

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD-ARTESIA

FORM APPROVED
OMB No. 1004-0177
Expires: March 31, 2010

RECEIVED

APR 12 2010

NMOCD ARTESIA

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. NMLC-029342B
2. Name of Operator COG Operating LLC		6. If Indian, Allottee or Tribe Name N/A
3a. Address 550 W. Texas Ave., Suite 100 Midland, TX 79701	3b. Phone No. (include area code) 432-685-4385	7. If Unit or CA/Agreement, Name and/or No. N/A
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) SHL: 630 FSL & 780 FEL SEC. 9, T17S, R30E, UNIT P BHL: 330 FSL & 990 FEL SEC. 9, T17S, R30E, UNIT P		8. Well Name and No. POLARIS B FEDERAL #32
		9. API Well No. 30-015- 36667
		10. Field and Pool, or Exploratory Area LOCO HILLS; Glorieta Yeso 96718
		11. County or Parish, State EDDY, 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 Move location
	☐ 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 permitted this well at this location:

SHL: 630 FSL & 780 FEL SEC. 9, T17S, R30E, UNIT P
BHL: 330 FSL & 990 FEL SEC. 9, T17S, R30E, UNIT P

COG respectfully requests permission to move this location to:

SHL: 630 FSL & 780 FEL SEC. 9, T17S, R30E, UNIT P
BHL: 990 FSL & 990 FEL SEC. 9, T17S, R30E, UNIT P

This move is requested in order to prevent a possible wellbore collision with another well.
An original C-102 is attached for your review.

14. I hereby certify that the foregoing is true and correct Name (Printed/Typed) Robyn M. Odom		Title Regulatory Analyst
Signature		Date 03/26/2010
THIS SPACE FOR FEDERAL OR STATE OFFICE USE		
Approved by		Title
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
		Date
		APR 7 2010
		Is/ Dustin Winkler
		BUREAU OF LAND MANAGEMENT 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 any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

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 and Natural Resources Department

OIL CONSERVATION DIVISION

1220 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 30-015-36667	Pool Code 96718	Pool Name LOCO HILLS; GLORIETA-YESO
Property Code 302547	Property Name POLARIS B FEDERAL	Well Number 32
OGRID No. 229137	Operator Name COG OPERATING, LLC	Elevation 3692'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	9	17-S	30-E		630	SOUTH	780	EAST	EDDY

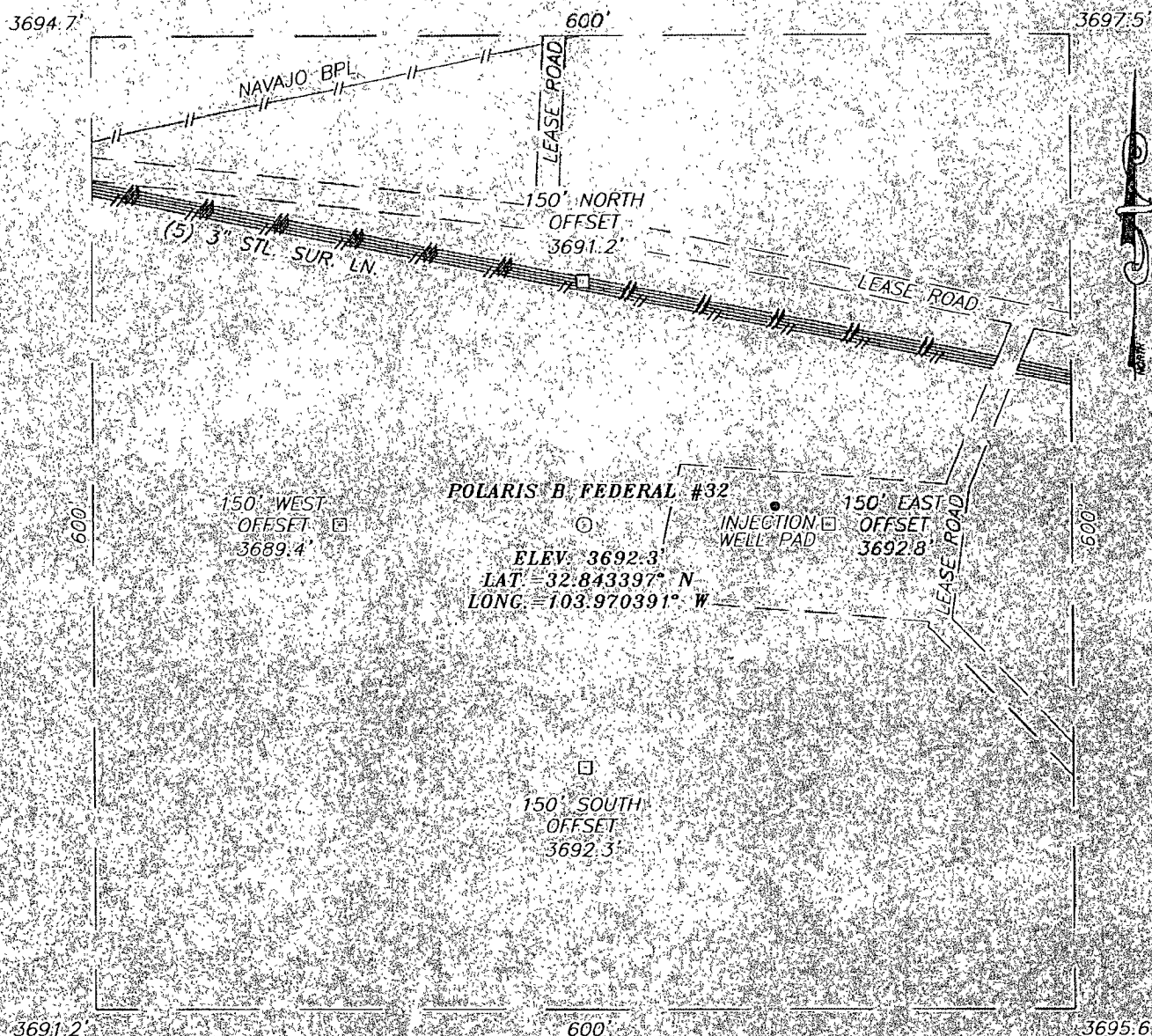
Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	9	17-S	30-E		990	SOUTH	990	EAST	EDDY
Dedicated Acres 40	Joint or Infill	Consolidation Code	Order No.						

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

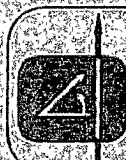
GEODETIC COORDINATES NAD 27 NME SURFACE LOCATION Y=670730.5 N X=611468.4 E LAT.=32.843397° N LONG.=103.970391° W BOTTOM HOLE LOCATION Y=671089.9 N X=611257.2 E GRID. AZ. -329°33'39" HORZ. DIST. -417.1'		SEE DETAIL SEE DETAIL	OPERATOR CERTIFICATION I hereby certify that the information herein is true 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 Odom</i> 3/24/2010 Signature Date Robyn Odom 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. CALED J. EIDSON AUGUST 12, 2008 Date Surveyed LA Signature & Seal of Professional Surveyor <i>Ronald J. Eidson</i> 03/23/2010 10130381 Certificate No. GARY EIDSON 12641 RONALD J. EIDSON 3239	

SECTION 9, TOWNSHIP 17 SOUTH, RANGE 30 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF U.S. HWY. #82 AND CO. RD. #219 (GOAT ROPERS RD.), GO NORTH ON CO. RD. #219 APPROX. 1.9 MILES. TURN RIGHT AND GO EAST APPROX. 0.4 MILES. THIS LOCATION IS SOUTH OF LEASE ROAD APPROX. 200 FEET.



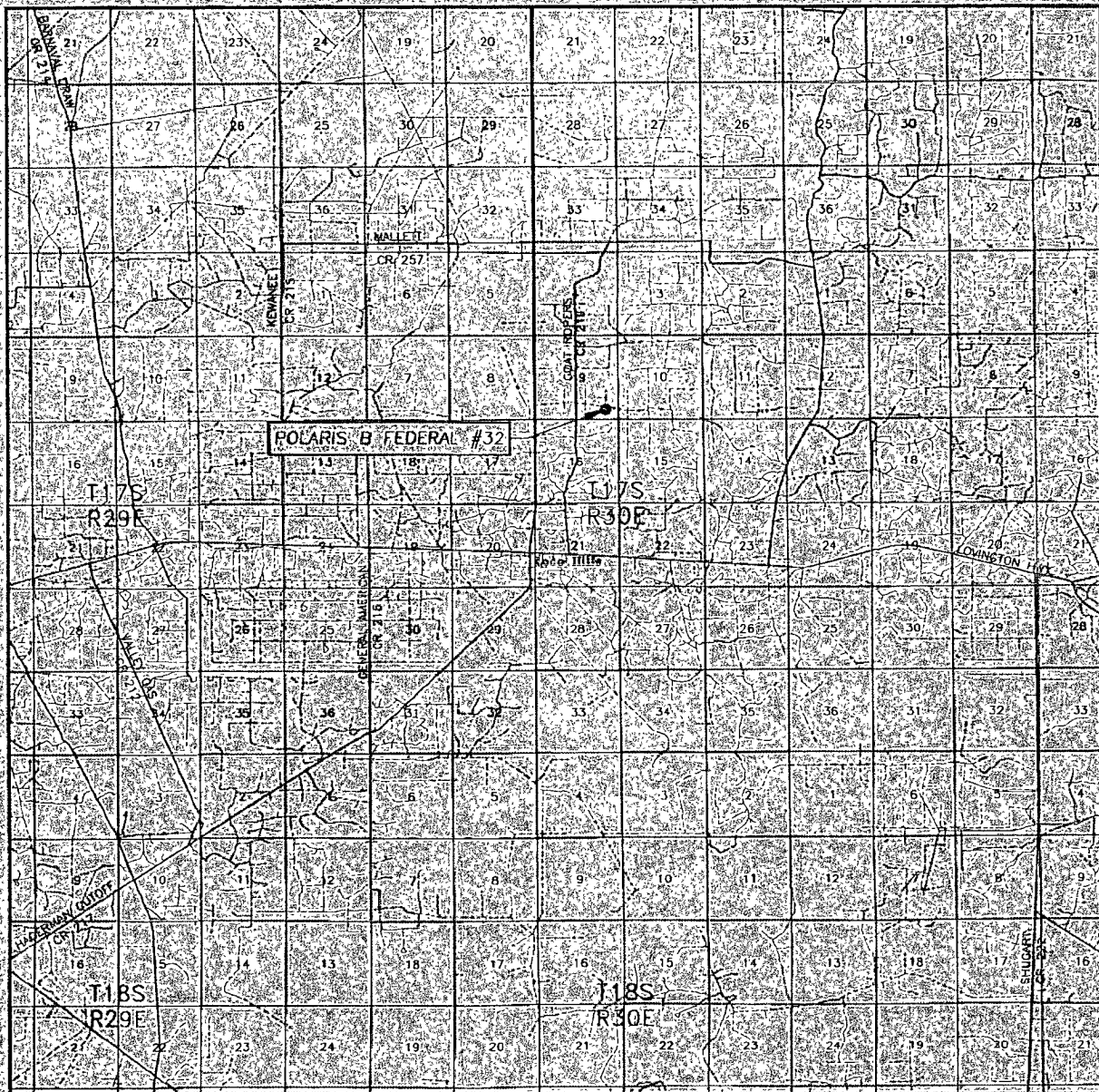
PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117

COG OPERATING, LLC

POLARIS B FEDERAL #32 WELL
LOCATED 630 FEET FROM THE SOUTH LINE
AND 780 FEET FROM THE EAST LINE OF SECTION 9,
TOWNSHIP 17 SOUTH, RANGE 30 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO

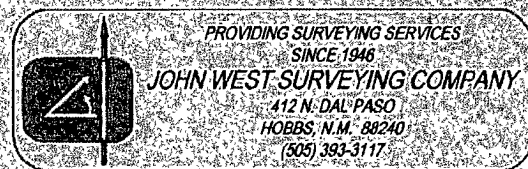
Survey Date: 8/12/08	Sheet: 1 of 1 Sheets
W.O. Number: 08.11.1099	Dr. By: AR
Date: 8/21/08	Disk: 08.11.1099
	Scale: 1"=100'

VICINITY MAP



SCALE: 1" = 2 MILES

SEC 9 TWP 17-S RGE 30-E
 SURVEY N.M.P.M.
 COUNTY EDDY STATE NEW MEXICO
 DESCRIPTION 630' FSL & 780' FEL
 ELEVATION 3692'
 OPERATOR COG OPERATING, LLC
 LEASE POLARIS B FEDERAL



LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
LOCO HILLS, N.M. = 10'

SEC. 9 TWP. 17-S. RGE. 30-E

SURVEY: N.M.P.M.

COUNTY: EDDY STATE: NEW MEXICO

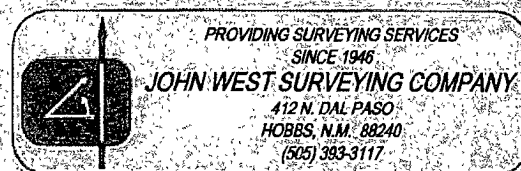
DESCRIPTION: 630' FSL. & 780' FEL

ELEVATION: 3692'

OPERATOR: COG OPERATING, LLC

LEASE: POLARIS B FEDERAL

U.S.G.S. TOPOGRAPHIC MAP
LOCO HILLS, N.M.





COG Operating LLC

Eddy County, NM (NAN27 NME)

Polaris B Federal #32

Polaris B Federal #32

OH

Plan: Plan #2 - 7-7/8" Hole

SHL = 630' FSL & 780' FEL

BHL = 980' FSL & 980' FEL

Top of Paddock = 263' N of Surf & 151' W of Surf @ 4400' TVD

Standard Planning Report

26 March, 2010





Scientific Drilling
Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Site Polaris B Federal #32
Company:	COG Operating LLC	TVD Reference:	Ground Elev @ 3692.00ft (Rig ?)
Project:	Eddy County, NM (NAN27 NME)	MD Reference:	Ground Elev @ 3692.00ft (Rig ?)
Site:	Polaris B Federal #32	North Reference:	Grid
Well:	Polaris B Federal #32	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2 - 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:	Polaris B Federal #32		
Site Position:	From: Map	Northing:	670,730 50 ft
		Easting:	611,468 40 ft
Position Uncertainty:	0.00 ft	Slot Radius:	0 "
		Latitude:	32° 50' 36.229 N
		Longitude:	103° 58' 13.409 W
		Grid Convergence:	0.20 °

Well:	Polaris B Federal #32		
Well Position	+N/-S	0 00 ft	Northing:
	+E/-W	0 00 ft	Easting:
Position Uncertainty	0 00 ft	Wellhead Elevation:	Ground Level:
			3,692 00 ft

Wellbore:	OH		
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Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	IGRF200510	2010/03/26	7 95	60.74	49,097

Design:	Plan #2 - 7-7/8" Hole		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth:
			0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(ft)	(ft)	(ft)
	0 00	0 00	0.00
			330 06

Plan Sections										
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Dogleg	Build	Turn	TFO	Target
Depth	(°)	(°)	Depth	(ft)	(ft)	Rate	Rate	Rate	(°)	
(ft)			(ft)			(°/100ft)	(°/100ft)	(°/100ft)		
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	
1,763 79	6 28	330 06	1,763 17	14 88	-8 57	2 00	2 00	0.00	330 06	
4,265 89	6.28	330 06	4,250 27	251.91	-145 06	0.00	0 00	0 00	0 00	
4,416 16	3 27	330 06	4,400 00	262 74	-151 30	2 00	-2 00	0 00	180 00	PP-PBF #32
6,169 02	3 27	330 06	6,150 00	349 40	-201 20	0 00	0 00	0 00	0 00	PBHL-PBF #32



Scientific Drilling
Planning Report



Database:	EDM 5000-1 Single User Db	Local Co-ordinate Reference:	Site Polaris B Federal #32
Company:	COG Operating LLC	TVD Reference:	Ground Elev @ 3692'00ft (Rig?)
Project:	Eddy County, NM (NAN27 NME)	MD Reference:	Ground Elev @ 3692'00ft (Rig ?)
Site:	Polaris B Federal #32	North Reference:	Grid
Well:	Polaris B Federal #32	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2 - 7-7/8" Hole		

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-PBF #32 - South HL-PBF #32									
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	330 06	1,500.00	0 38	-0 22	0 44	2 00	2 00	0 00
1,600.00	3 00	330 06	1,599.93	3.40	-1.96	3.93	2 00	2 00	0 00
1,700.00	5.00	330 06	1,699.68	9 45	-5 44	10 90	2 00	2 00	0 00
1,763.79	6 28	330 06	1,763.16	14.88	-8 57	17.17	2.00	2.00	0 00
EOC hold 6.28°									
1,800.00	6 28	330 06	1,799.16	18 31	-10.54	21 13	0 00	0 00	0 00
1,900.00	6 28	330 06	1,898.56	27 78	-16.00	32 06	0 00	0 00	0 00
2,000.00	6 28	330.06	1,997.96	37 25	-21.45	42 99	0.00	0 00	0 00
2,100.00	6.28	330 06	2,097.36	46.73	-26 91	53 92	0 00	0 00	0 00
2,200.00	6.28	330 06	2,196.76	56 20	-32.36	64 85	0.00	0 00	0 00
2,300.00	6 28	330 06	2,296.16	65 67	-37.82	75 78	0 00	0 00	0 00
2,400.00	6 28	330.06	2,395.56	75 15	-43 27	86 72	0 00	0 00	0 00
2,500.00	6 28	330.06	2,494.96	84.62	-48 73	97.65	0.00	0.00	0 00
2,600.00	6.28	330 06	2,594.36	94.09	-54.18	108.58	0 00	0 00	0 00
2,700.00	6 28	330 06	2,693.76	103 57	-59 64	119 51	0 00	0 00	0 00
2,800.00	6.28	330 06	2,793.16	113 04	-65 09	130.44	0 00	0 00	0 00
2,900.00	6 28	330 06	2,892.56	122 51	-70 55	141 37	0.00	0 00	0 00
3,000.00	6 28	330 06	2,991.96	131 99	-76.00	152 31	0 00	0.00	0 00
3,100.00	6 28	330.06	3,091.37	141 46	-81.46	163 24	0 00	0.00	0 00
3,200.00	6 28	330 06	3,190.77	150.93	-86.91	174 17	0 00	0 00	0 00
3,300.00	6 28	330 06	3,290.17	160 41	-92 37	185 10	0 00	0 00	0 00
3,400.00	6 28	330 06	3,389.57	169 88	-97 82	196.03	0 00	0 00	0 00
3,500.00	6 28	330 06	3,488.97	179 35	-103.28	206.96	0 00	0 00	0 00
3,600.00	6 28	330 06	3,588.37	188.83	-108.73	217 89	0 00	0 00	0.00
3,700.00	6.28	330.06	3,687.77	198 30	-114.19	228 83	0 00	0 00	0 00
3,800.00	6 28	330.06	3,787.17	207.77	-119 64	239 76	0 00	0 00	0 00
3,900.00	6.28	330 06	3,886.57	217 25	-125 10	250.69	0 00	0 00	0 00
4,000.00	6 28	330 06	3,985.97	226 72	-130 55	261 62	0 00	0 00	0 00
4,100.00	6.28	330 06	4,085.37	236 19	-136.01	272 55	0.00	0 00	0 00
4,200.00	6.28	330.06	4,184.77	245 66	-141.46	283 48	0.00	0 00	0 00
4,265.89	6 28	330.06	4,250.27	251 91	-145 06	290 69	0.00	0 00	0 00
Start Drop 2.00°/100'									
4,300.00	5 59	330 06	4,284.19	254 96	-146.82	294 21	2 00	-2 00	0 00
4,400.00	3 59	330 06	4,383.87	261 90	-150.82	302 22	2 00	-2 00	0 00
4,416.16	3 27	330 06	4,400.00	262 74	-151 30	303 19	2.00	-2.00	0 00
EOC hold 3.27° PP-PBF #32									
4,500.00	3 27	330 06	4,483.70	266.89	-153 68	307 97	0 00	0.00	0.00
4,600.00	3.27	330 06	4,583.54	271 83	-156.53	313.68	0 00	0.00	0 00
4,700.00	3 27	330 06	4,683.38	276 77	-159 38	319 38	0 00	0 00	0 00
4,800.00	3 27	330 06	4,783.21	281.72	-162 23	325.09	0.00	0 00	0.00
4,900.00	3 27	330.06	4,883.05	286.66	-165.07	330 79	0 00	0 00	0 00
5,000.00	3 27	330 06	4,982.89	291 61	-167 92	336 50	0 00	0 00	0 00
5,100.00	3.27	330.06	5,082.73	296.55	-170 77	342.20	0 00	0.00	0.00
5,200.00	3 27	330 06	5,182.56	301.49	-173.61	347 91	0 00	0.00	0.00
5,300.00	3.27	330.06	5,282.40	306 44	-176.46	353.61	0.00	0.00	0 00
5,400.00	3 27	330.06	5,382.24	311 38	-179 31	359 32	0 00	0 00	0 00
5,500.00	3.27	330 06	5,482.07	316 32	-182.15	365 02	0.00	0 00	0 00



Scientific Drilling
Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Site Polaris B Federal #32
Company:	COG Operating LLC	TVD Reference:	Ground Elev @ 3692.00ft (Rig ?)
Project:	Eddy County, NM (NAN27 NME)	MD Reference:	Ground Elev @ 3692.00ft (Rig ?)
Site:	Polaris B Federal #32	North Reference:	Grid
Well:	Polaris B Federal #32	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2 - 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)
5,600.00	3.27	330.06	5,581.91	321.27	-185.00	370.73	0.00	0.00	0.00
5,700.00	3.27	330.06	5,681.75	326.21	-187.85	376.43	0.00	0.00	0.00
5,800.00	3.27	330.06	5,781.59	331.16	-190.69	382.14	0.00	0.00	0.00
5,900.00	3.27	330.06	5,881.42	336.10	-193.54	387.84	0.00	0.00	0.00
6,000.00	3.27	330.06	5,981.26	341.04	-196.39	393.55	0.00	0.00	0.00
6,100.00	3.27	330.06	6,081.10	345.99	-199.24	399.25	0.00	0.00	0.00
6,169.02	3.27	330.06	6,150.00	349.40	-201.20	403.19	0.00	0.00	0.00
PBHL-PBF #32									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
East HL-PBF #32	0.00	0.00	0.00	359.40	-211.20	671,089.90	611,257.20	32° 50' 39.793 N	103° 58' 15.870 W
- plan misses target center by 416.86ft at 0.00ft MD (0.00 TVD, 0.00 N, 0.00 E)									
- Rectangle (sides W0.00 H200.00 D0.00)									
South HL-PBF #32	0.00	0.00	0.00	359.40	-211.20	671,089.90	611,257.20	32° 50' 39.793 N	103° 58' 15.870 W
- plan misses target center by 416.86ft at 0.00ft MD (0.00 TVD, 0.00 N, 0.00 E)									
- Rectangle (sides W200.00 H0.00 D0.00)									
PP-PBF #32	0.00	0.00	4,400.00	262.74	-151.30	670,993.25	611,317.11	32° 50' 38.834 N	103° 58' 15.172 W
- plan hits target center									
- Point									
PBHL-PBF #32	3.27	150.06	6,150.00	349.40	-201.20	671,079.90	611,267.20	32° 50' 39.693 N	103° 58' 15.753 W
- plan hits target center									
- Circle (radius 10.00)									

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name		Casing Diameter (")	Hole Diameter (")
1,350.00	1,350.00	8 5/8" Casing		8-5/8	10-5/8

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
1,450.00	1,450.00	0.00	0.00	KOP Start Build 2.00°/100'
1,763.79	1,763.16	14.88	-8.57	EOC hold 6.28°
4,265.89	4,250.27	251.91	-145.06	Start Drop 2.00°/100'
4,416.16	4,400.00	262.74	-151.30	EOC hold 3.27°



Scientific Drilling for COG Operating LLC
Site: Eddy County, NM (NAN27 NME)
Well: Polaris B Federal #32
Wellbore: OH
Design: Plan #2 - 7-7/8" Hole

