

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]

CTB 768

[1] **TYPE OF APPLICATION** - Check Those Which Apply for [A]

- [A] Location - Spacing Unit - Simultaneous Dedication
☐ NSL ☐ NSP ☐ SD

Check One Only for [B] or [C]

- [B] Commingling - Storage - Measurement
☐ DHC ☒ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

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

☐ WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PPR

- [D] Other: Specify _____

Cimarex Energy Co. of Colorado - 162683
Wells: Chaparral 33-Federal 3H 30-025-40253
Chaparral 33 Federal 4H 30-025-40328
Chaparral 33 Federal 5H 30-025-41879

Pool
-Grail Ridge Bone
Spring, South
50461

[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

9/11/15

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

2015 SEP 14 P 3: 58



September 11, 2015

NMOCD

1220 South St. Francis Drive

Santa Fe, NM 87505

RE: Request for a Commingle Oil & Gas Production

Chaparral 33 Fed 3H API# 30-025-40253

Chaparral 33 Fed 4H API# 30-025-40328

Chaparral 33 Fed 5H API# 30-025-41879

Pool: Quail Ridge; Bone Spring, South (50461)

Lea County, New Mexico

Mr. McMillian:

Cimarex Energy Company respectfully requests approval to surface commingle production at the Chaparral 33 Federal Battery. Chaparral 33 Fed 3H, 4H & 5H produce from the Quail Ridge; Bone Spring, South (50461).

The working, royalty and overriding interest owners are diverse and have been notified of this proposal.

Please contact me should you have any questions or need anything further.

Thank you in advance for your time.

Sincerely,

Aricka Easterling

Aricka Easterling

Regulatory Analyst

Enclosure



Chaparral 33 Fed Com Tank Battery Economic Justification
Sec. 33-19S-34E
Lea, County NM

CTB Commingling proposal for leases: NMNM057285, NMNM060789, NMNM094622

Federal Lease NMNM057285, NMNM060789 & NMNM094622 Royalty Rate 12-1/2%

Well Name	BOPD	Oil Gravity@60 deg	Value/bbl	MCFPD	Dry BTU	Value/mcf
Chaparral 33 Fed Com 3H	104.6	43.3	54	116	1.3669	2.93
Chaparral 33 Fed Com 4H	43.66	43.3	54	170	1.3669	2.93
Chaparral 33 Fed Com 5H	181.76	43.3	54	0	1.3669	2.93

Economic combined production

Federal Lease NMNM057285, NMNM060789 & NMNM094622 Royalty Rate 12-1/2%

Facility Name	BOPD	Oil Gravity@60 deg	Value/bbl	MCFPD	Dry BTU	Value/mcf
Chaparral 33 Fed Com Tank Battery	330.02	43.3	54	286	1.3669	2.93

Signed:

Aricka Easterling

Printed Name: Aricka Easterling

Title: Regulatory Analyst

Phone: 918-560-7060

Date: 9/11/15

HOBBS OCD

DISTRICT I

1625 N. French Dr., Hobbs, NM 88240

DISTRICT II

1501 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

MAR 12 2013

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102

Revised July 16, 2010

Submit one copy to appropriate
District OfficeRECEIVED OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

COWPENKING

WELL LOCATION AND ACREAGE DEDICATION PLAT

AMENDED REPORT

API Number 30-025-40253	Pool Code 50461	Pool Name Quall Ridge; Bone Spring, South
Property Code 38777	Property Name CHAPARRAL "33" FEDERAL COM	Well Number 3
GRID No. 162683	Operator Name CIMAREX ENERGY CO. OF COLORADO	Elevation 3699'

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	33	19 S	34 E		220	NORTH	880	EAST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	33	19 S	34 E		330'±	SOUTH	649	EAST	LEA
Dedicated Acres 160	Joint or Infill	Consolidation Code	Order No.						

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

<p>SURFACE LOCATION Lat - N 32°37'24.27" Long - W 103°55'34.16" NAD83 E 778585.2 (NAD-83)</p> <p>SHL & PP Bone Spring 220 FNL & 880 FEL</p> <p>EOC/Beg Prod Interval 423 FNL & 869 FEL</p> <p>NM-57285</p> <p>NM-60789</p> <p>NM-94622</p> <p>649'</p>	<p>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, or working interest or undivided 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.</p> <p>Signature: Terri Stathem Date: 3/8/13</p> <p>Printed Name: terri.stathem@cimarex.com</p> <p>Email Address:</p> <p>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.</p> <p>Date Surveyed: AUGUST 2012 Signature: [Signature] Professional Surveyor: 7877</p> <p>Certificate No.: Gary L. Jones 7877</p> <p>BASIN SURVEYS 27257</p>
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MAR 21 2013

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

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

DISTRICT III
1000 Rio Brazos Rd., Atec, NM 87503

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 July 18, 2010

Submit one copy to appropriate
District Office

OIL CONSERVATION DIVISION

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30025-40328	Pool Code 50461	Pool Name Quail Ridge; Bone Spring, South
Property Code 38777	Property Name CHAPPARAL 33 FEDERAL COM	Well Number 4H
OGRID No. 162683	Operator Name CIMAREX ENERGY CO. OF COLORADO	Elevation 3691'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	33	19 S	34 E		330	NORTH	2010	EAST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	33	19 S	34 E		338	SOUTH	2026	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
160			NSL Pending

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

<p>SURFACE LOCATION Lat - N 32°37'23.141" Long - W 103°33'47.375" NMSPCE- N 591271.9 E 778458.5 (NAD-83)</p> <p>SHL & PP Bone Spring 330 FNL & 2010 FEL</p> <p>BHL 338 FSL & 2026 FEL</p>	<p>3692.1' 3698.6'</p> <p>S.L.</p> <p>3689.6' 3690.1'</p> <p>2010'</p> <p>NM-57285</p> <p>4633.7'</p> <p>NM-60789</p> <p>NM-94622</p> <p>2026</p> <p>B.H.</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 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.</p> <p><i>Hope Knauls</i> 12/19/2013 Signature Date</p> <p>Hope Knauls Printed Name</p> <p>Hknauls@cimarex.com Email Address</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><i>Gary L. Jones</i> 2010 Date Surveyed</p> <p><i>Gary L. Jones</i> Signature & Seal of Professional Surveyor</p> <p>Certificate No. Gary L. Jones 7977 BASIN SURVEYS 23818</p>
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JAN 29 2014

DISTRICT I

1625 N. French Dr., Hobbs, NM 88240

DISTRICT II

1501 W. Grand Avenue, Artesia, NM 88210

DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV

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

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

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

Form C-102

Revised July 10, 2010

Submit one copy to appropriate
District Office

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-025-4879	Pool Code 50461	Pool Name QUACH MINE; CONE SPRING, SOUTH
Property Code 78777	Property Name CHAPARRAL "33" FEDERAL COM	Well Number 5H
OGRID No. 162683	Operator Name CIMAREX ENERGY CO. OF COLORADO	Elevation 3686'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	33	19 S	34 E		330	NORTH	1980	WEST	LEA

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
N	33	19 S	34 E		330	SOUTH	1980	WEST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
160			

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

<p>SURFACE LOCATION Lat - N 32°37'23.085" Long - W 103°34'02.668" NMSPCE- N 591256.8 E 777148.6 (NAD-83)</p> <p>PROPOSED BOTTOM HOLE LOCATION Lat - N 32°36'37.273" Long - W 103°34'02.378" NMSPCE- N 586827.21 E 777206.81 (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 undivided 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 is a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p><i>Paula Brunson</i> 9/13/2013 Signature Date</p> <p>Paula Brunson Printed Name pbrunson@cimarex.com Email Address</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>Date Surveyed 9/13/2013 Signature & Seal of Professional Surveyor <i>[Signature]</i></p> <p>Certificate No. Gary L. Jones 7977 BASIN SURVEYS 24681</p>
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MAY 28 2014

APPLICATION FOR COMMINGLING AT A COMMON CENTRAL TANK BATTERY

Proposal for Chaparral 33 Federal 3H, Chaparral 33 Federal 4H, and Chaparral 33 Federal 5H:

Cimarex Energy Co. is requesting approval for the Central Tank Battery Commingling:

Federal Lease NMNM057285

Well Name	Location	API #	Pool	BOPD	Gravities	MCFPD	BTU
Chaparral 33 Federal 3H	Sec 33, NENE T19S-R34E	30-025-40253	50461	104.6	43.3	116	1.3669
Chaparral 33 Federal 4H	Sec 33, NWNE T19S-R34E	30-025-40328	50461	43.66	43.3	170	1.3669
Chaparral 33 Federal 5H	Sec 33, NENW T19S-R34E	30-025-41879	50461	181.76	43.3	0	1.3669

The attached map shows the federal leases and well locations in Section 33-T19S-R34E.

The BLM's interest in all wells is the same. Lease NMNM057285 (SHL) royalty rate is 12.5% and involves 1280 acres, lease NMNM060789 royalty rate is 12.5% and involves 200 acres, and lease NMNM094622 (BHL) royalty rate is 12.5% and involves 120 acres.

Oil & Gas Metering:

The central tank battery is located on the well pad for the Chaparral 33 Federal 3H located in Sec. 33 NWNE, T19S-R34E on federal lease NMNM057285 in Lea County, New Mexico. The production from all wells will come to a common production header with isolation line to route each well's production:

Oil production will be allocated on a daily basis based from the turbine meter located downstream of the heater treater. Oil meter #'s 301471020P, 301471170P, 301471022P. This meter will be proven, as per API, NMOCD, and BLM specifications, when installed, once per month for the first 3 months (to establish a consistent repeatability factor), and then quarterly thereafter, the factor obtained will be used to allocate the production volumes. Gas production will be allocated on a daily basis based on the Chaparral 33 Federal allocation gas meter # 301471020, 301471170, & 301471022 downstream of the separator and heater treater. The gas production from the production equipment and the gas meter will commingle and flow through Targa Meter # 118-001218 sales meter on the SW side of the facility. These meters will be calibrated on a regular basis per API, NMOCD, and BLM specifications. The BLM and OCD will be notified of any future changes in the facilities.

Process and Flow Descriptions:

The flow of production is shown in detail on enclosed facilities diagram and map, which shows the lease boundaries. Communitization agreement boundaries, location of wells, facility, and gas sales meter. The commingling of this production is the most effective economical means of producing the reserves and will not result in reduced royalty or improper measurement of production. The proposed commingling will reduce operating expenses as well as reduce the surface facility footprint and overall emissions.

Cimarex Energy Co. understands the requested approval will not constitute the granting of any right-of-way or construction rights not granted by the lease instrument.

Working, royalty, and overriding interest owners have been notified of this proposal via certified mail (see attached).

District I
1625 N. French Drive, Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, 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-107-B
Revised August 1, 2011

OIL CONSERVATION DIVISION
1220 S. St Francis Drive
Santa Fe, New Mexico 87505

Submit the original
application to the Santa Fe
office with one copy to the
appropriate District Office.

APPLICATION FOR SURFACE COMMINGLING (DIVERSE OWNERSHIP)

OPERATOR NAME: Cimarex Energy Co. of Colorado

OPERATOR ADDRESS: 202 S. Cheyenne Ave, Suite 1000, Tulsa, OK 74103

APPLICATION TYPE:

☐ Pool Commingling ☒ Lease Commingling ☐ Pool and Lease Commingling ☐ Off-Lease Storage and Measurement (Only if not Surface Commingled)

LEASE TYPE: ☐ Fee ☐ State ☒ Federal

Is this an Amendment to existing Order? ☐ Yes ☒ No If "Yes", please include the appropriate Order No. _____

Have the Bureau of Land Management (BLM) and State Land office (SLO) been notified in writing of the proposed commingling
☒ Yes ☐ No

(A) POOL COMMINGLING

Please attach sheets with the following information

(1) Pool Names and Codes	Gravities / BTU of Non-Commingled Production	Calculated Gravities / BTU of Commingled Production		Calculated Value of Commingled Production	Volumes

(2) Are any wells producing at top allowables? ☐ Yes ☐ No

(3) Has all interest owners been notified by certified mail of the proposed commingling? ☐ Yes ☐ No.

(4) Measurement type: ☐ Metering ☐ Other (Specify)

(5) Will commingling decrease the value of production? ☐ Yes ☐ No If "yes", describe why commingling should be approved

(B) LEASE COMMINGLING

Please attach sheets with the following information

(1) Pool Name and Code.

(2) Is all production from same source of supply? ☒ Yes ☐ No

(3) Has all interest owners been notified by certified mail of the proposed commingling? ☒ Yes ☐ No

(4) Measurement type: ☒ Metering ☐ Other (Specify)

(C) POOL and LEASE COMMINGLING

Please attach sheets with the following information

(1) Complete Sections A and E.

(D) OFF-LEASE STORAGE and MEASUREMENT

Please attached sheets with the following information

(1) Is all production from same source of supply? ☐ Yes ☐ No

(2) Include proof of notice to all interest owners.

(E) ADDITIONAL INFORMATION (for all application types)

Please attach sheets with the following information

(1) A schematic diagram of facility, including legal location.

(2) A plat with lease boundaries showing all well and facility locations. Include lease numbers if Federal or State lands are involved.

(3) Lease Names, Lease and Well Numbers, and API Numbers.

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: 9/11/15

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

E-MAIL ADDRESS: aeasterling@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. # NCW1471020
Identification: Chaparral 33 Fed. 3H Sales
Company: Cimarex Energy
Lease:
Plant:

Sample Data: Date Sampled 1/16/2015 10:12 AM
Analysis Date 1/16/2015
Pressure-PSIA 56
Sample Temp F 59
Atmos Temp F 37

Sampled by: J. Jiron
Analysis by: Vicki McDaniel

H2S = 0.2 PPM

Component Analysis

		Mol Percent	GPM
Hydrogen Sulfide	H2S		
Nitrogen	N2	4.744	
Carbon Dioxide	CO2	0.072	
Methane	C1	67.003	
Ethane	C2	14.026	3.741
Propane	C3	8.908	2.448
I-Butane	IC4	0.894	0.292
N-Butane	NC4	2.578	0.811
I-Pentane	IC5	0.485	0.177
N-Pentane	NC5	0.526	0.190
Hexanes Plus	C6+	<u>0.764</u>	<u>0.331</u>
		100.000	7.990

REAL BTU/CU.FT.		Specific Gravity	
At 14.65 DRY	1343.7	Calculated	0.8188
At 14.65 WET	1320.2		
At 14.696 DRY	1347.9		
At 14.696 WET	1324.9	Molecular Weight	23.7145
At 14.73 DRY	1351.0		
At 14.73 Wet	1327.6		

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. # NCW9775198
Identification: Chaparral 33-5 Alloc
Company: Cimarex Energy
Lease:
Plant:

Sample Data: Date Sampled 12/19/2014
Analysis Date 12/22/2014
Pressure-PSIA 58
Sample Temp F 69
Atmos Temp F 56

Sampled by: Taylor Ridings
Analysis by: Vicki McDaniel

H2S = 0

Component Analysis

		Mol Percent	GPM
Hydrogen Sulfide	H2S	0.000	
Nitrogen	N2	3.601	
Carbon Dioxide	CO2	0.124	
Methane	C1	64.679	
Ethane	C2	16.616	4.432
Propane	C3	9.938	2.731
I-Butane	IC4	0.925	0.302
N-Butane	NC4	2.514	0.791
I-Pentane	IC5	0.454	0.166
N-Pentane	NC5	0.476	0.172
Hexanes Plus	C6+	<u>0.673</u>	<u>0.291</u>
		100.000	8.885

REAL BTU/CU.FT.		Specific Gravity	
At 14.65 DRY	1383.4	Calculated	0.8326
At 14.65 WET	1359.2		
At 14.696 DRY	1387.7		
At 14.696 WET	1364.1	Molecular Weight	24.1149
At 14.73 DRY	1390.9		
At 14.73 Wet	1366.9		

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 Bishop
600 N. Marienfeld, Suite 600
Midland, Texas 79701

Sample: Sta. #
Identification: Chaparral 33 Fed. # 4H
Company: Cimarex Energy
Lease:
Plant:

Sample Data: Date Sampled 9/13/2013 2:00 PM
Analysis Date 9/16/2013
Pressure-PSIA 114
Sample Temp F 85
Atmos Temp F 89
Sampled by: Mark Bishop
Analysis by: Dustin Armstrong

H2S = 0

Component Analysis

		Mol Percent	GPM
Hydrogen Sulfide	H2S	0.000	
Nitrogen	N2	3.701	
Carbon Dioxide	CO2	0.115	
Methane	C1	64.042	
Ethane	C2	16.758	4.470
Propane	C3	10.344	2.842
I-Butane	IC4	0.956	0.312
N-Butane	NC4	2.597	0.817
I-Pentane	IC5	0.426	0.155
N-Pentane	NC5	0.486	0.176
Hexanes Plus	C6+	<u>0.575</u>	<u>0.249</u>
		100.000	9.021

REAL BTU/CU.FT.		Specific Gravity	
At 14.65 DRY	1387.7	Calculated	0.8363
At 14.65 WET	1363.5		
At 14.696 DRY	1392.0		
At 14.696 WET	1368.4	Molecular Weight	24.2205
At 14.73 DRY	1395.2		
At 14.73 Wet	1371.1		

Well Name:	CHAPARRAL 33 FEDERAL COM # 003	API:	3002540253
Location:	A-33-19.0S-34E 220 FNL 880 FEL		
Lat:	32.6234189	Long:	-103.5596118
Operator Name:	CIMAREX ENERGY CO. OF COLORADO	County:	Lea
Land Type:	Federal	Well Type:	Oil
Spud Date:	10/5/2012	Plug Date:	
Elevation GL:	3696	Depth TVD:	15302

Year: 2014						
Pool Name: QUAIL RIDGE;BONE SPRING SOUTH						
Month	Oil(BBLS)	Gas(MCF)	Water(BBLS)	Days Produced	Accum. Oil(BBLS)	Accum. Gas(MCF)
January	4088	1098	4547	31	4088	1098
February	4030	685	3833	28	8118	1783
March	3262	758	3302	31	11380	2541
April	3548	634	3543	30	14928	3175
May	3780	798	3392	31	18708	3973
June	3231	849	2827	30	21939	4822
July	3248	911	2978	31	25187	5733
August	2324	1790	2064	20	27511	7523
September	2677	1431	2253	21	30188	8954
October	4965	4663	4092	31	35153	13617
November	3720	3470	2485	26	38873	17087
December	4210	5780	3510	31	43083	22867

Year: 2015						
Pool Name: QUAIL RIDGE;BONE SPRING SOUTH						
Month	Oil(BBLS)	Gas(MCF)	Water(BBLS)	Days Produced	Accum. Oil(BBLS)	Accum. Gas(MCF)
January	3655	5052	2729	31	46738	27919
February	3205	3886	2479	28	49943	31805
March	3441	3405	2642	31	53384	35210
April	2558	2100	2023	23	55942	37310
May	0	0	0	0	55942	37310
June	0	0	0	0	55942	37310
July	0	0	0	0	55942	37310
August	0	0	0	0	55942	37310
September	0	0	0	0	55942	37310
October	0	0	0	0	55942	37310
November	0	0	0	0	55942	37310
December	0	0	0	0	55942	37310

Well Name:	CHAPARRAL 33 FEDERAL COM # 004H	API:	3002540328
Location:	B-33-19.0S-34E 330 FNL 2010 FEL		
Lat:	32.6231074	Long:	-103.5632993
Operator Name	CIMAREX ENERGY CO. OF COLORADO	County:	Lea
Land Type:	Federal	Well Type:	Oil
Spud Date:	7/14/2013	Plug Date:	
Elevation GL:	3691	Depth TVD:	10847

Year: 2014

Pool Name: QUAIL RIDGE;BONE SPRING SOUTH

Month	Oil(BBLS)	Gas(MCF)	Water(BBLS)	Days Produced	Accum. Oil(BBLS)	Accum. Gas(MCF)
January	7542	7371	4495	31	7542	7371
February	5430	5620	4015	28	12972	12991
March	6227	5600	3748	31	19199	18591
April	5837	6030	4218	30	25036	24621
May	4879	5844	3664	31	29915	30465
June	4476	6128	3272	30	34391	36593
July	4118	5771	3098	31	38509	42364
August	3398	3677	2766	31	41907	46041
September	2773	2935	2470	30	44680	48976
October	2923	2410	2242	31	47603	51386
November	2224	1044	2323	24	49827	52430
December	2069	1707	2253	31	51896	54137

Year: 2015

Pool Name: QUAIL RIDGE;BONE SPRING SOUTH

Month	Oil(BBLS)	Gas(MCF)	Water(BBLS)	Days Produced	Accum. Oil(BBLS)	Accum. Gas(MCF)
January	1683	1764	1434	30	53579	55901
February	1460	883	1283	28	55039	56784
March	1531	1401	1146	31	56570	58185
April	1514	1511	1147	30	58084	59696
May	0	0	0	0	58084	59696
June	0	0	0	0	58084	59696
July	0	0	0	0	58084	59696
August	0	0	0	0	58084	59696
September	0	0	0	0	58084	59696
October	0	0	0	0	58084	59696
November	0	0	0	0	58084	59696
December	0	0	0	0	58084	59696

Well Name:	CHAPARRAL 33 FEDERAL COM # 005H	API:	3002541879
Location:	C-33-19.0S-34E 330 FNL 1980 FWL		
Lat:	32.62309721	Long:	-103.5674485
Operator Name:	CIMAREX ENERGY CO. OF COLORADO	County:	Lea
Land Type:	Federal	Well Type:	Oil
Spud Date:	9/26/2014	Plug Date:	
Elevation GL:	3686	Depth TVD:	10820

Year: 2014

Pool Name: QUAIL RIDGE;BONE SPRING SOUTH

Month	Oil(BBLS)	Gas(MCF)	Water(BBLS)	Days Produced	Accum. Oil(BBLS)	Accum. Gas(MCF)
January	0	0	0	0	0	0
February	0	0	0	0	0	0
March	0	0	0	0	0	0
April	0	0	0	0	0	0
May	0	0	0	0	0	0
June	0	0	0	0	0	0
July	0	0	0	0	0	0
August	0	0	0	0	0	0
September	0	0	0	0	0	0
October	0	0	0	0	0	0
November	5255	529	3623	30	5255	529
December	15143	10853	13766	28	20398	11382

Year: 2015

Pool Name: QUAIL RIDGE;BONE SPRING SOUTH

Month	Oil(BBLS)	Gas(MCF)	Water(BBLS)	Days Produced	Accum. Oil(BBLS)	Accum. Gas(MCF)
January	11065	8117	8566	31	31463	19499
February	7660	6143	6133	28	39123	25642
March	6753	5085	5806	31	45876	30727
April	5498	4109	5010	30	51374	34836
May	0	0	0	0	51374	34836
June	0	0	0	0	51374	34836
July	0	0	0	0	51374	34836
August	0	0	0	0	51374	34836
September	0	0	0	0	51374	34836
October	0	0	0	0	51374	34836
November	0	0	0	0	51374	34836
December	0	0	0	0	51374	34836

Chaparral 33 Fed Com Battery Commingle

Lea County, NM

Name	Address	City	State	Zip	USPS Certified Mail Receipt #
APOLLO INVESTMENT CORPORATION	9 W 57th Street	New York	NY	10019	7017 2870 0001 9842 4395
BALOG FAMILY TRUST	PO BOX 11890	Anchorage	AK	99511-1890	7014 0510 0001 2310 9943
CACTUS OPERATING CO LLC	PO Box 98	Lovington	NM	88260	7014 0510 0001 2310 9950
CAZA PETROLEUM INC	200 N Loraine Ste 1550	Midland	TX	79701	7014 0510 0001 2310 9967
CBR OIL PROPERTIES LLC	PO Box 1518	Roswell	NM	88202	7014 0510 0001 2310 9974
CELIA STIVASON	9500 Harrit SPC 97	Lakeside	CA	92040	7014 0510 0001 2310 9998
CLM PRODUCTION CO	PO Box 881	Roswell	NM	88202	7014 0510 0001 2310 9981
FIRST CENTURY OIL INC	PO Box 1518	Roswell	NM	88202-1518	7014 0510 0001 2311 0000
FUEL PRODUCTS INC	PO Box 3098	Midland	TX	79702	7014 0510 0001 2311 2516
HHB LTD PARTNERSHIP	6823 S Florence Ave	Tulsa	OK	74136	7014 2870 0001 9842 4159
HYDE OIL AND GAS CORP	6300 Ridglea Place, Ste 1018	Fort Worth	TX	76116	7014 2870 0001 9842 4166
JACK V WALKER REVOCABLE TRUST	Box 102256	Anchorage	AK	99510-2256	7014 2870 0001 9842 4173
LAURA K READ	PO Box 1518	Roswell	NM	88202	7014 2870 0001 9842 4180
LEE WILEY MONCRIEF 1988 TRUST	PO BOX 840738	Fort Worth	TX	75284-0738	7014 2870 0001 9842 4210
LINCOLN OIL & GAS LLC	701 Three Cross Dr	Roswell	NM	88201	7014 2870 0001 9842 4197
MAGNUM HUNTER PRODUCTION INC	PO Box 140907	Irving	TX	75014-0907	7014 2870 0001 9842 4203
MARGARETE JOHANNA PETERSON	4817 New castle Way	Anchorage	AK	99501	7014 2870 0001 9842 4227
MARION P RILEY ESTATE	1105 San Juan Dr	Roswell	NM	88201	7014 2870 0001 9842 4234
MARKS OIL INC	1775 Sherman St, Sutie 2990	Denver	CO	80203-4324	7014 2870 0001 9842 4241
MICHAEL J MONCRIEF 2008 TRUST A	PO Box 471610	Fort Worth	TX	76147	7014 2870 0001 9842 4258
Michael J Moncrief 2008 Trust A	777 Taylor St. Suite 1030	Fort Worth	TX	76102	7017 2870 0001 9842 4265
PECOS AIR LLC	PO Box 4172	Roswell	NM	88202	7014 2870 0001 9842 4272
READ & STEVENS	PO Box 1518	Roswell	NM	88202	7014 2870 0001 9842 4289
READ & STEVENS INC	PO Box 1518	Roswell	NM	88202	
RICHARD B MONCRIEF GRANTORS TRUST	PO Box 471610	Fort Worth	TX	76147	7014 2870 0001 9842 4296
ROYALTY MANAGEMENT PROGRAM (BLM)	PO Box 5810 TA	Denver	CO	80217-5810	
SHOGOIL & GAS CO II, LLC	PO Box 29450	Santa Fe	NM	87592-9450	7014 2870 0001 9842 4302
SHOGOIL & GAS CO LLC	PO Box 209	Hay Springs	NM	69347	7014 2870 0001 9842 7319
SPIRAL INC	PO Box 1933	Roswell	NM	88202-1933	7014 2870 0001 9842 4326
THOMAS M BEALL	PO Box 3098	Midland	TX	79702	7014 2870 0001 9842 4333
W A MONCRIEF JR TRUST	950 Commerce Street	Fort Worth	TX	76102-5418	7014 2870 0001 9842 4340
WALLACE H SCOTT UNIFIED TRUST	111 Congress Ave, Suite 600	Austin	TX	78701	7014 2870 0001 9842 4357
WATSON PROPERTIES LLC	3905 Futura Dr	Roswell	NM	88201	7014 2870 0001 9842 4364
WILBANKS RESERVE CORPORATION	450 E 17th Ave, Ste 220	Denver	Co	80203	7014 2870 0001 9842 4371

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0135
Expires: July 31, 2010

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.
NMNM94622

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

7. If Unit or CA/Agreement, Name and/or No.

1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.
CHAPARRAL 33 FEDERAL COM BATTERY

2. Name of Operator
CIMAREX ENERGY COMPANY

Contact: ARICKA EASTERLING
E-Mail: aeasterling@cimarex.com

9. API Well No.

3a. Address
202 S CHEYENNE AVE, SUITE 1000
TULSA, OK 74103

3b. Phone No. (include area code)
Ph: 918-560-7060

10. Field and Pool, or Exploratory
QUAIL RIDGE

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
Sec 33 T19S R34E NENE 220FNL 880FEL

11. County or Parish, and State
LEA COUNTY, NM

12. CHECK 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"/> Fracture Treat	<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	Surface Commingling
	<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 recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Cimarex Energy Co. respectfully requests approval to Surface Commingle production on the Chaparral 33 Fed 3H (API# 30-025-40253), Chaparral 33 Fed 4H (API# 30-025-40328) and Chaparral 33 Fed 5H (API# 30-025-41879) at the Chaparral 33 Fed Com Battery.

Please see attached application, economic justification and other important information regarding this commingle request.

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

Electronic Submission #316092 verified by the BLM Well Information System
For CIMAREX ENERGY COMPANY, sent to the Hobbs

Name (Printed/Typed) ARICKA EASTERLING

Title REGULATORY ANALYST

Signature (Electronic Submission)

Date 09/11/2015

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By

Title

Date

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

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.

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

COMMUNITIZATION AGREEMENT

Contract No. _____

THIS AGREEMENT is entered into as of the date shown in Section 10 hereof by and between the parties subscribing, ratifying, or consenting hereto, such parties being hereinafter referred to as "parties hereto."

WITNESSETH:

WHEREAS, the Act of February 25, 1920 (41 Stat. 437), as amended and supplemented, authorizes communitization or drilling agreements communitizing or pooling a Federal oil and gas lease, or any portion thereof, with other lands, whether or not owned by the United States, when separate tracts under such Federal lease cannot be independently developed and operated in conformity with an established well-spacing program for the field or area and such communitization or pooling is determined to be in the public interest;

WHEREAS, the parties hereto own working, royalty, or other leasehold interests, or operating rights under the oil and gas leases and lands subject to this agreement, which cannot be independently developed and operated in conformity with the well-spacing program established for the field or area in which said lands are located; and

WHEREAS, the parties hereto desire to communitize and pool their respective mineral interests in lands subject to this agreement for the purpose of developing and producing communitized substances in accordance with the terms and conditions of this agreement.

NOW, THEREFORE, in consideration of the premises and the mutual advantages to the parties hereto, it is mutually covenanted and agreed by and between the parties hereto as follows:

1. The lands covered by this agreement (hereinafter referred to as "communitized area") are described as follows:

Township 19 South, Range 34 East, N.M.P.M.
Section 33: E/2E/2
Lea County, New Mexico

Containing 160.00 acres, and this agreement shall include only the **Bone Spring** formation(s) underlying said lands, and the oil, natural gas and associated liquid hydrocarbons, hereafter referred to as "communitized substances," producible from such formation(s).

McMillan, Michael, EMNRD

From: Aricka Easterling <AEasterling@cimarex.com>
Sent: Wednesday, September 30, 2015 12:33 PM
To: McMillan, Michael, EMNRD
Subject: RE: Chaparral 33 Federal 3H,4H, and 5H wells
Attachments: Communitization Agreement - Chaparral 33 Fed Com #3.pdf

Mr. McMillan,
The #3 is out for signatures, and it sounds like our land man is working on getting the 4 & 5 out.
Thanks,
Aricka

From: McMillan, Michael, EMNRD [mailto:Michael.McMillan@state.nm.us]
Sent: Tuesday, September 29, 2015 5:52 PM
To: Aricka Easterling
Subject: Chaparral 33 Federal 3H,4H, and 5H wells

Ms. Easterling:
DO you have the com agreements for the Chaparral 33 Federal Wells No.3H,4H, and 5H wells?
Your application states diverse ownership, in which the wells penetrate three federal leases.

Thank you

Michael A. McMillan

Engineering and Geological Services Bureau, Oil Conservation Division
1220 South St. Francis Dr., Santa Fe NM 87505
O: 505.476.3448 F. 505.476.3462
Michael.mcmillan@state.nm.us