

**BEFORE THE OIL CONSERVATION COMMISSION  
EXAMINER HEARING NOVEMBER 15, 2018**

**CASE No. 16265**

*DUCK HUNT STATE COM 601H WELL*

*LEA COUNTY, NEW MEXICO*



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

**APPLICATION OF CENTENNIAL RESOURCE PRODUCTION, LLC  
TO RE-OPEN CASE NO. 16265 TO ADD ADDITIONAL INITIAL WELLS  
UNDER THE TERMS OF COMPULSORY POOLING ORDER  
R-20001 LEA COUNTY, NEW MEXICO.**

**CASE NO. 16265 (re-opened)**

**HEARING AFFIDAVIT OF GAVIN SMITH**

Gavin Smith, being first duly sworn on oath, states as follows:

1. My name is Gavin Smith. I work for Centennial Resource Production, LLC (“Centennial”) as a Landman.

2. I have previously testified before the New Mexico Oil Conservation Division as an expert witness in petroleum land matters. My credentials as a petroleum landman 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. Division Order R-20001, attached as **Exhibit 1-A**, entered on October 1, 2018, created a 240-acre non-standard spacing and proration unit consisting of the E/2 SE/4 of Section 1 and the E/2E/2 of Section 12, Township 23 South, Range 34 East, NMPM, Lea County, New Mexico. This order further pooled the uncommitted interests in the Bone Spring Formation (Antelope Ridge; Bone Spring, North (Pool Code 2205)) in this spacing and proration unit (the “Unit”) and dedicated the Unit to the **Duck Hunt 1 State Com Well No. 601H** (API No. 30-025-44963), a horizontal well to be drilled from a surface location 2340 feet from the South line and 771 feet from the East line (Unit I) of Section 1 to a

bottom hole location 100 feet from the South line and 330 feet from the East line (Unit P) of Section 12.

5. Since the entry of Order R-20001, Centennial has added two additional initial wells in the Bone Spring formation. The spacing unit and the pool remain the same as designated under Order R-20001. The parties pooled under Order R-20001 remain the same.

6. The spacing unit will be dedicated to three initial wells: the **Duck Hunt 1 State Com Well No. 301H**, the **Duck Hunt 1 State Com Well No. 501H**, and the **Duck Hunt 1 State Com Well No. 601H**. All wells will be drilled horizontally from a surface location in the NE/4 SE/4 (Unit I) of Section 1 to a bottom hole location in the SE/4 SE/4 (Unit P) of Section 12.

7. **Exhibit No. 1B** contains a Form C-102 for the two additional proposed wells. Centennial has been informed that the wells will be placed in the Antelope Ridge; Bone Spring, North Pool (Pool Code 2205). The C-102s reflects that the completed intervals for the two additional wells will remain within the standard offset required by the Statewide rules for oil wells.

8. **Exhibit 1C** contains the well proposal letters for both additional initial wells along with an AFE provided to all working interest owners, both those parties pooled pursuant to order R-20001 and those who are voluntarily committed to the wells.

9. The costs reflected in the Statement of Estimated Well Costs are consistent with what other operators have incurred for drilling similar horizontal wells in the area.

10. Pursuant to Order R-20001, p. 6, Paragraph 16, Centennial requests that the

Division apply the previously approved charges for supervision as \$7500 per month while drilling, and similarly requests that the 200 percent risk penalty for uncommitted interest owners apply to the two additional initial wells.

11. I provided the law firm of Holland & Hart LLP a list of names and addresses for notice. The names and last known addresses are included in Exhibit 3. In compiling these notice lists, 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. Certain letters were returned as undeliverable: Texas International Company and heirs of Rufus Sanders Ward. Notice was published directed to these parties.

12. **Exhibit 1-A through 1-C** were either prepared by me or compiled under my direction and supervision.

FURTHER AFFIANT SAYETH NOT.

Gavin Smith  
Gavin Smith

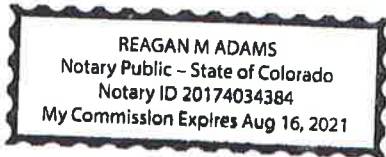
STATE OF Colorado )  
COUNTY OF Denver )

SUBSCRIBED and SWORN to before me this 14<sup>th</sup> day of November  
2018 by Gavin Smith.

Reagan M Adams  
NOTARY PUBLIC

My Commission Expires:

August 16, 2021



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

**IN THE MATTER OF THE HEARING  
CALLED BY THE OIL CONSERVATION  
DIVISION TO CONSIDER:**

**CASE NO. 16265  
ORDER NO. R-20001**

**APPLICATION OF CENTENNIAL RESOURCE PRODUCTION, LLC FOR A  
NON-STANDARD OIL SPACING AND PRORATION UNIT AND COMPULSORY  
POOLING, LEA COUNTY, NEW MEXICO.**

**ORDER OF THE DIVISION**

**BY THE DIVISION:**

This case came on for hearing at 8:15 a.m. on July 26, 2018, at Santa Fe, New Mexico, before Examiner William V. Jones. The case was again heard on August 9, 2018 and taken under advisement.

NOW, on this 1<sup>st</sup> day of October 2018, the Division Director, having considered the testimony, the record and the recommendations of the Examiner,

**FINDS THAT**

(1) Due public notice has been given and the Division has jurisdiction of this case and the subject matter.

(2) Cases No. 16265 and 16266 were consolidated at the hearing but separate orders will be issued.

(3) In Case No. 16265, Centennial Resource Production, LLC (the "Applicant") seeks approval of a 240-acre non-standard oil spacing and proration unit and project area (the "Unit") for oil and gas production from the Bone Spring formation, Antelope Ridge; Bone Spring, North (Pool Code 2205), comprising the E/2 SE/4 of Section 1, Township 23 South, Range 34 East and the E/2 E/2 of Section 12, Township 23 South, Range 34 East, NMPM, Lea County, New Mexico. Applicant further seeks an order pooling all uncommitted interests in the Unit for the Bone Spring formation.

(4) The Unit will be dedicated to the following "proposed well".

**Duck Hunt 1 State Com Well No. 601H, API No. 30-025-44963**

**BEFORE THE OIL CONSERVATION DIVISION  
Santa Fe, New Mexico  
Exhibit No. 1A  
Submitted by: Centennial Resource Development  
Hearing Date: November 15, 2018  
Case # 16265**

SHL: 2340 feet from the South line and 771 feet from the East line,  
(Unit I) of Section 1, Township 23 South, Range 34 East, NMPM.  
BHL: 100 feet from the South line and 330 feet from the East line  
(Unit P) of Section 12, Township 23 South, Range 34 East, NMPM.

(5) The proposed well is in an oil pool subject to Division Rule 19.15.15.9(A) NMAC, which provides for standard 40-acre units each comprising a governmental quarter-quarter section. The proposed Unit and project area consist of six adjacent quarter-quarter sections oriented north to south.

(6) Weldon Baird and the Beulah M. Baird Trust entered an appearance and pre-hearing statement and was represented at hearing and submitted exhibits. ConocoPhillips Company entered an appearance and was represented at the hearings. No other party appeared or otherwise opposed this application.

(7) Applicant appeared through counsel and presented the following land and technical evidence:

- (a) The Bone Spring formation in this area is suitable for development by horizontal drilling.
- (b) The proposed orientation of the horizontal well or wells from north to south is appropriate for the Unit.
- (c) All quarter-quarter sections to be included in the Unit are expected to be substantially productive in the Bone Spring formation, so that the Unit as requested will not impair correlative rights.
- (d) There are State and Fee lands within the Unit.
- (e) Applicant notified the Division at the August 9 hearing that Weldon Baird and the Beulah M. Baird Trust had leased its acreage and the lessee was negotiating with Applicant.
- (f) The well will be located on a common drilling pad with Well No. 602H which is the subject of companion Case No. 16266.
- (g) The application was submitted prior to the new horizontal well rule being in effect.
- (h) Notice by certified mail was provided to all uncommitted interest owners in the proposed Unit whose interests were evidenced by a conveyance instrument, either of record or known to Applicant when the Application was filed, and to heirs known to Applicant of deceased persons who appear as owners in such instruments.

- (i) Those potentially affected parties whose whereabouts could not be ascertained were noticed by publication as provided in Rule 19.15.4.12.B NMAC.

The Division Concludes That

(8) The proposed non-standard unit should be approved to enable Applicant to drill a horizontal well that will efficiently produce the reserves underlying the Unit, thereby preventing waste and protecting correlative rights.

(9) The completed interval for this horizontal oil well within the Unit would be non-standard under the pool rules but will be standard under Subsection C of 19.15.16.15 NMAC effective June 26, 2018.

(10) Two or more separately owned tracts are embraced within the Unit, and/or there are royalty interests and/or undivided interests in oil and gas minerals in one or more tracts included in the Unit that are separately owned.

(11) Applicant is owner of an oil and gas working interest within the Unit. Applicant has the right to drill and proposes to drill the proposed well to a common source of supply within the Unit at the described location.

(12) There are interest owners in the Unit that have not agreed to pool their interests.

(13) To avoid the drilling of unnecessary wells, protect correlative rights, prevent waste and afford to the owner of each interest in the Unit the opportunity to recover or receive without unnecessary expense a just and fair share of hydrocarbons, this application should be approved by pooling all uncommitted interests, whatever they may be, in the oil and gas within the Unit.

(14) Centennial Resource Production, LLC (OGRID 372165) should be designated the operator of the proposed well and the Unit.

(15) Infill wells within the Unit should be subject to Division Rules 19.15.13.9 NMAC through 19.15.13.10 NMAC, and to the terms and conditions of this order.

(16) Any pooled working interest owner who does not pay its share of estimated well costs of any well should have withheld from production from such well its share of reasonable well costs plus an additional 200% thereof as a reasonable charge for the risk involved in drilling the proposed wells.

(17) Reasonable charges for supervision (combined fixed rates) should be fixed at \$7500 per month, per well, while drilling and \$750 per month, per well, while producing, provided that these rates should be adjusted annually pursuant to the overhead adjustment provision of the COPAS form titled "Accounting Procedure-Joint Operations."



**IT IS THEREFORE ORDERED THAT**

(1) Pursuant to the application of Centennial Resource Production, LLC, a 240-acre non-standard oil spacing unit and project area (the "Unit") is hereby established for oil and gas production from the Bone Spring formation, Antelope Ridge; Bone Spring, North (Pool code 2205), comprising the E/2 SE/4 of Section 1, Township 23 South, Range 34 East and the E/2 E/2 of Section 12, Township 23 South, Range 34 East, NMPM, Lea County, New Mexico.

(2) All uncommitted interests, whatever they may be, in the oil and gas in the Bone Spring formation underlying the Unit, are hereby pooled.

(3) The Unit shall be dedicated to the following "proposed well":

**Duck Hunt 1 State Com Well No. 601H, API No. 30-025-44963**

SHL: 2340 feet from the South line and 771 feet from the East line,  
(Unit I) of Section 1, Township 23 South, Range 34 East, NMPM.

BHL: 100 feet from the South line and 330 feet from the East line  
(Unit P) of Section 12, Township 23 South, Range 34 East, NMPM.

The completed interval for this horizontal oil well within the Unit will be standard under Subsection C of 19.15.16.15 NMAC effective June 26, 2018.

(4) The operator of the Unit shall commence drilling the proposed well on or before October 31, 2019 and shall thereafter continue drilling the proposed well with due diligence to test the Bone Spring formation.

(5) In the event the operator does not commence drilling on or before October 31, 2019, Ordering Paragraphs (1) and (2) shall be of no effect, unless the operator obtains a time extension from the Division Director for good cause demonstrated by satisfactory evidence.

(6) The proposed well must be completed within 120 days after commencement of drilling, else Ordering Paragraphs (1) and (2) shall be of no further effect, and the Unit and project area created by this order shall terminate, unless operator requests in writing an extension of the time for completion of the proposed well for good cause shown by satisfactory evidence and the Division issues written approval. If the proposed well is not completed in all of the quarter-quarter sections included in the Unit then the operator shall apply to the Division for an amendment to this order to contract the Unit so that it includes only those quarter-quarter sections in which a well is completed.

(7) Upon final plugging and abandonment of the proposed well and any other well drilled on the Unit pursuant to Division Rule 19.15.13.9 NMAC, the pooled Unit shall terminate, unless this Order has been amended to authorize further operations.

(8) Infill wells within the Unit shall be subject to the terms and conditions of this order.

(9) Centennial Resource Production, LLC (OGRID 372165) is hereby designated the operator of the proposed well and the Unit.

(10) After pooling, uncommitted working interest owners are referred to as pooled working interest owners. ("Pooled working interest owners" are owners of working interests in the Unit, including unleased mineral interests, who are not parties to an operating agreement governing the Unit.) After the effective date of this order, the operator shall furnish the Division and each known pooled working interest owner in the Unit a separate itemized schedule of estimated costs of drilling, completing and equipping the proposed well ("well costs").

(11) Within 30 days from its receipt of the schedule of estimated well costs for any well, any pooled working interest owner shall have the right to pay its share of estimated well costs of such well to the operator in lieu of paying its share of reasonable well costs out of production as hereinafter provided, and any such owner who pays its share of estimated well costs as provided above for any well shall remain liable for operating costs but shall not be liable for risk charges for such well. Pooled working interest owners who elect not to pay their share of estimated well costs as provided in this paragraph shall thereafter be referred to as "non-consenting working interest owners."

(12) The operator shall furnish the Division and each known pooled working interest owner (including non-consenting working interest owners) an itemized schedule of actual well costs of each well within 90 days following completion of the proposed wells. If no objection to the actual well costs is received by the Division, and the Division has not objected, within 45 days following receipt of the schedule, the actual well costs shall be deemed to be the reasonable well costs. If there is an objection to actual well costs within the 45-day period, the Division will determine reasonable well costs after public notice and hearing.

(13) Within 60 days following determination of reasonable well costs for any well, any pooled working interest owner who has paid its share of estimated costs of such well or wells in advance as provided above shall pay to the operator its share of the amount that reasonable well costs exceed estimated well costs and shall receive from the operator the amount, if any, that the estimated well costs it has paid exceed its share of reasonable well costs.

(14) The operator is hereby authorized to withhold the following costs and charges from each non-consenting working interest owner's share of production from each well:

- (a) The proportionate share of reasonable well costs attributable to such interest; and

- (b) As a charge for the risk involved in drilling the well, 200% of the above costs.

(15) The operator shall distribute the costs and charges withheld from production, proportionately, to the parties who advanced the well costs.

(16) Reasonable charges for supervision (combined fixed rates) are hereby fixed at \$7500 per month, per well, while drilling and \$750 per month, per well, while producing, provided that these rates may, at the election of the operator, be adjusted annually pursuant to the overhead adjustment provisions of the COPAS form titled "*Accounting Procedure-Joint Operations.*" The operator is authorized to withhold from each pooled working interest owner's share of production from each well the proportionate share of both the supervision charges and the actual expenditures required for operating such well, not more than what are reasonable.

(17) During the cost recovery period, the operator shall furnish to the Division and to each known non-consenting pooled working interest owner, annually, and within 90 days after payout occurs, a schedule of all revenues attributable to each proposed well, and all charges for supervision and operating costs charged against such revenues. Operating costs shall include all reasonable costs incurred for the maintenance and operation of the well, except for "well costs" reported pursuant to requirements herein, that are properly chargeable to the joint account pursuant to COPAS procedures. If no objection to the operating costs is received by the Division, and the Division has not objected, within 45 days following receipt of any schedule, the costs shall be deemed to be the reasonable operating costs. If there is an objection to the accuracy or reasonableness of operating costs reported within the 45-day period, the Division will determine reasonable operating costs after public notice and hearing.

(18) Except as provided above, all proceeds of production from the proposed wells that are not disbursed for any reason shall be held for the account of the person or persons entitled thereto pursuant to the Oil and Gas Proceeds Payment Act (NMSA 1978 Sections 70-10-1 through 70-10-6, as amended). If not disbursed, such proceeds shall be turned over to the appropriate authority as and when required by the Uniform Unclaimed Property Act (NMSA 1978 Sections 7-8A-1 through 7-8A-31, as amended).

(19) Any unleased mineral interest shall be considered a seven-eighths (7/8) working interest and a one-eighth (1/8) royalty interest for allocating costs and charges under this Order. Any costs that are to be paid out of production shall be withheld only from the working interests' share of production, and no costs shall be withheld from production attributable to royalty interests.

(20) Should all the parties to this compulsory pooling order reach voluntary agreement after entry of this order, this order shall thereafter be of no further effect.

(21) The operator of the well and the Unit shall notify the Division in writing of the subsequent voluntary agreement of any party subject to the compulsory pooling provisions of this order.

(22) Jurisdiction of this case is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.



STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

*Heather Riley*  
HEATHER RILEY  
Director

District I  
1625 N. French Dr., Hobbs, NM 88240  
Phone: (575) 393-6161 Fax: (575) 393-0720  
District II  
811 S. First St., Artesia, NM 88210  
Phone: (575) 748-1283 Fax: (575) 748-9720  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
Phone: (505) 334-6178 Fax: (505) 334-6170  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505  
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico  
Energy, Minerals & Natural Resources Department  
OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

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

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number		2 Pool Code		3 Pool Name	
4 Property Code		5 Property Name		6 Well Number	
		DUCK HUNT 1 STATE COM		#301H	
7 OGRID No.		8 Operator Name		9 Elevation	
		CENTENNIAL RESOURCE PRODUCTION, LLC		3364.5'	

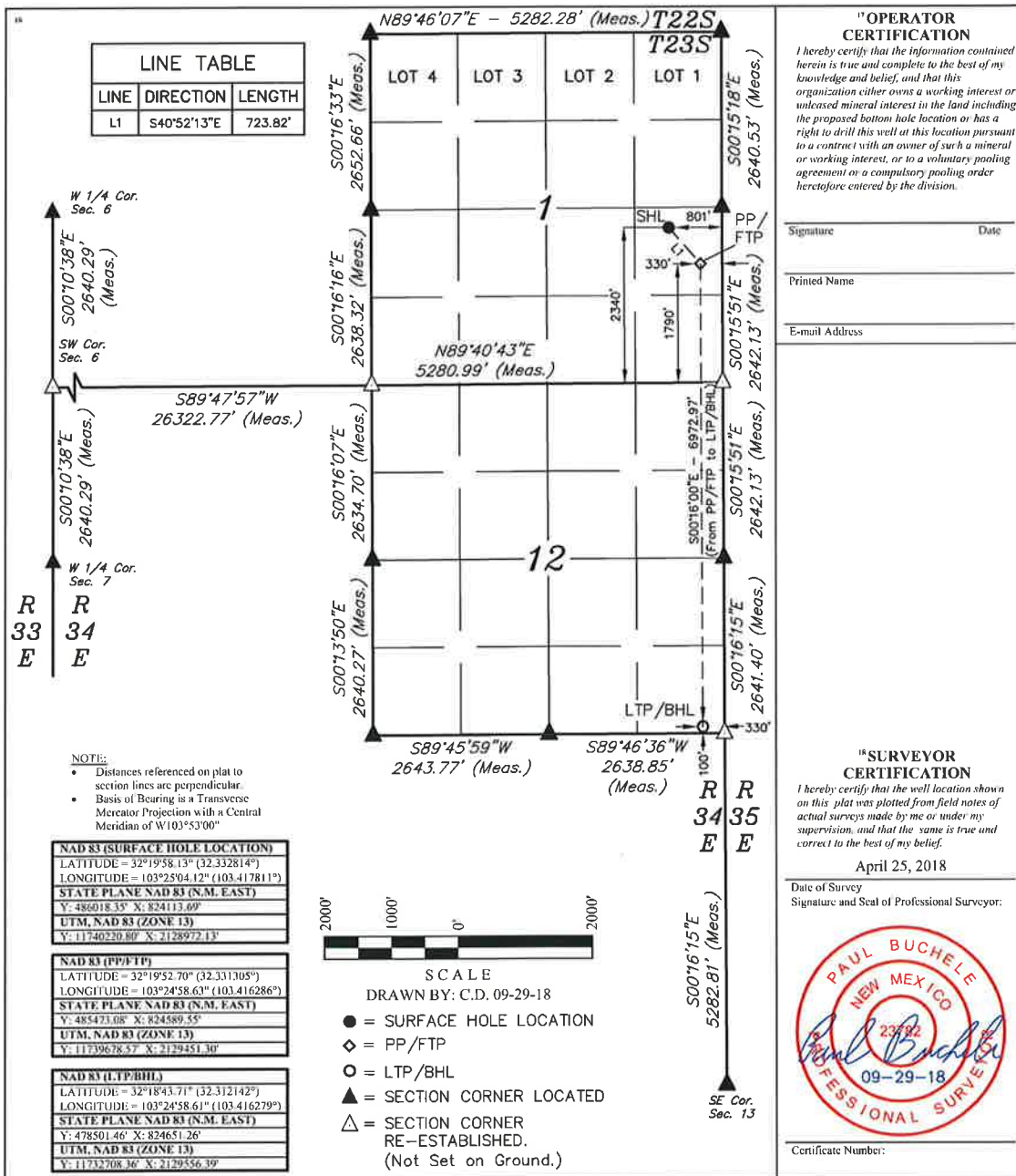
10 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
1	1	23S	34E		2340	SOUTH	801	EAST	LEA

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	12	23S	34E		100	SOUTH	330	EAST	LEA
12 Dedicated Acres		13 Joint or Infill		14 Consolidation Code		15 Order No.			
240									

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.



BEFORE THE OIL CONSERVATION DIVISION  
Santa Fe, New Mexico  
Exhibit No. 1B  
Submitted by: Centennial Resource Development  
Hearing Date: November 15, 2018  
Case # 16265

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  
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1220 S. St. Francis Dr., Santa Fe, NM 87505  
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State of New Mexico  
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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		6 Well Number	
		DUCK HUNT 1 STATE COM		#501H	
7 OGRID No.		8 Operator Name		9 Elevation	
		CENTENNIAL RESOURCE PRODUCTION, LLC		3364.3'	

10 Surface Location									
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	I	23S	34E		2340	SOUTH	771	EAST	LEA

11 Bottom Hole Location If Different From Surface									
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	12	23S	34E		100	SOUTH	330	EAST	LEA
12 Dedicated Acres		13 Joint or Infill		14 Consolidation Code		15 Order No.			
240									

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.

LINE TABLE		
LINE	DIRECTION	LENGTH
L1	S39°00'58"E	704.69'

**NOTE:**

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

NAD 83 (SURFACE HOLE LOCATION)	
LATITUDE = 32°19'58.13" (32.332815°)	LONGITUDE = 103°25'03.77" (103.417714°)
STATE PLANE NAD 83 (N.M. EAST)	
Y: 486018.65' X: 824143.69'	UTM, NAD 83 (ZONE 13)
Y: 11740221.29' X: 2129002.11'	

NAD 83 (PP/FTP)	
LATITUDE = 32°19'52.70" (32.331305°)	LONGITUDE = 103°24'58.63" (103.416286°)
STATE PLANE NAD 83 (N.M. EAST)	
Y: 485473.08' X: 824589.55'	UTM, NAD 83 (ZONE 13)
Y: 11739678.57' X: 2129451.30'	

NAD 83 (LTP/BHL)	
LATITUDE = 32°18'43.71" (32.312142°)	LONGITUDE = 103°24'58.61" (103.416279°)
STATE PLANE NAD 83 (N.M. EAST)	
Y: 478501.46' X: 824651.26'	UTM, NAD 83 (ZONE 13)
Y: 11732708.36' X: 2129556.39'	

**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.

April 25, 2018

Date of Survey  
Signature and Seal of Professional Surveyor:

Certificate Number: \_\_\_\_\_



October 1, 2018

RE: Duck Hunt 1 State Com #301H  
SHL: 2,340' FSL Sec. 1 & 831' FEL Sec. 1 T23S R34E  
BHL: 100' FSL Sec. 12 & 330' FEL Sec. 12 T23S R34E  
Lea County, New Mexico

To Whom it May Concern:

Centennial Resource Production, LLC ("CRP") proposes to drill and complete the Duck Hunt State Com #301H as a horizontal well to test the First Bone Spring Formation at a TVD of 9,750 feet. The E/2 E/2 of the referenced Section 12 and the E/2 SE/4 of Section 1 will be dedicated to the well as the proration unit being a total of 240 acres. Please see the enclosed AFE in the amount of \$10,759,088.00

Upon your response we will send a Joint Operating Agreement ("JOA") with an effective date of September 1, 2018. The JOA contains a proposed overhead rate of \$7500 per day for drilling and \$750 per day for producing and provides for a 100%/300%/300% non-consent penalty.

This well will be drilled with the previously proposed Duck Hunt State Com #601H from a three well pad in Section 1, T23S R34E, Lea County, New Mexico.

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](mailto:carl.messina@cdevinc.com). Should you have any questions, please call me at (720) 499-1411.

Best Regards

A handwritten signature in blue ink that reads "Carl Messina".

Carl Messina  
Land Coordinator



THE UNDERSIGNED HEREBY ELECTS **TO PARTICIPATE** IN THE CAPTIONED DUCK HUNT 1 STATE COM #301H WELLBORE AND TO WAIVE THE NEED FOR A COMPLETION ELECTION.

AGREED TO and ACCEPTED this \_\_\_\_ day of \_\_\_\_\_, 2018.

Owner Name: \_\_\_\_\_

Signature: \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

THE UNDERSIGNED HEREBY ELECTS **NOT TO PARTICIPATE** IN THE CAPTIONED DUCK HUNT 1 STATE COM #301H WELLBORE, AND TO GO NONCONSENT.

AGREED TO and ACCEPTED this \_\_\_\_ day of \_\_\_\_\_, 2018.

Owner Name: \_\_\_\_\_

Signature: \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_





## Authorization for Expenditure

<b>AFE Number</b>	400157	<b>Property #</b>	
<b>AFE Description</b>		<b>Property Name</b>	Well: Duck Hunt 1 State Com 301H
<b>AFE Originating Date</b>		<b>State</b>	New Mexico
<b>AFE Type</b>	Drill and Complete	<b>County</b>	Lea
<b>Operator</b>	Centennial Resource Production, LLC	<b>Field</b>	Delaware Basin - TX

**Non Operator Approval**

**AFE Total (\$)** \$10,759,088

Company \_\_\_\_\_

Approved By \_\_\_\_\_

Title \_\_\_\_\_

Date \_\_\_\_\_

**Cost Estimates**

Description	Total (\$)
IDC - PERMITS,LICENSES,ETC	\$8,500.00
IDC - STAKING & SURVEYING	\$20,000.00
IDC - LEGAL, TITLE SERVICES	\$20,000.00
IDC - SURFACE DAMAGE / ROW	\$60,000.00
IDC - PERMANENT EASEMENT	\$.00
IDC - ROAD, LOCATIONS, PITS	\$137,500.00
IDC - RIG MOB / TRUCKING	\$175,000.00
IDC - RIG MOB / STANDBY RATE	\$145,128.00
IDC - DAYWORK CONTRACT	\$551,691.00
IDC - FOOTAGE CONTRACT	\$.00
IDC - DIRECTNL DRILL & SURVEY	\$236,988.00
IDC - CONDUCTOR HOLE & SERVICE	\$30,000.00
IDC - WIRELINE SVCS CASED&OPEN	\$.00
IDC - BITS, TOOLS, STABILIZERS	\$157,030.00
IDC - FUEL / POWER	\$85,631.00
IDC - RIG WATER	\$10,000.00

IDC - MUD/CHEMICALS/ACIDIZING	\$135,578.00
IDC - MUD LOGGING	\$11,498.00
IDC - INSPECTION, TESTING & REPAIR	\$55,500.00
IDC - CORE ANALYSIS	\$ .00
IDC - OPEN/CASED HOLE LOGGING	\$ .00
IDC - CEMENT SERV/FLOAT EQUIP	\$110,000.00
IDC - CASING CREW & TOOLS	\$39,500.00
IDC - CONTRACT LABOR/ROUSTABOUT	\$30,000.00
IDC - MATERIALS & SUPPLIES	\$6,000.00
IDC - TRUCKING/VACUUM/ TRANSP	\$50,000.00
IDC - SOLIDS CONTROL/ CLOSED LOOP SYSTEM	\$39,326.00
IDC - DISPOSAL	\$195,000.00
IDC - WELLHEAD PREPARE/REPAIR	\$27,000.00
IDC - FISHING TOOLS & SERVICES	\$ .00
IDC - RENTAL EQUIPMENT	\$66,109.00
IDC - MANCAMP	\$39,961.00
IDC - WELLSITE SUPERVISION	\$97,443.00
IDC - SUPERVISION/ENGINEERING	\$ .00
IDC - SAFETY / ENVIRONMENTAL	\$17,000.00
IDC - OVERHEAD	\$2,500.00
IDC - WELL CONTROL INSURANCE	\$12,390.00
IDC - CONTINGENCY	\$240,000.00
TDC - CASING - CONDUCTOR	\$ .00
TDC - CASING - SURFACE	\$79,772.00
TDC - CASING - INTERMEDIATE - 9 5/8	\$176,974.00
TDC - CASING - INTERMEDIATE 2 - 7 5/8	\$ .00
TDC - CASING - PRODUCTION	\$329,052.00
TDC - WELLHEAD EQUIPMENT	\$65,000.00
TDC - PACKER/DOWNHOLE TOOLS	\$28,000.00
TDC - CONTINGENCY	\$ .00
ICC - STAKING & SURVEYING	\$ .00
ICC - ROAD, LOCATIONS, PITS	\$11,000.00

ICC - COMPLETION RIG	\$ .00
ICC - WIRELINE OPEN/CASED HOLE	\$46,750.00
ICC - FUEL / POWER	\$467,500.00
ICC - COILED TUBING	\$241,500.00
ICC - CEMENTING & SERVICES	\$ .00
ICC - WATER DISPOSAL/VACUUM TRUCK	\$30,261.00
ICC - INSPECTION & TESTING	\$ .00
ICC - TRUCKING	\$13,125.00
ICC - ELECTRIC LOGGING / PERFORATING	\$546,911.00
ICC - COMPLETION FLUIDS	\$7,500.00
ICC - CASING CREW AND TOOLS	\$ .00
ICC - WELL STIMULATION/FRACTUR	\$2,470,210.00
ICC - CONTRACT LABOR/ROUSTABOUT	\$20,000.00
ICC - WATER HANDLING	\$165,660.00
ICC - SOURCE WATER	\$581,250.00
ICC - WELLHEAD/FRACTREE REPAIR	\$35,000.00
ICC - FISHING TOOLS & SERVICES	\$ .00
ICC - COMMUNICATIONS	\$ .00
ICC - RENTAL EQUIPMENT	\$224,400.00
ICC - WELLSITE SUPERVISION	\$182,700.00
ICC - SUPERVISION/ENGINEERING	\$7,500.00
ICC - SAFETY / ENVIRONMENTAL	\$15,000.00
ICC - OVERHEAD	\$10,000.00
ICC - WELL CONTROL INSURANCE	\$ .00
ICC - CONTINGENCY	\$ .00
ICC - COMPANY LABOR	\$ .00
TCC - CASING - PRODUCTION	\$ .00
TCC - PROD LINER & EQUIPMENT	\$ .00
TCC - PACKER/DOWNHOLE TOOLS	\$ .00
TCC - WELLHEAD EQUIPMENT	\$51,750.00
FAC - SURFACE DAMAGE / ROW	\$ .00
FAC - PEMANENT EASEMENT	\$80,000.00

FAC - ROAD LOCATIONS PITS	\$20,000.00
FAC - MATERIALS & SUPPLIES	\$ .00
FAC - TRANSPORTATION TRUCKING	\$50,000.00
FAC - RENTAL EQUIPMENT	\$30,000.00
FAC - FUEL / POWER	\$ .00
FAC - WATER DISPOSAL / SWD	\$ .00
FAC - WASTE DISPOSAL	\$ .00
FAC - INSPECTION & TESTING	\$5,000.00
FAC - CONTRACT LABOR / ROUSTAB	\$225,000.00
FAC - FRAC TANK RENTAL	\$ .00
FAC - SUPERVISION	\$15,000.00
FAC - CONSULTING SERVICES	\$ .00
FAC - INJECTION PUMP	\$ .00
FAC - P-LINE F-LINE LINEPIPE	\$200,000.00
FAC - TANK BATTERY	\$175,000.00
FAC - HEATER TREATER/SEPERATOR	\$155,000.00
FAC - DEHYDRATOR EQUIPMENT	\$ .00
FAC - VALVES FITTINGS & PIPE	\$225,000.00
FAC - CIRCULATING TRNSFER PUMP	\$15,000.00
FAC - METER & LACT	\$25,000.00
FAC - COMPRESSOR	\$ .00
FAC - ELECTRICAL SUPPLIES	\$180,000.00
FAC - COMM TELEMETRY & AUTOMAT	\$50,000.00
FAC - FLARE/COMBUSTER	\$50,000.00
FAC - SAFETY / ENVIRONMENTAL	\$10,000.00
FAC - OVERHEAD	\$ .00
FAC - INSURANCE	\$ .00
FAC - COMPANY LABOR	\$ .00
FAC - CONTINGENCY	\$100,000.00
IFC - ROADS LOCATIONS/PITS	\$5,000.00
IFC - COMPLETION RIG	\$12,000.00
IFC - WIRELINE OPEN/CASED HOLE	\$ .00



IFC - FUEL / POWER	\$ .00
IFC - COILED TUBING	\$ .00
IFC - CEMENTING & SERVICES	\$ .00
IFC - FRAC WATER RECOVERY	\$175,000.00
IFC - INSPECTION & TESTING	\$3,500.00
IFC - TRUCKING/VACUUM/TRANSP	\$10,000.00
IFC - ELECTRIC LOGGING/PERFORATING	\$ .00
IFC - COMPLETION FLUID	\$10,000.00
IFC - CASING CREW AND TOOLS	\$ .00
IFC - CONTRACT LABOR/ROUSTABOUT	\$12,000.00
IFC - MATERIAL & SUPPLIES	\$2,000.00
IFC - WELL TESTING / FLOWBACK	\$170,000.00
IFC - WELLHEAD/FRAC TREE REPAIR	\$ .00
IFC - FISHING TOOLS & SERVICES	\$ .00
IFC - RENTAL EQUIPMENT	\$8,000.00
IFC - WELLSITE SUPERVISION	\$5,000.00
IFC - SAFETY / ENVIRONMENTAL	\$2,500.00
IFC - CONTINGENCY	\$30,000.00
IFC - COMPANY LABOR	\$ .00
IFC - SWABBING	\$ .00
TFC - TUBING	\$60,000.00
TFC - SUCKER RODS & ACCESSORY	\$ .00
TFC - DOWNHOLE ARTIFICIAL LIFT EQPT	\$25,000.00
TFC - SUBSURFACE PUMPS	\$ .00
TFC - PROD LINER & EQUIPMENT	\$ .00
TFC - PACKER/DOWNHOLE TOOLS	\$ .00
TFC - PUMPING UNITS/SURFACE LIFT EQPT	\$ .00
TFC - WELLHEAD EQUIPMENT	\$ .00
TFC - VALVES/CONNECTIONS/FITTINGS	\$ .00
TFC - MEASUREMENT EQUIPMENT	\$ .00
TFC - COMM, TELEMETRY & AUTOMATION	\$ .00
TFC - CONTRACTOR LABOR INSTALL	\$ .00

TFC - CONTINGENCY	\$ .00
TFC - COMPANY LABOR	\$ .00



October 1, 2018

RE: Duck Hunt 1 State Com #501H  
SHL: 2,340' FSL Sec. 1 & 801' FEL Sec. 1 T23S R34E  
BHL: 100' FSL Sec. 12 & 330' FEL Sec. 12 T23S R34E  
Lea County, New Mexico

To Whom it May Concern:

Centennial Resource Production, LLC ("CRP") proposes to drill and complete the Duck Hunt State Com #501H as a horizontal well to test the Second Bone Spring Formation at a TVD of 10,500 feet. The E/2 E/2 of the referenced Section 12 and the E/2 SE/4 of Section 1 will be dedicated to the well as the proration unit being a total of 240 acres. Please see the enclosed AFE in the amount of \$10,896,376.00

Upon your response we will send a Joint Operating Agreement ("JOA") with an effective date of September 1, 2018. The JOA contains a proposed overhead rate of \$7500 per day for drilling and \$750 per day for producing and provides for a 100%/300%/300% non-consent penalty.

This well will be drilled with the previously proposed Duck Hunt State Com #601H from a three well pad in Section 1, T23S R34E, Lea County, New Mexico.

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](mailto:carl.messina@cdevinc.com). Should you have any questions, please call me at (720) 499-1411.

Best Regards

A handwritten signature in blue ink that reads "Carl Messina".

Carl Messina  
Land Coordinator



THE UNDERSIGNED HEREBY ELECTS **TO PARTICIPATE** IN THE CAPTIONED DUCK HUNT 1 STATE COM #501H WELLBORE AND TO WAIVE THE NEED FOR A COMPLETION ELECTION.

AGREED TO and ACCEPTED this \_\_\_\_ day of \_\_\_\_\_, 2018.

**Owner Name:** \_\_\_\_\_

**Signature:** \_\_\_\_\_

**By:** \_\_\_\_\_

**Title:** \_\_\_\_\_

THE UNDERSIGNED HEREBY ELECTS **NOT TO PARTICIPATE** IN THE CAPTIONED DUCK HUNT 1 STATE COM #501H WELLBORE, AND TO GO NONCONSENT.

AGREED TO and ACCEPTED this \_\_\_\_ day of \_\_\_\_\_, 2018.

**Owner Name:** \_\_\_\_\_

**Signature:** \_\_\_\_\_

**By:** \_\_\_\_\_

**Title:** \_\_\_\_\_





## Authorization for Expenditure

<b>AFE Number</b>	400158	<b>Property #</b>	
<b>AFE Description</b>		<b>Property Name</b>	Well: Duck Hunt 1 State Com 501H
<b>AFE Originating Date</b>		<b>State</b>	New Mexico
<b>AFE Type</b>	Drill and Complete	<b>County</b>	Lea
<b>Operator</b>	Centennial Resource Production, LLC	<b>Field</b>	Delaware Basin - TX

**Non Operator Approval**

**AFE Total (\$)**

<b>\$10,896,376</b>
---------------------

Company \_\_\_\_\_

Approved By \_\_\_\_\_

Title \_\_\_\_\_

Date \_\_\_\_\_

**Cost Estimates**

Description	Total (\$)
IDC - PERMITS,LICENSES,ETC	\$8,500.00
IDC - STAKING & SURVEYING	\$20,000.00
IDC - LEGAL, TITLE SERVICES	\$20,000.00
IDC - SURFACE DAMAGE / ROW	\$60,000.00
IDC - PERMANENT EASEMENT	\$.00
IDC - ROAD, LOCATIONS, PITS	\$137,500.00
IDC - RIG MOB / TRUCKING	\$175,000.00
IDC - RIG MOB / STANDBY RATE	\$145,128.00
IDC - DAYWORK CONTRACT	\$551,691.00
IDC - FOOTAGE CONTRACT	\$.00
IDC - DIRECTNL DRILL & SURVEY	\$236,988.00
IDC - CONDUCTOR HOLE & SERVICE	\$30,000.00
IDC - WIRELINE SVCS CASED&OPEN	\$.00
IDC - BITS, TOOLS, STABILIZERS	\$157,030.00
IDC - FUEL / POWER	\$85,631.00
IDC - RIG WATER	\$10,000.00

IDC - MUD/CHEMICALS/ACIDIZING	\$135,578.00
IDC - MUD LOGGING	\$11,498.00
IDC - INSPECTION, TESTING & REPAIR	\$55,500.00
IDC - CORE ANALYSIS	\$ .00
IDC - OPEN/CASED HOLE LOGGING	\$ .00
IDC - CEMENT SERV/FLOAT EQUIP	\$110,000.00
IDC - CASING CREW & TOOLS	\$39,500.00
IDC - CONTRACT LABOR/ROUSTABOUT	\$30,000.00
IDC - MATERIALS & SUPPLIES	\$6,000.00
IDC - TRUCKING/VACUUM/ TRANSP	\$50,000.00
IDC - SOLIDS CONTROL/ CLOSED LOOP SYSTEM	\$39,326.00
IDC - DISPOSAL	\$195,000.00
IDC - WELLHEAD PREPARE/REPAIR	\$27,000.00
IDC - FISHING TOOLS & SERVICES	\$ .00
IDC - RENTAL EQUIPMENT	\$66,109.00
IDC - MANCAMP	\$39,961.00
IDC - WELLSITE SUPERVISION	\$97,443.00
IDC - SUPERVISION/ENGINEERING	\$ .00
IDC - SAFETY / ENVIRONMENTAL	\$17,000.00
IDC - OVERHEAD	\$2,500.00
IDC - WELL CONTROL INSURANCE	\$12,390.00
IDC - CONTINGENCY	\$240,000.00
TDC - CASING - CONDUCTOR	\$ .00
TDC - CASING - SURFACE	\$79,772.00
TDC - CASING - INTERMEDIATE - 9 5/8	\$176,974.00
TDC - CASING - INTERMEDIATE 2 - 7 5/8	\$ .00
TDC - CASING - PRODUCTION	\$329,052.00
TDC - WELLHEAD EQUIPMENT	\$65,000.00
TDC - PACKER/DOWNHOLE TOOLS	\$28,000.00
TDC - CONTINGENCY	\$ .00
ICC - STAKING & SURVEYING	\$ .00
ICC - ROAD, LOCATIONS, PITS	\$11,000.00

ICC - COMPLETION RIG	\$ .00
ICC - WIRELINE OPEN/CASED HOLE	\$46,750.00
ICC - FUEL / POWER	\$481,250.00
ICC - COILED TUBING	\$247,940.00
ICC - CEMENTING & SERVICES	\$ .00
ICC - WATER DISPOSAL/VACUUM TRUCK	\$30,765.00
ICC - INSPECTION & TESTING	\$ .00
ICC - TRUCKING	\$13,125.00
ICC - ELECTRIC LOGGING / PERFORATING	\$561,861.00
ICC - COMPLETION FLUIDS	\$7,500.00
ICC - CASING CREW AND TOOLS	\$ .00
ICC - WELL STIMULATION/FRACTUR	\$2,542,864.00
ICC - CONTRACT LABOR/ROUSTABOUT	\$20,000.00
ICC - WATER HANDLING	\$169,400.00
ICC - SOURCE WATER	\$596,750.00
ICC - WELLHEAD/FRACTREE REPAIR	\$35,000.00
ICC - FISHING TOOLS & SERVICES	\$ .00
ICC - COMMUNICATIONS	\$ .00
ICC - RENTAL EQUIPMENT	\$231,000.00
ICC - WELLSITE SUPERVISION	\$185,850.00
ICC - SUPERVISION/ENGINEERING	\$7,500.00
ICC - SAFETY / ENVIRONMENTAL	\$15,000.00
ICC - OVERHEAD	\$10,000.00
ICC - WELL CONTROL INSURANCE	\$ .00
ICC - CONTINGENCY	\$ .00
ICC - COMPANY LABOR	\$ .00
TCC - CASING - PRODUCTION	\$ .00
TCC - PROD LINER & EQUIPMENT	\$ .00
TCC - PACKER/DOWNHOLE TOOLS	\$ .00
TCC - WELLHEAD EQUIPMENT	\$51,750.00
FAC - SURFACE DAMAGE / ROW	\$ .00
FAC - PERMANENT EASEMENT	\$80,000.00

FAC - ROAD LOCATIONS PITS	\$20,000.00
FAC - MATERIALS & SUPPLIES	\$.00
FAC - TRANSPORTATION TRUCKING	\$50,000.00
FAC - RENTAL EQUIPMENT	\$30,000.00
FAC - FUEL / POWER	\$.00
FAC - WATER DISPOSAL / SWD	\$.00
FAC - WASTE DISPOSAL	\$.00
FAC - INSPECTION & TESTING	\$5,000.00
FAC - CONTRACT LABOR / ROUSTAB	\$225,000.00
FAC - FRAC TANK RENTAL	\$.00
FAC - SUPERVISION	\$15,000.00
FAC - CONSULTING SERVICES	\$.00
FAC - INJECTION PUMP	\$.00
FAC - P-LINE F-LINE LINEPIPE	\$200,000.00
FAC - TANK BATTERY	\$175,000.00
FAC - HEATER TREATER/SEPERATOR	\$155,000.00
FAC - DEHYDRATOR EQUIPMENT	\$.00
FAC - VALVES FITTINGS & PIPE	\$225,000.00
FAC - CIRCULATING TRNSFER PUMP	\$15,000.00
FAC - METER & LACT	\$25,000.00
FAC - COMPRESSOR	\$.00
FAC - ELECTRICAL SUPPLIES	\$180,000.00
FAC - COMM TELEMETRY & AUTOMAT	\$50,000.00
FAC - FLARE/COMBUSTER	\$50,000.00
FAC - SAFETY / ENVIRONMENTAL	\$10,000.00
FAC - OVERHEAD	\$.00
FAC - INSURANCE	\$.00
FAC - COMPANY LABOR	\$.00
FAC - CONTINGENCY	\$100,000.00
IFC - ROADS LOCATIONS/PITS	\$5,000.00
IFC - COMPLETION RIG	\$12,000.00
IFC - WIRELINE OPEN/CASED HOLE	\$.00

IFC - FUEL / POWER	\$ .00
IFC - COILED TUBING	\$ .00
IFC - CEMENTING & SERVICES	\$ .00
IFC - FRAC WATER RECOVERY	\$175,000.00
IFC - INSPECTION & TESTING	\$3,500.00
IFC - TRUCKING/VACUUM/TRANSP	\$10,000.00
IFC - ELECTRIC LOGGING/PERFORATING	\$ .00
IFC - COMPLETION FLUID	\$10,000.00
IFC - CASING CREW AND TOOLS	\$ .00
IFC - CONTRACT LABOR/ROUSTABOUT	\$12,000.00
IFC - MATERIAL & SUPPLIES	\$2,000.00
IFC - WELL TESTING / FLOWBACK	\$170,000.00
IFC - WELLHEAD/FRAC TREE REPAIR	\$ .00
IFC - FISHING TOOLS & SERVICES	\$ .00
IFC - RENTAL EQUIPMENT	\$8,000.00
IFC - WELLSITE SUPERVISION	\$5,000.00
IFC - SAFETY / ENVIRONMENTAL	\$2,500.00
IFC - CONTINGENCY	\$30,000.00
IFC - COMPANY LABOR	\$ .00
IFC - SWABBING	\$ .00
TFC - TUBING	\$60,000.00
TFC - SUCKER RODS & ACCESSORY	\$ .00
TFC - DOWNHOLE ARTIFICIAL LIFT EQPT	\$25,000.00
TFC - SUBSURFACE PUMPS	\$ .00
TFC - PROD LINER & EQUIPMENT	\$ .00
TFC - PACKER/DOWNHOLE TOOLS	\$ .00
TFC - PUMPING UNITS/SURFACE LIFT EQPT	\$ .00
TFC - WELLHEAD EQUIPMENT	\$ .00
TFC - VALVES/CONNECTIONS/FITTINGS	\$ .00
TFC - MEASUREMENT EQUIPMENT	\$ .00
TFC - COMM, TELEMETRY & AUTOMATION	\$ .00
TFC - CONTRACTOR LABOR INSTALL	\$ .00

TFC - CONTINGENCY	\$ .00
TFC - COMPANY LABOR	\$ .00

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

**APPLICATION OF CENTENNIAL RESOURCE PRODUCTION, LLC  
TO RE-OPEN CASE NO. 16265 TO ADD ADDITIONAL INITIAL WELLS  
UNDER THE TERMS OF COMPULSORY POOLING ORDER  
R-20001 LEA COUNTY, NEW MEXICO.**

**CASE NO. 16265 (re-opened)**

**HEARING AFFIDAVIT OF JOHN HARPER**

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

1. My name is John Harper and 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 and my credentials have been accepted by the Division and made a matter of public record.
3. I am familiar with the application filed by Centennial in this case, and I have conducted a geologic study of the Bone Spring formation underlying the subject acreage.
4. Centennial seeks to add two additional initial wells, targeting the First and the Second Bone Spring intervals.
5. **Exhibit 2A** identifies the wells that I used to construct a stratigraphic cross-section map for both the First and Second Bone Spring intervals. I chose these wells because they are representative of the geology of the area.
6. **Exhibit 2B** contains a subsea structure map that I prepared for the First Bone Spring interval with contour lines every 50 feet. The proposed wellbore path is denoted by a thin black dashed line. Structure control points are shown adjacent to their respected well. The First Bone Spring



in this area is gently dipping to the south and I do not observe any faulting, pinchouts, or other geologic impediments to developing this targeted interval with horizontal wells.

7. **Exhibit 2C** contains a stratigraphic cross section for the First Bone Spring interval using the representative wells depicted in blue on Exhibit 2A. Each well in the cross-section contains gamma ray and resistivity logs. The proposed target interval in the First Bone Spring interval is identified with a red bracket. This cross-section demonstrates that the targeted interval extends across the subject acreage.

8. **Exhibit 2D** contains a subsea structure map that I prepared for the Second Bone Spring interval with contour lines every 50 feet. The proposed wellbore path is denoted by a thin black dashed line. Structure control points are shown adjacent to their respected well. The Second Bone Spring in this area is gently dipping to the south and I do not observe any faulting, pinchouts, or other geologic impediments to developing this targeted interval with horizontal wells.

9. **Exhibit 2E** contains a stratigraphic cross section for the Second Bone Spring interval using the representative wells depicted in blue on Exhibit 2A. Each well in the cross-section contains gamma ray and resistivity logs. The proposed target interval in the Second Bone Spring interval is identified with a red bracket. This cross-section demonstrates that the targeted interval extends across the subject acreage.


10. The north to south orientation for the proposed wells in the First and Second Bone Spring interval will place the wells perpendicular to the known stress direction in the subject area and is appropriate to efficiently and effectively develop the targeted interval under the subject acreage.

11. My geologic study demonstrates that both the First and Second Bone Spring intervals underlying the subject acreage is suitable for development with horizontal wells, that the



acreage comprising the proposed horizontal spacing units will contribute more-or-less equally to the production from the wellbores, and the granting of these consolidated applications is in the best interest of conservation, the prevention of waste, and protection of correlative rights.

FURTHER AFFIANT SAYETH NOT.

  
\_\_\_\_\_  
John Harper

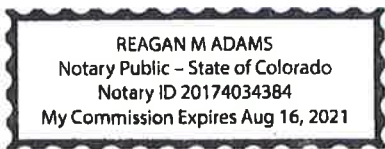
STATE OF Colorado )  
COUNTY OF Denver )

SUBSCRIBED and SWORN to before me this 14<sup>th</sup> day of November 2018 by John Harper.

  
\_\_\_\_\_  
NOTARY PUBLIC

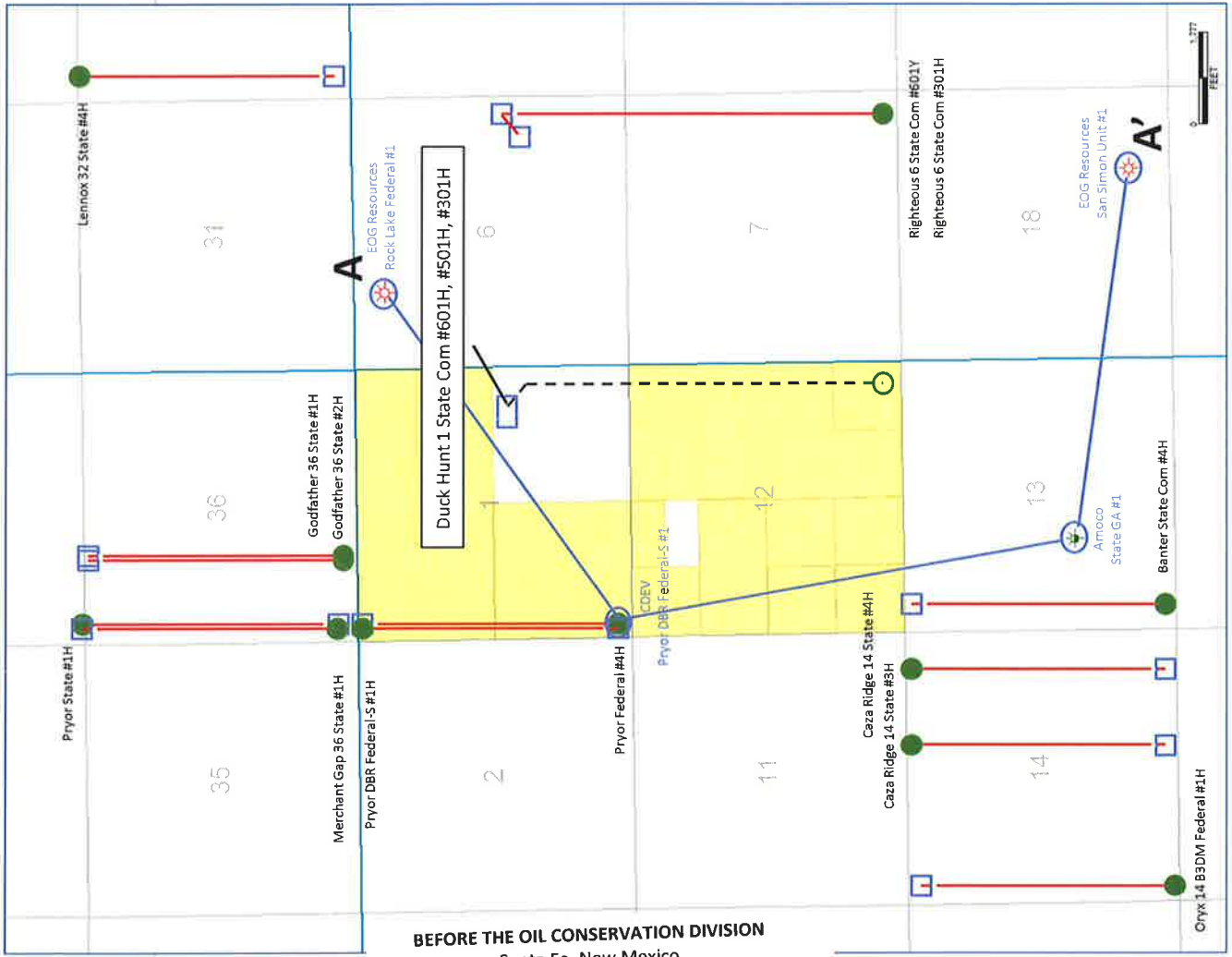
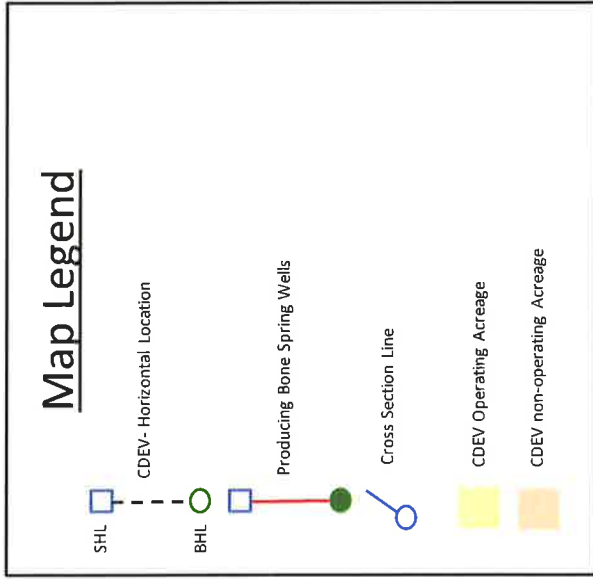
My Commission Expires:

August 16, 2021



# Bone Spring Pool

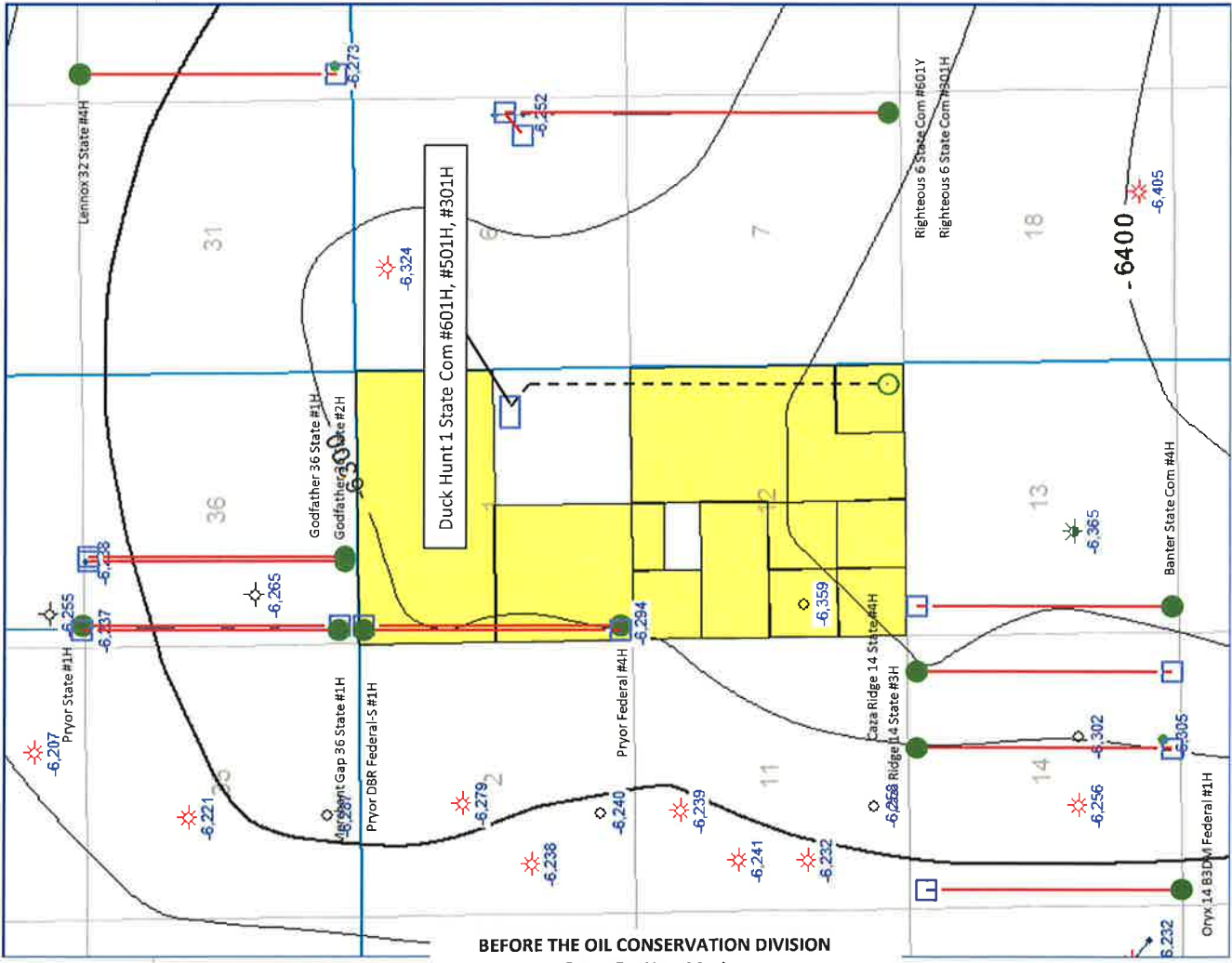
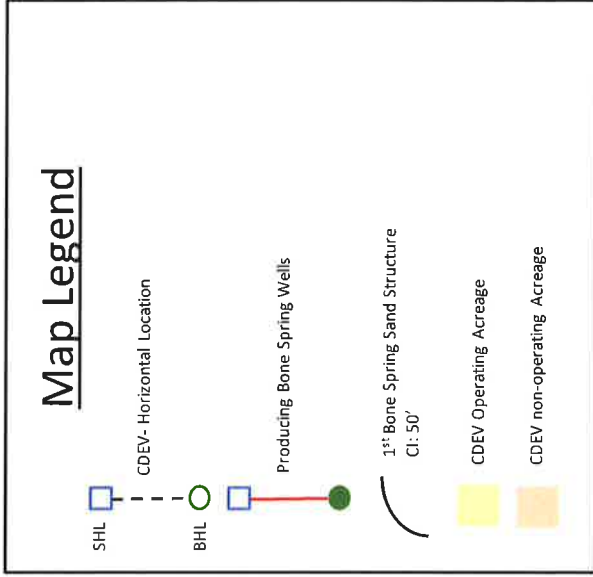
## Cross Section Map



BEFORE THE OIL CONSERVATION DIVISION  
 Santa Fe, New Mexico  
**Exhibit No. 2A**  
 Submitted by: Centennial Resource Development  
 Hearing Date: November 15, 2018  
 Case # 16265

# Bone Spring Pool

## 1st Bone Spring Sand Structure Map



BEFORE THE OIL CONSERVATION DIVISION  
 Santa Fe, New Mexico  
 Exhibit No. 2B  
 Submitted by: Centennial Resource Development  
 Hearing Date: November 15, 2018  
 Case # 16265

**A**

30025901900000

ENRON OIL & GAS CO  
ROCK LAKE 5 FEDERA 1

TWP: 23S - Range 35E - Sec. 6

<1.55M>

30025420930000

GMT EXPLORATION COMPANY LLC  
PRYOR DBR FEDERAL-S 1H

TWP: 23S - Range 34E - Sec. 1

<1.69M>

30025256220000

AMOCC PROD CO  
STATE GA 1

TWP: 23S - Range 34E - Sec. 13

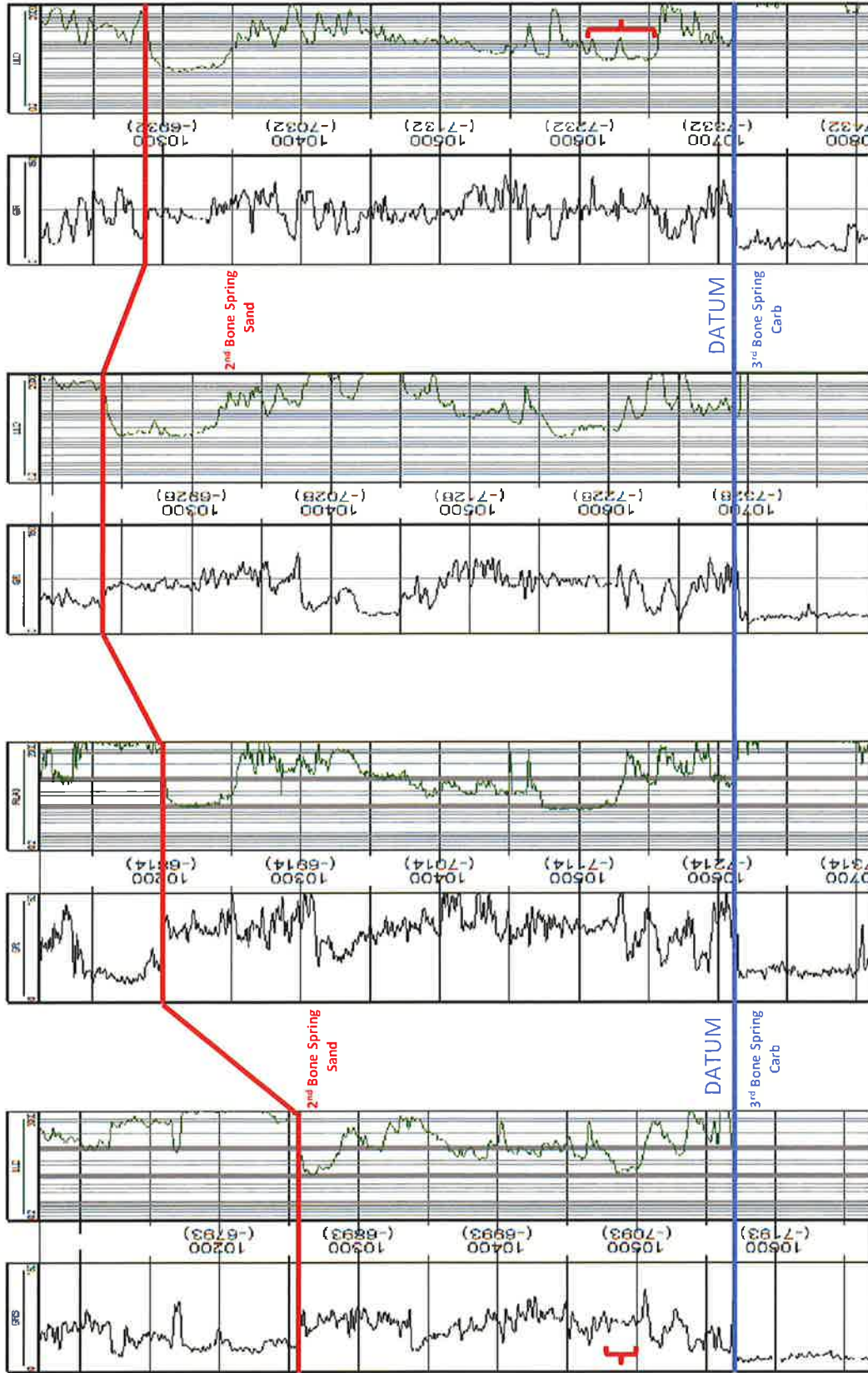
<1.27M>

30025330000000

EOG Y RESCS INC  
SAN SIMON UNIT 1

TWP: 23S - Range 35E - Sec. 18

**A'**



BEFORE THE OIL CONSERVATION DIVISION  
 Santa Fe, New Mexico  
 Exhibit No. 2C  
 Submitted by: Centennial Resource Development  
 Hearing Date: November 15, 2018  
 Case # 16265

Lateral Interval  
#501H

Lateral Interval  
#501H

TD= 14,205.00

TD= 11,600.00

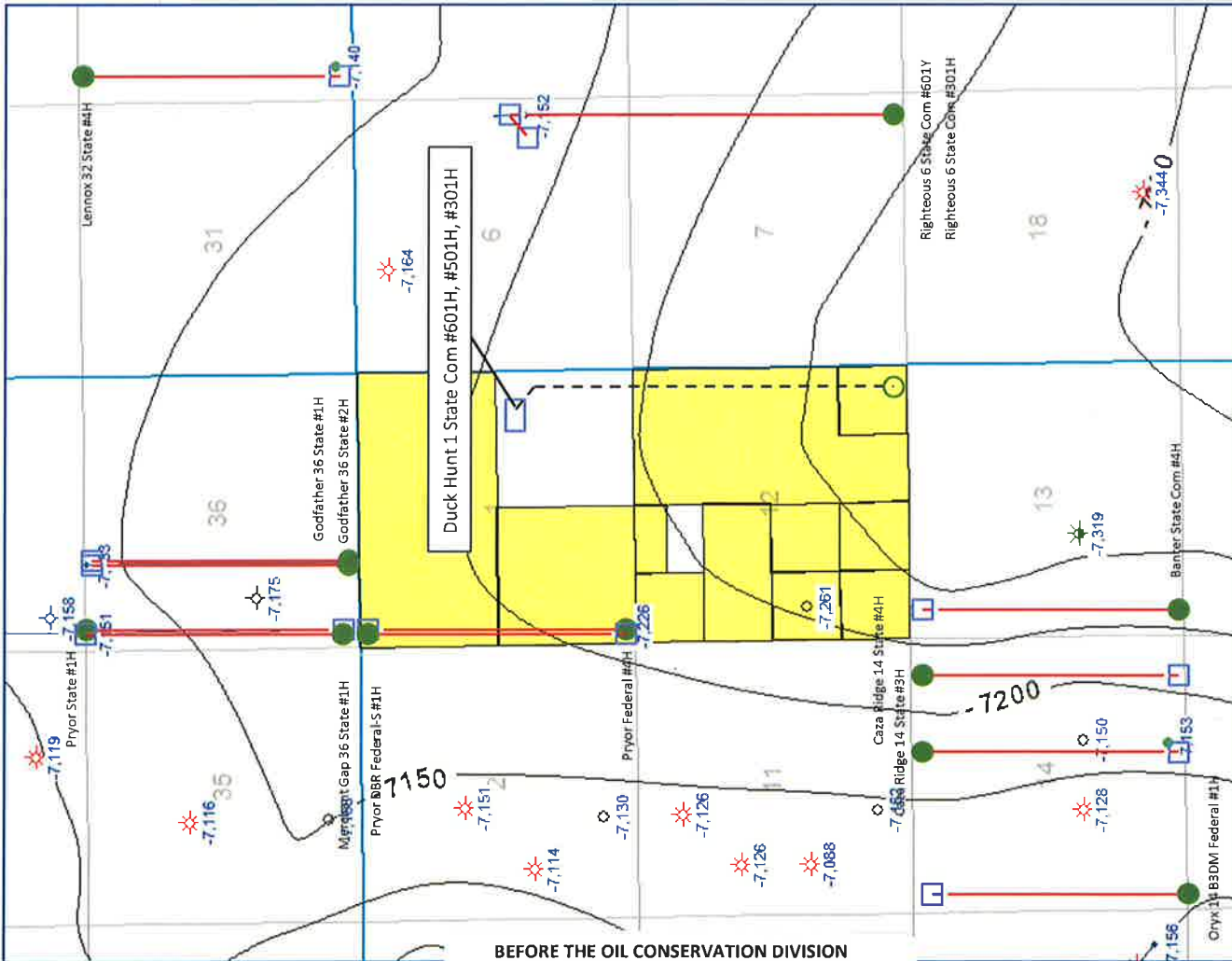
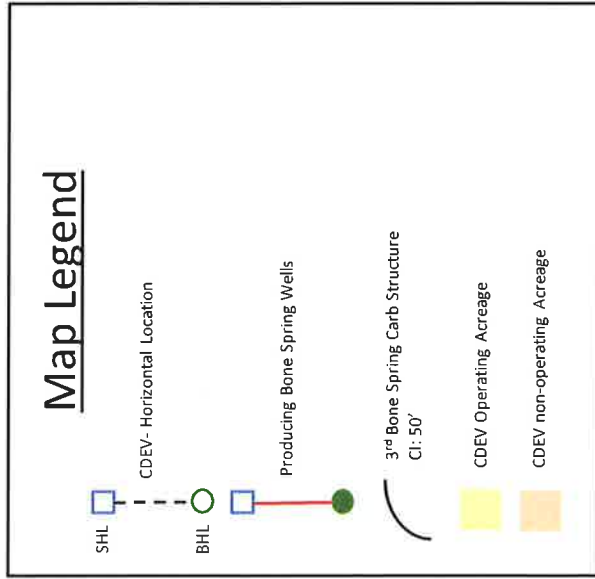
TD= 13,914.00

TD= 14,200.00

**CENTENNIAL**

# Bone Spring Pool

## 3<sup>RD</sup> Bone Spring Carb Structure Map



BEFORE THE OIL CONSERVATION DIVISION  
Santa Fe, New Mexico

Exhibit No. 2D

Submitted by: Centennial Resource Development

Hearing Date: November 15, 2018

Case # 16265



30025301900000

EMRON OIL & GAS CO  
ROCK LAKE 6 FEDERA 1

A

<1.55MI>

30025420830000

GMT EXPLORATION COMPANY LLC  
PRYOR DBR FEDERAL-S 1H

<1.69MI>

30025259220000

AMOCO PROD CO  
STATE GA 1

<1.27MI>

3002533000000000

EOG Y RESCS INC  
SAN SIMON UNIT 1

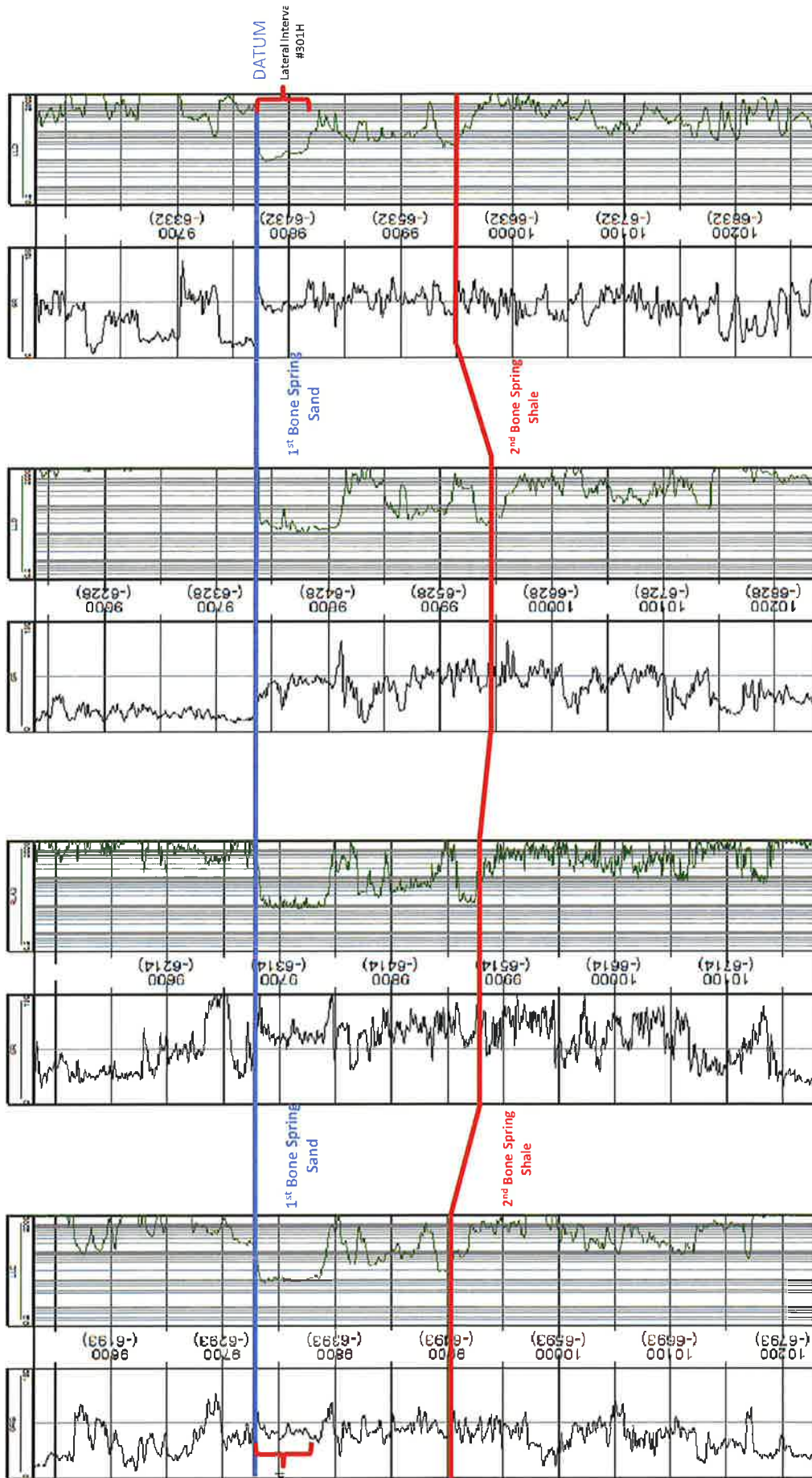
A'

TWP: 23S - Range 35E - Sec. 6

TWP: 23S - Range 34E - Sec. 1

TWP: 23S - Range 34E - Sec. 13

TWP: 23S - Range 35E - Sec. 18



TD= 14,205.00

TD= 11,600.00

TD= 13,914.00

TD= 14,200.00





October 26, 2018

**VIA CERTIFIED MAIL**  
**CERTIFIED RECEIPT REQUESTED**

**TO: ALL INTERESTED PARTIES**

**Re: Application of Centennial Resource Production, LLC for a Non-Standard Spacing and Proration Unit and Compulsory Pooling, Lea County, New Mexico.**  
**Duck Hunt State Com No. 601H Well**

Ladies & Gentlemen:

This letter is to advise you that Centennial Resource Production, LLC has filed the enclosed amended application with the New Mexico Oil Conservation Division. This application will be set for hearing before a Division Examiner at 8:15 a.m. on July 26, 2018. The hearing will be held in Porter Hall in the Oil Conservation Division's Santa Fe Offices located at 1220 South Saint Francis Drive, Santa Fe, New Mexico 87505. 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 days in advance of a scheduled hearing. This statement must be filed at the Division's Santa Fe office at the above specified address 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](mailto:gavin.smith@cdevinc.com).

Sincerely,

Jordan L. Kessler

**ATTORNEY FOR CENTENNIAL RESOURCE  
PRODUCTION, LLC**



Duck Hunt

	A	B	F	G	I	J	K
	MailClass	TrackingNo	ToName	DeliveryAddress	City	State	Zip
1	Certified with Return Receipt (Signature)	9414810898765020660354	**Margaret Ann Hebenstreit Revocable Trust	112 Mesa Street SE	Albuquerque	NM	87106
2	Certified with Return Receipt (Signature)	9414810898765020660361	Heirs of Dorothy Heard	2805 E. 16th Ave., Apt. 6	Denver	CO	80206
3	Certified with Return Receipt (Signature)	9414810898765020660378	Mo Oil, LLC	P.O. Box 429	Roswell	NM	88202
4	Certified with Return Receipt (Signature)	9414810898765020660385	Jetstream New Mexico MFTC, LLC	105 Nursery Ln. Suite 220	Fort Worth	TX	76114
5	Certified with Return Receipt (Signature)	9414810898765020660392	Heirs of Kate A. R. Herwig	1504 NE Madison	Oklahoma City	OK	73111
6	Certified with Return Receipt (Signature)	9414810898765020660408	Doris E. Raymond	8925 Winged Thistle Ct.	Raleigh	NC	27617
7	Certified with Return Receipt (Signature)	9414810898765020660415	Texas International Company	3545 NW 58th St., Ste 770	Oklahoma City	OK	73112
8	Certified with Return Receipt (Signature)	9414810898765020660422	**CJM Partners, LP	218 N. Main St., Ste. C	Midland	TX	79701
9	Certified with Return Receipt (Signature)	9414810898765020660439	**Blaze Interests, LLC	218 N. Main St., Ste. C	Midland	TX	79701
10	Certified with Return Receipt (Signature)	9414810898765020660446	Marathon Oil Permian, LLC	5555 San Felipe Street	Houston	TX	77056
11	Certified with Return Receipt (Signature)	9414810898765020660453	%Madison M. Hinkle, et ux	P.O. Box 2292	Roswell	NM	88202
12	Certified with Return Receipt (Signature)	9414810898765020660460	%Rolla R. Hinkle, III	P.O. Box 2292	Roswell	NM	88202
13	Certified with Return Receipt (Signature)	9414810898765020660477	OXY USA WTP, LLC	5 Greenway Plaza, Ste 110	Houston	TX	77046
14	Certified with Return Receipt (Signature)	9414810898765020660484	KMF Land, LLC	400 Madison Avenue, Suite 14C	New York	NY	10017
15	Certified with Return Receipt (Signature)	9414810898765020660507	Flatland GP II, LLC	4925 Greenville Avenue, Suite 1100	Dallas	TX	75206
16	Certified with Return Receipt (Signature)	9414810898765020660521	McMullen Minerals, LLC	P.O. Box 470857	Ft. Worth	TX	76147
17	Certified with Return Receipt (Signature)	9414810898765020660545	Pegasus Resources, LLC	P.O. Box 123610	Ft. Worth	TX	76121
18	Certified with Return Receipt (Signature)	9414810898765020660552	ConocoPhillips Company	600 North Dairy Ashford	Houston	TX	77079
19	Certified with Return Receipt (Signature)	9414810898765020660569	Heirs of Rufus Sanders Ward	237 S Murphy Way	Prescott	AZ	86303
20	Certified with Return Receipt (Signature)						

	N	R	USPS_Status
1	MailDate	ERR_SigDate	USPS_Status
2	10/26/2018	11/07/2018	Your item was delivered at 4:28 pm on November 6, 2018 in ALBUQUERQUE, NM 87106.
3	10/26/2018		This is a reminder to arrange for redelivery of your item or your item will be returned to sender.
4	10/26/2018	10/31/2018	Your item was delivered at 11:00 am on October 30, 2018 in ROSWELL, NM 88201.
5	10/26/2018	10/31/2018	Your item was delivered to an individual at the address at 2:54 pm on October 30, 2018 in FORT WORTH, TX 76114.
6	10/26/2018		Your item arrived at the SANTA FE, NM 87504 post office at 10:28 am on November 9, 2018 and is ready for pickup.
7	10/26/2018	11/01/2018	Your item was delivered to an individual at the address at 1:35 pm on October 30, 2018 in RALEIGH, NC 27617.
8	10/26/2018		Your item arrived at the SANTA FE, NM 87504 post office at 10:28 am on November 9, 2018 and is ready for pickup.
9	10/26/2018		The delivery status of your item has not been updated as of October 29, 2018, 11:28 pm. We apologize that it may arrive later than expected.
10	10/26/2018		The delivery status of your item has not been updated as of October 29, 2018, 11:28 pm. We apologize that it may arrive later than expected.
11	10/26/2018	10/30/2018	Your item was delivered to an individual at the address at 3:38 pm on October 29, 2018 in HOUSTON, TX 77056.
12	10/26/2018	10/31/2018	Your item was delivered at 11:41 am on October 30, 2018 in ROSWELL, NM 88201.
13	10/26/2018	10/31/2018	Your item was delivered at 11:41 am on October 30, 2018 in ROSWELL, NM 88201.
14	10/26/2018	10/31/2018	Your item has been delivered to an agent at 6:01 am on October 30, 2018 in HOUSTON, TX 77227.
15	10/26/2018	11/06/2018	Your item was delivered to the front desk, reception area, or mail room at 3:46 pm on November 5, 2018 in NEW YORK, NY 10011.
16	10/26/2018	10/30/2018	Your item was delivered in or at the mailbox at 1:21 pm on October 29, 2018 in DALLAS, TX 75206.
17	10/26/2018	10/30/2018	Your item was delivered at 11:11 am on October 29, 2018 in FORT WORTH, TX 76147.
18	10/26/2018	11/07/2018	Your item was picked up at the post office at 10:47 am on November 5, 2018 in FORT WORTH, TX 76116.
19	10/26/2018	10/30/2018	Your item has been delivered to an agent at 10:22 am on October 29, 2018 in HOUSTON, TX 77079.
20	10/26/2018		Your item arrived at the SANTA FE, NM 87504 post office at 10:28 am on November 9, 2018 and is ready for pickup.

# 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  
November 01, 2018  
and ending with the issue dated  
November 01, 2018.



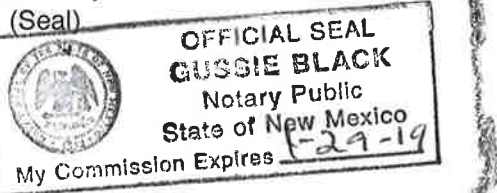
Publisher

Sworn and subscribed to before me this  
1st day of November 2018.



Business Manager

My commission expires  
January 29, 2019



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 NOVEMBER 1, 2018

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

The State of New Mexico through its Oil Conservation Division hereby gives notice pursuant to law and the Rules and Regulations of the Division of the following public hearing to be held at 8:15 A.M. on **November 15, 2018**, in the Oil Conservation Division Hearing Room at 1220 South St. Francis, Santa Fe, New Mexico, before an examiner duly appoint for the hearing. If you are an individual with a disability who is in need of a reader, amplifier, qualified sign language interpreter, or any other form of auxiliary aid or service to attend or participate in the hearing, please contact: Florene Davidson at 505-476-3458 or through the New Mexico Relay Network, 1-800-659-1779 by **November 5, 2018**. Public documents, including the agenda and minutes, can be provided in various accessible forms. Please contact Florene Davidson if a summary or other type of accessible form is needed.

**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: Margaret Ann Hebenstreit Revocable Trust; Heirs of Dorothy Heard; Mo Oil, LLC; Jetstream New Mexico MFTC, LLC; Heirs of Kate A. R. Herwig; Doris E. Raymond, her heirs and devisees; Texas International Company; CJM Partners, LP; Blaze Interests, LLC; Marathon Oil Permian, LLC; Madison M. Hinkle, et ux, their heirs and devisees; Rolla R. Hinkle, III, his heirs and devisees; OXY USA WTP, LLC; KMF Land, LLC; Flatland GP II, LLC; McMullen Minerals, LLC; Pegasus Resources, LLC; ConocoPhillips Company; Heirs of Rufus Sanders Ward.**

**Case No. 16265 (reopened): Application Centennial Resource Production, LLC to Re-Open Case No. 16265 To Add Additional Initials Well Under The Terms Of Compulsory Pooling Order R-20001, Lea County, New Mexico.** Applicant in the above-styled cause seeks to amend Division Order R-20001 to add additional initial wells dedicated to the spacing unit. The spacing unit is comprised of the E/2 SE/4 of Section 1 and the E/2 E/2 of Section 12, Township 23 South, Range 34 East, NMPM, Lea County, New Mexico and will be dedicated to three initial wells: the Duck Hunt 1 State Com Well No. 301H, the Duck Hunt 1 State Com Well No. 501H, and the Duck Hunt 1 State Com Well No. 601H. All wells will be drilled horizontally from a surface location in the NE/4 SE/4 (Unit I) of Section 1 to a bottom hole location in the SE/4 SE/4 (Unit P) of Section 12. All wells are at orthodox locations. Said area is located approximately 18 miles southwest of Eunice, New Mexico. #33396

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00220075

HOLLAND & HART LLC  
PO BOX 2208  
SANTA FE, NM 87504-2208