

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.**

1. Type of Well ☒ Oil Well ☐ Gas Well ☐ Other		5. Lease Serial No NMNM98120
2. Name of Operator COG OPERATING LLC		6. If Indian, Allottee or Tribe Name
Contact: KELLY J HOLLY E-Mail: kholly@conchoresources.com		7. If Unit or CA/Agreement, Name and/or No.
3a. Address 550 WEST TEXAS AVENUE SUITE 100 MIDLAND, TX 79707	3b. Phone No (include area code) Ph: 432-685-4384	8. Well Name and No. SKELLY UNIT 651
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 14 T17S R31E Mer NMP NENE 1183FNL 369FEL		9. API Well No 30-015-38224
		10. Field and Pool, or Exploratory FREN; GLORIETA-YESO, EAST
		11. County or Parish, and State EDDY COUNTY, NM

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 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 permitted this well at this location:

1183' FNL & 369' FEL, SEC 14, T17S, R31E, Unit A

Surface location unchanged OK J Fast 5-26-11

COG Operating respectfully requests permission to move this locaiton to:

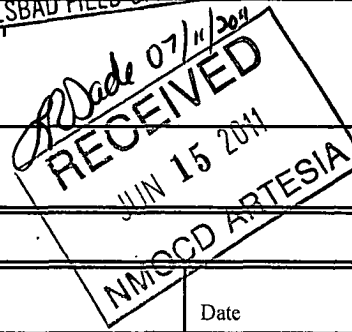
SHL: 1183' FNL & 369' FEL, Sec 14, T17S, R31E, Unit A

BHL: 990' FNL & 330' FEL, Sec 14, T17S, R31E, Unit A

A Revised C-102 and Directional Plan are attached for your review.

*Original COA Still Applies MD=6907
TVD=6900*

14. I hereby certify that the foregoing is true and correct. Electronic Submission #108710 verified by the BLM Well Information System For COG OPERATING LLC, sent to the Carlsbad	
Name (Printed/Typed) KELLY J HOLLY	Title PERMITTING TECH
Signature (Electronic Submission)	Date 05/20/2011

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved By	Title	Date
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	

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 ****



COG Operating LLC

Eddy County, NM (NAN27 NME)

Skelly Unit #651

Skelly Unit #651

OH

Plan: Plan #3 7-7/8" Hole

SHL = 1183' FNL & 369' FEL

BHL = 980' FNL & 340' FEL

Top of Paddock = 980' FNL & 340' FEL @ 5220' TVD

Standard Planning Report

28 January, 2011



Scientific Drilling
Directional Drilling Operations



Scientific Drilling
Planning Report



Database:	EDM-Julio	Local Co-ordinate Reference:	Site Skelly Unit #651
Company:	COG Operating LLC	TVD Reference:	GL Elev @ 3933.00usft
Project:	Eddy County, NM (NAN27 NME)	MD Reference:	GL Elev @ 3933.00usft
Site:	Skelly Unit #651	North Reference:	Grid
Well:	Skelly Unit #651	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #3 7-7/8" Hole		

Project	Eddy County, NM (NAN27 NME)		
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	Skelly Unit #651				
Site Position:	Northing:	669,138.20 usft	Latitude:	32° 50' 18.758 N	
From:	Map	Easting:	653,858.60 usft	Longitude:	103° 49' 56.629 W
Position Uncertainty:	0.00 usft	Slot Radius:	0 "	Grid Convergence:	0.27 °

Well	Skelly Unit #651					
Well Position	+N/-S	0.00 usft	Northing:	669,138.20 usft	Latitude:	32° 50' 18.758 N
	+E/-W	0.00 usft	Easting:	653,858.60 usft	Longitude:	103° 49' 56.629 W
Position Uncertainty	0.00 usft	Wellhead Elevation:		Ground Level:	3,933.00 usft	

Wellbore OH

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	2011/01/28	7.80	60.72	48,992

Design Plan #3 7-7/8" 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	7.81

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	
1,950.00	0.00	0.00	1,950.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,140.63	3.81	7.81	2,140.49	6.28	0.86	2.00	2.00	0.00	7.81	
5,036.06	3.81	7.81	5,029.51	197.02	27.04	0.00	0.00	0.00	0.00	
5,226.69	0.00	0.00	5,220.00	203.30	27.90	2.00	-2.00	0.00	180.00	TG1-SU #651
6,906.69	0.00	0.00	6,900.00	203.30	27.90	0.00	0.00	0.00	0.00	BHL-SU #651



Scientific Drilling
Planning Report



Database:	EDM-Julio	Local Co-ordinate Reference:	Site Skelly Unit #651
Company:	COG Operating LLC	TVD Reference:	GL Elev @ 3933.00usft
Project:	Eddy County, NM (NAN27-NME)	MD Reference:	GL Elev @ 3933.00usft
Site:	Skelly Unit #651	North Reference:	Grid
Well:	Skelly Unit #651	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #3.7-7/8" Hole		

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
West HL-SU #651 - North HL-SU #651									
1,850.00	0.00	0.00	1,850.00	0.00	0.00	0.00	0.00	0.00	0.00
8-5/8" Casing									
1,950.00	0.00	0.00	1,950.00	0.00	0.00	0.00	0.00	0.00	0.00
KOP Start Build 2.00°/100'									
2,000.00	1.00	7.81	2,000.00	0.43	0.06	0.44	2.00	2.00	0.00
2,100.00	3.00	7.81	2,099.93	3.89	0.53	3.93	2.00	2.00	0.00
2,140.63	3.81	7.81	2,140.49	6.28	0.86	6.34	2.00	2.00	0.00
EOC hold 3.81°									
2,200.00	3.81	7.81	2,199.73	10.19	1.40	10.29	0.00	0.00	0.00
2,300.00	3.81	7.81	2,299.51	16.78	2.30	16.94	0.00	0.00	0.00
2,400.00	3.81	7.81	2,399.29	23.37	3.21	23.59	0.00	0.00	0.00
2,500.00	3.81	7.81	2,499.06	29.95	4.11	30.24	0.00	0.00	0.00
2,600.00	3.81	7.81	2,598.84	36.54	5.01	36.88	0.00	0.00	0.00
2,700.00	3.81	7.81	2,698.62	43.13	5.92	43.53	0.00	0.00	0.00
2,800.00	3.81	7.81	2,798.40	49.72	6.82	50.18	0.00	0.00	0.00
2,900.00	3.81	7.81	2,898.18	56.31	7.73	56.83	0.00	0.00	0.00
3,000.00	3.81	7.81	2,997.96	62.89	8.63	63.48	0.00	0.00	0.00
3,100.00	3.81	7.81	3,097.74	69.48	9.54	70.13	0.00	0.00	0.00
3,200.00	3.81	7.81	3,197.51	76.07	10.44	76.78	0.00	0.00	0.00
3,300.00	3.81	7.81	3,297.29	82.66	11.34	83.43	0.00	0.00	0.00
3,400.00	3.81	7.81	3,397.07	89.24	12.25	90.08	0.00	0.00	0.00
3,500.00	3.81	7.81	3,496.85	95.83	13.15	96.73	0.00	0.00	0.00
3,600.00	3.81	7.81	3,596.63	102.42	14.06	103.38	0.00	0.00	0.00
3,700.00	3.81	7.81	3,696.41	109.01	14.96	110.03	0.00	0.00	0.00
3,800.00	3.81	7.81	3,796.19	115.59	15.86	116.68	0.00	0.00	0.00
3,900.00	3.81	7.81	3,895.97	122.18	16.77	123.33	0.00	0.00	0.00
4,000.00	3.81	7.81	3,995.74	128.77	17.67	129.97	0.00	0.00	0.00
4,100.00	3.81	7.81	4,095.52	135.36	18.58	136.62	0.00	0.00	0.00
4,200.00	3.81	7.81	4,195.30	141.94	19.48	143.27	0.00	0.00	0.00
4,300.00	3.81	7.81	4,295.08	148.53	20.38	149.92	0.00	0.00	0.00
4,400.00	3.81	7.81	4,394.86	155.12	21.29	156.57	0.00	0.00	0.00
4,500.00	3.81	7.81	4,494.64	161.71	22.19	163.22	0.00	0.00	0.00
4,600.00	3.81	7.81	4,594.42	168.29	23.10	169.87	0.00	0.00	0.00
4,700.00	3.81	7.81	4,694.20	174.88	24.00	176.52	0.00	0.00	0.00
4,800.00	3.81	7.81	4,793.97	181.47	24.90	183.17	0.00	0.00	0.00
4,900.00	3.81	7.81	4,893.75	188.06	25.81	189.82	0.00	0.00	0.00
5,000.00	3.81	7.81	4,993.53	194.64	26.71	196.47	0.00	0.00	0.00
5,036.06	3.81	7.81	5,029.51	197.02	27.04	198.87	0.00	0.00	0.00
Start Drop 2.00°/100'									
5,100.00	2.53	7.81	5,093.35	200.53	27.52	202.40	2.00	-2.00	0.00
5,200.00	0.53	7.81	5,193.31	203.18	27.88	205.08	2.00	-2.00	0.00
5,226.69	0.00	0.00	5,220.00	203.30	27.90	205.21	2.00	-2.00	-29.28
EOC hold 0.00° - TG1-SU #651									
6,906.69	0.00	0.00	6,900.00	203.30	27.90	205.21	0.00	0.00	0.00
BHL-SU #651									

APD - 6800'



Scientific Drilling Planning Report



Database: EDM-Julio
Company: COG Operating LLC
Project: Eddy County, NM (NAN27 NME)
Site: Skelly Unit #651
Well: Skelly Unit #651
Wellbore: OH
Design: Plan #3 7-7/8" Hole

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:
Site Skelly Unit #651
GL Elev @ 3933.00usft
GL Elev @ 3933.00usft
Grid:
Minimum Curvature

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N-S (usft)	+E-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
West HL-SU #651 - plan misses target center by 196.98usft at 0.00usft MD (0.00 TVD, 0.00 N, 0.00 E) - Rectangle (sides W0.00 H100.00 D0.00)	0.00	0.00	0.00	193.30	37.90	669,331.50	653,896.50	32° 50' 20.669 N	103° 49' 56.174 W
North HL-SU #651 - plan misses target center by 196.98usft at 0.00usft MD (0.00 TVD, 0.00 N, 0.00 E) - Rectangle (sides W150.00 H0.00 D0.00)	0.00	0.00	0.00	193.30	37.90	669,331.50	653,896.50	32° 50' 20.669 N	103° 49' 56.174 W
TG1-SU #651 - plan hits target center - Point	0.00	0.00	5,220.00	203.30	27.90	669,341.50	653,886.50	32° 50' 20.769 N	103° 49' 56.291 W
BHL-SU #651 - plan hits target center - Circle (radius 10.00)	3.41	316.06	6,900.00	203.30	27.90	669,341.50	653,886.50	32° 50' 20.769 N	103° 49' 56.291 W

Casing Points

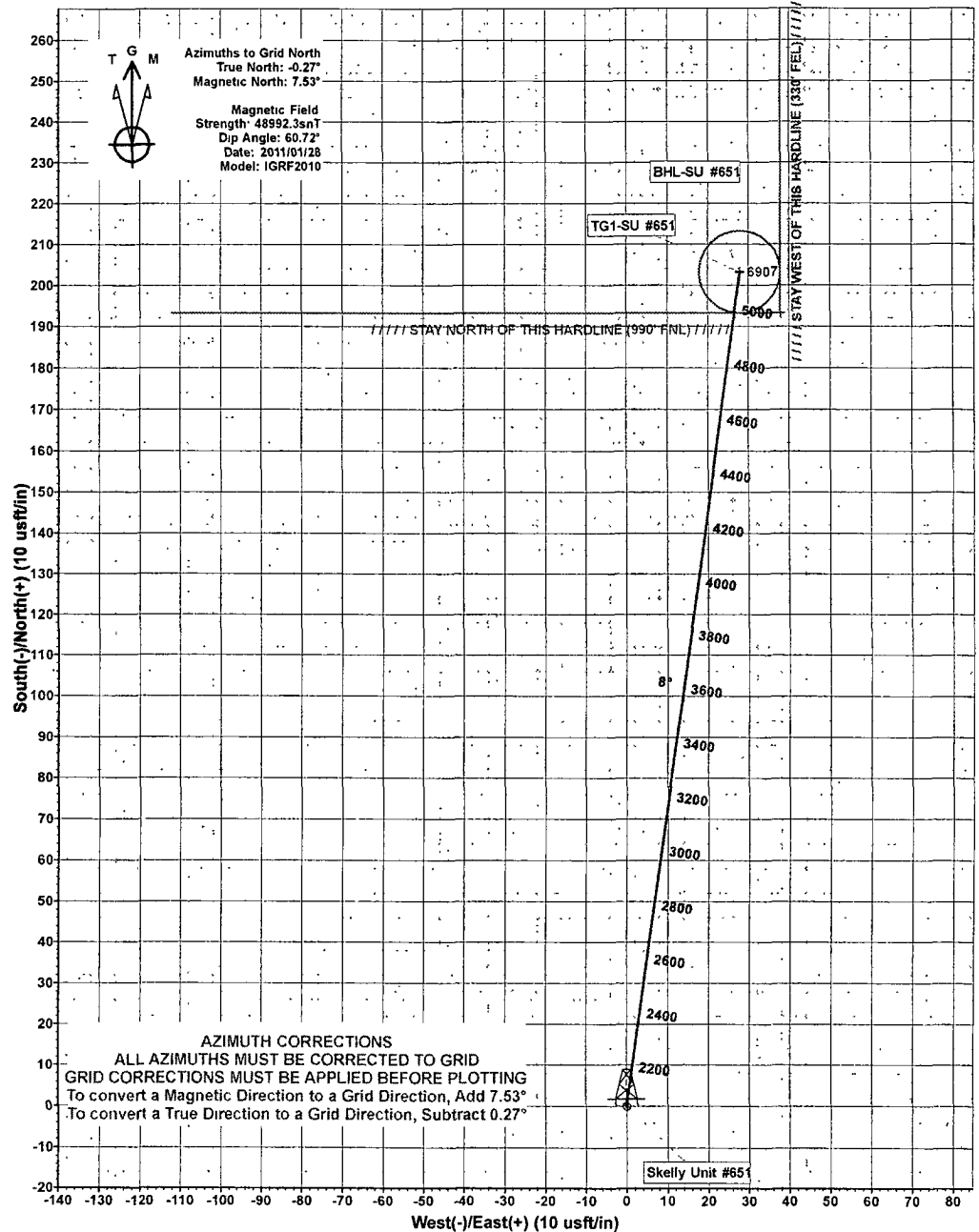
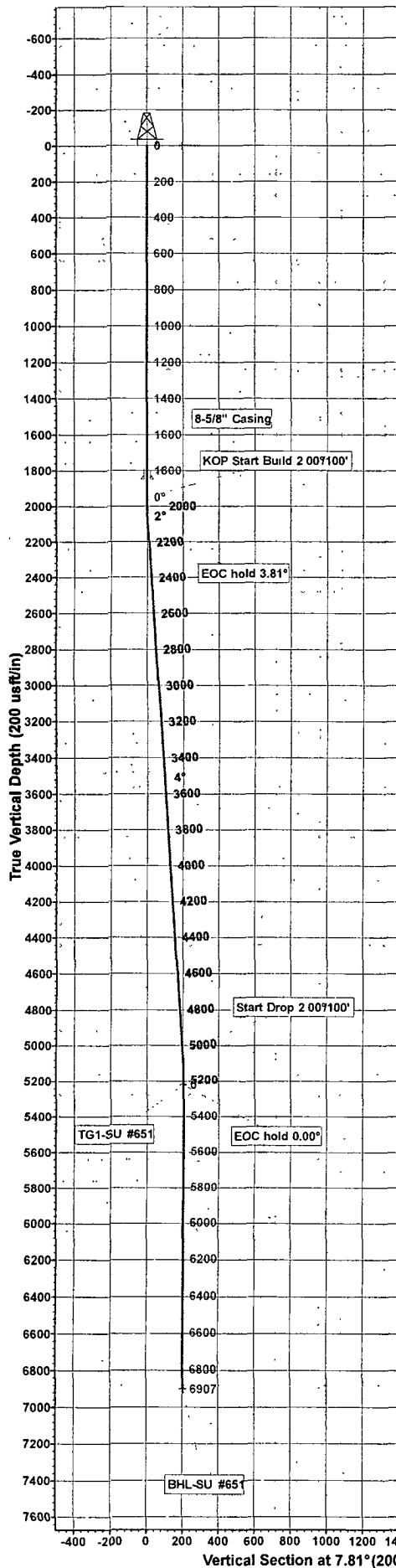
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
1,850.00	1,850.00	8-5/8" Casing	8-5/8	12-1/4

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N-S (usft)	+E-W (usft)	Comment
1,950.00	1,950.00	0.00	0.00	KOP Start Build 2.00°/100'
2,140.63	2,140.49	6.28	0.86	EOC hold 3.81°
5,036.06	5,029.51	197.02	27.04	Start Drop 2.00°/100'
5,226.69	5,220.00	203.30	27.90	EOC hold 0.00°



Scientific Drilling for COG Operating LLC
Site: Eddy County, NM (NAN27 NME)
Well: Skelly Unit #651
Wellbore: OH
Design: Plan #3 7-7/8" Hole



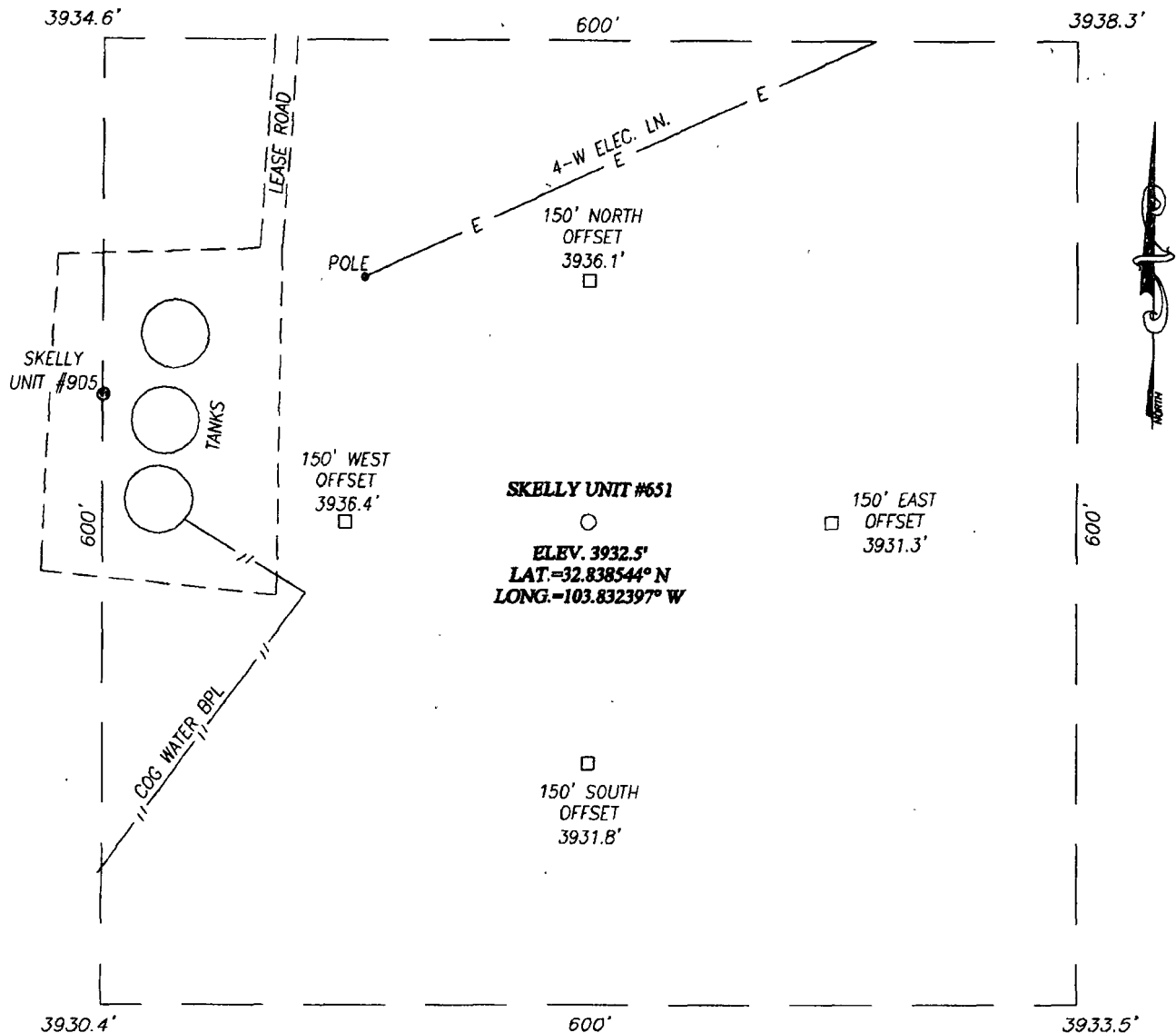
WELLBORE TARGET DETAILS (MAP CO-ORDINATES)									
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape	
North HL-SU #651	0.00	193.30	37.90	669331.50	653896.50	32° 50' 20.669 N	103° 49' 56.174 W	Rectangle (Sides: L0.00 W150.00)	
West HL-SU #651	0.00	193.30	37.90	669331.50	653896.50	32° 50' 20.669 N	103° 49' 56.174 W	Rectangle (Sides: L10.00 W0.00)	
TG1-SU #651	5220.00	203.30	27.90	669341.50	653886.50	32° 50' 20.769 N	103° 49' 56.291 W	Point	
BHL-SU #651	6900.00	203.30	27.90	669341.50	653886.50	32° 50' 20.769 N	103° 49' 56.291 W	Circle (Radius: 10.00)	

SECTION DETAILS									
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	1950.00	0.00	0.00	1950.00	0.00	0.00	0.00	0.00	0.00
3	2140.63	3.81	7.81	2140.49	6.28	0.86	2.00	7.81	6.34
4	5036.06	3.81	7.81	5029.51	197.02	27.04	0.00	0.00	198.87
5	5226.69	0.00	0.00	5220.00	203.30	27.90	2.00	180.00	205.21
6	6906.69	0.00	0.00	6900.00	203.30	27.90	0.00	0.00	205.21

WELL DETAILS: Skelly Unit #651									
Ground Level					3933.00				
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot			
0.00	0.00	669138.20	653858.60	32° 50' 18.758 N	103° 49' 56.629 W				

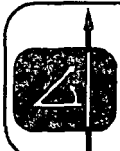
PROJECT DETAILS: Eddy County, NM (NAN27 NME) Plan: Plan #3 7-7/8" Hole (Skelly Unit #651/OH)
Geodetic System: US State Plane 1927 (Exact solution) Created By: Julio Pina Date: 28-Jan-11
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001
System Datum: Mean Sea Level
Checked: _____ Date: _____
Reviewed: _____ Date: _____
Approved: _____ Date: _____

SECTION 14, TOWNSHIP 17 SOUTH, RANGE 31 EAST, N.M.P.M.
 EDDY COUNTY NEW MEXICO

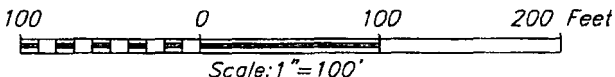


DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF U.S. HWY. #82 AND CO. RD. 224 (RIPPLE RD.), GO SOUTHWEST ON U.S. HWY. #82 APPROX. 1.2 MILES. TURN RIGHT AND GO NORTHWEST APPROX. 0.3 MILES. TURN RIGHT AND GO NORTH APPROX. 0.3 MILES. VEER RIGHT AND GO NORTHEAST APPROX. 0.5 MILES. VEER LEFT AND GO NORTH APPROX. 0.6 MILES. TURN RIGHT AND GO EAST APPROX. 0.3 MILES. TURN RIGHT AND GO SOUTH APPROX. 0.15 MILES TO THE CHEVRON SKELLY UNIT #905 WELL AND BATTERY PAD. THIS LOCATION IS APPROX. 300 FEET EAST.



PROVIDING SURVEYING SERVICES
 SINCE 1946
JOHN WEST SURVEYING COMPANY
 412 N. DAL PASO
 HOBBS, N.M. 88240
 (575) 393-3117

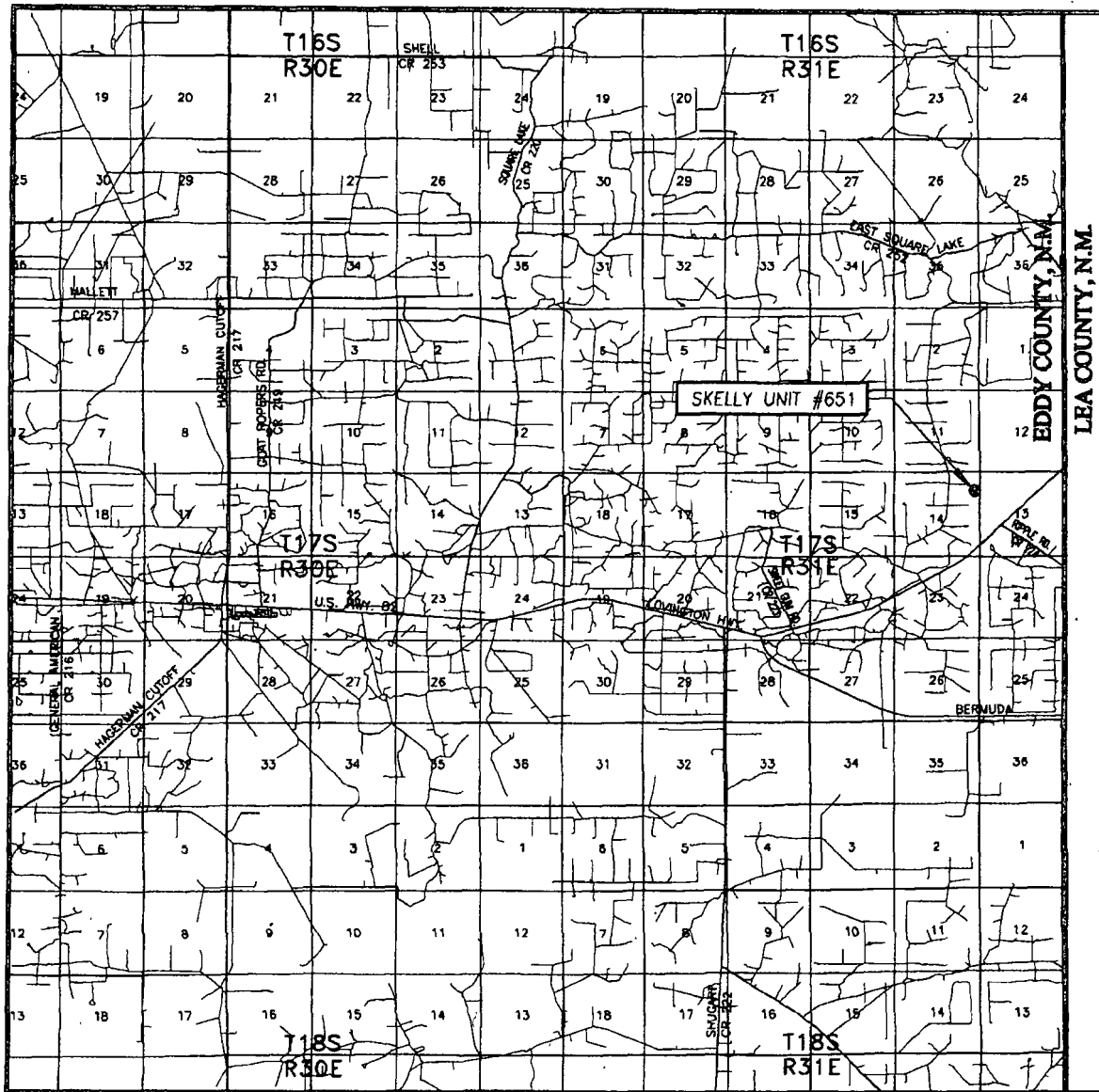


COG OPERATING, LLC

SKELLY UNIT #651 WELL
 LOCATED 1183 FEET FROM THE NORTH LINE
 AND 369 FEET FROM THE EAST LINE OF SECTION 14,
 TOWNSHIP 17 SOUTH, RANGE 31 EAST, N.M.P.M.,
 EDDY COUNTY, NEW MEXICO

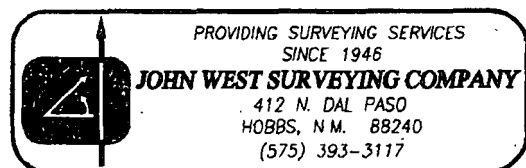
Survey Date: 3/25/10	Sheet 1 of 1 Sheets
W.O. Number: 09.11.1304	Dr By: LA
Date: 4/5/10	Rev 1: N/A
09111304	Scale: 1"=100'

VICINITY MAP

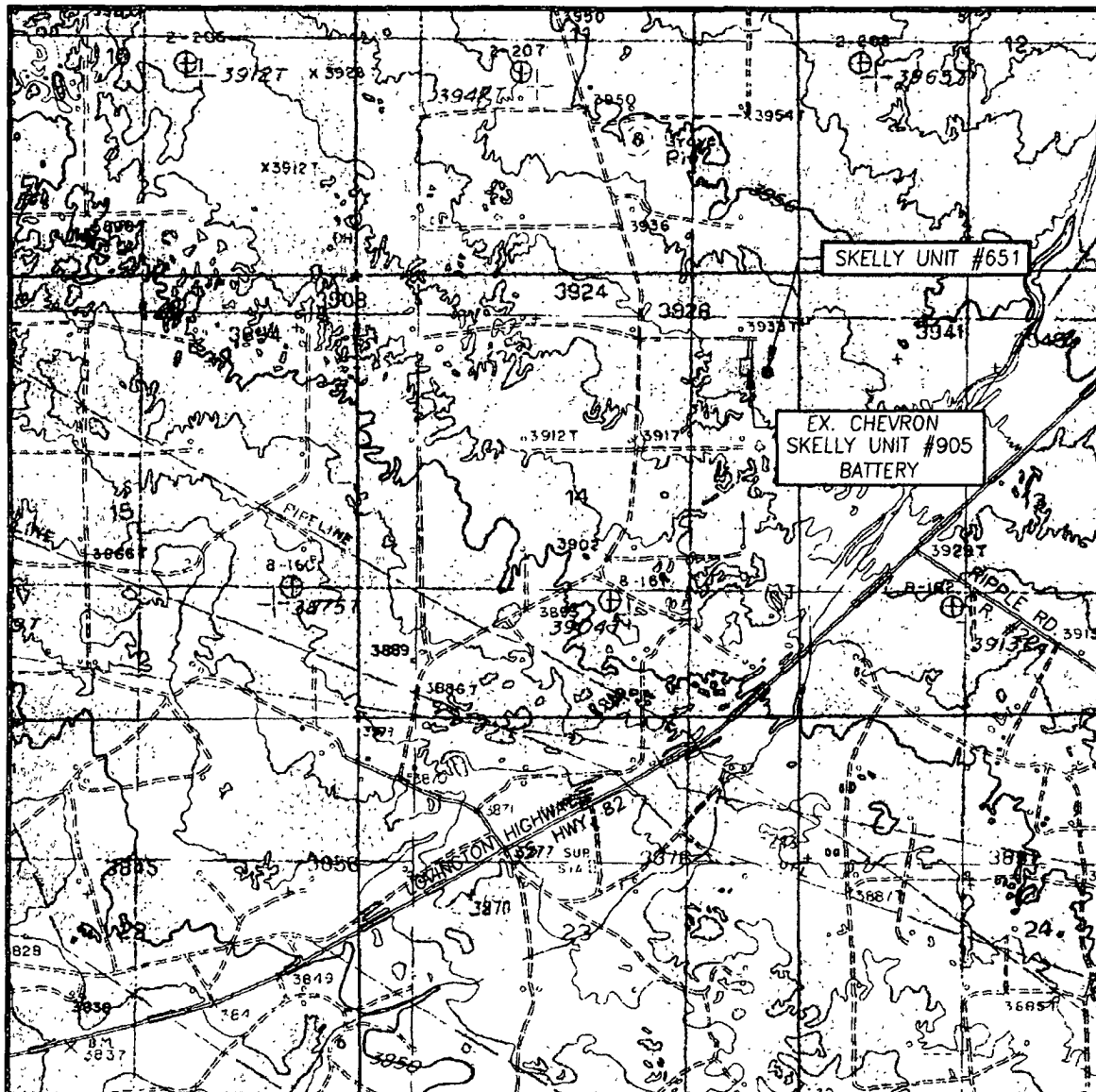


SCALE: 1" = 2 MILES

SEC. 14 TWP. 17-S RGE. 31-E
 SURVEY N.M.P.M.
 COUNTY EDDY STATE NEW MEXICO
 DESCRIPTION 1183' FNL & 369' FEL
 ELEVATION 3933'
 OPERATOR COG OPERATING, LLC
 LEASE SKELLY UNIT



LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
MALJAMAR, N.M. - 10'

SEC. 14 TWP. 17-S RGE. 31-E

SURVEY N.M.P.M.

COUNTY EDDY STATE NEW MEXICO

DESCRIPTION 1183' FNL & 369' FEL

ELEVATION 3933'

OPERATOR COG OPERATING, INC

LEASE SKELLY UNIT

U.S.G.S. TOPOGRAPHIC MAP
MALJAMAR, N.M.

