

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Artesia

FORM APPROVED
OMB NO. 1004-0135
Expires: July 31, 2010

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

5. Lease Serial No.
NMNM0467931
6. If Indian, Allottee or Tribe Name
7. If Unit or CA/Agreement, Name and/or No.
8. Well Name and No.
ELECTRA FEDERAL 62
9. API Well No.
30-015-40556
10. Field and Pool, or Exploratory
LOCO HILLS; GLORIETA YESO
11. County or Parish, and State
EDDY COUNTY, NM

1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator
COG OPERATING LLC

Contact: KELLY J HOLLY
E-Mail: kholly@concho.com

3a. Address
ONE CONCHO CENTER 600 WILLINOIS AVE
MIDLAND, TX 79701

3b. Phone No. (include area code)
Ph: 432-685-4384

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
Sec 10 T17S R30E Mer NMP NENE 115FNL 1259FEL

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other Change to Original A PD
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

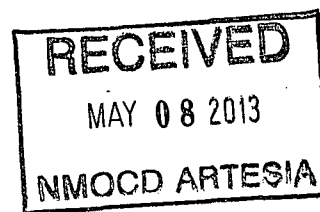
13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

COG Operating LLC respectfully requests to update the Directional Plan for this well.

Attached is the revised directional plan.

Accepted for record
NMDCD

Original COA still stand



14. I hereby certify that the foregoing is true and correct.

Electronic Submission #203567 verified by the BLM Well Information System
For COG OPERATING LLC, sent to the Carlsbad
Committed to AFMSS for processing by JOHNNY DICKERSON on 04/10/2013 ()

Name (Printed/Typed) KELLY J HOLLY

Title PERMITTING TECH

Signature (Electronic Submission)

Date 04/05/2013

APPROVED

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By

Title

Conditions of approval, if any, are attached. Approval of this notice 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.

Office

BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

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.

**** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ****

Plan Proposal

FOR

COG Operating, LLC
Electra Federal #62
Eddy Co., NM

Design #1

Presented By:

Aaron Boger
Account Manager

Bret Walford
Well Planner

SHL

115' FNL & 1259' FEL

Top of Paddock (4400' TVD)

340' FNL & 980' FEL

PBHL

340' FNL & 980' FEL

Sec: 10-T17S-R30E

ATTACHED



COG Operating, LLC
 Project: Eddy County(NM27E)
 Site: Sec.10-T17S-R30E
 Well: Electra Federal #62
 Wellbore: Wellbore #1
 Design: Design #1
 Latitude: 32° 51' 21.012 N
 Longitude: 103° 57' 17.149 W
 Ground Level: 3728.00
 WELL @ 3745.00usft

Archer

PROJECT DETAILS: Eddy County(NM27E)

Geodetic System: US State Plane 1927 (Exact solution)
 Datum: NAD 1927 (NADCON CONUS)
 Ellipsoid: Clarke 1866
 Zone: New Mexico East 3001
 System Datum: Mean Sea Level

REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well Electra Federal #62, Grid North
 Vertical (TVD) Reference: WELL @ 3745.00usft
 Section (VS) Reference: Slot - (0.00N, 0.00E)
 Measured Depth Reference: WELL @ 3745.00usft
 Calculation Method: Minimum Curvature

WELL DETAILS: Electra Federal #62

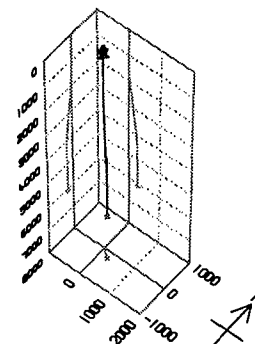
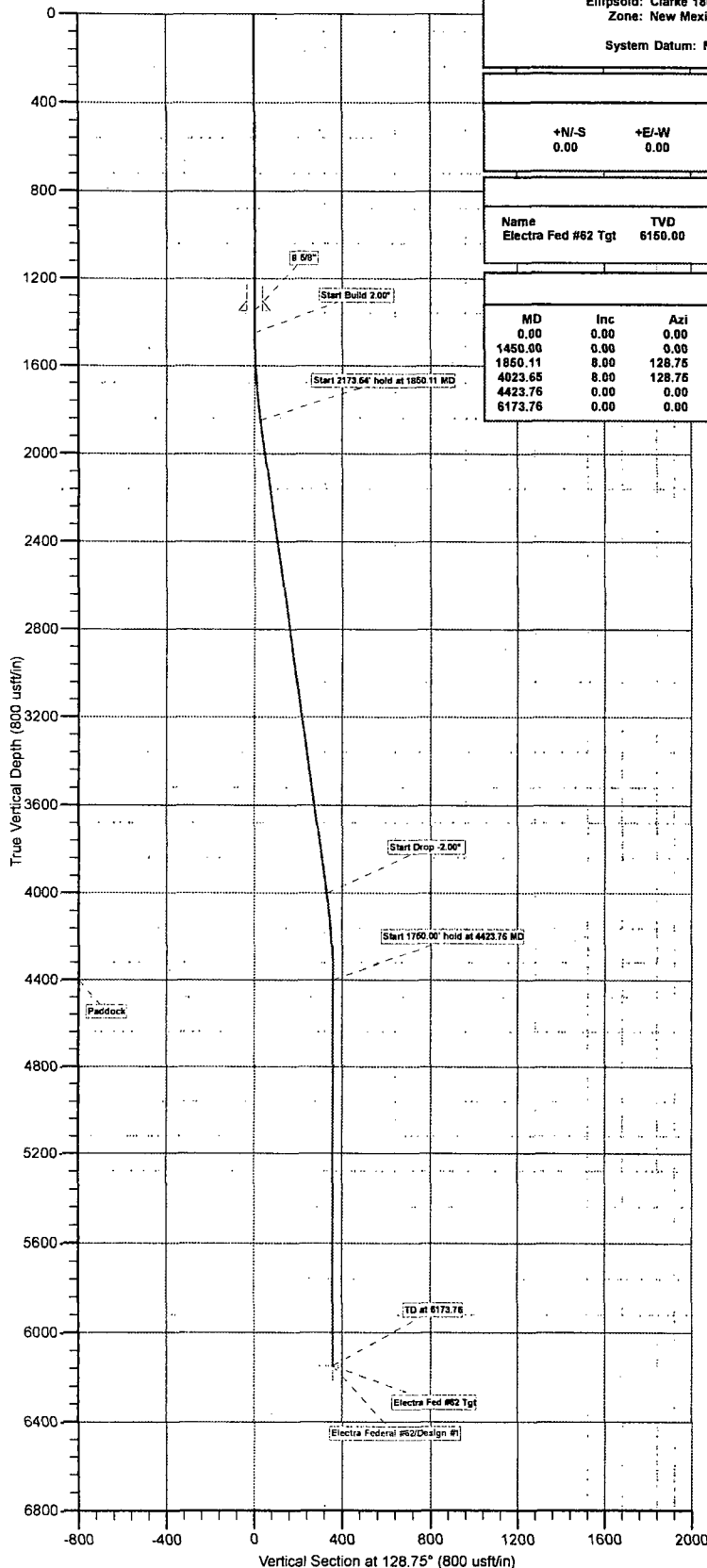
+N/-S	+E/-W	Northing	Ground Level:	Easting	Latitude	Longitude	Slot
0.00	0.00	676273.000	3728.00	616251.900	32° 51' 21.012 N	103° 57' 17.149 W	

WELLBORE TARGET DETAILS (MAP CO-ORDINATES AND LAT/LONG)

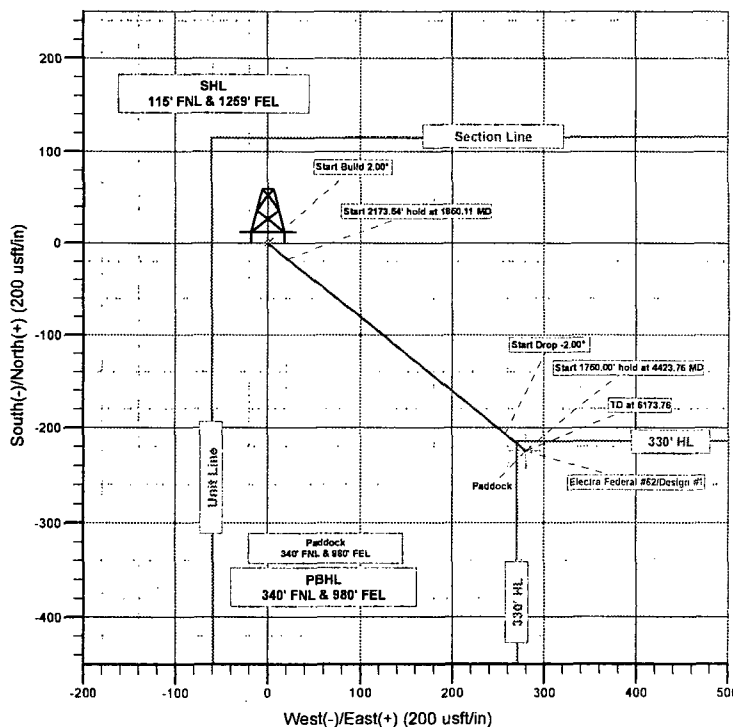
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
Electra Fed #62 Tgt	6150.00	-224.30	279.50	675048.700	616531.400	32° 51' 18.782 N	103° 57' 13.881 W	Point

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1450.00	0.00	0.00	1450.00	0.00	0.00	0.00	0.00	0.00	Start Build 2.00°
1850.11	8.00	128.75	1848.81	-17.46	21.76	2.00	128.75	27.90	Start 2173.54° hold at 1850.11 MD
4023.65	8.00	128.75	4001.19	-206.84	257.74	0.00	0.00	330.48	Start Drop -2.00°
4423.76	0.00	0.00	4400.00	-224.30	279.50	2.00	180.00	358.37	Start 1750.00° hold at 4423.76 MD
6173.76	0.00	0.00	6150.00	-224.30	279.50	0.00	0.00	358.37	TD at 6173.76



Azimuths to Grid North
 True North: -0.20°
 Magnetic North: 7.38°
 Magnetic Field
 Strength: 48771.4snT
 Dip Angle: 60.66°
 Date: 04/04/2013
 Model: IGRF2010



Plan: Design #1 (Electra Federal #62/Wellbore #1)

Created By: Bret Wolford Date: 13:46, April 04 2013



COG Operating, LLC

Eddy County(NM27E)

Sec.10-T17S-R30E

Electra Federal #62

Wellbore #1

Plan: Design #1

Standard Planning Report

04 April, 2013

Archer

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Electra Federal #82
Company:	COG Operating, LLC	TVD Reference:	WELL @ 3745.00usft
Project:	Eddy County(NM27E)	MD Reference:	WELL @ 3745.00usft
Site:	Sec.10-T17S-R30E	North Reference:	Grid
Well:	Electra Federal #82	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Project	Eddy County(NM27E)		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site	Sec.10-T17S-R30E		
Site Position:		Northing:	675,273.000 usft
From:	Map	Easting:	616,251.900 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16"
		Latitude:	32° 51' 21.012 N
		Longitude:	103° 57' 17.149 W
		Grid Convergence:	0.21 °

Well	Electra Federal #82		
Well Position	+N-S	0.00 usft	Northing:
	+E-W	0.00 usft	Easting:
Position Uncertainty	0.00 usft	Wellhead Elevation:	usft
		Latitude:	32° 51' 21.012 N
		Longitude:	103° 57' 17.149 W
		Ground Level:	3,728.00 usft

Wellbore	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination
	IGRF2010	04/04/13	7.59
			Dip Angle
			60.66
			Field Strength
			48,771

Design	Design #1		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth:
			0.00
Vertical Section:	Depth From (TVD)	+N-S	+E-W
	(usft)	(usft)	(usft)
	6,150.00	0.00	0.00
			Direction
			(°)
			128.75

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
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,450.00	0.00	0.00	1,450.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,850.11	8.00	128.75	1,848.81	-17.46	21.76	2.00	2.00	0.00	128.75	
4,023.65	8.00	128.75	4,001.19	-206.84	257.74	0.00	0.00	0.00	0.00	
4,423.76	0.00	0.00	4,400.00	-224.30	279.50	2.00	-2.00	0.00	180.00	
6,173.76	0.00	0.00	6,150.00	-224.30	279.50	0.00	0.00	0.00	0.00	

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Electra Federal #62
Company:	COG Operating, LLC	TVD Reference:	WELL @ 3745.00usft
Project:	Eddy County(NM27E)	MD Reference:	WELL @ 3745.00usft
Site:	Sec.10-T17S-R30E	North Reference:	Grid
Well:	Electra Federal #62	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #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 (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
8 5/8"									
1,350.00	0.00	0.00	1,350.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 2.00°									
1,450.00	0.00	0.00	1,450.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	1.00	128.75	1,500.00	-0.27	0.34	0.44	2.00	2.00	0.00
1,600.00	3.00	128.75	1,599.93	-2.46	3.06	3.93	2.00	2.00	0.00
1,700.00	5.00	128.75	1,699.68	-6.82	8.50	10.90	2.00	2.00	0.00
1,800.00	7.00	128.75	1,799.13	-13.36	16.65	21.35	2.00	2.00	0.00
Start 2173.64' hold at 1850.11 MD									
1,850.11	8.00	128.75	1,848.81	-17.46	21.76	27.90	2.00	2.00	0.00
1,900.00	8.00	128.75	1,898.21	-21.81	27.17	34.84	0.00	0.00	0.00
2,000.00	8.00	128.75	1,997.24	-30.52	38.03	48.76	0.00	0.00	0.00
2,100.00	8.00	128.75	2,096.27	-39.23	48.89	62.68	0.00	0.00	0.00
2,200.00	8.00	128.75	2,195.29	-47.95	59.74	76.60	0.00	0.00	0.00
2,300.00	8.00	128.75	2,294.32	-56.66	70.60	90.53	0.00	0.00	0.00
2,400.00	8.00	128.75	2,393.35	-65.37	81.46	104.45	0.00	0.00	0.00
2,500.00	8.00	128.75	2,492.37	-74.08	92.32	118.37	0.00	0.00	0.00
2,600.00	8.00	128.75	2,591.40	-82.80	103.17	132.29	0.00	0.00	0.00
2,700.00	8.00	128.75	2,690.42	-91.51	114.03	146.21	0.00	0.00	0.00
2,800.00	8.00	128.75	2,789.45	-100.22	124.89	160.13	0.00	0.00	0.00
2,900.00	8.00	128.75	2,888.48	-108.94	135.75	174.05	0.00	0.00	0.00
3,000.00	8.00	128.75	2,987.50	-117.65	146.60	187.97	0.00	0.00	0.00
3,100.00	8.00	128.75	3,086.53	-126.36	157.46	201.89	0.00	0.00	0.00
3,200.00	8.00	128.75	3,185.56	-135.08	168.32	215.82	0.00	0.00	0.00
3,300.00	8.00	128.75	3,284.58	-143.79	179.17	229.74	0.00	0.00	0.00
3,400.00	8.00	128.75	3,383.61	-152.50	190.03	243.66	0.00	0.00	0.00
3,500.00	8.00	128.75	3,482.64	-161.21	200.89	257.58	0.00	0.00	0.00
3,600.00	8.00	128.75	3,581.66	-169.93	211.75	271.50	0.00	0.00	0.00
3,700.00	8.00	128.75	3,680.69	-178.64	222.60	285.42	0.00	0.00	0.00
3,800.00	8.00	128.75	3,779.71	-187.35	233.46	299.34	0.00	0.00	0.00
3,900.00	8.00	128.75	3,878.74	-196.07	244.32	313.26	0.00	0.00	0.00
4,000.00	8.00	128.75	3,977.77	-204.78	255.18	327.18	0.00	0.00	0.00
Start Drop -2.00°									
4,023.65	8.00	128.75	4,001.19	-206.84	257.74	330.48	0.00	0.00	0.00
4,100.00	6.48	128.75	4,076.93	-212.86	265.25	340.10	2.00	-2.00	0.00
4,200.00	4.48	128.75	4,176.46	-218.83	272.69	349.64	2.00	-2.00	0.00
4,300.00	2.48	128.75	4,276.27	-222.63	277.42	355.70	2.00	-2.00	0.00
4,400.00	0.48	128.75	4,376.24	-224.24	279.42	358.27	2.00	-2.00	0.00
Start 1760.00' hold at 4423.76 MD - Paddock 1									

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Electra Federal #62
Company:	COG Operating, LLC	TVD Reference:	WELL @ 3745.00usft
Project:	Eddy County(NM27E)	MD Reference:	WELL @ 3745.00usft
Site:	Sec.10-T17S-R30E	North Reference:	Grid
Well:	Electra Federal #62	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #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 (°/100usft)	Turn Rate (°/100usft)
4,423.76	0.00	0.00	4,400.00	-224.30	279.50	358.37	2.00	-2.00	0.00
4,500.00	0.00	0.00	4,476.24	-224.30	279.50	358.37	0.00	0.00	0.00
4,600.00	0.00	0.00	4,576.24	-224.30	279.50	358.37	0.00	0.00	0.00
4,700.00	0.00	0.00	4,676.24	-224.30	279.50	358.37	0.00	0.00	0.00
4,800.00	0.00	0.00	4,776.24	-224.30	279.50	358.37	0.00	0.00	0.00
4,900.00	0.00	0.00	4,876.24	-224.30	279.50	358.37	0.00	0.00	0.00
5,000.00	0.00	0.00	4,976.24	-224.30	279.50	358.37	0.00	0.00	0.00
5,100.00	0.00	0.00	5,076.24	-224.30	279.50	358.37	0.00	0.00	0.00
5,200.00	0.00	0.00	5,176.24	-224.30	279.50	358.37	0.00	0.00	0.00
5,300.00	0.00	0.00	5,276.24	-224.30	279.50	358.37	0.00	0.00	0.00
5,400.00	0.00	0.00	5,376.24	-224.30	279.50	358.37	0.00	0.00	0.00
5,500.00	0.00	0.00	5,476.24	-224.30	279.50	358.37	0.00	0.00	0.00
5,600.00	0.00	0.00	5,576.24	-224.30	279.50	358.37	0.00	0.00	0.00
5,700.00	0.00	0.00	5,676.24	-224.30	279.50	358.37	0.00	0.00	0.00
5,800.00	0.00	0.00	5,776.24	-224.30	279.50	358.37	0.00	0.00	0.00
5,900.00	0.00	0.00	5,876.24	-224.30	279.50	358.37	0.00	0.00	0.00
6,000.00	0.00	0.00	5,976.24	-224.30	279.50	358.37	0.00	0.00	0.00
6,100.00	0.00	0.00	6,076.24	-224.30	279.50	358.37	0.00	0.00	0.00
TD at 6173.76 - Electra Fed #62 Tgt									
6,173.76	0.00	0.00	6,150.00	-224.30	279.50	358.37	0.00	0.00	0.00

Design 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									
Electra Fed #62 Tgt	0.00	0.00	6,150.00	-224.30	279.50	675,048.700	616,531.400	32° 51' 18.782 N	103° 57' 13.881 W
- plan hits target center									
- Point									

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
1,350.00	1,350.00	8 5/8"	8-5/8	12-1/4

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
4,423.76	4,400.00	Paddock		0.00	

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Electra Federal #82
Company:	COG Operating, LLC	TVD Reference:	WELL @ 3745.00usft
Project:	Eddy County(NM27E)	MD Reference:	WELL @ 3745.00usft
Site:	Sec.10-T17S-R30E	North Reference:	Grid
Well:	Electra Federal #82	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
1,450.00	1,450.00	0.00	0.00	Start Build 2.00"
1,850.11	1,848.81	-17.46	21.76	Start 2173.54' hold at 1850.11 MD
4,023.65	4,001.19	-206.84	257.74	Start Drop -2.00"
4,423.76	4,400.00	-224.30	279.50	Start 1750.00' hold at 4423.76 MD
6,173.76	6,150.00	-224.30	279.50	TD at 6173.76