

4/05/2016 DATE IN	SUSPENSE	M. Am ENGINEER	4/04/2016 LOGGED IN	DHL TYPE	Perm 1609746434 APP NO.
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ABOVE THIS LINE FOR DIVISION USE ONLY.

NEW MEXICO OIL CONSERVATION DIVISION
- 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

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]

DHL-471

- [1] **TYPE OF APPLICATION** - Check Those Which Apply for [A]
 [A] Location - Spacing Unit - Simultaneous Dedication
☐ NSL ☐ NSP ☐ SD

Cimarex Energy Co. of Colorado- 162683
Well: Glenwood 28 Federal 1 30-015-35735

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

Pools:
WC; High Lonesome
Atoka, SW (G) # 97692

Henshaw; Morrow SW
(G) #97149

- [D] Other: Specify _____

- [2] **NOTIFICATION REQUIRED TO:** - Check Those Which Apply, or ☐ 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.

Aricka Easterling

Print or Type Name

Aricka Easterling
Signature

Regulatory Analyst

Title

3/30/16
Date

aeasterling@cimarex.com
e-mail Address

Cimarex Energy Co.

202 S Cheyenne Ave

Suite 1000

Tulsa, Oklahoma 74103-4346

Phone 918.585.1100

Fax 918.749.8059

RECEIVED OGD

2016 APR -5 A 9:1



March 30, 2016

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

RE: Glenwood 28 Federal 1
28-16S-29E
30-015-35735
C-107-An Atoka and Morrow Well

Sir or Madam,

Enclosed is an original form C-107A (Application for Downhole Commingling) for the well mentioned above.

The well was drilled to the Morrow formation tested and plugged back to the Atoka. A CIBP is set at 10,222' to abandon the Morrow. Currently the well is producing from the Atoka formation. Cimarex proposes to down hole commingle the well by drilling out the CIBP.

Royalty, overriding, and working interest owner are the same in each zone.

If you have any questions or need further information, please contact me at 918-506-7060

Sincerely,

A handwritten signature in black ink that reads "Aricka Easterling". The signature is written in a cursive, flowing style.
Aricka Easterling
Regulatory Analyst

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240

DISTRICT II
1301 W. Grand Avenue, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised October 12, 2005

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-35735	Pool Code 97692	Pool Name WC; High Lonesome; Atoka SW (G)
Property Code	Property Name GLENWOOD "28" FEDERAL	Well Number 1
OGRID No. 162683	Operator Name CIMAREX ENERGY CO. OF COLORADO	Elevation 3645'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	28	16 S	29 E		760	NORTH	760	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

Dedicated Acres 320	Joint or Infill	Consolidation Code P	Order No.
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**NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION**

NM-99032	NM-15007	Glenwood 28 Fed Com 1	<p>Lot - N32°53'52.21" Lon - W104°04'25.46" NMSPCE - N 690464.422 E 621022.041 (NAD-83)</p>	<p>OPERATOR CERTIFICATION</p> <p>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 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.</p> <p><i>Aricka Easterling</i> Signature Date Aricka Easterling Printed Name</p> <p>SURVEYOR CERTIFICATION</p> <p>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.</p> <p>JUNE 15, 2007 Date Signature of Professional Surveyor Professional Surveyor No. 18234 Certificate No. Gary L. Jones 7977</p> <p>Basin Surveys</p>
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DISTRICT I
1625 N. French Dr., Hobbs, NM 88240

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1301 W. Grand Avenue, Artesia, NM 88210

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-35735		Pool Code 97149	Pool Name Henshaw; Morrow SW (G)
Property Code 36648	Property Name GLENWOOD "28" FEDERAL		Well Number 1
OGRID No. 162683	Operator Name CIMAREX ENERGY CO. OF COLORADO		Elevation 3645'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	28	16 S	29 E		760	NORTH	760	EAST	EDDY

Bottom Hole Location If Different From Surface

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				<p>SURVEYOR CERTIFICATION</p> <p>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.</p> <p>JUNE 15, 2007 Date</p> <p><i>Gary L. Jones</i> Signature of Professional Surveyor</p> <p>7977 Professional Surveyor No.</p> <p>18234 Certificate No.</p> <p>Gary L. Jones 7977 Certificate No.</p> <p>Basin Surveys</p>

Cimarex Energy Co.
600 N. Marienfeld St.
Suite 600
Midland, TX 79701
MAIN 432.571.7800



March 23, 2016

Mr. Michael A. McMillan
New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

RE: Ownership Verification
Glennwood 28 Fed Com 1H
API No. 30-015-35735
760' FNL x 760' FEL
Sec. 28-T16S-R29E
Eddy County, New Mexico

Dear Mr. McMillan:

Per the review of our records, it has been determined that there is common ownership for the Atoka and Morrow zones. Please feel free to contact me if there are any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Mark Compton", written over a white background.

Mark Compton
Landman
432-571-7896
mcompton@cimarex.com



LABORATORY SERVICES
Natural Gas Analysis

www.permianls.com

575.397.3713 2609 W Marland Hobbs NM 88240

For: Cimarex Energy
Attention: Mark Cummings
600 N. Marienfeld, Suite 600
Midland, Texas 79701

Sample: Sta. # Glen28Fed
Identification: Glenwood 28 Fed. 1
Company: Cimarex Energy
Lease:
Plant:

Sample Data: Date Sampled 1/28/2015 9:55 AM
Analysis Date 1/29/2015
Pressure-PSIA 204
Sample Temp F 71
Atmos Temp F 55
Sampled by: J. Jiron
Analysis by: Vicki McDaniel

H2S = 0.2 PPM

Component Analysis

		Mol Percent	GPM
Hydrogen Sulfide	H2S		
Nitrogen	N2	1.411	
Carbon Dioxide	CO2	0.139	
Methane	C1	86.421	
Ethane	C2	7.592	2.025
Propane	C3	2.744	0.754
I-Butane	IC4	0.341	0.111
N-Butane	NC4	0.605	0.190
I-Pentane	IC5	0.168	0.061
N-Pentane	NC5	0.143	0.052
Hexanes Plus	C6+	<u>0.436</u>	<u>0.189</u>
		100.000	3.382

REAL BTU/CU.FT.		Specific Gravity	
At 14.65 DRY	1141.6	Calculated	0.6558
At 14.65 WET	1121.7		
At 14.696 DRY	1145.1		
At 14.696 WET	1125.6	Molecular Weight	18.9939
At 14.73 DRY	1147.8		
At 14.73 Wet	1128.0		

Test Method GPA 2261-95

Calculations based on GPA 2145-09



LABORATORY SERVICES
Natural Gas Analysis

www.permianls.com

575.397.3713 2609 W Marland Hobbs NM 88240

For: Cimarex Energy
Attention: Mark Cummings
600 N. Marienfeld, Suite 600
Midland, Texas 79701

Sample: Sta. #SHFTGSNDS
Identification: Shifting Sands #1
Company: Cimarex Energy
Lease:
Plant:

Sample Data: Date Sampled 5/22/2012
Analysis Date 5/25/2012
Pressure-PSIA 47
Sample Temp F 76.4
Atmos Temp F 81

Sampled by: K. Hooten/Gas Meas.
Analysis by: Dustin Armstrong

H2S =

Component Analysis

		Mol Percent	GPM
Hydrogen Sulfide	H2S		
Nitrogen	N2	2.102	
Carbon Dioxide	CO2	0.244	
Methane	C1	72.100	
Ethane	C2	12.629	3.369
Propane	C3	7.521	2.067
I-Butane	IC4	1.084	0.354
N-Butane	NC4	2.253	0.708
I-Pentane	IC5	0.547	0.200
N-Pentane	NC5	0.507	0.183
Hexanes Plus	C6+	<u>1.013</u>	<u>0.438</u>
		100.000	7.319

REAL BTU/CU.FT.

At 14.65 DRY	1345.5
At 14.65 WET	1322.0
At 14.696 DRY	1349.7
At 14.696 WET	1326.7
At 14.73 DRY	1352.8
At 14.73 Wet	1329.5

Specific Gravity

Calculated 0.7948

Molecular Weight 23.0207



LABORATORY SERVICES
Natural Gas Analysis

www.permianls.com

575.397.3713 2609 W Marland Hobbs NM 88240

For: Cimarex Energy
Attention: Mark Cummings
600 N. Mariefeld, Suite 600
Midland, Texas 79701

Sample: Sta. # Glen 28 Fed
Identification: Glenwood 28 Fed. # 1
Company: Cimarex Energy
Lease:
Plant:

Sample Data: Date Sampled 7/10/2013
Analysis Date 7/12/2013
Pressure-PSIA 580
Sample Temp F 93
Atmos Temp F 93

Sampled by: J. Stevens/Gas Meas
Analysis by: Vicki McDaniel

H2S = 1 PPM

Component Analysis

		Mol Percent	GPM
Hydrogen Sulfide	H2S		
Nitrogen	N2	1.475	
Carbon Dioxide	CO2	0.165	
Methane	C1	86.627	
Ethane	C2	7.388	1.971
Propane	C3	2.577	0.708
I-Butane	IC4	0.314	0.102
N-Butane	NC4	0.607	0.191
I-Pentane	IC5	0.192	0.070
N-Pentane	NC5	0.155	0.056
Hexanes Plus	C6+	<u>0.500</u>	<u>0.216</u>
		100.000	3.315

REAL BTU/CU.FT.		Specific Gravity	
At 14.65 DRY	1139.8	Calculated	0.6558
At 14.65 WET	1119.9		
At 14.696 DRY	1143.3		
At 14.696 WET	1123.8	Molecular Weight	18.9924
At 14.73 DRY	1145.9		
At 14.73 Wet	1126.1		



Laboratory Services, Inc.
2609 W. Marland
Hobbs, New Mexico 88240
Telephone: (505) 397-3713

Scanned

SULFUR IN CRUDE OIL

Cimarex Energy
Attention: Manuel Cabezuela
P.O. Box 1237
Eunice, New Mexico 88231

Nov 16, 2007

	Total Sulfur	API Gravity @ 60° F	Specific Gravity @ 60° F
Glenwood 28 Fed. #1	0.0533 wt. %	53.2	0.7661

Thank You,
Vickie Sullivan



Laboratory Services, Inc.
2609 West Marland
Hobbs, New Mexico 88240

Telephone: (505) 397-3713

Scanned

FOR: Cimarex Energy
Attention: Manuel Cabezuela
P.O. Box 1237
Eunice, New Mexico 88231

SAMPLE: Morrow Formation
IDENTIFICATION: Glenwood 28 Fed. #1
COMPANY: Cimarex Energy
LEASE:
PLANT:

SAMPLE DATA: DATE SAMPLED 11/15/07 11:30am
ANALYSIS DATE: 11/16/07
PRESSURE - PSIG 82
SAMPLE TEMP. °F
ATMOS. TEMP. °F 51
REMARKS: H2S = 0.4 PPM

GAS (XX) LIQUID ()
SAMPLED BY: Vickie Sullivan
ANALYSIS BY: Vickie Sullivan

COMPONENT ANALYSIS

COMPONENT		MOL PERCENT	GPM
Hydrogen Sulfide	(H2S)		
Nitrogen	(N2)	1.025	
Carbon Dioxide	(CO2)	0.246	
Methane	(C1)	83.180	
Ethane	(C2)	7.915	2.112
Propane	(C3)	3.766	1.035
I-Butane	(IC4)	0.533	0.174
N-Butane	(NC4)	1.261	0.397
I-Pentane	(IC5)	0.455	0.166
N-Pentane	(NC5)	0.522	0.189
Hexane Plus	(C6+)	1.097	0.476
		100.000	4.549

BTU/CU.FT. - DRY 1225
AT 14.650 DRY 1221
AT 14.650 WET 1200
AT 14.73 DRY 1228
AT 14.73 WET 1206

MOLECULAR WT. 20.5405

SPECIFIC GRAVITY -
CALCULATED 0.707
MEASURED

**Laboratory Services, Inc.**

2609 W. Marland
Hobbs, New Mexico 88240
Telephone: (505) 397-3713

SULFUR IN CRUDE OIL

Cimarex Energy
Attention: Manuel Cabezuela
P.O. Box 1237
Eunice, New Mexico 88231

Aug 6, 2008

	Total Sulfur	API Gravity @ 60° F	Specific Gravity @ 60° F
Glenwood 28 #4	0.0396 wt.%	46.0	0.7971
Juno 27 Fed. Com. #2	0.0197 wt.%	54.0	0.7628

Thank You,

Vicki McDaniel

North Permian Basin Region
P.O. Box 740
Sundown, TX 79372-0740
(806) 229-8121
Lab Team Leader - Sheila Hernandez
(432) 495-7240

Water Analysis Report by Baker Petrolite

Company:	CIMAREX ENERGY	Sales RDT:	44212
Region:	PERMIAN BASIN	Account Manager:	WAYNE PETERSON (575) 910-9389
Area:	CARLSBAD, NM	Sample #:	434992
Lease/Platform:	GLENWOOD '28' FEDERAL	Analysis ID #:	85162
Entity (or well #):	1	Analysis Cost:	\$80.00
Formation:	STRAWN		
Sample Point:	WATER TANK		

Summary		Analysis of Sample 434992 @ 75 °F					
Sampling Date:	08/29/08	Anions	mg/l	meq/l	Cations	mg/l	meq/l
Analysis Date:	09/10/08	Chloride:	13080.0	368.94	Sodium:	4720.9	205.35
Analyst:	LISA HAMILTON	Bicarbonate:	219.6	3.6	Magnesium:	68.0	5.59
TDS (mg/l or g/m3):	25215.6	Carbonate:	0.0	0.	Calcium:	350.0	17.47
Density (g/cm3, tonne/m3):	1.016	Sulfate:	630.0	13.12	Strontium:	18.0	0.41
Anion/Cation Ratio:	1.0000000	Phosphate:			Barium:	0.3	0.
		Borate:			Iron:	8.0	0.29
		Silicate:			Potassium:	6120.0	156.51
Carbon Dioxide:	40 PPM	Hydrogen Sulfide:		0 PPM	Aluminum:		
Oxygen:	0 PPM	pH at time of sampling:		7.24	Chromium:		
Comments:		pH at time of analysis:			Copper:		
		pH used in Calculation:		7.24	Lead:		
					Manganese:	0.800	0.03
					Nickel:		

Conditions		Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl										
Temp	Gauge Press.	Calcite CaCO ₃		Gypsum CaSO ₄ *2H ₂ O		Anhydrite CaSO ₄		Celestite SrSO ₄		Barite BaSO ₄		CO ₂ Press
°F	psi	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	psi
140	0	0.35	8.55	-1.05	0.00	-0.87	0.00	-0.49	0.00	0.40	0.00	0.29
160	0	0.47	12.65	-1.04	0.00	-0.76	0.00	-0.46	0.00	0.30	0.00	0.36
180	0	0.59	16.75	-1.03	0.00	-0.64	0.00	-0.43	0.00	0.23	0.00	0.45
200	0	0.70	21.53	-1.02	0.00	-0.51	0.00	-0.39	0.00	0.17	0.00	0.54

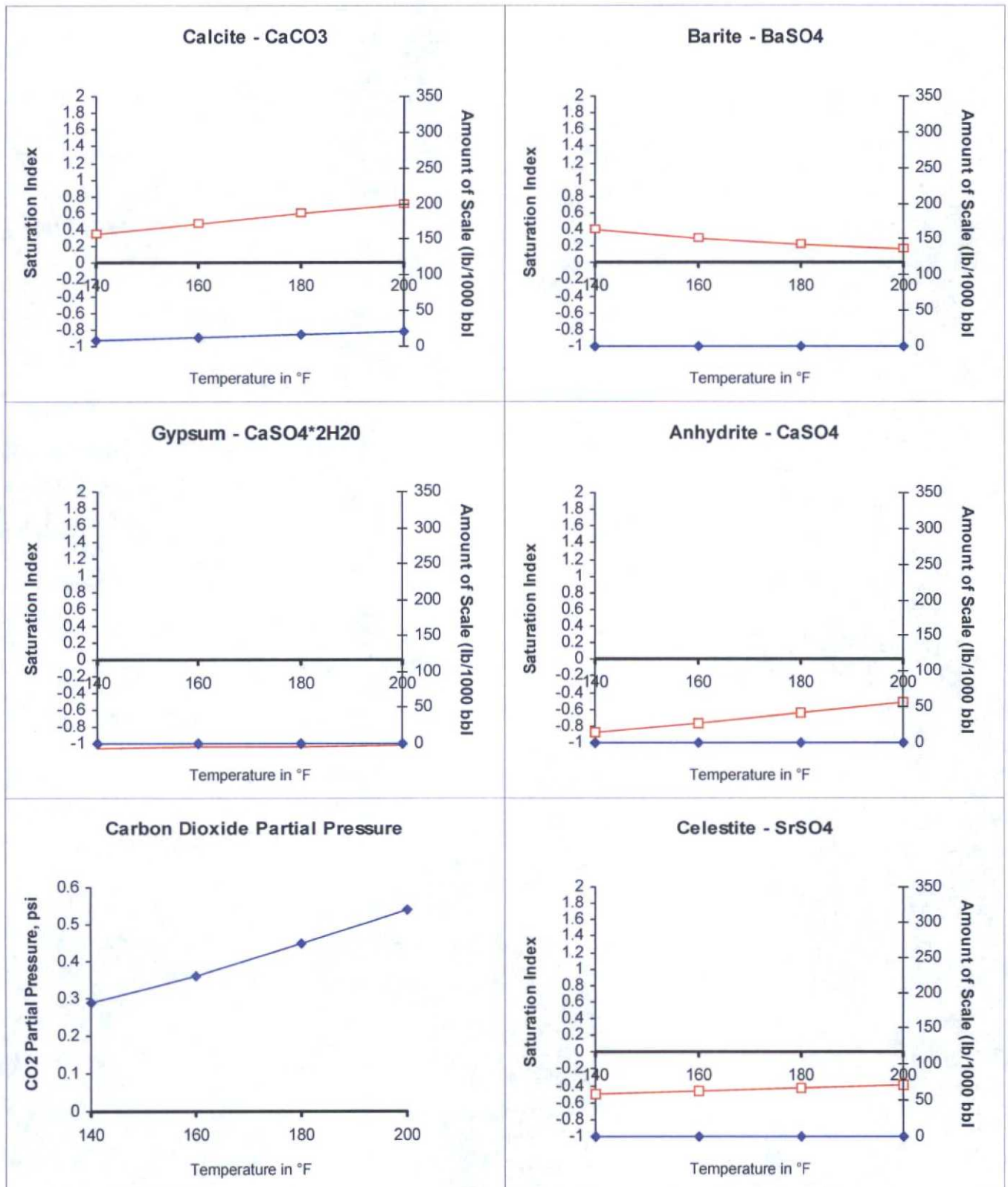
Note 1: When assessing the severity of the scale problem, both the saturation index (SI) and amount of scale must be considered.

Note 2: Precipitation of each scale is considered separately. Total scale will be less than the sum of the amounts of the five scales.

Note 3: The reported CO₂ pressure is actually the calculated CO₂ fugacity. It is usually nearly the same as the CO₂ partial pressure.

Scale Predictions from Baker Petrolite

Analysis of Sample 434992 @ 75 °F for CIMAREX ENERGY, 09/10/08



Proposed

Cimarex Energy Co. of Colorado

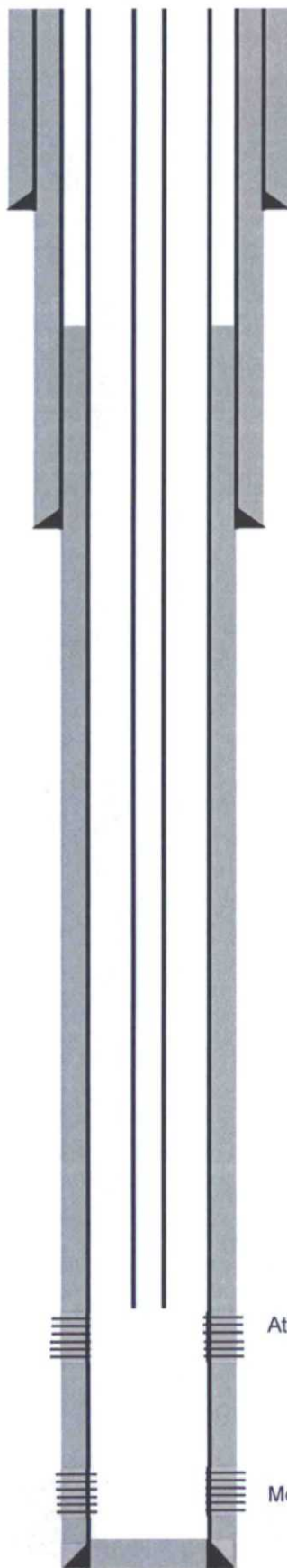
Glenwood 28 Federal Com #1

API 30-015-35735

Sec 28 T16S R29E 760' FNL & 760' FEL

D. Pearson

2/23/2016



13-3/8" 48# H-40 @ 355' 530 sx cmt
circl'd cmt to surface

TOC @ 980' (CBL)

8 5/8" 24# J-55 @ 2,660' w/831 sx cmt
circl'd cmt to surface

Atoka 10,067'-10,082' (91 holes)

Morrow 10,354'-10,382' (110 holes)

PBTD 10,621'
TD 10,621'

5-1/2" 17# P-110 @ 10,621 w/ 1,425 sx cmt

District I
1625 N. French Drive, Hobbs, NM 88240

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1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico.
Energy, Minerals and Natural Resources Department

Form C-107A
Revised August 1, 2011

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

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

APPLICATION FOR DOWNHOLE COMMINGLING

Cimarex Energy Co. Of Colorado 600 N. Marienfeld St., Suite 600, Midland, TX 79701
Operator Address

Glenwood 28 Federal Com 1 A-28-16S-29E Eddy
Lease Well No. Unit Letter-Section-Township-Range County

OGRID No. 162683 Property Code 35326 API No. 30-015-35735 Lease Type: ☒ Federal ☐ State ☐ Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	High Lonesome; Atoka SW (G)		Henshaw; Morrow SW (G)
Pool Code	97692		97149
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	10,067'-10,082'		10,354'-10,382'
Method of Production (Flowing or Artificial Lift)	Flowing		
Bottomhole Pressure (Note: Pressure data will not be required if the bottom perforation in the lower zone is within 150% of the depth of the top perforation in the upper zone)	Within 150% of bottom perms		
Oil Gravity or Gas BTU (Degree API or Gas BTU)	53.2, 99.3		
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: 2-24-16 Rates: .3 BOPD/550 MCFD/ 0 BWPD	Date: Rates:	Date: 11-9-2007 Rates: 0 BOPD/1545 MCFPD/0 BWPD
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 100 % 36 %	Oil Gas % %	Oil Gas 0 % 64 %

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: _____

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 Aricka Easterling TITLE Regulatory Analyst DATE 3/30/16

TYPE OR PRINT NAME Aricka Easterling TELEPHONE NO. (918) 560-7060

E-MAIL ADDRESS aeasterling@cimarex.com

McMillan, Michael, EMNRD

From: Dean Pearson <dpearson@cimarex.com>
Sent: Friday, April 08, 2016 7:17 AM
To: Terri Stathem; McMillan, Michael, EMNRD
Subject: RE: Glenwood 28 Federal Well No. 1 DHC application

Hi Michael,

I am the production engineer over the field concerning this DHC application for the Glenwood 28 Federal Well No. 1. After the well was drilled into the Morrow formation and completed, gas was flowed from the Morrow zone for a few days for testing purposes but none of it was sold. This is an area where both the Atoka and Morrow zones are good producers so I am not surprised they had the intention to test both zones. My feeling is that after they set the bridge plug over the Morrow perforations and completed the Atoka, they had an even better zone in the Atoka and wanted to flow it by itself for a while. I simply believe the Morrow zone below the plug was simply forgotten about over time. Having identified the plug being there with good rates shown out of the Morrow being plugged back, we would like to get it back. *The allocation percentages are based off of the flowrates seen out of the Morrow zone before a plug was set.* Atoka percentages are just based off existing rates. Thanks! Let me know of any further questions.

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-----Original Message-----

From: Terri Stathem
Sent: Friday, April 08, 2016 8:07 AM
To: Dean Pearson <dpearson@cimarex.com>
Subject: FW: Glenwood 28 Federal Well No. 1 DHC application

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