

**BEFORE THE OIL CONSERVATION DIVISION
EXAMINER HEARING JULY 01, 2021**

CASE No. 21979

GRAMA RIDGE 2 STATE COM 501H-503H, 601H-603H WELLS

LEA COUNTY, NEW MEXICO



**STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION**

**APPLICATION OF CENTENNIAL
RESOURCE PRODUCTION, LLC FOR
COMPULSORY POOLING, LEA COUNTY,
NEW MEXICO.**

CASE NO. 21979

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COMPULSORY POOLING APPLICATION CHECKLIST (pdf)**ALL INFORMATION IN THE APPLICATION MUST BE SUPPORTED BY SIGNED AFFIDAVITS**

Case No. 21979	APPLICANT'S RESPONSE
Date: July 1, 2021	
Applicant	Centennial Resource Production LLC
Designated Operator & OGRID (affiliation if applicable)	Centennial Resource Production LLC (OGRID 372165)
Applicant's Counsel:	Holland & Hart LLP
Case Title:	APPLICATION OF CENTENNIAL RESOURCE PRODUCTION, LLC FOR COMPULSORY POOLING, LEA COUNTY, NEW MEXICO
Entries of Appearance/Intervenors:	N/A
Well Family	Gramma Ridge 2 State Com Wells
Formation/Pool	
Formation Name(s) or Vertical Extent:	Bone Spring
Primary Product (Oil or Gas):	Oil
Pooling this vertical extent:	Bone Spring
Pool Name and Pool Code:	Gramma Ridge; Bone Spring Northeast Pool (Pool Code 28435)
Well Location Setback Rules:	Statewide oil
Spacing Unit Size:	324.37-acres
Spacing Unit	
Type (Horizontal/Vertical)	Horizontal
Size (Acres)	324.37-acres
Building Blocks:	40-acre
Orientation:	Standup
Description: TRS/County	W/2 of Section 2, Township 22 South, Range 34 East, NMPM, Lea County, New Mexico
Standard Horizontal Well Spacing Unit (Y/N), If No, describe	Yes
Other Situations	
Depth Severance: Y/N. If yes, description	No
Proximity Tracts: If yes, description	Yes
Proximity Defining Well: if yes, description	Gramma Ridge 2 State Com #501H well or the Gramma Ridge 2 State Com #601H well will remain within 330 feet of the quarter-quarter line separating the W/2 W/2 from the E/2 W/2 of Section 2 to allow inclusion of this acreage into a standard horizontal well spacing unit
Applicant's Ownership in Each Tract	Yes
Well(s)	
Name & API (if assigned), surface and bottom hole location, footages, completion target, orientation, completion status (standard or non-standard)	BEFORE THE OIL CONSERVATION DIVISION Santa Fe, New Mexico Exhibit No. A Submitted by: Centennial Resource Production, LLC Hearing Date: July 01, 2021

Well #1	<p>Grama Ridge 2 State Com #501H Well, API No. 30-025-pending SHL:275 FSL and 1110 FWL (Unit M) of Section 2, Township 22 South, Range 34 East, NMPM. BHL:100 FNL and 585 FWL (Unit D) of Section 2, Township 22 South, Range 34 East, NMPM.</p> <p>Completion Target: Bone Spring Well Orientation: Standup Completion Location expected to be: standard</p>
Well #2	<p>Grama Ridge 2 State Com #502H Well, API No. 30-025-pending SHL:275 FSL and 1140 FWL (Unit M) of Section 2, Township 22 South, Range 34 East, NMPM. BHL:100 FNL and 1445 FWL (Unit C) of Section 2, Township 22 South, Range 34 East, NMPM.</p> <p>Completion Target: Bone Spring Well Orientation: Standup Completion Location expected to be: standard</p>
Well #3	<p>Grama Ridge 2 State Com #601H Well, API No. 30-025-pending SHL:315 FSL and 1080 FWL (Unit M) of Section 2, Township 22 South, Range 34 East, NMPM. BHL:100 FNL and 585 FWL (Unit D) of Section 2, Township 22 South, Range 34 East, NMPM.</p> <p>Completion Target: Bone Spring Well Orientation: Standup Completion Location expected to be: standard</p>
Well #4	<p>Grama Ridge 2 State Com #602H Well, API No. 30-025-pending SHL:315 FSL and 1110 FWL (Unit M) of Section 2, Township 22 South, Range 34 East, NMPM. BHL:100 FNL and 1445 FWL (Unit C) of Section 2, Township 22 South, Range 34 East, NMPM.</p> <p>Completion Target: Bone Spring Well Orientation: Standup Completion Location expected to be: standard</p>
Horizontal Well First and Last Take Points	Exhibit C-1
Completion Target (Formation, TVD and MD)	Exhibit C-4, Exhibit D-4
AFE Capex and Operating Costs	
Drilling Supervision/Month \$	\$8,500 (drilling) & \$850 (producing)/month
Production Supervision/Month \$	Exhibit C, C-4
Justification for Supervision Costs	Exhibit C, C-4
Requested Risk Charge	Exhibit C, C-4

Notice of Hearing	
Proposed Notice of Hearing	Exhibit B
Proof of Mailed Notice of Hearing (20 days before hearing)	Exhibit E
Proof of Published Notice of Hearing (10 days before hearing)	Exhibit F
Ownership Determination	
Land Ownership Schematic of the Spacing Unit	Exhibit C-2
Tract List (including lease numbers and owners)	Exhibit C-3
Pooled Parties (including ownership type)	Exhibit C-3, Exhibit E
Unlocatable Parties to be Pooled	N/A
Ownership Depth Severance (including percentage above & below)	N/A
Joinder	
Sample Copy of Proposal Letter	Exhibit C-4
List of Interest Owners (ie Exhibit A of JOA)	Exhibit C-3, Exhibit E
Chronology of Contact with Non-Joined Working Interests	Exhibit C-5
Overhead Rates In Proposal Letter	Exhibit C-4
Cost Estimate to Drill and Complete	Exhibit C-5
Cost Estimate to Equip Well	Exhibit C-5
Cost Estimate for Production Facilities	Exhibit C-5
Geology	
Summary (including special considerations)	Exhibit D
Spacing Unit Schematic	Exhibit D-1
Gunbarrel/Lateral Trajectory Schematic	N/A
Well Orientation (with rationale)	Exhibit D-1
Target Formation	Exhibit D-2, D-3, D-4
HSU Cross Section	Exhibit D-4
Depth Severance Discussion	N/A
Forms, Figures and Tables	
C-102	Exhibit C-1
Tracts	Exhibit C-2
Summary of Interests, Unit Recapitulation (Tracts)	Exhibit C-3
General Location Map (including basin)	Exhibit D-1
Well Bore Location Map	Exhibit D-1
Structure Contour Map - Subsea Depth	Exhibit D-2
Cross Section Location Map (including wells)	Exhibit D-3, D-4
Cross Section (including Landing Zone)	Exhibit D-3, D-4
Additional Information	
Special Provisions/Stipulations	N/A
CERTIFICATION: I hereby certify that the information provided in this checklist is complete and accurate.	
Printed Name (Attorney or Party Representative):	Kaitlyn A. Luck
Signed Name (Attorney or Party Representative):	
Date:	29-Jun-21

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

APPLICATION OF CENTENNIAL
RESOURCE PRODUCTION, LLC FOR
COMPULSORY POOLING, LEA COUNTY,
NEW MEXICO.

CASE NO. 21979

APPLICATION

Centennial Resource Production, LLC (“Centennial” or “Applicant”) (OGRID No. 372165), through its undersigned attorneys, hereby files this application with the Oil Conservation Division pursuant to the provisions of NMSA 1978, § 70-2-17, for an order pooling all uncommitted interests in the Bone Spring formation underlying a standard 324.37-acre, more or less, horizontal spacing unit comprised of the W/2 of Section 2, Township 22 South, Range 34 East, NMPM, Lea County, New Mexico. In support of its application, Centennial states:

1. Applicant is a working interest owner in the proposed horizontal spacing unit and has the right to drill thereon.
2. Applicant proposes to dedicate the above-referenced spacing unit to the following proposed initial wells:
 - The **Gramma Ridge 2 State Com #501H well**, and the **Gramma Ridge 2 State Com #601H well**, both are to be horizontally drilled from a common surface location in the SW/4 SW/4 (Unit M) of Section 2, to bottom hole locations in the NW/4 NW/4 (Unit D) of Section 2; and

BEFORE THE OIL CONSERVATION DIVISION
Santa Fe, New Mexico
Exhibit No. B
Submitted by: Centennial Resource Production, LLC
Hearing Date: July 01, 2021
Case No. 21979

- The **Grama Ridge 2 State Com #502H well**, the **Grama Ridge 2 State Com #503H well**, the **Grama Ridge 2 State Com #602H well** and the **Grama Ridge 2 State Com #603H well**, each of which are to be horizontally drilled from a surface location in the SW/4 SW/4 (Unit M) of Section 2, to bottom hole locations in the NE/4 NW/4 (Unit C) of Section 2.

3. The completed intervals for the proposed **Grama Ridge 2 State Com #502H well** or the **Grama Ridge 2 State Com #602H well** will remain within 330 feet of the quarter-quarter line separating the W/2 W/2 from the E/2 W/2 of Section 2 to allow inclusion of this acreage into a standard horizontal well spacing unit

4. Applicant has sought and been unable to obtain voluntary agreement for the development of these lands from all the working interest owners in the subject spacing unit.

5. The pooling of interests will avoid the drilling of unnecessary wells, will prevent waste, and will protect correlative rights.

6. In order to permit Applicant to obtain its just and fair share of the oil and gas underlying the subject lands, all uncommitted interests in this horizontal spacing unit should be pooled, and Applicant should be designated the operator of the proposed horizontal wells and spacing unit.

7. Centennial requests an expedited order in this case due to a lease expiration for the subject acreage in September 2021.

WHEREFORE, Applicant requests that this application be set for hearing before an Examiner of the Oil Conservation Division on July 1, 2021, and, after notice and hearing as required by law, the Division enter an order:

- A. Pooling all uncommitted interests in the horizontal spacing unit and approving the initial wells thereon;
- B. Designating Applicant as operator of the horizontal spacing unit and the horizontal wells to be drilled thereon;
- C. Authorizing Applicant to recover its costs of drilling, equipping, and completing the wells;
- D. Approving the actual operating charges and costs of supervision while drilling and after completion, together with a provision adjusting the rates pursuant to the COPAS accounting procedures; and
- E. Imposing a 200% charge for the risk assumed by Applicant in drilling and completing the well against any working interest owner who does not voluntarily participate in the drilling of the wells.

Respectfully submitted,

HOLLAND & HART LLP



By: _____
Michael H. Feldewert
Adam G. Rankin
Julia Broggi
Kaitlyn A. Luck
Post Office Box 2208
Santa Fe, New Mexico 87504-2208
(505) 988-4421
(505) 983-6043 Facsimile
mhfeldewert@hollandhart.com
agrarkin@hollandhart.com
jbroggi@hollandhart.com
kaluck@hollandhart.com

**ATTORNEYS FOR
CENTENNIAL RESOURCE PRODUCTION, LLC**

**STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION**

**APPLICATION OF CENTENNIAL
RESOURCE PRODUCTION, LLC FOR
COMPULSORY POOLING, LEA COUNTY,
NEW MEXICO.**

CASE NO. 21979

**AFFIDAVIT OF GAVIN SMITH
IN SUPPORT OF CASE NO. 21979**

Gavin Smith, of lawful age and being first duly sworn, declares as follows:

1. My name is Gavin Smith. I work for Centennial Resource Production, LLC (“Centennial”) as a Senior Landman.
2. I have previously testified before the New Mexico Oil Conservation Division as an expert witness in petroleum land matters. My credentials in petroleum land matters have been accepted by the Division and made a matter of record.
3. I am familiar with the application filed by Centennial in this case, and I am familiar with the status of the lands in the subject area.
4. None of the uncommitted parties in this case has indicated opposition to this pooling case proceeding by affidavits, and therefore I do not expect any opposition at the hearing.
5. In this case, Centennial seeks an order pooling all uncommitted interests in the Bone Spring formation underlying a standard 324.37-acre, more or less, horizontal spacing unit comprised of the W/2 of Section 2, Township 22 South, Range 34 East, NMPM, Lea County, New Mexico.
6. Centennial seeks to dedicate this spacing unit to the following proposed initial wells:

**BEFORE THE OIL CONSERVATION DIVISION
Santa Fe, New Mexico
Exhibit No. C
Submitted by: Centennial Resource Production, LLC
Hearing Date: July 01, 2021
Case No. 21979**

- The **Grama Ridge 2 State Com #501H well**, and the **Grama Ridge 2 State Com #601H well**, both are to be horizontally drilled from a common surface location in the SW/4 SW/4 (Unit M) of Section 2, to bottom hole locations in the NW/4 NW/4 (Unit D) of Section 2; and
- The **Grama Ridge 2 State Com #502H well**, and the **Grama Ridge 2 State Com #602H well**, each of which are to be horizontally drilled from a surface location in the SW/4 SW/4 (Unit M) of Section 2, to bottom hole locations in the NE/4 NW/4 (Unit C) of Section 2.

7. **Centennial Exhibit C-1** are the Form C-102s for each of the wells in the proposed horizontal spacing unit reflecting that the wells are located in the **Bilbrey Basin; Bone Spring Pool (Pool Code 5695)**. Centennial no longer intends to proceed with the **Grama Ridge 2 State Com #503H and #603H wells** that were included in the application.

8. The completed intervals of the **Grama Ridge 2 State Com #501H well** or the **Grama Ridge 2 State Com #601H well** will remain within 330 feet of the quarter-quarter line separating the W/2 W/2 from the E/2 W/2 of Section 2 to allow inclusion of this acreage into a standard horizontal well spacing unit.

9. There are no depth severances in the Bone Spring formation in the proposed spacing unit.

10. **Centennial Exhibit C-2** contains a plat outlining the unit being pooled and identifies the tracts of land comprising the proposed spacing unit.

11. **Centennial Exhibit C-3** identifies the working interests in each tract, and their interest in the horizontal spacing unit. There are no unleased mineral interest owners.

12. Centennial sent well proposal letters, together with corresponding AFEs, to the working interest owners. The costs reflected in the AFE are consistent with what other operators have incurred for drilling similar horizontal wells in the area. A copy of the well proposal letters, along with the AFE, are included with my affidavit as **Centennial Exhibit C-4**.

13. Centennial seeks approval of overhead and administrative costs at \$8,500/month while drilling and \$850/month while producing. These costs are consistent with what Centennial and other operators are charging in this area for these types of wells. Centennial respectfully requests that these administrative and overhead costs be incorporated into any order entered by the Division in this case.

14. Centennial has been able to locate contact information for all parties it seeks to pool and has undertaken good faith efforts to reach an agreement with the uncommitted interest owners. **Centennial Exhibit C-5** contains a chronology of the contacts with the working interest owners that Centennial seeks to pool in this case.

15. If Centennial reaches an agreement with any of the proposed pool parties before the Division enters any order, I will let the Division know that Centennial is no longer seeking to pool that party.

16. I provided the law firm of Holland & Hart LLP a list of names and addresses for the uncommitted interest owners shown on **Centennial Exhibit C-3**. In compiling these addresses, Centennial conducted a diligent search of all public records in the county where the proposed wells are located and of phone directories, including computer searches. All parties were locatable.

17. **Centennial Exhibits C-1 through C-5** were either prepared by me or compiled under my direction and supervision.

FURTHER AFFIANT SAYETH NOT.

DocuSigned by:

Gavin Smith

789C11ECC59F4F6

GAVIN SMITH

STATE OF COLORADO)

COUNTY OF Denver)

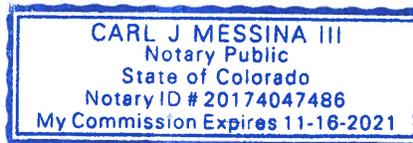
SUBSCRIBED and SWORN to before me this 29th day of June
2021 by Gavin Smith.

Carl J. Messina III

NOTARY PUBLIC

My Commission Expires:

11-16-2021



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

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number		² Pool Code		³ Pool Name	
⁴ Property Code		⁵ Property Name GRAMA RIDGE 2 STATE COM			⁶ Well Number 501H
⁷ OGRID No.		⁸ Operator Name CENTENNIAL RESOURCE PRODUCTION, LLC			⁹ Elevation 3571.4'

¹⁰ Surface Location

UL or lot no. M	Section 2	Township 22S	Range 34E	Lot Idn	Feet from the 300	North/South line SOUTH	Feet from the 1245	East/West line WEST	County LEA
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¹¹ Bottom Hole Location If Different From Surface

UL or lot no. 4	Section 2	Township 22S	Range 34E	Lot Idn	Feet from the 100	North/South line NORTH	Feet from the 1050	East/West line WEST	County LEA
¹² Dedicated Acres		¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ 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.

¹⁶ **NAD 83 (SURFACE HOLE LOCATION)**
LATITUDE = 32°24'51.48" (32.414300°)
LONGITUDE = 103°26'42.67" (103.445185°)
STATE PLANE NAD 83 (N.M. EAST)
Y: 515592.13' X: 815412.32'
UTM, NAD 83 (ZONE 13)
Y: 11769735.96' X: 2120087.76'

NAD 83 (PP/FTP)
LATITUDE = 32°24'49.50" (32.413750°)
LONGITUDE = 103°26'44.95" (103.445818°)
STATE PLANE NAD 83 (N.M. EAST)
Y: 515390.76' X: 815218.59'
UTM, NAD 83 (ZONE 13)
Y: 11769533.41' X: 2119895.32'

NAD 83 (LTP/BHL)
LATITUDE = 32°25'40.44" (32.427901°)
LONGITUDE = 103°26'44.82" (103.445783°)
STATE PLANE NAD 83 (N.M. EAST)
Y: 520539.02' X: 815186.81'
UTM, NAD 83 (ZONE 13)
Y: 11774680.70' X: 2119831.42'

NOTE:

- Distances referenced on plat to section lines are perpendicular.
- Basis of Bearings is a Transverse Mercator Projection with a Central Meridian of W103°53'00" (NAD 83)

● = SURFACE HOLE LOCATION
◆ = PENETRATION POINT/
FIRST TAKE POINT
○ = LAST TAKE POINT/
BOTTOM HOLE LOCATION
▲ = SECTION CORNER LOCATED

SCALE
DRAWN BY: Z.T. 05-25-21
REV: 1 06-23-21 C.IVIE
(WELL NAME CHANGE)

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.

Signature _____ Date _____

Printed Name _____

E-mail Address _____

LINE TABLE

LINE	DIRECTION	LENGTH
L1	S44°07'59"W	279.47'

Diagram details: Lot 4 (42.15 Acres), Lot 3 (42.22 Acres), Lot 2 (42.28 Acres), Lot 1 (42.35 Acres). Section 2. Township 22S, Range 34E. Well location (SHL) at intersection of 1245' and 1050' lines. Penetration point (PP/FTP) at intersection of 100' and 300' lines. Bearings: S89°33'45"W (2640.22' Meas.), S89°39'33"W (2639.95' Meas.), S89°48'08"W (2638.60' Meas.), S89°45'11"W (2639.25' Meas.). Distances: 1050', 1245', 100', 300', 5344.78' (Meas.), 5360.16' (Meas.), 5149.17' (From PP/FTP to LTP/BHL), AZ = 359.89°.

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.

May 24, 2021

Date of Survey
Signature and Seal of Professional Surveyor:

Certificate Number: _____

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: (505) 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		² Pool Code		³ Pool Name		
⁴ Property Code		⁵ Property Name GRAMA RIDGE 2 STATE COM			⁶ Well Number 502H	
⁷ OGRID No.		⁸ Operator Name CENTENNIAL RESOURCE PRODUCTION, LLC			⁹ Elevation 3571.3'	

¹⁰ Surface Location

UL or lot no. M	Section 2	Township 22S	Range 34E	Lot Idn	Feet from the 300	North/South line SOUTH	Feet from the 1275	East/West line WEST	County LEA
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¹¹ Bottom Hole Location If Different From Surface

UL or lot no. 3	Section 2	Township 22S	Range 34E	Lot Idn	Feet from the 100	North/South line NORTH	Feet from the 2310	East/West line WEST	County LEA
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¹² Dedicated Acres	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ 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.

¹⁶ **NAD 83 (SURFACE HOLE LOCATION)**
LATITUDE = 32°24'51.48" (32.414299°)
LONGITUDE = 103°26'42.32" (103.445088°)
STATE PLANE NAD 83 (N.M. EAST)
Y: 515592.36' X: 815442.31'
UTM, NAD 83 (ZONE 13)
Y: 11769736.38' X: 2120117.75'

NAD 83 (PP/FTP)
LATITUDE = 32°24'49.49" (32.413748°)
LONGITUDE = 103°26'30.25" (103.441736°)
STATE PLANE NAD 83 (N.M. EAST)
Y: 515400.41' X: 816478.36'
UTM, NAD 83 (ZONE 13)
Y: 11769550.92' X: 2121154.84'

NAD 83 (LTP/BHL)
LATITUDE = 32°25'40.49" (32.427913°)
LONGITUDE = 103°26'30.12" (103.441700°)
STATE PLANE NAD 83 (N.M. EAST)
Y: 520553.95' X: 816446.54'
UTM, NAD 83 (ZONE 13)
Y: 11774703.48' X: 2121090.87'

NOTE:

- Distances referenced on plat to section lines are perpendicular.
- Basis of Bearings is a Transverse Mercator Projection with a Central Meridian of W103°53'00" (NAD 83)

● = SURFACE HOLE LOCATION
◆ = PENETRATION POINT/
FIRST TAKE POINT
○ = LAST TAKE POINT/
BOTTOM HOLE LOCATION
▲ = SECTION CORNER LOCATED

SCALE
DRAWN BY: Z.T. 05-25-21
REV: 1 06-23-21 C.IVIE
(WELL NAME CHANGE)

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.

Signature _____ Date _____

Printed Name _____

E-mail Address _____

LINE TABLE

LINE	DIRECTION	LENGTH
L1	S79°15'45"E	1053.84'

The diagram shows a survey plat with four lots: LOT 4 (42.15 Acres), LOT 3 (42.22 Acres), LOT 2 (42.28 Acres), and LOT 1 (42.35 Acres). A well location is marked with a red circle (LTP/BHL) and a red diamond (PP/FTP). Bearings and distances are provided for various lines, including a line from the PP/FTP to the LTP/BHL (AZ = 359.89°, L = 5154.45'). A scale bar shows 0, 500, and 1000 feet.

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.

May 24, 2021

Date of Survey _____
Signature and Seal of Professional Surveyor: _____

Certificate Number: _____

District I
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Phone: (575) 748-1283 Fax: (575) 748-9720
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Phone: (505) 334-6178 Fax: (505) 334-6170
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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		² Pool Code		³ Pool Name	
⁴ Property Code		⁵ Property Name GRAMA RIDGE 2 STATE COM			⁶ Well Number 601H
⁷ OGRID No.		⁸ Operator Name CENTENNIAL RESOURCE PRODUCTION, LLC			⁹ Elevation 3571.4'

¹⁰ Surface Location

UL or lot no. M	Section 2	Township 22S	Range 34E	Lot Idn	Feet from the 300	North/South line SOUTH	Feet from the 1245	East/West line WEST	County LEA
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¹¹ Bottom Hole Location If Different From Surface

UL or lot no. 4	Section 2	Township 22S	Range 34E	Lot Idn	Feet from the 100	North/South line NORTH	Feet from the 1050	East/West line WEST	County LEA
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¹² Dedicated Acres	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ 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.

¹⁶

NAD 83 (SURFACE HOLE LOCATION) LATITUDE = 32°24'51.48" (32.414300°) LONGITUDE = 103°26'42.67" (103.445185°) STATE PLANE NAD 83 (N.M. EAST) Y: 515592.13' X: 815412.32' UTM, NAD 83 (ZONE 13) Y: 11769735.96' X: 2120087.76'	<p>NOTE:</p> <ul style="list-style-type: none"> Distances referenced on plat to section lines are perpendicular. Basis of Bearings is a Transverse Mercator Projection with a Central Meridian of W103°53'00" (NAD 83) 	<p>● = SURFACE HOLE LOCATION ◆ = PENETRATION POINT/ FIRST TAKE POINT ○ = LAST TAKE POINT/ BOTTOM HOLE LOCATION ▲ = SECTION CORNER LOCATED</p>
NAD 83 (PP/FTP) LATITUDE = 32°24'49.50" (32.413750°) LONGITUDE = 103°26'44.95" (103.445818°) STATE PLANE NAD 83 (N.M. EAST) Y: 515390.76' X: 815218.59' UTM, NAD 83 (ZONE 13) Y: 11769533.41' X: 2119895.32'		
NAD 83 (LTP/BHL) LATITUDE = 32°25'40.44" (32.427901°) LONGITUDE = 103°26'44.82" (103.445783°) STATE PLANE NAD 83 (N.M. EAST) Y: 520539.02' X: 815186.81' UTM, NAD 83 (ZONE 13) Y: 11774680.70' X: 2119831.42'		

SCALE
DRAWN BY: Z.T. 05-25-21

LINE TABLE		
LINE	DIRECTION	LENGTH
L1	S44°07'59"W	279.47'

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.

Signature _____ Date _____

Printed Name _____

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.

May 24, 2021

Date of Survey _____
Signature and Seal of Professional Surveyor: _____

Certificate Number: _____

The diagram shows a survey plat with four lots: LOT 4 (42.15 Acres), LOT 3 (42.22 Acres), LOT 2 (42.28 Acres), and LOT 1 (42.35 Acres). A well location is marked with a red dot (SHL) and a red circle (LTP/BHL). The well is located 1245' from the top boundary and 1050' from the left boundary. The bottom hole location (LTP/BHL) is 100' from the top boundary and 300' from the left boundary. The distance from the PP/FTP to the LTP/BHL is 359.89' with an azimuth of 359.89°. The distance from the PP/FTP to the SHL is 5149.17'. The plat is bounded by bearings and distances: Top (S89°33'45"W, 2640.22' Meas.), Right (S89°39'33"W, 2639.95' Meas.), Bottom (S89°45'11"W, 2639.25' Meas.), and Left (N00°06'45"W, 5344.78' Meas.). Section lines are labeled T21S, T22S, and 2.

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: (505) 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		² Pool Code		³ Pool Name	
⁴ Property Code		⁵ Property Name GRAMA RIDGE 2 STATE COM			⁶ Well Number 602H
⁷ OGRID No.		⁸ Operator Name CENTENNIAL RESOURCE PRODUCTION, LLC			⁹ Elevation 3571.3'

¹⁰ Surface Location									
UL or lot no. M	Section 2	Township 22S	Range 34E	Lot Idn	Feet from the 300	North/South line SOUTH	Feet from the 1275	East/West line WEST	County LEA

¹¹ Bottom Hole Location If Different From Surface									
UL or lot no. 3	Section 2	Township 22S	Range 34E	Lot Idn	Feet from the 100	North/South line NORTH	Feet from the 2310	East/West line WEST	County LEA
¹² Dedicated Acres		¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ 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.

¹⁶

NAD 83 (SURFACE HOLE LOCATION)	
LATITUDE = 32°24'51.48" (32.414299°)	
LONGITUDE = 103°26'42.32" (103.445088°)	
STATE PLANE NAD 83 (N.M. EAST)	
Y: 515592.36' X: 815442.31'	
UTM, NAD 83 (ZONE 13)	
Y: 11769736.38' X: 2120117.75'	

NOTE:
• Distances referenced on plat to section lines are perpendicular.
• Basis of Bearings is a Transverse Mercator Projection with a Central Meridian of W103°53'00" (NAD 83)

NAD 83 (PP/FTP)	
LATITUDE = 32°24'49.49" (32.413748°)	
LONGITUDE = 103°26'30.25" (103.441736°)	
STATE PLANE NAD 83 (N.M. EAST)	
Y: 515400.41' X: 816478.36'	
UTM, NAD 83 (ZONE 13)	
Y: 11769550.92' X: 2121154.84'	

NAD 83 (LTP/BHL)	
LATITUDE = 32°25'40.49" (32.427913°)	
LONGITUDE = 103°26'30.12" (103.441700°)	
STATE PLANE NAD 83 (N.M. EAST)	
Y: 520553.95' X: 816446.54'	
UTM, NAD 83 (ZONE 13)	
Y: 11774703.48' X: 2121090.87'	

LINE TABLE		
LINE	DIRECTION	LENGTH
L1	S79°15'45"E	1053.84'

● = SURFACE HOLE LOCATION
◆ = PENETRATION POINT/
FIRST TAKE POINT
○ = LAST TAKE POINT/
BOTTOM HOLE LOCATION
▲ = SECTION CORNER LOCATED

SCALE
DRAWN BY: Z.T. 05-25-21

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.

Signature _____ Date _____

Printed Name _____

E-mail Address _____

Diagram labels:
Top boundary: S89°33'45"W - 2640.22' (Meas.)
Top boundary: S89°39'33"W - 2639.95' (Meas.)
Left boundary: N00°06'45"W - 5344.78' (Meas.)
Right boundary: N00°05'18"W - 5360.16' (Meas.)
Bottom boundary: S89°48'08"W - 2638.60' (Meas.)
Bottom boundary: S89°45'11"W - 2639.25' (Meas.)
Section: T21S, T22S, R34E, S2
Lots: LOT 4 (42.15 Acres), LOT 3 (42.22 Acres), LOT 2 (42.28 Acres), LOT 1 (42.35 Acres)
Well Location: SHL (Surface Hole Location) at 1275' from left, 300' from bottom. L1 (Line) from SHL to PP/FTP (Penetration Point/First Take Point) at 1053.84'. LTP/BHL (Last Take Point/Bottom Hole Location) at 100' from top, 2310' from left.

¹⁸ SURVEYOR
CERTIFICATION

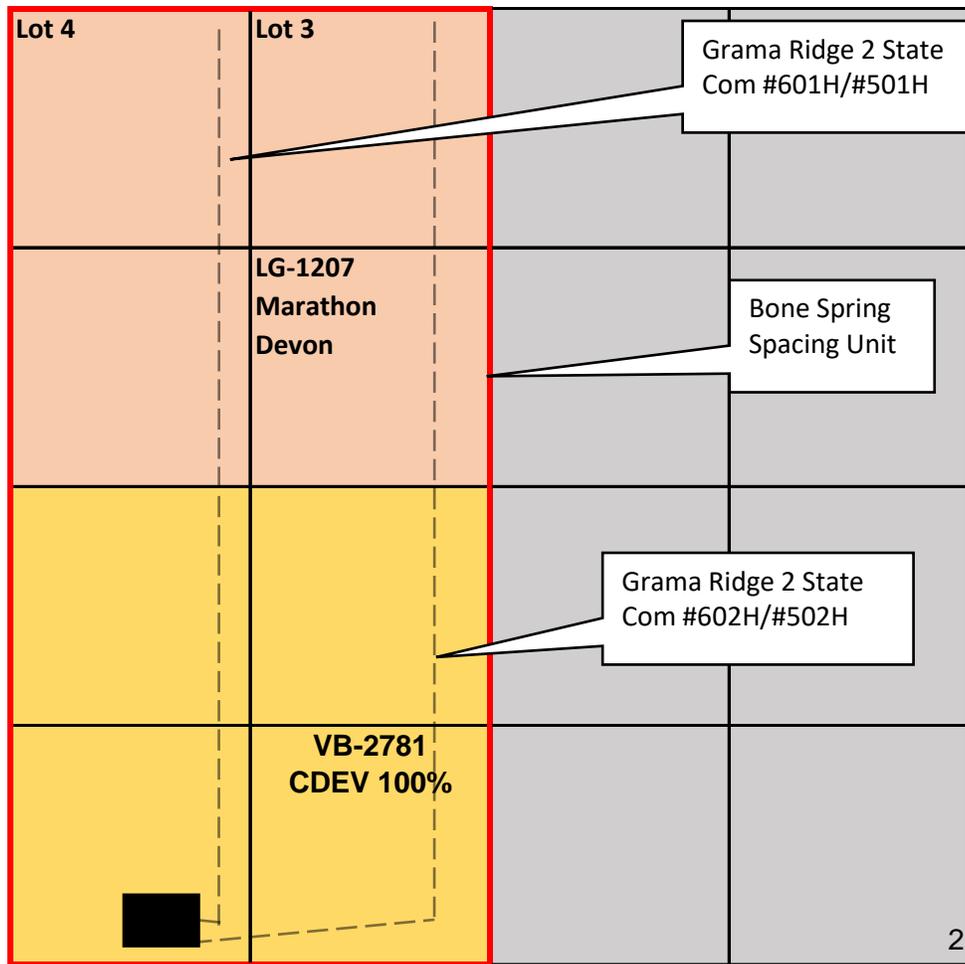
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

May 24, 2021

Date of Survey
Signature and Seal of Professional Surveyor:

Certificate Number: _____

Exhibit C-2
Ownership Map
Township 22 South, Range 34 East, Lea County, New Mexico



BEFORE THE OIL CONSERVATION DIVISION
Santa Fe, New Mexico
Exhibit No. C2
Submitted by: Centennial Resource Production, LLC
Hearing Date: July 01, 2021
Case No. 21979

Exhibit C-3 Grama Ridge State Com Ownership Schedule

Name	Address	Interest Type	Working Interest
Owners to be Pooled			
Marathon Oil Permian, LLC	16930 Park Row Drive, Houston, TX 77084	Working Interest	0.47526782
Devon Energy Production Company, LP	303 W. Wall, Suite 1800 Midland, TX 79701	Working Interest	0.03146831
Total:			0.50673614

ADD ORRI

Owners NOT being Pooled			
Centennial Resource Production, LLC	1001 17th St., Suite 1800 Denver, CO 80202	Working Interest	0.49326387
Total:			0.49326387

Total Working Interest:			1.00000000
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BEFORE THE OIL CONSERVATION DIVISION
Santa Fe, New Mexico
Exhibit No. C3
Submitted by: Centennial Resource Production, LLC
Hearing Date: July 01, 2021
Case No. 21979



April 15, 2021

RE: Grama Ridge 2 State Com 501H
SHL: 275' FSL Sec. 2 & 1,110' FWL Sec. 2 T22S R34E
BHL: 100' FNL Sec. 2 & 585' FWL Sec. 2 T22S R34E
Lea County, New Mexico

To Whom it May Concern:

Centennial Resource Production, LLC ("CRP") proposes to drill and complete the Grama Ridge 2 State Com 501H as a horizontal well to test the Bone Spring Formation at a TVD of 10,320 feet. The W/2 of the referenced Section 2 will be dedicated to the well as the proration unit being a total of 324.37 acres. Please see the enclosed AFE in the amount of \$5,165,639.44

Upon your response we will send a Joint Operating Agreement ("JOA") with an effective date of April 1, 2021. The JOA contains a proposed overhead rate of \$8000 per month for drilling and \$800 per month for producing and provides for a 100%/300%/300% non-consent penalty.

In the space provided below, please indicate your election and return one original copy of this letter along with an original copy of the enclosed AFE or email me a copy at geoffrey.johnson@cdevinc.com. Should you have any questions, please call me at (720) 499-1513.

Best Regards

A handwritten signature in black ink, appearing to read "Geoffrey Johnson", is written over a light blue horizontal line.

Geoffrey Johnson
Land Coordinator

**BEFORE THE OIL CONSERVATION DIVISION
Santa Fe, New Mexico**

Exhibit No. C4

Submitted by: Centennial Resource Production, LLC

Hearing Date: July 01, 2021

Case No. 21979



THE UNDERSIGNED HEREBY ELECTS **TO PARTICIPATE** IN THE CAPTIONED GRAMA RIDGE 2 STATE COM 501H WELLBORE AND TO WAIVE THE NEED FOR A COMPLETION ELECTION.

AGREED TO and ACCEPTED this ____ day of _____, 2021.

Owner Name: _____

Signature: _____

By: _____

Title: _____

THE UNDERSIGNED HEREBY ELECTS **NOT TO PARTICIPATE** IN THE CAPTIONED GRAMA RIDGE 2 STATE COM 501H WELLBORE, AND TO GO NONCONSENT.

AGREED TO and ACCEPTED this ____ day of _____, 2021.

Owner Name: _____

Signature: _____

By: _____

Title: _____

Centennial Resource Production, LLC

AUTHORIZATION OF EXPENDITURE

AFE NO.:	STATE: New Mexico
AFE DESC: Grama Ridge 2 State Com 501H	FIELD: Grama Ridge
DATE: 4/14/2021	PROPERTY #:
AFE TYPE: DRILL AND COMPLETE	PROPERTY NAME:
OPERATOR: 200 - CENTENNIAL RESOURCE	STATE/COUNTY: Lea County, NM

Cost Code (NEW)	Line Item Description (NEW)	AFE Item Cost Estimate (\$)
8015.1000	IDC - PERMITS,LICENSES,ETC	\$15,000.00
8015.1100	IDC - STAKING & SURVEYING	\$18,000.00
8015.1200	IDC - LEGAL, TITLE SERVICES	\$13,000.00
8015.1300	IDC - SURFACE DAMAGE / ROW	\$15,000.00
8015.1310	IDC - PERMANENT EASEMENT	\$12,000.00
8015.1400	IDC - ROAD, LOCATIONS, PITS	\$85,000.00
8015.1500	IDC - RIG MOB / TRUCKING	\$75,000.00
8015.1600	IDC - RIG MOB / STANDBY RATE	\$45,000.00
8015.1700	IDC - DAYWORK CONTRACT	\$252,000.00
8015.1800	IDC - FOOTAGE CONTRACT	\$0.00
8015.1900	IDC - DIRECTNL DRILL & SURVEY	\$165,000.00
8015.1950	IDC - LOST IN HOLE	\$0.00
8015.2000	IDC - CONDUCTOR HOLE & SERVICE	\$25,000.00
8015.2100	IDC - WIRELINE SVCS CASED&OPEN	\$0.00
8015.2150	IDC - DRILL BIT	\$73,500.00
8015.2200	IDC - BITS, TOOLS, STABILIZERS	\$17,500.00
8015.2300	IDC - FUEL / POWER	\$55,500.00
8015.2350	IDC - FUEL / MUD	\$20,000.00
8015.2400	IDC - RIG WATER	\$15,000.00
8015.2500	IDC - MUD/CHEMICALS/ACIDIZING	\$144,000.00
8015.2600	IDC - MUD LOGGING	\$0.00
8015.2700	IDC - INSPECTION & TESTING	\$35,000.00
8015.2800	IDC - CORE ANALYSIS	\$0.00
8015.2900	IDC - OPEN/CASED HOLE LOGGING	\$0.00
8015.3000	IDC - CEMENT SERV/FLOAT EQUIP	\$122,500.00
8015.3100	IDC - CASING CREW & TOOLS	\$50,000.00
8015.3200	IDC - CONTRACT LABOR/ROUSTABOUT	\$30,000.00
8015.3400	IDC - MATERIALS & SUPPLIES	\$5,000.00
8015.3500	IDC - TRUCKING/VACUUM/ TRANSP	\$23,500.00
8015.3600	IDC - SOLIDS CONTROL/ CLOSED LOOP SYSTEM	\$38,500.00
8015.3700	IDC - DISPOSAL	\$92,000.00
8015.3800	IDC - WELLHEAD PREPARE/REPAIR	\$22,500.00
8015.3900	IDC - FISHING TOOLS & SERVICES	\$0.00
8015.4100	IDC - RENTAL EQUIPMENT	\$54,000.00
8015.4200	IDC - MANCAMP	\$28,000.00
8015.4300	IDC - WELLSITE SUPERVISION	\$74,000.00
8015.4400	IDC - SUPERVISION/ENGINEERING	\$0.00
8015.4600	IDC - SAFETY / ENVIRONMENTAL	\$10,400.00
8015.5000	IDC - WELL CONTROL INSURANCE	\$9,919.23
8020.1000	TDC - CASING - CONDUCTOR	\$0.00
8020.1100	TDC - CASING - SURFACE - 13 3/8	\$58,968.75
8020.1200	TDC - CASING - INTERMEDIATE - 9 5/8	\$148,750.00
8020.1300	TDC - CASING - INTERMEDIATE 2 - 7 5/8	\$0.00
8020.1400	TDC - CASING - PRODUCTION - 5 1/2 AND 5	\$296,437.50
8020.1700	TDC - PACKER/DOWNHOLE TOOLS	\$65,875.00
8025.1000	ICC - STAKING & SURVEYING	\$60,000.00
8025.1100	ICC - ROAD, LOCATIONS, PITS	\$10,500.00
8025.1200	ICC - COMPLETION RIG	\$0.00
8025.1400	ICC - WIRELINE OPEN/CASED HOLE	\$20,000.00
8025.1500	ICC - FUEL / POWER	\$151,620.00

8025.1600	ICC - COILED TUBING	\$50,000.00
8025.1700	ICC - CEMENTING & SERVICES	\$0.00
8025.1800	ICC - WATER DISPOSAL / VACUUM	\$11,025.00
8025.1900	ICC - INSPECTION & TESTING	\$0.00
8025.2000	ICC - TRUCKING	\$13,125.00
8025.2200	ICC - ELECTRIC LOGGING / PERFORATING	\$96,650.00
8025.2300	ICC - COMPLETION FLUIDS	\$10,000.00
8025.2400	ICC - CASING CREW AND TOOLS	\$0.00
8025.2500	ICC - WELL STIMULATION/FRACTUR	\$779,359.30
8025.2600	ICC - CONTRACT LABOR/ROUSTABOUT	\$15,000.00
8025.3000	ICC - WATER HANDLING	\$67,640.69
8025.3050	ICC - SOURCE WATER	\$297,619.05
8025.3100	ICC - WELLHEAD/FRACTREE REPAIR	\$40,000.00
8025.3200	ICC - FISHING TOOLS & SERVICES	\$0.00
8025.3300	ICC - COMMUNICATIONS	\$0.00
8025.3400	ICC - RENTAL EQUIPMENT	\$130,000.00
8025.3500	ICC - WELLSITE SUPERVISION	\$29,700.00
8025.3600	ICC - SUPERVISION/ENGINEERING	\$5,000.00
8025.3700	ICC - SAFETY / ENVIRONMENTAL	\$15,000.00
8025.3800	ICC - OVERHEAD	\$10,000.00
8025.4000	ICC - WELL CONTROL INSURANCE	\$0.00
8025.4200	ICC - CONTINGENCY	\$0.00
8025.4400	ICC - COMPANY LABOR	\$0.00
8030.1000	TCC - CASING - PRODUCTION	\$0.00
8030.1600	TCC - PROD LINER & EQUIPMENT	\$0.00
8030.1700	TCC - PACKER/DOWNHOLE TOOLS	\$0.00
8030.2000	TCC - WELLHEAD EQUIPMENT	\$47,250.00
8035.1300	FAC - SURFACE DAMAGE / ROW	\$0.00
8015.1310	FAC - PERMANENT EASEMENT	\$0.00
8035.1400	FAC - ROAD LOCATIONS PITS	\$8,333.33
8035.1500	FAC - MATERIALS & SUPPLIES	\$5,000.00
8035.1600	FAC - TRANSPORTATION TRUCKING	\$5,000.00
8035.1700	FAC - RENTAL EQUIPMENT	\$12,500.00
8035.1800	FAC - FUEL / POWER	\$0.00
8035.1900	FAC - WATER DISPOSAL / SWD	\$0.00
8035.2000	FAC - WASTE DISPOSAL	\$0.00
8035.2100	FAC - INSPECTION & TESTING	\$0.00
8035.2200	FAC - CONTRACT LABOR / ROUSTAB	\$60,000.00
8035.2300	FAC - FRAC TANK RENTAL	\$0.00
8035.2400	FAC - SUPERVISION	\$10,000.00
8035.2500	FAC - CONSULTING SERVICES	\$0.00
8035.2600	FAC - INJECTION PUMP	\$0.00
8035.2700	FAC - P-LINE F-LINE LINEPIPE	\$0.00
8035.2900	FAC - TANK BATTERY	\$66,166.67
8035.3000	FAC - HEATER TREATER/SEPERATOR	\$45,833.33
8035.3100	FAC - DEHYDRATOR EQUIPMENT	\$0.00
8035.3200	FAC - VALVES FITTINGS & PIPE	\$100,000.00
8035.3300	FAC - CIRCULATING TRNSFER PUMP	\$10,500.00
8035.3400	FAC - METER & DRIPS	\$55,833.33
8035.3500	FAC - COMPRESSOR	\$0.00
8035.3600	FAC - POWER GENERATION	\$20,000.00
8035.3700	FAC - COMM TELEMETRY & AUTOMAT	\$35,000.00
8035.3800	FAC - OTHER SURFACE EQUIPMENT	\$10,000.00
8035.4000	FAC - SAFETY / ENVIRONMENTAL	\$4,000.00
8013.4100	FAC - OVERHEAD	\$0.00
8035.4300	FAC - INSURANCE	\$0.00
8035.4400	FAC - COMPANY LABOR	\$0.00
8035.4500	FAC - CONTINGENCY	\$28,312.60
8036.1300	PLN - SURFACE DAMAGE / ROW	\$0.00
8036.1310	PLN - PEMANENT EASEMENT	\$4,266.67
8036.2700	PLN - PIPELINE	\$97,152.00
8036.2800	PLN - FLOWLINE	\$0.00

8036.3600	PLN - ELECTRICAL SUPPLIES	\$0.00
8036.3610	PLN - POWER DISTRIBUTION MATERIAL	\$8,333.33
8036.3620	PLN - POWER DISTRIBUTION LABOR	\$8,333.33
8040.1100	IFC - ROADS LOCATIONS / PITS	\$0.00
8040.1200	IFC - COMPLETION RIG	\$9,000.00
8040.1400	IFC - WIRELINE OPEN/CASED HOLE	\$5,000.00
8040.1500	IFC - FUEL / POWER	\$0.00
8040.1600	IFC - COILED TUBING	\$0.00
8040.1700	IFC - CEMENTING & SERVICES	\$0.00
8040.1899	IFC - FRAC WATER RECOVERY	\$111,235.32
8040.1900	IFC - INSPECTION & TESTING	\$0.00
8040.2000	IFC - TRUCKING/VACUUM/TRANSP	\$6,000.00
8040.2200	IFC - ELECTRIC LOGGING/PERFORATING	\$0.00
8040.2300	IFC - COMPLETION FLUID	\$0.00
8040.2400	IFC - CASING CREW AND TOOLS	\$0.00
8040.2600	IFC - CONTRACT LABOR/ROUSTABOUT	\$5,000.00
8040.2800	IFC - MATERIAL & SUPPLIES	\$0.00
8040.2900	IFC - WELL TESTING / FLOWBACK	\$130,000.00
8040.3100	IFC - WELLHEAD/FRAC TREE REPAIR	\$0.00
8040.3200	IFC - FISHING TOOLS & SERVICES	\$0.00
8040.3400	IFC - RENTAL EQUIPMENT	\$60,000.00
8040.3500	IFC - WELLSITE SUPERVISION	\$7,000.00
8040.3700	IFC - SAFETY / ENVIRONMENTAL	\$5,000.00
8040.4200	IFC - CONTINGENCY	\$0.00
8040.4400	IFC - COMPANY LABOR	\$0.00
8040.4500	IFC - SWABBING	\$0.00
8045.1100	TFC - TUBING	\$65,000.00
8045.1200	TFC - SUCKER RODS & ACCESSORY	\$0.00
8045.1300	TFC - DOWNHOLE ARTIFICIAL LIFT EQPT	\$25,000.00
8045.1500	TFC - SUBSURFACE PUMPS	\$0.00
8045.1600	TFC - PROD LINER & EQUIPMENT	\$0.00
8045.1700	TFC - PACKER/DOWNHOLE TOOLS	\$8,500.00
8045.1900	TFC - PUMPING UNITS /SURFACE LIFT EQUIPMENT	\$0.00
8045.2000	TFC - WELLHEAD EQUIPMENT	\$14,000.00
8045.2500	TFC - VALVES / CONNECTIONS / FITINGS	\$20,000.00
8045.3100	TFC - MEASUREMENT EQUIPMENT	\$10,000.00
8045.3200	TFC - COMM, TELEMETRY & AUTOMATION	\$0.00
8045.3400	TFC - CONTRACTOR LABOR INSTALL	\$20,000.00
8045.3500	TFC - CONTINGENCY	\$0.00
8045.4400	TFC - COMPANY LABOR	\$0.00
		\$5,165,639.44

*** This AFE is an estimate only. By returning one signed copy, you agree to pay your share of the actual cost incurred. ***

REMARKS

Non Operator Approval	
DATE	_____
COMPANY	_____
BY	_____
TITLE	_____



April 15, 2021

RE: Grama Ridge 2 State Com 502H
SHL: 275' FSL Sec. 2 & 1,140' FWL Sec. 2 T22S R34E
BHL: 100' FNL Sec. 2 & 1,445' FWL Sec. 2 T22S R34E
Lea County, New Mexico

To Whom it May Concern:

Centennial Resource Production, LLC ("CRP") proposes to drill and complete the Grama Ridge 2 State Com 502H as a horizontal well to test the Bone Spring Formation at a TVD of 10,090 feet. The W/2 of the referenced Section 2 will be dedicated to the well as the proration unit being a total of 324.37 acres. Please see the enclosed AFE in the amount of \$5,165,639.44.

Upon your response we will send a Joint Operating Agreement ("JOA") with an effective date of April 1, 2021. The JOA contains a proposed overhead rate of \$8000 per month for drilling and \$800 per month for producing and provides for a 100%/300%/300% non-consent penalty.

In the space provided below, please indicate your election and return one original copy of this letter along with an original copy of the enclosed AFE or email me a copy at geoffrey.johnson@cdevinc.com. Should you have any questions, please call me at (720) 499-1513.

Best Regards

A handwritten signature in black ink, appearing to read "Geoffrey Johnson", is written over a horizontal line.

Geoffrey Johnson
Land Coordinator



THE UNDERSIGNED HEREBY ELECTS **TO PARTICIPATE** IN THE CAPTIONED GRAMA RIDGE 2 STATE COM 502H WELLBORE AND TO WAIVE THE NEED FOR A COMPLETION ELECTION.

AGREED TO and ACCEPTED this ____ day of _____, 2021.

Owner Name: _____

Signature: _____

By: _____

Title: _____

THE UNDERSIGNED HEREBY ELECTS **NOT TO PARTICIPATE** IN THE CAPTIONED GRAMA RIDGE 2 STATE COM 502H WELLBORE, AND TO GO NONCONSENT.

AGREED TO and ACCEPTED this ____ day of _____, 2021.

Owner Name: _____

Signature: _____

By: _____

Title: _____

Centennial Resource Production, LLC

AUTHORIZATION OF EXPENDITURE

AFE NO.:	STATE: New Mexico
AFE DESC: Grama Ridge 2 State Com 502H	FIELD: Grama Ridge
DATE: 4/14/2021	PROPERTY #:
AFE TYPE: DRILL AND COMPLETE	PROPERTY NAME:
OPERATOR: 200 - CENTENNIAL RESOURCE	STATE/COUNTY: Lea County, NM

Cost Code (NEW)	Line Item Description (NEW)	AFE Item Cost Estimate (\$)
8015.1000	IDC - PERMITS,LICENSES,ETC	\$15,000.00
8015.1100	IDC - STAKING & SURVEYING	\$18,000.00
8015.1200	IDC - LEGAL, TITLE SERVICES	\$13,000.00
8015.1300	IDC - SURFACE DAMAGE / ROW	\$15,000.00
8015.1310	IDC - PERMANENT EASEMENT	\$12,000.00
8015.1400	IDC - ROAD, LOCATIONS, PITS	\$85,000.00
8015.1500	IDC - RIG MOB / TRUCKING	\$75,000.00
8015.1600	IDC - RIG MOB / STANDBY RATE	\$45,000.00
8015.1700	IDC - DAYWORK CONTRACT	\$252,000.00
8015.1800	IDC - FOOTAGE CONTRACT	\$0.00
8015.1900	IDC - DIRECTNL DRILL & SURVEY	\$165,000.00
8015.1950	IDC - LOST IN HOLE	\$0.00
8015.2000	IDC - CONDUCTOR HOLE & SERVICE	\$25,000.00
8015.2100	IDC - WIRELINE SVCS CASED&OPEN	\$0.00
8015.2150	IDC - DRILL BIT	\$73,500.00
8015.2200	IDC - BITS, TOOLS, STABILIZERS	\$17,500.00
8015.2300	IDC - FUEL / POWER	\$55,500.00
8015.2350	IDC - FUEL / MUD	\$20,000.00
8015.2400	IDC - RIG WATER	\$15,000.00
8015.2500	IDC - MUD/CHEMICALS/ACIDIZING	\$144,000.00
8015.2600	IDC - MUD LOGGING	\$0.00
8015.2700	IDC - INSPECTION & TESTING	\$35,000.00
8015.2800	IDC - CORE ANALYSIS	\$0.00
8015.2900	IDC - OPEN/CASED HOLE LOGGING	\$0.00
8015.3000	IDC - CEMENT SERV/FLOAT EQUIP	\$122,500.00
8015.3100	IDC - CASING CREW & TOOLS	\$50,000.00
8015.3200	IDC - CONTRACT LABOR/ROUSTABOUT	\$30,000.00
8015.3400	IDC - MATERIALS & SUPPLIES	\$5,000.00
8015.3500	IDC - TRUCKING/VACUUM/ TRANSP	\$23,500.00
8015.3600	IDC - SOLIDS CONTROL/ CLOSED LOOP SYSTEM	\$38,500.00
8015.3700	IDC - DISPOSAL	\$92,000.00
8015.3800	IDC - WELLHEAD PREPARE/REPAIR	\$22,500.00
8015.3900	IDC - FISHING TOOLS & SERVICES	\$0.00
8015.4100	IDC - RENTAL EQUIPMENT	\$54,000.00
8015.4200	IDC - MANCAMP	\$28,000.00
8015.4300	IDC - WELLSITE SUPERVISION	\$74,000.00
8015.4400	IDC - SUPERVISION/ENGINEERING	\$0.00
8015.4600	IDC - SAFETY / ENVIRONMENTAL	\$10,400.00
8015.5000	IDC - WELL CONTROL INSURANCE	\$9,919.23
8020.1000	TDC - CASING - CONDUCTOR	\$0.00
8020.1100	TDC - CASING - SURFACE - 13 3/8	\$58,968.75
8020.1200	TDC - CASING - INTERMEDIATE - 9 5/8	\$148,750.00
8020.1300	TDC - CASING - INTERMEDIATE 2 - 7 5/8	\$0.00
8020.1400	TDC - CASING - PRODUCTION - 5 1/2 AND 5	\$296,437.50
8020.1700	TDC - PACKER/DOWNHOLE TOOLS	\$65,875.00
8025.1000	ICC - STAKING & SURVEYING	\$60,000.00
8025.1100	ICC - ROAD, LOCATIONS, PITS	\$10,500.00
8025.1200	ICC - COMPLETION RIG	\$0.00
8025.1400	ICC - WIRELINE OPEN/CASED HOLE	\$20,000.00
8025.1500	ICC - FUEL / POWER	\$151,620.00

8025.1600	ICC - COILED TUBING	\$50,000.00
8025.1700	ICC - CEMENTING & SERVICES	\$0.00
8025.1800	ICC - WATER DISPOSAL / VACUUM	\$11,025.00
8025.1900	ICC - INSPECTION & TESTING	\$0.00
8025.2000	ICC - TRUCKING	\$13,125.00
8025.2200	ICC - ELECTRIC LOGGING / PERFORATING	\$96,650.00
8025.2300	ICC - COMPLETION FLUIDS	\$10,000.00
8025.2400	ICC - CASING CREW AND TOOLS	\$0.00
8025.2500	ICC - WELL STIMULATION/FRACTUR	\$779,359.30
8025.2600	ICC - CONTRACT LABOR/ROUSTABOUT	\$15,000.00
8025.3000	ICC - WATER HANDLING	\$67,640.69
8025.3050	ICC - SOURCE WATER	\$297,619.05
8025.3100	ICC - WELLHEAD/FRACTREE REPAIR	\$40,000.00
8025.3200	ICC - FISHING TOOLS & SERVICES	\$0.00
8025.3300	ICC - COMMUNICATIONS	\$0.00
8025.3400	ICC - RENTAL EQUIPMENT	\$130,000.00
8025.3500	ICC - WELLSITE SUPERVISION	\$29,700.00
8025.3600	ICC - SUPERVISION/ENGINEERING	\$5,000.00
8025.3700	ICC - SAFETY / ENVIRONMENTAL	\$15,000.00
8025.3800	ICC - OVERHEAD	\$10,000.00
8025.4000	ICC - WELL CONTROL INSURANCE	\$0.00
8025.4200	ICC - CONTINGENCY	\$0.00
8025.4400	ICC - COMPANY LABOR	\$0.00
8030.1000	TCC - CASING - PRODUCTION	\$0.00
8030.1600	TCC - PROD LINER & EQUIPMENT	\$0.00
8030.1700	TCC - PACKER/DOWNHOLE TOOLS	\$0.00
8030.2000	TCC - WELLHEAD EQUIPMENT	\$47,250.00
8035.1300	FAC - SURFACE DAMAGE / ROW	\$0.00
8015.1310	FAC - PERMANENT EASEMENT	\$0.00
8035.1400	FAC - ROAD LOCATIONS PITS	\$8,333.33
8035.1500	FAC - MATERIALS & SUPPLIES	\$5,000.00
8035.1600	FAC - TRANSPORTATION TRUCKING	\$5,000.00
8035.1700	FAC - RENTAL EQUIPMENT	\$12,500.00
8035.1800	FAC - FUEL / POWER	\$0.00
8035.1900	FAC - WATER DISPOSAL / SWD	\$0.00
8035.2000	FAC - WASTE DISPOSAL	\$0.00
8035.2100	FAC - INSPECTION & TESTING	\$0.00
8035.2200	FAC - CONTRACT LABOR / ROUSTAB	\$60,000.00
8035.2300	FAC - FRAC TANK RENTAL	\$0.00
8035.2400	FAC - SUPERVISION	\$10,000.00
8035.2500	FAC - CONSULTING SERVICES	\$0.00
8035.2600	FAC - INJECTION PUMP	\$0.00
8035.2700	FAC - P-LINE F-LINE LINEPIPE	\$0.00
8035.2900	FAC - TANK BATTERY	\$66,166.67
8035.3000	FAC - HEATER TREATER/SEPERATOR	\$45,833.33
8035.3100	FAC - DEHYDRATOR EQUIPMENT	\$0.00
8035.3200	FAC - VALVES FITTINGS & PIPE	\$100,000.00
8035.3300	FAC - CIRCULATING TRNSFER PUMP	\$10,500.00
8035.3400	FAC - METER & DRIPS	\$55,833.33
8035.3500	FAC - COMPRESSOR	\$0.00
8035.3600	FAC - POWER GENERATION	\$20,000.00
8035.3700	FAC - COMM TELEMETRY & AUTOMAT	\$35,000.00
8035.3800	FAC - OTHER SURFACE EQUIPMENT	\$10,000.00
8035.4000	FAC - SAFETY / ENVIRONMENTAL	\$4,000.00
8013.4100	FAC - OVERHEAD	\$0.00
8035.4300	FAC - INSURANCE	\$0.00
8035.4400	FAC - COMPANY LABOR	\$0.00
8035.4500	FAC - CONTINGENCY	\$28,312.60
8036.1300	PLN - SURFACE DAMAGE / ROW	\$0.00
8036.1310	PLN - PEMANENT EASEMENT	\$4,266.67
8036.2700	PLN - PIPELINE	\$97,152.00
8036.2800	PLN - FLOWLINE	\$0.00

8036.3600	PLN - ELECTRICAL SUPPLIES	\$0.00
8036.3610	PLN - POWER DISTRIBUTION MATERIAL	\$8,333.33
8036.3620	PLN - POWER DISTRIBUTION LABOR	\$8,333.33
8040.1100	IFC - ROADS LOCATIONS / PITS	\$0.00
8040.1200	IFC - COMPLETION RIG	\$9,000.00
8040.1400	IFC - WIRELINE OPEN/CASED HOLE	\$5,000.00
8040.1500	IFC - FUEL / POWER	\$0.00
8040.1600	IFC - COILED TUBING	\$0.00
8040.1700	IFC - CEMENTING & SERVICES	\$0.00
8040.1899	IFC - FRAC WATER RECOVERY	\$111,235.32
8040.1900	IFC - INSPECTION & TESTING	\$0.00
8040.2000	IFC - TRUCKING/VACUUM/TRANSP	\$6,000.00
8040.2200	IFC - ELECTRIC LOGGING/PERFORATING	\$0.00
8040.2300	IFC - COMPLETION FLUID	\$0.00
8040.2400	IFC - CASING CREW AND TOOLS	\$0.00
8040.2600	IFC - CONTRACT LABOR/ROUSTABOUT	\$5,000.00
8040.2800	IFC - MATERIAL & SUPPLIES	\$0.00
8040.2900	IFC - WELL TESTING / FLOWBACK	\$130,000.00
8040.3100	IFC - WELLHEAD/FRAC TREE REPAIR	\$0.00
8040.3200	IFC - FISHING TOOLS & SERVICES	\$0.00
8040.3400	IFC - RENTAL EQUIPMENT	\$60,000.00
8040.3500	IFC - WELLSITE SUPERVISION	\$7,000.00
8040.3700	IFC - SAFETY / ENVIRONMENTAL	\$5,000.00
8040.4200	IFC - CONTINGENCY	\$0.00
8040.4400	IFC - COMPANY LABOR	\$0.00
8040.4500	IFC - SWABBING	\$0.00
8045.1100	TFC - TUBING	\$65,000.00
8045.1200	TFC - SUCKER RODS & ACCESSORY	\$0.00
8045.1300	TFC - DOWNHOLE ARTIFICIAL LIFT EQPT	\$25,000.00
8045.1500	TFC - SUBSURFACE PUMPS	\$0.00
8045.1600	TFC - PROD LINER & EQUIPMENT	\$0.00
8045.1700	TFC - PACKER/DOWNHOLE TOOLS	\$8,500.00
8045.1900	TFC - PUMPING UNITS /SURFACE LIFT EQUIPMENT	\$0.00
8045.2000	TFC - WELLHEAD EQUIPMENT	\$14,000.00
8045.2500	TFC - VALVES / CONNECTIONS / FITINGS	\$20,000.00
8045.3100	TFC - MEASUREMENT EQUIPMENT	\$10,000.00
8045.3200	TFC - COMM, TELEMETRY & AUTOMATION	\$0.00
8045.3400	TFC - CONTRACTOR LABOR INSTALL	\$20,000.00
8045.3500	TFC - CONTINGENCY	\$0.00
8045.4400	TFC - COMPANY LABOR	\$0.00
		\$5,165,639.44

*** This AFE is an estimate only. By returning one signed copy, you agree to pay your share of the actual cost incurred. ***

REMARKS

Non Operator Approval	
DATE	_____
COMPANY	_____
BY	_____
TITLE	_____



April 15, 2021

RE: Grama Ridge 2 State Com 503H
SHL: 275' FSL Sec. 2 & 1,170' FWL Sec. 2 T22S R34E
BHL: 100' FNL Sec. 2 & 2,305' FWL Sec. 2 T22S R34E
Lea County, New Mexico

To Whom it May Concern:

Centennial Resource Production, LLC ("CRP") proposes to drill and complete the Grama Ridge 2 State Com 503H as a horizontal well to test the Bone Spring Formation at a TVD of 10,320 feet. The W/2 of the referenced Section 2 will be dedicated to the well as the proration unit being a total of 324.37 acres. Please see the enclosed AFE in the amount of \$5,165,639.44

Upon your response we will send a Joint Operating Agreement ("JOA") with an effective date of April 1, 2021. The JOA contains a proposed overhead rate of \$8000 per month for drilling and \$800 per month for producing and provides for a 100%/300%/300% non-consent penalty.

In the space provided below, please indicate your election and return one original copy of this letter along with an original copy of the enclosed AFE or email me a copy at geoffrey.johnson@cdevinc.com. Should you have any questions, please call me at (720) 499-1513.

Best Regards

A handwritten signature in black ink, appearing to read "Geoffrey Johnson", is written over a horizontal line.

Geoffrey Johnson
Land Coordinator



THE UNDERSIGNED HEREBY ELECTS **TO PARTICIPATE** IN THE CAPTIONED GRAMA RIDGE 2 STATE COM 503H WELLBORE AND TO WAIVE THE NEED FOR A COMPLETION ELECTION.

AGREED TO and ACCEPTED this ____ day of _____, 2021.

Owner Name: _____

Signature: _____

By: _____

Title: _____

THE UNDERSIGNED HEREBY ELECTS **NOT TO PARTICIPATE** IN THE CAPTIONED GRAMA RIDGE 2 STATE COM 503H WELLBORE, AND TO GO NONCONSENT.

AGREED TO and ACCEPTED this ____ day of _____, 2021.

Owner Name: _____

Signature: _____

By: _____

Title: _____

Centennial Resource Production, LLC

AUTHORIZATION OF EXPENDITURE

AFE NO.:	STATE: New Mexico
AFE DESC: Grama Ridge 2 State Com 503H	FIELD: Grama Ridge
DATE: 4/14/2021	PROPERTY #:
AFE TYPE: DRILL AND COMPLETE	PROPERTY NAME:
OPERATOR: 200 - CENTENNIAL RESOURCE	STATE/COUNTY: Lea County, NM

Cost Code (NEW)	Line Item Description (NEW)	AFE Item Cost Estimate (\$)
8015.1000	IDC - PERMITS,LICENSES,ETC	\$15,000.00
8015.1100	IDC - STAKING & SURVEYING	\$18,000.00
8015.1200	IDC - LEGAL, TITLE SERVICES	\$13,000.00
8015.1300	IDC - SURFACE DAMAGE / ROW	\$15,000.00
8015.1310	IDC - PERMANENT EASEMENT	\$12,000.00
8015.1400	IDC - ROAD, LOCATIONS, PITS	\$85,000.00
8015.1500	IDC - RIG MOB / TRUCKING	\$75,000.00
8015.1600	IDC - RIG MOB / STANDBY RATE	\$45,000.00
8015.1700	IDC - DAYWORK CONTRACT	\$252,000.00
8015.1800	IDC - FOOTAGE CONTRACT	\$0.00
8015.1900	IDC - DIRECTNL DRILL & SURVEY	\$165,000.00
8015.1950	IDC - LOST IN HOLE	\$0.00
8015.2000	IDC - CONDUCTOR HOLE & SERVICE	\$25,000.00
8015.2100	IDC - WIRELINE SVCS CASED&OPEN	\$0.00
8015.2150	IDC - DRILL BIT	\$73,500.00
8015.2200	IDC - BITS, TOOLS, STABILIZERS	\$17,500.00
8015.2300	IDC - FUEL / POWER	\$55,500.00
8015.2350	IDC - FUEL / MUD	\$20,000.00
8015.2400	IDC - RIG WATER	\$15,000.00
8015.2500	IDC - MUD/CHEMICALS/ACIDIZING	\$144,000.00
8015.2600	IDC - MUD LOGGING	\$0.00
8015.2700	IDC - INSPECTION & TESTING	\$35,000.00
8015.2800	IDC - CORE ANALYSIS	\$0.00
8015.2900	IDC - OPEN/CASED HOLE LOGGING	\$0.00
8015.3000	IDC - CEMENT SERV/FLOAT EQUIP	\$122,500.00
8015.3100	IDC - CASING CREW & TOOLS	\$50,000.00
8015.3200	IDC - CONTRACT LABOR/ROUSTABOUT	\$30,000.00
8015.3400	IDC - MATERIALS & SUPPLIES	\$5,000.00
8015.3500	IDC - TRUCKING/VACUUM/ TRANSP	\$23,500.00
8015.3600	IDC - SOLIDS CONTROL/ CLOSED LOOP SYSTEM	\$38,500.00
8015.3700	IDC - DISPOSAL	\$92,000.00
8015.3800	IDC - WELLHEAD PREPARE/REPAIR	\$22,500.00
8015.3900	IDC - FISHING TOOLS & SERVICES	\$0.00
8015.4100	IDC - RENTAL EQUIPMENT	\$54,000.00
8015.4200	IDC - MANCAMP	\$28,000.00
8015.4300	IDC - WELLSITE SUPERVISION	\$74,000.00
8015.4400	IDC - SUPERVISION/ENGINEERING	\$0.00
8015.4600	IDC - SAFETY / ENVIRONMENTAL	\$10,400.00
8015.5000	IDC - WELL CONTROL INSURANCE	\$9,919.23
8020.1000	TDC - CASING - CONDUCTOR	\$0.00
8020.1100	TDC - CASING - SURFACE - 13 3/8	\$58,968.75
8020.1200	TDC - CASING - INTERMEDIATE - 9 5/8	\$148,750.00
8020.1300	TDC - CASING - INTERMEDIATE 2 - 7 5/8	\$0.00
8020.1400	TDC - CASING - PRODUCTION - 5 1/2 AND 5	\$296,437.50
8020.1700	TDC - PACKER/DOWNHOLE TOOLS	\$65,875.00
8025.1000	ICC - STAKING & SURVEYING	\$60,000.00
8025.1100	ICC - ROAD, LOCATIONS, PITS	\$10,500.00
8025.1200	ICC - COMPLETION RIG	\$0.00
8025.1400	ICC - WIRELINE OPEN/CASED HOLE	\$20,000.00
8025.1500	ICC - FUEL / POWER	\$151,620.00

8025.1600	ICC - COILED TUBING	\$50,000.00
8025.1700	ICC - CEMENTING & SERVICES	\$0.00
8025.1800	ICC - WATER DISPOSAL / VACUUM	\$11,025.00
8025.1900	ICC - INSPECTION & TESTING	\$0.00
8025.2000	ICC - TRUCKING	\$13,125.00
8025.2200	ICC - ELECTRIC LOGGING / PERFORATING	\$96,650.00
8025.2300	ICC - COMPLETION FLUIDS	\$10,000.00
8025.2400	ICC - CASING CREW AND TOOLS	\$0.00
8025.2500	ICC - WELL STIMULATION/FRACTUR	\$779,359.30
8025.2600	ICC - CONTRACT LABOR/ROUSTABOUT	\$15,000.00
8025.3000	ICC - WATER HANDLING	\$67,640.69
8025.3050	ICC - SOURCE WATER	\$297,619.05
8025.3100	ICC - WELLHEAD/FRACTREE REPAIR	\$40,000.00
8025.3200	ICC - FISHING TOOLS & SERVICES	\$0.00
8025.3300	ICC - COMMUNICATIONS	\$0.00
8025.3400	ICC - RENTAL EQUIPMENT	\$130,000.00
8025.3500	ICC - WELLSITE SUPERVISION	\$29,700.00
8025.3600	ICC - SUPERVISION/ENGINEERING	\$5,000.00
8025.3700	ICC - SAFETY / ENVIRONMENTAL	\$15,000.00
8025.3800	ICC - OVERHEAD	\$10,000.00
8025.4000	ICC - WELL CONTROL INSURANCE	\$0.00
8025.4200	ICC - CONTINGENCY	\$0.00
8025.4400	ICC - COMPANY LABOR	\$0.00
8030.1000	TCC - CASING - PRODUCTION	\$0.00
8030.1600	TCC - PROD LINER & EQUIPMENT	\$0.00
8030.1700	TCC - PACKER/DOWNHOLE TOOLS	\$0.00
8030.2000	TCC - WELLHEAD EQUIPMENT	\$47,250.00
8035.1300	FAC - SURFACE DAMAGE / ROW	\$0.00
8015.1310	FAC - PERMANENT EASEMENT	\$0.00
8035.1400	FAC - ROAD LOCATIONS PITS	\$8,333.33
8035.1500	FAC - MATERIALS & SUPPLIES	\$5,000.00
8035.1600	FAC - TRANSPORTATION TRUCKING	\$5,000.00
8035.1700	FAC - RENTAL EQUIPMENT	\$12,500.00
8035.1800	FAC - FUEL / POWER	\$0.00
8035.1900	FAC - WATER DISPOSAL / SWD	\$0.00
8035.2000	FAC - WASTE DISPOSAL	\$0.00
8035.2100	FAC - INSPECTION & TESTING	\$0.00
8035.2200	FAC - CONTRACT LABOR / ROUSTAB	\$60,000.00
8035.2300	FAC - FRAC TANK RENTAL	\$0.00
8035.2400	FAC - SUPERVISION	\$10,000.00
8035.2500	FAC - CONSULTING SERVICES	\$0.00
8035.2600	FAC - INJECTION PUMP	\$0.00
8035.2700	FAC - P-LINE F-LINE LINEPIPE	\$0.00
8035.2900	FAC - TANK BATTERY	\$66,166.67
8035.3000	FAC - HEATER TREATER/SEPERATOR	\$45,833.33
8035.3100	FAC - DEHYDRATOR EQUIPMENT	\$0.00
8035.3200	FAC - VALVES FITTINGS & PIPE	\$100,000.00
8035.3300	FAC - CIRCULATING TRNSFER PUMP	\$10,500.00
8035.3400	FAC - METER & DRIPS	\$55,833.33
8035.3500	FAC - COMPRESSOR	\$0.00
8035.3600	FAC - POWER GENERATION	\$20,000.00
8035.3700	FAC - COMM TELEMETRY & AUTOMAT	\$35,000.00
8035.3800	FAC - OTHER SURFACE EQUIPMENT	\$10,000.00
8035.4000	FAC - SAFETY / ENVIRONMENTAL	\$4,000.00
8013.4100	FAC - OVERHEAD	\$0.00
8035.4300	FAC - INSURANCE	\$0.00
8035.4400	FAC - COMPANY LABOR	\$0.00
8035.4500	FAC - CONTINGENCY	\$28,312.60
8036.1300	PLN - SURFACE DAMAGE / ROW	\$0.00
8036.1310	PLN - PEMANENT EASEMENT	\$4,266.67
8036.2700	PLN - PIPELINE	\$97,152.00
8036.2800	PLN - FLOWLINE	\$0.00

8036.3600	PLN - ELECTRICAL SUPPLIES	\$0.00
8036.3610	PLN - POWER DISTRIBUTION MATERIAL	\$8,333.33
8036.3620	PLN - POWER DISTRIBUTION LABOR	\$8,333.33
8040.1100	IFC - ROADS LOCATIONS / PITS	\$0.00
8040.1200	IFC - COMPLETION RIG	\$9,000.00
8040.1400	IFC - WIRELINE OPEN/CASED HOLE	\$5,000.00
8040.1500	IFC - FUEL / POWER	\$0.00
8040.1600	IFC - COILED TUBING	\$0.00
8040.1700	IFC - CEMENTING & SERVICES	\$0.00
8040.1899	IFC - FRAC WATER RECOVERY	\$111,235.32
8040.1900	IFC - INSPECTION & TESTING	\$0.00
8040.2000	IFC - TRUCKING/VACUUM/TRANSP	\$6,000.00
8040.2200	IFC - ELECTRIC LOGGING/PERFORATING	\$0.00
8040.2300	IFC - COMPLETION FLUID	\$0.00
8040.2400	IFC - CASING CREW AND TOOLS	\$0.00
8040.2600	IFC - CONTRACT LABOR/ROUSTABOUT	\$5,000.00
8040.2800	IFC - MATERIAL & SUPPLIES	\$0.00
8040.2900	IFC - WELL TESTING / FLOWBACK	\$130,000.00
8040.3100	IFC - WELLHEAD/FRAC TREE REPAIR	\$0.00
8040.3200	IFC - FISHING TOOLS & SERVICES	\$0.00
8040.3400	IFC - RENTAL EQUIPMENT	\$60,000.00
8040.3500	IFC - WELLSITE SUPERVISION	\$7,000.00
8040.3700	IFC - SAFETY / ENVIRONMENTAL	\$5,000.00
8040.4200	IFC - CONTINGENCY	\$0.00
8040.4400	IFC - COMPANY LABOR	\$0.00
8040.4500	IFC - SWABBING	\$0.00
8045.1100	TFC - TUBING	\$65,000.00
8045.1200	TFC - SUCKER RODS & ACCESSORY	\$0.00
8045.1300	TFC - DOWNHOLE ARTIFICIAL LIFT EQPT	\$25,000.00
8045.1500	TFC - SUBSURFACE PUMPS	\$0.00
8045.1600	TFC - PROD LINER & EQUIPMENT	\$0.00
8045.1700	TFC - PACKER/DOWNHOLE TOOLS	\$8,500.00
8045.1900	TFC - PUMPING UNITS /SURFACE LIFT EQUIPMENT	\$0.00
8045.2000	TFC - WELLHEAD EQUIPMENT	\$14,000.00
8045.2500	TFC - VALVES / CONNECTIONS / FITINGS	\$20,000.00
8045.3100	TFC - MEASUREMENT EQUIPMENT	\$10,000.00
8045.3200	TFC - COMM, TELEMETRY & AUTOMATION	\$0.00
8045.3400	TFC - CONTRACTOR LABOR INSTALL	\$20,000.00
8045.3500	TFC - CONTINGENCY	\$0.00
8045.4400	TFC - COMPANY LABOR	\$0.00
		\$5,165,639.44

*** This AFE is an estimate only. By returning one signed copy, you agree to pay your share of the actual cost incurred. ***

REMARKS

Non Operator Approval	
DATE	_____
COMPANY	_____
BY	_____
TITLE	_____



April 15, 2021

RE: Grama Ridge 2 State Com 601H
SHL: 315' FSL Sec. 2 & 1,080' FWL Sec. 2 T22S R34E
BHL: 100' FNL Sec. 2 & 585' FWL Sec. 2 T22S R34E
Lea County, New Mexico

To Whom it May Concern:

Centennial Resource Production, LLC ("CRP") proposes to drill and complete the Grama Ridge 2 State Com 601H as a horizontal well to test the Bone Spring Formation at a TVD of 11,220 feet. The W/2 of the referenced Section 2 will be dedicated to the well as the proration unit being a total of 324.37 acres. Please see the enclosed AFE in the amount of \$5,333,446.54.

Upon your response we will send a Joint Operating Agreement ("JOA") with an effective date of April 1, 2021. The JOA contains a proposed overhead rate of \$8000 per month for drilling and \$800 per month for producing and provides for a 100%/300%/300% non-consent penalty.

In the space provided below, please indicate your election and return one original copy of this letter along with an original copy of the enclosed AFE or email me a copy at carl.messina@cdevinc.com. Should you have any questions, please call me at (720) 499-1411.

Best Regards,

A handwritten signature in black ink, appearing to read "Geoffrey Johnson", is written over a horizontal line.

Geoffrey Johnson
Land Coordinator



THE UNDERSIGNED HEREBY ELECTS **TO PARTICIPATE** IN THE CAPTIONED GRAMA RIDGE 2 STATE COM 601H WELLBORE AND TO WAIVE THE NEED FOR A COMPLETION ELECTION.

AGREED TO and ACCEPTED this ____ day of _____, 2021.

Owner Name: _____

Signature: _____

By: _____

Title: _____

THE UNDERSIGNED HEREBY ELECTS **NOT TO PARTICIPATE** IN THE CAPTIONED GRAMA RIDGE 2 STATE COM 601H WELLBORE, AND TO GO NONCONSENT.

AGREED TO and ACCEPTED this ____ day of _____, 2021.

Owner Name: _____

Signature: _____

By: _____

Title: _____

Centennial Resource Production, LLC

AUTHORIZATION OF EXPENDITURE

AFE NO.:	STATE: New Mexico
AFE DESC: Grama Ridge 2 State Com 601H	FIELD: Grama Ridge
DATE: 4/14/2021	PROPERTY #:
AFE TYPE: DRILL AND COMPLETE	PROPERTY NAME:
OPERATOR: 200 - CENTENNIAL RESOURCE	STATE/COUNTY: Lea County, NM

Cost Code (NEW)	Line Item Description (NEW)	AFE Item Cost Estimate (\$)
8015.1000	IDC - PERMITS,LICENSES,ETC	\$15,000.00
8015.1100	IDC - STAKING & SURVEYING	\$18,000.00
8015.1200	IDC - LEGAL, TITLE SERVICES	\$13,000.00
8015.1300	IDC - SURFACE DAMAGE / ROW	\$15,000.00
8015.1310	IDC - PERMANENT EASEMENT	\$12,000.00
8015.1400	IDC - ROAD, LOCATIONS, PITS	\$85,000.00
8015.1500	IDC - RIG MOB / TRUCKING	\$75,000.00
8015.1600	IDC - RIG MOB / STANDBY RATE	\$45,000.00
8015.1700	IDC - DAYWORK CONTRACT	\$273,000.00
8015.1800	IDC - FOOTAGE CONTRACT	\$0.00
8015.1900	IDC - DIRECTNL DRILL & SURVEY	\$177,000.00
8015.1950	IDC - LOST IN HOLE	\$0.00
8015.2000	IDC - CONDUCTOR HOLE & SERVICE	\$25,000.00
8015.2100	IDC - WIRELINE SVCS CASED&OPEN	\$0.00
8015.2150	IDC - DRILL BIT	\$73,500.00
8015.2200	IDC - BITS, TOOLS, STABILIZERS	\$47,500.00
8015.2300	IDC - FUEL / POWER	\$60,000.00
8015.2350	IDC - FUEL / MUD	\$50,000.00
8015.2400	IDC - RIG WATER	\$16,000.00
8015.2500	IDC - MUD/CHEMICALS/ACIDIZING	\$189,000.00
8015.2600	IDC - MUD LOGGING	\$0.00
8015.2700	IDC - INSPECTION & TESTING	\$50,000.00
8015.2800	IDC - CORE ANALYSIS	\$0.00
8015.2900	IDC - OPEN/CASED HOLE LOGGING	\$0.00
8015.3000	IDC - CEMENT SERV/FLOAT EQUIP	\$127,500.00
8015.3100	IDC - CASING CREW & TOOLS	\$50,000.00
8015.3200	IDC - CONTRACT LABOR/ROUSTABOUT	\$30,000.00
8015.3400	IDC - MATERIALS & SUPPLIES	\$5,000.00
8015.3500	IDC - TRUCKING/VACUUM/ TRANSP	\$25,500.00
8015.3600	IDC - SOLIDS CONTROL/ CLOSED LOOP SYSTEM	\$41,250.00
8015.3700	IDC - DISPOSAL	\$100,000.00
8015.3800	IDC - WELLHEAD PREPARE/REPAIR	\$22,500.00
8015.3900	IDC - FISHING TOOLS & SERVICES	\$0.00
8015.4100	IDC - RENTAL EQUIPMENT	\$57,000.00
8015.4200	IDC - MANCAMP	\$30,000.00
8015.4300	IDC - WELLSITE SUPERVISION	\$80,000.00
8015.4400	IDC - SUPERVISION/ENGINEERING	\$0.00
8015.4600	IDC - SAFETY / ENVIRONMENTAL	\$11,400.00
8015.5000	IDC - WELL CONTROL INSURANCE	\$10,807.50
8020.1000	TDC - CASING - CONDUCTOR	\$0.00
8020.1100	TDC - CASING - SURFACE - 13 3/8	\$58,968.75
8020.1200	TDC - CASING - INTERMEDIATE - 9 5/8	\$148,750.00
8020.1300	TDC - CASING - INTERMEDIATE 2 - 7 5/8	\$0.00
8020.1400	TDC - CASING - PRODUCTION - 5 1/2 AND 5	\$296,437.50
8020.1700	TDC - PACKER/DOWNHOLE TOOLS	\$65,875.00
8025.1000	ICC - STAKING & SURVEYING	\$60,000.00
8025.1100	ICC - ROAD, LOCATIONS, PITS	\$10,500.00
8025.1200	ICC - COMPLETION RIG	\$0.00
8025.1400	ICC - WIRELINE OPEN/CASED HOLE	\$20,000.00
8025.1500	ICC - FUEL / POWER	\$151,620.00

8025.1600	ICC - COILED TUBING	\$50,000.00
8025.1700	ICC - CEMENTING & SERVICES	\$0.00
8025.1800	ICC - WATER DISPOSAL / VACUUM	\$11,025.00
8025.1900	ICC - INSPECTION & TESTING	\$0.00
8025.2000	ICC - TRUCKING	\$13,125.00
8025.2200	ICC - ELECTRIC LOGGING / PERFORATING	\$96,650.00
8025.2300	ICC - COMPLETION FLUIDS	\$10,000.00
8025.2400	ICC - CASING CREW AND TOOLS	\$0.00
8025.2500	ICC - WELL STIMULATION/FRACTUR	\$779,359.30
8025.2600	ICC - CONTRACT LABOR/ROUSTABOUT	\$15,000.00
8025.3000	ICC - WATER HANDLING	\$67,640.69
8025.3050	ICC - SOURCE WATER	\$297,619.05
8025.3100	ICC - WELLHEAD/FRACTREE REPAIR	\$40,000.00
8025.3200	ICC - FISHING TOOLS & SERVICES	\$0.00
8025.3300	ICC - COMMUNICATIONS	\$0.00
8025.3400	ICC - RENTAL EQUIPMENT	\$130,000.00
8025.3500	ICC - WELLSITE SUPERVISION	\$29,700.00
8025.3600	ICC - SUPERVISION/ENGINEERING	\$5,000.00
8025.3700	ICC - SAFETY / ENVIRONMENTAL	\$15,000.00
8025.3800	ICC - OVERHEAD	\$10,000.00
8025.4000	ICC - WELL CONTROL INSURANCE	\$0.00
8025.4200	ICC - CONTINGENCY	\$0.00
8025.4400	ICC - COMPANY LABOR	\$0.00
8030.1000	TCC - CASING - PRODUCTION	\$0.00
8030.1600	TCC - PROD LINER & EQUIPMENT	\$0.00
8030.1700	TCC - PACKER/DOWNHOLE TOOLS	\$0.00
8030.2000	TCC - WELLHEAD EQUIPMENT	\$47,250.00
8035.1300	FAC - SURFACE DAMAGE / ROW	\$0.00
8015.1310	FAC - PERMANENT EASEMENT	\$0.00
8035.1400	FAC - ROAD LOCATIONS PITS	\$8,333.33
8035.1500	FAC - MATERIALS & SUPPLIES	\$5,000.00
8035.1600	FAC - TRANSPORTATION TRUCKING	\$5,000.00
8035.1700	FAC - RENTAL EQUIPMENT	\$12,500.00
8035.1800	FAC - FUEL / POWER	\$0.00
8035.1900	FAC - WATER DISPOSAL / SWD	\$0.00
8035.2000	FAC - WASTE DISPOSAL	\$0.00
8035.2100	FAC - INSPECTION & TESTING	\$0.00
8035.2200	FAC - CONTRACT LABOR / ROUSTAB	\$60,000.00
8035.2300	FAC - FRAC TANK RENTAL	\$0.00
8035.2400	FAC - SUPERVISION	\$10,000.00
8035.2500	FAC - CONSULTING SERVICES	\$0.00
8035.2600	FAC - INJECTION PUMP	\$0.00
8035.2700	FAC - P-LINE F-LINE LINEPIPE	\$0.00
8035.2900	FAC - TANK BATTERY	\$66,166.67
8035.3000	FAC - HEATER TREATER/SEPERATOR	\$45,833.33
8035.3100	FAC - DEHYDRATOR EQUIPMENT	\$0.00
8035.3200	FAC - VALVES FITTINGS & PIPE	\$100,000.00
8035.3300	FAC - CIRCULATING TRNSFER PUMP	\$10,500.00
8035.3400	FAC - METER & DRIPS	\$55,833.33
8035.3500	FAC - COMPRESSOR	\$0.00
8035.3600	FAC - POWER GENERATION	\$20,000.00
8035.3700	FAC - COMM TELEMETRY & AUTOMAT	\$35,000.00
8035.3800	FAC - OTHER SURFACE EQUIPMENT	\$10,000.00
8035.4000	FAC - SAFETY / ENVIRONMENTAL	\$4,000.00
8013.4100	FAC - OVERHEAD	\$0.00
8035.4300	FAC - INSURANCE	\$0.00
8035.4400	FAC - COMPANY LABOR	\$0.00
8035.4500	FAC - CONTINGENCY	\$28,312.60
8036.1300	PLN - SURFACE DAMAGE / ROW	\$0.00
8036.1310	PLN - PEMANENT EASEMENT	\$4,266.67
8036.2700	PLN - PIPELINE	\$97,152.00
8036.2800	PLN - FLOWLINE	\$0.00

8036.3600	PLN - ELECTRICAL SUPPLIES	\$0.00
8036.3610	PLN - POWER DISTRIBUTION MATERIAL	\$8,333.33
8036.3620	PLN - POWER DISTRIBUTION LABOR	\$8,333.33
8040.1100	IFC - ROADS LOCATIONS / PITS	\$0.00
8040.1200	IFC - COMPLETION RIG	\$9,000.00
8040.1400	IFC - WIRELINE OPEN/CASED HOLE	\$5,000.00
8040.1500	IFC - FUEL / POWER	\$0.00
8040.1600	IFC - COILED TUBING	\$0.00
8040.1700	IFC - CEMENTING & SERVICES	\$0.00
8040.1899	IFC - FRAC WATER RECOVERY	\$89,904.15
8040.1900	IFC - INSPECTION & TESTING	\$0.00
8040.2000	IFC - TRUCKING/VACUUM/TRANSP	\$6,000.00
8040.2200	IFC - ELECTRIC LOGGING/PERFORATING	\$0.00
8040.2300	IFC - COMPLETION FLUID	\$0.00
8040.2400	IFC - CASING CREW AND TOOLS	\$0.00
8040.2600	IFC - CONTRACT LABOR/ROUSTABOUT	\$5,000.00
8040.2800	IFC - MATERIAL & SUPPLIES	\$0.00
8040.2900	IFC - WELL TESTING / FLOWBACK	\$130,000.00
8040.3100	IFC - WELLHEAD/FRAC TREE REPAIR	\$0.00
8040.3200	IFC - FISHING TOOLS & SERVICES	\$0.00
8040.3400	IFC - RENTAL EQUIPMENT	\$60,000.00
8040.3500	IFC - WELLSITE SUPERVISION	\$7,000.00
8040.3700	IFC - SAFETY / ENVIRONMENTAL	\$5,000.00
8040.4200	IFC - CONTINGENCY	\$0.00
8040.4400	IFC - COMPANY LABOR	\$0.00
8040.4500	IFC - SWABBING	\$0.00
8045.1100	TFC - TUBING	\$65,000.00
8045.1200	TFC - SUCKER RODS & ACCESSORY	\$0.00
8045.1300	TFC - DOWNHOLE ARTIFICIAL LIFT EQPT	\$25,000.00
8045.1500	TFC - SUBSURFACE PUMPS	\$0.00
8045.1600	TFC - PROD LINER & EQUIPMENT	\$0.00
8045.1700	TFC - PACKER/DOWNHOLE TOOLS	\$8,500.00
8045.1900	TFC - PUMPING UNITS /SURFACE LIFT EQUIPMENT	\$0.00
8045.2000	TFC - WELLHEAD EQUIPMENT	\$14,000.00
8045.2500	TFC - VALVES / CONNECTIONS / FITINGS	\$20,000.00
8045.3100	TFC - MEASUREMENT EQUIPMENT	\$10,000.00
8045.3200	TFC - COMM, TELEMETRY & AUTOMATION	\$0.00
8045.3400	TFC - CONTRACTOR LABOR INSTALL	\$20,000.00
8045.3500	TFC - CONTINGENCY	\$0.00
8045.4400	TFC - COMPANY LABOR	\$0.00
		\$5,333,446.54

ing one signed copy, you agree to pay your share of the actual cost incurred. ***

REMARKS

Non Operator Approval	
DATE	_____
COMPANY	_____
BY	_____
TITLE	_____



April 15, 2021

RE: Grama Ridge 2 State Com 602H
SHL: 315' FSL Sec. 2 & 1,110' FWL Sec. 2 T22S R34E
BHL: 100' FNL Sec. 2 & 1,445' FWL Sec. 2 T22S R34E
Lea County, New Mexico

To Whom it May Concern:

Centennial Resource Production, LLC ("CRP") proposes to drill and complete the Grama Ridge 2 State Com 602H as a horizontal well to test the Bone Spring Formation at a TVD of 11,220 feet. The W/2 of the referenced Section 2 will be dedicated to the well as the proration unit being a total of 324.37 acres. Please see the enclosed AFE in the amount of \$5,333,446.54.

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In the space provided below, please indicate your election and return one original copy of this letter along with an original copy of the enclosed AFE or email me a copy at carl.messina@cdevinc.com. Should you have any questions, please call me at (720) 499-1411.

Best Regards,

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Geoffrey Johnson
Land Coordinator



THE UNDERSIGNED HEREBY ELECTS **TO PARTICIPATE** IN THE CAPTIONED GRAMA RIDGE 2 STATE COM 602H WELLBORE AND TO WAIVE THE NEED FOR A COMPLETION ELECTION.

AGREED TO and ACCEPTED this ____ day of _____, 2021.

Owner Name: _____

Signature: _____

By: _____

Title: _____

THE UNDERSIGNED HEREBY ELECTS **NOT TO PARTICIPATE** IN THE CAPTIONED GRAMA RIDGE 2 STATE COM 602H WELLBORE, AND TO GO NONCONSENT.

AGREED TO and ACCEPTED this ____ day of _____, 2021.

Owner Name: _____

Signature: _____

By: _____

Title: _____

Centennial Resource Production, LLC

AUTHORIZATION OF EXPENDITURE

AFE NO.:	STATE: New Mexico
AFE DESC: Grama Ridge 2 State Com 602H	FIELD: Grama Ridge
DATE: 4/14/2021	PROPERTY #:
AFE TYPE: DRILL AND COMPLETE	PROPERTY NAME:
OPERATOR: 200 - CENTENNIAL RESOURCE	STATE/COUNTY: Lea County, NM

Cost Code (NEW)	Line Item Description (NEW)	AFE Item Cost Estimate (\$)
8015.1000	IDC - PERMITS,LICENSES,ETC	\$15,000.00
8015.1100	IDC - STAKING & SURVEYING	\$18,000.00
8015.1200	IDC - LEGAL, TITLE SERVICES	\$13,000.00
8015.1300	IDC - SURFACE DAMAGE / ROW	\$15,000.00
8015.1310	IDC - PERMANENT EASEMENT	\$12,000.00
8015.1400	IDC - ROAD, LOCATIONS, PITS	\$85,000.00
8015.1500	IDC - RIG MOB / TRUCKING	\$75,000.00
8015.1600	IDC - RIG MOB / STANDBY RATE	\$45,000.00
8015.1700	IDC - DAYWORK CONTRACT	\$273,000.00
8015.1800	IDC - FOOTAGE CONTRACT	\$0.00
8015.1900	IDC - DIRECTNL DRILL & SURVEY	\$177,000.00
8015.1950	IDC - LOST IN HOLE	\$0.00
8015.2000	IDC - CONDUCTOR HOLE & SERVICE	\$25,000.00
8015.2100	IDC - WIRELINE SVCS CASED&OPEN	\$0.00
8015.2150	IDC - DRILL BIT	\$73,500.00
8015.2200	IDC - BITS, TOOLS, STABILIZERS	\$47,500.00
8015.2300	IDC - FUEL / POWER	\$60,000.00
8015.2350	IDC - FUEL / MUD	\$50,000.00
8015.2400	IDC - RIG WATER	\$16,000.00
8015.2500	IDC - MUD/CHEMICALS/ACIDIZING	\$189,000.00
8015.2600	IDC - MUD LOGGING	\$0.00
8015.2700	IDC - INSPECTION & TESTING	\$50,000.00
8015.2800	IDC - CORE ANALYSIS	\$0.00
8015.2900	IDC - OPEN/CASED HOLE LOGGING	\$0.00
8015.3000	IDC - CEMENT SERV/FLOAT EQUIP	\$127,500.00
8015.3100	IDC - CASING CREW & TOOLS	\$50,000.00
8015.3200	IDC - CONTRACT LABOR/ROUSTABOUT	\$30,000.00
8015.3400	IDC - MATERIALS & SUPPLIES	\$5,000.00
8015.3500	IDC - TRUCKING/VACUUM/ TRANSP	\$25,500.00
8015.3600	IDC - SOLIDS CONTROL/ CLOSED LOOP SYSTEM	\$41,250.00
8015.3700	IDC - DISPOSAL	\$100,000.00
8015.3800	IDC - WELLHEAD PREPARE/REPAIR	\$22,500.00
8015.3900	IDC - FISHING TOOLS & SERVICES	\$0.00
8015.4100	IDC - RENTAL EQUIPMENT	\$57,000.00
8015.4200	IDC - MANCAMP	\$30,000.00
8015.4300	IDC - WELLSITE SUPERVISION	\$80,000.00
8015.4400	IDC - SUPERVISION/ENGINEERING	\$0.00
8015.4600	IDC - SAFETY / ENVIRONMENTAL	\$11,400.00
8015.5000	IDC - WELL CONTROL INSURANCE	\$10,807.50
8020.1000	TDC - CASING - CONDUCTOR	\$0.00
8020.1100	TDC - CASING - SURFACE - 13 3/8	\$58,968.75
8020.1200	TDC - CASING - INTERMEDIATE - 9 5/8	\$148,750.00
8020.1300	TDC - CASING - INTERMEDIATE 2 - 7 5/8	\$0.00
8020.1400	TDC - CASING - PRODUCTION - 5 1/2 AND 5	\$296,437.50
8020.1700	TDC - PACKER/DOWNHOLE TOOLS	\$65,875.00
8025.1000	ICC - STAKING & SURVEYING	\$60,000.00
8025.1100	ICC - ROAD, LOCATIONS, PITS	\$10,500.00
8025.1200	ICC - COMPLETION RIG	\$0.00
8025.1400	ICC - WIRELINE OPEN/CASED HOLE	\$20,000.00
8025.1500	ICC - FUEL / POWER	\$151,620.00

8025.1600	ICC - COILED TUBING	\$50,000.00
8025.1700	ICC - CEMENTING & SERVICES	\$0.00
8025.1800	ICC - WATER DISPOSAL / VACUUM	\$11,025.00
8025.1900	ICC - INSPECTION & TESTING	\$0.00
8025.2000	ICC - TRUCKING	\$13,125.00
8025.2200	ICC - ELECTRIC LOGGING / PERFORATING	\$96,650.00
8025.2300	ICC - COMPLETION FLUIDS	\$10,000.00
8025.2400	ICC - CASING CREW AND TOOLS	\$0.00
8025.2500	ICC - WELL STIMULATION/FRACTUR	\$779,359.30
8025.2600	ICC - CONTRACT LABOR/ROUSTABOUT	\$15,000.00
8025.3000	ICC - WATER HANDLING	\$67,640.69
8025.3050	ICC - SOURCE WATER	\$297,619.05
8025.3100	ICC - WELLHEAD/FRACTREE REPAIR	\$40,000.00
8025.3200	ICC - FISHING TOOLS & SERVICES	\$0.00
8025.3300	ICC - COMMUNICATIONS	\$0.00
8025.3400	ICC - RENTAL EQUIPMENT	\$130,000.00
8025.3500	ICC - WELLSITE SUPERVISION	\$29,700.00
8025.3600	ICC - SUPERVISION/ENGINEERING	\$5,000.00
8025.3700	ICC - SAFETY / ENVIRONMENTAL	\$15,000.00
8025.3800	ICC - OVERHEAD	\$10,000.00
8025.4000	ICC - WELL CONTROL INSURANCE	\$0.00
8025.4200	ICC - CONTINGENCY	\$0.00
8025.4400	ICC - COMPANY LABOR	\$0.00
8030.1000	TCC - CASING - PRODUCTION	\$0.00
8030.1600	TCC - PROD LINER & EQUIPMENT	\$0.00
8030.1700	TCC - PACKER/DOWNHOLE TOOLS	\$0.00
8030.2000	TCC - WELLHEAD EQUIPMENT	\$47,250.00
8035.1300	FAC - SURFACE DAMAGE / ROW	\$0.00
8015.1310	FAC - PERMANENT EASEMENT	\$0.00
8035.1400	FAC - ROAD LOCATIONS PITS	\$8,333.33
8035.1500	FAC - MATERIALS & SUPPLIES	\$5,000.00
8035.1600	FAC - TRANSPORTATION TRUCKING	\$5,000.00
8035.1700	FAC - RENTAL EQUIPMENT	\$12,500.00
8035.1800	FAC - FUEL / POWER	\$0.00
8035.1900	FAC - WATER DISPOSAL / SWD	\$0.00
8035.2000	FAC - WASTE DISPOSAL	\$0.00
8035.2100	FAC - INSPECTION & TESTING	\$0.00
8035.2200	FAC - CONTRACT LABOR / ROUSTAB	\$60,000.00
8035.2300	FAC - FRAC TANK RENTAL	\$0.00
8035.2400	FAC - SUPERVISION	\$10,000.00
8035.2500	FAC - CONSULTING SERVICES	\$0.00
8035.2600	FAC - INJECTION PUMP	\$0.00
8035.2700	FAC - P-LINE F-LINE LINEPIPE	\$0.00
8035.2900	FAC - TANK BATTERY	\$66,166.67
8035.3000	FAC - HEATER TREATER/SEPERATOR	\$45,833.33
8035.3100	FAC - DEHYDRATOR EQUIPMENT	\$0.00
8035.3200	FAC - VALVES FITTINGS & PIPE	\$100,000.00
8035.3300	FAC - CIRCULATING TRNSFER PUMP	\$10,500.00
8035.3400	FAC - METER & DRIPS	\$55,833.33
8035.3500	FAC - COMPRESSOR	\$0.00
8035.3600	FAC - POWER GENERATION	\$20,000.00
8035.3700	FAC - COMM TELEMETRY & AUTOMAT	\$35,000.00
8035.3800	FAC - OTHER SURFACE EQUIPMENT	\$10,000.00
8035.4000	FAC - SAFETY / ENVIRONMENTAL	\$4,000.00
8013.4100	FAC - OVERHEAD	\$0.00
8035.4300	FAC - INSURANCE	\$0.00
8035.4400	FAC - COMPANY LABOR	\$0.00
8035.4500	FAC - CONTINGENCY	\$28,312.60
8036.1300	PLN - SURFACE DAMAGE / ROW	\$0.00
8036.1310	PLN - PEMANENT EASEMENT	\$4,266.67
8036.2700	PLN - PIPELINE	\$97,152.00
8036.2800	PLN - FLOWLINE	\$0.00

8036.3600	PLN - ELECTRICAL SUPPLIES	\$0.00
8036.3610	PLN - POWER DISTRIBUTION MATERIAL	\$8,333.33
8036.3620	PLN - POWER DISTRIBUTION LABOR	\$8,333.33
8040.1100	IFC - ROADS LOCATIONS / PITS	\$0.00
8040.1200	IFC - COMPLETION RIG	\$9,000.00
8040.1400	IFC - WIRELINE OPEN/CASED HOLE	\$5,000.00
8040.1500	IFC - FUEL / POWER	\$0.00
8040.1600	IFC - COILED TUBING	\$0.00
8040.1700	IFC - CEMENTING & SERVICES	\$0.00
8040.1899	IFC - FRAC WATER RECOVERY	\$89,904.15
8040.1900	IFC - INSPECTION & TESTING	\$0.00
8040.2000	IFC - TRUCKING/VACUUM/TRANSP	\$6,000.00
8040.2200	IFC - ELECTRIC LOGGING/PERFORATING	\$0.00
8040.2300	IFC - COMPLETION FLUID	\$0.00
8040.2400	IFC - CASING CREW AND TOOLS	\$0.00
8040.2600	IFC - CONTRACT LABOR/ROUSTABOUT	\$5,000.00
8040.2800	IFC - MATERIAL & SUPPLIES	\$0.00
8040.2900	IFC - WELL TESTING / FLOWBACK	\$130,000.00
8040.3100	IFC - WELLHEAD/FRAC TREE REPAIR	\$0.00
8040.3200	IFC - FISHING TOOLS & SERVICES	\$0.00
8040.3400	IFC - RENTAL EQUIPMENT	\$60,000.00
8040.3500	IFC - WELLSITE SUPERVISION	\$7,000.00
8040.3700	IFC - SAFETY / ENVIRONMENTAL	\$5,000.00
8040.4200	IFC - CONTINGENCY	\$0.00
8040.4400	IFC - COMPANY LABOR	\$0.00
8040.4500	IFC - SWABBING	\$0.00
8045.1100	TFC - TUBING	\$65,000.00
8045.1200	TFC - SUCKER RODS & ACCESSORY	\$0.00
8045.1300	TFC - DOWNHOLE ARTIFICIAL LIFT EQPT	\$25,000.00
8045.1500	TFC - SUBSURFACE PUMPS	\$0.00
8045.1600	TFC - PROD LINER & EQUIPMENT	\$0.00
8045.1700	TFC - PACKER/DOWNHOLE TOOLS	\$8,500.00
8045.1900	TFC - PUMPING UNITS /SURFACE LIFT EQUIPMENT	\$0.00
8045.2000	TFC - WELLHEAD EQUIPMENT	\$14,000.00
8045.2500	TFC - VALVES / CONNECTIONS / FITINGS	\$20,000.00
8045.3100	TFC - MEASUREMENT EQUIPMENT	\$10,000.00
8045.3200	TFC - COMM, TELEMETRY & AUTOMATION	\$0.00
8045.3400	TFC - CONTRACTOR LABOR INSTALL	\$20,000.00
8045.3500	TFC - CONTINGENCY	\$0.00
8045.4400	TFC - COMPANY LABOR	\$0.00
		\$5,333,446.54

ing one signed copy, you agree to pay your share of the actual cost incurred. ***

REMARKS

Non Operator Approval	
DATE	_____
COMPANY	_____
BY	_____
TITLE	_____



April 15, 2021

RE: Grama Ridge 2 State Com 603H
SHL: 315' FSL Sec. 2 & 1,140' FWL Sec. 2 T22S R34E
BHL: 100' FNL Sec. 2 & 2,305' FWL Sec. 2 T22S R34E
Lea County, New Mexico

To Whom it May Concern:

Centennial Resource Production, LLC ("CRP") proposes to drill and complete the Grama Ridge 2 State Com 603H as a horizontal well to test the Bone Spring Formation at a TVD of 11,220 feet. The W/2 of the referenced Section 2 will be dedicated to the well as the proration unit being a total of 324.37 acres. Please see the enclosed AFE in the amount of \$5,333,446.54.

Upon your response we will send a Joint Operating Agreement ("JOA") with an effective date of April 1, 2021. The JOA contains a proposed overhead rate of \$8000 per month for drilling and \$800 per month for producing and provides for a 100%/300%/300% non-consent penalty.

In the space provided below, please indicate your election and return one original copy of this letter along with an original copy of the enclosed AFE or email me a copy at carl.messina@cdevinc.com. Should you have any questions, please call me at (720) 499-1411.

Best Regards,

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

Geoffrey Johnson
Land Coordinator



THE UNDERSIGNED HEREBY ELECTS **TO PARTICIPATE** IN THE CAPTIONED GRAMA RIDGE 2 STATE COM 603H WELLBORE AND TO WAIVE THE NEED FOR A COMPLETION ELECTION.

AGREED TO and ACCEPTED this ____ day of _____, 2021.

Owner Name: _____

Signature: _____

By: _____

Title: _____

THE UNDERSIGNED HEREBY ELECTS **NOT TO PARTICIPATE** IN THE CAPTIONED GRAMA RIDGE 2 STATE COM 603H WELLBORE, AND TO GO NONCONSENT.

AGREED TO and ACCEPTED this ____ day of _____, 2021.

Owner Name: _____

Signature: _____

By: _____

Title: _____

Centennial Resource Production, LLC

AUTHORIZATION OF EXPENDITURE

AFE NO.:	STATE: New Mexico
AFE DESC: Grama Ridge 2 State Com 603H	FIELD: Grama Ridge
DATE: 4/14/2021	PROPERTY #:
AFE TYPE: DRILL AND COMPLETE	PROPERTY NAME:
OPERATOR: 200 - CENTENNIAL RESOURCE	STATE/COUNTY: Lea County, NM

Cost Code (NEW)	Line Item Description (NEW)	AFE Item Cost Estimate (\$)
8015.1000	IDC - PERMITS,LICENSES,ETC	\$15,000.00
8015.1100	IDC - STAKING & SURVEYING	\$18,000.00
8015.1200	IDC - LEGAL, TITLE SERVICES	\$13,000.00
8015.1300	IDC - SURFACE DAMAGE / ROW	\$15,000.00
8015.1310	IDC - PERMANENT EASEMENT	\$12,000.00
8015.1400	IDC - ROAD, LOCATIONS, PITS	\$85,000.00
8015.1500	IDC - RIG MOB / TRUCKING	\$75,000.00
8015.1600	IDC - RIG MOB / STANDBY RATE	\$45,000.00
8015.1700	IDC - DAYWORK CONTRACT	\$273,000.00
8015.1800	IDC - FOOTAGE CONTRACT	\$0.00
8015.1900	IDC - DIRECTNL DRILL & SURVEY	\$177,000.00
8015.1950	IDC - LOST IN HOLE	\$0.00
8015.2000	IDC - CONDUCTOR HOLE & SERVICE	\$25,000.00
8015.2100	IDC - WIRELINE SVCS CASED&OPEN	\$0.00
8015.2150	IDC - DRILL BIT	\$73,500.00
8015.2200	IDC - BITS, TOOLS, STABILIZERS	\$47,500.00
8015.2300	IDC - FUEL / POWER	\$60,000.00
8015.2350	IDC - FUEL / MUD	\$50,000.00
8015.2400	IDC - RIG WATER	\$16,000.00
8015.2500	IDC - MUD/CHEMICALS/ACIDIZING	\$189,000.00
8015.2600	IDC - MUD LOGGING	\$0.00
8015.2700	IDC - INSPECTION & TESTING	\$50,000.00
8015.2800	IDC - CORE ANALYSIS	\$0.00
8015.2900	IDC - OPEN/CASED HOLE LOGGING	\$0.00
8015.3000	IDC - CEMENT SERV/FLOAT EQUIP	\$127,500.00
8015.3100	IDC - CASING CREW & TOOLS	\$50,000.00
8015.3200	IDC - CONTRACT LABOR/ROUSTABOUT	\$30,000.00
8015.3400	IDC - MATERIALS & SUPPLIES	\$5,000.00
8015.3500	IDC - TRUCKING/VACUUM/ TRANSP	\$25,500.00
8015.3600	IDC - SOLIDS CONTROL/ CLOSED LOOP SYSTEM	\$41,250.00
8015.3700	IDC - DISPOSAL	\$100,000.00
8015.3800	IDC - WELLHEAD PREPARE/REPAIR	\$22,500.00
8015.3900	IDC - FISHING TOOLS & SERVICES	\$0.00
8015.4100	IDC - RENTAL EQUIPMENT	\$57,000.00
8015.4200	IDC - MANCAMP	\$30,000.00
8015.4300	IDC - WELLSITE SUPERVISION	\$80,000.00
8015.4400	IDC - SUPERVISION/ENGINEERING	\$0.00
8015.4600	IDC - SAFETY / ENVIRONMENTAL	\$11,400.00
8015.5000	IDC - WELL CONTROL INSURANCE	\$10,807.50
8020.1000	TDC - CASING - CONDUCTOR	\$0.00
8020.1100	TDC - CASING - SURFACE - 13 3/8	\$58,968.75
8020.1200	TDC - CASING - INTERMEDIATE - 9 5/8	\$148,750.00
8020.1300	TDC - CASING - INTERMEDIATE 2 - 7 5/8	\$0.00
8020.1400	TDC - CASING - PRODUCTION - 5 1/2 AND 5	\$296,437.50
8020.1700	TDC - PACKER/DOWNHOLE TOOLS	\$65,875.00
8025.1000	ICC - STAKING & SURVEYING	\$60,000.00
8025.1100	ICC - ROAD, LOCATIONS, PITS	\$10,500.00
8025.1200	ICC - COMPLETION RIG	\$0.00
8025.1400	ICC - WIRELINE OPEN/CASED HOLE	\$20,000.00
8025.1500	ICC - FUEL / POWER	\$151,620.00

8025.1600	ICC - COILED TUBING	\$50,000.00
8025.1700	ICC - CEMENTING & SERVICES	\$0.00
8025.1800	ICC - WATER DISPOSAL / VACUUM	\$11,025.00
8025.1900	ICC - INSPECTION & TESTING	\$0.00
8025.2000	ICC - TRUCKING	\$13,125.00
8025.2200	ICC - ELECTRIC LOGGING / PERFORATING	\$96,650.00
8025.2300	ICC - COMPLETION FLUIDS	\$10,000.00
8025.2400	ICC - CASING CREW AND TOOLS	\$0.00
8025.2500	ICC - WELL STIMULATION/FRACTUR	\$779,359.30
8025.2600	ICC - CONTRACT LABOR/ROUSTABOUT	\$15,000.00
8025.3000	ICC - WATER HANDLING	\$67,640.69
8025.3050	ICC - SOURCE WATER	\$297,619.05
8025.3100	ICC - WELLHEAD/FRACTREE REPAIR	\$40,000.00
8025.3200	ICC - FISHING TOOLS & SERVICES	\$0.00
8025.3300	ICC - COMMUNICATIONS	\$0.00
8025.3400	ICC - RENTAL EQUIPMENT	\$130,000.00
8025.3500	ICC - WELLSITE SUPERVISION	\$29,700.00
8025.3600	ICC - SUPERVISION/ENGINEERING	\$5,000.00
8025.3700	ICC - SAFETY / ENVIRONMENTAL	\$15,000.00
8025.3800	ICC - OVERHEAD	\$10,000.00
8025.4000	ICC - WELL CONTROL INSURANCE	\$0.00
8025.4200	ICC - CONTINGENCY	\$0.00
8025.4400	ICC - COMPANY LABOR	\$0.00
8030.1000	TCC - CASING - PRODUCTION	\$0.00
8030.1600	TCC - PROD LINER & EQUIPMENT	\$0.00
8030.1700	TCC - PACKER/DOWNHOLE TOOLS	\$0.00
8030.2000	TCC - WELLHEAD EQUIPMENT	\$47,250.00
8035.1300	FAC - SURFACE DAMAGE / ROW	\$0.00
8015.1310	FAC - PERMANENT EASEMENT	\$0.00
8035.1400	FAC - ROAD LOCATIONS PITS	\$8,333.33
8035.1500	FAC - MATERIALS & SUPPLIES	\$5,000.00
8035.1600	FAC - TRANSPORTATION TRUCKING	\$5,000.00
8035.1700	FAC - RENTAL EQUIPMENT	\$12,500.00
8035.1800	FAC - FUEL / POWER	\$0.00
8035.1900	FAC - WATER DISPOSAL / SWD	\$0.00
8035.2000	FAC - WASTE DISPOSAL	\$0.00
8035.2100	FAC - INSPECTION & TESTING	\$0.00
8035.2200	FAC - CONTRACT LABOR / ROUSTAB	\$60,000.00
8035.2300	FAC - FRAC TANK RENTAL	\$0.00
8035.2400	FAC - SUPERVISION	\$10,000.00
8035.2500	FAC - CONSULTING SERVICES	\$0.00
8035.2600	FAC - INJECTION PUMP	\$0.00
8035.2700	FAC - P-LINE F-LINE LINEPIPE	\$0.00
8035.2900	FAC - TANK BATTERY	\$66,166.67
8035.3000	FAC - HEATER TREATER/SEPERATOR	\$45,833.33
8035.3100	FAC - DEHYDRATOR EQUIPMENT	\$0.00
8035.3200	FAC - VALVES FITTINGS & PIPE	\$100,000.00
8035.3300	FAC - CIRCULATING TRNSFER PUMP	\$10,500.00
8035.3400	FAC - METER & DRIPS	\$55,833.33
8035.3500	FAC - COMPRESSOR	\$0.00
8035.3600	FAC - POWER GENERATION	\$20,000.00
8035.3700	FAC - COMM TELEMETRY & AUTOMAT	\$35,000.00
8035.3800	FAC - OTHER SURFACE EQUIPMENT	\$10,000.00
8035.4000	FAC - SAFETY / ENVIRONMENTAL	\$4,000.00
8013.4100	FAC - OVERHEAD	\$0.00
8035.4300	FAC - INSURANCE	\$0.00
8035.4400	FAC - COMPANY LABOR	\$0.00
8035.4500	FAC - CONTINGENCY	\$28,312.60
8036.1300	PLN - SURFACE DAMAGE / ROW	\$0.00
8036.1310	PLN - PEMANENT EASEMENT	\$4,266.67
8036.2700	PLN - PIPELINE	\$97,152.00
8036.2800	PLN - FLOWLINE	\$0.00

8036.3600	PLN - ELECTRICAL SUPPLIES	\$0.00
8036.3610	PLN - POWER DISTRIBUTION MATERIAL	\$8,333.33
8036.3620	PLN - POWER DISTRIBUTION LABOR	\$8,333.33
8040.1100	IFC - ROADS LOCATIONS / PITS	\$0.00
8040.1200	IFC - COMPLETION RIG	\$9,000.00
8040.1400	IFC - WIRELINE OPEN/CASED HOLE	\$5,000.00
8040.1500	IFC - FUEL / POWER	\$0.00
8040.1600	IFC - COILED TUBING	\$0.00
8040.1700	IFC - CEMENTING & SERVICES	\$0.00
8040.1899	IFC - FRAC WATER RECOVERY	\$89,904.15
8040.1900	IFC - INSPECTION & TESTING	\$0.00
8040.2000	IFC - TRUCKING/VACUUM/TRANSP	\$6,000.00
8040.2200	IFC - ELECTRIC LOGGING/PERFORATING	\$0.00
8040.2300	IFC - COMPLETION FLUID	\$0.00
8040.2400	IFC - CASING CREW AND TOOLS	\$0.00
8040.2600	IFC - CONTRACT LABOR/ROUSTABOUT	\$5,000.00
8040.2800	IFC - MATERIAL & SUPPLIES	\$0.00
8040.2900	IFC - WELL TESTING / FLOWBACK	\$130,000.00
8040.3100	IFC - WELLHEAD/FRAC TREE REPAIR	\$0.00
8040.3200	IFC - FISHING TOOLS & SERVICES	\$0.00
8040.3400	IFC - RENTAL EQUIPMENT	\$60,000.00
8040.3500	IFC - WELLSITE SUPERVISION	\$7,000.00
8040.3700	IFC - SAFETY / ENVIRONMENTAL	\$5,000.00
8040.4200	IFC - CONTINGENCY	\$0.00
8040.4400	IFC - COMPANY LABOR	\$0.00
8040.4500	IFC - SWABBING	\$0.00
8045.1100	TFC - TUBING	\$65,000.00
8045.1200	TFC - SUCKER RODS & ACCESSORY	\$0.00
8045.1300	TFC - DOWNHOLE ARTIFICIAL LIFT EQPT	\$25,000.00
8045.1500	TFC - SUBSURFACE PUMPS	\$0.00
8045.1600	TFC - PROD LINER & EQUIPMENT	\$0.00
8045.1700	TFC - PACKER/DOWNHOLE TOOLS	\$8,500.00
8045.1900	TFC - PUMPING UNITS /SURFACE LIFT EQUIPMENT	\$0.00
8045.2000	TFC - WELLHEAD EQUIPMENT	\$14,000.00
8045.2500	TFC - VALVES / CONNECTIONS / FITINGS	\$20,000.00
8045.3100	TFC - MEASUREMENT EQUIPMENT	\$10,000.00
8045.3200	TFC - COMM, TELEMETRY & AUTOMATION	\$0.00
8045.3400	TFC - CONTRACTOR LABOR INSTALL	\$20,000.00
8045.3500	TFC - CONTINGENCY	\$0.00
8045.4400	TFC - COMPANY LABOR	\$0.00
		\$5,333,446.54

ing one signed copy, you agree to pay your share of the actual cost incurred. ***

REMARKS

Non Operator Approval	
DATE	_____
COMPANY	_____
BY	_____
TITLE	_____

Exhibit C-5

Date	Action
September 2020	Initiated discussions with Marathon to develop Grama Ridge area
April 2021	Centennial sent well proposals for the Grama Ridge State Com #601H-603H and Grama Ridge State Com #501H-503H
May 2021	Sent JOA to Marathon and Devon to reach voluntary agreement
June 2021	Centennial files for compulsory pooling

BEFORE THE OIL CONSERVATION DIVISION

Santa Fe, New Mexico

Exhibit No. C5

Submitted by: Centennial Resource Production, LLC

Hearing Date: July 01, 2021

Case No. 21979

**STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION**

**APPLICATION OF CENTENNIAL
RESOURCE PRODUCTION, LLC FOR
COMPULSORY POOLING, LEA COUNTY,
NEW MEXICO.**

CASE NO. 21979

**AFFIDAVIT OF ISABEL HARPER
IN SUPPORT OF CASE NO. 21979**

Isabel Harper, of lawful age and being first duly sworn, declares as follows:

1. My name is Isabel Harper. I work for Centennial Resource Production, LLC (“Centennial”) as a Geologist.
2. I have previously testified before the New Mexico Oil Conservation Division as an expert witness in petroleum geology. My credentials as a petroleum geologist have been accepted by the Division and made a matter of record.
3. I am familiar with the application filed by Centennial in this case, and I have conducted a geologic study of the lands in the subject area.
4. **Centennial Exhibit D-1** are two project locator maps, reflecting the proposed spacing unit in Section 2 in relation to the surrounding area. The first Map shows the proposed Second Bone Spring wells, depicted by dashed lines and shows the offset Second Bone Spring Sand producing wells. The second map shows the proposed Third Bone Spring wells, depicted by dashed lines and shows the offset Third Bone Spring Sand producing wells.
5. Centennial is targeting the Second and Third Bone Spring intervals, within the Bone Spring formation, with the proposed **Gramma Ridge 2 State Com #501H & #502H wells**, and the **Gramma Ridge 2 State Com #601H & #602H wells**.

**BEFORE THE OIL CONSERVATION DIVISION
Santa Fe, New Mexico
Exhibit No. D**

**Submitted by: Centennial Resource Production, LLC
Hearing Date: July 01, 2021
Case No. 21979**

6. **Centennial Exhibit D-2** is a subsea structure map that I prepared for the Second Bone Spring Sand formation and that is representative of the targeted intervals. The structure map shows that the formation is gently dipping to the southeast in this area. I do not observe any faulting, pinchouts, or other geologic impediments to developing the targeted interval with horizontal wells in this area. The second map in Exhibit D-2 show the subsea structure map of the top of the Wolfcamp formation at the base of the Third Bone Spring Sand target. The structure map shows that the formation is gently dipping to the south in this area. I do not observe any faulting, pinchouts, or other geologic impediments to developing the targeted interval with horizontal wells in this area.

7. **Centennial Exhibit D-3** overlays a cross-section line in blue consisting of three wells penetrating the Bone Spring formation that I used to construct a stratigraphic cross-section from A to A'. I consider these wells to be representative of the geology in the area.

8. **Centennial Exhibit D-4** is a cross section using the representative wells depicted on Exhibit D-3. Each well in the cross-section contains gamma ray, resistivity, and porosity logs. The proposed targeted interval in the Bone Spring formations is labeled on the exhibit. The cross-section demonstrates that the targeted interval extends across the proposed spacing unit.

9. In my opinion, the stand-up orientation of the proposed wells is the preferred orientation for horizontal well development in this area and is appropriate to efficiently and effectively develop the subject acreage.

10. Based on my geologic study, the Bone Spring formation underlying the subject area is suitable for development by horizontal wells, and the acreage comprising the proposed spacing units will contribute more-or-less equally to the production from the wellbores.

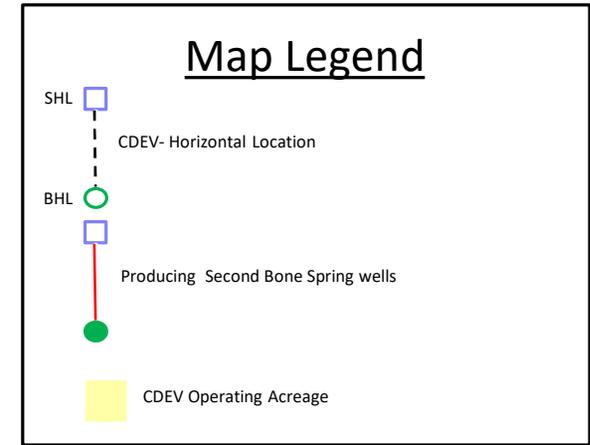
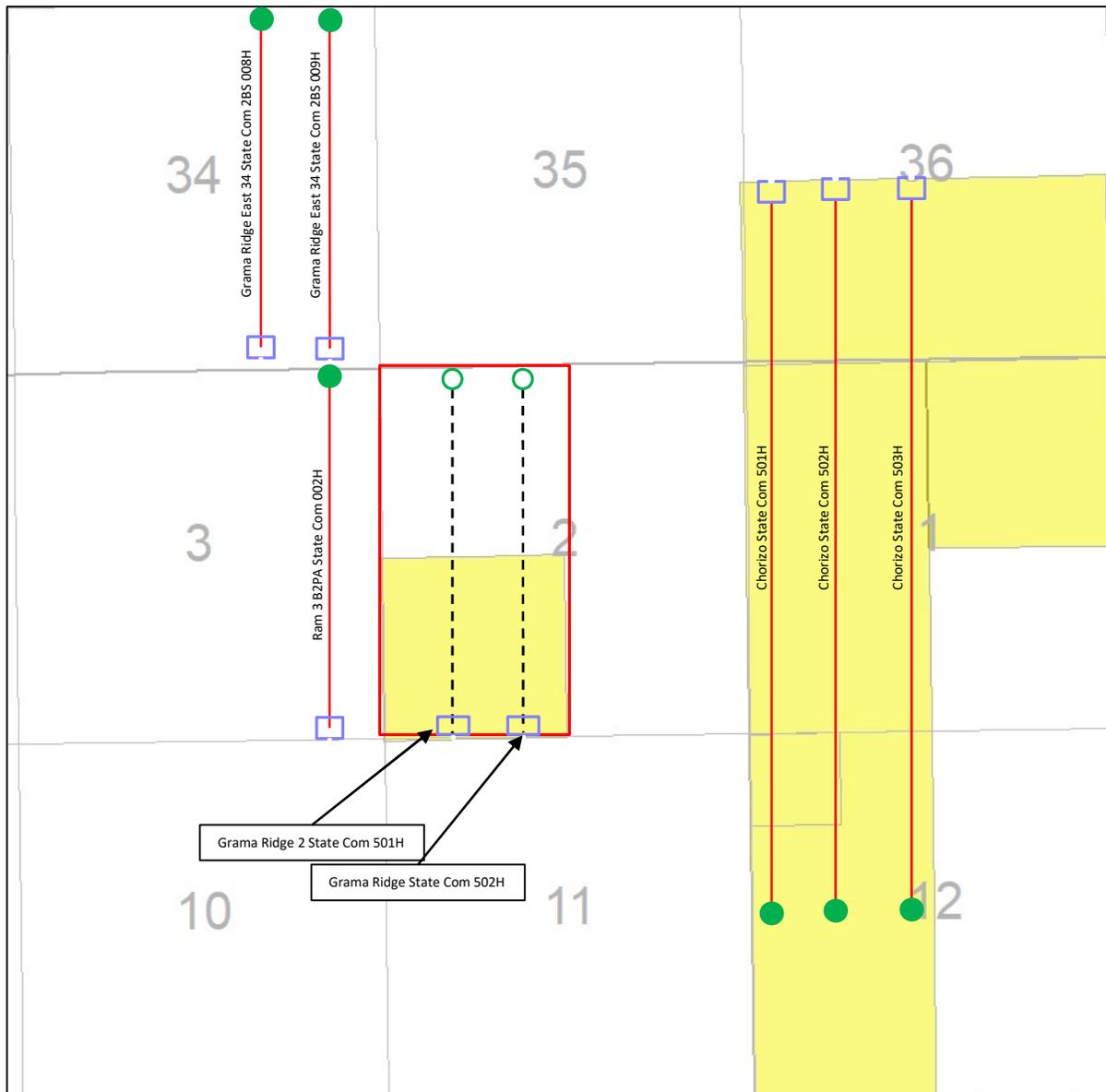
11. In my opinion, the granting of Centennial application in this case will be in the best interest of conservation, the prevention of waste, and protection of correlative rights.

12. **Centennial Exhibits D-1** through **D-4** were either prepared by me or compiled under my direction and supervision.

FURTHER AFFIANT SAYETH NOT.

Bone Spring Pool

Gramma Ridge 2 State Com 501H & 502H



BEFORE THE OIL CONSERVATION DIVISION

Santa Fe, New Mexico

Exhibit No. D1

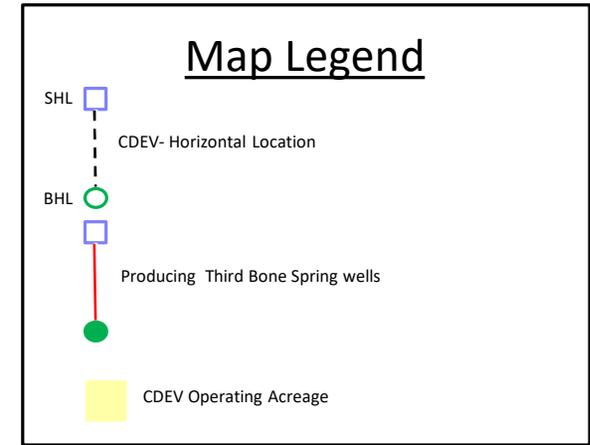
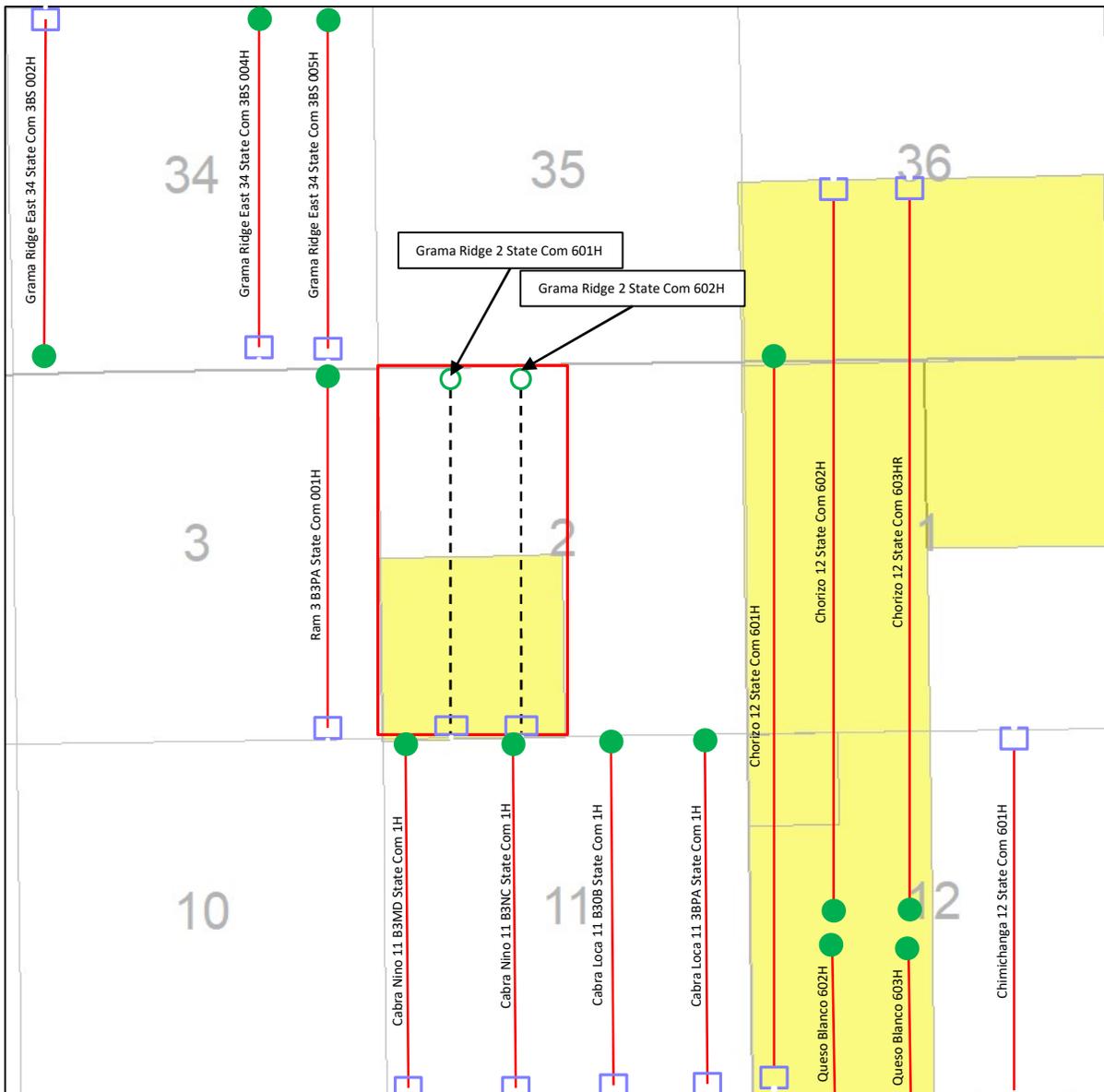
Submitted by: Centennial Resource Production, LLC

Hearing Date: July 01, 2021

Case No. 21979

Bone Spring Pool

Gramma Ridge 2 State Com 601H & 602H



BEFORE THE OIL CONSERVATION DIVISION

Santa Fe, New Mexico

Exhibit No. D2

Submitted by: Centennial Resource Production, LLC

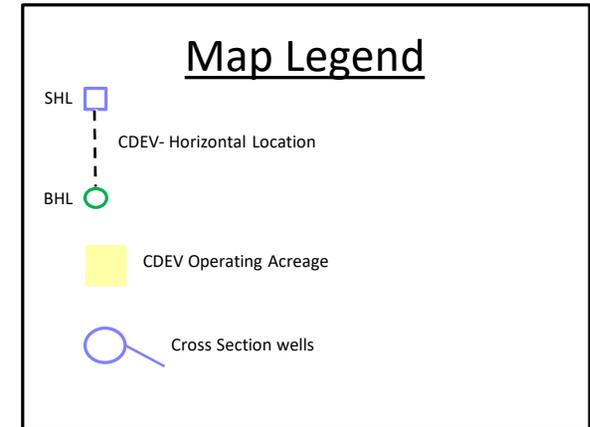
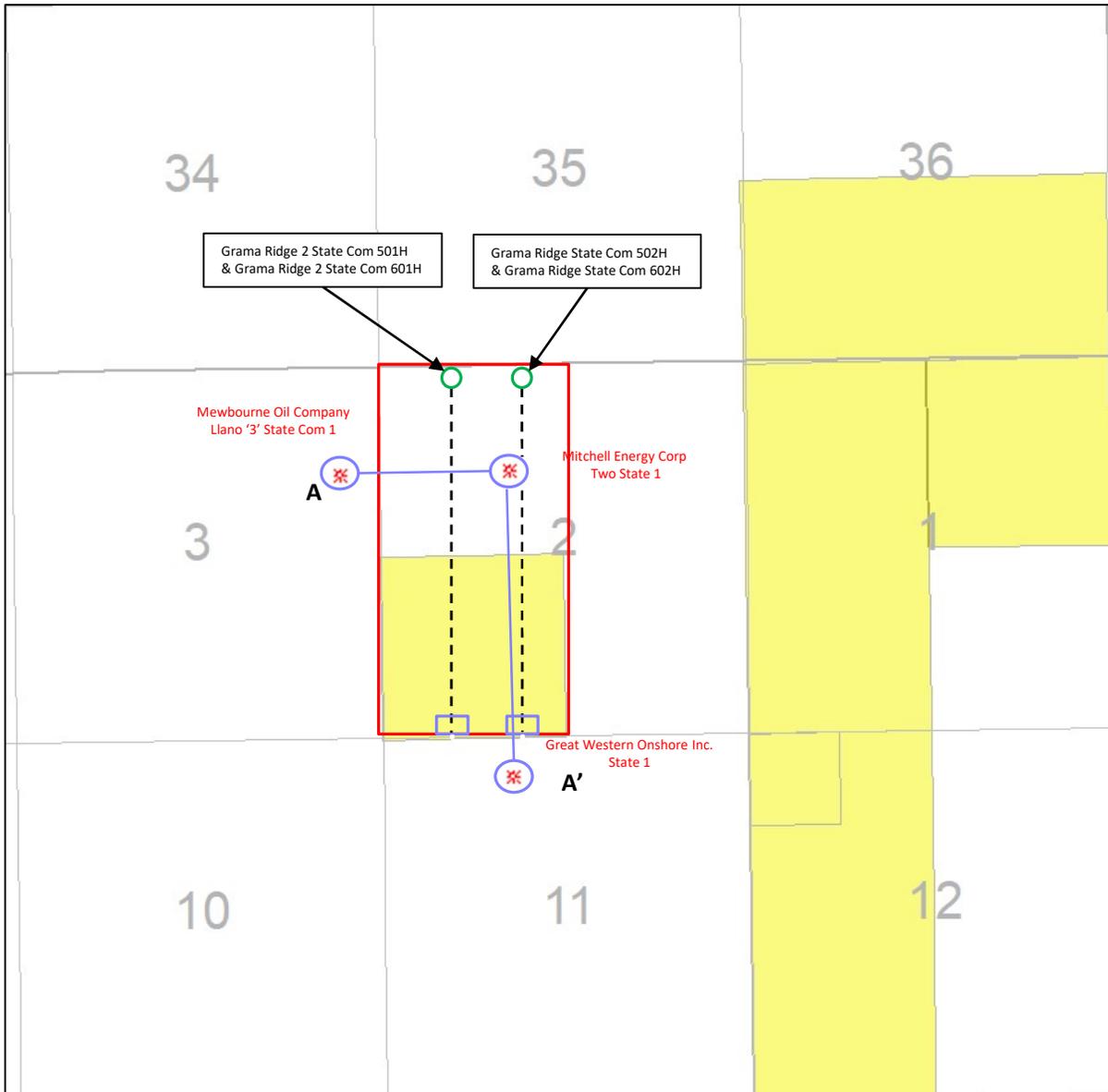
Hearing Date: July 01, 2021

Case No. 21979

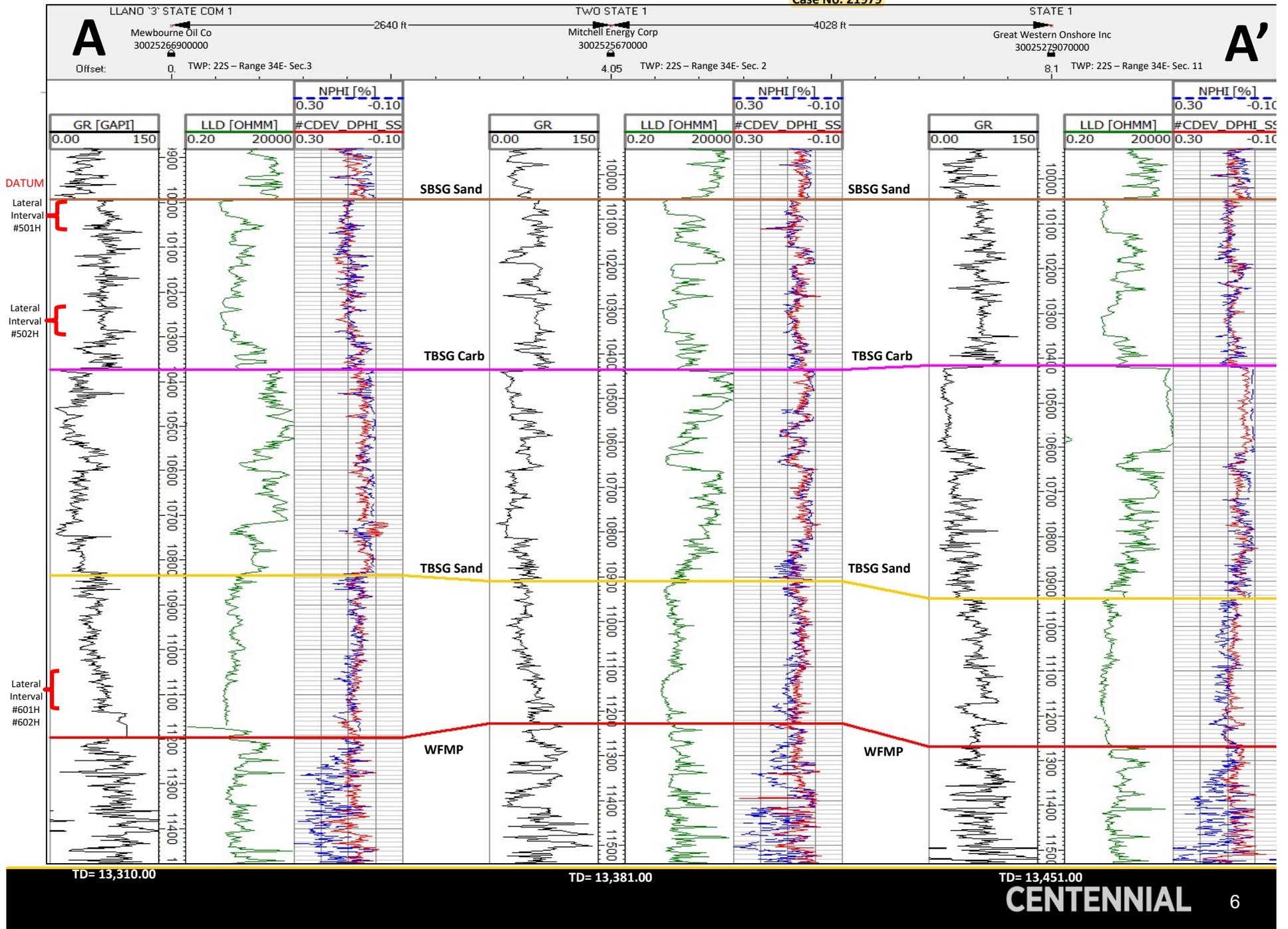
X-Section Bone Spring Pool

Grama Ridge 2 State Com 501H & 502H

Grama Ridge 2 State Com 601H & 602H



BEFORE THE OIL CONSERVATION DIVISION
Santa Fe, New Mexico
Exhibit No. D3
Submitted by: Centennial Resource Production, LLC
Hearing Date: July 01, 2021
Case No. 21979





Kaitlyn A. Luck
Associate
Phone (505) 988-4421
kaluck@hollandhart.com

June 11, 2021

VIA CERTIFIED MAIL
CERTIFIED RECEIPT REQUESTED

TO: ALL INTEREST OWNERS SUBJECT TO POOLING PROCEEDINGS

Re: Application of Centennial Resource Production, LLC for Compulsory Pooling, Lea County, New Mexico.
Grama Ridge 2 State Com #501H-#503H, #601H-#603H wells

Ladies & Gentlemen:

This letter is to advise you that Centennial Resource Production, LLC, has filed the enclosed application with the New Mexico Oil Conservation Division.

During the COVID-19 Public Health Emergency, state buildings are closed to the public and hearings will be conducted remotely. The hearing will be conducted on July 1, 2020 beginning at 8:15 a.m., until it is concluded. To participate in the electronic hearing, see the instructions posted on the OCD Hearings website: <http://www.emnrd.state.nm.us/OCD/announcements.html>.

You are not required to attend this hearing, but as an owner of an interest that may be affected by this application, you may appear and present testimony. Failure to appear at that time and become a party of record will preclude you from challenging the matter at a later date. Parties appearing in cases are required by Division Rule 19.15.4.13.B to file a Pre-hearing Statement four business days in advance of a scheduled hearing. This statement must be filed online or in person at the Division’s Santa Fe office and should include: the names of the parties and their attorneys; a concise statement of the case; the names of all witnesses the party will call to testify at the hearing; the approximate time the party will need to present its case; and identification of any procedural matters that are to be resolved prior to the hearing.

If you have any questions about this matter, please contact Gavin Smith, at (720) 499-1474, or Gavin.Smith@cdevinc.com.

Sincerely,

Kaitlyn A. Luck
**ATTORNEY FOR CENTENNIAL RESOURCE
PRODUCTION, LLC**

T 505.988.4421 F 505.983.6043
110 North Guadalupe, Suite 1, Santa Fe, NM 87501-1849
Mail to: P.O. Box 2208, Santa Fe, NM 87504-2208
www.hollandhart.com

Alaska	Montana	Utah
Colorado	Nevada	Washington, D.C.
Idaho	New Mexico	Wyoming

Centennial - Gramma Ridge 501H-502H, 601H-603H
Case No. 21979 Postal Delivery Report

TrackingNo	ToName	DeliveryAddress	City	State	Zip	USPS_Status
9414811898765802383270	Marathon Oil Permian, LLC	5555 San Felipe St	Houston	TX	77056-2701	Your item was delivered to an individual at the address at 10:59 am on June 15, 2021 in HOUSTON, TX 77056.
9414811898765802383287	Devon Energy Production Company, L.P.	333 W Sheridan Ave	Oklahoma City	OK	73102-5010	Your item was delivered at 8:39 am on June 15, 2021 in OKLAHOMA CITY, OK 73102.

Affidavit of Publication

STATE OF NEW MEXICO
COUNTY OF LEA

I, Daniel Russell, Publisher of the Hobbs News-Sun, a newspaper published at Hobbs, New Mexico, solemnly swear that the clipping attached hereto was published in the regular and entire issue of said newspaper, and not a supplement thereof for a period of 1 issue(s).

Beginning with the issue dated
June 15, 2021
and ending with the issue dated
June 15, 2021.



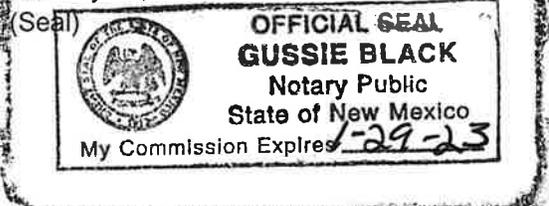
Publisher

Sworn and subscribed to before me this
15th day of June 2021.



Business Manager

My commission expires
January 29, 2023



This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937 and payment of fees for said

LEGAL NOTICE June 15, 2021

STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION SANTA FE, NEW MEXICO

The State of New Mexico, Energy Minerals and Natural Resources Department, Oil Conservation Division ("Division") hereby gives notice that the Division will hold public hearings before a hearing examiner on the following case. During the COVID-19 Public Health Emergency, state buildings are closed to the public and Division hearings will be conducted remotely. The public hearing for the following case will be electronic and conducted remotely. The hearing will be conducted on **Thursday, July 1, 2021, beginning at 8:15 a.m.** To participate in the electronic hearing, see the instructions posted below. The docket may be viewed at <http://www.emnrd.state.nm.us/OCD/hearings.html> or obtained from Marlene Salvidrez, at Marlene.Salvidrez@state.nm.us. Documents filed in the case may be viewed at <http://ocdimage.emnrd.state.nm.us/imagin/CaseFileCriteria.aspx>. If you are an individual with a disability who needs a reader, amplifier, qualified sign language interpreter, or other form of auxiliary aid or service to attend or participate in a hearing, contact Marlene Salvidrez at Marlene.Salvidrez@state.nm.us, or the New Mexico Relay Network at 1-800-659-1779, no later than **June 21, 2021**.

Persons may view and participate in the hearings through the following link:

<https://nmemnrd.webex.com/nmemnrd/onstage/g.php?MTID=e27ab61b7f5ad68b04d4652ecf5502112>
Event number: 187 606 9449
Event password: cMbpmxsh633

Join by video: 1876069449@nmemnrd.webex.com
Numeric Password: 359882
You can also dial 173.243.2.68 and enter your meeting number

Join by audio: 1-844-992-4726 United States Toll Free
Access code: 187 606 9449

**STATE OF NEW MEXICO TO:
All named parties and persons
having any right, title, interest
or claim in the following case
and notice to the public.**

(NOTE: All land descriptions herein refer to the New Mexico Principal Meridian whether or not so stated.)

**To: All overriding royalty interest owners and pooled parties, including:
Devon Energy Production Company, L.P. and Marathon Oil Permian, LLC.**

Case No. 21979: Application of Centennial Resource Production, LLC for compulsory pooling, Lea County, New Mexico. Applicant in the above-styled cause seeks an order pooling all uncommitted interests in the Bone Spring formation underlying a standard 324.37-acre, more or less, horizontal spacing unit comprised of the W/2 of Section 2, Township 22 South, Range 34 East, NMPM, Lea County, New Mexico. Said horizontal spacing unit is to be dedicated to the proposed initial wells:

- The **Grama Ridge 2 State Com #501H well**, and the **Grama Ridge 2 State Com #601H well**, both are to be horizontally drilled from a common surface location in the SW/4 SW/4 (Unit M) of Section 2, to bottom hole locations in the NW/4 NW/4 (Unit D) of Section 2; and
- The **Grama Ridge 2 State Com #502H well**, the **Grama Ridge 2 State Com #503H well**, the **Grama Ridge 2 State Com #602H well**, and the **Grama Ridge 2 State Com #603H well**, each of which are to be horizontally drilled from a surface location in the SW/4 SW/4 (Unit M) of Section 2, to bottom hole locations in the NE/4 NW/4 (Unit C) of Section.

Also to be considered will be the cost of drilling and completing the wells and the allocation of the cost thereof, the actual operating costs and charges for supervision, the designation of applicant as operator of the wells, and a 200% charge for risk involved in drilling said wells. Said area is located approximately 15 miles west of Eunice, New Mexico.
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HOLLAND & HART LLC
PO BOX 2208
SANTA FE,, NM 87504-2208

**BEFORE THE OIL CONSERVATION DIVISION
Santa Fe, New Mexico
Exhibit No. F**

**Submitted by: Centennial Resource Production, LLC
Hearing Date: July 01, 2021
Case No. 21979**