

Form 3160-3  
(June 2019)

FORM APPROVED  
OMB No. 1004-0137  
Expires: October 31, 2021

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
**APPLICATION FOR PERMIT TO DRILL OR REENTER**

5. Lease Serial No.  
**NMNM134888**

6. If Indian, Allottee or Tribe Name

7. If Unit or CA Agreement, Name and No.

8. Lease Name and Well No.  
**EL CAMPEON FED COM 513H**

9. API Well No.  
**30-025-51592**

10. Field and Pool, or Exploratory  
(96776)JABALINA; WOLFCAMP, SOUTHWEST

1a. Type of work:  DRILL  REENTER

1b. Type of Well:  Oil Well  Gas Well  Other

1c. Type of Completion:  Hydraulic Fracturing  Single Zone  Multiple Zone

2. Name of Operator  
**EARTHSTONE OPERATING, LLC (331165)**

3a. Address **1400 WOODLOCH FOREST DR., SUITE 1300  
THE WOODLANDS, TX 77380**

3b. Phone No. (include area code)

4. Location of Well (Report location clearly and in accordance with any State requirements. \*)

At surface **O-20-26S-35E; 581 FSL, 200E FEL; 32.02311532, -103.38737004**

At proposed prod. zone **LOT 2-29-26S-35E; 100 FNL, 1870 FEL; 32.02124248, -103.38694183**

14. Distance in miles and direction from nearest town or post office\*  
**13 MILES**

12. County or Parish  
**LEA**

13. State  
**NM**

15. Distance from proposed\* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) **100 FEET**

16. No of acres in lease **200**

17. Spacing Unit dedicated to this well **240 ac.**

18. Distance from proposed location\* to nearest well, drilling, completed, applied for, on this lease, ft. **30 FEET**

19. Proposed Depth **12,989 FEET/23,102 FEET**

20. BLM/BIA Bond No. in file **NMB002110**

21. Elevations (Show whether DF, KDB, RT, GL, etc.) **3174' GL**

22. Approximate date work will start\* **06/09/2023**

23. Estimated duration **30**

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable)

- |  |   |
|--|---|
| 1. Well plat certified by a registered surveyor.   | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan.  | 5. Operator certification.  |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be requested by the BLM.            |

25. Signature 	Name (Printed/Typed) <b>JENNIFER ELROD</b>	Date <b>06/05/2023</b>
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Title  
**SR. REGULATORY ANALYST**

Approved by (Signature) <b>CHRISTOPHER WALLS</b>	Digitally signed by CHRISTOPHER WALLS Date: 2023.06.09 12:53:17 -06'00'	Name (Printed/Typed) <b>CHRISTOPHER WALLS</b>	Date <b>6/9/2023</b>
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Title  
**Sup. P.E.**

Office  
**CFO**

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

**KZ**

**06/09/2023**

**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**

<b>1 API Number</b>		<b>2 Pool Code</b> 96776		<b>3 Pool Name</b> JABALINA; WOLFCAMP, SOUTHWEST	
<b>4 Property Code</b>		<b>5 Property Name</b> EL CAMPEON FED COM			<b>6 Well Number</b> 513H
<b>7 OGRID No.</b> 331165		<b>8 Operator Name</b> EARTHSTONE OPERATING LLC			<b>9 Elevation</b> 3174.48'

**10 Surface Location**

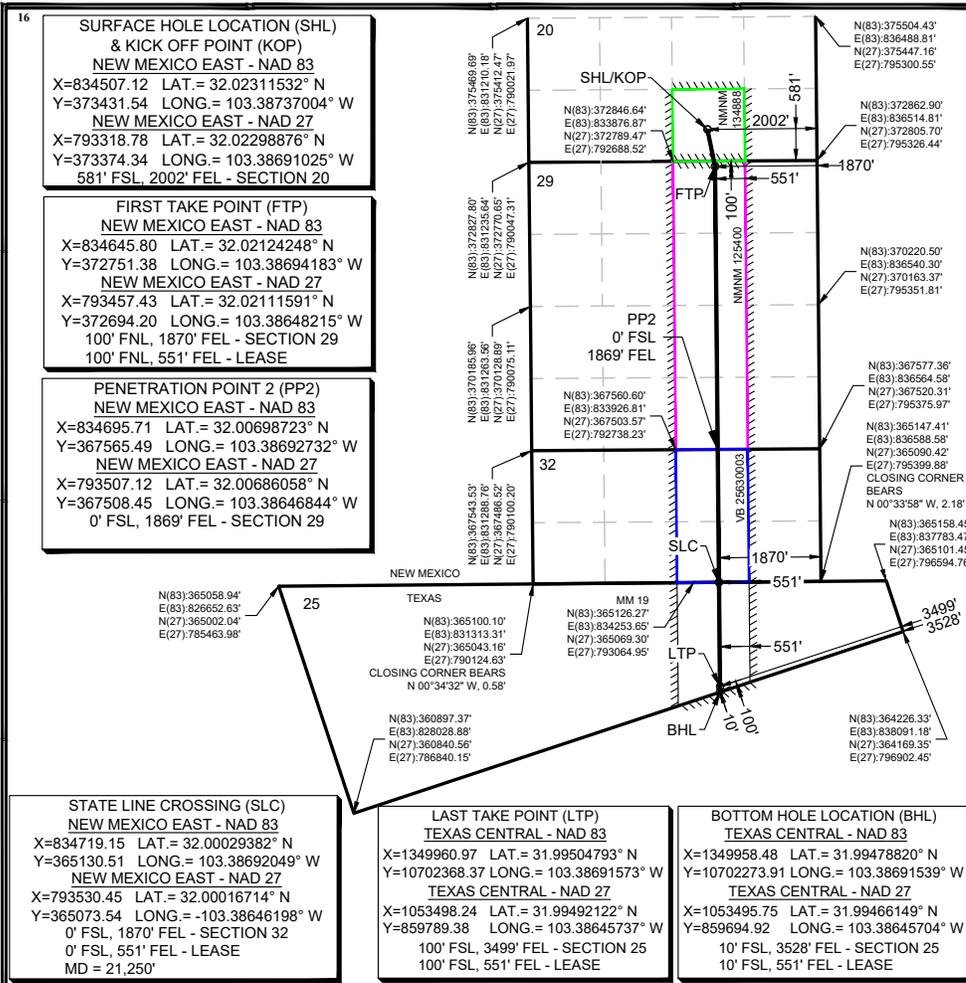
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	20	26-S	35-E		581'	SOUTH	2002'	EAST	LEA

**11 State Line Crossing 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 (TX)
1	32	26S	35E	2	0'	SOUTH	1870'	EAST	LEA

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.
240	Y		

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.  
**\*BHL & LTP WILL BE IN TEXAS**



**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.

*Jennifer Elrod* 06/07/2023  
Signature Date

JENNIFER ELROD  
Printed Name  
EJLROD@EARTHSTONEENERGY.COM  
E-mail Address

**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.

CHARLES R. JURICA  
NEW MEXICO  
25490  
PROFESSIONAL SURVEYOR  
Date of Survey: 06/07/2023  
Signature and Seal of Professional Surveyor  
Certificate Number

State of New Mexico  
Energy, Minerals and Natural Resources Department

Submit Electronically  
Via E-permitting

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

## NATURAL GAS MANAGEMENT PLAN

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.

### Section 1 – Plan Description Effective May 25, 2021

**I. Operator:** EARTHSTONE OPERATING, LLC      **OGRID:** 331165      **Date:** 06/09/2023

**II. Type:**  Original    Amendment due to  19.15.27.9.D(6)(a) NMAC    19.15.27.9.D(6)(b) NMAC    Other.

If Other, please describe: \_\_\_\_\_

**III. Well(s):** Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
El Campeon Fed Com 513H		O-20-26S-35E	250 FNL, 1400 FEL	1200	1500	5000

**IV. Central Delivery Point Name:** El Campeon CTB [See 19.15.27.9(D)(1) NMAC]

**V. Anticipated Schedule:** Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
El Campeon Fed Com 513H		06/09/2023	7/1/2023	07/16/2023	08/24/2023	08/25/2023

**VI. Separation Equipment:**  Attach a complete description of how Operator will size separation equipment to optimize gas capture.

**VII. Operational Practices:**  Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.

**VIII. Best Management Practices:**  Attach a complete description of Operator’s best management practices to minimize venting during active and planned maintenance.

**Section 2 – Enhanced Plan**  
**EFFECTIVE APRIL 1, 2022**

Beginning April 1, 2022, an operator that is not in compliance with its statewide natural gas capture requirement for the applicable reporting area must complete this section.

Operator certifies that it is not required to complete this section because Operator is in compliance with its statewide natural gas capture requirement for the applicable reporting area.

**IX. Anticipated Natural Gas Production:**

Well	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF

**X. Natural Gas Gathering System (NGGS):**

Operator	System	ULSTR of Tie-in	Anticipated Gathering Start Date	Available Maximum Daily Capacity of System Segment Tie-in

**XI. Map.**  Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of the segment or portion of the natural gas gathering system(s) to which the well(s) will be connected.

**XII. Line Capacity.** The natural gas gathering system  will  will not have capacity to gather 100% of the anticipated natural gas production volume from the well prior to the date of first production.

**XIII. Line Pressure.** Operator  does  does not anticipate that its existing well(s) connected to the same segment, or portion, of the natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the new well(s).

Attach Operator’s plan to manage production in response to the increased line pressure.

**XIV. Confidentiality:**  Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provided in Section 2 as provided in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and attaches a full description of the specific information for which confidentiality is asserted and the basis for such assertion.

### **Section 3 - Certifications**

**Effective May 25, 2021**

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal:

Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or

Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system.

***If Operator checks this box, Operator will select one of the following:***

**Well Shut-In.**  Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or

**Venting and Flaring Plan.**  Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including:

- (a) power generation on lease;
- (b) power generation for grid;
- (c) compression on lease;
- (d) liquids removal on lease;
- (e) reinjection for underground storage;
- (f) reinjection for temporary storage;
- (g) reinjection for enhanced oil recovery;
- (h) fuel cell production; and
- (i) other alternative beneficial uses approved by the division.

### **Section 4 - Notices**

1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

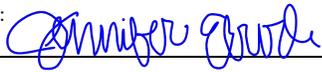
(a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or

(b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.

2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

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**I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.**

Signature: 
Printed Name: JENNIFER ELROD
Title: SR. REGULATORY ANALYST
E-mail Address: JELROD@EARTHSTONEENERGY.COM
Date: 06/09/2023
Phone: 940-452-6214
<b>OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)</b>
Approved By:
Title:
Approval Date:
Conditions of Approval:

**ESTE Natural Gas****Management Plan Items VI-VIII****VI. Separation Equipment: Attach a complete description of how Operator will size separation equipment to optimize gas capture.**

- Separation equipment will be sized to provide adequate separation for anticipated rates.
- Adequate separation relates to retention time for Liquid – Liquid separation and velocity for Gas-Liquid separation.
- Collection systems are appropriately sized to handle facility production rates on all (3) phases.
- Ancillary equipment and metering are selected to be serviced without flow interruptions or the need to release gas from the well.

**VII. Operational Practices: Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F 19.15.27.8NMAC.****Drilling Operations**

- All flare stacks will be properly sized. The flare stacks will be located at a minimum 100' from the nearest surface hole location on the pad.
- All-natural gas produced during drilling operations will be flared, unless there is an equipment malfunction and/or to avoid risk of an immediate and substantial adverse impact on safety and the environment, at which point the gas will be vented.

**Completions/Recompletions Operations**

- New wells will not be flowed back until they are connected to a properly sized gathering system.
- The facility will be built/sized for maximum anticipated flowrates and pressures to minimize waste.
- For flowback operations, multiple stages of separation will be used as well as excess VRU and blowers to make sure waste is minimized off the storage tanks and facility.
- During initial flowback, the well stream will be routed to separation equipment.
- At an existing facility, when necessary, post separation natural gas will be flared until it meets pipeline specifications, at which point it will be turned into a collection system.
- At a new facility, post separation natural gas will be vented until storage tanks can safely function, at which point it will be flared until it meets pipeline spec.

**Production Operations**

- Weekly AVOs will be performed on all facilities.
- All flares will be equipped with auto-ignition systems and continuous pilot operations.
- After a well is stabilized from liquid unloading, the well will be turned back into the collection system.
- All tanks will have sight glasses installed, but no electronic gauging equipment.
- Leaking thief hatches found during AVOs will be cleaned and properly re-sealed.
- There will be no gas re-injection for underground storage, temporary storage, or for enhanced oil recovery; however, gas injection will be used for gas lift applications in which the gas would be circulated through a closed loop system.
- If H2S is encountered, gas will be treated to pipeline spec to avoid shut-in's and/or flaring.

**Performance Standards**

- Production equipment will be designed to handle maximum anticipated rates and pressure.

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- All flared gas will be combusted in a flare stack that is properly sized and designed to ensure proper combustion.
- Weekly AVOs will be performed on all wells and facilities that produce more than 50MCFPD.

Measurement & Estimation

- All volume that is flared or vented that is not measured will be estimated.
- All measurement equipment for flared volumes will conform to API 14.10.
- No meter bypasses will be installed.
- When metering is not practical due to low pressure/low rate, the vented or flared volume will be estimated.

**VIII. Best Management Practices: Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.**

- During downhole well maintenance, CEH will use best management practices to vent as minimally as possible.
- After downhole well maintenance, natural gas will be flared until it reaches pipeline specification.

Form 3160-5  
(June 2019)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0137  
Expires: October 31, 2021

**SUNDRY NOTICES AND REPORTS ON WELLS**  
**Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.**

5. Lease Serial No. **NMNM134888**

6. If Indian, Allottee or Tribe Name

**SUBMIT IN TRIPLICATE - Other instructions on page 2**

1. Type of Well  
 Oil Well     Gas Well     Other

2. Name of Operator **EARTHSTONE OPERATING LLC**

3a. Address **1400 WOODLOCH FOREST DRIVE SUITE 300,** 3b. Phone No. (include area code)  
**(281) 298-4240**

4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description)  
**SEC 20/T26S/R35E/NMP**

7. If Unit of CA/Agreement, Name and/or No.

8. Well Name and No. **EL CAMPEON FED COM/513H**

9. API Well No. **3002548139**

10. Field and Pool or Exploratory Area  
**JABALINA/WC Bone Springs**

11. Country or Parish, State  
**LEA/NM**

**12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

06/05/2023

-Notice of Intent to Skid original wellbore for El Campeon Fed Com 513H

-Request to change name of original/plugged well

From: El Campeon Fed Com 513H

To: El Campeon Fed Com 513Y (30-025-48139)

-Revise total depth

From: 22,278'MD/13,092'TVD

To: 23,102'MD/12,959' TVD

Updated Drilling/Directional/AC plans attached

\*\*There will be NO additional surface disturbance at this location\*\*

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)  
**JENNIFER ELROD / Ph: (817) 953-3728**

Title **Senior Regulatory Technician**

Signature



Date

06/07/2023

**THE SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by  
**CHRISTOPHER WALLS / Ph: (575) 234-2234 / Approved**

Title **Petroleum Engineer** Date **06/09/2023**

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office **CARLSBAD**

Title 18 U.S.C Section 1001 and Title 43 U.S.C Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

## GENERAL INSTRUCTIONS

This form is designed for submitting proposals to perform certain well operations and reports of such operations when completed as indicated on Federal and Indian lands pursuant to applicable Federal law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area or regional procedures and practices, are either shown below, will be issued by or may be obtained from the local Federal office.

## SPECIFIC INSTRUCTIONS

*Item 4* - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

*Item 13*: Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to the top of any tubing left in the hole; method of closing top of well and date well site conditioned for final inspection looking for approval of the abandonment. If the proposal will involve **hydraulic fracturing operations**, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

## NOTICES

The privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c) and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.

ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.

EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

Response to this request is mandatory.

The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

**BURDEN HOURS STATEMENT:** Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C St., N.W., Mail Stop 401 LS, Washington, D.C. 20240

## Additional Information

### Location of Well

0. SHL: SWSE / 581 FSL / 1942 FEL / TWSP: 26S / RANGE: 35E / SECTION: 20 / LAT: 32.0231147 / LONG: -103.3871762 ( TVD: 0 feet, MD: 0 feet )

PPP: NWNE / 0 FNL / 1872 FEL / TWSP: 26S / RANGE: 35E / SECTION: 29 / LAT: 32.021515 / LONG: -103.386948 ( TVD: 11900 feet, MD: 11920 feet )

PPP: LOT 2 / 0 FNL / 1869 FEL / TWSP: 26S / RANGE: 35E / SECTION: 32 / LAT: 32.006987 / LONG: -103.386928 ( TVD: 13088 feet, MD: 18146 feet )

BHL: LOT 1 / 0 FSL / 1870 FEL / TWSP: 26S / RANGE: 35E / SECTION: 32 / LAT: 32.0003212 / LONG: -103.386922 ( TVD: 13086 feet, MD: 20601 feet )

CONFIDENTIAL

## Earthstone Operating LLC - EL Campeon Fed Com 513H

### 1. Geologic Formations

TVD of target	12,999' EOL	Kick Off Point	12,428'
MD at TD:	23,102'	Deepest expected fresh water:	400'

Formation	Depth (TVD) from KB	Water/Mineral Bearing/ Target Zone?	Hazards*
Quaternary Fill	Surface	Water	
Rustler	1046	Water	
Salado	1597	Salt	
Base of Salt	5033	Salt	
Lamar	5343	Salt Water	
Bell Canyon	5372	Water	
Cherry Canyon	6364	Oil/Gas	
Brushy Canyon	7881	Oil/Gas	
Top BSPG Lime	9256	Oil/Gas	
1st BSPG Ss	10544	Oil/Gas	
2nd BSPG Ss	11071	Oil/Gas	
3rd BSPG Carb	11509	Oil/Gas	
3rd BSPG Ss	12128	Oil/Gas	
Wolfcamp	12479	Oil/Gas	
Wolfcamp B	12999	Target Oil/Gas	

### 2. Casing Program

Hole Size	Casing Interval		Csg. Size	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	SF Body Tension	SF Joint Tension
	From	To								
14.5"	0	1100	10.75"	45.5	J55	BTC	6.09	9.10	14.29	15.90
9.875"	0	12000	7.625"	29.7	L80 HC	BTC	1.49	1.65	1.92	1.92
7.875"	0	11500	5.5"	23	P110 HC	GBCD	2.38	1.94	2.76	2.87
6.75"	11500	23,102	5."	18	P110 EC	DWC/C-IS Plus	1.69	2.12	2.43	2.82
BLM Minimum Safety Factor							1.125	1	1.6 Dry 1.8 Wet	1.6 Dry 1.8 Wet

Intermediate casing will be kept at least 1/3 full while running casing to mitigate collapse. Intermediate burst based on 0.7 frac gradient at the shoe with Gas Gradient 0.1 psi/ft to surface.

All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h

The 5-1/2" casing will be run back 500' into the intermediate casing to ensure the coupling OD clearance is greater than .422" for cement bond tie in.

**Earthstone Operating LLC - EL Campeon Fed Com 513H**

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Does casing meet API specifications? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	Y
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the intermediate pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
<b>Is well located within Capitan Reef?</b>	
If yes, does production casing cement tie back a minimum of 50' above the Reef?	N
Is well within the designated 4 string boundary?	
<b>Is well located in SOPA but not in R-111-P?</b>	
If yes, are the first 2 strings cemented to surface and 3 <sup>rd</sup> string cement tied back 500' into previous casing?	N
<b>Is well located in R-111-P and SOPA?</b>	
If yes, are the first three strings cemented to surface?	N
Is 2 <sup>nd</sup> string set 100' to 600' below the base of salt?	
<b>Is well located in high Cave/Karst?</b>	
If yes, are there two strings cemented to surface?	N
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
<b>Is well located in critical Cave/Karst?</b>	
If yes, are there three strings cemented to surface?	N

**Earthstone Operating LLC - EL Campeon Fed Com 513H**

**3. Cementing Program**

Casing	# Sks	Wt. lb/ gal	Yld ft3/ sack	H <sub>2</sub> O gal/sk	500# Comp. Strength (hours)	Slurry Description
Surface	300	12.5	1.83	9	12	Lead: Class C + 4% Gel + 1% CaCl <sub>2</sub>
	290	14.8	1.34	6.34	8	Tail: Class C + 2% CaCl <sub>2</sub>
Intermediate	990	10.3	3.65	9.6	16	Lead: 35:65:6 C Blend
	130	16.4	1.27	6.34	8	Tail: Class H
Production	240	12.7	2.13	19	72	Lead: 50:50:10 H Blend
	2690	14.5	1.24	5.7	19	Tail: 50:50:2 Class H Blend

Volumes Subject to Observed Hole Conditions and/or Fluid Caliper Results

Lab reports with the 500 psi compressive strength time for the cement will be onsite for review.

If losses are encountered in the intermediate section a DV/ECP tool will be run ~50' above the Lamar Lime Top, cement will be adjusted accordingly if this contingency is necessary.

Casing String	TOC Tail	TOC Lead	% Excess
Surface	600	0	50%
1 <sup>st</sup> Intermediate	11500	0'	50%
Production	12,000'	6,500'	35% OH in Lateral (KOP to EOL) – 40% OH in Vertical

**Earthstone Operating LLC - EL Campeon Fed Com 513H**

**4. Pressure Control Equipment**

N	A variance is requested for the use of a diverter on the surface casing. See attached for schematic.
---	--

BOP installed and tested before drilling which hole?	Size?	Min. Required WP	Type	x	Tested to:
9.875	11"	3M	Annular	x	2000 psi
			Blind Ram	x	3M
			Pipe Ram	x	
			Double Ram		
			Other*		
6-3/4"	11"	10M	Annular	x	5000 psi
			Blind Ram	x	10M
			Pipe Ram	x	
			Double Ram		
			Other*		

BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested.

Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold. See attached schematics.

X	Formation integrity test will be performed per Onshore Order #2. On Exploratory wells or on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.i.
Y	A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for specs and hydrostatic test chart.
N	Are anchors required by manufacturer?
Y	A multibowl wellhead is being used. The BOP will be tested per Onshore Order #2 after installation on the surface casing which will cover testing requirements for a maximum of 30 days. If any seal subject to test pressure is broken the system must be tested.

**Earthstone Operating LLC - EL Campeon Fed Com 513H**

**5. Mud Program**

Depth		Type	Weight (ppg)	Viscosity	Water Loss
From	To				
Surface	10-3/4" Shoe	FW Gel	8.6 - 8.8	28-34	N/C
10-3/4" Shoe	7-5/8" Int shoe	Saturated Brine	8.8 - 9.5	28-34	N/C
7-5/8" Int shoe	Lateral TD	OBM	12.5 - 13	45 - 65	N/C

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times.

What will be used to monitor the loss or gain of fluid?	PVT/Pason/Visual Monitoring
---	-----------------------------

**6. Logging and Testing Procedures**

Logging, Coring and Testing.	
Y	Will run GR/CNL from TD to surface (horizontal well – vertical portion of hole). Stated logs run will be in the Completion Report and submitted to the BLM.
Y	No Logs are planned based on well control or offset log information.
N	Drill stem test? If yes, explain.
N	Coring? If yes, explain.

Additional logs planned		Interval
N	Resistivity	Pilot Hole TD to ICP
N	Density	Pilot Hole TD to ICP
Y	CBL	Production casing (If cement not circulated to surface)
Y	Mud log	Intermediate shoe to TD
N	PEX	

**Earthstone Operating LLC - EL Campeon Fed Com 513H**

**7. Drilling Conditions**

Condition	Specify what type and where?
BH Pressure at deepest TVD	8790 psi at 12999' TVD
Abnormal Temperature	NO 185 Deg. F.

No abnormal pressure or temperature conditions are anticipated. Sufficient mud materials to maintain mud properties and weight increase requirements will be kept on location at all times.

Sufficient supplies of Paper/LCM for periodic sweeps to control seepage and losses will be maintained on location.

Hydrogen Sulfide (H2S) monitors will be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions of Onshore Oil and Gas Order #6. If Hydrogen Sulfide is encountered, measured values and formations will be provided to the BLM.	
N	H2S is present
Y	H2S Plan attached

**8. Other Facets of Operation**

Y	Is it a walking operation?
Y	Is casing pre-set?

x	H2S Plan.
x	BOP & Choke Schematics.
x	Directional Plan

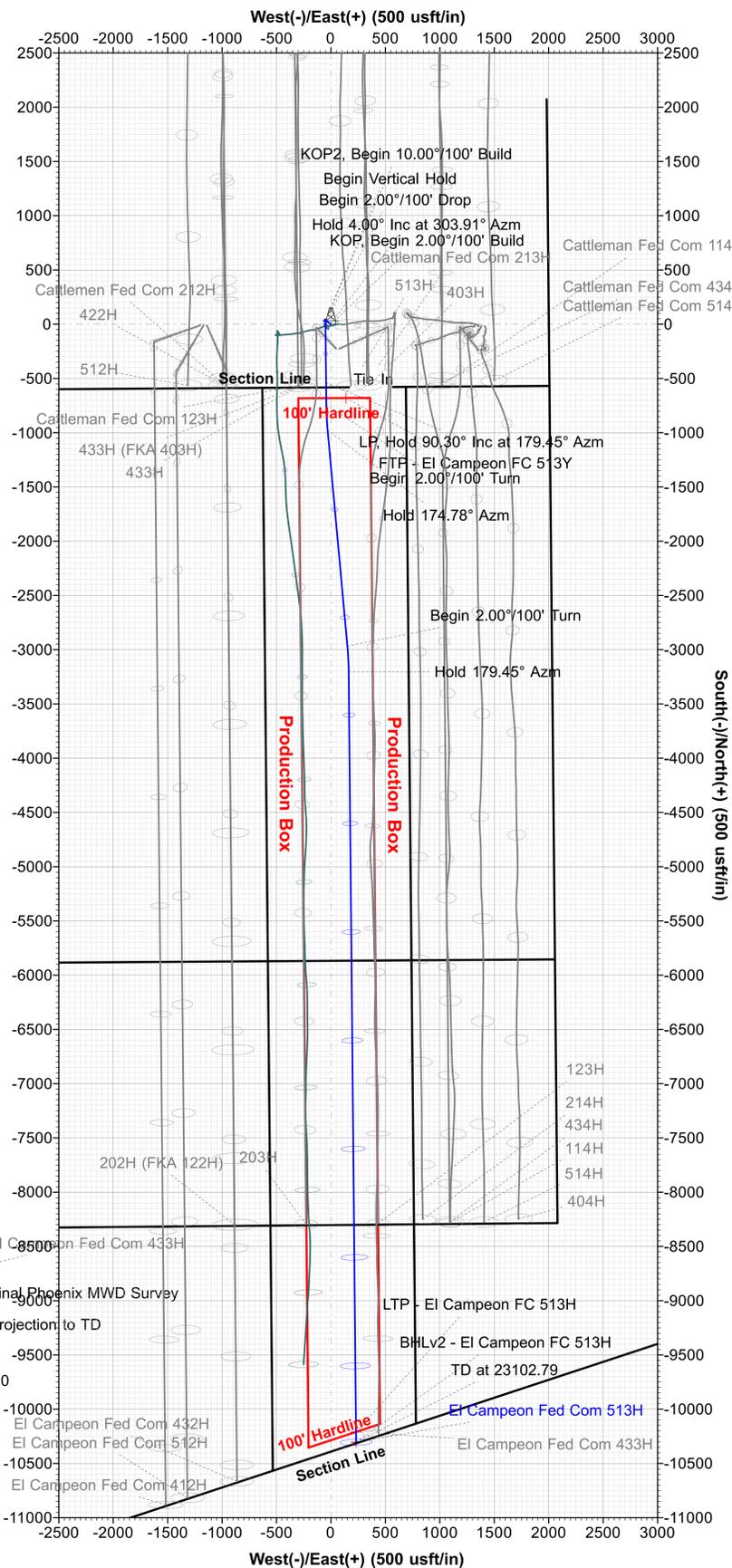
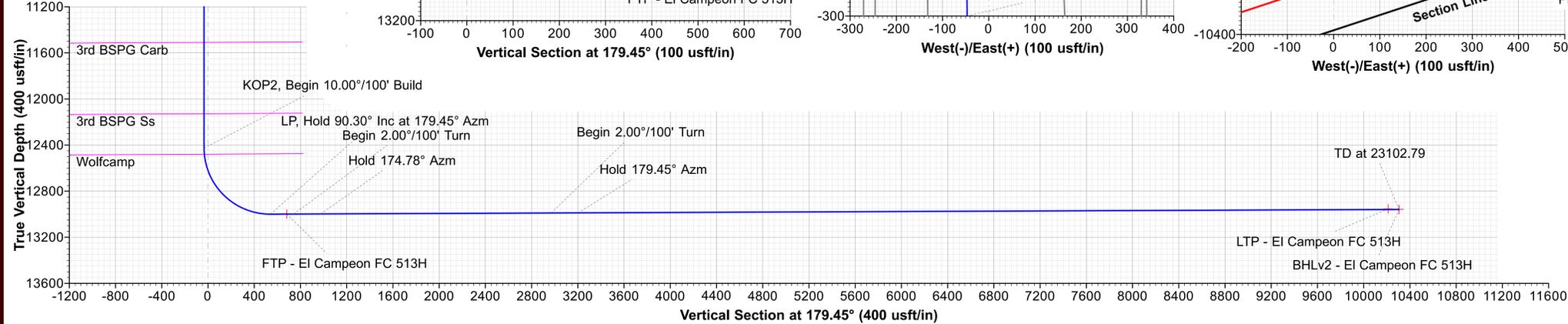
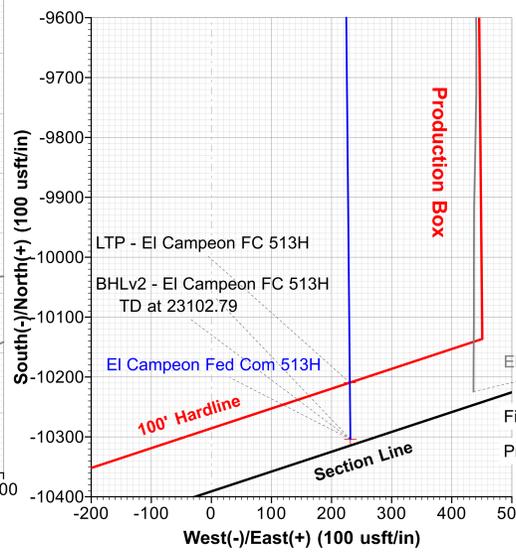
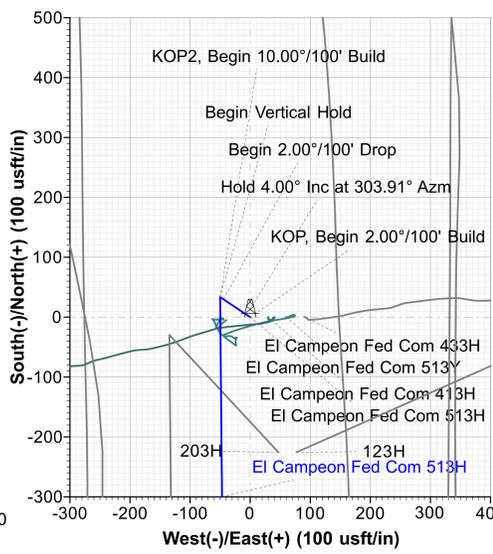
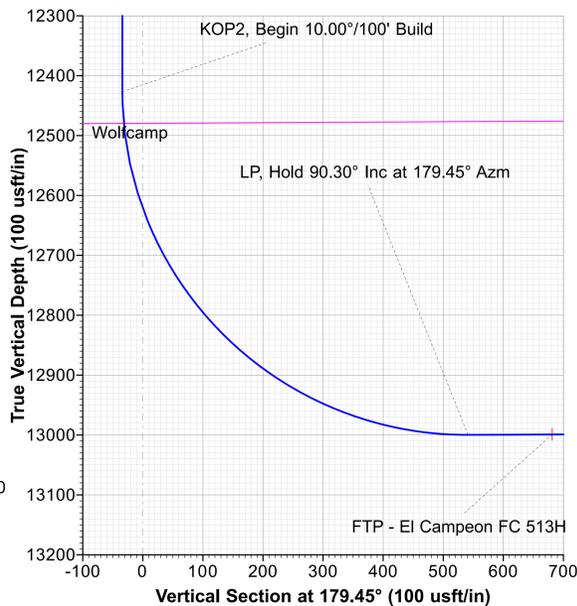
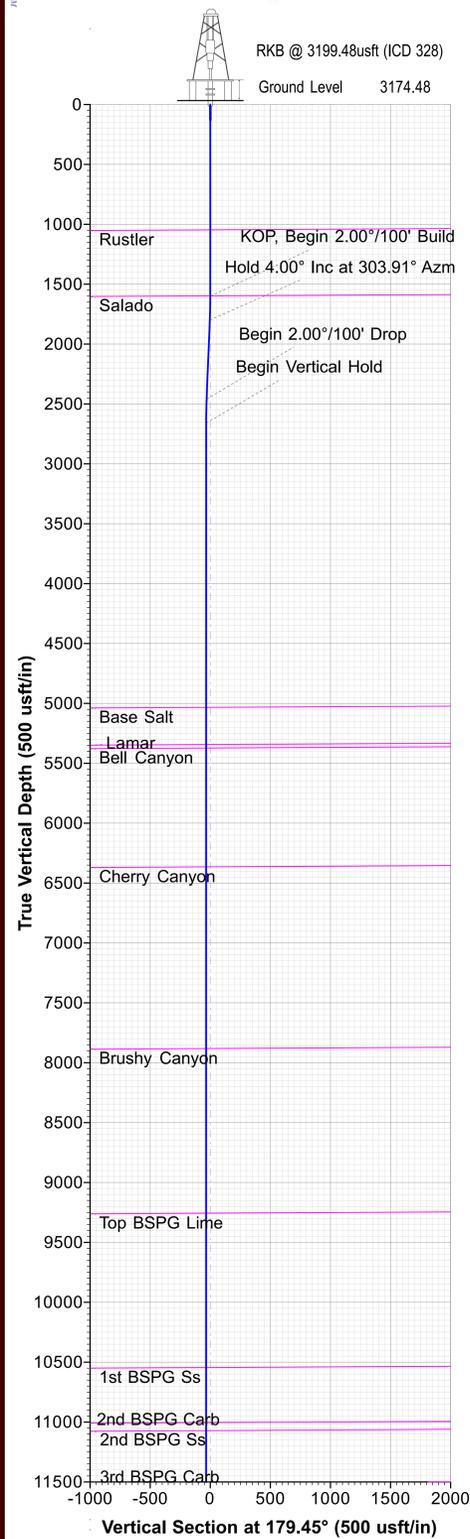
WELL DETAILS						
+N/-S	+E/-W	Northing	Ground Level	Easting	Latitude	Longitude
0.00	0.00	373431.54	3174.48	834507.12	32° 1' 23.215142 N	103° 23' 14.532094 W

SECTION DETAILS											
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Target	Annotation
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	1600.00	0.00	0.00	1600.00	0.00	0.00	0.00	0.00	0.00	0.00	KOP, Begin 2.00°/100' Build
3	1800.19	4.00	303.91	1800.03	3.90	-5.80	2.00	303.909	-3.96		Hold 4.00° Inc at 303.91° Azm
4	2462.75	4.00	303.91	2460.97	29.71	-44.20	0.00	0.000	-30.13		Begin 2.00°/100' Drop
5	2662.94	0.00	0.00	2661.00	33.61	-50.00	2.00	180.000	-34.09		Begin Vertical Hold
6	12428.78	0.00	0.00	12426.84	33.61	-50.00	0.00	0.000	-34.09		KOP2, Begin 10.00°/100' Build
7	13331.18	90.24	179.45	12999.79	-541.72	-44.48	10.00	179.450	541.27		LP, Hold 90.30° Inc at 179.45° Azm
8	13531.18	90.24	179.45	12998.95	-741.71	-42.56	0.00	0.000	741.27		Begin 2.00°/100' Turn
9	13764.82	90.24	174.78	12997.98	-974.99	-30.80	2.00	-90.035	974.65		Hold 174.78° Azm
10	15766.15	90.24	174.78	12989.72	-2967.99	151.39	0.00	0.000	2969.31		Begin 2.00°/100' Turn
11	15999.79	90.24	179.45	12988.75	-3201.27	163.15	2.00	89.946	3202.69		Hold 179.45° Azm
12	23102.79	90.24	179.45	12959.00	-10303.88	231.33	0.00	0.000	10305.63		BHLv2 - El Campeon FC 513Y TD at 23102.79

DESIGN TARGET DETAILS							
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
LTP - El Campeon FC 513H	12954.40	-10209.39	230.40	363222.15	834737.52	31° 59' 42.172787 N	103° 23' 12.894383 W
BHLv2 - El Campeon FC 513H	12959.00	-10303.88	231.33	363127.66	834738.45	31° 59' 41.237721 N	103° 23' 12.893187 W
FTP - El Campeon FC 513H	12999.00	-680.16	138.68	372751.38	834645.80	32° 1' 16.472924 N	103° 23' 12.990567 W

Map System: US State Plane 1983  
 Datum: North American Datum 1983  
 Ellipsoid: GRS 1980  
 Zone Name: New Mexico Eastern Zone  
 Local Origin: Well El Campeon Fed Com 513H, Grid North  
 Latitude: 32° 1' 23.215142 N  
 Longitude: 103° 23' 14.532094 W  
 Grid East: 834507.12  
 Grid North: 373431.54  
 Scale Factor: 1.000  
 Geomagnetic Model: MVHD  
 Sample Date: 25-Jun-23  
 Magnetic Declination: 6.191°  
 Dip Angle from Horizontal: 59.548°  
 Magnetic Field Strength: 47226.87665315nT  
 To convert a Magnetic Direction to a Grid Direction, Add 5.690°  
 To convert a Magnetic Direction to a True Direction, Add 6.191° East  
 To convert a True Direction to a Grid Direction, Subtract 0.502°

FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
1046.48	1046.48	Rustler
1597.48	1597.48	Salado
5033.66	5035.60	Base Salt
5343.66	5345.60	Lamar
5372.66	5374.60	Bell Canyon
6364.66	6366.60	Cherry Canyon
7881.66	7883.60	Brushy Canyon
9256.66	9258.60	Top BSPG Lime
10544.66	10546.60	1st BSPG Ss
11004.66	11006.60	2nd BSPG Carb
11071.66	11073.60	2nd BSPG Ss
11509.66	11511.60	3rd BSPG Carb
12128.66	12130.60	3rd BSPG Ss
12479.65	12481.66	Wolfcamp





## **Earthstone Operating, LLC**

**Lea County, NM (Nad 83 NME)**

**EI Campeon**

**EI Campeon Fed Com 513H**

**OH / 72521**

**Plan: Plan 2 06-04-23**

## **Standard Planning Report**

**04 June, 2023**





# Phoenix Planning Report



<b>Database:</b>	USAEDMDB	<b>Local Co-ordinate Reference:</b>	Well El Campeon Fed Com 513H
<b>Company:</b>	Earthstone Operating, LLC	<b>TVD Reference:</b>	RKB @ 3199.48usft (ICD 328)
<b>Project:</b>	Lea County, NM (Nad 83 NME)	<b>MD Reference:</b>	RKB @ 3199.48usft (ICD 328)
<b>Site:</b>	El Campeon	<b>North Reference:</b>	Grid
<b>Well:</b>	El Campeon Fed Com 513H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH / 72521		
<b>Design:</b>	Plan 2 06-04-23		

<b>Project</b>	Lea County, NM (Nad 83 NME)		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	New Mexico Eastern Zone		

<b>Site</b>	El Campeon				
<b>Site Position:</b>		<b>Northing:</b>	373,431.66 usft	<b>Latitude:</b>	32° 1' 23.213733 N
<b>From:</b>	Map	<b>Easting:</b>	834,537.09 usft	<b>Longitude:</b>	103° 23' 14.183990 W
<b>Position Uncertainty:</b>	0.00 usft	<b>Slot Radius:</b>	13-3/16 "		

<b>Well</b>	El Campeon Fed Com 513Y					
<b>Well Position</b>	<b>+N/-S</b>	0.00 usft	<b>Northing:</b>	373,431.54 usft	<b>Latitude:</b>	32° 1' 23.215142 N
	<b>+E/-W</b>	0.00 usft	<b>Easting:</b>	834,507.12 usft	<b>Longitude:</b>	103° 23' 14.532094 W
<b>Position Uncertainty</b>	0.00 usft		<b>Wellhead Elevation:</b>	usft	<b>Ground Level:</b>	3,174.48 usft
<b>Grid Convergence:</b>	0.502 °					

<b>Wellbore</b>	OH / 72521				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	MVHD	2023-06-25	6.191	59.548	47,226.87665315

<b>Design</b>	Plan 2 06-04-23			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>
	0.00	0.00	0.00	179.45

<b>Plan Survey Tool Program</b>	<b>Date</b>	2023-06-04		
<b>Depth From (usft)</b>	<b>Depth To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Remarks</b>
1	0.00	23,102.78 Plan 2 06-04-23 (OH / 72521)	MWD+HRGM OWSG MWD + HRGM	



**Phoenix**  
Planning Report



<b>Database:</b>	USAEDMDB	<b>Local Co-ordinate Reference:</b>	Well El Campeon Fed Com 513H
<b>Company:</b>	Earthstone Operating, LLC	<b>TVD Reference:</b>	RKB @ 3199.48usft (ICD 328)
<b>Project:</b>	Lea County, NM (Nad 83 NME)	<b>MD Reference:</b>	RKB @ 3199.48usft (ICD 328)
<b>Site:</b>	El Campeon	<b>North Reference:</b>	Grid
<b>Well:</b>	El Campeon Fed Com 513H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH / 72521		
<b>Design:</b>	Plan 2 06-04-23		

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.000	
1,800.19	4.00	303.91	1,800.03	3.90	-5.80	2.00	2.00	0.00	303.909	
2,462.75	4.00	303.91	2,460.97	29.71	-44.20	0.00	0.00	0.00	0.000	
2,662.94	0.00	0.00	2,661.00	33.61	-50.00	2.00	-2.00	0.00	180.000	
12,428.78	0.00	0.00	12,426.84	33.61	-50.00	0.00	0.00	0.00	0.000	
13,331.18	90.24	179.45	12,999.79	-541.72	-44.48	10.00	10.00	0.00	179.450	
13,531.18	90.24	179.45	12,998.95	-741.71	-42.56	0.00	0.00	0.00	0.000	
13,764.82	90.24	174.78	12,997.98	-974.99	-30.80	2.00	0.00	-2.00	-90.035	
15,766.15	90.24	174.78	12,989.72	-2,967.99	151.39	0.00	0.00	0.00	0.000	
15,999.79	90.24	179.45	12,988.75	-3,201.27	163.15	2.00	0.00	2.00	89.946	
23,102.79	90.24	179.45	12,959.00	-10,303.88	231.33	0.00	0.00	0.00	0.000	BHLv2 - El Campeon



**Phoenix**  
Planning Report



<b>Database:</b>	USAEDMDB	<b>Local Co-ordinate Reference:</b>	Well El Campeon Fed Com 513H
<b>Company:</b>	Earthstone Operating, LLC	<b>TVD Reference:</b>	RKB @ 3199.48usft (ICD 328)
<b>Project:</b>	Lea County, NM (Nad 83 NME)	<b>MD Reference:</b>	RKB @ 3199.48usft (ICD 328)
<b>Site:</b>	El Campeon	<b>North Reference:</b>	Grid
<b>Well:</b>	El Campeon Fed Com 513H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH / 72521		
<b>Design:</b>	Plan 2 06-04-23		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,046.48	0.00	0.00	1,046.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Rustler</b>										
1,597.48	0.00	0.00	1,597.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Salado</b>										
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>KOP, Begin 2.00°/100' Build</b>										
1,700.00	2.00	303.91	1,699.98	0.97	-1.45	-0.99	2.00	2.00	2.00	0.00
1,800.00	4.00	303.91	1,799.84	3.89	-5.79	-3.95	2.00	2.00	2.00	0.00
1,800.19	4.00	303.91	1,800.03	3.90	-5.80	-3.96	2.00	2.00	2.00	0.00
<b>Hold 4.00° Inc at 303.91° Azm</b>										
1,900.00	4.00	303.91	1,899.59	7.79	-11.59	-7.90	0.00	0.00	0.00	0.00
2,000.00	4.00	303.91	1,999.35	11.68	-17.38	-11.85	0.00	0.00	0.00	0.00
2,100.00	4.00	303.91	2,099.11	15.58	-23.18	-15.80	0.00	0.00	0.00	0.00
2,200.00	4.00	303.91	2,198.86	19.47	-28.97	-19.75	0.00	0.00	0.00	0.00
2,300.00	4.00	303.91	2,298.62	23.37	-34.77	-23.70	0.00	0.00	0.00	0.00
2,400.00	4.00	303.91	2,398.37	27.27	-40.56	-27.65	0.00	0.00	0.00	0.00
2,462.75	4.00	303.91	2,460.97	29.71	-44.20	-30.13	0.00	0.00	0.00	0.00
<b>Begin 2.00°/100' Drop</b>										
2,500.00	3.26	303.91	2,498.14	31.03	-46.16	-31.47	2.00	-2.00	2.00	0.00
2,600.00	1.26	303.91	2,598.06	33.22	-49.43	-33.70	2.00	-2.00	2.00	0.00
2,662.94	0.00	0.00	2,661.00	33.61	-50.00	-34.09	2.00	-2.00	2.00	0.00
<b>Begin Vertical Hold</b>										
5,035.60	0.00	0.00	5,033.66	33.61	-50.00	-34.09	0.00	0.00	0.00	0.00
<b>Base Salt</b>										
5,345.60	0.00	0.00	5,343.66	33.61	-50.00	-34.09	0.00	0.00	0.00	0.00
<b>Lamar</b>										
5,374.60	0.00	0.00	5,372.66	33.61	-50.00	-34.09	0.00	0.00	0.00	0.00
<b>Bell Canyon</b>										
6,366.60	0.00	0.00	6,364.66	33.61	-50.00	-34.09	0.00	0.00	0.00	0.00
<b>Cherry Canyon</b>										
7,883.60	0.00	0.00	7,881.66	33.61	-50.00	-34.09	0.00	0.00	0.00	0.00
<b>Brushy Canyon</b>										
9,258.60	0.00	0.00	9,256.66	33.61	-50.00	-34.09	0.00	0.00	0.00	0.00
<b>Top BSPG Lime</b>										
10,546.60	0.00	0.00	10,544.66	33.61	-50.00	-34.09	0.00	0.00	0.00	0.00
<b>1st BSPG Ss</b>										
11,006.60	0.00	0.00	11,004.66	33.61	-50.00	-34.09	0.00	0.00	0.00	0.00
<b>2nd BSPG Carb</b>										
11,073.60	0.00	0.00	11,071.66	33.61	-50.00	-34.09	0.00	0.00	0.00	0.00
<b>2nd BSPG Ss</b>										
11,511.60	0.00	0.00	11,509.66	33.61	-50.00	-34.09	0.00	0.00	0.00	0.00
<b>3rd BSPG Carb</b>										
12,130.60	0.00	0.00	12,128.66	33.61	-50.00	-34.09	0.00	0.00	0.00	0.00
<b>3rd BSPG Ss</b>										
12,428.78	0.00	0.00	12,426.84	33.61	-50.00	-34.09	0.00	0.00	0.00	0.00
<b>KOP2, Begin 10.00°/100' Build</b>										
12,481.66	5.29	179.45	12,479.65	31.17	-49.98	-31.65	10.00	10.00	10.00	0.00
<b>Wolfcamp</b>										
12,500.00	7.12	179.45	12,497.87	29.19	-49.96	-29.67	10.00	10.00	10.00	0.00
12,600.00	17.12	179.45	12,595.52	8.22	-49.76	-8.70	10.00	10.00	10.00	0.00
12,700.00	27.12	179.45	12,688.04	-29.39	-49.40	28.92	10.00	10.00	10.00	0.00



# Phoenix Planning Report



<b>Database:</b>	USAEDMDB	<b>Local Co-ordinate Reference:</b>	Well El Campeon Fed Com 513H
<b>Company:</b>	Earthstone Operating, LLC	<b>TVD Reference:</b>	RKB @ 3199.48usft (ICD 328)
<b>Project:</b>	Lea County, NM (Nad 83 NME)	<b>MD Reference:</b>	RKB @ 3199.48usft (ICD 328)
<b>Site:</b>	El Campeon	<b>North Reference:</b>	Grid
<b>Well:</b>	El Campeon Fed Com 513H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH / 72521		
<b>Design:</b>	Plan 2 06-04-23		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
12,800.00	37.12	179.45	12,772.63	-82.49	-48.89	82.02	10.00	10.00	0.00
12,900.00	47.12	179.45	12,846.70	-149.48	-48.24	149.01	10.00	10.00	0.00
13,000.00	57.12	179.45	12,908.02	-228.30	-47.49	227.84	10.00	10.00	0.00
13,100.00	67.12	179.45	12,954.72	-316.58	-46.64	316.12	10.00	10.00	0.00
13,200.00	77.12	179.45	12,985.38	-411.63	-45.73	411.17	10.00	10.00	0.00
13,300.00	87.12	179.45	12,999.07	-510.55	-44.78	510.10	10.00	10.00	0.00
13,331.18	90.24	179.45	12,999.79	-541.72	-44.48	541.27	10.00	10.00	0.00
<b>LP, Hold 90.30° Inc at 179.45° Azm</b>									
13,400.00	90.24	179.45	12,999.50	-610.54	-43.82	610.09	0.00	0.00	0.00
13,500.00	90.24	179.45	12,999.08	-710.53	-42.86	710.09	0.00	0.00	0.00
13,531.18	90.24	179.45	12,998.95	-741.71	-42.56	741.27	0.00	0.00	0.00
<b>Begin 2.00°/100' Turn</b>									
13,600.00	90.24	178.07	12,998.66	-810.51	-41.07	810.08	2.00	0.00	-2.00
13,700.00	90.24	176.07	12,998.25	-910.38	-35.97	909.99	2.00	0.00	-2.00
13,764.82	90.24	174.78	12,997.98	-974.99	-30.80	974.65	2.00	0.00	-2.00
<b>Hold 174.78° Azm</b>									
13,800.00	90.24	174.78	12,997.84	-1,010.02	-27.59	1,009.71	0.00	0.00	0.00
13,900.00	90.24	174.78	12,997.42	-1,109.60	-18.49	1,109.38	0.00	0.00	0.00
14,000.00	90.24	174.78	12,997.01	-1,209.19	-9.39	1,209.04	0.00	0.00	0.00
14,100.00	90.24	174.78	12,996.60	-1,308.77	-0.28	1,308.71	0.00	0.00	0.00
14,200.00	90.24	174.78	12,996.19	-1,408.36	8.82	1,408.38	0.00	0.00	0.00
14,300.00	90.24	174.78	12,995.77	-1,507.94	17.92	1,508.04	0.00	0.00	0.00
14,400.00	90.24	174.78	12,995.36	-1,607.52	27.03	1,607.71	0.00	0.00	0.00
14,500.00	90.24	174.78	12,994.95	-1,707.11	36.13	1,707.38	0.00	0.00	0.00
14,600.00	90.24	174.78	12,994.54	-1,806.69	45.23	1,807.04	0.00	0.00	0.00
14,700.00	90.24	174.78	12,994.12	-1,906.28	54.33	1,906.71	0.00	0.00	0.00
14,800.00	90.24	174.78	12,993.71	-2,005.86	63.44	2,006.38	0.00	0.00	0.00
14,900.00	90.24	174.78	12,993.30	-2,105.44	72.54	2,106.04	0.00	0.00	0.00
15,000.00	90.24	174.78	12,992.89	-2,205.03	81.64	2,205.71	0.00	0.00	0.00
15,100.00	90.24	174.78	12,992.47	-2,304.61	90.75	2,305.38	0.00	0.00	0.00
15,200.00	90.24	174.78	12,992.06	-2,404.20	99.85	2,405.04	0.00	0.00	0.00
15,300.00	90.24	174.78	12,991.65	-2,503.78	108.95	2,504.71	0.00	0.00	0.00
15,400.00	90.24	174.78	12,991.24	-2,603.36	118.06	2,604.38	0.00	0.00	0.00
15,500.00	90.24	174.78	12,990.82	-2,702.95	127.16	2,704.04	0.00	0.00	0.00
15,600.00	90.24	174.78	12,990.41	-2,802.53	136.26	2,803.71	0.00	0.00	0.00
15,700.00	90.24	174.78	12,990.00	-2,902.12	145.36	2,903.38	0.00	0.00	0.00
15,766.15	90.24	174.78	12,989.72	-2,967.99	151.39	2,969.31	0.00	0.00	0.00
<b>Begin 2.00°/100' Turn</b>									
15,800.00	90.24	175.45	12,989.59	-3,001.72	154.27	3,003.06	2.00	0.00	2.00
15,900.00	90.24	177.45	12,989.17	-3,101.52	160.45	3,102.92	2.00	0.00	2.00
15,999.79	90.24	179.45	12,988.75	-3,201.27	163.15	3,202.69	2.00	0.00	2.00
<b>Hold 179.45° Azm</b>									
16,000.00	90.24	179.45	12,988.75	-3,201.48	163.15	3,202.90	0.02	0.00	0.02
16,100.00	90.24	179.45	12,988.33	-3,301.47	164.11	3,302.90	0.00	0.00	0.00
16,200.00	90.24	179.45	12,987.91	-3,401.47	165.07	3,402.89	0.00	0.00	0.00
16,300.00	90.24	179.45	12,987.50	-3,501.46	166.03	3,502.89	0.00	0.00	0.00
16,400.00	90.24	179.45	12,987.08	-3,601.46	166.99	3,602.89	0.00	0.00	0.00
16,500.00	90.24	179.45	12,986.66	-3,701.45	167.95	3,702.89	0.00	0.00	0.00
16,600.00	90.24	179.45	12,986.24	-3,801.44	168.91	3,802.89	0.00	0.00	0.00
16,700.00	90.24	179.45	12,985.82	-3,901.44	169.87	3,902.89	0.00	0.00	0.00
16,800.00	90.24	179.45	12,985.40	-4,001.43	170.83	4,002.89	0.00	0.00	0.00
16,900.00	90.24	179.45	12,984.98	-4,101.43	171.79	4,102.89	0.00	0.00	0.00
17,000.00	90.24	179.45	12,984.56	-4,201.42	172.75	4,202.89	0.00	0.00	0.00



# Phoenix Planning Report



<b>Database:</b>	USAEDMDB	<b>Local Co-ordinate Reference:</b>	Well El Campeon Fed Com 513H
<b>Company:</b>	Earthstone Operating, LLC	<b>TVD Reference:</b>	RKB @ 3199.48usft (ICD 328)
<b>Project:</b>	Lea County, NM (Nad 83 NME)	<b>MD Reference:</b>	RKB @ 3199.48usft (ICD 328)
<b>Site:</b>	El Campeon	<b>North Reference:</b>	Grid
<b>Well:</b>	El Campeon Fed Com 513H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH / 72521		
<b>Design:</b>	Plan 2 06-04-23		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
17,100.00	90.24	179.45	12,984.14	-4,301.42	173.71	4,302.89	0.00	0.00	0.00
17,200.00	90.24	179.45	12,983.73	-4,401.41	174.67	4,402.89	0.00	0.00	0.00
17,300.00	90.24	179.45	12,983.31	-4,501.41	175.63	4,502.88	0.00	0.00	0.00
17,400.00	90.24	179.45	12,982.89	-4,601.40	176.59	4,602.88	0.00	0.00	0.00
17,500.00	90.24	179.45	12,982.47	-4,701.40	177.55	4,702.88	0.00	0.00	0.00
17,600.00	90.24	179.45	12,982.05	-4,801.39	178.51	4,802.88	0.00	0.00	0.00
17,700.00	90.24	179.45	12,981.63	-4,901.38	179.47	4,902.88	0.00	0.00	0.00
17,800.00	90.24	179.45	12,981.21	-5,001.38	180.43	5,002.88	0.00	0.00	0.00
17,900.00	90.24	179.45	12,980.79	-5,101.37	181.39	5,102.88	0.00	0.00	0.00
18,000.00	90.24	179.45	12,980.37	-5,201.37	182.35	5,202.88	0.00	0.00	0.00
18,100.00	90.24	179.45	12,979.96	-5,301.36	183.31	5,302.88	0.00	0.00	0.00
18,200.00	90.24	179.45	12,979.54	-5,401.36	184.27	5,402.88	0.00	0.00	0.00
18,300.00	90.24	179.45	12,979.12	-5,501.35	185.23	5,502.88	0.00	0.00	0.00
18,400.00	90.24	179.45	12,978.70	-5,601.35	186.19	5,602.88	0.00	0.00	0.00
18,500.00	90.24	179.45	12,978.28	-5,701.34	187.15	5,702.87	0.00	0.00	0.00
18,600.00	90.24	179.45	12,977.86	-5,801.33	188.11	5,802.87	0.00	0.00	0.00
18,700.00	90.24	179.45	12,977.44	-5,901.33	189.07	5,902.87	0.00	0.00	0.00
18,800.00	90.24	179.45	12,977.02	-6,001.32	190.03	6,002.87	0.00	0.00	0.00
18,900.00	90.24	179.45	12,976.60	-6,101.32	190.99	6,102.87	0.00	0.00	0.00
19,000.00	90.24	179.45	12,976.19	-6,201.31	191.95	6,202.87	0.00	0.00	0.00
19,100.00	90.24	179.45	12,975.77	-6,301.31	192.91	6,302.87	0.00	0.00	0.00
19,200.00	90.24	179.45	12,975.35	-6,401.30	193.87	6,402.87	0.00	0.00	0.00
19,300.00	90.24	179.45	12,974.93	-6,501.30	194.83	6,502.87	0.00	0.00	0.00
19,400.00	90.24	179.45	12,974.51	-6,601.29	195.79	6,602.87	0.00	0.00	0.00
19,500.00	90.24	179.45	12,974.09	-6,701.29	196.75	6,702.87	0.00	0.00	0.00
19,600.00	90.24	179.45	12,973.67	-6,801.28	197.71	6,802.86	0.00	0.00	0.00
19,700.00	90.24	179.45	12,973.25	-6,901.27	198.67	6,902.86	0.00	0.00	0.00
19,800.00	90.24	179.45	12,972.83	-7,001.27	199.63	7,002.86	0.00	0.00	0.00
19,900.00	90.24	179.45	12,972.42	-7,101.26	200.59	7,102.86	0.00	0.00	0.00
20,000.00	90.24	179.45	12,972.00	-7,201.26	201.55	7,202.86	0.00	0.00	0.00
20,100.00	90.24	179.45	12,971.58	-7,301.25	202.51	7,302.86	0.00	0.00	0.00
20,200.00	90.24	179.45	12,971.16	-7,401.25	203.47	7,402.86	0.00	0.00	0.00
20,300.00	90.24	179.45	12,970.74	-7,501.24	204.43	7,502.86	0.00	0.00	0.00
20,400.00	90.24	179.45	12,970.32	-7,601.24	205.39	7,602.86	0.00	0.00	0.00
20,500.00	90.24	179.45	12,969.90	-7,701.23	206.35	7,702.86	0.00	0.00	0.00
20,600.00	90.24	179.45	12,969.48	-7,801.23	207.31	7,802.86	0.00	0.00	0.00
20,700.00	90.24	179.45	12,969.07	-7,901.22	208.27	7,902.85	0.00	0.00	0.00
20,800.00	90.24	179.45	12,968.65	-8,001.21	209.23	8,002.85	0.00	0.00	0.00
20,900.00	90.24	179.45	12,968.23	-8,101.21	210.19	8,102.85	0.00	0.00	0.00
21,000.00	90.24	179.45	12,967.81	-8,201.20	211.15	8,202.85	0.00	0.00	0.00
21,100.00	90.24	179.45	12,967.39	-8,301.20	212.11	8,302.85	0.00	0.00	0.00
21,200.00	90.24	179.45	12,966.97	-8,401.19	213.06	8,402.85	0.00	0.00	0.00
21,300.00	90.24	179.45	12,966.55	-8,501.19	214.02	8,502.85	0.00	0.00	0.00
21,400.00	90.24	179.45	12,966.13	-8,601.18	214.98	8,602.85	0.00	0.00	0.00
21,500.00	90.24	179.45	12,965.71	-8,701.18	215.94	8,702.85	0.00	0.00	0.00
21,600.00	90.24	179.45	12,965.30	-8,801.17	216.90	8,802.85	0.00	0.00	0.00
21,700.00	90.24	179.45	12,964.88	-8,901.17	217.86	8,902.85	0.00	0.00	0.00
21,800.00	90.24	179.45	12,964.46	-9,001.16	218.82	9,002.85	0.00	0.00	0.00
21,900.00	90.24	179.45	12,964.04	-9,101.15	219.78	9,102.84	0.00	0.00	0.00
22,000.00	90.24	179.45	12,963.62	-9,201.15	220.74	9,202.84	0.00	0.00	0.00
22,100.00	90.24	179.45	12,963.20	-9,301.14	221.70	9,302.84	0.00	0.00	0.00
22,200.00	90.24	179.45	12,962.78	-9,401.14	222.66	9,402.84	0.00	0.00	0.00
22,300.00	90.24	179.45	12,962.36	-9,501.13	223.62	9,502.84	0.00	0.00	0.00
22,400.00	90.24	179.45	12,961.94	-9,601.13	224.58	9,602.84	0.00	0.00	0.00



# Phoenix Planning Report



<b>Database:</b>	USAEDMDB	<b>Local Co-ordinate Reference:</b>	Well El Campeon Fed Com 513H
<b>Company:</b>	Earthstone Operating, LLC	<b>TVD Reference:</b>	RKB @ 3199.48usft (ICD 328)
<b>Project:</b>	Lea County, NM (Nad 83 NME)	<b>MD Reference:</b>	RKB @ 3199.48usft (ICD 328)
<b>Site:</b>	El Campeon	<b>North Reference:</b>	Grid
<b>Well:</b>	El Campeon Fed Com 513H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH / 72521		
<b>Design:</b>	Plan 2 06-04-23		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
22,500.00	90.24	179.45	12,961.53	-9,701.12	225.54	9,702.84	0.00	0.00	0.00	
22,600.00	90.24	179.45	12,961.11	-9,801.12	226.50	9,802.84	0.00	0.00	0.00	
22,700.00	90.24	179.45	12,960.69	-9,901.11	227.46	9,902.84	0.00	0.00	0.00	
22,800.00	90.24	179.45	12,960.27	-10,001.10	228.42	10,002.84	0.00	0.00	0.00	
22,900.00	90.24	179.45	12,959.85	-10,101.10	229.38	10,102.84	0.00	0.00	0.00	
23,000.00	90.24	179.45	12,959.43	-10,201.09	230.34	10,202.83	0.00	0.00	0.00	
23,100.00	90.24	179.45	12,959.01	-10,301.09	231.30	10,302.83	0.00	0.00	0.00	
23,102.79	90.24	179.45	12,959.00	-10,303.88	231.33	10,305.62	0.00	0.00	0.00	
<b>TD at 23102.79</b>										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
LTP - El Campeon FC 5 - hit/miss target - Shape - Point	0.00	0.00	12,954.40	-10,209.39	230.40	363,222.15	834,737.52	31° 59' 42.172787 N	103° 23' 12.894383 W	- plan misses target center by 5.00usft at 23008.32usft MD (12959.40 TVD, -10209.41 N, 230.42 E)
BHLv2 - El Campeon FC - plan hits target center - Point	0.00	0.01	12,959.00	-10,303.88	231.33	363,127.66	834,738.45	31° 59' 41.237722 N	103° 23' 12.893188 W	
FTP - El Campeon FC 5 - plan misses target center by 181.82usft at 13471.37usft MD (12999.20 TVD, -681.91 N, -43.13 E) - Point	0.00	0.00	12,999.00	-680.16	138.68	372,751.38	834,645.80	32° 1' 16.472924 N	103° 23' 12.990567 W	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,046.48	1,046.48	Rustler		-0.300	179.45	
1,597.48	1,597.48	Salado		-0.300	179.45	
5,035.60	5,033.66	Base Salt		-0.300	179.45	
5,345.60	5,343.66	Lamar		-0.300	179.45	
5,374.60	5,372.66	Bell Canyon		-0.300	179.45	
6,366.60	6,364.66	Cherry Canyon		-0.300	179.45	
7,883.60	7,881.66	Brushy Canyon		-0.300	179.45	
9,258.60	9,256.66	Top BSPG Lime		-0.300	179.45	
10,546.60	10,544.66	1st BSPG Ss		-0.300	179.45	
11,006.60	11,004.66	2nd BSPG Carb		-0.300	179.45	
11,073.60	11,071.66	2nd BSPG Ss		-0.300	179.45	
11,511.60	11,509.66	3rd BSPG Carb		-0.300	179.45	
12,130.60	12,128.66	3rd BSPG Ss		-0.300	179.45	
12,481.66	12,479.65	Wolfcamp		-0.300	179.45	



**Phoenix**  
Planning Report



<b>Database:</b>	USAEDMDB	<b>Local Co-ordinate Reference:</b>	Well El Campeon Fed Com 513H
<b>Company:</b>	Earthstone Operating, LLC	<b>TVD Reference:</b>	RKB @ 3199.48usft (ICD 328)
<b>Project:</b>	Lea County, NM (Nad 83 NME)	<b>MD Reference:</b>	RKB @ 3199.48usft (ICD 328)
<b>Site:</b>	El Campeon	<b>North Reference:</b>	Grid
<b>Well:</b>	El Campeon Fed Com 513H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH / 72521		
<b>Design:</b>	Plan 2 06-04-23		

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
1,600.00	1,600.00	0.00	0.00	KOP, Begin 2.00°/100' Build	
1,800.19	1,800.03	3.90	-5.80	Hold 4.00° Inc at 303.91° Azm	
2,462.75	2,460.97	29.71	-44.20	Begin 2.00°/100' Drop	
2,662.94	2,661.00	33.61	-50.00	Begin Vertical Hold	
12,428.78	12,426.84	33.61	-50.00	KOP2, Begin 10.00°/100' Build	
13,331.18	12,999.79	-541.72	-44.48	LP, Hold 90.30° Inc at 179.45° Azm	
13,531.18	12,998.95	-741.71	-42.56	Begin 2.00°/100' Turn	
13,764.82	12,997.98	-974.99	-30.80	Hold 174.78° Azm	
15,766.15	12,989.72	-2,967.99	151.39	Begin 2.00°/100' Turn	
15,999.79	12,988.75	-3,201.27	163.15	Hold 179.45° Azm	
23,102.79	12,959.00	-10,303.88	231.33	TD at 23102.79	

## PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

<b>OPERATOR'S NAME:</b>	<b>Earthstone</b>
<b>LEASE NO.:</b>	<b>NMNM134888</b>
<b>LOCATION:</b>	Section 20, T.26 S., R.35 E., NMPM
<b>COUNTY:</b>	Lea County, New Mexico

<b>WELL NAME &amp; NO.:</b>	El CampeonFed Com 513H
<b>SURFACE HOLE FOOTAGE:</b>	581'S & 2002'E
<b>BOTTOM HOLE FOOTAGE:</b>	0'S & 1870'E

COA

H2S	<input type="radio"/> Yes	<input checked="" type="radio"/> No	
Potash	<input checked="" type="radio"/> None	<input type="radio"/> Secretary	<input type="radio"/> R-111-P
Cave/Karst Potential	<input checked="" type="radio"/> Low	<input type="radio"/> Medium	<input type="radio"/> High
Cave/Karst Potential	<input type="radio"/> Critical		
Variance	<input type="radio"/> None	<input checked="" type="radio"/> Flex Hose	<input type="radio"/> Other
Wellhead	<input type="radio"/> Conventional	<input checked="" type="radio"/> Multibowl	<input type="radio"/> Both
Other	<input type="checkbox"/> 4 String Area	<input type="checkbox"/> Capitan Reef	<input type="checkbox"/> WIPP
Other	<input type="checkbox"/> Fluid Filled	<input checked="" type="checkbox"/> Cement Squeeze	<input type="checkbox"/> Pilot Hole
Special Requirements	<input type="checkbox"/> Water Disposal	<input checked="" type="checkbox"/> COM	<input type="checkbox"/> Unit

### A. HYDROGEN SULFIDE

Hydrogen Sulfide (H2S) monitors shall be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

### B. CASING

1. The **10-3/4** inch surface casing shall be set at approximately **1100** feet (a minimum of **25 feet (Lea County)** into the Rustler Anhydrite and above the salt) and cemented to the surface.
  - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
  - b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8**

- hours** or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
- c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
  - d. If cement falls back, remedial cementing will be done prior to drilling out that string.
2. The minimum required fill of cement behind the **7-5/8** inch intermediate casing is:
- Cement to surface. If cement does not circulate see B.1.a, c-d above.

**Wait on cement (WOC) time for a primary cement job is to include the tail cement slurry due to cave/karst.**

**Operator is approved to use DV Tool. Operator shall notify the BLM before proceeding with DV Tool operation.**

3. The minimum required fill of cement behind the **5-1/2 x 5** inch production casing is:
- Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.

### **C. PRESSURE CONTROL**

1. **Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).**
2. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **10,000 (10M) psi. Variance is approved to use a 5000 (5M) Annular which shall be tested to 5000 (5M) psi.**
  - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
  - c. Manufacturer representative shall install the test plug for the initial BOP test.
  - d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
  - e. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.

**D. SPECIAL REQUIREMENT (S)**

**Communitization Agreement**

- The operator will submit a Communitization Agreement to the Santa Fe Office, 301 Dinosaur Trail Santa Fe, New Mexico 87508, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.
- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

**GENERAL REQUIREMENTS**

The BLM is to be notified in advance for a representative to witness:

- a. Spudding well (minimum of 24 hours)
- b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
- c. BOPE tests (minimum of 4 hours)

Eddy County  
 Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,  
 (575) 361-2822

Lea County  
 Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575)  
 689-5981

- 1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
  - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure

- rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
- b. When the operator proposes to set surface casing with Spudder Rig
    - Notify the BLM when moving in and removing the Spudder Rig.
    - Notify the BLM when moving in the 2<sup>nd</sup> Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
    - BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.
  2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
  3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

#### A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.

4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.
3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
  - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.

- b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
  - c. Manufacturer representative shall install the test plug for the initial BOP test.
  - d. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
  - e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
  - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
  - b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time, except the casing pressure test can be initiated immediately after bumping the plug (only applies to single stage cement jobs).
  - c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
  - d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall

have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.

- e. The results of the test shall be reported to the appropriate BLM office.
- f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- g. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
- h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

#### C. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.

#### D. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

**ZS060723**

Earthstone Operating, LLC plans to operate a Closed Loop System.



# GEOLOGIC WELL PROGNOSIS

(Updated 05-31-2023)

May 31, 2023

**EARTHSTONE OPERATING, LLC**  
**El Campeon Fed Com 513H-SKID WELL**

Sec. 20 26S, 35E (Surface)

FIELD: Jabalina Wolfcamp            Lea Co., NM

**Drilling**

SHL: 581' FSL, 2002' FEL Sec. 20 26S, 35E

FTP: 100' FNL, 1870' FEL Sec. 29 26S, 35E

LTP: 100' FSL, 3499' FEL Sec. 25 PSL Block C24

BHL: 10' FSL, 3528' FEL Sec. 25 PSL Block C24

**Mudlogging**

Stratagraph

D: Rick Marshall- (512)963-8643

N: Gabriel Garamillo- (432)308-8169

Geologic Contact
Mat McWhorter (Primary) (432) 686-1100 (Office) (713) 703-3613 (Cell)
Jason Asmus (Secondary) (432) 686-1100 ext. 3298 (Office) (419) 308-7778 (Cell)

Office: (800)256-1147

Non-pilot horizontal well. Planned ~10,000' lateral targeting Wolfcamp B Shale at ~12,999' TVD. Surface casing point at ~XXX' (13 3/8"). Intermediate casing point at ~XXXX' (9 5/8"). 5 1/2" Production casing will be run to TD.

**Open Hole Logging**

None planned at this time

ESTIMATED TOPS			
Formation	Depth (TVD)	SS	Lithology
Rustler	1046	2153	Anhy.
Salado	1597	1602	Salt
Base Salt	5033	-1834	Salt
Lamar	5343	-2144	Lmst.
Bell Canyon	5372	-2173	Ss., Slst., Sh.
Cherry Canyon	6364	-3165	Ss., Slst., Sh.
Brushy Canyon	7881	-4682	Ss., Slst., Sh.
Top BSPG Lime	9256	-6057	Ls., Sh.
1st BSPG Ss	10544	-7345	Ss., Slst., Sh.
2nd BSPG Carb	11004	-7805	Ls., Sh.
2nd BSPG Ss	11071	-7872	Ss., Slst., Sh.
3rd BSPG Carb	11509	-8310	Ls., Sh.
3rd BSPG Ss	12128	-8929	Ss., Slst., Sh.
Wolfcamp	12479	-9280	Slst., Sh.
Target LP	12999	-9800	Slst., Sh.

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Lateral Landing Data	
TVD @ Heel	12999
TVD @ Toe	12959

Datums	
KB:	3199
GL:	3174

Please email all data to: [Jasmus@earthstoneenergy.com](mailto:Jasmus@earthstoneenergy.com)  
[Tim@earthstoneenergy.com](mailto:Tim@earthstoneenergy.com)  
[Mat@earthstoneenergy.com](mailto:Mat@earthstoneenergy.com)  
[Lenny@earthstoneenergy.com](mailto:Lenny@earthstoneenergy.com)

Data and Partner Distribution: please see attached

## BOP SHEET

### **Annular Preventer**

13-3/8 2,500 PSI WP

### **Ram Preventers**

13-3/8" 5,000 PSI WP Double Ram

13-3/8" 5,000 PSI WP Single Ram

Test the pipe rams, blind rams, floor valves (IBOP and/or upper Kelly valve), choke lines and manifold to 250 psi/5,000 psi with a test plug and a test pump.

Test the annular to 250 psi/2,500 psi with same as above.

**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 Rd., Aztec, NM 87410  
 Phone:(505) 334-6178 Fax:(505) 334-6170  
**District IV**  
 1220 S. St Francis Dr., Santa Fe, NM 87505  
 Phone:(505) 476-3470 Fax:(505) 476-3462

**State of New Mexico**  
**Energy, Minerals and Natural Resources**  
**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

CONDITIONS

Action 225989

**CONDITIONS**

Operator: Earthstone Operating, LLC 1400 Woodloch Forest; Ste 300 The Woodlands, TX 77380	OGRID:	331165
	Action Number:	225989
	Action Type:	[C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

**CONDITIONS**

Created By	Condition	Condition Date
pkautz	Will require a File As Drilled C-102 and a Directional Survey with the C-104	6/9/2023
pkautz	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string	6/9/2023
pkautz	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system	6/9/2023
pkautz	Cement is required to circulate on both surface and intermediate1 strings of casing	6/9/2023