

District I - (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II - (575) 748-1283
811 S. First St., Artesia, NM 88210
District III - (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV - (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM 87505

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

WELL API NO. 30-015-40211
5. Indicate Type of Lease STATE ☐ FEE ☒
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name Falabella 31 Fee
8. Well Number 6H
9. OGRID Number 229137
10. Pool name or Wildcat Penasco Draw; SA-Yeso (Assoc) 50270

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)	
1. Type of Well: Oil Well ☒ Gas Well ☐ Other ☐	7. Lease Name or Unit Agreement Name
2. Name of Operator COG Operating LLC	8. Well Number 6H
3. Address of Operator One Concho Center - 600 W Illinois Ave Midland, TX 79701	9. OGRID Number 229137
4. Well Location Unit Letter N 150 feet from the SOUTH line and 2260 feet from the WEST line Section 31 Township 18S Range 26E NMPM County EDDY	10. Pool name or Wildcat Penasco Draw; SA-Yeso (Assoc) 50270
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3428'	

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
 TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
 PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐
 DOWNHOLE COMMINGLE ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
 COMMENCE DRILLING OPNS. ☐ P AND A ☐
 CASING/CEMENT JOB ☐

OTHER: **Change SHL & BHL** ☒

OTHER: ☐

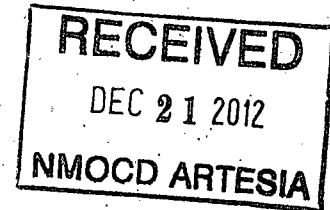
13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

COG Operating LLC submitted APD for this well at this location:

SHL: 150 FSL 2260 FWL, Unit N
BHL: 330 FNL 2260 FWL, Unit C

COG Operating LLC respectfully requests permission to change the SHL & BHL to:

SHL: 150 FSL 2223 FWL, Unit N
BHL: 330 FNL 2127 FWL, Unit C.



Revision is due to skewed section and avoiding a non-standard location. Estimated completed interval in within the 330' hard line due to skewed section.

A revised Directional Plan and C102 are attached for your review.

Spud Date:

Rig Release Date:

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

SIGNATURE TITLE **Permitting Tech** DATE **12/20/2012**

Type or print name **Kelly J. Holly** E-mail address: **kholly@concho.com** PHONE: **432-685-4384**

For State Use Only

APPROVED BY: TITLE **Geologist** DATE **12/21/2012**

Conditions of Approval (if any):

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
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-40211	Pool Code 50270	Pool Name Penasco Draw; SA-Yeso (Assoc)
Property Code 38873	Property Name FALABELLA 31 FEE	Well Number 6H
OGRID No. 229137	Operator Name COG OPERATING, LLC	Elevation 3428'

Surface Location

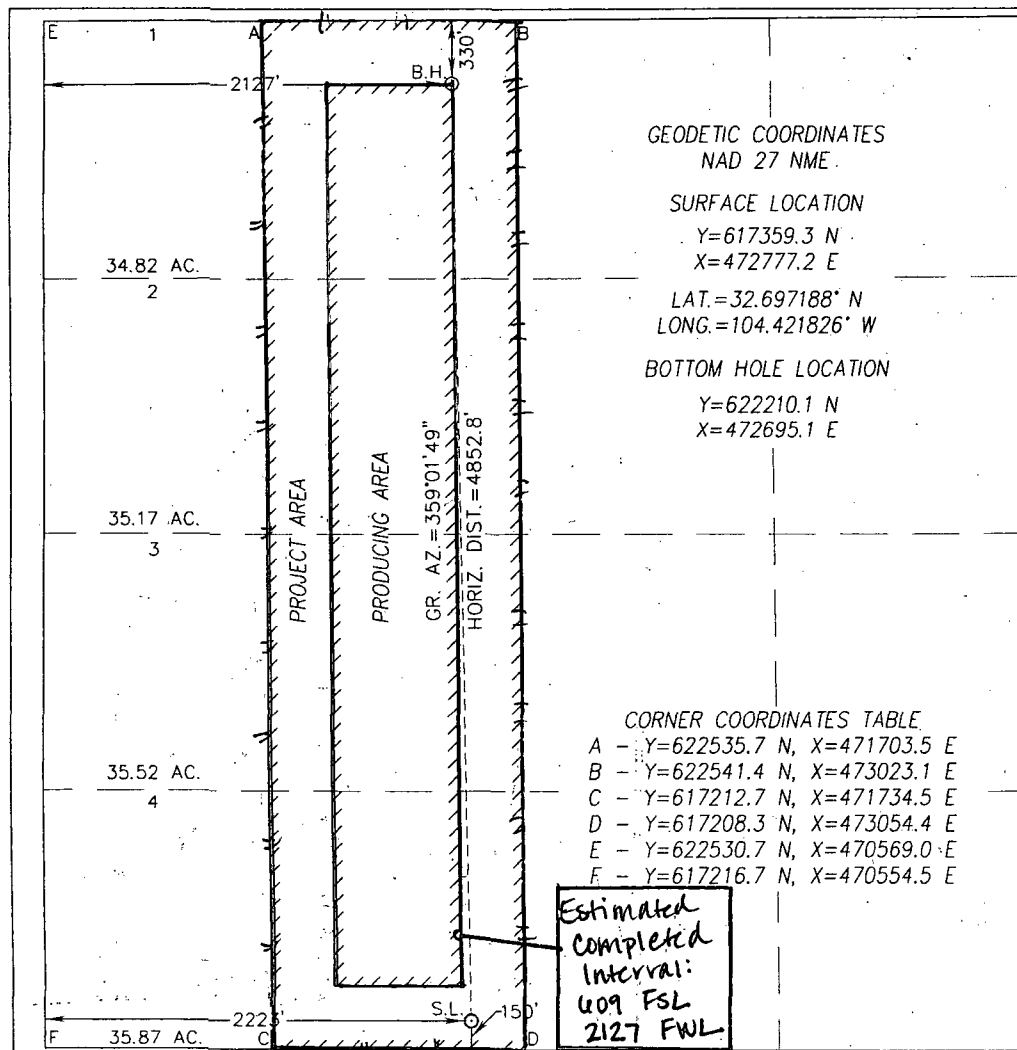
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	31	18-S	26-E		150	SOUTH	2223	WEST	EDDY

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	31	18-S	26-E		330	NORTH	2127	WEST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
160			

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



OPERATOR CERTIFICATION

I hereby certify that the information 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 mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Kelly J. Holly 12-20-12
Signature Date

Kelly J. Holly
Printed Name

kholly@concho.com
E-mail Address

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.

NOVEMBER 29, 2012

Date of Survey
Signature & Seal of Professional Surveyor:

Ronald J. Eidson
NEW MEXICO
3239
Certificate Number Gary C. Eidson 12641
Professional Surveyor Ronald J. Eidson 3239
AF JWSC W.O.: 12.11.1720



COG Operating LLC

Eddy County, NM (NAN27 NME)

Falabella 31 Fee #6H

OH

Plan #1 8-3/4" Hole

Surface: 150' FSL, 2223' FWL, Sec 31, T18S, R26E, Unit N

PP: 609' FSL, 2127' FWL, Sec 31, T18S, R26E, Unit N

BHL: 330' FNL, 2127' FWL, Sec 31, T18S, R26E, Unit C

Standard Planning Report

19 December, 2012





Scientific Drilling
Planning Report



Database: EDM 5000.1 Single User Db
Company: COG Operating LLC
Project: Eddy County, NM (NAN27 NME)
Site: Falabella 31 Fee
Well: #6H
Wellbore: OH
Design: Plan #1 8-3/4" Hole

Local Co-ordinate Reference: Well #6H
TVD Reference: GL @ 3428.00usft
MD Reference: GL @ 3428.00usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Project: Eddy County, NM (NAN27 NME)

Map System: US State Plane 1927 (Exact solution)
Geo Datum: NAD 1927 (NADCON CONUS)
Map Zone: New Mexico East 3001

System Datum: Mean Sea Level
Using geodetic scale factor

Site: Falabella 31 Fee

Site Position: Northing: 617,365.40 usft Latitude: 32° 41' 49.921 N
From: Map Easting: 470,934.80 usft Longitude: 104° 25' 40.136 W
Position Uncertainty: 0.00 usft Slot Radius: 13-3/16" Grid Convergence: -0.05°

Well: #6H

Well Position: +N-S -6.10 usft Northing: 617,359.30 usft Latitude: 32° 41' 49.876 N
+E-W 1,842.57 usft Easting: 472,777.20 usft Longitude: 104° 25' 18.575 W
Position Uncertainty: 0.00 usft Wellhead Elevation: Ground Level: 3,428.00 usft

Wellbore: OH

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2012	12/19/2012	7.93	60.40	48,631

Design: Plan #1 8-3/4" Hole

Audit Notes:

Version: Phase: PLAN Tie On Depth: 0.00

Vertical Section:	Depth From (TVD) (usft)	+N-S (usft)	+E-W (usft)	Direction (°)
	0.00	0.00	0.00	359.03

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	
2,340.56	0.00	0.00	2,340.56	0.00	0.00	0.00	0.00	0.00	0.00	
3,176.92	92.00	353.00	2,861.11	535.03	-65.69	11.00	11.00	0.00	353.00	
3,409.09	92.00	359.97	2,853.00	766.48	-79.91	3.00	0.00	3.00	89.89	
7,496.34	92.00	359.97	2,710.50	4,851.24	-82.11	0.00	0.00	0.00	0.00	PBHL



Scientific Drilling
Planning Report



Database: EDM 5000.1 Single User Db
Company: COG Operating LLC
Project: Eddy County, NM (NAN27 NME)
Site: Falabella 31 Fee
Well: #6H
Wellbore: OH
Design: Plan #1 8-3/4" Hole

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:

Well #6H
GL @ 3428.00usft
GL @ 3428.00usft
Grid
Minimum Curvature

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
2,340.56	0.00	0.00	2,340.56	0.00	0.00	0.00	0.00	0.00	0.00
KOP Start Build 11.00									
2,400.00	6.54	353.00	2,399.87	3.36	-0.41	3.37	11.00	11.00	0.00
2,500.00	17.54	353.00	2,497.52	24.03	-2.95	24.08	11.00	11.00	0.00
2,600.00	28.54	353.00	2,589.40	62.82	-7.71	62.94	11.00	11.00	0.00
2,700.00	39.54	353.00	2,672.14	118.29	-14.52	118.52	11.00	11.00	0.00
2,800.00	50.54	353.00	2,742.70	188.41	-23.13	188.78	11.00	11.00	0.00
2,900.00	61.54	353.00	2,798.48	270.61	-33.23	271.13	11.00	11.00	0.00
3,000.00	72.54	353.00	2,837.43	361.86	-44.43	362.56	11.00	11.00	0.00
3,100.00	83.54	353.00	2,858.12	458.81	-56.33	459.70	11.00	11.00	0.00
3,100.19	83.54	353.00	2,858.14	459.00	-56.36	459.89	0.00	0.00	0.00
PP									
3,176.92	92.00	353.00	2,861.11	535.03	-65.69	536.07	11.03	11.03	0.00
EOC Start DLS 3.00 TFO 89.89									
3,200.00	92.00	353.69	2,860.31	557.94	-68.37	559.01	3.00	0.00	3.00
3,300.00	92.00	356.69	2,856.81	657.51	-76.74	658.72	3.00	0.00	3.00
3,400.00	92.00	359.70	2,853.32	757.39	-79.89	758.64	3.00	0.00	3.00
3,409.09	92.00	359.97	2,853.00	766.48	-79.91	767.72	3.00	-0.01	3.00
Start 4087.25 hold at 3409.09 MD									
3,500.00	92.00	359.97	2,849.84	857.33	-79.96	858.56	0.00	0.00	0.00
3,600.00	92.00	359.97	2,846.35	957.27	-80.01	958.49	0.00	0.00	0.00
3,700.00	92.00	359.97	2,842.86	1,057.21	-80.07	1,058.41	0.00	0.00	0.00
3,800.00	92.00	359.97	2,839.38	1,157.15	-80.12	1,158.34	0.00	0.00	0.00
3,900.00	92.00	359.97	2,835.89	1,257.09	-80.18	1,258.26	0.00	0.00	0.00
4,000.00	92.00	359.97	2,832.40	1,357.03	-80.23	1,358.19	0.00	0.00	0.00
4,100.00	92.00	359.97	2,828.92	1,456.97	-80.28	1,458.12	0.00	0.00	0.00
4,200.00	92.00	359.97	2,825.43	1,556.91	-80.34	1,558.04	0.00	0.00	0.00
4,300.00	92.00	359.97	2,821.94	1,656.84	-80.39	1,657.97	0.00	0.00	0.00
4,400.00	92.00	359.97	2,818.46	1,756.78	-80.44	1,757.89	0.00	0.00	0.00
4,500.00	92.00	359.97	2,814.97	1,856.72	-80.50	1,857.82	0.00	0.00	0.00
4,600.00	92.00	359.97	2,811.48	1,956.66	-80.55	1,957.75	0.00	0.00	0.00
4,700.00	92.00	359.97	2,808.00	2,056.60	-80.61	2,057.67	0.00	0.00	0.00
4,800.00	92.00	359.97	2,804.51	2,156.54	-80.66	2,157.60	0.00	0.00	0.00
4,900.00	92.00	359.97	2,801.02	2,256.48	-80.71	2,257.52	0.00	0.00	0.00
5,000.00	92.00	359.97	2,797.54	2,356.42	-80.77	2,357.45	0.00	0.00	0.00
5,100.00	92.00	359.97	2,794.05	2,456.36	-80.82	2,457.37	0.00	0.00	0.00
5,200.00	92.00	359.97	2,790.56	2,556.30	-80.87	2,557.30	0.00	0.00	0.00
5,300.00	92.00	359.97	2,787.08	2,656.24	-80.93	2,657.23	0.00	0.00	0.00
5,400.00	92.00	359.97	2,783.59	2,756.18	-80.98	2,757.15	0.00	0.00	0.00
5,500.00	92.00	359.97	2,780.10	2,856.11	-81.03	2,857.08	0.00	0.00	0.00
5,600.00	92.00	359.97	2,776.62	2,956.05	-81.09	2,957.00	0.00	0.00	0.00
5,700.00	92.00	359.97	2,773.13	3,055.99	-81.14	3,056.93	0.00	0.00	0.00
5,800.00	92.00	359.97	2,769.64	3,155.93	-81.20	3,156.85	0.00	0.00	0.00
5,900.00	92.00	359.97	2,766.16	3,255.87	-81.25	3,256.78	0.00	0.00	0.00
6,000.00	92.00	359.97	2,762.67	3,355.81	-81.30	3,356.71	0.00	0.00	0.00
6,100.00	92.00	359.97	2,759.18	3,455.75	-81.36	3,456.63	0.00	0.00	0.00
6,200.00	92.00	359.97	2,755.70	3,555.69	-81.41	3,556.56	0.00	0.00	0.00
6,300.00	92.00	359.97	2,752.21	3,655.63	-81.46	3,656.48	0.00	0.00	0.00
6,400.00	92.00	359.97	2,748.72	3,755.57	-81.52	3,756.41	0.00	0.00	0.00
6,500.00	92.00	359.97	2,745.24	3,855.51	-81.57	3,856.33	0.00	0.00	0.00
6,600.00	92.00	359.97	2,741.75	3,955.45	-81.63	3,956.26	0.00	0.00	0.00
6,700.00	92.00	359.97	2,738.26	4,055.39	-81.68	4,056.19	0.00	0.00	0.00
6,800.00	92.00	359.97	2,734.78	4,155.32	-81.73	4,156.11	0.00	0.00	0.00



Scientific Drilling Planning Report



Database: EDM 5000.1 Single User Db
Company: COG Operating LLC
Project: Eddy County, NM (NAN27 NME)
Site: Falabella 31 Fee
Well: #6H
Wellbore: OH
Design: Plan #1 - 8-3/4" Hole

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:

Well #6H
GL @ 3428.00usft
GL @ 3428.00usft
Grid
Minimum Curvature

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)
6,900.00	92.00	359.97	2,731.29	4,255.26	-81.79	4,256.04	0.00	0.00	0.00
7,000.00	92.00	359.97	2,727.81	4,355.20	-81.84	4,355.96	0.00	0.00	0.00
7,100.00	92.00	359.97	2,724.32	4,455.14	-81.89	4,455.89	0.00	0.00	0.00
7,200.00	92.00	359.97	2,720.83	4,555.08	-81.95	4,555.82	0.00	0.00	0.00
7,300.00	92.00	359.97	2,717.35	4,655.02	-82.00	4,655.74	0.00	0.00	0.00
7,400.00	92.00	359.97	2,713.86	4,754.96	-82.06	4,755.67	0.00	0.00	0.00
7,496.34	92.00	359.97	2,710.50	4,851.24	-82.11	4,851.93	0.00	0.00	0.00

PBHL

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									
PBHL	0.00	0.00	2,710.50	4,851.24	-82.11	622,210.10	472,695.10	32° 42' 37.877 N	104° 25' 19.583 W
- plan hits target center									
- Point									
PP	0.00	360.00	2,858.14	459.00	-56.36	617,818.26	472,720.85	32° 41' 54.417 N	104° 25' 19.239 W
- plan hits target center									
- Point									

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates	+N/-S (usft)	+E/-W (usft)	Comment
2,340.56	2,340.56	0.00	0.00	0.00	KOP Start Build 11.00
3,176.92	2,861.11	535.03	-65.69	-65.69	EOC Start DLS 3.00 TFO 89.89
3,409.09	2,853.00	766.48	-79.91	-79.91	Start 4087.25 hold at 3409.09 MD



Azimuths to Grid North
True North: 9.05°
Magnetic North: 7.98°

Magnetic Field
Strength: 48631.3anT
Dip Angle: 50.40°
Date: 12/19/2012
Model: BGGM2012

Falabella 31 Fee #6H
Eddy County, NM (NAN27 NME)
Northing: (Y) 617359.30
Easting: (X) 472777.20
Plan #1 8-3/4" Hole

WELL DETAILS:						
Ground Level: 3428.00						
+N/S	+E/W	Northing	Easting	Latitude	Longitude	
0.00	0.00	617359.30	472777.20	32° 41' 49.876 N	104° 25' 18.575 W	

SECTION DETAILS									
MD	Inc	Azi	TVD	+N/S	+E/W	Dleg	TFace	VSecl	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2340.56	0.00	0.00	2340.56	0.00	0.00	0.00	0.00	0.00	
3176.82	82.00	353.00	2861.11	535.03	-85.88	11.00	353.00	536.07	
3409.09	92.00	359.97	2853.00	765.48	-79.91	3.00	89.89	767.72	
7406.34	92.00	359.97	2710.50	4851.24	-82.11	0.00	0.00	4851.93	PBHL

DESIGN TARGET DETAILS					
Name	TVD	+N/S	+E/W	Northing	Easting
PBHL	2710.50	4851.24	-82.11	622210.10	472695.10
PP	2858.14	458.00	-56.36	617818.26	472720.85

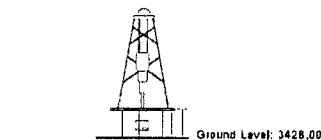
SITE DETAILS: Falabella 31 Fee
Site Centre Northing: 617359.40
Easting: 470934.80
Positional Uncertainty: 0.00
Convergence: -0.05
Local North: Grid

Map System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone Name: New Mexico East 3001
Local Origin: Well #6H, Grid North
Latitude: 32° 41' 49.876 N
Longitude: 104° 25' 18.575 W
Grid East: 472777.20
Grid North: 617359.30
Scale Factor: 1.000

PROJECT DETAILS: Eddy County, NM (NAN27 NME)
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

Geomagnetic Model: BGGM2012
Sample Date: 19-Dec-12
Magnetic Declination: 7.93°
Dip Angle from Horizontal: 60.40°
Magnetic Field Strength: 48631

To convert a Magnetic Direction to a Grid Direction, Add 7.98°
To convert a Magnetic Direction to a True Direction, Add 7.93° East
To convert a True Direction to a Grid Direction, Add 0.05°



Ground Level: 3428.00

Job Data
15-30, December 19 2012
Scientific Drilling
2024 Texas Drive
Midland, TX 79709

