

DATE IN 5-24-10	SUSPENSE	ENGINEER DB	LOGGED IN 524-10	TYPE NSL	PTG W APP NO. 1014449457
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
 - Engineering Bureau -
 1220 South St. Francis Drive, Santa Fe, NM 87505



C-06
6204
 Miranda Fed #14

ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Application Acronyms:

[NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]
[DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
[PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
[WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
[SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
[EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

- 54547 -

[1] TYPE OF APPLICATION - Check Those Which Apply for [A]

[A] Location - Spacing Unit - Simultaneous Dedication
☒ NSL ☐ NSP ☐ SD

Check One Only for [B] or [C]

[B] Commingling - Storage - Measurement
☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
☐ WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PPR

[D] Other: Specify _____

RECEIVED OCT 2010
 MAY 24 11:22 AM
 INTEREST ARE THE SAME

[2] NOTIFICATION REQUIRED TO: - Check Those Which Apply, or ☒ Does Not Apply

- [A] ☐ Working, Royalty or Overriding Royalty Interest Owners
- [B] ☐ Offset Operators, Leaseholders or Surface Owner
- [C] ☐ Application is One Which Requires Published Legal Notice
- [D] ☐ Notification and/or Concurrent Approval by BLM or SLO
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
- [E] ☐ For all of the above, Proof of Notification or Publication is Attached, and/or,
- [F] ☐ Waivers are Attached

[3] SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.

[4] CERTIFICATION: I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

ROBYN M. ODOM
 Print or Type Name

Signature

REGULATORY ANALYST
 Title

5/21/10
 Date

(432) 685-4385
 Phone Number

rodomb@conchoresources.com
 E-mail Address

**Miranda Federal #14
Eddy County, NM**

COG proposes to drill a Vertical, North ½, 40 acre spacing
Loco Hills; Glorieta-Yeso oil well
TD of approximately 6000'

Non-Standard Location:

SHL: 2528' FNL & 2309' FWL Sec 9, T17S, R30E, Unit F
BHL: 2310' FNL & 2310' FWL Sec 9, T17S, R30E, Unit F

This well had to be drilled at a non-standard location due to sand dunes.

The plan for this well is to complete it in the Yeso formation.
We won't know the exact perms until we drill & log it, but it will be very similar to the Electra Federal #10 which was recently drilled in January 2007 and is located 765' FSL 2310' FWL, Section 10, T17S, R30E, Unit N.

The Electra Federal #10 completion divided the Yeso up into 3 perf/stimulation intervals. Electra Federal #10 has perms from: 4920' – 5848.5' overall, with the following breakdown:

1st interval: 5567' – 5848.5',
acidized w/ 2500 gals,
frac'd w/ 95,103 gals gel, 8321# LiteProp, & 85,970# 16/30 sand.

2nd interval: 5192.5' – 5475.5',
acidized w/ 2500 gals,
frac'd w/ 97,107 gals gel, 8215# LiteProp, & 87,106# 16/30 sand.

3rd interval: 4920' – 5107',
acidized w/ 2500 gals,
frac'd w/ 94,099 gals gel, 8448# LiteProp, & 87,526# 16/30 sand.

Attachment 1

Plat & Map

Attachment 2

Map & legend of offset wells.

Attachment 3

Updated land plat showing COG Operating LLC owns the offset acreage.
The acreage we are encroaching on is the NE/4 SW/4 and the NW/4 SE/4 of
Section 9.

Interests are the same.

COG Operating LLC respectfully requests permission to have this NSL approved.

District I
1625 N. French Dr., Hobbs, NM 88240

District II
1301 W. Grand Avenue, 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 Department
OIL CONSERVATION DIVISION
1220 South St. Frances Dr.
Santa Fe, NM 87505

Form C-102
Revised October 15, 2009
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number 30-015-	2 Pool Code 96718	3 Pool Name LOCO HILLS; GLORIETA-YESO
4 Property Code 37868	5 Property Name MIRANDA FEDERAL	6 Well Number 14
7 OGRID No. 229137	8 Operator Name COG OPERATING LLC	9 Elevation 3691.3

10 Surface Location

UL or lot	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	9	17 S	30 E		2528	NORTH	2309	WEST	EDDY

11 Bottom Hole Location If Different From Surface

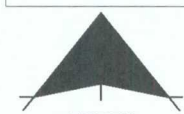
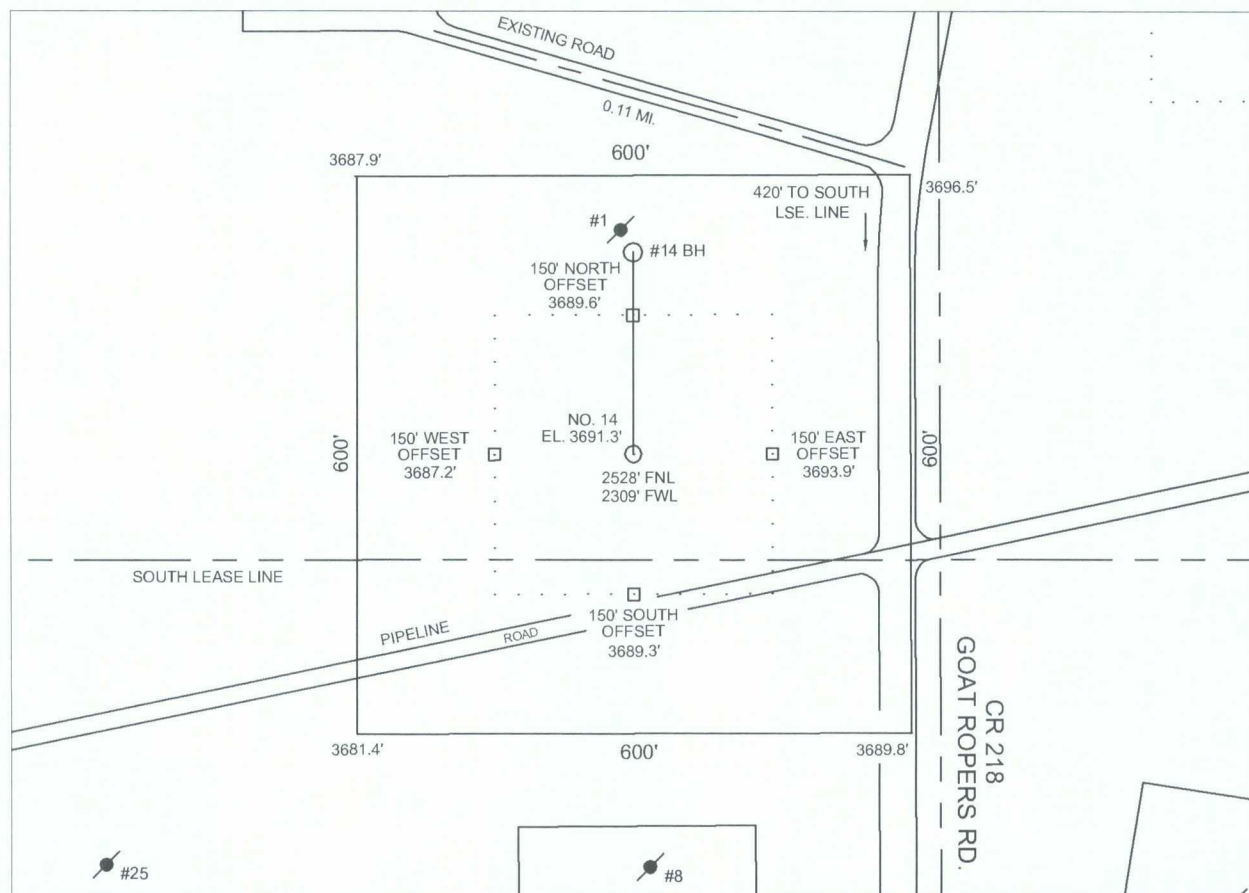
UL or lot	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	9	17 S	30 E		2310	NORTH	2310	WEST	EDDY

12 Dedicated Acres 40	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.

16 <table border="1"> <tr> <th colspan="4">BOTTOM HOLE</th> </tr> <tr> <th>LAT 27</th> <th>LON 27</th> <th>SPC27- X</th> <th>SPC27-Y</th> </tr> <tr> <td>32.84984</td> <td>-103.97753</td> <td>609268.6</td> <td>673066.4</td> </tr> </table>	BOTTOM HOLE				LAT 27	LON 27	SPC27- X	SPC27-Y	32.84984	-103.97753	609268.6	673066.4	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 enter by the division. <i>Robyn Odom</i> 5/21/2010 Signature Date Robyn Odom Printed Name 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. 03/10/2010 Date of Survey Signature and Seal of Professional Surveyor Bruce R. Pennell Certificate Number 9062
BOTTOM HOLE													
LAT 27	LON 27	SPC27- X	SPC27-Y										
32.84984	-103.97753	609268.6	673066.4										

NAD27 GEOGRAPHIC COORDINATES		NAD27 SPC - NM EAST	
LAT: 32.84924	LON: -103.97753	X = 609268.8	Y = 672848.6



DIRECTIONS TO LOCATION

NAD27 GEOGRAPHIC COORDINATES

LAT: 32.84924

LON: -103.97753

NAD83 GEOGRAPHIC COORDINATES

LAT: 32°50'57.680" N.

LON: 103°58'40.937" W.

0' 200' 400' 800'

SCALE: 1" = 200'

DATUM: NEW MEXICO EAST ZONE - NAD83 (HARN)

1. FROM THE INTERSECTION OF U.S. HIGHWAY 82 AND CR 217 (HAGGERMAN CUTOFF RD.) AT LOCO HILLS, NEW MEXICO, 20.6 MILES EAST OF ARTESIA, NEW MEXICO:
2. THEN NORTH ON CR 217, 1.81 MILES TO A LEASE ROAD ON THE RIGHT;
3. THEN EAST ON THE LEASE ROAD, 0.48 MILES TO THE INTERSECTION OF CR 218 (GOAT ROPERS RD.);
4. THEN NORTH ON CR 218, 0.27 MILES TO THE SOUTH LINE OF THE MIRANDA FEDERAL LEASE AND A "T" INTERSECTION OF A PIPELINE ROAD;
5. THEN SOUTHWESTERLY ON THE PIPELINE ROAD, 130' TO THE SOUTHEAST CORNER OF THE NO. 14 WELL SITE.



A. E. FULLER & ASSOCIATES
LAND SURVEYORS

AL FULLER

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Midland, TX 79703

www.aefuller.com

COG OPERATING LLC
MIRANDA FEDERAL NO. 14
SECTION 9 - TOWNSHIP 17 S - RANGE 30 E
EDDY COUNTY, NM
N 88 E - 24.7 MILES FROM ARTESIA, NM

DATE: 03/10/2010

USGS
QUAD LOCO HILLS



COG Operating LLC

Eddy County, NM (NAN27 NME)

Miranda Federal #14

Miranda Federal #14

OH

Plan: Plan #1 - 7-7/8" Hole

SHL = 2528' FNL & 2309' FWL

BHL = 2300' FNL & 2300' FWL

Top of Paddock = 2300' FNL & 2300' FWL @ 4400' TVD

Standard Planning Report

20 May, 2010





Scientific Drilling
Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Site Miranda Federal #14
Company:	COG Operating LLC	TVD Reference:	GL Elev @ 3691.30ft
Project:	Eddy County, NM (NAN27 NME)	MD Reference:	GL Elev @ 3691.30ft
Site:	Miranda Federal #14	North Reference:	Grid
Well:	Miranda Federal #14	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1 - 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	Miranda Federal #14		
Site Position:		Northing:	672,848.60 ft
From:	Map	Easting:	609,268.80 ft
Position Uncertainty:	0.00 ft	Slot Radius:	0 "
		Latitude:	32° 50' 57.262 N
		Longitude:	103° 58' 39.108 W
		Grid Convergence:	0.19 °

Well	Miranda Federal #14		
Well Position	+N-S	0.00 ft	Northing:
	+E-W	0.00 ft	Easting:
Position Uncertainty	0.00 ft	Wellhead Elevation:	Ground Level:
			3,691.30 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	2010/05/20	7.94	60.74	49,085

Design	Plan #1 - 7-7/8" Hole			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	357.44

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	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	
1,690.55	4.81	357.44	1,690.26	10.08	-0.45	2.00	2.00	0.00	357.44	
4,168.75	4.81	357.44	4,159.74	217.72	-9.75	0.00	0.00	0.00	0.00	
4,409.30	0.00	0.01	4,400.00	227.80	-10.20	2.00	-2.00	0.00	180.00	TG1-MF #14
6,159.30	0.00	0.01	6,150.00	227.80	-10.20	0.00	0.00	0.00	0.01	PBHL-MF #14



Scientific Drilling
Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Site Miranda Federal #14
Company:	COG Operating LLC	TVD Reference:	GL Elev @ 3691.30ft
Project:	Eddy County, NM (NAN27 NME)	MD Reference:	GL Elev @ 3691.30ft
Site:	Miranda Federal #14	North Reference:	Grid
Well:	Miranda Federal #14	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1 - 7-7/8" Hole		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
North HL-MF #14 - West HL-MF #14									
1,350.00	0.00	0.00	1,350.00	0.00	0.00	0.00	0.00	0.00	0.00
8-5/8" Casing									
1,450.00	0.00	0.00	1,450.00	0.00	0.00	0.00	0.00	0.00	0.00
KOP Start Build 2.00°/100'									
1,500.00	1.00		1,500.00	0.44	-0.02	0.44	2.00	2.00	0.00
1,600.00	3.00	357.44	1,599.93	3.92	-0.18	3.93	2.00	2.00	0.00
1,690.55	4.81	357.44	1,690.27	10.08	-0.45	10.09	2.00	2.00	0.00
EOC Hold 4.81°									
1,700.00	4.81	357.44	1,699.68	10.87	-0.49	10.89	0.00	0.00	0.00
1,800.00	4.81	357.44	1,799.33	19.25	-0.86	19.27	0.00	0.00	0.00
1,900.00	4.81	357.44	1,898.98	27.63	-1.24	27.66	0.00	0.00	0.00
2,000.00	4.81	357.44	1,998.63	36.01	-1.61	36.05	0.00	0.00	0.00
2,100.00	4.81	357.44	2,098.27	44.39	-1.99	44.43	0.00	0.00	0.00
2,200.00	4.81	357.44	2,197.92	52.77	-2.36	52.82	0.00	0.00	0.00
2,300.00	4.81	357.44	2,297.57	61.15	-2.74	61.21	0.00	0.00	0.00
2,400.00	4.81	357.44	2,397.22	69.52	-3.11	69.59	0.00	0.00	0.00
2,500.00	4.81	357.44	2,496.87	77.90	-3.49	77.98	0.00	0.00	0.00
2,600.00	4.81	357.44	2,596.51	86.28	-3.86	86.37	0.00	0.00	0.00
2,700.00	4.81	357.44	2,696.16	94.66	-4.24	94.75	0.00	0.00	0.00
2,800.00	4.81	357.44	2,795.81	103.04	-4.61	103.14	0.00	0.00	0.00
2,900.00	4.81	357.44	2,895.46	111.42	-4.99	111.53	0.00	0.00	0.00
3,000.00	4.81	357.44	2,995.10	119.79	-5.36	119.91	0.00	0.00	0.00
3,100.00	4.81	357.44	3,094.75	128.17	-5.74	128.30	0.00	0.00	0.00
3,200.00	4.81	357.44	3,194.40	136.55	-6.11	136.69	0.00	0.00	0.00
3,300.00	4.81	357.44	3,294.05	144.93	-6.49	145.07	0.00	0.00	0.00
3,400.00	4.81	357.44	3,393.69	153.31	-6.86	153.46	0.00	0.00	0.00
3,500.00	4.81	357.44	3,493.34	161.69	-7.24	161.85	0.00	0.00	0.00
3,600.00	4.81	357.44	3,592.99	170.06	-7.61	170.24	0.00	0.00	0.00
3,700.00	4.81	357.44	3,692.64	178.44	-7.99	178.62	0.00	0.00	0.00
3,800.00	4.81	357.44	3,792.29	186.82	-8.37	187.01	0.00	0.00	0.00
3,900.00	4.81	357.44	3,891.93	195.20	-8.74	195.40	0.00	0.00	0.00
4,000.00	4.81	357.44	3,991.58	203.58	-9.12	203.78	0.00	0.00	0.00
4,100.00	4.81	357.44	4,091.23	211.96	-9.49	212.17	0.00	0.00	0.00
4,168.75	4.81	357.44	4,159.74	217.72	-9.75	217.94	0.00	0.00	0.00
Start DLS 2.00°/100'									
4,200.00	4.19	357.44	4,190.89	220.17	-9.86	220.39	2.00	-2.00	0.00
4,300.00	2.19	357.44	4,290.73	225.72	-10.11	225.94	2.00	-2.00	0.00
4,400.00	0.19	357.44	4,390.70	227.78	-10.20	228.01	2.00	-2.00	0.00
4,409.30	0.00	357.44	4,400.00	227.80	-10.20	228.03	2.00	-2.00	0.00
EOC Hold 3.27° - TG1-MF #14									
6,159.30	0.00	0.01	6,150.00	227.80	-10.20	228.03	0.00	0.00	0.00
PBHL-MF #14									



Scientific Drilling
Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Site Miranda Federal #14
Company:	COG Operating LLC	TVD Reference:	GL Elev @ 3691.30ft
Project:	Eddy County, NM (NAN27 NME)	MD Reference:	GL Elev @ 3691.30ft
Site:	Miranda Federal #14	North Reference:	Grid
Well:	Miranda Federal #14	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1 - 7-7/8" Hole		

Design Targets

Target Name

- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
North HL-MF #14	0.00	0.00	0.00	217.80	-0.20	673,066.40	609,268.60	32° 50' 59.417 N	103° 58' 39.101 W
- plan misses target center by 217.80ft at 0.00ft MD (0.00 TVD, 0.00 N, 0.00 E)									
- Rectangle (sides W200.00 H0.00 D0.00)									
West HL-MF #14	0.00	0.00	0.00	217.80	-0.20	673,066.40	609,268.60	32° 50' 59.417 N	103° 58' 39.101 W
- plan misses target center by 217.80ft at 0.00ft MD (0.00 TVD, 0.00 N, 0.00 E)									
- Rectangle (sides W0.00 H100.00 D0.00)									
TG1-MF #14	0.00	0.00	4,400.00	227.80	-10.20	673,076.40	609,258.60	32° 50' 59.517 N	103° 58' 39.218 W
- plan hits target center									
- Point									
PBHL-MF #14	0.00	0.01	6,150.00	227.80	-10.20	673,076.40	609,258.60	32° 50' 59.517 N	103° 58' 39.218 W
- plan hits target center									
- Circle (radius 10.00)									

Casing Points

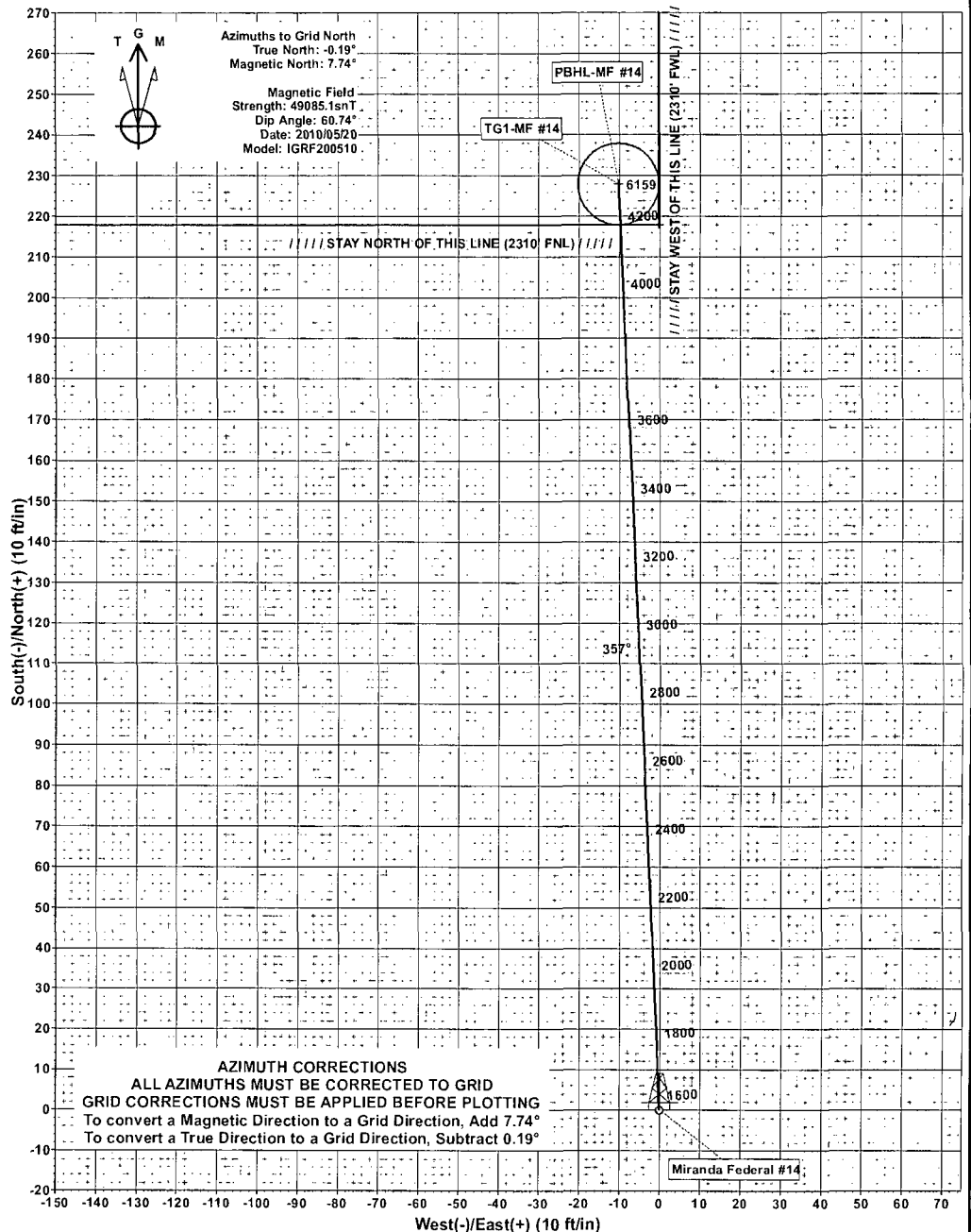
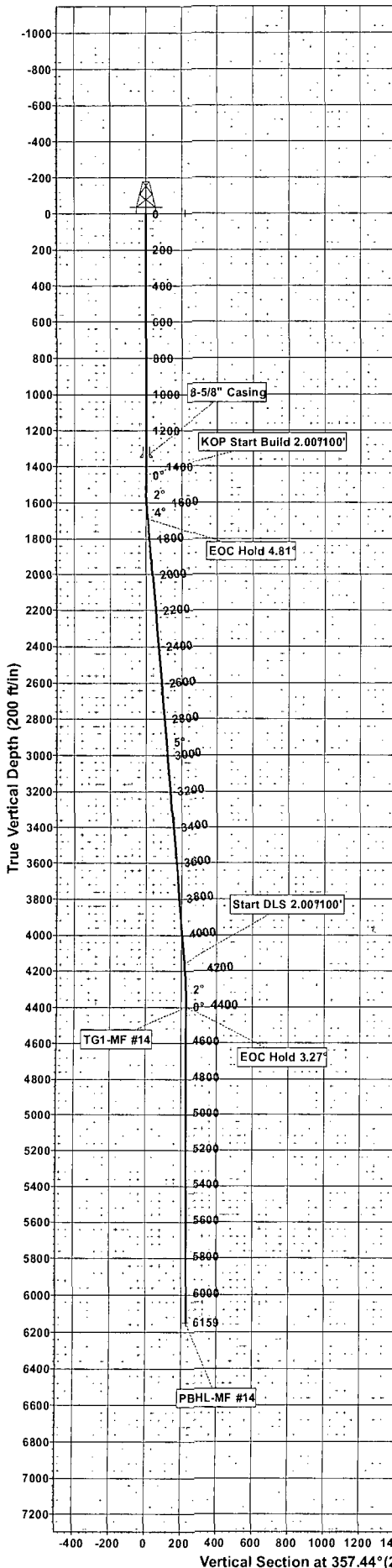
Measured Depth	Vertical Depth	Name	Casing Diameter	Hole Diameter
(ft)	(ft)		(")	(")
1,350.00	1,350.00	8-5/8" Casing	8-5/8	12-1/4

Plan Annotations

Measured Depth	Vertical Depth	Local Coordinates		Comment
(ft)	(ft)	+N/-S	+E/-W	
(ft)	(ft)	(ft)	(ft)	
1,450.00	1,450.00	0.00	0.00	KOP Start Build 2.00°/100'
1,690.55	1,690.27	10.08	-0.45	EOC Hold 4.81°
4,168.75	4,159.74	217.72	-9.75	Start DLS 2.00°/100'
4,409.30	4,400.00	227.80	-10.20	EOC Hold 3.27°



Scientific Drilling for COG Operating LLC
Site: Eddy County, NM (NAN27 NME)
Well: Miranda Federal #14
Wellbore: OH
Design: Plan #1 - 7-7/8" Hole



AZIMUTH CORRECTIONS
ALL AZIMUTHS MUST BE CORRECTED TO GRID
GRID CORRECTIONS MUST BE APPLIED BEFORE PLOTTING
To convert a Magnetic Direction to a Grid Direction, Add 7.74°
To convert a True Direction to a Grid Direction, Subtract 0.19°

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
North HL-MF #14	0.00	217.80	-0.20	673066.40	609268.60	32° 50' 59.417 N	103° 58' 39.101 W	Rectangle (Sides: L0.00 W200.00)
West HL-MF #14	0.00	217.80	-0.20	673066.40	609268.60	32° 50' 59.417 N	103° 58' 39.101 W	Rectangle (Sides: L100.00 W0.00)
TG1-MF #14	4400.00	227.80	-10.20	673076.40	609258.60	32° 50' 59.517 N	103° 58' 39.218 W	Point
PBHL-MF #14	6150.00	227.80	-10.20	673076.40	609258.60	32° 50' 59.517 N	103° 58' 39.218 W	Circle (Radius: 10.00)

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	1450.00	0.00	0.00	1450.00	0.00	0.00	0.00	0.00	0.00	
3	1690.55	4.81	357.44	1690.26	10.08	-0.45	2.00	357.44	10.09	
4	4168.75	4.81	357.44	4159.74	217.72	-9.75	0.00	0.00	217.94	
5	4409.30	0.00	0.00	4400.00	227.80	-10.20	2.00	180.00	228.03	TG1-MF #14
6	6159.30	0.00	0.00	6150.00	227.80	-10.20	0.00	0.00	228.03	PBHL-MF #14

WELL DETAILS: Miranda Federal #14

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	672848.60	609268.80	32° 50' 57.262 N	103° 58' 39.108 W

PROJECT DETAILS: Eddy County, NM (NAN27 NME) Plan: Plan #1 - 7-7/8" Hole (Miranda Federal #14/OH)
Geodetic System: US State Plane 1927 (Exact solution) Created By: Julio Pina Date: 20-May-10
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866 Checked: Date:
Zone: New Mexico East 3001 Reviewed: Date:
System Datum: Mean Sea Level Approved: Date:



Offset Wells to Miranda Federal #14

API#	Operator	Lease	Well#	County	Legal	Field Name	Reservoir Name	Total Depth	Well Type	Well Status	First Prod.	Last Prod.
30-015-20537	CBS OPERATING CORP	LOCO HILLS B FEDERAL	001	EDDY	S.9, T:17S, R:30E	GRAYBURG JACKSON	SR-Q-G-SA	2,872	PO	Injection Well	Jan 1993	Feb 2010
30-015-20617	CBS OPERATING CORP	LOCO HILLS B FEDERAL	002	EDDY	S.9, T:17S, R:30E	GRAYBURG JACKSON	SR-Q-G-SA	2,878	O	Active	Jan 1979	Apr 2005
30-015-20617	CBS OPERATING CORP	LOCO HILLS B FEDERAL	002	EDDY	S.9, T:17S, R:30E	GRAYBURG JKSN SR-Q-G-SA(DO NOT USE)		2,878	O	Active	Jun 1972	Dec 1977
30-015-20672	CBS OPERATING CORP	LOCO HILLS B FEDERAL	005	EDDY	S.9, T:17S, R:30E	GRAYBURG JACKSON	SR-Q-G-SA	2,870	PI	Flowing	Jan 1979	Dec 1982
30-015-20672	CBS OPERATING CORP	LOCO HILLS B FEDERAL	005	EDDY	S.9, T:17S, R:30E	GRAYBURG JKSN SR-Q-G-SA(DO NOT USE)		2,870	PI	Flowing	Jul 1972	Dec 1977
30-015-20673	CBS OPERATING CORP	LOCO HILLS B FEDERAL	006	EDDY	S.9, T:17S, R:30E	GRAYBURG JACKSON	SR-Q-G-SA	2,880	O	Active	Jan 1979	Feb 2010
30-015-20673	CBS OPERATING CORP	LOCO HILLS B FEDERAL	006	EDDY	S.9, T:17S, R:30E	GRAYBURG JKSN SR-Q-G-SA(DO NOT USE)		2,880	O	Active	Jul 1972	Dec 1977
30-015-20674	CBS OPERATING CORP	LOCO HILLS B FEDERAL	007	EDDY	S.9, T:17S, R:30E	GRAYBURG JACKSON	SR-Q-G-SA		G	Flowing	Jan 1979	Dec 1982
30-015-20674	CBS OPERATING CORP	LOCO HILLS B FEDERAL	007	EDDY	S.9, T:17S, R:30E	GRAYBURG JKSN SR-Q-G-SA(DO NOT USE)			G	Flowing	Jul 1972	Dec 1977
30-015-20675	CBS OPERATING CORP	LOCO HILLS B FEDERAL	008	EDDY	S.9, T:17S, R:30E	GRAYBURG JKSN SR-Q-G-SA(DO NOT USE)			O	Shut-in	Jan 1973	Dec 1977
30-015-20675	CBS OPERATING CORP	LOCO HILLS B FEDERAL	008	EDDY	S.9, T:17S, R:30E	GRAYBURG JACKSON	SR-Q-G-SA		O	Shut-in	Jan 1979	Feb 2010
30-015-20851	SEELY OIL CO	ARCO FEDERAL	001	EDDY	S.9, T:17S, R:30E	SQUARE LAKE	GRAYBURG-SAN ANDRES	2,880	O	Active	Nov 1973	Feb 2010
30-015-20951	SEELY OIL CO	ARCO FEDERAL	002	EDDY	S.9, T:17S, R:30E	SQUARE LAKE	GRAYBURG-SAN ANDRES	0	O	Pumping	Jan 1975	Feb 2010
30-015-21221	SEELY OIL CO	ARCO FEDERAL	003	EDDY	S.9, T:17S, R:30E	SQUARE LAKE	GRAYBURG-SAN ANDRES	0	O	Pumping	Jan 1975	Feb 2010
30-015-21276	SEELY OIL CO	ARCO FEDERAL	004	EDDY	S.9, T:17S, R:30E	SQUARE LAKE	GRAYBURG-SAN ANDRES	0	O	Pumping	Jan 1975	Feb 2010
30-015-21436	SEELY OIL CO	ARCO FEDERAL	005	EDDY	S.9, T:17S, R:30E	SQUARE LAKE	GRAYBURG-SAN ANDRES	0	O	Pumping	Feb 1975	Feb 2010
30-015-21437	SEELY OIL CO	ARCO FEDERAL	006	EDDY	S.9, T:17S, R:30E	SQUARE LAKE	GRAYBURG-SAN ANDRES	0	O	Pumping	Feb 1975	Feb 2010
		PARKE G			S.9, T:17S,							

30-015-21493	SEELY OIL CO	FEDERAL	001	EDDY	R:30E	SQUARE LAKE	GRAYBURG-SAN ANDRES	0	O	Pumping	Apr 1975	Feb 2010
	CBS OPERATING CORP	LOCO HILLS B			S:9, T:17S, R:30E	GRAYBURG JACKSON						
30-015-25110		FEDERAL	009	EDDY			SR-Q-G-SA	3,040	PO	Shut-in	Jan 1993	Feb 2010
30-015-20735		HOLDER CB NCT B			S:9, T:17S, R:30E	GRAYBURG JACKSON	SR-Q-G-SA	3,600	O	Active		
		FEDERAL	003	EDDY								
30-015-04114		HOLDER CB NCT B			S:9, T:17S, R:30E	GRAYBURG JACKSON	SR-Q-G-SA		G	Active	Jan 1988	Dec 1993
		FEDERAL	001	EDDY								
	GRUY PETROLEUM MANAGEMENT CO.	STEWART 9			S:9, T:17S, R:30E							
30-015-34915		FEDERAL COM			S:9, T:17S, R:30E	LOCO HILLS	MORROW (GAS)	11,650	PG	Active Permit		
30-015-35823		FEDERAL COM	1	EDDY		LOCO HILLS	MORROW (GAS)	11,650	PG	Active Permit		
		STEWART 9			S:9, T:17S, R:30E							
30-015-34707		FEDERAL	5	EDDY		LOCO HILLS; GLORIETA-YESO		5,985	O	Active Permit	Nov 2006	Nov 2006
		POLARIS B			S:9, T:17S, R:30E							
30-015-35393		FEDERAL	8	EDDY		LOCO HILLS	PADDOCK	5,970	O	Active	Sep 2007	Feb 2010
		POLARIS B			S:9, T:17S, R:30E							
30-015-35394		FEDERAL	9	EDDY		LOCO HILLS	PADDOCK	6,007	O	Active Permit	Nov 2007	Feb 2010
		POLARIS B			S:9, T:17S, R:30E							
30-015-35395		FEDERAL	10	EDDY		LOCO HILLS	PADDOCK	6,000	O	Active	May 2008	Feb 2010
		POLARIS B			S:9, T:17S, R:30E							
30-015-35396		FEDERAL	11	EDDY		LOCO HILLS	PADDOCK	6,015	O	Active	Nov 2007	Feb 2010
		POLARIS B			S:9, T:17S, R:30E							
30-015-35397		FEDERAL	12	EDDY		LOCO HILLS; GLORETA-YESO (GAS)	GAS	5,920	O	Active	Nov 2007	Nov 2007
		POLARIS B			S:9, T:17S, R:30E							
30-015-34707		FEDERAL	5	EDDY		LOCO HILLS	PADDOCK	5,985	O	Active Permit	Nov 2006	Feb 2010
		POLARIS B			S:9, T:17S, R:30E							
30-015-35471		HOLDER CB			S:9, T:17S, R:30E							
		FEDERAL	11	EDDY		LOCO HILLS	PADDOCK	5,896	O	Active	Sep 2007	Feb 2010
		POLARIS B			S:9, T:17S, R:30E							
30-015-35649		FEDERAL	6	EDDY		LOCO HILLS	PADDOCK	5,970	O	Active	Nov 2007	Feb 2010
		POLARIS B			S:9, T:17S, R:30E							
30-015-35699		FEDERAL	7	EDDY		LOCO HILLS	PADDOCK	6,020	O	Active Permit	Feb 2008	Feb 2010
		POLARIS B			S:9, T:17S, R:30E							
30-015-35393		FEDERAL	8	EDDY		LOCO HILLS; GLORIETA YESO		5,970	O	Active		
		POLARIS B			S:9, T:17S, R:30E							
30-015-35927		FEDERAL	16	EDDY		LOCO HILLS	PADDOCK	5,935	O	Active Permit	Mar 2008	Feb 2010
		POLARIS B			S:9, T:17S, R:30E							
30-015-35931		FEDERAL	15	EDDY		LOCO HILLS	PADDOCK	5,920	O	Active Permit	Feb 2008	Feb 2010
		POLARIS B			S:9, T:17S, R:30E							
		POLARIS			S:9,							

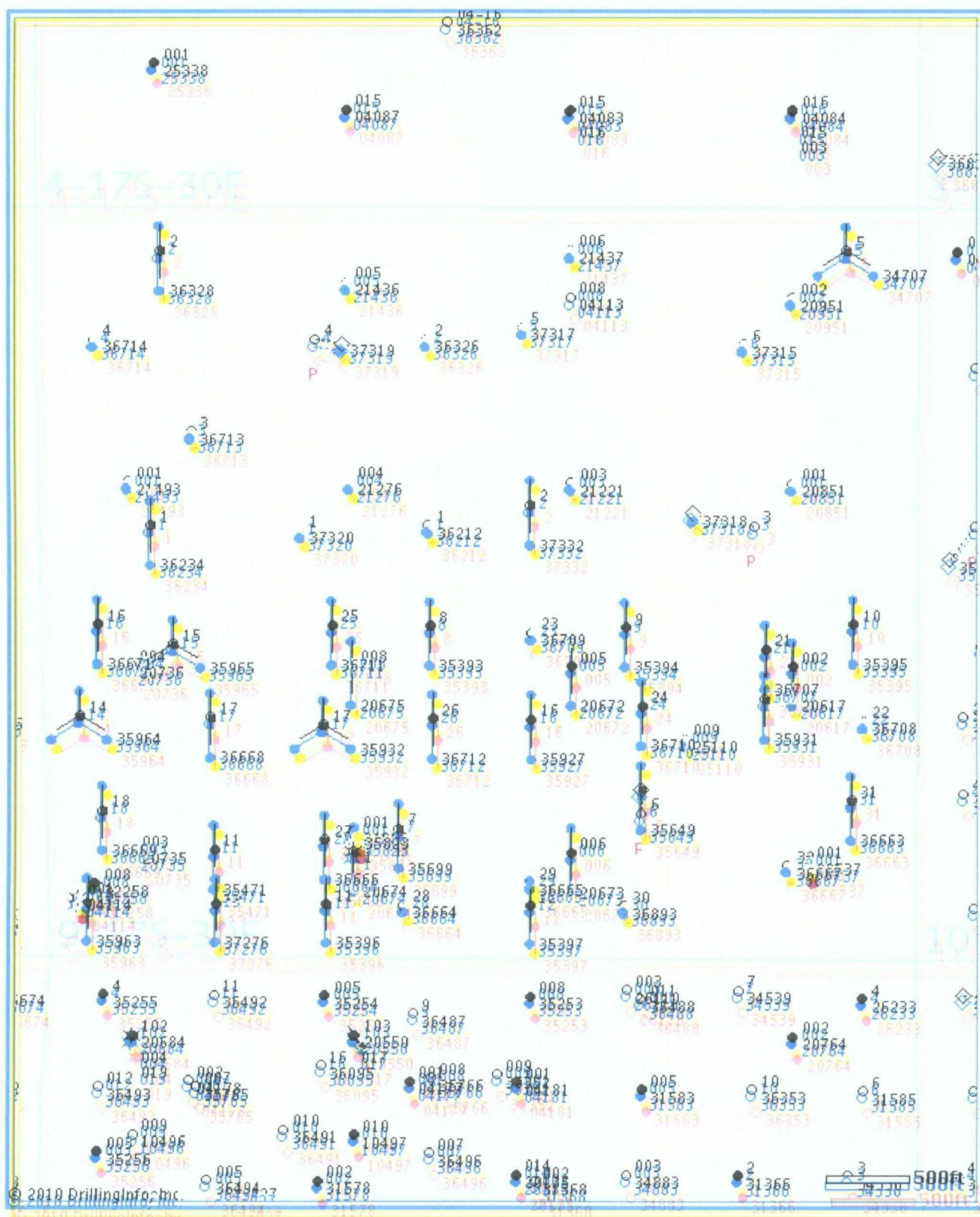
30-015-35932	OPERATING LLC	B FEDERAL	17	EDDY	T-17S, R-30E	LOCO HILLS	PADDOCK	5,920	O	Active Permit	Feb 2008	Feb 2010
30-015-35471	COG OPERATING LLC	HOLDER CB FEDERAL	11	EDDY	S-9, T-17S, R-30E	LOCO HILLS; EMPIRE; YESO		5,896	O	Active		
30-015-35649	COG OPERATING LLC	POLARIS B FEDERAL	6	EDDY	S-9, T-17S, R-30E	LOCO HILLS; GLORETA-YESO (GAS)	GAS	5,970	O	Active		
30-015-35963	COG OPERATING LLC	HOLDER CB FEDERAL	13	EDDY	S-9, T-17S, R-30E	LOCO HILLS	PADDOCK	5,917	O	Active Permit	Aug 2008	Feb 2010
30-015-35964	COG OPERATING LLC	HOLDER CB FEDERAL	14	EDDY	S-9, T-17S, R-30E	LOCO HILLS	PADDOCK	5,935	O	Active Permit	Oct 2008	Feb 2010
30-015-35965	COG OPERATING LLC	HOLDER CB FEDERAL	15	EDDY	S-9, T-17S, R-30E	LOCO HILLS	PADDOCK	5,920	O	Active Permit	Jun 2008	Feb 2010
30-015-35394	COG OPERATING LLC	POLARIS B FEDERAL	9	EDDY	S-9, T-17S, R-30E	LOCO HILLS; GLORETA-YESO (GAS)	GAS	6,007	O	Active Permit		
30-015-35396	COG OPERATING LLC	POLARIS B FEDERAL	11	EDDY	S-9, T-17S, R-30E	LOCO HILLS; GLORETA-YESO (GAS)	GAS	6,015	O	Active		
30-015-35397	COG OPERATING LLC	POLARIS B FEDERAL	12	EDDY	S-9, T-17S, R-30E	LOCO HILLS	PADDOCK	5,920	O	Active	Nov 2007	Feb 2010
30-015-35699	COG OPERATING LLC	POLARIS B FEDERAL	7	EDDY	S-9, T-17S, R-30E	LOCO HILLS; GLORIETA YESO		6,020	O	Active Permit		
30-015-35927	COG OPERATING LLC	POLARIS B FEDERAL	16	EDDY	S-9, T-17S, R-30E	LOCO HILLS; GLORIETA YESO		5,935	O	Active Permit		
30-015-35931	COG OPERATING LLC	POLARIS B FEDERAL	15	EDDY	S-9, T-17S, R-30E	LOCO HILLS; GLORIETA YESO		5,920	O	Active Permit		
30-015-35932	COG OPERATING LLC	POLARIS B FEDERAL	17	EDDY	S-9, T-17S, R-30E	LOCO HILLS	QU-GB-SA, SOUTH	5,920	O	Active Permit		
30-015-36212	CIMAREX ENERGY CO. OF COLORADO	DRACO 9 FEDERAL	1	EDDY	S-9, T-17S, R-30E	LOCO HILLS	PADDOCK	6,000	PO	Active Permit		
30-015-36234	CIMAREX ENERGY CO. OF COLORADO	VEGA "9" FEDERAL	1	EDDY	S-9, T-17S, R-30E	LOCO HILLS	PADDOCK	5,995	O	Active Permit	Jun 2008	Feb 2010
30-015-35395	COG OPERATING LLC	POLARIS B FEDERAL	10	EDDY	S-9, T-17S, R-30E	LOCO HILLS	QU-GB-SA, SOUTH	6,000	O	Active		
30-015-35965	COB OPERATING LLC	HOLDER CB FEDERAL	15	EDDY	S-9, T-17S, R-30E	LOCO HILLS; GLORIETA-YESO		5,920	O	Active Permit		
30-015-36328	CIMAREX ENERGY CO. OF COLORADO	VEGA "9" FEDERAL	2	EDDY	S-9, T-17S, R-30E	LOCO HILLS (PADDOCK)	PADDOCK	6,005	O	Active Permit	Jun 2008	Feb 2010
	CIMAREX ENERGY CO.				S-9,							

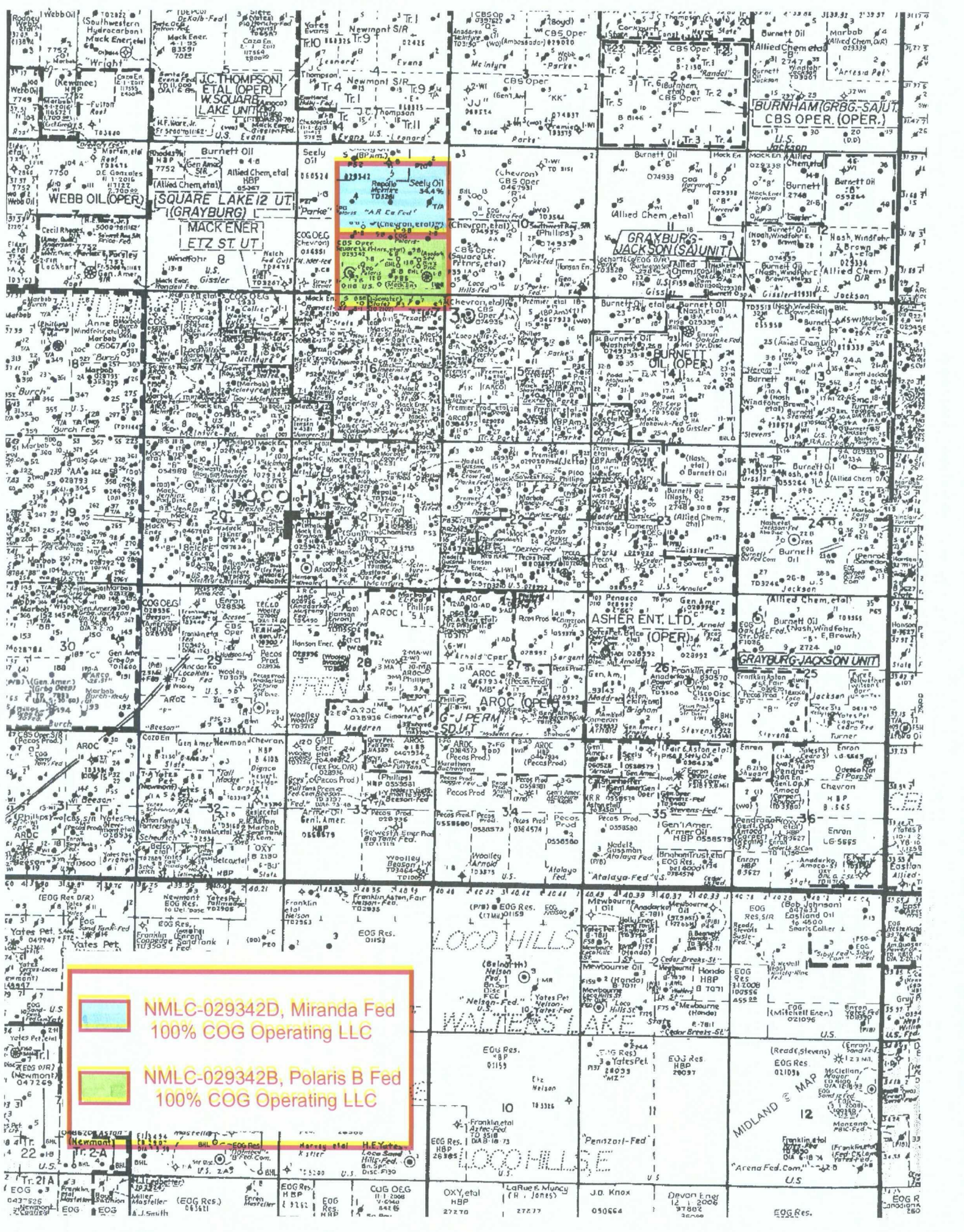
30-015-36326	OF COLORADO	DRACO 9 FEDERAL	2	EDDY	T-17S, R-30E	LOCO HILLS (PADDOCK)	PADDOCK	6,000	PO	Active Permit		
30-015-35965	COG OPERATING LLC	HOLDER CB FEDERAL	15	EDDY	S-9, T-17S, R-30E	LOCO HILLS	QU-GB-SA, SOUTH	5,920	O	Active Permit		
30-015-35963	COG OPERATING LLC	HOLDER CB FEDERAL	13	EDDY	S-9, T-17S, R-30E	LOCO HILLS, GLORIETA-YESO		5,917	O	Active Permit		
30-015-36234	CIMAREX ENERGY CO. OF COLORADO	VEGA 9 FEDERAL	1	EDDY	S-9, T-17S, R-30E	LOCO HILLS, GLORIETA-YESO		5,995	O	Active Permit		
30-015-36663	COG OPERATING LLC	POLARIS B FEDERAL	31	EDDY	S-9, T-17S, R-30E	LOCO HILLS (PADDOCK)	PADDOCK	6,006	O	Active Permit	Jul 2009	Feb 2010
30-015-36664	COG OPERATING LLC	POLARIS B FEDERAL	28	EDDY	S-9, T-17S, R-30E	LOCO HILLS (PADDOCK)	PADDOCK	6,000	PO	Active Permit		
30-015-36665	COG OPERATING LLC	POLARIS B FEDERAL	29	EDDY	S-9, T-17S, R-30E	LOCO HILLS (PADDOCK)	PADDOCK	6,000	PO	Active Permit		
30-015-36666	COG OPERATING LLC	POLARIS B FEDERAL	27	EDDY	S-9, T-17S, R-30E	LOCO HILLS (PADDOCK)	PADDOCK	6,023	O	Active Permit	Feb 2010	Feb 2010
30-015-36667	COG OPERATING LLC	POLARIS B FEDERAL	32	EDDY	S-9, T-17S, R-30E	LOCO HILLS (PADDOCK)	PADDOCK	6,000	PO	Active Permit		
30-015-36668	COG OPERATING LLC	HOLDER CB FEDERAL	17	EDDY	S-9, T-17S, R-30E	LOCO HILLS (PADDOCK)	PADDOCK	6,004	O	Active Permit	Aug 2009	Feb 2010
30-015-36669	COG OPERATING LLC	HOLDER CB FEDERAL	18	EDDY	S-9, T-17S, R-30E	LOCO HILLS (PADDOCK)	PADDOCK	6,049	O	Active Permit	Dec 2009	Feb 2010
30-015-36671	COG OPERATING LLC	HOLDER CB FEDERAL	16	EDDY	S-9, T-17S, R-30E	LOCO HILLS (PADDOCK)	PADDOCK	6,017	O	Active Permit	Jan 2010	Feb 2010
30-015-36707	COG OPERATING LLC	POLARIS B FEDERAL	21	EDDY	S-9, T-17S, R-30E	LOCO HILLS (PADDOCK)	PADDOCK	6,010	O	Active Permit	May 2009	Feb 2010
30-015-36708	COG OPERATING LLC	POLARIS B FEDERAL	22	EDDY	S-9, T-17S, R-30E	LOCO HILLS (PADDOCK)	PADDOCK	6,000	PO	Active Permit		
30-015-36709	COG OPERATING LLC	POLARIS B FEDERAL	23	EDDY	S-9, T-17S, R-30E	LOCO HILLS (PADDOCK)	PADDOCK	6,000	PO	Active Permit		
30-015-36710	COG OPERATING LLC	POLARIS B FEDERAL	24	EDDY	S-9, T-17S, R-30E	LOCO HILLS (PADDOCK)	PADDOCK	6,005	O	Active Permit	May 2009	Feb 2010
30-015-36711	COG OPERATING LLC	POLARIS B FEDERAL	25	EDDY	S-9, T-17S, R-30E	LOCO HILLS (PADDOCK)	PADDOCK	6,012	O	Active Permit	Oct 2009	Feb 2010
30-015-36712	COG OPERATING LLC	POLARIS B FEDERAL	26	EDDY	S-9, T-17S, R-30E	LOCO HILLS (PADDOCK)	PADDOCK	6,007	O	Active Permit	Jul 2009	Feb 2010
30-015-36713	CIMAREX ENERGY CO. OF COLORADO	VEGA 9 FEDERAL	3	EDDY	S-9, T-17S, R-30E	LOCO HILLS (PADDOCK)	PADDOCK	6,000	PO	Active Permit		

30-015-36714	CIMAREX ENERGY CO. OF COLORADO	VEGA 9 FEDERAL	4	EDDY	S:9, T:17S, R:30E	LOCO HILLS (PADDOCK)	PADDOCK	6,000	PO	Active Permit		
30-015-36328	CIMAREX ENERGY CO. OF COLORADO	VEGA 9 FEDERAL	2	EDDY	S:9, T:17S, R:30E	LOCO HILLS; GLORIETA-YESO		6,005	O	Active Permit		
30-015-35964	COG OPERATING LLC	HOLDER CB FEDERAL	14	EDDY	S:9, T:17S, R:30E	LOCO HILLS; GLORIETA-YESO		5,935	O	Active Permit		
30-015-35964	COG OPERATING LLC	HOLDER CB FEDERAL	14	EDDY	S:9, T:17S, R:30E	LOCO HILLS; GLORIETA-YESO		5,935	O	Active Permit		
30-015-36893	COG OPERATING LLC	POLARIS B FEDERAL	30	EDDY	S:9, T:17S, R:30E	LOCO HILLS (PADDOCK)	PADDOCK	6,000	PO	Active Permit		
30-015-35932	COG OPERATING LLC	POLARIS B FEDERAL	17	EDDY	S:9, T:17S, R:30E	LOCO HILLS; GLORIETA-YESO		5,920	O	Active Permit		
30-015-36710	COG OPERATING LLC	POLARIS B FEDERAL	24	EDDY	S:9, T:17S, R:30E	LOCO HILLS		6,005	O	Active Permit		
30-015-36707	COG OPERATING LLC	POLARIS B FEDERAL	21	EDDY	S:9, T:17S, R:30E	LOCO HILLS		6,010	O	Active Permit		
30-015-36712	COG OPERATING LLC	POLARIS B FEDERAL	26	EDDY	S:9, T:17S, R:30E	LOCO HILLS; GLORIETA-YESO		6,007	O	Active Permit		
30-015-36663	COG OPERATING LLC	POLARIS B FEDERAL	31	EDDY	S:9, T:17S, R:30E	LOCO HILLS; GLORIETA-YESO		6,006	O	Active Permit		
30-015-37276	COG OPERATING LLC	HOLDER CB FEDERAL	19	EDDY	S:9, T:17S, R:30E	LOCO HILLS (PADDOCK)	PADDOCK	5,860	O	Active Permit		
30-015-37319	COG OPERATING LLC	MIRANDA FEDERAL	4	EDDY	S:9, T:17S, R:30E	LOCO HILLS (PADDOCK)	PADDOCK	6,159	PO	Active Permit		
30-015-37315	COG OPERATING LLC	MIRANDA FEDERAL	6	EDDY	S:9, T:17S, R:30E	LOCO HILLS (PADDOCK)	PADDOCK	6,000	PO	Active Permit		
30-015-37318	COG OPERATING LLC	MIRANDA FEDERAL	3	EDDY	S:9, T:17S, R:30E	LOCO HILLS (PADDOCK)	PADDOCK	6,170	PO	Active Permit		
30-015-37317	COG OPERATING LLC	MIRANDA FEDERAL	5	EDDY	S:9, T:17S, R:30E	LOCO HILLS (PADDOCK)	PADDOCK	6,000	PO	Active Permit		
30-015-37332	COG OPERATING LLC	MIRANDA FEDERAL	2	EDDY	S:9, T:17S, R:30E	LOCO HILLS (PADDOCK)	PADDOCK	6,030	O	Active Permit		
30-015-36668	COG OPERATING LLC	HOLDER CB FEDERAL	17	EDDY	S:9, T:17S, R:30E	LOCO HILLS	QU-GB-SA, SOUTH	6,004	O	Active Permit		
30-015-36711	COG OPERATING LLC	POLARIS B FEDERAL	25	EDDY	S:9, T:17S, R:30E	LOCO HILLS; GLORIETA-YESO		6,012	O	Active Permit		
	COG OPERATING	POLARIS B			S:9, T:17S,							

30-015-34707	LLC	FEDERAL	5	EDDY	R:30E	LOCO HILLS; GLORIETA-YESO		5,985	O	Active Permit		
30-015-36669	COG OPERATING LLC	HOLDER CB FEDERAL	18	EDDY	S:9, T:17S, R:30E	LOCO HILLS		6,049	O	Active Permit		
30-015-36666	COG OPERATING LLC	POLARIS B FEDERAL	27	EDDY	S:9, T:17S, R:30E	LOCO HILLS	QU-GB-SA, SOUTH	6,023	O	Active Permit		
30-015-36671	COG OPERATING LLC	HOLDER CB FEDERAL	16	EDDY	S:9, T:17S, R:30E	LOCO HILLS	QU-GB-SA, SOUTH	6,017	O	Active Permit		
30-015-37276	COG OPERATING LLC	HOLDER CB FEDERAL	19	EDDY	S:9, T:17S, R:30E	LOCO HILLS; GLORIETA-YESO		5,860	O	Active Permit		
30-015-37320	COG OPERATING LLC	MIRANDA FEDERAL	1	EDDY	S:9, T:17S, R:30E	LOCO HILLS; GLORIETA-YESO		6,023	O	Active Permit		
30-015-37332	COG OPERATING LLC	MIRANDA FEDERAL	2	EDDY	S:9, T:17S, R:30E	LOCO HILLS GLORIETA -YESO		6,030	O	Active Permit		

Offset Wells to Miranda Federal #14





NMLC-029342D, Miranda Fed
100% COG Operating LLC

NMLC-029342B, Polaris B Fed
100% COG Operating LLC