

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 Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico

Form C-101
Revised July 18, 2013

Energy Minerals and Natural Resources

Oil Conservation Division

1220 South St. Francis Dr.

Santa Fe, NM 87505

☐ AMENDED REPORT

OIL CONS. DIV DIST. 3
JUN 30 2014

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

Operator Name and Address Coleman Oil & Gas, Inc. P. O. Drawer 3337 Farmington NM 87499		GRID Number 4838
		API Number 30-045-35567
Property Code 313430	Property Name Bonds 15	Well No. 21

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
J	15	32 N	10 W		2470	S	2273	E	San Juan

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
C	15	32 N	10 W		1200	N	1980	W	San Juan

9. Pool Information

Pool Name Blanco - Mesa Verde (Prorated Gas) & Basin Dakota (Prorated Gas)	Pool Code 72319 71599
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Additional Well Information

11. Work Type N	12. Well Type G	13. Cable/Rotary R	14. Lease Type P	15. Ground Level Elevation 5913
16. Multiple N	17. Proposed Depth TVD: 7410 MD: 7899'	18. Formation Burro Canyon	19. Contractor	20. Spud Date Upon Approval
Depth to Ground water 5' (well SJ 02845)		Distance from nearest fresh water well 1,430' (southwest to well SJ 02845)		Distance to nearest surface water 250' (east)

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

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surface	12-1/4"	8-5/8"	36	500'	270	GL
Intermed.	8-3/4"	7"	23	4376' MD	653	GL
Product'n	6-1/4"	4-1/2"	11.6	7899' MD	535	3000'

Casing/Cement Program: Additional Comments

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22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
	2000	2000	

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

I further certify that I have complied with 19.15.14.9 (A) NMAC ☐ and/or 19.15.14.9 (B) NMAC ☐, if applicable.

Signature:

Brian Wood

Printed name: **Brian Wood**

Hold C104

Title: **Consultant**

for Directional Survey
and "As Drilled" plat

E-mail Address: **brian@permitswest.com**

Date: **6-27-14**

Phone: **(505) 466-8120**

OIL CONSERVATION DIVISION

Approved By:

Title: **SUPERVISOR DISTRICT # 3**

Approved Date: **03 2014**

Expiration Date: **7-3-16**

Conditions of Approval Attached

Hold C104
for Directional Survey
and "As Drilled" plat

AV

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

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, N.M. 87505
Phone: (505) 478-3460 Fax: (505) 478-3462

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045- 35507		² Pool Code 72319	³ Pool Name BLANCO - MESA VERDE (PRORATED GAS)
⁴ Property Code 313430	⁵ Property Name BONDS 15		⁶ Well Number 21
⁷ OGRID No. 4838	⁸ Operator Name COLEMAN OIL & GAS, INC.		⁹ Elevation 5913

¹⁰ Surface Location

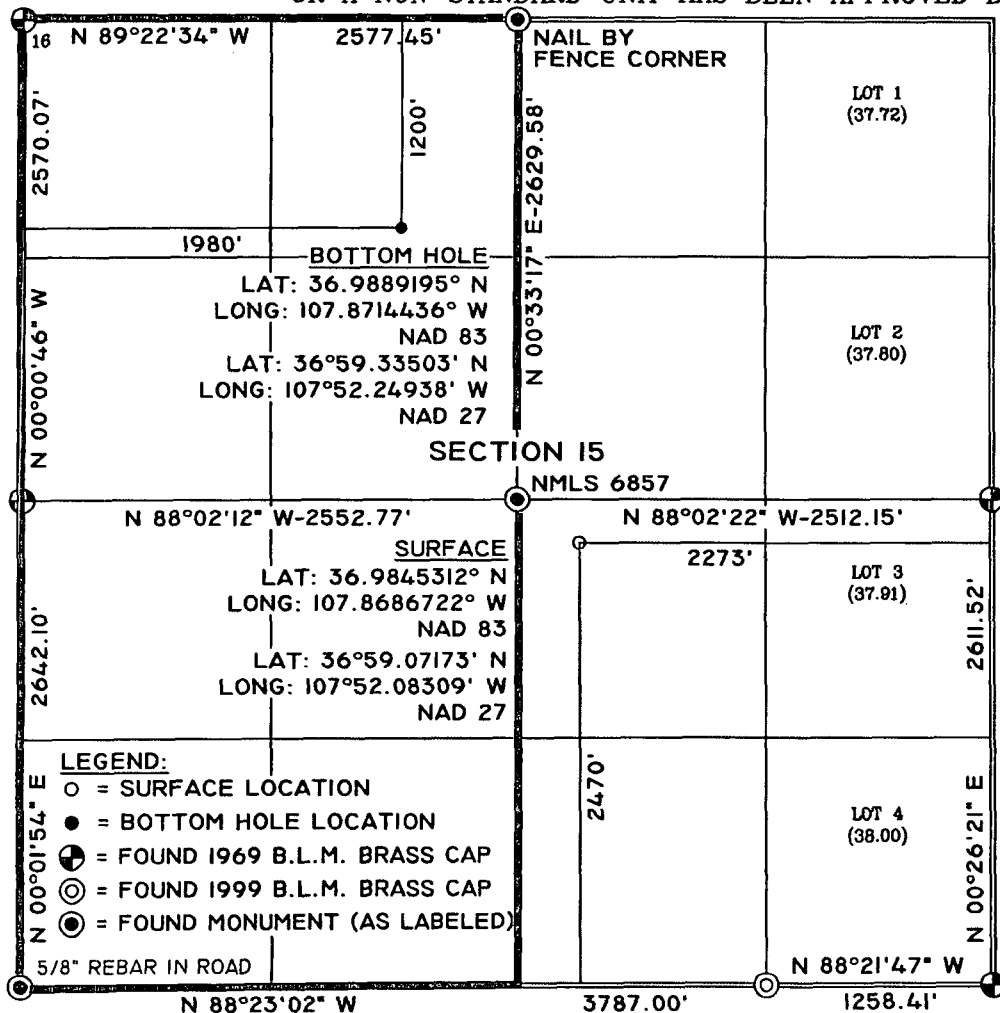
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	15	32 N	10 W		2470	SOUTH	2273	EAST	SAN JUAN

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
C	15	32 N	10 W		1200	NORTH	1980	WEST	SAN JUAN

^{12a} Dedicated Acres 320	¹³ Joint or Infill	¹⁴ Consolidation Code C	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



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.

6-27-14

Signature **BRIAN WOOD** Date

brian@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.

03/24/14

Date of Survey

Signature and Seal of Professional Surveyor:

117-273150

17078

2019

~~SECRET~~

[Handwritten signature]

SECRET

17078

Certificate Number

Certificate Number

DISTRICT I
1625 N. French Dr., Hobbs, N.M. 88240
Phone: (575) 393-6181 Fax: (575) 393-0720

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811 S. First St., Artesia, N.M. 88210
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1220 S. St. Francis Dr., Santa Fe, N.M. 87505
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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 30-045-355207	² Pool Code 71599	³ Pool Name BASIN DAKOTA (PRORATED GAS)
⁴ Property Code 313430	⁵ Property Name BONDS 15	⁶ Well Number 21
⁷ GRID No. 4838	⁸ Operator Name COLEMAN OIL & GAS, INC.	⁹ Elevation 5913

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
J	15	32 N	10 W		2470	SOUTH	2273	EAST	SAN JUAN

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
C	15	32 N	10 W		1200	NORTH	1980	WEST	SAN JUAN

¹² Dedicated Acres 320	¹³ Joint or Infill	¹⁴ Consolidation Code C	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

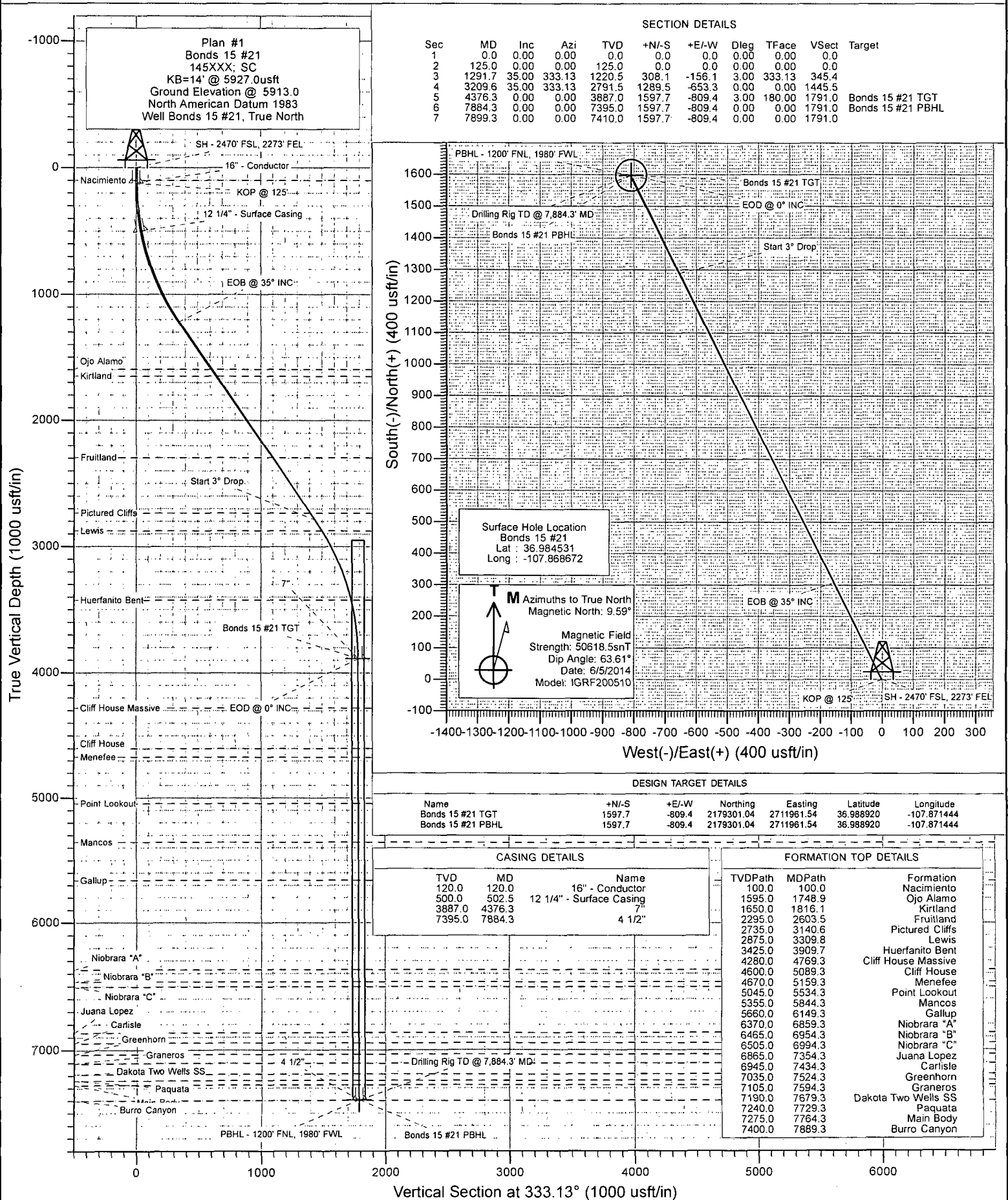
16 N 89°22'34" W 2577.45' 2570.07' 1980' N 00°00'46" W 2642.10' N 00°01'54" E 5/8" REBAR IN ROAD	NAIL BY FENCE CORNER 1200' N 00°33'17" E-2629.58' BOTTOM HOLE LAT: 36.9889195° N LONG: 107.8714436° W NAD 83 LAT: 36°59.33503' N LONG: 107°52.24938' W NAD 27 SECTION 15 NMLS 6857 SURFACE LAT: 36.9845312° N LONG: 107.8686722° W NAD 83 LAT: 36°59.07173' N LONG: 107°52.08309' W NAD 27 LEGEND: ○ = SURFACE LOCATION ● = BOTTOM HOLE LOCATION ⊙ = FOUND 1969 B.L.M. BRASS CAP ⊙ = FOUND 1999 B.L.M. BRASS CAP ⊙ = FOUND MONUMENT (AS LABELED)	LOT 1 (37.72) LOT 2 (37.80) LOT 3 (37.91) LOT 4 (38.00) 2273' 2611.52' 2470' N 88°02'12" W-2552.77' N 88°02'22" W-2512.15' N 88°21'47" W 3787.00' 1258.41'	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. <i>Brian Wood</i> 6-27-14 Signature Date BRIAN WOOD brian@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. 03/24/14 Date of Survey Signature and Seal of Professional Surveyor: <i>Marshall W. Lindeen</i> 17078 Certificate Number
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Project: San Juan County, NM
Site: S15-T32N-R10W
Well: Bonds 15 #21
Wellbore: DD
Design: Plan #1



CATHEDRAL



Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Bonds 15 #21
Company:	Coleman Oil & Gas, Inc.	TVD Reference:	KB=14' @ 5927.0usft
Project:	San Juan County, NM	MD Reference:	KB=14' @ 5927.0usft
Site:	S15-T32N-R10W	North Reference:	True
Well:	Bonds 15 #21	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

Project	San Juan County, NM		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Western Zone		

Site	S15-T32N-R10W		
Site Position:		Northing:	2,177,437.16 usft
From:	Lat/Long	Easting:	2,712,500.02 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16"
		Latitude:	36.983801
		Longitude:	-107.869597
		Grid Convergence:	-0.02 °

Well	Bonds 15 #21		
Well Position	+N/-S	0.0 usft	Northing:
	+E/-W	0.0 usft	Easting:
Position Uncertainty	0.0 usft	Wellhead Elevation:	0.0 usft
		Latitude:	36.984531
		Longitude:	-107.868672
		Ground Level:	5,913.0 usft

Wellbore	DD		
Magnetics	Model Name	Sample Date	Declination
			(°)
	IGRF200510	6/5/2014	9.59
			Dip Angle
			(°)
			63.61
			Field Strength
			(nT)
			50,619

Design	Plan #1		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth:
			0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.0	0.0	0.0
			Direction
			(°)
			333.13

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
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
125.0	0.00	0.00	125.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,291.7	35.00	333.13	1,220.5	308.1	-156.1	3.00	3.00	0.00	333.13	
3,209.6	35.00	333.13	2,791.5	1,289.5	-653.3	0.00	0.00	0.00	0.00	
4,376.3	0.00	0.00	3,887.0	1,597.7	-809.4	3.00	-3.00	0.00	180.00	Bonds 15 #21 TGT
7,884.3	0.00	0.00	7,395.0	1,597.7	-809.4	0.00	0.00	0.00	0.00	Bonds 15 #21 PBHL
7,899.3	0.00	0.00	7,410.0	1,597.7	-809.4	0.00	0.00	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Bonds 15 #21
Company:	Coleman Oil & Gas, Inc.	TVD Reference:	KB=14' @ 5927.0usft
Project:	San Juan County, NM	MD Reference:	KB=14' @ 5927.0usft
Site:	S15-T32N-R10W	North Reference:	True
Well:	Bonds 15 #21	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100u)	Comments / Formations
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
0.5	0.00	0.00	0.5	0.0	0.0	0.0	0.00	0.00	SH - 2470' FSL, 2273' FEL
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	Nacimiento
120.0	0.00	0.00	120.0	0.0	0.0	0.0	0.00	0.00	16" - Conductor
125.0	0.00	0.00	125.0	0.0	0.0	0.0	0.00	0.00	KOP @ 125'
200.0	2.25	333.13	200.0	1.3	-0.7	1.5	3.00	3.00	
300.0	5.25	333.13	299.8	7.1	-3.6	8.0	3.00	3.00	
400.0	8.25	333.13	399.1	17.6	-8.9	19.8	3.00	3.00	
500.0	11.25	333.13	497.6	32.7	-16.6	36.7	3.00	3.00	
502.5	11.32	333.13	500.0	33.2	-16.8	37.2	3.00	3.00	12 1/4" - Surface Casing
600.0	14.25	333.13	595.1	52.4	-26.6	58.8	3.00	3.00	
700.0	17.25	333.13	691.4	76.6	-38.8	85.9	3.00	3.00	
800.0	20.25	333.13	786.0	105.3	-53.3	118.0	3.00	3.00	
900.0	23.25	333.13	878.9	138.4	-70.1	155.1	3.00	3.00	
1,000.0	26.25	333.13	969.7	175.7	-89.0	197.0	3.00	3.00	
1,100.0	29.25	333.13	1,058.2	217.2	-110.1	243.5	3.00	3.00	
1,200.0	32.25	333.13	1,144.1	262.8	-133.2	294.6	3.00	3.00	
1,291.7	35.00	333.13	1,220.5	308.1	-156.1	345.4	3.00	3.00	EOB @ 35° INC
1,300.0	35.00	333.13	1,227.3	312.4	-158.3	350.2	0.00	0.00	
1,400.0	35.00	333.13	1,309.2	363.5	-184.2	407.5	0.00	0.00	
1,500.0	35.00	333.13	1,391.1	414.7	-210.1	464.9	0.00	0.00	
1,600.0	35.00	333.13	1,473.0	465.9	-236.0	522.3	0.00	0.00	
1,700.0	35.00	333.13	1,554.9	517.1	-261.9	579.6	0.00	0.00	
1,748.9	35.00	333.13	1,595.0	542.1	-274.6	607.7	0.00	0.00	Ojo Alamo
1,800.0	35.00	333.13	1,636.8	568.2	-287.9	637.0	0.00	0.00	
1,816.1	35.00	333.13	1,650.0	576.4	-292.0	646.2	0.00	0.00	Kirtland
1,900.0	35.00	333.13	1,718.8	619.4	-313.8	694.3	0.00	0.00	
2,000.0	35.00	333.13	1,800.7	670.6	-339.7	751.7	0.00	0.00	
2,100.0	35.00	333.13	1,882.6	721.7	-365.6	809.1	0.00	0.00	
2,200.0	35.00	333.13	1,964.5	772.9	-391.6	866.4	0.00	0.00	
2,300.0	35.00	333.13	2,046.4	824.1	-417.5	923.8	0.00	0.00	
2,400.0	35.00	333.13	2,128.3	875.2	-443.4	981.1	0.00	0.00	
2,500.0	35.00	333.13	2,210.2	926.4	-469.3	1,038.5	0.00	0.00	
2,600.0	35.00	333.13	2,292.1	977.6	-495.3	1,095.9	0.00	0.00	
2,603.5	35.00	333.13	2,295.0	979.4	-496.2	1,097.9	0.00	0.00	Fruitland
2,700.0	35.00	333.13	2,374.1	1,028.7	-521.2	1,153.2	0.00	0.00	
2,800.0	35.00	333.13	2,456.0	1,079.9	-547.1	1,210.6	0.00	0.00	
2,900.0	35.00	333.13	2,537.9	1,131.1	-573.0	1,267.9	0.00	0.00	
3,000.0	35.00	333.13	2,619.8	1,182.3	-598.9	1,325.3	0.00	0.00	
3,100.0	35.00	333.13	2,701.7	1,233.4	-624.9	1,382.7	0.00	0.00	
3,140.6	35.00	333.13	2,735.0	1,254.2	-635.4	1,406.0	0.00	0.00	Pictured Cliffs
3,209.6	35.00	333.13	2,791.5	1,289.5	-653.3	1,445.5	0.00	0.00	Start 3° Drop
3,300.0	32.29	333.13	2,866.7	1,334.2	-675.9	1,495.6	3.00	-3.00	
3,309.8	32.00	333.13	2,875.0	1,338.8	-678.3	1,500.8	3.00	-3.00	Lewis
3,400.0	29.29	333.13	2,952.6	1,379.8	-699.0	1,546.8	3.00	-3.00	
3,500.0	26.29	333.13	3,041.1	1,421.4	-720.1	1,593.4	3.00	-3.00	
3,600.0	23.29	333.13	3,131.9	1,458.8	-739.1	1,635.3	3.00	-3.00	
3,700.0	20.29	333.13	3,224.7	1,491.9	-755.8	1,672.5	3.00	-3.00	
3,800.0	17.29	333.13	3,319.4	1,520.7	-770.4	1,704.7	3.00	-3.00	
3,900.0	14.29	333.13	3,415.6	1,544.9	-782.7	1,731.9	3.00	-3.00	
3,909.7	14.00	333.13	3,425.0	1,547.1	-783.8	1,734.3	3.00	-3.00	Huerfanito Bent
4,000.0	11.29	333.13	3,513.1	1,564.7	-792.7	1,754.0	3.00	-3.00	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Bonds 15 #21
Company:	Coleman Oil & Gas, Inc.	TVD Reference:	KB=14' @ 5927.0usft
Project:	San Juan County, NM	MD Reference:	KB=14' @ 5927.0usft
Site:	S15-T32N-R10W	North Reference:	True
Well:	Bonds 15 #21	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100u)	Comments / Formations
4,100.0	8.29	333.13	3,611.6	1,579.8	-800.4	1,771.0	3.00	-3.00	
4,200.0	5.29	333.13	3,710.9	1,590.4	-805.7	1,782.8	3.00	-3.00	
4,300.0	2.29	333.13	3,810.7	1,596.3	-808.7	1,789.5	3.00	-3.00	
4,376.3	0.00	0.00	3,887.0	1,597.7	-809.4	1,791.0	3.00	-3.00	EOD @ 0° INC - 7"
4,400.0	0.00	0.00	3,910.7	1,597.7	-809.4	1,791.0	0.00	0.00	
4,500.0	0.00	0.00	4,010.7	1,597.7	-809.4	1,791.0	0.00	0.00	
4,600.0	0.00	0.00	4,110.7	1,597.7	-809.4	1,791.0	0.00	0.00	
4,700.0	0.00	0.00	4,210.7	1,597.7	-809.4	1,791.0	0.00	0.00	
4,769.3	0.00	0.00	4,280.0	1,597.7	-809.4	1,791.0	0.00	0.00	Cliff House Massive
4,800.0	0.00	0.00	4,310.7	1,597.7	-809.4	1,791.0	0.00	0.00	
4,900.0	0.00	0.00	4,410.7	1,597.7	-809.4	1,791.0	0.00	0.00	
5,000.0	0.00	0.00	4,510.7	1,597.7	-809.4	1,791.0	0.00	0.00	
5,089.3	0.00	0.00	4,600.0	1,597.7	-809.4	1,791.0	0.00	0.00	Cliff House
5,100.0	0.00	0.00	4,610.7	1,597.7	-809.4	1,791.0	0.00	0.00	
5,159.3	0.00	0.00	4,670.0	1,597.7	-809.4	1,791.0	0.00	0.00	Menefee
5,200.0	0.00	0.00	4,710.7	1,597.7	-809.4	1,791.0	0.00	0.00	
5,300.0	0.00	0.00	4,810.7	1,597.7	-809.4	1,791.0	0.00	0.00	
5,400.0	0.00	0.00	4,910.7	1,597.7	-809.4	1,791.0	0.00	0.00	
5,500.0	0.00	0.00	5,010.7	1,597.7	-809.4	1,791.0	0.00	0.00	
5,534.3	0.00	0.00	5,045.0	1,597.7	-809.4	1,791.0	0.00	0.00	Point Lookout
5,600.0	0.00	0.00	5,110.7	1,597.7	-809.4	1,791.0	0.00	0.00	
5,700.0	0.00	0.00	5,210.7	1,597.7	-809.4	1,791.0	0.00	0.00	
5,800.0	0.00	0.00	5,310.7	1,597.7	-809.4	1,791.0	0.00	0.00	
5,844.3	0.00	0.00	5,355.0	1,597.7	-809.4	1,791.0	0.00	0.00	Mancos
5,900.0	0.00	0.00	5,410.7	1,597.7	-809.4	1,791.0	0.00	0.00	
6,000.0	0.00	0.00	5,510.7	1,597.7	-809.4	1,791.0	0.00	0.00	
6,100.0	0.00	0.00	5,610.7	1,597.7	-809.4	1,791.0	0.00	0.00	
6,149.3	0.00	0.00	5,660.0	1,597.7	-809.4	1,791.0	0.00	0.00	Gallup
6,200.0	0.00	0.00	5,710.7	1,597.7	-809.4	1,791.0	0.00	0.00	
6,300.0	0.00	0.00	5,810.7	1,597.7	-809.4	1,791.0	0.00	0.00	
6,400.0	0.00	0.00	5,910.7	1,597.7	-809.4	1,791.0	0.00	0.00	
6,500.0	0.00	0.00	6,010.7	1,597.7	-809.4	1,791.0	0.00	0.00	
6,600.0	0.00	0.00	6,110.7	1,597.7	-809.4	1,791.0	0.00	0.00	
6,700.0	0.00	0.00	6,210.7	1,597.7	-809.4	1,791.0	0.00	0.00	
6,800.0	0.00	0.00	6,310.7	1,597.7	-809.4	1,791.0	0.00	0.00	
6,859.3	0.00	0.00	6,370.0	1,597.7	-809.4	1,791.0	0.00	0.00	Niobrara "A"
6,900.0	0.00	0.00	6,410.7	1,597.7	-809.4	1,791.0	0.00	0.00	
6,954.3	0.00	0.00	6,465.0	1,597.7	-809.4	1,791.0	0.00	0.00	Niobrara "B"
6,994.3	0.00	0.00	6,505.0	1,597.7	-809.4	1,791.0	0.00	0.00	Niobrara "C"
7,000.0	0.00	0.00	6,510.7	1,597.7	-809.4	1,791.0	0.00	0.00	
7,100.0	0.00	0.00	6,610.7	1,597.7	-809.4	1,791.0	0.00	0.00	
7,200.0	0.00	0.00	6,710.7	1,597.7	-809.4	1,791.0	0.00	0.00	
7,300.0	0.00	0.00	6,810.7	1,597.7	-809.4	1,791.0	0.00	0.00	
7,354.3	0.00	0.00	6,865.0	1,597.7	-809.4	1,791.0	0.00	0.00	Juana Lopez
7,400.0	0.00	0.00	6,910.7	1,597.7	-809.4	1,791.0	0.00	0.00	
7,434.3	0.00	0.00	6,945.0	1,597.7	-809.4	1,791.0	0.00	0.00	Carlisle
7,500.0	0.00	0.00	7,010.7	1,597.7	-809.4	1,791.0	0.00	0.00	
7,524.3	0.00	0.00	7,035.0	1,597.7	-809.4	1,791.0	0.00	0.00	Greenhorn
7,594.3	0.00	0.00	7,105.0	1,597.7	-809.4	1,791.0	0.00	0.00	Graneros
7,600.0	0.00	0.00	7,110.7	1,597.7	-809.4	1,791.0	0.00	0.00	
7,679.3	0.00	0.00	7,190.0	1,597.7	-809.4	1,791.0	0.00	0.00	Dakota Two Wells SS
7,700.0	0.00	0.00	7,210.7	1,597.7	-809.4	1,791.0	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Bonds 15 #21
Company:	Coleman Oil & Gas, Inc.	TVD Reference:	KB=14' @ 5927.0usft
Project:	San Juan County, NM	MD Reference:	KB=14' @ 5927.0usft
Site:	S15-T32N-R10W	North Reference:	True
Well:	Bonds 15 #21	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100u)	Comments / Formations
7,729.3	0.00	0.00	7,240.0	1,597.7	-809.4	1,791.0	0.00	0.00	Paquata
7,764.3	0.00	0.00	7,275.0	1,597.7	-809.4	1,791.0	0.00	0.00	Main Body
7,800.0	0.00	0.00	7,310.7	1,597.7	-809.4	1,791.0	0.00	0.00	
7,884.3	0.00	0.00	7,395.0	1,597.7	-809.4	1,791.0	0.00	0.00	PBHL - 1200' FNL, 1980' FWL - Drilling Rig TD
7,889.3	0.00	0.00	7,400.0	1,597.7	-809.4	1,791.0	0.00	0.00	Burro Canyon
7,899.3	0.00	0.00	7,410.0	1,597.7	-809.4	1,791.0	0.00	0.00	Final TD @ 7,899.3' MD

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
Bonds 15 #21 TGT	0.00	0.00	3,887.0	1,597.7	-809.4	2,179,301.04	2,711,961.54	36.988920	-107.871444
- plan hits target center									
- Point									
Bonds 15 #21 PBHL	0.00	0.00	7,395.0	1,597.7	-809.4	2,179,301.04	2,711,961.54	36.988920	-107.871444
- plan hits target center									
- Circle (radius 50.0)									

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
120.0	120.0	16" - Conductor	16	206	
502.5	500.0	12 1/4" - Surface Casing	9-5/8	12-1/4	
4,376.3	3,887.0	7"	7	8-3/4	
7,884.3	7,395.0	4 1/2"	4-1/2	6-1/4	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Bonds 15 #21
Company:	Coleman Oil & Gas, Inc.	TVD Reference:	KB=14' @ 5927.0usft
Project:	San Juan County, NM	MD Reference:	KB=14' @ 5927.0usft
Site:	S15-T32N-R10W	North Reference:	True
Well:	Bonds 15 #21	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
100.0	100.0	Nacimiento			
1,748.9	1,595.0	Ojo Alamo			
1,816.1	1,650.0	Kirtland			
2,603.5	2,295.0	Fruitland			
3,140.6	2,735.0	Pictured Cliffs			
3,309.8	2,875.0	Lewis			
3,909.7	3,425.0	Huerfano Bent			
4,769.3	4,280.0	Cliff House Massive			
5,089.3	4,600.0	Cliff House			
5,159.3	4,670.0	Menefee			
5,534.3	5,045.0	Point Lookout			
5,844.3	5,355.0	Mancos			
6,149.3	5,660.0	Gallup			
6,859.3	6,370.0	Niobrara "A"			
6,954.3	6,465.0	Niobrara "B"			
6,994.3	6,505.0	Niobrara "C"			
7,354.3	6,865.0	Juana Lopez			
7,434.3	6,945.0	Carlisle			
7,524.3	7,035.0	Greenhorn			
7,594.3	7,105.0	Graneros			
7,679.3	7,190.0	Dakota Two Wells SS			
7,729.3	7,240.0	Paquata			
7,764.3	7,275.0	Main Body			
7,889.3	7,400.0	Burro Canyon			

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
0.5	0.5	0.0	0.0	SH - 2470' FSL, 2273' FEL
125.0	125.0	0.0	0.0	KOP @ 125'
1,291.7	1,220.5	308.1	-156.1	EOB @ 35° INC
3,209.6	2,791.5	1,289.5	-653.3	Start 3° Drop
4,376.3	3,887.0	1,597.7	-809.4	EOD @ 0° INC
7,884.3	7,395.0	1,597.7	-809.4	PBHL - 1200' FNL, 1980' FWL
7,884.3	7,395.0	1,597.7	-809.4	Drilling Rig TD @ 7,884.3' MD
7,899.3	7,410.0	1,597.7	-809.4	Final TD @ 7,899.3' MD