

**BEFORE THE OIL CONSERVATION DIVISION  
EXAMINER HEARING AUGUST 06, 2020**

**CASE No. 21355**

*BALL 183529 1H WELL*

*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. 21355**


**TABLE OF CONTENTS**

- Compulsory Pooling Application Checklist and Filed Application
- **Catena Exhibit A** – Affidavit of Robert Swann, Land
  - **Catena Exhibit A-1** – C-102
  - **Catena Exhibit A-2** – General Location Map
  - **Catena Exhibit A-3** – Spacing Unit Plat/Ownership Breakdown
  - **Catena Exhibit A-4** – Sample Well Proposal Letter/AFE
  - **Catena Exhibit A-5** – Chronology of Contact with Non-Joined Working Interests
- **Catena Exhibit B** – Affidavit of Vince Smith, Geology
  - **Catena Exhibit B-1** – Structure Map/Cross-Section Map
  - **Catena Exhibit B-2** – Cross-Section
  - **Catena Exhibit B-3** – Location Map
- **Catena Exhibit C** – Notice Affidavit

# COMPULSORY POOLING APPLICATION CHECKLIST

**ALL INFORMATION IN THE APPLICATION MUST BE SUPPORTED BY SIGNED AFFIDAVITS**

<b>Case: 21355</b>	<b>APPLICANT'S RESPONSE</b>
<b>Date: August 4, 2020</b>	
Applicant	Catena Resources Operating, LLC
Designated Operator & OGRID (affiliation if applicable)	Catena Resources Operating, LLC (OGRID No. 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:	Marathon Oil Permian, LLC
Well Family	Ball 183529 1H
<b>Formation/Pool</b>	
Formation Name(s) or Vertical Extent:	Wolfcamp Formation
Primary Product (Oil or Gas):	Oil
Pooling this vertical extent:	Wolfcamp Formation
Pool Name and Pool Code:	Airstrip; Wolfcamp (970)
Well Location Setback Rules:	Statewide horizontal oil well rules
Spacing Unit Size:	640-acres, more or less
<b>Spacing Unit</b>	
Type (Horizontal/Vertical)	Horizontal well spacing unit
Size (Acres)	640 acres, more or less
Building Blocks:	quarter-quarter sections
Orientation:	South to North
Description: TRS/County	E/2 of Sections 20 and 29, T-18-S, R-35-E, NMPM, Lea County, New Mexico.
Standard Horizontal Well Spacing Unit (Y/N), If No, describe	Yes
<b>Other Situations</b>	
Depth Severance: Y/N. If yes, description	None
Proximity Tracts: If yes, description	W/2 E/2 Sections 20 and 29
Proximity Defining Well: if yes, description	Ball 183529 1H
Applicant's Ownership in Each Tract	Exhibit A-3
<b>Well(s)</b>	
Name & API (if assigned), surface and bottom hole location, footages, completion target, orientation, completion status (standard or non-standard)	Add wells as needed
Well #1	Ball 183529 1H (API # Pending) SHL: 190' FNL & 1250' FEL (Unit A), Sec. 32, T18S, R35E BHL: 100' FNL & 1250' FEL (Unit A), Sec. 20, T18S, R35E Completion target: Wolfcamp Well orientation: South to North Completion location: expected to be standard
Horizontal Well First and Last Take Points	See Exhibit A-1
Completion Target (Formation, TVD and MD)	See Exhibit B
<b>AFE Capex and Operating Costs</b>	
Drilling Supervision/Month \$	\$8,000
Production Supervision/Month \$	\$800
Justification for Supervision Costs	See Exhibit A

Requested Risk Charge	200%
<b>Notice of Hearing</b>	
Proposed Notice of Hearing	Exhibit C
Proof of Mailed Notice of Hearing (20 days before hearing)	Exhibit C
Proof of Published Notice of Hearing (10 days before hearing)	N/A
<b>Ownership Determination</b>	
Land Ownership Schematic of the Spacing Unit	Exhibit A-3
Tract List (including lease numbers and owners)	Exhibit A-3
Pooled Parties (including ownership type)	Exhibit A-3
Unlocatable Parties to be Pooled	N/A
Ownership Depth Severance (including percentage above & below)	N/A
<b>Joinder</b>	
Sample Copy of Proposal Letter	Exhibit A-4
List of Interest Owners (ie Exhibit A of JOA)	Exhibit A-3
Chronology of Contact with Non-Joined Working Interests	Exhibit A-5
Overhead Rates In Proposal Letter	Exhibit A-4
Cost Estimate to Drill and Complete	Exhibit A-4
Cost Estimate to Equip Well	Exhibit A-4
Cost Estimate for Production Facilities	Exhibit A-4
<b>Geology</b>	
Summary (including special considerations)	Exhibit B
Spacing Unit Schematic	Exhibit A-2
Gunbarrel/Lateral Trajectory Schematic	Exhibit A-2
Well Orientation (with rationale)	Exhibit B-3
Target Formation	Exhibit B
HSU Cross Section	Exhibit B-2
Depth Severance Discussion	N/A
<b>Forms, Figures and Tables</b>	
C-102	Exhibit A-1
Tracts	Exhibit A-3
Summary of Interests, Unit Recapitulation (Tracts)	Exhibit A-3
General Location Map (including basin)	Exhibit A-2
Well Bore Location Map	Exhibit A-2
Structure Contour Map - Subsea Depth	Exhibit B-1
Cross Section Location Map (including wells)	Exhibit B-1
Cross Section (including Landing Zone)	Exhibit B-2
<b>Additional Information</b>	
Special Provisions/Stipulations	None
<b>CERTIFICATION: I hereby certify that the information provided in this checklist is complete and accurate.</b>	
<b>Printed Name</b> (Attorney or Party Representative):	Michael H. Feldewert
<b>Signed Name</b> (Attorney or Party Representative):	
<b>Date:</b>	4-Aug-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. 21355**

**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 640-acre, more or less, horizontal spacing unit comprised of the E/2 of Sections 20 and 29, Township 18 South, Range 35 East, 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 **Ball 183529 1H Well** to be horizontally drilled from a surface location in the NE/4 NE/4 (Unit A) of Section 32 to a bottom hole location in the NE/4 NE/4 (Unit A) of Section 20.
3. The completed interval for the proposed well will remain within 330 feet of the W/2 E/2 of Sections 20 and 29 to allow inclusion of this offsetting acreage in a standard horizontal well spacing unit.
4. Applicant has sought and been unable to obtain voluntary agreement for the development of these lands from all interest owners in the subject spacing unit.

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

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

WHEREFORE, Applicant requests that this application be set for hearing before an Examiner of the Oil Conservation Division on July 23, 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 wells 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

(505) 988-4421

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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 NOS. 21355

**AFFIDAVIT OF ROBERT SWANN**

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

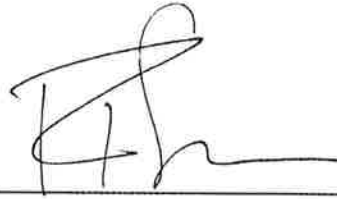
1. My name is Robert Swann. I am a Land Manager with Catena Resources Operating, LLC ("Catena").
2. I have previously testified before the New Mexico Oil Conservation Division as an expert witness in petroleum land matters. My credentials as a petroleum land manager have been accepted by the Division 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. The uncommitted parties have not indicated any opposition to this pooling application, and therefore I do not expect any opposition at the hearing
5. Catena seek an order pooling all uncommitted interests in the Wolfcamp formation [Airstrip; Wolfcamp Pool (970)] underlying a standard 640-acre horizontal spacing unit comprised of the E/2 of Sections 20 and 29, Township 18 South, Range 35 East, Lea County, New Mexico.
6. Catena seeks to initially dedicate this spacing unit to the proposed **Ball 183529 1H** well to be horizontally drilled from a surface location in the NE/4 NE/4 (Unit A) of Section 32 to a bottom hole location in the NE/4 NE/4 (Unit A) of Section 20. The completed interval for the proposed well will remain within 330 feet of the W/2 E/2 of Sections 20 and 29 to allow inclusion of this offsetting acreage in a standard horizontal well spacing unit.

7. **Exhibit A-1** contains the Form C-102 for the proposed well.
8. **Exhibit A-2** is a general location map outlining the acreage being pooled and the lateral trajectory of the proposed well. The acreage is comprised of state lands.
9. **Exhibit A-3** identifies the tracts of land comprising the proposed spacing unit, the working interest ownership in each tract and their respective interest in the horizontal spacing unit. The mineral owners that remain to be pooled are highlighted on Exhibit A-3.
10. No ownership depth severances exist within in the Wolfcamp formation underlying the subject acreage.
11. Catena has conducted a diligent search of company records, county records, telephone directories and conducted computer searches to locate contact information for each of the mineral owners that it seeks to pool.
12. **Exhibit A-4** contains a sample of the letter and AFE for the proposed well sent to the working interest owners that Catena has been able to locate. The costs reflected on the AFE are consistent with what Catena and other operators have incurred for drilling similar horizontal wells in the area in this formation.
13. **Exhibit A-5** contains a chronology of the contacts with the uncommitted mineral owners Catena was able to locate. Catena has made a good faith effort to obtain voluntary joinder of these owners in the proposed wells.
14. Catena requests overhead and administrative rates of \$8,000 per month for drilling and \$800 per month for a producing well. These rates are consistent with the rates charged by Catena and other operators for similar wells in this area.

15. I have provided the law firm of Holland and Hart, LLP, with the names and addresses (where available) of the mineral owners that Catena seeks to pool and instructed that they be notified of this hearing.

16. Exhibits A-1 through A-5 were prepared by me or compiled under my direction from company business records.

FURTHER AFFIANT SAYETH NAUGHT



ROBERT SWANN

STATE OF TEXAS                    )  
  )  
COUNTY OF BEXAR                )

SUBSCRIBED and SWORN to before me this 4<sup>th</sup> day of AUGUST 2020 by Robert Swann.



  
NOTARY PUBLIC

My Commission Expires:

12/05/2023

15155528\_v1

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) 334-6176 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

<sup>1</sup> API Number		<sup>2</sup> Pool Code 970		<sup>3</sup> Pool Name Airstrip; Wolfcamp	
<sup>4</sup> Property Code		<sup>5</sup> Property Name Ball 183529			<sup>6</sup> Well Number 111
<sup>7</sup> OGRID No. 328449		<sup>8</sup> Operator Name Catena Resources Operating, LLC			<sup>9</sup> Elevation

<sup>10</sup> Surface Location

1/4 or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	32	18 S	35 E		190'	North	1250'	East	Lea

<sup>11</sup> Bottom Hole Location If Different From Surface

1/4 or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	20	18 S	35 E		100'	North	1250'	East	Lea

<sup>12</sup> Dedicated Acres	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
640		COM	

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.

NWNW	NENW	NWNE	NENE	BHL & LTP 100' FNL 1250' FEL S-20, 18S,35E	NWNE	NENE
SWNW	SEnw	SWNE	SENE	SWNW	SEnw	SWNE
NWSW	NESW	NWSE	NESE	NWSW	NESW	NWSE
SWSW	SESW	SWSE	SESE	SWSW	SESW	SWSE
NWNW	NENW	NWNE	NENE	NWNW	NENW	NWNE
SWNW	SEnw	SWNE	SENE	FTP 100' FSL 1250' FEL S-29, 18S,35E	SWNE	SENE
NWSW	NESW	NWSE	NESE	NWSW	NESW	NWSE
SWSW	SESW	SWSE	SESE	SWSW	SESW	SWSE
NWNW	NENW	NWNE	NENE	NWNW	NENW	NWNE
SHL 190' FNL 1250' FEL S-32, 18S,35E						

<sup>17</sup> 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 undivided mineral interest in the land including the proposed bottom hole location and a right to drill this well this location pursuant to a contract with an owner of such a mineral or works interest, or to a voluntary pooling agreement or compulsory pooling order hereby approved by the division

Signature:  Date: 8/4/2020

Printed Name: ROBERT SWANN

E-mail Address: RSWANN@CatenaResources.com

<sup>18</sup> 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.

Date of Survey

Signature and Seal of Professional Surveyor:

Certificate Number

BEFORE THE OIL CONSERVATION DIVISION

Santa Fe, New Mexico

Exhibit No. A1

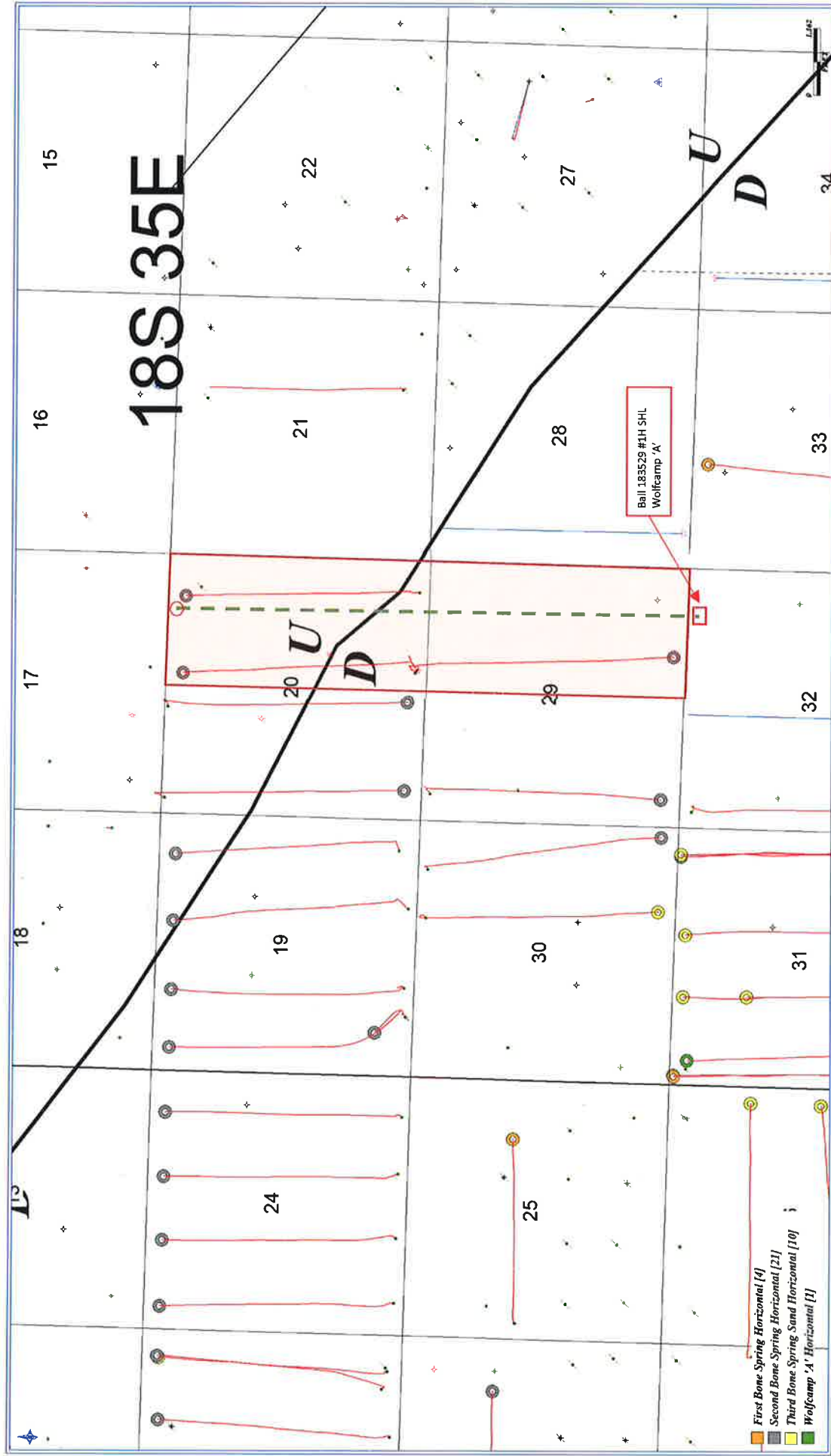
Submitted by: Catena Resources Operating, LLC

Hearing Date: August 06, 2020

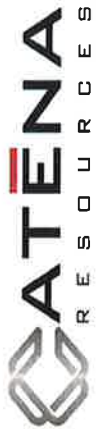
Case No. 21355

# Ball 183529 #1H

Locator Map



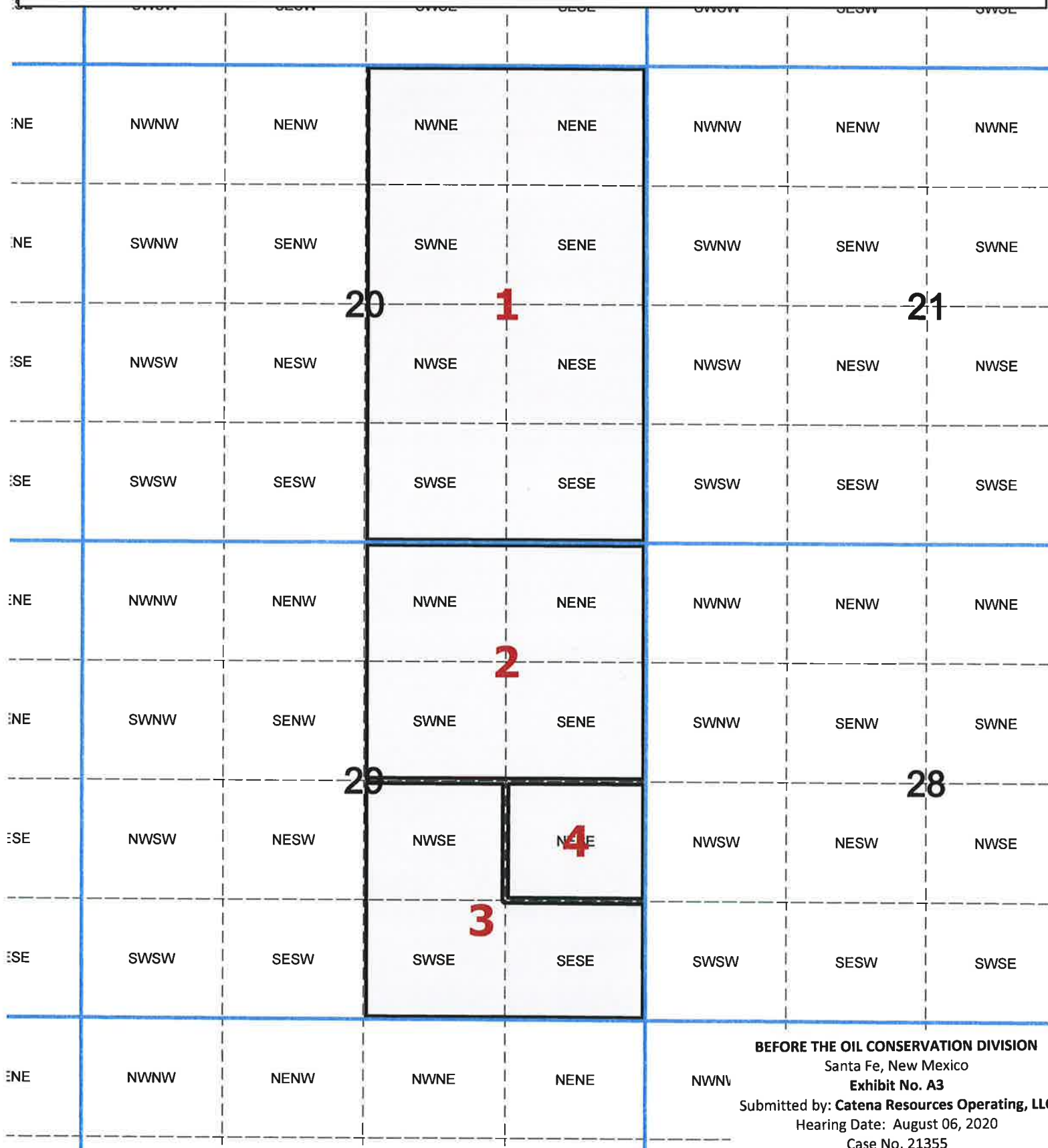
BEFORE THE OIL CONSERVATION DIVISION  
Santa Fe, New Mexico  
Exhibit No. A2  
Submitted by: Catena Resources Operating, LLC  
Hearing Date: August 06, 2020  
Case No. 21355



# Catena Resources Operating, LLC

## Ball 183529 1H - Wolfcamp

### Case No. 21355



BEFORE THE OIL CONSERVATION DIVISION

Santa Fe, New Mexico

Exhibit No. A3

Submitted by: Catena Resources Operating, LLC

Hearing Date: August 06, 2020

Case No. 21355

<b>Unit Size</b>	<b>Ball 183529 1H - Wolfcamp - Case No. 21355</b>			
<b>640</b>				
<b>WI Owner</b>	<b>Tract No</b>	<b>Tract Gross</b>	<b>Tract WI</b>	<b>Tract NMA</b>
Catena Resources Operating	1	320	87.50%	280.000
T.H. McElvain Oil & Gas, LLLP	1	320	12.50%	40.000
Marathon Oil Permian LLC	3	320	100.00%	320.000
<b>Tract Totals</b>				<b>640.000</b>

<b>WI Owner</b>	<b>Unit WI</b>	<b>Unit NMA</b>
Catena Resources Operating	43.75%	280.000
T.H. McElvain Oil & Gas, LLLP	6.25%	40.000
Marathon Oil Permian LLC	50.00%	320.000
<b>Unit Totals</b>	<b>100.00%</b>	<b>640.000</b>



June 10, 2020

Via Certified Mail

Re: **Ball 183529 1H Well Proposal**  
**Wolfcamp Formation**  
**E2 of Section 20 T18S, 35E, and Section 29, T18S, R35E**  
**Lea County, New Mexico**

**Ball 183529 2H Well Proposal**  
**Bone Springs Formation**  
**E2 of Section 20 T18S, 35E, and Section 29, T18S, R35E**  
**Lea County, New Mexico**

Ladies and Gentlemen,

Catena Resources Operating, LLC ("Catena") as Operator hereby proposes to drill the following wells to a depth sufficient to test the Wolfcamp and Bone Spring formations:

Well Name	SHL Sec. 32	BHL Sec. 20	Spacing Unit 640 Acres	Target TVD	Estimated TMD
Ball 183529 1H Wolfcamp Formation	FNL: 190' FEL: 1250'	FNL: 100' FEL: 1250'	E/2 of Section 20, T18S, 35E and E/2 of Section 29, T19S, R35E	9,755'	20,469'
Ball 183529 2H Bone Spring Formation	FNL: 190' FEL: 1350'	FNL: 100' FEL: 1250'	E/2 of Section 20, T18S, 35E and E/2 of Section 29, T19S, R35E	9,570'	20,284'

*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 April 16, 2020 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. 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.

18402 US Hwy 281 N  
Suite 258  
San Antonio, TX 78259



**BEFORE THE OIL CONSERVATION DIVISION**  
Santa Fe, New Mexico  
**Exhibit No. A4**

Submitted by: **Catena Resources Operating, LLC**  
Hearing Date: August 06, 2020  
Case No. 21355


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

Sincerely,

Catena Resources Operating, LLC

Robert Swann

Land Manager

				WELL COST ESTIMATE				AFE NO.		
<div></div>				WELL NAME:	Ball 183529 1H	DATE:	16-Apr-20			
				RELD NAME:		START DATE:				
				LOCATION:	2.0 sec. lateral,	COMPLETE DATE:				
				COUNTY / ST:	Lee County, NM	ORIGINAL:	x			
				OBJECTIVE:	Wolfcamp	SUPPLEMENT:				
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	\$60,000	32003	\$0		\$0	\$60,000
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	\$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	\$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	33009	\$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, Roat 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	\$21,000
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	\$19,500		\$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
Roustabout / 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	\$0
Safety / EH&S				31048		32042	\$6,610	33007	\$0	\$6,610
5.5% Contingency (8% Taxes on Casing included in casing cost)				31049	\$141,973	32043	\$311,200		\$10,500	\$463,673
NON-Op Drilling Intangible				31050		32044	\$0		\$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										
Surface Casing				31101						
1st Intermediate Casing / Liner				31102	\$68,600					\$68,600
2nd Intermediate Casing / Liner				31103	\$113,200					\$113,200
Production Casing / Liner				31104						\$0
Casing Tie Back						32101	\$430,000			\$430,000
Liner Hanger Assembly						32102				
Tubing						32103				
Casing Equipment - OHMS / Etc.						32104	\$61,425			\$61,425
Wellhead Equipment						32105	\$31,200			\$31,200
Pumping Unit / Prime Mover / Base				31105	\$52,000	32106	\$27,000			\$79,000
Rods / Pony Rods / Sinker Bars						32107	\$0	33101	\$0	\$0
Artificial Lift Other - Gas Lift						32108	\$0	33102	\$0	\$0
Wellhead Equipment Completions - Production Tree						32109	\$14,000	33103	\$0	\$14,000
Tanks / Tank Steps / Stairs						32110	\$42,000	33104	\$0	\$42,000
Gas Treating / Dehydration Equipment						32111	\$0	33105	\$66,000	\$66,000
Separation Equipment, Heater Treater						32112	\$0	33106	\$0	\$0
Surface Pumps						32113	\$0	33107	\$68,200	\$68,200
Filters						32114	\$0	33108	\$3,000	\$3,000
Buildings						32115	\$0	33109	\$0	\$0
Interconnect Piping / Manifolds / Headers						32116	\$0	33110	\$0	\$0
Flowlines / Connections / Valves						32117	\$0	33111	\$60,000	\$60,000
Automation / Instruments / Controls / Analyzers						32118	\$0	33112	\$46,960	\$46,960
Electrical Equipment / Generators						32119	\$0	33113	\$16,000	\$16,000
Compressor & Related Equipment						32120	\$0	33114	\$52,000	\$52,000
Metering Equipment, LACT Unit						32121	\$0	33115	\$0	\$0
Chemical Equipment / Cathodic Protection						32122	\$0	33116	\$104,000	\$104,000
Subsurface Equipment - Packer, Plugs, TAC						32123	\$0	33117	\$0	\$0
Safety / EH&S Equipment						32124	\$11,000	33118	\$0	\$11,000
NON-OP Drilling Intangible						32125	\$4,000	33119	\$36,000	\$40,000
Transfer/SWD Pumps & Equipment						32126	\$0	33120	\$0	\$0
Flare / Combustor						32127	\$0	33121	\$19,060	\$19,060
Miscellaneous						32128	\$0	33122	\$32,000	\$32,000
Contingency Costs				31106	\$11,690	32129	\$24,410	33123	\$0	\$24,410
TOTAL TANGIBLE COSTS				31107	\$11,690	32130	\$31,031	33124	\$0	\$42,721
					\$245,490		\$676,066		\$503,220	\$1,424,776

## **Catena Resources Operating, LLC – Discussion Timeline**

### **Wells**

Ball 183529 1H

Catena's conversations with Marathon began on December 6, 2019. From that time on, multiple emails, phone calls, proposals and letters were exchanged. The main contact at Marathon is Jeff Broussard and as of August 3, 2020, dealings with Marathon are ongoing.

**BEFORE THE OIL CONSERVATION DIVISION**

Santa Fe, New Mexico

**Exhibit No. A5**

Submitted by: **Catena Resources Operating, LLC**

Hearing Date: August 06, 2020

Case No. 21355

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 NOS. 21355

AFFIDAVIT OF VINCE SMITH

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 matter and I have conducted a geologic study of the lands in the subject area.
4. Catena is initially targeting the 'A' interval of the Wolfcamp formation. **Exhibit B-1** is a subsea structure map that I prepared for this interval with 25-foot contours. The proposed horizontal well spacing unit is highlighted in red and the initial well is depicted with a dashed line. The structure map shows the Wolfcamp formation dipping gently to the south. The dark line between the notations "D" and "U" represents a deeper structure that caused the shallower formations to sit high. The notations "D" and "U" refer to "downthrown" and "upthrown" side of the deep structure faulting. The structure appears consistent across the proposed spacing unit and I do not observe any faulting, pinch outs, or other geologic impediments to drilling horizontal wells in this area.
5. **Exhibit B-1** also shows a cross-section line in red running north to south reflecting four wells penetrating the Wolfcamp formation that I used to construct a stratigraphic cross-section

BEFORE THE OIL CONSERVATION DIVISION

Santa Fe, New Mexico

**Exhibit No. B**

Submitted by: **Catena Resources Operating, LLC**

Hearing Date: August 06, 2020

Case No. 21355

from A to A'. These wells contain good logs and I consider them representative of the geology in the subject area.

6. **Exhibit B-2** is a stratigraphic cross-section that I prepared using the logs from the wells noted on Exhibit B-1. Three of the four wells in the cross-section contains the gamma ray in the first track, resistivity in the second track and porosity curves in the third track. The initial target interval is labeled and marked. The cross-section demonstrates that the targeted interval is continuous across the proposed spacing unit.

7. 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 be productive and contribute proportionately to the production from the well.

8. **Exhibit B-3** shows the orientation of the wells drilled in the Wolfcamp and Bone Spring formations in the surrounding area. 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.

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

10. **Exhibits B-1** through **B-3** were either prepared by me or compiled under my direction and supervision.

FURTHER AFFIANT SAYETH NOT

  
\_\_\_\_\_  
VINCE SMITH

STATE OF TEXAS                   )  
  )  
COUNTY OF BEXAR            )

SUBSCRIBED and SWORN to before me this 4 day of AUGUST 2020 by Vince Smith.



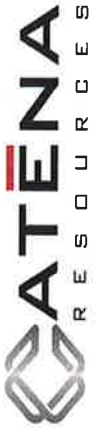
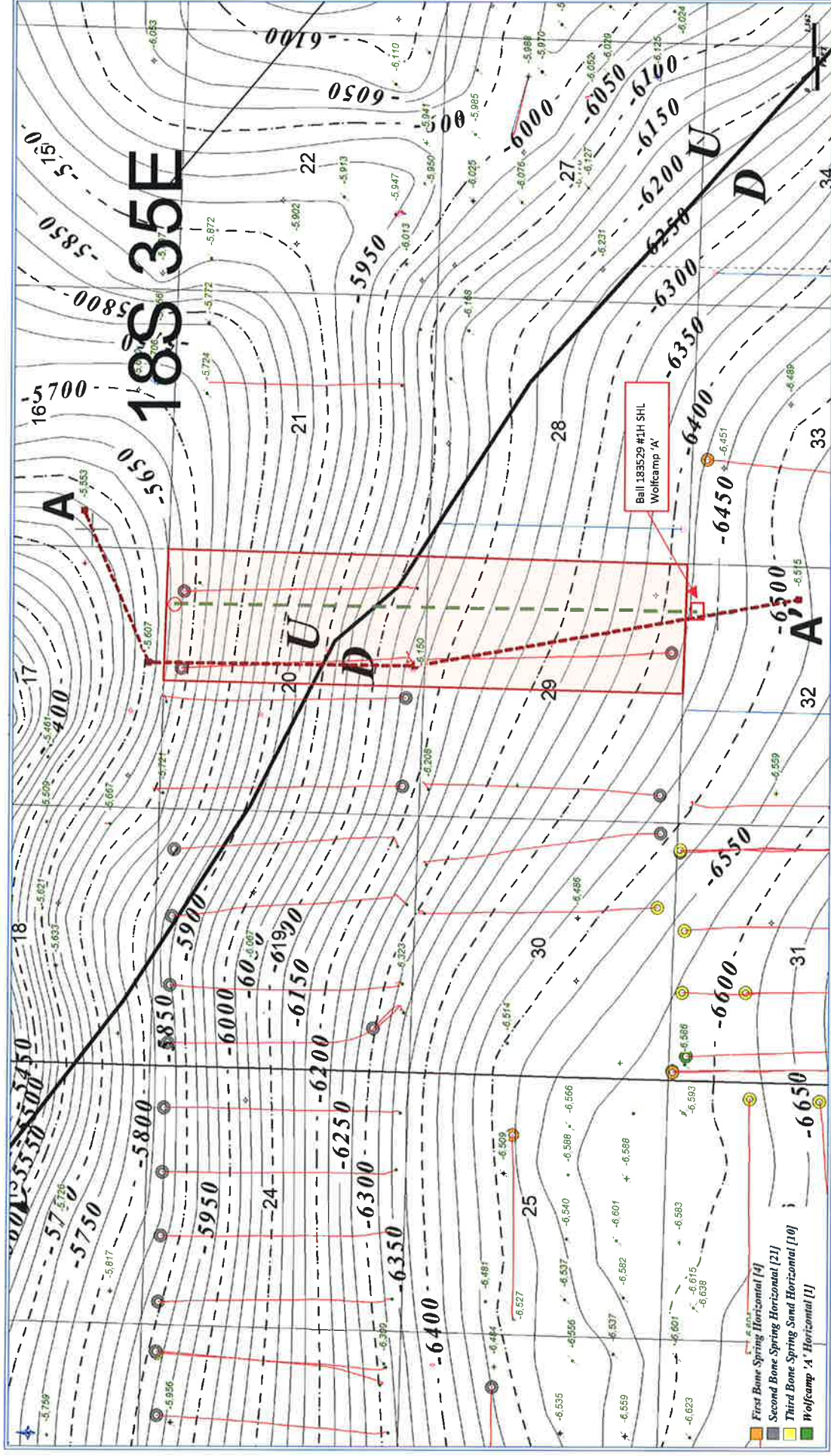
Caitlin Mary Hart  
NOTARY PUBLIC

My Commission Expires:

12/5/2023

# Wolfcamp 'A'

Subsea Structure



Contour Interval = 25'

BEFORE THE OIL CONSERVATION DIVISION  
 Santa Fe, New Mexico  
 Exhibit No. B1  
 Submitted by: Catena Resources Operating, LLC  
 H Hearing Date: August 06, 2020  
 Case No. 21355

# Wolfcamp 'A' Datum

Cross Section

**A'**

30025293470000  
MARALO SV 16 STATE #1  
MARALO LLC  
ELEV\_KB : 3,942

<3,359FT>

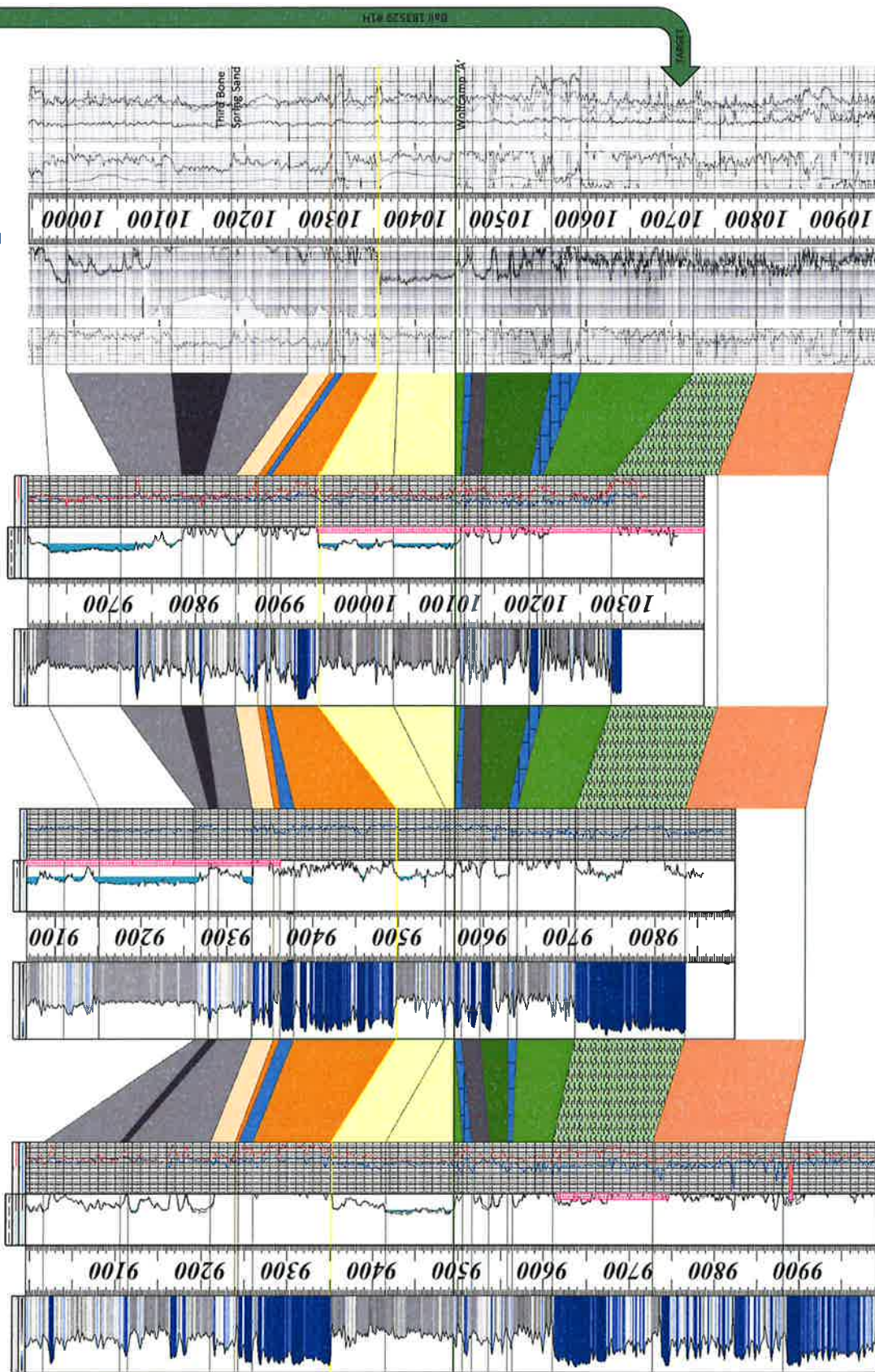
30025417570000  
BARBARO STATE #2  
MACK ENERGY CORP  
ELEV\_KB : 3,959

<5,283FT>

30025406117000  
IRONHOUSE 20 STATE #1H  
CATENA RESOURCES OP  
ELEV\_KB : 3,954

<8,057FT>

30025293360000  
PEOPLES 32 STATE #2  
SOUTHLAND ROYALTY CO  
ELEV\_KB : 3,931



Third Bone  
Spring Sand

Wolfcamp 'A'

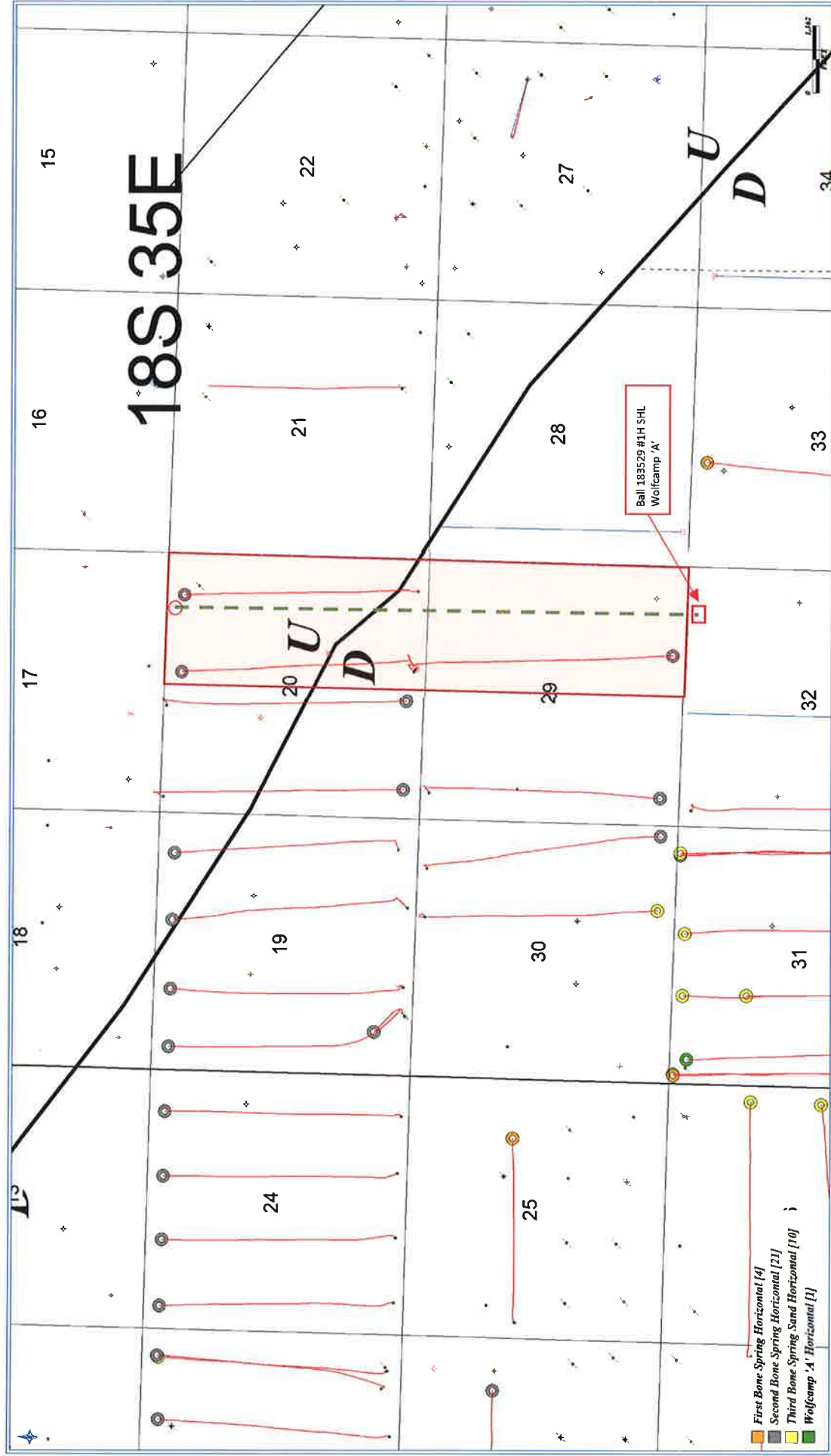
BEFORE THE OIL CONSERVATION DIVISION  
Santa Fe, New Mexico  
Exhibit No. B2

Submitted by: Catena Resources Operating, LLC  
Hearing Date: August 06, 2020  
Case No. 21355



# Ball 183529 #1H

## Locator Map



BEFORE THE OIL CONSERVATION DIVISION  
Santa Fe, New Mexico

Exhibit No. B3

Submitted by: Catena Resources Operating, LLC

Hearing Date: August 06, 2020

Case No. 21355







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

July 17, 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.**  
**Ball 183529 1H Well**

Ladies & Gentlemen:

This letter is to advise you that COG Operating Inc. has filed the enclosed application with the New Mexico Oil Conservation Division. A hearing has been requested before a Division Examiner on August 6, 2020, and the status of the hearing can be monitored through the Division's website at <http://www.emnrd.state.nm.us/ocd/>. 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 subsequently challenging this matter.

**During the COVID-19 Pubic Health Emergency, state buildings are closed to the public and hearings will be conducted remotely. To participate in the electronic hearing, see the instructions posted on the Oil Conservation Division "OCD Hearings" website at <http://www.emnrd.state.nm.us/OCD/announcements.html>.**

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](mailto: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**

Catena - Ball 1H-2H

Case NOs. 21355-21356 Postal Delivery Report

9414811898765825959773	Marathon Oil Permian LLC	P.O. Box 2069	Houston	TX	77252	Your item was delivered at Jul 22 in HOUSTON, TX 77210.
9414811898765825959919	McElvain Energy	1600 Stout Street	Denver	CO	80202	Delivered to Agent for Final Delivery at Jul 20 in DENVER, CO 80202.
9414811898765825959957	Loy G. Fletcher	P.O. Box 852	Artesia	NM	88211	Mail piece was scanned in ZIP code 88211 on Jul 27