

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

OCD-ARTESIA

FORM APPROVED  
OMB NO. 1004-0137  
Expires: January 31, 2018**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.*5. Lease Serial No.  
NMLC028793A ✓

6. If Indian, Allottee or Tribe Name

**SUBMIT IN TRIPLICATE - Other instructions on page 2**7. If Unit or CA/Agreement, Name and/or No.  
NM88525x

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other8. Well Name and No.  
BURCH KEELY UNIT 363 ✓

2. Name of Operator

COG OPERATING LLC ✓

Contact: KANICIA CASTILLO

E-Mail: kcastillo@concho.com

9. API Well No.

30-015-32992 ✓

3a. Address

600 W ILLINOIS AVE  
MIDLAND, TX 79701

3b. Phone No. (include area code)

Ph: 432-685-4332

10. Field and Pool or Exploratory Area  
BK-GLORIETA-UPPER YESO

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Sec 19 T17S R30E Mer NMP 1750FSL 1070FWL ✓

11. County or Parish, State

EDDY COUNTY, NM

**12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> 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 recomplete 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 must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.

COG Operating LLC respectfully requests to down hole commingle as follows:

Grayburg Jackson;SR-Q-G-SA 28509  
Interval 2927 - 4044  
Percentages: Oil 80%, Gas 52% **5190**Burch Keely -Glorieta-Upper Yeso 97918  
Interval 4224 - 4557 **90**  
Percentages: Oil 20%, Gas 49%Ownership in both zones are the same.  
Commingling will not reduce the value of the production.**NM OIL CONSERVATION**  
ARTESIA DISTRICT

OCT 20 2017

**RECEIVED**  
**SEE ATTACHED FOR**  
**CONDITIONS OF APPROVAL**

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #377576 verified by the BLM Well Information System  
For COG OPERATING LLC, sent to the Carlsbad  
Committed to AFMSS for processing by DEBORAH MCKINNEY on 06/01/2017 ( )

Name (Printed/Typed) KANICIA CASTILLO

Title PREPARER

Signature (Electronic Submission)

Date 05/31/2017

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved By <b>Paul R. Swartz</b>	Title <b>TPET</b>	Date <b>09/25/17</b>
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 <b>CFO</b>

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

**\*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\***

Ref 10-20-17

**Additional data for EC transaction #377576 that would not fit on the form**

**32. Additional remarks, continued**

Please see well commingle worksheet, map, serial register page, and oil water, gas analysis attached.

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

Run Time: 01:02 PM

Page 1 of 2

Run Date 03/07/2017

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

Name & Address		Serial Number: NMNM-- - 088525X		Int Rel	% Interest
BLM CARLSBAD FO	620 E GREENE ST	CARLSBAD NM 88220	OFFICE OF RECORD		0 000000000
COG OPERATING LLC	600 WILLINOIS AVE	MIDLAND TX 797014882	OPERATOR		100 000000000

Serial Number: NMNM-- - 088525X								
Mer Twp	Rng	Sec	S Typ	SNr Suff	Subdivision	District/Field Office	County	Mgmt Agency
23 01705	0290E	012	ALIQ		SESE,	CARLSBAD FIELD OFFICE	EDDY	BUREAU OF LAND MGMT
23 01705	0290E	013	ALL		ENTIRE SECTION	CARLSBAD FIELD OFFICE	EDDY	BUREAU OF LAND MGMT
23 01705	0290E	023	ALL		ENTIRE SECTION	CARLSBAD FIE.D OFFICE	EDDY	BUREAU OF LAND MGMT
23 01705	0290E	024	ALL		ENTIRE SECTION	CARLSBAD FIELD OFFICE	EDDY	BUREAU OF LAND MGMT
23 01705	0290E	025	ALL		ENTIRE SECTION	CARLSBAD FIELD OFFICE	EDDY	BUREAU OF LAND MGMT
23 01705	0290E	026	ALL		ENTIRE SECTION	CARLSBAD FIELD OFFICE	EDDY	BUREAU OF LAND MGMT
23 01705	0300E	018	ALL		ENTIRE SECTION	CARLSBAD FIELD OFFICE	EDDY	BUREAU OF LAND MGMT
23 01705	0300E	019	ALL		ENTIRE SECTION	CARLSBAD FIELD OFFICE	EDDY	BUREAU OF LAND MGMT
23 01705	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	590	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 25.95970
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 01:02 PM

Page 2 of 2

Run Date: 03/07/2017

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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.

NM OIL CONSERVATION  
ARTESIA DISTRICT  
JUL 21 2015

RECEIVED

## COG Operating, LLC

### Lease & Well #

3001532992

Spud date 3-27-05

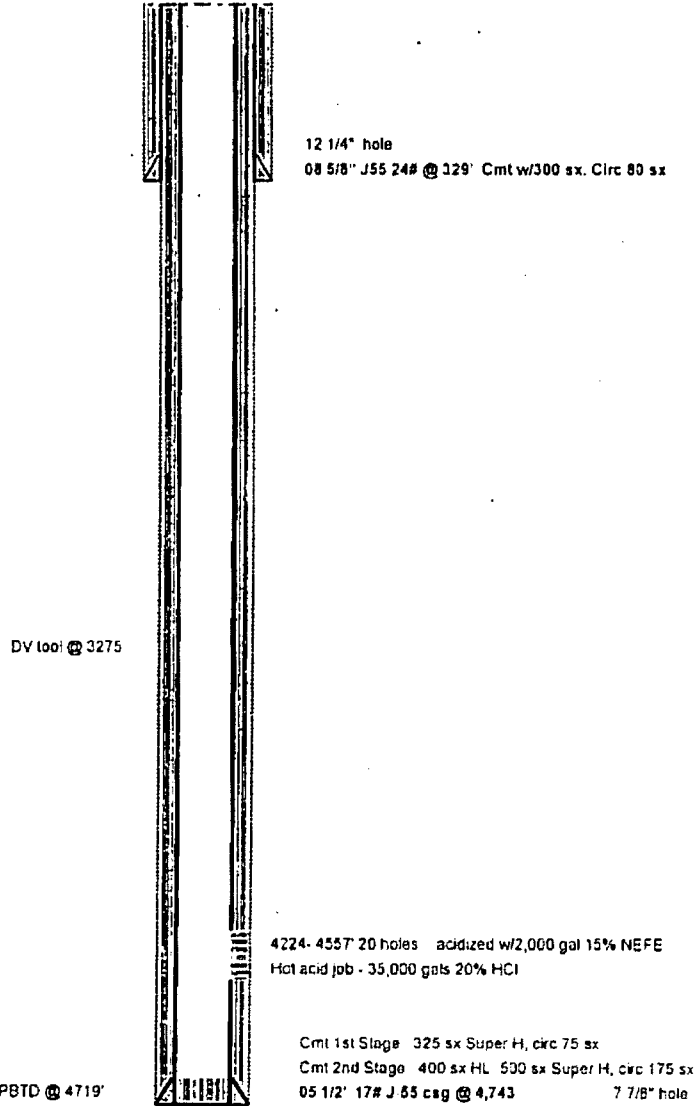
Completion date 4-25-05

Elevation - GL = 3618'

KB = 3630'

### Burch Keely Unit 363

Sec 19 T17S R30E 1750 FSL & 1070 FWL  
EDDY CO., NM



Proposed.

## COG Operating, LLC

### Lease & Well #

3001532992

Spud date 3-27-05

Completion date 4-25-05

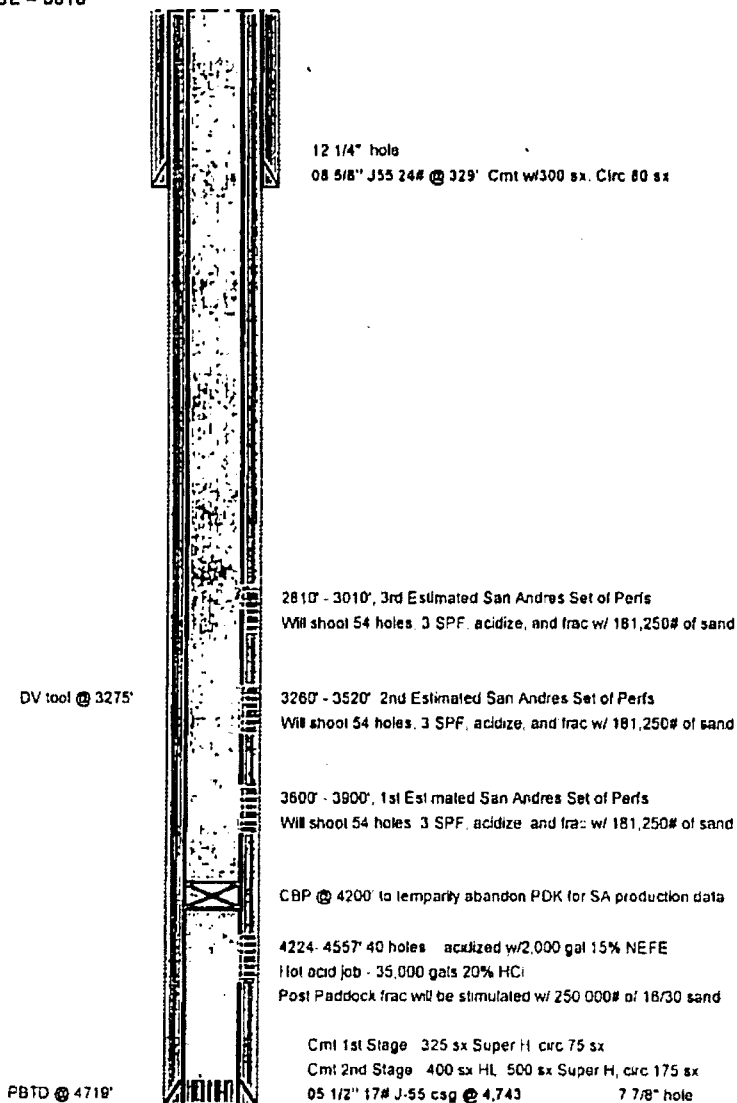
Elevation - GL = 3618'

KB = 3630'

### Burch Keely Unit 363

Sec 19 T17S R30E, 1750 FSL & 1070 FWL

EDDY CO., NM



### Downhole Commingling Worksheet

Operator: COG Operating LLC  
 Lease/Well Name/API Number/Location: Burch Keely Unit #363 30-015-32992 L, 19, T17S, R30E

Date:

<u>Date</u>	<u>Bottom Formation</u>	<u>Middle Formation</u>	<u>Upper Formation</u>	<u>Estimated Combined Production Data</u>
Pool name	BK-G-Upper Yeso		GJ,SR-Q-G-SA	
Pool Code	97918		28509	
State Form C-102 with dedicated Acres Provided	40		40	
Formation Name	Paddock		San Andres	
Top and Bottom of Pay Section (Perforated or open-hole interval)	4224 - 4557		2927 - 4044	
Method of production	Pump		Pump	
Bottom Hole Pressure	500 psi		500 psi	
Reservoir Drive mechanism	Water Drive Reservoir		Water Drive Reservoir	
Oil gravity and/or BTU	38 / 1448		36 / 1418	* 36.4 / 1433
Average Sulfur Content (Wt %)	0		0	* 0
Oil sample Analysis provided	Yes		Yes	
Gas Analysis provided	Yes		Yes	
Produce Water Analysis provided	Yes		Yes	
H2S present	No		No	* 0
Producing, Shut-In or New Zone	Shut-In		New Zone	
Date and Oil/Gas/Water rates of Last Production (new zones or no production history Operator shall attached production estimated and supporting data)	2014 Average Oil - 3 bbls Gas - 22 mcf Water - 2 bbls		2016 Average Oil - 12 bbls Gas - 23 mcf Water 31 bbls	
Average decline % (provide back up data)	36% Avg Decline		34% Avg Decline	
Fixed Allocation Percentage	O-20% G-49% W-6%		O-80% G-52% W-94%	

Remarks: Yeso Analysis based on BKU #370

Operator Signature: 

Date: 5/4/17

#### Attached Supporting documents

- State Form C-102 with dedicated Acres Provided
- Oil sample Analysis provided (Must be current)
- Gas Analysis provided (Must be current)
- Produce Water Analysis provided (Must be current)
- Any additional supporting data (i.e. offset well production and decline curves etc.)
- \*Utilize weighted average.



Certificate of Analysis  
Number: 5030-17030103-002A

Midland Laboratory  
3312 Bankhead Highway  
Midland, TX 79701  
Phone 432-689-7252

Justin Disney  
Catalyst Oilfield Services  
PO Box 8485  
Midland, TX 79706

Mar. 23, 2017

Station Name: BURCH KEELY UNIT  
Station Number: #370  
Method: GPA-2261M  
Analyzed: 03/23/2017 10:37:08 by KR

Sampled By:  
Sample Of: Gas Spot  
Sample Date: 03/17/2017  
Sample Conditions: 26 psig

Analytical Data

Components	Mol. %	Wt. %	GPM at 14.65 psia		
Hydrogen Sulfide	0.0000	0.0000		GPM TOTAL C2+	9.7287
Nitrogen	1.2078	1.2991		GPM TOTAL C3+	5.0498
Methane	62.0297	38.2083		GPM TOTAL iC5+	1.4187
Carbon Dioxide	3.2756	5.5351			
Ethane	17.4967	20.2005	4.6789		
Propane	8.9874	15.2166	2.4758		
Iso-Butane	1.0077	2.2488	0.3297		
n-Butane	2.6189	5.8445	0.8256		
Iso-Pentane	0.6773	1.8763	0.2477		
n-Pentane	0.7840	2.1719	0.2842		
Hexanes	0.5993	1.9830	0.2464		
Heptanes Plus	1.3156	5.4159	0.6404		
	100.0000	100.0000	9.7287		

Calculated Physical Properties	Total	C7+
Relative Density Real Gas	0.9040	3.7019
Calculated Molecular Weight	26.04	107.22
Compressibility Factor	0.9944	
26 # Gasoline	5.2729	

GPA 2172-09 Calculation:

Calculated Gross BTU per ft<sup>3</sup> @ 14.65 psia & 60°F

Real Gas Dry BTU	1448.4	5857.4
Water Sat. Gas Base BTU	1423.7	5754.9

Comments: H<sub>2</sub>O Mol% : 1.750 ; Wt% : 1.217

Hydrocarbon Laboratory Manager

Quality Assurance:

The above analyses are performed in accordance with ASTM, UOP, GPA guidelines for quality assurance, unless otherwise stated.





Certificate of Analysis  
Number: 5030-17030103-001A

Midland Laboratory  
3312 Bankhead Highway  
Midland, TX 79701  
Phone 432-689-7252

Justin Disney  
Catalyst Oilfield Services  
PO Box 8485  
Midland, TX 79706

Mar. 23, 2017

Station Name: BURCH KEELY UNIT  
Station Number: #363  
Method: GPA-2261M  
Analyzed: 03/23/2017 10:01:06 by KR

Sampled By:  
Sample Of: Gas Spot  
Sample Date: 03/17/2017  
Sample Conditions: 38 psig

Analytical Data

Components	Mol. %	Wt. %	GPM at 14.65 psia	
Hydrogen Sulfide	0.0000	0.0000		GPM TOTAL C2+
Nitrogen	2.1000	2.2372		GPM TOTAL C3+
Methane	59.0965	36.0533		GPM TOTAL iC5+
Carbon Dioxide	4.4371	7.4260		
Ethane	18.0283	20.6150	4.8204	
Propane	9.7918	16.4198	2.6971	
Iso-Butane	1.1037	2.4395	0.3611	
n-Butane	2.7203	6.0127	0.8574	
Iso-Pentane	0.7061	1.9373	0.2582	
n-Pentane	0.6867	1.8841	0.2489	
Hexanes	0.5569	1.8250	0.2290	
Heptanes Plus	0.7726	3.1501	0.3760	
	100.0000	100.0000	9.8481	

Calculated Physical Properties	Total	C7+
Relative Density Real Gas	0.9126	3.7019
Calculated Molecular Weight	26.30	107.22
Compressibility Factor	0.9945	
26 # Gasoline	5.1963	
GPA 2172-09 Calculation:		
Calculated Gross BTU per ft <sup>3</sup> @ 14.65 psia & 60°F		
Real Gas Dry BTU	1417.9	5857.4
Water Sat Gas Base BTU	1393.8	5754.9
Comments: H2O Mol% : 1.750 ; Wt% : 1.206		

Hydrocarbon Laboratory Manager

Quality Assurance:

The above analyses are performed in accordance with ASTM, UOP, GPA guidelines for quality assurance, unless otherwise stated.



Catalyst Oilfield Services  
11999 E Hwy 158  
Gardendale, TX 79758  
(432) 563-0727  
Fax: (432) 224-1038

## OIL ANALYSIS

Customer:	COG Operating LLC - NM	Report Date	3/22/2017
Area:	Shelf - New	Date Range:	12/22/2016 - 3/23/2017
Lease:	Burch-Keely Unit		

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Location	Sample Point	Sample Date	API Gravity	Gel Point (°F)	Pour Point (°F)	Cloud Point (°F)	% Paraffin	% Asphaltene
363	Wellhead	3/15/2017	36				3.746	0.39
370	Wellhead	3/15/2017	38				3.171	0.098



Catalyst Oilfield Services  
11999 E Hwy 158  
Gardendale, TX 79758  
(432) 563-0727  
Fax: (432) 224-1038

## Water Analysis Report

Customer: COG Operating LLC - NM Sample #: 44132  
Area: Shelf - New Analysis ID #: 42174  
Lease: Burch-Keely Unit  
Location: 363 0  
Sample Point: Wellhead

		Anions		Cations	
		mg/l	meq/l	mg/l	meq/l
Sampling Date:	3/15/2017	Chloride:	100412.6	Sodium:	60910.0
Analysis Date:	3/28/2017	Bicarbonate:	483.1	Magnesium:	897.5
Analyst:	Catalyst	Carbonate:		Calcium:	3247.0
TDS (mg/l or g/m3):	170020.7	Sulfate:	3100.0	Potassium:	778.7
Density (g/cm3):	1.114	Borate*:	129.9	Strontium:	61.9
		Phosphate*:		Barium:	0.0
Hydrogen Sulfide	10	*Calculated based on measured elemental boron and phosphorus.		Iron:	0.0
Carbon Dioxide	132			Manganese:	0.000
Comments				Conductivity (micro-ohms/cm):	187000
				Resistivity (ohm meter):	.0535
		pH at time of sampling	6.54		
		pH at time of analysis:			
		pH used in Calculation:	6.54		
		Temperature @ lab conditions (F):	75		

### Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl

Temp	Calcite CaCO <sub>3</sub>		Gypsum CaSO <sub>4</sub> ·2H <sub>2</sub> O		Anhydrite CaSO <sub>4</sub>		Celestite SrSO <sub>4</sub>		Barite BaSO <sub>4</sub>	
	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount
80	0.48	30.30	-0.03	0.00	-0.02	0.00	-0.06	0.00	0.00	0.00
100	0.56	36.24	-0.11	0.00	-0.03	0.00	-0.09	0.00	0.00	0.00
120	0.64	42.47	-0.17	0.00	-0.01	0.00	-0.11	0.00	0.00	0.00
140	0.73	49.01	-0.22	0.00	0.03	70.69	-0.11	0.00	0.00	0.00
160	0.80	55.84	-0.26	0.00	0.09	198.40	-0.11	0.00	0.00	0.00
180	0.88	62.67	-0.30	0.00	0.17	344.53	-0.11	0.00	0.00	0.00
200	0.96	69.80	-0.33	0.00	0.25	496.31	-0.09	0.00	0.00	0.00
220	1.04	76.33	-0.36	0.00	0.35	643.33	-0.08	0.00	0.00	0.00



Catalyst Oilfield Services  
11999 E Hwy 158  
Gardendale, TX 79758  
(432) 563-0727  
Fax: (432) 224-1038

## Water Analysis Report

Customer: COG Operating LLC - NM Sample #: 44133  
Area: Shelf - New Analysis ID #: 42175  
Lease: Burch-Keely Unit  
Location: 370 0  
Sample Point: Wellhead

		Anions		mg/l	meq/l	Cations		mg/l	meq/l
Sampling Date:	3/15/2017	Chloride:	91121.8	2570.21		Sodium:	57750.0	2511.98	
Analysis Date:	3/28/2017	Bicarbonate:	614.9	10.08		Magnesium:	324.3	26.68	
Analyst:	Catalyst	Carbonate:				Calcium:	1985.0	99.05	
TDS (mg/l or g/m3):	170020.7	Sulfate:	3200.0	66.62		Potassium:	355.6	9.09	
Density (g/cm3):	1.104	Borate*:	30.5	0.19		Strontium:	31.2	0.71	
		Phosphate*:				Barium:	0.0	0.0	
Hydrogen Sulfide	15	*Calculated based on measured elemental boron and phosphorus.				Iron:	0.0	0.0	
Carbon Dioxide	66					Manganese:	0.000	0.0	
Comments					pH at time of sampling:	7			
					pH at time of analysis:				
					pH used in Calculation:	7			
					Temperature @ lab conditions (F):	75			
						Conductivity (micro-ohms/cm):	186200		
						Resistivity (ohm meter):	.0537		

### Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl

Temp	Calcite CaCO <sub>3</sub>		Gypsum CaSO <sub>4</sub> ·2H <sub>2</sub> O		Anhydrite CaSO <sub>4</sub>		Celestite SrSO <sub>4</sub>		Barite BaSO <sub>4</sub>	
	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount
80	0.48	30.72	-0.03	0.00	-0.02	0.00	-0.06	0.00	0.00	0.00
100	0.56	36.74	-0.11	0.00	-0.03	0.00	-0.09	0.00	0.00	0.00
120	0.64	43.07	-0.17	0.00	-0.01	0.00	-0.11	0.00	0.00	0.00
140	0.73	49.69	-0.22	0.00	0.03	71.68	-0.11	0.00	0.00	0.00
160	0.80	56.62	-0.26	0.00	0.09	201.18	-0.11	0.00	0.00	0.00
180	0.88	63.55	-0.30	0.00	0.17	349.35	-0.11	0.00	0.00	0.00
200	0.96	70.77	-0.33	0.00	0.25	503.25	-0.09	0.00	0.00	0.00
220	1.04	77.40	-0.36	0.00	0.35	652.32	-0.08	0.00	0.00	0.00

RECEIVED	REVIEWER:	TYPE:	APP NO:
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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

**Applicant:** COG Operating LLC **OGRID Number:** 229137  
**Well Name:** Burch Keely Unit #363 **API:** 30-015-32992  
**Pool:** Grayburg Jackson;SR-Q-G-SA **Pool Code:** 28509

**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)      ☐ SD

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    ☐ PPR
**2) NOTIFICATION REQUIRED TO:** Check those which apply.

- A. ☐ Offset operators or lease holders  
 B. ☐ Royalty, overriding royalty owners, revenue owners  
 C. ☐ Application requires published notice  
 D. ☐ Notification and/or concurrent approval by SLO  
 E. ☒ Notification and/or concurrent approval by BLM  
 F. ☐ Surface owner  
 G. ☐ 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.**

Kanicia Castillo

Print or Type Name

Signature

5/3/17

Date

432-685-4332

Phone Number

kcastillo@concho.com

e-mail Address

District I  
1625 N French Drive, Hobbs, NM 88241

District II  
811 S 17th St., Artesia, NM 88210

District III  
1000 Km Escorial Royal Artesia, NM 87419

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-107A  
Revised August 1, 2011

APPLICATION TYPE  
Single Well  
Establish Pre-Approved Pools  
EXISTING WELLBORE  
Yes No

APPLICATION FOR DOWNHOLE COMMINGLING

COG Operating LLC, 600 West Illioniois Ave, Midland, TX 79701

Operator

Address

Burch Keely Unit 363 L, 19, 17S, 30E Eddy  
Lease Well No. Unit Letter-Section-Township-Range County

OGRID No. 229137 Property Code 308086 API No 30-015-32992 Lease Type X Federal State Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Grayburg Jackson SR-Q-G-SA		Burch Keely-Glorieta-Upper Yaso
Pool Code	28509		97918
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	2927 - 4044		4224 - 4557
Method of Production (Flowing or Artificial Lift)	Artificial Lift		Artificial Lift
Bottomhole Pressure (Note: Pressure data will not be required if the bottomhole pressure in the lower zone is within 150% of the depth of the top perforations in the upper zone)	500 psi		500 psi
Oil Gravity or Gas BTU (Degree API or Unit BTU)	36 / 1418		38 / 1448
Producing, Shut-In or New Zone	Producing		Shut-In
Date and Oil/Gas/Water Rates of Last Production (Note: For new zones with no production history applicant shall be required to attach production estimates and supporting data.)	Date: 2016 Average Rates: O-12 bbls, G-23 mcf, W-31 bbls	Date Rates	Date: 2014 Average Rates: O-3 bbls, G-22 mcf, W-2 bbls
Fixed Allocation Percentage (Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.)	Oil Gas 80 % 52 %	Oil Gas % %	Oil Gas 20 % 49 %

ADDITIONAL DATA

Are all working, royalty and overriding royalty interests identical in all commingled zones? Yes ☒ No  
If not, have all working, royalty and overriding royalty interest owners been notified by certified mail? Yes ☒ No  
Are all produced fluids from all commingled zones compatible with each other? Yes ☒ No  
Will commingling decrease the value of production? Yes No ☒  
If this well is on, or communitized with, state or federal lands, has either the Commissioner of Public Lands or the United States Bureau of Land Management been notified in writing of this application? Yes ☒ No  
NMOCD Reference Case No. applicable to this well: NMNM88525X

Attachments:

C-102 for each zone to be commingled showing its spacing unit and acreage dedication.  
Production curve for each zone for at least one year. (If not available, attach explanation.)  
For zones with no production history, estimated production rates and supporting data.  
Data to support allocation method or formula.  
Notification list of working, royalty and overriding royalty interests for uncommon interest cases.  
Any additional statements, data or documents required to support commingling.

PRE-APPROVED POOLS

If application is to establish Pre-Approved Pools, the following additional information will be required

List of other orders approving downhole commingling within the proposed Pre-Approved Pools  
List of all operators within the proposed Pre-Approved Pools  
Proof that all operators within the proposed Pre-Approved Pools were provided notice of this application  
Bottomhole pressure data

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

SIGNATURE KC TITLE Lead Regulatory Analyst DATE 5/3/17

TYPE OR PRINT NAME Kanicia Castillo TELEPHONE NO ( 432 ) 685-4332

E-MAIL ADDRESS kcastillo@concho.com

## Conditions of Approval

**COG Operating LLC**  
**Burch Keely Unit - 363, API 3001532992**  
**T17S-R30E, Sec 19, 1750FSL & 1070FWL**  
**September 25, 2017**

1. **Within 90 days of these conditions of approval for the processed Electronic Submission #377576 notice of intent begin wellbore operations**
2. **Operator is required to have the BLM approved NOI procedure with applicable conditions of approval on location for this workover operation.**
3. Due to being within the Lesser Prairie Chicken habitat, this workover activity will be restricted to the hours of 9:00am through 3:00am for the period of March 1 through June 15. Exceptions to these restrictions may be granted by BLM's Bob Ballard <bballard@blm.gov> 575.234.5973.
4. Before casing or a liner is added, replaced, or repaired prior BLM approval of the design is required. Use notice of intent Form 3160-5.
5. Subject to like approval by the New Mexico Oil Conservation Division..
6. Surface disturbance beyond the existing pad shall have prior approval.
7. A closed loop system is required. The operator shall properly dispose of drilling/circulating contents at an authorized disposal site. Tanks are required for all operations, no excavated pits.
8. Functional H<sub>2</sub>S monitoring equipment shall be on location.
9. Blow Out Prevention Equipment 2000 (2M) to be used. All BOPE and workover procedures shall establish fail safe well control. Ram(s) for the work string(s) used is required equipment. Manual BOP closure system including a blind ram and pipe ram(s) designed to close on all (hand wheels or automatic locking devices) equipment installed regardless of BOP design. Function test the installed BOPE to 500psig when well conditions allow. Related equipment, (choke manifolds, kill trucks, gas vent or flare lines, etc.) employed when needed for reasonable well control requirements.
10. All waste (i.e. trash, salts, chemicals, sewage, gray water, etc.) created resulting from work over operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area. Porto-johns and trash containers will be on-location during any crew-intensive operations.
11. File intermediate **subsequent sundry** Form 3160-5 within 30 days of any interrupted workover procedures and a complete workover subsequent sundry.
12. Submit the BLM Form 3160-4 **Recompletion Report** within 30 days of the date all BLM approved procedures are complete.