

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. 22074

EXHIBIT INDEX

Compulsory Pooling Checklist

Exhibit A Self-Affirmed Statement of Cato Clark

- A-1 Resume of Cato Clark
- A-2 Application & Proposed Notice of Hearing
- A-3 C-102(s)
- A-4 Plat of Tracts, Tract Ownership, Pooled Party, Unit Recapitulation
- A-5 Sample Well Proposal Letter & AFE(s)
- A-6 Summary of Communications
- A-7 Hearing Notice Letter and Return Receipts
- A-8 Affidavit of Publication


Exhibit B Self-Affirmed Statement of Brian Moore

- B-1 Location Map
- B-2 Structure Map
- B-3 Stratigraphic Cross-Section
- B-4 Gross Isopach Map

COMPULSORY POOLING APPLICATION CHECKLIST

ALL INFORMATION IN THE APPLICATION MUST BE SUPPORTED BY SIGNED AFFIDAVITS

Case No.:	22074
Hearing Date:	8/5/2021
Applicant	Catena Resources Operating, LLC
Designated Operator & OGRID	OGRID # 328449
Applicant's Counsel	Hinkle Shanor LLP
Case Title	Application of Catena Resources Operating, LLC for Compulsory Pooling, Lea County, New Mexico
Entries of Appearance/Intervenors	-
Well Family	Creed
Formation/Pool	
Formation Name(s) or Vertical Extent	Wolfcamp
Primary Product (Oil or Gas)	Oil
Pooling this vertical extent	Wolfcamp
Pool Name and Pool Code	Scharb; Wolfcamp (55640)
Well Location Setback Rules	Statewide
Spacing Unit Size	320-acre
Spacing Unit	
Type (Horizontal/Vertical)	Horizontal
Size (Acres)	320-acre
Building Blocks	quarter-quarter
Orientation	Standup
Description: TRS/County	E/2W/2 of Sections 29 and 32, Township 18 South, Range 35 East, Lea County, New Mexico
Standard Horizontal Well Spacing Unit (Y/N), If No, describe	Yes
Other Situations	
Depth Severance: Y/N. If yes, description	No
Proximity Tracts: If yes, description	No
Proximity Defining Well: if yes, description	-
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
Well #1	Creed E2W2 29-32 W1 1H (API # pending) SHL: 500' FSL & 1650' FWL, Unit N, Section 20, T18S-R35E BHL: 100' FSL & 2310' FWL, Unit N, Section 32, T18S-R35E Completion Target: WolfCamp (Approx. 10,250' TVD)
Horizontal Well First and Last Take Points	Exhibit A-3
Completion Target (Formation, TVD and MD)	Exhibit A-5
APE Capex and Operating Costs	
Drilling Supervision/Month \$	Exhibit A
Production Supervision/Month \$	Exhibit A
Justification for Supervision Costs	Exhibit A
Requested Risk Charge	200%
Notice of Hearing	
Proposed Notice of Hearing	Exhibit A-2
Proof of Mailed Notice of Hearing (20 days before hearing)	Exhibit A-7
Proof of Published Notice of Hearing (10 days before hearing)	Exhibit A-8
Ownership Determination	

Land Ownership Schematic of Spacing Unit	Exhibit A-4
Tract List (including lease numbers & owners)	Exhibit A-4
Pooled Parties (including ownership type)	Exhibit A-4
Unlocatable Parties to be Pooled	Exhibit A-4
Ownership Depth Severance	N/A
Joinder	
Sample Copy of Proposal Letter	Exhibit A-5
List of Interest Owners (ie Exhibit A of JOA)	Exhibit A-4
Chronology of Contact with Non-Joined Working Interests	Exhibit A-5
Overhead Rates In Proposal Letter	N/A
Cost Estimate to Drill and Complete	Exhibit A-5
Cost Estimate to Equip Well	Exhibit A-5
Cost Estimate for Production Facilities	Exhibit A-5
Geology	
Summary (including special considerations)	Exhibit B
Spacing Unit Schematic	Exhibit B-1
Gunbarrel/Lateral Trajectory Schematic	Exhibit B-4
Well Orientation (with rationale)	Exhibit B
Target Formation	Exhibit B
HSU Cross Section	Exhibit B-3
Depth Severance Discussion	N/A
Forms, Figures and Tables	
C-102	Exhibit A-2
Tracts	Exhibit A-4
Summary of Interests, Unit Recapitulation (Tracts)	Exhibit A-4
General Location Map (including basin)	Exhibit B-1
Well Bore Location Map	Exhibit B-1
Structure Contour Map - Subsea Depth	Exhibit B-2
Cross Section Location Map (including wells)	Exhibit B-2
Cross Section (including Landing Zone)	Exhibit B-3
Additional Information	
<p>CERTIFICATION: I hereby certify that the information provided in this checklist is complete and accurate.</p>	
Printed Name (Attorney or Party Representative):	Michael Rodriguez
Signed Name (Attorney or Party Representative):	
Date:	8/3/2021

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. 22074

SELF-AFFIRMED STATEMENT
OF CATO CLARK

1. I am a consulting land advisor for Catena Resources Operating, LLC (“Catena”) and am over 18 years of age. I have personal knowledge of the matters addressed herein and am competent to provide this Self-Affirmed Statement. I have not previously testified before the New Mexico Oil Conservation Division (“Division”). A copy of my resume is attached as **Exhibit A-1**.

2. I am familiar with the land matters involved in the above-referenced case. Copies of this application and proposed hearing notice are attached hereto as **Exhibit A-2**.

3. None of the parties proposed to be pooled in this case indicated opposition to this matter proceeding by affidavit, therefore I do not expect any opposition at hearing.

4. Catena seeks an order pooling all uncommitted mineral interests in the Wolfcamp formation in a 320-acre, more or less, standard horizontal spacing unit (“Unit”) comprised of the E/2W/2 of Sections 29 and 32, Township 18 South, Range 35 East, Lea County, New Mexico.

5. The Unit will be dedicated to the **Creed E2W2 29-32 W1 1H** well (“Well”) which will be horizontally drilled from a surface location in the SE/4SW/4 (Unit N) of Section 20 to a bottom hole location in the SE/4SW/4 (Unit N) of Section 32.

6. The completed interval of the Well will be orthodox.

7. The Well is located in the Scharb; Wolfcamp (Pool Code 55640).

8. With respect to well setback requirements, this pool is subject to the statewide horizontal well rules set out in NMAC 19.15.16.15.

9. **Exhibit A-3** contains the C-102 for the Well.

10. **Exhibit A-4** contains a plat identifying ownership by tract in the Unit. This exhibit also includes any applicable lease numbers, a unit recapitulation, and the interests Catena seeks to pool.

11. **Exhibit A-5** contains a sample well proposal letter and AFE sent to working interest owners for the Well. The estimated costs reflected on the AFE are fair and reasonable and comparable to the cost of other wells of similar depth and length drilled in the subject formation in the area.

12. Catena has conducted a diligent search of all public records in Lea County including phone directories and computer databases.

13. All interest owners Catena seeks to pool are locatable.

14. In my opinion, Catena made a good-faith effort to reach voluntary joinder of uncommitted interests in the Well as indicated by the chronology of contact described in **Exhibit A-6**.

15. Catena requests overhead and administrative rates of \$8,500 per month while the Well is being drilled and \$850 per month while the Well is producing. These rates are fair and are comparable to the rates charged by Catena and other operators in the vicinity.

16. Notice of this case and the Division hearing was timely provided to the uncommitted interests by certified mail more than 20 days prior to the hearing date. A sample of the notice letters and associated green cards are attached as **Exhibit A-7**.

17. Notice of this case and the Division hearing was published more than ten business days prior to the hearing date. The affidavit of publication is attached as **Exhibit A-8**.

18. The exhibits attached hereto were either prepared by me or under my supervision or were compiled from company business records.

19. In my opinion, the granting of Catena's application will serve the interests of conservation, the protection of correlative rights, and the prevention of waste.

20. I understand this Self-Affirmed Statement will be used as written testimony in this case. I affirm that my testimony in paragraphs 1 through 19 above is true and correct and is made under penalty of perjury under the laws of the State of New Mexico. My testimony is made as of the date handwritten next to my signature below.



Cato Clark

7/29/2021

Date

Cato L. Clark, CPL

Houston, TX 77494

346-200-7894

clark@catenares.com

LAND AND BUSINESS DEVELOPMENT PROFESSIONAL

PROFESSIONAL SUMMARY

- 15-year energy industry career with a board experience managing land, regulatory and business development functions for conventional and unconventional assets across multiple basins.

PROFESSIONAL EXPERIENCE

**Catena Resources Operating, LLC, Houston, TX
Consulting Land Advisor**

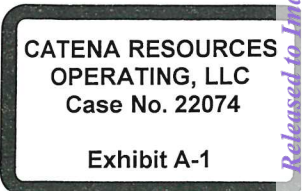
2021 – 2021

- Manage all Land and Regulatory functions including title, partner approvals, regulatory hearings, permitting, and surface use requiring collaboration across disciplines for the successful planning and general development of Catena’s drilling program in New Mexico
- Manage all Land functions for Catena’s Operated assets in New Mexico.

**Riviera Resources Inc. f/k/a LINN, Houston, TX
Vice President, Land**

2018 – 2021

- Recruited by LINN to help consolidate Oklahoma City and Houston corporate offices and build a new Land team for the corporate spin-off of Riviera Resources. Focused on establishing a new corporate culture with appropriately sized staffing for a publicly traded niche development company; Duly elected as a corporate officer of Riviera Resources upon completion of spin-off
- Responsible for supervising and coordinating the activities of all Land, Lease Records, Regulatory and Division Order personnel and other land field employees for the entire organization which included ~1.7 Million acres, ~9000 operated wells, and multiple midstream assets spanning 17 states
- Managed all Land and Regulatory functions including title, partner approvals, OCC force pooling orders, permitting, and surface use requiring collaboration across disciplines for the successful planning and general development of drilling programs in the NW Stack and North Louisiana
- Successfully negotiated several farmout(in) agreements, WI buyouts, and trade agreements across the company’s diverse portfolio of assets
- Collaborated on PSA negotiation, exhibit preparation, and managed a multi-disciplined group through closing and diligence for the company’s divestment efforts, leading to the successful closing of 16 transactions totaling ~\$700 Million in proceeds from opportunistic asset monetization’s since Jan. 2019
- Manage and coordinate with outside counsel for all land related litigation



- Collaborate with Legal to insure all title and mortgage coverage covenants are successfully met during every acquisition, divesture, and redetermination of the corporate Credit Facility
- Manage all Land and Regulatory requirements, notifications, and collection efforts related to the company Plan of Dissolution.

Breitbart Energy Partners LP, Houston, TX

2013 – 2018

Land and Corporate Development Manager

2016 – 2018

Sr. Landman, Corporate Development & Strategy

2014 - 2016

Advanced Landman

2013 – 2014

- Managed all land related sourcing, screening, evaluation, and due diligence for hundreds of potential acquisition opportunities in Texas, OK and other states which led to the successful closing of over a dozen acquisitions totaling ~\$1.3 Billion in assets
- Successfully negotiated numerous purchase and sale agreements, farmout(in) agreements, and trade agreements, across the company's diverse portfolio of assets which included trades to consolidate drilling locations in over 10,000 acres of the company's core Permian position
- Managed a multi-functional personnel team through the marketing, negotiation, and the successful closing of a divestment of substantially all of the company's non-core conventional Mid-Con assets, which consisted of over 400 operated and non-operated wells across 24 counties
- Worked closely with credit facility trustees and lawyers to insure all title and mortgage coverage covenants were successfully met during every acquisition, divesture, and redetermination
- Managed land diligence and integration related to the successful closing of the \$3 Billion merger with QR Energy
- Managed exhibit preparation, certain document preparation, and post-closing obligations related to the successful closing of the BBEP/QRE merger combined credit facility, and the successful closing of the EIG secured 2nd lien transaction
- Land team lead for integrating \$1 Billion of asset acquisitions in Oklahoma and New Mexico
- Provided operational land support and management for all the company's operated and non-operated assets in Oklahoma, New Mexico, and Florida, including but not limited to, negotiating operating agreements, purchase and sale agreements, and surface use agreements
- Provided land support integrating over \$500 Million of assets in the Permian Basin
- Managed leasing/farming projects and successfully negotiated and acquired over 15,000 acres of additional bolt-on acreage to the company's operated assets in multiple basins
- Managed and negotiated surface and mineral permitting for a 62 square mile 3D seismic program
- Named member of the Key Employee Program during Chapter 11 Corporate Restructuring

- During restructuring my additional responsibilities included; Managing restructuring related land diligence; Managing restructuring related exhibit preparation, land request, presentations, and notices; Managing the court approval process for all 363 trades and divestments, which included filing declarations and testimony in support of these transactions with the court; collaborated with Legal on responses to various claims

BETA Land Services LLC, Lafayette, Louisiana **2007 - 2013**

Project Manager	2009-2013
Project Supervisor	2008-2009
Landman	2007-2008

- Opened and managed Beta Land Services LLC's Houston office and was responsible for staffing and personnel management, networking, and advertising of company services to identify and acquire new clients
- Managed title due diligence projects across multiple basins covering both onshore and offshore properties for over \$8 Billion in total assets, and worked on title due diligence projects for over \$3 Billion in additional assets
- Managed lease negotiation, acquisition and title on over 100,000 acres of Marcellus Shale assets
- Managed multiple crews of over 100 brokers in abstracting and curative projects for drill site title opinions and division order title opinions for over 90 horizontal wells in the Marcellus and Utica Shales for multiple operators
- Managed data organization and review for multiple internal and external audits
- Researched and compiled numerous abstracts of title for various clients through deed research and charting chains of title
- Title research for oil and gas lease acquisitions
- Lease preparation, execution and filing
- Completed curative work to resolve title issues including the execution and filing of various affidavits, amendments, ratifications, subordinations and releases
- Trained personnel in various aspects of title examination, leasing, curative and abstract preparation
- Communication with clients and attorneys regarding progress of leasing, abstracting, due diligence and curative

EDUCATION

Bachelor of Arts in Business Management August, 2005
 Southeastern Louisiana University: Hammond, Louisiana

CERTIFICATIONS

Registered Professional Landman (RPL), July, 2012
 American Association of Professional Landmen
 Certified Professional Landman (CPL), March, 2016
 American Association of Professional Landmen

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

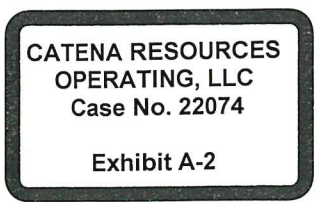
APPLICATION OF CATENA RESOURCES
OPERATING, LLC FOR COMPULSORY
POOLING, LEA COUNTY, NEW MEXICO

Case No. 22074

APPLICATION

Pursuant to NMSA § 70-2-17, Catena Resources Operating, LLC (“Applicant”) applies for an order pooling all uncommitted mineral interests in the Wolfcamp formation in a 320-acre, more or less, standard horizontal spacing unit (“Unit”) comprised of the E/2W/2 of Sections 29 and 32, Township 18 South, Range 35 East, Lea County, New Mexico. In support of its application, Applicant states:

1. Applicant (OGRID No. 328449) is a working interest owner in the Unit and has the right to drill wells thereon.
2. The Unit will be dedicated to the **Creed E2W2 29-32 W1 1H** well (“Well”) which will be horizontally drilled from a surface location in the SE/4SW/4 (Unit N) of Section 20 to a bottom hole location in the SE/4SW/4 (Unit N) of Section 32.
3. The completed interval of the Well will be orthodox.
4. Applicant has undertaken diligent, good-faith efforts to obtain voluntary agreements from all mineral interest owners to participate in the drilling of the Well but has been unable to obtain voluntary agreements from all of the mineral interest owners.
5. The pooling of uncommitted mineral interests will avoid the drilling of unnecessary wells, prevent waste, and protect correlative rights.



6. In order to allow Applicant to obtain its just and fair share of the oil and gas underlying the subject lands, all uncommitted mineral interests in the Unit should be pooled and Applicant should be designated the operator of the Well and Unit.

WHEREFORE, Applicant requests this application be set for hearing on August 5, 2021 and that, after notice and hearing, the Division enter an order:

- A. Pooling all uncommitted interests in the Unit;
- B. Approving the Well in the Unit;
- C. Designating Applicant as operator of the Unit and the Well to be drilled thereon;
- D. Authorizing Applicant to recover its costs of drilling, equipping and completing the Well;
- E. 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
- F. Imposing a 200% penalty 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,

HINKLE SHANOR LLP

/s/ Dana S. Hardy _____

Dana S. Hardy
 Michael Rodriguez
 P.O. Box 2068
 Santa Fe, NM 87504-2068
 Phone: (505) 982-4554
 Facsimile: (505) 982-8623
 dhardy@hinklelawfirm.com
 mrodriguez@hinklelawfirm.com
 Counsel for Catena Resources Operating, LLC

Application of Catena Resources Operating, LLC for Compulsory Pooling, Lea County, New Mexico. Applicant applies for an order pooling all uncommitted mineral interests in the Wolfcamp formation in a 320-acre, more or less, standard horizontal spacing unit (“Unit”) comprised of the E/2W/2 of Sections 29 and 32, Township 18 South, Range 35 East, Lea County, New Mexico. The Unit will be dedicated to the **Creed E2W2 29-32 W1 1H** well (“Well”) which will be horizontally drilled from a surface location in the SE/4SW/4 (Unit N) of Section 20 to a bottom hole location in the SE/4SW/4 (Unit N) of Section 32. The completed intervals of the Wells will be orthodox. Also to be considered will be the cost of drilling and completing the wells and the allocation of the cost, the designation of Applicant as the operator of the wells, and a 200% charge for the risk involved in drilling and completing the wells. The wells are located approximately 20 miles west of Hobbs, New Mexico.

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 55640		³ Pool Name Scharb: Wolfcamp	
⁴ Property Code		⁵ Property Name Creed E2W2 29-32			⁶ Well Number 1H
⁷ OGRID No. 328449		⁸ Operator Name Catena Resources Operating, LLC			⁹ Elevation

¹⁰ Surface Location

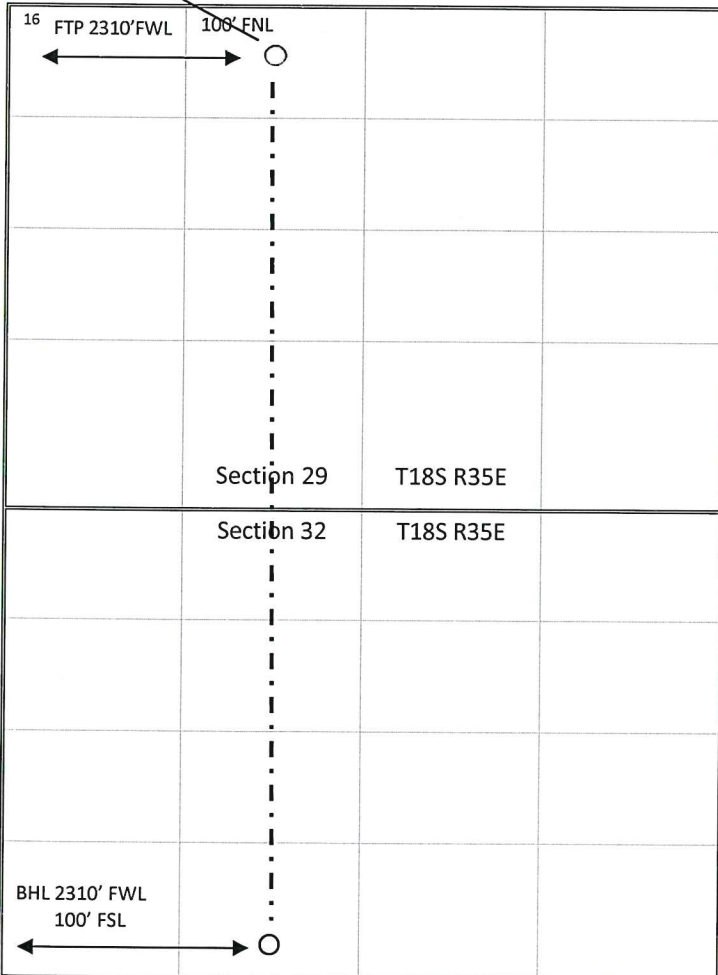
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
	20	18-S	35-E	N	500	South	1650	West	LEA

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
	32	18-S	35-E	N	100	South	2310	West	LEA

¹² Dedicated Acres 640	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division. S.L. 1650' FWL - 500' FSL SEC 20 T18S R35E



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.

Date of Survey _____

Signature and Seal of Professional Surveyor: _____

Certificate Number _____

CATENA RESOURCES
OPERATING, LLC
Case No. 22074

Exhibit A-3

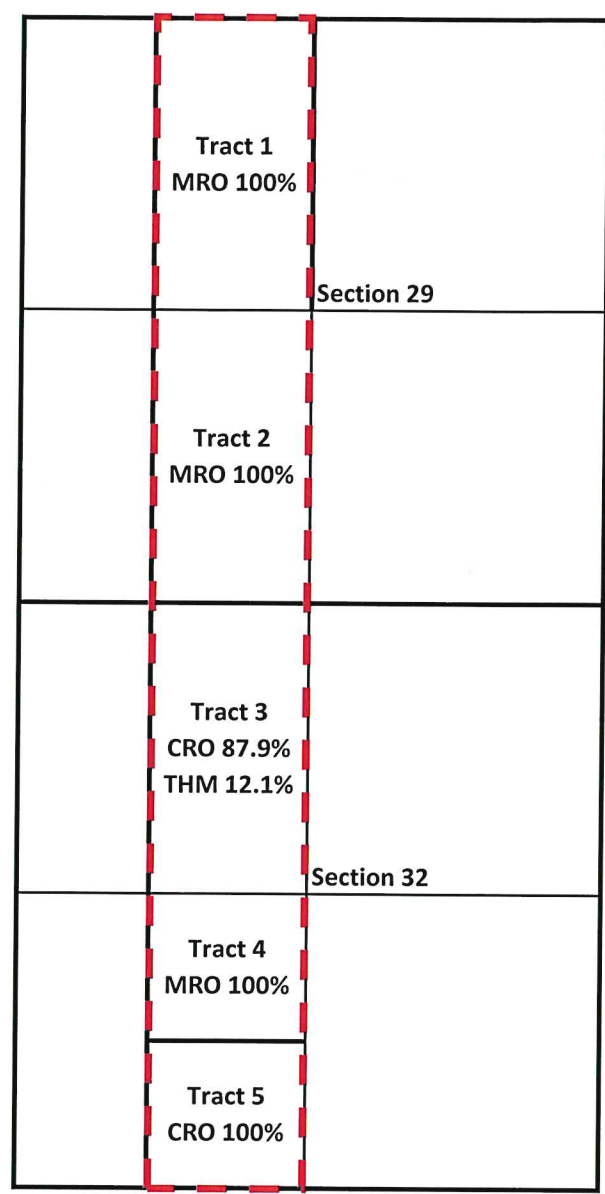
EXHIBIT A-4
Creed E2W2 29-32 W1 1H
Proposed Wolfcamp Spacing Unit
Lea County, New Mexico
E2W2 Section 29 & 32 - T18S - R35E

Parties to be Pooled

Catena Resources Operating (CRO)	34.48%
Marathon Oil Permian, LLC (MRO)	62.50%
T.H. McElvain Oil & Gas LLLP (THM)	3.03%
Total	100.00%

Tracts

Tract 1	E/2 NW/4	Section 29
Tract 2	E/2 SW/4	Section 29
Tract 3	E/2 NW/4	Section 32
Tract 4	NE/4 SW/4	Section 32
Tract 5	SE/4 SW/4	Section 32



**CATENA RESOURCES
 OPERATING, LLC**
 Case No. 22074
 Exhibit A-4



May 28,2021

Via Certified Mail

{Address}

Re: Creed E2W2 29-32 W1 1H
500' FSL & 1650' FWL of Sec. 20, 18S-35E
100' FSL & 2310' FWL of Sec. 32, 18S-35E
Section 29 & 32, 18S-35E
Lea County, New Mexico

Ladies and Gentlemen,

Catena Resources Operating, LLC ("Catena") as Operator hereby proposes to drill the following horizontal well(s):

Creed E2W2 29-32 W1 1H well located at a surface location of 500' FSL & 1650' FWL of Sec. 20, 18S-35E, and a bottom hole location of 100' FSL & 2310' FWL of Sec. 32, 18S-35E. We anticipate drilling to an approximate total vertical depth of 10,250' and plan to continue drilling horizontally to the south to the proposed bottom hole location at an approximate total measured depth of 21,500'. The Creed E2W2 29-32 W1 1H will target the Wolfcamp formation and the E/2 W/2 of Sec. 29 & the E/2 W/2 of Sec. 32, 18S-35E will be dedicated to the well as the proration unit.

Regarding the above, enclosed for your further handling are our AFE's dated 5/27/2021 for the proposed wells. In the event you elect to participate in the proposed wells, please execute the enclosed AFE's and return to Catena at their mailing address, attn: Chris Canon. 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.

Should you have any questions regarding the above, please email me at canon@catenares.com or call me at (713) 331-1208.

Sincerely,

Catena Resources Operating, LLC

Chris Canon
Land Manager

919 Milam Street
Suite 2475
Houston, TX 77002



**CATENA RESOURCES
OPERATING, LLC
Case No. 22074**

Exhibit A-5

713-429-5229
www.catenares.com
info@catenares.com



WELL COST ESTIMATE		AFE NO.
WELL NAME: Creed E2W2 29-32 W1 1H	DATE: 5/27/2021	
FIELD NAME:	START DATE:	
LOCATION: 2 mile lateral	COMPLETE DATE:	
COUNTY / ST: Lea County, NM	ORIGINAL:	
OBJECTIVE: Wolfcamp	SUPPLEMENT:	

INTANGIBLE COSTS	ACCT CODE	DRILLING - 310XX	ACCT CODE	COMPLETION - 320XX	ACCT CODE	FACILITIES - 330XX	TOTAL
Legal Fees / Title Opinion	31001	\$75,000	32001		33001		\$75,000
Surveys / Staking / Permits / Bonds / Regulatory ROW / Surface Damages	31002	\$25,000	32002	\$10,000	33002		\$35,000
Roads & Location / Reserve Pit - Construction	31003		32003		33012		\$0
Roads & Location / Reserve Pit - Reclamation	31004	\$80,000	32004				\$80,000
Frac Pond	31005	\$90,000	32005	\$45,000			\$135,000
Gate Guard	31006		32006	\$100,000			\$100,000
Mouse / Rathole / Conductor	31007		32007				\$0
Mobilization / Demobilization	31008						\$0
Drilling - Daywork	31009	\$150,000	32008				\$150,000
Drilling - Footage	31010	\$620,000					\$620,000
Drilling - Turnkey	31011						\$0
Completion / Snubbing / Workover Unit	31012						\$0
Trailer House / Communications	31013		32009	\$432,500			\$432,500
Drill Bits	31014		32010				\$0
Directional Equipment / Gyro Surveys	31015	\$70,000	32011				\$70,000
Downhole Tool / Stabilization Rental	31016	\$280,000	32012				\$280,000
Mud / Chemicals	31017		32013	\$65,000			\$65,000
Fuel / Power	31018	\$310,000	32014				\$310,000
Water Supply Well, equipment	31019	\$180,000	32015	\$40,692			\$220,692
Water / Water Hauling	31020		32016	\$468,286			\$468,286
Offsite Water & Cuttings Disposal	31021		32017				\$0
Transportation / Hauling	31022		32018				\$0
Inspection / Tubular Testing	31023	\$40,000	32019		33009		\$40,000
Laydown Machine / Casing Crew / Tongs	31024		32020	\$20,000			\$20,000
Cementing, Float Equipment & Services	31025		32021				\$0
Mud Logging	31026	\$120,000	32022				\$120,000
Logging - Open Hole	31027	\$40,000					\$40,000
Logging - Cased Hole	31028		32023				\$0
Coring & Analysis, Drill Stem Test	31029		32024				\$0
Perforating	31030						\$0
Wireline / Slickline Services	31031		32025	\$285,500			\$285,500
Equipment Rental	31032		32026				\$0
Pumping Services/Rental	31033	\$200,000	32027	\$183,288			\$383,288
Acidizing & Fracturing	31034		32028				\$0
Coil Tubing Unit	31035		32029	\$2,500,000			\$2,500,000
Flow Testing, Swabbing	31036		32030				\$0
Fishing / Sidetrack Services	31037		32031	\$73,038			\$73,038
Nipple Up / BOPE Testing	31038		32032				\$0
Overhead	31039		32033	\$102,000			\$102,000
Wellsite Consulting Services/Supervision	31040	\$10,000	32034				\$10,000
Engineering / Geological / Lab Serviv Tracers and diagnostics	31041	\$110,000	32035	\$89,385	33003		\$199,385
Roustabout / Contract Labor	31042		32036	\$26,538			\$26,538
Welding Services	31043	\$120,000	32037	\$20,000	33004	\$200,000	\$340,000
Insurance	31044		32038				\$0
Miscellaneous	31045	\$10,000	32039		33005		\$10,000
P&A Costs	31046		32040	\$80,000	33006		\$80,000
Safety / EH&S	31047		32041				\$0
3% Contingency	31048		32042		33007		\$0
NON-Op Drilling Intangible	31049		32043	\$135,242			\$135,242
Pipeline Installation / Interconnect	31050		32044				\$0
	31051		32045		33008		\$0
TOTAL INTANGIBLE COSTS		\$2,530,000		\$4,676,469		\$200,000	\$7,406,469

TANGIBLE COSTS	ACCT CODE	DRILLING - 311XX	ACCT CODE	COMPLETION - 321XX	ACCT CODE	FACILITIES - 331XX	TOTAL
Conductor	31101	\$20,000					\$20,000
Surface Casinq	31102	\$70,000					\$70,000
1st Intermediate Casinq / Liner	31103	\$130,000					\$130,000
2nd Intermediate Casinq / Liner	31104	\$510,000					\$510,000
Production Casinq / Liner			32101				\$0
Casinq Tie Back			32102				\$0
Liner Hanqer Assembly			32103				\$0
Tubinq			32104	\$60,000			\$60,000
Casinq Equipment - OHMS / Etc.			32105				\$0
Wellhead Equipment	31105	\$60,000	32106				\$60,000
Pumpinq Unit / Prime Mover / Base			32107		33101		\$0
Rods / Pony Rods / Sinkers Bars			32108		33102		\$0
Artificial Lift			32109	\$175,000	33103		\$175,000
Wellhead Equipment Completions - Production Tree			32110		33104		\$0
Tanks / Tank Steps / Stairs			32111	\$200,000	33105		\$200,000
Gas Treatinq / Dehydration Equipment			32112		33106		\$0
Separation Equipment, Heater Treater			32113	\$100,000	33107		\$100,000
Surface Pumps			32114		33108		\$0
Filters			32115		33109		\$0
Buildinqs			32116		33110		\$0
Interconnect Pipinq / Manifolds / Headers			32117		33111		\$0
Flowlines / Connections / Valves			32118	\$25,000	33112		\$25,000
Automation / Instruments / Controls / Analyzers			32119	\$50,000	33113		\$50,000
Electrical Equipment / Generators			32120	\$25,000	33114		\$25,000
Compressor & Related Equipment			32121		33115		\$0
Meterinq Equipment, LACT Unit			32122	\$25,000	33116		\$25,000
Chemical Equipment / Cathodic Protection			32123		33117		\$0
Subsurface Equipment - Packer, Pluqs, TAC			32124		33118		\$0
Safety / EH&S Equipment			32125		33119		\$0
NON-OP Drilling Intangible			32126		33120		\$0
Transfer/SWD Pumps & Equipment			32127		33121		\$0
Flare / Combustor			32128		33122		\$0
Miscellaneous	31106	\$50,000	32129	\$106,000	33123		\$156,000
Capillary Strinq			32132				\$0
Contingency Costs	31107		32130		33124		\$0
TOTAL TANGIBLE COSTS		\$840,000		\$766,000		\$0	\$1,606,000
TOTAL WELL COSTS		\$3,370,000		\$5,442,469		\$200,000	\$9,012,469

Prepared by _____

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

I elect to be covered by Operator's Extra Expense insurance and pay my proportionate share of the premium

I elect to purchase my own well control insurance policy.

If neither 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: _____

Exhibit A-6

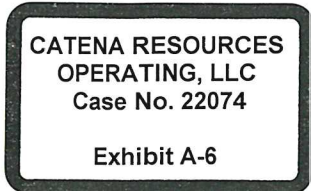
Catena Resources Operating, LLC – Creed E2W2 29-32 W1 1H Discussion Timeline

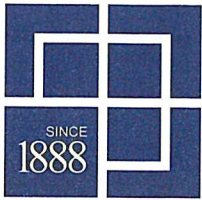
Marathon Oil Permian, LLC

Catena Resources Operating, LLC sent original well proposals on May 28, 2021. At such time, Catena and Marathon Oil Permian, LLC were already engaged in discussions regarding the proposed well. Catena and Marathon Oil Permian, LLC are in ongoing discussions on the well proposal.

T. H. McElvain Oil and Gas LLLP

Catena Resources Operating, LLC sent original well proposals on May 28, 2021. At such time, Catena and T.H. McElvain Oil and Gas LLLP were already engaged in discussions regarding the proposed well. Catena and T.H. McElvain Oil and Gas LLLP are in ongoing discussions on the well proposal.





HINKLE SHANOR LLP
ATTORNEYS AT LAW
PO BOX 2068
SANTA FE, NEW MEXICO 87504
505-982-4554 (FAX) 505-982-8623

WRITER:

Dana S. Hardy, Partner
dhardy@hinklelawfirm.com

July 9, 2021

VIA CERTIFIED MAIL
RETURN RECEIPT REQUESTED

TO ALL INTEREST OWNERS SUBJECT TO POOLING PROCEEDINGS

Re: Case No. 22074 - Application of Catena Resources Operating, LLC for Compulsory Pooling, Lea County, New Mexico.

To whom it may concern:

This letter is to advise you that Catena Resources Operating, LLC filed the enclosed application with the New Mexico Oil Conservation Division. The hearing will be conducted on **August 5, 2021** beginning at 8:15 a.m.

During the COVID-19 Public 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 OCD Hearings website: <http://www.emnrd.state.nm.us/OCD/announcements.html>. You are not required to attend this hearing, but as an owner of an interest that may be affected by this application, you may appear and present testimony. Failure to appear at that time and become a party of record will preclude you from challenging the matter at a later date.

Pursuant to Division Rule 19.15.4.13.B, a party who intends to present evidence at the hearing shall file a pre-hearing statement and serve copies on other parties, or the attorneys of parties who are represented by counsel, at least four business days in advance of a scheduled hearing, but in no event later than 5:00 p.m. mountain time, on the Thursday preceding the scheduled hearing date. The statement must be filed at the Division's Santa Fe office or electronically submitted to ocd.hearings@state.nm.us 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.

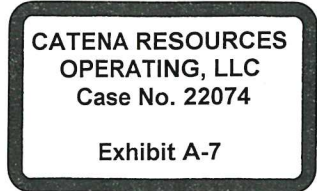
Please do not hesitate to contact me if you have any questions about this matter.

Sincerely,

/s/ Dana S. Hardy

Dana S. Hardy

Enclosure



PO BOX 10
ROSWELL, NEW MEXICO 88202
575-622-6510
(FAX) 575-623-9332

PO BOX 2068
SANTA FE, NEW MEXICO 87504
505-982-4554
(FAX) 505-982-8623

7601 JEFFERSON ST NE • SUITE 180
ALBUQUERQUE, NEW MEXICO 87109
505-858-8320
(FAX) 505-858-8321

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Adult Signature Restricted Delivery \$ _____

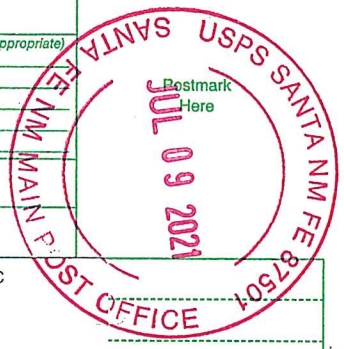
Postage \$ _____

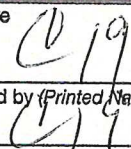



Total Postage and Fees \$ _____

Sent To: Marathon Oil Permian, LLC
5555 San Felipe
Houston, TX 77056

City, State: _____

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions



SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none"> Complete items 1, 2, and 3. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. 	<p>A. Signature  <input type="checkbox"/> Agent <input type="checkbox"/> Addressee</p> <p>B. Received by (Printed Name)  C. Date of Delivery </p>
<p>1. Article Addressed to:</p> <p>Marathon Oil Permian, LLC 5555 San Felipe Houston, TX 77056</p> <p> 9590 9402 6698 1060 4289 25</p>	<p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes <input type="checkbox"/> No If YES, enter delivery address below:</p>
<p>2. Article Number (Transfer from service label) 7020 0640 0000 0143 3215</p>	<p>3. Service Type</p> <p><input type="checkbox"/> Adult Signature <input type="checkbox"/> Priority Mail Express®</p> <p><input type="checkbox"/> Adult Signature Restricted Delivery <input type="checkbox"/> Registered Mail™</p> <p><input type="checkbox"/> Certified Mail® <input type="checkbox"/> Registered Mail Restricted Delivery</p> <p><input checked="" type="checkbox"/> Certified Mail Restricted Delivery <input checked="" type="checkbox"/> Signature Confirmation™</p> <p><input type="checkbox"/> Collect on Delivery <input type="checkbox"/> Signature Confirmation Restricted Delivery</p> <p><input type="checkbox"/> Collect on Delivery Restricted Delivery</p> <p><input type="checkbox"/> Insured Mail</p> <p><input type="checkbox"/> Insured Mail Restricted Delivery (over \$500)</p>

PS Form 3811, July 2020 PSN 7530-02-000-9053

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<input type="checkbox"/> Return Receipt (hardcopy)	\$	
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<input type="checkbox"/> Adult Signature Required	\$	
<input type="checkbox"/> Adult Signature Restricted Delivery	\$	
Postage		
\$		
Total Postage and Fees		
\$		
Sent To	T.H. McElvain Oil and Gas LLLP	
Street	1600 Stout Street, Suite 500	
City, St	Denver, CO 80202	

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions



SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY																
<ul style="list-style-type: none"> Complete items 1, 2, and 3. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. 	<p>A. Signature <input checked="" type="checkbox"/> <i>[Signature]</i> <input checked="" type="checkbox"/> Agent <input type="checkbox"/> Addressee</p> <p>B. Received by (Printed Name) <i>P. J. Smith</i> C. Date of Delivery <i>07/13/21</i></p> <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If YES, enter delivery address below:</p>																
<p>1. Article Addressed to:</p> <p>T.H. McElvain Oil and Gas LLLP 1600 Stout Street, Suite 500 Denver, CO 80202</p>	<p>3. Service Type</p> <table border="0"> <tr> <td><input type="checkbox"/> Adult Signature</td> <td><input type="checkbox"/> Priority Mail Express®</td> </tr> <tr> <td><input type="checkbox"/> Adult Signature Restricted Delivery</td> <td><input type="checkbox"/> Registered Mail™</td> </tr> <tr> <td><input checked="" type="checkbox"/> Certified Mail®</td> <td><input type="checkbox"/> Registered Mail Restricted Delivery</td> </tr> <tr> <td><input type="checkbox"/> Certified Mail Restricted Delivery</td> <td><input checked="" type="checkbox"/> Signature Confirmation™</td> </tr> <tr> <td><input type="checkbox"/> Collect on Delivery</td> <td><input type="checkbox"/> Signature Confirmation Restricted Delivery</td> </tr> <tr> <td><input type="checkbox"/> Collect on Delivery Restricted Delivery</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Insured Mail</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Insured Mail Restricted Delivery (over \$500)</td> <td></td> </tr> </table>	<input type="checkbox"/> Adult Signature	<input type="checkbox"/> Priority Mail Express®	<input type="checkbox"/> Adult Signature Restricted Delivery	<input type="checkbox"/> Registered Mail™	<input checked="" type="checkbox"/> Certified Mail®	<input type="checkbox"/> Registered Mail Restricted Delivery	<input type="checkbox"/> Certified Mail Restricted Delivery	<input checked="" type="checkbox"/> Signature Confirmation™	<input type="checkbox"/> Collect on Delivery	<input type="checkbox"/> Signature Confirmation Restricted Delivery	<input type="checkbox"/> Collect on Delivery Restricted Delivery		<input type="checkbox"/> Insured Mail		<input type="checkbox"/> Insured Mail Restricted Delivery (over \$500)	
<input type="checkbox"/> Adult Signature	<input type="checkbox"/> Priority Mail Express®																
<input type="checkbox"/> Adult Signature Restricted Delivery	<input type="checkbox"/> Registered Mail™																
<input checked="" type="checkbox"/> Certified Mail®	<input type="checkbox"/> Registered Mail Restricted Delivery																
<input type="checkbox"/> Certified Mail Restricted Delivery	<input checked="" type="checkbox"/> Signature Confirmation™																
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<input type="checkbox"/> Collect on Delivery Restricted Delivery																	
<input type="checkbox"/> Insured Mail																	
<input type="checkbox"/> Insured Mail Restricted Delivery (over \$500)																	
<p>2. Article Number (Transfer from service label)</p> <p>7020 0640 0000 0143 3239</p>																	



9590 9402 6698 1060 4289 32

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
July 14, 2021
and ending with the issue dated
July 14, 2021.



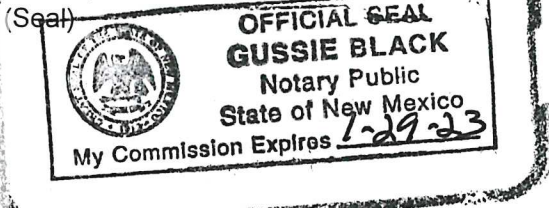
Publisher

Sworn and subscribed to before me this
14th day of July 2021.



Business Manager

My commission expires
January 29, 2023



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

LEGAL NOTICE July 14, 2021

This is to notify all interested parties, including Marathon Oil Permian, LLC, T.H. McElvain Oil and Gas LLLP, and their successors and assigns, that the New Mexico Oil Conservation Division will conduct a hearing on an application submitted by Catena Resources Operating, LLC (Case No. 22074). During the COVID-19 Public Health Emergency, state buildings are closed to the public and hearings will be conducted remotely. The hearing will be conducted on August 5, 2021 beginning at 8:15 a.m. To participate in the electronic hearing, see the instructions posted on the docket for the hearing date: <http://www.emnrd.state.nm.us/OCD/hearings.html>. Applicant applies for an order pooling all uncommitted mineral interests in the Wolfcamp formation in a 320-acre, more or less, standard horizontal spacing unit ("Unit") comprised of the E/2W/2 of Sections 29 and 32, Township 18 South, Range 35 East, Lea County, New Mexico. The Unit will be dedicated to the **Creed E2W2 29-32 W1 1H well** ("Well") which will be horizontally drilled from a surface location in the SE/4SW/4 (Unit N) of Section 20 to a bottom hole location in the SE/4SW/4 (Unit N) of Section 32. The completed intervals of the Wells will be orthodox. Also to be considered will be the cost of drilling and completing the wells and the allocation of the cost, the designation of Applicant as the operator of the wells, and a 200% charge for the risk involved in drilling and completing the wells. The wells are located approximately 20 miles west of Hobbs, New Mexico.
#36636

02107475

00256182

GILBERT
HINKLE, SHANOR LLP
PO BOX 2068
SANTA FE, NM 87504

CATENA RESOURCES
OPERATING, LLC
Case No. 22074

Exhibit A-8

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. 22074

SELF-AFFIRMED STATEMENT
OF BRIAN MOORE

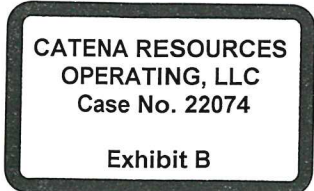
1. I am a geologist at Catena Resources Operating, LLC (“Catena”) and am over 18 years of age. I have personal knowledge of the matters addressed herein and am competent to provide this Self-Affirmed Statement. I have previously testified before the New Mexico Oil Conservation Division (“Division”) where my credentials as an expert in petroleum geology matters were accepted and made a matter of record.

2. I am familiar with the geological matters that pertain to the above-referenced case.

3. **Exhibit B-1** is a project location map that shows the location of the proposed horizontal well spacing unit.

4. Catena is targeting the Wolfcamp ‘A’ interval of the Wolfcamp formation. **Exhibit B-2** is a subsea structure map that I prepared for this interval with 20-foot contours. The proposed horizontal well spacing unit is highlighted in red and the initial well is depicted with a green dashed line. Existing producing wells in the Wolfcamp interval are represented by solid red lines. The structure map shows the Wolfcamp dipping to the South. 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-2** also shows a cross-section line in brown running North to South reflecting four wells penetrating the Wolfcamp ‘A’ formation that I used to construct a



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

6. **Exhibit B-3** is a stratigraphic cross-section that I prepared using the logs from the four wells noted on Exhibit B-2. Each well 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. **Exhibit B-4** is a Gross Isopach map of the Wolfcamp 'A' interval. The proposed horizontal well spacing unit is highlighted in red and the initial well is depicted with a green dashed line. Existing producing wells in the Wolfcamp are represented by solid red lines. The anticipated gross thickness of the Wolfcamp 'A' interval is 650 to 725 ft. The gross isopach map demonstrates that the Wolfcamp 'A' interval is present across the proposed spacing unit. The location of the previous cross-section from A-A' in Exhibit B-3 is also shown as a brown line on this map.

8. 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.

9. 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.

10. In my opinion, the granting of Catena's application will serve the interests of conservation, the protection of correlative rights, and the prevention of waste.

11. The exhibits attached hereto were either prepared by me or under my supervision or were compiled from company business records.

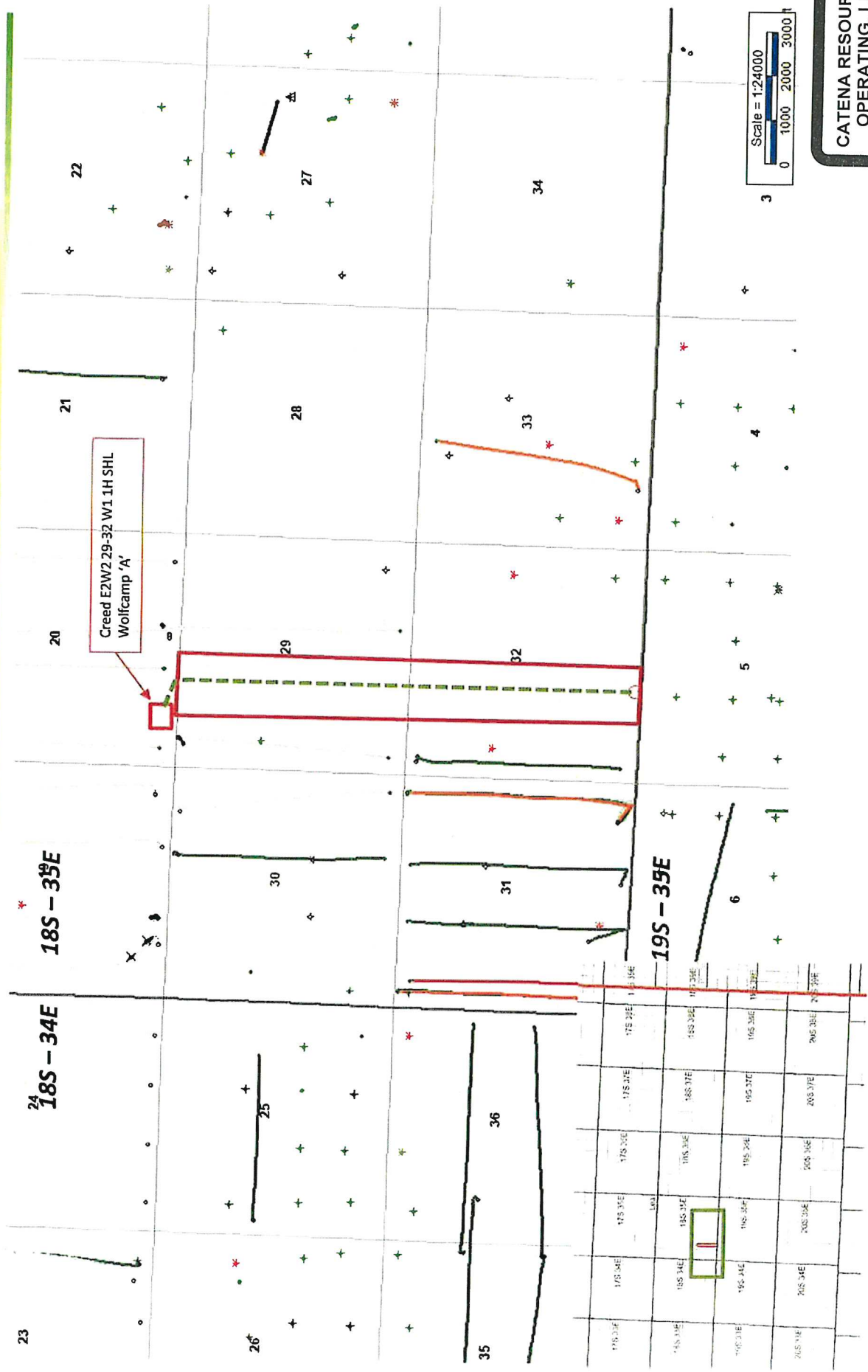
12. I understand this Self-Affirmed Statement will be used as written testimony in this case. I affirm my testimony in paragraphs 1 through 11 above is true and correct and is made under penalty of perjury under the laws of the State of New Mexico. My testimony is made as of the date identified next to my signature below.



Brian Moore

7/29/2021
Date

Creed E2W2 29-32 W1 1H 1H Exhibit B-1: Locator Map

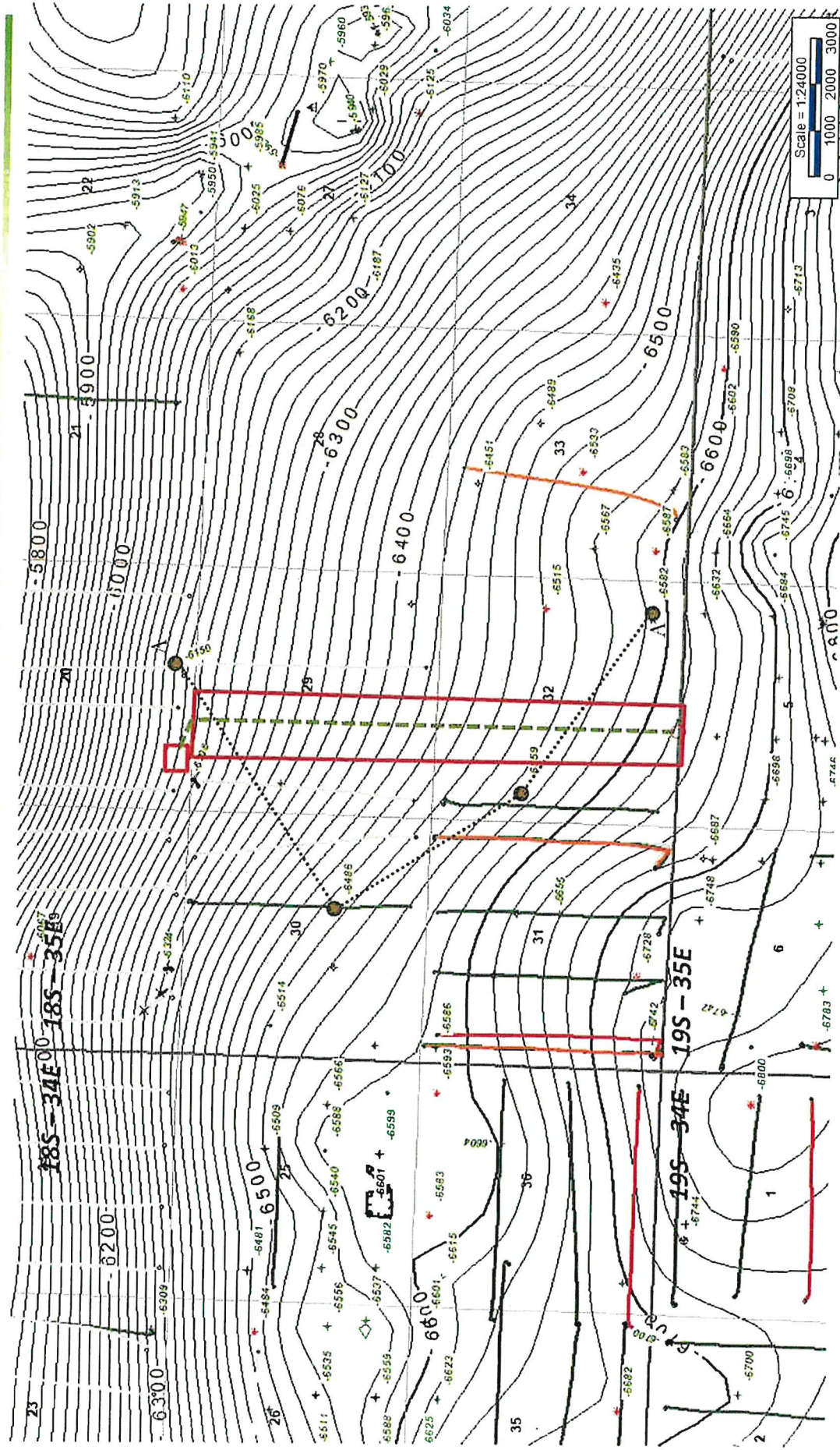


CATENA RESOURCES OPERATING, LLC
Case No. 22074
Exhibit B-1

Creed E2W2 29-32 W1 1H

Exhibit B-2: Wolfcamp 'A' Structure (Subsea TVD-ft)

- First Bone Spring
- Second Bone Spring
- Third Bone Spring
- Wolfcamp A

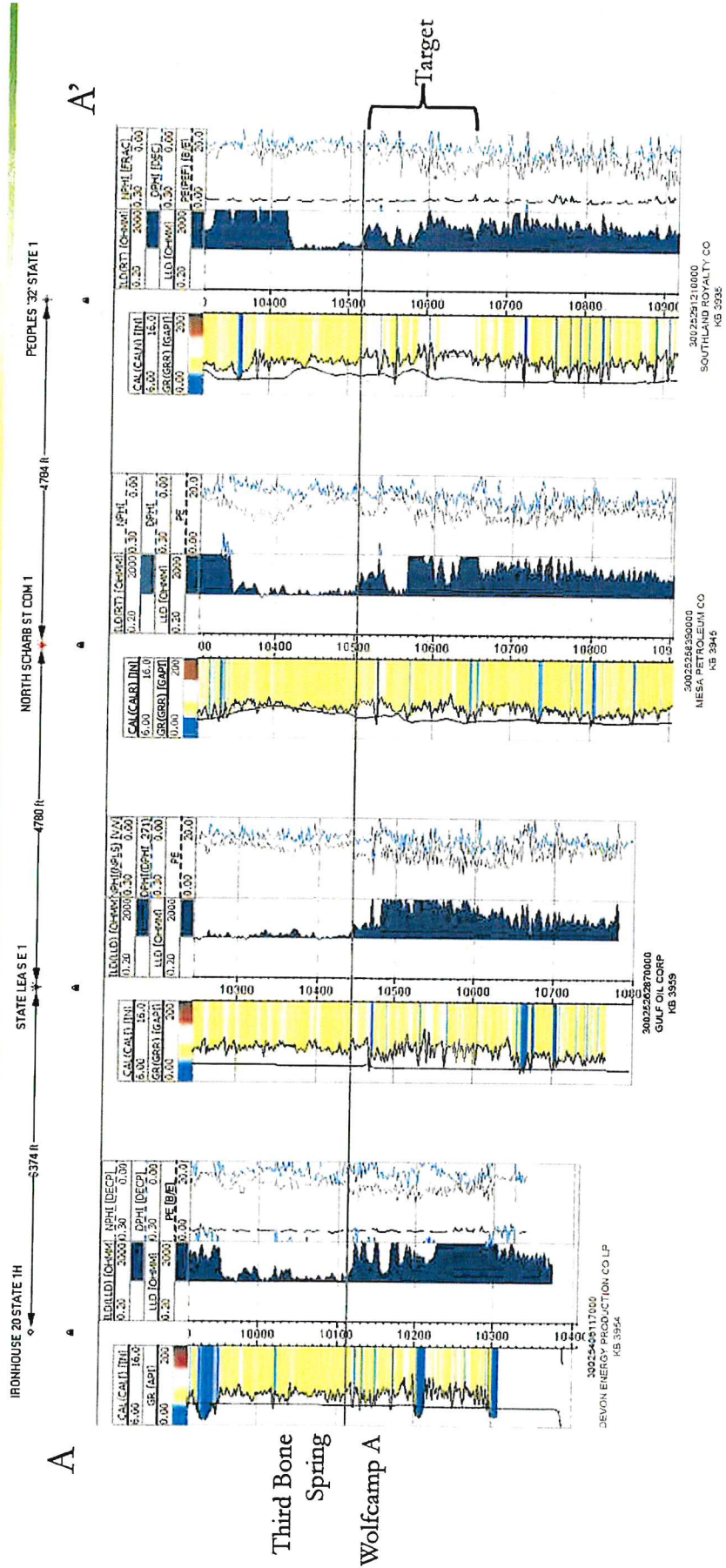


Contour Interval = 20'

Creed E2W2 29-32 W1 1H



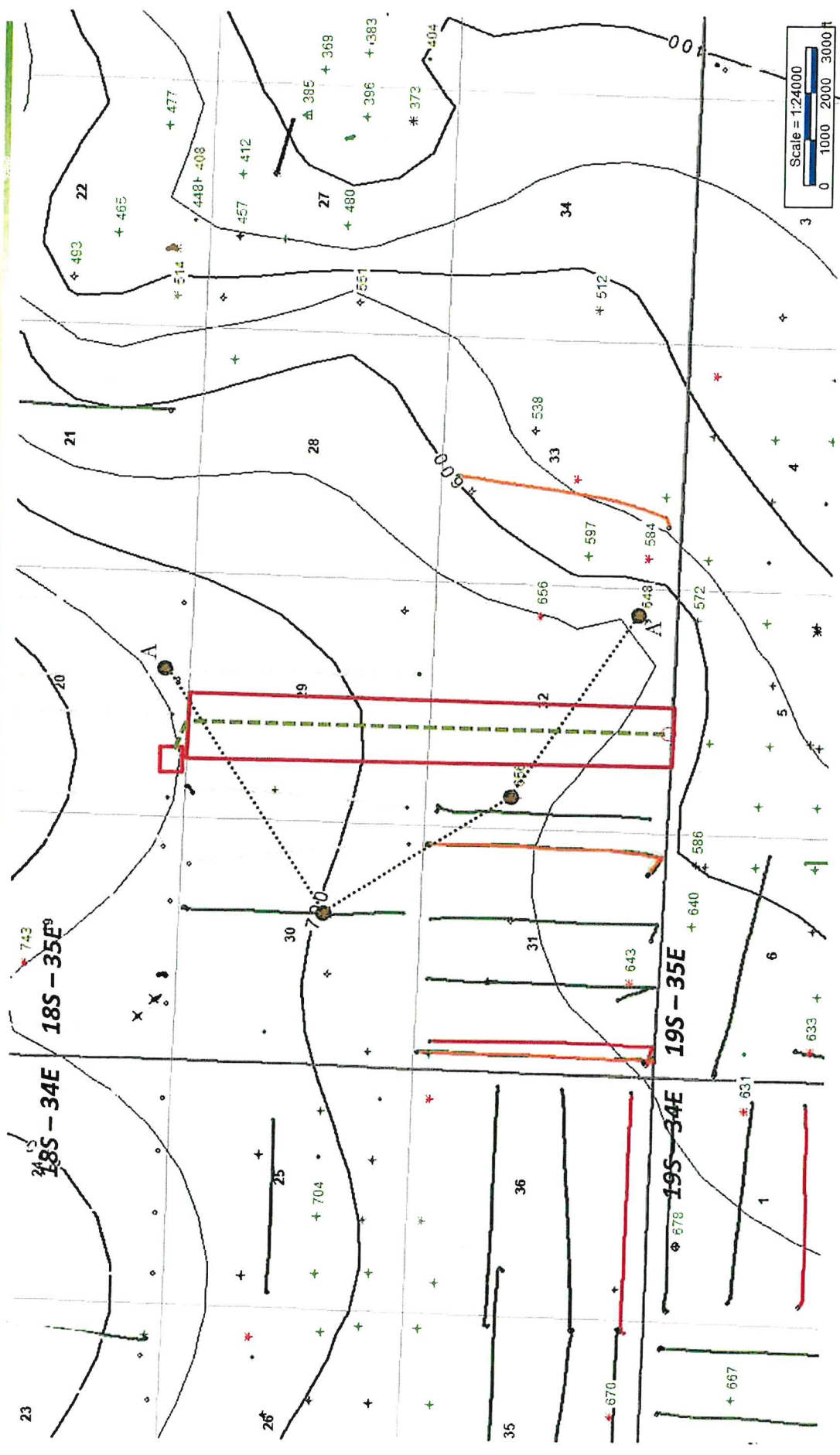
Exhibit B-3: Stratigraphic Cross section A-A' – Wolfcamp 'A' Datum



Third Bone Spring
Wolfcamp A

CATENA RESOURCES OPERATING, LLC
Case No. 22074
Exhibit B-3

Creed E2W2 29-32 W1 1H Exhibit B-4: Wolfcamp 'A' Gross Isopach (TVD-ft)



Contour Interval = 50'

CATENA RESOURCES
OPERATING, LLC
Case No. 22074
Exhibit B-4