

**BEFORE THE OIL CONSERVATION DIVISION
EXAMINER HEARING APRIL 28, 2020**

CASE No. 21180

PARALLEL 193402 #1H

LEA COUNTY, NEW MEXICO



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

**APPLICATION OF CATENA RESOURCES
OPERATING, LLC FOR COMPULSORY
POOLING, LEA COUNTY, NEW MEXICO.**

CASE NO. 21180

TABLE OF CONTENTS

1. **Catena Exhibit A** – Compulsory Pooling Application Checklist
2. **Catena Exhibit B** – Application for Compulsory Pooling
3. **Catena Exhibit C** – Land Affidavit
4. **Catena Exhibit C-1** – C-102
5. **Catena Exhibit C-2** – Land Ownership Schematic for Spacing Unit
6. **Catena Exhibit C-3** – Well Proposal Letter with Accompanying AFEs
7. **Catena Exhibit C-4** – Chronology of Contact with Non-Joined Working Interests
8. **Catena Exhibit D** – Geology Affidavit
9. **Catena Exhibit D-1** – Locator / Cross-Section Location Map
10. **Catena Exhibit D-2** – Subsea Structure Map
11. **Catena Exhibit D-3** – Stratigraphic Cross-Section
12. **Catena Exhibit E** – Notice Affidavit
13. **Catena Exhibit F** – Affidavit of Publication of Notice

COMPULSORY POOLING APPLICATION CHECKLIST

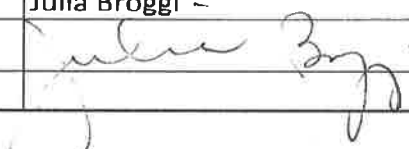
ALL INFORMATION IN THE APPLICATION MUST BE SUPPORTED BY SIGNED AFFIDAVITS

Case: 21180	APPLICANT'S RESPONSE
Date: April 30, 2020	
Applicant	Catena Resources Operating, LLC
Designated Operator & OGRID (affiliation if applicable)	328449
Applicant's Counsel:	Holland & Hart LLP
Case Title:	Application of Catena Resources Operating, LLC for Compulsory Pooling, Lea County, New Mexico
Entries of Appearance/Intervenors:	n/a
Well Family	Parallel 193402 No. 1H Well
Formation/Pool	
Formation Name(s) or Vertical Extent:	Wolfcamp
Primary Product (Oil or Gas):	Oil
Pooling this vertical extent:	Wolfcamp formation
Pool Name and Pool Code:	970 Airstrip; Wolfcamp
Well Location Setback Rules:	Statewide horizontal well rules
Spacing Unit Size:	320 acres, more or less
Spacing Unit	
Type (Horizontal/Vertical)	Horizontal
Size (Acres)	320 acres, more or less
Building Blocks:	quarter-quarter sections
Orientation:	South/North
Description: TRS/County	W/2 W/2 of Section 2, Township 19 South, Range 34 East and W/2 W/2 of Section 35 of Township 18 South, Range 34 East, NMPM,
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	No
Proximity Defining Well: if yes, description	No
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)	Add wells as needed

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

Submitted by: **Catena Resources Operating, LLC**
 Hearing Date: April 30, 2020
 Case No. 21180

Well #1	Parallel 193402 No. 1H Well (API 30-025-46715) SHL: 190' from South Line & 330' from West Line Unit M of Section 2, Township 19 South, Range 34 East, NMPM, Lea County BHL: 1319' from North Line & 330' from West Line Unit D of Section 35, Township 18 South, Range 34 East, NMPM, Lea County Completion target: Wolfcamp Well Orientation: South/North Completion location expected to be standard
Horizontal Well First and Last Take Points	See Exhibit C-1
Completion Target (Formation, TVD and MD)	See Exhibit C-3
AFE Capex and Operating Costs	
Drilling Supervision/Month \$	\$8,000
Production Supervision/Month \$	\$800
Justification for Supervision Costs	Exhibit C, Para.
Requested Risk Charge	Exhibit B
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-2
Pooled Parties (including ownership type)	Exhibit C-2
Unlocatable Parties to be Pooled	None
Ownership Depth Severance (including percentage above & below)	None
Joinder	
Sample Copy of Proposal Letter	Exhibit C-3
List of Interest Owners (ie Exhibit A of JOA)	Exhibit C-2
Chronology of Contact with Non-Joined Working Interests	Exhibit C-4
Overhead Rates In Proposal Letter	N/A
Cost Estimate to Drill and Complete	Exhibit C

Cost Estimate to Equip Well	Exhibit C-3
Cost Estimate for Production Facilities	Exhibit C-3
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
Target Formation	Exhibit D, D-1, D-2, D-3
HSU Cross Section	Exhibit D, D-3
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-2
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)	Exhibits D-1, D-2
Cross Section (including Landing Zone)	Exhibit D-3
Additional Information	
Special Provisions/Stipulations	None
CERTIFICATION: I hereby certify that the information provided in this checklist is complete and accurate.	
Printed Name (Attorney or Party Representative):	Julia Broggi -
Signed Name (Attorney or Party Representative):	
Date:	28-Apr-20

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

**APPLICATION OF CATENA RESOURCES
OPERATING, LLC FOR COMPULSORY
POOLING, LEA COUNTY, NEW MEXICO.**

CASE NO. _____

APPLICATION

Catena Resources Operating, LLC ("Applicant") (OGRID No. 328449), 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 Wolfcamp formation underlying a standard 324.13-acre, more or less, horizontal spacing unit comprised of the W/2 W/2 of Section 35, Township 18 South, Range 34 East, and the W/2 W/2 of Section 2, Township 19 South, Range 34 East, NMPM, Lea County, New Mexico. In support Applicant states:

1. Applicant is a working interest owner in the proposed horizontal spacing unit and has the right to drill thereon.
2. Applicant seeks to initially dedicate the above-referenced spacing unit to the proposed **Parallel 193402 #1H Well** to be horizontally drilled from a surface location in the SW/4 SW/4 (Unit M) of Section 2 to a bottom hole location in the NW/4 NW/4 (Unit D) of Section 35.
3. The completed interval for the proposed well will comply with the statewide setback requirements for horizontal oil wells.
4. Applicant has sought and been unable to obtain voluntary agreement for the development of these lands from all interest owners in the subject spacing unit.

BEFORE THE OIL CONSERVATION DIVISION
Santa Fe, New Mexico
Exhibit No. B
Submitted by: **Catena Resources Operating, LLC**
Hearing Date: April 30, 2020
Case No. 21180

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 well and horizontal spacing unit.

WHEREFORE, Applicant requests that this application be set for hearing before an Examiner of the Oil Conservation Division on April 2, 2020, 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 well thereon;
- B. Designating Applicant as operator of the horizontal spacing unit and the horizontal well to be drilled thereon;
- C. Authorizing Applicant to recover its costs of drilling, equipping, and completing the well;
- 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 well.

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

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**ATTORNEYS FOR
CATENA RESOURCES OPERATING, LLC**

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

**APPLICATION OF CATENA RESOURCES
OPERATING, LLC FOR COMPULSORY
POOLING, LEA COUNTY, NEW MEXICO**

CASE NO. 21180

**AFFIDAVIT OF ROBERT SWANN
IN SUPPORT OF CASE NO. 21180**

Robert Swann, of lawful age and being first duly sworn, declares as follows:

1. My name is Robert Swann. I am a Land Manager with Catena Resources Operating, LLC ("Catena").
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 land manager have been accepted by the Division and made a matter of record.
3. I am familiar with the application filed by Catena in this case, and I am familiar with the status of the lands in the subject area.
4. None of the uncommitted parties has indicated opposition to this pooling application, and therefore I do not expect any opposition at the hearing
5. Catena seeks an order pooling all uncommitted interests in the Wolfcamp formation underlying a standard 324.13-acre, more or less, horizontal spacing unit comprised of the W/2 W/2 of Section 35, Township 18 South, Range 34 East and the W/2 W/2 of Section 2 Township 19 South, Range 34 East, NMPM, Lea County, New Mexico.
6. Catena proposes to dedicate the above horizontal spacing unit to the following **Parallel 193402 No. 1H Well (API 30-025-46715)**, to be horizontally drilled from a surface

location in the SW/4 SW/4 (Unit M) of Section 2 to a bottom hole location in the NW/4 NW/4 (Unit D) of Section 35.

7. Catena has filed a Form C-102 with the Division for the proposed Parallel 193402 No. 1H Well, which is attached hereto as **Catena Exhibit C-1**. The pool code for the proposed well is 970 (Airstrip; Wolfcamp).

8. The completed interval for the proposed Parallel 193402 No. 1H Well will comply with the statewide setback requirements for oil wells.

9. There are no depth severances in the Wolfcamp formation.

10. **Catena Exhibit C-2** is an exhibit that I prepared that identifies the tracts of land comprising the proposed spacing unit. This spacing unit includes state land only. Catena Exhibit C-2 also identifies the interest owners and their ownership interest in the spacing unit.

11. Catena seeks to pool the following working interest owners: COG Operating LLC and Concho Oil and Gas LLC.

12. Catena sent well proposal letters, along 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 letter, along with the AFE, is attached hereto as **Catena Exhibit C-3**.

13. Catena also seeks to pool the overriding royalty interest owners identified on Catena Exhibit C-2.

14. There are no unleased mineral interests in the subject acreage.

15. Catena 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.


A chronology of Catena's contacts with the working interest owners is seeking to pool is attached hereto as **Catena Exhibit C-4**.

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

17. I provided the law firm of Holland & Hart LLP a list of names and addresses for the uncommitted interest owners shown. In compiling these addresses, Catena 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 interest owners were locatable.

18. Catena seeks approval of overhead and administrative costs at \$8,000/month while drilling and \$800/month while producing. These costs are consistent with what Catena and other operators are charging in this area for these types of wells. Catena respectfully requests that these administrative and overhead costs be incorporated into any order entered by the Division in these cases.

19. **Catena Exhibits C-1 through C-4** were either prepared by me or compiled under my direction and supervision.



ROBERT SWANN

STATE OF TEXAS)
)
COUNTY OF BEXAR)

SUBSCRIBED and SWORN to before me this 27th day of April 2020 by Robert Swann.





NOTARY PUBLIC

My Commission Expires:

12/05/2023

14543029_1

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 30-025-		² Pool Code 970		³ Pool Name AIRSTRIP; WOLFCAMP	
⁴ Property Code		⁵ Property Name PARALLEL 193402			⁶ Well Number 1H
⁷ OGRID No. 328449		⁸ Operator Name CATENA RESOURCES OPERATING, LLC			⁹ Elevation 3983.8
¹⁰ Surface Location					
UL or lot no. M	Section 2	Township 19 S	Range 34 E	Lot Idn	Feet from the 190
				North/South line SOUTH	Feet from the 330
				East/West line WEST	County LEA
¹¹ Bottom Hole Location If Different From Surface					
UL or lot no. D	Section 35	Township 18 S	Range 34 E	Lot Idn	Feet from the 1319
				North/South line NORTH	Feet from the 330
				East/West line WEST	County LEA
¹² Dedicated Acres 324.13		¹³ Joint or Infill		¹⁴ Consolidation Code C	
				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.

<p>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 district.</p> <p><i>Brian Wood</i> 1-3-20 Signature Date</p> <p>BRIAN WOOD Printed Name</p> <p>brian@permitswest.com E-mail Address</p> <p>505 466-8120</p>		<p>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.</p> <p>DECEMBER 12, 2019 Date of Survey</p> <p><i>[Signature]</i> Signature and Seal of Registered Surveyor</p> <p>Certificate Number: 12797 PROFESSIONAL SURVEYOR NO. 7853</p>
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BEFORE THE OIL CONSERVATION DIVISION

Santa Fe, New Mexico

Exhibit No. C1

Submitted by: Catena Resources Operating, LLC

Hearing Date: April 30, 2020

Case No. 21180

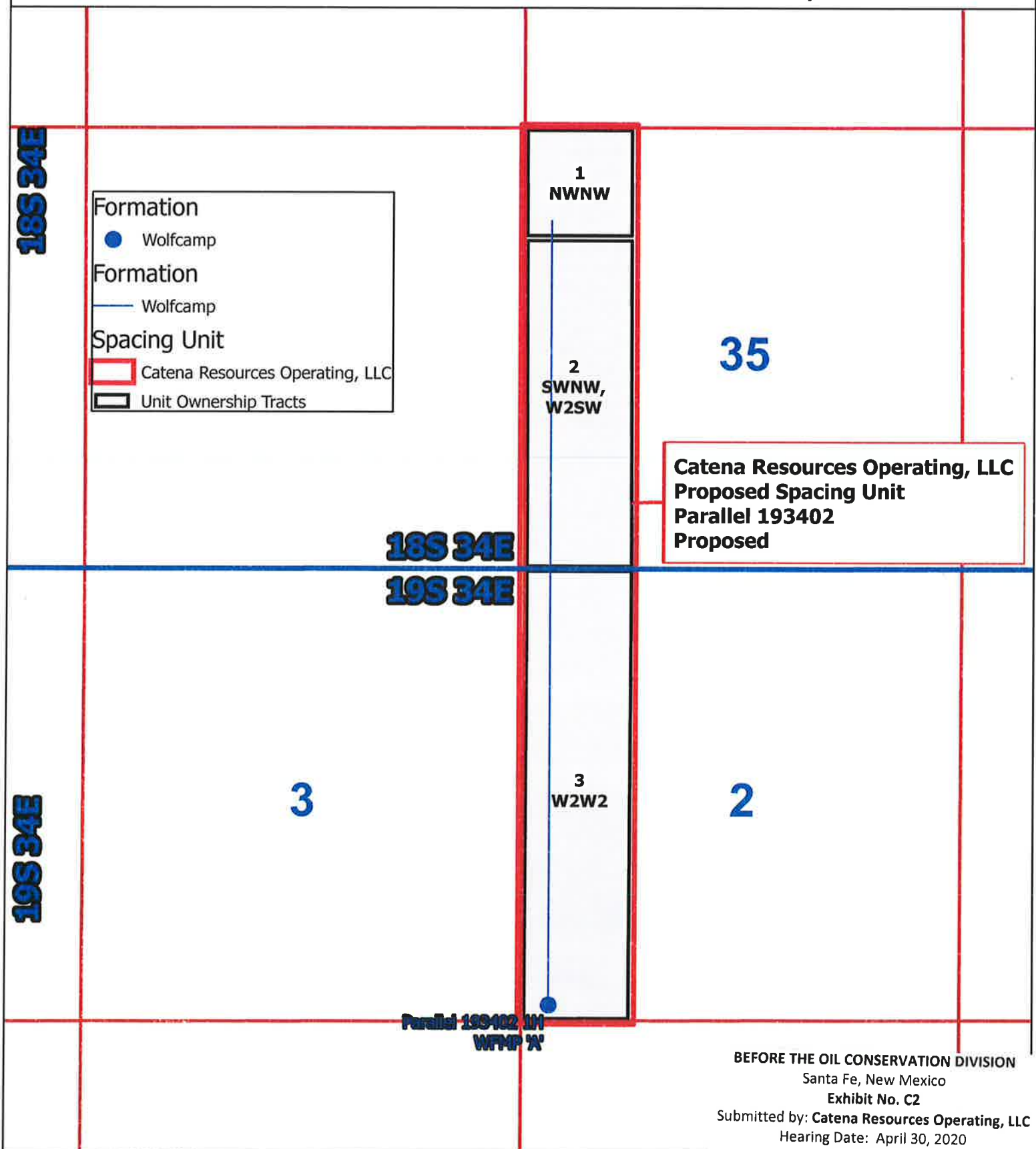
Compulsory Pooling, Lea County, New Mexico

Catena Resources Operating, LLC

Parallel 193402 1H Well

320 Acre Spacing Unit

W2W2 Section 35, 18S-34E & W2W2 Section 2, 19S-34E



BEFORE THE OIL CONSERVATION DIVISION

Santa Fe, New Mexico

Exhibit No. C2

Submitted by: Catena Resources Operating, LLC

Hearing Date: April 30, 2020

Case No. 21180

Tract 1	
40.0 acres of land, more or less, being the Northwest Quarter of the Northwest Quarter of Section 35, Township 18 South, Range 34 East, Lea County, New Mexico	
Owner	Interest
Catena Resources Operating, LLC	100.00%
Totals	100.00%
Tract 2	
120.0 acres of land, more or less, being the Southwest Quarter of the Northwest Quarter, and the West Half of the Southwest Quarter of Section 35, Township 18 South, Range 34 East, Lea County, New Mexico	
Owner	Interest
Catena Resources Operating, LLC	43.21%
T. H. McElvain Oil & Gas LLLP	14.40%
COG Operating LLC	40.26%
Concho Oil & Gas LLC	2.12%
Totals	100.00%
Tract 3	
164.13 acres of land, more or less, being Lot 4, the Southwest Quarter of the Northwest Quarter, and the West Half of the Southwest Quarter of Section 2, Township 19 South, Range 34 East, Lea County, New Mexico	
Owner	Interest
Catena Resources Operating, LLC	75.00%
T. H. McElvain Oil & Gas LLLP	25.00%
Totals	100.00%

Overriding Royalty Interests Seeking to Compulsory Pool
Nestegg Energy Corporation
COG Operating LLC
Concho Oil & Gas LLC

** Catena is seeking to pool the parties highlighted in Orange.



January 7, 2020

Via Certified Mail

COG Operating
600 W Illinois Ave
Midland, TX 79701
432-683-7443

Re: **Parallel 193402 1H Well Proposal**
Wolfcamp Formation
W2W2 of Section 2 T19S, R34E, and Section 35, T18S, R34E
Lea County, New Mexico

Ladies and Gentlemen,

Catena Resources Operating, LLC ("Catena") as Operator hereby proposes to drill the following well to a depth sufficient to test the Wolfcamp formation:

Well Name	SHL	BHL	Spacing Unit	Target TVD	Estimated TMD
Parallel 193402 1H	FSL: 190' Sec. 2 FWL: 330' Sec. 2	FNL: 100' Sec. 35 FWL: 330' Sec. 35	W2W2 of Section 2 T19S, R34E, and Section 35, T18S, R34E	11,058'	21,596'

These proposed locations and target depths are subject to change depending on any surface or subsurface concerns encountered.

Regarding the above, enclosed for your further handling are our AFE's dated November 16, 2019 for the proposed wells. The AFE's represent an estimate of the costs that will be incurred to drill and complete the wells, but those electing to participate in the wells are responsible for their proportionate share of the actual costs incurred. In the event you elect to participate in the proposed wells, please execute the enclosed AFE's and return to me. We are happy to furnish you with a proposed Joint Operating Agreement upon request, should you be inclined to elect to participate. Please respond within 30 days of receiving this notice. If you do not wish to participate, Catena proposes to acquire your interest via term assignment subject to due diligence and title verification satisfactory to Catena.

Should you have any questions regarding the above, please email me at rswann@catenares.com or call me at (210) 775-6993.


Sincerely,

Catena Resources Operating, LLC

Robert Swann

Land Manager



<div></div>		WELL COST ESTIMATE				AFE NO.		
		WELL NAME: Parallel 193402 1H FIELD NAME: LOCATION: 2.0 sec. lateral, COUNTY/ ST: Lee County, NM OBJECTIVE: Wolfcamp		DATE: 16-Nov-19 START DATE: COMPLETE DATE: ORIGINAL: x SUPPLEMENT:				
		Drilling		Completion		Facilities		
INTANGIBLE COSTS		ACCT CODE	DRILLING - 310XX	ACCT CODE	COMPLETION - 320XX	ACCT CODE	FACILITIES - 330XX	TOTAL
Legal Fees / Title Opinion	31001	\$50,000	32001	\$0	33001	\$0	\$50,000	
Surveys / Staking / Permits / Bonds / Regulatory	31002	\$25,700	32002	\$0	33002	\$0	\$25,700	
ROW / Surface Damages	31003	\$80,000	32003	\$0		\$0	\$80,000	
Roads & Location / Reserve Pit - Construction	31004	\$90,000	32004	\$0		\$0	\$90,000	
Roads & Location / Reserve Pit - Reclamation	31005		32005	\$0		\$0	\$0	
Frac Pond	31006		32006	\$0		\$0		
Gate Guard	31007		32007	\$0		\$0	\$0	
Mouse / Rathole / Conductor	31008	\$19,000		\$0		\$0	\$19,000	
Mobilization / Demobilization	31009	\$230,675	32008	\$0		\$0	\$230,675	
Drilling - Daywork	31010	\$574,646		\$0		\$0	\$574,646	
Drilling - Footage	31011			\$0		\$0	\$0	
Drilling - Turnkey	31012			\$0		\$0	\$0	
Completion / Snubbing / Workover Unit	31013		32009	\$40,000		\$0	\$40,000	
Trailer House / Communications	31014	\$43,572	32010	\$24,200		\$0	\$67,772	
Drill Bits	31015	\$103,000	32011	\$0		\$0	\$103,000	
Directional Equipment / Gyro Surveys	31016	\$266,326	32012	\$0		\$0	\$266,326	
Downhole Tool / Stabilization Rental	31017	\$57,075	32013	\$34,000		\$0	\$91,075	
Mud / Chemicals	31018	\$222,558	32014	\$601,500		\$0	\$824,058	
Fuel / Power	31019	\$116,482	32015	\$471,800		\$0	\$588,282	
Water Supply Well, equipment	31020	\$3,603	32016	\$0		\$0		
Water / Water Hauling	31021		32017	\$816,550		\$0	\$816,550	
Offsite Water & Cuttings Disposal	31022	\$284,770	32018	\$30,500		\$0	\$315,270	
Transportation / Hauling	31023	\$31,000	32019	\$0	33008	\$15,000	\$46,000	
Inspection / Tubular Testing	31024	\$101,000	32020	\$0		\$0	\$101,000	
Laydown Machine / Casing Crew / Tongs	31025	\$62,190	32021	\$0		\$0	\$62,190	
Cementing, Float Equipment & Services	31026	\$65,072	32022	\$0		\$0	\$65,072	
Mud Logging	31027	\$35,343		\$0		\$0	\$35,343	
Logging - Open Hole	31028		32023	\$0		\$0	\$0	
Logging - Cased Hole	31029		32024	\$13,000		\$0	\$13,000	
Coring & Analysis, Drill Stem Test	31030			\$0		\$0	\$0	
Perforating	31031		32025	\$421,200		\$0	\$421,200	
Wireline / Slickline Services	31032		32026	\$15,000		\$0	\$15,000	
Equipment Rental	31033	\$163,809	32027	\$236,000		\$0	\$399,809	
Pumping Services/Rental	31034		32028	\$21,000		\$0		
Acidizing & Fracturing	31035		32029	\$2,479,000		\$0	\$2,479,000	
Coil Tubing Unit	31036		32030	\$120,000		\$0	\$120,000	
Flow Testing, Swabbing	31037		32031	\$95,875		\$0	\$95,875	
Fishing / Sidetrack Services	31038		32032	\$0		\$0	\$0	
Nipple Up / BOPE Testing	31039	\$6,400	32033	\$23,000		\$0	\$29,400	
Overhead	31040	\$8,000	32034	\$18,500		\$0	\$27,500	
Wellsite Consulting Services/Supervision	31041	\$170,628	32035	\$153,950	33003	\$20,000	\$344,578	
Engineering / Geological / Lab Service: Tracers and diagnostics	31042	\$25,000	32036	\$35,500		\$15,000	\$75,500	
Roostabout / Contract Labor	31043	\$8,480	32037	\$0	33004	\$160,000	\$168,480	
Welding Services	31044	\$5,120	32038	\$0		\$0	\$5,120	
Insurance	31045	\$10,000	32039	\$0	33005	\$0	\$10,000	
Miscellaneous	31046		32040	\$0	33006	\$0	\$0	
P&A Costs	31047		32041	\$0		\$0		
Safety / EH&S	31048		32042	\$6,610	33007	\$0	\$6,610	
5.5% Contingency (8% Taxes on Casing included in casing cost)	31049	\$141,873	32043	\$311,200		\$10,500	\$463,673	
NON-Op Drilling Intangible	31050		32044	\$0		\$0		
Pipeline Installation / Interconnect	31051		32045	\$0	33008	\$0	\$0	
TOTAL INTANGIBLE COSTS			\$2,981,422		\$5,969,385		\$220,500	\$9,171,307
TANGIBLE COSTS		ACCT CODE	DRILLING - 311XX	ACCT CODE	COMPLETION - 321XX	ACCT CODE	FACILITIES - 331XX	TOTAL
Conductor	Size	Feet	\$/ft	31101				
Surface Casing	13 3/8"			31102	\$68,600			\$68,600
1st Intermediate Casing / Liner	9 5/8"			31103	\$113,200			\$113,200
2nd Intermediate Casing / Liner				31104				\$0
Production Casing / Liner	5 1/2"	21,500	\$18.00			32101		\$430,000
Casing Tie Back						32102		
Liner Hanger Assembly						32103		
Tubing	2.875	10,500	\$	5.85		32104	\$61,425	\$61,425
Casing Equipment - OHMS / Etc.						32105	\$31,200	\$31,200
Wellhead Equipment				31105	\$52,000	32106	\$27,000	\$79,000
Pumping Unit / Prime Mover / Base						32107	\$0	\$0
Rods / Pony Rods / Sinker Bars						32108	\$0	\$0
Artificial Lift Other - Gas Lift						32109	\$14,000	\$14,000
Wellhead Equipment Completions - Production Tree						32110	\$42,000	\$42,000
Tanks / Tank Steps / Stairs						32111	\$0	\$66,000
Gas Treating / Dehydration Equipment						32112	\$0	\$0
Separation Equipment, Heater Treater						32113	\$0	\$68,280
Surface Pumps						32114	\$0	\$3,000
Filters						32115	\$0	\$0
Buildings						32116	\$0	\$0
Interconnect Piping / Manifolds / Headers						32117	\$0	\$0
Flowlines / Connections / Valves						32118	\$0	\$60,000
Automation / Instruments / Controls / Analyzers						32119	\$0	\$46,960
Electrical Equipment / Generators						32120	\$0	\$16,000
Compressor & Related Equipment						32121	\$0	\$52,000
Metering Equipment, LACT Unit						32122	\$0	\$0
Chemical Equipment / Cathodic Protection						32123	\$0	\$0
Subsurface Equipment - Packer, Plugs, TAC						32124	\$11,000	\$104,000
Safety / EH&S Equipment						32125	\$4,000	\$11,000
NON-OP Drilling Intangible						32126	\$0	\$38,000
Transfer/SWD Pumps & Equipment						32127	\$0	\$0
Flare / Combustor						32128	\$0	\$19,060
Miscellaneous				31108		32129	\$24,410	\$32,000
Contingency Costs				31107	\$11,690	32130	\$31,031	\$0
TOTAL TANGIBLE COSTS			\$245,490		\$676,066		\$503,220	\$1,424,776
TOTAL WELL COSTS			\$3,226,912		\$6,645,451		\$723,720	\$10,596,083
Prepared by Iraws Salinas Title: Contract Engineer								
This AFE is only an estimate. By returning one signed copy, you agree to pay your share of the actual costs incurred.								
Extra Expense Insurance								
<input type="checkbox"/> I elect to be covered by Operator's Extra Expense insurance and pay my proportionate share of the premium.								
<input type="checkbox"/> I elect to purchase my own well control insurance policy.								
either box is checked above, non-operating working interest owner elects to be covered by Operator's well control insurance								
Joint Owner Interest: Amount:								
Joint Owner Name: Signature:								

CHRONOLOGY OF CONTACT WITH NON-JOINED WORKING INTERESTS

1/7/2020 – Proposal Letter Sent to COG/Concho

1/30/2020 – Email from Stuart Dirks – Requesting to send Title Opinions

1/30/2020 – Robert Swann emailed Stuart Dirks, stating that we will send Title Opinions when we receive them

1/30/2020 – Robert Swann and Stuart Dirks Phone call explaining ownership in lands

1/30/2020 – Robert Swann send email with ownership numbers – COG Agreed with the working interest

2/4/2020 – Robert Swann and Stuart Dirks Phone Call – Getting update on whether COG will participate or not

2/12/2020 – Robert Swann email to Stuart Dirks – Sending requested title opinions

2/25/2020 – Robert Swann email to Stuart about an update

2/25/2020 – Stuart Dirks email to Robert Swann – Stating that the team was still evaluating

4/1/2020 – Stuart Dirks email to Robert Swann – requesting estimated spud dates

4/1/2020 – Robert Swann email to Stuart Dirks – responding to estimated spud dates

4/8/2020 – Phone call with Jason Edwards (Catena) and Grant Bohls (COG) Reviewing terms on a Term assignment.

4/20/2020 – Stuart Dirks email to Robert Swann – Asking if Catena operates any wells which COG are partners?

4/20/2020 – Robert Swann email to Stuart Dirks – Responding to Catena operated wells

4/23/2020 – Robert Swann and Jason Edwards email to Grant Bohls – Asking for an update on the term assignment

4/27/2020 - Robert Swann and Jason Edwards email to Grant Bohls – Asking for an update on the term assignment

4/27/2020 – Grant Bohls response email to Robert Swann and Jason Edwards – COG is running the term assignment up the approval chain.

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

APPLICATION OF CATENA RESOURCES
OPERATING, LLC FOR COMPULSORY
POOLING, LEA COUNTY, NEW MEXICO

CASE NO. 21180

AFFIDAVIT OF VINCE SMITH
IN SUPPORT OF CASE NO. 21180

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

1. My name is Vince Smith. I work for Catena Resources Operating, LLC ("Catena") 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 Catena in this case, and I have conducted a geologic study of the lands in the subject area.
4. Catena is targeting the Wolfcamp formation.
5. **Catena Exhibit D-1** is a locator map. It shows Catena's acreage in pink and the path of the proposed wellbore for the **Parallel 193402 State No. 1H Well**, with the surface hole marked with a red square and bottom hole locations marked with a red circle.
6. **Catena Exhibit D-2** is a subsea structure map that I prepared off the top of the Wolfcamp formation. The contour interval is 25 feet. The structure map shows the Wolfcamp dipping gently to the south. The structure appears consistent across the proposed wellbore path. Based on this subsea structure map, I do not observe any faulting, pinchouts, or other geologic impediments to developing the targeted interval with horizontal wells in this area.

7. Both Catena Exhibits D-1 and D-2 show a cross-section line in red indicating four wells penetrating the Wolfcamp 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. **Catena Exhibit No. D-3** is a stratigraphic cross-section that I prepared displaying open-hole logs run over the Wolfcamp from the four representative wells denoted from A to A'. The first well on the left has the digital gamma ray in track one and the sonic log in track two. For the other three wells in the cross-section, the exhibit shows the following logs: gamma ray, resistivity, and porosity. The proposed target interval is labeled and marked. The logs in the cross-section demonstrate that the target interval, within the Wolfcamp is consistent in thickness, across the entire spacing unit.

9. In my opinion, the stand-up orientation of the proposed well 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 Wolfcamp formation underlying the subject area is suitable for development by horizontal wells and the acreage comprising the proposed spacing unit will contribute more-or-less equally to the production from the wellbores.

11. In my opinion, the granting of Catena's application will be in the best interest of conservation, the prevention of waste, and protection of correlative rights.

12. **Catena Exhibit Nos. D-1 through D-3** were either prepared by me or compiled under my direction and supervision.

Vince Smith
VINCE SMITH

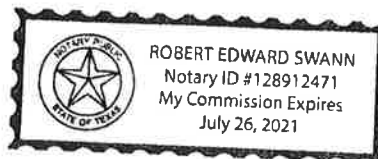
STATE OF TEXAS)
)
COUNTY OF BEXAR)

SUBSCRIBED and SWORN to before me this 29 day of April 2020 by Vince Smith.

[Signature]
NOTARY PUBLIC

My Commission Expires:

7/26/2021



Parallel 193402 State #1H

Locator Map

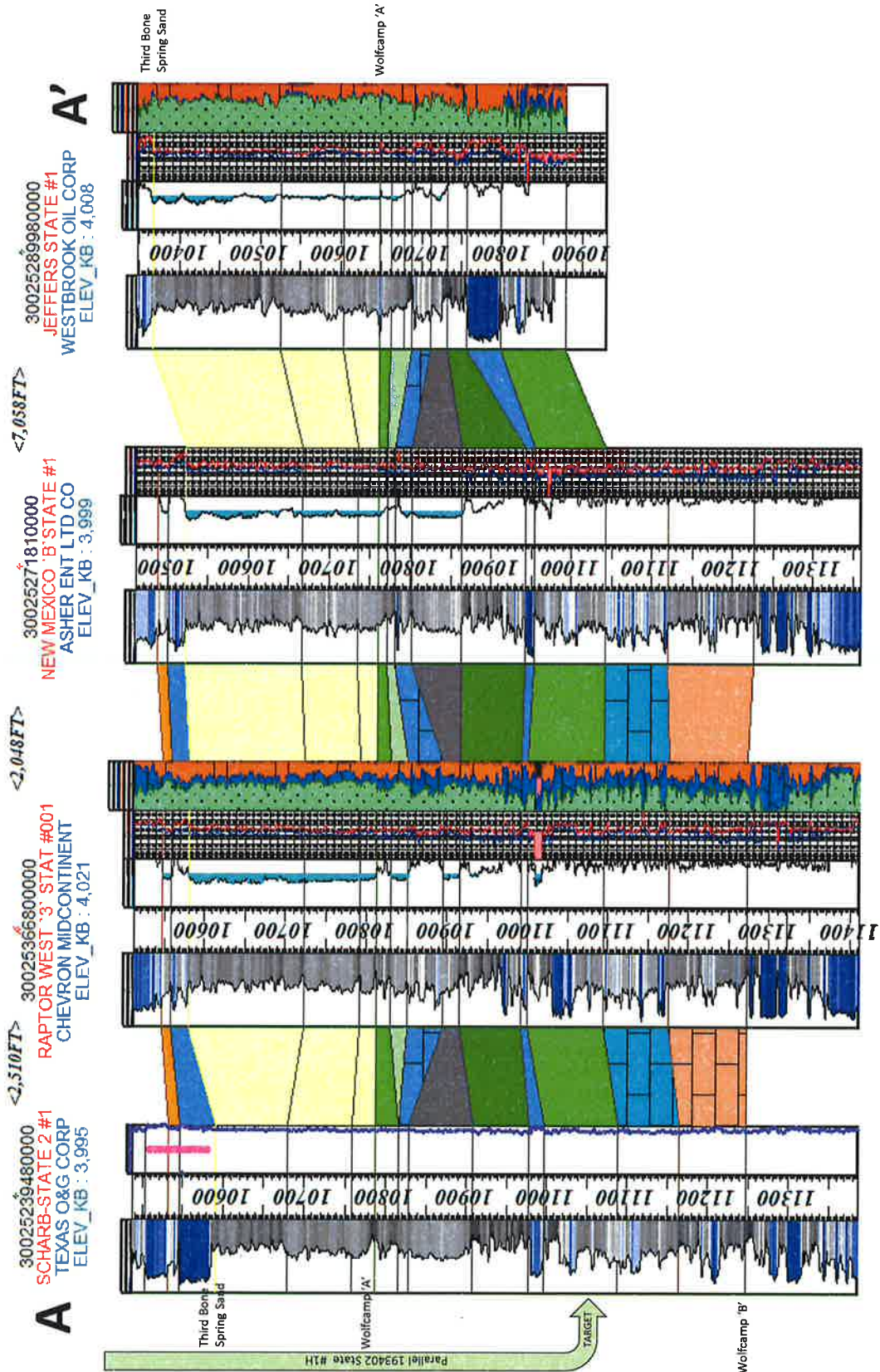


Wolfcamp 'A'

Subsea Structure



Wolfcamp 'A' Datum Cross Section



BEFORE THE OIL CONSERVATION DIVISION

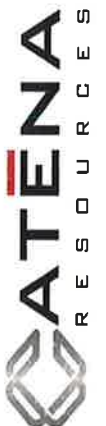
Santa Fe, New Mexico

Exhibit No. D3

Submitted by: Catena Resources Operating, LLC

Hearing Date: April 30, 2020

Case No. 21180





Michael H. Feldewert
Phone (505) 988-4421
Fax (505) 983-6043
mfeldewert@hollandhart.com

March 19, 2020

VIA CERTIFIED MAIL
CERTIFIED RECEIPT REQUESTED

TO: ALL INTEREST OWNERS SUBJECT TO POOLING PROCEEDINGS

Re: NOTICE OF UPDATED HEARING ADDRESS

Application of Catena Resources Operating, LLC for Compulsory Pooling, Lea County, New Mexico.

Parallel 193402 #1H Well

Ladies & Gentlemen:

The purpose of this letter is to amend the notice provided on March 13, 2020 of Catena Resources Operating LLC's application with the New Mexico Oil Conservation Division related to the above-referenced wells. A hearing has been requested before a Division Examiner on April 2, 2020, however, the hearing may be rescheduled, and the status of the hearing can be monitored through the Division's website at <http://www.emnrd.state.nm.us/ocd/>. The hearing will be held in Room 311, New Mexico State Capitol Building (the Roundhouse), 490 Old Santa Fe Trail, Santa Fe, New Mexico. 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 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 Robert Swann at (210) 775-6993 or at rswann@catenares.com.

Sincerely,

A handwritten signature in blue ink, appearing to read "Michael H. Feldewert".

Michael H. Feldewert

ATTORNEY FOR CATENA RESOURCES OPERATING, LLC

Handwritten initials in blue ink, possibly "RS" or "JS".

HOLLAND & HART



Michael H. Feldewert
Phone (505) 988-4421
Fax (505) 983-6043
mfeldewert@hollandhart.com

March 13, 2020

VIA CERTIFIED MAIL
CERTIFIED RECEIPT REQUESTED

TO: ALL INTEREST OWNERS SUBJECT TO POOLING PROCEEDINGS

Re: Application of Catena Resources Operating, LLC for Compulsory Pooling, Lea County, New Mexico.
Parallel 193402 #1H Well

Ladies & Gentlemen:

This letter is to advise you that Catena Resources Operating, LLC, has filed the enclosed application with the New Mexico Oil Conservation Division. A hearing has been requested before a Division Examiner on April 2, 2020, and the status of the hearing can be monitored through the Division's website at <http://www.emnrd.state.nm.us/ocd/>. Division hearings will commence at 8:15 a.m. in Porter Hall at 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 business 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 Robert Swann at (210) 775-6993 or at rswann@catenares.com.

Sincerely,

for
Michael H. Feldewert

ATTORNEY FOR CATENA RESOURCES OPERATING, LLC

Catena - Parallel

Case No. 21180 Postal Delivery Report

Tracking Number	Recipient	Status
9214890194038309329330	COG Operating LLC 600 W Illinois Avenue Midland TX 79701	Delivered Signature Received
9214890194038309329347	Concho Oil & Gas LLC 600 W Illinois Avenue Midland TX 79701	Delivered Signature Received
9214890194038309329354	Nestegg Energy Corporation 2308 Sierra Vista Rd Artesia NM 88210	Delivered Signature Received

Catena - Parallel - Amended Letter
Case No. 21180 Postal Delivery Report

9414810898765056487550	COG Operating LLC	600 W Illinois Ave	Midland TX	79701-4882	Your item arrived at our MIDLAND TX DISTRIBUTION CENTER destination facility on March 22, 2020 at 3:48 am. The item is currently in transit to the destination.
9414810898765056487567	Concho Oil & Gas LLC	600 W Illinois Ave	Midland TX	79701-4882	Your item arrived at our MIDLAND TX DISTRIBUTION CENTER destination facility on March 22, 2020 at 3:48 am. The item is currently in transit to the destination.
9414810898765056487574	Nestegg Energy Corporation	2308 Sierra Vista Rd	Artesia NM	88210-9409	Your item departed our LUBBOCK TX DISTRIBUTION CENTER destination facility on March 22, 2020 at 6:48 pm. The item is currently in transit to the destination.



UNITED STATES
POSTAL SERVICE®

\$5.90 x 3 = \$17.70

Shipment Confirmation Acceptance Notice

A. Mailer Action

Note to Mailer: The labels and volume associated to this form online, **must** match the labeled packages being presented to the USPS® employee with this form.

Catena - Parallel
Case No. 21180
CM# 106903.0001

Shipment Date: 03/13/2020

Shipped From:

Name: HOLLAND & HART LLP (1)

Address: 110 N GUADALUPE ST # 1

City: SANTA FE

State: NM ZIP+4® 87501

Type of Mail	Volume
Priority Mail Express®	
Priority Mail®	0
First-Class Package Service®	
Returns	
International*	
Other	3
Total	3

*Start time for products with service guarantees will begin when mail arrives at the local Post Office™ and items receive individual processing and acceptance scans.

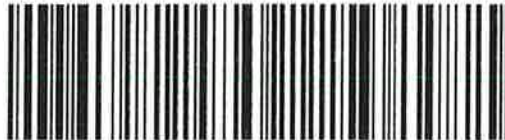
B. USPS Action

Note to RSS Clerk:

1. Home screen > Mailing/Shipping > More
2. Select Shipment Confirm
3. Scan or enter the barcode/label number from PS Form 5630
4. Confirm the volume count message by selecting Yes or No
5. Select Pay and End Visit to complete transaction

USPS EMPLOYEE: Please scan upon pickup or receipt of mail.
Leave form with customer or in customer's mail receptacle.

USPS SCAN AT ACCEPTANCE



9275 0901 1935 6200 0020 9863 21





Firm Mailing Book For Accountable Mail

[illegible]

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).

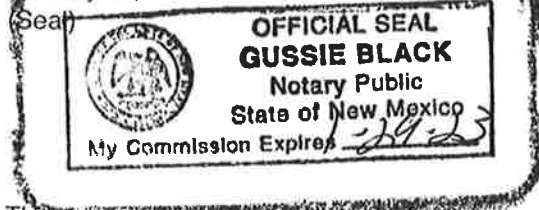
Beginning with the issue dated
March 19, 2020
and ending with the issue dated
March 19, 2020.


Publisher

Sworn and subscribed to before me this
19th day of March 2020.


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
MARCH 19, 2020

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 a public hearing before a hearing examiner on April 2, 2020, 8:15 a.m., in Room 311, New Mexico State Capitol Building (the Roundhouse), 490 Old Santa Fe Trail, Santa Fe, New Mexico. The docket may be viewed electronically on the Division's website, <http://www.emnrd.state.nm.us/OCD/hearings.html> or obtained from Florene Davidson, OCD Clerk, at (505) 476-3458. Documents filed in the case may be viewed at <http://ocdimage.emnrd.state.nm.us/imaging/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 the hearing, contact Florene Davidson, OCD Clerk, at (505) 476-3458, or at the New Mexico Relay Network, 1-800-659-1779, no later than March 23, 2020.

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: COG Operating LLC; Concho Oil & Gas LLC; and Nestegg Energy Corporation.

Case No. 21180: Application of Catena Resources Operating, LLC for compulsory pooling, Lea County, New Mexico. Applicant in the above-styled cause seeks an order pooling all uncommitted interests in the Wolfcamp formation underlying a standard 324.13-acre, more or less, horizontal spacing unit comprised of the W/2 W/2 of Section 35, Township 18 South, Range 34 East, and the W/2 W/2 of Section 2, Township 19 South, Range 34 East, NMPM, Lea County, New Mexico. Said horizontal spacing unit is to be initially dedicated to the proposed Parallel 193402 #1H Well to be horizontally drilled from a surface location in the SW/4 SW/4 (Unit M) of Section 2 to a bottom hole location in the NW/4 NW/4 (Unit D) of Section 35. The completed interval for the proposed well will comply with the statewide setback requirements for horizontal oil wells. Also, to be considered will be the cost of drilling and completing the well and the allocation of the cost thereof, the actual operating costs and charges for supervision, the designation of applicant as operator of the well and the proposed horizontal spacing unit, and a 200% charge for risk involved in drilling said well. Said area is located approximately 20 miles East of Hobbs, New Mexico.
#35326

67100754

00240808

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: Catena Resources Operating, LLC

Hearing Date: April 30, 2020

Case No. 21180