

RECEIVED: <u>5/8/17</u>	REVIEWER: <u>LRL</u>	TYPE: <u>NSL</u>	APP. NO: <u>PLE1712855711</u>
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ABOVE THIS TABLE FOR OCD DIVISION USE ONLY

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

**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

NSL-
Applicant: COG Operating LLC **OGRID Number:** 229137
Well Name: Burch Keely Unit #962H **API:** 30-015-44101
Pool: Burch Keely; Glorieta-Upper Yeso **Pool Code:** 979183

SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED BELOW

1) **TYPE OF APPLICATION:** Check those which apply for [A]

A. Location - Spacing Unit - Simultaneous Dedication

☒ NSL☐ NSP (PROJECT AREA)☐ NSP (PRORATION UNIT)☐ SDNSL-7533

B. Check one only for [I] or [II]

[I] Commingling - Storage - Measurement

☐ DHC☐ CTB☐ PLC☐ PC☐ OLS☐ OLM

[II] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery

☐ WFX☐ PMX☐ SWD☐ IPI☐ EOR☐ PPR2) **NOTIFICATION REQUIRED TO:** Check those which apply.A. ☐ Offset operators or lease holdersB. ☐ Royalty, overriding royalty owners, revenue ownersC. ☐ Application requires published noticeD. ☐ Notification and/or concurrent approval by SLOE. ☐ Notification and/or concurrent approval by BLMF. ☐ Surface ownerG. ☐ For all of the above, proof of notification or publication is attached, and/or,H. ☒ No notice required**FOR OCD ONLY**☐ Notice Complete☐ Application
Content
Complete

3) **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 Russell

Print or Type Name

Signature

05/05/2017

Date

(432) 685-4385

Phone Number

Russell@concho.com

e-mail Address

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 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
1220 South St. Francis Dr.
Santa Fe, NM 87505

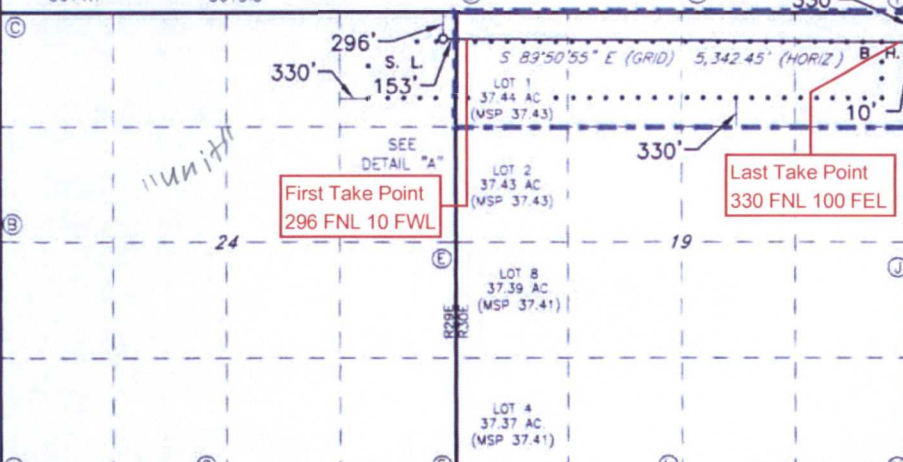
Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-44101		² Pool Code 97918		³ Pool Name Burch Keely; Glorieta-Upper Yeso					
⁴ Property Code 308086		⁵ Property Name BURCH KEELY UNIT						⁶ Well Number 962H	
⁷ OGRID NO 229137		⁸ Operator Name COG OPERATING, LLC						⁹ Elevation 3618	
¹⁰ Surface Location									
UL or lot no A	Section 24	Township 17S	Range 29E	Lot Ltn	Feet from the 296	North South line NORTH	Feet from the 153	East West line EAST	County EDDY
¹¹ Bottom Hole Location If Different From Surface									
UL or lot no A	Section 19	Township 17S	Range 30E	Lot Ltn	Feet from the 330	North South line NORTH	Feet from the 10	East West line EAST	County EDDY
¹² Dedicated Acres 157.43		¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ Order No.			

No allowable will be assigned to this completion until all interest have been consolidated or a non-standard unit has been approved by the division.

¹⁶ GEODETIC DATA NAD 83 GRID - NM EAST SURFACE LOCATION N: 664544.1 - E: 637534.5 LAT: 32.82648708° N LONG: 104.02016751° W BOTTOM HOLE N: 664530.0 - E: 642875.6 LAT: 32.82638367° N LONG: 104.02078017° W DETAIL "A" 3620.6' 600' 3624.6' 3614.7' 600' 3613.3'			CORNER DATA NAD 83 GRID - NM EAST A. FOUND 2" GALVANIZED IP N: 659552.3 - E: 632418.3 B. FOUND 3/4" IP N: 662189.9 - E: 632413.4 C. FOUND 1" STEEL PIPE N: 664828.6 - E: 632407.9 D. FOUND BRASS CAP "1914" N: 664840.4 - E: 637685.9 E. FOUND BRASS CAP "1914" N: 662203.0 - E: 637700.0 F. FOUND BRASS CAP "1914" N: 659567.0 - E: 637708.9 G. FOUND 1/2" REBAR N: 659559.8 - E: 635063.4			CORNER DATA NAD 83 GRID - NM EAST H. FOUND BRASS CAP "1937" N: 664849.8 - E: 640242.9 I. FOUND BRASS CAP "1916" N: 664860.0 - E: 642884.4 J. FOUND BRASS CAP "1990" N: 662220.5 - E: 642893.7 K. FOUND BRASS CAP "1916" N: 659581.0 - E: 642902.6 L. FOUND BRASS CAP "1916" N: 659574.2 - E: 640262.1			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 entered by the division  Date 05/01/2017 Signature Robyn M. Russell Printed Name Russell@concho.com E-mail Address		
			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. 6/25/13 Date of Survey Signature and Seal of Professional Surveyor  19680 Certificate Number 3/23/17 BH CHANGE								



C O N C H O

COG Operating LLC

Eddy County, NM (NAD-27 2015)

Burch Keely Unit #962H

API #: 30-015-44101

SHL: 296' FNL, 153' FEL, Sec 24, T17S, R29E, Unit A

PP: 333' FNL, 330' FWL, Sec 19, T17S, R30E, Unit D

BHL: 330' FNL, 10' FEL, Sec 19, T17S, R30E, Unit A

Plan: Design #1

Standard Planning Report

04 May, 2017



Database:	EDM:5000.1 Single User Db	Local Co-ordinate Reference:	Site Burch Keely Unit #962H
Company:	COG Operating LLC	TVD Reference:	KB @ 3636.00usft (Silver Oak 3)
Project:	Eddy County, NM (NAD-27 2015)	MD Reference:	KB @ 3636.00usft (Silver Oak 3)
Site:	Burch Keely Unit #962H	North Reference:	Grid
Well:	SHL: 296' FNL: 153' FEL: Sec 24 T17S R29E Unit A	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 330' FNL: 10' FEL: Sec 19 T17S R30E Unit A		
Design:	Design #1		

Project	Eddy County, NM (NAD-27 2015)		
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		Burch Keely Unit #962H			
Site Position:		Northing:	664,480.60 usft	Latitude:	32° 49' 34.864 N
From:	Map	Easting:	596,355.50 usft	Longitude:	104° 1' 10.772 W
Position Uncertainty:	0.00 usft	Slot Radius:	13.20 in	Grid Convergence:	0.17 °

Well	SHL: 296' FNL: 153' FEL: Sec 24 T17S R29E Unit A					
Well Position	+N/-S	0.00 usft	Northing:	664,480.60 usft	Latitude:	32° 49' 34.864 N
	+E/-W	0.00 usft	Easting:	596,355.50 usft	Longitude:	104° 1' 10.772 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	3,618.00 usft

Wellbore	BHL: 330' FNL: 10' FEL: Sec 19 T17S R30E Unit A				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	5/3/2017	7.22	60.54	48,259

Design	Design #1			
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	90.15

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	
4,429.21	0.00	0.00	4,429.21	0.00	0.00	0.00	0.00	0.00	0.00	
5,256.48	91.00	94.57	4,950.00	-42.23	528.28	11.00	11.00	0.00	94.57	
5,508.27	91.00	89.53	4,945.61	-51.24	779.78	2.00	0.00	-2.00	-89.96	
10,070.43	91.00	89.53	4,866.02	-14.10	5,341.10	0.00	0.00	0.00	0.00	PBHL (BKU#962H/L1)

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Site Burch Keely Unit #962H
Company:	COG Operating LLC	TVD Reference:	KB @ 3636.00usft (Silver Oak 3)
Project:	Eddy County, NM (NAD-27 2015)	MD Reference:	KB @ 3636.00usft (Silver Oak 3)
Site:	Burch Keely Unit #962H	North Reference:	Grid
Well:	SHL 296' FNL 153' FEL Sec 24 T17S R29E, Unit A	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL 330' FNL 10' FEL Sec 19 T17S R30E Unit A		
Design:	Design #1		

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
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	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
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00
4,100.00	0.00	0.00	4,100.00	0.00	0.00	0.00	0.00	0.00	0.00
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.00	0.00	0.00
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.00	0.00	0.00
4,400.00	0.00	0.00	4,400.00	0.00	0.00	0.00	0.00	0.00	0.00
4,429.21	0.00	0.00	4,429.21	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 11.00									
4,450.00	2.29	94.57	4,449.99	-0.03	0.41	0.41	11.00	11.00	0.00
4,500.00	7.79	94.57	4,499.78	-0.38	4.79	4.79	11.00	11.00	0.00
4,550.00	13.29	94.57	4,548.92	-1.11	13.90	13.90	11.00	11.00	0.00
4,600.00	18.79	94.57	4,596.96	-2.21	27.66	27.67	11.00	11.00	0.00
4,650.00	24.29	94.57	4,643.45	-3.67	45.95	45.96	11.00	11.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Site Burch Keely Unit #962H
Company:	COG Operating LLC	TVD Reference:	KB @ 3636.00usft (Silver Oak 3)
Project:	Eddy County, NM (NAD-27/2015)	MD Reference:	KB @ 3636.00usft (Silver Oak 3)
Site:	Burch Keely Unit #962H	North Reference:	Grid
Well:	SHL 296' FNL 153' FEL Sec 24 T17S R29E Unit A	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL 330' FNL 10' FEL Sec 19 T17S R30E Unit A		
Design:	Design #1		

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)
4,700.00	29.79	94.57	4,687.97	-5.48	68.60	68.61	11.00	11.00	0.00
4,750.00	35.29	94.57	4,730.10	-7.63	95.40	95.42	11.00	11.00	0.00
4,800.00	40.79	94.57	4,769.47	-10.08	126.09	126.12	11.00	11.00	0.00
4,850.00	46.29	94.57	4,805.70	-12.82	160.41	160.45	11.00	11.00	0.00
4,900.00	51.79	94.57	4,838.47	-15.83	198.03	198.08	11.00	11.00	0.00
4,950.00	57.29	94.57	4,867.46	-19.07	238.61	238.66	11.00	11.00	0.00
5,000.00	62.79	94.57	4,892.43	-22.52	281.78	281.84	11.00	11.00	0.00
5,050.00	68.29	94.57	4,913.12	-26.15	327.13	327.19	11.00	11.00	0.00
5,100.00	73.79	94.57	4,929.37	-29.91	374.24	374.32	11.00	11.00	0.00
5,150.00	79.29	94.57	4,941.00	-33.79	422.70	422.78	11.00	11.00	0.00
5,200.00	84.79	94.57	4,947.93	-37.73	472.04	472.14	11.00	11.00	0.00
5,250.00	90.29	94.57	4,950.07	-41.71	521.81	521.92	11.00	11.00	0.00
5,256.48	91.00	94.57	4,950.00	-42.23	528.27	528.38	11.00	11.00	0.00
Start DLS 2.00 TFO -89.96									
5,300.00	91.00	93.70	4,949.24	-45.36	571.67	571.79	2.00	0.00	-2.00
5,400.00	91.00	91.70	4,947.50	-50.07	671.54	671.67	2.00	0.00	-2.00
5,508.27	91.00	89.53	4,945.61	-51.24	779.78	779.92	2.00	0.00	-2.00
Start 4562.17 hold at 5508.27 MD									
5,600.00	91.00	89.53	4,944.01	-50.49	871.50	871.63	0.00	0.00	0.00
5,700.00	91.00	89.53	4,942.26	-49.68	971.48	971.60	0.00	0.00	0.00
5,800.00	91.00	89.53	4,940.52	-48.86	1,071.46	1,071.58	0.00	0.00	0.00
5,900.00	91.00	89.53	4,938.77	-48.05	1,171.44	1,171.56	0.00	0.00	0.00
6,000.00	91.00	89.53	4,937.03	-47.23	1,271.42	1,271.54	0.00	0.00	0.00
6,100.00	91.00	89.53	4,935.28	-46.42	1,371.40	1,371.52	0.00	0.00	0.00
6,200.00	91.00	89.53	4,933.54	-45.61	1,471.38	1,471.50	0.00	0.00	0.00
6,300.00	91.00	89.53	4,931.79	-44.79	1,571.37	1,571.48	0.00	0.00	0.00
6,400.00	91.00	89.53	4,930.05	-43.98	1,671.35	1,671.46	0.00	0.00	0.00
6,500.00	91.00	89.53	4,928.30	-43.16	1,771.33	1,771.44	0.00	0.00	0.00
6,600.00	91.00	89.53	4,926.56	-42.35	1,871.31	1,871.42	0.00	0.00	0.00
6,700.00	91.00	89.53	4,924.82	-41.54	1,971.29	1,971.39	0.00	0.00	0.00
6,800.00	91.00	89.53	4,923.07	-40.72	2,071.27	2,071.37	0.00	0.00	0.00
6,900.00	91.00	89.53	4,921.33	-39.91	2,171.25	2,171.35	0.00	0.00	0.00
7,000.00	91.00	89.53	4,919.58	-39.09	2,271.24	2,271.33	0.00	0.00	0.00
7,100.00	91.00	89.53	4,917.84	-38.28	2,371.22	2,371.31	0.00	0.00	0.00
7,200.00	91.00	89.53	4,916.09	-37.47	2,471.20	2,471.29	0.00	0.00	0.00
7,300.00	91.00	89.53	4,914.35	-36.65	2,571.18	2,571.27	0.00	0.00	0.00
7,400.00	91.00	89.53	4,912.60	-35.84	2,671.16	2,671.25	0.00	0.00	0.00
7,500.00	91.00	89.53	4,910.86	-35.02	2,771.14	2,771.23	0.00	0.00	0.00
7,600.00	91.00	89.53	4,909.12	-34.21	2,871.13	2,871.21	0.00	0.00	0.00
7,700.00	91.00	89.53	4,907.37	-33.40	2,971.11	2,971.18	0.00	0.00	0.00
7,800.00	91.00	89.53	4,905.63	-32.58	3,071.09	3,071.16	0.00	0.00	0.00
7,900.00	91.00	89.53	4,903.88	-31.77	3,171.07	3,171.14	0.00	0.00	0.00
8,000.00	91.00	89.53	4,902.14	-30.95	3,271.05	3,271.12	0.00	0.00	0.00
8,100.00	91.00	89.53	4,900.39	-30.14	3,371.03	3,371.10	0.00	0.00	0.00
8,200.00	91.00	89.53	4,898.65	-29.33	3,471.01	3,471.08	0.00	0.00	0.00
8,300.00	91.00	89.53	4,896.90	-28.51	3,571.00	3,571.06	0.00	0.00	0.00
8,400.00	91.00	89.53	4,895.16	-27.70	3,670.98	3,671.04	0.00	0.00	0.00
8,500.00	91.00	89.53	4,893.42	-26.88	3,770.96	3,771.02	0.00	0.00	0.00
8,600.00	91.00	89.53	4,891.67	-26.07	3,870.94	3,871.00	0.00	0.00	0.00
8,700.00	91.00	89.53	4,889.93	-25.26	3,970.92	3,970.97	0.00	0.00	0.00
8,800.00	91.00	89.53	4,888.18	-24.44	4,070.90	4,070.95	0.00	0.00	0.00
8,900.00	91.00	89.53	4,886.44	-23.63	4,170.88	4,170.93	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Site Burch Keely Unit #962H
Company:	COG Operating LLC	TVD Reference:	KB @ 3636.00usft (Silver Oak 3)
Project:	Eddy County, NM (NAD-27 2015)	MD Reference:	KB @ 3636.00usft (Silver Oak 3)
Site:	Burch Keely Unit #962H	North Reference:	Grid
Well:	SHL: 296' FNL: 153' FEL: Sec 24, T17S R29E Unit A	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 330' FNL: 10' FEL: Sec 19, T17S, R30E Unit A		
Design:	Design #1		

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)
9,000.00	91.00	89.53	4,884.69	-22.81	4,270.87	4,270.91	0.00	0.00	0.00
9,100.00	91.00	89.53	4,882.95	-22.00	4,370.85	4,370.89	0.00	0.00	0.00
9,200.00	91.00	89.53	4,881.20	-21.19	4,470.83	4,470.87	0.00	0.00	0.00
9,300.00	91.00	89.53	4,879.46	-20.37	4,570.81	4,570.85	0.00	0.00	0.00
9,400.00	91.00	89.53	4,877.72	-19.56	4,670.79	4,670.83	0.00	0.00	0.00
9,500.00	91.00	89.53	4,875.97	-18.74	4,770.77	4,770.81	0.00	0.00	0.00
9,600.00	91.00	89.53	4,874.23	-17.93	4,870.75	4,870.79	0.00	0.00	0.00
9,700.00	91.00	89.53	4,872.48	-17.12	4,970.74	4,970.76	0.00	0.00	0.00
9,800.00	91.00	89.53	4,870.74	-16.30	5,070.72	5,070.74	0.00	0.00	0.00
9,900.00	91.00	89.53	4,868.99	-15.49	5,170.70	5,170.72	0.00	0.00	0.00
10,000.00	91.00	89.53	4,867.25	-14.67	5,270.68	5,270.70	0.00	0.00	0.00
10,070.43	91.00	89.53	4,866.02	-14.10	5,341.10	5,341.12	0.00	0.00	0.00
TD at 10070.43									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N-S (usft)	+E-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
Max Dev 68.73' @ 4639	0.00	0.00	0.00	-34.50	-176.65	664,446.10	596,178.85	32° 49' 34.528 N	104° 1' 12.843 W
- plan misses target center by 179.99usft at 0.00usft MD (0.00 TVD, 0.00 N, 0.00 E)									
- Circle (radius 68.73)									
86.10' Radius @ 4873.1'	0.00	0.00	0.00	-15.34	5,021.04	664,465.26	601,376.54	32° 49' 34.561 N	104° 0' 11.929 W
- plan misses target center by 4870.86usft at 9835.31usft MD (4870.12 TVD, -16.01 N, 5106.02 E)									
- Circle (radius 86.10)									
KOP (BKU#962H/L1)	0.00	0.00	4,429.21	0.00	0.00	664,480.60	596,355.50	32° 49' 34.864 N	104° 1' 10.772 W
- plan hits target center									
- Point									
PBHL (BKU#962H/L1)	0.00	0.00	4,866.02	-14.10	5,341.10	664,466.50	601,696.60	32° 49' 34.563 N	104° 0' 8.179 W
- plan hits target center									
- Point									
END TURN (BKU#962H)	0.00	0.00	4,945.61	-51.24	779.78	664,429.37	597,135.29	32° 49' 34.334 N	104° 1' 1.635 W
- plan hits target center									
- Point									
PP (BKU#962H/L1)	0.00	0.00	4,948.83	-38.62	483.21	664,441.98	596,838.71	32° 49' 34.467 N	104° 1' 5.110 W
- plan hits target center									
- Point									
EOC/TURN (BKU#962H)	0.00	0.00	4,950.00	-42.23	528.27	664,438.38	596,883.78	32° 49' 34.430 N	104° 1' 4.582 W
- plan hits target center									
- Point									

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Site Burch Keely Unit #962H
Company:	COG Operating LLC	TVD Reference:	KB @ 3636.00usft (Silver Oak 3)
Project:	Eddy County NM (NAD-27-2015)	MD Reference:	KB @ 3636.00usft (Silver Oak 3)
Site:	Burch Keely Unit #962H	North Reference:	Grid
Well:	SHL 296' FNL 153' FEL Sec 24 T17S R29E Unit A	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL 330' FNL 10' FEL Sec 19 T17S R30E Unit A		
Design:	Design #1		

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N-S (usft)	+E-W (usft)	
4,429.21	4,429.21	0.00	0.00	Start Build 11.00
5,256.48	4,950.00	-38.62	483.21	Start DLS 2.00 TFO -89.96
5,508.27	4,945.61	-42.23	528.28	Start 4562.17 hold at 5508.27 MD
10,070.43	4,866.02	-51.24	779.78	TD at 10070.43



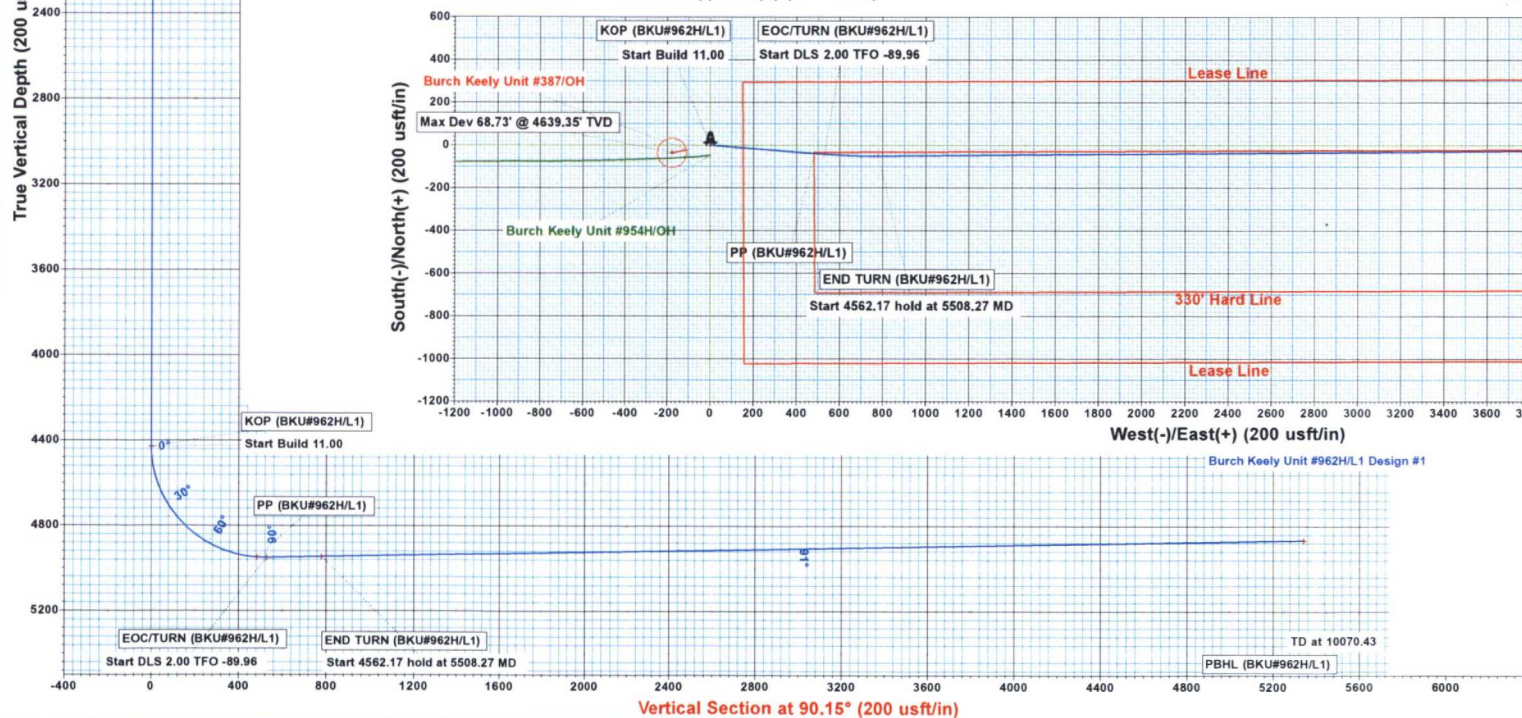
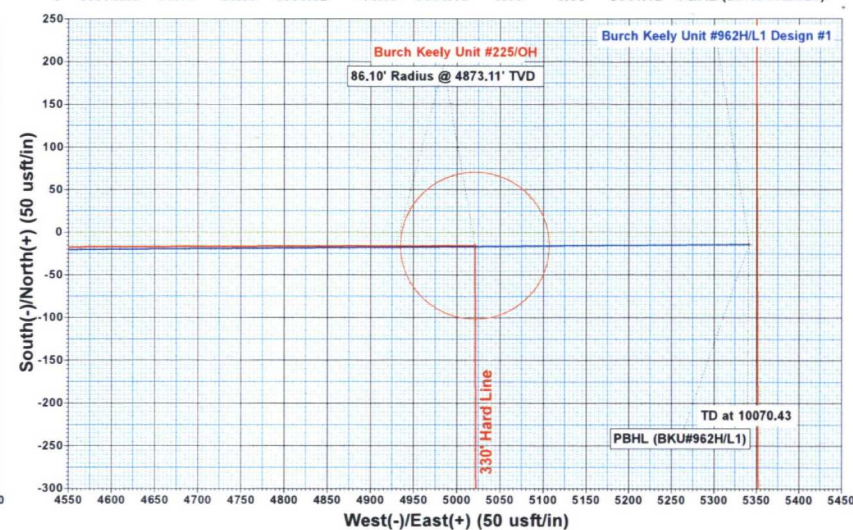
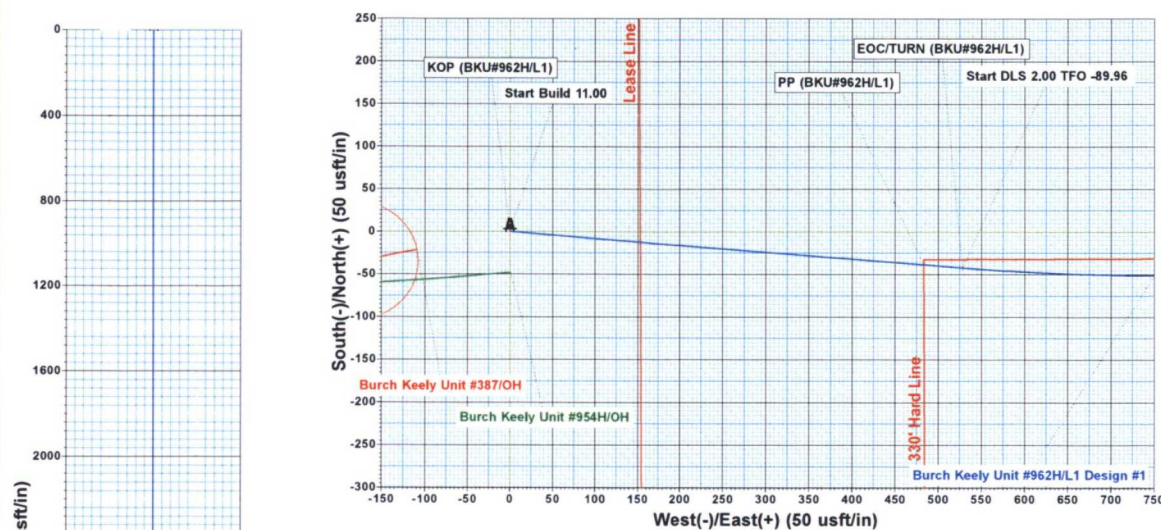
Project: COG Operating LLC
Site: Eddy County, NM (NAD-27 2015)
Site: Burch Keely Unit #962H

Well: SHL: 296' FNL, 153' FEL, Sec 24, T17S, R29E, Unit A
Wellbore: BHL: 330' FNL, 10' FEL, Sec 19, T17S, R30E, Unit A

Plan: Design #1 (SHL: 296' FNL, 153' FEL, Sec 24, T17S, R29E, Unit A/BHL: 330' FNL, 10' FEL, Sec 19, T17S, R30E, Unit A)

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	4429.21	0.00	0.00	4429.21	0.00	0.00	0.00	0.00	0.00	
3	5256.48	91.00	94.57	4950.00	-42.23	528.28	11.00	94.57	528.39	
4	5508.27	91.00	89.53	4945.61	-51.24	779.78	2.00	-89.96	779.91	
5	10070.43	91.00	89.53	4866.02	-14.10	5341.10	0.00	0.00	5341.12	PBHL (BKU#962H/L1)



Azimuths to Grid North
True North: -0.17°
Magnetic North: 7.05°
Magnetic Field
Strength: 48258.6nT
Dip Angle: 60.54°
Date: 5/3/2017
Model: IGRF2015



Terra Directional Services LLC
3705 South County Road 1210, Midland, TX 79706
Phone: 432-618-1210

Ground Elevation:: 3618.00
RKB Elevation: KB @ 3636.00usft (Silver Oak 3)

Northing 664480.60 Easting 596355.50 Latitude 32° 49' 34.864 N Longitude 104° 1' 10.772 W

PROJECT DETAILS: Eddy County, NM (NAD-27 2015)
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
Local North: Grid



CONCHO

COG Operating LLC

Eddy County, NM (NAD-27 2015)

Burch Keely Unit #962H

API #: 30-015-44101

SHL: 296' FNL, 153' FEL, Sec 24, T17S, R29E, Unit A

PP: 333' FNL, 330' FWL, Sec 19, T17S, R30E, Unit D

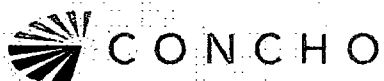
BHL: 330' FNL, 10' FEL, Sec 19, T17S, R30E, Unit A

Design #1

Anticollision Report

04 May, 2017





TDS
Anticollision Report



Company:	COG Operating LLC	Local Co-ordinate Reference:	Site Burch Keely Unit #962H
Project:	Eddy County, NM (NAD:27 2015)	TVD Reference:	KB @ 3636.00usft (Silver Oak 3)
Reference Site:	Burch Keely Unit #962H	MD Reference:	KB @ 3636.00usft (Silver Oak 3)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	SHL: 296' FNL: 153' FEL: Sec 24 T17S, R29E, Unit A	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore:	BHL: 330' FNL: 10' FEL: Sec 19 T17S, R30E, Unit A	Database:	EDM-5000.1 Single User Db
Reference Design:	Design #1	Offset TVD Reference:	Offset: Datum

Reference	Design #1		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.00usft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum separation factor of 4.00	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program		Date 5/4/2017			
From (usft)	To (usft)	Survey (Wellbore)		Tool Name	Description
0.00	10,070.43	Design #1 (BHL: 330' FNL, 10' FEL, Sec 1		MWD	MWD - Standard

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Eddy County Offset Wells						
Burch Keely Unit #225 - OH - OH	9,664.23	4,855.96	0.19	-420.39	0.000	Level 1, CC, ES, SF
Burch Keely Unit #387 - OH - OH	4,410.00	4,394.12	114.60	16.22	1.165	Level 2, CC, ES, SF
Burch Keely Unit #954H - OH - OH	4,800.00	9,968.00	168.68	122.23	3.632	ES, SF
Burch Keely Unit #954H - OH - OH	4,800.79	9,968.00	168.67	122.32	3.639	CC

Eddy County Offset Wells - Burch Keely Unit #225 - OH - OH											Offset Site Error: 0.00 usft		
Offset Design		Survey Program: 432-INC									Offset Well Error: 0.00 usft		
Reference		Offset		Semi Major Axis		Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)		Separation Factor
9,300.00	4,879.46	4,873.70	4,872.85	124.75	287.60	179.36	-17.61	4,934.41	363.79	256.54	107.25	3.392	
9,400.00	4,877.72	4,868.87	4,868.01	127.49	287.13	179.14	-17.60	4,934.56	263.91	156.73	107.18	2.462	
9,500.00	4,875.97	4,864.00	4,863.15	130.24	286.66	178.63	-17.60	4,934.72	164.03	56.92	107.11	1.531	
9,600.00	4,874.23	4,859.11	4,858.26	132.99	286.18	176.57	-17.60	4,934.87	64.15	-42.89	107.04	0.599	Level 1
9,664.23	4,873.11	4,855.96	4,855.11	134.75	285.88	89.97	-17.59	4,934.97	0.19	-420.39	420.58	0.000	Level 1, CC, ES, SF
9,700.00	4,872.48	4,854.19	4,853.34	135.73	285.70	6.04	-17.59	4,935.03	35.73	-71.29	107.02	0.334	Level 1
9,800.00	4,870.74	4,849.24	4,848.40	138.48	285.22	1.57	-17.59	4,935.19	135.61	28.70	106.90	1.268	Level 3
9,900.00	4,868.99	4,844.26	4,843.42	141.23	284.74	0.89	-17.58	4,935.35	235.48	128.65	106.83	2.204	
10,000.00	4,867.25	4,839.26	4,838.42	143.98	284.26	0.61	-17.58	4,935.51	335.36	228.60	106.76	3.141	
10,070.89	4,866.01	4,835.69	4,834.85	145.92	283.91	0.50	-17.58	4,935.62	406.16	299.09	107.07	3.794	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	COG Operating LLC	Local Co-ordinate Reference:	Site Burch Keely Unit #962H
Project:	Eddy County NM (NAD-27 2015)	TVD Reference:	KB @ 3636.00usft (Silver Oak 3)
Reference Site:	Burch Keely Unit #962H	MD Reference:	KB @ 3636.00usft (Silver Oak 3)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	SHL 296' FNL 153' FEL Sec 24 T17S R29E Unit A	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	BHL 330' FNL 10' FEL Sec 19 T17S R30E Unit A	Database:	EDM 5000.1 Single User Db
Reference Design:	Design #1	Offset TVD Reference:	Offset Datum

Offset Design Eddy County Offset Wells - Burch Keely Unit #387 - OH - OH														Offset Site Error: 0.00 usft
Survey Program: 201-INC														Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
1,800.00	1,800.00	1,784.35	1,783.95	3.91	104.59	-101.05	-28.49	-145.93	148.70	109.58	39.12	3.801		
1,900.00	1,900.00	1,884.34	1,883.93	4.14	109.12	-101.05	-28.24	-144.65	147.39	106.11	41.29	3.570		
2,000.00	2,000.00	1,984.33	1,983.91	4.36	113.64	-101.05	-27.99	-143.36	146.08	102.63	43.45	3.362		
2,100.00	2,100.00	2,084.32	2,083.90	4.59	118.17	-101.05	-27.74	-142.08	144.77	99.16	45.62	3.174		
2,200.00	2,200.00	2,184.31	2,183.88	4.81	122.72	-101.05	-27.49	-140.79	143.46	95.64	47.83	3.000		
2,300.00	2,300.00	2,284.30	2,283.86	5.04	127.28	-101.05	-27.24	-139.51	142.16	92.07	50.09	2.838		
2,400.00	2,400.00	2,384.30	2,383.84	5.26	131.85	-101.05	-26.99	-138.22	140.85	88.48	52.37	2.690		
2,500.00	2,500.00	2,484.29	2,483.83	5.49	136.45	-101.05	-26.74	-136.94	139.54	84.84	54.69	2.551		
2,600.00	2,600.00	2,584.28	2,583.81	5.71	141.05	-101.05	-26.48	-135.66	138.23	81.21	57.02	2.424		
2,700.00	2,700.00	2,684.27	2,683.79	5.94	145.64	-101.05	-26.23	-134.37	136.92	77.57	59.35	2.307		
2,800.00	2,800.00	2,784.26	2,783.78	6.16	150.24	-101.05	-25.98	-133.09	135.61	73.94	61.68	2.199		
2,900.00	2,900.00	2,884.25	2,883.76	6.39	154.83	-101.05	-25.73	-131.80	134.30	70.32	63.98	2.099		
3,000.00	3,000.00	2,984.24	2,983.74	6.61	159.41	-101.05	-25.48	-130.52	132.99	66.74	66.26	2.007		
3,100.00	3,100.00	3,084.24	3,083.72	6.84	163.99	-101.05	-25.23	-129.23	131.68	63.16	68.53	1.922		
3,200.00	3,200.00	3,184.23	3,183.71	7.06	168.57	-101.05	-24.98	-127.95	130.38	59.57	70.80	1.841		
3,300.00	3,300.00	3,284.22	3,283.69	7.28	173.15	-101.05	-24.73	-126.66	129.07	55.98	73.09	1.766		
3,400.00	3,400.00	3,384.21	3,383.67	7.51	177.74	-101.05	-24.48	-125.38	127.76	52.38	75.38	1.695		
3,500.00	3,500.00	3,484.20	3,483.66	7.73	182.33	-101.05	-24.23	-124.09	126.45	48.78	77.67	1.628		
3,600.00	3,600.00	3,584.19	3,583.64	7.96	186.92	-101.05	-23.98	-122.81	125.14	45.18	79.96	1.565		
3,700.00	3,700.00	3,684.18	3,683.62	8.18	191.51	-101.05	-23.73	-121.53	123.83	41.58	82.25	1.506		
3,800.00	3,800.00	3,784.18	3,783.60	8.41	196.10	-101.05	-23.47	-120.24	122.52	37.99	84.53	1.449 Level 3		
3,900.00	3,900.00	3,884.17	3,883.59	8.63	200.68	-101.05	-23.22	-118.96	121.21	34.41	86.81	1.398 Level 3		
4,000.00	4,000.00	3,984.16	3,983.57	8.86	205.27	-101.05	-22.97	-117.67	119.90	30.82	89.08	1.346 Level 3		
4,100.00	4,100.00	4,084.15	4,083.55	9.08	209.86	-101.05	-22.72	-116.39	118.59	27.23	91.36	1.298 Level 3		
4,200.00	4,200.00	4,184.14	4,183.54	9.31	214.45	-101.05	-22.47	-115.10	117.29	23.65	93.64	1.253 Level 3		
4,300.00	4,300.00	4,284.13	4,283.52	9.53	219.03	-101.05	-22.22	-113.82	115.98	20.08	95.90	1.209 Level 2		
4,400.00	4,400.00	4,384.12	4,383.50	9.76	223.61	-101.05	-21.97	-112.53	114.67	16.51	98.16	1.168 Level 2		
4,410.00	4,410.00	4,394.12	4,393.50	9.78	224.07	164.39	-21.94	-112.40	114.60	16.22	98.38	1.165 Level 2, CC, ES, SF		
4,500.00	4,499.78	4,483.96	4,483.33	9.97	228.18	164.90	-21.72	-111.25	117.99	17.57	100.42	1.175 Level 2		
4,600.00	4,596.96	4,581.41	4,580.77	10.18	232.64	166.84	-21.47	-110.00	139.01	35.73	103.29	1.346 Level 3		
4,700.00	4,687.97	4,640.00	4,639.35	10.45	235.33	167.71	-21.33	-109.25	181.15	76.04	105.12	1.723		
4,800.00	4,769.47	4,640.00	4,639.35	10.86	235.33	163.88	-21.33	-109.25	260.92	162.22	98.70	2.644		
4,900.00	4,838.47	4,640.00	4,639.35	11.54	235.33	147.43	-21.33	-109.25	356.73	260.57	96.16	3.710		



TDS
Anticollision Report



Company:	COG Operating LLC	Local Co-ordinate Reference:	Site Burch Keely Unit #962H
Project:	Eddy County, NM (NAD-27-2015)	TVD Reference:	KB @ 3636.00usft (Silver Oak 3)
Reference Site:	Burch Keely Unit #962H	MD Reference:	KB @ 3636.00usft (Silver Oak 3)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	SHL: 296' FNL: 153' FEL: Sec 24 T17S R29E, Unit A	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore:	BHL: 330' FNL: 10' FEL: Sec 19 T17S R30E Unit A	Database:	EDM 5000.1 Single User Db
Reference Design:	Design #1	Offset TVD Reference:	Offset Datum

Offset Design Eddy County Offset Wells - Burch Keely Unit #954H - OH - OH													Offset Site Error:	0.00 usft
Survey Program: 100-VES-ISCWSA-GYRO-3, 4297-MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
4,800.00	4,769.47	9,968.00	4,854.93	10.86	142.52	163.55	-47.97	0.87	168.68	122.23	46.44	3.632 ES, SF		
4,800.79	4,770.07	9,968.00	4,854.93	10.87	142.52	163.55	-47.97	0.87	168.67	122.32	46.36	3.639 CC		

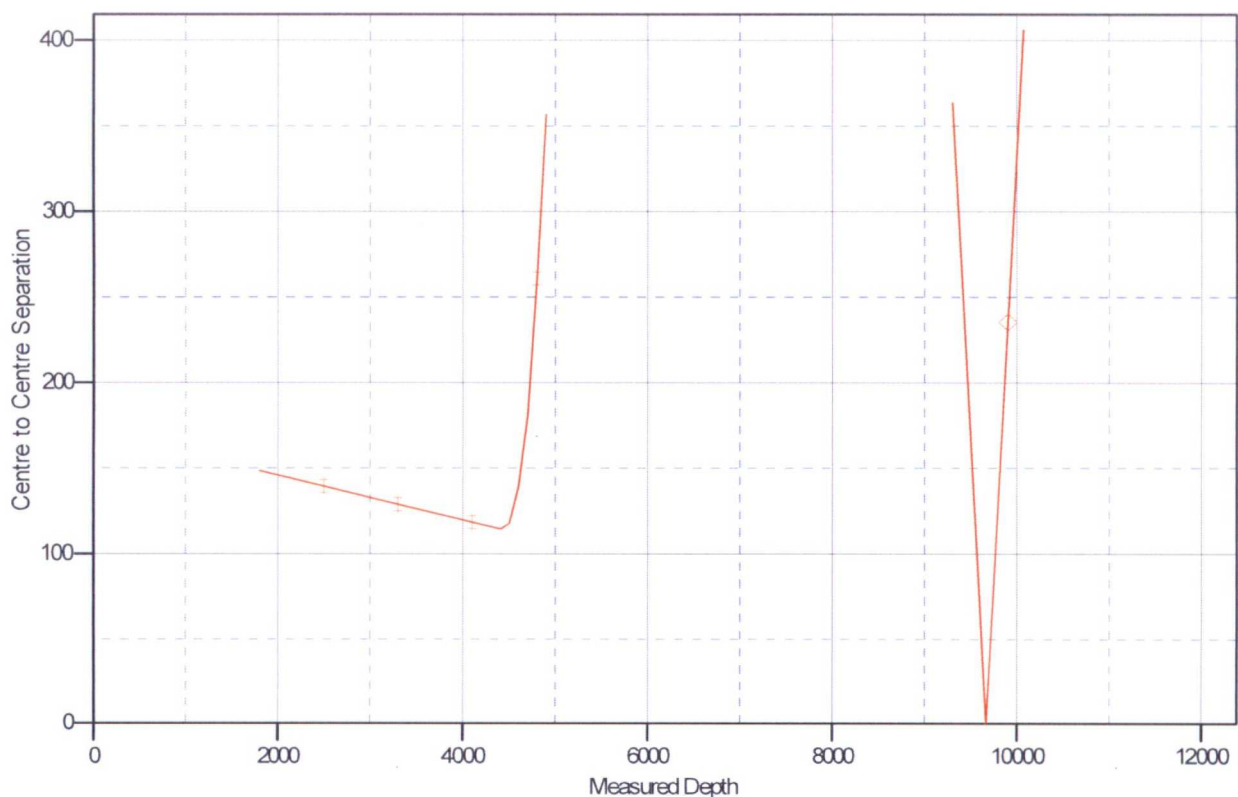
Company: COG Operating LLC
Project: Eddy County, NM (NAD-27 2015)
Reference Site: Burch Keely Unit #962H
Site Error: 0.00 usft
Reference Well: SHL: 296' FNL, 153' FEL, Sec 24, T17S, R29E, Unit A
Well Error: 0.00 usft
Reference Wellbore: BHL: 330' FNL, 10' FEL, Sec 19, T17S, R30E, Unit A
Reference Design: Design #1

Local Co-ordinate Reference: Site Burch Keely Unit #962H
TVD Reference: KB @ 3636.00usft (Silver Oak 3)
MD Reference: KB @ 3636.00usft (Silver Oak 3)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM 5000.1 Single User Db
Offset TVD Reference: Offset Datum

Reference Depths are relative to KB @ 3636.00usft (Silver Oak 3)
 Offset Depths are relative to Offset Datum
 Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: Burch Keely Unit #962H
 Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30
 Grid Convergence at Surface is: 0.17°

Ladder Plot



LEGEND

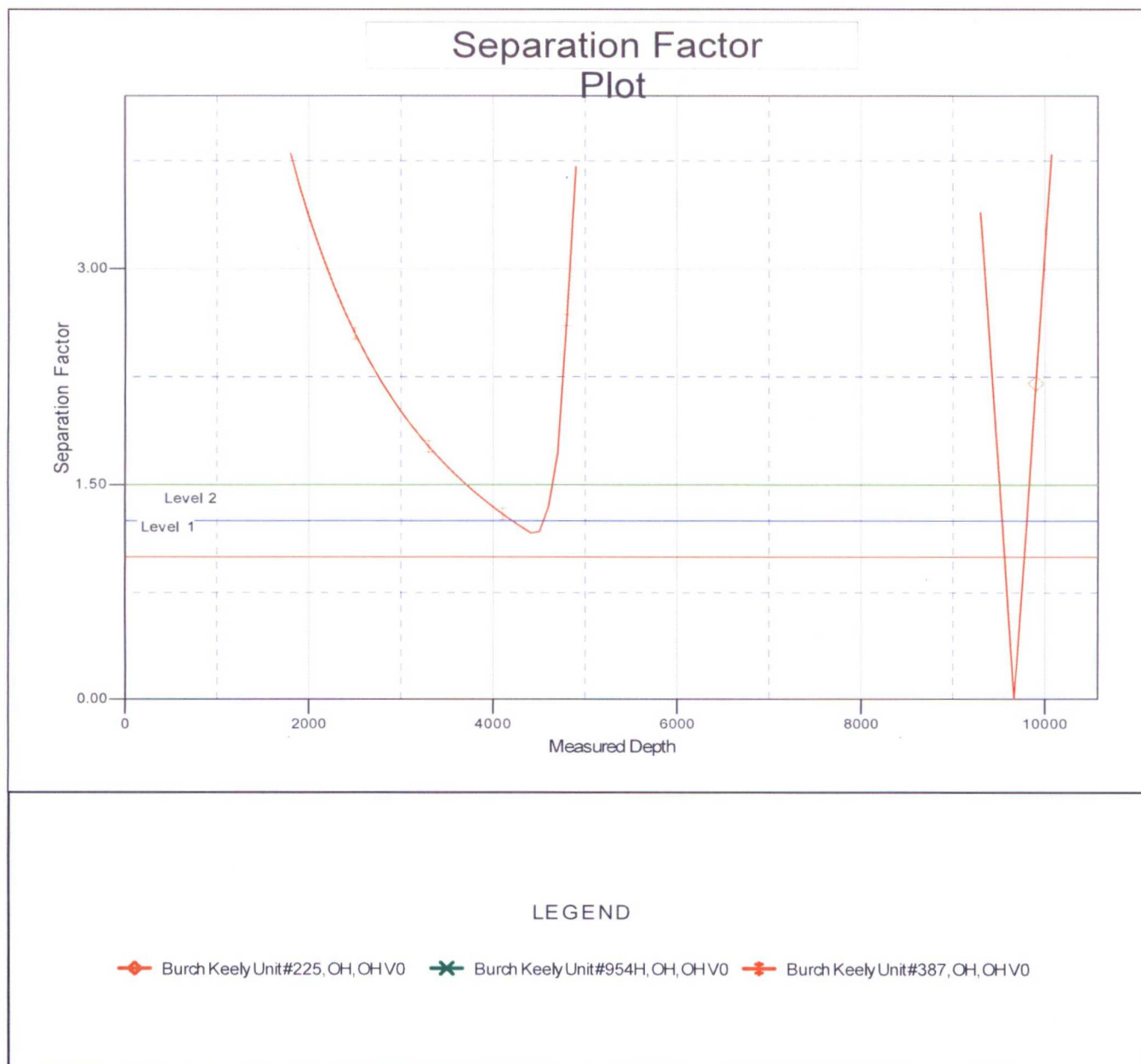
◆ Burch Keely Unit#225, OH, OHV0
 ✕ Burch Keely Unit#954H, OH, OHV0
 ✕ Burch Keely Unit#387, OH, OHV0

Company: COG Operating LLC
Project: Eddy County, NM (NAD-27 2015)
Reference Site: Burch Keely Unit #962H
Site Error: 0.00 usft
Reference Well: SHL: 296' FNL, 153' FEL, Sec 24, T17S, R29E, Unit A
Well Error: 0.00 usft
Reference Wellbore: BHL: 330' FNL, 10' FEL, Sec 19, T17S, R30E, Unit A
Reference Design: Design #1

Local Co-ordinate Reference: Site Burch Keely Unit #962H
TVD Reference: KB @ 3636.00usft (Silver Oak 3)
MD Reference: KB @ 3636.00usft (Silver Oak 3)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM 5000.1 Single User Db
Offset TVD Reference: Offset Datum

Reference Depths are relative to KB @ 3636.00usft (Silver Oak 3)
 Offset Depths are relative to Offset Datum
 Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: Burch Keely Unit #962H
 Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30
 Grid Convergence at Surface is: 0.17°



○ Burch Keely Unit #962H 1mile Radius

7-17S-30E

8-17S-30E

29E

30E

17S-30E

17S-30E

29E

30E

30-17S-30E

29-17S-30E

2000 ft

Burch Keely Unit #962H 1mile Radius List

API#	Operator	County	Legal	Lease	Well#	Date Issued	Permitted Depth	Permit TVD	Total Depth	Well Type	Well Status	Target Formation
30-015-32916	MARBOB ENERGY CORP	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	939	06/16/03	4,800		4,822	O	Inactive	
30-015-32915	MARBOB ENERGY CORP	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	937	06/25/03	4,800		4,720	O	Inactive	
30-015-32916	MARBOB ENERGY CORP	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	939	07/25/03	4,800		4,822	O	Inactive	
30-015-32969	MARBOB ENERGY CORP	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	934	08/26/03	4,800		4,728	O	Inactive	
30-015-32970	MARBOB ENERGY CORP	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	935	08/26/03	4,800		4,730	O	Inactive	
30-015-32971	MARBOB ENERGY CORP	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	938	08/26/03	4,800		4,836	O	Inactive	
30-015-32992	MARBOB ENERGY CORP	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	940	09/09/03	4,800		4,750	G	Inactive	
30-015-04204	MARBOB ENERGY CORP	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	95	08/30/96	0		0	I	Inactive	
30-015-04209	MARBOB ENERGY CORP	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	97	08/08/96	0		0	I	Temporarily Abandoned	
30-015-04210	MARBOB ENERGY CORP	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	104	08/31/99	0		0	I	Inactive	
30-015-04212	MARBOB ENERGY CORP	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	102	08/29/96	0		0	O	Plugged and Abandoned	
30-015-20794	MARBOB ENERGY CORP	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	101	08/01/96	0		0	O	Plugged and Abandoned	
30-015-21268	MARBOB ENERGY CORP	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	51	09/01/74	0		3,300	O	Inactive	
30-015-21657	MARBOB ENERGY CORP	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	55	03/01/76	0		3,625	O	Inactive	
30-015-22092	MARBOB ENERGY CORP	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	94	08/30/96	0		3,600	G	Plugged and Abandoned	
30-015-25796	CONOCOPHILLIPS COMPANY	EDDY	S:19, T:17S, R:30E	GRAYBURG DEEP UNIT	10	01/01/03			11,240	G	Plugged and Abandoned	
30-015-27769	MARBOB ENERGY CORP	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	220	07/08/94			4,600	O	Inactive	
30-015-28018	MARBOB ENERGY CORP	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	239	06/21/94			4,808	O	Inactive	
30-015-28019	MARBOB ENERGY CORP	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	812	06/21/96				PO	Unknown	
30-015-28089	MARBOB ENERGY CORP	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	244	08/25/94			4,740	O	Inactive	
30-015-28144	MARBOB ENERGY CORP	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	250	09/30/94			4,831	O	Inactive	
30-015-28145	MARBOB ENERGY CORP	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	231	01/01/96			4,805	O	Inactive	
30-015-28155	MARBOB ENERGY CORP	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	229	01/01/96			4,800	O	Inactive	
30-015-28156	MARBOB ENERGY CORP	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	245	10/05/94			4,775	O	Inactive	
30-015-28330	MARBOB ENERGY CORP	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	246	03/10/95			4,715	O	Inactive	
30-015-28331	MARBOB ENERGY CORP	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	238	01/22/96			4,725	O	Inactive	
30-015-28332	MARBOB ENERGY CORP	EDDY	S:19, T:17S, R:30E	BURCH AA FEDERAL	42	01/31/95				PO	Unknown	
30-015-28333	MARBOB ENERGY CORP	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	262	08/06/96			4,740	O	Inactive	
30-015-28334	MARBOB ENERGY CORP	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	840	03/04/99			4,758	PO	Unknown	
30-015-28335	MARBOB ENERGY CORP	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	247	04/27/95			4,715	O	Inactive	
30-015-28887	MARBOB ENERGY CORP	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	256	03/25/96			4,845	O	Inactive	
30-015-29038	MARBOB ENERGY CORP	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	265	07/09/96			4,787	O	Inactive	
30-015-29512	MARBOB ENERGY CORP	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	276	04/09/97			4,775	O	Inactive	
30-015-29722	MARBOB ENERGY CORP	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	282	07/09/97			4,796	O	Inactive	
30-015-29811	MARBOB ENERGY CORP	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	274	08/20/97			4,751	O	Inactive	
30-015-29821	MARBOB ENERGY CORP	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	279	08/21/97			4,816	O	Inactive	
30-015-30633	MARBOB ENERGY CORP	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	304	04/21/99			4,758	O	Inactive	

Burch Keely Unit #962H-1mile Radius List

API#	Operator	County	Legal	Lease	Well#	Date Issued	Permitted Depth	Permit TVD	Total Depth	Well Type	Well Status	Target Formation
30-015-30646	MARBOB ENERGY CORP	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	296	05/06/99			5,036	G	Plugged and Abandoned	
30-015-30704	MARBOB ENERGY CORP	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	296V	07/22/99			4,049	O	Inactive	
30-015-32108	MARBOB ENERGY CORP	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	322	11/09/01			4,737	O	Inactive	
30-015-21269	STEVEN'S OPERATING CORPORATION or HANAGAN PETROLEUM CORP	EDDY	S:19, T:17S, R:30E	PRE-ONGARD WELL	30	01/01/70				PO	Unknown	
30-015-32915	MARBOB ENERGY CORP	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	357	08/19/03			4,720	O	Inactive	
30-015-33558	MARBOB ENERGY CORP	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	941	07/27/04	4,800		4,850	G	Inactive	
30-015-33569	MARBOB ENERGY CORP	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	3610	08/02/04	4,800		4,832	G	Inactive	
30-015-33815	MARBOB ENERGY CORP	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	973	09/15/04	4,800		4,691	G	Inactive	
30-015-33816	MARBOB ENERGY CORP	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	974	09/15/04	4,800		4,710	G	Inactive	
30-015-32971	MARBOB ENERGY CORP	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	362	07/31/03			4,836	O	Inactive	
30-015-32970	MARBOB ENERGY CORP	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	360	10/31/03			4,730	O	Inactive	
30-015-32969	MARBOB ENERGY CORP	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	359	10/31/03			4,728	O	Inactive	
30-015-33569	MARBOB ENERGY CORP	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	944	07/31/04			4,832	G	Inactive	
30-015-32992	MARBOB ENERGY CORP	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	363	08/31/04			4,750	G	Inactive	
30-015-33815	MARBOB ENERGY CORP	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	973	08/31/04			4,691	G	Inactive	
30-015-33816	MARBOB ENERGY CORP	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	974	08/31/04			4,710	G	Inactive	
30-015-34192	GRUY PETROLEUM MANAGEMENT CO. or CIMAREX ENERGY CO OF COLORADO	EDDY	S:19, T:17S, R:30E	GRAYBURG DEEP UNIT	20	05/26/05	12,500		12,500	G	Unknown	MORROW,MORROW
30-015-34214	GRUY PETROLEUM MANAGEMENT CO. or CIMAREX ENERGY CO OF COLORADO	EDDY	S:19, T:17S, R:30E	GRAYBURG DEEP	17	05/26/05	12,500		11,300	G	Plugged and Abandoned	
30-015-35441	MARBOB ENERGY CORP	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	988	02/13/07	4,800		4,693	G	Inactive	
30-015-39576	COG OPERATING LLC	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	822H	10/26/11	9,155	4,850	9,103	G	Inactive	SR-Q-G-SA
30-015-39577	COG OPERATING LLC	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	824H	10/26/11	9,191	4,850	9,191	G	Unknown	SR-Q-G-SA
30-015-39579	COG OPERATING LLC	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	826H	10/26/11	9,265	4,850	9,232	G	Inactive	SR-Q-G-SA
30-015-39567	COG OPERATING LLC	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	657	10/25/11	4,800		4,672	G	Inactive	SR-Q-G-SA
30-015-39570	COG OPERATING LLC	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	643	10/25/11	4,800		4,660	G	Inactive	SR-Q-G-SA
30-015-39571	COG OPERATING LLC	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	644	10/25/11	4,800		4,816	G	Inactive	SR-Q-G-SA
30-015-40276	COG OPERATING LLC	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	626	05/08/12	4,859	4,800	4,792	O	Completed	SR-Q-G-SA
30-015-40277	COG OPERATING LLC	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	646	05/09/12	4,800		4,668	G	Inactive	GLORIETA-UPPER YESO
30-015-40278	COG OPERATING LLC	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	651	05/08/12	4,800		4,672	G	Inactive	GLORIETA-UPPER YESO
30-015-40279	COG OPERATING LLC	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	652	05/08/12	4,800		4,802	G	Inactive	GLORIETA-UPPER YESO
30-015-40280	COG OPERATING LLC	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	654	05/08/12	4,800		4,828	G	Inactive	GLORIETA-UPPER YESO
30-015-40298	COG OPERATING LLC	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	649	05/11/12	4,800		4,808	G	Inactive	SR-Q-G-SA
30-015-40300	COG OPERATING LLC	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	914	05/11/12	4,800		4,819	G	Inactive	SR-Q-G-SA
30-015-43102	COG OPERATING LLC	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	655	05/06/15	4,950		4,950	PO	Unknown	GLORIETA-UPPER YESO
30-015-43420	COG OPERATING LLC	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	641	10/15/15	4,750		4,750	PO	Active Permit	GLORIETA-UPPER YESO
30-015-43470	COG OPERATING LLC	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	647	10/21/15	4,750		4,750	PO	Active Permit	GLORIETA-UPPER YESO
30-015-43526	COG OPERATING LLC	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	653	12/14/15	4,700		4,700	PO	Active Permit	GLORIETA-UPPER YESO
30-015-43529	COG OPERATING LLC	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	659	12/14/15	4,700		4,700	PO	Active Permit	GLORIETA-UPPER YESO
30-015-43543	COG OPERATING LLC	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	642	12/14/15	4,763	4,750	4,763	PO	Active Permit	GLORIETA-UPPER YESO

Burch Keely Unit #962H 1mile Radius List

API#	Operator	County	Legal	Lease	Well#	Date Issued	Permitted Depth	Permit TVD	Total Depth	Well Type	Well Status	Target Formation
30-015-44067	COG OPERATING LLC	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	966H	02/17/17	9,313	4,879	9,313	PO	Active Permit	GLORIETA-UPPER YESO
30-015-44078	COG OPERATING LLC	EDDY	S:19, T:17S, R:30E	BURCH KEELY UNIT	648	02/16/17	4,809	4,800	4,809	PO	Active Permit	GLORIETA-UPPER YESO

Lowe, Leonard, EMNRD

From: Lowe, Leonard, EMNRD
Sent: Monday, May 8, 2017 4:54 PM
To: 'Russell@concho.com'
Cc: Jones, William V, EMNRD
Subject: First and last Perf: NSL Application for Burch Keely Unit No. 962H; API # 30-015-44101
Importance: High

Robyn Russell,

Good afternoon,

OCD has received your NSL application for the above subject well.

Your application is NOT clear in specifying the First and Last take points of your NSL request.

Your application is currently suspended until a complete application is received at the OCD Santa Fe office. Additional information may be sent to this e-mail.

The information below was taken from our NSL/NSP Administrative Application Instructions, attached to our Administrative Application online.

Provide the following information:

- 1) A signed "Administrative Application Checklist"
- 2) A statement/letter indicating;
 - a) Reason for the NSL/NSP request
 - b) API number and well information
 1. SHL
 2. FTP
 3. LTP
 4. BHL
- 3) Pool name and Pool code
- 4) C-102
- 5) Plat surrounding spacing unit
- 6) Ensure proper "Public Notice" was given to all affected parties

I will be out of the office tomorrow, Tuesday May 9, 2017. I will be in the office on Wednesday, May 10, 2017.

Lowe, Leonard, EMNRD

From: Robyn Russell <Rrussell@concho.com>
Sent: Wednesday, May 10, 2017 7:52 AM
To: Lowe, Leonard, EMNRD
Cc: Jones, William V, EMNRD
Subject: RE: First and last Perf: NSL Application for Burch Keely Unit No. 962H; API # 30-015-44101
Attachments: Burch Keely Unit 962H C102.pdf

Dear Mr. Lowe,

Attached is the revised C102 for this NSL application. Please let me know if you need anything else for approval of this application.

Thank you,

Robyn Russell
Regulatory Analyst
(432) 685-4385

From: Lowe, Leonard, EMNRD [mailto:Leonard.Lowe@state.nm.us]
Sent: Monday, May 08, 2017 5:54 PM
To: Robyn Russell
Cc: Jones, William V, EMNRD
Subject: [External] First and last Perf: NSL Application for Burch Keely Unit No. 962H; API # 30-015-44101
Importance: High

**** External email. Use caution. ****

Robyn Russell,

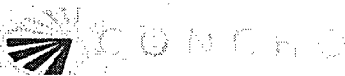
Good afternoon,

OCD has received your NSL application for the above subject well.

Your application is NOT clear in specifying the First and Last take points of your NSL request.

Your application is currently suspended until a complete application is received at the OCD Santa Fe office. Additional information may be sent to this e-mail.

The information below was taken from our NSL/NSP Administrative Application Instructions, attached to our Administrative Application online.



May 19, 2017

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

RE: **Burch Keely Unit #964H NSL**

To Whom It May Concern,

COG Operating LLC respectfully requests approval of a non-standard location for the following well:

Burch Keely Unit #964H - API# 3001544149
SHL: 1485 FNL 215 FEL, UL H, Sec 24, T17S, R29E
BHL: 1650 FNL 10 FEL, UL H, Sec 19, T17S, R30E
TVD: 4950'

The purpose of this NSL request is to satisfy the approved BLM Sundry for drilling to 1650' FNL and 10' FEL. The granting of this NSL will optimize the completed lateral length of this wellbore, reducing waste while protecting correlative rights, and improving well economics and increasing revenue to the State of New Mexico and the federal government.

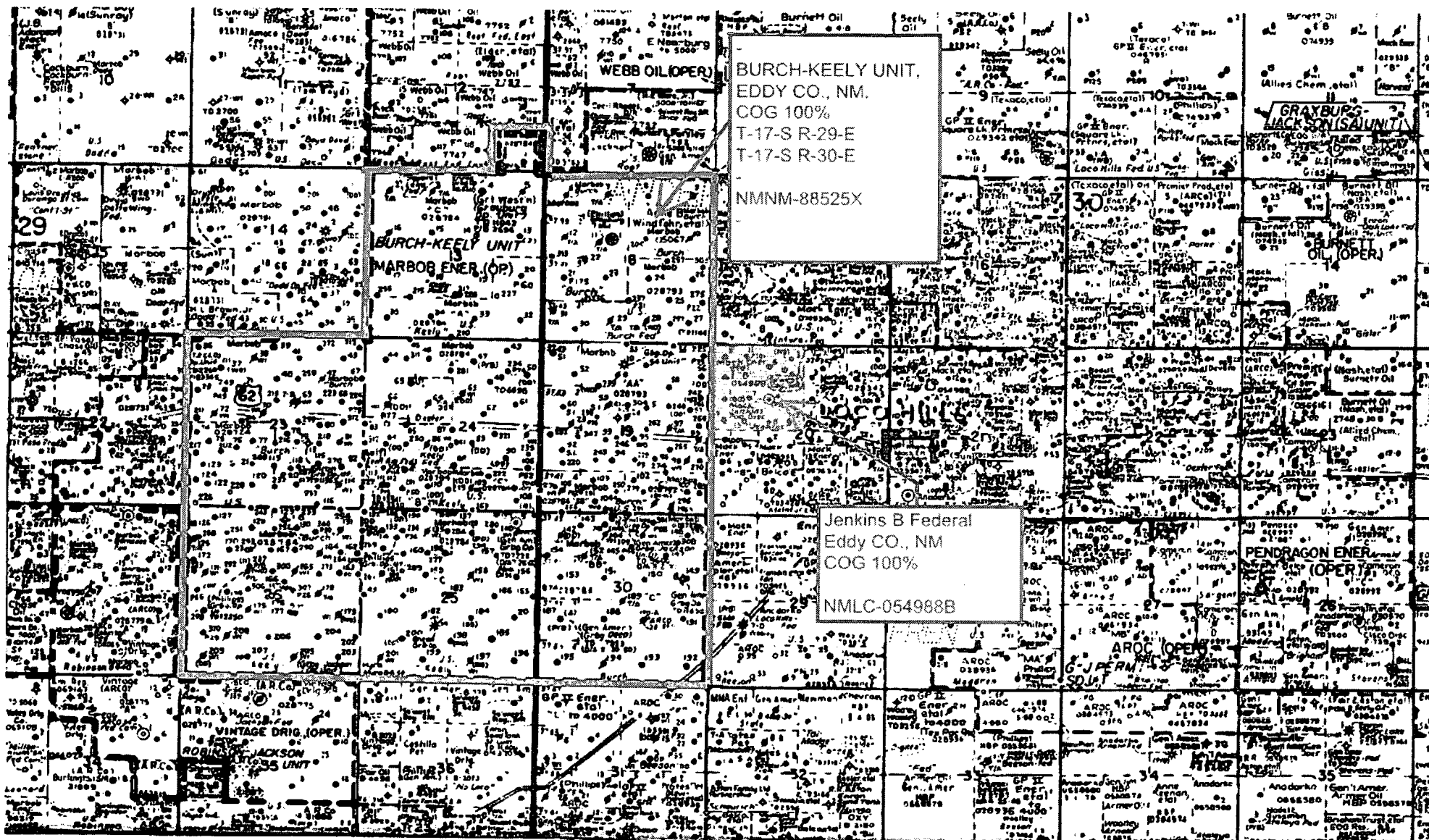
Attached to this application is a plat showing this well's location, a map and legend of offset wells within 1 mile and an updated land plat showing that COG Operating LLC owns and operates the offset Yeso wells in UL A & H of Sec. 24, T17S, R29E; Lot 1 of Sec. 19, T17S, R30E; UL D & E of Sec 20, T17S, R30E. All interests are the same in these offsets and no notification is needed.

Please contact me should you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Robyn Russell", written over a horizontal line.

Robyn Russell
Regulatory Analyst
COG Operating, LLC
(432) 685-4385
Russell@concho.com



BURCH-KEELY UNIT,
EDDY CO., NM.
COG 100%
T-17-S R-29-E
T-17-S R-30-E
NMMN-88525X

Jenkins B Federal
Eddy CO., NM
COG 100%
NMLC-054988B

GRAYBURG-
JACKSON (SA) UNIT

PENDRAGON ENER
(OPER)

VINTAGE DRIG. (OPER.)
ROBINSON JACKSON
UNIT

**DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
CASE RECORDATION
(MASS) Serial Register Page**

Run Time: 09:40 AM

Page 1 of 2

Run Date: 05/19/2017

01 02-25-1920;041STAT0437;30USC181
Case Type 318220: O&G SECONDARY UNIT
Commodity 459: OIL & GAS
Case Disposition: AUTHORIZED

Total Acres
5,129.440

Serial Number
NMNM-- - 088525X

Serial Number: NMNM-- - 088525X

Name & Address	Int Rel	% Interest
BLM CARLSBAD FO	OFFICE OF RECORD	0.000000000
COG OPERATING LLC	OPERATOR	100.000000000

Serial Number: NMNM-- - 088525X

Mer Twp	Rng	Sec	STyp	SNr Suff	Subdivision	District/Field Office	County	Mgmt Agency
23 0170S	0290E	012	ALIQ		SESE;	CARLSBAD FIELD OFFICE	EDDY	BUREAU OF LAND MGMT
23 0170S	0290E	013	ALL		ENTIRE SECTION	CARLSBAD FIELD OFFICE	EDDY	BUREAU OF LAND MGMT
23 0170S	0290E	023	ALL		ENTIRE SECTION	CARLSBAD FIELD OFFICE	EDDY	BUREAU OF LAND MGMT
23 0170S	0290E	024	ALL		ENTIRE SECTION	CARLSBAD FIELD OFFICE	EDDY	BUREAU OF LAND MGMT
23 0170S	0290E	025	ALL		ENTIRE SECTION	CARLSBAD FIELD OFFICE	EDDY	BUREAU OF LAND MGMT
23 0170S	0290E	026	ALL		ENTIRE SECTION	CARLSBAD FIELD OFFICE	EDDY	BUREAU OF LAND MGMT
23 0170S	0300E	018	ALL		ENTIRE SECTION	CARLSBAD FIELD OFFICE	EDDY	BUREAU OF LAND MGMT
23 0170S	0300E	019	ALL		ENTIRE SECTION	CARLSBAD FIELD OFFICE	EDDY	BUREAU OF LAND MGMT
23 0170S	0300E	030	ALL		ENTIRE SECTION	CARLSBAD FIELD OFFICE	EDDY	BUREAU OF LAND MGMT

Serial Number: NMNM-- - 088525X

Act Date	Code	Action	Action Remark	Pending Office
06/03/1993	387	CASE ESTABLISHED	DESIGNATION RECEIVED	
06/03/1993	500	GEOGRAPHIC NAME	BURCH-KEELY;	
06/23/1993	519	AGRMT/EXPANSION DESIG	AGREEMENT	
07/08/1993	680	AGREEMENT FILED		
07/19/1993	334	AGRMT APPROVED		
08/01/1993	516	FORMATION	/B/	
08/01/1993	526	ACRES-FED INT 100%	5129.44;100.00%	
08/01/1993	868	EFFECTIVE DATE	/A/ UNIT AGREEMENT	
08/20/1993	974	AUTOMATED RECORD VERIF	MO/MO	
07/01/1994	600	RECORDS NOTED		
02/23/1995	421	PLAN OPER/EXPL/DEV FILED	/1/	
02/28/1995	422	PLAN OPER/EXPL/DEV APPV	/1/	
10/01/2010	672	SUCCESSOR OPERATOR	MARBOB/COG	
01/31/2011	519	AGRMT/EXPANSION DESIG	/C/	

Serial Number: NMNM-- - 088525X

Line Nr	Remarks
0002	/A/ EXHIBIT C EFFECTIVE 08/01/1993
0003	LEASE SERIAL NO TR# PH 1% PH 2% PH 3%
0004	NMLC 0 28784A 1 9.72270
0005	NMLC 0 28793A 2 12.68260
0006	NMLC 0 28784B 3A 15.95490
0007	NMLC 0 28784B 3B 14.45700
0008	NMLC 0 28793C 4 20.35470
0009	NMLC 0 28784C 5 25.98970
0010	NMLC 0 54406 6 .83840
0011	/B/ UNITIZATION WILL BE LIMITED TO THE FOLLOWING

NO WARRANTY IS MADE BY BLM FOR USE OF THE DATA FOR PURPOSES NOT INTENDED BY BLM

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
CASE RECORDATION
(MASS) Serial Register Page

Run Time: 09:40 AM

Page 2 of 2

Run Date: 05/19/2017

0012 INTERVAL: THAT INTERVAL UNDERLYING THE UNIT AREA,
0013 THE VERTICAL LIMITS OF WHICH EXTEND FROM THE TOP OF
0014 THE SEVEN RIVERS FORMATION TO THE BASE OF THE SAN
0015 ANDRES FORMATION OR 5,000' BENEATH THE SURFACE,
0016 WHICHEVER IS THE LESSER. THE UNITIZED FORMATION
0017 WAS EXPANDED, EFFECTIVE AS OF FEBRUARY 22, 1994, TO
0018 INCLUDE THE TOP 500 FEET OF THE PADDOCK FORMATION.
0019 /C/ UNIT TO COMPRISE THAT INTERVAL UNDERLYING THE
0020 UNIT AREA FROM THE TOP OF THE SEVEN RIVERS TO A TRUE
0021 VERTICAL DEPTH OF 5000 FEET BELOW THE SURFACE.
0022 EFFECTIVE 01/31/2001.



Memorandum

To: Michael McMillan
Engineering Bureau
New Mexico Oil Conservation Division

From: Adam Clay Reker
Landman, NM Shelf Team
COG Operating LLC

Date: May 22, 2017

Subject: Burch Keely Unit #962H NSL Landman Statement

I, Adam Clay Reker, Landman for COG Operating LLC, have examined or have had title attorneys examine the lands and leases associated with the Burch Keely Unit and its offsets:

COG's "Jenkins B" lease covers the NW/4 of Section 20, T17S-R30E and is wholly owned 100% by COG Operating at all depths. This fact was confirmed by a Certified Title Attorney, licensed to examine title in the State of New Mexico via a title opinion that was rendered on March 22, 2017. Said lease being Federal Lease USA LC-054988.

Additionally, COG owns 100% of the leasehold and operating rights from the surface to 5,000' in the McIntyre DK Lease located in the S/2S/2 of Section 17, T17S-R30E (ZPZ Delaware owning all the rights deeper than 5,000'). Said fact was confirmed by a Certified Title Attorney licensed to examine title in the State of New Mexico via a title opinion that was rendered January 3, 2017. Said lease being Federal Lease USA NM-86025.



Memorandum

**To: Michael McMillan
Engineering Bureau
New Mexico Oil Conservation Division**

**From: Bryan Montgomery
Reservoir Engineering Supervisor, NM Shelf Team
COG Operating LLC**

Date: May 22, 2017

Subject: Burch Keely Unit #962H NSL Engineer Statement

COG Operating LLC (COG) is requesting a non-standard location exception (NSL) for this horizontal well to be able to access and drain Yeso reserves that would otherwise be left in the reservoir, thereby preventing waste of an economic resource. The Yeso is a very low permeability reservoir that does not sufficiently drain a great distance from wellbores and their hydraulic fractures. In addition, it would not be economical to try to access these reserves with a vertical well.

[Wells](#) [Operators](#) [Operator Data](#) [OCD Review](#) [OCD Only](#) [Administration](#)

OCD Permitting

[Home](#) [Land Searches](#) [Land Details](#)

Section : 19-17S-30E

Type: Normal

Total Acres: 629.68

County: Eddy (15)

D (1) Federal ¹ Federal ² (15) 37.43	C (C) Federal ¹ Federal ² (15) 40	B (B) Federal ¹ Federal ² (15) 40	A (A) Federal ¹ Federal ² (15) 40
E (2) Federal ¹ Federal ² (15) 37.43	F (F) Federal ¹ Federal ² (15) 40	G (G) Federal ¹ Federal ² (15) 40	H (H) Federal ¹ Federal ² (15) 40
L (3) Federal ¹ Federal ² (15) 37.41	K (K) Federal ¹ Federal ² (15) 40	J (J) Federal ¹ Federal ² (15) 40	I (I) Federal ¹ Federal ² (15) 40
M (4) Federal ¹ Federal ² (15) 37.41	N (N) Federal ¹ Federal ² (15) 40	O (O) Federal ¹ Federal ² (15) 40	P (P) Federal ¹ Federal ² (15) 40

Note ¹ = Surface Owner RightsNote ² = Sub-Surface Mineral Rights

Land Restrictions

No land restrictions found for this section.

[Return to Search](#)



May 5, 2017

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

RE: Burch Keely Unit #962H NSL

To Whom It May Concern,

COG Operating LLC respectfully requests approval of a non-standard project area for the following wells:

Burch Keely Unit #962H - API# 3001544101
SHL: 296 FNL 153 FEL, UL A, Sec 24, T17S, R29E
BHL: 330 FNL 10 FEL, UL A, Sec 19, T17S, R30E

This non-standard location is requested to maximize the production of this well and reduce waste of the reserves when drilling horizontally in a west/east orientation.

COG Operating LLC is the operator of the offset Yeso wells in UL D, Sec 20, and UL P, Sec 17 of T17S, R30E and no notification is needed.

Please contact me should you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Robyn Russell", written over a horizontal line.

Robyn Russell
Regulatory Analyst
COG Operating, LLC
(432) 685-4385
Russell@concho.com