

05/10/13 DATE IN	SUSPENSE	DB ENGINEER	05/14/13 LOGGED IN	NSL TYPE	PPAG1313560843 APP NO.
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

RECEIVED Engineering Bureau -

1220 South St. Francis Drive, Santa Fe, NM 87505

2013 MAY 10 2:51



30-015-Pending
OG Production
Canvasback 13

ADMINISTRATIVE APPLICATION CHECKLIST

Federal #34

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]

6816

[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 _____

[2] NOTIFICATION REQUIRED TO: - 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.

Brian Maiorino

Print or Type Name

Brian Maiorino
Signature

Regulatory Analyst

Title

5/8/13

Date

bmaiorino@concho.com
e-mail Address



May 7, 2013

New Mexico Oil Conservation Division
David Brooks
1220 S St. Francis Drive
Santa Fe, New Mexico 87505

Re: Canvasback 13 Federal 3H Non-Standard Location

Mr. Brooks,

COG Operating LLC respectfully requests approval of a non-standard location for the Canvasback 13 Federal 3H.

SHL: UL B, Section 13, Township 24S, Range 31E, 190 FNL 1470 FEL

BHL: UL O, Section 13, Township 24S, Range 31E, 330 FSL 1470 FEL

API #: pending APD approval

This location is requested to allow spacing for 2 lateral well bores within the 160 acre project area.

Offset acreage is owned by COG Operating LLC, all interest are the same.

Please contact me at 432-221-0467 should you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "B. Maiorino".

Brian Maiorino
Regulatory Analyst
COG Operating, LLC

RECEIVED OCD
2013 MAY 10 P 2:51

DISTRICT I
1820 N. FRENCH DR., HOBBBS, NM 88240
Phone: (505) 863-6101 Fax: (505) 393-0720

DISTRICT II
1301 W. GRAND AVENUE, ARTESIA, NM 88210
Phone: (505) 748-1283 Fax: (505) 748-9720

DISTRICT III
1000 RIO BRAZOS RD., AZTEC, NM 87410
Phone: (505) 334-6176 Fax: (505) 334-6170

DISTRICT IV
11885 S. ST. FRANCIS DR., SANTA FE, NM 87505
Phone: (505) 476-3480 Fax: (505) 476-3482

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
11885 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code 13367	Pool Name Cotton Draw; Bone Spring
Property Code 39372	Property Name CANVASBACK 13 FEDERAL	Well Number 3H
OGRID No. 229137	Operator Name COG PRODUCTION, LLC	Elevation 3582.3

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	13	24-S	31-E		190	NORTH	1470	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
O	13	24-S	31-E		330	SOUTH	1470	EAST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
160			

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

Y=445914.4 N X=686251.6 E NAD 27 SURFACE LOCATION Y=445731.2 N X=687423.4 E LAT.=32.223979° N LONG.=103.727258° W NAD 27 PROPOSED BOTTOM HOLE LOCATION Y=440973.0 N X=687452.8 E LAT.=32.210899° N LONG.=103.727250° W Y=440636.7 N X=686281.3 E		Estimated completed Interval 346' FNL 1471' FEL GRID AZ. - 179° 38' 36" HORIZ. DIST. - 4,758.3'	130' S.L. 1470' Y=445922.1 N X=687571.9 E 1470' Y=440643.9 N X=687603.1 E B.H. 330'	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. Signature: <i>Brian Maiorino</i> Date: 5/8/13 Printed Name: Brian Maiorino E-mail Address: bmaiorino@concho.com 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. MARCH 12, 2013 Date of Survey Signature & Seal of Professional Surveyor <i>Chad L. Harcrow</i> 3/20/13 Certificate No. CHAD HARCROW 17777 W.S. # 13-136 DRAWN BY: VD
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COG PRODUCTION, L.L.C.

EDDY COUNTY (NAD27)

SECTION 13

Canvasback 13 Federal #3H

Wellbore #1

Plan: Proposal 1

Standard Planning Report

08 April, 2013





Stryker Directional Planning Report



Database: EDM 5000.1 Single User Db
Company: COG PRODUCTION, L.L.C.
Project: EDDY COUNTY (NAD27)
Site: SECTION 13
Well: Canvasback 13 Federal #3H
Wellbore: Wellbore #1
Design: Proposal 1

Local Co-ordinate Reference: Well Canvasback 13 Federal #3H
TVD Reference: WELL @ 18.0usft (Original Well Elev)
MD Reference: WELL @ 18.0usft (Original Well Elev)
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Project	EDDY COUNTY (NAD27), NM-East		
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	SECTION 13		
Site Position:	Northings:	445,731.20 usft	Latitude: 32° 13' 28.325 N
From: Map	Easting:	887,423.40 usft	Longitude: 103° 43' 38.130 W
Position Uncertainty:	0.0 usft	Spot Radius: 13-3/16 "	Grid Convergence: 0.32 "

Well	Canvasback 13 Federal #3H		
Well Position	+N-S	0.0 usft	Northings: 445,731.20 usft
	+E-W	0.0 usft	Easting: 887,423.40 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	Ground Level: 0.0 usft

Wellbore	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination
	IGRF2010	3/22/2013	7.44
			Dip Angle
			60.12
			Field Strength
			48,448

Design	Proposal 1		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth: 0.0
Vertical Section:	Depth From (TVD)	+N-S	+E-W
	(usft)	(usft)	(usft)
	0.0	0.0	0.0
			Direction
			179.85

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N-S (usft)	+E-W (usft)	Dogleg Rate (°/100usft)	Bulld Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
7,902.6	0.00	0.00	7,902.6	0.0	0.0	0.00	0.00	0.00	0.00	
8,649.3	89.60	179.85	8,380.1	-474.1	2.9	12.00	12.00	0.00	179.85	
12,933.6	89.60	179.85	8,410.0	-4,758.2	29.4	0.00	0.00	0.00	0.00	PBHL Canvasback 12



Stryker Directional Planning Report



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Site: SECTION 13
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MD Reference: WELL @ 18.0usft (Original Well Elev)
North Reference: Grid
Survey Calculation Method: Minimum Curvature

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)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	0.00
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	0.00
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	0.00
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	0.00
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	0.00
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	0.00
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	0.00
4,100.0	0.00	0.00	4,100.0	0.0	0.0	0.0	0.00	0.00	0.00
4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	0.00
4,300.0	0.00	0.00	4,300.0	0.0	0.0	0.0	0.00	0.00	0.00
4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	0.00
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	0.00
4,600.0	0.00	0.00	4,600.0	0.0	0.0	0.0	0.00	0.00	0.00
4,700.0	0.00	0.00	4,700.0	0.0	0.0	0.0	0.00	0.00	0.00
4,800.0	0.00	0.00	4,800.0	0.0	0.0	0.0	0.00	0.00	0.00
4,900.0	0.00	0.00	4,900.0	0.0	0.0	0.0	0.00	0.00	0.00
5,000.0	0.00	0.00	5,000.0	0.0	0.0	0.0	0.00	0.00	0.00
5,100.0	0.00	0.00	5,100.0	0.0	0.0	0.0	0.00	0.00	0.00
5,200.0	0.00	0.00	5,200.0	0.0	0.0	0.0	0.00	0.00	0.00
5,300.0	0.00	0.00	5,300.0	0.0	0.0	0.0	0.00	0.00	0.00



Stryker Directional Planning Report



Database: EDM 5000.1 Single User Db
Company: COG PRODUCTION, L.L.C.
Project: EDDY COUNTY (NAD27)
Site: SECTION 13
Well: Canvasback 13 Federal #3H
Wellbore: Wellbore #1
Design: Proposal 1

Local Co-ordinate Reference: Well Canvasback 13 Federal #3H
TVD Reference: WELL @ 18.0usft (Original Well Elev)
MD Reference: WELL @ 18.0usft (Original Well Elev)
North Reference: Grid
Survey Calculation Method: Minimum Curvature

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)
5,400.0	0.00	0.00	5,400.0	0.0	0.0	0.0	0.00	0.00	0.00
5,500.0	0.00	0.00	5,500.0	0.0	0.0	0.0	0.00	0.00	0.00
5,600.0	0.00	0.00	5,600.0	0.0	0.0	0.0	0.00	0.00	0.00
5,700.0	0.00	0.00	5,700.0	0.0	0.0	0.0	0.00	0.00	0.00
5,800.0	0.00	0.00	5,800.0	0.0	0.0	0.0	0.00	0.00	0.00
5,900.0	0.00	0.00	5,900.0	0.0	0.0	0.0	0.00	0.00	0.00
6,000.0	0.00	0.00	6,000.0	0.0	0.0	0.0	0.00	0.00	0.00
6,100.0	0.00	0.00	6,100.0	0.0	0.0	0.0	0.00	0.00	0.00
6,200.0	0.00	0.00	6,200.0	0.0	0.0	0.0	0.00	0.00	0.00
6,300.0	0.00	0.00	6,300.0	0.0	0.0	0.0	0.00	0.00	0.00
6,400.0	0.00	0.00	6,400.0	0.0	0.0	0.0	0.00	0.00	0.00
6,500.0	0.00	0.00	6,500.0	0.0	0.0	0.0	0.00	0.00	0.00
6,600.0	0.00	0.00	6,600.0	0.0	0.0	0.0	0.00	0.00	0.00
6,700.0	0.00	0.00	6,700.0	0.0	0.0	0.0	0.00	0.00	0.00
6,800.0	0.00	0.00	6,800.0	0.0	0.0	0.0	0.00	0.00	0.00
6,900.0	0.00	0.00	6,900.0	0.0	0.0	0.0	0.00	0.00	0.00
7,000.0	0.00	0.00	7,000.0	0.0	0.0	0.0	0.00	0.00	0.00
7,100.0	0.00	0.00	7,100.0	0.0	0.0	0.0	0.00	0.00	0.00
7,200.0	0.00	0.00	7,200.0	0.0	0.0	0.0	0.00	0.00	0.00
7,300.0	0.00	0.00	7,300.0	0.0	0.0	0.0	0.00	0.00	0.00
7,400.0	0.00	0.00	7,400.0	0.0	0.0	0.0	0.00	0.00	0.00
7,500.0	0.00	0.00	7,500.0	0.0	0.0	0.0	0.00	0.00	0.00
7,600.0	0.00	0.00	7,600.0	0.0	0.0	0.0	0.00	0.00	0.00
7,700.0	0.00	0.00	7,700.0	0.0	0.0	0.0	0.00	0.00	0.00
7,800.0	0.00	0.00	7,800.0	0.0	0.0	0.0	0.00	0.00	0.00
7,900.0	0.00	0.00	7,900.0	0.0	0.0	0.0	0.00	0.00	0.00
7,902.6	0.00	0.00	7,902.6	0.0	0.0	0.0	0.00	0.00	0.00
KOP @ 7902.6 MD									
8,000.0	11.68	179.85	7,999.3	-9.9	0.1	9.9	12.00	12.00	0.00
8,100.0	23.68	179.85	8,094.4	-40.2	0.2	40.2	12.00	12.00	0.00
8,200.0	35.68	179.85	8,181.1	-89.8	0.6	89.8	12.00	12.00	0.00
8,300.0	47.68	179.85	8,255.7	-158.0	1.0	158.0	12.00	12.00	0.00
8,400.0	59.68	179.85	8,314.8	-238.4	1.5	238.5	12.00	12.00	0.00
8,500.0	71.68	179.85	8,355.9	-327.4	2.0	327.4	12.00	12.00	0.00
8,600.0	83.68	179.85	8,377.2	-424.9	2.8	424.9	12.00	12.00	0.00
8,645.2	88.10	179.85	8,380.0	-470.0	2.9	470.0	12.00	12.00	0.00
LP Canvasback 13 Federal #3H									
8,649.3	89.60	179.85	8,380.1	-474.1	2.9	474.1	12.00	12.00	0.00
LP @ 8649.3 MD									
8,700.0	89.60	179.85	8,380.4	-524.8	3.2	524.8	0.00	0.00	0.00
8,800.0	89.60	179.85	8,381.1	-624.8	3.9	624.8	0.00	0.00	0.00
8,900.0	89.60	179.85	8,381.8	-724.8	4.5	724.8	0.00	0.00	0.00
9,000.0	89.60	179.85	8,382.5	-824.8	5.1	824.8	0.00	0.00	0.00
9,100.0	89.60	179.85	8,383.2	-924.8	5.7	924.8	0.00	0.00	0.00
9,200.0	89.60	179.85	8,383.9	-1,024.8	6.3	1,024.8	0.00	0.00	0.00
9,300.0	89.60	179.85	8,384.6	-1,124.8	6.9	1,124.8	0.00	0.00	0.00
9,400.0	89.60	179.85	8,385.3	-1,224.8	7.6	1,224.8	0.00	0.00	0.00
9,500.0	89.60	179.85	8,386.0	-1,324.8	8.2	1,324.8	0.00	0.00	0.00
9,600.0	89.60	179.85	8,386.7	-1,424.8	8.8	1,424.8	0.00	0.00	0.00
9,700.0	89.60	179.85	8,387.4	-1,524.8	9.4	1,524.8	0.00	0.00	0.00
9,800.0	89.60	179.85	8,388.1	-1,624.8	10.0	1,624.8	0.00	0.00	0.00
9,900.0	89.60	179.85	8,388.8	-1,724.8	10.7	1,724.8	0.00	0.00	0.00
10,000.0	89.60	179.85	8,389.5	-1,824.8	11.3	1,824.8	0.00	0.00	0.00



Stryker Directional Planning Report



Database: EDM 5000.1 Single User Db
Company: COG PRODUCTION, L.L.C.
Project: EDDY COUNTY (NAD27)
Site: SECTION 13
Well: Canvasback 13 Federal #3H
Wellbore: Wellbore #1
Design: Proposal 1

Local Co-ordinate Reference: Well Canvasback 13 Federal #3H
TVD Reference: WELL @ 18.0usft (Original Well Elev)
MD Reference: WELL @ 18.0usft (Original Well Elev)
North Reference: Grid
Survey Calculation Method: Minimum Curvature

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)
10,100.0	89.60	179.85	8,390.2	-1,924.8	11.9	1,924.8	0.00	0.00	0.00
10,200.0	89.60	179.85	8,390.9	-2,024.8	12.5	2,024.8	0.00	0.00	0.00
10,300.0	89.60	179.85	8,391.6	-2,124.7	13.1	2,124.8	0.00	0.00	0.00
10,400.0	89.60	179.85	8,392.3	-2,224.7	13.7	2,224.8	0.00	0.00	0.00
10,500.0	89.60	179.85	8,393.0	-2,324.7	14.4	2,324.8	0.00	0.00	0.00
10,600.0	89.60	179.85	8,393.7	-2,424.7	15.0	2,424.8	0.00	0.00	0.00
10,700.0	89.60	179.85	8,394.4	-2,524.7	15.6	2,524.8	0.00	0.00	0.00
10,800.0	89.60	179.85	8,395.1	-2,624.7	16.2	2,624.8	0.00	0.00	0.00
10,900.0	89.60	179.85	8,395.8	-2,724.7	16.8	2,724.8	0.00	0.00	0.00
11,000.0	89.60	179.85	8,396.5	-2,824.7	17.5	2,824.8	0.00	0.00	0.00
11,100.0	89.60	179.85	8,397.2	-2,924.7	18.1	2,924.8	0.00	0.00	0.00
11,200.0	89.60	179.85	8,397.9	-3,024.7	18.7	3,024.8	0.00	0.00	0.00
11,300.0	89.60	179.85	8,398.6	-3,124.7	19.3	3,124.8	0.00	0.00	0.00
11,400.0	89.60	179.85	8,399.3	-3,224.7	19.9	3,224.8	0.00	0.00	0.00
11,500.0	89.60	179.85	8,400.0	-3,324.7	20.5	3,324.8	0.00	0.00	0.00
11,600.0	89.60	179.85	8,400.7	-3,424.7	21.2	3,424.8	0.00	0.00	0.00
11,700.0	89.60	179.85	8,401.4	-3,524.7	21.8	3,524.8	0.00	0.00	0.00
11,800.0	89.60	179.85	8,402.1	-3,624.7	22.4	3,624.8	0.00	0.00	0.00
11,900.0	89.60	179.85	8,402.8	-3,724.7	23.0	3,724.7	0.00	0.00	0.00
12,000.0	89.60	179.85	8,403.5	-3,824.7	23.6	3,824.7	0.00	0.00	0.00
12,100.0	89.60	179.85	8,404.2	-3,924.7	24.2	3,924.7	0.00	0.00	0.00
12,200.0	89.60	179.85	8,404.9	-4,024.7	24.9	4,024.7	0.00	0.00	0.00
12,300.0	89.60	179.85	8,405.6	-4,124.7	25.5	4,124.7	0.00	0.00	0.00
12,400.0	89.60	179.85	8,406.3	-4,224.7	26.1	4,224.7	0.00	0.00	0.00
12,500.0	89.60	179.85	8,407.0	-4,324.7	26.7	4,324.7	0.00	0.00	0.00
12,600.0	89.60	179.85	8,407.7	-4,424.8	27.3	4,424.7	0.00	0.00	0.00
12,700.0	89.60	179.85	8,408.4	-4,524.8	28.0	4,524.7	0.00	0.00	0.00
12,800.0	89.60	179.85	8,409.1	-4,624.8	28.6	4,624.7	0.00	0.00	0.00
12,900.0	89.60	179.85	8,409.8	-4,724.8	29.2	4,724.7	0.00	0.00	0.00
12,933.6	89.60	179.85	8,410.0	-4,758.2	29.4	4,758.3	0.00	0.00	0.00

TD at 12933.6 MD - PBHL Canvasback 13 Federal #3H

Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N-S (usft)	+E-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
LP Canvasback 13 Fede	0.00	0.00	8,380.0	-470.0	2.9	445,261.21	687,428.27	32° 13' 21.873 N	103° 43' 38.128 W
- hits miss target									
- Shape									
- plan misses target center by 0.1usft at 8645.2usft MD (8380.0 TVD, -470.0 N, 2.9 E)									
- Point									
PBHL Canvasback 13 Fi	0.00	0.00	8,410.0	-4,758.2	29.4	440,873.00	687,452.80	32° 12' 39.237 N	103° 43' 38.100 W
- plan hits target center									
- Point									

Plan Annotations

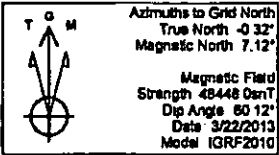
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N-S (usft)	+E-W (usft)	
7,902.6	7,902.6	0.0	0.0	KOP @ 7902.6 MD
8,649.3	8,380.1	-474.1	2.9	LP @ 8649.3 MD
12,933.6	8,410.0	-4,758.2	29.4	TD at 12933.6 MD



COMPANY: COG PRODUCTION, L.L.C.
 WELL: Canvasback 13 Federal 63H
 COUNTY: EDDY COUNTY (NAD27)
 DATUM: NAD 1927 (NADCON CONUS)
 RIG: Basic #46
 GRID CORRECTION: 7.12" E



OFFICE: 934.682.7294 PLANNING: 214.784.3778



CREATED BY: BRANDON ESTES

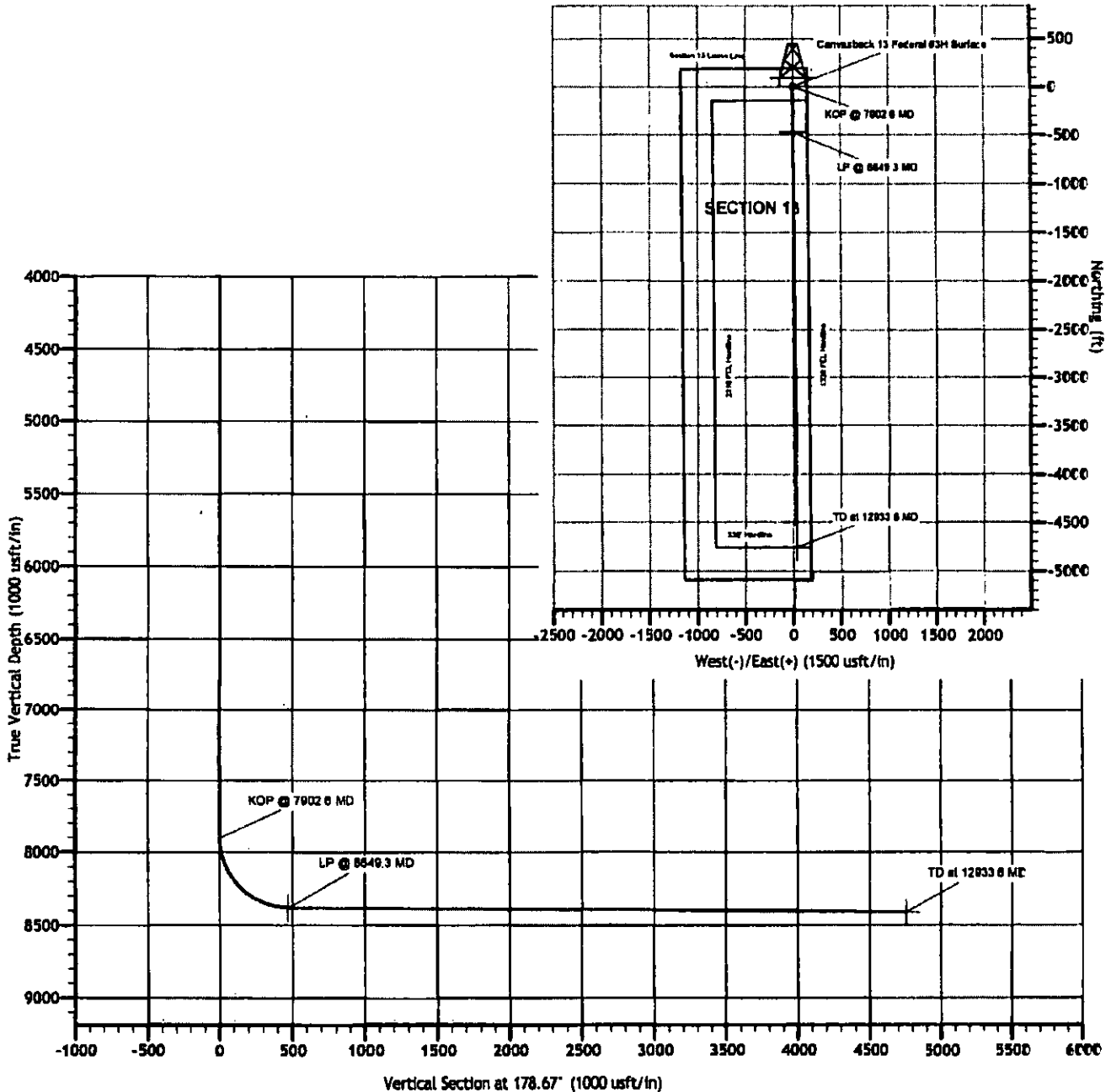
DATE: 15.10. April 08 2013
 PLAN: Proposal 1

GEODETTIC ZONE: New Mexico East 3001
 WELL @ 18 Oust (Original Well Elev)
 GROUND ELEVATION 0.0

+N-S	+E-W	Northing	Easting	Latitude	Longitude
0.0	0.0	445731.20	687423.46	32° 13' 26.325 N	103° 43' 38.136 W

CRITICAL POINTS

TVD	MD	Inc	Azi	+N-S	+E-W	VSeciDeparture	Annotation
7902.6	7902.6	0.00	0.00	0.0	0.0	0.0	KOP @ 7902.6 MD
8380.1	8649.3	89.60	179.65	-474.1	2.9	474.1	LP @ 8649.3 MD
8410.0	12833.6	89.60	179.65	-4758.2	28.4	4758.3	TD at 12833.6 MD



DISTRICT I
1625 N. FRENCH DR., HOBBS, NM 88240
Phone: (575) 393-6181 Fax: (575) 393-0720

DISTRICT II
1901 W. GRAND AVENUE, ARTESIA, NM 88210
Phone: (505) 334-1283 Fax: (505) 748-9720

DISTRICT III
1000 RIO BRAZOS RD., AZTEC, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

DISTRICT IV
11885 S. ST. FRANCIS DR., SANTA FE, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
11885 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code 13367	Pool Name Cotton Draw; Bone Spring
Property Code 39372	Property Name CANVASBACK 13 FEDERAL	Well Number 3H
OGRID No. 229137	Operator Name COG PRODUCTION, LLC	Elevation 3582.3

Surface Location

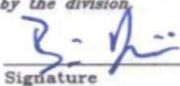
UL or lot No. B	Section 13	Township 24-S	Range 31-E	Lot Idn	Feet from the 190	North/South line NORTH	Feet from the 1470	East/West line EAST	County EDDY
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Bottom Hole Location If Different From Surface

UL or lot No. O	Section 13	Township 24-S	Range 31-E	Lot Idn	Feet from the 330	North/South line SOUTH	Feet from the 1470	East/West line EAST	County EDDY
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Dedicated Acres 160	Joint or Infill	Consolidation Code	Order No.
------------------------	-----------------	--------------------	-----------

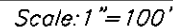
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

Y=445914.4 N X=686251.6 E NAD 27 SURFACE LOCATION Y=445731.2 N X=687423.4 E LAT.=32.223979° N LONG.=103.727258° W NAD 27 PROPOSED BOTTOM HOLE LOCATION Y=440973.0 N X=687452.8 E LAT.=32.210899° N LONG.=103.727250° W Y=440636.7 N X=686281.3 E	190' S.L. 1470' Y=445922.1 N X=687571.9 E GRID AZ. - 179°38'36" HORZ. DIST. - 4,758.3' B.H. 330' 1470' Y=440643.9 N X=687603.1 E	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.  5/8/13 Signature Date Brian Maiorino Printed Name bmaiorino@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. MARCH 12, 2013 Date of Survey Signature & Seal of Professional Surveyor  Chad Harcrow 3/20/13 Certificate No. CHAD HARCROW 17777 W.O. # 13-106 DRAWN BY: VD
--	--	--

NEW MEXICO



HEADING SOUTHEAST ON HWY 128 TURN RIGHT (SOUTHWEST) APPROX. 0.6 MILES PAST MILE MARKER 19 ONTO BUCK JACKSON ROAD. GO APPROX. 0.4 MILES TURN LEFT (SOUTH) ONTO A CALICHE LEASE ROAD. GO APPROX. 0.5 MILES TURN RIGHT (WEST). GO APPROX. 350 FEET TO AN EXISTING WELL PAD. FROM THE SOUTHWEST PAD CORNER PROPOSED WELL IS APPROX. 880 FEET WEST.



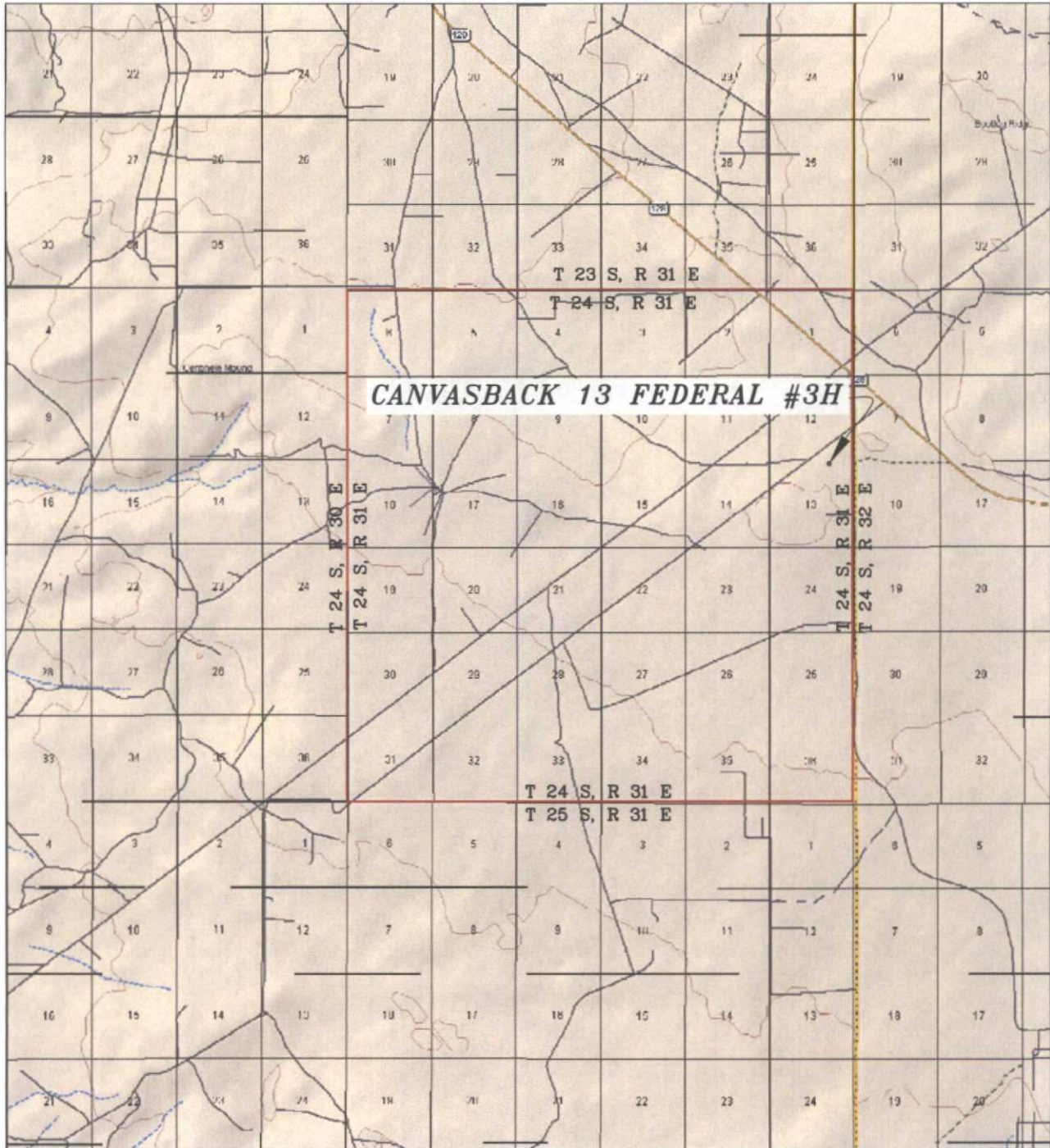
CANVASBACK 13 FEDERAL #3H WELL
LOCATED 190 FEET FROM THE NORTH LINE
AND 1470 FEET FROM THE EAST LINE OF SECTION 13,
TOWNSHIP 24 SOUTH, RANGE 31 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO

PAGE: 1 OF 1

100

FILE: 13-106

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 13 TWP. 24-S RGE. 31-E
 SURVEY N.M.P.M.
 COUNTY LEA STATE NEW MEXICO
 DESCRIPTION 190' FNL & 1470 FEL
 ELEVATION 3582.3'
 OPERATOR COG PRODUCTION, LLC
 LEASE CANVASBACK 13 FEDERAL

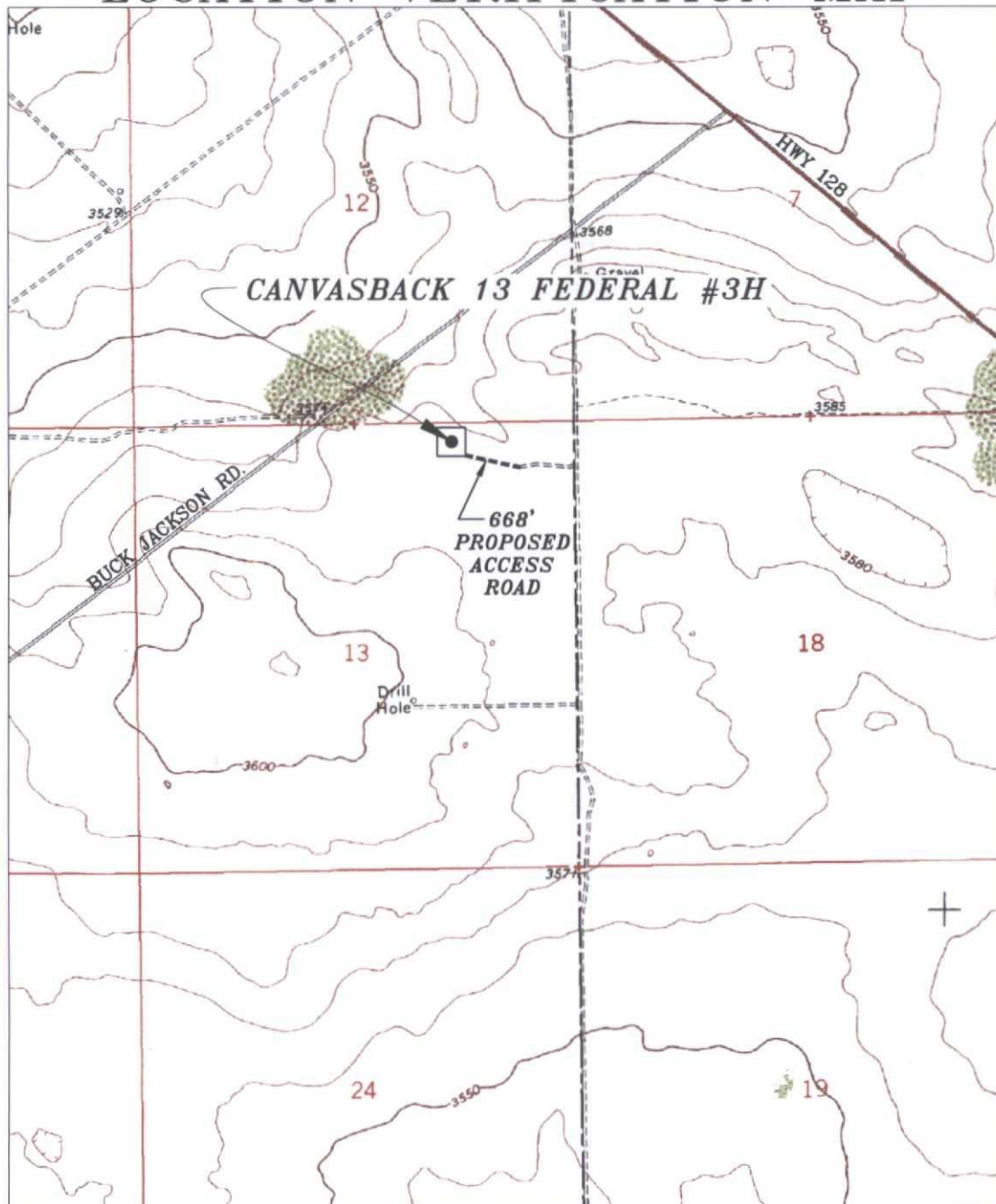
HARCROW SURVEYING, LLC
 1107 WATSON, ARTESIA N.M. 88210
 PH: (575) 513-2570 FAX: (575) 746-2158
 chad_harcrow77@yahoo.com



COG PRODUCTION, LLC

SURVEY DATE: MAR. 12, 2013	PAGE: 1 OF 1
DRAFTING DATE: MAR. 13, 2013	
APPROVED BY: CH	DRAWN BY: DDSI FILE: 13-106

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL: 10'

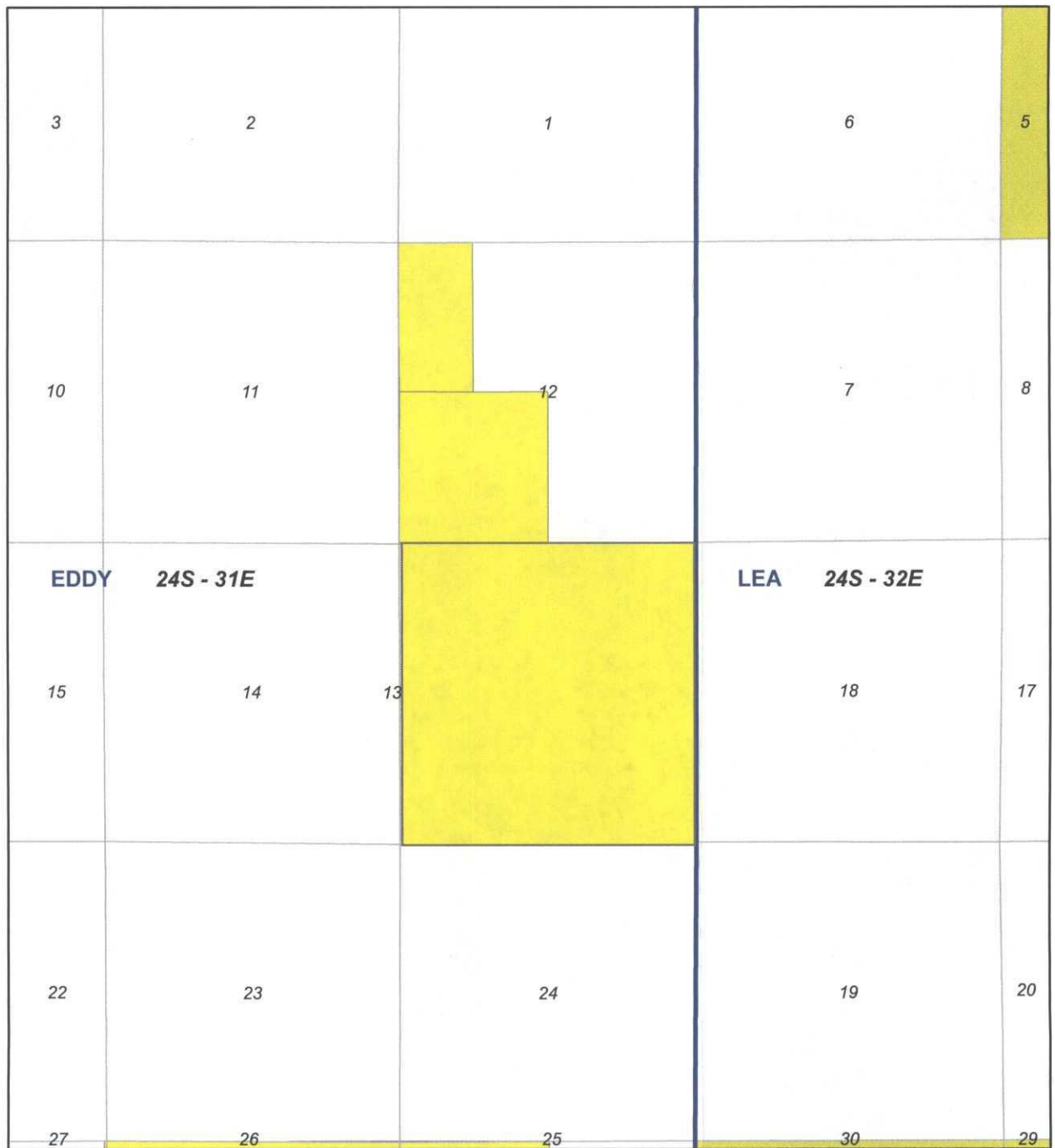
SEC. 13 TWP. 24-S RGE. 31-E
 SURVEY N.M.P.M.
 COUNTY LEA STATE NEW MEXICO
 DESCRIPTION 190' FNL & 1470' FEL
 ELEVATION 3582.3'
 OPERATOR COG PRODUCTION, LLC
 LEASE CANVASBACK 13 FEDERAL
 U.S.G.S. TOPOGRAPHIC MAP
 PADUCA BREAK NW, N.M.

HARCROW SURVEYING, LLC
 1107 WATSON, ARTESIA N.M. 88210
 PH: (575) 513-2570 FAX: (575) 746-2158
 chad_harcrow77@yahoo.com



COG PRODUCTION, LLC

SURVEY DATE: MAR. 12, 2013	PAGE: 1 OF 1
DRAFTING DATE: MAR. 13, 2013	
APPROVED BY: CH	DRAWN BY: DDSI FILE: 13-106



Legend

 COG ACREAGE (RT)

Brooks, David K., EMNRD

From: Brooks, David K., EMNRD
Sent: Tuesday, May 21, 2013 11:48 AM
To: bmaiorino@concho.com
Subject: Canvasback 13 Fed. #3H; NSL Application

Dear Mr. Maiorino

As with the Gunner 8 Federal wells that I sent you a messages yesterday, this application does not give the footage location for the beginning of the completed interval. Since it is non-standard at the surface location, and the attached map does not indicate that the spacing unit offsetting the surface location is owned by COG, we need that information.

Sincerely

David K. Brooks

Brooks, David K., EMNRD

From: Brian Maiorino <BMaiorino@concho.com>
Sent: Monday, June 03, 2013 1:10 PM
To: Brooks, David K., EMNRD
Subject: RE: NSL Application
Attachments: Canvasback 13 Federal 3H C-102 and directional plan.pdf; Gunner 8 Federal 5H C-102 and directional plan.pdf; Gunner 8 Federal 6H C-102 and directional plan.pdf

Hi David, Attached are corrected C-102s showing estimated completed interval for the Canvasback 13 Federal 3H, Gunner 8 Federal 5H, and Gunner 8 Federal 6H along with their proposed directional drill plans. All three wells are to be drilled with their penetration point to be more than 330 feet from the section line. Please let me know if any other information is needed for the approval non-standard locations.

Appreciate your help!

Brian Maiorino
Regulatory Analyst
Operations & Engineering

COG Operations LLC
One Concho Center
600 W. Illinois Avenue
Midland, TX 79701
432-221-0467
bmaiorino@concho.com



From: Brooks, David K., EMNRD [<mailto:david.brooks@state.nm.us>]
Sent: Tuesday, May 21, 2013 12:48 PM
To: Brian Maiorino
Subject: Canvasback 13 Fed. #3H; NSL Application

Dear Mr. Maiorino

As with the Gunner 8 Federal wells that I sent you a messages yesterday, this application does not give the footage location for the beginning of the completed interval. Since it is non-standard at the surface location, and the attached map does not indicate that the spacing unit offsetting the surface location is owned by COG, we need that information.

Sincerely

David K. Brooks

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