

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

HOBBS OCD

OCD Hobbs

NOV 03 2011

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 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. NMLC029405B
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. GC FEDERAL 58
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 19 T17S R32E Mer NMP NESE 2310FSL 330FEL		9. API Well No. 30-025-40151
		10. Field and Pool, or Exploratory MALJAMAR; YESO WEST
		11. County or Parish, and State LEA 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	Change to Original APD
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

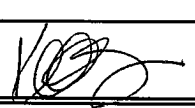
13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths 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 submitted APD for this well at this location:

2310 FSL & 330 FEL, UNIT I

COG Operating respectfully requests permission change this location to:

* SHL: 2370' FSL & 590' FEL, SEC 19, T17S, R32E, Unit I *
BHL: 2310' FSL & 330' FEL, SEC 19, T17S, R32E, Unit I
Reason for location change is Holly Pipeline built on original pad site.
V-Door: SOUTH
Top Soil: EAST

14. I hereby certify that the foregoing is true and correct. Electronic Submission #115556 verified by the BLM Well Information System For COG OPERATING LLC, sent to the Hobbs	
Name (Printed/Typed) KELLY J HOLLY	Title PERMITTING TECH
Signature (Electronic Submission) 	Date 08/19/2011

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By <u>/s/ Don Peterson</u>	Title <u>08/13/2011</u>
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 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 ****

NOV 08 2011

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
11885 S. ST. FRANCIS DR., SANTA FE, NM 87505

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 July 16, 2010
Submit to Appropriate
District Office

HOBBS OCD

NOV 03 2011

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025	Pool Code 44500	Pool Name Maljamar; Yeso-West
Property Code 302498	Property Name GC FEDERAL	Well Number 58
OGRID No. 229137	Operator Name COG OPERATING, LLC	Elevation 3947'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	19	17-S	32-E		2370	SOUTH	590	EAST	LEA

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
I	19	17-S	32-E		2310	SOUTH	330	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
40			

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

LOT 1		SECTION, QUARTER & SIXTEENTH CORNER COORDINATES A - Y=662454.3, X=663535.4 B - Y=661134.1, X=663540.7 C - Y=662459.3, X=664858.9 D - Y=661139.1, X=664866.3
40.98 AC. LOT 2	GEODETIC COORDINATES NAD 27 NME SURFACE LOCATION Y=662186.0 N X=664270.6 E LAT.=32.819295° N LONG.=103.798613° W	
40.98 AC. LOT 3	BOTTOM HOLE LOCATION Y=662127.0 N X=664530.8 E	
40.98 AC. LOT 4		
40.98 AC.		

DETAIL

3944.7' 3948.5' 3943.1' 3935.6'

600' 600'

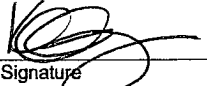
GRID. AZ -102°46'54"
HORZ. DIST.-266.9'

590' 330' B.H.

2370' 2310'

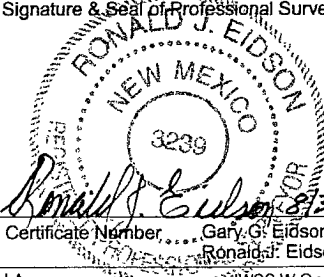
OPERATOR CERTIFICATION

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.

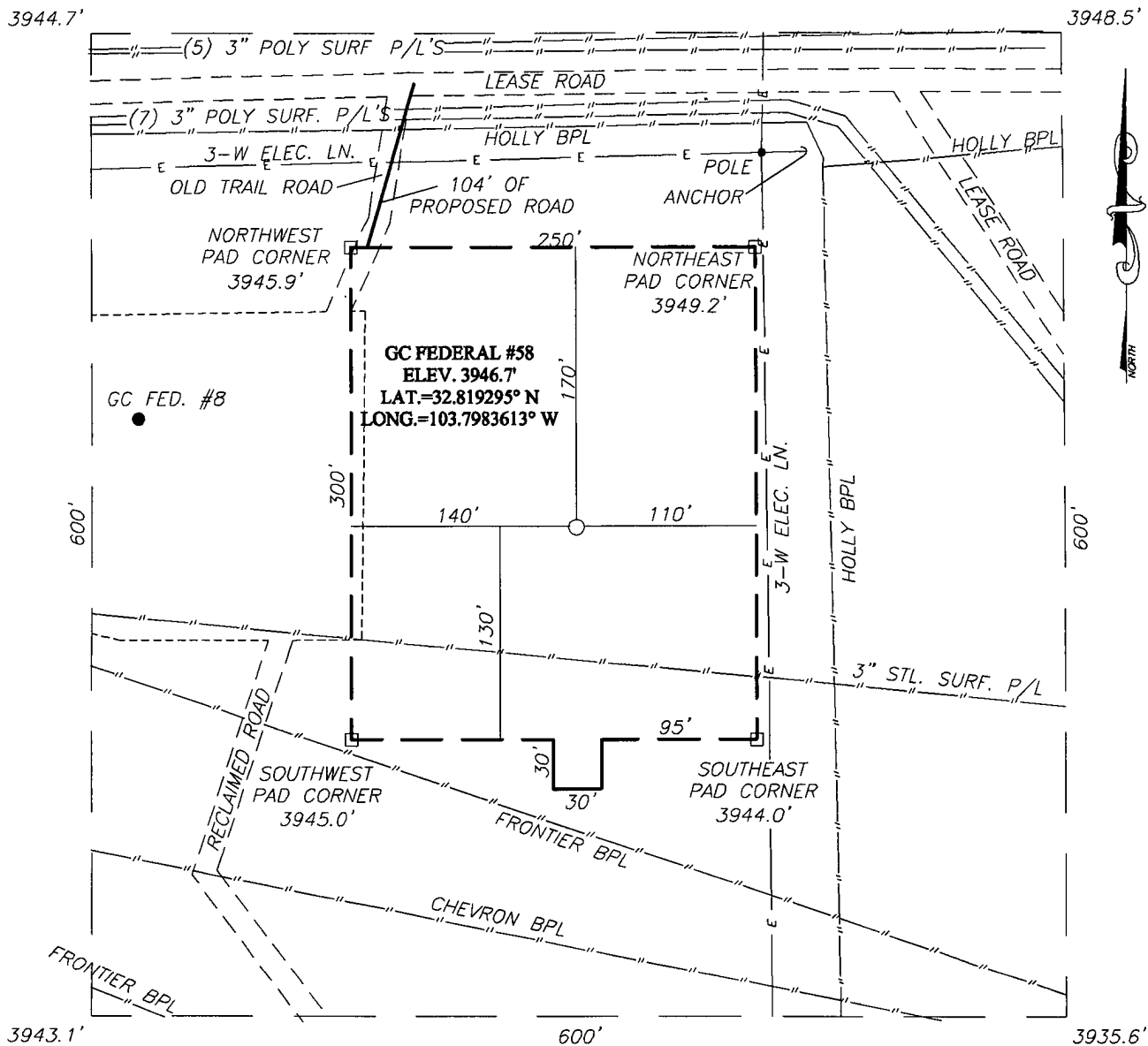
 9-9-11
Signature Date
Kelly J. Holly
Printed Name
kholly@concho.com
E-mail Address

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.

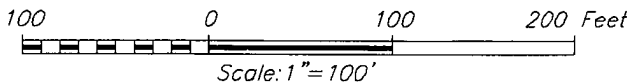
AUGUST 18, 2011
Date of Survey
Signature & Seal of Professional Surveyor:

Certificate Number Gary G. Eidson 12641
Ronald J. Eidson 3239
LA JWSC W.O.: 11.11 1817

SECTION 19, TOWNSHIP 17 SOUTH, RANGE 32 EAST, N.M.P.M.,
 LEA COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF U.S. HWY. #83 AND
 CO. RD #224 (RIPPLE RD) GO SOUTHEAST ON
 RIPPLE ROAD APPROX. 1.0 MILE VEER RIGHT AND
 GO SOUTH APPROX. 0.4 MILES. TURN LEFT AND
 GO EAST APPROX. 0.9 MILES. THIS LOCATION IS
 APPROX 280 FEET SOUTH.



COG OPERATING, LLC

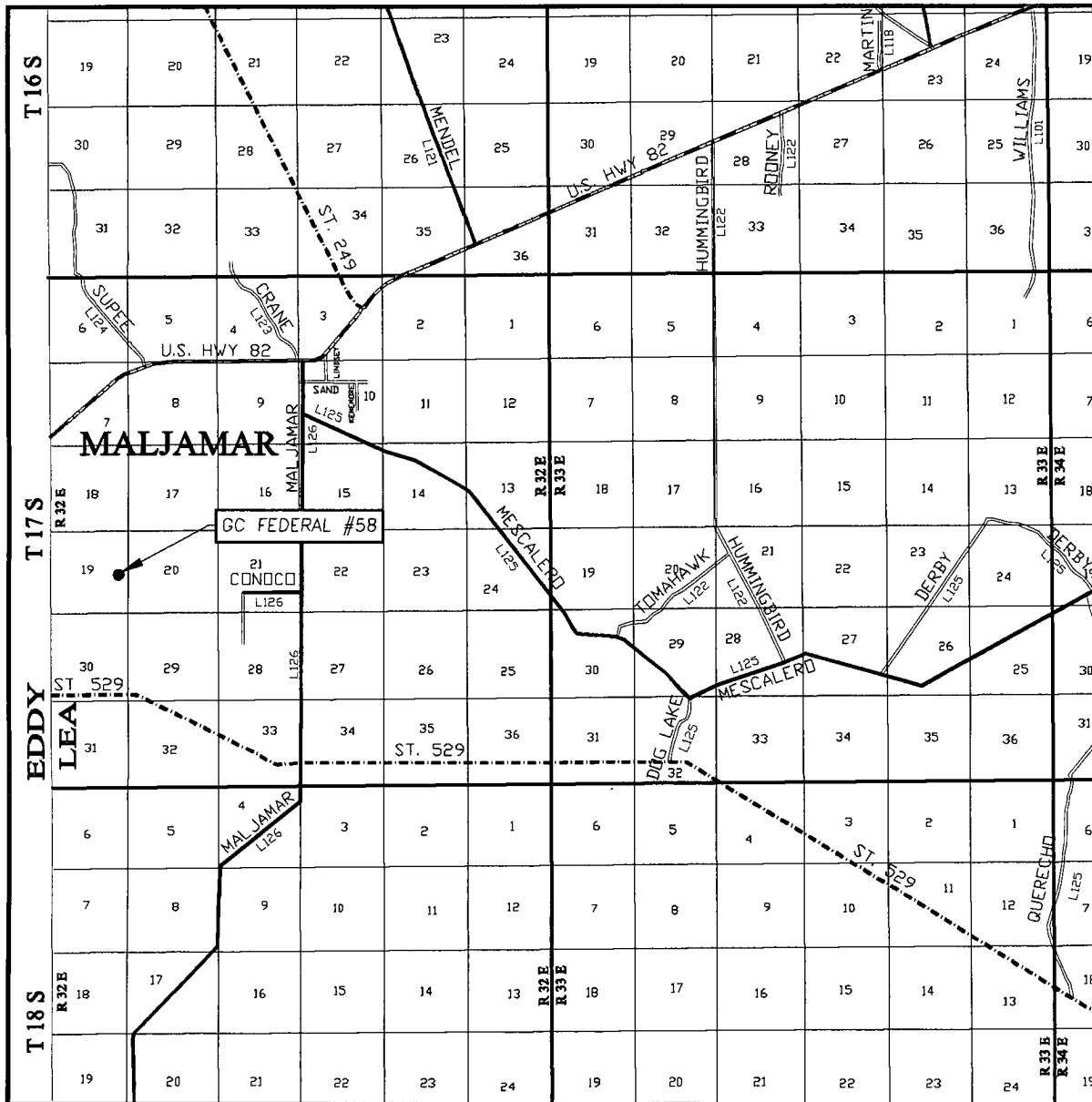
GC FEDERAL #58 WELL
 LOCATED 2370 FEET FROM THE SOUTH LINE
 AND 590 FEET FROM THE EAST LINE OF SECTION 19,
 TOWNSHIP 17 SOUTH, RANGE 32 EAST, N.M.P.M.,
 LEA COUNTY, NEW MEXICO.

Survey Date: 8/18/11	Sheet 1 of 1 Sheets
W.O. Number: 11.11.1817	Dr By: LA
Date: 8/29/11	11111817
	Scale: 1"=100'



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

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 19 TWP. 17-S RGE. 32-E

SURVEY N.M.P.M.

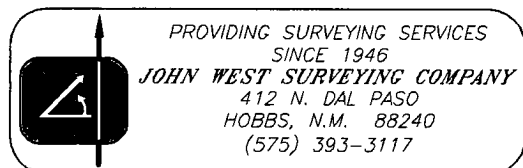
COUNTY LEA STATE NEW MEXICO

DESCRIPTION 2370' FSL & 590' FEL

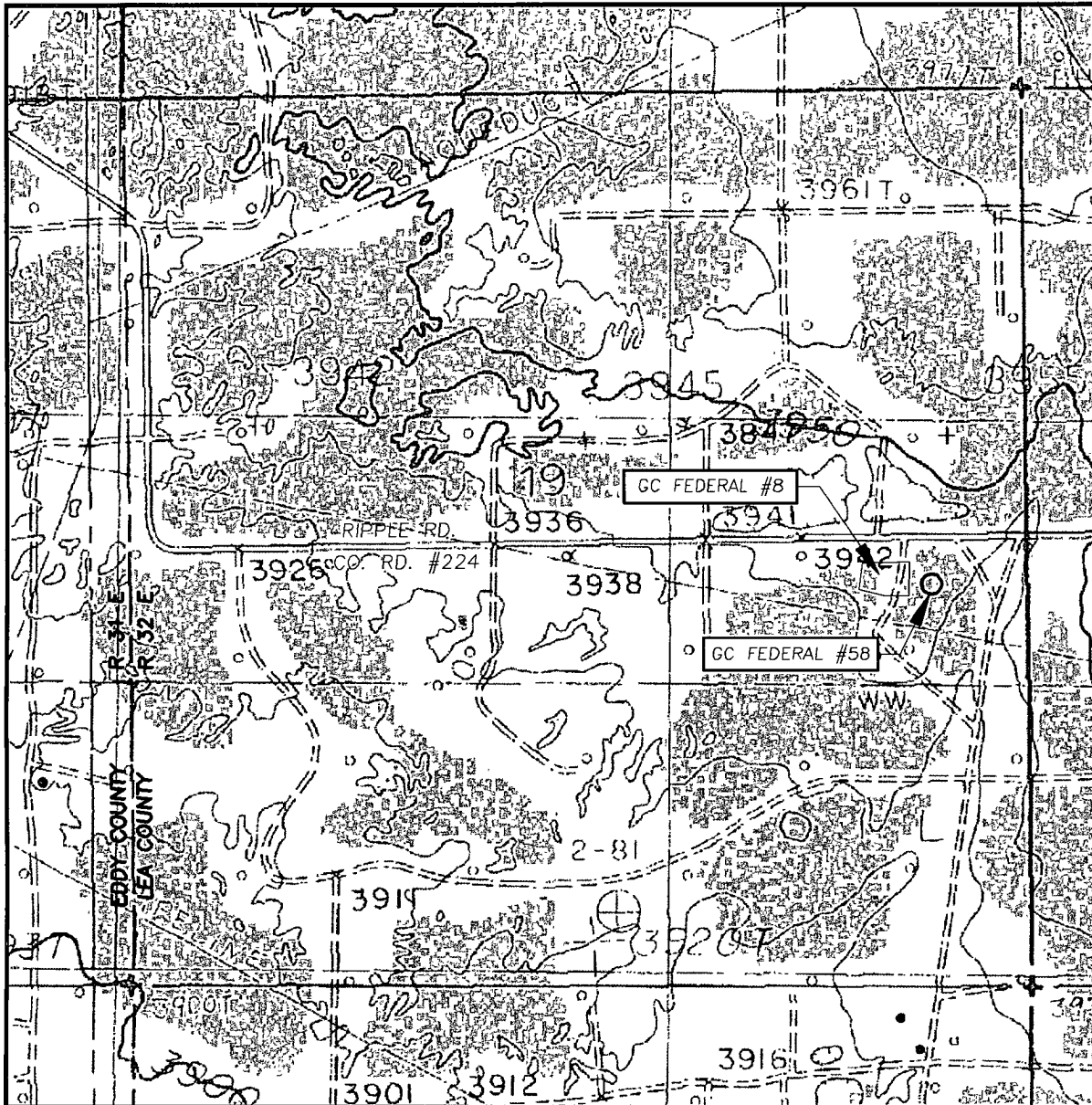
ELEVATION 3947'

OPERATOR COG OPERATING, LLC

LEASE GC FEDERAL



LOCATION VERIFICATION MAP



SCALE: 1" = 1000'

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

SEC. 19 TWP 17-S RGE. 32-E

SURVEY N.M.P.M.

COUNTY LEA STATE NEW MEXICO

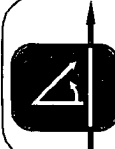
DESCRIPTION 2370' FSL & 590' FEL

ELEVATION 3947'

OPERATOR COG OPERATING, LLC

LEASE GC FEDERAL

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



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



COG Operating LLC

Lea County, NM (NAD27 NME)

GC Federal #58

GC Federal #58

HOBBS OCD

NOV 03 2011

OH

RECEIVED

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

SHL = 2370' FSL & 590' FEL

BHL = 2300' FSL & 340' FEL

Top of Paddock = 2300' FSL & 340' FEL @ 5270' TVD

Standard Planning Report

07 September, 2011



Scientific Drilling
Directional Drilling Operations



Scientific Drilling
Planning Report



Database:	EDM-Julio	Local Co-ordinate Reference:	Well GC Federal #58
Company:	COG Operating LLC	TVD Reference:	GL Elev @ 3947 00usft
Project:	Lea County, NM (NAD27 NME)	MD Reference:	GL Elev @ 3947 00usft
Site:	GC Federal #58	North Reference:	Grid
Well:	GC Federal #58	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1 - 7-7/8" Hole		

Project:	Lea County, NM (NAD27 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:	GC Federal #58		
Site Position:	Northings:	662,186.00 usft	Latitude: 32° 49' 9.461 N
From: Map	Easting:	664,270.60 usft	Longitude: 103° 47' 55.007 W
Position Uncertainty:	0 00 usft	Slot Radius: 13-3/16 "	Grid Convergence: 0 29 °

Well:	GC Federal #58		
Well Position	+N/-S	0 00 usft	Northings: 662,186.00 usft
	+E/-W	0 00 usft	Easting: 664,270.60 usft
Position Uncertainty	0 00 usft	Wellhead Elevation:	Ground Level: 3,947.00 usft

Wellbore:	OH		
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	2011/09/07	7.71	60.69	48,923

Design:	Plan #1 - 7-7/8" Hole		
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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	105.42

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	
2,200.00	0 00	0 00	2,200.00	0 00	0 00	0 00	0 00	0 00	0 00	
2,464.27	5.29	105.42	2,463.89	-3.24	11.74	2.00	2.00	0 00	105.42	
5,017.34	5.29	105.42	5,006.11	-65.76	238.46	0 00	0 00	0 00	0 00	
5,281.60	0 00	0 00	5,270.00	-69.00	250.20	2.00	-2.00	0 00	180.00	TG1-GC Fed #58
7,011.60	0 00	0 00	7,000.00	-69.00	250.20	0 00	0 00	0 00	0 00	PBHL-GC Fed #58



Scientific Drilling
Planning Report



Database:	EDM-Julio	Local Co-ordinate Reference:	Well GC Federal #58
Company:	COG Operating LLC	TVD Reference:	GL Elev @ 3947 00usft
Project:	Lea County, NM (NAD27 NME)	MD Reference:	GL Elev @ 3947 00usft
Site:	GC Federal #58	North Reference:	Grid
Well:	GC Federal #58	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1 - 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	
North HL-GC Fed #58 - East HL-GC Fed #58										
2,100 00	0 00	0 00	2,100 00	0 00	0 00	0.00	0.00	0 00	0 00	
8-5/8" Casing										
2,200 00	0 00	0 00	2,200 00	0.00	0.00	0 00	0 00	0 00	0 00	
KOP Start Build 2.00°/100'										
2,300 00	2 00	105.42	2,299 98	-0.46	1 68	1 75	2 00	2 00	0 00	
2,400 00	4 00	105.42	2,399 84	-1.86	6 73	6 98	2 00	2 00	0 00	
2,464 27	5 29	105 42	2,463 90	-3.24	11 74	12 18	2 00	2 00	0 00	
EOC hold 5.29°										
2,500 00	5 29	105 42	2,499.47	-4 11	14.92	15 47	0 00	0 00	0 00	
2,600 00	5 29	105 42	2,599 05	-6 56	23.80	24 68	0 00	0 00	0 00	
2,700 00	5 29	105 42	2,698 62	-9 01	32 68	33 90	0 00	0 00	0 00	
2,800 00	5 29	105 42	2,798 20	-11 46	41 56	43 11	0 00	0 00	0 00	
2,900 00	5 29	105 42	2,897 77	-13 91	50 44	52 32	0.00	0 00	0 00	
3,000 00	5 29	105 42	2,997 35	-16 36	59 32	61.53	0.00	0 00	0 00	
3,100 00	5 29	105 42	3,096 92	-18 81	68.20	70 74	0.00	0 00	0 00	
3,200 00	5 29	105.42	3,196 50	-21 26	77 08	79 95	0 00	0 00	0 00	
3,300 00	5 29	105.42	3,296 07	-23.70	85 96	89 16	0 00	0 00	0 00	
3,400 00	5 29	105 42	3,395 65	-26 15	94.84	98 38	0 00	0 00	0 00	
3,500 00	5 29	105 42	3,495.22	-28 60	103 72	107 59	0 00	0 00	0 00	
3,600 00	5 29	105 42	3,594 80	-31 05	112 60	116 80	0 00	0 00	0 00	
3,700 00	5 29	105 42	3,694 37	-33 50	121 48	126 01	0 00	0 00	0 00	
3,800 00	5 29	105 42	3,793 95	-35 95	130 36	135 22	0 00	0 00	0 00	
3,900 00	5 29	105 42	3,893 52	-38 40	139.24	144 43	0 00	0 00	0 00	
4,000 00	5 29	105 42	3,993 10	-40 85	148 12	153.65	0 00	0 00	0 00	
4,100 00	5 29	105 42	4,092 67	-43 30	157 00	162 86	0 00	0 00	0 00	
4,200 00	5 29	105.42	4,192 25	-45 75	165 88	172 07	0 00	0 00	0 00	
4,300 00	5 29	105 42	4,291.82	-48 19	174 76	181 28	0.00	0 00	0 00	
4,400 00	5 29	105 42	4,391 40	-50 64	183.64	190 49	0 00	0 00	0 00	
4,500 00	5 29	105 42	4,490 97	-53 09	192 52	199.70	0 00	0 00	0 00	
4,600 00	5 29	105 42	4,590 54	-55.54	201.40	208 92	0 00	0 00	0 00	
4,700 00	5 29	105 42	4,690 12	-57 99	210 28	218.13	0 00	0 00	0 00	
4,800 00	5 29	105 42	4,789 69	-60 44	219 16	227 34	0 00	0 00	0 00	
4,900 00	5 29	105 42	4,889 27	-62.89	228 04	236 55	0 00	0.00	0 00	
5,000 00	5 29	105 42	4,988 84	-65 34	236 92	245 76	0.00	0 00	0 00	
5,017 34	5 29	105 42	5,006 11	-65 76	238.46	247 36	0 00	0 00	0 00	
Start Drop 2.00°/100'										
5,100 00	3 63	105 42	5,088 52	-67 47	244 65	253 79	2 00	-2 00	0 00	
5,200 00	1 63	105 42	5,188 41	-68 69	249.08	258 38	2 00	-2 00	0 00	
5,281 60	0 00	0 00	5,270 00	-69.00	250 20	259 54	2 00	-2 00	0 00	
EOC hold 0.00° - Top of Paddock - TG1-GC Fed #58										
7,011.60	0 00	0 00	7,000 00	-69 00	250 20	259 54	0 00	0 00	0 00	
PBHL-GC Fed #58										



Scientific Drilling Planning Report



Database:	EDM-Julio	Local Co-ordinate Reference:	Well GC Federal #58
Company:	CQG Operating LLC	TVD Reference:	GL Elev @ 3947 00usft
Project:	Lea County, NM (NAD27 NME)	MD Reference:	GL Elev @ 3947 00usft
Site:	GC Federal #58	North Reference:	Grid
Well:	GC Federal #58	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1 - 7-7/8" Hole		

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
North HL-GC Fed #58	- plan misses target center by 266.81usft 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	-59 00	260 20	662,127 00	664,530 80	32° 49' 8 864 N 103° 47' 51 962 W
East HL-GC Fed #58	- plan misses target center by 266.81usft 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	-59 00	260 20	662,127 00	664,530.80	32° 49' 8 864 N 103° 47' 51 962 W
TG1-GC Fed #58	- plan hits target center - Point	0 00	0 00	5,270 00	-69 00	250.20	662,117 00	664,520 80	32° 49' 8 766 N 103° 47' 52 080 W
PBHL-GC Fed #58	- plan hits target center - Circle (radius 10 00)	0 00	0 00	7,000 00	-69.00	250 20	662,117 00	664,520 80	32° 49' 8 766 N 103° 47' 52 080 W

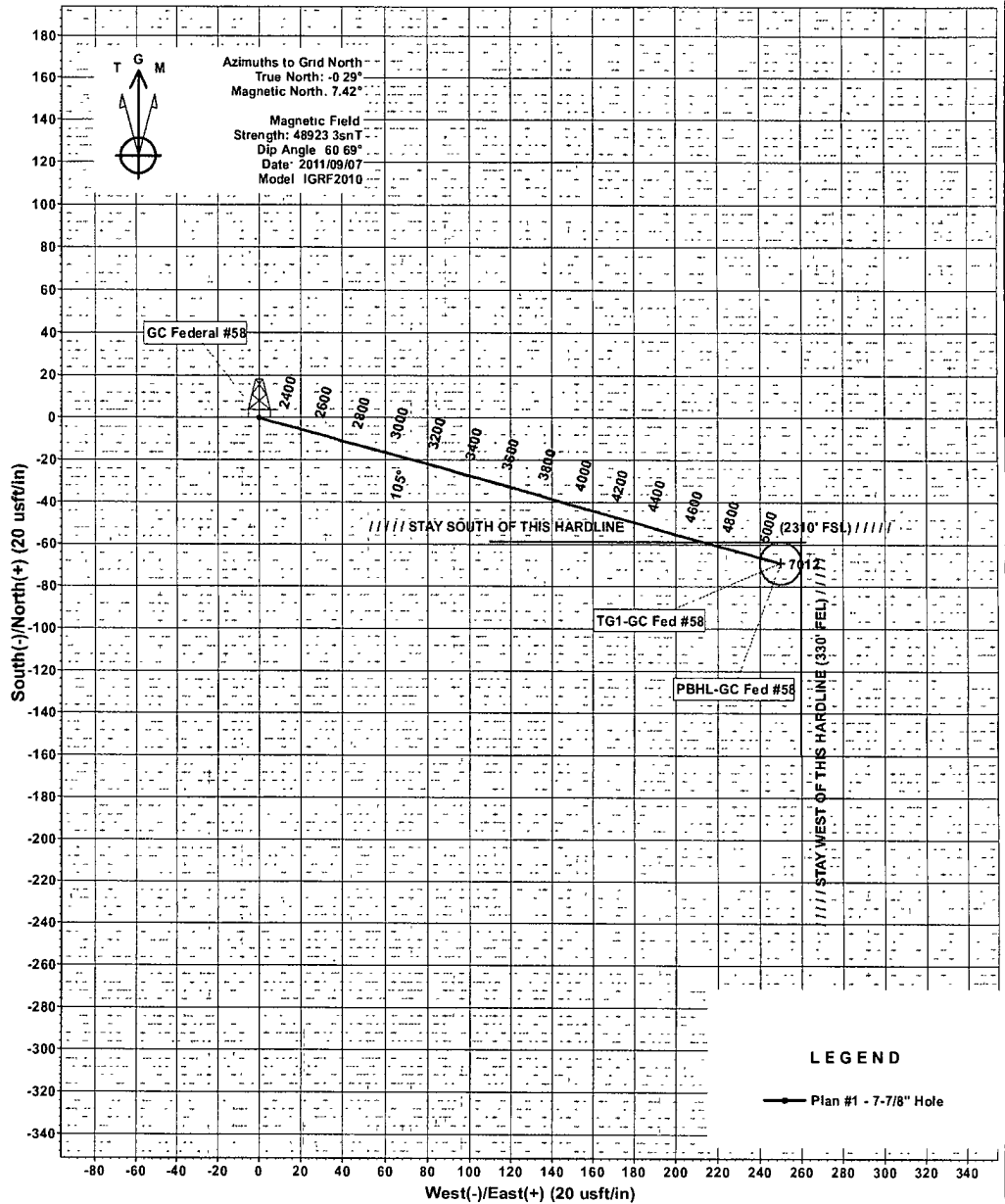
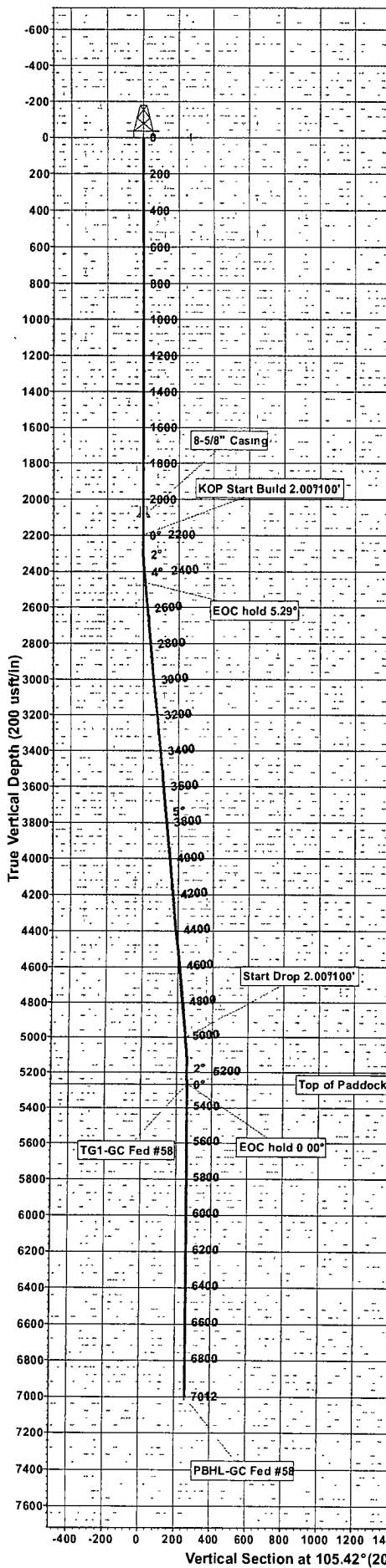
Casing Points				
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
2,100 00	2,100 00	8-5/8" Casing	8-5/8	12-1/4

Formations					
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
5,281 60	5,270 00	Top of Paddock		0 00	

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
2,200 00	2,200 00	0 00	0 00	KOP Start Build 2 00°/100'
2,464 27	2,463 90	-3 24	11 74	EOC hold 5 29°
5,017 34	5,006 11	-65 76	238 46	Start Drop 2 00°/100'
5,281 60	5,270 00	-69 00	250 20	EOC hold 0 00°



Scientific Drilling for COG Operating LLC
Site: Lea County, NM (NAD27 NME)
Well: GC Federal #58
Wellbore: OH
Design: Plan #1 - 7-7/8" Hole



WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
East HL-GC Fed #58	0.00	-59.00	260.20	662127.00	664530.80	32°49' 8.865 N	103°47' 51.962 W	Rectangle (Sides: L100.00 W0.00)
North HL-GC Fed #58	0.00	-59.00	260.20	662127.00	664530.80	32°49' 8.865 N	103°47' 51.962 W	Rectangle (Sides: L0.00 W150.00)
TG1-GC Fed #58	5270.00	-69.00	250.20	662117.00	664520.80	32°49' 8.766 N	103°47' 52.080 W	Point
PBHL-GC Fed #58	7000.00	-69.00	250.20	662117.00	664520.80	32°49' 8.766 N	103°47' 52.080 W	Circle (Radius: 10.00)

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	2200.00	0.00	0.00	2200.00	0.00	0.00	0.00	0.00	0.00	
3	2464.27	5.29	105.42	2463.89	-3.24	11.74	2.00	105.42	12.18	
4	5017.34	5.29	105.42	5006.11	-65.76	238.46	0.00	0.00	247.36	
5	5281.60	0.00	0.00	5270.00	-69.00	250.20	2.00	180.00	259.54	TG1-GC Fed #58
6	7011.60	0.00	0.00	7000.00	-69.00	250.20	0.00	0.00	259.54	PBHL-GC Fed #58

WELL DETAILS: GC Federal #58

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	662186.00	664270.60	32°49' 9.461 N	103°47' 5 5.007 W	

PROJECT DETAILS: Lea County, NM (NAD27 NME)

Plan: Plan #1 - 7-7/8" Hole (GC Federal #58/OH)

Geodetic System: US State Plane 1927 (Exact solution) Created By: Julio Pina

Date: 07-Sep-11

Datum: NAD 1927 (NADCON CONUS)

Ellipsoid: Clarke 1866

Checked: _____ Date: _____

Zone: New Mexico East 3001

System Datum: Mean Sea Level

Reviewed: _____ Date: _____

Approved: _____ Date: _____