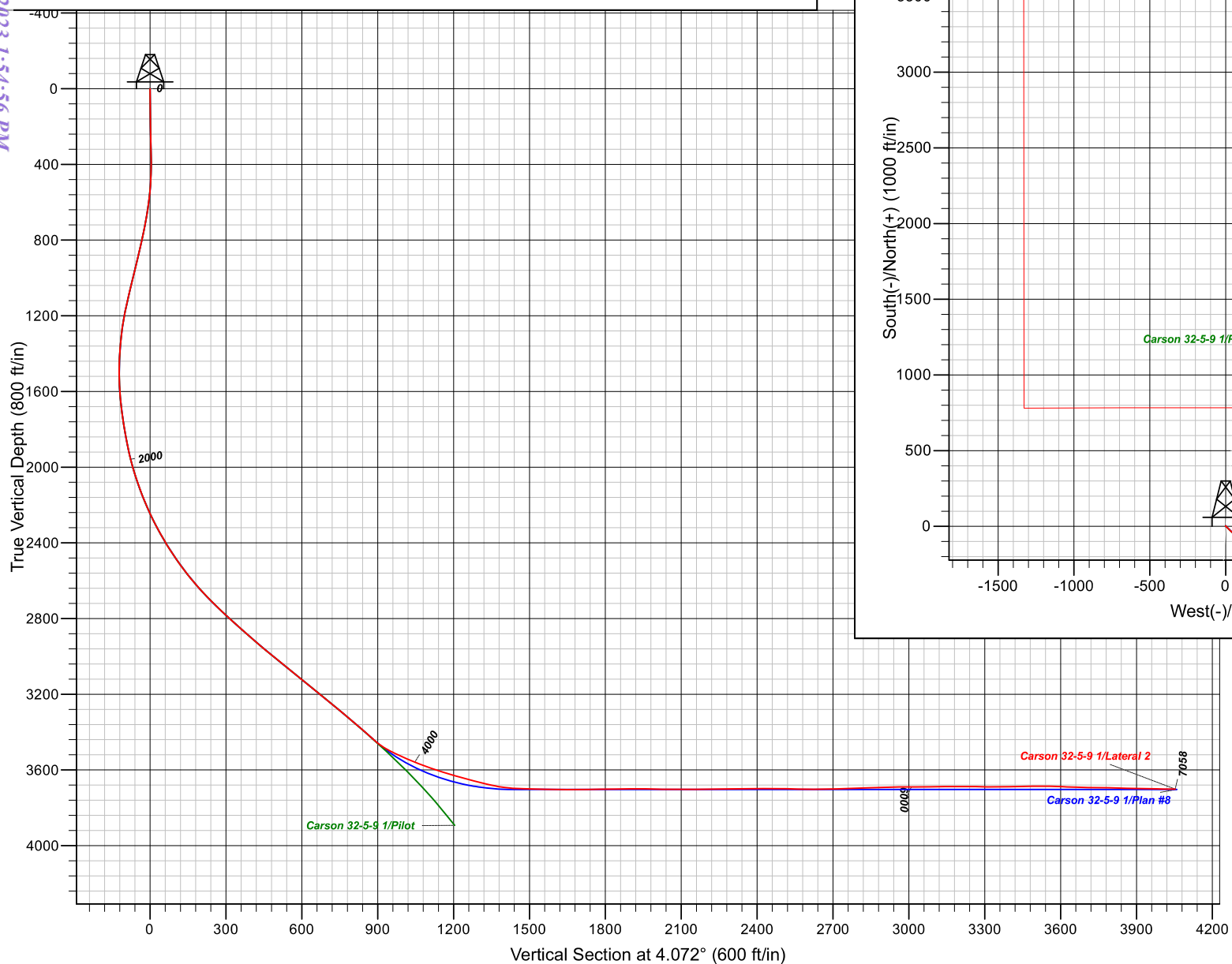
Company Name: Coleman Oil & Gas Inc.
Project: Rio Arriba County, NM
Site: Carson 32-5-9
Well: Carson 32-5-9 1
Wellbore: Lateral 2



WELL DETAILS: Carson 32-5-9 1

GL 7221' & RKB 15' @ 7236.00ft (Aztec 920) 7221.00

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	2180525.56	1313970.64	36.9871264	-107.3677452



Design: Lateral 2 (Carson 32-5-9 1/Lateral 2)

Created By: Janie Collins Date: 8:55, September 24 2023

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



Coleman Oil & Gas Inc.

Rio Arriba County, NM

Carson 32-5-9

Carson 32-5-9 1

Lateral 2

Design: Lateral 2

Standard Survey Report

24 September, 2023



www.scientificdrilling.com



Scientific Drilling

Survey Report



Company:	Coleman Oil & Gas Inc.	Local Co-ordinate Reference:	Well Carson 32-5-9 1
Project:	Rio Arriba County, NM	TVD Reference:	GL 7221' & RKB 15' @ 7236.00ft (Aztec 920)
Site:	Carson 32-5-9	MD Reference:	GL 7221' & RKB 15' @ 7236.00ft (Aztec 920)
Well:	Carson 32-5-9 1	North Reference:	True
Wellbore:	Lateral 2	Survey Calculation Method:	Minimum Curvature
Design:	Lateral 2	Database:	Grand Junction

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 32-5-9, Site Center: Carson 32-5-9 1H			
Site Position:		Northing:	2,180,525.56 usft	Latitude:	36.9871264
From:	Lat/Long	Easting:	1,313,970.64 usft	Longitude:	-107.3677452
Position Uncertainty:	0.00 ft	Slot Radius:	13.20 in	Grid Convergence:	-0.67 °

Well	Carson 32-5-9 1, 124' FNL 2626' FEL Sec 16 T32N R5W					
Well Position	+N/-S	0.00 ft	Northing:	2,180,525.56 usft	Latitude:	36.9871264
	+E/-W	0.00 ft	Easting:	1,313,970.64 usft	Longitude:	-107.3677452
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	7,221.00 ft

Wellbore	Lateral 2				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM2023	9/21/2023	8.52	63.37	49,481.60000000

Design	Lateral 2				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	3,793.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.00	0.00	0.00	4.072	

Survey Program	Date	9/24/2023			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
392.00	3,793.00	Survey #1 - MWD Survey (Pilot)	MWD+HDGM	OWSG MWD + HDGM	
3,803.00	7,058.00	Survey #1 - MWD Survey (Lateral 2)	MWD+HDGM	OWSG MWD + HDGM	

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
392.00	1.26	334.090	391.97	3.88	-1.88	3.73	0.32	0.32	0.00	
452.00	1.93	145.880	451.96	3.63	-1.60	3.51	5.30	1.12	286.32	
511.00	4.13	141.560	510.87	1.15	0.27	1.16	3.75	3.73	-7.32	
570.00	7.17	132.010	569.58	-2.98	4.33	-2.67	5.38	5.15	-16.19	
629.00	10.35	135.440	627.89	-9.22	10.79	-8.44	5.46	5.39	5.81	
689.00	11.45	134.940	686.80	-17.27	18.79	-15.89	1.84	1.83	-0.83	
749.00	12.74	134.290	745.47	-26.10	27.74	-24.06	2.16	2.15	-1.08	
809.00	14.98	133.890	803.72	-36.10	38.06	-33.30	3.74	3.73	-0.67	
868.00	15.58	132.700	860.63	-46.76	49.38	-43.13	1.15	1.02	-2.02	



Scientific Drilling

Survey Report



Scientific Drilling

Company:	Coleman Oil & Gas Inc.	Local Co-ordinate Reference:	Well Carson 32-5-9 1
Project:	Rio Arriba County, NM	TVD Reference:	GL 7221' & RKB 15' @ 7236.00ft (Aztec 920)
Site:	Carson 32-5-9	MD Reference:	GL 7221' & RKB 15' @ 7236.00ft (Aztec 920)
Well:	Carson 32-5-9 1	North Reference:	True
Wellbore:	Lateral 2	Survey Calculation Method:	Minimum Curvature
Design:	Lateral 2	Database:	Grand Junction

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
928.00	16.67	131.120	918.27	-57.88	61.79	-53.35	1.96	1.82	-2.63
988.00	17.51	129.950	975.62	-69.34	75.19	-63.82	1.51	1.40	-1.95
1,048.00	16.96	129.860	1,032.93	-80.74	88.83	-74.23	0.92	-0.92	-0.15
1,107.00	16.89	129.020	1,089.37	-91.65	102.09	-84.17	0.43	-0.12	-1.42
1,166.00	16.72	128.760	1,145.85	-102.36	115.37	-93.91	0.32	-0.29	-0.44
1,227.00	15.58	124.230	1,204.45	-112.46	128.98	-103.02	2.78	-1.87	-7.43
1,286.00	15.09	117.100	1,261.35	-120.42	142.37	-110.00	3.30	-0.83	-12.08
1,349.00	14.42	109.170	1,322.28	-126.73	157.08	-115.26	3.37	-1.06	-12.59
1,411.00	14.00	105.840	1,382.38	-131.31	171.59	-118.80	1.48	-0.68	-5.37
1,474.00	13.40	102.800	1,443.59	-135.01	186.04	-121.46	1.49	-0.95	-4.83
1,537.00	12.42	94.260	1,505.00	-137.13	199.92	-122.59	3.40	-1.56	-13.56
1,600.00	11.93	84.640	1,566.59	-137.03	213.16	-121.54	3.31	-0.78	-15.27
1,662.00	11.94	73.890	1,627.26	-134.65	225.70	-118.28	3.58	0.02	-17.34
1,725.00	10.89	64.100	1,689.02	-130.24	237.32	-113.06	3.49	-1.67	-15.54
1,788.00	10.46	58.610	1,750.93	-124.66	247.55	-106.77	1.75	-0.68	-8.71
1,850.00	10.74	54.810	1,811.87	-118.40	257.08	-99.85	1.21	0.45	-6.13
1,913.00	11.92	50.030	1,873.65	-110.84	266.86	-91.61	2.39	1.87	-7.59
1,976.00	12.55	40.550	1,935.22	-101.46	276.30	-81.58	3.34	1.00	-15.05
2,039.00	13.45	31.390	1,996.61	-90.00	284.57	-69.56	3.56	1.43	-14.54
2,102.00	14.64	25.110	2,057.73	-76.54	291.76	-55.62	3.07	1.89	-9.97
2,164.00	15.73	18.810	2,117.57	-61.48	297.80	-40.18	3.19	1.76	-10.16
2,226.00	17.20	13.980	2,177.03	-44.63	302.72	-23.02	3.24	2.37	-7.79
2,288.00	19.20	12.450	2,235.92	-25.78	307.13	-3.90	3.32	3.23	-2.47
2,351.00	21.34	13.440	2,295.02	-4.51	312.03	17.66	3.44	3.40	1.57
2,413.00	22.95	11.110	2,352.45	18.32	316.98	40.79	2.96	2.60	-3.76
2,475.00	24.88	8.030	2,409.12	43.10	321.14	65.80	3.71	3.11	-4.97
2,538.00	26.60	7.890	2,465.87	70.20	324.92	93.10	2.73	2.73	-0.22
2,601.00	28.69	7.740	2,521.67	99.16	328.90	122.26	3.32	3.32	-0.24
2,663.00	31.03	5.160	2,575.44	129.82	332.34	153.10	4.30	3.77	-4.16
2,726.00	32.68	2.850	2,628.95	162.99	334.65	186.34	3.26	2.62	-3.67
2,789.00	35.73	3.250	2,681.05	198.35	336.53	221.75	4.85	4.84	0.63
2,852.00	37.86	2.900	2,731.50	236.03	338.56	259.47	3.40	3.38	-0.56
2,915.00	39.60	2.430	2,780.64	275.40	340.38	298.87	2.80	2.76	-0.75
2,977.00	39.61	0.900	2,828.41	314.90	341.53	338.36	1.57	0.02	-2.47
3,040.00	39.76	0.160	2,876.89	355.13	341.90	378.51	0.79	0.24	-1.17
3,102.00	41.08	0.520	2,924.09	395.33	342.15	418.63	2.16	2.13	0.58
3,165.00	42.49	0.820	2,971.07	437.30	342.64	460.53	2.26	2.24	0.48
3,228.00	42.70	1.010	3,017.45	479.94	343.32	503.11	0.39	0.33	0.30
3,291.00	42.98	1.090	3,063.64	522.77	344.10	545.88	0.45	0.44	0.13
3,354.00	42.21	1.280	3,110.02	565.40	344.98	588.47	1.24	-1.22	0.30
3,417.00	42.65	1.640	3,156.52	607.89	346.07	630.93	0.80	0.70	0.57
3,479.00	42.63	1.610	3,202.13	649.87	347.26	672.89	0.05	-0.03	-0.05
3,542.00	42.65	1.790	3,248.47	692.53	348.53	715.53	0.20	0.03	0.29

Scientific Drilling

Survey Report



Company:	Coleman Oil & Gas Inc.	Local Co-ordinate Reference:	Well Carson 32-5-9 1
Project:	Rio Arriba County, NM	TVD Reference:	GL 7221' & RKB 15' @ 7236.00ft (Aztec 920)
Site:	Carson 32-5-9	MD Reference:	GL 7221' & RKB 15' @ 7236.00ft (Aztec 920)
Well:	Carson 32-5-9 1	North Reference:	True
Wellbore:	Lateral 2	Survey Calculation Method:	Minimum Curvature
Design:	Lateral 2	Database:	Grand Junction

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
3,605.00	42.11	1.920	3,295.01	734.97	349.90	757.96	0.87	-0.86	0.21
3,668.00	41.27	1.910	3,342.05	776.85	351.30	799.83	1.33	-1.33	-0.02
3,730.00	40.88	1.860	3,388.79	817.56	352.64	840.54	0.63	-0.63	-0.08
3,793.00	39.85	1.530	3,436.79	858.34	353.85	881.31	1.67	-1.63	-0.52
3,803.00	39.66	1.470	3,444.48	864.74	354.02	887.69	1.94	-1.90	-0.60
3,882.00	56.07	6.930	3,497.32	922.90	358.65	946.03	21.38	20.77	6.91
3,914.00	56.91	7.610	3,514.99	949.36	362.03	972.67	3.17	2.63	2.13
3,976.00	60.22	6.690	3,547.32	1,001.84	368.60	1,025.49	5.49	5.34	-1.48
4,039.00	63.94	6.630	3,576.81	1,057.12	375.06	1,081.09	5.91	5.90	-0.10
4,102.00	66.41	5.400	3,603.26	1,113.98	381.04	1,138.23	4.30	3.92	-1.95
4,162.00	68.78	4.610	3,626.13	1,169.24	385.88	1,193.69	4.13	3.95	-1.32
4,222.00	71.18	3.450	3,646.67	1,225.47	389.84	1,250.06	4.39	4.00	-1.93
4,282.00	70.48	2.530	3,666.37	1,282.06	392.79	1,306.72	1.86	-1.17	-1.53
4,341.00	74.75	3.160	3,684.00	1,338.28	395.59	1,363.00	7.31	7.24	1.07
4,401.00	83.92	5.260	3,695.09	1,397.02	399.93	1,421.90	15.66	15.28	3.50
4,461.00	87.92	5.960	3,699.36	1,456.57	405.78	1,481.71	6.77	6.67	1.17
4,520.00	88.32	6.130	3,701.30	1,515.21	411.99	1,540.64	0.74	0.68	0.29
4,581.00	88.92	6.220	3,702.76	1,575.84	418.55	1,601.58	0.99	0.98	0.15
4,641.00	89.80	6.560	3,703.43	1,635.46	425.23	1,661.53	1.57	1.47	0.57
4,700.00	91.04	7.510	3,703.00	1,694.01	432.45	1,720.45	2.65	2.10	1.61
4,758.00	91.88	8.330	3,701.52	1,751.44	440.44	1,778.30	2.02	1.45	1.41
4,818.00	90.20	3.610	3,700.43	1,811.09	446.68	1,838.24	8.35	-2.80	-7.87
4,878.00	90.84	0.370	3,699.89	1,871.04	448.76	1,898.19	5.50	1.07	-5.40
4,938.00	88.59	357.340	3,700.19	1,931.02	447.56	1,957.93	6.29	-3.75	-5.05
4,998.00	88.73	357.500	3,701.59	1,990.94	444.86	2,017.50	0.35	0.23	0.27
5,057.00	89.66	358.080	3,702.42	2,049.89	442.59	2,076.14	1.86	1.58	0.98
5,117.00	90.30	358.320	3,702.44	2,109.86	440.70	2,135.83	1.14	1.07	0.40
5,177.00	90.74	357.920	3,701.90	2,169.82	438.74	2,195.50	0.99	0.73	-0.67
5,236.00	91.85	358.690	3,700.56	2,228.78	436.99	2,254.19	2.29	1.88	1.31
5,295.00	90.84	357.950	3,699.18	2,287.74	435.26	2,312.87	2.12	-1.71	-1.25
5,356.00	89.97	357.180	3,698.75	2,348.68	432.67	2,373.48	1.90	-1.43	-1.26
5,415.00	89.20	355.840	3,699.17	2,407.57	429.08	2,431.96	2.62	-1.31	-2.27
5,475.00	90.37	356.320	3,699.40	2,467.43	424.98	2,491.38	2.11	1.95	0.80
5,535.00	88.12	355.640	3,700.19	2,527.27	420.77	2,550.77	3.92	-3.75	-1.13
5,595.00	88.49	356.050	3,701.97	2,587.09	416.43	2,610.13	0.92	0.62	0.68
5,654.00	91.71	356.030	3,701.86	2,645.94	412.35	2,668.54	5.46	5.46	-0.03
5,714.00	94.23	356.250	3,698.75	2,705.72	408.32	2,727.88	4.22	4.20	0.37
5,775.00	91.28	354.350	3,695.82	2,766.43	403.33	2,788.09	5.75	-4.84	-3.11
5,835.00	91.81	354.050	3,694.20	2,826.10	397.26	2,847.18	1.01	0.88	-0.50
5,895.00	92.68	354.950	3,691.85	2,885.78	391.52	2,906.30	2.09	1.45	1.50
5,954.00	90.84	354.230	3,690.04	2,944.48	385.96	2,964.46	3.35	-3.12	-1.22
6,014.00	90.30	353.300	3,689.44	3,004.13	379.44	3,023.49	1.79	-0.90	-1.55
6,075.00	90.74	353.980	3,688.89	3,064.75	372.69	3,083.48	1.33	0.72	1.11



Scientific Drilling

Survey Report



Company:	Coleman Oil & Gas Inc.	Local Co-ordinate Reference:	Well Carson 32-5-9 1
Project:	Rio Arriba County, NM	TVD Reference:	GL 7221' & RKB 15' @ 7236.00ft (Aztec 920)
Site:	Carson 32-5-9	MD Reference:	GL 7221' & RKB 15' @ 7236.00ft (Aztec 920)
Well:	Carson 32-5-9 1	North Reference:	True
Wellbore:	Lateral 2	Survey Calculation Method:	Minimum Curvature
Design:	Lateral 2	Database:	Grand Junction

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
6,136.00	91.07	352.630	3,687.93	3,125.32	365.57	3,143.39	2.28	0.54	-2.21
6,197.00	89.43	353.190	3,687.66	3,185.85	358.05	3,203.24	2.84	-2.69	0.92
6,258.00	90.13	357.340	3,687.90	3,246.63	353.01	3,263.50	6.90	1.15	6.80
6,320.00	89.20	357.830	3,688.26	3,308.57	350.40	3,325.10	1.70	-1.50	0.79
6,381.00	90.64	357.860	3,688.34	3,369.53	348.11	3,385.74	2.36	2.36	0.05
6,441.00	91.68	356.990	3,687.13	3,429.45	345.41	3,445.33	2.26	1.73	-1.45
6,501.00	91.21	357.440	3,685.62	3,489.36	342.50	3,504.88	1.08	-0.78	0.75
6,561.00	87.65	358.320	3,686.21	3,549.31	340.28	3,564.51	6.11	-5.93	1.47
6,622.00	86.75	358.070	3,689.19	3,610.21	338.36	3,625.12	1.53	-1.48	-0.41
6,682.00	87.95	355.660	3,691.97	3,670.05	335.08	3,684.58	4.48	2.00	-4.02
6,742.00	89.70	355.800	3,693.20	3,729.87	330.61	3,743.93	2.93	2.92	0.23
6,802.00	87.58	351.790	3,694.62	3,789.48	324.13	3,802.93	7.56	-3.53	-6.68
6,862.00	88.72	352.150	3,696.56	3,848.86	315.76	3,861.57	1.99	1.90	0.60
6,922.00	88.09	352.210	3,698.23	3,908.28	307.60	3,920.26	1.05	-1.05	0.10
6,982.00	88.73	351.560	3,699.89	3,967.66	299.13	3,978.88	1.52	1.07	-1.08
7,011.00	89.53	351.420	3,700.33	3,996.33	294.84	4,007.18	2.80	2.76	-0.48
7,058.00	89.53	351.420	3,700.72	4,042.81	287.83	4,053.04	0.00	0.00	0.00

Checked By: _____ Approved By: _____ Date: _____

**Directional Survey Certification**

7327 West Barton Road
Casper, WY 82604
(307)-472-6621 Fax (307) 472-5439

Operator	Coleman Oil & Gas
Well Name & No.	Carson 32-5-9 1 Lateral 3
County & State	Rio Arriba County, NM
SDI Job No.	OP.041504
Rig	Aztec 920

I, Janie Collins, having personal knowledge of all the facts, hereby certify that the attached directional survey run from a measured depth of 3,851 feet to a measured depth of 7,781 feet is true and correct as determined from all available records.

A handwritten signature in blue ink, appearing to read 'Janie Collins', written over a horizontal line.

Signature

27-Sep-23

Date

Janie Collins

Rockies Region Well Planner
Scientific Drilling - Rocky Mountain District



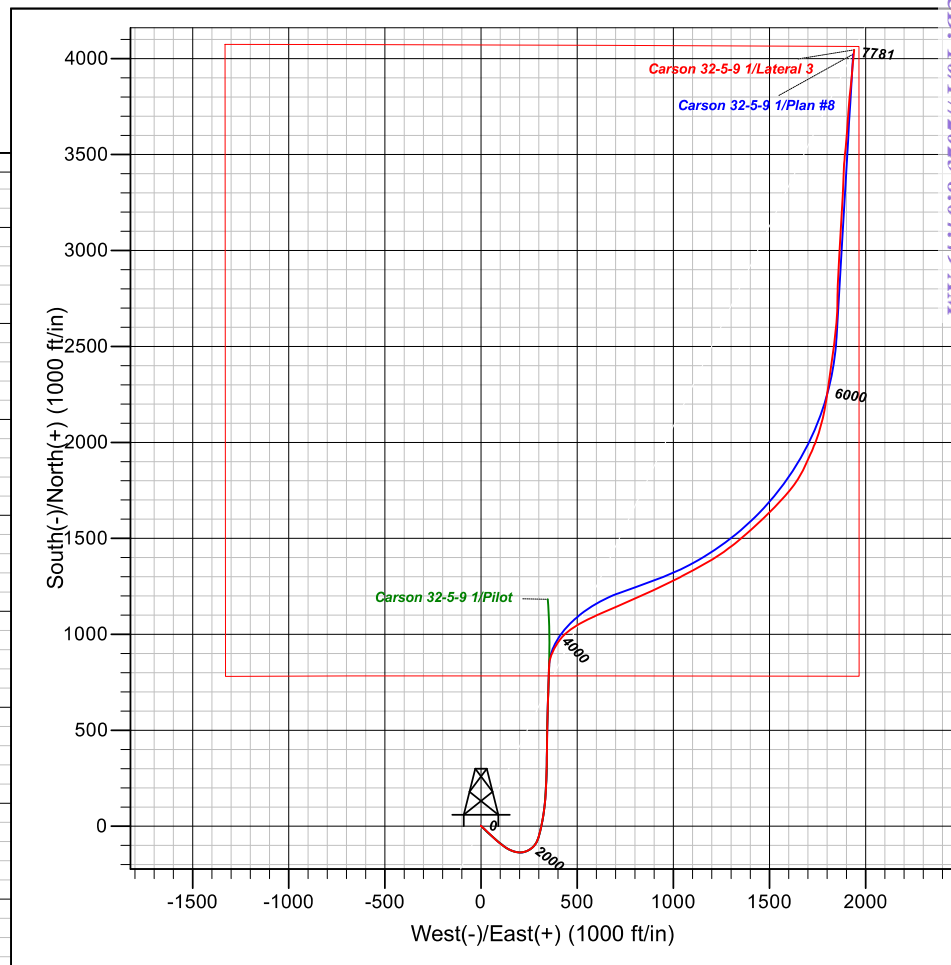
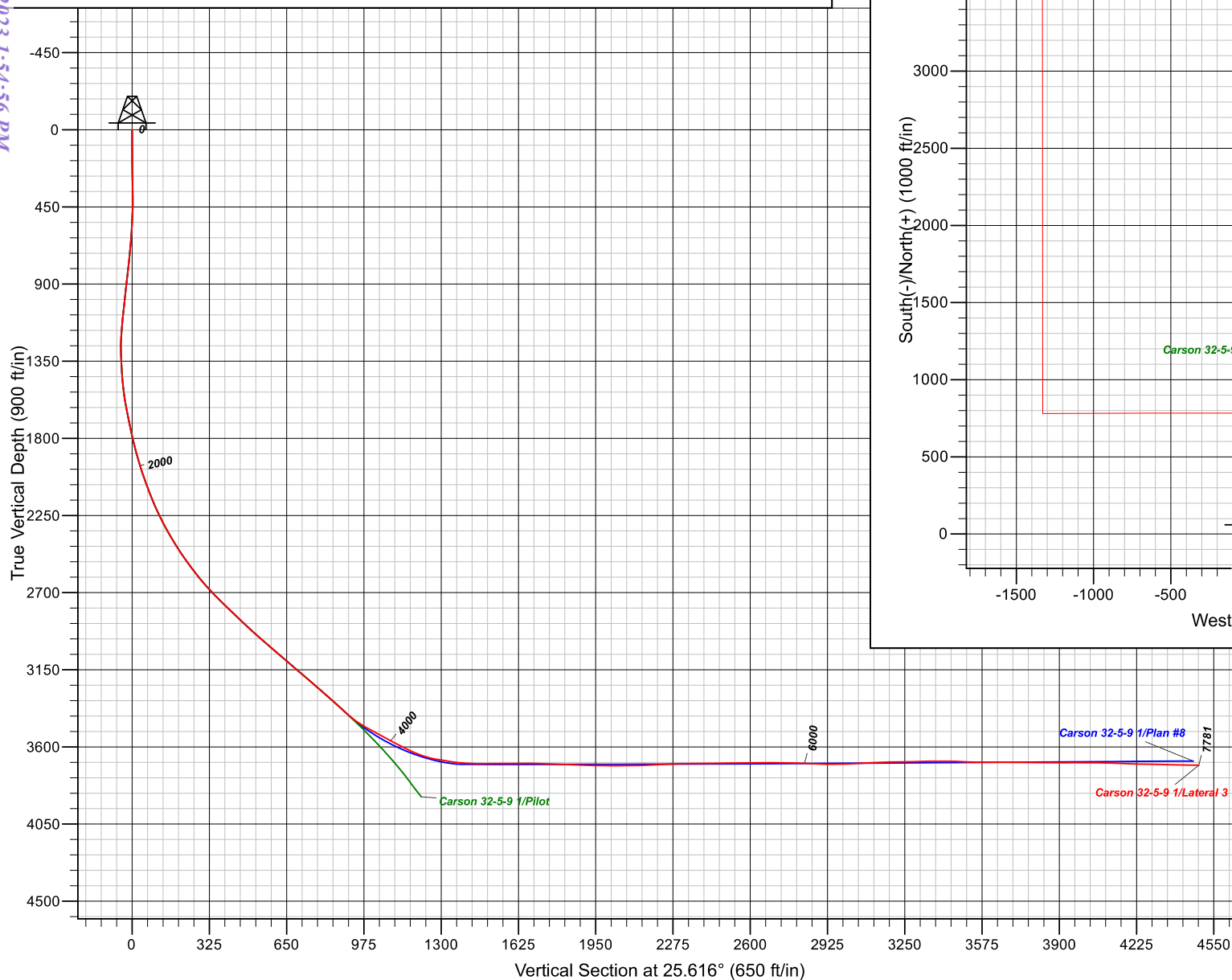
Company Name: Coleman Oil & Gas Inc.
Project: Rio Arriba County, NM
Site: Carson 32-5-9
Well: Carson 32-5-9 1
Wellbore: Lateral 3



WELL DETAILS: Carson 32-5-9 1

GL 7221' & RKB 15' @ 7236.00ft (Aztec 920) 7221.00

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	2180525.56	1313970.64	36.9871264	-107.3677452



Design: Lateral 3 (Carson 32-5-9 1/Lateral 3)

Created By: Janie Collins Date: 10:18, September 27 2023

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



Coleman Oil & Gas Inc.

Rio Arriba County, NM

Carson 32-5-9

Carson 32-5-9 1

Lateral 3

Design: Lateral 3

Standard Survey Report

27 September, 2023



www.scientificdrilling.com



Scientific Drilling

Survey Report



Company:	Coleman Oil & Gas Inc.	Local Co-ordinate Reference:	Well Carson 32-5-9 1
Project:	Rio Arriba County, NM	TVD Reference:	GL 7221' & RKB 15' @ 7236.00ft (Aztec 920)
Site:	Carson 32-5-9	MD Reference:	GL 7221' & RKB 15' @ 7236.00ft (Aztec 920)
Well:	Carson 32-5-9 1	North Reference:	True
Wellbore:	Lateral 3	Survey Calculation Method:	Minimum Curvature
Design:	Lateral 3	Database:	Grand Junction

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 32-5-9, Site Center: Carson 32-5-9 1H				
Site Position:		Northing:	2,180,525.56 usft	Latitude:	36.9871264
From:	Lat/Long	Easting:	1,313,970.64 usft	Longitude:	-107.3677452
Position Uncertainty:	0.00 ft	Slot Radius:	13.20 in	Grid Convergence:	-0.67 °

Well	Carson 32-5-9 1, 124' FNL 2626' FEL Sec 16 T32N R5W					
Well Position	+N/-S	0.00 ft	Northing:	2,180,525.56 usft	Latitude:	36.9871264
	+E/-W	0.00 ft	Easting:	1,313,970.64 usft	Longitude:	-107.3677452
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	7,221.00 ft

Wellbore	Lateral 3				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM2023	9/23/2023	8.52	63.37	49,481.00000000

Design	Lateral 3				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	3,760.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.00	0.00	0.00	25.616	

Survey Program	Date	9/27/2023			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
392.00	3,760.00	Survey #1 - MWD Survey (Pilot)	MWD+HDGM	OWSG MWD + HDGM	
3,851.00	7,781.00	Survey #1 - MWD Survey (Lateral 3)	MWD+HDGM	OWSG MWD + HDGM	

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
392.00	1.26	334.090	391.97	3.88	-1.88	2.68	0.32	0.32	0.00	
452.00	1.93	145.880	451.96	3.63	-1.60	2.58	5.30	1.12	286.32	
511.00	4.13	141.560	510.87	1.15	0.27	1.15	3.75	3.73	-7.32	
570.00	7.17	132.010	569.58	-2.98	4.33	-0.82	5.38	5.15	-16.19	
629.00	10.35	135.440	627.89	-9.22	10.79	-3.65	5.46	5.39	5.81	
689.00	11.45	134.940	686.80	-17.27	18.79	-7.45	1.84	1.83	-0.83	
749.00	12.74	134.290	745.47	-26.10	27.74	-11.54	2.16	2.15	-1.08	
809.00	14.98	133.890	803.72	-36.10	38.06	-16.09	3.74	3.73	-0.67	
868.00	15.58	132.700	860.63	-46.76	49.38	-20.81	1.15	1.02	-2.02	

Scientific Drilling

Survey Report



Scientific Drilling

Company:	Coleman Oil & Gas Inc.	Local Co-ordinate Reference:	Well Carson 32-5-9 1
Project:	Rio Arriba County, NM	TVD Reference:	GL 7221' & RKB 15' @ 7236.00ft (Aztec 920)
Site:	Carson 32-5-9	MD Reference:	GL 7221' & RKB 15' @ 7236.00ft (Aztec 920)
Well:	Carson 32-5-9 1	North Reference:	True
Wellbore:	Lateral 3	Survey Calculation Method:	Minimum Curvature
Design:	Lateral 3	Database:	Grand Junction

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
928.00	16.67	131.120	918.27	-57.88	61.79	-25.48	1.96	1.82	-2.63
988.00	17.51	129.950	975.62	-69.34	75.19	-30.01	1.51	1.40	-1.95
1,048.00	16.96	129.860	1,032.93	-80.74	88.83	-34.40	0.92	-0.92	-0.15
1,107.00	16.89	129.020	1,089.37	-91.65	102.09	-38.50	0.43	-0.12	-1.42
1,166.00	16.72	128.760	1,145.85	-102.36	115.37	-42.42	0.32	-0.29	-0.44
1,227.00	15.58	124.230	1,204.45	-112.46	128.98	-45.64	2.78	-1.87	-7.43
1,286.00	15.09	117.100	1,261.35	-120.42	142.37	-47.03	3.30	-0.83	-12.08
1,349.00	14.42	109.170	1,322.28	-126.73	157.08	-46.36	3.37	-1.06	-12.59
1,411.00	14.00	105.840	1,382.38	-131.31	171.59	-44.22	1.48	-0.68	-5.37
1,474.00	13.40	102.800	1,443.59	-135.01	186.04	-41.31	1.49	-0.95	-4.83
1,537.00	12.42	94.260	1,505.00	-137.13	199.92	-37.22	3.40	-1.56	-13.56
1,600.00	11.93	84.640	1,566.59	-137.03	213.16	-31.40	3.31	-0.78	-15.27
1,662.00	11.94	73.890	1,627.26	-134.65	225.70	-23.83	3.58	0.02	-17.34
1,725.00	10.89	64.100	1,689.02	-130.24	237.32	-14.84	3.49	-1.67	-15.54
1,788.00	10.46	58.610	1,750.93	-124.66	247.55	-5.38	1.75	-0.68	-8.71
1,850.00	10.74	54.810	1,811.87	-118.40	257.08	4.38	1.21	0.45	-6.13
1,913.00	11.92	50.030	1,873.65	-110.84	266.86	15.43	2.39	1.87	-7.59
1,976.00	12.55	40.550	1,935.22	-101.46	276.30	27.97	3.34	1.00	-15.05
2,039.00	13.45	31.390	1,996.61	-90.00	284.57	41.88	3.56	1.43	-14.54
2,102.00	14.64	25.110	2,057.73	-76.54	291.76	57.13	3.07	1.89	-9.97
2,164.00	15.73	18.810	2,117.57	-61.48	297.80	73.31	3.19	1.76	-10.16
2,226.00	17.20	13.980	2,177.03	-44.63	302.72	90.64	3.24	2.37	-7.79
2,288.00	19.20	12.450	2,235.92	-25.78	307.13	109.54	3.32	3.23	-2.47
2,351.00	21.34	13.440	2,295.02	-4.51	312.03	130.84	3.44	3.40	1.57
2,413.00	22.95	11.110	2,352.45	18.32	316.98	153.57	2.96	2.60	-3.76
2,475.00	24.88	8.030	2,409.12	43.10	321.14	177.71	3.71	3.11	-4.97
2,538.00	26.60	7.890	2,465.87	70.20	324.92	203.78	2.73	2.73	-0.22
2,601.00	28.69	7.740	2,521.67	99.16	328.90	231.61	3.32	3.32	-0.24
2,663.00	31.03	5.160	2,575.44	129.82	332.34	260.75	4.30	3.77	-4.16
2,726.00	32.68	2.850	2,628.95	162.99	334.65	291.65	3.26	2.62	-3.67
2,789.00	35.73	3.250	2,681.05	198.35	336.53	324.35	4.85	4.84	0.63
2,852.00	37.86	2.900	2,731.50	236.03	338.56	359.20	3.40	3.38	-0.56
2,915.00	39.60	2.430	2,780.64	275.40	340.38	395.49	2.80	2.76	-0.75
2,977.00	39.61	0.900	2,828.41	314.90	341.53	431.61	1.57	0.02	-2.47
3,040.00	39.76	0.160	2,876.89	355.13	341.90	468.04	0.79	0.24	-1.17
3,102.00	41.08	0.520	2,924.09	395.33	342.15	504.40	2.16	2.13	0.58
3,165.00	42.49	0.820	2,971.07	437.30	342.64	542.46	2.26	2.24	0.48
3,228.00	42.70	1.010	3,017.45	479.94	343.32	581.20	0.39	0.33	0.30
3,291.00	42.98	1.090	3,063.64	522.77	344.10	620.15	0.45	0.44	0.13
3,354.00	42.21	1.280	3,110.02	565.40	344.98	658.98	1.24	-1.22	0.30
3,417.00	42.65	1.640	3,156.52	607.89	346.07	697.76	0.80	0.70	0.57
3,479.00	42.63	1.610	3,202.13	649.87	347.26	736.13	0.05	-0.03	-0.05
3,542.00	42.65	1.790	3,248.47	692.53	348.53	775.14	0.20	0.03	0.29

Scientific Drilling

Survey Report



Company:	Coleman Oil & Gas Inc.	Local Co-ordinate Reference:	Well Carson 32-5-9 1
Project:	Rio Arriba County, NM	TVD Reference:	GL 7221' & RKB 15' @ 7236.00ft (Aztec 920)
Site:	Carson 32-5-9	MD Reference:	GL 7221' & RKB 15' @ 7236.00ft (Aztec 920)
Well:	Carson 32-5-9 1	North Reference:	True
Wellbore:	Lateral 3	Survey Calculation Method:	Minimum Curvature
Design:	Lateral 3	Database:	Grand Junction

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
3,605.00	42.11	1.920	3,295.01	734.97	349.90	814.00	0.87	-0.86	0.21
3,668.00	41.27	1.910	3,342.05	776.85	351.30	852.37	1.33	-1.33	-0.02
3,730.00	40.88	1.860	3,388.79	817.56	352.64	889.66	0.63	-0.63	-0.08
3,760.00	40.39	1.705	3,411.56	837.09	353.25	907.53	1.67	-1.64	-0.52
3,851.00	51.06	23.310	3,475.38	899.61	368.26	970.41	20.53	11.73	23.74
3,914.00	53.35	30.020	3,514.01	944.04	390.62	1,020.13	9.16	3.63	10.65
3,976.00	54.04	41.920	3,550.81	984.34	419.90	1,069.12	15.50	1.11	19.19
4,039.00	57.90	52.970	3,586.13	1,019.47	458.33	1,117.42	15.76	6.13	17.54
4,102.00	60.74	59.620	3,618.30	1,049.46	503.39	1,163.95	10.13	4.51	10.56
4,162.00	66.86	63.570	3,644.79	1,075.01	550.73	1,207.45	11.78	10.20	6.58
4,222.00	75.69	65.630	3,664.03	1,099.34	602.02	1,251.56	15.07	14.72	3.43
4,282.00	80.49	66.730	3,676.41	1,123.03	655.71	1,296.14	8.20	8.00	1.83
4,341.00	80.59	66.530	3,686.11	1,146.12	709.13	1,340.06	0.37	0.17	-0.34
4,401.00	84.08	66.390	3,694.11	1,169.87	763.64	1,385.03	5.82	5.82	-0.23
4,461.00	88.83	65.820	3,697.82	1,194.12	818.38	1,430.56	7.97	7.92	-0.95
4,520.00	89.26	64.410	3,698.80	1,218.94	871.89	1,476.08	2.50	0.73	-2.39
4,581.00	90.70	65.640	3,698.82	1,244.69	927.18	1,523.21	3.10	2.36	2.02
4,641.00	90.13	62.870	3,698.39	1,270.75	981.22	1,570.07	4.71	-0.95	-4.62
4,700.00	91.68	63.800	3,697.46	1,297.23	1,033.94	1,616.74	3.06	2.63	1.58
4,758.00	89.80	60.950	3,696.71	1,324.11	1,085.31	1,663.19	5.89	-3.24	-4.91
4,818.00	88.02	60.790	3,697.85	1,353.31	1,137.71	1,712.18	2.98	-2.97	-0.27
4,878.00	87.68	60.210	3,700.10	1,382.84	1,189.90	1,761.36	1.12	-0.57	-0.97
4,938.00	87.68	56.150	3,702.53	1,414.44	1,240.83	1,811.88	6.76	0.00	-6.77
4,998.00	86.91	52.600	3,705.36	1,449.34	1,289.53	1,864.41	6.05	-1.28	-5.92
5,057.00	88.05	50.480	3,707.96	1,486.00	1,335.69	1,917.42	4.08	1.93	-3.59
5,117.00	88.93	49.530	3,709.54	1,524.55	1,381.63	1,972.04	2.16	1.47	-1.58
5,177.00	90.00	46.830	3,710.10	1,564.55	1,426.34	2,027.44	4.84	1.78	-4.50
5,236.00	90.77	45.750	3,709.70	1,605.32	1,468.99	2,082.64	2.25	1.31	-1.83
5,295.00	92.48	44.850	3,708.03	1,646.80	1,510.91	2,138.17	3.27	2.90	-1.53
5,356.00	93.16	43.260	3,705.03	1,690.59	1,553.27	2,195.96	2.83	1.11	-2.61
5,415.00	94.20	40.550	3,701.24	1,734.40	1,592.59	2,252.47	4.91	1.76	-4.59
5,475.00	91.44	35.330	3,698.29	1,781.65	1,629.42	2,310.99	9.83	-4.60	-8.70
5,535.00	90.60	28.950	3,697.22	1,832.42	1,661.31	2,370.56	10.72	-1.40	-10.63
5,595.00	90.23	24.600	3,696.78	1,885.97	1,688.34	2,430.54	7.28	-0.62	-7.25
5,654.00	91.01	24.740	3,696.14	1,939.58	1,712.96	2,489.52	1.34	1.32	0.24
5,714.00	91.78	21.050	3,694.68	1,994.83	1,736.29	2,549.43	6.28	1.28	-6.15
5,775.00	92.08	17.690	3,692.63	2,052.33	1,756.51	2,610.02	5.53	0.49	-5.51
5,835.00	89.06	13.670	3,692.03	2,110.08	1,772.72	2,669.10	8.38	-5.03	-6.70
5,895.00	87.92	10.750	3,693.61	2,168.69	1,785.40	2,727.44	5.22	-1.90	-4.87
5,954.00	88.66	9.380	3,695.37	2,226.76	1,795.71	2,784.25	2.64	1.25	-2.32
6,014.00	86.91	7.980	3,697.69	2,286.02	1,804.76	2,841.60	3.73	-2.92	-2.33
6,075.00	87.68	7.930	3,700.57	2,346.37	1,813.19	2,899.66	1.26	1.26	-0.08
6,136.00	90.44	7.530	3,701.57	2,406.80	1,821.39	2,957.70	4.57	4.52	-0.66



Scientific Drilling Survey Report



Company:	Coleman Oil & Gas Inc.	Local Co-ordinate Reference:	Well Carson 32-5-9 1
Project:	Rio Arriba County, NM	TVD Reference:	GL 7221' & RKB 15' @ 7236.00ft (Aztec 920)
Site:	Carson 32-5-9	MD Reference:	GL 7221' & RKB 15' @ 7236.00ft (Aztec 920)
Well:	Carson 32-5-9 1	North Reference:	True
Wellbore:	Lateral 3	Survey Calculation Method:	Minimum Curvature
Design:	Lateral 3	Database:	Grand Junction

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
6,197.00	93.49	7.960	3,699.48	2,467.20	1,829.61	3,015.72	5.05	5.00	0.70	
6,258.00	94.33	7.320	3,695.32	2,527.52	1,837.70	3,073.60	1.73	1.38	-1.05	
6,320.00	93.53	6.190	3,691.07	2,588.94	1,844.97	3,132.13	2.23	-1.29	-1.82	
6,381.00	91.21	3.170	3,688.55	2,649.67	1,849.94	3,189.05	6.24	-3.80	-4.95	
6,441.00	91.07	1.580	3,687.35	2,709.61	1,852.43	3,244.16	2.66	-0.23	-2.65	
6,501.00	92.42	0.850	3,685.53	2,769.57	1,853.70	3,298.78	2.56	2.25	-1.22	
6,561.00	90.67	2.270	3,683.91	2,829.52	1,855.34	3,353.54	3.76	-2.92	2.37	
6,622.00	89.73	2.920	3,683.70	2,890.45	1,858.10	3,409.68	1.87	-1.54	1.07	
6,682.00	87.11	3.130	3,685.35	2,950.34	1,861.26	3,465.05	4.38	-4.37	0.35	
6,742.00	87.05	2.900	3,688.41	3,010.18	1,864.41	3,520.37	0.40	-0.10	-0.38	
6,802.00	90.10	3.050	3,689.90	3,070.07	1,867.53	3,575.73	5.09	5.08	0.25	
6,862.00	90.23	4.190	3,689.73	3,129.95	1,871.31	3,631.36	1.91	0.22	1.90	
6,922.00	89.13	3.810	3,690.06	3,189.81	1,875.50	3,687.14	1.94	-1.83	-0.63	
6,982.00	90.00	2.630	3,690.52	3,249.71	1,878.87	3,742.61	2.44	1.45	-1.97	
7,043.00	87.92	2.210	3,691.62	3,310.64	1,881.45	3,798.66	3.48	-3.41	-0.69	
7,103.00	89.63	2.500	3,692.91	3,370.57	1,883.91	3,853.77	2.89	2.85	0.48	
7,163.00	90.77	3.040	3,692.70	3,430.50	1,886.81	3,909.06	2.10	1.90	0.90	
7,223.00	89.70	4.940	3,692.45	3,490.35	1,890.98	3,964.84	3.63	-1.78	3.17	
7,283.00	89.19	5.580	3,693.03	3,550.10	1,896.48	4,021.09	1.36	-0.85	1.07	
7,343.00	89.90	4.810	3,693.51	3,609.85	1,901.92	4,077.31	1.75	1.18	-1.28	
7,403.00	86.78	3.280	3,695.25	3,669.66	1,906.15	4,133.08	5.79	-5.20	-2.55	
7,463.00	87.01	4.090	3,698.50	3,729.45	1,910.00	4,188.65	1.40	0.38	1.35	
7,523.00	89.46	6.520	3,700.34	3,789.16	1,915.54	4,244.89	5.75	4.08	4.05	
7,583.00	87.42	5.480	3,701.98	3,848.80	1,921.81	4,301.38	3.82	-3.40	-1.73	
7,643.00	88.52	4.640	3,704.10	3,908.53	1,927.10	4,357.52	2.31	1.83	-1.40	
7,704.00	88.59	6.020	3,705.64	3,969.24	1,932.76	4,414.72	2.26	0.11	2.26	
7,734.00	88.52	5.140	3,706.40	3,999.09	1,935.68	4,442.90	2.94	-0.23	-2.93	
7,781.00	88.52	5.140	3,707.61	4,045.89	1,939.89	4,486.91	0.00	0.00	0.00	

Checked By: _____ Approved By: _____ Date: _____

**Directional Survey Certification**

7327 West Barton Road
Casper, WY 82604
(307)-472-6621 Fax (307) 472-5439

Operator	Coleman Oil & Gas
Well Name & No.	Carson 32-5-9 1 Pilot
County & State	Rio Arriba County, NM
SDI Job No.	OP.041366
Rig	Aztec 920

I, Janie Collins, having personal knowledge of all the facts, hereby certify that the attached directional survey run from a measured depth of 392 feet to a measured depth of 4,353 feet is true and correct as determined from all available records.

A handwritten signature in blue ink, appearing to read 'Janie Collins', written over a horizontal line.

Signature

21-Sep-23

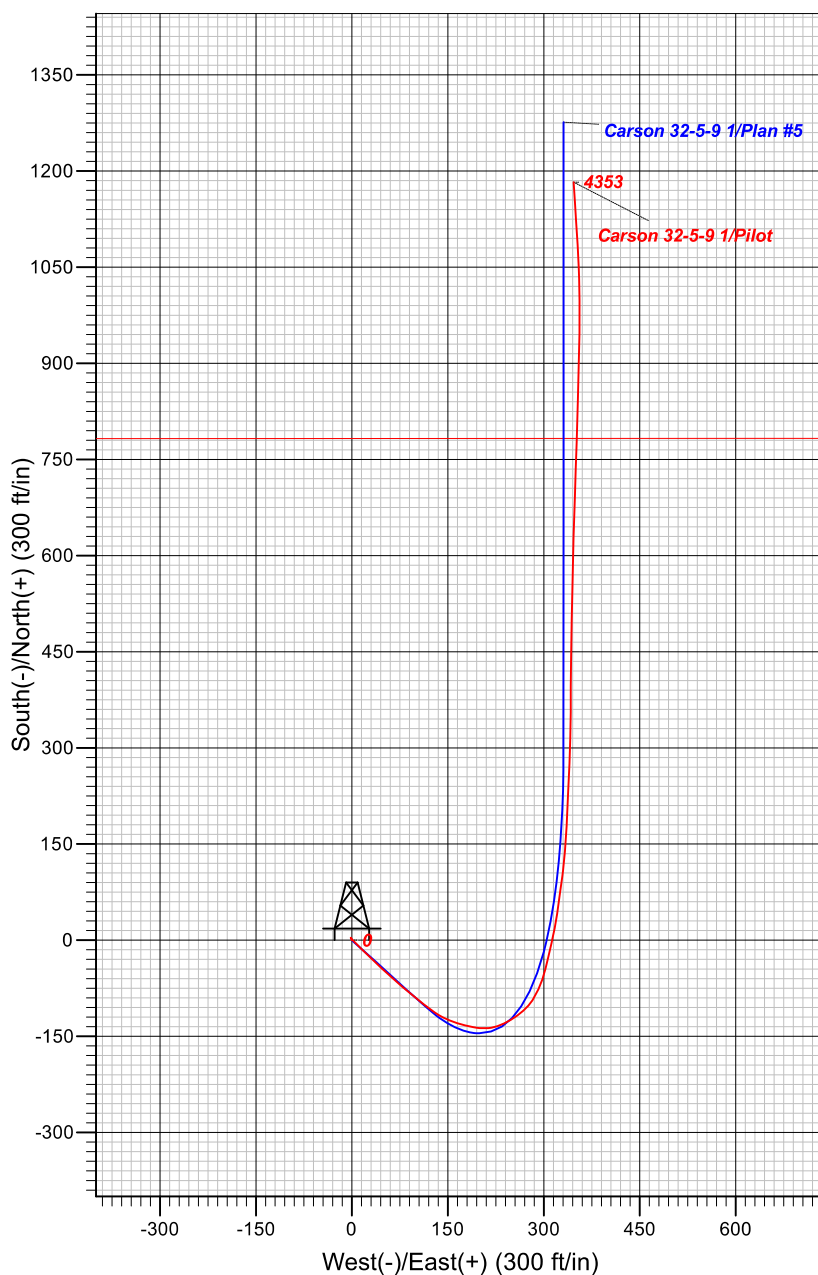
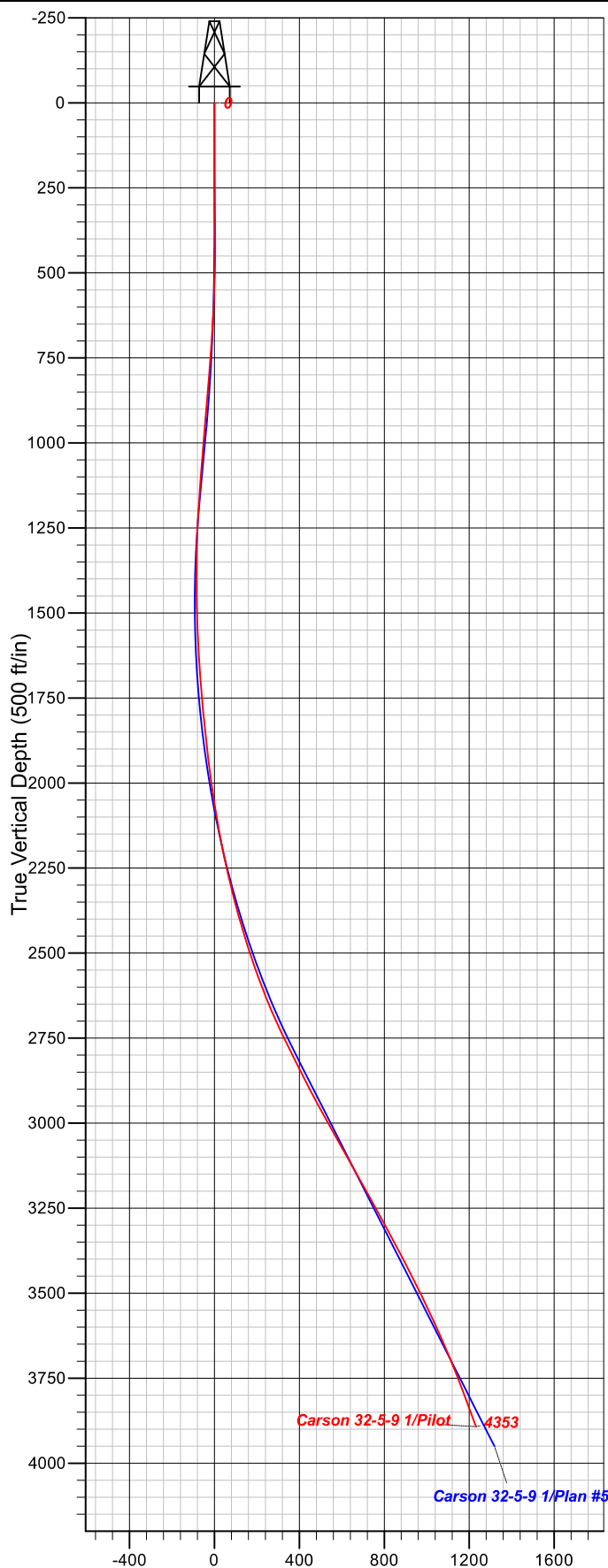
Date

Janie Collins

Rockies Region Well Planner
Scientific Drilling - Rocky Mountain District



Company: Coleman Oil & Gas Inc.
 Project: Rio Arriba County, NM
 Site: Carson 32-5-9
 Well: Carson 32-5-9 1
 Wellbore: Pilot
 Design: Pilot



Well Details: Carson 32-5-9 1

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	2180525.56	1313970.64	36.9871264	-107.3677452	

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

Plan: Pilot

16:01, September 21 2023
 Created By: Janie Collins



Coleman Oil & Gas Inc.

Rio Arriba County, NM

Carson 32-5-9

Carson 32-5-9 1

Pilot

Design: Pilot

Standard Survey Report

21 September, 2023



Scientific Drilling

www.scientificdrilling.com





Scientific Drilling

Survey Report



Company:	Coleman Oil & Gas Inc.	Local Co-ordinate Reference:	Well Carson 32-5-9 1
Project:	Rio Arriba County, NM	TVD Reference:	GL 7221' & RKB 15' @ 7236.00ft (Aztec 920)
Site:	Carson 32-5-9	MD Reference:	GL 7221' & RKB 15' @ 7236.00ft (Aztec 920)
Well:	Carson 32-5-9 1	North Reference:	True
Wellbore:	Pilot	Survey Calculation Method:	Minimum Curvature
Design:	Pilot	Database:	Grand Junction

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 32-5-9, Site Center: Carson 32-5-9 1H			
Site Position:		Northing:	2,180,525.56 usft	Latitude: 36.9871264
From:	Lat/Long	Easting:	1,313,970.64 usft	Longitude: -107.3677452
Position Uncertainty:	0.00 ft	Slot Radius:	13.20 in	Grid Convergence: -0.67 °

Well	Carson 32-5-9 1, 124' FNL 2626' FEL Sec 16 T32N R5W			
Well Position	+N/-S	0.00 ft	Northing:	2,180,525.56 usft
	+E/-W	0.00 ft	Easting:	1,313,970.64 usft
Position Uncertainty	0.00 ft		Wellhead Elevation:	ft
			Ground Level:	7,221.00 ft

Wellbore	Pilot				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM2023	9/12/2023	8.52	63.37	49,484.30000000

Design	Pilot			
Audit Notes:				
Version:	1.0	Phase:	ACTUAL	Tie On Depth: 0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	14.543

Survey Program	Date	9/18/2023		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
392.00	4,353.00	Survey #1 - MWD Survey (Pilot)	MWD+HDGM	OWSG MWD + HDGM

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
392.00	1.26	334.090	391.97	3.88	-1.88	3.28	0.32	0.32	0.00
452.00	1.93	145.880	451.96	3.63	-1.60	3.11	5.30	1.12	286.32
511.00	4.13	141.560	510.87	1.15	0.27	1.18	3.75	3.73	-7.32
570.00	7.17	132.010	569.58	-2.98	4.33	-1.80	5.38	5.15	-16.19
629.00	10.35	135.440	627.89	-9.22	10.79	-6.22	5.46	5.39	5.81
689.00	11.45	134.940	686.80	-17.27	18.79	-12.00	1.84	1.83	-0.83
749.00	12.74	134.290	745.47	-26.10	27.74	-18.30	2.16	2.15	-1.08
809.00	14.98	133.890	803.72	-36.10	38.06	-25.38	3.74	3.73	-0.67
868.00	15.58	132.700	860.63	-46.76	49.38	-32.86	1.15	1.02	-2.02

Scientific Drilling

Survey Report



Company:	Coleman Oil & Gas Inc.	Local Co-ordinate Reference:	Well Carson 32-5-9 1
Project:	Rio Arriba County, NM	TVD Reference:	GL 7221' & RKB 15' @ 7236.00ft (Aztec 920)
Site:	Carson 32-5-9	MD Reference:	GL 7221' & RKB 15' @ 7236.00ft (Aztec 920)
Well:	Carson 32-5-9 1	North Reference:	True
Wellbore:	Pilot	Survey Calculation Method:	Minimum Curvature
Design:	Pilot	Database:	Grand Junction

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
928.00	16.67	131.120	918.27	-57.88	61.79	-40.51	1.96	1.82	-2.63
988.00	17.51	129.950	975.62	-69.34	75.19	-48.23	1.51	1.40	-1.95
1,048.00	16.96	129.860	1,032.93	-80.74	88.83	-55.85	0.92	-0.92	-0.15
1,107.00	16.89	129.020	1,089.37	-91.65	102.09	-63.08	0.43	-0.12	-1.42
1,166.00	16.72	128.760	1,145.85	-102.36	115.37	-70.11	0.32	-0.29	-0.44
1,227.00	15.58	124.230	1,204.45	-112.46	128.98	-76.47	2.78	-1.87	-7.43
1,286.00	15.09	117.100	1,261.35	-120.42	142.37	-80.81	3.30	-0.83	-12.08
1,349.00	14.42	109.170	1,322.28	-126.73	157.08	-83.23	3.37	-1.06	-12.59
1,411.00	14.00	105.840	1,382.38	-131.31	171.59	-84.02	1.48	-0.68	-5.37
1,474.00	13.40	102.800	1,443.59	-135.01	186.04	-83.97	1.49	-0.95	-4.83
1,537.00	12.42	94.260	1,505.00	-137.13	199.92	-82.54	3.40	-1.56	-13.56
1,600.00	11.93	84.640	1,566.59	-137.03	213.16	-79.11	3.31	-0.78	-15.27
1,662.00	11.94	73.890	1,627.26	-134.65	225.70	-73.66	3.58	0.02	-17.34
1,725.00	10.89	64.100	1,689.02	-130.24	237.32	-66.48	3.49	-1.67	-15.54
1,788.00	10.46	58.610	1,750.93	-124.66	247.55	-58.51	1.75	-0.68	-8.71
1,850.00	10.74	54.810	1,811.87	-118.40	257.08	-50.05	1.21	0.45	-6.13
1,913.00	11.92	50.030	1,873.65	-110.84	266.86	-40.28	2.39	1.87	-7.59
1,976.00	12.55	40.550	1,935.22	-101.46	276.30	-28.83	3.34	1.00	-15.05
2,039.00	13.45	31.390	1,996.61	-90.00	284.57	-15.66	3.56	1.43	-14.54
2,102.00	14.64	25.110	2,057.73	-76.54	291.76	-0.82	3.07	1.89	-9.97
2,164.00	15.73	18.810	2,117.57	-61.48	297.80	15.26	3.19	1.76	-10.16
2,226.00	17.20	13.980	2,177.03	-44.63	302.72	32.81	3.24	2.37	-7.79
2,288.00	19.20	12.450	2,235.92	-25.78	307.13	52.17	3.32	3.23	-2.47
2,351.00	21.34	13.440	2,295.02	-4.51	312.03	73.99	3.44	3.40	1.57
2,413.00	22.95	11.110	2,352.45	18.32	316.98	97.33	2.96	2.60	-3.76
2,475.00	24.88	8.030	2,409.12	43.10	321.14	122.36	3.71	3.11	-4.97
2,538.00	26.60	7.890	2,465.87	70.20	324.92	149.54	2.73	2.73	-0.22
2,601.00	28.69	7.740	2,521.67	99.16	328.90	178.57	3.32	3.32	-0.24
2,663.00	31.03	5.160	2,575.44	129.82	332.34	209.12	4.30	3.77	-4.16
2,726.00	32.68	2.850	2,628.95	162.99	334.65	241.80	3.26	2.62	-3.67
2,789.00	35.73	3.250	2,681.05	198.35	336.53	276.50	4.85	4.84	0.63
2,852.00	37.86	2.900	2,731.50	236.03	338.56	313.48	3.40	3.38	-0.56
2,915.00	39.60	2.430	2,780.64	275.40	340.38	352.05	2.80	2.76	-0.75
2,977.00	39.61	0.900	2,828.41	314.90	341.53	390.57	1.57	0.02	-2.47
3,040.00	39.76	0.160	2,876.89	355.13	341.90	429.61	0.79	0.24	-1.17
3,102.00	41.08	0.520	2,924.09	395.33	342.15	468.58	2.16	2.13	0.58
3,165.00	42.49	0.820	2,971.07	437.30	342.64	509.33	2.26	2.24	0.48
3,228.00	42.70	1.010	3,017.45	479.94	343.32	550.77	0.39	0.33	0.30
3,291.00	42.98	1.090	3,063.64	522.77	344.10	592.42	0.45	0.44	0.13
3,354.00	42.21	1.280	3,110.02	565.40	344.98	633.91	1.24	-1.22	0.30
3,417.00	42.65	1.640	3,156.52	607.89	346.07	675.31	0.80	0.70	0.57
3,479.00	42.63	1.610	3,202.13	649.87	347.26	716.25	0.05	-0.03	-0.05
3,542.00	42.65	1.790	3,248.47	692.53	348.53	757.85	0.20	0.03	0.29
3,605.00	42.11	1.920	3,295.01	734.97	349.90	799.28	0.87	-0.86	0.21

Scientific Drilling

Survey Report



Company:	Coleman Oil & Gas Inc.	Local Co-ordinate Reference:	Well Carson 32-5-9 1
Project:	Rio Arriba County, NM	TVD Reference:	GL 7221' & RKB 15' @ 7236.00ft (Aztec 920)
Site:	Carson 32-5-9	MD Reference:	GL 7221' & RKB 15' @ 7236.00ft (Aztec 920)
Well:	Carson 32-5-9 1	North Reference:	True
Wellbore:	Pilot	Survey Calculation Method:	Minimum Curvature
Design:	Pilot	Database:	Grand Junction

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
3,668.00	41.27	1.910	3,342.05	776.85	351.30	840.17	1.33	-1.33	-0.02	
3,730.00	40.88	1.860	3,388.79	817.56	352.64	879.92	0.63	-0.63	-0.08	
3,793.00	39.85	1.530	3,436.79	858.34	353.85	919.70	1.67	-1.63	-0.52	
3,855.00	38.68	1.140	3,484.80	897.57	354.76	957.90	1.93	-1.89	-0.63	
3,918.00	37.70	0.910	3,534.31	936.52	355.46	995.77	1.57	-1.56	-0.37	
3,981.00	37.27	0.090	3,584.30	974.85	355.80	1,032.96	1.05	-0.68	-1.30	
4,044.00	36.16	359.410	3,634.80	1,012.52	355.64	1,069.38	1.88	-1.76	-1.08	
4,106.00	35.70	357.320	3,685.01	1,048.88	354.60	1,104.31	2.11	-0.74	-3.37	
4,169.00	33.90	356.800	3,736.74	1,084.78	352.76	1,138.61	2.90	-2.86	-0.83	
4,232.00	31.84	356.500	3,789.65	1,118.92	350.77	1,171.15	3.28	-3.27	-0.48	
4,295.00	31.81	356.090	3,843.18	1,152.07	348.62	1,202.70	0.35	-0.05	-0.65	
4,353.00	31.81	356.090	3,892.47	1,182.57	346.53	1,231.70	0.00	0.00	0.00	

Checked By: _____ Approved By: _____ Date: _____

**Directional Survey Certification**

7327 West Barton Road
Casper, WY 82604
(307)-472-6621 Fax (307) 472-5439

Operator	Coleman Oil & Gas
Well Name & No.	Carson 32-5-9 1 Lateral 1
County & State	Rio Arriba County, NM
SDI Job No.	OP.041366
Rig	Aztec 920

I, Janie Collins, having personal knowledge of all the facts, hereby certify that the attached directional survey run from a measured depth of 3,847 feet to a measured depth of 7,749 feet is true and correct as determined from all available records.

A handwritten signature in blue ink, appearing to read 'Janie Collins', written over a horizontal line.

Signature

22-Sep-23

Date

Janie Collins

Rockies Region Well Planner
Scientific Drilling - Rocky Mountain District



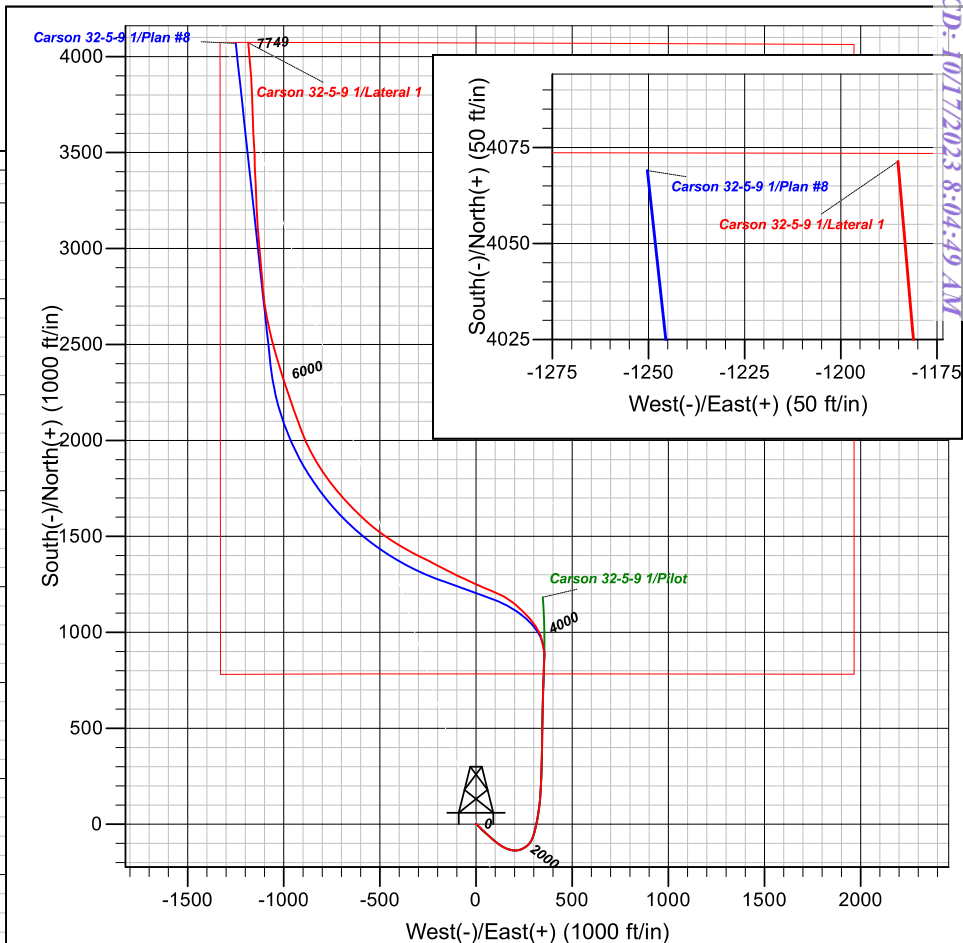
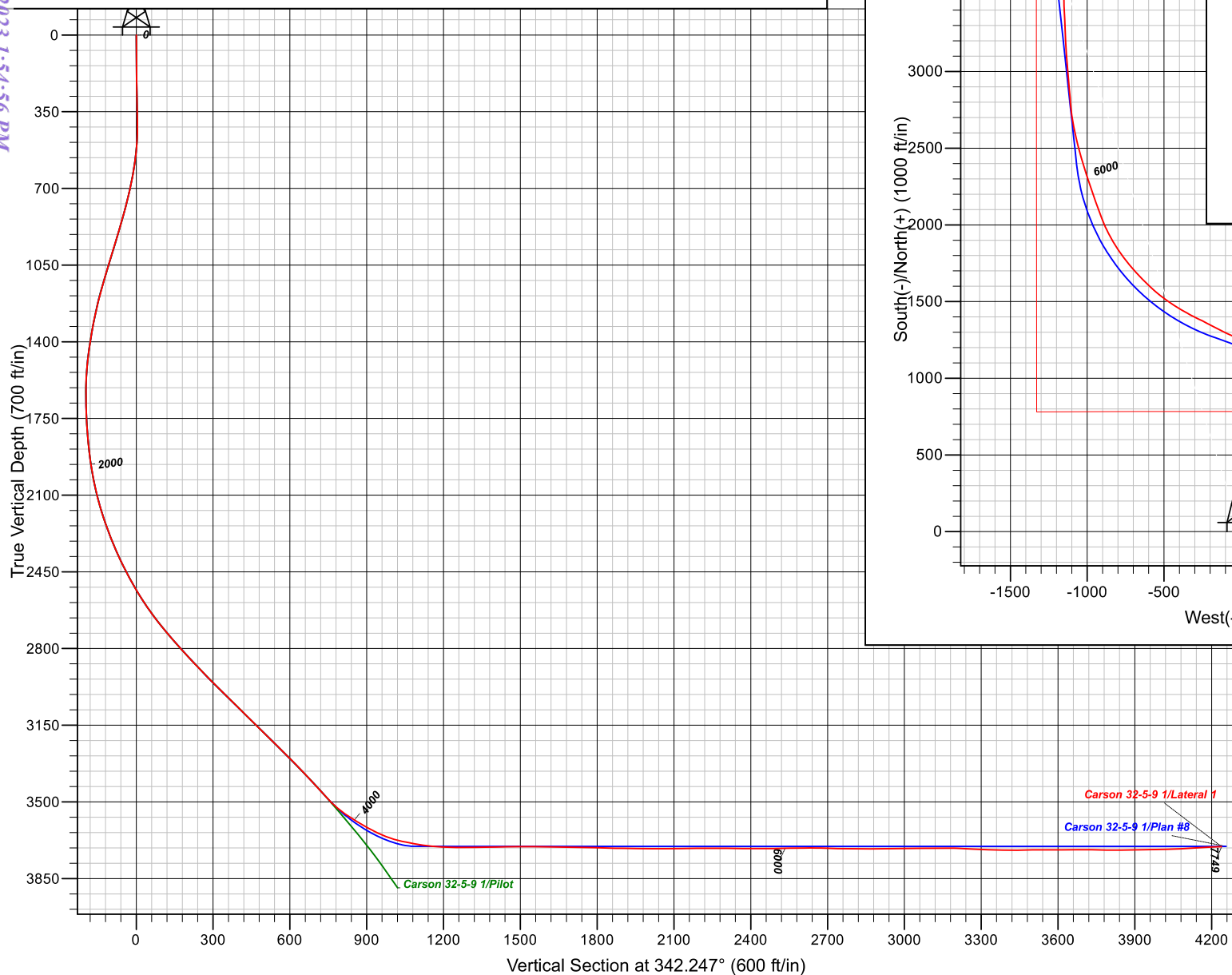
Company Name: Coleman Oil & Gas Inc.
 Project: Rio Arriba County, NM
 Site: Carson 32-5-9
 Well: Carson 32-5-9 1
 Wellbore: Lateral 1



WELL DETAILS: Carson 32-5-9 1

GL 7221' & RKB 15' @ 7236.00ft (Aztec 920) 7221.00

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	2180525.56	1313970.64	36.9871264	-107.3677452



Design: Lateral 1 (Carson 32-5-9 1/Lateral 1)

Created By: Janie Collins Date: 11:59, September 22 2023

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



Coleman Oil & Gas Inc.

Rio Arriba County, NM

Carson 32-5-9

Carson 32-5-9 1

Lateral 1

Design: Lateral 1

Standard Survey Report

22 September, 2023



Scientific Drilling

www.scientificdrilling.com



Scientific Drilling

Survey Report



Company:	Coleman Oil & Gas Inc.	Local Co-ordinate Reference:	Well Carson 32-5-9 1
Project:	Rio Arriba County, NM	TVD Reference:	GL 7221' & RKB 15' @ 7236.00ft (Aztec 920)
Site:	Carson 32-5-9	MD Reference:	GL 7221' & RKB 15' @ 7236.00ft (Aztec 920)
Well:	Carson 32-5-9 1	North Reference:	True
Wellbore:	Lateral 1	Survey Calculation Method:	Minimum Curvature
Design:	Lateral 1	Database:	Grand Junction

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 32-5-9, Site Center: Carson 32-5-9 1H				
Site Position:		Northing:	2,180,525.56 usft	Latitude:	36.9871264
From:	Lat/Long	Easting:	1,313,970.64 usft	Longitude:	-107.3677452
Position Uncertainty:	0.00 ft	Slot Radius:	13.20 in	Grid Convergence:	-0.67 °

Well	Carson 32-5-9 1, 124' FNL 2626' FEL Sec 16 T32N R5W					
Well Position	+N/-S	0.00 ft	Northing:	2,180,525.56 usft	Latitude:	36.9871264
	+E/-W	0.00 ft	Easting:	1,313,970.64 usft	Longitude:	-107.3677452
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	7,221.00 ft

Wellbore	Lateral 1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM2023	9/18/2023	8.52	63.37	49,482.40000000

Design	Lateral 1				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	3,793.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.00	0.00	0.00	342.247	

Survey Program	Date	9/22/2023			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
392.00	3,793.00	Survey #1 - MWD Survey (Pilot)	MWD+HDGM	OWSG MWD + HDGM	
3,847.00	7,749.00	Survey #1 - MWD Survey (Lateral 1)	MWD+HDGM	OWSG MWD + HDGM	

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
392.00	1.26	334.090	391.97	3.88	-1.88	4.27	0.32	0.32	0.00	
452.00	1.93	145.880	451.96	3.63	-1.60	3.95	5.30	1.12	286.32	
511.00	4.13	141.560	510.87	1.15	0.27	1.01	3.75	3.73	-7.32	
570.00	7.17	132.010	569.58	-2.98	4.33	-4.16	5.38	5.15	-16.19	
629.00	10.35	135.440	627.89	-9.22	10.79	-12.07	5.46	5.39	5.81	
689.00	11.45	134.940	686.80	-17.27	18.79	-22.18	1.84	1.83	-0.83	
749.00	12.74	134.290	745.47	-26.10	27.74	-33.31	2.16	2.15	-1.08	
809.00	14.98	133.890	803.72	-36.10	38.06	-45.98	3.74	3.73	-0.67	
868.00	15.58	132.700	860.63	-46.76	49.38	-59.59	1.15	1.02	-2.02	

Scientific Drilling

Survey Report



Scientific Drilling

Company:	Coleman Oil & Gas Inc.	Local Co-ordinate Reference:	Well Carson 32-5-9 1
Project:	Rio Arriba County, NM	TVD Reference:	GL 7221' & RKB 15' @ 7236.00ft (Aztec 920)
Site:	Carson 32-5-9	MD Reference:	GL 7221' & RKB 15' @ 7236.00ft (Aztec 920)
Well:	Carson 32-5-9 1	North Reference:	True
Wellbore:	Lateral 1	Survey Calculation Method:	Minimum Curvature
Design:	Lateral 1	Database:	Grand Junction

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
928.00	16.67	131.120	918.27	-57.88	61.79	-73.96	1.96	1.82	-2.63
988.00	17.51	129.950	975.62	-69.34	75.19	-88.96	1.51	1.40	-1.95
1,048.00	16.96	129.860	1,032.93	-80.74	88.83	-103.98	0.92	-0.92	-0.15
1,107.00	16.89	129.020	1,089.37	-91.65	102.09	-118.41	0.43	-0.12	-1.42
1,166.00	16.72	128.760	1,145.85	-102.36	115.37	-132.66	0.32	-0.29	-0.44
1,227.00	15.58	124.230	1,204.45	-112.46	128.98	-146.44	2.78	-1.87	-7.43
1,286.00	15.09	117.100	1,261.35	-120.42	142.37	-158.10	3.30	-0.83	-12.08
1,349.00	14.42	109.170	1,322.28	-126.73	157.08	-168.59	3.37	-1.06	-12.59
1,411.00	14.00	105.840	1,382.38	-131.31	171.59	-177.38	1.48	-0.68	-5.37
1,474.00	13.40	102.800	1,443.59	-135.01	186.04	-185.31	1.49	-0.95	-4.83
1,537.00	12.42	94.260	1,505.00	-137.13	199.92	-191.56	3.40	-1.56	-13.56
1,600.00	11.93	84.640	1,566.59	-137.03	213.16	-195.50	3.31	-0.78	-15.27
1,662.00	11.94	73.890	1,627.26	-134.65	225.70	-197.05	3.58	0.02	-17.34
1,725.00	10.89	64.100	1,689.02	-130.24	237.32	-196.40	3.49	-1.67	-15.54
1,788.00	10.46	58.610	1,750.93	-124.66	247.55	-194.21	1.75	-0.68	-8.71
1,850.00	10.74	54.810	1,811.87	-118.40	257.08	-191.15	1.21	0.45	-6.13
1,913.00	11.92	50.030	1,873.65	-110.84	266.86	-186.93	2.39	1.87	-7.59
1,976.00	12.55	40.550	1,935.22	-101.46	276.30	-180.87	3.34	1.00	-15.05
2,039.00	13.45	31.390	1,996.61	-90.00	284.57	-172.48	3.56	1.43	-14.54
2,102.00	14.64	25.110	2,057.73	-76.54	291.76	-161.85	3.07	1.89	-9.97
2,164.00	15.73	18.810	2,117.57	-61.48	297.80	-149.36	3.19	1.76	-10.16
2,226.00	17.20	13.980	2,177.03	-44.63	302.72	-134.81	3.24	2.37	-7.79
2,288.00	19.20	12.450	2,235.92	-25.78	307.13	-118.20	3.32	3.23	-2.47
2,351.00	21.34	13.440	2,295.02	-4.51	312.03	-99.44	3.44	3.40	1.57
2,413.00	22.95	11.110	2,352.45	18.32	316.98	-79.20	2.96	2.60	-3.76
2,475.00	24.88	8.030	2,409.12	43.10	321.14	-56.87	3.71	3.11	-4.97
2,538.00	26.60	7.890	2,465.87	70.20	324.92	-32.22	2.73	2.73	-0.22
2,601.00	28.69	7.740	2,521.67	99.16	328.90	-5.85	3.32	3.32	-0.24
2,663.00	31.03	5.160	2,575.44	129.82	332.34	22.31	4.30	3.77	-4.16
2,726.00	32.68	2.850	2,628.95	162.99	334.65	53.19	3.26	2.62	-3.67
2,789.00	35.73	3.250	2,681.05	198.35	336.53	86.29	4.85	4.84	0.63
2,852.00	37.86	2.900	2,731.50	236.03	338.56	121.56	3.40	3.38	-0.56
2,915.00	39.60	2.430	2,780.64	275.40	340.38	158.50	2.80	2.76	-0.75
2,977.00	39.61	0.900	2,828.41	314.90	341.53	195.77	1.57	0.02	-2.47
3,040.00	39.76	0.160	2,876.89	355.13	341.90	233.97	0.79	0.24	-1.17
3,102.00	41.08	0.520	2,924.09	395.33	342.15	272.18	2.16	2.13	0.58
3,165.00	42.49	0.820	2,971.07	437.30	342.64	312.01	2.26	2.24	0.48
3,228.00	42.70	1.010	3,017.45	479.94	343.32	352.40	0.39	0.33	0.30
3,291.00	42.98	1.090	3,063.64	522.77	344.10	392.95	0.45	0.44	0.13
3,354.00	42.21	1.280	3,110.02	565.40	344.98	433.29	1.24	-1.22	0.30
3,417.00	42.65	1.640	3,156.52	607.89	346.07	473.42	0.80	0.70	0.57
3,479.00	42.63	1.610	3,202.13	649.87	347.26	513.04	0.05	-0.03	-0.05
3,542.00	42.65	1.790	3,248.47	692.53	348.53	553.28	0.20	0.03	0.29

Scientific Drilling

Survey Report



Company:	Coleman Oil & Gas Inc.	Local Co-ordinate Reference:	Well Carson 32-5-9 1
Project:	Rio Arriba County, NM	TVD Reference:	GL 7221' & RKB 15' @ 7236.00ft (Aztec 920)
Site:	Carson 32-5-9	MD Reference:	GL 7221' & RKB 15' @ 7236.00ft (Aztec 920)
Well:	Carson 32-5-9 1	North Reference:	True
Wellbore:	Lateral 1	Survey Calculation Method:	Minimum Curvature
Design:	Lateral 1	Database:	Grand Junction

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
3,605.00	42.11	1.920	3,295.01	734.97	349.90	593.28	0.87	-0.86	0.21
3,668.00	41.27	1.910	3,342.05	776.85	351.30	632.74	1.33	-1.33	-0.02
3,730.00	40.88	1.860	3,388.79	817.56	352.64	671.11	0.63	-0.63	-0.08
3,793.00	39.85	1.530	3,436.79	858.34	353.85	709.58	1.67	-1.63	-0.52
3,847.00	38.83	1.190	3,478.56	892.57	354.66	741.92	1.93	-1.89	-0.63
3,977.00	53.14	337.280	3,569.32	982.41	335.18	833.43	17.07	11.01	-18.39
4,039.00	56.98	327.730	3,604.88	1,027.35	311.67	883.40	14.05	6.19	-15.40
4,102.00	61.31	318.600	3,637.23	1,070.50	279.23	934.39	14.20	6.87	-14.49
4,165.00	69.91	314.840	3,663.23	1,112.18	239.90	986.07	14.69	13.65	-5.97
4,228.00	78.59	309.260	3,680.33	1,152.69	194.89	1,038.37	16.20	13.78	-8.86
4,290.00	81.74	298.370	3,690.95	1,186.60	144.21	1,086.13	18.03	5.08	-17.56
4,353.00	83.41	291.410	3,699.10	1,212.87	87.58	1,128.41	11.27	2.65	-11.05
4,401.00	85.59	292.850	3,703.70	1,230.87	43.32	1,159.05	5.44	4.54	3.00
4,461.00	89.40	294.940	3,706.32	1,255.15	-11.47	1,198.88	7.24	6.35	3.48
4,521.00	89.30	295.110	3,707.00	1,280.53	-65.83	1,239.62	0.33	-0.17	0.28
4,579.00	89.93	296.220	3,707.39	1,305.64	-118.11	1,279.48	2.20	1.09	1.91
4,639.00	90.13	297.130	3,707.36	1,332.58	-171.72	1,321.48	1.55	0.33	1.52
4,698.00	90.74	297.610	3,706.91	1,359.70	-224.12	1,363.29	1.32	1.03	0.81
4,758.00	90.84	296.540	3,706.09	1,387.01	-277.54	1,405.59	1.79	0.17	-1.78
4,818.00	90.80	297.500	3,705.23	1,414.26	-330.98	1,447.84	1.60	-0.07	1.60
4,878.00	90.44	300.360	3,704.58	1,443.28	-383.48	1,491.49	4.80	-0.60	4.77
4,937.00	90.07	303.320	3,704.31	1,474.41	-433.60	1,536.41	5.06	-0.63	5.02
4,997.00	88.73	305.150	3,704.94	1,508.16	-483.20	1,583.67	3.78	-2.23	3.05
5,057.00	88.86	308.920	3,706.21	1,544.28	-531.08	1,632.67	6.29	0.22	6.28
5,116.00	89.63	312.400	3,706.98	1,582.71	-575.82	1,682.92	6.04	1.31	5.90
5,176.00	88.69	314.350	3,707.86	1,623.91	-619.43	1,735.45	3.61	-1.57	3.25
5,236.00	88.89	316.650	3,709.13	1,666.70	-661.47	1,789.02	3.85	0.33	3.83
5,295.00	87.55	319.130	3,710.96	1,710.44	-701.01	1,842.73	4.78	-2.27	4.20
5,356.00	89.43	321.630	3,712.57	1,757.41	-739.89	1,899.32	5.13	3.08	4.10
5,416.00	89.83	323.810	3,712.96	1,805.14	-776.23	1,955.86	3.69	0.67	3.63
5,475.00	89.30	327.000	3,713.41	1,853.70	-809.72	2,012.32	5.48	-0.90	5.41
5,535.00	90.24	330.790	3,713.65	1,905.07	-840.71	2,070.69	6.51	1.57	6.32
5,595.00	90.70	333.660	3,713.15	1,958.15	-868.67	2,129.77	4.84	0.77	4.78
5,655.00	90.40	336.710	3,712.58	2,012.60	-893.85	2,189.30	5.11	-0.50	5.08
5,715.00	89.66	339.990	3,712.55	2,068.36	-915.98	2,249.15	5.60	-1.23	5.47
5,775.00	90.13	340.800	3,712.66	2,124.88	-936.11	2,309.12	1.56	0.78	1.35
5,835.00	89.66	340.690	3,712.77	2,181.52	-955.90	2,369.10	0.80	-0.78	-0.18
5,895.00	89.66	340.520	3,713.12	2,238.11	-975.82	2,429.07	0.28	0.00	-0.28
5,956.00	91.07	341.590	3,712.73	2,295.81	-995.62	2,490.06	2.90	2.31	1.75
6,018.00	91.14	343.280	3,711.54	2,354.90	-1,014.33	2,552.04	2.73	0.11	2.73
6,079.00	90.60	343.480	3,710.61	2,413.35	-1,031.78	2,613.02	0.94	-0.89	0.33
6,140.00	88.16	343.810	3,711.27	2,471.87	-1,048.95	2,674.00	4.04	-4.00	0.54
6,201.00	88.46	346.650	3,713.07	2,530.82	-1,064.49	2,734.88	4.68	0.49	4.66



Scientific Drilling Survey Report



Company:	Coleman Oil & Gas Inc.	Local Co-ordinate Reference:	Well Carson 32-5-9 1
Project:	Rio Arriba County, NM	TVD Reference:	GL 7221' & RKB 15' @ 7236.00ft (Aztec 920)
Site:	Carson 32-5-9	MD Reference:	GL 7221' & RKB 15' @ 7236.00ft (Aztec 920)
Well:	Carson 32-5-9 1	North Reference:	True
Wellbore:	Lateral 1	Survey Calculation Method:	Minimum Curvature
Design:	Lateral 1	Database:	Grand Junction

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
6,261.00	89.20	348.400	3,714.30	2,589.39	-1,077.45	2,794.61	3.17	1.23	2.92
6,322.00	90.27	348.180	3,714.58	2,649.12	-1,089.83	2,855.27	1.79	1.75	-0.36
6,382.00	90.97	351.810	3,713.93	2,708.19	-1,100.25	2,914.71	6.16	1.17	6.05
6,442.00	89.97	355.530	3,713.44	2,767.82	-1,106.87	2,973.51	6.42	-1.67	6.20
6,502.00	90.47	354.770	3,713.21	2,827.60	-1,111.94	3,031.99	1.52	0.83	-1.27
6,562.00	91.68	355.540	3,712.08	2,887.37	-1,117.01	3,090.47	2.39	2.02	1.28
6,623.00	90.27	354.780	3,711.04	2,948.14	-1,122.15	3,149.91	2.63	-2.31	-1.25
6,682.00	86.95	355.120	3,712.47	3,006.89	-1,127.34	3,207.44	5.66	-5.63	0.58
6,743.00	87.01	355.360	3,715.69	3,067.60	-1,132.40	3,266.80	0.41	0.10	0.39
6,803.00	87.85	355.860	3,718.38	3,127.36	-1,136.99	3,325.12	1.63	1.40	0.83
6,863.00	88.63	357.010	3,720.22	3,187.21	-1,140.71	3,383.26	2.32	1.30	1.92
6,923.00	90.77	358.690	3,720.54	3,247.16	-1,142.97	3,441.04	4.53	3.57	2.80
6,984.00	90.87	356.720	3,719.66	3,308.11	-1,145.41	3,499.82	3.23	0.16	-3.23
7,043.00	89.53	356.410	3,719.46	3,367.00	-1,148.94	3,556.99	2.33	-2.27	-0.53
7,103.00	90.30	358.410	3,719.55	3,426.93	-1,151.65	3,614.90	3.57	1.28	3.33
7,164.00	91.41	359.260	3,718.64	3,487.91	-1,152.89	3,673.35	2.29	1.82	1.39
7,224.00	88.49	356.850	3,718.69	3,547.87	-1,154.93	3,731.07	6.31	-4.87	-4.02
7,283.00	89.40	356.150	3,719.77	3,606.75	-1,158.53	3,788.24	1.95	1.54	-1.19
7,343.00	90.30	357.280	3,719.93	3,666.65	-1,161.97	3,846.34	2.41	1.50	1.88
7,404.00	90.97	359.030	3,719.26	3,727.61	-1,163.93	3,905.00	3.07	1.10	2.87
7,464.00	91.24	358.880	3,718.10	3,787.59	-1,165.03	3,962.45	0.51	0.45	-0.25
7,524.00	91.34	357.230	3,716.75	3,847.53	-1,167.06	4,020.17	2.75	0.17	-2.75
7,584.00	93.29	355.000	3,714.32	3,907.34	-1,171.12	4,078.37	4.93	3.25	-3.72
7,644.00	94.77	355.280	3,710.11	3,966.98	-1,176.19	4,136.71	2.51	2.47	0.47
7,705.00	92.32	355.050	3,706.34	4,027.64	-1,181.33	4,196.04	4.03	-4.02	-0.38
7,749.00	92.32	355.050	3,704.55	4,071.44	-1,185.12	4,238.92	0.00	0.00	0.00

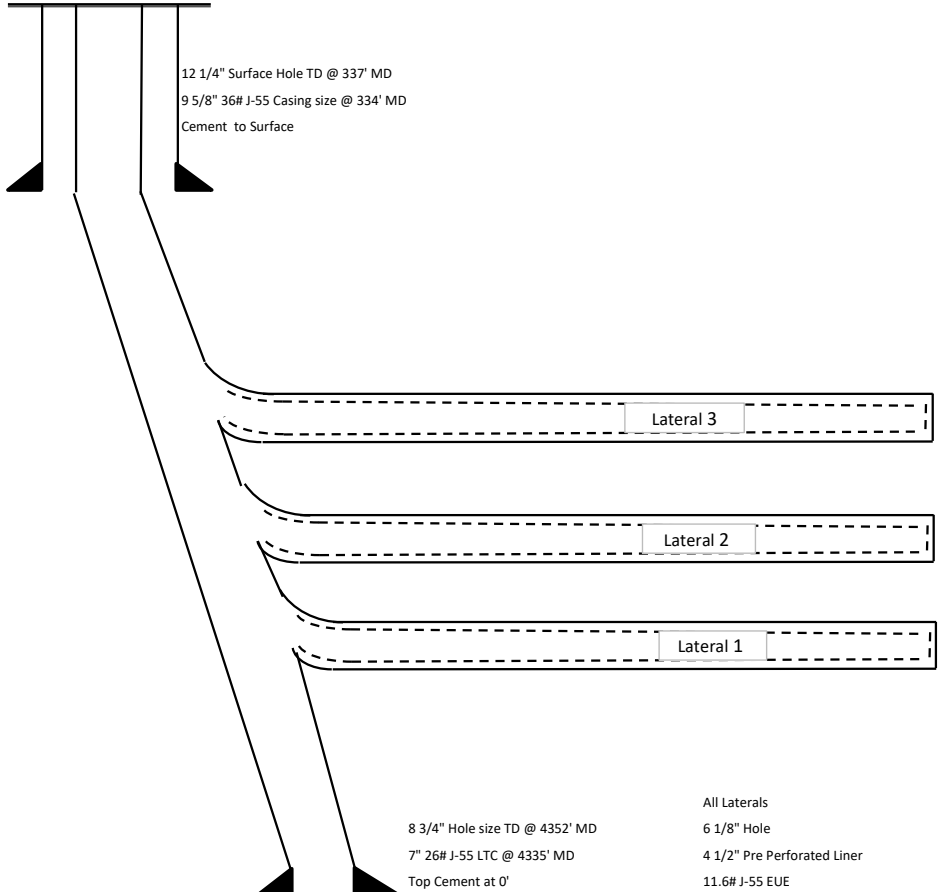
Checked By: _____ Approved By: _____ Date: _____

Carson 32-5-9 1H

Lateral WBD

DRAWING NOT TO SCALE

State: New Mexico
County: Rio Arriba
API: 30-039-31398
GL: 7221
KB: 7236



							Total Depth								
Well/Lateral Name	Top of Window	Base Of Window	Bridge Plug	KOP Method	KOP (MD)	KOP (TVD)	First Take Point	TD (MD)	TD (TVD)	Liner Bottom	Liner Top	Perfs	Last Take Point	BHL	Notes
Pilot Hole	N/A	N/A	N/A	Bent housing			N/A*	4352.0	3892.0	N/A	N/A		N/A	1059 FSL & 2279 FEL	BHL/Last Take Point in S9 T32N R5W
Lateral #1	3837.0	3845.0		Whip stock	3845	3479	1059 FSL & 2469 FEL S9 T32N R5W	7749.0	3705.0	7731.0	3853.0	4277-7731	662' FNL & 1475' FWL	662' FNL & 1475' FWL	BHL/Last Take Point in S9 T32N R5W
Lateral #2	3797.0	3805.0		Whip stock	3805	3444	1195 FSL & 2231 FEL S9 T32N R5W	7058.0	3701.0	7038.0	3813.0	4320-7038	687' FNL & 2337' FEL	687' FNL & 2337' FEL	BHL/Last Take Point in S9 T32N R5W
Lateral #3	3753.0	3761.0		Whip stock	3761	3412	1031 FSL & 1898 FEL S9 T32N R5W	7779.0	3707.0	7761.0	3769.0	4361-7761	677' FNL & 685' FEL	677' FNL & 685' FEL	BHL/Last Take Point in S9 T32N R5W

District I
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District II
811 S. First St., Artesia, NM 88210
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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

ACKNOWLEDGMENTS

Action 276200

ACKNOWLEDGMENTS

Operator: COLEMAN OIL & GAS INC P.O. Drawer 3337 Farmington, NM 87499	OGRID: 4838
	Action Number: 276200
	Action Type: [C-104] Completion Packet (C-104C)

ACKNOWLEDGMENTS

☒	I hereby certify that the required Water Use Report has been, or will be, submitted for this wells completion.
☒	I hereby certify that the required FracFocus disclosure has been, or will be, submitted for this wells completion.

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CONDITIONS

Action 276200

CONDITIONS

Operator: COLEMAN OIL & GAS INC P.O. Drawer 3337 Farmington, NM 87499	OGRID: 4838
	Action Number: 276200
	Action Type: [C-104] Completion Packet (C-104C)

CONDITIONS

Created By	Condition	Condition Date
smcgrath	RT Expires 01/03/2024	10/20/2023