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

APPLICATION OF EARTHSTONE OPERATING, LLC FOR COMPULSORY POOLING, LEA COUNTY, NEW MEXICO.

**CASE NO. 23296** 

#### **HEARING EXHIBITS**

#### Compulsory Pooling Checklist

Exhibit A	Self-Affirmed Statement of Matt Solomon
A-1	Application & Proposed Notice of Hearing
A-2	C-102
A-3	Plat of Tracts, Tract Ownership, Pooled Parties, Unit Recapitulation
A-4	Sample Well Proposal Letter & AFE
A-5	Chronology of Contact
Exhibit B	Self-Affirmed Statement of Jason Asmus
B-1	Location Map
B-2	First Bone Spring Structure Map
B-3	Structural Cross-Section
B-4	Gun Barrel Development Proposal
Exhibit C	Self-Affirmed Statement of Dana S. Hardy
C-1	Sample Notice Letter to All Interested Parties
C-2	Chart of Notice to All Interested Parties
C-3	Copies of Certified Mail Receipts and Returns
C-4	Affidavit of Publication of January 11, 2023

### COMPULSORY POOLING APPLICATION CHECKLIST

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

23296	APPLICANT'S RESPONSE
Date	February 2, 2023
Applicant	Earthstone Operating, LLC
Designated Operator & OGRID (affiliation if applicable)	OGRID No. 331165
Applicant's Counsel:	Hinkle Shanor LLP
Case Title:	Application of Earthstone Operating, LLC for Compulsory Pooling,
Entries of Appearance/Intervenors:	Lea County, New Mexico COG Operating LLC; Tap Rock Operating, LLC
Well Family	Jade
·	
Formation/Pool Formation Name(s) or Vertical Extent:	Bone Spring
Primary Product (Oil or Gas):	Oil
Pooling this vertical extent:	First Bone Spring
Pool Name and Pool Code:	Teas; Bone Spring Pool (Code 58960)
Well Location Setback Rules:	Statewide
Canada Hait	
Spacing Unit Type (Horizontal/Vertical)	Horizontal
Size (Acres)	319.86
Building Blocks:	quarter-quarter
Orientation:	North/South
Description: TRS/County	E/2 E/2 of Section 34, Township 19 South, Range 33 East, and Lot 1, SE/4 NE/4, and E/2 SE/4 (E/2 E/2 equivalent) of irregular Section 3, Township 20 South, Range 33 East, Lea County
Standard Horizontal Well Spacing Unit (Y/N), If No, describe and is approval of non-standard unit requested in this application?	Yes
Other Situations	
Depth Severance: Y/N. If yes, description	Yes, pooling the First Bone Spring interval from the top of the Bone Spring Formation to approximately 9,570' TVD.
Proximity Tracts: If yes, description	No.
Proximity Defining Well: if yes, description	N/A
Applicant's Ownership in Each Tract	Exhibit A-3
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	Jade 34-4 Fed 1BS Com 12H (API #) SHL: 240' FNL & 650' FEL (Unit A), Section 34, T19S, R33E BHL: 50' FSL & 810' FEL (Unit P), Section 3, T20S, R33E Completion Target: Bone Spring - First Bench (Approx. 9,226' TVD)
Horizontal Well First and Last Take Points	Exhibit A-2
Completion Target (Formation, TVD and MD)	Exhibit A-4
AFE Capex and Operating Costs	

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Production Supervision/Month \$	\$750.00	
Justification for Supervision Costs	Exhibit A	
Requested Risk Charge	200%	
Notice of Hearing		
Proposed Notice of Hearing	Exhibit A-1	
Proof of Mailed Notice of Hearing (20 days before hearing)	Exhibit C-1, Exhibit C-2, Exhibit C-3	
Proof of Published Notice of Hearing (10 days before hearing)	Exhibit C-4	
Ownership Determination		
Land Ownership Schematic of the Spacing Unit	Exhibit A-3	
Tract List (including lease numbers and owners)	Exhibit A-3	
If approval of Non-Standard Spacing Unit is requested, Tract List (including lease numbers and owners) of Tracts subject to notice		
requirements.	N/A	
Pooled Parties (including ownership type)	Exhibit A-3	
Unlocatable Parties to be Pooled	N/A	
Ownership Depth Severance (including percentage above & below)		
	Exhibit A-3	
Joinder		
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	
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	Exhibit A	
Forms, Figures and Tables		
C-102	Exhibit A-2	
Tracts	Exhibit A-3	
Summary of Interests, Unit Recapitulation (Tracts)	Exhibit A-3	
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	
Gross Isopach Map	N/A	
Well Orientation (with rationale)  Target Formation  HSU Cross Section  Depth Severance Discussion  Forms, Figures and Tables  C-102  Tracts  Summary of Interests, Unit Recapitulation (Tracts)  General Location Map (including basin)  Well Bore Location Map  Structure Contour Map - Subsea Depth  Cross Section Location Map (including wells)  Cross Section (including Landing Zone)	Exhibit B Exhibit B Exhibit B-3 Exhibit A  Exhibit A-2 Exhibit A-3 Exhibit A-3 Exhibit B-1 Exhibit B-1 Exhibit B-2 Exhibit B-2 Exhibit B-3	

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Special Provisions/Stipulations	N/A	
CERTIFICATION: I hereby certify that the information provided in	this checklist is complete and accurate.	
Printed Name (Attorney or Party Representative):	Dana S. Hardy	
Signed Name (Attorney or Party Representative):	/s/ Dana S. Hardy	
Date:	1/31/2023	

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

APPLICATION OF EARTHSTONE OPERATING, LLC FOR COMPULSORY POOLING, LEA COUNTY, NEW MEXICO.

**CASE NO. 23296** 

#### SELF-AFFIRMED STATEMENT OF MATT SOLOMON

- 1. I am a Senior Landman with Earthstone Operating, LLC ("Earthstone"). I am over 18 years of age, 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") and my credentials as an expert in petroleum land matters were accepted and made a matter of record.
- 2. I am familiar with the land matters involved in the above-referenced case. Copies of Earthstone's Application and proposed hearing notice are attached as **Exhibit A-1**.
- 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. Earthstone applies for an order pooling all uncommitted interests in the First Bone Spring interval of the Bone Spring formation underlying a 319.86-acre, more or less, standard horizontal spacing unit comprised of the E/2 E/2 of Section 34, Township 19 South, Range 33 East, and Lot 1, SE/4 NE/4, and E/2 SE/4 (E/2 E/2 equivalent) of irregular Section 3, Township 20 South, Range 33 East, Lea County, New Mexico ("Unit").
- 5. The Unit will be dedicated to the **Jade 34-3 Fed 1BS Com 12H** well ("Well"), which will be completed in the Teas; Bone Spring Pool (Code 58960). The Well will be horizontally drilled from a surface hole location in the NE/4 NE/4 (Unit A) of Section 34,

Earthstone Operating, LLC Case No. 23296 Exhibit A Township 19 South, Range 33 East to a proposed bottom hole location in the SE/4 SE/4 (Unit P) of Section 3, Township 20 South, Range 33 East.

- 6. There is a depth severance in the Bone Spring formation within the Unit. Accordingly, Applicant seeks to pool interests from the top of the Bone Spring formation to a depth of approximately 9,570° TVD.
  - 7. **Exhibit A-2** contains the C-102 for the Well.
- 8. **Exhibit A-3** contains a plat that identifies ownership by tract in the Unit. This exhibit also includes any applicable lease numbers, a unit recapitulation, and the interests Earthstone seeks to pool highlighted in yellow.
- 9. Earthstone has conducted a diligent search of all county public records including phone directories and computer databases, to locate the interest owners it seeks to pool.
- 10. **Exhibit A-4** contains a sample well proposal letter and AFE sent to the working interest owners for the Well. The estimated costs reflected on the AFE is fair and reasonable and comparable to the cost of other wells of similar depth and length drilled in the subject formation in the area.
- 11. In my opinion, Earthstone 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-5.
- 12. Earthstone requests overhead and administrative rates of \$7,500.00 per month while the Well is being drilled and \$750.00 per month while the Well is producing. These rates are fair and are comparable to the rates charged by Earthstone and other operators in the vicinity.
- 13. The attached exhibits were either prepared by me or under my supervision or were compiled from company business records.

- 14. In my opinion, the granting of Earthstone's application would serve the interests of conservation, the protection of correlative rights, and the prevention of waste.
- 15. I understand this Self-Affirmed Statement will be used as written testimony in the subject cases. I affirm that my testimony 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.

Matt Solomon

1.29.23 Date

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

APPLICATION OF EARTHSTONE OPERATING, LLC FOR COMPULSORY POOLING, LEA COUNTY, NEW MEXICO.

**CASE NO. 23296** 

#### **APPLICATION**

Pursuant to NMSA 1978, § 70-2-17, Earthstone Operating, LLC (OGRID No. 331165) ("Earthstone" or "Applicant") applies for an order pooling all uncommitted interests in the First Bone Spring formation underlying a 319.86-acre, more or less, standard horizontal spacing unit comprised of the E/2 E/2 of Section 34, Township 19 South, Range 33 East, and Lot 1, SE/4 NE/4, and E/2 SE/4 (E/2 E/2 equivalent) of irregular Section 3, Township 20 South, Range 33 East, Lea County, New Mexico ("Unit"). In support of this application, Earthstone states the following:

- 1. Applicant is a working interest owner in the Unit and has the right to drill wells thereon.
- 2. The Unit will be dedicated to the **Jade 34-3 Fed 1BS Com 12H** well ("Well"), to be drilled from a surface hole location in the NE/4 NE/4 (Unit A) of Section 34, Township 19 South, Range 33 East to a proposed bottom hole location in the SE/4 SE/4 (Unit P) of Section 3, Township 20 South, Range 33 East.
  - 3. The completed interval of the Well will be orthodox.
- 4. There is a depth severance in the Bone Spring formation within the Unit. Accordingly, Applicant seeks to pool interests from the top of the Bone Spring Formation to the base of the First Bone Spring formation at a stratigraphic equivalent of approximately 9,560' TVD.

Earthstone Operating, LLC Case No. 23296 Exhibit A-1

- 5. Applicant has undertaken diligent, good-faith efforts to obtain voluntary agreements from all interest owners to participate in the drilling of the Well but has been unable to obtain voluntary agreements from all interest owners.
- 6. The pooling of uncommitted interests will avoid the drilling of unnecessary wells, prevent waste, and protect correlative rights.
- 7. In order to allow Applicant to obtain its just and fair share of the oil and gas underlying the subject lands, all uncommitted interests in the Unit should be pooled and Applicant should be designated as the operator of the Well and Unit.

WHEREFORE, Applicant requests that this application be set for hearing before an Examiner of the Oil Conservation Division on February 2, 2023, and, after notice and hearing as required by law, 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 charged and costs of supervision while drilling and after completion, together with a provision adjusting the rated 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
Jaclyn M. McLean
Yarithza Peña
P.O. Box 2068
Santa Fe, NM 87504-2068
Phone: (505) 982-4554
dhardy@hinklelawfirm.com
jmclean@hinklelawfirm.com
ypena@hinklelawfirm.com
Counsel for Earthstone Operating, LLC

Application of Earthstone Operating, LLC for Compulsory Pooling, Lea County, New Mexico. Applicant seeks an order pooling all uncommitted interests in the First Bone Spring formation underlying a 319.86-acre, more or less, standard horizontal spacing unit comprised of the E/2 E/2 of Section 34, Township 19 South, Range 33 East, and Lot 1, SE/4 NE/4, and E/2 SE/4 (E/2 E/2 equivalent) of irregular Section 3, Township 20 South, Range 33 East, Lea County, New Mexico ("Unit"). The Unit will be dedicated to the proposed Jade 34-3 Fed 1BS Com 12H well ("Well"), to be drilled from a surface hole location in the NE/4 NE/4 (Unit A) of Section 34, Township 19 South, Range 33 East to a proposed bottom hole location in the SE/4 SE/4 (Unit P) of Section 3, Township 20 South, Range 33 East. The completed interval of the Well will be orthodox. Due to a depth severance, Applicant seeks to pool interests from the top of the Bone Spring Formation to the base of the First Bone Spring formation at a stratigraphic equivalent of approximately 9,560' TVD. Also to be considered will be the cost of drilling and completing the Well and the allocation of the cost, the designation of Applicant as operator of the Well, and a 200% charge for the risk involved in drilling and completing the Well. The Well is located approximately 30 miles southwest of Hobbs, New Mexico.

DISTRICT I
1025 N. French Dr., Hobbs, NM 88240
Phone (575) 993-6101 Fax: (576) 393-0720
DISTRICT II
811 S. First St., Artesia, NM 88210
Phone (575) 746-1283 Pax: (575) 746-9720

DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410 Phone (505) 334-6178 Fax: (505) 334-6170

DISTRICT IV 1226 S. St. Francis Dr., Santa Fe, NM 87505 Phone (505) 478-3460 Fax: (505) 478-3462 State of New Mexico Energy, Minerals and Natural Resources Department Form C-102 Revised August 1, 2011

Submit one copy to appropriate District Office

#### OIL CONSERVATION DIVISION

1226 South St. Francis Dr. Santa Fe, New Mexico 87505

#### WELL LOCATION AND ACREAGE DEDICATION PLAT

□ AMENDED REPORT

API Number Pool Code 58960		Pool Name TEAS; BONE SPI	RING
Property Code 323001	Property Name JADE 34-3 FED 1BS COM		Well Number 12H
ogrid no. 372137	EARTHSTONE OPERATING LLC		Elevation 3579'

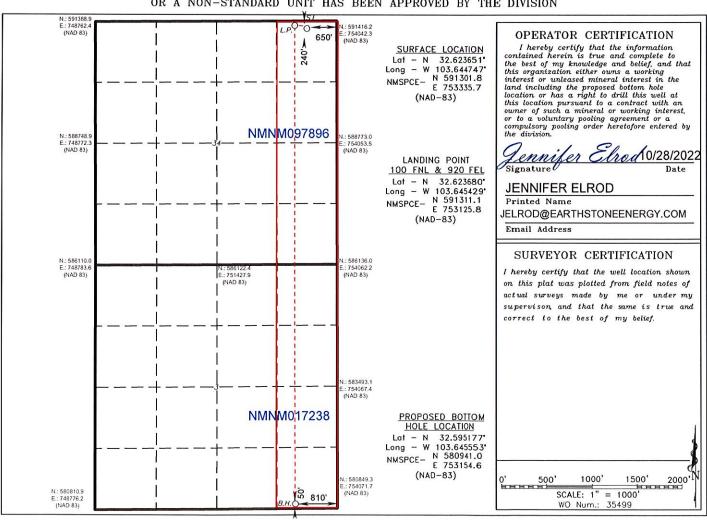
#### Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	FEET from the	North/South line	FEET from the	East/West line	County
Α	34	19 S	33 E		240	NORTH	650	EAST	LEA

#### Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	9	Range	Lot Idn	FEET from the	North/South line	FEET from the	East/West line	County
Р	3	20 5	5	33 E		50	SOUTH	810	EAST	LEA
Dedicated Acres	Joint o	r Infill	Con	solidation (	Code Or	der No.				
319.86										

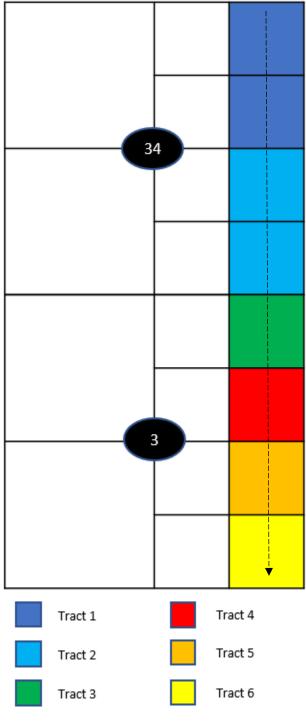
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



Earthstone Operating, LLC Case No. 23296 Exhibit A-2

#### **JADE 34-3 FED 1BS COM 12H**

E2E2 of Section 34, Township 19 South – Range 33 East
Lot 1, SENE, E2SE of Section 3, Township 20 South – Range 33 East
Lea County, New Mexico



Earthstone Operating, LLC Case No. 23296 Exhibit A-3

#### TRACT 1 WI OWNERSHIP (NM-97896) - TOP OF BONE SPRING TO 9,570' TVD

Earthstone Permian LLC	58.304444%
Devon Energy Production	12.000000%
FR Energy, LLC	22.000000%
Timothy R. MacDonald	0.146667%
Maverick Oil & Gas Corporation	0.048889%
Marathon Oil Permian, LLC	7.500000%
	100.000000%

#### TRACT 2 WI OWNERSHIP (NM-97896) - TOP OF BONE SPRING TO 9,570' TVD

Earthstone Permian LLC	29.051111%
Legacy Reserves Operating, LP	29.250000%
Devon Energy Production	12.000000%
FR Energy, LLC	22.000000%
Timothy R. MacDonald	0.149167%
Maverick Oil & Gas Corporation	0.049722%
Marathon Oil Permian, LLC	7.500000%
	100.000000%

#### TRACT 3 WI OWNERSHIP (NM-17238) - TOP OF BONE SPRING TO 9,570' TVD

Earthstone Permian LLC	69.979115%
COG Operating LLC	30.000000%
Timothy R. MacDonald	0.012531%
Maverick Oil & Gas Corporation	0.008354%
	100.000000%

#### TRACT 4 WI OWNERSHIP (NM-17238) – TOP OF BONE SPRING TO 9,570' TVD

Earthstone Permian LLC	69.979115%
COG Operating LLC	30.000000%
Timothy R. MacDonald	0.012531%
Maverick Oil & Gas Corporation	0.008354%
	100.000000%

#### TRACT 5 WI OWNERSHIP (NM-17238) – TOP OF BONE SPRING TO 9,570' TVD

Earthstone Permian LLC	28.000000%
Tap Rock Resources	24.979500%
Marshall & Winston, Inc.	14.000000%
JD Murchison Interests, Inc.	2.320500%
MEC Petroleum Corp.	0.700000%
COG Operating LLC	30.000000%
	100.000000%

#### TRACT 6 WI OWNERSHIP (NM-17238) – TOP OF BONE SPRING TO 9,570' TVD

Earthstone Permian LLC	40.000000%
Tap Rock Resources	35.685000%
Marshall & Winston, Inc.	20.000000%
JD Murchison Interests, Inc.	3.315000%
MEC Petroleum Corp.	1.000000%
	100.000000%

#### SPACING UNIT WI OWNERSHIP - TOP OF BONE SPRING TO 9,570' TVD

Earthstone Permian LLC	47.823974%
Devon Energy Production Co. L.P.	6.002626%
FR Energy, LLC	11.004815%
Marathon Oil Permian, LLC	3.751641%
Legacy Reserves Operating, LP	7.315701%
Maverick Oil & Gas Corporation	0.026749%
Timothy R. MacDonald	0.077120%
JD Murchison Interests, Inc.	0.704746%
Marshall & Winston, Inc.	4.251860%
MEC Petroleum Corp.	0.212593%
Tap Rock Resources	7.586382%
COG Operating LLC	11.241793%
	100.000000%

#### <u>SPACING UNIT WI OWNERSHIP – BELOW 9,570' TVD TO BASE OF BONE SPRING</u>

Earthstone Permian LLC	46.323318%
Devon Energy Production Co. L.P.	6.002626%
FR Energy, LLC	11.004815%
Marathon Oil Permian, LLC	3.751641%
Legacy Reserves Operating, LP	7.315701%
Maverick Oil & Gas Corporation	0.026749%
Timothy R. MacDonald	0.077120%
JD Murchison Interests, Inc.	0.580379%
Marshall & Winston, Inc.	3.501532%
MEC Petroleum Corp.	0.175077%
Tap Rock Resources	6.247608%
COG Operating LLC	14.993435%
	100.000000%

#### **WORKING INTEREST OWNERS TO POOL**

**Devon Energy Production Co. L.P.** 

FR Energy, LLC

**Marathon Oil Permian, LLC** 

**Legacy Reserves Operating, LP** 

**Maverick Oil & Gas Corporation** 

Timothy R. MacDonald

JD Murchison Interests, Inc.

**MEC Petroleum Corp.** 

**Tap Rock Resources** 



**EARTHSTONE** Operating, LLC

1400 Woodloch Forest Drive, Suite 300 The Woodlands, TX 77380 Office: 281-298-4246

Fax: 832-823-0478

October 26, 2022

VIA FED-X

Devon Energy Production Company, L.P. 333 W. Sheridan Avenue Oklahoma City, OK 73102

Re: Jade 34-3 Fed 1BS Com 12H

E2E2-Sec 34, T19S-R33E; Lot 1, SENE, E2SE-Sec 3, T20S-R33E

Lea County, New Mexico

Dear Working Interest Partner:

Earthstone Operating, LLC ("Earthstone") proposes to drill and operate the subject well to test the first bench of the Bone Spring Formation. Enclosed find an Authority for Expenditure ("AFE") reflecting estimated costs to drill, test, complete, and equip the well.

The Jade 34-3 Fed 1BS Com 12H is scheduled to be drilled from a proposed surface hole location of 240′ FNL & 650′ FEL of Section 34, T19S-R33E to a proposed bottom hole location of 50′ FSL & 810′ FEL of Section 3-T20S-R33E with an expected TVD of 9,226′ and expected MD of 19,400′.

Earthstone hereby proposes the creation of a 319.86 acre working interest unit consisting of the E2E2-Sec 34, T19S-R33E and Lot 1, SENE, E2SE-Sec 3, T20S-R33E to be governed by a modified 1989 AAPL Model Form Operating Agreement with the following general provisions:

- Limited from the top of the Bone Spring Formation to 9,570' below the surface
- 100/300 non-consent penalties
- \$7,500/\$750 fixed drilling and production overhead rates
- Earthstone Operating, LLC named as Operator

Please indicate your election in the space provided below and return one copy of this letter to the undersigned. Should you elect to participate, please also sign and return one copy of the AFE.

Contact the undersigned with any questions or concerns.

Sincerely,

Matt Solomon Senior Landman 713-379-3083 msolomon@earthstonenergy.com

> Earthstone Operating, LLC Case No. 23296 Exhibit A-4

Devon	Energy Production Company, L.P. hereby elects to:
	Participate for its proportionate share in the drilling & completion of the <b>Jade 34-3 Fed 1BS Com 12H</b> . Non-consent/farmout/assign its interest in the <b>Jade 34-3 Fed 1BS Com 12H</b> , subject to acceptable terms.
Devon	Energy Production Company, L.P.
By: Name:	
Title:	



## Earthstone Operating, LLC Statement of Estimated Well Cost

Well Name: Jade 34-3 Fed Com 1BS 12H	Project Description:
Field Name: Hat Mesa	7 WELL PAD. Estimate is for the drilling of a 2.0 mile 1st Bone Spring Sand lateral in Lea County, NM. 13-
Location: Lea Co., NM	3/8" Surface casing will be set at 1,300' MD. The 1st intermediate section will be a 12-1/4" hole drilled to 3,400' MD with10-3/4" casing set. The 2nd Intermediate section will be 9-7/8" drilled through the Capitan Reef
	and 8-5/8" Casing set at 5,400' MD. A production interval will be drilled with OBM as a 7-7/8" curve, and 7-7/8" lateral to TD at approximately 20,000 MD', ~10,400' VS. 5.5" production casing will be run to surface. Scheduled as 26 days to Ric Release.

	DRILLING INTANGIBLE				COMPLETION INTANGIBLE		
ACCOUNT CODE	ITEM DESCRIPTION	Al	MOUNT	ACCOUNT CODE	ITEM DESCRIPTION		AMOUNT
1420/ 10	LEASE / STAKE / PERMIT	\$	6,000	1432/ 10	LEASE / STAKE / PERMIT	\$	2,500
1420/ 16	INSPECTION	\$	10,000	1432/ 20	LOCATION AND ROADS	\$	10,000
1420/ 20	LOCATION AND ROADS	\$	50,000	1432/ 70	COMPLETION/WORKOVER RIG	\$	46,400
		\$	22,500	1432/ 90	FUEL, POWER & WATER	_	-
	SURFACE DAMAGES				· ·	\$	308,000
	RIG MOBILIZATION	\$	50,000	1432/110	TRUCKING/VACUUM TRUCK	\$	15,000
1420/ 50	DAYWORK	\$	812,000	1432/120	DRILLING/COMPLETION FLUIDS	\$	3,500
1420/ 80	BITS/ REAMERS	\$	108,000	1432/130	CEMENT AND PUMP SERVICE	\$	-
1420/ 90	FUEL, POWER & WATER	\$	396,000	1432/150	ELECTRIC LOGGING/PERFORATING	\$	352,800
1420/110	TRUCKING/VACUUM TRUCK	\$	55,000	1432/170	EQUIPMENT/TOOL RENTALS	\$	490,680
1420/120	DRILLING/COMPLETION FLUIDS	\$	344,000	1432/171	COMPLETION HOUSING	\$	19,600
1420/130	CEMENT AND PUMP SERVICE	\$	300,000	1432/180	WELL STIMULATION	\$	3,316,600
	CASING CREWS AND TOOLS	\$	60,000	1432/181	WELL TEST SERVICES	\$	100,800
	ELECTRIC LOGGING/PERFORATING	\$	00,000	1432/183	DIAGNOSTIC SERVICES	\$	60,000
		\$	32,000			\$	
	MUD LOGGING	_	·	1432/190	SLICKLINE SERVICES		4,500
*	EQUIPMENT/TOOL RENTALS	\$	163,000	1432/195	CONTRACT LABOR/CREW/ROUSTABOUT	\$	15,000
	DOWNHOLE RENTALS	\$	104,000	1432/220	WELLHEAD REPAIR & SERVICEMAN	\$	-
1420/180	WELL STIMULATION / TESTING	\$	-	1432/230	COILED TUBING SERVICES	\$	18,000
1420/186	CLOSED LOOP SYS/CUTTINGS DISP	\$	208,000	1432/250	INSURANCE	\$	1,700
1420/195	CONTRACT LABOR/CREW/ROUSTABOUT	\$	65,000	1432/260	SUPERVISION/ENGINEERING	\$	62,000
1420/200	DIRECTION DRILLING/SURVEYING	\$	316,000	1432/270	ADMINISTRATIVE/OVERHEAD	\$	_
1420/250	INSURANCE	\$	10,000	1432/280	PIT REMEDIATION	\$	15,714
	SUPERVISION/ENGINEERING	\$	104,000	1432/290	MISCELLANEOUS	\$	12,500
	ADMINISTRATIVE/OVERHEAD	\$	10,000	1432/310	FRESH WATER TRANSFER	\$	28,000
	PARTS	\$	15,000	1432/350	COMMUNICATIONS	\$	3,800
1420/350	COMMUNICATIONS	\$	12,000	1432/412	ARTIFICIAL LIFT	\$	50,000
1420/300	CONTINGENCY	\$	66,500	1432/417	FRAC INCIDENTAL	\$	
				1432/300	CONTINGENCY	\$	162,049
		+					·
		+	-	COM	IPLETION INTANGIBLE TOTAL	\$	5,099,144
		+					
					COMPLETION TANGIBLE		
				ACCOUNT CODE	ITEM DESCRIPTION		AMOUNT
DDI	LUNCINTANCIDI E TOTAL	•	2 240 000	1433/300	VALVES/CONNECTIONS/FITTINGS	\$	45,000
DKI	LLING INTANGIBLE TOTAL	\$	3,319,000	1433/320	FLOWLINE	\$	5,200
				1433/370	TUBING	\$	137,300
	DRILLING TANGIBLE			1433/380	PUMPING UNIT	\$	-
ACCOUNT CORE			MOUNT	1433/400			
ACCOUNT CODE	ITEM DESCRIPTION	_	MOUNT		WELLHEAD EQUIPMENT	\$	65,000
	CONDUCTOR CASING	\$	50,000	1433/410	DOWNHOLE ARTIFICIAL LIFT EQUIP	\$	325,000
	SURFACE CASING	\$	136,000	1433/412	SURFACE ARTIFICIAL LIFT EQUIP	\$	92,500
1430/330	INTERMEDIATE CASING	\$	618,000	1433/417	FRAC INCIDENTAL	\$	-
1430/340	DRILLING LINERS	\$	-	COL	MPLETION TANGIBLE TOTAL	\$	670,000
1430/350	PRODUCTION CASING	\$	550,000	00.	MI LETION TANGIBLE TOTAL	Ψ	070,000
1430/400	CASING HANGER/WELLHEAD EQUIP	\$	95,000				
1430/405	DOWNHOLE TOOLS	\$	-		FACILITIES INTANGIBLE		
		†		ACCOUNT CODE	ITEM DESCRIPTION		AMOUNT
		1		1450/ 20	LOCATION AND ROADS	\$	13,500
		+		1450/ 90	FUEL, POWER & WATER	\$	1,000
		+			· ·		-
				1450/110	TRUCKING/VACUUM TRUCK		16,200
				1450/170	EQUIPMENT/TOOL RENTAL	\$	50,000
				1.00.110	EQUIT INEITITIOGE REITITIE	\$	30,000
				1450/195	CONTRACT LABOR	<del></del>	
		$\pm$				\$	100,000
				1450/195	CONTRACT LABOR	\$	100,000
				1450/195 1450/260	CONTRACT LABOR SUPERVISION/ENGINEERING	\$ \$ \$	100,000 25,000 -
				1450/195 1450/260 1450/270	CONTRACT LABOR SUPERVISION/ENGINEERING ADMINISTRATIVE/OVERHEAD	\$ \$ \$	100,000 25,000 -
				1450/195 1450/260 1450/270 1450/290	CONTRACT LABOR SUPERVISION/ENGINEERING ADMINISTRATIVE/OVERHEAD	\$ \$ \$	100,000 25,000 - 10,000
				1450/195 1450/260 1450/270 1450/290	CONTRACT LABOR SUPERVISION/ENGINEERING ADMINISTRATIVE/OVERHEAD MISCELLANEOUS	\$ \$ \$ \$	100,000 25,000 - 10,000
				1450/195 1450/260 1450/270 1450/290	CONTRACT LABOR SUPERVISION/ENGINEERING ADMINISTRATIVE/OVERHEAD MISCELLANEOUS CILITIES INTANGIBLE TOTAL	\$ \$ \$ \$	100,000 25,000 - 10,000
				1450/195 1450/260 1450/270 1450/290 FAG	CONTRACT LABOR SUPERVISION/ENGINEERING ADMINISTRATIVE/OVERHEAD MISCELLANEOUS CILITIES INTANGIBLE TOTAL FACILITIES TANGIBLE	\$ \$ \$ \$	100,000 25,000 - 10,000 215,700
				1450/195 1450/260 1450/270 1450/290 FAG ACCOUNT CODE	CONTRACT LABOR SUPERVISION/ENGINEERING ADMINISTRATIVE/OVERHEAD MISCELLANEOUS CILITIES INTANGIBLE TOTAL  FACILITIES TANGIBLE ITEM DESCRIPTION	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	100,000 25,000 - 10,000 215,700
				1450/195 1450/260 1450/270 1450/290 FAG	CONTRACT LABOR SUPERVISION/ENGINEERING ADMINISTRATIVE/OVERHEAD MISCELLANEOUS CILITIES INTANGIBLE TOTAL FACILITIES TANGIBLE	\$ \$ \$ \$	100,000 25,000 - 10,000 215,700
				1450/195 1450/260 1450/270 1450/290 FAG ACCOUNT CODE	CONTRACT LABOR SUPERVISION/ENGINEERING ADMINISTRATIVE/OVERHEAD MISCELLANEOUS CILITIES INTANGIBLE TOTAL  FACILITIES TANGIBLE ITEM DESCRIPTION	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	100,000 25,000 - 10,000 215,700 AMOUNT 55,000
				1450/195 1450/260 1450/270 1450/290 FAG ACCOUNT CODE 1452/300	CONTRACT LABOR SUPERVISION/ENGINEERING ADMINISTRATIVE/OVERHEAD MISCELLANEOUS CILITIES INTANGIBLE TOTAL  FACILITIES TANGIBLE ITEM DESCRIPTION VALVES/CONNECTIONS/FITTINGS	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	100,000 25,000 - 10,000 215,700
				1450/195 1450/260 1450/270 1450/290 FAC ACCOUNT CODE 1452/300 1452/315	CONTRACT LABOR SUPERVISION/ENGINEERING ADMINISTRATIVE/OVERHEAD MISCELLANEOUS CILITIES INTANGIBLE TOTAL  FACILITIES TANGIBLE ITEM DESCRIPTION VALVES/CONNECTIONS/FITTINGS METER EQUIPMENT SEPARATORS	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	100,000 25,000 10,000 215,700 AMOUNT 55,000 15,000
				1450/195 1450/260 1450/270 1450/290 FAC ACCOUNT CODE 1452/300 1452/315 1452/340 1452/345	CONTRACT LABOR SUPERVISION/ENGINEERING ADMINISTRATIVE/OVERHEAD MISCELLANEOUS CILITIES INTANGIBLE TOTAL  FACILITIES TANGIBLE ITEM DESCRIPTION VALVES/CONNECTIONS/FITTINGS METER EQUIPMENT SEPARATORS HEATER TREATER	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	100,000 25,000
				1450/195 1450/260 1450/270 1450/290 FAC ACCOUNT CODE 1452/300 1452/315 1452/340 1452/345 1452/355	CONTRACT LABOR SUPERVISION/ENGINEERING ADMINISTRATIVE/OVERHEAD MISCELLANEOUS CILITIES INTANGIBLE TOTAL  FACILITIES TANGIBLE ITEM DESCRIPTION VALVES/CONNECTIONS/FITTINGS METER EQUIPMENT SEPARATORS HEATER TREATER GATHERING LINE	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	100,000 25,000 - 10,000 215,700  AMOUNT  55,000 115,000 45,000 175,000
				1450/195 1450/260 1450/270 1450/290 FAC ACCOUNT CODE 1452/300 1452/315 1452/340 1452/345 1452/355 1452/360	CONTRACT LABOR SUPERVISION/ENGINEERING ADMINISTRATIVE/OVERHEAD MISCELLANEOUS CILITIES INTANGIBLE TOTAL  FACILITIES TANGIBLE ITEM DESCRIPTION VALVES/CONNECTIONS/FITTINGS METER EQUIPMENT SEPARATORS HEATER TREATER GATHERING LINE STOCK TANKS	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	100,000 25,000 - 10,000 215,700  AMOUNT  55,000 115,000 45,000 175,000 110,000
				1450/195 1450/260 1450/270 1450/290 FAC ACCOUNT CODE 1452/300 1452/315 1452/340 1452/345 1452/360 1452/366	CONTRACT LABOR SUPERVISION/ENGINEERING ADMINISTRATIVE/OVERHEAD MISCELLANEOUS CILITIES INTANGIBLE TOTAL  FACILITIES TANGIBLE ITEM DESCRIPTION VALVES/CONNECTIONS/FITTINGS METER EQUIPMENT SEPARATORS HEATER TREATER GATHERING LINE STOCK TANKS DIAGNOSTIC EQUIPMENT	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	100,000 25,000 - 10,000 215,700  AMOUNT 55,000 115,000 45,000 175,000 110,000 70,000
				1450/195 1450/260 1450/270 1450/290 FAC ACCOUNT CODE 1452/300 1452/315 1452/340 1452/345 1452/360 1452/365 1452/360	CONTRACT LABOR SUPERVISION/ENGINEERING ADMINISTRATIVE/OVERHEAD MISCELLANEOUS  CILITIES INTANGIBLE TOTAL  FACILITIES TANGIBLE ITEM DESCRIPTION VALVES/CONNECTIONS/FITTINGS METER EQUIPMENT SEPARATORS HEATER TREATER GATHERING LINE STOCK TANKS DIAGNOSTIC EQUIPMENT & SUPPLIES	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	100,000 25,000 10,000 215,700  AMOUNT 55,000 115,000 175,000 110,000 50,000 50,000
				1450/195 1450/260 1450/270 1450/290 FAC ACCOUNT CODE 1452/300 1452/315 1452/340 1452/345 1452/360 1452/366	CONTRACT LABOR SUPERVISION/ENGINEERING ADMINISTRATIVE/OVERHEAD MISCELLANEOUS CILITIES INTANGIBLE TOTAL  FACILITIES TANGIBLE ITEM DESCRIPTION VALVES/CONNECTIONS/FITTINGS METER EQUIPMENT SEPARATORS HEATER TREATER GATHERING LINE STOCK TANKS DIAGNOSTIC EQUIPMENT	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	100,000 25,000 10,000 215,700  AMOUNT 55,000 115,000 175,000 110,000 50,000 50,000
				1450/195 1450/260 1450/270 1450/290 FAC ACCOUNT CODE 1452/300 1452/315 1452/340 1452/345 1452/355 1452/365 1452/365 1452/380 1452/390	CONTRACT LABOR SUPERVISION/ENGINEERING ADMINISTRATIVE/OVERHEAD MISCELLANEOUS CILITIES INTANGIBLE TOTAL  FACILITIES TANGIBLE ITEM DESCRIPTION VALVES/CONNECTIONS/FITTINGS METER EQUIPMENT SEPARATORS HEATER TREATER GATHERING LINE STOCK TANKS DIAGNOSTIC EQUIPMENT ELECTRICAL EQUIPMENT & SUPPLIES FACILITES	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	100,000 25,000
				1450/195 1450/260 1450/270 1450/290 FAC ACCOUNT CODE 1452/300 1452/315 1452/340 1452/345 1452/355 1452/365 1452/365 1452/380 1452/390	CONTRACT LABOR SUPERVISION/ENGINEERING ADMINISTRATIVE/OVERHEAD MISCELLANEOUS  CILITIES INTANGIBLE TOTAL  FACILITIES TANGIBLE ITEM DESCRIPTION VALVES/CONNECTIONS/FITTINGS METER EQUIPMENT SEPARATORS HEATER TREATER GATHERING LINE STOCK TANKS DIAGNOSTIC EQUIPMENT & SUPPLIES	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	100,000 25,000
				1450/195 1450/260 1450/270 1450/290 FAC ACCOUNT CODE 1452/300 1452/315 1452/340 1452/345 1452/355 1452/365 1452/365 1452/380 1452/390	CONTRACT LABOR SUPERVISION/ENGINEERING ADMINISTRATIVE/OVERHEAD MISCELLANEOUS CILITIES INTANGIBLE TOTAL  FACILITIES TANGIBLE ITEM DESCRIPTION VALVES/CONNECTIONS/FITTINGS METER EQUIPMENT SEPARATORS HEATER TREATER GATHERING LINE STOCK TANKS DIAGNOSTIC EQUIPMENT ELECTRICAL EQUIPMENT & SUPPLIES FACILITIES CILITIES TANGIBLE TOTAL	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	100,000 25,000 10,000 215,700  AMOUNT 55,000 115,000 175,000 10,000 50,000 680,000
DR	RILLING TANGIBLE TOTAL	\$	1,449,000	1450/195 1450/260 1450/270 1450/290 FAC ACCOUNT CODE 1452/300 1452/315 1452/340 1452/345 1452/355 1452/365 1452/365 1452/380 1452/390	CONTRACT LABOR SUPERVISION/ENGINEERING ADMINISTRATIVE/OVERHEAD MISCELLANEOUS CILITIES INTANGIBLE TOTAL  FACILITIES TANGIBLE ITEM DESCRIPTION VALVES/CONNECTIONS/FITTINGS METER EQUIPMENT SEPARATORS HEATER TREATER GATHERING LINE STOCK TANKS DIAGNOSTIC EQUIPMENT ELECTRICAL EQUIPMENT & SUPPLIES FACILITES	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	100,000 25,000 10,000 215,700  AMOUNT 55,000 115,000 175,000 10,000 50,000 680,000
	RILLING TANGIBLE TOTAL  AL DRILLING COSTS	<u> </u>		1450/195 1450/260 1450/270 1450/290  FAC  ACCOUNT CODE 1452/300 1452/315 1452/340 1452/345 1452/365 1452/365 1452/360 1452/390  FAC  FAC  FAC  FAC  FAC  FAC  FAC  FA	CONTRACT LABOR SUPERVISION/ENGINEERING ADMINISTRATIVE/OVERHEAD MISCELLANEOUS CILITIES INTANGIBLE TOTAL  FACILITIES TANGIBLE ITEM DESCRIPTION VALVES/CONNECTIONS/FITTINGS METER EQUIPMENT SEPARATORS HEATER TREATER GATHERING LINE STOCK TANKS DIAGNOSTIC EQUIPMENT ELECTRICAL EQUIPMENT & SUPPLIES FACILITIES CILITIES TANGIBLE TOTAL	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	100,000 25,000
		<u> </u>	1,449,000	1450/195 1450/260 1450/270 1450/290  FAC  ACCOUNT CODE 1452/300 1452/315 1452/340 1452/345 1452/360 1452/365 1452/380 1452/390  FAC  TOTAL CON	CONTRACT LABOR SUPERVISION/ENGINEERING ADMINISTRATIVE/OVERHEAD MISCELLANEOUS CILITIES INTANGIBLE TOTAL  FACILITIES TANGIBLE ITEM DESCRIPTION VALVES/CONNECTIONS/FITTINGS METER EQUIPMENT SEPARATORS HEATER TREATER GATHERING LINE STOCK TANKS DIAGNOSTIC EQUIPMENT ELECTRICAL EQUIPMENT & SUPPLIES FACILITIES CILITIES TANGIBLE TOTAL  FACILITIES TOTAL	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	100,000 25,000 10,000 215,700  AMOUNT 55,000 15,000 45,000 70,000 50,000 45,000 680,000
тот		<u> </u>		1450/195 1450/260 1450/270 1450/290  FAC  ACCOUNT CODE 1452/300 1452/315 1452/340 1452/345 1452/365 1452/360 1452/365 1452/380 1452/390  FAC  TOTAL CON	CONTRACT LABOR SUPERVISION/ENGINEERING ADMINISTRATIVE/OVERHEAD MISCELLANEOUS CILITIES INTANGIBLE TOTAL  FACILITIES TANGIBLE ITEM DESCRIPTION VALVES/CONNECTIONS/FITTINGS METER EQUIPMENT SEPARATORS HEATER TREATER GATHERING LINE STOCK TANKS DIAGNOSTIC EQUIPMENT ELECTRICAL EQUIPMENT & SUPPLIES FACILITIES TANGIBLE TOTAL  FACILITIES TOTAL  MPLETION/FACILITIES COSTS ESTIMATED WELL COST	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	100,000 25,000
TOTA		\$ 4,		1450/195 1450/260 1450/270 1450/290  FAC  ACCOUNT CODE 1452/300 1452/315 1452/340 1452/345 1452/365 1452/360 1452/390  FAC  TOTAL CON  TOTAL  Participant Approv	CONTRACT LABOR SUPERVISION/ENGINEERING ADMINISTRATIVE/OVERHEAD MISCELLANEOUS CILITIES INTANGIBLE TOTAL  FACILITIES TANGIBLE ITEM DESCRIPTION VALVES/CONNECTIONS/FITTINGS METER EQUIPMENT SEPARATORS HEATER TREATER GATHERING LINE STOCK TANKS DIAGNOSTIC EQUIPMENT ELECTRICAL EQUIPMENT & SUPPLIES FACILITIES TANGIBLE TOTAL  FACILITIES TOTAL  MPLETION/FACILITIES COSTS ESTIMATED WELL COST	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	100,000 25,000
TOTA		<u> </u>		1450/195 1450/260 1450/270 1450/290  FAC  ACCOUNT CODE 1452/300 1452/315 1452/340 1452/345 1452/365 1452/360 1452/365 1452/380 1452/390  FAC  TOTAL CON	CONTRACT LABOR SUPERVISION/ENGINEERING ADMINISTRATIVE/OVERHEAD MISCELLANEOUS CILITIES INTANGIBLE TOTAL  FACILITIES TANGIBLE ITEM DESCRIPTION VALVES/CONNECTIONS/FITTINGS METER EQUIPMENT SEPARATORS HEATER TREATER GATHERING LINE STOCK TANKS DIAGNOSTIC EQUIPMENT ELECTRICAL EQUIPMENT & SUPPLIES FACILITIES TANGIBLE TOTAL  FACILITIES TOTAL  MPLETION/FACILITIES COSTS ESTIMATED WELL COST	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	100,000 25,000 10,000 215,700  AMOUNT 55,000 15,000 45,000 70,000 50,000 45,000 680,000
TOTA Operator Approval Prepared By:		\$ 4,	768,000	1450/195 1450/260 1450/270 1450/290  FAC  ACCOUNT CODE 1452/300 1452/315 1452/340 1452/345 1452/360 1452/365 1452/380 1452/390  FAC  TOTAL CON  TOTAL  Participant Approve  Company:	CONTRACT LABOR SUPERVISION/ENGINEERING ADMINISTRATIVE/OVERHEAD MISCELLANEOUS CILITIES INTANGIBLE TOTAL  FACILITIES TANGIBLE ITEM DESCRIPTION VALVES/CONNECTIONS/FITTINGS METER EQUIPMENT SEPARATORS HEATER TREATER GATHERING LINE STOCK TANKS DIAGNOSTIC EQUIPMENT ELECTRICAL EQUIPMENT & SUPPLIES FACILITIES TANGIBLE TOTAL  FACILITIES TOTAL  MPLETION/FACILITIES COSTS ESTIMATED WELL COST	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	100,000 25,000
TOTA		\$ 4,	768,000	1450/195 1450/260 1450/270 1450/290  FAC  ACCOUNT CODE 1452/300 1452/315 1452/340 1452/345 1452/365 1452/360 1452/390  FAC  TOTAL CON  TOTAL  Participant Approv	CONTRACT LABOR SUPERVISION/ENGINEERING ADMINISTRATIVE/OVERHEAD MISCELLANEOUS CILITIES INTANGIBLE TOTAL  FACILITIES TANGIBLE ITEM DESCRIPTION VALVES/CONNECTIONS/FITTINGS METER EQUIPMENT SEPARATORS HEATER TREATER GATHERING LINE STOCK TANKS DIAGNOSTIC EQUIPMENT ELECTRICAL EQUIPMENT & SUPPLIES FACILITIES TANGIBLE TOTAL  FACILITIES TOTAL  MPLETION/FACILITIES COSTS ESTIMATED WELL COST	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	100,000 25,000

#### Case 23296

Company	Contact	Date
Company  Devon Energy Production Company	Email	12/1/2022
Devon Energy Production Company	EIIIdii	12/1/2022
FR Energy, LLC	Email	11/14/2022
		11/15/2022
		11/21/2022
		11/28/2022
		11/30/2022
		12/12/2022
		12/20/2022
		12/22/2022
Maverick Oil and Gas Corporation	Email	11/22/2022
		12/20/2022
		1/31/2023
Legacy Reserves Opearating, LLC	Email	11/19/2022
		12/1/2022
		12/7/2022
		12/10/2022
		1/4/2023
		1/5/2023
		1/18/2023
	Phone Calls	4/8/2022
		12/1/2022
		12/8/2022
Tap Rock Resources, LLC	Email	10/26/2022
Tap Nook Nessarees, 228		11/14/2022
		12/2/2022
		12/13/2022
		12/20/2022
		12/21/2022
		1/5/2023
		1/19/2023
		1/23/12023
		1/25/2023
	Phone Calls	12/21/2022
		12/16/2022
		12/13/2022

Earthstone Operating, LLC Case No. 23296 Exhibit A-5

Murchison Oil and Gas, LLC	Email	11/4/2022
JD Murchison Interests, Inc.		11/30/2022
		12/2/2022
		1/3/2023
Timothy R. MacDonald	non-consent letter	11/3/2022
Marathon Oil Permian, LLC	Email	12/20/2022
MEC Petroleum Corp	Email	11/7/2022
		11/8/2022
		11/9/2022
		12/22/2022
		1/31/2023

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

APPLICATION OF EARTHSTONE OPERATING, LLC FOR COMPULSORY POOLING, LEA COUNTY, NEW MEXICO.

**CASE NO. 23296** 

## SELF-AFFIRMED STATEMENT OF JASON ASMUS

- 1. I am a geologist with Earthstone Operating, LLC ("Earthstone"). I am over 18 years of age, 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") and my credentials as an expert in geology were accepted as 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 location map of the proposed horizontal spacing unit comprised of the E/2 E/2 of Section 34, Township 19 South, Range 33 East, and Lot 1, SE/4 NE/4, and E/2 SE/4 (E/2 E/2 equivalent) of irregular Section 3, Township 20 South, Range 33 East, Lea County, New Mexico ("Unit").
- 4. **Exhibits B-2** is a structure map for the top of the 1<sup>st</sup> Bone Spring, formation in subsea TVD with contour intervals of 25 ft. Map control points are shown in red. Approximate wellbore path for the proposed **Jade 34-3 Fed 1BS Com 12H** well is represented by an orange dashed line. The map demonstrates that the formation is gently dipping to the south to southeast in this area. I do not observe any faulting, pinch-outs, or geologic impediments to developing the targeted interval with horizontal wells. The map also identifies the location of a three well cross-section running from A-A', which penetrate each targeted interval and are in proximity to the

Earthstone Operating, LLC Case No. 23296 Exhibit B proposed well. I used these well logs because they penetrate the targeted intervals, are of good quality, and are representative of the geology in the area.

- 5. **Exhibit B-3** is a structural cross-section using the representative wells identified on **Exhibits B-2**. It contains gamma ray and resistivity logs. The proposed landing zone for the well is labeled on the exhibit. This cross-section demonstrates the target interval is continuous across the Unit.
- 6. **Exhibit B-4** is a gun barrel, or cross-sectional view of the proposed development plan for this Unit. This shows vertical and horizontal spacing within the unit.
- 7. In my opinion, a stand-up orientation for the proposed well is appropriate to properly develop the subject acreage because of an established directional pattern and the known fracture orientation in this portion of the trend. Stand-up orientation is also supported by a study of the production of stand-up versus laydown orientation in the area, with stand-up well results being significantly better.
- 8. Based on my geologic study of the area, the targeted interval underlying the Unit is suitable for development by horizontal wells and the tracts comprising the Unit will contribute equally to the production of the wells.
- 9. In my opinion, the granting of Earthstone's application will serve the interests of conservation, the protection of correlative rights, and the prevention of waste.
- 10. The attached exhibits were either prepared by me or under my supervision or were compiled from company business records.
- 11. I understand this Self-Affirmed Statement will be used as written testimony in this case. I affirm my testimony 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.

Jason Asmus

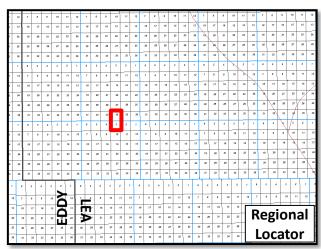
Date

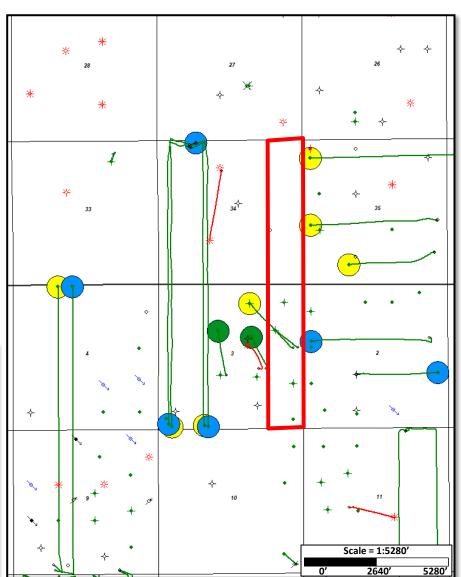
### Exhibit B-1 Locator Map

- Brushy Canyon

- 1st Bone Spring Sand

- 2<sup>nd</sup> Bone Spring Sand

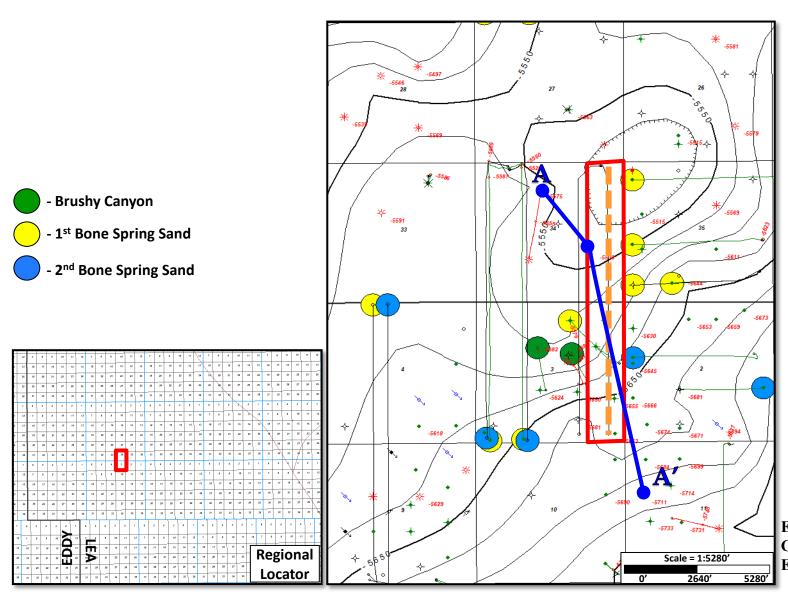




Earthstone Operating, LLC Case No. 23296 Exhibit B-1



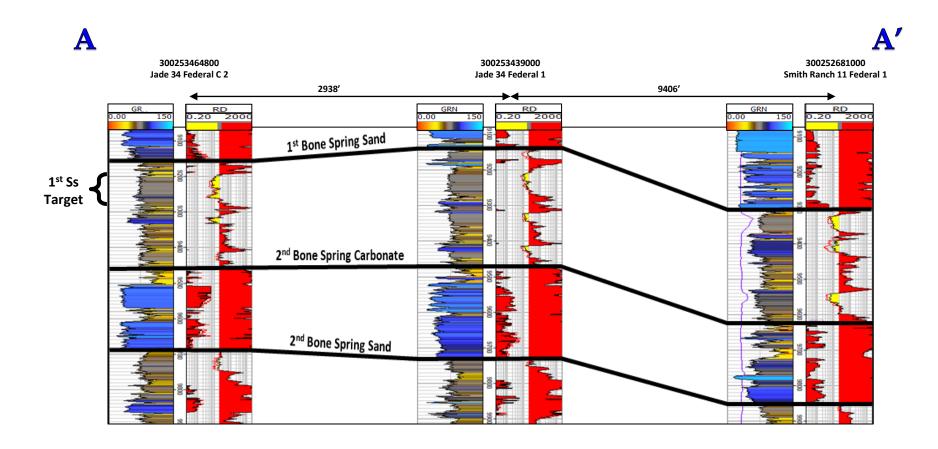
### Exhibit B-2 1st Bone Spring Sand Structure (SSTVD): Contour Interval = 25'



Earthstone Operating, LLC Case No. 23296 Exhibit B-2



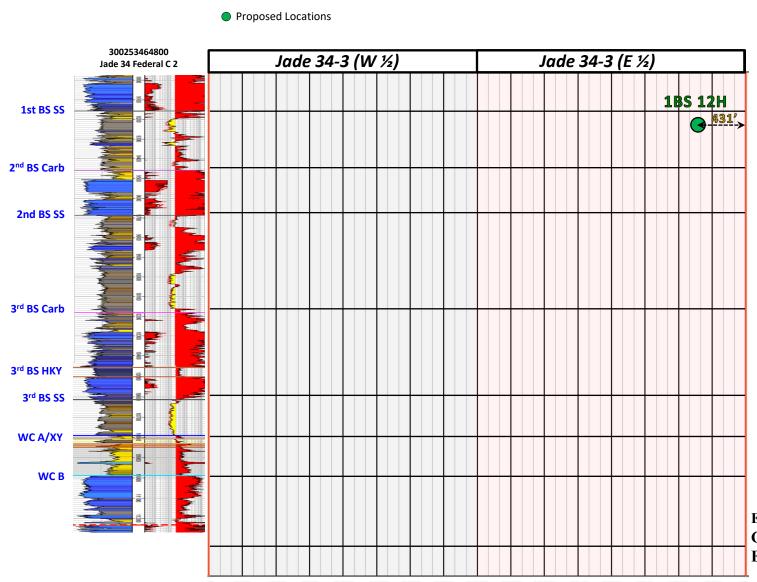
## Exhibit B-3 Structural Cross Section A-A': 1st Bone Spring Sand



Earthstone Operating, LLC Case No. 23296 Exhibit B-3



### Exhibit B-4 Gun Barrel Development Proposal



Earthstone Operating, LLC Case No. 23296 Exhibit B-4



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

APPLICATION OF EARTHSTONE OPERATING, LLC FOR COMPULSORY POOLING, LEA COUNTY, NEW MEXICO.

**CASE NO. 23296** 

## SELF-AFFIRMED STATEMENT OF DANA S. HARDY

- 1. I am attorney in fact and authorized representative of Earthstone Operating, LLC the Applicant herein.
- 2. I am familiar with the Notice Letter attached as **Exhibit C-1** and caused the Notice Letter, along with the Application in this case, to be sent to the parties set out in the chart attached as **Exhibit C-2**.
- 3. Exhibit C-2 also provides the date each Notice Letter was sent and the date each return was received.
- 4. Copies of the certified mail green cards and white slips are attached as **Exhibit C-3** as supporting documentation for proof of mailing and the information provided on Exhibit C-2.
- 5. On January 11, 2023, I caused a notice to be published to all interested parties in the Hobbs News-Sun. An Affidavit of Publication from the Legal Clerk of the Hobbs News-Sun, along with a copy of the notice publication, is attached as **Exhibit C-4**.
- 6. I understand this Self-Affirmed Statement will be used as written testimony in the subject cases. I affirm that my testimony above is true and correct and it 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.

/s/ Dana S. Hardy

January 31, 2023 Date

Dana S. Hardy

Earthstone Operating, LLC Case No. 23296 Exhibit C



#### HINKLE SHANOR LLP

### P.O. BOX 2068

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

WRITER: Dana S. Hardy, Partner dhardy@hinklelawfirm.com

January 6, 2023

#### <u>VIA CERTIFIED MAIL</u> RETURN RECEIPT REQUESTED

#### TO ALL PARTIES ENTITLED TO NOTICE

Re: Case No. 23296 – Application of Earthstone Operating, LLC for Compulsory Pooling, Lea County, New Mexico.

To whom it may concern:

This letter is to advise you that the enclosed application was filed with the New Mexico Oil Conservation Division. The hearing will be conducted on **February 2, 2023** beginning at 8:15a.m.

Hearings are currently conducted remotely. To participate in the electronic hearing, see the instructions posted on the OCD Hearings website: <a href="https://www.emnrd.nm.gov/ocd/hearing-info/">https://www.emnrd.nm.gov/ocd/hearing-info/</a>. 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 submitted through the OCD E-Permitting system (<a href="https://www.apps.emnrd.nm.gov/ocd/ocdpermitting/">https://www.apps.emnrd.nm.gov/ocd/ocdpermitting/</a>) or via e-mail to ocd.hearings@emnrd.nm.gov 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 contact Matt Solomon, Senior Landman for Earthstone Operating, LLC, by phone at (713) 379-3083 if you have questions regarding this matter.

Sincerely,

/s/ Dana S. Hardy

Dana S. Hardy

Enclosure

Earthstone Operating, LLC Case No. 23296 Exhibit C-1

PO BOX 10 ROSWELL, NEW MEXICO 88202 (575) 622-6510 FAX (575) 623-9332 7601 JEFFERSON ST NE · SUITE 180 ALBUQUERQUE, NEW MEXICO 87109 505-858-8320 (FAX) 505-858-8321 PO BOX 2068 SANTA FE, NEW MEXICO 87504 (505) 982-4554 FAX (505) 982-8623

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

APPLICATION OF EARTHSTONE OPERATING, LLC FOR COMPULSORY POOLING, LEA COUNTY, NEW MEXICO.

**CASE NO. 23296** 

#### **NOTICE LETTER CHART**

PARTY	NOTICE LETTER SENT	RETURN RECEIVED
COG Operating LLC	01/06/23	01/12/23
600 W. Illinois Avenue		
Midland, TX 79701		
Devon Energy Production Co., L.P.	01/06/23	01/18/23
333 W. Sheridan Avenue		
Oklahoma City, OK 73102		
FR Energy, LLC	01/06/23	01/18/23
55 Waugh Drive, Suite 1200		
Houston, TX 77007		
Legacy Reserves Operating, LP	01/06/23	01/11/23
15 Smith Road, Suite 3000		
Midland, TX 79705		
MEC Petroleum Corp.	01/06/23	01/12/23
P.O. Box 11265		
Midland, TX 79702		
Timothy R. MacDonald	01/06/23	01/18/23
3003 Paleo Point		
College Station, TX 77845		
Marathon Oil Permian, LLC	01/06/23	01/18/23
990 Town and Country Blvd.		
Houston, TX 77024		
Maverick Oil & Gas Corporation	01/06/23	01/12/23
1001 W. Wall St.		No signature.
Midland, TX 79701		
Murchison Oil and Gas, LLC	01/06/23	01/12/23
7250 Dallas Parkway, Ste. 1400		
Plano, TX 75024		
Tap Rock Resources, LLC	01/06/23	01/13/23
523 Park Point Drive, Ste. 200		
Golden, CO 80401		

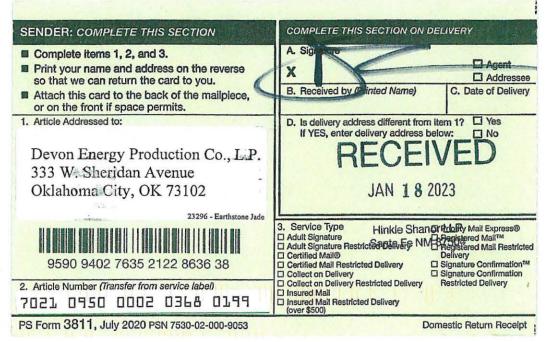
Earthstone Operating, LLC Case No. 23296 Exhibit C-2



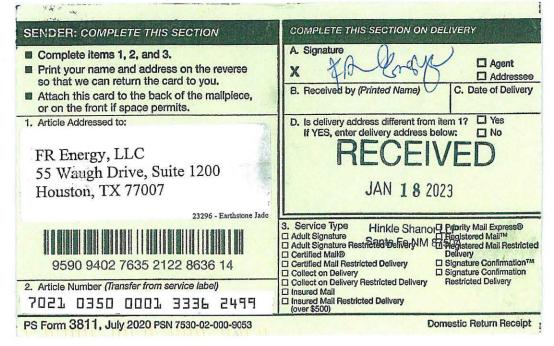


Earthstone Operating, LLC Case No. 23296 Exhibit C-3

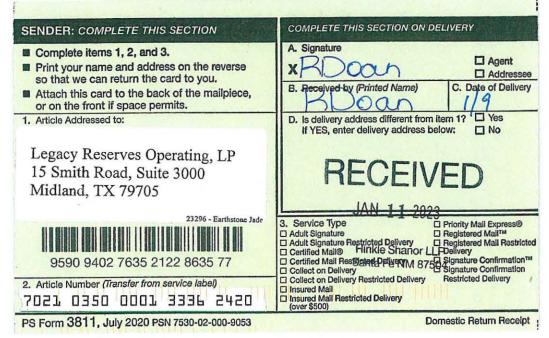




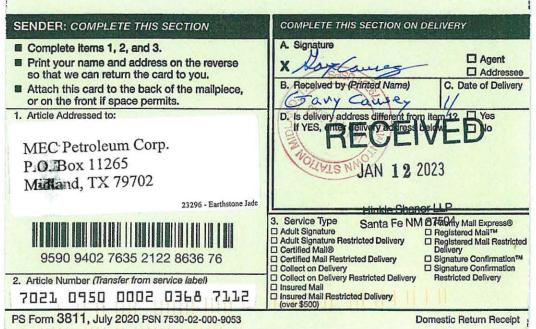




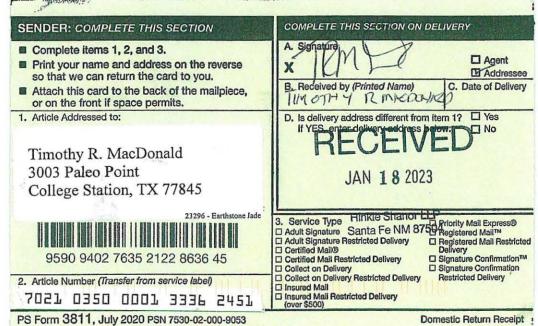




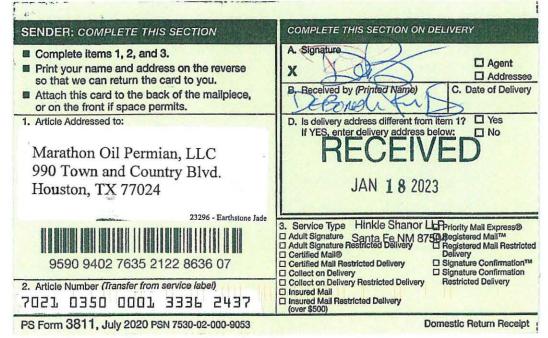








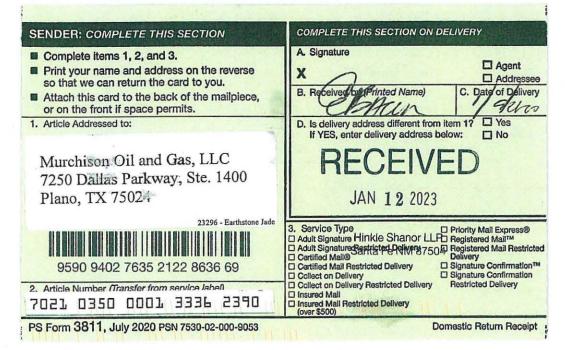




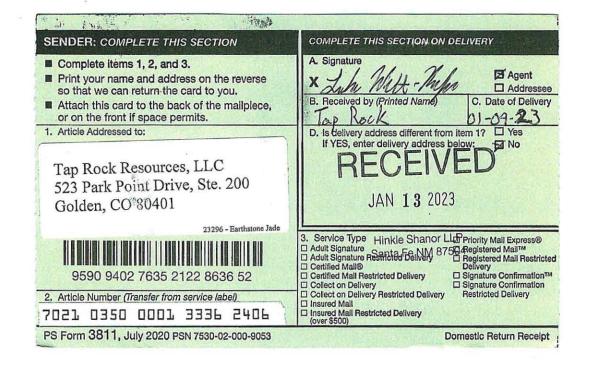












### **Affidavit of Publication**

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 January 11, 2023 and ending with the issue dated January 11, 2023.

Publisher

Sworn and subscribed to before me this 11th day of January 2023.

Business Manager

My commission expires January 29, 2023

(Seal)

GUSSIE BLACK Notary Public - State of Hew Mexico Commission # 1087526 My Comm. Expires Jan 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 January 11, 2023

This is to notify all interested parties, including FR Energy, LLC, Maverick Oil & Gas Corporation, Legacy Reserves Operating, LP, Tap Rock Resources, LLC, Murchison Oil and Gas, LLC, Devon Energy Production, L.P., Timothy R. MacDonald, Marathon Oil Permian, LLC, COG Operating LLC, Marshall & Winston, LLC, MEC Petroleum Corp., and their successors and assigns, that the New Mexico Oil Conservation Division will conduct a hearing on an application submitted by Earthstone Operating, LLC (Case No. 23296). The hearing will be conducted remotely on February 2, 2023, beginning at 8:15 a.m. To participate in the electronic hearing, see the instructions posted on the OCD Hearings website for that date: https://www.emnrd.nm.gov/ocd/hearing-info/. Applicant applies for an order pooling all uncommitted interests in the First Bone Spring formation underlying a 319.86-acre, more or less, standard horizontal spacing unit comprised of the E/2 E/2 of Section 34, Township 19 South, Range 33 East, and Lot 1, SE/4 NE/4, and E/2 SE/4 (E/2 E/2 equivalent) of Irregular Section 3, Township 20 South, Range 33 East, Lea County, New Mexico ("Unit"). The Unit will be dedicated to the proposed Jade 34-3 Fed 1BS Com 12H well ("Well"), to be drilled from a surface hole location in the NE/4 NE/4 (Unit A) of Section 34, Township 19 South, Range 33 East to a proposed bottom hole location in the SE/4 SE/4 (Unit P) of Section 3, Township 20 South, Range 33 East. The completed interval of the Well will be orthodox. Due to a depth severance, Applicant seeks to pool interests from the top of the Bone Spring Formation to the base of the First Bone Spring formation at a stratigraphic equivalent of approximately 9,560° TVD. Also to be considered will be the cost of drilling and completing the Well and the allocation of the cost, the designation of Applicant as operator of the Well, and a 200% charge for the risk involved in drilling and completing the Well. The Well is located approximately 30 miles southwest of Hobbs, New Mexico.

02107475

GILBERT HINKLE, SHANOR LLP PO BOX 2068 SANTA FE, NM 87504 00274730

Earthstone Operating, LLC Case No. 23296 Exhibit C-4