

Submit 3 Copies To Appropriate District Office
District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Ave., 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 and Natural Resources

Form C-103
June 19, 2008

LM

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

WELL API NO. 30-015-37503
5. Indicate Type of Lease STATE ☒ FEE ☐
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name Firecracker State
8. Well Number 11
9. OGRID Number 229137
10. Pool name or Wildcat 96210 Empire; Glorieta-Yeso

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 ☐	RECEIVED MAR 03 2010 NMOCD ARTESIA
2. Name of Operator COG Operating LLC	
3. Address of Operator 550 West Texas Ave., Suite 100, Midland, TX 79701	
4. Well Location Unit Letter I : 1650' feet from the South line and 990' feet from the East line Section 14 Township 17S Range 28E NMPM County EDDY	
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3620' GR	

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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐	P AND A ☐
PULL OR ALTER CASING ☐	MULTIPLE COMPL ☐	CASING/CEMENT JOB ☐	
DOWNHOLE COMMINGLE ☐			
OTHER: ☐		OTHER: Move location ☒	

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 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

COG Operating LLC respectfully requests permission to move this location to:

SHL: 1780' FSL & 815' FEL, Section 14, T17S, R28E, UL I
BHL: 1650' FSL & 990' FEL, Section 14, T17S, R28E, UL I

An amended plat and directional plan are attached for your review.

This location move is requested due to the original location being too close to a playa.

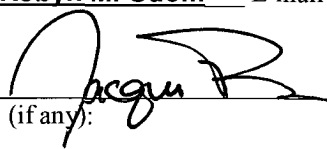
Spud Date:

Rig Release Date:

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

SIGNATURE  TITLE Regulatory Analyst DATE 03/02/2010

Type or print name Robyn M. Odom E-mail address: rodome@conchoresources.com PHONE: 432-685-4385
For State Use Only

APPROVED BY:  TITLE Geologist DATE 3/16/2010
Conditions of Approval (if any):

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 and Natural Resources Department

OIL CONSERVATION DIVISION
11885 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

Form C-102

Revised October 12, 2005
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-015-37503	Pool Code 96210	Pool Name EMPIRE: GLORIETA-YESO
Property Code 37882	Property Name FIRECRACKER STATE	Well Number 11
OGRID No. 229137	Operator Name COG OPERATING, LLC	Elevation 3626'

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	14	17-S	28-E		1780	SOUTH	815	EAST	EDDY

Bottom Hole Location If Different From Surface

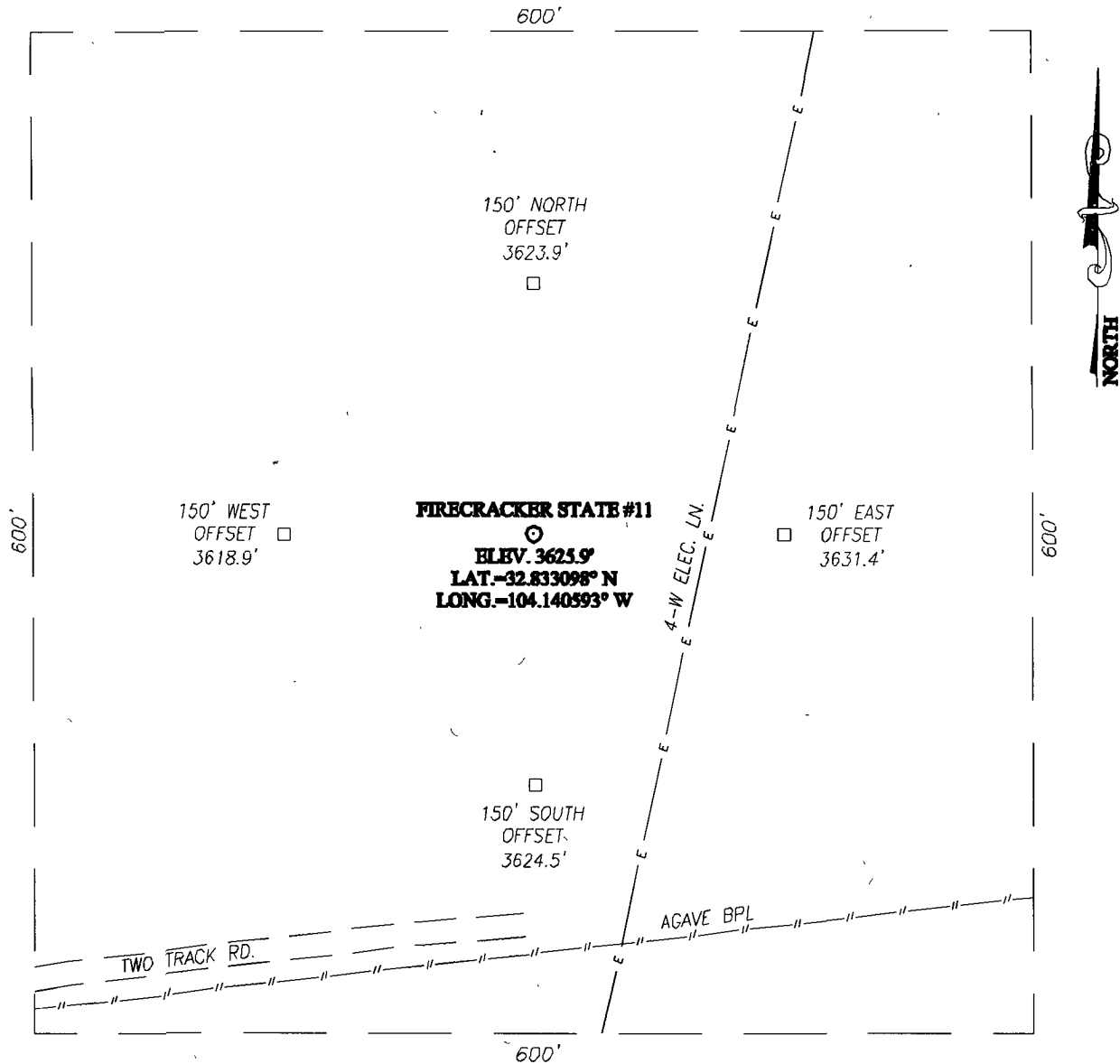
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/EAST line	County
I	14	17-S	28-E		1650	SOUTH	990	EAST	EDDY

Dedicated Acres 40	Joint or Infill	Consolidation Code	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

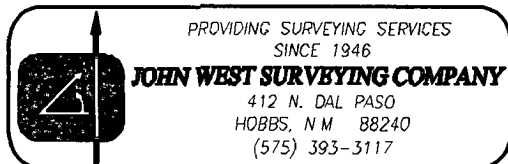
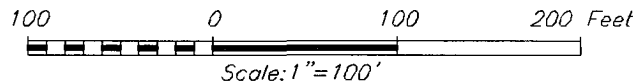
GEODETIC COORDINATES NAD 27 NME SURFACE LOCATION Y=666846.2 N X=559202.0 E LAT.=32.833098° N LONG.=104.140593° W BOTTOM HOLE LOCATION Y=666699.5 N X=559030.5 E GRID AZ.=229°28'34" HORZ. DIST.=225.8' B.H.O. S.L. 990' 815' 1650' 1780'	OPERATOR CERTIFICATION I hereby certify that the information herein 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. <i>Robyn Odum</i> 2/19/2010 Signature Date Robyn Odum Printed Name 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. GARY G. EIDSON FEBRUARY 10, 2010 Date Surveyed: Signature & Seal of Professional Surveyor 12641 DSS Certificate No. GARY G. EIDSON 12641 RONALD J. EIDSON 3239
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SECTION 14, TOWNSHIP 17 SOUTH, RANGE 28 EAST, N.M.P.M.,
 EDDY COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF ST. HWY. #82 AND CO. RD. #209 (TURKEY TRACK RD.), GO NORTH ON CO. RD. #209 APPROX. 2.2 MILES. TURN RIGHT AT TWO TRACK RD. AND GO EAST APPROX. 0.3 MILES. THIS LOCATION STAKE IS APPROX. 234 FEET NORTH OF TWO TRACK RD..

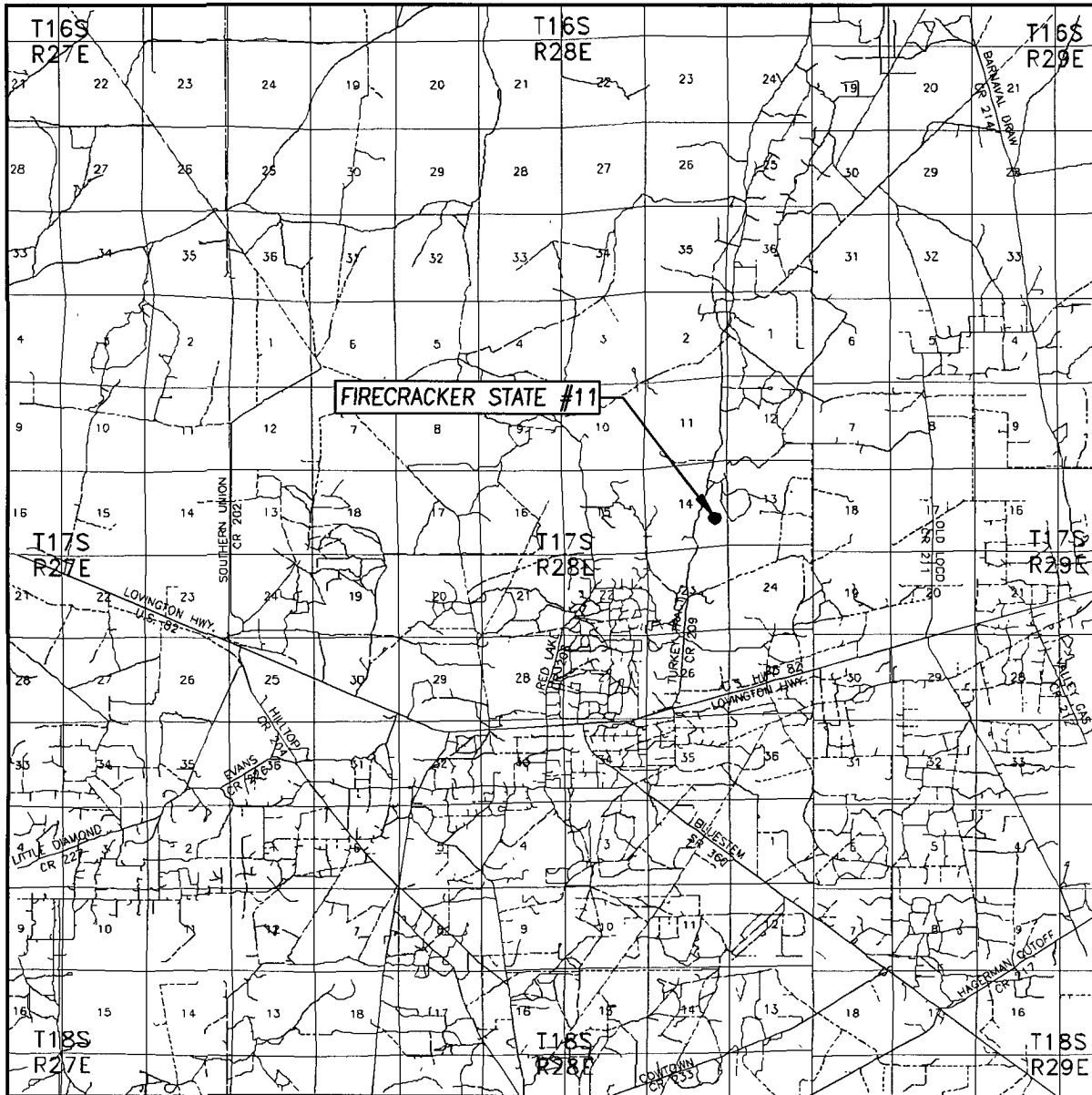


COG OPERATING, LLC

FIRECRACKER STATE #11 WELL
 LOCATED 1780 FEET FROM THE SOUTH LINE
 AND 815 FEET FROM THE EAST LINE OF SECTION 14,
 TOWNSHIP 17 SOUTH, RANGE 28 EAST, N.M.P.M.,
 EDDY COUNTY, NEW MEXICO.

Survey Date: 02/10/10	Sheet 1 of 1 Sheets
W.O. Number: 10.11.0181	Dr By. DSS
Date: 02/16/10	10110181
	Scale: 1"=100'

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 14 TWP. 17-S RGE. 28-E

SURVEY N.M.P.M.

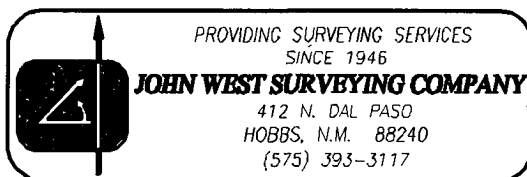
COUNTY EDDY STATE NEW MEXICO

DESCRIPTION 1780' FSL & 815' FEL

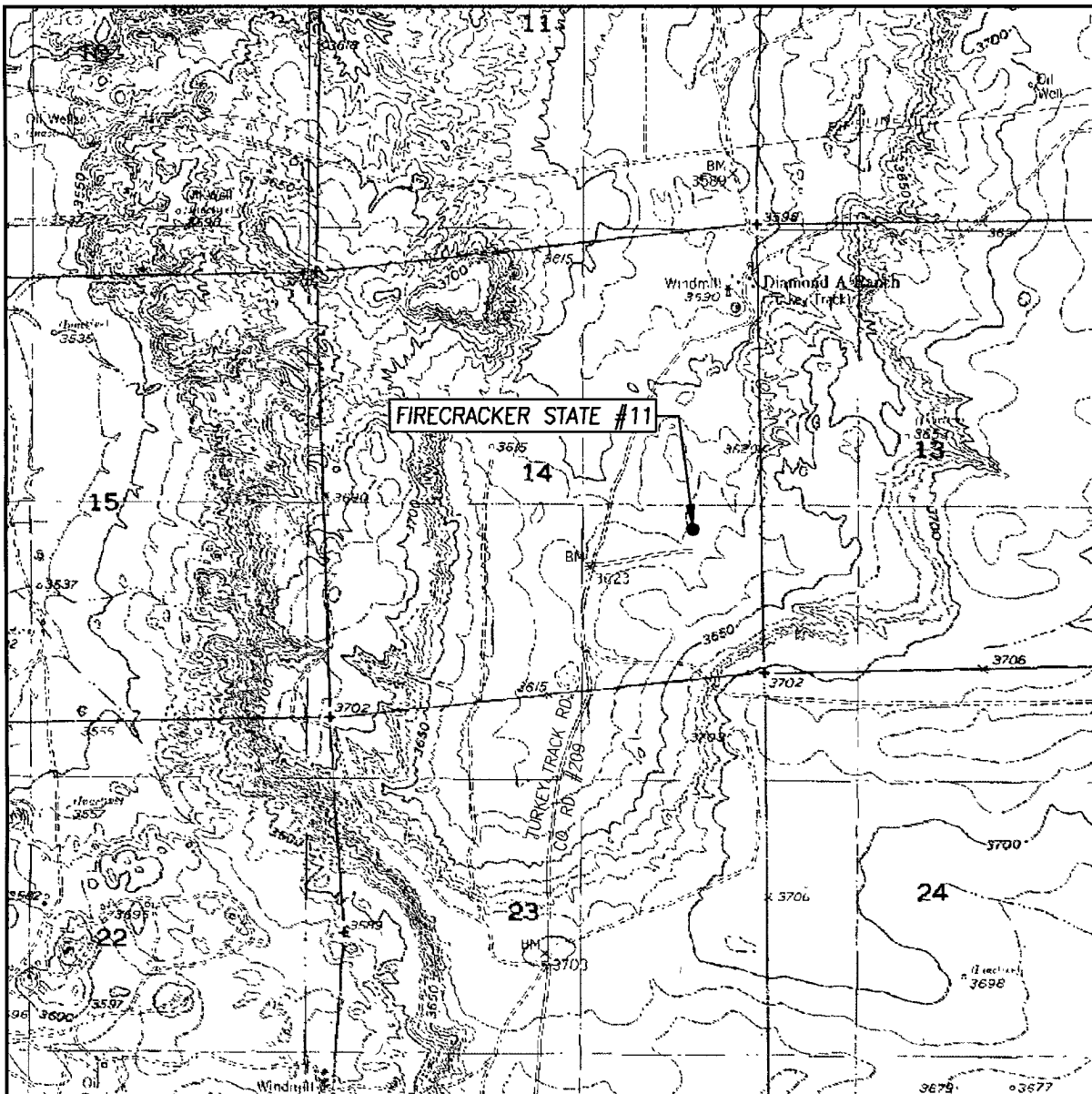
ELEVATION 3626'

OPERATOR COG OPERATING, LLC

LEASE FIRECRACKER STATE



LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
RED LAKE, N.M. - 10'

SEC. 14 TWP. 17-S RGE. 28-E

SURVEY N.M.P.M.

COUNTY EDDY STATE NEW MEXICO

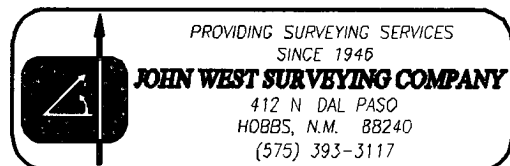
DESCRIPTION 1780' FSL & 815' FEL

ELEVATION 3626'

OPERATOR COG OPERATING, LLC

LEASE FIRECRACKER STATE

U.S.G.S. TOPOGRAPHIC MAP
RED LAKE, N.M.





COG Operating LLC

Eddy County, NM (NAN27 NME)

Firecracker State #11

Firecracker State #11

OH

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

SHL = 1780' FSL & 815' FEL

BHL = 1660' FSL & 980' FEL

Paddock Top = 1660' FSL & 980' FEL @ 3700' TVD

Standard Planning Report

01 March, 2010





Scientific Drilling
Planning Report



Database:	EDM 5000 1 Single User Db	Local Co-ordinate Reference:	Site Firecracker State #11
Company:	COG Operating LLC	TVD Reference:	GL Elev @ 3626 00ft
Project:	Eddy County, NM (NAN27 NME)	MD Reference:	GL Elev @ 3626 00ft
Site:	Firecracker State #11	North Reference:	Grid
Well:	Firecracker State #11	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	Firecracker State #11		
Site Position:		Northing:	666,846 20 ft
From:	Map	Easting:	559,202 00 ft
Position Uncertainty:	0 00 ft	Slot Radius:	0 "
		Latitude:	32° 49' 59 153 N
		Longitude:	104° 8' 26 135 W
		Grid Convergence:	0 10 °

Well	Firecracker State #11		
Well Position	+N/-S	0 00 ft	Northing:
	+E/-W	0 00 ft	Easting:
Position Uncertainty	0 00 ft	Wellhead Elevation:	Ground Level:
			3,626 00 ft

Wellbore	OH		
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	2010/03/01	8 04	60 70	49,078

Design	Plan #1 - 7-7/8" Hole		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth: 0 00
Vertical Section:	Depth From (TVD)	+N/-S (ft)	+E/-W (ft)
	(ft)	(ft)	(ft)
	0 00	0 00	0 00

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	
950 00	0 00	0 00	950 00	0 00	0 00	0 00	0 00	0 00	0 00	
1,191 04	4 82	229 75	1,190 75	-6 55	-7 74	2 00	2 00	0 00	229 75	
3,467 58	4 82	229 75	3,459 25	-130 15	-153 76	0 00	0 00	0 00	0 00	
3,708 62	0 00	0 00	3,700 00	-136 70	-161 50	2 00	-2 00	0 00	180 00	PP-FS #11
5,408 62	0 00	0 00	5,400 00	-136 70	-161 50	0 00	0 00	0 00	0 00	PBHL-FS #11



Scientific Drilling
Planning Report



Database:	EDM 5000 1 Single User Db	Local Co-ordinate Reference:	Site Firecracker State #11
Company:	COG Operating LLC	TVD Reference:	GL Elev @ 3626 00ft
Project:	Eddy County, NM (NAN27 NME)	MD Reference:	GL Elev @ 3626 00ft
Site:	Firecracker State #11	North Reference:	Grid
Well:	Firecracker State #11	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
East HL-FS #11 - South HL-FS #11									
850 00	0 00	0 00	850 00	0 00	0 00	0 00	0 00	0 00	0 00
8-5/8" Casing									
950 00	0 00	0 00	950 00	0 00	0 00	0 00	0 00	0 00	0 00
KOP Start Build 2.00°/100'									
1,000 00	1 00	229 75	1,000 00	-0 28	-0 33	0 44	2 00	2 00	0 00
1,100 00	3 00	229 75	1,099 93	-2 54	-3 00	3 93	2 00	2 00	0 00
1,191 04	4 82	229 75	1,190 75	-6 55	-7 74	10 13	2 00	2 00	0 00
EOC hold 4.82°									
1,200 00	4 82	229 75	1,199 68	-7 03	-8 31	10 89	0 00	0 00	0 00
1,300 00	4 82	229 75	1,299 33	-12 46	-14 72	19 29	0 00	0 00	0 00
1,400 00	4 82	229 75	1,398 98	-17 89	-21 14	27 70	0 00	0 00	0 00
1,500 00	4 82	229 75	1,498 62	-23 32	-27 55	36 10	0 00	0 00	0 00
1,600 00	4 82	229 75	1,598 27	-28 75	-33 97	44 50	0 00	0 00	0 00
1,700 00	4 82	229 75	1,697 92	-34 18	-40 38	52 91	0 00	0 00	0 00
1,800 00	4 82	229 75	1,797 56	-39 61	-46 80	61 31	0 00	0 00	0 00
1,900 00	4 82	229 75	1,897 21	-45 04	-53 21	69 71	0 00	0 00	0 00
2,000 00	4 82	229 75	1,996 85	-50 47	-59 63	78 12	0 00	0 00	0 00
2,100 00	4 82	229 75	2,096 50	-55 90	-66 04	86 52	0 00	0 00	0 00
2,200 00	4 82	229 75	2,196 15	-61 33	-72 46	94 93	0 00	0 00	0 00
2,300 00	4 82	229 75	2,295 79	-66 76	-78 87	103 33	0 00	0 00	0 00
2,400 00	4 82	229 75	2,395 44	-72 19	-85 28	111 73	0 00	0 00	0 00
2,500 00	4 82	229 75	2,495 09	-77 62	-91 70	120 14	0 00	0 00	0 00
2,600 00	4 82	229 75	2,594 73	-83 05	-98 11	128 54	0 00	0 00	0 00
2,700 00	4 82	229 75	2,694 38	-88 48	-104 53	136 95	0 00	0 00	0 00
2,800 00	4 82	229 75	2,794 02	-93 91	-110 94	145 35	0 00	0 00	0 00
2,900 00	4 82	229 75	2,893 67	-99 34	-117 36	153 75	0 00	0 00	0 00
3,000 00	4 82	229 75	2,993 32	-104 77	-123 77	162 16	0 00	0 00	0 00
3,100 00	4 82	229 75	3,092 96	-110 19	-130 19	170 56	0 00	0 00	0 00
3,200 00	4 82	229 75	3,192 61	-115 62	-136 60	178 97	0 00	0 00	0 00
3,300 00	4 82	229 75	3,292 26	-121 05	-143 02	187 37	0 00	0 00	0 00
3,400 00	4 82	229 75	3,391 90	-126 48	-149 43	195 77	0 00	0 00	0 00
3,467 58	4 82	229 75	3,459 25	-130 15	-153 76	201 45	0 00	0 00	0 00
Start Drop 2.00°/100'									
3,500 00	4 17	229 75	3,491 56	-131 79	-155 70	203 99	2 00	-2 00	0 00
3,600 00	2.17	229 75	3,591 40	-135 37	-159 93	209 53	2 00	-2 00	0 00
3,700 00	0 17	229 75	3,691 38	-136 69	-161 49	211 57	2 00	-2 00	0 00
3,708 62	0 00	0 00	3,700 00	-136 70	-161 50	211 59	2 00	-2 00	0 00
EOC hold 0.00° - PP-FS #11									
5,408 62	0 00	0 00	5,400 00	-136 70	-161 50	211 59	0 00	0 00	0 00
PBHL-FS #11									



Scientific Drilling
Planning Report



Database:	EDM 5000 1 Single User Db	Local Co-ordinate Reference:	Site Firecracker State #11
Company:	COG Operating LLC	TVD Reference:	GL Elev @ 3626 00ft
Project:	Eddy County, NM (NAN27 NME)	MD Reference:	GL Elev @ 3626 00ft
Site:	Firecracker State #11	North Reference:	Grid
Well:	Firecracker State #11	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1 - 7-7/8" Hole		

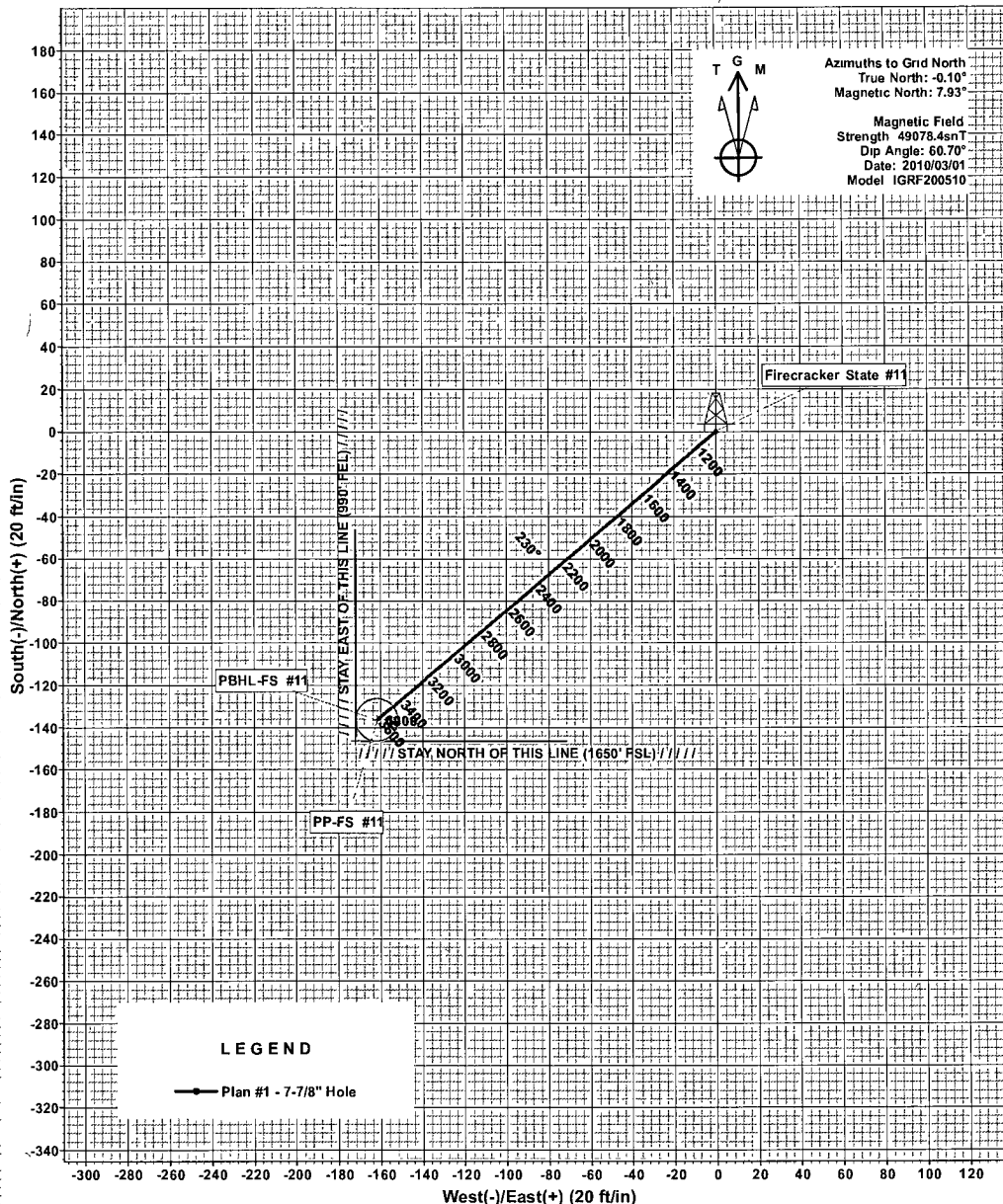
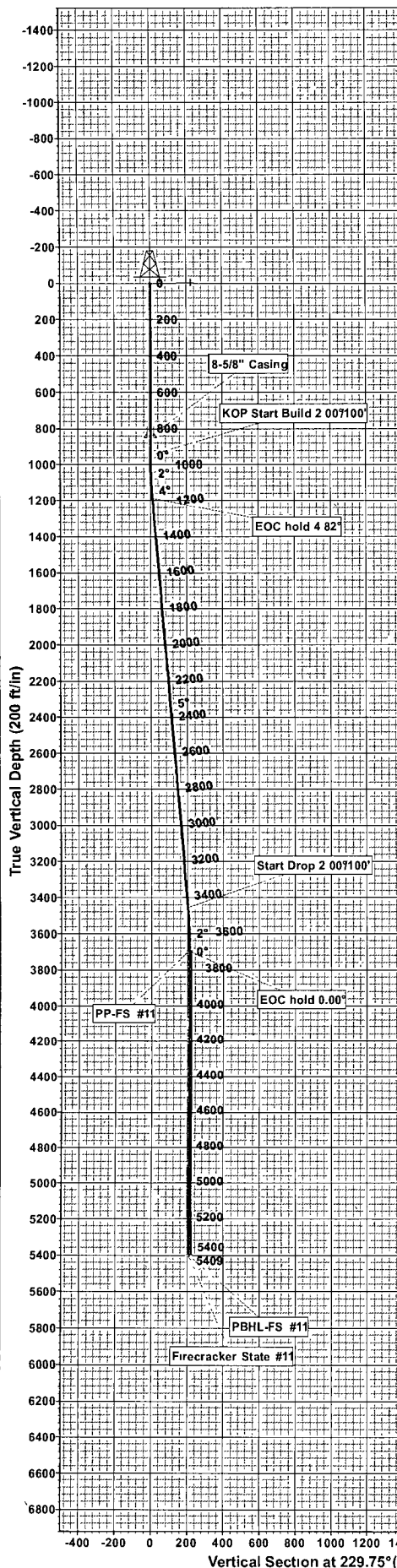
Design Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
- Shape									
East HL-FS #11	0 00	0 00	0 00	-146 70	-171 50	666,699 50	559,030 50	32° 49' 57 704 N	104° 8' 28 148 W
- plan misses target center by 225 68ft at 0 00ft MD (0 00 TVD, 0 00 N, 0 00 E)									
- Rectangle (sides W0 00 H100 00 D0 00)									
South HL-FS #11	0 00	0 00	0 00	-146 70	-171 50	666,699.50	559,030 50	32° 49' 57 704 N	104° 8' 28 148 W
- plan misses target center by 225 68ft at 0 00ft MD (0 00 TVD, 0 00 N, 0 00 E)									
- Rectangle (sides W100 00 H0 00 D0 00)									
PP-FS #11	0 00	0 00	3,700 00	-136 70	-161 50	666,709 50	559,040 50	32° 49' 57 803 N	104° 8' 28 031 W
- plan hits target center									
- Point									
PBHL-FS #11	0 00	0 00	5,400 00	-136 70	-161 50	666,709 50	559,040 50	32° 49' 57 803 N	104° 8' 28 031 W
- plan hits target center									
- Circle (radius 10 00)									

Casing Points					
Measured Depth	Vertical Depth	Name		Casing Diameter	Hole Diameter
(ft)	(ft)			(")	(")
850 00	850 00	8-5/8" Casing		8-5/8	12-1/4

Plan/Annotations					
Measured Depth	Vertical Depth	Local Coordinates			
(ft)	(ft)	+N/-S	+E/-W	Comment	
(ft)	(ft)	(ft)	(ft)		
950 00	950 00	0 00	0 00	KOP Start Build 2 00°/100'	
1,191 04	1,190 75	-6 55	-7 74	EOC hold 4 82°	
3,467 58	3,459 25	-130 15	-153 76	Start Drop 2 00°/100'	
3,708 62	3,700 00	-136 70	-161 50	EOC hold 0 00°	



Scientific Drilling for COG Operating LLC
Site: Eddy County, NM (NAN27 NME)
Well: Firecracker State #11
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-FS #11	0.00	-146.70	-171.50	666699.50	559030.50	32°49' 57.704 N	104°8' 28.148 W	Rectangle (Sides: L1 00.00 W0.00)	
South HL-FS #11	0.00	-146.70	-171.50	666699.50	559030.50	32°49' 57.704 N	104°8' 28.148 W	Rectangle (Sides: L 0 00 W100.00)	
PP-FS #11	3700.00	-136.70	-161.50	666709.50	559040.50	32°49' 57.803 N	104°8' 28.031 W	Point	
PBHL-FS #11	5400.00	-136.70	-161.50	666709.50	559040.50	32°49' 57.803 N	104°8' 28.031 W	Circle (Radius: 10 0 0)	

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	950.00	0.00	0.00	950.00	0.00	0.00	0.00	0.00	0.00		
3	1191.04	4.82	229.75	1190.75	-6.55	-7.74	2.00	229.75	10.13		
4	3467.58	4.82	229.75	3458.25	-130.15	-153.76	0.00	0.00	201.45		
5	3708.62	0.00	0.00	3700.00	-136.70	-161.50	2.00	180.00	211.59	PP-FS #11	
6	5408.62	0.00	0.00	5400.00	-136.70	-161.50	0.00	0.00	211.59	PBHL-FS #11	

WELL DETAILS: Firecracker State #11

		Ground Level		3626.00	
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	666846.20	559202.00	32°49' 59.153 N	104°8' 2.6135 W

PROJECT DETAILS: Eddy County, NM (NAN27 NME) Plan: Plan #1 - 7-7/8" Hole (Firecracker State #11/OH)

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
Created By: Julio Pina
Checked: _____
Reviewed: _____
Approved: _____
Date: 01-Mar-10
Date: _____
Date: _____
Date: _____