



**Case No. 24849: Compulsory Pooling/Non-Standard Unit**

**Sections 14 and 23, Township 19 South, Range 33 East,  
N.M.P.M., Lea County, New Mexico**

**Wells: Sapphire 14 Federal Com 301H; Sapphire 14 Federal Com 302H  
Sapphire 14 Federal Com 303H; Sapphire 14 Federal Com 304H  
Sapphire 14 Federal Com 305H; Sapphire 14 Federal Com 306H  
Sapphire 14 Federal Com 501H; Sapphire 14 Federal Com 502H  
Sapphire 14 Federal Com 513H; Sapphire 14 Federal Com 514H  
Sapphire 14 Federal Com 505H; Sapphire 14 Federal Com 506H  
Sapphire 14 Federal Com 601H; Sapphire 14 Federal Com 602H  
Sapphire 14 Federal Com 603H; Sapphire 14 Federal Com 604H  
Sapphire 14 Federal Com 605H; Sapphire 14 Federal Com 606H**

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

**APPLICATION OF AVANT OPERATING, LLC  
FOR APPROVAL OF A NON-STANDARD UNIT  
AND COMPULSORY POOLING,  
LEA COUNTY, NEW MEXICO**

**CASE NO. 24849**

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# COMPULSORY POOLING APPLICATION CHECKLIST

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

<b>Case: 24849</b>	<b>APPLICANT'S RESPONSE</b>
<b>Hearing Date</b>	<b>October 3, 2024</b>
Applicant	<b>Avant Operating, LLC</b>
Designated Operator & OGRID (affiliation if applicable)	<b>Avant Operating, LLC (OGRID No. 330396)</b>
Applicant's Counsel:	Modrall, Sperling, Roehl, Harris, & Sisk, P.A.
Case Title:	Application of Avant Operating, LLC for Approval of Non-Standard Unit and Compulsory Pooling, Lea County, New Mexico.
Entries of Appearance/Intervenors:	None.
Well Family	Sapphire 14 Federal Com
<b>Formation/Pool</b>	
Formation Name(s) or Vertical Extent:	Bone Spring
Primary Product (Oil or Gas):	Oil
Pooling this vertical extent:	Bone Spring
Pool Name and Pool Code (Only if NSP is requested):	Gem; Bone Spring, East Pool (Code 27230)
Well Location Setback Rules (Only if NSP is Requested):	State-Wide Rules Apply
<b>Spacing Unit</b>	
Type (Horizontal/Vertical)	Horizontal
Size (Acres)	1280-acres
Building Blocks:	40-acres
Orientation:	North/South
Description: TRS/County	Sections 14 and 23, Township 19 South, Range 33 East, N.M.P.M., Lea County
Standard Horizontal Well Spacing Unit (Y/N), If No, describe <u>and</u> is approval of non-standard unit requested in this application?	No. Approval of a 1280 acre non-standard unit is being requested in this application.
<b>Other Situations</b>	
Depth Severance: Y/N. If yes, description	N/A
Proximity Tracts: If yes, description	N/A: Applicant is seeking approval of a non-standard unit.
Proximity Defining Well: if yes, description	N/A
Applicant's Ownership in Each Tract	See Exhibit A-5
<b>Well(s)</b>	
Name & API (if assigned), surface and bottom hole location, footages, completion target, orientation, completion status (standard or non-standard)	Add wells as needed

Well #1: Sapphire 14 Federal Com #301H	<p>API No. Pending</p> <p>SHL: 425' FNL &amp; 1280' FWL, (Unit D), Section 14, T19S, R33E</p> <p>BHL: 100' FSL &amp; 330' FWL, (Unit M) Section 23, T19S, R33E</p> <p>Completion Target: First Bone Spring</p> <p>Completion Status: Standard</p> <p>Orientation: North/South</p> <p>TVD: 9,300' MVD: 19,573'</p>
Well #2: Sapphire 14 Federal Com #302H	<p>API No. Pending</p> <p>SHL: 425' FNL &amp; 1300' FWL, (Unit D), Section 14, T19S, R33E</p> <p>BHL: 100' FSL &amp; 1254' FWL, (Unit M) Section 23, T19S, R33E</p> <p>Completion Target: First Bone Spring</p> <p>Completion Status: Standard</p> <p>Orientation: North/South</p> <p>TVD: 9,300' MVD: 19,573'</p>
Well #3: Sapphire 14 Federal Com #303H	<p>API No. Pending</p> <p>SHL: 425' FNL &amp; 1320' FWL, (Unit C), Section 14, T19S, R33E</p> <p>BHL: 100' FSL &amp; 2178' FWL, (Unit N) Section 23, T19S, R33E</p> <p>Completion Target: First Bone Spring</p> <p>Completion Status: Standard</p> <p>Orientation: North/South</p> <p>TVD: 9,300' MVD: 19,573'</p>
Well #4: Sapphire 14 Federal Com #304H	<p>API No. Pending</p> <p>SHL: 375' FNL &amp; 1280' FEL, (Unit A), Section 14, T19S, R33E</p> <p>BHL: 100' FSL &amp; 2178' FEL, (Unit O) Section 23, T19S, R33E</p> <p>Completion Target: First Bone Spring</p> <p>Completion Status: Standard</p> <p>Orientation: North/South</p> <p>TVD: 9,300' MVD: 19,573'</p>
Well #5: Sapphire 14 Federal Com #305H	<p>API No. Pending</p> <p>SHL: 375' FNL &amp; 1260' FEL, (Unit A), Section 14, T19S, R33E</p> <p>BHL: 100' FSL &amp; 1254' FEL, (Unit P) Section 23, T19S, R33E</p> <p>Completion Target: First Bone Spring</p> <p>Completion Status: Standard</p> <p>Orientation: North/South</p> <p>TVD: 9,300' MVD: 19,573'</p>
Well #6: Sapphire 14 Federal Com #306H	<p>API No. Pending</p> <p>SHL: 375' FNL &amp; 1240' FEL, (Unit A), Section 14, T19S, R33E</p> <p>BHL: 100' FSL &amp; 330' FEL, (Unit P) Section 23, T19S, R33E</p> <p>Completion Target: First Bone Spring</p> <p>Completion Status: Standard</p> <p>Orientation: North/South</p> <p>TVD: 9,300' MVD: 19,573'</p>
Well #7: Sapphire 14 Federal Com #501H	<p>API No. Pending</p> <p>SHL: 265' FNL &amp; 1280' FWL, (Unit D), Section 14, T19S, R33E</p> <p>BHL: 100' FSL &amp; 330' FWL, (Unit M) Section 23, T19S, R33E</p> <p>Completion Target: Second Bone Spring</p> <p>Completion Status: Standard</p> <p>Orientation: North/South</p> <p>TVD: 10,150' MVD: 20,423'</p>



Well #8: Sapphire 14 Federal Com #502H	<i>API No. Pending</i> SHL: 265' FNL & 1300' FWL, (Unit D), Section 14, T19S, R33E BHL: 100' FSL & 1254' FWL, (Unit M) Section 23, T19S, R33E Completion Target: Second Bone Spring Completion Status: Standard Orientation: North/South TVD: 10,150' MVD: 20,423'
Well #9: Sapphire 14 Federal Com #505H	<i>API No. Pending</i> SHL: 215' FNL & 1430' FEL, (Unit B), Section 14, T19S, R33E BHL: 100' FSL & 1254' FEL, (Unit P) Section 23, T19S, R33E Completion Target: Second Bone Spring Completion Status: Standard Orientation: North/South TVD: 10,150' MVD: 20,423'
Well #10: Sapphire 14 Federal Com #506H	<i>API No. Pending</i> SHL: 215' FNL & 1410' FEL, (Unit B), Section 14, T19S, R33E BHL: 100' FSL & 330' FEL, (Unit P) Section 23, T19S, R33E Completion Target: Second Bone Spring Completion Status: Standard Orientation: North/South TVD: 10,150' MVD: 20,423'
Well #11: Sapphire 14 Federal Com #513H	<i>API No. Pending</i> SHL: 265' FNL & 1320' FWL, (Unit C), Section 14, T19S, R33E BHL: 100' FSL & 2178' FWL, (Unit N) Section 23, T19S, R33E Completion Target: Second Bone Spring Completion Status: Standard Orientation: North/South TVD: 10,150' MVD: 20,423'
Well #12: Sapphire 14 Federal Com #514H	<i>API No. Pending</i> SHL: 215' FNL & 1450' FEL, (Unit B), Section 14, T19S, R33E BHL: 100' FSL & 2178' FEL, (Unit O) Section 23, T19S, R33E Completion Target: Second Bone Spring Completion Status: Standard Orientation: North/South TVD: 10,150' MVD: 20,423'
Well #13: Sapphire 14 Federal Com #601H	<i>API No. Pending</i> SHL: 465' FNL & 1280' FWL, (Unit D), Section 14, T19S, R33E BHL: 100' FSL & 330' FWL, (Unit M) Section 23, T19S, R33E Completion Target: Third Bone Spring Completion Status: Standard Orientation: North/South TVD: 10,700' MVD: 20,973'

Well #14: Sapphire 14 Federal Com #602H	<i>API No. Pending</i> SHL: 465' FNL & 1300' FWL, (Unit D), Section 14, T19S, R33E BHL: 100' FSL & 1254' FWL, (Unit M) Section 23, T19S, R33E Completion Target: Third Bone Spring Completion Status: Standard Orientation: North/South TVD: 10,700' MVD: 20,973'
Well #15: Sapphire 14 Federal Com #603H	<i>API No. Pending</i> SHL: 465' FNL & 1320' FWL, (Unit C), Section 14, T19S, R33E BHL: 100' FSL & 2178' FWL, (Unit N) Section 23, T19S, R33E Completion Target: Third Bone Spring Completion Status: Standard Orientation: North/South TVD: 10,700' MVD: 20,973'
Well #16: Sapphire 14 Federal Com #604H	<i>API No. Pending</i> SHL: 190' FNL & 1280' FEL, (Unit A), Section 14, T19S, R33E BHL: 100' FSL & 2178' FEL, (Unit O) Section 23, T19S, R33E Completion Target: Third Bone Spring Completion Status: Standard Orientation: North/South TVD: 10,700' MVD: 20,973'
Well #17: Sapphire 14 Federal Com #605H	<i>API No. Pending</i> SHL: 190' FNL & 1260' FEL, (Unit A), Section 14, T19S, R33E BHL: 100' FSL & 1254' FEL, (Unit P) Section 23, T19S, R33E Completion Target: Third Bone Spring Completion Status: Standard Orientation: North/South TVD: 10,700' MVD: 20,973'
Well #18: Sapphire 14 Federal Com #606H	<i>API No. Pending</i> SHL: 190' FNL & 1240' FEL, (Unit A), Section 14, T19S, R33E BHL: 100' FSL & 330' FEL, (Unit P) Section 23, T19S, R33E Completion Target: Third Bone Spring Completion Status: Standard Orientation: North/South TVD: 10,700' MVD: 20,973'
Horizontal Well First and Last Take Points	Exhibit B.2
Completion Target (Formation, TVD and MD)	Exhibit B.6
<b>AFE Capex and Operating Costs</b>	
Drilling Supervision/Month \$	\$10,000.00
Production Supervision/Month \$	\$1,000.00
Justification for Supervision Costs	See Exhibit A-2, Paragraph 20
Requested Risk Charge	200%
<b>Notice of Hearing</b>	
Proposed Notice of Hearing	Exhibits A.1, C.1

Proof of Mailed Notice of Hearing (20 days before hearing)	Exhibit C.2 and C.3
Proof of Published Notice of Hearing (10 days before hearing)	Exhibit C.4
<b>Ownership Determination</b>	
Land Ownership Schematic of the Spacing Unit	Exhibit A-4
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Unlocatable Parties to be Pooled	N/A
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Cross Section (including Landing Zone)	Exhibits B-4 to B-9

<b>Additional Information</b>	
Special Provisions/Stipulations	N/A
<b>CERTIFICATION: I hereby certify that the information provided in this checklist is complete and accurate.</b>	
<b>Printed Name</b> (Attorney or Party Representative):	Deana M. Bennett
<b>Signed Name</b> (Attorney or Party Representative):	/s/ Deana M. Bennett
<b>Date:</b>	9/26/2024

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

**APPLICATION OF AVANT OPERATING, LLC  
FOR APPROVAL OF A NON-STANDARD UNIT  
AND COMPULSORY POOLING,  
LEA COUNTY, NEW MEXICO.**

**CASE NO. 24849**

**APPLICATION**

Avant Operating, LLC ("Avant"), OGRID Number 330396, through its undersigned attorneys, hereby files this application with the Oil Conservation Division ("Division") pursuant to the provisions of NMSA 1978, § 70-2-17, for an order (1) approving a non-standard unit, and (2) pooling all uncommitted mineral interests within a non-standard 1280-acre, more or less, Bone Spring horizontal spacing unit comprised of Sections 14 and 23, Township 19 South, Range 33 East, N.M.P.M., Lea County, New Mexico. In support of this application, Avant states as follows:

1. Avant has an interest in the subject lands and has a right to drill and operate a well thereon.
2. Avant seeks approval of the 1280-acre non-standard spacing as approval of this application will allow Avant to efficiently locate surface facilities, reduce surface disturbance, consolidate roads, tanks, and pipelines, and promote effective well spacing, which is consistent with Division rules. *See, e.g.*, Rule 19.15.16.7(P) NMAC; Rule 19.15.16.15(B)(8) NMAC; Rule 19.15.16.15(C)(7)(NMAC).
3. Avant seeks to dedicate all of Sections 14 and 23, Township 19 South, Range 33 East, N.M.P.M., Lea County, New Mexico to the following wells:
  - a. **Sapphire 14 Federal Com #301H, Sapphire 14 Federal Com #302H,  
Sapphire 14 Federal Com #501H, Sapphire 14 Federal Com #502H,  
Sapphire 14 Federal Com #601H, and Sapphire 14 Federal Com #602H**

Exhibit A-1

wells with proposed surface hole locations in the NW/4 NW/4 (Unit D) of Section 14 and proposed bottom hole locations in the SW/4 SW/4 (Unit M) of Section 23;

- b. **Sapphire 14 Federal Com #303H and Sapphire 14 Federal Com #603H** wells with proposed first take points in the NE/4 NW/4 (Unit C) of Section 14 and proposed last take points in the SE/4 SW/4 (Unit N) of Section 23;
- c. **Sapphire 14 Federal Com #513H** well with a proposed surface hole location in the NW/4 NW/4 (Unit D) of Section 14 and a proposed bottom hole location in the SE/4 SW/4 (Unit N) of Section 23;
- d. **Sapphire 14 Federal Com #304H, and Sapphire 14 Federal Com #604H** wells with proposed surface hole locations in the NE/4 NE/4 (Unit A) of Section 14 and proposed bottom hole locations in the SW/4 SE/4 (Unit O) of Section 23;
- e. **Sapphire 14 Federal Com #514H** well with a proposed surface hole location in the NW/4 NE/4 (Unit B) of Section 14 and a proposed bottom hole location in the SW/4 SE/4 (Unit O) of Section 23;
- f. **Sapphire 14 Federal Com #505H, and Sapphire 14 Federal Com #506H** wells with proposed surface hole locations in the NW/4 NE/4 (Unit B) of Section 14 and proposed bottom hole locations in the SE/4 SE/4 (Unit P) of Section 23; and
- g. **Sapphire 14 Federal Com #305H, Sapphire 14 Federal Com #306H, Sapphire 14 Federal Com #605H, and Sapphire 14 Federal Com #606H** wells with proposed surface hole locations in the NE/4 NE/4 (Unit A) of Section 14 and proposed bottom hole locations in the SE/4 SE/4 (Unit P) of Section 23.



4. The wells will be horizontally drilled, and the producing areas for the wells are expected to be orthodox.

5. The pool and pool code for Sections 14 and 23 is the Gem; Bone Spring, East Pool (Code 27230), which is an oil pool.

6. Avant sought, but has been unable to obtain, a voluntary agreement from all interest owners in the Bone Spring formation underlying the proposed spacing unit to participate in the drilling of the wells or to otherwise commit their interests to the wells.

7. The pooling of all interests in the Bone Spring formation underlying the proposed unit will prevent the drilling of unnecessary wells, prevent waste and protect correlative rights.

WHEREFORE, Avant requests this application be set for hearing before an Examiner of the Oil Conservation Division on October 3, 2024, and after notice and hearing as required by law, the Division enter its order:

- A. Approving the non-standard spacing unit;
- B. Pooling all uncommitted interests in the Bone Spring formation underlying a horizontal spacing unit within Sections 14 and 23, Township 19 South, Range 33 East, N.M.P.M., Lea County, New Mexico;
- C. Designating Avant as operator of this unit and the wells to be drilled thereon;
- D. Authorizing Avant to recover its costs of drilling, equipping and completing the wells;
- E. Approving actual operating charges and costs charged for supervision, together with a provision adjusting the rates pursuant to the COPAS accounting procedure; and
- F. Setting a 200% charge for the risk involved in drilling and completing the wells in the event a working interest owner elects not to participate in the wells.

Respectfully submitted,

MODRALL, SPERLING, ROEHL, HARRIS  
& SISK, P.A.

By: /s/ Deana M. Bennett

Earl E. DeBrine, Jr.

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*Attorneys for Avant Operating, LLC*

**CASE NO. 24849 : Application of Avant Operating, LLC for approval of a non-standard spacing unit and compulsory pooling, Lea County, New Mexico.** Applicant seeks an order from the Division approving a non-standard spacing unit and pooling all uncommitted interests within a 1280-acre, more or less, Bone Spring horizontal spacing unit comprised of Sections 14 and 23, Township 19 South, Range 33 East, N.M.P.M., Lea County, New Mexico. This spacing unit will be dedicated to the following wells: the **Sapphire 14 Federal Com #301H, Sapphire 14 Federal Com #302H, Sapphire 14 Federal Com #501H, Sapphire 14 Federal Com #502H, Sapphire 14 Federal Com #601H, and Sapphire 14 Federal Com #602H** wells with proposed surface hole locations in the NW/4 NW/4 (Unit D) of Section 14 and proposed bottom hole locations in the SW/4 SW/4 (Unit M) of Section 23; **Sapphire 14 Federal Com #303H and Sapphire 14 Federal Com #603H** wells with proposed first take points in the NE/4 NW/4 (Unit C) of Section 14 and proposed last take points in the SE/4 SW/4 (Unit N) of Section 23; **Sapphire 14 Federal Com #513H** well with a proposed surface hole location in the NW/4 NW/4 (Unit D) of Section 14 and a proposed bottom hole location in the SE/4 SW/4 (Unit N) of Section 23; **Sapphire 14 Federal Com #304H, and Sapphire 14 Federal Com #604H** wells with proposed surface hole locations in the NE/4 NE/4 (Unit A) of Section 14 and proposed bottom hole locations in the SW/4 SE/4 (Unit O) of Section 23; **Sapphire 14 Federal Com #514H** well with a proposed surface hole location in the NW/4 NE/4 (Unit B) of Section 14 and a proposed bottom hole location in the SW/4 SE/4 (Unit O) of Section 23; **Sapphire 14 Federal Com #505H, and Sapphire 14 Federal Com #506H** wells with proposed surface hole locations in the NW/4 NE/4 (Unit B) of Section 14 and proposed bottom hole locations in the SE/4 SE/4 (Unit P) of Section 23; and the **Sapphire 14 Federal Com #305H, Sapphire 14 Federal Com #306H, Sapphire 14 Federal Com #605H, and Sapphire 14 Federal Com #606H** wells with proposed surface hole locations in the NE/4 NE/4 (Unit A) of Section 14 and proposed bottom hole locations in the SE/4 SE/4 (Unit P) of Section 23. The wells will be drilled at orthodox locations. The pool and pool code for Sections 14 and 23 is the Gem; Bone Spring, East Pool (Code 27230), which is an oil pool. Also to be considered will be the cost of drilling and completing said wells, the allocation of these costs as well as the actual operating costs and charges for supervision, designation of Avant Operating, LLC as operator of the wells, and a 200% charge for risk involved in drilling said wells. Said area is located approximately 23 miles west of Hobbs, New Mexico.

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

**APPLICATION OF AVANT OPERATING, LLC  
FOR APPROVAL OF A NON-STANDARD UNIT,  
AND COMPULSORY POOLING,  
LEA COUNTY, NEW MEXICO.**

**CASE NO. 24849**

**SELF-AFFIRMED STATEMENT OF TIFFANY SARANTINOS**

Tiffany Sarantinos hereby states and declares as follows:

1. I am over the age of 18, I am a senior landman for Avant Operating, LLC (“Avant”) and have personal knowledge of the matters stated herein.

2. I have previously testified before the Oil Conservation Division (“Division”) and my credentials as an expert petroleum landman were accepted as a matter of record.

3. My area of responsibility at Avant includes the area Lea County in New Mexico.

4. I am familiar with the application filed by Avant in this case, which is attached as **Exhibit A-1.**

5. I am familiar with the status of the lands that are subject to this application.

6. I submit the following information pursuant to NMAC 19.15.4.12.A(1) in support of the above referenced application.

7. Avant seeks an order (1) approving a non-standard unit, and (2) pooling all uncommitted mineral interests within a non-standard 1280-acre, more or less, Bone Spring horizontal spacing unit comprised of Sections 14 and 23, Township 19 South, Range 33 East, N.M.P.M., Lea County, New Mexico.

8. Avant seeks approval of a 1280-acre spacing unit as approval of this application will allow Avant to efficiently locate surface facilities, reduce surface disturbance, consolidate roads,

**Avant Operating, LLC  
Case No. 24849  
Exhibit A-2**

tanks, and pipelines, and promote effective well spacing, which is consistent with Division rules. *See, e.g.,* Rule 19.15.167(P) NMAC; Rule 19.15.16.15(B)(8) NMAC; Rule 19.15.16.15(C)(7)(NMAC).

9. Avant seeks to dedicate all of Sections 14 and 23, Township 19 South, Range 33 East, N.M.P.M., Lea County, New Mexico to the following wells:

- a. **Sapphire 14 Federal Com #301H, Sapphire 14 Federal Com #302H, Sapphire 14 Federal Com #501H, Sapphire 14 Federal Com #502H, Sapphire 14 Federal Com #601H, and Sapphire 14 Federal Com #602H** wells with proposed surface hole locations in the NW/4 NW/4 (Unit D) of Section 14 and proposed bottom hole locations in the SW/4 SW/4 (Unit M) of Section 23;
- b. **Sapphire 14 Federal Com #303H and Sapphire 14 Federal Com #603H** wells with proposed first take points in the NE/4 NW/4 (Unit C) of Section 14 and proposed last take points in the SE/4 SW/4 (Unit N) of Section 23;
- c. **Sapphire 14 Federal Com #513H** well with a proposed surface hole location in the NW/4 NW/4 (Unit D) of Section 14 and a proposed bottom hole location in the SE/4 SW/4 (Unit N) of Section 23;
- d. **Sapphire 14 Federal Com #304H, and Sapphire 14 Federal Com #604H** wells with proposed surface hole locations in the NE/4 NE/4 (Unit A) of Section 14 and proposed bottom hole locations in the SW/4 SE/4 (Unit O) of Section 23;
- e. **Sapphire 14 Federal Com #514H** well with a proposed surface hole location in the NW/4 NE/4 (Unit B) of Section 14 and a proposed bottom hole location in the SW/4 SE/4 (Unit O) of Section 23;
- f. **Sapphire 14 Federal Com #505H, and Sapphire 14 Federal Com #506H** wells with proposed surface hole locations in the NW/4 NE/4 (Unit B) of Section 14 and proposed bottom hole locations in the SE/4 SE/4 (Unit P) of Section 23; and

g. **Sapphire 14 Federal Com #305H, Sapphire 14 Federal Com #306H, Sapphire 14 Federal Com #605H, and Sapphire 14 Federal Com #606H** wells with proposed surface hole locations in the NE/4 NE/4 (Unit A) of Section 14 and proposed bottom hole locations in the SE/4 SE/4 (Unit P) of Section 23.

10. The wells will be horizontally drilled, and the producing areas for the wells are expected to be orthodox.

11. Attached as **Exhibit A-3** are the proposed C-102s for the wells.

12. The C-102s identify the proposed surface hole locations and the bottom hole locations, and the first take points. The C-102s also identify the pool and pool code.

13. The wells will develop the Gem; Bone Spring, East Pool (Code 27230).

14. This pool is an oil pool with 40-acre building blocks.

15. This pool is governed by the state-wide horizontal well rules.

16. There are no depth severances within the proposed spacing unit.

17. **Exhibit A-4** includes leases tract map outlining the unit being pooled. The tract maps show the general location of the wells within the proposed non-standard unit, and a list of the wells with the pool code identified. Exhibit A.4 also includes a tract map comparing what a standard unit would be to Avant's proposed non-standard unit.

18. **Exhibit A-5** is a unit recapitulation with the working interest owners to be pooled highlighted in yellow. Exhibit A-5 also includes a list of the ORRI owners, all of which Avant is seeking to pool.

19. **Exhibit A-6** contains a sample well proposal letter and Authorizations for Expenditure ("AFEs") sent to all working interest owners. The estimated cost of the wells set forth in the AFEs are fair and reasonable and comparable to the costs of other wells of similar depths and length drilled in this area of New Mexico.



20. Avant requests overhead and administrative rates of \$10,000.00/month for drilling a well and \$1,000.00/month for a producing well. These rates are fair, and comparable to the rates charged by other operators for wells of this type in this area of Southeastern, New Mexico. Avant requests that these rates be adjusted periodically as provided in the COPAS Accounting Procedure.

21. Avant requests the maximum cost plus 200% risk charge be assessed against non-consenting working interest owners.

22. I have conducted a diligent search of the public records in the county where the wells are located, and conducted phone directory and computer searches to locate contact information for parties entitled to notification, and mailed the working interest owners well proposals, including an Authorization for Expenditure.

23. In my opinion, Avant has made a good faith effort to obtain voluntary joinder of the working interest owners in the proposed wells as demonstrated by the chronology of contact in **Exhibit A-7**.

24. Avant requests that it be designated operator of the wells.

25. The parties Avant is seeking to pool were notified of this hearing.

26. Avant seeks to pool overriding royalty interest owners, and they were also provided notice of this hearing.

27. No opposition is expected because the interest owners being pooled have been contacted regarding the proposed wells, but have failed or refused to voluntarily commit their interests in the wells.

28. Avant also provided notice to offset affected parties for purposes of the non-standard unit application.

29. In my opinion, the granting of this application is in the interests of conservation and the prevention of waste.

30. The exhibits to my self-affirmed statement were prepared by me, or compiled from company business records, or were prepared at my direction or supervision.

31. I attest under penalty of perjury the laws of the State of New Mexico that the information provided herein is correct and complete to the best of my knowledge and belief and I will adopt this testimony at the hearing in this matter.

*[Signature Page Follows]*

September 23, 2024

Date

T Sarantinos

Tiffany Sarantinos

C-102  Submit Electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION	Revised July 9, 2024
		Submittal Type: <input checked="" type="checkbox"/> Initial Submittal <input type="checkbox"/> Amended Report <input type="checkbox"/> As Drilled

## WELL LOCATION INFORMATION

API Number	Pool Code 27230	Pool Name Gem; Bone Spring, East
Property Code	Property Name SAPPHIRE FEDERAL COM	Well Number 30IH
OGRID No. 330396	Operator Name AVANT OPERATING, LLC	Ground Level Elevation 3692.2
Surface Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input type="checkbox"/> Federal		Mineral Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input type="checkbox"/> Federal

## Surface Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
D	14	19 S	33 E		425 FNL	1280 FWL	32.6663075° N	103.6381508° W	LEA

## Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
M	23	19 S	33 E		100 FSL	330 FWL	32.6387291° N	103.6413296° W	LEA

Dedicated Acres 1280	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
Order Numbers.	Well setbacks are under Common Ownership: <input type="checkbox"/> Yes <input type="checkbox"/> No			

## Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
D	14	19 S	33 E		50 FNL	330 FWL	32.6673388° N	103.6412345° W	LEA

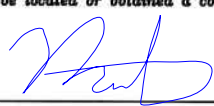

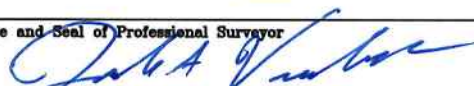
## First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
D	14	19 S	33 E		100 FNL	330 FWL	32.6672014° N	103.6412350° W	LEA

## Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
M	23	19 S	33 E		100 FSL	330 FWL	32.6387291° N	103.6413296° W	LEA

Unitized Area or Area of Uniform Interest	Spacing Unit Type <input checked="" type="checkbox"/> Horizontal <input type="checkbox"/> Vertical	Ground Floor Elevation:
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<b>OPERATOR CERTIFICATIONS</b> I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is vertical or directional well, 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 a working interest or unleased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.  If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.   9/24/2024  Signature Meghan Twele  Printed Name mtwele@outlook.com  E-mail Address	<b>SURVEYOR CERTIFICATIONS</b> 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.    Signature and Seal of Professional Surveyor   Certificate Number 14831  Date of Survey 5/07/24 9/24/2024
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Not to be Examined until all interests have been consolidated or a non-standard unit has been approved by the division.



## ACREAGE DEDICATION PLATS

This grid represents a standard section. You may superimpose a non-standard section, or larger area, over this grid. Operators must outline the dedicated acreage in a red box, clearly show the well surface location and bottom hole location, if it is directionally drilled, with dimensions from the section lines in the cardinal directions. If this is a horizontal wellbore show on this plat the location of the First Take Point and Last Take Point, and the point within the Completed interval (other than the First Take Point or Last Take Point) that is closest to any outer boundary of the tract.

Surveyors shall use the latest United States government survey or dependent resurvey. Well locations will be in reference to the New Mexico Principal Meridian. If the land is not surveyed, contact the OCD Engineering Bureau. Independent subdivision surveys will not be acceptable.

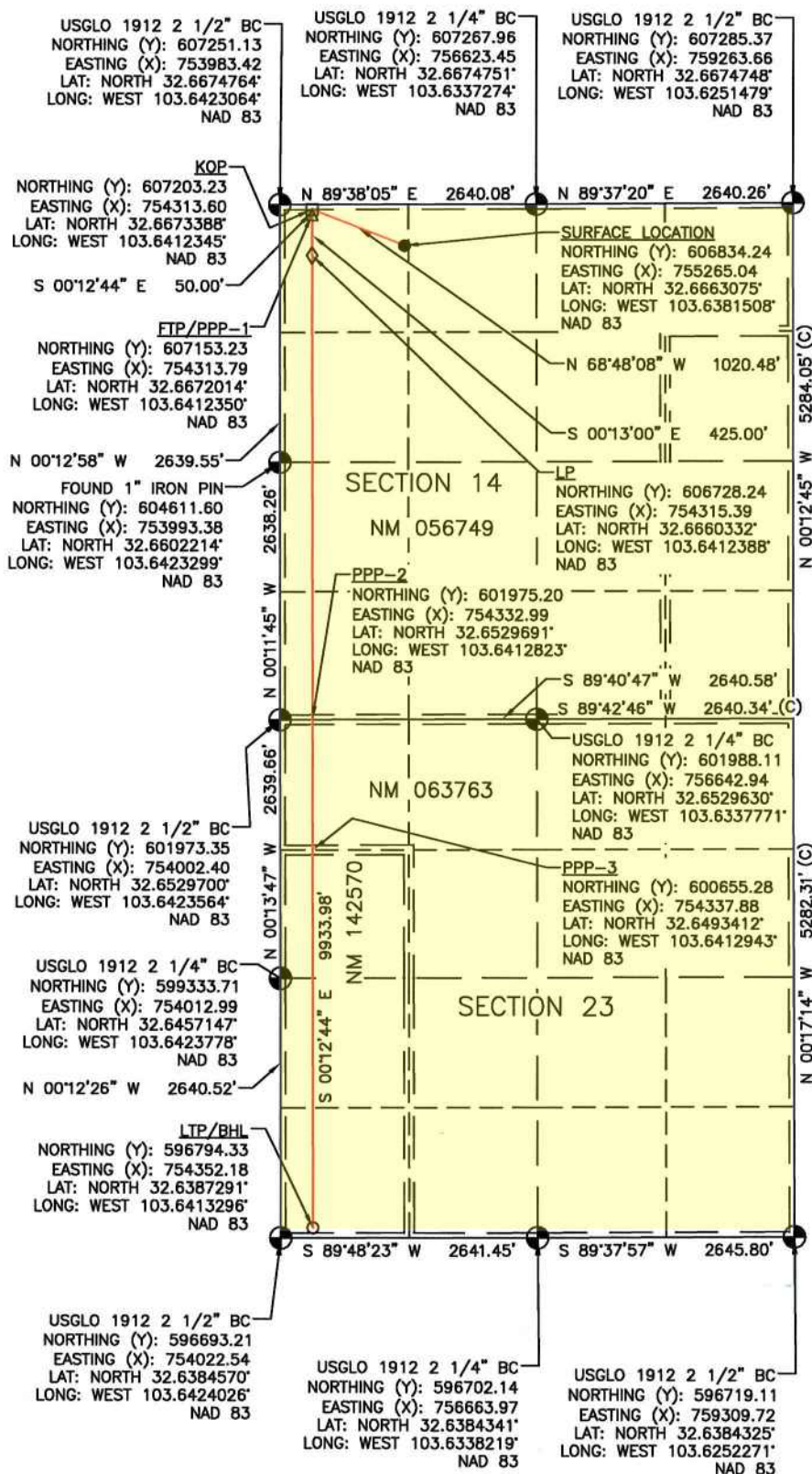
PLAT REVISED: 9/19/24

NOTE: BEARINGS AND DISTANCES SHOWN ARE REFERENCED TO THE NEW MEXICO COORDINATE SYSTEM, EAST ZONE, NAD 83, UNLESS OTHERWISE NOTED

## LEGEND:

- = SURFACE LOCATION (SHL)
- = KICK OFF POINT (KOP)
- △ = FTP/PPP-1
- ◇ = LANDING POINT (LP)
- = LTP/BHL
- ⊙ = FOUND MONUMENT
- (C) = CALCULATED

FOOTAGES		
SHL	425' FNL	1280' FWL
KOP	50' FNL	330' FWL
FTP/PPP-1	100' FNL	330' FWL
PPP-2	0' FNL	330' FWL
PPP-3	1320' FNL	330' FWL
LP	525' FNL	330' FWL
LTP/BHL	100' FSL	330' FWL



OCD Examiner Hearing 10-3-24

<b>C-102</b>  Submit Electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department <b>OIL CONSERVATION DIVISION</b>		Revised July 9, 2024	
	Submittal Type:	<input checked="" type="checkbox"/> Initial Submittal		
		<input type="checkbox"/> Amended Report		
		<input type="checkbox"/> As Drilled		

## WELL LOCATION INFORMATION

API Number	Pool Code 27230	Pool Name Gem; Bone Spring, East
Property Code	Property Name <b>SAPPHIRE FEDERAL COM</b>	Well Number <b>302H</b>
OGRID No. 330396	Operator Name <b>AVANT OPERATING, LLC</b>	Ground Level Elevation <b>3692.1</b>
Surface Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input type="checkbox"/> Federal		Mineral Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input type="checkbox"/> Federal

## Surface Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
D	14	19 S	33 E		425 FNL	1300 FWL	32.6663076° N	103.6380859° W	LEA

## Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
M	23	19 S	33 E		100 FSL	1254 FWL	32.6387211° N	103.6383280° W	LEA

Dedicated Acres 1280	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
Order Numbers.	Well setbacks are under Common Ownership: <input type="checkbox"/> Yes <input type="checkbox"/> No			

## Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
D	14	19 S	33 E		50 FNL	1254 FWL	32.6673384° N	103.6382320° W	LEA



## First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
D	14	19 S	33 E		100 FNL	1254 FWL	32.6672010° N	103.6382324° W	LEA

## Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
M	23	19 S	33 E		100 FSL	1254 FWL	32.6387211° N	103.6383280° W	LEA

Unitized Area or Area of Uniform Interest	Spacing Unit Type <input checked="" type="checkbox"/> Horizontal <input type="checkbox"/> Vertical	Ground Floor Elevation:
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<b>OPERATOR CERTIFICATIONS</b> I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is vertical or directional well, 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 a working interest or unleased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.  If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.   9/24/2024 Signature Printed Name E-mail Address		<b>SURVEYOR CERTIFICATIONS</b> 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.   Signature and Seal of Professional Surveyor Certificate Number Date of Survey	
mtwele@outlook.com		14831 5/07/24 9/24/2024	

Not to be Examined until all interests have been consolidated or a non-standard unit has been approved by the division.



## ACREAGE DEDICATION PLATS

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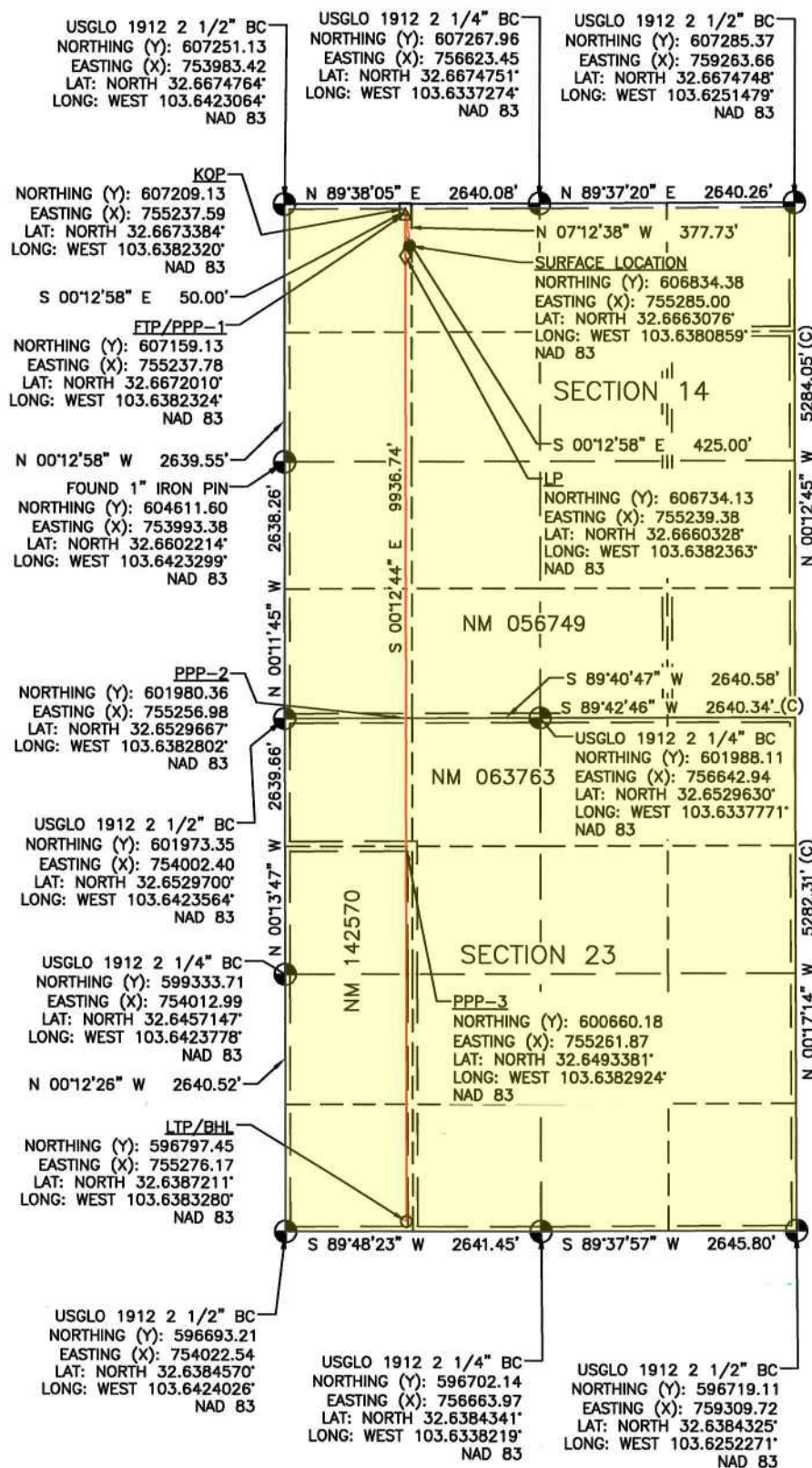
PLAT REVISED: 9/19/24

NOTE: BEARINGS AND DISTANCES SHOWN ARE REFERENCED TO THE NEW MEXICO COORDINATE SYSTEM, EAST ZONE, NAD 83, UNLESS OTHERWISE NOTED

## LEGEND:

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- = KICK OFF POINT (KOP)
- △ = FTP/PPP-1
- ◇ = LANDING POINT (LP)
- = LTP/BHL
- ⊙ = FOUND MONUMENT
- (C) = CALCULATED

FOOTAGES		
SHL	425' FNL	1300' FWL
KOP	50' FNL	1254' FWL
FTP/PPP-1	100' FNL	1254' FWL
PPP-2	0' FNL	1255' FWL
PPP-3	1320' FNL	1254' FWL
LP	525' FNL	1254' FWL
LTP/BHL	100' FSL	1254' FWL



C-102  Submit Electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION	Revised July 9, 2024
		Submittal Type: <input checked="" type="checkbox"/> Initial Submittal <input type="checkbox"/> Amended Report <input type="checkbox"/> As Drilled

## WELL LOCATION INFORMATION

API Number	Pool Code 27230	Pool Name Gem; Bone Spring, East
Property Code	Property Name SAPPHIRE FEDERAL COM	Well Number 303H
OGRID No. 330396	Operator Name AVANT OPERATING, LLC	Ground Level Elevation 3691.9
Surface Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input type="checkbox"/> Federal		Mineral Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input type="checkbox"/> Federal

## Surface Location

UL C	Section 14	Township 19 S	Range 33 E	Lot	Ft. from N/S 425 FNL	Ft. from E/W 1320 FWL	Latitude 32.6663077° N	Longitude 103.6380207° W	County LEA
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## Bottom Hole Location

UL N	Section 23	Township 19 S	Range 33 E	Lot	Ft. from N/S 100 FSL	Ft. from E/W 2178 FWL	Latitude 32.6387130° N	Longitude 103.6353265° W	County LEA
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Dedicated Acres 1280	Infll or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
Order Numbers.	Well setbacks are under Common Ownership: <input type="checkbox"/> Yes <input type="checkbox"/> No			

## Kick Off Point (KOP)

UL C	Section 14	Township 19 S	Range 33 E	Lot	Ft. from N/S 50 FNL	Ft. from E/W 2178 FWL	Latitude 32.6673379° N	Longitude 103.6352294° W	County LEA
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## First Take Point (FTP)

UL C	Section 14	Township 19 S	Range 33 E	Lot	Ft. from N/S 100 FNL	Ft. from E/W 2178 FWL	Latitude 32.6672005° N	Longitude 103.6352299° W	County LEA
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## Last Take Point (LTP)

UL N	Section 23	Township 19 S	Range 33 E	Lot	Ft. from N/S 100 FSL	Ft. from E/W 2178 FWL	Latitude 32.6387130° N	Longitude 103.6353265° W	County LEA
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Unitized Area or Area of Uniform Interest	Spacing Unit Type <input checked="" type="checkbox"/> Horizontal <input type="checkbox"/> Vertical	Ground Floor Elevation:
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<b>OPERATOR CERTIFICATIONS</b> I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is vertical or directional well, 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 a working interest or unleased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.  If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.   Signature Meghan Twele Printed Name mtwele@outlook.com E-mail Address	<b>SURVEYOR CERTIFICATIONS</b> 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.   Signature and Seal of Professional Surveyor Certificate Number 14831 Date of Survey 5/07/24 9/24/2024
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OCD Examiner Hearing 10-3-24  
No CD Examination until this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



## ACREAGE DEDICATION PLATS

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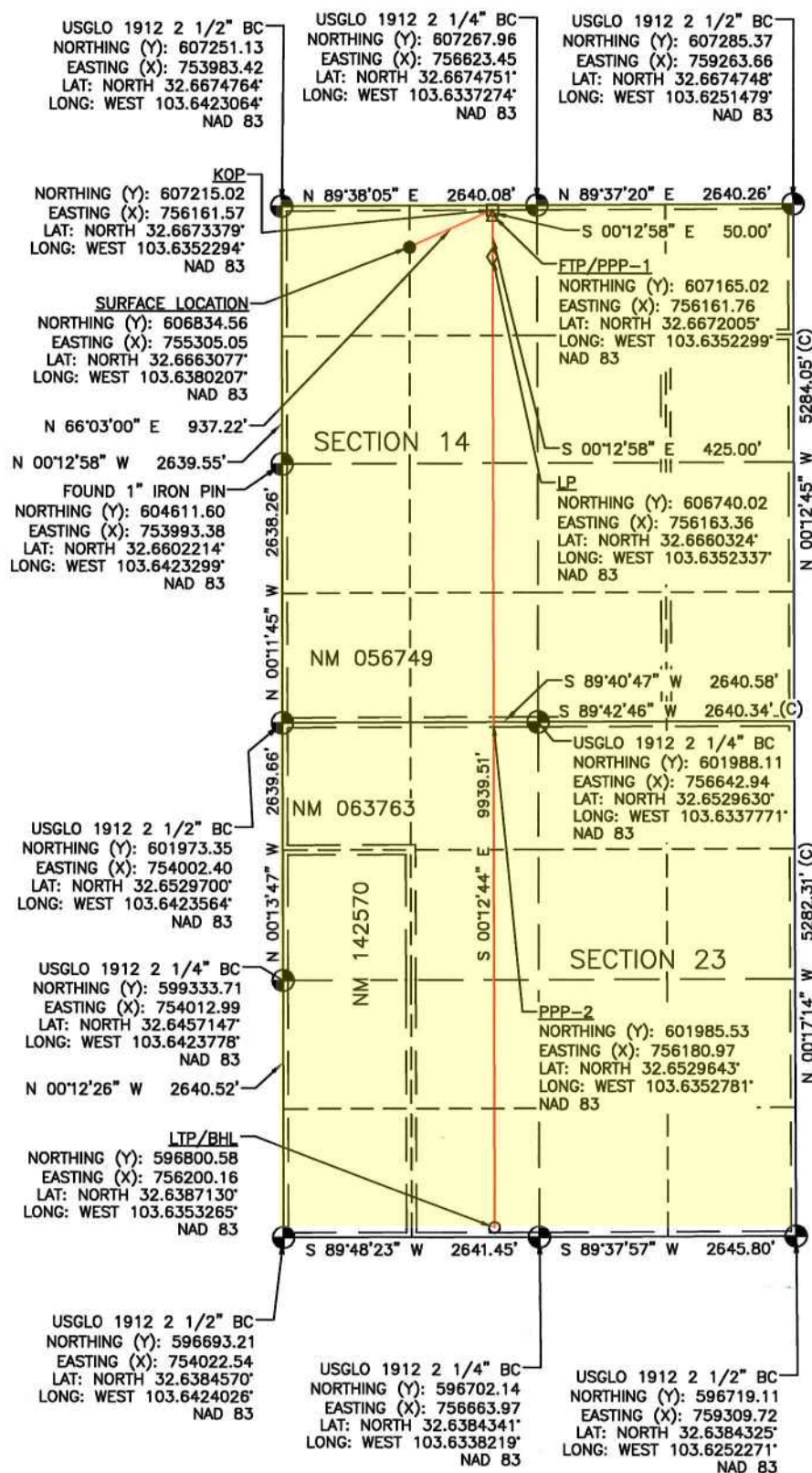
PLAT REVISED: 9/19/24

NOTE: BEARINGS AND DISTANCES SHOWN ARE REFERENCED TO THE NEW MEXICO COORDINATE SYSTEM, EAST ZONE, NAD 83, UNLESS OTHERWISE NOTED

## LEGEND:

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- ⊙ = FOUND MONUMENT
- (C) = CALCULATED

FOOTAGES		
SHL	425' FNL	1320' FWL
KOP	50' FNL	2178' FWL
FTP/PPP-1	100' FNL	2178' FWL
PPP-2	0' FNL	2178' FWL
LP	525' FNL	2178' FWL
LTP/BHL	100' FSL	2178' FWL



OCD Examiner Hearing 10-3-24

<b>C-102</b>  Submit Electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department <b>OIL CONSERVATION DIVISION</b>		Revised July 9, 2024	
	Submittal Type:	<input checked="" type="checkbox"/> Initial Submittal		
		<input type="checkbox"/> Amended Report		
		<input type="checkbox"/> As Drilled		

## WELL LOCATION INFORMATION

API Number	Pool Code 27230	Pool Name Gem; Bone Spring, East
Property Code	Property Name <b>SAPPHIRE FEDERAL COM</b>	Well Number <b>304H</b>
OGRID No. 330396	Operator Name <b>AVANT OPERATING, LLC</b>	Ground Level Elevation <b>3701.3</b>
Surface Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input type="checkbox"/> Federal		Mineral Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input type="checkbox"/> Federal

## Surface Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
A	14	19 S	33 E		375 FNL	1280 FEL	32.6664442° N	103.6293097° W	LEA

## Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
O	23	19 S	33 E		100 FSL	2178 FEL	32.6387087° N	103.6323018° W	LEA

Dedicated Acres 1280	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
Order Numbers.	Well setbacks are under Common Ownership: <input type="checkbox"/> Yes <input type="checkbox"/> No			

## Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
B	14	19 S	33 E		50 FNL	2178 FEL	32.6673377° N	103.6322258° W	LEA

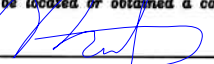
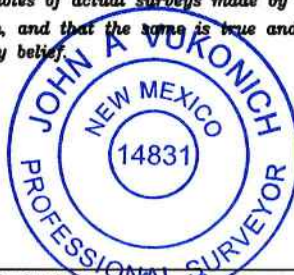

## First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
B	14	19 S	33 E		100 FNL	2178 FEL	32.6672002° N	103.6322263° W	LEA

## Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
O	23	19 S	33 E		100 FSL	2178 FEL	32.6387087° N	103.6323018° W	LEA

Unitized Area or Area of Uniform Interest	Spacing Unit Type <input checked="" type="checkbox"/> Horizontal <input type="checkbox"/> Vertical	Ground Floor Elevation:
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<b>OPERATOR CERTIFICATIONS</b> I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is vertical or directional well, 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 a working interest or unleased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.  If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.		<b>SURVEYOR CERTIFICATIONS</b> 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.	
Signature  Date 9/24/2024	Signature and Seal of Professional Surveyor  Signature: 		
Printed Name Meghan Twele  E-mail Address mtwele@outlook.com	Certificate Number 14831	Date of Survey 4/10/24 9/23/2024	

Note: No certificate will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



## ACREAGE DEDICATION PLATS

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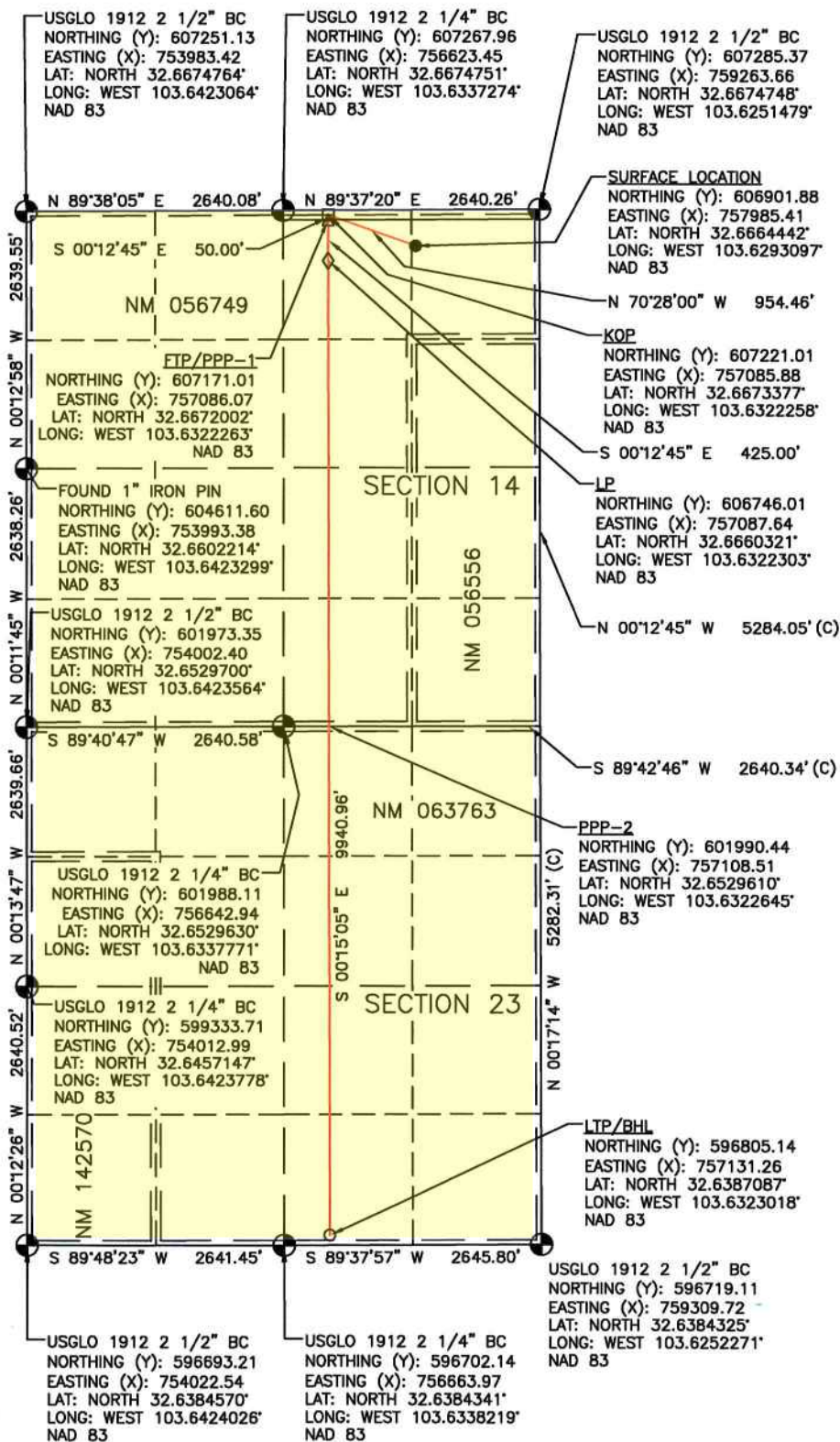
Surveyors shall use the latest United States government survey or dependent resurvey. Well locations will be in reference to the New Mexico Principal Meridian. If the land is not surveyed, contact the OCD Engineering Bureau. Independent subdivision surveys will not be acceptable.

Plat Revised: 9/18/24

## LEGEND:

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- = KICK OFF POINT (KOP)
- △ = FTP/PPP-1
- ◇ = LANDING POINT (LP)
- = LTP/BHL
- ⊙ = FOUND MONUMENT
- (C) = CALCULATED

FOOTAGES		
SHL	375' FNL	1280' FEL
KOP	50' FNL	2178' FEL
FTP/PPP-1	100' FNL	2178' FEL
LP	525' FNL	2178' FEL
PPP-2	0' FNL	2178' FEL
LTP/BHL	100' FSL	2178' FEL



NOTE: BEARINGS AND DISTANCES SHOWN ARE REFERENCED TO THE NEW MEXICO COORDINATE SYSTEM, EAST ZONE, NAD 83, UNLESS OTHERWISE NOTED

OCD Examiner Hearing 10-3-24

C-102  Submit Electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION	Revised July 9, 2024	
		Submittal Type:	<input checked="" type="checkbox"/> Initial Submittal
			<input type="checkbox"/> Amended Report
		<input type="checkbox"/> As Drilled	

## WELL LOCATION INFORMATION

API Number	Pool Code 27230	Pool Name Gem; Bone Spring, East
Property Code	Property Name SAPPHIRE FEDERAL COM	Well Number 305H
OGRID No. 330396	Operator Name AVANT OPERATING, LLC	Ground Level Elevation 3701.6
Surface Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input type="checkbox"/> Federal		Mineral Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input type="checkbox"/> Federal

## Surface Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
A	14	19 S	33 E		375 FNL	1260 FEL	32.6664443° N	103.6292452° W	LEA

## Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
P	23	19 S	33 E		100 FSL	1254 FEL	32.6387082° N	103.6293002° W	LEA

Dedicated Acres 1280	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
Order Numbers.		Well setbacks are under Common Ownership: <input type="checkbox"/> Yes <input type="checkbox"/> No		

## Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
A	14	19 S	33 E		50 FNL	1254 FEL	32.6673376° N	103.6292232° W	LEA

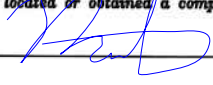

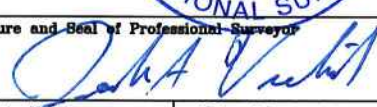
## First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
A	14	19 S	33 E		100 FNL	1254 FEL	32.6672002° N	103.6292237° W	LEA

## Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
P	23	19 S	33 E		100 FSL	1254 FEL	32.6387082° N	103.6293002° W	LEA

Unitized Area or Area of Uniform Interest	Spacing Unit Type <input checked="" type="checkbox"/> Horizontal <input type="checkbox"/> Vertical	Ground Floor Elevation:
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<b>OPERATOR CERTIFICATIONS</b> I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is vertical or directional well, 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 a working interest or unleased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.  If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.  Signature  Date 9/24/2024  Printed Name Meghan Twele  E-mail Address mtwele@outlook.com		<b>SURVEYOR CERTIFICATIONS</b> 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.    Signature and Seal of Professional Surveyor   Certificate Number 14831  Date of Survey 4/10/24 9/23/2024	
--	--	--	--

Note: Do not submit this plat to the division for completion until all interests have been consolidated or a non-standard unit has been approved by the division.



## ACREAGE DEDICATION PLATS

This grid represents a standard section. You may superimpose a non-standard section, or larger area, over this grid. Operators must outline the dedicated acreage in a red box, clearly show the well surface location and bottom hole location, if it is directionally drilled, with dimensions from the section lines in the cardinal directions. If this is a horizontal wellbore show on this plat the location of the First Take Point and Last Take Point, and the point within the Completed interval (other than the First Take Point or Last Take Point) that is closest to any outer boundary of the tract.

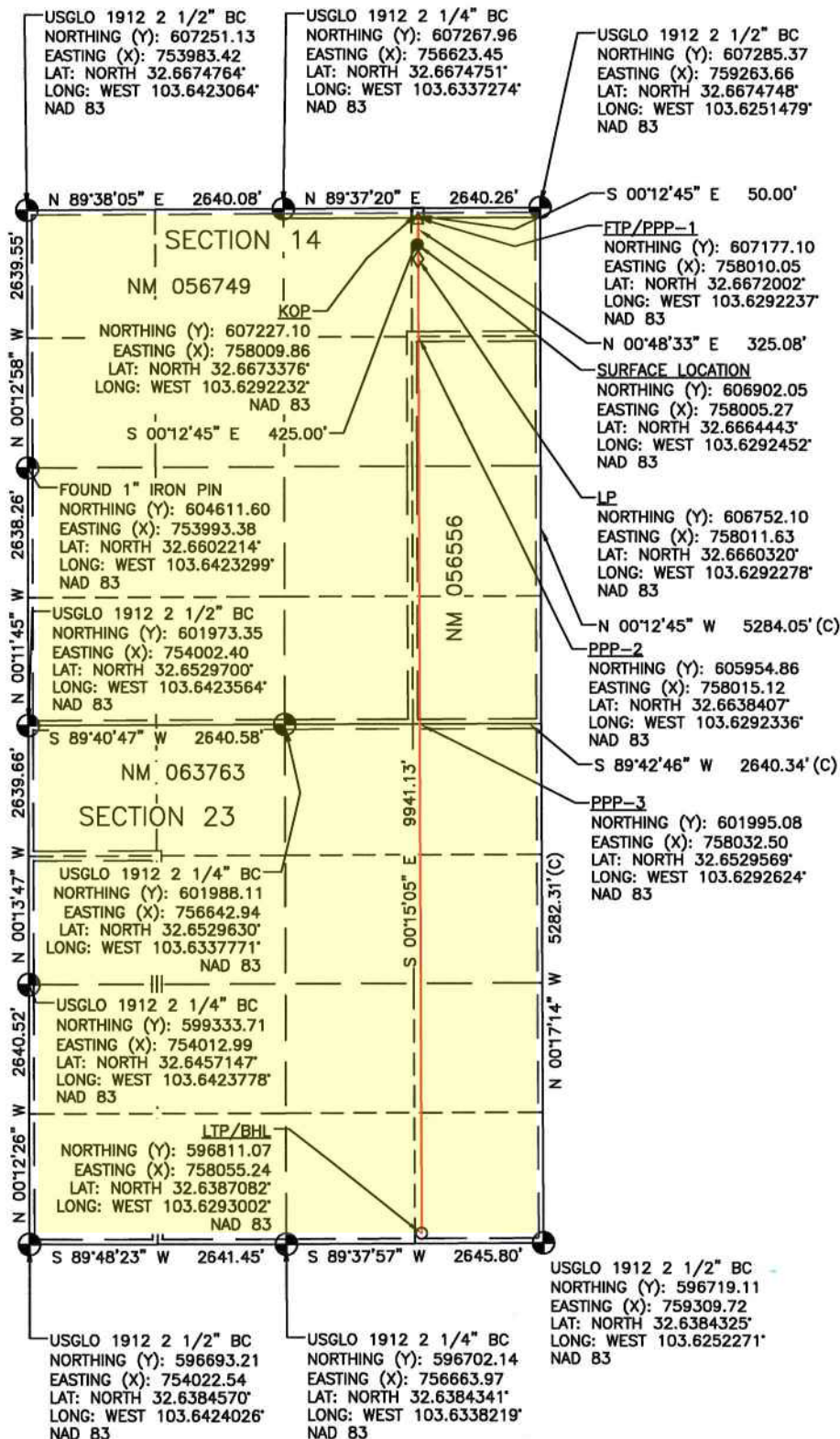
Surveyors shall use the latest United States government survey or dependent resurvey. Well locations will be in reference to the New Mexico Principal Meridian. If the land is not surveyed, contact the OCD Engineering Bureau. Independent subdivision surveys will not be acceptable.

Plat Revised: 9/18/24

## LEGEND:

- = SURFACE LOCATION (SHL)
- = KICK OFF POINT (KOP)
- △ = FTP/PPP-1
- ◇ = LANDING POINT (LP)
- = LTP/BHL
- ⊙ = FOUND MONUMENT
- (C) = CALCULATED

FOOTAGES		
SHL	375' FNL	1260' FEL
KOP	50' FNL	1254' FEL
FTP/PPP-1	100' FNL	1254' FEL
LP	525' FNL	1254' FEL
PPP-2	1322' FNL	1254' FEL
PPP-3	0' FNL	1251' FEL
LTP/BHL	100' FSL	1254' FEL



NOTE: BEARINGS AND DISTANCES SHOWN ARE REFERENCED TO THE NEW MEXICO COORDINATE SYSTEM, EAST ZONE, NAD 83, UNLESS OTHERWISE NOTED

OCD Examiner Hearing 10-3-24

<b>C-102</b>  Submit Electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department <b>OIL CONSERVATION DIVISION</b>		Revised July 9, 2024	
	Submittal Type:	<input checked="" type="checkbox"/> Initial Submittal		
		<input type="checkbox"/> Amended Report		
		<input type="checkbox"/> As Drilled		

## WELL LOCATION INFORMATION

API Number	Pool Code 27230	Pool Name Gem; Bone Spring, East
Property Code	Property Name <b>SAPPHIRE FEDERAL COM</b>	Well Number <b>306H</b>
OGRID No. 330396	Operator Name <b>AVANT OPERATING, LLC</b>	Ground Level Elevation <b>3701.8</b>
Surface Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input type="checkbox"/> Federal		Mineral Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input type="checkbox"/> Federal

## Surface Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
A	14	19 S	33 E		375 FNL	1240 FEL	32.6664443° N	103.6291802° W	LEA

## Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
P	23	19 S	33 E		100 FSL	330 FEL	32.6387076° N	103.6262986° W	LEA

Dedicated Acres 1280	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
Order Numbers.	Well setbacks are under Common Ownership: <input type="checkbox"/> Yes <input type="checkbox"/> No			

## Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
A	14	19 S	33 E		50 FNL	330 FEL	32.6673375° N	103.6262207° W	LEA


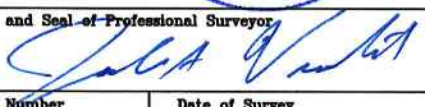
## First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
A	14	19 S	33 E		100 FNL	330 FEL	32.6672000° N	103.6262212° W	LEA

## Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
P	23	19 S	33 E		100 FSL	330 FEL	32.6387076° N	103.6262986° W	LEA

Unitized Area or Area of Uniform Interest	Spacing Unit Type <input checked="" type="checkbox"/> Horizontal <input type="checkbox"/> Vertical	Ground Floor Elevation:
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Signature	Date 9/24/2024		
Printed Name Meghan Twele			
E-mail Address mtwele@outlook.com		Signature and Seal of Professional Surveyor 	Certificate Number 14831
		Date of Survey 4/10/24	9/23/2024

Note: No document will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



## ACREAGE DEDICATION PLATS

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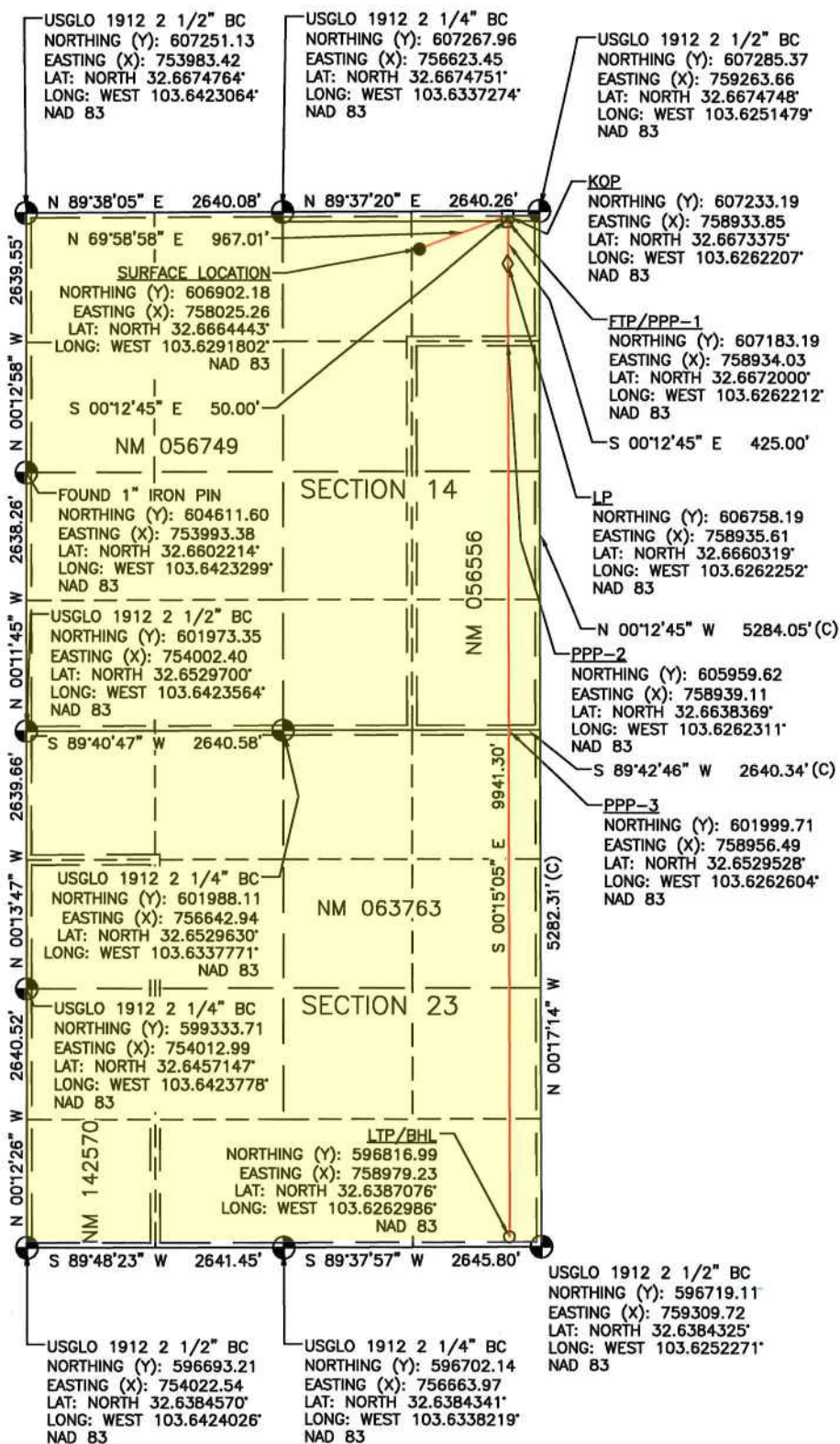
Surveyors shall use the latest United States government survey or dependent resurvey. Well locations will be in reference to the New Mexico Principal Meridian. If the land is not surveyed, contact the OCD Engineering Bureau. Independent subdivision surveys will not be acceptable.

Plat Revised: 9/18/24

## LEGEND:

- = SURFACE LOCATION (SHL)
- = KICK OFF POINT (KOP)
- △ = FTP/PPP-1
- ◇ = LANDING POINT (LP)
- = LTP/BHL
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- (C) = CALCULATED

FOOTAGES		
SHL	375' FNL	1240' FEL
KOP	50' FNL	330' FEL
FTP/PPP-1	100' FNL	330' FEL
LP	525' FNL	330' FEL
PPP-2	1324' FNL	330' FEL
PPP-3	0' FNL	330' FEL
LTP/BHL	100' FSL	330' FEL



NOTE: BEARINGS AND DISTANCES SHOWN ARE REFERENCED TO THE NEW MEXICO COORDINATE SYSTEM, EAST ZONE, NAD 83, UNLESS OTHERWISE NOTED

OCD Examiner Hearing 10-3-24

<b>C-102</b>  Submit Electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department <b>OIL CONSERVATION DIVISION</b>	Revised July 9, 2024	
		Submittal Type:	<input checked="" type="checkbox"/> Initial Submittal <input type="checkbox"/> Amended Report <input type="checkbox"/> As Drilled

## WELL LOCATION INFORMATION

API Number 30-025-50999	Pool Code 27230	Pool Name Gem; Bone Spring, East
Property Code 335609	Property Name <b>SAPPHIRE FEDERAL COM</b>	Well Number <b>50IH</b>
OGRID No. 330396	Operator Name <b>AVANT OPERATING, LLC</b>	Ground Level Elevation <b>3689.6</b>
Surface Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input type="checkbox"/> Federal		Mineral Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input type="checkbox"/> Federal

## Surface Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
D	14	19 S	33 E		265 FNL	1280 FWL	32.6667475° N	103.6381500° W	LEA

## Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
M	23	19 S	33 E		100 FSL	330 FWL	32.6387291° N	103.6413296° W	LEA

Dedicated Acres 1280	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
Order Numbers.	Well setbacks are under Common Ownership: <input type="checkbox"/> Yes <input type="checkbox"/> No			

## Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
D	14	19 S	33 E		50 FNL	330 FWL	32.6673388° N	103.6412345° W	LEA

## First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
D	14	19 S	33 E		100 FNL	330 FWL	32.6672014° N	103.6412350° W	LEA

## Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
M	23	19 S	33 E		100 FSL	330 FWL	32.6387291° N	103.6413296° W	LEA

Unitized Area or Area of Uniform Interest	Spacing Unit Type <input checked="" type="checkbox"/> Horizontal <input type="checkbox"/> Vertical	Ground Floor Elevation:
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## OPERATOR CERTIFICATIONS

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 9/24/2024

Signature  
Meghan Twele

Printed Name  
mtwele@outlook.com

E-mail Address

## SURVEYOR CERTIFICATIONS

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.



Signature and Seal of Professional Surveyor

Certificate Number

14831

Date of Survey

12/19/23

9/24/2024

Noted Examiner Hearing 10-3-24 this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



## ACREAGE DEDICATION PLATS

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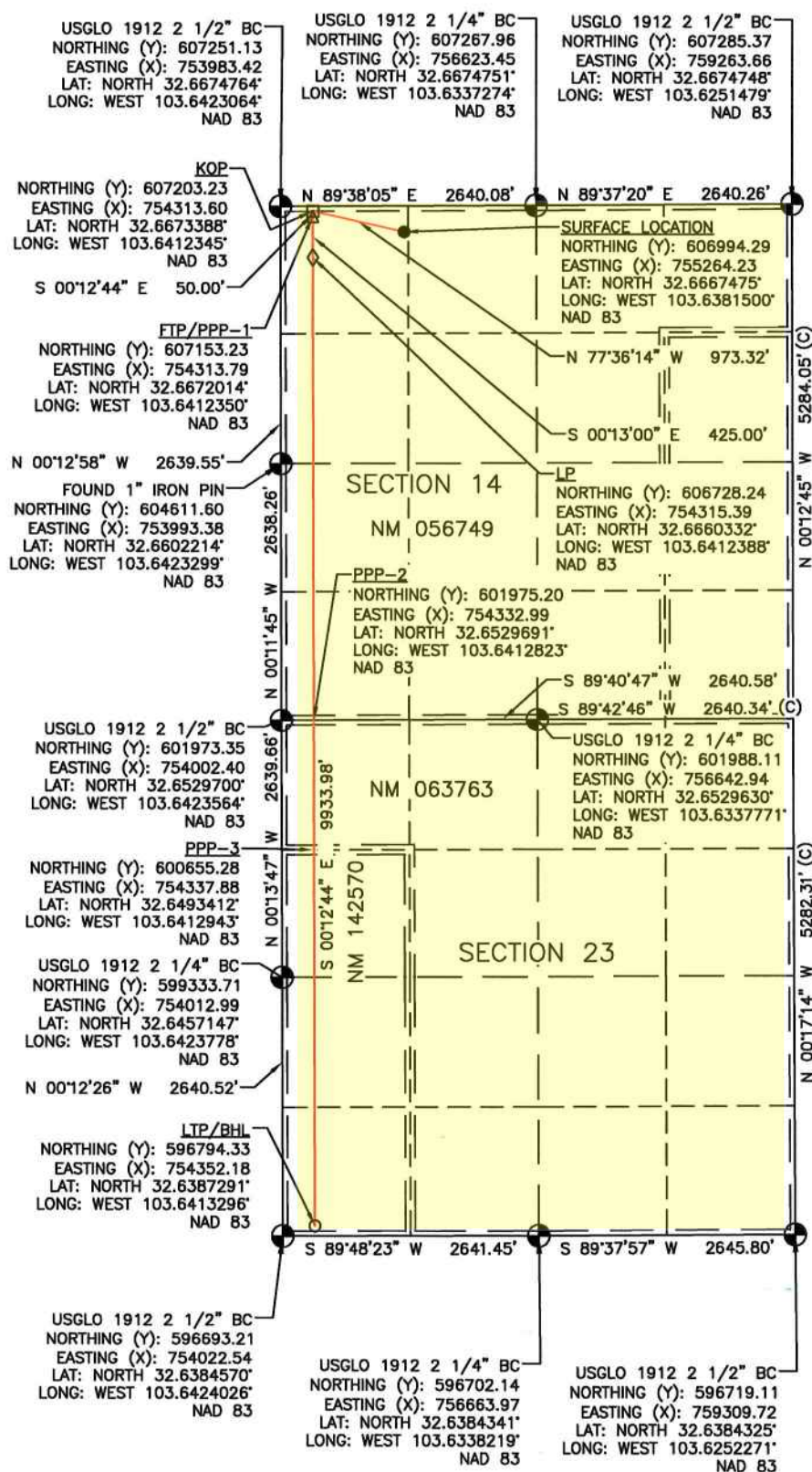
PLAT REVISED: 9/19/24

NOTE: BEARINGS AND DISTANCES SHOWN ARE REFERENCED TO THE NEW MEXICO COORDINATE SYSTEM, EAST ZONE, NAD 83, UNLESS OTHERWISE NOTED

**LEGEND:**

- = SURFACE LOCATION (SHL)
- = KICK OFF POINT (KOP)
- △ = FTP/PPP-1
- ◇ = LANDING POINT (LP)
- = LTP/BHL
- ⊙ = FOUND MONUMENT
- (C) = CALCULATED

FOOTAGES		
SHL	265' FNL	1280' FWL
KOP	50' FNL	330' FWL
FTP/PPP-1	100' FNL	330' FWL
PPP-2	0' FNL	330' FWL
PPP-3	1320' FNL	330' FWL
LP	525' FNL	330' FWL
LTP/BHL	100' FSL	330' FWL



OCD Examiner Hearing 10-3-24

Released to Imaging: 9/26/2024 1:36:25 PM

C-102  Submit Electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION		Revised July 9, 2024	
	Submittal Type:	<input checked="" type="checkbox"/> Initial Submittal		
		<input type="checkbox"/> Amended Report		
		<input type="checkbox"/> As Drilled		

## WELL LOCATION INFORMATION

API Number 30-025-51000	Pool Code 27230	Pool Name Gem; Bone Spring, East
Property Code 335609	Property Name SAPPHIRE FEDERAL COM	Well Number 502H
OGRID No. 330396	Operator Name AVANT OPERATING, LLC	Ground Level Elevation 3689.7
Surface Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input type="checkbox"/> Federal		Mineral Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input type="checkbox"/> Federal

## Surface Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
D	14	19 S	33 E		265 FNL	1300 FWL	32.6667475° N	103.6380847° W	LEA

## Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
M	23	19 S	33 E		100 FSL	1254 FWL	32.6387211° N	103.6383280° W	LEA

Dedicated Acres 1280	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
Order Numbers.	Well setbacks are under Common Ownership: <input type="checkbox"/> Yes <input type="checkbox"/> No			

## Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
D	14	19 S	33 E		50 FNL	1254 FWL	32.6673384° N	103.6382320° W	LEA

## First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
D	14	19 S	33 E		100 FNL	1254 FWL	32.6672010° N	103.6382324° W	LEA

## Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
M	23	19 S	33 E		100 FSL	1254 FWL	32.6387211° N	103.6383280° W	LEA

Unitized Area or Area of Uniform Interest	Spacing Unit Type <input checked="" type="checkbox"/> Horizontal <input type="checkbox"/> Vertical	Ground Floor Elevation:
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9/24/2024

Signature

Meghan Twele

Printed Name

mtwele@outlook.com

E-mail Address

## SURVEYOR CERTIFICATIONS

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Signature and Seal of Professional Surveyor

Certificate Number

14931

Date of Survey

12/19/23

9/24/2024

Noted: This completion until all interests have been consolidated or a non-standard unit has been approved by the division.



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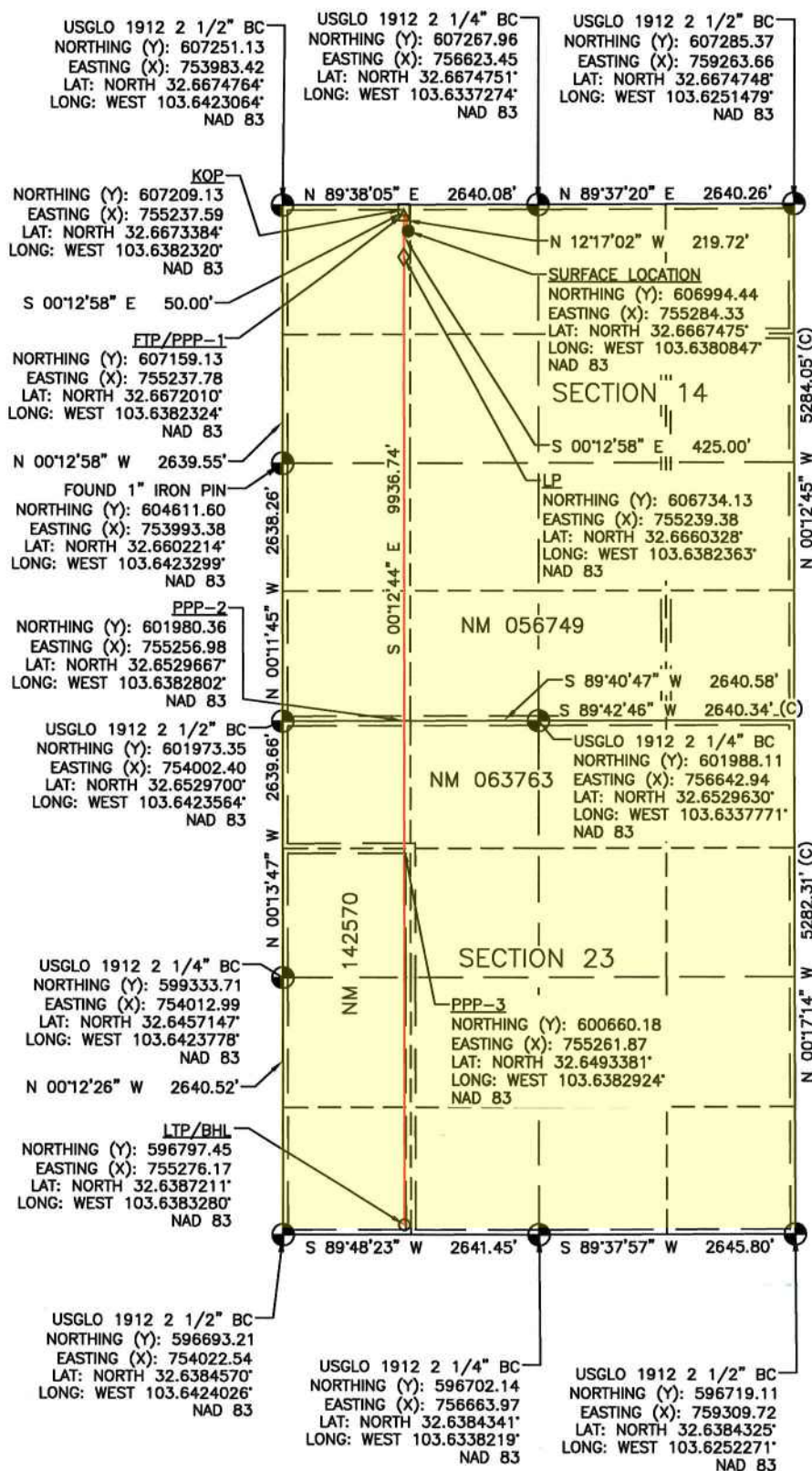
PLAT REVISED: 9/19/24

NOTE: BEARINGS AND DISTANCES SHOWN ARE REFERENCED TO THE NEW MEXICO COORDINATE SYSTEM, EAST ZONE, NAD 83, UNLESS OTHERWISE NOTED

## LEGEND:

- = SURFACE LOCATION (SHL)
- = KICK OFF POINT (KOP)
- △ = FTP/PPP-1
- ◇ = LANDING POINT (LP)
- = LTP/BHL
- ⊙ = FOUND MONUMENT
- (C) = CALCULATED

FOOTAGES		
SHL	265' FNL	1300' FWL
KOP	50' FNL	1254' FWL
FTP/PPP-1	100' FNL	1254' FWL
PPP-2	0' FNL	1255' FWL
PPP-3	1320' FNL	1254' FWL
LP	525' FNL	1254' FWL
LTP/BHL	100' FSL	1254' FWL



C-102  Submit Electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION	Revised July 9, 2024	
		Submittal Type:	<input checked="" type="checkbox"/> Initial Submittal
			<input type="checkbox"/> Amended Report
		<input type="checkbox"/> As Drilled	

## WELL LOCATION INFORMATION

API Number 30-025-51002	Pool Code 27230	Pool Name Gem; Bone Spring, East
Property Code 335609	Property Name SAPPHIRE FEDERAL COM	Well Number 505H
OGRID No. 330396	Operator Name AVANT OPERATING, LLC	Ground Level Elevation 3701.4
Surface Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input type="checkbox"/> Federal		Mineral Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input type="checkbox"/> Federal

## Surface Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
B	14	19 S	33 E		215 FNL	1430 FEL	32.6668843° N	103.6297965° W	LEA

## Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
P	23	19 S	33 E		100 FSL	1254 FEL	32.6387082° N	103.6293002° W	LEA

Dedicated Acres 1280	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
Order Numbers.		Well setbacks are under Common Ownership: <input type="checkbox"/> Yes <input type="checkbox"/> No		

## Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
A	14	19 S	33 E		50 FNL	1254 FEL	32.6673376° N	103.6292232° W	LEA

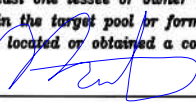
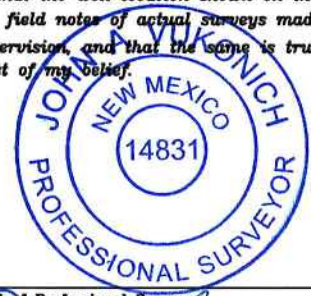
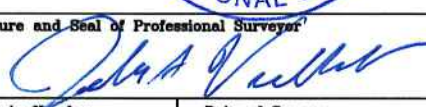
## First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
A	14	19 S	33 E		100 FNL	1254 FEL	32.6672002° N	103.6292237° W	LEA

## Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
P	23	19 S	33 E		100 FSL	1254 FEL	32.6387082° N	103.6293002° W	LEA

Unitized Area or Area of Uniform Interest	Spacing Unit Type <input checked="" type="checkbox"/> Horizontal <input type="checkbox"/> Vertical	Ground Floor Elevation:
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Note: OCD Examiner Hearing 10-3-24. This completion until all interests have been consolidated or a non-standard unit has been approved by the division.

No. 24849



## ACREAGE DEDICATION PLATS

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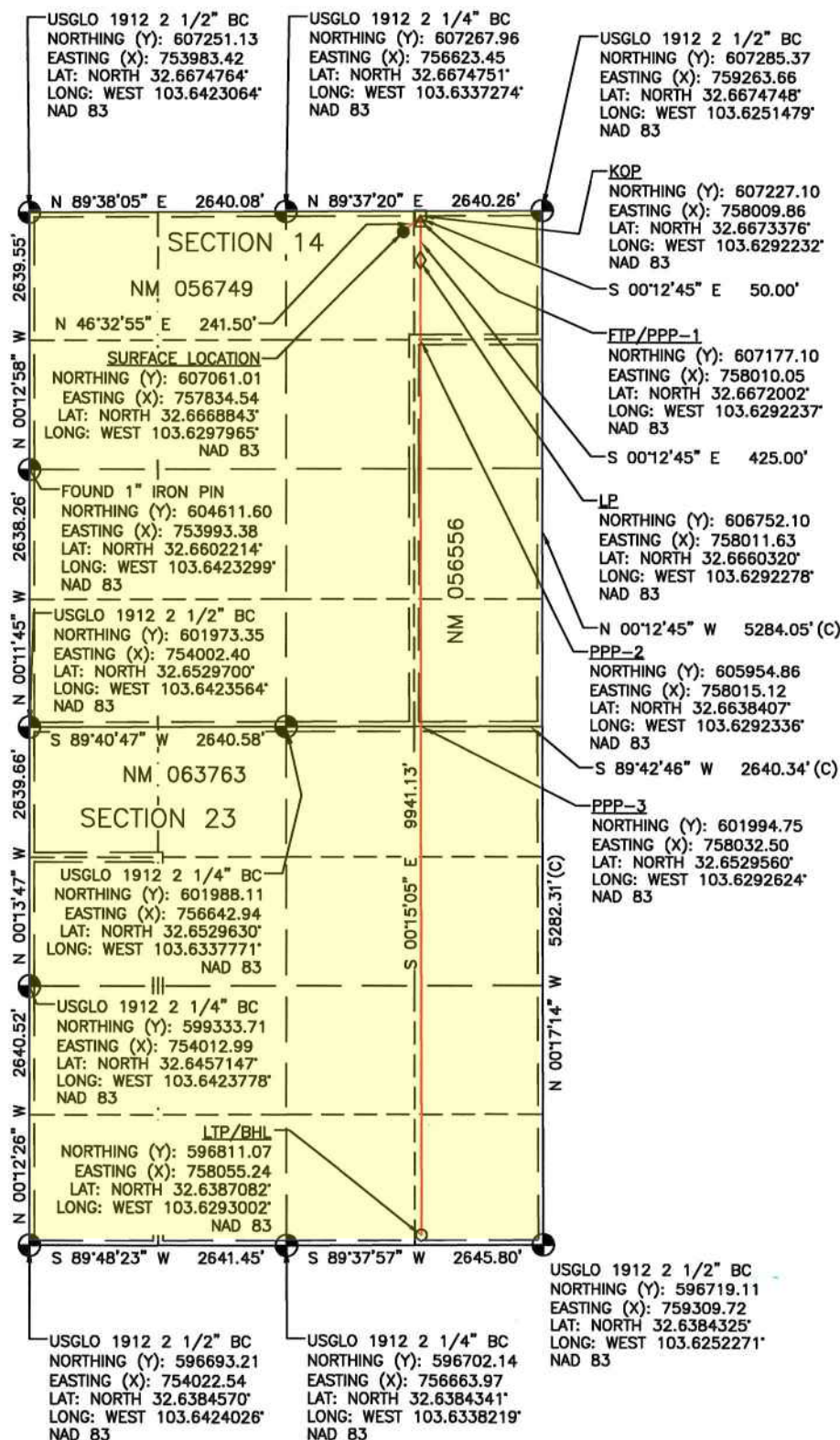
Surveyors shall use the latest United States government survey or dependent resurvey. Well locations will be in reference to the New Mexico Principal Meridian. If the land is not surveyed, contact the OCD Engineering Bureau. Independent subdivision surveys will not be acceptable.

Plat Revised: 9/18/24

## LEGEND:

- = SURFACE LOCATION (SHL)
- = KICK OFF POINT (KOP)
- △ = FTP/PPP-1
- ◇ = LANDING POINT (LP)
- = LTP/BHL
- ⊙ = FOUND MONUMENT
- (C) = CALCULATED

FOOTAGES		
SHL	215' FNL	1430' FEL
KOP	50' FNL	1254' FEL
FTP/PPP-1	100' FNL	1254' FEL
LP	525' FNL	1254' FEL
PPP-2	1322' FNL	1254' FEL
PPP-3	0' FNL	1251' FEL
LTP/BHL	100' FSL	1254' FEL



NOTE: BEARINGS AND DISTANCES SHOWN ARE REFERENCED TO THE NEW MEXICO COORDINATE SYSTEM, EAST ZONE, NAD 83, UNLESS OTHERWISE NOTED

OCD Examiner Hearing 10-3-24

<b>C-102</b>  Submit Electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department <b>OIL CONSERVATION DIVISION</b>		Revised July 9, 2024	
	Submittal Type:	<input checked="" type="checkbox"/> Initial Submittal		
		<input type="checkbox"/> Amended Report		
		<input type="checkbox"/> As Drilled		

## WELL LOCATION INFORMATION

API Number	Pool Code 27230	Pool Name Gem; Bone Spring, East
Property Code	Property Name <b>SAPPHIRE FEDERAL COM</b>	Well Number <b>506H</b>
OGRID No. 330396	Operator Name <b>AVANT OPERATING, LLC</b>	Ground Level Elevation <b>3701.9</b>
Surface Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input type="checkbox"/> Federal		Mineral Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input type="checkbox"/> Federal

## Surface Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
B	14	19 S	33 E		215 FNL	1410 FEL	32.6668838° N	103.6297310° W	LEA

## Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
P	23	19 S	33 E		100 FSL	330 FEL	32.6387076° N	103.6262986° W	LEA

Dedicated Acres 1280	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
Order Numbers.	Well setbacks are under Common Ownership: <input type="checkbox"/> Yes <input type="checkbox"/> No			

## Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
A	14	19 S	33 E		50 FNL	330 FEL	32.6673375° N	103.6262207° W	LEA

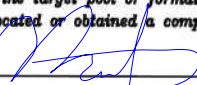

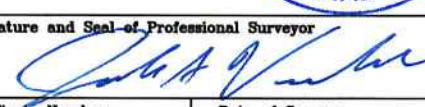
## First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
A	14	19 S	33 E		100 FNL	330 FEL	32.6672000° N	103.6262212° W	LEA

## Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
P	23	19 S	33 E		100 FSL	330 FEL	32.6387076° N	103.6262986° W	LEA

Unitized Area or Area of Uniform Interest	Spacing Unit Type <input checked="" type="checkbox"/> Horizontal <input type="checkbox"/> Vertical	Ground Floor Elevation:
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<b>OPERATOR CERTIFICATIONS</b> I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is vertical or directional well, 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 a working interest or unleased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.  If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.		<b>SURVEYOR CERTIFICATIONS</b> 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.	
Signature  Date 9/24/2024	Signature and Seal of Professional Surveyor  		
Printed Name mtwele@outlook.com	Certificate Number 14831	Date of Survey 12/19/23 9/23/2024	
E-mail Address			

Not to be Examined or Released until all interests have been consolidated or a non-standard unit has been approved by the division.



## ACREAGE DEDICATION PLATS

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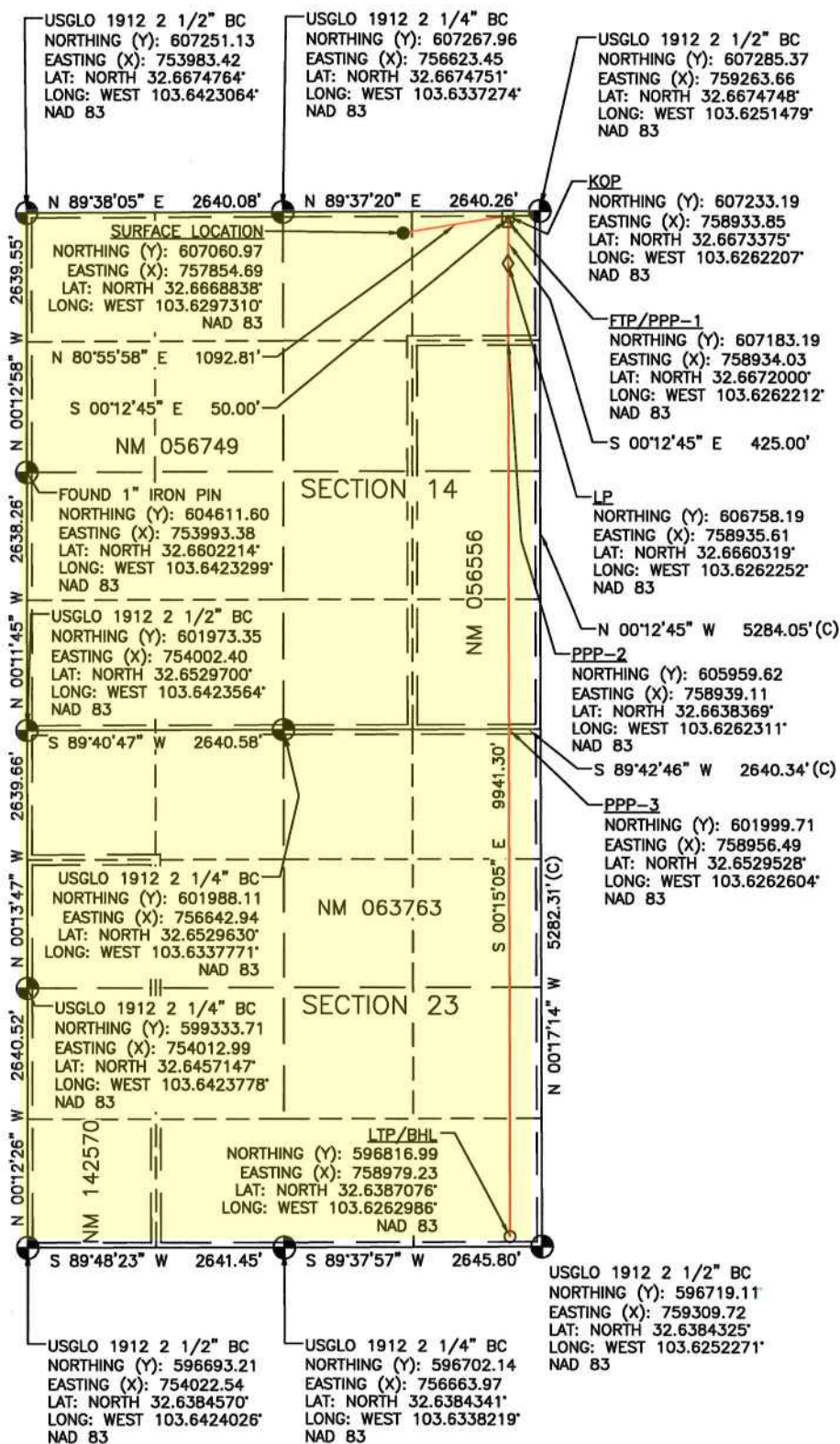
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Plat Revised: 9/18/24

## LEGEND:

- = SURFACE LOCATION (SHL)
- = KICK OFF POINT (KOP)
- △ = FTP/PPP-1
- ◇ = LANDING POINT (LP)
- = LTP/BHL
- ⊙ = FOUND MONUMENT
- (C) = CALCULATED

FOOTAGES		
SHL	215' FNL	1410' FEL
KOP	50' FNL	330' FEL
FTP/PPP-1	100' FNL	330' FEL
LP	525' FNL	330' FEL
PPP-2	1324' FNL	330' FEL
PPP-3	0' FNL	330' FEL
LTP/BHL	100' FSL	330' FEL



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OCD Examiner Hearing 10-3-24

C-102  Submit Electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION		Revised July 9, 2024	
	Submittal Type:	<input checked="" type="checkbox"/> Initial Submittal		
		<input type="checkbox"/> Amended Report		
		<input type="checkbox"/> As Drilled		

## WELL LOCATION INFORMATION

API Number	Pool Code 27230	Pool Name Gem; Bone Spring, East
Property Code	Property Name SAPPHIRE FEDERAL COM	Well Number 513H
OGRID No. 330396	Operator Name AVANT OPERATING, LLC	Ground Level Elevation 3690.0
Surface Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input type="checkbox"/> Federal		Mineral Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input type="checkbox"/> Federal

## Surface Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
C	14	19 S	33 E		265 FNL	1320 FWL	32.6667474° N	103.6380195° W	LEA

## Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
N	23	19 S	33 E		100 FSL	2178 FWL	32.6387130° N	103.6353265° W	LEA

Dedicated Acres 1280	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
Order Numbers.		Well setbacks are under Common Ownership: <input type="checkbox"/> Yes <input type="checkbox"/> No		

## Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
C	14	19 S	33 E		50 FNL	2178 FWL	32.6673379° N	103.6352294° W	LEA

## First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
C	14	19 S	33 E		100 FNL	2178 FWL	32.6672005° N	103.6352299° W	LEA

## Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
N	23	19 S	33 E		100 FSL	2178 FWL	32.6387130° N	103.6353265° W	LEA

Unitized Area or Area of Uniform Interest	Spacing Unit Type <input checked="" type="checkbox"/> Horizontal <input type="checkbox"/> Vertical	Ground Floor Elevation:
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## OPERATOR CERTIFICATIONS

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is vertical or directional well, 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 a working interest or unleased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.

 9/24/2024

Signature

Meghan Twele

Printed Name

mtwele@outlook.com

E-mail Address

## SURVEYOR CERTIFICATIONS

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.



Signature and Seal of Professional Surveyor



Certificate Number

14831

Date of Survey

12/19/23

9/24/2024

Not to be Examined or Released until all interests have been consolidated or a non-standard unit has been approved by the division.



## ACREAGE DEDICATION PLATS

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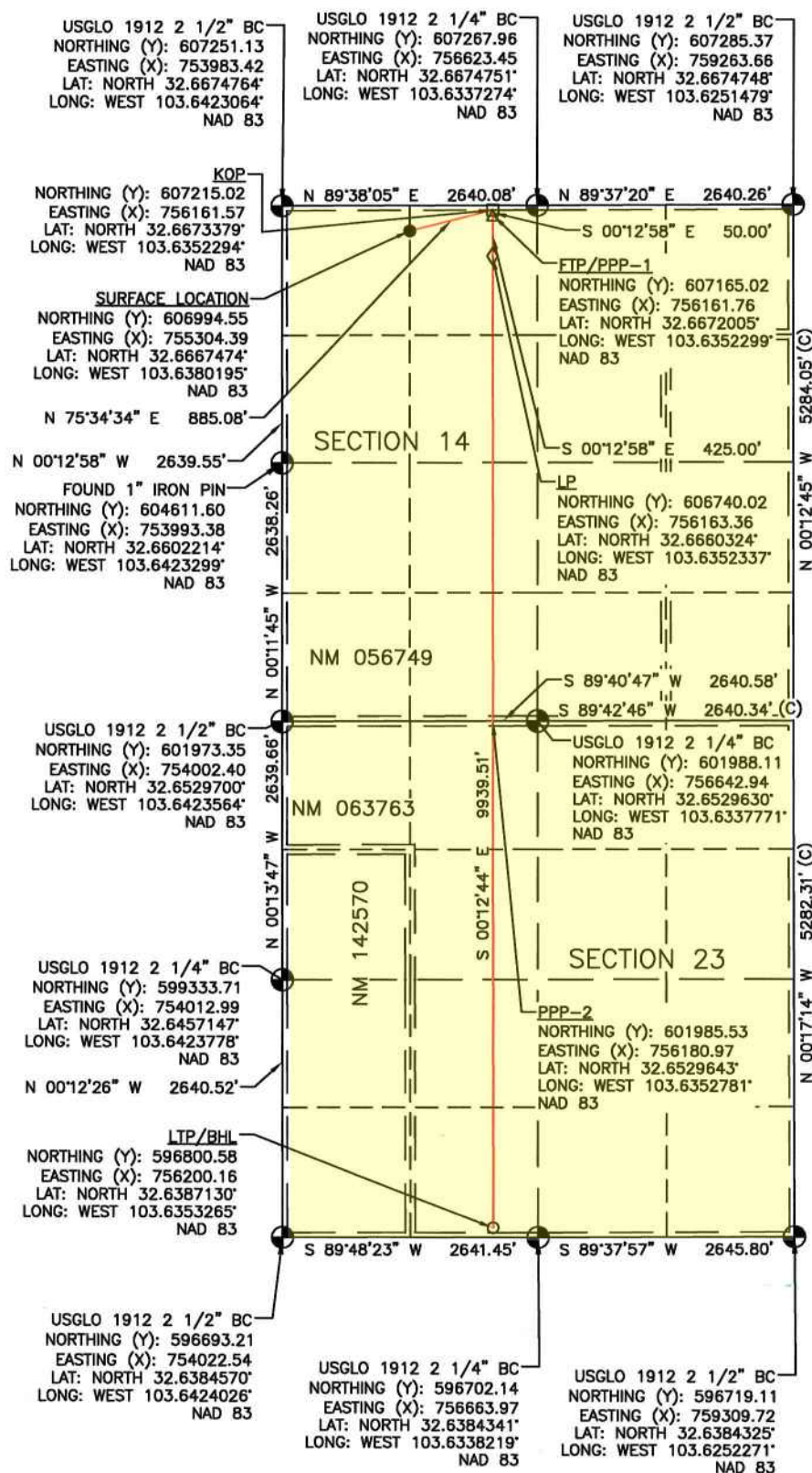
PLAT REVISED: 9/19/24

NOTE: BEARINGS AND DISTANCES SHOWN ARE REFERENCED TO THE NEW MEXICO COORDINATE SYSTEM, EAST ZONE, NAD 83, UNLESS OTHERWISE NOTED

## LEGEND:

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- = KICK OFF POINT (KOP)
- △ = FTP/PPP-1
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FOOTAGES		
SHL	265' FNL	1320' FWL
KOP	50' FNL	2178' FWL
FTP/PPP-1	100' FNL	2178' FWL
PPP-2	0' FNL	2178' FWL
LP	525' FNL	2178' FWL
LTP/BHL	100' FSL	2178' FWL



<b>C-102</b>  Submit Electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department <b>OIL CONSERVATION DIVISION</b>	Revised July 9, 2024	
		Submittal Type:	<input checked="" type="checkbox"/> Initial Submittal
			<input type="checkbox"/> Amended Report
		<input type="checkbox"/> As Drilled	

## WELL LOCATION INFORMATION

API Number 30-025-51001	Pool Code 27230	Pool Name Gem; Bone Spring, East
Property Code 335609	Property Name <b>SAPPHIRE FEDERAL COM</b>	Well Number <b>514H</b>
OGRID No. 330396	Operator Name <b>AVANT OPERATING, LLC</b>	Ground Level Elevation <b>3700.8</b>
Surface Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input type="checkbox"/> Federal		Mineral Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input type="checkbox"/> Federal

## Surface Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
B	14	19 S	33 E		215 FNL	1450 FEL	32.6668842° N	103.6298614° W	LEA

## Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
O	23	19 S	33 E		100 FSL	2178 FEL	32.6387087° N	103.6323018° W	LEA

Dedicated Acres 1280	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
Order Numbers.		Well setbacks are under Common Ownership: <input type="checkbox"/> Yes <input type="checkbox"/> No		

## Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
B	14	19 S	33 E		50 FNL	2178 FEL	32.6673377° N	103.6322258° W	LEA


## First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
B	14	19 S	33 E		100 FNL	2178 FEL	32.6672002° N	103.6322263° W	LEA

## Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
O	23	19 S	33 E		100 FSL	2178 FEL	32.6387087° N	103.6323018° W	LEA

Unitized Area or Area of Uniform Interest	Spacing Unit Type <input checked="" type="checkbox"/> Horizontal <input type="checkbox"/> Vertical	Ground Floor Elevation:
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Noted: OGD Examiner Hearing 10-3-24 This completion until all interests have been consolidated or a non-standard unit has been approved by the division.



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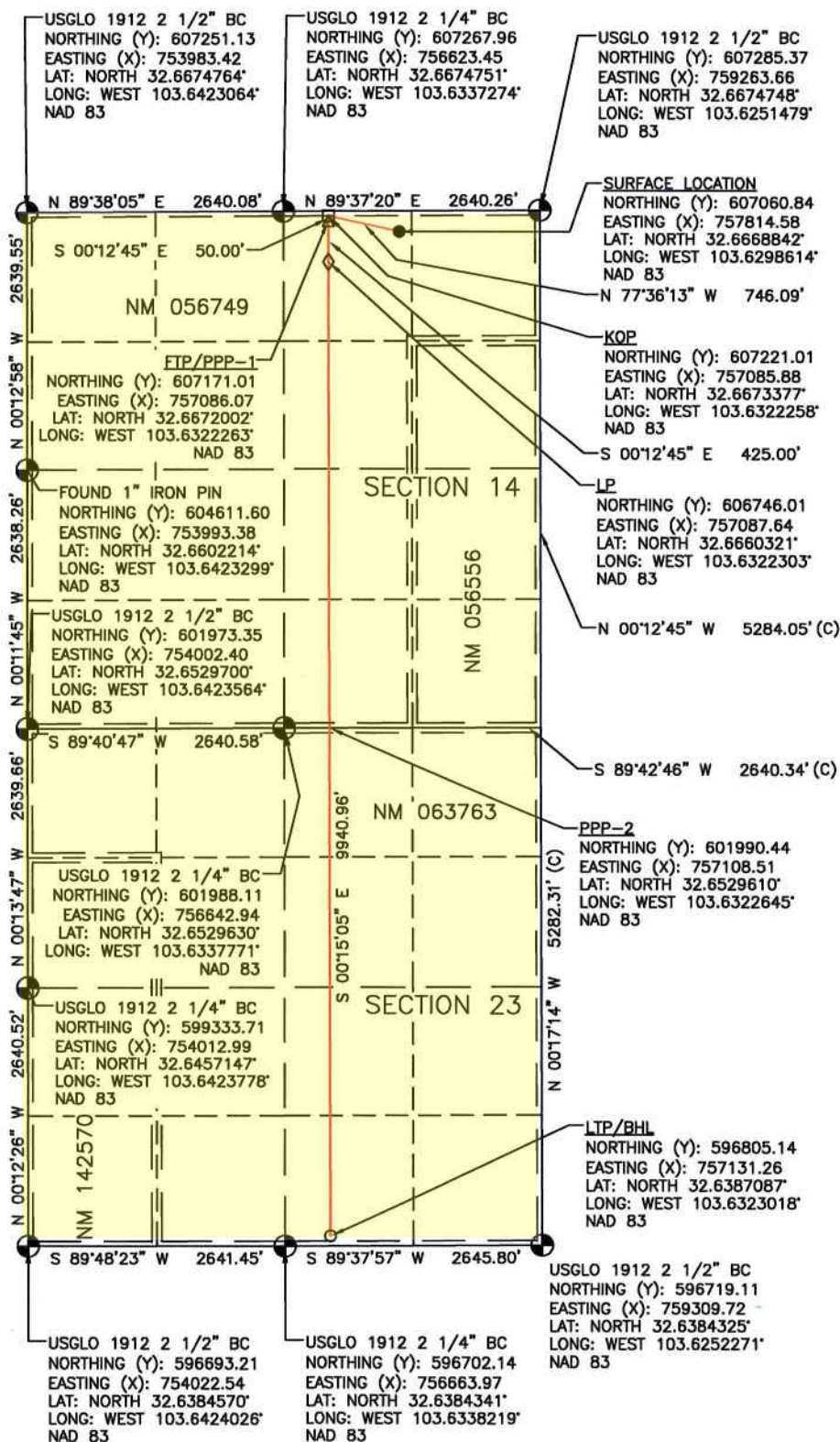
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Plat Revised: 9/18/24

**LEGEND:**

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FOOTAGES		
SHL	215' FNL	1450' FEL
KOP	50' FNL	2178' FEL
FTP/PPP-1	100' FNL	2178' FEL
LP	525' FNL	2178' FEL
PPP-2	0' FNL	2178' FEL
LTP/BHL	100' FSL	2178' FEL



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OCD Examiner Hearing 10-3-24

<b>C-102</b>  Submit Electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department <b>OIL CONSERVATION DIVISION</b>		Revised July 9, 2024	
	Submittal Type:	<input checked="" type="checkbox"/> Initial Submittal		
		<input type="checkbox"/> Amended Report		
		<input type="checkbox"/> As Drilled		

## WELL LOCATION INFORMATION

API Number	Pool Code 27230	Pool Name Gem; Bone Spring, East
Property Code	Property Name <b>SAPPHIRE FEDERAL COM</b>	Well Number <b>60IH</b>
OGRID No. 330396	Operator Name <b>AVANT OPERATING, LLC</b>	Ground Level Elevation <b>3691.2</b>
Surface Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input type="checkbox"/> Federal		Mineral Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input type="checkbox"/> Federal

## Surface Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
D	14	19 S	33 E		465 FNL	1280 FWL	32.6661978° N	103.6381516° W	LEA

## Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
M	23	19 S	33 E		100 FSL	330 FWL	32.6387291° N	103.6413296° W	LEA

Dedicated Acres 1280	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
Order Numbers.	Well setbacks are under Common Ownership: <input type="checkbox"/> Yes <input type="checkbox"/> No			

## Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
D	14	19 S	33 E		50 FNL	330 FWL	32.6673388° N	103.6412345° W	LEA

## First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
D	14	19 S	33 E		100 FNL	330 FWL	32.6672014° N	103.6412350° W	LEA

## Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
M	23	19 S	33 E		100 FSL	330 FWL	32.6387291° N	103.6413296° W	LEA

Unitized Area or Area of Uniform Interest	Spacing Unit Type <input checked="" type="checkbox"/> Horizontal <input type="checkbox"/> Vertical	Ground Floor Elevation:
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 9/24/2024

Signature  
Meghan Twele

Printed Name  
mtwele@outlook.com

E-mail Address

## SURVEYOR CERTIFICATIONS

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.



Signature and Seal of Professional Surveyor



Certificate Number

14831

Date of Survey

5/30/24

9/24/2024

Note: No Examination or Approval is required until all interests have been consolidated or a non-standard unit has been approved by the division.



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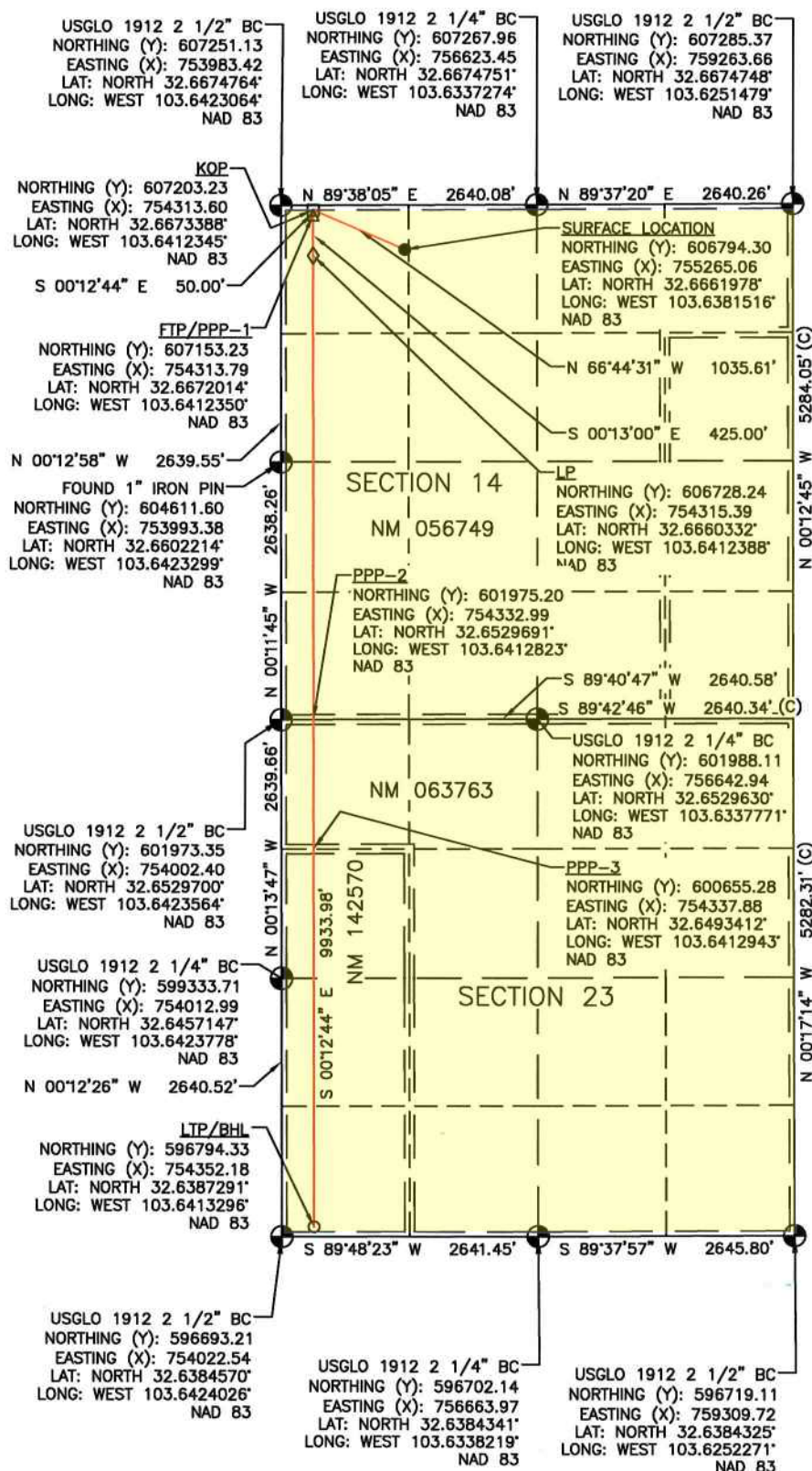
PLAT REVISED: 9/19/24

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- △ = FTP/PPP-1
- ◇ = LANDING POINT (LP)
- = LTP/BHL
- ⊕ = FOUND MONUMENT
- (C) = CALCULATED

FOOTAGES		
SHL	465' FNL	1280' FWL
KOP	50' FNL	330' FWL
FTP/PPP-1	100' FNL	330' FWL
PPP-2	0' FNL	330' FWL
PPP-3	1320' FNL	330' FWL
LP	525' FNL	330' FWL
LTP/BHL	100' FSL	330' FWL



C-102  Submit Electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION		Revised July 9, 2024	
			Submittal Type:	<input checked="" type="checkbox"/> Initial Submittal
				<input type="checkbox"/> Amended Report
		<input type="checkbox"/> As Drilled		

## WELL LOCATION INFORMATION

API Number	Pool Code 27230	Pool Name Gem; Bone Spring, East
Property Code	Property Name SAPPHIRE FEDERAL COM	Well Number 602H
OGRID No. 330396	Operator Name AVANT OPERATING, LLC	Ground Level Elevation 3691.2
Surface Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input type="checkbox"/> Federal		Mineral Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input type="checkbox"/> Federal

## Surface Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
D	14	19 S	33 E		465 FNL	1300 FWL	32.6661977° N	103.6380870° W	LEA

## Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
M	23	19 S	33 E		100 FSL	1254 FWL	32.6387211° N	103.6383280° W	LEA

Dedicated Acres 1280	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
Order Numbers.	Well setbacks are under Common Ownership: <input type="checkbox"/> Yes <input type="checkbox"/> No			

## Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
D	14	19 S	33 E		50 FNL	1254 FWL	32.6673384° N	103.6382320° W	LEA

## First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
D	14	19 S	33 E		100 FNL	1254 FWL	32.6672010° N	103.6382324° W	LEA

## Last Take Point (LTP)


UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
M	23	19 S	33 E		100 FSL	1254 FWL	32.6387211° N	103.6383280° W	LEA

Unitized Area or Area of Uniform Interest	Spacing Unit Type <input checked="" type="checkbox"/> Horizontal <input type="checkbox"/> Vertical	Ground Floor Elevation:
---	--	-------------------------

## OPERATOR CERTIFICATIONS

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is vertical or directional well, 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 a working interest or unleased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

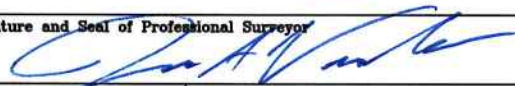
If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.

Signature 	9/24/2024
Printed Name Meghan Twele	
E-mail Address mtwele@outlook.com	

## SURVEYOR CERTIFICATIONS

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.



Signature and Seal of Professional Surveyor 	
Certificate Number 14831	Date of Survey 5/30/24
9/24/2024	

Not to be completed until all interests have been consolidated or a non-standard unit has been approved by the division.



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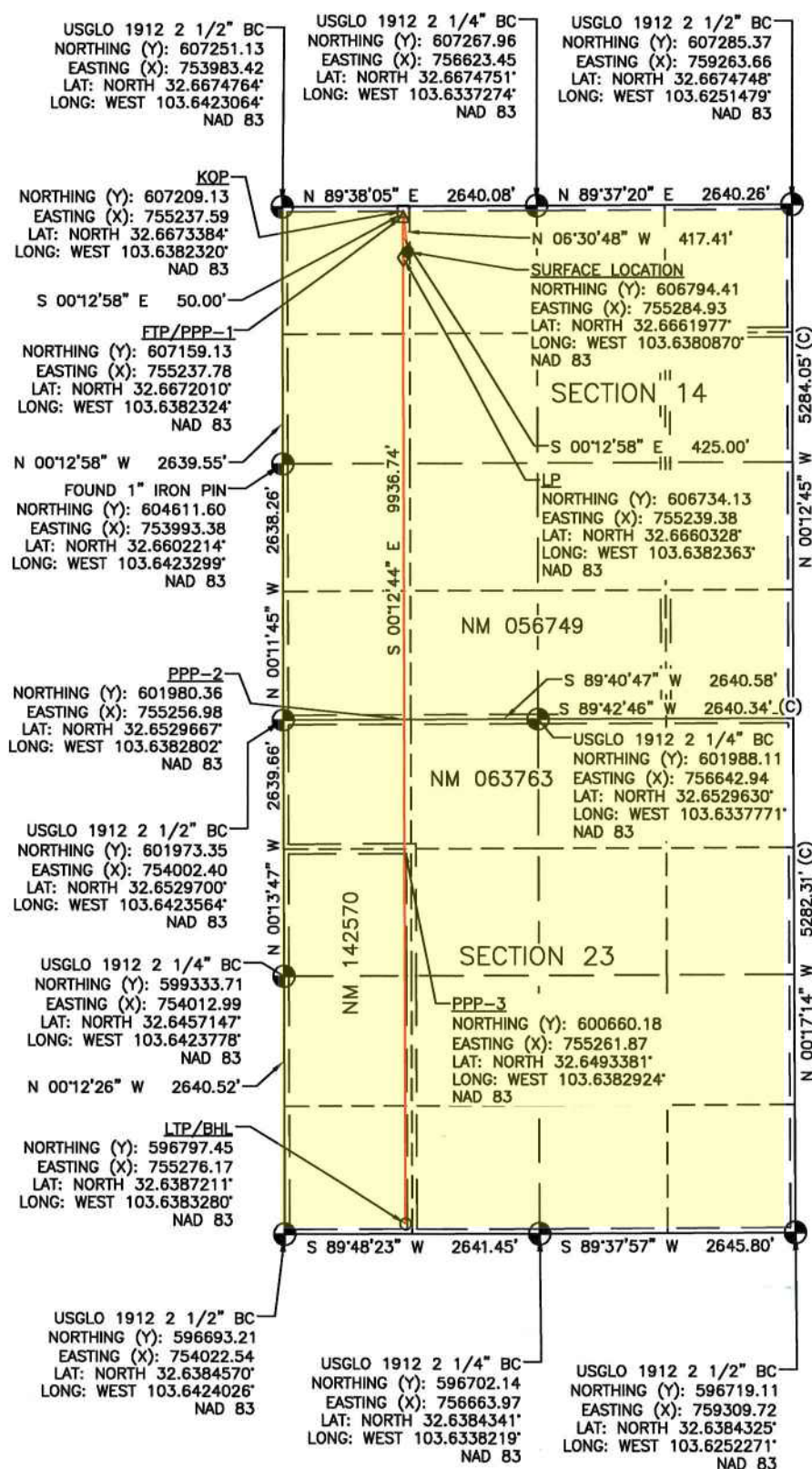
PLAT REVISED: 9/19/24

NOTE: BEARINGS AND DISTANCES SHOWN ARE REFERENCED TO THE NEW MEXICO COORDINATE SYSTEM, EAST ZONE, NAD 83, UNLESS OTHERWISE NOTED

**LEGEND:**

- = SURFACE LOCATION (SHL)
- = KICK OFF POINT (KOP)
- △ = FTP/PPP-1
- ◇ = LANDING POINT (LP)
- = LTP/BHL
- ⊙ = FOUND MONUMENT
- (C) = CALCULATED

FOOTAGES		
SHL	465' FNL	1300' FWL
KOP	50' FNL	1254' FWL
FTP/PPP-1	100' FNL	1254' FWL
PPP-2	0' FNL	1255' FWL
PPP-3	1320' FNL	1254' FWL
LP	525' FNL	1254' FWL
LTP/BHL	100' FSL	1254' FWL



C-102  Submit Electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION	Revised July 9, 2024	
		Submittal Type:	<input checked="" type="checkbox"/> Initial Submittal
			<input type="checkbox"/> Amended Report
		<input type="checkbox"/> As Drilled	

## WELL LOCATION INFORMATION

API Number	Pool Code 27230	Pool Name
Property Code	Property Name SAPPHIRE FEDERAL COM	Well Number 603H
OGRID No. 330396	Operator Name AVANT OPERATING, LLC	Ground Level Elevation 3691.3
Surface Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input type="checkbox"/> Federal		Mineral Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input type="checkbox"/> Federal

## Surface Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
C	14	19 S	33 E		465 FNL	1320 FWL	32.6661978° N	103.6380210° W	LEA

## Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
N	23	19 S	33 E		100 FSL	2178 FWL	32.6387130° N	103.6353265° W	LEA

Dedicated Acres 1280	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
Order Numbers.	Well setbacks are under Common Ownership: <input type="checkbox"/> Yes <input type="checkbox"/> No			

## Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
C	14	19 S	33 E		50 FNL	2178 FWL	32.6673379° N	103.6352294° W	LEA

## First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
C	14	19 S	33 E		100 FNL	2178 FWL	32.6672005° N	103.6352299° W	LEA

## Last Take Point (LTP)


UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
N	23	19 S	33 E		100 FSL	2178 FWL	32.6387130° N	103.6353265° W	LEA

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Signature

9/24/2024

Printed Name  
Meghan Twele  
mtwele@outlook.com

E-mail Address

## SURVEYOR CERTIFICATIONS

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.



Signature and Seal of Professional Surveyor

Certificate Number

14831

Date of Survey

5/30/24

9/24/2024

OCD Examiner Hearing 10-3-24

No. 24849

46



## ACREAGE DEDICATION PLATS

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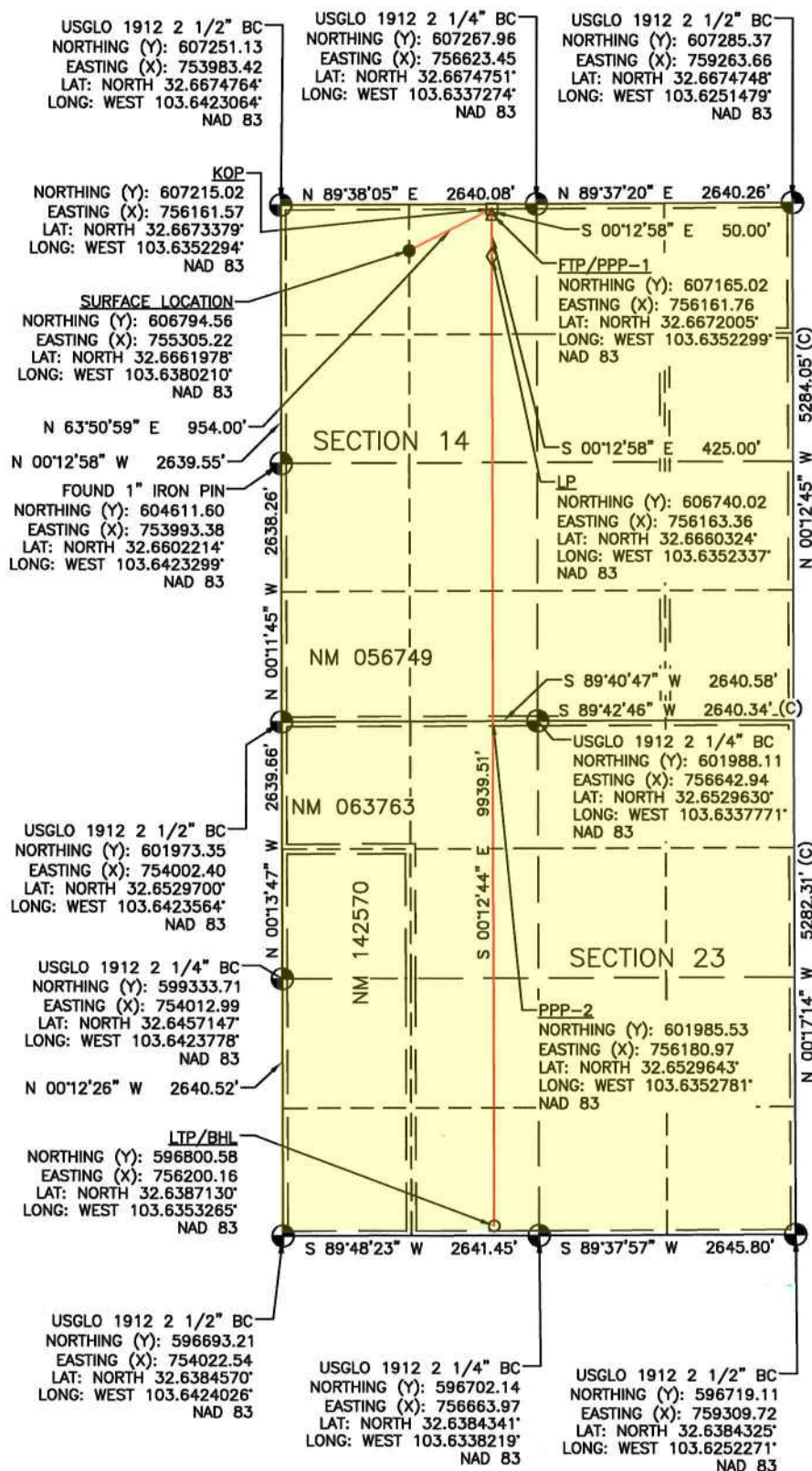
PLAT REVISED: 9/19/24

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FOOTAGES		
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KOP	50' FNL	2178' FWL
FTP/PPP-1	100' FNL	2178' FWL
PPP-2	0' FNL	2178' FWL
LP	525' FNL	2178' FWL
LTP/BHL	100' FSL	2178' FWL



C-102  Submit Electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION	Revised July 9, 2024
	Submittal Type:	<input checked="" type="checkbox"/> Initial Submittal
		<input type="checkbox"/> Amended Report
		<input type="checkbox"/> As Drilled

## WELL LOCATION INFORMATION

API Number	Pool Code 27230	Pool Name Gem; Bone Spring, East
Property Code	Property Name SAPPHIRE FEDERAL COM	Well Number 604H
OGRID No. 330396	Operator Name AVANT OPERATING, LLC	Ground Level Elevation 3702.7
Surface Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input type="checkbox"/> Federal		Mineral Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input type="checkbox"/> Federal

## Surface Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
A	14	19 S	33 E		190 FNL	1280 FEL	32.6669526° N	103.6293086° W	LEA

## Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
O	23	19 S	33 E		100 FSL	2178 FEL	32.6387087° N	103.6323018° W	LEA

Dedicated Acres 1280	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
Order Numbers.	Well setbacks are under Common Ownership: <input type="checkbox"/> Yes <input type="checkbox"/> No			

## Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
B	14	19 S	33 E		50 FNL	2178 FEL	32.6673377° N	103.6322258° W	LEA



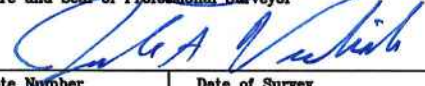
## First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
B	14	19 S	33 E		100 FNL	2178 FEL	32.6672002° N	103.6322263° W	LEA

## Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
O	23	19 S	33 E		100 FSL	2178 FEL	32.6387087° N	103.6323018° W	LEA

Unitized Area or Area of Uniform Interest	Spacing Unit Type <input checked="" type="checkbox"/> Horizontal <input type="checkbox"/> Vertical	Ground Floor Elevation:
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Note: No certificate will be signed in this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



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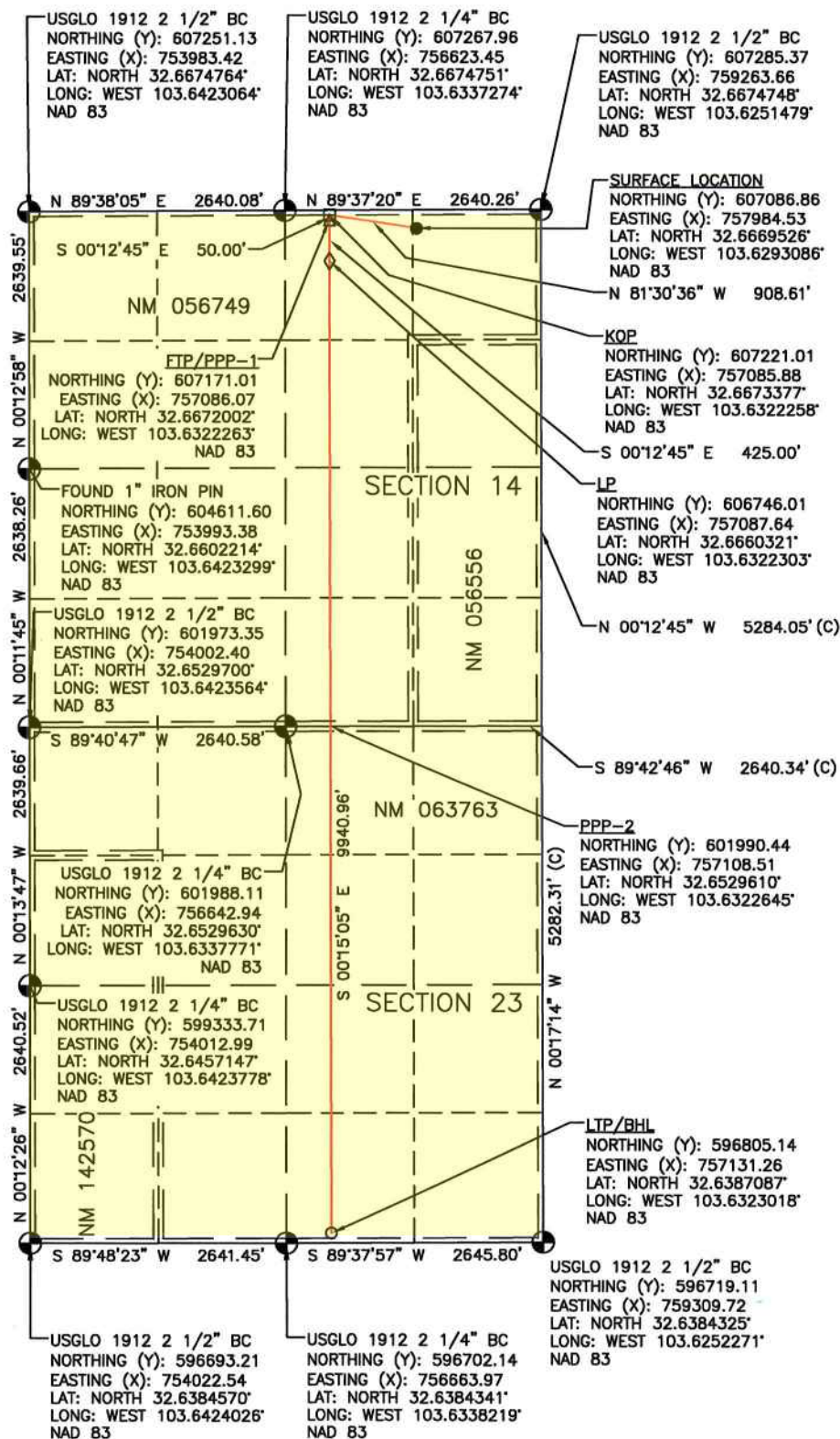
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Plat Revised: 9/18/24

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- = LTP/BHL
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FOOTAGES		
SHL	190' FNL	1280' FEL
KOP	50' FNL	2178' FEL
FTP/PPP-1	100' FNL	2178' FEL
LP	525' FNL	2178' FEL
PPP-2	0' FNL	2178' FEL
LTP/BHL	100' FSL	2178' FEL



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OCD Examiner Hearing 10-3-24

C-102  Submit Electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION	Revised July 9, 2024
	Submittal Type:	<input checked="" type="checkbox"/> Initial Submittal
		<input type="checkbox"/> Amended Report
		<input type="checkbox"/> As Drilled

## WELL LOCATION INFORMATION

API Number	Pool Code 27230	Pool Name Gem; Bone Spring, East
Property Code	Property Name SAPPHIRE FEDERAL COM	Well Number 605H
OGRID No. 330396	Operator Name AVANT OPERATING, LLC	Ground Level Elevation 3702.0
Surface Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input type="checkbox"/> Federal		Mineral Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input type="checkbox"/> Federal

## Surface Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
A	14	19 S	33 E		190 FNL	1260 FEL	32.6669527° N	103.6292435° W	LEA

## Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
P	23	19 S	33 E		100 FSL	1254 FEL	32.6387082° N	103.6293002° W	LEA

Dedicated Acres 1280	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
Order Numbers.	Well setbacks are under Common Ownership: <input type="checkbox"/> Yes <input type="checkbox"/> No			

## Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
A	14	19 S	33 E		50 FNL	1254 FEL	32.6673376° N	103.6292232° W	LEA

## First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
A	14	19 S	33 E		100 FNL	1254 FEL	32.6672002° N	103.6292237° W	LEA

## Last Take Point (LTP)


UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
P	23	19 S	33 E		100 FSL	1254 FEL	32.6387082° N	103.6293002° W	LEA

Unitized Area or Area of Uniform Interest	Spacing Unit Type <input checked="" type="checkbox"/> Horizontal <input type="checkbox"/> Vertical	Ground Floor Elevation:
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Signature 	Date 9/24/2024
Printed Name Meghan Twele	
E-mail Address mtwele@outlook.com	

## SURVEYOR CERTIFICATIONS

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.



Signature and Seal of Professional Surveyor 	
Certificate Number 14831	Date of Survey 4/10/24 9/23/2024

Not to be Examined or Filed until all interests have been consolidated or a non-standard unit has been approved by the division.



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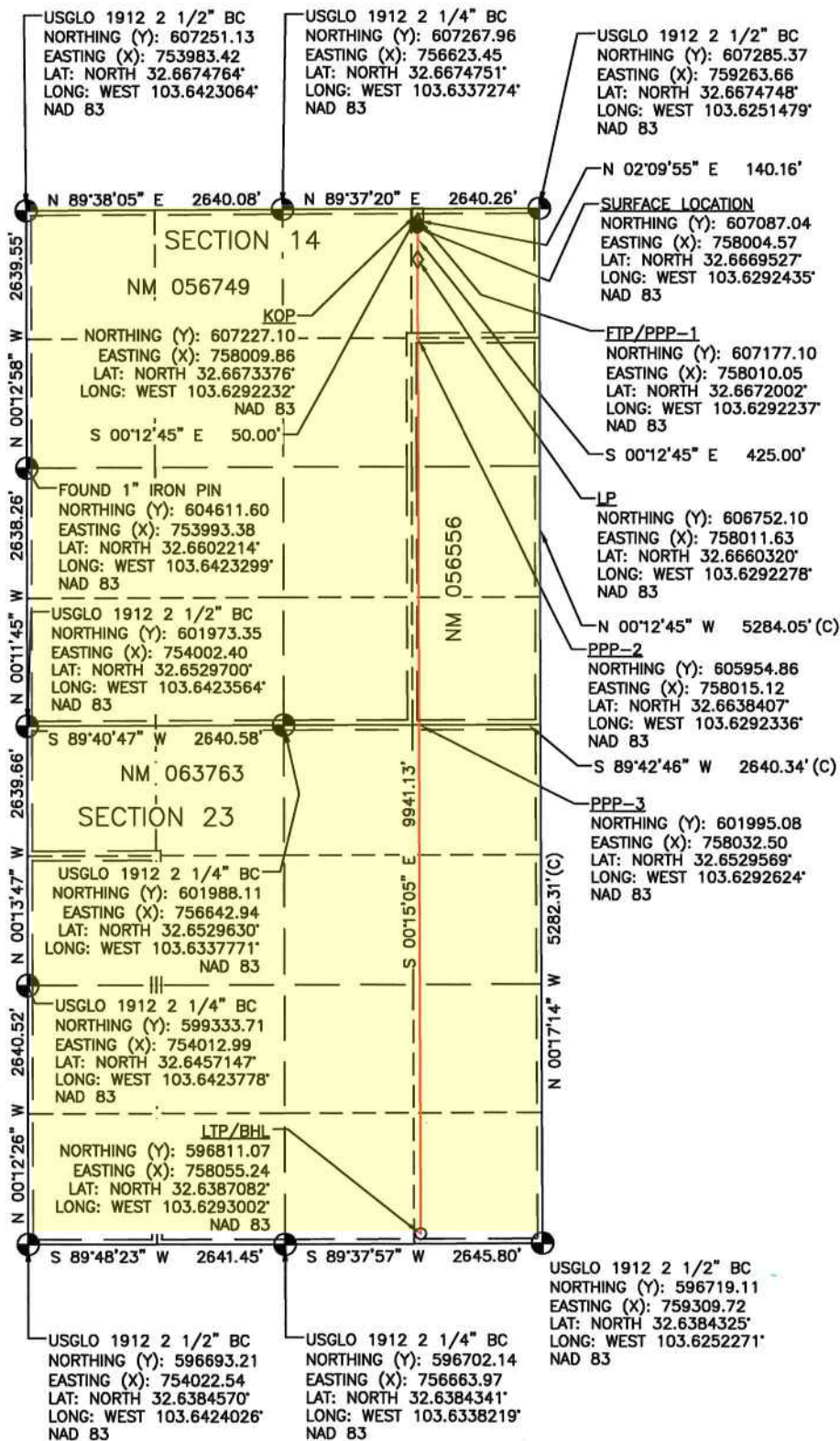
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Plat Revised: 9/18/24

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- △ = FTP/PPP-1
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FOOTAGES		
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KOP	50' FNL	1254' FEL
FTP/PPP-1	100' FNL	1254' FEL
LP	525' FNL	1254' FEL
PPP-2	1322' FNL	1254' FEL
PPP-3	0' FNL	1251' FEL
LTP/BHL	100' FSL	1254' FEL



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OCD Examiner Hearing 10-3-24

<b>C-102</b>  Submit Electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department <b>OIL CONSERVATION DIVISION</b>		Revised July 9, 2024	
	Submittal Type:	<input checked="" type="checkbox"/> Initial Submittal		
		<input type="checkbox"/> Amended Report		
		<input type="checkbox"/> As Drilled		

## WELL LOCATION INFORMATION

API Number	Pool Code 27230	Pool Name Gem; Bone Spring, East
Property Code	Property Name <b>SAPPHIRE FEDERAL COM</b>	Well Number <b>606H</b>
OGRID No. 330396	Operator Name <b>AVANT OPERATING, LLC</b>	Ground Level Elevation <b>3702.1</b>
Surface Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input type="checkbox"/> Federal		Mineral Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input type="checkbox"/> Federal

## Surface Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
A	14	19 S	33 E		190 FNL	1240 FEL	32.6669528° N	103.6291785° W	LEA

## Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
P	23	19 S	33 E		100 FSL	330 FEL	32.6387076° N	103.6262986° W	LEA

Dedicated Acres 1280	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
Order Numbers.	Well setbacks are under Common Ownership: <input type="checkbox"/> Yes <input type="checkbox"/> No			

## Kick Off Point (KOP)

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## First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
A	14	19 S	33 E		100 FNL	330 FEL	32.6672000° N	103.6262212° W	LEA

## Last Take Point (LTP)


UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
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Signature  Date 9/24/2024

Printed Name  
Meghan Twele

E-mail Address  
mtwele@outlook.com

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Signature and Seal of Professional Surveyor

Certificate Number

14831

Date of Survey

4/10/24

9/23/2024

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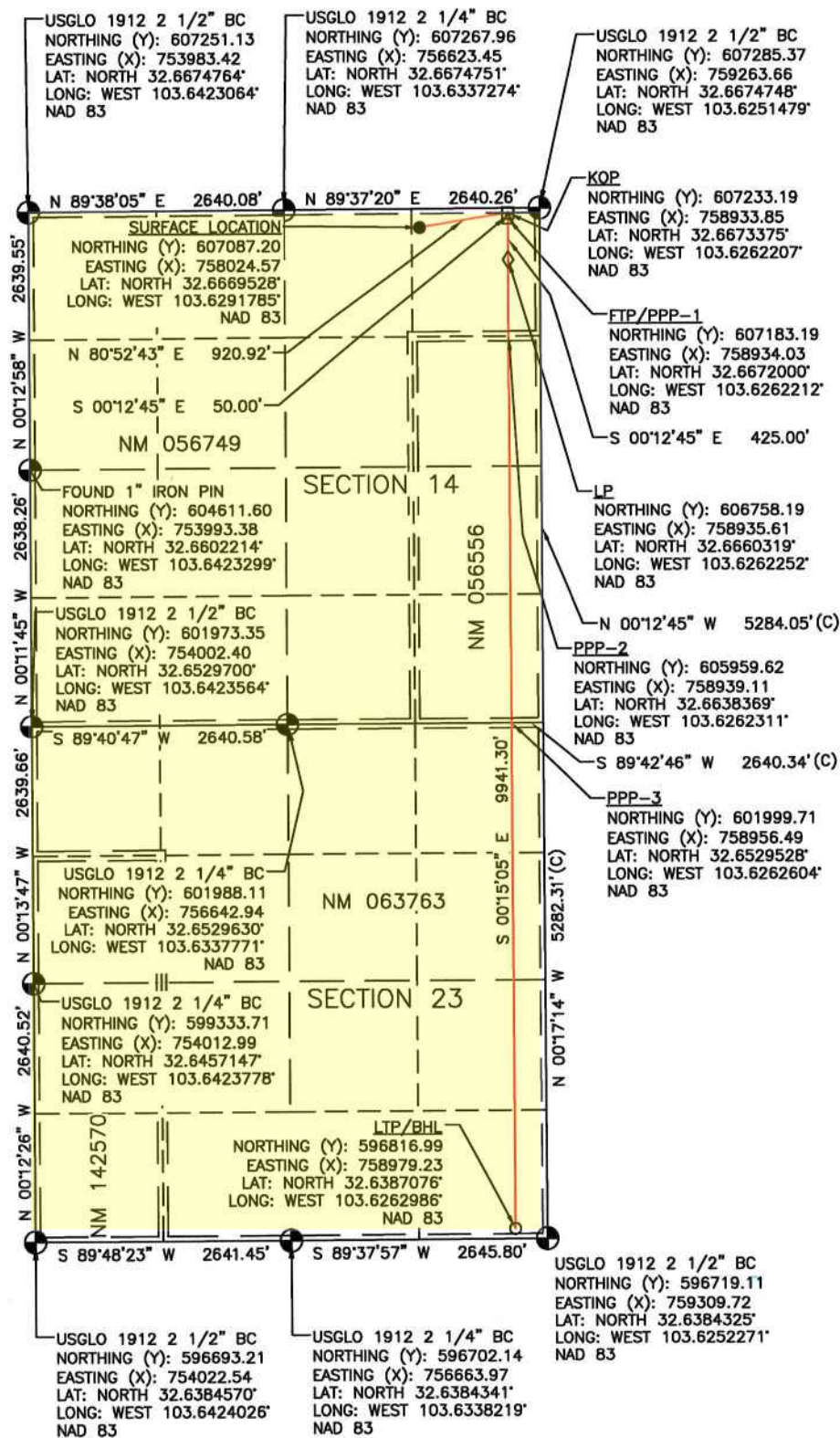
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Plat Revised: 9/18/24

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PPP-2	1324' FNL	330' FEL
PPP-3	0' FNL	330' FEL
LTP/BHL	100' FSL	330' FEL



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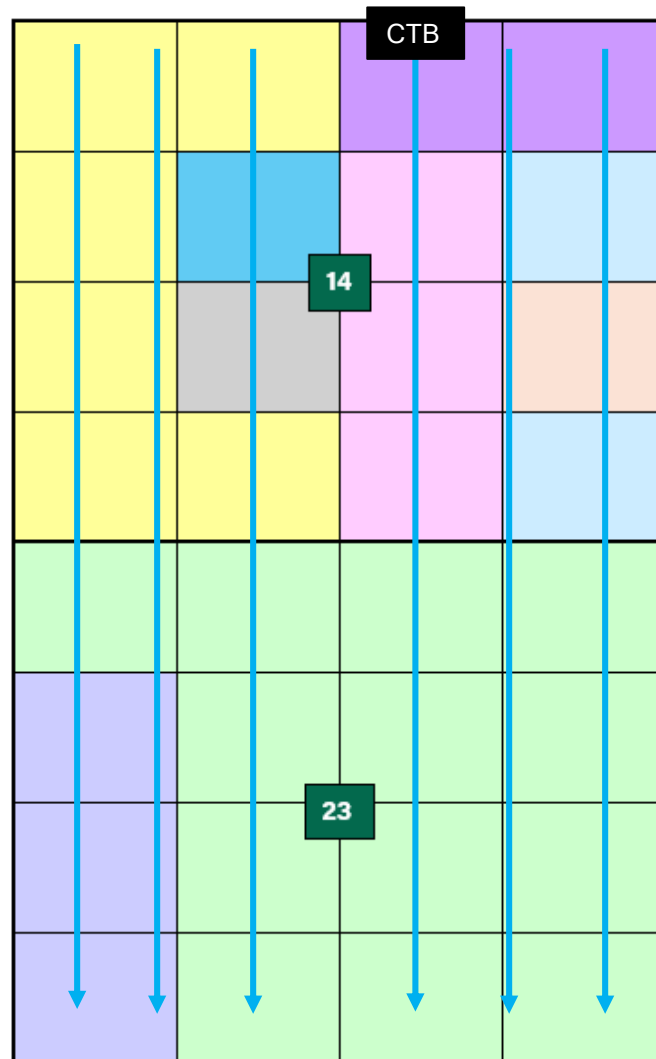
OCD Examiner Hearing 10-3-24

Sapphire 14 Federal Com  
 #301H-#306H / #501H-#502H, #513H-#514H, #505H-#506H/ #601H-#606H

Avant Operating, LLC  
 Case No. 24849  
 Exhibit A-4



## Tract Map with approx. well locations and Pool Codes



Tract	Type	Lease
1	FED	NMNM 056556
2	FED	NMNM 056556
3	FED	NMNM 056749
4	FED	NMNM 056749
5	FED	NMNM 056749
6	FED	NMNM 056749
7	FED	NMNM 056749
8	FED	NMNM 063763
9	FED	NMNM 142570

### FIRST BONE SPRING

Well Name	Pool	Pool Code
Sapphire Federal Com #301H	Gem; Bone Spring, East Pool	27230
Sapphire Federal Com #302H	Gem; Bone Spring, East Pool	27230
Sapphire Federal Com #303H	Gem; Bone Spring, East Pool	27230
Sapphire Federal Com #304H	Gem; Bone Spring, East Pool	27230
Sapphire Federal Com #305H	Gem; Bone Spring, East Pool	27230
Sapphire Federal Com #306H	Gem; Bone Spring, East Pool	27230

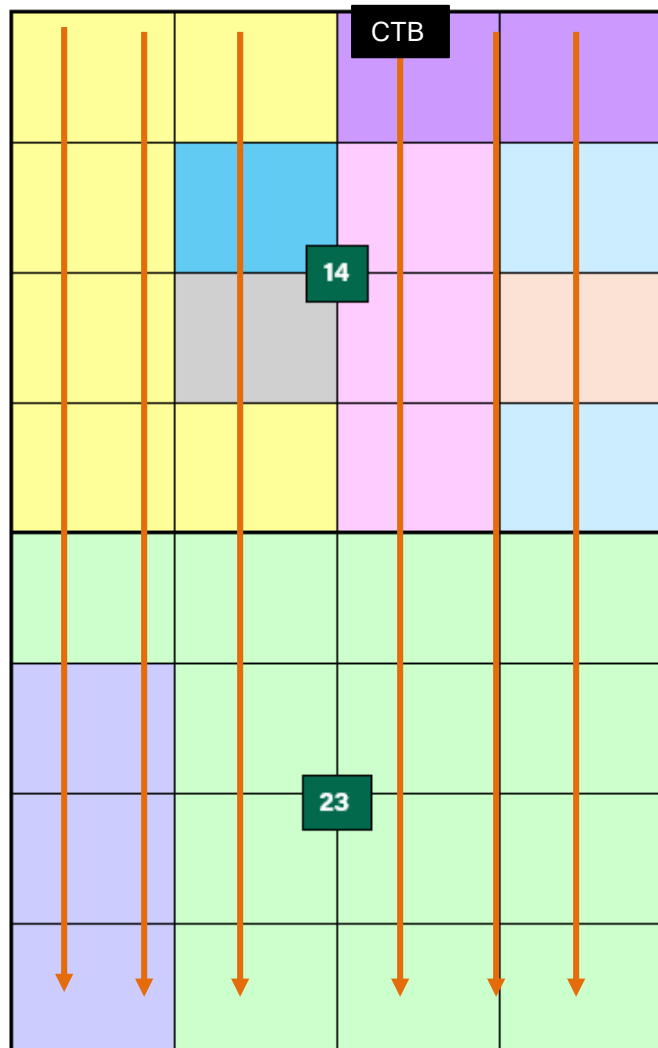


Sapphire 14 Federal Com  
 #301H-#306H / #501H-#502H, #513H-#514H, #505H-#506H/ #601H-#606H

Avant Operating, LLC  
 Case No. 24849  
 Exhibit A-4



## Tract Map with approx. well locations and Pool Codes



Tract	Type	Lease
1	FED	NMNM 056556
2	FED	NMNM 056556
3	FED	NMNM 056749
4	FED	NMNM 056749
5	FED	NMNM 056749
6	FED	NMNM 056749
7	FED	NMNM 056749
8	FED	NMNM 063763
9	FED	NMNM 142570

### SECOND BONE SPRING

Well Name	Pool	Pool Code
Sapphire Federal Com #501H	Gem; Bone Spring, East Pool	27230
Sapphire Federal Com #502H	Gem; Bone Spring, East Pool	27230
Sapphire Federal Com #513H	Gem; Bone Spring, East Pool	27230
Sapphire Federal Com #514H	Gem; Bone Spring, East Pool	27230
Sapphire Federal Com #505H	Gem; Bone Spring, East Pool	27230
Sapphire Federal Com #506H	Gem; Bone Spring, East Pool	27230





Sapphire 14 Federal Com

#301H-#306H / #501H-#502H, #513H-#514H, #505H-#506H/ #601H-#606H

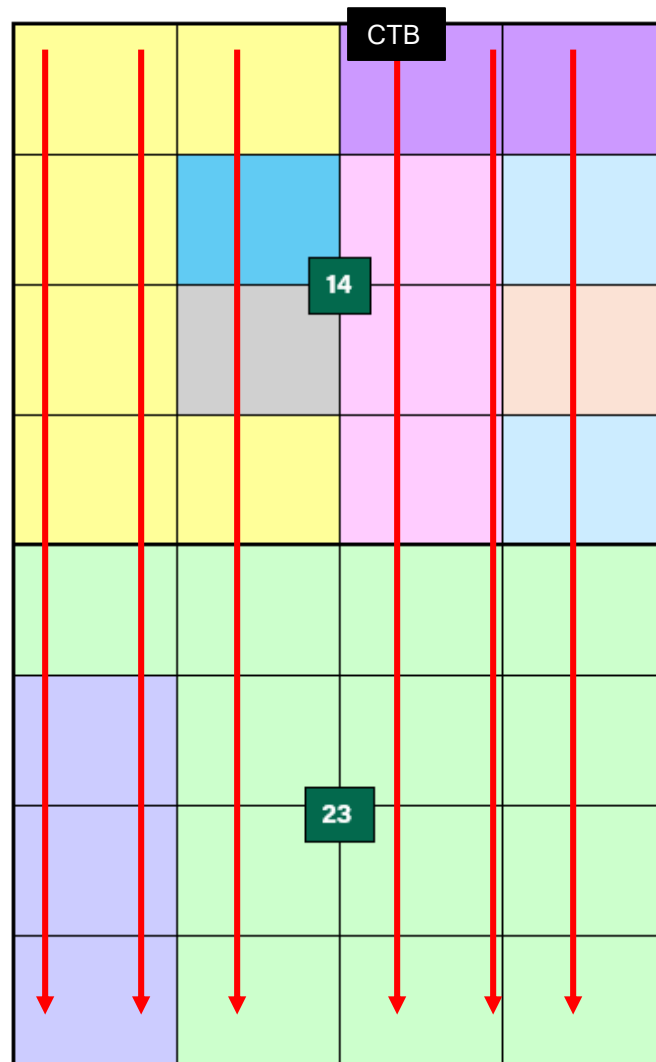
Avant Operating, LLC

Case No. 24849

Exhibit A-4



## Tract Map with approx. well locations and Pool Codes



Tract	Type	Lease
1	FED	NMNM 056556
2	FED	NMNM 056556
3	FED	NMNM 056749
4	FED	NMNM 056749
5	FED	NMNM 056749
6	FED	NMNM 056749
7	FED	NMNM 056749
8	FED	NMNM 063763
9	FED	NMNM 142570

### THIRD BONE SPRING

Well Name	Pool	Pool Code
Sapphire Federal Com #601H	Gem; Bone Spring, East Pool	27230
Sapphire Federal Com #602H	Gem; Bone Spring, East Pool	27230
Sapphire Federal Com #603H	Gem; Bone Spring, East Pool	27230
Sapphire Federal Com #604H	Gem; Bone Spring, East Pool	27230
Sapphire Federal Com #605H	Gem; Bone Spring, East Pool	27230
Sapphire Federal Com #606H	Gem; Bone Spring, East Pool	27230



Sapphire 14 Federal Com  
 #301H-#306H / #501H-#502H, #513H-#514H, #505H-#506H/ #601H-#606H

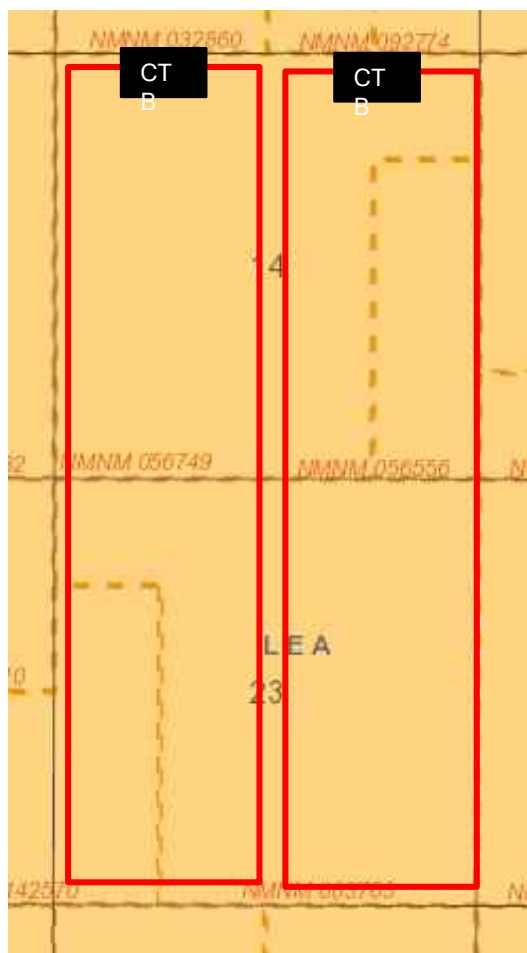
Avant Operating, LLC  
 Case No. 24849  
 Exhibit A-4 continued



## *NSU reduces surface facilities and surface impacts*

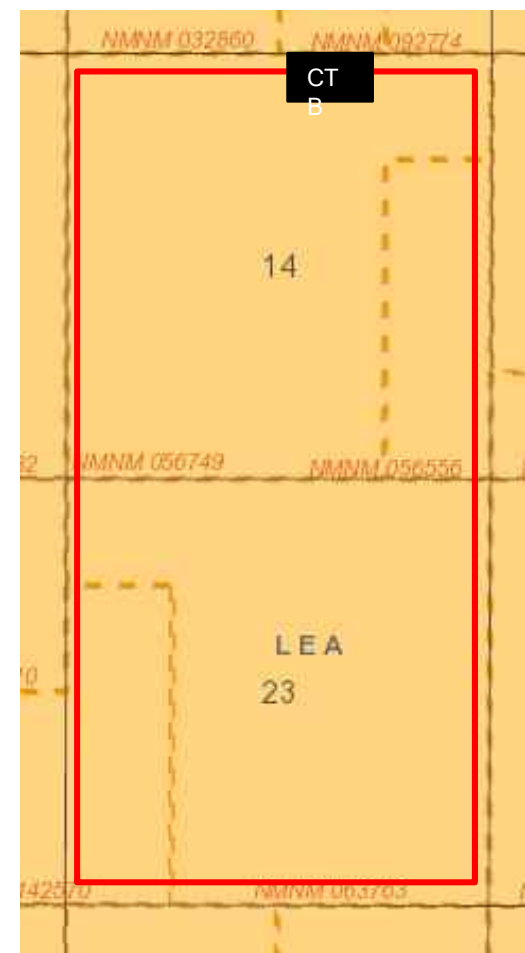
### STANDARD UNIT DEVELOPMENT

2 CTBs



### NON-STANDARD UNIT DEVELOPMENT

1 CTBs



## Non-Standard Unit Notice

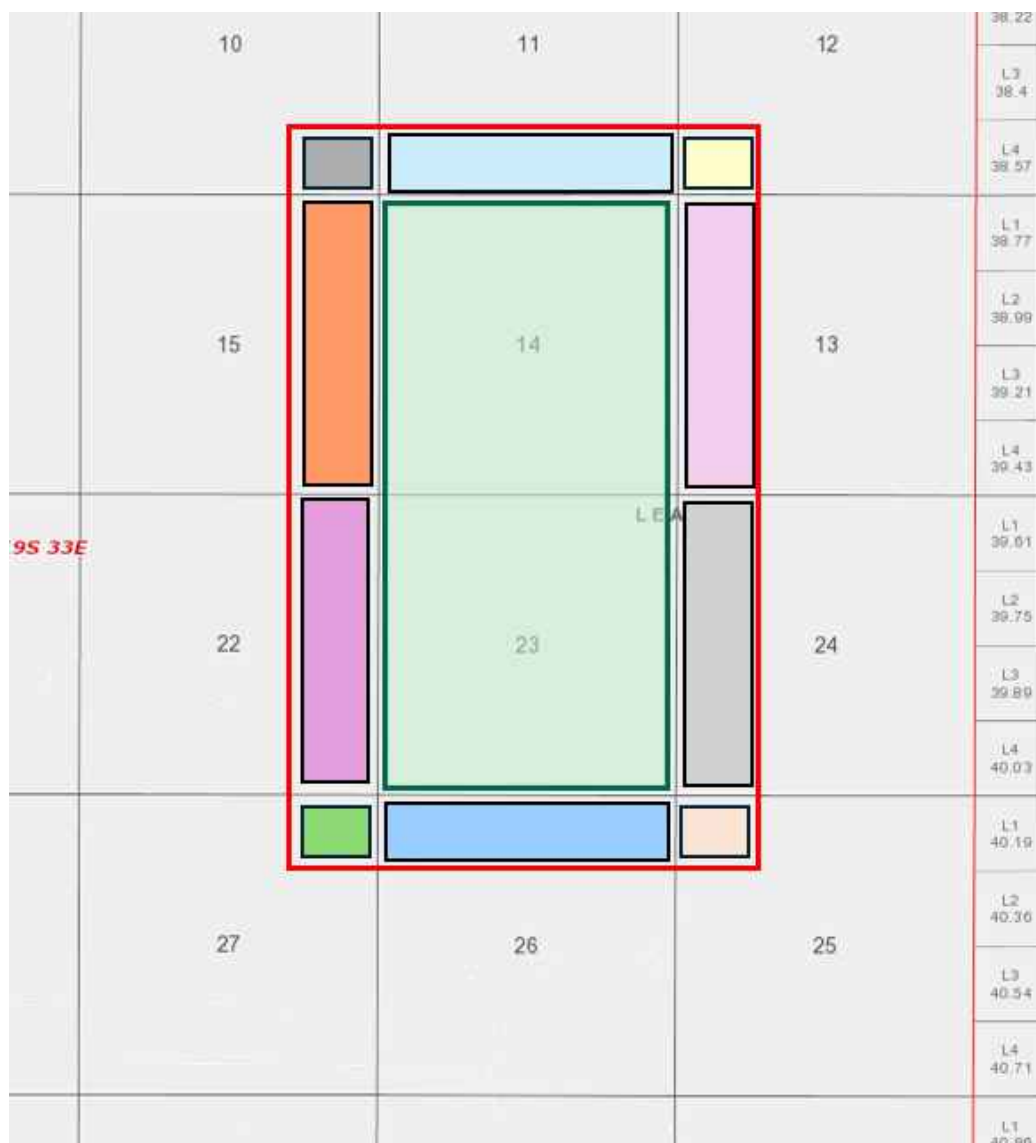
Sapphire 14 Federal Com

#301H-#306H / #501H-#502H, #513H-#514H, #505H-#506H/ #601H-#606H

Avant Operating, LLC

Case No. 24849

Exhibit A-4 Continued



Notice List Outline

LANDS	OWNER
T19S-R33E Sec 12	Permian Resources (OPR)
T19S-R33E Sec 13	Permian Resources (OPR)
T19S-R33E Sec 22	Raybaw Operating, LLC
T19S-R33E Sec 24	Magnum Hunter Production Inc. (RT Owner)
T19S-R33E Sec 25	Coterra Energy
T19S-R33E Sec 25	Magnum Hunter Production Inc. (RT Owner)
T19S-R33E Sec 26	Cimarex Energy Co. (Unit OPR)
T19S-R33E Sec 26	Magnum Hunter Production Inc. (RT Owner)
T19S-R33E Sec 27	Devon Energy Production Company (RT Owner)
T19S-R33E Sec 27	MEC Development LTD (RT Owner)
T19S-R33E Sec 27	Occidental Permian LP
T19S-R33E Sec 27	Raybaw Operating, LLC
T19S-R33E Sec 10	Permian Resources (OPR)
T19S-R33E Sec 11	Earthstone Permian, LLC (OPR / RT OWNER)
T19S-R33E Sec 11	Eau Rouge, LLC (RT Owner)
T19S-R33E Sec 11	Maverick Oil & Gas Corp (RT Owner)
T19S-R33E Sec 11	Oxy USA, Inc (RT Owner)
T19S-R33E Sec 11	PXP Producing Co LLC (RT Owner)
T19S-R33E Sec 11	Burlington Resources Oil & Gas Company (RT Owner)
T19S-R33E Sec 15	COG Operating, LLC (OPR)



OCD Examiner Hearing 10-3-24

AVANT OPERATING, LLC

11



Sapphire 14 Federal Com  
 #301H-#306H / #501H-#502H, #513H-#514H, #505H-#506H/ #601H-#606H

Avant Operating, LLC  
 Case No. 24849  
 Exhibit A-5



ALL of Sections 14 and 23, Township 19 South, Range 33 East, N.M.P.M., Lea County, New Mexico

## Summary of Interests and Working Interest Owners Committed:

UNIT BREAKOUT BY OWNER	Owner Type	NMA	Unit WI	Tract No.	Status
Legion Production Partners, LLC	WI	477.18	0.3609	1, 2, 3, 4, 5, 6, 7, 8, 9	JOA-Committed
Double Cabin Minerals, LLC	WI	95.42	0.0662	1, 2, 3, 4, 5, 6, 7, 8, 9	JOA-Committed
Cibolo Resources, LLC	WI	94.65	0.0739	1, 2, 3, 4, 5, 6, 7, 8, 9	JOA-Committed
T.H. McElvain Oil & Gas LLLP	WI	47.33	0.0370	1, 2, 3, 4, 5, 6, 7, 8, 9	JOA-Committed
WTI Energy Partners LLC	WI	0.36	0.0003	4	JOA-Committed
Lone Oak Capital LLC	WI	0.18	0.0001	4	JOA-Committed
Ellipsis Oil & Gas Inc.	WI	7.50	0.0059	1, 2	JOA-Committed
Gregory J. Nibert and Carolyn S. Nibert, Co-Trustees of the DJS Trust Established under Trust Agreement dated 9/12/2005, as amended and restated	WI	12.00	0.0094	1, 2	JOA-Committed
Innoventions Inc.	WI	2.40	0.0019	1, 2	JOA-Committed
Williamson Enterprises	WI	1.88	0.0015	1, 2	JOA-Committed
Nuevo Seis Limited Partnership	WI	1.13	0.0009	1, 2, 4	JOA-Committed
Yates Energy Corporation	WI	23.87	0.0373	8	JOA-Committed

**TOTAL: 1041.1813 80.8345%**

*\*Avant Operating, LLC, Legion Production Partners, LLC and Double Cabin Minerals, LLC are all Avant-controlled entities*



Sapphire 14 Federal Com  
 #301H-#306H / #501H-#502H, #513H-#514H, #505H-#506H/ #601H-#606H

Avant Operating, LLC  
 Case No. 24849  
 Exhibit A-5 continued



ALL of Sections 14 and 23, Township 19 South, Range 33 East, N.M.P.M., Lea County, New Mexico

### Summary of Interests and Working Interest Owners to be Pooled:

UNIT BREAKOUT BY OWNER	Owner Type	NMA	Unit WI	Tract No.	Status
Avant Operating, LLC	WI	277.29	0.2131	1, 2, 3, 4, 5, 6, 7, 8, 9	<b>OPERATOR</b>
Legion Production Partners, LLC	WI	477.18	0.3609	1, 2, 3, 4, 5, 6, 7, 8, 9	JOA-Committed
Double Cabin Minerals, LLC	WI	95.42	0.0662	1, 2, 3, 4, 5, 6, 7, 8, 9	JOA-Committed
Cibolo Resources, LLC	WI	94.65	0.0739	1, 2, 3, 4, 5, 6, 7, 8, 9	JOA-Committed
T.H. McElvain Oil & Gas LLLP	WI	47.33	0.0370	1, 2, 3, 4, 5, 6, 7, 8, 9	JOA-Committed
Devon Energy Production Company, L.P.	WI	3.33	0.0026	4	Uncommitted - Compulsory Pool
Nuevo Seis Limited Partnership	WI	1.13	0.0009	1, 2, 4	JOA-Committed
Ball Oil and Gas, LLC	WI	0.22	0.0002	4	JOA-Committed
Community Minerals, LLC	WI	0.36	0.0003	4	Uncommitted - Compulsory Pool
James K. Lusk and Martha Lusk Trust, James K. Lusk, Trustee	WI	0.22	0.0002	4	Uncommitted - Compulsory Pool
WTI Energy Partners LLC	WI	0.36	0.0003	4	JOA-Committed
Lone Oak Capital LLC	WI	0.18	0.0001	4	JOA-Committed
Winn Investments, Inc.	WI	2.40	0.0019	1, 2	Uncommitted - Compulsory Pool
Earthstone Permian, LLC	WI	24.19	0.0189	1	Uncommitted - Compulsory Pool
Ellipsis Oil & Gas Inc.	WI	7.50	0.0059	1, 2	JOA-Committed

Highlighted = Parties to be Pooled

Avant entities = 66.3979% Working Interest

*\*Avant Operating, LLC, Legion Production Partners, LLC and Double Cabin Minerals, LLC are all Avant-controlled entities*



Sapphire 14 Federal Com  
 #301H-#306H / #501H-#502H, #513H-#514H, #505H-#506H/ #601H-#606H

Avant Operating, LLC  
 Case No. 24849  
 Exhibit A-5 continued



ALL of Sections 14 and 23, Township 19 South, Range 33 East, N.M.P.M., Lea County, New Mexico

### Summary of Interests and Working Interest Owners to be Pooled (continued):

UNIT BREAKOUT BY OWNER	Owner Type	NMA	Unit WI	Tract No.	Status
Gregory J. Nibert and Carolyn S. Nibert, Co-Trustees of the DJS Trust Established under Trust Agreement dated 9/12/2005, as amended and restated	WI	12.00	0.0094	1, 2	JOA-Committed
Innoventions Inc.	WI	2.40	0.0019	1, 2	JOA-Committed
Williamson Enterprises	WI	1.88	0.0015	1, 2	JOA-Committed
Hutchings Oil Company	WI	11.10	0.0087	1, 2	Uncommitted - Compulsory Pool
MCM Permian, LLC	WI	5.69	0.0044	8	now PBEX
MCM Exploration Company, LLC	WI	2.85	0.0022	8	now PBEX
Voyage Energy, LP	WI	0.54	0.0004	8	now PBEX
S.E.S. Investments, Ltd	WI	0.50	0.0004	8	now PBEX
First Southern Funding, LLC	WI	0.50	0.0004	8	now PBEX
Red River Holdings, LLC	WI	0.53	0.0004	8	now PBEX
TMT Energy Resources, Inc.	WI	0.50	0.0004	8	now PBEX
PBEX, LLC	WI	0.28	0.0002	8	Uncommitted - Compulsory Pool
Capco Resource Corporation	WI	2.60	0.0020	8	Uncommitted - Compulsory Pool
Yates Energy Corporation	WI	23.87	0.0373	8	JOA-Committed
MRC Delaware Resources, LLC	WI	183.01	0.1430	8	Uncommitted - Compulsory Pool

Highlighted = Parties to be Pooled

Avant entities = 66.3979% Working Interest

*\*Avant Operating, LLC, Legion Production Partners, LLC and Double Cabin Minerals, LLC are all Avant-controlled entities*





Sapphire 14 Federal Com

#301H-#306H / #501H-#502H, #513H-#514H, #505H-#506H/ #601H-#606H

Avant Operating, LLC

Case No. 24849

Exhibit A-5 continued



ALL of Sections 14 and 23, Township 19 South, Range 33 East, N.M.P.M., Lea County, New Mexico

## ORRI Owners to be Pooled:

ORRI Owner	Tract No.
Legion Production Partners, LLC	1, 2, 8, 9
Avant Operating, LLC	1, 2, 8, 9
Double Cabin Minerals, LLC	1, 2, 8, 9
AmeriPermian Holdings, LLC	3, 4, 5, 6, 7,
COG Operating LLC	1, 2, 3, 4, 5, 6, 7
Concho Oil & Gas LLC	3, 4, 5, 6, 7
Innoventions Inc.	1, 2
Cavin Trust, Sealy H. Cavin, Jr., Synda S. Cavin, and their successors, as Trustees under Trust Agreement dated 8/28/2013	1, 2
Bob G. Howell	1, 2
Lawrence Andersen	1, 2
Donna Andersen	1, 2
Clayton Andersen	1, 2
Show Goat Capital, LP	1, 2
Wing Resources VI, LLC	1, 2
Elk Range Royalties II, LP	1, 2
McMullen Minerals II LP	8
Pegasus Resources II, LLC	8
Colgate Royalties, LP	1
Jalapeno Corporation	8
Grewal (Royalty) LLC	8
SMP Sidecar Tital Mineral Holdings, LP	8
SMP Titan Mineral Holdings, LP	8
MSH Family Real Estate Partnership II, LLC	8
SMP Titan Flex, LP	8
Pegasus Resources, LLC	8
Chad Barbe	8
Oline E. Groves	8





June 27, 2024  
resent via email 7.22.2024

Ball Oil & Gas LLC  
P.O. Box 1401  
Roswell, NM 88202-1401

RE: Sapphire 14 Fed Com 301H, 302H, 303H 304H, 305H, 306H  
501H, 502H, 505H, 506H, 513H, 514H,  
601H, 602H, 603H, 604H, 605H, 606H  
ALL of Sections 14 & 23, Township 19 South, Range 33 East  
Lea County, New Mexico

Dear Mr. Ball:

Earlier this year, Avant Operating, LLC ("Avant") proposed our two Sapphire Units separately, one covering the E2 and one covering the W2 640-acres. We have voluntarily dismissed our Compulsory Pooling hearing on June 13, 2024, so that we may pursue a non-standard 1280-acre unit. Please note that there are NO changes in Avant's below development plan or AFE costs, just the proposed unit size.

Given the above, Avant hereby proposes to drill and complete the Sapphire 14 Fed Com 301H, 302H, 303H 304H, 305H, 306H, 501H, 502H, 505H, 506H, 513H, 514H, 601H, 602H, 603H, 604H, 605H, 606H wells in Sections 14 and 23, Township 19 South, Range 33 East, Lea County, New Mexico, to test the Bone Spring Formation.

In connection with the above, please note the following:

- The estimated cost of drilling, testing, completing, and equipping of each d well and CTB is itemized on the enclosed Authority for Expenditure ("AFE") dated June 4, 2024.
- **Sapphire 14 Fed Com #301H:** to be drilled from a legal location with a proposed surface hole location of Section 14-19S-33E at 425' FNL, 1280' FWL and a proposed last take point and bottom hole location of Section 23-19S-33E at 100' FSL and 330' FWL . The Well will have a targeted interval within the Bone Spring formation at a depth of approximately 9,300' TVD and will be drilled horizontally to a Measured Depth of approximately 19,573'.
- **Sapphire 14 Fed Com #302H:** to be drilled from a legal location with a proposed surface hole location of Section 14-19S-33E at 425' FNL, 1300' FWL and a proposed last take point and bottom hole location of Section 23-19S-33E at 100' FSL and 1254' FWL . The Well will have a targeted interval within the Bone Spring formation at a depth of approximately 9,300' TVD and will be drilled horizontally to a Measured Depth of approximately 19,573'.
- **Sapphire 14 Fed Com #303H:** to be drilled from a legal location with a proposed surface hole location of Section 14-19S-33E at 425' FNL, 1320' FWL and a proposed last take point and bottom

Avant Operating, LLC | 1515 Wynkoop Street, Suite #700 | Land Department | Denver, CO 80202



hole location of Section 23-19S-33E at 100' FSL and 2178' FWL . The Well will have a targeted interval within the Bone Spring formation at a depth of approximately 9,300' TVD and will be drilled horizontally to a Measured Depth of approximately 19,573'.

- **Sapphire 14 Fed Com #304H:** to be drilled from a legal location with a proposed surface hole location of Section 14-19S-33E at 375' FNL, 1280' FEL and a proposed last take point and bottom hole location of Section 23-19S-33E at 100' FSL and 2178' FWL . The Well will have a targeted interval within the Bone Spring formation at a depth of approximately 9,300' TVD and will be drilled horizontally to a Measured Depth of approximately 19,573'.
- **Sapphire 14 Fed Com #305H:** to be drilled from a legal location with a proposed surface hole location of Section 14-19S-33E at 375' FNL, 1260' FEL and a proposed last take point and bottom hole location of Section 23-19S-33E at 100' FSL and 1254' FEL . The Well will have a targeted interval within the Bone Spring formation at a depth of approximately 9,300' TVD and will be drilled horizontally to a Measured Depth of approximately 19,573'.
- **Sapphire 14 Fed Com #306H:** to be drilled from a legal location with a proposed surface hole location of Section 14-19S-33E at 375' FNL, 1240' FEL and a proposed last take point and bottom hole location of Section 23-19S-33E at 100' FSL and 330' FEL . The Well will have a targeted interval within the Bone Spring formation at a depth of approximately 9,300' TVD and will be drilled horizontally to a Measured Depth of approximately 19,573'.
- **Sapphire 14 Fed Com #501H:** to be drilled from a legal location with a proposed surface hole location of Section 14-19S-33E at 265' FNL, 1280' FWL and a proposed last take point and bottom hole location of Section 23-19S-33E at 100' FSL and 330' FWL. The Well will have a targeted interval within the Bone Spring formation at a depth of approximately 10,150' TVD and will be drilled horizontally to a Measured Depth of approximately 20,423'.
- **Sapphire 14 Fed Com #502H:** to be drilled from a legal location with a proposed surface hole location of Section 14-19S-33E at 265' FNL, 1300' FWL and a proposed last take point and bottom hole location of Section 23-19S-33E at 100' FSL, 1,254' FWL. The Well will have a targeted interval within the Bone Spring formation at a depth of approximately 10,150' TVD and will be drilled horizontally to a Measured Depth of approximately 20,423'.
- **Sapphire 14 Fed Com #505H:** to be drilled from a legal location with a proposed surface hole location of Section 14-19S-33E at 215' FNL, 1430' FEL and a proposed last take point and bottom hole location of Section 23-19S-33E at 100' FSL, 1,254' FEL . The Well will have a targeted interval within the Bone Spring formation at a depth of approximately 10,150' TVD and will be drilled horizontally to a Measured Depth of approximately 20,423'.
- **Sapphire 14 Fed Com #506H:** to be drilled from a legal location with a proposed surface hole location of Section 14-19S-33E at 215' FNL, 1,410' FEL and a proposed last take point and bottom hole location of Section 23-19S-33E at 100' FSL and 1,254' FEL. The Well will have a targeted interval within the Bone Spring formation at a depth of approximately 10,150' TVD and will be drilled horizontally to a Measured Depth of approximately 20,423'.





- **Sapphire 14 Fed Com #513H:** to be drilled from a legal location with a proposed surface hole location of Section 14-19S-33E at 265' FNL, 1310' FWL and a proposed last take point and bottom hole location of Section 23-19S-33E at 100' FSL, 2,178' FWL. The Well will have a targeted interval within the Bone Spring formation at a depth of approximately 10,150' TVD and will be drilled horizontally to a Measured Depth of approximately 20,423'.
- **Sapphire 14 Fed Com #514H:** to be drilled from a legal location with a proposed surface hole location of Section 14-19S-33E at 215' FNL, 1450' FEL and a proposed last take point and bottom hole location of Section 23-19S-33E at 100' FSL, 2,178' FEL. The Well will have a targeted interval within the Bone Spring formation at a depth of approximately 10,150' TVD and will be drilled horizontally to a Measured Depth of approximately 20,423'.
- **Sapphire 14 Fed Com #601H:** to be drilled from a legal location with a proposed surface hole location of Section 14-19S-33E at 465' FNL and 1,280' FWL and a proposed last take point and bottom hole location of Section 23-19S-33E at 100' FSL, 330' FWL . The Well will have a targeted interval within the Bone Spring formation at a depth of approximately 10,700' TVD and will be drilled horizontally to a Measured Depth of approximately 20,973'.
- **Sapphire 14 Fed Com #602H:** to be drilled from a legal location with a proposed surface hole location of Section 14-19S-33E at 465' FNL, 1,300' FWL and a proposed last take point and bottom hole location of Section 23-19S-33E at 100' FSL, 1,254' FWL . The Well will have a targeted interval within the Bone Spring formation at a depth of approximately 10,700' TVD and will be drilled horizontally to a Measured Depth of approximately 20,973'.
- **Sapphire 14 Fed Com #603H:** to be drilled from a legal location with a proposed surface hole location of Section 14-19S-33E at 465' FNL and 1,320' FWL and a proposed last take point and bottom hole location of Section 23-19S-33E at 100' FSL, 2,178' FWL . The Well will have a targeted interval within the Bone Spring formation at a depth of approximately 10,700' TVD and will be drilled horizontally to a Measured Depth of approximately 20,973'.
- **Sapphire 14 Fed Com #604H:** to be drilled from a legal location with a proposed surface hole location of Section 14-19S-33E at 190' FNL and 1,280' FEL and a proposed last take point and bottom hole location of Section 23-19S-33E at 100' FSL and 2,178' FEL . The Well will have a targeted interval within the Bone Spring formation at a depth of approximately 10,700' TVD and will be drilled horizontally to a Measured Depth of approximately 20,973'.
- **Sapphire 14 Fed Com #605H:** to be drilled from a legal location with a proposed surface hole location of Section 14-19S-33E at 190' FNL, 1,260' FEL and a proposed last take point and bottom hole location of Section 23-19S-33E at 100' FSL and 1,254' FEL . The Well will have a targeted interval within the Bone Spring formation at a depth of approximately 10,700' TVD and will be drilled horizontally to a Measured Depth of approximately 20,973'.



- **Sapphire 14 Fed Com #606H:** to be drilled from a legal location with a proposed surface hole location of Section 14-19S-33E at 190' FNL, 1,240' FEL and a proposed last take point and bottom hole location of Section 23-19S-33E at 100' FSL, 330' FEL . The Well will have a targeted interval within the Bone Spring formation at a depth of approximately 10,700' TVD and will be drilled horizontally to a Measured Depth of approximately 20,973'.

Avant reserves the right to modify the locations and drilling plans described above to address topography, cultural or environmental concerns, among other reasons.

Avant is proposing to drill the proposed wells under the terms of a modified 1989 AAPL form of Operating Agreement ("JOA") with the below general provisions, which will be provided at a later date.

- 100%/300%/300% non-consent penalty
- \$10,000/\$1000 drilling and producing monthly overhead rates
- Contract Area of ALL of Section 14-T19S-R33E and ALL of Section 23-T19S-R33E
- Avant Operating Company named as Operator
- This proposed Operating Agreement will supersede any and all existing Operating Agreements as to all depths on all horizontal wells drilled after the effective date of the JOA.

If your election is to participate in the drilling and completion of the wells, please sign and return a copy of the enclosed AFEs within thirty (30) days of receipt of this notice. Please be aware that the enclosed AFEs are only an estimate of costs to be incurred and by electing to participate in the wells, each working interest owner shall be responsible for its proportionate share of all costs incurred.

If you would like to discuss a farmout, an assignment of interest, an acreage trade or other form of agreement for your interests in the Subject Lands, please contact the undersigned. If we do not reach an agreement within thirty (30) days of receipt of these well proposals, Avant will file an application(s) with the New Mexico Oil Conservation Division to compulsory pool your interest into a spacing unit(s) for the proposed wells to promote the development of these lands.

Sincerely,

A handwritten signature in blue ink that reads "T Sarantinos".

Tiffany Sarantinos  
Senior Landman  
Enclosures



**Ball Oil & Gas LLC, hereby elects to:**

\_\_\_\_\_ Participate for its proportionate share of the costs detailed in the enclosed AFE associated with Avant Operating Company's **Sapphire 14 Fed Com #301H** well.

\_\_\_\_\_ Not to participate in the **Sapphire 14 Fed Com #301H** well.

\_\_\_\_\_ Participate for its proportionate share of the costs detailed in the enclosed AFE associated with Avant Operating Company's **Sapphire 14 Fed Com #302H** well.

\_\_\_\_\_ Not to participate in the **Sapphire 14 Fed Com #302H** well.

\_\_\_\_\_ Participate for its proportionate share of the costs detailed in the enclosed AFE associated with Avant Operating Company's **Sapphire 14 Fed Com #303H** well.

\_\_\_\_\_ Not to participate in the **Sapphire 14 Fed Com #303H** well.

\_\_\_\_\_ Participate for its proportionate share of the costs detailed in the enclosed AFE associated with Avant Operating Company's **Sapphire 14 Fed Com #304H** well.

\_\_\_\_\_ Not to participate in the **Sapphire 14 Fed Com #304H** well.

\_\_\_\_\_ Participate for its proportionate share of the costs detailed in the enclosed AFE associated with Avant Operating Company's **Sapphire 14 Fed Com #305H** well.

\_\_\_\_\_ Not to participate in the **Sapphire 14 Fed Com #305H** well.

\_\_\_\_\_ Participate for its proportionate share of the costs detailed in the enclosed AFE associated with Avant Operating Company's **Sapphire 14 Fed Com #306H** well.

\_\_\_\_\_ Not to participate in the **Sapphire 14 Fed Com #306H** well.

\_\_\_\_\_ Participate for its proportionate share of the costs detailed in the enclosed AFE associated with Avant Operating Company's **Sapphire 14 Fed Com #501H** well.

\_\_\_\_\_ Not to participate in the **Sapphire 14 Fed Com #501H** well.

\_\_\_\_\_ Participate for its proportionate share of the costs detailed in the enclosed AFE associated with Avant Operating Company's **Sapphire 14 Fed Com #502H** well.

\_\_\_\_\_ Not to participate in the **Sapphire 14 Fed Com #502H** well.

\_\_\_\_\_ Participate for its proportionate share of the costs detailed in the enclosed AFE associated with Avant Operating Company's **Sapphire 14 Fed Com #505H** well.

\_\_\_\_\_ Not to participate in the **Sapphire 14 Fed Com #505H** well.

\_\_\_\_\_ Participate for its proportionate share of the costs detailed in the enclosed AFE associated with Avant Operating Company's **Sapphire 14 Fed Com #506H** well.

\_\_\_\_\_ Not to participate in the **Sapphire 14 Fed Com #506H** well.

\_\_\_\_\_ Participate for its proportionate share of the costs detailed in the enclosed AFE associated with Avant Operating Company's **Sapphire 14 Fed Com #513H** well.

\_\_\_\_\_ Not to participate in the **Sapphire 14 Fed Com #513H** well.

Avant Operating, LLC | 1515 Wynkoop Street, Suite #700 | Land Department | Denver, CO 80202





\_\_\_\_\_ Participate for its proportionate share of the costs detailed in the enclosed AFE associated with Avant Operating Company's **Sapphire 14 Fed Com #514H** well.

\_\_\_\_\_ Not to participate in the **Sapphire 14 Fed Com #514H** well.

\_\_\_\_\_ Participate for its proportionate share of the costs detailed in the enclosed AFE associated with Avant Operating Company's **Sapphire 14 Fed Com #601H** well.

\_\_\_\_\_ Not to participate in the **Sapphire 14 Fed Com #601H** well.

\_\_\_\_\_ Participate for its proportionate share of the costs detailed in the enclosed AFE associated with Avant Operating Company's **Sapphire 14 Fed Com #602H** well.

\_\_\_\_\_ Not to participate in the **Sapphire 14 Fed Com #602H** well.

\_\_\_\_\_ Participate for its proportionate share of the costs detailed in the enclosed AFE associated with Avant Operating Company's **Sapphire 14 Fed Com #603H** well.

\_\_\_\_\_ Not to participate in the **Sapphire 14 Fed Com #603H** well.

\_\_\_\_\_ Participate for its proportionate share of the costs detailed in the enclosed AFE associated with Avant Operating Company's **Sapphire 14 Fed Com #604H** well.

\_\_\_\_\_ Not to participate in the **Sapphire 14 Fed Com #604H** well.

\_\_\_\_\_ Participate for its proportionate share of the costs detailed in the enclosed AFE associated with Avant Operating Company's **Sapphire 14 Fed Com #605H** well.

\_\_\_\_\_ Not to participate in the **Sapphire 14 Fed Com #605H** well.

\_\_\_\_\_ Participate for its proportionate share of the costs detailed in the enclosed AFE associated with Avant Operating Company's **Sapphire 14 Fed Com #606H** well.

\_\_\_\_\_ Not to participate in the **Sapphire 14 Fed Com #606H** well.

**Ball Oil & Gas LLC**

By: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_



### AUTHORIZATION FOR EXPENDITURE

**AFE: NM0582**

Date: June 04, 2024

Well Name: Sapphire 14 Federal Com #301H

Projected MD/TVD: 19573/9300

Target: 1BS

Spud to TD: 16.8

County: Lea

Lateral Length: 10000

State: NM

Stages: 64

SHL: S14-T19S-R33E 425' FNL, 1280' FWL

Total Proppant (ppf): 2500

BHL: S23-T19S-R33E 100'FSL, 330' FWL

Total Fluid (gal/ft): 3000

#### PROJECT DESCRIPTION:

The proposed AFE is for the Sapphire 14 Federal Com #301H, a 2 section Bone Springs horizontal well to be drilled in Lea County, NM. The well is a 3 string casing design consisting of the following: 17.5" surface hole drilled on Fresh to 1250' and 13.375" 54.5# J-55 BTC casing will be set and cemented in place; 12.25" hole will then be drilled on Brine to 3500' and a string of 9.625" 40# J-55 BTC casing will be set and cemented in place; 8.75" production hole will then be drilled on OBM to 19573' and a string of 5.5" 20# P-110 HC GBCD casing will be set and cemented in place. There will be 10000' of treatable lateral and the completions design will consist of +/-64 stages at 2500 lbs/ft & 3000 gals/ft. AFE includes associated costs for initial gas lift installation.

	<u>TOTAL</u>
<b>DRILLING:</b>	<b>\$3,831,757.11</b>
<b>COMPLETIONS:</b>	<b>\$6,656,201.06</b>
<b>FACILITIES:</b>	<b>\$1,580,000.00</b>
<b>COMPLETED WELL COST:</b>	<b>\$12,067,958.17</b>

#### OPERATOR APPROVAL:



## AUTHORIZATION FOR EXPENDITURE

AFE: NM0582

Date: June 04, 2024

Well Name: Sapphire 14 Federal Com #301H

Projected MD/TVD: 19573/9300

Target: 1BS

Spud to TD: 16.8

County: Lea

Lateral Length: 10000

State: NM

Stages: 64

SHL: S14-T19S-R33E 425' FNL, 1280' FWL

Total Proppant (ppf): 2500

BHL: S23-T19S-R33E 100'FSL, 330' FWL

Total Fluid (gal/ft): 3000

TANGIBLE COSTS			Drilling	Completion	Facility	Total
<b>Tangible Drilling</b>			\$ 763,754	\$ -	\$ -	\$ 763,754
	8400.303	Production Casing	\$ 515,654	\$ -	\$ -	\$ 515,654
	8400.301	Surface Casing	\$ 64,795	\$ -	\$ -	\$ 64,795
	8400.302	Intrm 1&2 Casing	\$ 126,471	\$ -	\$ -	\$ 126,471
	8400.340	Wellhead	\$ 56,835	\$ -	\$ -	\$ 56,835
<b>Tangible Completion</b>			\$ -	\$ 602,713	\$ -	\$ 602,713
	8400.352	Wellhead & Equipment	\$ -	\$ 44,205	\$ -	\$ 44,205
	8325.704	Downhole Artificial Lift Eqpt	\$ -	\$ 350,000	\$ -	\$ 350,000
	8325.705	ESP Equipment/Install	\$ -	\$ 40,000	\$ -	\$ 40,000
	8325.719	Contract Labor Install	\$ -	\$ 15,000	\$ -	\$ 15,000
	8325.702	Tubing	\$ -	\$ 90,000	\$ -	\$ 90,000
	8325.711	Wellhead Equipment	\$ -	\$ 63,508	\$ -	\$ 63,508
<b>Tangible Facility</b>			\$ -	\$ -	\$ 915,100	\$ 915,100
	8355.515	Flare	\$ -	\$ -	\$ 32,000	\$ 32,000
	8355.565	Flowline	\$ -	\$ -	\$ 49,100	\$ 49,100
	8355.555	Pump / Supplies	\$ -	\$ -	\$ 87,200	\$ 87,200
	8355.510	Tanks	\$ -	\$ -	\$ 128,400	\$ 128,400
	8355.525	Containment	\$ -	\$ -	\$ 25,700	\$ 25,700
	8355.530	Compressors	\$ -	\$ -	\$ 11,100	\$ 11,100
	8355.500	Vessels	\$ -	\$ -	\$ 253,200	\$ 253,200
	8355.535	Instrumentation / Meters	\$ -	\$ -	\$ 60,500	\$ 60,500
	8355.550	Overhead Power Material	\$ -	\$ -	\$ 53,100	\$ 53,100
	8355.540	Electrical Supplies	\$ -	\$ -	\$ 68,800	\$ 68,800
	8355.520	PVF	\$ -	\$ -	\$ 146,000	\$ 146,000
<b>TOTAL TANGIBLE COSTS &gt;&gt;&gt;</b>			\$ 763,754	\$ 602,713	\$ 915,100	\$ 2,281,567

INTANGIBLE COSTS			Drilling	Completion	Facility	Total
<b>Intangible Drilling</b>			\$ 3,068,003	\$ -	\$ -	\$ 3,068,003
	8200.102	Drilling - Daywork	\$ 806,307	\$ -	\$ -	\$ 806,307
	8200.113	Damages/Row	\$ 7,894	\$ -	\$ -	\$ 7,894
	8200.164	Solids Control & Closed Loop	\$ 111,542	\$ -	\$ -	\$ 111,542
	8200.103	Drilling - Rig Move	\$ 93,673	\$ -	\$ -	\$ 93,673
	8200.144	Company Supervision	\$ 2,400	\$ -	\$ -	\$ 2,400
	8200.143	Geological Services	\$ 10,112	\$ -	\$ -	\$ 10,112
	8200.168	Roustabout Services	\$ 2,196	\$ -	\$ -	\$ 2,196
	8200.112	Location & Roads, Conductor	\$ 124,415	\$ -	\$ -	\$ 124,415
	8200.124	Equipment Rental	\$ 113,168	\$ -	\$ -	\$ 113,168
	8200.128	Drilling - Directional	\$ 243,572	\$ -	\$ -	\$ 243,572
	8200.116	Drill Bits & BHA	\$ 68,512	\$ -	\$ -	\$ 68,512
	8200.152	Well Control Ins.	\$ 7,894	\$ -	\$ -	\$ 7,894
	8200.167	Consulting Services	\$ 242,291	\$ -	\$ -	\$ 242,291
	8200.149	Legal, Title, Etc	\$ 10,525	\$ -	\$ -	\$ 10,525
	8200.117	Mud & Chemicals	\$ 175,212	\$ -	\$ -	\$ 175,212
	8200.125	Inspection	\$ 45,258	\$ -	\$ -	\$ 45,258
	8200.138	Cementing Services	\$ 199,975	\$ -	\$ -	\$ 199,975
	8200.127	Contract Labor	\$ 27,255	\$ -	\$ -	\$ 27,255
	8200.165	Safety/Environmental	\$ 2,513	\$ -	\$ -	\$ 2,513
	8200.106	Transportation	\$ 92,233	\$ -	\$ -	\$ 92,233
	8200.114	Disposal	\$ 191,556	\$ -	\$ -	\$ 191,556
	8200.162	Mancamp	\$ 45,636	\$ -	\$ -	\$ 45,636
	8200.104	Fuel - Rig	\$ 187,966	\$ -	\$ -	\$ 187,966
	8200.169	Mud-Brine	\$ 25,837	\$ -	\$ -	\$ 25,837
	8200.147	Drilling Overhead	\$ 5,194	\$ -	\$ -	\$ 5,194





## AUTHORIZATION FOR EXPENDITURE

	8200.137	Casing Services	\$ 71,978	\$ -	\$ -	\$ 71,978
	8200.119	Mud-Auxiliary	\$ 31,076	\$ -	\$ -	\$ 31,076
	8200.111	Survey, Stake/Permit	\$ 5,263	\$ -	\$ -	\$ 5,263
	8200.115	Mud-Drill Water	\$ 5,671	\$ -	\$ -	\$ 5,671
	8200.170	Mud-Diesel	\$ 110,882	\$ -	\$ -	\$ 110,882
<b>Intangible Completion</b>			\$ -	\$ 5,616,994	\$ -	\$ 5,616,994
	8300.229	Transportation	\$ -	\$ 5,263	\$ -	\$ 5,263
	8300.203	Fuel	\$ -	\$ 683,704	\$ -	\$ 683,704
	8300.277	Consulting Services	\$ -	\$ 116,828	\$ -	\$ 116,828
	8300.275	Frac - Sand	\$ -	\$ 1,015,231	\$ -	\$ 1,015,231
	8300.220	Engineering & Supervision	\$ -	\$ 15,156	\$ -	\$ 15,156
	8300.207	Fresh Water	\$ -	\$ 537,798	\$ -	\$ 537,798
	8300.271	Coil Tubing	\$ -	\$ 113,093	\$ -	\$ 113,093
	8300.214	Perforating & Plugs	\$ -	\$ 390,293	\$ -	\$ 390,293
	8300.212	Contract Labor	\$ -	\$ 10,678	\$ -	\$ 10,678
	8300.270	Frac - Equipment	\$ -	\$ 1,692,841	\$ -	\$ 1,692,841
	8300.278	Roustabouts	\$ -	\$ 1,579	\$ -	\$ 1,579
	8300.240	Pump Down Services	\$ -	\$ 101,040	\$ -	\$ 101,040
	8300.209	Chemicals	\$ -	\$ 419,703	\$ -	\$ 419,703
	8300.248	Mancamp	\$ -	\$ 21,324	\$ -	\$ 21,324
	8300.232	Disposal	\$ -	\$ 19,004	\$ -	\$ 19,004
	8300.205	Location & Roads	\$ -	\$ 5,288	\$ -	\$ 5,288
	8300.276	Safety & Environmental	\$ -	\$ 3,473	\$ -	\$ 3,473
	8300.274	Water Transfer	\$ -	\$ 99,015	\$ -	\$ 99,015
	8300.250	Downhole Rental Equip	\$ -	\$ 43,391	\$ -	\$ 43,391
	8300.210	Surface Rental Equip	\$ -	\$ 305,001	\$ -	\$ 305,001
	8300.243	Analysis	\$ -	\$ 9,473	\$ -	\$ 9,473
	8300.273	Flowback	\$ -	\$ 7,821	\$ -	\$ 7,821
<b>Intangible Artificial Lift</b>			\$ -	\$ 95,150	\$ -	\$ 95,150
	8320.605	Fuel / Power	\$ -	\$ 5,263	\$ -	\$ 5,263
	8320.621	Rental Equipment	\$ -	\$ 15,000	\$ -	\$ 15,000
	8320.628	Chemicals	\$ -	\$ 5,000	\$ -	\$ 5,000
	8320.610	Inspection & Testing	\$ -	\$ 4,000	\$ -	\$ 4,000
	8320.611	Trucking/Vacuum/Transportation	\$ -	\$ 10,000	\$ -	\$ 10,000
	8320.625	Wellsite Supervision	\$ -	\$ 5,000	\$ -	\$ 5,000
	8320.617	Contract Labor/Roustabout	\$ -	\$ 15,887	\$ -	\$ 15,887
	8320.612	Kill Truck	\$ -	\$ 5,000	\$ -	\$ 5,000
	8320.602	Workover Rig	\$ -	\$ 30,000	\$ -	\$ 30,000
<b>Intangible Flowback</b>			\$ -	\$ 341,344	\$ -	\$ 341,344
	8360.805	Trucked Water Disposal	\$ -	\$ 21,464	\$ -	\$ 21,464
	8360.845	Wellsite Supervision	\$ -	\$ 50,400	\$ -	\$ 50,400
	8360.820	Well Testing / Flowback	\$ -	\$ 60,746	\$ -	\$ 60,746
	8360.850	Safety / Environmental	\$ -	\$ 4,400	\$ -	\$ 4,400
	8360.815	Trucking/Vacuum/Transp	\$ -	\$ 14,334	\$ -	\$ 14,334
	8360.825	Rental Equipment	\$ -	\$ 190,000	\$ -	\$ 190,000
<b>Intangible Facility</b>			\$ -	\$ -	\$ 664,900	\$ 664,900
	8350.404	Equipment Rental	\$ -	\$ -	\$ 31,000	\$ 31,000
	8350.410	Transportation/Trucking	\$ -	\$ -	\$ 24,500	\$ 24,500
	8350.413	Contingency	\$ -	\$ -	\$ 75,200	\$ 75,200
	8350.421	Commissioning	\$ -	\$ -	\$ 3,500	\$ 3,500
	8350.418	Mechanical Labor	\$ -	\$ -	\$ 222,500	\$ 222,500
	8350.420	Electrical Labor	\$ -	\$ -	\$ 61,900	\$ 61,900
	8350.416	Supervision	\$ -	\$ -	\$ 29,600	\$ 29,600
	8350.422	Flowline Labor	\$ -	\$ -	\$ 35,100	\$ 35,100
	8350.417	Overhead Power Labor	\$ -	\$ -	\$ 24,600	\$ 24,600
	8350.415	Engineering / Technical	\$ -	\$ -	\$ 38,700	\$ 38,700
	8350.403	Roads/Location	\$ -	\$ -	\$ 85,100	\$ 85,100
	8350.411	Safety & Environmental	\$ -	\$ -	\$ 11,700	\$ 11,700
	8350.419	Automation Labor	\$ -	\$ -	\$ 21,500	\$ 21,500
<b>TOTAL INTANGIBLE COSTS &gt;&gt;&gt;</b>			\$ 3,068,003	\$ 6,053,488	\$ 664,900	\$ 9,786,391
<b>TOTAL PROJECT COSTS &gt;&gt;&gt;</b>			\$ 3,831,757	\$ 6,656,201	\$ 1,580,000	\$ 12,067,958
			<b>Drilling</b>	<b>Completion</b>	<b>Facility</b>	<b>Total</b>

This Authority for Expenditure is based on cost estimates. Billing will reflect your proportionate share of the actual invoice costs.



AUTHORIZATION FOR EXPENDITURE

JOINT INTEREST APPROVAL:

Company: \_\_\_\_\_ Working Interest: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

By: \_\_\_\_\_



### AUTHORIZATION FOR EXPENDITURE

**AFE: NM0583**

Date: June 04, 2024

Well Name: Sapphire 14 Federal Com #302H

Projected MD/TVD: 19573/9300

Target: 1BS

Spud to TD: 16.8

County: Lea

Lateral Length: 10000

State: NM

Stages: 64

SHL: S14-T19S-R33E 425' FNL, 1300' FWL

Total Proppant (ppf): 2500

BHL: S23-T19S-R33E 100'FSL, 1254' FWL

Total Fluid (gal/ft): 3000

#### PROJECT DESCRIPTION:

The proposed AFE is for the Sapphire 14 Federal Com #302H, a 2 section Bone Springs horizontal well to be drilled in Lea County, NM. The well is a 3 string casing design consisting of the following: 17.5" surface hole drilled on Fresh to 1250' and 13.375" 54.5# J-55 BTC casing will be set and cemented in place; 12.25" hole will then be drilled on Brine to 3500' and a string of 9.625" 40# J-55 BTC casing will be set and cemented in place; 8.75" production hole will then be drilled on OBM to 19573' and a string of 5.5" 20# P-110 HC GBCD casing will be set and cemented in place. There will be 10000' of treatable lateral and the completions design will consist of +/-64 stages at 2500 lbs/ft & 3000 gals/ft. AFE includes associated costs for initial gas lift installation.

	<u>TOTAL</u>
<b>DRILLING:</b>	<b>\$3,831,757.11</b>
<b>COMPLETIONS:</b>	<b>\$6,656,201.06</b>
<b>FACILITIES:</b>	<b>\$1,580,000.00</b>
<b>COMPLETED WELL COST:</b>	<b>\$12,067,958.17</b>

#### OPERATOR APPROVAL:





## AUTHORIZATION FOR EXPENDITURE

AFE: NM0583

Date: June 04, 2024

Well Name: Sapphire 14 Federal Com #302H

Projected MD/TVD: 19573/9300

Target: 1BS

Spud to TD: 16.8

County: Lea

Lateral Length: 10000

State: NM

Stages: 64

SHL: S14-T19S-R33E 425' FNL, 1300' FWL

Total Proppant (ppf): 2500

BHL: S23-T19S-R33E 100'FSL, 1254' FWL

Total Fluid (gal/ft): 3000

TANGIBLE COSTS			Drilling	Completion	Facility	Total
<b>Tangible Drilling</b>			\$ 763,754	\$ -	\$ -	\$ 763,754
	8400.340	Wellhead	\$ 56,835	\$ -	\$ -	\$ 56,835
	8400.303	Production Casing	\$ 515,654	\$ -	\$ -	\$ 515,654
	8400.301	Surface Casing	\$ 64,795	\$ -	\$ -	\$ 64,795
	8400.302	Intrm 1&2 Casing	\$ 126,471	\$ -	\$ -	\$ 126,471
<b>Tangible Completion</b>			\$ -	\$ 602,713	\$ -	\$ 602,713
	8400.352	Wellhead & Equipment	\$ -	\$ 44,205	\$ -	\$ 44,205
	8325.704	Downhole Artificial Lift Eqpt	\$ -	\$ 350,000	\$ -	\$ 350,000
	8325.705	ESP Equipment/Install	\$ -	\$ 40,000	\$ -	\$ 40,000
	8325.719	Contract Labor Install	\$ -	\$ 15,000	\$ -	\$ 15,000
	8325.711	Wellhead Equipment	\$ -	\$ 63,508	\$ -	\$ 63,508
	8325.702	Tubing	\$ -	\$ 90,000	\$ -	\$ 90,000
<b>Tangible Facility</b>			\$ -	\$ -	\$ 915,100	\$ 915,100
	8355.565	Flowline	\$ -	\$ -	\$ 49,100	\$ 49,100
	8355.540	Electrical Supplies	\$ -	\$ -	\$ 68,800	\$ 68,800
	8355.555	Pump / Supplies	\$ -	\$ -	\$ 87,200	\$ 87,200
	8355.525	Containment	\$ -	\$ -	\$ 25,700	\$ 25,700
	8355.510	Tanks	\$ -	\$ -	\$ 128,400	\$ 128,400
	8355.515	Flare	\$ -	\$ -	\$ 32,000	\$ 32,000
	8355.535	Instrumentation / Meters	\$ -	\$ -	\$ 60,500	\$ 60,500
	8355.500	Vessels	\$ -	\$ -	\$ 253,200	\$ 253,200
	8355.520	PVF	\$ -	\$ -	\$ 146,000	\$ 146,000
	8355.530	Compressors	\$ -	\$ -	\$ 11,100	\$ 11,100
	8355.550	Overhead Power Material	\$ -	\$ -	\$ 53,100	\$ 53,100
<b>TOTAL TANGIBLE COSTS &gt;&gt;&gt;</b>			\$ 763,754	\$ 602,713	\$ 915,100	\$ 2,281,567

INTANGIBLE COSTS			Drilling	Completion	Facility	Total
<b>Intangible Drilling</b>			\$ 3,068,003	\$ -	\$ -	\$ 3,068,003
	8200.168	Roustabout Services	\$ 2,196	\$ -	\$ -	\$ 2,196
	8200.115	Mud-Drill Water	\$ 5,671	\$ -	\$ -	\$ 5,671
	8200.170	Mud-Diesel	\$ 110,882	\$ -	\$ -	\$ 110,882
	8200.149	Legal, Title, Etc	\$ 10,525	\$ -	\$ -	\$ 10,525
	8200.147	Drilling Overhead	\$ 5,194	\$ -	\$ -	\$ 5,194
	8200.162	Mancamp	\$ 45,636	\$ -	\$ -	\$ 45,636
	8200.106	Transportation	\$ 92,233	\$ -	\$ -	\$ 92,233
	8200.128	Drilling - Directional	\$ 243,572	\$ -	\$ -	\$ 243,572
	8200.127	Contract Labor	\$ 27,255	\$ -	\$ -	\$ 27,255
	8200.164	Solids Control & Closed Loop	\$ 111,542	\$ -	\$ -	\$ 111,542
	8200.111	Survey, Stake/Permit	\$ 5,263	\$ -	\$ -	\$ 5,263
	8200.169	Mud-Brine	\$ 25,837	\$ -	\$ -	\$ 25,837
	8200.125	Inspection	\$ 45,258	\$ -	\$ -	\$ 45,258
	8200.124	Equipment Rental	\$ 113,168	\$ -	\$ -	\$ 113,168
	8200.144	Company Supervision	\$ 2,400	\$ -	\$ -	\$ 2,400
	8200.114	Disposal	\$ 191,556	\$ -	\$ -	\$ 191,556
	8200.137	Casing Services	\$ 71,978	\$ -	\$ -	\$ 71,978
	8200.104	Fuel - Rig	\$ 187,966	\$ -	\$ -	\$ 187,966
	8200.138	Cementing Services	\$ 199,975	\$ -	\$ -	\$ 199,975
	8200.143	Geological Services	\$ 10,112	\$ -	\$ -	\$ 10,112
	8200.112	Location & Roads, Conductor	\$ 124,415	\$ -	\$ -	\$ 124,415
	8200.113	Damages/Row	\$ 7,894	\$ -	\$ -	\$ 7,894
	8200.119	Mud-Auxiliary	\$ 31,076	\$ -	\$ -	\$ 31,076
	8200.103	Drilling - Rig Move	\$ 93,673	\$ -	\$ -	\$ 93,673
	8200.152	Well Control Ins.	\$ 7,894	\$ -	\$ -	\$ 7,894



## AUTHORIZATION FOR EXPENDITURE

	8200.165	Safety/Environmental	\$ 2,513	\$ -	\$ -	\$ 2,513
	8200.167	Consulting Services	\$ 242,291	\$ -	\$ -	\$ 242,291
	8200.117	Mud & Chemicals	\$ 175,212	\$ -	\$ -	\$ 175,212
	8200.102	Drilling - Daywork	\$ 806,307	\$ -	\$ -	\$ 806,307
	8200.116	Drill Bits & BHA	\$ 68,512	\$ -	\$ -	\$ 68,512
<b>Intangible Completion</b>			\$ -	\$ 5,616,994	\$ -	\$ 5,616,994
	8300.250	Downhole Rental Equip	\$ -	\$ 43,391	\$ -	\$ 43,391
	8300.220	Engineering & Supervision	\$ -	\$ 15,156	\$ -	\$ 15,156
	8300.277	Consulting Services	\$ -	\$ 116,828	\$ -	\$ 116,828
	8300.248	Mancamp	\$ -	\$ 21,324	\$ -	\$ 21,324
	8300.275	Frac - Sand	\$ -	\$ 1,015,231	\$ -	\$ 1,015,231
	8300.229	Transportation	\$ -	\$ 5,263	\$ -	\$ 5,263
	8300.274	Water Transfer	\$ -	\$ 99,015	\$ -	\$ 99,015
	8300.273	Flowback	\$ -	\$ 7,821	\$ -	\$ 7,821
	8300.271	Coil Tubing	\$ -	\$ 113,093	\$ -	\$ 113,093
	8300.203	Fuel	\$ -	\$ 683,704	\$ -	\$ 683,704
	8300.270	Frac - Equipment	\$ -	\$ 1,692,841	\$ -	\$ 1,692,841
	8300.212	Contract Labor	\$ -	\$ 10,678	\$ -	\$ 10,678
	8300.276	Safety & Environmental	\$ -	\$ 3,473	\$ -	\$ 3,473
	8300.207	Fresh Water	\$ -	\$ 537,798	\$ -	\$ 537,798
	8300.214	Perforating & Plugs	\$ -	\$ 390,293	\$ -	\$ 390,293
	8300.243	Analysis	\$ -	\$ 9,473	\$ -	\$ 9,473
	8300.240	Pump Down Services	\$ -	\$ 101,040	\$ -	\$ 101,040
	8300.232	Disposal	\$ -	\$ 19,004	\$ -	\$ 19,004
	8300.209	Chemicals	\$ -	\$ 419,703	\$ -	\$ 419,703
	8300.278	Roustabouts	\$ -	\$ 1,579	\$ -	\$ 1,579
	8300.205	Location & Roads	\$ -	\$ 5,288	\$ -	\$ 5,288
	8300.210	Surface Rental Equip	\$ -	\$ 305,001	\$ -	\$ 305,001
<b>Intangible Artificial Lift</b>			\$ -	\$ 95,150	\$ -	\$ 95,150
	8320.617	Contract Labor/Roustabout	\$ -	\$ 15,887	\$ -	\$ 15,887
	8320.610	Inspection & Testing	\$ -	\$ 4,000	\$ -	\$ 4,000
	8320.628	Chemicals	\$ -	\$ 5,000	\$ -	\$ 5,000
	8320.621	Rental Equipment	\$ -	\$ 15,000	\$ -	\$ 15,000
	8320.612	Kill Truck	\$ -	\$ 5,000	\$ -	\$ 5,000
	8320.625	Wellsite Supervision	\$ -	\$ 5,000	\$ -	\$ 5,000
	8320.611	Trucking/Vacuum/Transportation	\$ -	\$ 10,000	\$ -	\$ 10,000
	8320.605	Fuel / Power	\$ -	\$ 5,263	\$ -	\$ 5,263
	8320.602	Workover Rig	\$ -	\$ 30,000	\$ -	\$ 30,000
<b>Intangible Flowback</b>			\$ -	\$ 341,344	\$ -	\$ 341,344
	8360.820	Well Testing / Flowback	\$ -	\$ 60,746	\$ -	\$ 60,746
	8360.845	Wellsite Supervision	\$ -	\$ 50,400	\$ -	\$ 50,400
	8360.815	Trucking/Vacuum/Transp	\$ -	\$ 14,334	\$ -	\$ 14,334
	8360.805	Trucked Water Disposal	\$ -	\$ 21,464	\$ -	\$ 21,464
	8360.825	Rental Equipment	\$ -	\$ 190,000	\$ -	\$ 190,000
	8360.850	Safety / Environmental	\$ -	\$ 4,400	\$ -	\$ 4,400
<b>Intangible Facility</b>			\$ -	\$ -	\$ 664,900	\$ 664,900
	8350.404	Equipment Rental	\$ -	\$ -	\$ 31,000	\$ 31,000
	8350.421	Commissioning	\$ -	\$ -	\$ 3,500	\$ 3,500
	8350.403	Roads/Location	\$ -	\$ -	\$ 85,100	\$ 85,100
	8350.420	Electrical Labor	\$ -	\$ -	\$ 61,900	\$ 61,900
	8350.419	Automation Labor	\$ -	\$ -	\$ 21,500	\$ 21,500
	8350.416	Supervision	\$ -	\$ -	\$ 29,600	\$ 29,600
	8350.413	Contingency	\$ -	\$ -	\$ 75,200	\$ 75,200
	8350.418	Mechanical Labor	\$ -	\$ -	\$ 222,500	\$ 222,500
	8350.411	Safety & Environmental	\$ -	\$ -	\$ 11,700	\$ 11,700
	8350.415	Engineering / Technical	\$ -	\$ -	\$ 38,700	\$ 38,700
	8350.422	Flowline Labor	\$ -	\$ -	\$ 35,100	\$ 35,100
	8350.417	Overhead Power Labor	\$ -	\$ -	\$ 24,600	\$ 24,600
	8350.410	Transportation/Trucking	\$ -	\$ -	\$ 24,500	\$ 24,500
<b>TOTAL INTANGIBLE COSTS &gt;&gt;&gt;</b>			\$ 3,068,003	\$ 6,053,488	\$ 664,900	\$ 9,786,391
<b>TOTAL PROJECT COSTS &gt;&gt;&gt;</b>			\$ 3,831,757	\$ 6,656,201	\$ 1,580,000	\$ 12,067,958
			<b>Drilling</b>	<b>Completion</b>	<b>Facility</b>	<b>Total</b>

This Authority for Expenditure is based on cost estimates. Billing will reflect your proportionate share of the actual invoice costs.



AUTHORIZATION FOR EXPENDITURE

JOINT INTEREST APPROVAL:

Company: \_\_\_\_\_

Working Interest: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

By: \_\_\_\_\_





### AUTHORIZATION FOR EXPENDITURE

**AFE: NM0584**

Date: June 04, 2024

Well Name: Sapphire 14 Federal Com #303H

Projected MD/TVD: 19573/9300

Target: 1BS

Spud to TD: 16.8

County: Lea

Lateral Length: 10000

State: NM

Stages: 64

SHL: S14-T19S-R33E 425' FNL, 1320' FWL

Total Proppant (ppf): 2500

BHL: S23-T19S-R33E 100'FSL, 2178' FWL

Total Fluid (gal/ft): 3000

### PROJECT DESCRIPTION:

The proposed AFE is for the Sapphire 14 Federal Com #303H, a 2 section Bone Springs horizontal well to be drilled in Lea County, NM. The well is a 3 string casing design consisting of the following: 17.5" surface hole drilled on Fresh to 1250' and 13.375" 54.5# J-55 BTC casing will be set and cemented in place; 12.25" hole will then be drilled on Brine to 3500' and a string of 9.625" 40# J-55 BTC casing will be set and cemented in place; 8.75" production hole will then be drilled on OBM to 19573' and a string of 5.5" 20# P-110 HC GBCD casing will be set and cemented in place. There will be 10000' of treatable lateral and the completions design will consist of +/-64 stages at 2500 lbs/ft & 3000 gals/ft. AFE includes associated costs for initial gas lift installation.

	<u>TOTAL</u>
<b>DRILLING:</b>	<b>\$3,831,757.11</b>
<b>COMPLETIONS:</b>	<b>\$6,656,201.06</b>
<b>FACILITIES:</b>	<b>\$1,580,000.00</b>
<b>COMPLETED WELL COST:</b>	<b>\$12,067,958.17</b>

### OPERATOR APPROVAL:



## AUTHORIZATION FOR EXPENDITURE

AFE: NM0584

Date: June 04, 2024

Well Name: Sapphire 14 Federal Com #303H

Projected MD/TVD: 19573/9300

Target: 1BS

Spud to TD: 16.8

County: Lea

Lateral Length: 10000

State: NM

Stages: 64

SHL: S14-T19S-R33E 425' FNL, 1320' FWL

Total Proppant (ppf): 2500

BHL: S23-T19S-R33E 100'FSL, 2178' FWL

Total Fluid (gal/ft): 3000

TANGIBLE COSTS			Drilling	Completion	Facility	Total
<b>Tangible Drilling</b>			\$ 763,754	\$ -	\$ -	\$ 763,754
	8400.340	Wellhead	\$ 56,835	\$ -	\$ -	\$ 56,835
	8400.303	Production Casing	\$ 515,654	\$ -	\$ -	\$ 515,654
	8400.301	Surface Casing	\$ 64,795	\$ -	\$ -	\$ 64,795
	8400.302	Intrm 1&2 Casing	\$ 126,471	\$ -	\$ -	\$ 126,471
<b>Tangible Completion</b>			\$ -	\$ 602,713	\$ -	\$ 602,713
	8400.352	Wellhead & Equipment	\$ -	\$ 44,205	\$ -	\$ 44,205
	8325.719	Contract Labor Install	\$ -	\$ 15,000	\$ -	\$ 15,000
	8325.705	ESP Equipment/Install	\$ -	\$ 40,000	\$ -	\$ 40,000
	8325.702	Tubing	\$ -	\$ 90,000	\$ -	\$ 90,000
	8325.711	Wellhead Equipment	\$ -	\$ 63,508	\$ -	\$ 63,508
	8325.704	Downhole Artificial Lift Eqpt	\$ -	\$ 350,000	\$ -	\$ 350,000
<b>Tangible Facility</b>			\$ -	\$ -	\$ 915,100	\$ 915,100
	8355.525	Containment	\$ -	\$ -	\$ 25,700	\$ 25,700
	8355.510	Tanks	\$ -	\$ -	\$ 128,400	\$ 128,400
	8355.555	Pump / Supplies	\$ -	\$ -	\$ 87,200	\$ 87,200
	8355.515	Flare	\$ -	\$ -	\$ 32,000	\$ 32,000
	8355.520	PV/F	\$ -	\$ -	\$ 146,000	\$ 146,000
	8355.500	Vessels	\$ -	\$ -	\$ 253,200	\$ 253,200
	8355.565	Flowline	\$ -	\$ -	\$ 49,100	\$ 49,100
	8355.530	Compressors	\$ -	\$ -	\$ 11,100	\$ 11,100
	8355.535	Instrumentation / Meters	\$ -	\$ -	\$ 60,500	\$ 60,500
	8355.550	Overhead Power Material	\$ -	\$ -	\$ 53,100	\$ 53,100
	8355.540	Electrical Supplies	\$ -	\$ -	\$ 68,800	\$ 68,800
<b>TOTAL TANGIBLE COSTS &gt;&gt;&gt;</b>			\$ 763,754	\$ 602,713	\$ 915,100	\$ 2,281,567

INTANGIBLE COSTS			Drilling	Completion	Facility	Total
<b>Intangible Drilling</b>			\$ 3,068,003	\$ -	\$ -	\$ 3,068,003
	8200.128	Drilling - Directional	\$ 243,572	\$ -	\$ -	\$ 243,572
	8200.104	Fuel - Rig	\$ 187,966	\$ -	\$ -	\$ 187,966
	8200.112	Location & Roads, Conductor	\$ 124,415	\$ -	\$ -	\$ 124,415
	8200.168	Roustabout Services	\$ 2,196	\$ -	\$ -	\$ 2,196
	8200.127	Contract Labor	\$ 27,255	\$ -	\$ -	\$ 27,255
	8200.124	Equipment Rental	\$ 113,168	\$ -	\$ -	\$ 113,168
	8200.103	Drilling - Rig Move	\$ 93,673	\$ -	\$ -	\$ 93,673
	8200.116	Drill Bits & BHA	\$ 68,512	\$ -	\$ -	\$ 68,512
	8200.143	Geological Services	\$ 10,112	\$ -	\$ -	\$ 10,112
	8200.111	Survey, Stake/Permit	\$ 5,263	\$ -	\$ -	\$ 5,263
	8200.137	Casing Services	\$ 71,978	\$ -	\$ -	\$ 71,978
	8200.138	Cementing Services	\$ 199,975	\$ -	\$ -	\$ 199,975
	8200.144	Company Supervision	\$ 2,400	\$ -	\$ -	\$ 2,400
	8200.169	Mud-Brine	\$ 25,837	\$ -	\$ -	\$ 25,837
	8200.165	Safety/Environmental	\$ 2,513	\$ -	\$ -	\$ 2,513
	8200.170	Mud-Diesel	\$ 110,882	\$ -	\$ -	\$ 110,882
	8200.147	Drilling Overhead	\$ 5,194	\$ -	\$ -	\$ 5,194
	8200.167	Consulting Services	\$ 242,291	\$ -	\$ -	\$ 242,291
	8200.152	Well Control Ins.	\$ 7,894	\$ -	\$ -	\$ 7,894
	8200.102	Drilling - Daywork	\$ 806,307	\$ -	\$ -	\$ 806,307
	8200.106	Transportation	\$ 92,233	\$ -	\$ -	\$ 92,233
	8200.114	Disposal	\$ 191,556	\$ -	\$ -	\$ 191,556
	8200.115	Mud-Drill Water	\$ 5,671	\$ -	\$ -	\$ 5,671
	8200.149	Legal, Title, Etc	\$ 10,525	\$ -	\$ -	\$ 10,525
	8200.125	Inspection	\$ 45,258	\$ -	\$ -	\$ 45,258



## AUTHORIZATION FOR EXPENDITURE

	8200.119	Mud-Auxiliary	\$ 31,076	\$ -	\$ -	\$ 31,076
	8200.164	Solids Control & Closed Loop	\$ 111,542	\$ -	\$ -	\$ 111,542
	8200.113	Damages/Row	\$ 7,894	\$ -	\$ -	\$ 7,894
	8200.117	Mud & Chemicals	\$ 175,212	\$ -	\$ -	\$ 175,212
	8200.162	Mancamp	\$ 45,636	\$ -	\$ -	\$ 45,636
<b>Intangible Completion</b>			\$ -	\$ 5,616,994	\$ -	\$ 5,616,994
	8300.210	Surface Rental Equip	\$ -	\$ 305,001	\$ -	\$ 305,001
	8300.243	Analysis	\$ -	\$ 9,473	\$ -	\$ 9,473
	8300.270	Frac - Equipment	\$ -	\$ 1,692,841	\$ -	\$ 1,692,841
	8300.212	Contract Labor	\$ -	\$ 10,678	\$ -	\$ 10,678
	8300.209	Chemicals	\$ -	\$ 419,703	\$ -	\$ 419,703
	8300.240	Pump Down Services	\$ -	\$ 101,040	\$ -	\$ 101,040
	8300.229	Transportation	\$ -	\$ 5,263	\$ -	\$ 5,263
	8300.275	Frac - Sand	\$ -	\$ 1,015,231	\$ -	\$ 1,015,231
	8300.205	Location & Roads	\$ -	\$ 5,288	\$ -	\$ 5,288
	8300.220	Engineering & Supervision	\$ -	\$ 15,156	\$ -	\$ 15,156
	8300.214	Perforating & Plugs	\$ -	\$ 390,293	\$ -	\$ 390,293
	8300.274	Water Transfer	\$ -	\$ 99,015	\$ -	\$ 99,015
	8300.271	Coil Tubing	\$ -	\$ 113,093	\$ -	\$ 113,093
	8300.232	Disposal	\$ -	\$ 19,004	\$ -	\$ 19,004
	8300.278	Roustabouts	\$ -	\$ 1,579	\$ -	\$ 1,579
	8300.203	Fuel	\$ -	\$ 683,704	\$ -	\$ 683,704
	8300.207	Fresh Water	\$ -	\$ 537,798	\$ -	\$ 537,798
	8300.276	Safety & Environmental	\$ -	\$ 3,473	\$ -	\$ 3,473
	8300.250	Downhole Rental Equip	\$ -	\$ 43,391	\$ -	\$ 43,391
	8300.273	Flowback	\$ -	\$ 7,821	\$ -	\$ 7,821
	8300.248	Mancamp	\$ -	\$ 21,324	\$ -	\$ 21,324
	8300.277	Consulting Services	\$ -	\$ 116,828	\$ -	\$ 116,828
<b>Intangible Artificial Lift</b>			\$ -	\$ 95,150	\$ -	\$ 95,150
	8320.611	Trucking/Vacuum/Transportation	\$ -	\$ 10,000	\$ -	\$ 10,000
	8320.625	Wellsite Supervision	\$ -	\$ 5,000	\$ -	\$ 5,000
	8320.605	Fuel / Power	\$ -	\$ 5,263	\$ -	\$ 5,263
	8320.621	Rental Equipment	\$ -	\$ 15,000	\$ -	\$ 15,000
	8320.612	Kill Truck	\$ -	\$ 5,000	\$ -	\$ 5,000
	8320.602	Workover Rig	\$ -	\$ 30,000	\$ -	\$ 30,000
	8320.610	Inspection & Testing	\$ -	\$ 4,000	\$ -	\$ 4,000
	8320.617	Contract Labor/Roustabout	\$ -	\$ 15,887	\$ -	\$ 15,887
	8320.628	Chemicals	\$ -	\$ 5,000	\$ -	\$ 5,000
<b>Intangible Flowback</b>			\$ -	\$ 341,344	\$ -	\$ 341,344
	8360.820	Well Testing / Flowback	\$ -	\$ 60,746	\$ -	\$ 60,746
	8360.850	Safety / Environmental	\$ -	\$ 4,400	\$ -	\$ 4,400
	8360.825	Rental Equipment	\$ -	\$ 190,000	\$ -	\$ 190,000
	8360.805	Trucked Water Disposal	\$ -	\$ 21,464	\$ -	\$ 21,464
	8360.845	Wellsite Supervision	\$ -	\$ 50,400	\$ -	\$ 50,400
	8360.815	Trucking/Vacuum/Transp	\$ -	\$ 14,334	\$ -	\$ 14,334
<b>Intangible Facility</b>			\$ -	\$ -	\$ 664,900	\$ 664,900
	8350.421	Commissioning	\$ -	\$ -	\$ 3,500	\$ 3,500
	8350.411	Safety & Environmental	\$ -	\$ -	\$ 11,700	\$ 11,700
	8350.416	Supervision	\$ -	\$ -	\$ 29,600	\$ 29,600
	8350.418	Mechanical Labor	\$ -	\$ -	\$ 222,500	\$ 222,500
	8350.415	Engineering / Technical	\$ -	\$ -	\$ 38,700	\$ 38,700
	8350.404	Equipment Rental	\$ -	\$ -	\$ 31,000	\$ 31,000
	8350.420	Electrical Labor	\$ -	\$ -	\$ 61,900	\$ 61,900
	8350.410	Transportation/Trucking	\$ -	\$ -	\$ 24,500	\$ 24,500
	8350.403	Roads/Location	\$ -	\$ -	\$ 85,100	\$ 85,100
	8350.417	Overhead Power Labor	\$ -	\$ -	\$ 24,600	\$ 24,600
	8350.413	Contingency	\$ -	\$ -	\$ 75,200	\$ 75,200
	8350.422	Flowline Labor	\$ -	\$ -	\$ 35,100	\$ 35,100
	8350.419	Automation Labor	\$ -	\$ -	\$ 21,500	\$ 21,500
<b>TOTAL INTANGIBLE COSTS &gt;&gt;&gt;</b>			\$ 3,068,003	\$ 6,053,488	\$ 664,900	\$ 9,786,391
<b>TOTAL PROJECT COSTS &gt;&gt;&gt;</b>			\$ 3,831,757	\$ 6,656,201	\$ 1,580,000	\$ 12,067,958
			<b>Drilling</b>	<b>Completion</b>	<b>Facility</b>	<b>Total</b>

This Authority for Expenditure is based on cost estimates. Billing will reflect your proportionate share of the actual invoice costs.





AUTHORIZATION FOR EXPENDITURE

JOINT INTEREST APPROVAL:

Company:	_____	Working Interest:	_____
Signature:	_____	Date:	_____
By:	_____		



### AUTHORIZATION FOR EXPENDITURE

**AFE: NM0591**

Date: June 04, 2024

Well Name: Sapphire 14 Federal Com #304H

Projected MD/TVD: 19573/9300

Target: 1BS

Spud to TD: 16.8

County: Lea

Lateral Length: 10000

State: NM

Stages: 64

SHL: S14-T19S-R33E 375' FNL, 1280' FEL

Total Proppant (ppf): 2500

BHL: S23-T19S-R33E 100'FSL, 2178' FEL

Total Fluid (gal/ft): 3000

### PROJECT DESCRIPTION:

The proposed AFE is for the Sapphire 14 Federal Com #304H, a 2 section Bone Springs horizontal well to be drilled in Lea County, NM. The well is a 3 string casing design consisting of the following: 17.5" surface hole drilled on Fresh to 1250' and 13.375" 54.5# J-55 BTC casing will be set and cemented in place; 12.25" hole will then be drilled on Brine to 3500' and a string of 9.625" 40# J-55 BTC casing will be set and cemented in place; 8.75" production hole will then be drilled on OBM to 19573' and a string of 5.5" 20# P-110 HC GBCD casing will be set and cemented in place. There will be 10000' of treatable lateral and the completions design will consist of +/-64 stages at 2500 lbs/ft & 3000 gals/ft. AFE includes associated costs for initial gas lift installation.

	<u>TOTAL</u>
<b>DRILLING:</b>	<b>\$3,831,757.11</b>
<b>COMPLETIONS:</b>	<b>\$6,656,201.06</b>
<b>FACILITIES:</b>	<b>\$1,580,000.00</b>
<b>COMPLETED WELL COST:</b>	<b>\$12,067,958.17</b>

### OPERATOR APPROVAL:



## AUTHORIZATION FOR EXPENDITURE

AFE: NM0591

Date: June 04, 2024

Well Name: Sapphire 14 Federal Com #304H

Projected MD/TVD: 19573/9300

Target: 1BS

Spud to TD: 16.8

County: Lea

Lateral Length: 10000

State: NM

Stages: 64

SHL: S14-T19S-R33E 375' FNL, 1280' FEL

Total Proppant (ppf): 2500

BHL: S23-T19S-R33E 100'FSL, 2178' FEL

Total Fluid (gal/ft): 3000

TANGIBLE COSTS			Drilling	Completion	Facility	Total
<b>Tangible Drilling</b>			\$ 763,754	\$ -	\$ -	\$ 763,754
	8400.301	Surface Casing	\$ 64,795	\$ -	\$ -	\$ 64,795
	8400.340	Wellhead	\$ 56,835	\$ -	\$ -	\$ 56,835
	8400.303	Production Casing	\$ 515,654	\$ -	\$ -	\$ 515,654
	8400.302	Intrm 1&2 Casing	\$ 126,471	\$ -	\$ -	\$ 126,471
<b>Tangible Completion</b>			\$ -	\$ 602,713	\$ -	\$ 602,713
	8400.352	Wellhead & Equipment	\$ -	\$ 44,205	\$ -	\$ 44,205
	8325.704	Downhole Artificial Lift Eqpt	\$ -	\$ 350,000	\$ -	\$ 350,000
	8325.711	Wellhead Equipment	\$ -	\$ 63,508	\$ -	\$ 63,508
	8325.702	Tubing	\$ -	\$ 90,000	\$ -	\$ 90,000
	8325.719	Contract Labor Install	\$ -	\$ 15,000	\$ -	\$ 15,000
	8325.705	ESP Equipment/Install	\$ -	\$ 40,000	\$ -	\$ 40,000
<b>Tangible Facility</b>			\$ -	\$ -	\$ 915,100	\$ 915,100
	8355.555	Pump / Supplies	\$ -	\$ -	\$ 87,200	\$ 87,200
	8355.525	Containment	\$ -	\$ -	\$ 25,700	\$ 25,700
	8355.550	Overhead Power Material	\$ -	\$ -	\$ 53,100	\$ 53,100
	8355.500	Vessels	\$ -	\$ -	\$ 253,200	\$ 253,200
	8355.535	Instrumentation / Meters	\$ -	\$ -	\$ 60,500	\$ 60,500
	8355.530	Compressors	\$ -	\$ -	\$ 11,100	\$ 11,100
	8355.520	P/VF	\$ -	\$ -	\$ 146,000	\$ 146,000
	8355.540	Electrical Supplies	\$ -	\$ -	\$ 68,800	\$ 68,800
	8355.510	Tanks	\$ -	\$ -	\$ 128,400	\$ 128,400
	8355.565	Flowline	\$ -	\$ -	\$ 49,100	\$ 49,100
	8355.515	Flare	\$ -	\$ -	\$ 32,000	\$ 32,000
<b>TOTAL TANGIBLE COSTS &gt;&gt;&gt;</b>			\$ 763,754	\$ 602,713	\$ 915,100	\$ 2,281,567

INTANGIBLE COSTS			Drilling	Completion	Facility	Total
<b>Intangible Drilling</b>			\$ 3,068,003	\$ -	\$ -	\$ 3,068,003
	8200.138	Cementing Services	\$ 199,975	\$ -	\$ -	\$ 199,975
	8200.167	Consulting Services	\$ 242,291	\$ -	\$ -	\$ 242,291
	8200.111	Survey, Stake/Permit	\$ 5,263	\$ -	\$ -	\$ 5,263
	8200.116	Drill Bits & BHA	\$ 68,512	\$ -	\$ -	\$ 68,512
	8200.113	Damages/Row	\$ 7,894	\$ -	\$ -	\$ 7,894
	8200.165	Safety/Environmental	\$ 2,513	\$ -	\$ -	\$ 2,513
	8200.103	Drilling - Rig Move	\$ 93,673	\$ -	\$ -	\$ 93,673
	8200.162	Mancamp	\$ 45,636	\$ -	\$ -	\$ 45,636
	8200.128	Drilling - Directional	\$ 243,572	\$ -	\$ -	\$ 243,572
	8200.112	Location & Roads, Conductor	\$ 124,415	\$ -	\$ -	\$ 124,415
	8200.127	Contract Labor	\$ 27,255	\$ -	\$ -	\$ 27,255
	8200.144	Company Supervision	\$ 2,400	\$ -	\$ -	\$ 2,400
	8200.143	Geological Services	\$ 10,112	\$ -	\$ -	\$ 10,112
	8200.104	Fuel - Rig	\$ 187,966	\$ -	\$ -	\$ 187,966
	8200.102	Drilling - Daywork	\$ 806,307	\$ -	\$ -	\$ 806,307
	8200.147	Drilling Overhead	\$ 5,194	\$ -	\$ -	\$ 5,194
	8200.114	Disposal	\$ 191,556	\$ -	\$ -	\$ 191,556
	8200.119	Mud-Auxiliary	\$ 31,076	\$ -	\$ -	\$ 31,076
	8200.137	Casing Services	\$ 71,978	\$ -	\$ -	\$ 71,978
	8200.152	Well Control Ins.	\$ 7,894	\$ -	\$ -	\$ 7,894
	8200.170	Mud-Diesel	\$ 110,882	\$ -	\$ -	\$ 110,882
	8200.164	Solids Control & Closed Loop	\$ 111,542	\$ -	\$ -	\$ 111,542
	8200.149	Legal, Title, Etc	\$ 10,525	\$ -	\$ -	\$ 10,525
	8200.169	Mud-Brine	\$ 25,837	\$ -	\$ -	\$ 25,837
	8200.168	Roustabout Services	\$ 2,196	\$ -	\$ -	\$ 2,196





## AUTHORIZATION FOR EXPENDITURE

	8200.106	Transportation	\$ 92,233	\$ -	\$ -	\$ 92,233
	8200.115	Mud-Drill Water	\$ 5,671	\$ -	\$ -	\$ 5,671
	8200.125	Inspection	\$ 45,258	\$ -	\$ -	\$ 45,258
	8200.117	Mud & Chemicals	\$ 175,212	\$ -	\$ -	\$ 175,212
	8200.124	Equipment Rental	\$ 113,168	\$ -	\$ -	\$ 113,168
<b>Intangible Completion</b>			\$ -	\$ 5,616,994	\$ -	\$ 5,616,994
	8300.240	Pump Down Services	\$ -	\$ 101,040	\$ -	\$ 101,040
	8300.212	Contract Labor	\$ -	\$ 10,678	\$ -	\$ 10,678
	8300.271	Coil Tubing	\$ -	\$ 113,093	\$ -	\$ 113,093
	8300.214	Perforating & Plugs	\$ -	\$ 390,293	\$ -	\$ 390,293
	8300.275	Frac - Sand	\$ -	\$ 1,015,231	\$ -	\$ 1,015,231
	8300.274	Water Transfer	\$ -	\$ 99,015	\$ -	\$ 99,015
	8300.278	Roustabouts	\$ -	\$ 1,579	\$ -	\$ 1,579
	8300.248	Mancamp	\$ -	\$ 21,324	\$ -	\$ 21,324
	8300.210	Surface Rental Equip	\$ -	\$ 305,001	\$ -	\$ 305,001
	8300.277	Consulting Services	\$ -	\$ 116,828	\$ -	\$ 116,828
	8300.209	Chemicals	\$ -	\$ 419,703	\$ -	\$ 419,703
	8300.229	Transportation	\$ -	\$ 5,263	\$ -	\$ 5,263
	8300.220	Engineering & Supervision	\$ -	\$ 15,156	\$ -	\$ 15,156
	8300.273	Flowback	\$ -	\$ 7,821	\$ -	\$ 7,821
	8300.232	Disposal	\$ -	\$ 19,004	\$ -	\$ 19,004
	8300.205	Location & Roads	\$ -	\$ 5,288	\$ -	\$ 5,288
	8300.276	Safety & Environmental	\$ -	\$ 3,473	\$ -	\$ 3,473
	8300.207	Fresh Water	\$ -	\$ 537,798	\$ -	\$ 537,798
	8300.203	Fuel	\$ -	\$ 683,704	\$ -	\$ 683,704
	8300.270	Frac - Equipment	\$ -	\$ 1,692,841	\$ -	\$ 1,692,841
	8300.250	Downhole Rental Equip	\$ -	\$ 43,391	\$ -	\$ 43,391
	8300.243	Analysis	\$ -	\$ 9,473	\$ -	\$ 9,473
<b>Intangible Artificial Lift</b>			\$ -	\$ 95,150	\$ -	\$ 95,150
	8320.610	Inspection & Testing	\$ -	\$ 4,000	\$ -	\$ 4,000
	8320.612	Kill Truck	\$ -	\$ 5,000	\$ -	\$ 5,000
	8320.605	Fuel / Power	\$ -	\$ 5,263	\$ -	\$ 5,263
	8320.628	Chemicals	\$ -	\$ 5,000	\$ -	\$ 5,000
	8320.621	Rental Equipment	\$ -	\$ 15,000	\$ -	\$ 15,000
	8320.602	Workover Rig	\$ -	\$ 30,000	\$ -	\$ 30,000
	8320.625	Wellsite Supervision	\$ -	\$ 5,000	\$ -	\$ 5,000
	8320.611	Trucking/Vacuum/Transportation	\$ -	\$ 10,000	\$ -	\$ 10,000
	8320.617	Contract Labor/Roustabout	\$ -	\$ 15,887	\$ -	\$ 15,887
<b>Intangible Flowback</b>			\$ -	\$ 341,344	\$ -	\$ 341,344
	8360.815	Trucking/Vacuum/Transp	\$ -	\$ 14,334	\$ -	\$ 14,334
	8360.850	Safety / Environmental	\$ -	\$ 4,400	\$ -	\$ 4,400
	8360.825	Rental Equipment	\$ -	\$ 190,000	\$ -	\$ 190,000
	8360.805	Trucked Water Disposal	\$ -	\$ 21,464	\$ -	\$ 21,464
	8360.845	Wellsite Supervision	\$ -	\$ 50,400	\$ -	\$ 50,400
	8360.820	Well Testing / Flowback	\$ -	\$ 60,746	\$ -	\$ 60,746
<b>Intangible Facility</b>			\$ -	\$ -	\$ 664,900	\$ 664,900
	8350.417	Overhead Power Labor	\$ -	\$ -	\$ 24,600	\$ 24,600
	8350.420	Electrical Labor	\$ -	\$ -	\$ 61,900	\$ 61,900
	8350.421	Commissioning	\$ -	\$ -	\$ 3,500	\$ 3,500
	8350.403	Roads/Location	\$ -	\$ -	\$ 85,100	\$ 85,100
	8350.404	Equipment Rental	\$ -	\$ -	\$ 31,000	\$ 31,000
	8350.411	Safety & Environmental	\$ -	\$ -	\$ 11,700	\$ 11,700
	8350.418	Mechanical Labor	\$ -	\$ -	\$ 222,500	\$ 222,500
	8350.422	Flowline Labor	\$ -	\$ -	\$ 35,100	\$ 35,100
	8350.413	Contingency	\$ -	\$ -	\$ 75,200	\$ 75,200
	8350.419	Automation Labor	\$ -	\$ -	\$ 21,500	\$ 21,500
	8350.415	Engineering / Technical	\$ -	\$ -	\$ 38,700	\$ 38,700
	8350.416	Supervision	\$ -	\$ -	\$ 29,600	\$ 29,600
	8350.410	Transportation/Trucking	\$ -	\$ -	\$ 24,500	\$ 24,500
<b>TOTAL INTANGIBLE COSTS &gt;&gt;&gt;</b>			\$ 3,068,003	\$ 6,053,488	\$ 664,900	\$ 9,786,391
<b>TOTAL PROJECT COSTS &gt;&gt;&gt;</b>			\$ 3,831,757	\$ 6,656,201	\$ 1,580,000	\$ 12,067,958
			<b>Drilling</b>	<b>Completion</b>	<b>Facility</b>	<b>Total</b>

This Authority for Expenditure is based on cost estimates. Billing will reflect your proportionate share of the actual invoice costs.



AUTHORIZATION FOR EXPENDITURE

JOINT INTEREST APPROVAL:

Company: \_\_\_\_\_

Working Interest: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

By: \_\_\_\_\_



### AUTHORIZATION FOR EXPENDITURE

**AFE: NM0592**

Date: June 04, 2024

Well Name: Sapphire 14 Federal Com #305H

Projected MD/TVD: 19573/9300

Target: 1BS

Spud to TD: 16.8

County: Lea

Lateral Length: 10000

State: NM

Stages: 64

SHL: S14-T19S-R33E 375' FNL, 1260' FEL

Total Proppant (ppf): 2500

BHL: S23-T19S-R33E 100'FSL, 1254' FEL

Total Fluid (gal/ft): 3000

### PROJECT DESCRIPTION:

The proposed AFE is for the Sapphire 14 Federal Com #305H, a 2 section Bone Springs horizontal well to be drilled in Lea County, NM. The well is a 3 string casing design consisting of the following: 17.5" surface hole drilled on Fresh to 1250' and 13.375" 54.5# J-55 BTC casing will be set and cemented in place; 12.25" hole will then be drilled on Brine to 3500' and a string of 9.625" 40# J-55 BTC casing will be set and cemented in place; 8.75" production hole will then be drilled on OBM to 19573' and a string of 5.5" 20# P-110 HC GBCD casing will be set and cemented in place. There will be 10000' of treatable lateral and the completions design will consist of +/-64 stages at 2500 lbs/ft & 3000 gals/ft. AFE includes associated costs for initial gas lift installation.

	<u>TOTAL</u>
<b>DRILLING:</b>	<b>\$3,831,757.11</b>
<b>COMPLETIONS:</b>	<b>\$6,656,201.06</b>
<b>FACILITIES:</b>	<b>\$1,580,000.00</b>
<b>COMPLETED WELL COST:</b>	<b>\$12,067,958.17</b>

### OPERATOR APPROVAL:





## AUTHORIZATION FOR EXPENDITURE

AFE: NM0592

Date: June 04, 2024

Well Name: Sapphire 14 Federal Com #305H

Projected MD/TVD: 19573/9300

Target: 1BS

Spud to TD: 16.8

County: Lea

Lateral Length: 10000

State: NM

Stages: 64

SHL: S14-T19S-R33E 375' FNL, 1260' FEL

Total Proppant (ppf): 2500

BHL: S23-T19S-R33E 100'FSL, 1254' FEL

Total Fluid (gal/ft): 3000

TANGIBLE COSTS			Drilling	Completion	Facility	Total
<b>Tangible Drilling</b>			\$ 763,754	\$ -	\$ -	\$ 763,754
	8400.303	Production Casing	\$ 515,654	\$ -	\$ -	\$ 515,654
	8400.302	Intrm 1&2 Casing	\$ 126,471	\$ -	\$ -	\$ 126,471
	8400.340	Wellhead	\$ 56,835	\$ -	\$ -	\$ 56,835
	8400.301	Surface Casing	\$ 64,795	\$ -	\$ -	\$ 64,795
<b>Tangible Completion</b>			\$ -	\$ 602,713	\$ -	\$ 602,713
	8400.352	Wellhead & Equipment	\$ -	\$ 44,205	\$ -	\$ 44,205
	8325.704	Downhole Artificial Lift Eqpt	\$ -	\$ 350,000	\$ -	\$ 350,000
	8325.705	ESP Equipment/Install	\$ -	\$ 40,000	\$ -	\$ 40,000
	8325.711	Wellhead Equipment	\$ -	\$ 63,508	\$ -	\$ 63,508
	8325.702	Tubing	\$ -	\$ 90,000	\$ -	\$ 90,000
	8325.719	Contract Labor Install	\$ -	\$ 15,000	\$ -	\$ 15,000
<b>Tangible Facility</b>			\$ -	\$ -	\$ 915,100	\$ 915,100
	8355.515	Flare	\$ -	\$ -	\$ 32,000	\$ 32,000
	8355.525	Containment	\$ -	\$ -	\$ 25,700	\$ 25,700
	8355.520	PVF	\$ -	\$ -	\$ 146,000	\$ 146,000
	8355.555	Pump / Supplies	\$ -	\$ -	\$ 87,200	\$ 87,200
	8355.500	Vessels	\$ -	\$ -	\$ 253,200	\$ 253,200
	8355.535	Instrumentation / Meters	\$ -	\$ -	\$ 60,500	\$ 60,500
	8355.540	Electrical Supplies	\$ -	\$ -	\$ 68,800	\$ 68,800
	8355.550	Overhead Power Material	\$ -	\$ -	\$ 53,100	\$ 53,100
	8355.510	Tanks	\$ -	\$ -	\$ 128,400	\$ 128,400
	8355.565	Flowline	\$ -	\$ -	\$ 49,100	\$ 49,100
	8355.530	Compressors	\$ -	\$ -	\$ 11,100	\$ 11,100
<b>TOTAL TANGIBLE COSTS &gt;&gt;&gt;</b>			\$ 763,754	\$ 602,713	\$ 915,100	\$ 2,281,567

INTANGIBLE COSTS			Drilling	Completion	Facility	Total
<b>Intangible Drilling</b>			\$ 3,068,003	\$ -	\$ -	\$ 3,068,003
	8200.164	Solids Control & Closed Loop	\$ 111,542	\$ -	\$ -	\$ 111,542
	8200.124	Equipment Rental	\$ 113,168	\$ -	\$ -	\$ 113,168
	8200.147	Drilling Overhead	\$ 5,194	\$ -	\$ -	\$ 5,194
	8200.138	Cementing Services	\$ 199,975	\$ -	\$ -	\$ 199,975
	8200.102	Drilling - Daywork	\$ 806,307	\$ -	\$ -	\$ 806,307
	8200.119	Mud-Auxiliary	\$ 31,076	\$ -	\$ -	\$ 31,076
	8200.144	Company Supervision	\$ 2,400	\$ -	\$ -	\$ 2,400
	8200.103	Drilling - Rig Move	\$ 93,673	\$ -	\$ -	\$ 93,673
	8200.115	Mud-Drill Water	\$ 5,671	\$ -	\$ -	\$ 5,671
	8200.169	Mud-Brine	\$ 25,837	\$ -	\$ -	\$ 25,837
	8200.112	Location & Roads, Conductor	\$ 124,415	\$ -	\$ -	\$ 124,415
	8200.116	Drill Bits & BHA	\$ 68,512	\$ -	\$ -	\$ 68,512
	8200.117	Mud & Chemicals	\$ 175,212	\$ -	\$ -	\$ 175,212
	8200.113	Damages/Row	\$ 7,894	\$ -	\$ -	\$ 7,894
	8200.143	Geological Services	\$ 10,112	\$ -	\$ -	\$ 10,112
	8200.104	Fuel - Rig	\$ 187,966	\$ -	\$ -	\$ 187,966
	8200.114	Disposal	\$ 191,556	\$ -	\$ -	\$ 191,556
	8200.137	Casing Services	\$ 71,978	\$ -	\$ -	\$ 71,978
	8200.111	Survey, Stake/Permit	\$ 5,263	\$ -	\$ -	\$ 5,263
	8200.128	Drilling - Directional	\$ 243,572	\$ -	\$ -	\$ 243,572
	8200.162	Mancamp	\$ 45,636	\$ -	\$ -	\$ 45,636
	8200.127	Contract Labor	\$ 27,255	\$ -	\$ -	\$ 27,255
	8200.168	Roustabout Services	\$ 2,196	\$ -	\$ -	\$ 2,196
	8200.167	Consulting Services	\$ 242,291	\$ -	\$ -	\$ 242,291
	8200.149	Legal, Title, Etc	\$ 10,525	\$ -	\$ -	\$ 10,525



## AUTHORIZATION FOR EXPENDITURE

	8200.125	Inspection	\$ 45,258	\$ -	\$ -	\$ 45,258
	8200.170	Mud-Diesel	\$ 110,882	\$ -	\$ -	\$ 110,882
	8200.152	Well Control Ins.	\$ 7,894	\$ -	\$ -	\$ 7,894
	8200.165	Safety/Environmental	\$ 2,513	\$ -	\$ -	\$ 2,513
	8200.106	Transportation	\$ 92,233	\$ -	\$ -	\$ 92,233
<b>Intangible Completion</b>			\$ -	\$ 5,616,994	\$ -	\$ 5,616,994
	8300.276	Safety & Environmental	\$ -	\$ 3,473	\$ -	\$ 3,473
	8300.248	Mancamp	\$ -	\$ 21,324	\$ -	\$ 21,324
	8300.274	Water Transfer	\$ -	\$ 99,015	\$ -	\$ 99,015
	8300.277	Consulting Services	\$ -	\$ 116,828	\$ -	\$ 116,828
	8300.212	Contract Labor	\$ -	\$ 10,678	\$ -	\$ 10,678
	8300.270	Frac - Equipment	\$ -	\$ 1,692,841	\$ -	\$ 1,692,841
	8300.240	Pump Down Services	\$ -	\$ 101,040	\$ -	\$ 101,040
	8300.273	Flowback	\$ -	\$ 7,821	\$ -	\$ 7,821
	8300.220	Engineering & Supervision	\$ -	\$ 15,156	\$ -	\$ 15,156
	8300.210	Surface Rental Equip	\$ -	\$ 305,001	\$ -	\$ 305,001
	8300.243	Analysis	\$ -	\$ 9,473	\$ -	\$ 9,473
	8300.214	Perforating & Plugs	\$ -	\$ 390,293	\$ -	\$ 390,293
	8300.232	Disposal	\$ -	\$ 19,004	\$ -	\$ 19,004
	8300.271	Coil Tubing	\$ -	\$ 113,093	\$ -	\$ 113,093
	8300.250	Downhole Rental Equip	\$ -	\$ 43,391	\$ -	\$ 43,391
	8300.275	Frac - Sand	\$ -	\$ 1,015,231	\$ -	\$ 1,015,231
	8300.209	Chemicals	\$ -	\$ 419,703	\$ -	\$ 419,703
	8300.203	Fuel	\$ -	\$ 683,704	\$ -	\$ 683,704
	8300.205	Location & Roads	\$ -	\$ 5,288	\$ -	\$ 5,288
	8300.207	Fresh Water	\$ -	\$ 537,798	\$ -	\$ 537,798
	8300.278	Roustabouts	\$ -	\$ 1,579	\$ -	\$ 1,579
	8300.229	Transportation	\$ -	\$ 5,263	\$ -	\$ 5,263
<b>Intangible Artificial Lift</b>			\$ -	\$ 95,150	\$ -	\$ 95,150
	8320.610	Inspection & Testing	\$ -	\$ 4,000	\$ -	\$ 4,000
	8320.625	Wellsite Supervision	\$ -	\$ 5,000	\$ -	\$ 5,000
	8320.605	Fuel / Power	\$ -	\$ 5,263	\$ -	\$ 5,263
	8320.617	Contract Labor/Roustabout	\$ -	\$ 15,887	\$ -	\$ 15,887
	8320.602	Workover Rig	\$ -	\$ 30,000	\$ -	\$ 30,000
	8320.621	Rental Equipment	\$ -	\$ 15,000	\$ -	\$ 15,000
	8320.612	Kill Truck	\$ -	\$ 5,000	\$ -	\$ 5,000
	8320.628	Chemicals	\$ -	\$ 5,000	\$ -	\$ 5,000
	8320.611	Trucking/Vacuum/Transportation	\$ -	\$ 10,000	\$ -	\$ 10,000
<b>Intangible Flowback</b>			\$ -	\$ 341,344	\$ -	\$ 341,344
	8360.805	Trucked Water Disposal	\$ -	\$ 21,464	\$ -	\$ 21,464
	8360.815	Trucking/Vacuum/Transp	\$ -	\$ 14,334	\$ -	\$ 14,334
	8360.825	Rental Equipment	\$ -	\$ 190,000	\$ -	\$ 190,000
	8360.850	Safety / Environmental	\$ -	\$ 4,400	\$ -	\$ 4,400
	8360.820	Well Testing / Flowback	\$ -	\$ 60,746	\$ -	\$ 60,746
	8360.845	Wellsite Supervision	\$ -	\$ 50,400	\$ -	\$ 50,400
<b>Intangible Facility</b>			\$ -	\$ -	\$ 664,900	\$ 664,900
	8350.404	Equipment Rental	\$ -	\$ -	\$ 31,000	\$ 31,000
	8350.417	Overhead Power Labor	\$ -	\$ -	\$ 24,600	\$ 24,600
	8350.418	Mechanical Labor	\$ -	\$ -	\$ 222,500	\$ 222,500
	8350.413	Contingency	\$ -	\$ -	\$ 75,200	\$ 75,200
	8350.420	Electrical Labor	\$ -	\$ -	\$ 61,900	\$ 61,900
	8350.410	Transportation/Trucking	\$ -	\$ -	\$ 24,500	\$ 24,500
	8350.415	Engineering / Technical	\$ -	\$ -	\$ 38,700	\$ 38,700
	8350.422	Flowline Labor	\$ -	\$ -	\$ 35,100	\$ 35,100
	8350.416	Supervision	\$ -	\$ -	\$ 29,600	\$ 29,600
	8350.419	Automation Labor	\$ -	\$ -	\$ 21,500	\$ 21,500
	8350.403	Roads/Location	\$ -	\$ -	\$ 85,100	\$ 85,100
	8350.411	Safety & Environmental	\$ -	\$ -	\$ 11,700	\$ 11,700
	8350.421	Commissioning	\$ -	\$ -	\$ 3,500	\$ 3,500
<b>TOTAL INTANGIBLE COSTS &gt;&gt;&gt;</b>			\$ 3,068,003	\$ 6,053,488	\$ 664,900	\$ 9,786,391
<b>TOTAL PROJECT COSTS &gt;&gt;&gt;</b>			\$ 3,831,757	\$ 6,656,201	\$ 1,580,000	\$ 12,067,958
			<b>Drilling</b>	<b>Completion</b>	<b>Facility</b>	<b>Total</b>

This Authority for Expenditure is based on cost estimates. Billing will reflect your proportionate share of the actual invoice costs.



AUTHORIZATION FOR EXPENDITURE

JOINT INTEREST APPROVAL:

Company: \_\_\_\_\_

Working Interest: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

By: \_\_\_\_\_





**AUTHORIZATION FOR EXPENDITURE**

**AFE: NM0593**

Date: June 04, 2024

Well Name: Sapphire 14 Federal Com #306H

Projected MD/TVD: 19573/9300

Target: 1BS

Spud to TD: 16.8

County: Lea

Lateral Length: 10000

State: NM

Stages: 64

SHL: S14-T19S-R33E 375' FNL, 1240' FEL

Total Proppant (ppf): 2500

BHL: S23-T19S-R33E 100'FSL, 330' FEL

Total Fluid (gal/ft): 3000

**PROJECT DESCRIPTION:**

The proposed AFE is for the Sapphire Federal Com #306H, a 2 section Bone Springs horizontal well to be drilled in Lea County, NM. The well is a 3 string casing design consisting of the following: 17.5" surface hole drilled on Fresh to 1250' and 13.375" 54.5# J-55 BTC casing will be set and cemented in place; 12.25" hole will then be drilled on Brine to 3500' and a string of 9.625" 40# J-55 BTC casing will be set and cemented in place; 8.75" production hole will then be drilled on OBM to 19573' and a string of 5.5" 20# P-110 HC GBCD casing will be set and cemented in place. There will be 10000' of treatable lateral and the completions design will consist of +/-64 stages at 2500 lbs/ft & 3000 gals/ft. AFE includes associated costs for initial gas lift installation.

	<u>TOTAL</u>
<b>DRILLING:</b>	<b>\$3,831,757.11</b>
<b>COMPLETIONS:</b>	<b>\$6,656,201.06</b>
<b>FACILITIES:</b>	<b>\$1,580,000.00</b>
<b>COMPLETED WELL COST:</b>	<b>\$12,067,958.17</b>

**OPERATOR APPROVAL:**



## AUTHORIZATION FOR EXPENDITURE

AFE: NM0593

Date: June 04, 2024

Well Name: Sapphire 14 Federal Com #306H

Projected MD/TVD: 19573/9300

Target: 1BS

Spud to TD: 16.8

County: Lea

Lateral Length: 10000

State: NM

Stages: 64

SHL: S14-T19S-R33E 375' FNL, 1240' FEL

Total Proppant (ppf): 2500

BHL: S23-T19S-R33E 100'FSL, 330' FEL

Total Fluid (gal/ft): 3000

TANGIBLE COSTS			Drilling	Completion	Facility	Total
<b>Tangible Drilling</b>			\$ 763,754	\$ -	\$ -	\$ 763,754
	8400.340	Wellhead	\$ 56,835	\$ -	\$ -	\$ 56,835
	8400.303	Production Casing	\$ 515,654	\$ -	\$ -	\$ 515,654
	8400.302	Intrm 1&2 Casing	\$ 126,471	\$ -	\$ -	\$ 126,471
	8400.301	Surface Casing	\$ 64,795	\$ -	\$ -	\$ 64,795
<b>Tangible Completion</b>			\$ -	\$ 602,713	\$ -	\$ 602,713
	8400.352	Wellhead & Equipment	\$ -	\$ 44,205	\$ -	\$ 44,205
	8325.702	Tubing	\$ -	\$ 90,000	\$ -	\$ 90,000
	8325.705	ESP Equipment/Install	\$ -	\$ 40,000	\$ -	\$ 40,000
	8325.719	Contract Labor Install	\$ -	\$ 15,000	\$ -	\$ 15,000
	8325.711	Wellhead Equipment	\$ -	\$ 63,508	\$ -	\$ 63,508
	8325.704	Downhole Artificial Lift Eqpt	\$ -	\$ 350,000	\$ -	\$ 350,000
<b>Tangible Facility</b>			\$ -	\$ -	\$ 915,100	\$ 915,100
	8355.535	Instrumentation / Meters	\$ -	\$ -	\$ 60,500	\$ 60,500
	8355.530	Compressors	\$ -	\$ -	\$ 11,100	\$ 11,100
	8355.565	Flowline	\$ -	\$ -	\$ 49,100	\$ 49,100
	8355.550	Overhead Power Material	\$ -	\$ -	\$ 53,100	\$ 53,100
	8355.555	Pump / Supplies	\$ -	\$ -	\$ 87,200	\$ 87,200
	8355.520	PVF	\$ -	\$ -	\$ 146,000	\$ 146,000
	8355.540	Electrical Supplies	\$ -	\$ -	\$ 68,800	\$ 68,800
	8355.500	Vessels	\$ -	\$ -	\$ 253,200	\$ 253,200
	8355.510	Tanks	\$ -	\$ -	\$ 128,400	\$ 128,400
	8355.515	Flare	\$ -	\$ -	\$ 32,000	\$ 32,000
	8355.525	Containment	\$ -	\$ -	\$ 25,700	\$ 25,700
<b>TOTAL TANGIBLE COSTS &gt;&gt;&gt;</b>			\$ 763,754	\$ 602,713	\$ 915,100	\$ 2,281,567

INTANGIBLE COSTS			Drilling	Completion	Facility	Total
<b>Intangible Drilling</b>			\$ 3,068,003	\$ -	\$ -	\$ 3,068,003
	8200.165	Safety/Environmental	\$ 2,513	\$ -	\$ -	\$ 2,513
	8200.103	Drilling - Rig Move	\$ 93,673	\$ -	\$ -	\$ 93,673
	8200.106	Transportation	\$ 92,233	\$ -	\$ -	\$ 92,233
	8200.137	Casing Services	\$ 71,978	\$ -	\$ -	\$ 71,978
	8200.119	Mud-Auxiliary	\$ 31,076	\$ -	\$ -	\$ 31,076
	8200.168	Roustabout Services	\$ 2,196	\$ -	\$ -	\$ 2,196
	8200.169	Mud-Brine	\$ 25,837	\$ -	\$ -	\$ 25,837
	8200.147	Drilling Overhead	\$ 5,194	\$ -	\$ -	\$ 5,194
	8200.113	Damages/Row	\$ 7,894	\$ -	\$ -	\$ 7,894
	8200.117	Mud & Chemicals	\$ 175,212	\$ -	\$ -	\$ 175,212
	8200.102	Drilling - Daywork	\$ 806,307	\$ -	\$ -	\$ 806,307
	8200.149	Legal, Title, Etc	\$ 10,525	\$ -	\$ -	\$ 10,525
	8200.162	Mancamp	\$ 45,636	\$ -	\$ -	\$ 45,636
	8200.111	Survey, Stake/Permit	\$ 5,263	\$ -	\$ -	\$ 5,263
	8200.116	Drill Bits & BHA	\$ 68,512	\$ -	\$ -	\$ 68,512
	8200.104	Fuel - Rig	\$ 187,966	\$ -	\$ -	\$ 187,966
	8200.143	Geological Services	\$ 10,112	\$ -	\$ -	\$ 10,112
	8200.167	Consulting Services	\$ 242,291	\$ -	\$ -	\$ 242,291
	8200.115	Mud-Drill Water	\$ 5,671	\$ -	\$ -	\$ 5,671
	8200.112	Location & Roads, Conductor	\$ 124,415	\$ -	\$ -	\$ 124,415
	8200.125	Inspection	\$ 45,258	\$ -	\$ -	\$ 45,258
	8200.170	Mud-Diesel	\$ 110,882	\$ -	\$ -	\$ 110,882
	8200.124	Equipment Rental	\$ 113,168	\$ -	\$ -	\$ 113,168
	8200.152	Well Control Ins.	\$ 7,894	\$ -	\$ -	\$ 7,894
	8200.164	Solids Control & Closed Loop	\$ 111,542	\$ -	\$ -	\$ 111,542



## AUTHORIZATION FOR EXPENDITURE

	8200.144	Company Supervision	\$ 2,400	\$ -	\$ -	\$ 2,400
	8200.114	Disposal	\$ 191,556	\$ -	\$ -	\$ 191,556
	8200.128	Drilling - Directional	\$ 243,572	\$ -	\$ -	\$ 243,572
	8200.127	Contract Labor	\$ 27,255	\$ -	\$ -	\$ 27,255
	8200.138	Cementing Services	\$ 199,975	\$ -	\$ -	\$ 199,975
<b>Intangible Completion</b>			\$ -	\$ 5,616,994	\$ -	\$ 5,616,994
	8300.205	Location & Roads	\$ -	\$ 5,288	\$ -	\$ 5,288
	8300.248	Mancamp	\$ -	\$ 21,324	\$ -	\$ 21,324
	8300.274	Water Transfer	\$ -	\$ 99,015	\$ -	\$ 99,015
	8300.209	Chemicals	\$ -	\$ 419,703	\$ -	\$ 419,703
	8300.250	Downhole Rental Equip	\$ -	\$ 43,391	\$ -	\$ 43,391
	8300.278	Roustabouts	\$ -	\$ 1,579	\$ -	\$ 1,579
	8300.243	Analysis	\$ -	\$ 9,473	\$ -	\$ 9,473
	8300.270	Frac - Equipment	\$ -	\$ 1,692,841	\$ -	\$ 1,692,841
	8300.220	Engineering & Supervision	\$ -	\$ 15,156	\$ -	\$ 15,156
	8300.275	Frac - Sand	\$ -	\$ 1,015,231	\$ -	\$ 1,015,231
	8300.277	Consulting Services	\$ -	\$ 116,828	\$ -	\$ 116,828
	8300.207	Fresh Water	\$ -	\$ 537,798	\$ -	\$ 537,798
	8300.232	Disposal	\$ -	\$ 19,004	\$ -	\$ 19,004
	8300.273	Flowback	\$ -	\$ 7,821	\$ -	\$ 7,821
	8300.240	Pump Down Services	\$ -	\$ 101,040	\$ -	\$ 101,040
	8300.229	Transportation	\$ -	\$ 5,263	\$ -	\$ 5,263
	8300.203	Fuel	\$ -	\$ 683,704	\$ -	\$ 683,704
	8300.212	Contract Labor	\$ -	\$ 10,678	\$ -	\$ 10,678
	8300.271	Coil Tubing	\$ -	\$ 113,093	\$ -	\$ 113,093
	8300.214	Perforating & Plugs	\$ -	\$ 390,293	\$ -	\$ 390,293
	8300.210	Surface Rental Equip	\$ -	\$ 305,001	\$ -	\$ 305,001
	8300.276	Safety & Environmental	\$ -	\$ 3,473	\$ -	\$ 3,473
<b>Intangible Artificial Lift</b>			\$ -	\$ 95,150	\$ -	\$ 95,150
	8320.617	Contract Labor/Roustabout	\$ -	\$ 15,887	\$ -	\$ 15,887
	8320.628	Chemicals	\$ -	\$ 5,000	\$ -	\$ 5,000
	8320.610	Inspection & Testing	\$ -	\$ 4,000	\$ -	\$ 4,000
	8320.605	Fuel / Power	\$ -	\$ 5,263	\$ -	\$ 5,263
	8320.611	Trucking/Vacuum/Transportation	\$ -	\$ 10,000	\$ -	\$ 10,000
	8320.625	Wellsite Supervision	\$ -	\$ 5,000	\$ -	\$ 5,000
	8320.621	Rental Equipment	\$ -	\$ 15,000	\$ -	\$ 15,000
	8320.602	Workover Rig	\$ -	\$ 30,000	\$ -	\$ 30,000
	8320.612	Kill Truck	\$ -	\$ 5,000	\$ -	\$ 5,000
<b>Intangible Flowback</b>			\$ -	\$ 341,344	\$ -	\$ 341,344
	8360.820	Well Testing / Flowback	\$ -	\$ 60,746	\$ -	\$ 60,746
	8360.815	Trucking/Vacuum/Transp	\$ -	\$ 14,334	\$ -	\$ 14,334
	8360.845	Wellsite Supervision	\$ -	\$ 50,400	\$ -	\$ 50,400
	8360.805	Trucked Water Disposal	\$ -	\$ 21,464	\$ -	\$ 21,464
	8360.825	Rental Equipment	\$ -	\$ 190,000	\$ -	\$ 190,000
	8360.850	Safety / Environmental	\$ -	\$ 4,400	\$ -	\$ 4,400
<b>Intangible Facility</b>			\$ -	\$ -	\$ 664,900	\$ 664,900
	8350.417	Overhead Power Labor	\$ -	\$ -	\$ 24,600	\$ 24,600
	8350.413	Contingency	\$ -	\$ -	\$ 75,200	\$ 75,200
	8350.403	Roads/Location	\$ -	\$ -	\$ 85,100	\$ 85,100
	8350.422	Flowline Labor	\$ -	\$ -	\$ 35,100	\$ 35,100
	8350.420	Electrical Labor	\$ -	\$ -	\$ 61,900	\$ 61,900
	8350.416	Supervision	\$ -	\$ -	\$ 29,600	\$ 29,600
	8350.411	Safety & Environmental	\$ -	\$ -	\$ 11,700	\$ 11,700
	8350.410	Transportation/Trucking	\$ -	\$ -	\$ 24,500	\$ 24,500
	8350.404	Equipment Rental	\$ -	\$ -	\$ 31,000	\$ 31,000
	8350.419	Automation Labor	\$ -	\$ -	\$ 21,500	\$ 21,500
	8350.415	Engineering / Technical	\$ -	\$ -	\$ 38,700	\$ 38,700
	8350.421	Commissioning	\$ -	\$ -	\$ 3,500	\$ 3,500
	8350.418	Mechanical Labor	\$ -	\$ -	\$ 222,500	\$ 222,500
<b>TOTAL INTANGIBLE COSTS &gt;&gt;&gt;</b>			\$ 3,068,003	\$ 6,053,488	\$ 664,900	\$ 9,786,391
<b>TOTAL PROJECT COSTS &gt;&gt;&gt;</b>			\$ 3,831,757	\$ 6,656,201	\$ 1,580,000	\$ 12,067,958
			<b>Drilling</b>	<b>Completion</b>	<b>Facility</b>	<b>Total</b>

This Authority for Expenditure is based on cost estimates. Billing will reflect your proportionate share of the actual invoice costs.



AUTHORIZATION FOR EXPENDITURE

JOINT INTEREST APPROVAL:

Company: \_\_\_\_\_

Working Interest: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

By: \_\_\_\_\_





### AUTHORIZATION FOR EXPENDITURE

**AFE: NM0585**

Date: June 04, 2024

Well Name: Sapphire 14 Federal Com #501H

Projected MD/TVD: 20423/10150

Target: 2BS

Spud to TD: 17.3

County: Lea

Lateral Length: 10000

State: NM

Stages: 64

SHL: S14-T19S-R33E 265' FNL, 1280' FWL

Total Proppant (ppf): 2500

BHL: S23-T19S-R33E 100' FSL, 330' FWL

Total Fluid (gal/ft): 3000

#### PROJECT DESCRIPTION:

The proposed AFE is for the Sapphire 14 Federal Com #501H, a 2 section Bone Springs horizontal well to be drilled in Lea County, NM. The well is a 3 string casing design consisting of the following: 17.5" surface hole drilled on Fresh to 1250' and 13.375" 54.5# J-55 BTC casing will be set and cemented in place; 12.25" hole will then be drilled on Brine to 3500' and a string of 9.625" 40# J-55 BTC casing will be set and cemented in place; 8.75" production hole will then be drilled on OBM to 20423' and a string of 5.5" 20# P-110 HC GBCD casing will be set and cemented in place. There will be 10000' of treatable lateral and the completions design will consist of +/-64 stages at 2500 lbs/ft & 3000 gals/ft. AFE includes associated costs for initial gas lift installation.

	<u>TOTAL</u>
<b>DRILLING:</b>	<b>\$3,874,027.40</b>
<b>COMPLETIONS:</b>	<b>\$6,659,324.81</b>
<b>FACILITIES:</b>	<b>\$1,580,000.00</b>
<b>COMPLETED WELL COST:</b>	<b>\$12,113,352.21</b>

#### OPERATOR APPROVAL:



## AUTHORIZATION FOR EXPENDITURE

AFE: NM0585

Date: June 04, 2024

Well Name: Sapphire 14 Federal Com #501H

Projected MD/TVD: 20423/10150

Target: 2BS

Spud to TD: 17.3

County: Lea

Lateral Length: 10000

State: NM

Stages: 64

SHL: S14-T19S-R33E 265' FNL, 1280' FWL

Total Proppant (ppf): 2500

BHL: S23-T19S-R33E 100' FSL, 330' FWL

Total Fluid (gal/ft): 3000

TANGIBLE COSTS			Drilling	Completion	Facility	Total
<b>Tangible Drilling</b>			\$ 776,700	\$ -	\$ -	\$ 776,700
	8400.340	Wellhead	\$ 56,835	\$ -	\$ -	\$ 56,835
	8400.302	Intrm 1&2 Casing	\$ 126,471	\$ -	\$ -	\$ 126,471
	8400.303	Production Casing	\$ 528,600	\$ -	\$ -	\$ 528,600
	8400.301	Surface Casing	\$ 64,795	\$ -	\$ -	\$ 64,795
<b>Tangible Completion</b>			\$ -	\$ 602,713	\$ -	\$ 602,713
	8400.352	Wellhead & Equipment	\$ -	\$ 44,205	\$ -	\$ 44,205
	8325.705	ESP Equipment/Install	\$ -	\$ 40,000	\$ -	\$ 40,000
	8325.702	Tubing	\$ -	\$ 90,000	\$ -	\$ 90,000
	8325.704	Downhole Artificial Lift Eqpt	\$ -	\$ 350,000	\$ -	\$ 350,000
	8325.711	Wellhead Equipment	\$ -	\$ 63,508	\$ -	\$ 63,508
	8325.719	Contract Labor Install	\$ -	\$ 15,000	\$ -	\$ 15,000
<b>Tangible Facility</b>			\$ -	\$ -	\$ 915,100	\$ 915,100
	8355.515	Flare	\$ -	\$ -	\$ 32,000	\$ 32,000
	8355.535	Instrumentation / Meters	\$ -	\$ -	\$ 60,500	\$ 60,500
	8355.530	Compressors	\$ -	\$ -	\$ 11,100	\$ 11,100
	8355.555	Pump / Supplies	\$ -	\$ -	\$ 87,200	\$ 87,200
	8355.525	Containment	\$ -	\$ -	\$ 25,700	\$ 25,700
	8355.500	Vessels	\$ -	\$ -	\$ 253,200	\$ 253,200
	8355.540	Electrical Supplies	\$ -	\$ -	\$ 68,800	\$ 68,800
	8355.510	Tanks	\$ -	\$ -	\$ 128,400	\$ 128,400
	8355.565	Flowline	\$ -	\$ -	\$ 49,100	\$ 49,100
	8355.550	Overhead Power Material	\$ -	\$ -	\$ 53,100	\$ 53,100
	8355.520	PVF	\$ -	\$ -	\$ 146,000	\$ 146,000
<b>TOTAL TANGIBLE COSTS &gt;&gt;&gt;</b>			\$ 776,700	\$ 602,713	\$ 915,100	\$ 2,294,513

INTANGIBLE COSTS			Drilling	Completion	Facility	Total
<b>Intangible Drilling</b>			\$ 3,097,328	\$ -	\$ -	\$ 3,097,328
	8200.106	Transportation	\$ 93,811	\$ -	\$ -	\$ 93,811
	8200.114	Disposal	\$ 192,069	\$ -	\$ -	\$ 192,069
	8200.137	Casing Services	\$ 72,089	\$ -	\$ -	\$ 72,089
	8200.152	Well Control Ins.	\$ 7,894	\$ -	\$ -	\$ 7,894
	8200.167	Consulting Services	\$ 246,443	\$ -	\$ -	\$ 246,443
	8200.124	Equipment Rental	\$ 114,515	\$ -	\$ -	\$ 114,515
	8200.125	Inspection	\$ 45,258	\$ -	\$ -	\$ 45,258
	8200.115	Mud-Drill Water	\$ 5,718	\$ -	\$ -	\$ 5,718
	8200.117	Mud & Chemicals	\$ 176,172	\$ -	\$ -	\$ 176,172
	8200.103	Drilling - Rig Move	\$ 93,673	\$ -	\$ -	\$ 93,673
	8200.104	Fuel - Rig	\$ 190,965	\$ -	\$ -	\$ 190,965
	8200.168	Roustabout Services	\$ 2,202	\$ -	\$ -	\$ 2,202
	8200.149	Legal, Title, Etc	\$ 10,525	\$ -	\$ -	\$ 10,525
	8200.113	Damages/Row	\$ 7,894	\$ -	\$ -	\$ 7,894
	8200.165	Safety/Environmental	\$ 2,545	\$ -	\$ -	\$ 2,545
	8200.138	Cementing Services	\$ 199,975	\$ -	\$ -	\$ 199,975
	8200.143	Geological Services	\$ 10,157	\$ -	\$ -	\$ 10,157
	8200.144	Company Supervision	\$ 2,400	\$ -	\$ -	\$ 2,400
	8200.164	Solids Control & Closed Loop	\$ 113,092	\$ -	\$ -	\$ 113,092
	8200.119	Mud-Auxiliary	\$ 31,269	\$ -	\$ -	\$ 31,269
	8200.147	Drilling Overhead	\$ 5,272	\$ -	\$ -	\$ 5,272
	8200.102	Drilling - Daywork	\$ 818,273	\$ -	\$ -	\$ 818,273
	8200.170	Mud-Diesel	\$ 110,882	\$ -	\$ -	\$ 110,882
	8200.116	Drill Bits & BHA	\$ 68,656	\$ -	\$ -	\$ 68,656
	8200.127	Contract Labor	\$ 27,255	\$ -	\$ -	\$ 27,255



## AUTHORIZATION FOR EXPENDITURE

	8200.128	Drilling - Directional	\$ 246,815	\$ -	\$ -	\$ 246,815
	8200.111	Survey, Stake/Permit	\$ 5,263	\$ -	\$ -	\$ 5,263
	8200.112	Location & Roads, Conductor	\$ 124,415	\$ -	\$ -	\$ 124,415
	8200.169	Mud-Brine	\$ 25,837	\$ -	\$ -	\$ 25,837
	8200.162	Mancamp	\$ 45,996	\$ -	\$ -	\$ 45,996
<b>Intangible Completion</b>			\$ -	\$ 5,620,118	\$ -	\$ 5,620,118
	8300.220	Engineering & Supervision	\$ -	\$ 15,156	\$ -	\$ 15,156
	8300.203	Fuel	\$ -	\$ 683,704	\$ -	\$ 683,704
	8300.270	Frac - Equipment	\$ -	\$ 1,692,841	\$ -	\$ 1,692,841
	8300.271	Coil Tubing	\$ -	\$ 113,408	\$ -	\$ 113,408
	8300.275	Frac - Sand	\$ -	\$ 1,015,231	\$ -	\$ 1,015,231
	8300.273	Flowback	\$ -	\$ 7,821	\$ -	\$ 7,821
	8300.277	Consulting Services	\$ -	\$ 116,828	\$ -	\$ 116,828
	8300.274	Water Transfer	\$ -	\$ 99,015	\$ -	\$ 99,015
	8300.229	Transportation	\$ -	\$ 5,263	\$ -	\$ 5,263
	8300.278	Roustabouts	\$ -	\$ 1,579	\$ -	\$ 1,579
	8300.243	Analysis	\$ -	\$ 9,473	\$ -	\$ 9,473
	8300.209	Chemicals	\$ -	\$ 419,703	\$ -	\$ 419,703
	8300.240	Pump Down Services	\$ -	\$ 101,040	\$ -	\$ 101,040
	8300.212	Contract Labor	\$ -	\$ 10,678	\$ -	\$ 10,678
	8300.232	Disposal	\$ -	\$ 19,004	\$ -	\$ 19,004
	8300.205	Location & Roads	\$ -	\$ 5,288	\$ -	\$ 5,288
	8300.214	Perforating & Plugs	\$ -	\$ 390,293	\$ -	\$ 390,293
	8300.250	Downhole Rental Equip	\$ -	\$ 43,391	\$ -	\$ 43,391
	8300.207	Fresh Water	\$ -	\$ 537,798	\$ -	\$ 537,798
	8300.276	Safety & Environmental	\$ -	\$ 3,473	\$ -	\$ 3,473
	8300.210	Surface Rental Equip	\$ -	\$ 305,001	\$ -	\$ 305,001
	8300.248	Mancamp	\$ -	\$ 21,324	\$ -	\$ 21,324
	8300.279	Completions Overhead	\$ -	\$ 2,808	\$ -	\$ 2,808
<b>Intangible Artificial Lift</b>			\$ -	\$ 95,150	\$ -	\$ 95,150
	8320.611	Trucking/Vacuum/Transportation	\$ -	\$ 10,000	\$ -	\$ 10,000
	8320.605	Fuel / Power	\$ -	\$ 5,263	\$ -	\$ 5,263
	8320.625	Wellsite Supervision	\$ -	\$ 5,000	\$ -	\$ 5,000
	8320.612	Kill Truck	\$ -	\$ 5,000	\$ -	\$ 5,000
	8320.621	Rental Equipment	\$ -	\$ 15,000	\$ -	\$ 15,000
	8320.602	Workover Rig	\$ -	\$ 30,000	\$ -	\$ 30,000
	8320.628	Chemicals	\$ -	\$ 5,000	\$ -	\$ 5,000
	8320.617	Contract Labor/Roustabout	\$ -	\$ 15,887	\$ -	\$ 15,887
	8320.610	Inspection & Testing	\$ -	\$ 4,000	\$ -	\$ 4,000
<b>Intangible Flowback</b>			\$ -	\$ 341,344	\$ -	\$ 341,344
	8360.845	Wellsite Supervision	\$ -	\$ 50,400	\$ -	\$ 50,400
	8360.850	Safety / Environmental	\$ -	\$ 4,400	\$ -	\$ 4,400
	8360.825	Rental Equipment	\$ -	\$ 190,000	\$ -	\$ 190,000
	8360.815	Trucking/Vacuum/Transp	\$ -	\$ 14,334	\$ -	\$ 14,334
	8360.820	Well Testing / Flowback	\$ -	\$ 60,746	\$ -	\$ 60,746
	8360.805	Trucked Water Disposal	\$ -	\$ 21,464	\$ -	\$ 21,464
<b>Intangible Facility</b>			\$ -	\$ -	\$ 664,900	\$ 664,900
	8350.419	Automation Labor	\$ -	\$ -	\$ 21,500	\$ 21,500
	8350.422	Flowline Labor	\$ -	\$ -	\$ 35,100	\$ 35,100
	8350.403	Roads/Location	\$ -	\$ -	\$ 85,100	\$ 85,100
	8350.418	Mechanical Labor	\$ -	\$ -	\$ 222,500	\$ 222,500
	8350.410	Transportation/Trucking	\$ -	\$ -	\$ 24,500	\$ 24,500
	8350.417	Overhead Power Labor	\$ -	\$ -	\$ 24,600	\$ 24,600
	8350.420	Electrical Labor	\$ -	\$ -	\$ 61,900	\$ 61,900
	8350.416	Supervision	\$ -	\$ -	\$ 29,600	\$ 29,600
	8350.404	Equipment Rental	\$ -	\$ -	\$ 31,000	\$ 31,000
	8350.413	Contingency	\$ -	\$ -	\$ 75,200	\$ 75,200
	8350.415	Engineering / Technical	\$ -	\$ -	\$ 38,700	\$ 38,700
	8350.411	Safety & Environmental	\$ -	\$ -	\$ 11,700	\$ 11,700
	8350.421	Commissioning	\$ -	\$ -	\$ 3,500	\$ 3,500
<b>TOTAL INTANGIBLE COSTS &gt;&gt;&gt;</b>			\$ 3,097,328	\$ 6,056,612	\$ 664,900	\$ 9,818,840
<b>TOTAL PROJECT COSTS &gt;&gt;&gt;</b>			\$ 3,874,027	\$ 6,659,325	\$ 1,580,000	\$ 12,113,352
			<b>Drilling</b>	<b>Completion</b>	<b>Facility</b>	<b>Total</b>



**AUTHORIZATION FOR EXPENDITURE**

This Authority for Expenditure is based on cost estimates. Billing will reflect your proportionate share of the actual invoice costs.

**JOINT INTEREST APPROVAL:**

Company: \_\_\_\_\_

Working Interest: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

By: \_\_\_\_\_





### AUTHORIZATION FOR EXPENDITURE

**AFE: NM0586**

Date: June 04, 2024

Well Name: Sapphire 14 Federal Com #502H

Projected MD/TVD: 20423/10150

Target: 2BS

Spud to TD: 17.3

County: Lea

Lateral Length: 10000

State: NM

Stages: 64

SHL: S14-T19S-R33E 265' FNL, 1300' FWL

Total Proppant (ppf): 2500

BHL: S23-T19S-R33E 100' FSL, 1254' FWL

Total Fluid (gal/ft): 3000

#### PROJECT DESCRIPTION:

The proposed AFE is for the Sapphire 14 Federal Com #502H, a 2 section Bone Springs horizontal well to be drilled in Lea County, NM. The well is a 3 string casing design consisting of the following: 17.5" surface hole drilled on Fresh to 1250' and 13.375" 54.5# J-55 BTC casing will be set and cemented in place; 12.25" hole will then be drilled on Brine to 3500' and a string of 9.625" 40# J-55 BTC casing will be set and cemented in place; 8.75" production hole will then be drilled on OBM to 20423' and a string of 5.5" 20# P-110 HC GBCD casing will be set and cemented in place. There will be 10000' of treatable lateral and the completions design will consist of +/-64 stages at 2500 lbs/ft & 3000 gals/ft. AFE includes associated costs for initial gas lift installation.

	<u>TOTAL</u>
<b>DRILLING:</b>	<b>\$3,874,027.40</b>
<b>COMPLETIONS:</b>	<b>\$6,659,324.81</b>
<b>FACILITIES:</b>	<b>\$1,580,000.00</b>
<b>COMPLETED WELL COST:</b>	<b>\$12,113,352.21</b>

#### OPERATOR APPROVAL:



## AUTHORIZATION FOR EXPENDITURE

AFE: NM0586

Date: June 04, 2024

Well Name: Sapphire 14 Federal Com #502H

Projected MD/TVD: 20423/10150

Target: 2BS

Spud to TD: 17.3

County: Lea

Lateral Length: 10000

State: NM

Stages: 64

SHL: S14-T19S-R33E 265' FNL, 1300' FWL

Total Proppant (ppf): 2500

BHL: S23-T19S-R33E 100' FSL, 1254' FWL

Total Fluid (gal/ft): 3000

TANGIBLE COSTS			Drilling	Completion	Facility	Total
<b>Tangible Drilling</b>			\$ 776,700	\$ -	\$ -	\$ 776,700
	8400.301	Surface Casing	\$ 64,795	\$ -	\$ -	\$ 64,795
	8400.303	Production Casing	\$ 528,600	\$ -	\$ -	\$ 528,600
	8400.340	Wellhead	\$ 56,835	\$ -	\$ -	\$ 56,835
	8400.302	Intrm 1&2 Casing	\$ 126,471	\$ -	\$ -	\$ 126,471
<b>Tangible Completion</b>			\$ -	\$ 602,713	\$ -	\$ 602,713
	8400.352	Wellhead & Equipment	\$ -	\$ 44,205	\$ -	\$ 44,205
	8325.704	Downhole Artificial Lift Eqpt	\$ -	\$ 350,000	\$ -	\$ 350,000
	8325.711	Wellhead Equipment	\$ -	\$ 63,508	\$ -	\$ 63,508
	8325.719	Contract Labor Install	\$ -	\$ 15,000	\$ -	\$ 15,000
	8325.702	Tubing	\$ -	\$ 90,000	\$ -	\$ 90,000
	8325.705	ESP Equipment/Install	\$ -	\$ 40,000	\$ -	\$ 40,000
<b>Tangible Facility</b>			\$ -	\$ -	\$ 915,100	\$ 915,100
	8355.515	Flare	\$ -	\$ -	\$ 32,000	\$ 32,000
	8355.565	Flowline	\$ -	\$ -	\$ 49,100	\$ 49,100
	8355.550	Overhead Power Material	\$ -	\$ -	\$ 53,100	\$ 53,100
	8355.530	Compressors	\$ -	\$ -	\$ 11,100	\$ 11,100
	8355.525	Containment	\$ -	\$ -	\$ 25,700	\$ 25,700
	8355.555	Pump / Supplies	\$ -	\$ -	\$ 87,200	\$ 87,200
	8355.500	Vessels	\$ -	\$ -	\$ 253,200	\$ 253,200
	8355.540	Electrical Supplies	\$ -	\$ -	\$ 68,800	\$ 68,800
	8355.510	Tanks	\$ -	\$ -	\$ 128,400	\$ 128,400
	8355.535	Instrumentation / Meters	\$ -	\$ -	\$ 60,500	\$ 60,500
	8355.520	PVF	\$ -	\$ -	\$ 146,000	\$ 146,000
<b>TOTAL TANGIBLE COSTS &gt;&gt;&gt;</b>			\$ 776,700	\$ 602,713	\$ 915,100	\$ 2,294,513

INTANGIBLE COSTS			Drilling	Completion	Facility	Total
<b>Intangible Drilling</b>			\$ 3,097,328	\$ -	\$ -	\$ 3,097,328
	8200.168	Roustabout Services	\$ 2,202	\$ -	\$ -	\$ 2,202
	8200.115	Mud-Drill Water	\$ 5,718	\$ -	\$ -	\$ 5,718
	8200.104	Fuel - Rig	\$ 190,965	\$ -	\$ -	\$ 190,965
	8200.112	Location & Roads, Conductor	\$ 124,415	\$ -	\$ -	\$ 124,415
	8200.162	Mancamp	\$ 45,996	\$ -	\$ -	\$ 45,996
	8200.127	Contract Labor	\$ 27,255	\$ -	\$ -	\$ 27,255
	8200.119	Mud-Auxiliary	\$ 31,269	\$ -	\$ -	\$ 31,269
	8200.138	Cementing Services	\$ 199,975	\$ -	\$ -	\$ 199,975
	8200.143	Geological Services	\$ 10,157	\$ -	\$ -	\$ 10,157
	8200.117	Mud & Chemicals	\$ 176,172	\$ -	\$ -	\$ 176,172
	8200.167	Consulting Services	\$ 246,443	\$ -	\$ -	\$ 246,443
	8200.169	Mud-Brine	\$ 25,837	\$ -	\$ -	\$ 25,837
	8200.165	Safety/Environmental	\$ 2,545	\$ -	\$ -	\$ 2,545
	8200.147	Drilling Overhead	\$ 5,272	\$ -	\$ -	\$ 5,272
	8200.116	Drill Bits & BHA	\$ 68,656	\$ -	\$ -	\$ 68,656
	8200.144	Company Supervision	\$ 2,400	\$ -	\$ -	\$ 2,400
	8200.113	Damages/Row	\$ 7,894	\$ -	\$ -	\$ 7,894
	8200.111	Survey, Stake/Permit	\$ 5,263	\$ -	\$ -	\$ 5,263
	8200.152	Well Control Ins.	\$ 7,894	\$ -	\$ -	\$ 7,894
	8200.114	Disposal	\$ 192,069	\$ -	\$ -	\$ 192,069
	8200.128	Drilling - Directional	\$ 246,815	\$ -	\$ -	\$ 246,815
	8200.170	Mud-Diesel	\$ 110,882	\$ -	\$ -	\$ 110,882
	8200.137	Casing Services	\$ 72,089	\$ -	\$ -	\$ 72,089
	8200.125	Inspection	\$ 45,258	\$ -	\$ -	\$ 45,258
	8200.124	Equipment Rental	\$ 114,515	\$ -	\$ -	\$ 114,515



## AUTHORIZATION FOR EXPENDITURE

	8200.102	Drilling - Daywork	\$ 818,273	\$ -	\$ -	\$ 818,273
	8200.149	Legal, Title, Etc	\$ 10,525	\$ -	\$ -	\$ 10,525
	8200.164	Solids Control & Closed Loop	\$ 113,092	\$ -	\$ -	\$ 113,092
	8200.103	Drilling - Rig Move	\$ 93,673	\$ -	\$ -	\$ 93,673
	8200.106	Transportation	\$ 93,811	\$ -	\$ -	\$ 93,811
<b>Intangible Completion</b>			\$ -	\$ 5,620,118	\$ -	\$ 5,620,118
	8300.203	Fuel	\$ -	\$ 683,704	\$ -	\$ 683,704
	8300.271	Coil Tubing	\$ -	\$ 113,408	\$ -	\$ 113,408
	8300.277	Consulting Services	\$ -	\$ 116,828	\$ -	\$ 116,828
	8300.232	Disposal	\$ -	\$ 19,004	\$ -	\$ 19,004
	8300.205	Location & Roads	\$ -	\$ 5,288	\$ -	\$ 5,288
	8300.209	Chemicals	\$ -	\$ 419,703	\$ -	\$ 419,703
	8300.250	Downhole Rental Equip	\$ -	\$ 43,391	\$ -	\$ 43,391
	8300.248	Mancamp	\$ -	\$ 21,324	\$ -	\$ 21,324
	8300.214	Perforating & Plugs	\$ -	\$ 390,293	\$ -	\$ 390,293
	8300.243	Analysis	\$ -	\$ 9,473	\$ -	\$ 9,473
	8300.229	Transportation	\$ -	\$ 5,263	\$ -	\$ 5,263
	8300.210	Surface Rental Equip	\$ -	\$ 305,001	\$ -	\$ 305,001
	8300.275	Frac - Sand	\$ -	\$ 1,015,231	\$ -	\$ 1,015,231
	8300.207	Fresh Water	\$ -	\$ 537,798	\$ -	\$ 537,798
	8300.278	Roustabouts	\$ -	\$ 1,579	\$ -	\$ 1,579
	8300.273	Flowback	\$ -	\$ 7,821	\$ -	\$ 7,821
	8300.270	Frac - Equipment	\$ -	\$ 1,692,841	\$ -	\$ 1,692,841
	8300.279	Completions Overhead	\$ -	\$ 2,808	\$ -	\$ 2,808
	8300.274	Water Transfer	\$ -	\$ 99,015	\$ -	\$ 99,015
	8300.240	Pump Down Services	\$ -	\$ 101,040	\$ -	\$ 101,040
	8300.220	Engineering & Supervision	\$ -	\$ 15,156	\$ -	\$ 15,156
	8300.212	Contract Labor	\$ -	\$ 10,678	\$ -	\$ 10,678
	8300.276	Safety & Environmental	\$ -	\$ 3,473	\$ -	\$ 3,473
<b>Intangible Artificial Lift</b>			\$ -	\$ 95,150	\$ -	\$ 95,150
	8320.617	Contract Labor/Roustabout	\$ -	\$ 15,887	\$ -	\$ 15,887
	8320.625	Wellsite Supervision	\$ -	\$ 5,000	\$ -	\$ 5,000
	8320.621	Rental Equipment	\$ -	\$ 15,000	\$ -	\$ 15,000
	8320.612	Kill Truck	\$ -	\$ 5,000	\$ -	\$ 5,000
	8320.605	Fuel / Power	\$ -	\$ 5,263	\$ -	\$ 5,263
	8320.610	Inspection & Testing	\$ -	\$ 4,000	\$ -	\$ 4,000
	8320.602	Workover Rig	\$ -	\$ 30,000	\$ -	\$ 30,000
	8320.611	Trucking/Vacuum/Transportation	\$ -	\$ 10,000	\$ -	\$ 10,000
	8320.628	Chemicals	\$ -	\$ 5,000	\$ -	\$ 5,000
<b>Intangible Flowback</b>			\$ -	\$ 341,344	\$ -	\$ 341,344
	8360.825	Rental Equipment	\$ -	\$ 190,000	\$ -	\$ 190,000
	8360.845	Wellsite Supervision	\$ -	\$ 50,400	\$ -	\$ 50,400
	8360.815	Trucking/Vacuum/Transp	\$ -	\$ 14,334	\$ -	\$ 14,334
	8360.850	Safety / Environmental	\$ -	\$ 4,400	\$ -	\$ 4,400
	8360.820	Well Testing / Flowback	\$ -	\$ 60,746	\$ -	\$ 60,746
	8360.805	Trucked Water Disposal	\$ -	\$ 21,464	\$ -	\$ 21,464
<b>Intangible Facility</b>			\$ -	\$ -	\$ 664,900	\$ 664,900
	8350.417	Overhead Power Labor	\$ -	\$ -	\$ 24,600	\$ 24,600
	8350.416	Supervision	\$ -	\$ -	\$ 29,600	\$ 29,600
	8350.419	Automation Labor	\$ -	\$ -	\$ 21,500	\$ 21,500
	8350.421	Commissioning	\$ -	\$ -	\$ 3,500	\$ 3,500
	8350.418	Mechanical Labor	\$ -	\$ -	\$ 222,500	\$ 222,500
	8350.422	Flowline Labor	\$ -	\$ -	\$ 35,100	\$ 35,100
	8350.415	Engineering / Technical	\$ -	\$ -	\$ 38,700	\$ 38,700
	8350.411	Safety & Environmental	\$ -	\$ -	\$ 11,700	\$ 11,700
	8350.413	Contingency	\$ -	\$ -	\$ 75,200	\$ 75,200
	8350.410	Transportation/Trucking	\$ -	\$ -	\$ 24,500	\$ 24,500
	8350.404	Equipment Rental	\$ -	\$ -	\$ 31,000	\$ 31,000
	8350.403	Roads/Location	\$ -	\$ -	\$ 85,100	\$ 85,100
	8350.420	Electrical Labor	\$ -	\$ -	\$ 61,900	\$ 61,900
<b>TOTAL INTANGIBLE COSTS &gt;&gt;&gt;</b>			\$ 3,097,328	\$ 6,056,612	\$ 664,900	\$ 9,818,840
<b>TOTAL PROJECT COSTS &gt;&gt;&gt;</b>			\$ 3,874,027	\$ 6,659,325	\$ 1,580,000	\$ 12,113,352
			<b>Drilling</b>	<b>Completion</b>	<b>Facility</b>	<b>Total</b>



**AUTHORIZATION FOR EXPENDITURE**

This Authority for Expenditure is based on cost estimates. Billing will reflect your proportionate share of the actual invoice costs.

**JOINT INTEREST APPROVAL:**

Company: \_\_\_\_\_ Working Interest: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

By: \_\_\_\_\_





### AUTHORIZATION FOR EXPENDITURE

**AFE: NM0595**

Date: June 04, 2024

Well Name: Sapphire 14 Federal Com #505H

Projected MD/TVD: 20423/10150

Target: 2BS

Spud to TD: 17.3

County: Lea

Lateral Length: 10000

State: NM

Stages: 64

SHL: S14-T19S-R33E 215' FNL, 1430' FEL

Total Proppant (ppf): 2500

BHL: S23-T19S-R33E 100' FSL, 1254' FEL

Total Fluid (gal/ft): 3000

### PROJECT DESCRIPTION:

The proposed AFE is for the Sapphire 14 Federal Com #505H, a 2 section Bone Springs horizontal well to be drilled in Lea County, NM. The well is a 3 string casing design consisting of the following: 17.5" surface hole drilled on Fresh to 1250' and 13.375" 54.5# J-55 BTC casing will be set and cemented in place; 12.25" hole will then be drilled on Brine to 3500' and a string of 9.625" 40# J-55 BTC casing will be set and cemented in place; 8.75" production hole will then be drilled on OBM to 20423' and a string of 5.5" 20# P-110 HC GBCD casing will be set and cemented in place. There will be 10000' of treatable lateral and the completions design will consist of +/-64 stages at 2500 lbs/ft & 3000 gals/ft. AFE includes associated costs for initial gas lift installation.

	<u>TOTAL</u>
<b>DRILLING:</b>	<b>\$3,874,027.40</b>
<b>COMPLETIONS:</b>	<b>\$6,659,324.81</b>
<b>FACILITIES:</b>	<b>\$1,580,000.00</b>
<b>COMPLETED WELL COST:</b>	<b>\$12,113,352.21</b>

### OPERATOR APPROVAL:



## AUTHORIZATION FOR EXPENDITURE

AFE: NM0595

Date: June 04, 2024

Well Name: Sapphire 14 Federal Com #505H

Projected MD/TVD: 20423/10150

Target: 2BS

Spud to TD: 17.3

County: Lea

Lateral Length: 10000

State: NM

Stages: 64

SHL: S14-T19S-R33E 215' FNL, 1430' FEL

Total Proppant (ppf): 2500

BHL: S23-T19S-R33E 100' FSL, 1254' FEL

Total Fluid (gal/ft): 3000

TANGIBLE COSTS			Drilling	Completion	Facility	Total
<b>Tangible Drilling</b>			\$ 776,700	\$ -	\$ -	\$ 776,700
	8400.303	Production Casing	\$ 528,600	\$ -	\$ -	\$ 528,600
	8400.302	Intrm 1&2 Casing	\$ 126,471	\$ -	\$ -	\$ 126,471
	8400.301	Surface Casing	\$ 64,795	\$ -	\$ -	\$ 64,795
	8400.340	Wellhead	\$ 56,835	\$ -	\$ -	\$ 56,835
<b>Tangible Completion</b>			\$ -	\$ 602,713	\$ -	\$ 602,713
	8400.352	Wellhead & Equipment	\$ -	\$ 44,205	\$ -	\$ 44,205
	8325.704	Downhole Artificial Lift Eqpt	\$ -	\$ 350,000	\$ -	\$ 350,000
	8325.711	Wellhead Equipment	\$ -	\$ 63,508	\$ -	\$ 63,508
	8325.702	Tubing	\$ -	\$ 90,000	\$ -	\$ 90,000
	8325.719	Contract Labor Install	\$ -	\$ 15,000	\$ -	\$ 15,000
	8325.705	ESP Equipment/Install	\$ -	\$ 40,000	\$ -	\$ 40,000
<b>Tangible Facility</b>			\$ -	\$ -	\$ 915,100	\$ 915,100
	8355.500	Vessels	\$ -	\$ -	\$ 253,200	\$ 253,200
	8355.525	Containment	\$ -	\$ -	\$ 25,700	\$ 25,700
	8355.540	Electrical Supplies	\$ -	\$ -	\$ 68,800	\$ 68,800
	8355.550	Overhead Power Material	\$ -	\$ -	\$ 53,100	\$ 53,100
	8355.530	Compressors	\$ -	\$ -	\$ 11,100	\$ 11,100
	8355.510	Tanks	\$ -	\$ -	\$ 128,400	\$ 128,400
	8355.565	Flowline	\$ -	\$ -	\$ 49,100	\$ 49,100
	8355.520	PVF	\$ -	\$ -	\$ 146,000	\$ 146,000
	8355.555	Pump / Supplies	\$ -	\$ -	\$ 87,200	\$ 87,200
	8355.515	Flare	\$ -	\$ -	\$ 32,000	\$ 32,000
	8355.535	Instrumentation / Meters	\$ -	\$ -	\$ 60,500	\$ 60,500
<b>TOTAL TANGIBLE COSTS &gt;&gt;&gt;</b>			\$ 776,700	\$ 602,713	\$ 915,100	\$ 2,294,513

INTANGIBLE COSTS			Drilling	Completion	Facility	Total
<b>Intangible Drilling</b>			\$ 3,097,328	\$ -	\$ -	\$ 3,097,328
	8200.124	Equipment Rental	\$ 114,515	\$ -	\$ -	\$ 114,515
	8200.167	Consulting Services	\$ 246,443	\$ -	\$ -	\$ 246,443
	8200.125	Inspection	\$ 45,258	\$ -	\$ -	\$ 45,258
	8200.113	Damages/Row	\$ 7,894	\$ -	\$ -	\$ 7,894
	8200.152	Well Control Ins.	\$ 7,894	\$ -	\$ -	\$ 7,894
	8200.117	Mud & Chemicals	\$ 176,172	\$ -	\$ -	\$ 176,172
	8200.143	Geological Services	\$ 10,157	\$ -	\$ -	\$ 10,157
	8200.111	Survey, Stake/Permit	\$ 5,263	\$ -	\$ -	\$ 5,263
	8200.165	Safety/Environmental	\$ 2,545	\$ -	\$ -	\$ 2,545
	8200.168	Roustabout Services	\$ 2,202	\$ -	\$ -	\$ 2,202
	8200.144	Company Supervision	\$ 2,400	\$ -	\$ -	\$ 2,400
	8200.103	Drilling - Rig Move	\$ 93,673	\$ -	\$ -	\$ 93,673
	8200.162	Mancamp	\$ 45,996	\$ -	\$ -	\$ 45,996
	8200.149	Legal, Title, Etc	\$ 10,525	\$ -	\$ -	\$ 10,525
	8200.147	Drilling Overhead	\$ 5,272	\$ -	\$ -	\$ 5,272
	8200.164	Solids Control & Closed Loop	\$ 113,092	\$ -	\$ -	\$ 113,092
	8200.170	Mud-Diesel	\$ 110,882	\$ -	\$ -	\$ 110,882
	8200.137	Casing Services	\$ 72,089	\$ -	\$ -	\$ 72,089
	8200.102	Drilling - Daywork	\$ 818,273	\$ -	\$ -	\$ 818,273
	8200.104	Fuel - Rig	\$ 190,965	\$ -	\$ -	\$ 190,965
	8200.127	Contract Labor	\$ 27,255	\$ -	\$ -	\$ 27,255
	8200.128	Drilling - Directional	\$ 246,815	\$ -	\$ -	\$ 246,815
	8200.106	Transportation	\$ 93,811	\$ -	\$ -	\$ 93,811
	8200.112	Location & Roads, Conductor	\$ 124,415	\$ -	\$ -	\$ 124,415
	8200.138	Cementing Services	\$ 199,975	\$ -	\$ -	\$ 199,975



## AUTHORIZATION FOR EXPENDITURE

	8200.119	Mud-Auxiliary	\$	31,269	\$	-	\$	-	\$	31,269
	8200.114	Disposal	\$	192,069	\$	-	\$	-	\$	192,069
	8200.115	Mud-Drill Water	\$	5,718	\$	-	\$	-	\$	5,718
	8200.116	Drill Bits & BHA	\$	68,656	\$	-	\$	-	\$	68,656
	8200.169	Mud-Brine	\$	25,837	\$	-	\$	-	\$	25,837
<b>Intangible Completion</b>			\$	-	\$	5,620,118	\$	-	\$	5,620,118
	8300.273	Flowback	\$	-	\$	7,821	\$	-	\$	7,821
	8300.232	Disposal	\$	-	\$	19,004	\$	-	\$	19,004
	8300.274	Water Transfer	\$	-	\$	99,015	\$	-	\$	99,015
	8300.210	Surface Rental Equip	\$	-	\$	305,001	\$	-	\$	305,001
	8300.278	Roustabouts	\$	-	\$	1,579	\$	-	\$	1,579
	8300.205	Location & Roads	\$	-	\$	5,288	\$	-	\$	5,288
	8300.214	Perforating & Plugs	\$	-	\$	390,293	\$	-	\$	390,293
	8300.279	Completions Overhead	\$	-	\$	2,808	\$	-	\$	2,808
	8300.229	Transportation	\$	-	\$	5,263	\$	-	\$	5,263
	8300.276	Safety & Environmental	\$	-	\$	3,473	\$	-	\$	3,473
	8300.248	Mancamp	\$	-	\$	21,324	\$	-	\$	21,324
	8300.209	Chemicals	\$	-	\$	419,703	\$	-	\$	419,703
	8300.250	Downhole Rental Equip	\$	-	\$	43,391	\$	-	\$	43,391
	8300.271	Coil Tubing	\$	-	\$	113,408	\$	-	\$	113,408
	8300.203	Fuel	\$	-	\$	683,704	\$	-	\$	683,704
	8300.243	Analysis	\$	-	\$	9,473	\$	-	\$	9,473
	8300.207	Fresh Water	\$	-	\$	537,798	\$	-	\$	537,798
	8300.212	Contract Labor	\$	-	\$	10,678	\$	-	\$	10,678
	8300.275	Frac - Sand	\$	-	\$	1,015,231	\$	-	\$	1,015,231
	8300.240	Pump Down Services	\$	-	\$	101,040	\$	-	\$	101,040
	8300.270	Frac - Equipment	\$	-	\$	1,692,841	\$	-	\$	1,692,841
	8300.277	Consulting Services	\$	-	\$	116,828	\$	-	\$	116,828
	8300.220	Engineering & Supervision	\$	-	\$	15,156	\$	-	\$	15,156
<b>Intangible Artificial Lift</b>			\$	-	\$	95,150	\$	-	\$	95,150
	8320.621	Rental Equipment	\$	-	\$	15,000	\$	-	\$	15,000
	8320.625	Wellsite Supervision	\$	-	\$	5,000	\$	-	\$	5,000
	8320.628	Chemicals	\$	-	\$	5,000	\$	-	\$	5,000
	8320.605	Fuel / Power	\$	-	\$	5,263	\$	-	\$	5,263
	8320.611	Trucking/Vacuum/Transportation	\$	-	\$	10,000	\$	-	\$	10,000
	8320.617	Contract Labor/Roustabout	\$	-	\$	15,887	\$	-	\$	15,887
	8320.612	Kill Truck	\$	-	\$	5,000	\$	-	\$	5,000
	8320.610	Inspection & Testing	\$	-	\$	4,000	\$	-	\$	4,000
	8320.602	Workover Rig	\$	-	\$	30,000	\$	-	\$	30,000
<b>Intangible Flowback</b>			\$	-	\$	341,344	\$	-	\$	341,344
	8360.815	Trucking/Vacuum/Transp	\$	-	\$	14,334	\$	-	\$	14,334
	8360.820	Well Testing / Flowback	\$	-	\$	60,746	\$	-	\$	60,746
	8360.825	Rental Equipment	\$	-	\$	190,000	\$	-	\$	190,000
	8360.805	Trucked Water Disposal	\$	-	\$	21,464	\$	-	\$	21,464
	8360.845	Wellsite Supervision	\$	-	\$	50,400	\$	-	\$	50,400
	8360.850	Safety / Environmental	\$	-	\$	4,400	\$	-	\$	4,400
<b>Intangible Facility</b>			\$	-	\$	-	\$	664,900	\$	664,900
	8350.419	Automation Labor	\$	-	\$	-	\$	21,500	\$	21,500
	8350.421	Commissioning	\$	-	\$	-	\$	3,500	\$	3,500
	8350.416	Supervision	\$	-	\$	-	\$	29,600	\$	29,600
	8350.422	Flowline Labor	\$	-	\$	-	\$	35,100	\$	35,100
	8350.404	Equipment Rental	\$	-	\$	-	\$	31,000	\$	31,000
	8350.418	Mechanical Labor	\$	-	\$	-	\$	222,500	\$	222,500
	8350.413	Contingency	\$	-	\$	-	\$	75,200	\$	75,200
	8350.411	Safety & Environmental	\$	-	\$	-	\$	11,700	\$	11,700
	8350.417	Overhead Power Labor	\$	-	\$	-	\$	24,600	\$	24,600
	8350.420	Electrical Labor	\$	-	\$	-	\$	61,900	\$	61,900
	8350.403	Roads/Location	\$	-	\$	-	\$	85,100	\$	85,100
	8350.415	Engineering / Technical	\$	-	\$	-	\$	38,700	\$	38,700
	8350.410	Transportation/Trucking	\$	-	\$	-	\$	24,500	\$	24,500
<b>TOTAL INTANGIBLE COSTS &gt;&gt;&gt;</b>			\$	3,097,328	\$	6,056,612	\$	664,900	\$	9,818,840
<b>TOTAL PROJECT COSTS &gt;&gt;&gt;</b>			\$	3,874,027	\$	6,659,325	\$	1,580,000	\$	12,113,352
				Drilling		Completion		Facility		Total



**AUTHORIZATION FOR EXPENDITURE**

This Authority for Expenditure is based on cost estimates. Billing will reflect your proportionate share of the actual invoice costs.

**JOINT INTEREST APPROVAL:**

Company:	_____	Working Interest:	_____
Signature:	_____	Date:	_____
By:	_____		





### AUTHORIZATION FOR EXPENDITURE

**AFE: NM0596**

Date: June 04, 2024

Well Name: Sapphire 14 Federal Com #506H

Projected MD/TVD: 20423/10150

Target: 2BS

Spud to TD: 17.3

County: Lea

Lateral Length: 10000

State: NM

Stages: 64

SHL: S14-T19S-R33E 215' FNL, 1410' FEL

Total Proppant (ppf): 2500

BHL: S23-T19S-R33E 100' FSL, 330' FEL

Total Fluid (gal/ft): 3000

#### PROJECT DESCRIPTION:

The proposed AFE is for the Sapphire 14 Federal Com #506H, a 2 section Bone Springs horizontal well to be drilled in Lea County, NM. The well is a 3 string casing design consisting of the following: 17.5" surface hole drilled on Fresh to 1250' and 13.375" 54.5# J-55 BTC casing will be set and cemented in place; 12.25" hole will then be drilled on Brine to 3500' and a string of 9.625" 40# J-55 BTC casing will be set and cemented in place; 8.75" production hole will then be drilled on OBM to 20423' and a string of 5.5" 20# P-110 HC GBCD casing will be set and cemented in place. There will be 10000' of treatable lateral and the completions design will consist of +/-64 stages at 2500 lbs/ft & 3000 gals/ft. AFE includes associated costs for initial gas lift installation.

	<u>TOTAL</u>
<b>DRILLING:</b>	<b>\$3,874,027.40</b>
<b>COMPLETIONS:</b>	<b>\$6,659,324.81</b>
<b>FACILITIES:</b>	<b>\$1,580,000.00</b>
<b>COMPLETED WELL COST:</b>	<b>\$12,113,352.21</b>

#### OPERATOR APPROVAL:



## AUTHORIZATION FOR EXPENDITURE

AFE: NM0596

Date: June 04, 2024

Well Name: Sapphire 14 Federal Com #506H

Projected MD/TVD: 20423/10150

Target: 2BS

Spud to TD: 17.3

County: Lea

Lateral Length: 10000

State: NM

Stages: 64

SHL: S14-T19S-R33E 215' FNL, 1410' FEL

Total Proppant (ppf): 2500

BHL: S23-T19S-R33E 100' FSL, 330' FEL

Total Fluid (gal/ft): 3000

TANGIBLE COSTS			Drilling	Completion	Facility	Total
<b>Tangible Drilling</b>			\$ 776,700	\$ -	\$ -	\$ 776,700
	8400.302	Intrm 1&2 Casing	\$ 126,471	\$ -	\$ -	\$ 126,471
	8400.303	Production Casing	\$ 528,600	\$ -	\$ -	\$ 528,600
	8400.340	Wellhead	\$ 56,835	\$ -	\$ -	\$ 56,835
	8400.301	Surface Casing	\$ 64,795	\$ -	\$ -	\$ 64,795
<b>Tangible Completion</b>			\$ -	\$ 602,713	\$ -	\$ 602,713
	8400.352	Wellhead & Equipment	\$ -	\$ 44,205	\$ -	\$ 44,205
	8325.702	Tubing	\$ -	\$ 90,000	\$ -	\$ 90,000
	8325.705	ESP Equipment/Install	\$ -	\$ 40,000	\$ -	\$ 40,000
	8325.711	Wellhead Equipment	\$ -	\$ 63,508	\$ -	\$ 63,508
	8325.719	Contract Labor Install	\$ -	\$ 15,000	\$ -	\$ 15,000
	8325.704	Downhole Artificial Lift Eqpt	\$ -	\$ 350,000	\$ -	\$ 350,000
<b>Tangible Facility</b>			\$ -	\$ -	\$ 915,100	\$ 915,100
	8355.515	Flare	\$ -	\$ -	\$ 32,000	\$ 32,000
	8355.500	Vessels	\$ -	\$ -	\$ 253,200	\$ 253,200
	8355.535	Instrumentation / Meters	\$ -	\$ -	\$ 60,500	\$ 60,500
	8355.525	Containment	\$ -	\$ -	\$ 25,700	\$ 25,700
	8355.510	Tanks	\$ -	\$ -	\$ 128,400	\$ 128,400
	8355.540	Electrical Supplies	\$ -	\$ -	\$ 68,800	\$ 68,800
	8355.530	Compressors	\$ -	\$ -	\$ 11,100	\$ 11,100
	8355.565	Flowline	\$ -	\$ -	\$ 49,100	\$ 49,100
	8355.550	Overhead Power Material	\$ -	\$ -	\$ 53,100	\$ 53,100
	8355.555	Pump / Supplies	\$ -	\$ -	\$ 87,200	\$ 87,200
	8355.520	PVF	\$ -	\$ -	\$ 146,000	\$ 146,000
<b>TOTAL TANGIBLE COSTS &gt;&gt;&gt;</b>			\$ 776,700	\$ 602,713	\$ 915,100	\$ 2,294,513

INTANGIBLE COSTS			Drilling	Completion	Facility	Total
<b>Intangible Drilling</b>			\$ 3,097,328	\$ -	\$ -	\$ 3,097,328
	8200.117	Mud & Chemicals	\$ 176,172	\$ -	\$ -	\$ 176,172
	8200.147	Drilling Overhead	\$ 5,272	\$ -	\$ -	\$ 5,272
	8200.168	Roustabout Services	\$ 2,202	\$ -	\$ -	\$ 2,202
	8200.138	Cementing Services	\$ 199,975	\$ -	\$ -	\$ 199,975
	8200.115	Mud-Drill Water	\$ 5,718	\$ -	\$ -	\$ 5,718
	8200.144	Company Supervision	\$ 2,400	\$ -	\$ -	\$ 2,400
	8200.170	Mud-Diesel	\$ 110,882	\$ -	\$ -	\$ 110,882
	8200.114	Disposal	\$ 192,069	\$ -	\$ -	\$ 192,069
	8200.102	Drilling - Daywork	\$ 818,273	\$ -	\$ -	\$ 818,273
	8200.111	Survey, Stake/Permit	\$ 5,263	\$ -	\$ -	\$ 5,263
	8200.167	Consulting Services	\$ 246,443	\$ -	\$ -	\$ 246,443
	8200.152	Well Control Ins.	\$ 7,894	\$ -	\$ -	\$ 7,894
	8200.169	Mud-Brine	\$ 25,837	\$ -	\$ -	\$ 25,837
	8200.164	Solids Control & Closed Loop	\$ 113,092	\$ -	\$ -	\$ 113,092
	8200.143	Geological Services	\$ 10,157	\$ -	\$ -	\$ 10,157
	8200.128	Drilling - Directional	\$ 246,815	\$ -	\$ -	\$ 246,815
	8200.125	Inspection	\$ 45,258	\$ -	\$ -	\$ 45,258
	8200.149	Legal, Title, Etc	\$ 10,525	\$ -	\$ -	\$ 10,525
	8200.106	Transportation	\$ 93,811	\$ -	\$ -	\$ 93,811
	8200.165	Safety/Environmental	\$ 2,545	\$ -	\$ -	\$ 2,545
	8200.137	Casing Services	\$ 72,089	\$ -	\$ -	\$ 72,089
	8200.124	Equipment Rental	\$ 114,515	\$ -	\$ -	\$ 114,515
	8200.103	Drilling - Rig Move	\$ 93,673	\$ -	\$ -	\$ 93,673
	8200.113	Damages/Row	\$ 7,894	\$ -	\$ -	\$ 7,894
	8200.162	Mancamp	\$ 45,996	\$ -	\$ -	\$ 45,996



## AUTHORIZATION FOR EXPENDITURE

	8200.119	Mud-Auxiliary	\$	31,269	\$	-	\$	-	\$	31,269
	8200.127	Contract Labor	\$	27,255	\$	-	\$	-	\$	27,255
	8200.112	Location & Roads, Conductor	\$	124,415	\$	-	\$	-	\$	124,415
	8200.116	Drill Bits & BHA	\$	68,656	\$	-	\$	-	\$	68,656
	8200.104	Fuel - Rig	\$	190,965	\$	-	\$	-	\$	190,965
<b>Intangible Completion</b>			\$	-	\$	5,620,118	\$	-	\$	5,620,118
	8300.273	Flowback	\$	-	\$	7,821	\$	-	\$	7,821
	8300.250	Downhole Rental Equip	\$	-	\$	43,391	\$	-	\$	43,391
	8300.243	Analysis	\$	-	\$	9,473	\$	-	\$	9,473
	8300.220	Engineering & Supervision	\$	-	\$	15,156	\$	-	\$	15,156
	8300.232	Disposal	\$	-	\$	19,004	\$	-	\$	19,004
	8300.274	Water Transfer	\$	-	\$	99,015	\$	-	\$	99,015
	8300.279	Completions Overhead	\$	-	\$	2,808	\$	-	\$	2,808
	8300.240	Pump Down Services	\$	-	\$	101,040	\$	-	\$	101,040
	8300.278	Roustabouts	\$	-	\$	1,579	\$	-	\$	1,579
	8300.203	Fuel	\$	-	\$	683,704	\$	-	\$	683,704
	8300.214	Perforating & Plugs	\$	-	\$	390,293	\$	-	\$	390,293
	8300.271	Coil Tubing	\$	-	\$	113,408	\$	-	\$	113,408
	8300.210	Surface Rental Equip	\$	-	\$	305,001	\$	-	\$	305,001
	8300.207	Fresh Water	\$	-	\$	537,798	\$	-	\$	537,798
	8300.229	Transportation	\$	-	\$	5,263	\$	-	\$	5,263
	8300.276	Safety & Environmental	\$	-	\$	3,473	\$	-	\$	3,473
	8300.270	Frac - Equipment	\$	-	\$	1,692,841	\$	-	\$	1,692,841
	8300.248	Mancamp	\$	-	\$	21,324	\$	-	\$	21,324
	8300.277	Consulting Services	\$	-	\$	116,828	\$	-	\$	116,828
	8300.212	Contract Labor	\$	-	\$	10,678	\$	-	\$	10,678
	8300.205	Location & Roads	\$	-	\$	5,288	\$	-	\$	5,288
	8300.209	Chemicals	\$	-	\$	419,703	\$	-	\$	419,703
	8300.275	Frac - Sand	\$	-	\$	1,015,231	\$	-	\$	1,015,231
<b>Intangible Artificial Lift</b>			\$	-	\$	95,150	\$	-	\$	95,150
	8320.602	Workover Rig	\$	-	\$	30,000	\$	-	\$	30,000
	8320.625	Wellsite Supervision	\$	-	\$	5,000	\$	-	\$	5,000
	8320.605	Fuel / Power	\$	-	\$	5,263	\$	-	\$	5,263
	8320.611	Trucking/Vacuum/Transportation	\$	-	\$	10,000	\$	-	\$	10,000
	8320.621	Rental Equipment	\$	-	\$	15,000	\$	-	\$	15,000
	8320.617	Contract Labor/Roustabout	\$	-	\$	15,887	\$	-	\$	15,887
	8320.612	Kill Truck	\$	-	\$	5,000	\$	-	\$	5,000
	8320.628	Chemicals	\$	-	\$	5,000	\$	-	\$	5,000
	8320.610	Inspection & Testing	\$	-	\$	4,000	\$	-	\$	4,000
<b>Intangible Flowback</b>			\$	-	\$	341,344	\$	-	\$	341,344
	8360.825	Rental Equipment	\$	-	\$	190,000	\$	-	\$	190,000
	8360.845	Wellsite Supervision	\$	-	\$	50,400	\$	-	\$	50,400
	8360.850	Safety / Environmental	\$	-	\$	4,400	\$	-	\$	4,400
	8360.820	Well Testing / Flowback	\$	-	\$	60,746	\$	-	\$	60,746
	8360.805	Trucked Water Disposal	\$	-	\$	21,464	\$	-	\$	21,464
	8360.815	Trucking/Vacuum/Transp	\$	-	\$	14,334	\$	-	\$	14,334
<b>Intangible Facility</b>			\$	-	\$	-	\$	664,900	\$	664,900
	8350.410	Transportation/Trucking	\$	-	\$	-	\$	24,500	\$	24,500
	8350.403	Roads/Location	\$	-	\$	-	\$	85,100	\$	85,100
	8350.416	Supervision	\$	-	\$	-	\$	29,600	\$	29,600
	8350.417	Overhead Power Labor	\$	-	\$	-	\$	24,600	\$	24,600
	8350.415	Engineering / Technical	\$	-	\$	-	\$	38,700	\$	38,700
	8350.420	Electrical Labor	\$	-	\$	-	\$	61,900	\$	61,900
	8350.421	Commissioning	\$	-	\$	-	\$	3,500	\$	3,500
	8350.411	Safety & Environmental	\$	-	\$	-	\$	11,700	\$	11,700
	8350.419	Automation Labor	\$	-	\$	-	\$	21,500	\$	21,500
	8350.418	Mechanical Labor	\$	-	\$	-	\$	222,500	\$	222,500
	8350.404	Equipment Rental	\$	-	\$	-	\$	31,000	\$	31,000
	8350.422	Flowline Labor	\$	-	\$	-	\$	35,100	\$	35,100
	8350.413	Contingency	\$	-	\$	-	\$	75,200	\$	75,200
<b>TOTAL INTANGIBLE COSTS &gt;&gt;&gt;</b>			\$	3,097,328	\$	6,056,612	\$	664,900	\$	9,818,840
<b>TOTAL PROJECT COSTS &gt;&gt;&gt;</b>			\$	3,874,027	\$	6,659,325	\$	1,580,000	\$	12,113,352
				<b>Drilling</b>		<b>Completion</b>		<b>Facility</b>		<b>Total</b>



**AUTHORIZATION FOR EXPENDITURE**

This Authority for Expenditure is based on cost estimates. Billing will reflect your proportionate share of the actual invoice costs.

**JOINT INTEREST APPROVAL:**

Company:	_____	Working Interest:	_____
Signature:	_____	Date:	_____
By:	_____		





### AUTHORIZATION FOR EXPENDITURE

**AFE: NM0587**

Date: June 04, 2024

Well Name: Sapphire 14 Federal Com #513H

Projected MD/TVD: 20423/10150

Target: 2BS

Spud to TD: 17.3

County: Lea

Lateral Length: 10000

State: NM

Stages: 64

SHL: S14-T19S-R33E 265' FNL, 1320' FWL

Total Proppant (ppf): 2500

BHL: S23-T19S-R33E 100' FSL, 2178' FWL

Total Fluid (gal/ft): 3000

#### PROJECT DESCRIPTION:

The proposed AFE is for the Sapphire 14 Federal Com #513H, a 2 section Bone Springs horizontal well to be drilled in Lea County, NM. The well is a 3 string casing design consisting of the following: 17.5" surface hole drilled on Fresh to 1250' and 13.375" 54.5# J-55 BTC casing will be set and cemented in place; 12.25" hole will then be drilled on Brine to 3500' and a string of 9.625" 40# J-55 BTC casing will be set and cemented in place; 8.75" production hole will then be drilled on OBM to 20423' and a string of 5.5" 20# P-110 HC GBCD casing will be set and cemented in place. There will be 10000' of treatable lateral and the completions design will consist of +/-64 stages at 2500 lbs/ft & 3000 gals/ft. AFE includes associated costs for initial gas lift installation.

	<u>TOTAL</u>
<b>DRILLING:</b>	<b>\$3,874,027.40</b>
<b>COMPLETIONS:</b>	<b>\$6,659,324.81</b>
<b>FACILITIES:</b>	<b>\$1,580,000.00</b>
<b>COMPLETED WELL COST:</b>	<b>\$12,113,352.21</b>

#### OPERATOR APPROVAL:



## AUTHORIZATION FOR EXPENDITURE

AFE: NM0587

Date: June 04, 2024

Well Name: Sapphire 14 Federal Com #513H

Projected MD/TVD: 20423/10150

Target: 2BS

Spud to TD: 17.3

County: Lea

Lateral Length: 10000

State: NM

Stages: 64

SHL: S14-T19S-R33E 265' FNL, 1320' FWL

Total Proppant (ppf): 2500

BHL: S23-T19S-R33E 100' FSL, 2178' FWL

Total Fluid (gal/ft): 3000

TANGIBLE COSTS			Drilling	Completion	Facility	Total
<b>Tangible Drilling</b>			\$ 776,700	\$ -	\$ -	\$ 776,700
	8400.301	Surface Casing	\$ 64,795	\$ -	\$ -	\$ 64,795
	8400.340	Wellhead	\$ 56,835	\$ -	\$ -	\$ 56,835
	8400.302	Intrm 1&2 Casing	\$ 126,471	\$ -	\$ -	\$ 126,471
	8400.303	Production Casing	\$ 528,600	\$ -	\$ -	\$ 528,600
<b>Tangible Completion</b>			\$ -	\$ 602,713	\$ -	\$ 602,713
	8400.352	Wellhead & Equipment	\$ -	\$ 44,205	\$ -	\$ 44,205
	8325.719	Contract Labor Install	\$ -	\$ 15,000	\$ -	\$ 15,000
	8325.704	Downhole Artificial Lift Eqpt	\$ -	\$ 350,000	\$ -	\$ 350,000
	8325.711	Wellhead Equipment	\$ -	\$ 63,508	\$ -	\$ 63,508
	8325.702	Tubing	\$ -	\$ 90,000	\$ -	\$ 90,000
	8325.705	ESP Equipment/Install	\$ -	\$ 40,000	\$ -	\$ 40,000
<b>Tangible Facility</b>			\$ -	\$ -	\$ 915,100	\$ 915,100
	8355.535	Instrumentation / Meters	\$ -	\$ -	\$ 60,500	\$ 60,500
	8355.525	Containment	\$ -	\$ -	\$ 25,700	\$ 25,700
	8355.520	PVF	\$ -	\$ -	\$ 146,000	\$ 146,000
	8355.500	Vessels	\$ -	\$ -	\$ 253,200	\$ 253,200
	8355.515	Flare	\$ -	\$ -	\$ 32,000	\$ 32,000
	8355.565	Flowline	\$ -	\$ -	\$ 49,100	\$ 49,100
	8355.540	Electrical Supplies	\$ -	\$ -	\$ 68,800	\$ 68,800
	8355.555	Pump / Supplies	\$ -	\$ -	\$ 87,200	\$ 87,200
	8355.510	Tanks	\$ -	\$ -	\$ 128,400	\$ 128,400
	8355.550	Overhead Power Material	\$ -	\$ -	\$ 53,100	\$ 53,100
	8355.530	Compressors	\$ -	\$ -	\$ 11,100	\$ 11,100
<b>TOTAL TANGIBLE COSTS &gt;&gt;&gt;</b>			\$ 776,700	\$ 602,713	\$ 915,100	\$ 2,294,513

INTANGIBLE COSTS			Drilling	Completion	Facility	Total
<b>Intangible Drilling</b>			\$ 3,097,328	\$ -	\$ -	\$ 3,097,328
	8200.143	Geological Services	\$ 10,157	\$ -	\$ -	\$ 10,157
	8200.168	Roustabout Services	\$ 2,202	\$ -	\$ -	\$ 2,202
	8200.127	Contract Labor	\$ 27,255	\$ -	\$ -	\$ 27,255
	8200.102	Drilling - Daywork	\$ 818,273	\$ -	\$ -	\$ 818,273
	8200.115	Mud-Drill Water	\$ 5,718	\$ -	\$ -	\$ 5,718
	8200.147	Drilling Overhead	\$ 5,272	\$ -	\$ -	\$ 5,272
	8200.103	Drilling - Rig Move	\$ 93,673	\$ -	\$ -	\$ 93,673
	8200.164	Solids Control & Closed Loop	\$ 113,092	\$ -	\$ -	\$ 113,092
	8200.119	Mud-Auxiliary	\$ 31,269	\$ -	\$ -	\$ 31,269
	8200.128	Drilling - Directional	\$ 246,815	\$ -	\$ -	\$ 246,815
	8200.124	Equipment Rental	\$ 114,515	\$ -	\$ -	\$ 114,515
	8200.137	Casing Services	\$ 72,089	\$ -	\$ -	\$ 72,089
	8200.125	Inspection	\$ 45,258	\$ -	\$ -	\$ 45,258
	8200.165	Safety/Environmental	\$ 2,545	\$ -	\$ -	\$ 2,545
	8200.170	Mud-Diesel	\$ 110,882	\$ -	\$ -	\$ 110,882
	8200.116	Drill Bits & BHA	\$ 68,656	\$ -	\$ -	\$ 68,656
	8200.111	Survey, Stake/Permit	\$ 5,263	\$ -	\$ -	\$ 5,263
	8200.169	Mud-Brine	\$ 25,837	\$ -	\$ -	\$ 25,837
	8200.144	Company Supervision	\$ 2,400	\$ -	\$ -	\$ 2,400
	8200.113	Damages/Row	\$ 7,894	\$ -	\$ -	\$ 7,894
	8200.167	Consulting Services	\$ 246,443	\$ -	\$ -	\$ 246,443
	8200.104	Fuel - Rig	\$ 190,965	\$ -	\$ -	\$ 190,965
	8200.149	Legal, Title, Etc	\$ 10,525	\$ -	\$ -	\$ 10,525
	8200.106	Transportation	\$ 93,811	\$ -	\$ -	\$ 93,811
	8200.117	Mud & Chemicals	\$ 176,172	\$ -	\$ -	\$ 176,172



## AUTHORIZATION FOR EXPENDITURE

	8200.162	Mancamp	\$ 45,996	\$ -	\$ -	\$ 45,996
	8200.112	Location & Roads, Conductor	\$ 124,415	\$ -	\$ -	\$ 124,415
	8200.138	Cementing Services	\$ 199,975	\$ -	\$ -	\$ 199,975
	8200.152	Well Control Ins.	\$ 7,894	\$ -	\$ -	\$ 7,894
	8200.114	Disposal	\$ 192,069	\$ -	\$ -	\$ 192,069
<b>Intangible Completion</b>			\$ -	\$ 5,620,118	\$ -	\$ 5,620,118
	8300.279	Completions Overhead	\$ -	\$ 2,808	\$ -	\$ 2,808
	8300.276	Safety & Environmental	\$ -	\$ 3,473	\$ -	\$ 3,473
	8300.275	Frac - Sand	\$ -	\$ 1,015,231	\$ -	\$ 1,015,231
	8300.214	Perforating & Plugs	\$ -	\$ 390,293	\$ -	\$ 390,293
	8300.207	Fresh Water	\$ -	\$ 537,798	\$ -	\$ 537,798
	8300.270	Frac - Equipment	\$ -	\$ 1,692,841	\$ -	\$ 1,692,841
	8300.232	Disposal	\$ -	\$ 19,004	\$ -	\$ 19,004
	8300.203	Fuel	\$ -	\$ 683,704	\$ -	\$ 683,704
	8300.273	Flowback	\$ -	\$ 7,821	\$ -	\$ 7,821
	8300.205	Location & Roads	\$ -	\$ 5,288	\$ -	\$ 5,288
	8300.250	Downhole Rental Equip	\$ -	\$ 43,391	\$ -	\$ 43,391
	8300.220	Engineering & Supervision	\$ -	\$ 15,156	\$ -	\$ 15,156
	8300.243	Analysis	\$ -	\$ 9,473	\$ -	\$ 9,473
	8300.248	Mancamp	\$ -	\$ 21,324	\$ -	\$ 21,324
	8300.278	Roustabouts	\$ -	\$ 1,579	\$ -	\$ 1,579
	8300.271	Coil Tubing	\$ -	\$ 113,408	\$ -	\$ 113,408
	8300.212	Contract Labor	\$ -	\$ 10,678	\$ -	\$ 10,678
	8300.229	Transportation	\$ -	\$ 5,263	\$ -	\$ 5,263
	8300.209	Chemicals	\$ -	\$ 419,703	\$ -	\$ 419,703
	8300.240	Pump Down Services	\$ -	\$ 101,040	\$ -	\$ 101,040
	8300.274	Water Transfer	\$ -	\$ 99,015	\$ -	\$ 99,015
	8300.210	Surface Rental Equip	\$ -	\$ 305,001	\$ -	\$ 305,001
	8300.277	Consulting Services	\$ -	\$ 116,828	\$ -	\$ 116,828
<b>Intangible Artificial Lift</b>			\$ -	\$ 95,150	\$ -	\$ 95,150
	8320.605	Fuel / Power	\$ -	\$ 5,263	\$ -	\$ 5,263
	8320.628	Chemicals	\$ -	\$ 5,000	\$ -	\$ 5,000
	8320.612	Kill Truck	\$ -	\$ 5,000	\$ -	\$ 5,000
	8320.621	Rental Equipment	\$ -	\$ 15,000	\$ -	\$ 15,000
	8320.611	Trucking/Vacuum/Transportation	\$ -	\$ 10,000	\$ -	\$ 10,000
	8320.610	Inspection & Testing	\$ -	\$ 4,000	\$ -	\$ 4,000
	8320.617	Contract Labor/Roustabout	\$ -	\$ 15,887	\$ -	\$ 15,887
	8320.625	Wellsite Supervision	\$ -	\$ 5,000	\$ -	\$ 5,000
	8320.602	Workover Rig	\$ -	\$ 30,000	\$ -	\$ 30,000
<b>Intangible Flowback</b>			\$ -	\$ 341,344	\$ -	\$ 341,344
	8360.845	Wellsite Supervision	\$ -	\$ 50,400	\$ -	\$ 50,400
	8360.820	Well Testing / Flowback	\$ -	\$ 60,746	\$ -	\$ 60,746
	8360.805	Trucked Water Disposal	\$ -	\$ 21,464	\$ -	\$ 21,464
	8360.815	Trucking/Vacuum/Transp	\$ -	\$ 14,334	\$ -	\$ 14,334
	8360.850	Safety / Environmental	\$ -	\$ 4,400	\$ -	\$ 4,400
	8360.825	Rental Equipment	\$ -	\$ 190,000	\$ -	\$ 190,000
<b>Intangible Facility</b>			\$ -	\$ -	\$ 664,900	\$ 664,900
	8350.403	Roads/Location	\$ -	\$ -	\$ 85,100	\$ 85,100
	8350.418	Mechanical Labor	\$ -	\$ -	\$ 222,500	\$ 222,500
	8350.404	Equipment Rental	\$ -	\$ -	\$ 31,000	\$ 31,000
	8350.419	Automation Labor	\$ -	\$ -	\$ 21,500	\$ 21,500
	8350.415	Engineering / Technical	\$ -	\$ -	\$ 38,700	\$ 38,700
	8350.413	Contingency	\$ -	\$ -	\$ 75,200	\$ 75,200
	8350.410	Transportation/Trucking	\$ -	\$ -	\$ 24,500	\$ 24,500
	8350.421	Commissioning	\$ -	\$ -	\$ 3,500	\$ 3,500
	8350.417	Overhead Power Labor	\$ -	\$ -	\$ 24,600	\$ 24,600
	8350.422	Flowline Labor	\$ -	\$ -	\$ 35,100	\$ 35,100
	8350.416	Supervision	\$ -	\$ -	\$ 29,600	\$ 29,600
	8350.420	Electrical Labor	\$ -	\$ -	\$ 61,900	\$ 61,900
	8350.411	Safety & Environmental	\$ -	\$ -	\$ 11,700	\$ 11,700
<b>TOTAL INTANGIBLE COSTS &gt;&gt;&gt;</b>			\$ 3,097,328	\$ 6,056,612	\$ 664,900	\$ 9,818,840
<b>TOTAL PROJECT COSTS &gt;&gt;&gt;</b>			\$ 3,874,027	\$ 6,659,325	\$ 1,580,000	\$ 12,113,352
			<b>Drilling</b>	<b>Completion</b>	<b>Facility</b>	<b>Total</b>



**AUTHORIZATION FOR EXPENDITURE**

This Authority for Expenditure is based on cost estimates. Billing will reflect your proportionate share of the actual invoice costs.

**JOINT INTEREST APPROVAL:**

Company: \_\_\_\_\_ Working Interest: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

By: \_\_\_\_\_





### AUTHORIZATION FOR EXPENDITURE

**AFE: NM0594**

Date: June 04, 2024

Well Name: Sapphire 14 Federal Com #514H

Projected MD/TVD: 20423/10150

Target: 2BS

Spud to TD: 17.3

County: Lea

Lateral Length: 10000

State: NM

Stages: 64

SHL: S14-T19S-R33E 215' FNL, 1450' FEL

Total Proppant (ppf): 2500

BHL: S23-T19S-R33E 100' FSL, 2178' FEL

Total Fluid (gal/ft): 3000

### PROJECT DESCRIPTION:

The proposed AFE is for the Sapphire 14 Federal Com #514H, a 2 section Bone Springs horizontal well to be drilled in Lea County, NM. The well is a 3 string casing design consisting of the following: 17.5" surface hole drilled on Fresh to 1250' and 13.375" 54.5# J-55 BTC casing will be set and cemented in place; 12.25" hole will then be drilled on Brine to 3500' and a string of 9.625" 40# J-55 BTC casing will be set and cemented in place; 8.75" production hole will then be drilled on OBM to 20423' and a string of 5.5" 20# P-110 HC GBCD casing will be set and cemented in place. There will be 10000' of treatable lateral and the completions design will consist of +/-64 stages at 2500 lbs/ft & 3000 gals/ft. AFE includes associated costs for initial gas lift installation.

	<u>TOTAL</u>
<b>DRILLING:</b>	<b>\$3,874,027.40</b>
<b>COMPLETIONS:</b>	<b>\$6,659,324.81</b>
<b>FACILITIES:</b>	<b>\$1,580,000.00</b>
<b>COMPLETED WELL COST:</b>	<b>\$12,113,352.21</b>

### OPERATOR APPROVAL:



## AUTHORIZATION FOR EXPENDITURE

AFE: NM0594

Date: June 04, 2024

Well Name: Sapphire 14 Federal Com #514H

Projected MD/TVD: 20423/10150

Target: 2BS

Spud to TD: 17.3

County: Lea

Lateral Length: 10000

State: NM

Stages: 64

SHL: S14-T19S-R33E 215' FNL, 1450' FEL

Total Proppant (ppf): 2500

BHL: S23-T19S-R33E 100' FSL, 2178' FEL

Total Fluid (gal/ft): 3000

TANGIBLE COSTS			Drilling	Completion	Facility	Total
<b>Tangible Drilling</b>			\$ 776,700	\$ -	\$ -	\$ 776,700
	8400.302	Intrm 1&2 Casing	\$ 126,471	\$ -	\$ -	\$ 126,471
	8400.340	Wellhead	\$ 56,835	\$ -	\$ -	\$ 56,835
	8400.301	Surface Casing	\$ 64,795	\$ -	\$ -	\$ 64,795
	8400.303	Production Casing	\$ 528,600	\$ -	\$ -	\$ 528,600
<b>Tangible Completion</b>			\$ -	\$ 602,713	\$ -	\$ 602,713
	8400.352	Wellhead & Equipment	\$ -	\$ 44,205	\$ -	\$ 44,205
	8325.705	ESP Equipment/Install	\$ -	\$ 40,000	\$ -	\$ 40,000
	8325.704	Downhole Artificial Lift Eqpt	\$ -	\$ 350,000	\$ -	\$ 350,000
	8325.711	Wellhead Equipment	\$ -	\$ 63,508	\$ -	\$ 63,508
	8325.702	Tubing	\$ -	\$ 90,000	\$ -	\$ 90,000
	8325.719	Contract Labor Install	\$ -	\$ 15,000	\$ -	\$ 15,000
<b>Tangible Facility</b>			\$ -	\$ -	\$ 915,100	\$ 915,100
	8355.500	Vessels	\$ -	\$ -	\$ 253,200	\$ 253,200
	8355.520	P/VF	\$ -	\$ -	\$ 146,000	\$ 146,000
	8355.555	Pump / Supplies	\$ -	\$ -	\$ 87,200	\$ 87,200
	8355.550	Overhead Power Material	\$ -	\$ -	\$ 53,100	\$ 53,100
	8355.515	Flare	\$ -	\$ -	\$ 32,000	\$ 32,000
	8355.535	Instrumentation / Meters	\$ -	\$ -	\$ 60,500	\$ 60,500
	8355.530	Compressors	\$ -	\$ -	\$ 11,100	\$ 11,100
	8355.540	Electrical Supplies	\$ -	\$ -	\$ 68,800	\$ 68,800
	8355.510	Tanks	\$ -	\$ -	\$ 128,400	\$ 128,400
	8355.525	Containment	\$ -	\$ -	\$ 25,700	\$ 25,700
	8355.565	Flowline	\$ -	\$ -	\$ 49,100	\$ 49,100
<b>TOTAL TANGIBLE COSTS &gt;&gt;&gt;</b>			\$ 776,700	\$ 602,713	\$ 915,100	\$ 2,294,513

INTANGIBLE COSTS			Drilling	Completion	Facility	Total
<b>Intangible Drilling</b>			\$ 3,097,328	\$ -	\$ -	\$ 3,097,328
	8200.165	Safety/Environmental	\$ 2,545	\$ -	\$ -	\$ 2,545
	8200.169	Mud-Brine	\$ 25,837	\$ -	\$ -	\$ 25,837
	8200.117	Mud & Chemicals	\$ 176,172	\$ -	\$ -	\$ 176,172
	8200.149	Legal, Title, Etc	\$ 10,525	\$ -	\$ -	\$ 10,525
	8200.144	Company Supervision	\$ 2,400	\$ -	\$ -	\$ 2,400
	8200.127	Contract Labor	\$ 27,255	\$ -	\$ -	\$ 27,255
	8200.113	Damages/Row	\$ 7,894	\$ -	\$ -	\$ 7,894
	8200.152	Well Control Ins.	\$ 7,894	\$ -	\$ -	\$ 7,894
	8200.103	Drilling - Rig Move	\$ 93,673	\$ -	\$ -	\$ 93,673
	8200.162	Mancamp	\$ 45,996	\$ -	\$ -	\$ 45,996
	8200.164	Solids Control & Closed Loop	\$ 113,092	\$ -	\$ -	\$ 113,092
	8200.125	Inspection	\$ 45,258	\$ -	\$ -	\$ 45,258
	8200.106	Transportation	\$ 93,811	\$ -	\$ -	\$ 93,811
	8200.170	Mud-Diesel	\$ 110,882	\$ -	\$ -	\$ 110,882
	8200.114	Disposal	\$ 192,069	\$ -	\$ -	\$ 192,069
	8200.138	Cementing Services	\$ 199,975	\$ -	\$ -	\$ 199,975
	8200.124	Equipment Rental	\$ 114,515	\$ -	\$ -	\$ 114,515
	8200.102	Drilling - Daywork	\$ 818,273	\$ -	\$ -	\$ 818,273
	8200.147	Drilling Overhead	\$ 5,272	\$ -	\$ -	\$ 5,272
	8200.168	Roustabout Services	\$ 2,202	\$ -	\$ -	\$ 2,202
	8200.116	Drill Bits & BHA	\$ 68,656	\$ -	\$ -	\$ 68,656
	8200.112	Location & Roads, Conductor	\$ 124,415	\$ -	\$ -	\$ 124,415
	8200.128	Drilling - Directional	\$ 246,815	\$ -	\$ -	\$ 246,815
	8200.104	Fuel - Rig	\$ 190,965	\$ -	\$ -	\$ 190,965
	8200.143	Geological Services	\$ 10,157	\$ -	\$ -	\$ 10,157



## AUTHORIZATION FOR EXPENDITURE

	8200.119	Mud-Auxiliary	\$ 31,269	\$ -	\$ -	\$ 31,269
	8200.137	Casing Services	\$ 72,089	\$ -	\$ -	\$ 72,089
	8200.111	Survey, Stake/Permit	\$ 5,263	\$ -	\$ -	\$ 5,263
	8200.167	Consulting Services	\$ 246,443	\$ -	\$ -	\$ 246,443
	8200.115	Mud-Drill Water	\$ 5,718	\$ -	\$ -	\$ 5,718
<b>Intangible Completion</b>			\$ -	\$ 5,620,118	\$ -	\$ 5,620,118
	8300.214	Perforating & Plugs	\$ -	\$ 390,293	\$ -	\$ 390,293
	8300.232	Disposal	\$ -	\$ 19,004	\$ -	\$ 19,004
	8300.229	Transportation	\$ -	\$ 5,263	\$ -	\$ 5,263
	8300.243	Analysis	\$ -	\$ 9,473	\$ -	\$ 9,473
	8300.278	Roustabouts	\$ -	\$ 1,579	\$ -	\$ 1,579
	8300.212	Contract Labor	\$ -	\$ 10,678	\$ -	\$ 10,678
	8300.250	Downhole Rental Equip	\$ -	\$ 43,391	\$ -	\$ 43,391
	8300.274	Water Transfer	\$ -	\$ 99,015	\$ -	\$ 99,015
	8300.277	Consulting Services	\$ -	\$ 116,828	\$ -	\$ 116,828
	8300.220	Engineering & Supervision	\$ -	\$ 15,156	\$ -	\$ 15,156
	8300.203	Fuel	\$ -	\$ 683,704	\$ -	\$ 683,704
	8300.240	Pump Down Services	\$ -	\$ 101,040	\$ -	\$ 101,040
	8300.271	Coil Tubing	\$ -	\$ 113,408	\$ -	\$ 113,408
	8300.279	Completions Overhead	\$ -	\$ 2,808	\$ -	\$ 2,808
	8300.205	Location & Roads	\$ -	\$ 5,288	\$ -	\$ 5,288
	8300.210	Surface Rental Equip	\$ -	\$ 305,001	\$ -	\$ 305,001
	8300.207	Fresh Water	\$ -	\$ 537,798	\$ -	\$ 537,798
	8300.276	Safety & Environmental	\$ -	\$ 3,473	\$ -	\$ 3,473
	8300.248	Mancamp	\$ -	\$ 21,324	\$ -	\$ 21,324
	8300.209	Chemicals	\$ -	\$ 419,703	\$ -	\$ 419,703
	8300.273	Flowback	\$ -	\$ 7,821	\$ -	\$ 7,821
	8300.270	Frac - Equipment	\$ -	\$ 1,692,841	\$ -	\$ 1,692,841
	8300.275	Frac - Sand	\$ -	\$ 1,015,231	\$ -	\$ 1,015,231
<b>Intangible Artificial Lift</b>			\$ -	\$ 95,150	\$ -	\$ 95,150
	8320.621	Rental Equipment	\$ -	\$ 15,000	\$ -	\$ 15,000
	8320.602	Workover Rig	\$ -	\$ 30,000	\$ -	\$ 30,000
	8320.605	Fuel / Power	\$ -	\$ 5,263	\$ -	\$ 5,263
	8320.611	Trucking/Vacuum/Transportation	\$ -	\$ 10,000	\$ -	\$ 10,000
	8320.617	Contract Labor/Roustabout	\$ -	\$ 15,887	\$ -	\$ 15,887
	8320.628	Chemicals	\$ -	\$ 5,000	\$ -	\$ 5,000
	8320.625	Wellsite Supervision	\$ -	\$ 5,000	\$ -	\$ 5,000
	8320.610	Inspection & Testing	\$ -	\$ 4,000	\$ -	\$ 4,000
	8320.612	Kill Truck	\$ -	\$ 5,000	\$ -	\$ 5,000
<b>Intangible Flowback</b>			\$ -	\$ 341,344	\$ -	\$ 341,344
	8360.820	Well Testing / Flowback	\$ -	\$ 60,746	\$ -	\$ 60,746
	8360.805	Trucked Water Disposal	\$ -	\$ 21,464	\$ -	\$ 21,464
	8360.825	Rental Equipment	\$ -	\$ 190,000	\$ -	\$ 190,000
	8360.845	Wellsite Supervision	\$ -	\$ 50,400	\$ -	\$ 50,400
	8360.815	Trucking/Vacuum/Transp	\$ -	\$ 14,334	\$ -	\$ 14,334
	8360.850	Safety / Environmental	\$ -	\$ 4,400	\$ -	\$ 4,400
<b>Intangible Facility</b>			\$ -	\$ -	\$ 664,900	\$ 664,900
	8350.404	Equipment Rental	\$ -	\$ -	\$ 31,000	\$ 31,000
	8350.403	Roads/Location	\$ -	\$ -	\$ 85,100	\$ 85,100
	8350.410	Transportation/Trucking	\$ -	\$ -	\$ 24,500	\$ 24,500
	8350.417	Overhead Power Labor	\$ -	\$ -	\$ 24,600	\$ 24,600
	8350.411	Safety & Environmental	\$ -	\$ -	\$ 11,700	\$ 11,700
	8350.420	Electrical Labor	\$ -	\$ -	\$ 61,900	\$ 61,900
	8350.416	Supervision	\$ -	\$ -	\$ 29,600	\$ 29,600
	8350.421	Commissioning	\$ -	\$ -	\$ 3,500	\$ 3,500
	8350.418	Mechanical Labor	\$ -	\$ -	\$ 222,500	\$ 222,500
	8350.415	Engineering / Technical	\$ -	\$ -	\$ 38,700	\$ 38,700
	8350.413	Contingency	\$ -	\$ -	\$ 75,200	\$ 75,200
	8350.419	Automation Labor	\$ -	\$ -	\$ 21,500	\$ 21,500
	8350.422	Flowline Labor	\$ -	\$ -	\$ 35,100	\$ 35,100
<b>TOTAL INTANGIBLE COSTS &gt;&gt;&gt;</b>			\$ 3,097,328	\$ 6,056,612	\$ 664,900	\$ 9,818,840
<b>TOTAL PROJECT COSTS &gt;&gt;&gt;</b>			\$ 3,874,027	\$ 6,659,325	\$ 1,580,000	\$ 12,113,352
			<b>Drilling</b>	<b>Completion</b>	<b>Facility</b>	<b>Total</b>



**AUTHORIZATION FOR EXPENDITURE**

This Authority for Expenditure is based on cost estimates. Billing will reflect your proportionate share of the actual invoice costs.

**JOINT INTEREST APPROVAL:**

Company:	_____	Working Interest:	_____
Signature:	_____	Date:	_____
By:	_____		





### AUTHORIZATION FOR EXPENDITURE

**AFE: NM0588**

Date: June 04, 2024

Well Name: Sapphire 14 Federal Com #601H

Projected MD/TVD: 20973/10700

Target: 3BS

Spud to TD: 17.6

County: Lea

Lateral Length: 10000

State: NM

Stages: 64

SHL: S14-T19S-R33E 465' FNL, 1280' FWL

Total Proppant (ppf): 2500

BHL: S23-T19S-R33E 100' FSL, 330' FWL

Total Fluid (gal/ft): 3000

#### PROJECT DESCRIPTION:

The proposed AFE is for the Sapphire 14 Federal Com #601H, a 2 section Bone Springs horizontal well to be drilled in Lea County, NM. The well is a 3 string casing design consisting of the following: 17.5" surface hole drilled on Fresh to 1250' and 13.375" 54.5# J-55 BTC casing will be set and cemented in place; 12.25" hole will then be drilled on Brine to 3500' and a string of 9.625" 40# J-55 BTC casing will be set and cemented in place; 8.75" production hole will then be drilled on OBM to 20973' and a string of 5.5" 20# P-110 HC GBCD casing will be set and cemented in place. There will be 10000' of treatable lateral and the completions design will consist of +/-64 stages at 2500 lbs/ft & 3000 gals/ft. AFE includes associated costs for initial gas lift installation.

	<u>TOTAL</u>
<b>DRILLING:</b>	<b>\$3,915,866.85</b>
<b>COMPLETIONS:</b>	<b>\$6,659,640.84</b>
<b>FACILITIES:</b>	<b>\$1,580,000.00</b>
<b>COMPLETED WELL COST:</b>	<b>\$12,155,507.69</b>

#### OPERATOR APPROVAL:



## AUTHORIZATION FOR EXPENDITURE

AFE: NM0588

Date: June 04, 2024

Well Name: Sapphire 14 Federal Com #601H

Projected MD/TVD: 20973/10700

Target: 3BS

Spud to TD: 17.6

County: Lea

Lateral Length: 10000

State: NM

Stages: 64

SHL: S14-T19S-R33E 465' FNL, 1280' FWL

Total Proppant (ppf): 2500

BHL: S23-T19S-R33E 100' FSL, 330' FWL

Total Fluid (gal/ft): 3000

TANGIBLE COSTS			Drilling	Completion	Facility	Total
<b>Tangible Drilling</b>			\$ 789,620	\$ -	\$ -	\$ 789,620
	8400.303	Production Casing	\$ 541,519	\$ -	\$ -	\$ 541,519
	8400.340	Wellhead	\$ 56,835	\$ -	\$ -	\$ 56,835
	8400.302	Intrm 1&2 Casing	\$ 126,471	\$ -	\$ -	\$ 126,471
	8400.301	Surface Casing	\$ 64,795	\$ -	\$ -	\$ 64,795
<b>Tangible Completion</b>			\$ -	\$ 602,713	\$ -	\$ 602,713
	8400.352	Wellhead & Equipment	\$ -	\$ 44,205	\$ -	\$ 44,205
	8325.719	Contract Labor Install	\$ -	\$ 15,000	\$ -	\$ 15,000
	8325.705	ESP Equipment/Install	\$ -	\$ 40,000	\$ -	\$ 40,000
	8325.711	Wellhead Equipment	\$ -	\$ 63,508	\$ -	\$ 63,508
	8325.702	Tubing	\$ -	\$ 90,000	\$ -	\$ 90,000
	8325.704	Downhole Artificial Lift Eqpt	\$ -	\$ 350,000	\$ -	\$ 350,000
<b>Tangible Facility</b>			\$ -	\$ -	\$ 915,100	\$ 915,100
	8355.520	PVF	\$ -	\$ -	\$ 146,000	\$ 146,000
	8355.530	Compressors	\$ -	\$ -	\$ 11,100	\$ 11,100
	8355.535	Instrumentation / Meters	\$ -	\$ -	\$ 60,500	\$ 60,500
	8355.555	Pump / Supplies	\$ -	\$ -	\$ 87,200	\$ 87,200
	8355.500	Vessels	\$ -	\$ -	\$ 253,200	\$ 253,200
	8355.525	Containment	\$ -	\$ -	\$ 25,700	\$ 25,700
	8355.540	Electrical Supplies	\$ -	\$ -	\$ 68,800	\$ 68,800
	8355.510	Tanks	\$ -	\$ -	\$ 128,400	\$ 128,400
	8355.515	Flare	\$ -	\$ -	\$ 32,000	\$ 32,000
	8355.550	Overhead Power Material	\$ -	\$ -	\$ 53,100	\$ 53,100
	8355.565	Flowline	\$ -	\$ -	\$ 49,100	\$ 49,100
<b>TOTAL TANGIBLE COSTS &gt;&gt;&gt;</b>			\$ 789,620	\$ 602,713	\$ 915,100	\$ 2,307,433

INTANGIBLE COSTS			Drilling	Completion	Facility	Total
<b>Intangible Drilling</b>			\$ 3,126,247	\$ -	\$ -	\$ 3,126,247
	8200.128	Drilling - Directional	\$ 249,531	\$ -	\$ -	\$ 249,531
	8200.119	Mud-Auxiliary	\$ 31,462	\$ -	\$ -	\$ 31,462
	8200.147	Drilling Overhead	\$ 5,351	\$ -	\$ -	\$ 5,351
	8200.152	Well Control Ins.	\$ 7,894	\$ -	\$ -	\$ 7,894
	8200.162	Mancamp	\$ 46,357	\$ -	\$ -	\$ 46,357
	8200.168	Roustabout Services	\$ 2,207	\$ -	\$ -	\$ 2,207
	8200.144	Company Supervision	\$ 2,400	\$ -	\$ -	\$ 2,400
	8200.125	Inspection	\$ 45,258	\$ -	\$ -	\$ 45,258
	8200.106	Transportation	\$ 95,387	\$ -	\$ -	\$ 95,387
	8200.103	Drilling - Rig Move	\$ 93,673	\$ -	\$ -	\$ 93,673
	8200.127	Contract Labor	\$ 27,255	\$ -	\$ -	\$ 27,255
	8200.137	Casing Services	\$ 72,199	\$ -	\$ -	\$ 72,199
	8200.114	Disposal	\$ 192,723	\$ -	\$ -	\$ 192,723
	8200.124	Equipment Rental	\$ 115,861	\$ -	\$ -	\$ 115,861
	8200.169	Mud-Brine	\$ 25,836	\$ -	\$ -	\$ 25,836
	8200.104	Fuel - Rig	\$ 193,963	\$ -	\$ -	\$ 193,963
	8200.167	Consulting Services	\$ 250,595	\$ -	\$ -	\$ 250,595
	8200.112	Location & Roads, Conductor	\$ 124,415	\$ -	\$ -	\$ 124,415
	8200.113	Damages/Row	\$ 7,894	\$ -	\$ -	\$ 7,894
	8200.116	Drill Bits & BHA	\$ 68,801	\$ -	\$ -	\$ 68,801
	8200.111	Survey, Stake/Permit	\$ 5,263	\$ -	\$ -	\$ 5,263
	8200.138	Cementing Services	\$ 199,975	\$ -	\$ -	\$ 199,975
	8200.117	Mud & Chemicals	\$ 177,133	\$ -	\$ -	\$ 177,133
	8200.149	Legal, Title, Etc	\$ 10,525	\$ -	\$ -	\$ 10,525
	8200.164	Solids Control & Closed Loop	\$ 114,641	\$ -	\$ -	\$ 114,641



## AUTHORIZATION FOR EXPENDITURE

	8200.115	Mud-Drill Water	\$ 5,765	\$ -	\$ -	\$ 5,765
	8200.102	Drilling - Daywork	\$ 830,236	\$ -	\$ -	\$ 830,236
	8200.143	Geological Services	\$ 10,201	\$ -	\$ -	\$ 10,201
	8200.165	Safety/Environmental	\$ 2,577	\$ -	\$ -	\$ 2,577
	8200.170	Mud-Diesel	\$ 110,871	\$ -	\$ -	\$ 110,871
<b>Intangible Completion</b>			\$ -	\$ 5,620,434	\$ -	\$ 5,620,434
	8300.273	Flowback	\$ -	\$ 7,821	\$ -	\$ 7,821
	8300.220	Engineering & Supervision	\$ -	\$ 15,156	\$ -	\$ 15,156
	8300.270	Frac - Equipment	\$ -	\$ 1,692,841	\$ -	\$ 1,692,841
	8300.214	Perforating & Plugs	\$ -	\$ 390,293	\$ -	\$ 390,293
	8300.277	Consulting Services	\$ -	\$ 116,828	\$ -	\$ 116,828
	8300.274	Water Transfer	\$ -	\$ 99,015	\$ -	\$ 99,015
	8300.203	Fuel	\$ -	\$ 683,704	\$ -	\$ 683,704
	8300.276	Safety & Environmental	\$ -	\$ 3,473	\$ -	\$ 3,473
	8300.279	Completions Overhead	\$ -	\$ 2,808	\$ -	\$ 2,808
	8300.207	Fresh Water	\$ -	\$ 537,798	\$ -	\$ 537,798
	8300.212	Contract Labor	\$ -	\$ 10,678	\$ -	\$ 10,678
	8300.205	Location & Roads	\$ -	\$ 5,288	\$ -	\$ 5,288
	8300.240	Pump Down Services	\$ -	\$ 101,040	\$ -	\$ 101,040
	8300.275	Frac - Sand	\$ -	\$ 1,015,231	\$ -	\$ 1,015,231
	8300.209	Chemicals	\$ -	\$ 419,703	\$ -	\$ 419,703
	8300.278	Roustabouts	\$ -	\$ 1,579	\$ -	\$ 1,579
	8300.210	Surface Rental Equip	\$ -	\$ 305,001	\$ -	\$ 305,001
	8300.250	Downhole Rental Equip	\$ -	\$ 43,391	\$ -	\$ 43,391
	8300.243	Analysis	\$ -	\$ 9,473	\$ -	\$ 9,473
	8300.271	Coil Tubing	\$ -	\$ 113,724	\$ -	\$ 113,724
	8300.229	Transportation	\$ -	\$ 5,263	\$ -	\$ 5,263
	8300.248	Mancamp	\$ -	\$ 21,324	\$ -	\$ 21,324
	8300.232	Disposal	\$ -	\$ 19,004	\$ -	\$ 19,004
<b>Intangible Artificial Lift</b>			\$ -	\$ 95,150	\$ -	\$ 95,150
	8320.625	Wellsite Supervision	\$ -	\$ 5,000	\$ -	\$ 5,000
	8320.621	Rental Equipment	\$ -	\$ 15,000	\$ -	\$ 15,000
	8320.610	Inspection & Testing	\$ -	\$ 4,000	\$ -	\$ 4,000
	8320.602	Workover Rig	\$ -	\$ 30,000	\$ -	\$ 30,000
	8320.611	Trucking/Vacuum/Transportation	\$ -	\$ 10,000	\$ -	\$ 10,000
	8320.628	Chemicals	\$ -	\$ 5,000	\$ -	\$ 5,000
	8320.605	Fuel / Power	\$ -	\$ 5,263	\$ -	\$ 5,263
	8320.617	Contract Labor/Roustabout	\$ -	\$ 15,887	\$ -	\$ 15,887
	8320.612	Kill Truck	\$ -	\$ 5,000	\$ -	\$ 5,000
<b>Intangible Flowback</b>			\$ -	\$ 341,344	\$ -	\$ 341,344
	8360.820	Well Testing / Flowback	\$ -	\$ 60,746	\$ -	\$ 60,746
	8360.825	Rental Equipment	\$ -	\$ 190,000	\$ -	\$ 190,000
	8360.845	Wellsite Supervision	\$ -	\$ 50,400	\$ -	\$ 50,400
	8360.850	Safety / Environmental	\$ -	\$ 4,400	\$ -	\$ 4,400
	8360.815	Trucking/Vacuum/Transp	\$ -	\$ 14,334	\$ -	\$ 14,334
	8360.805	Trucked Water Disposal	\$ -	\$ 21,464	\$ -	\$ 21,464
<b>Intangible Facility</b>			\$ -	\$ -	\$ 664,900	\$ 664,900
	8350.411	Safety & Environmental	\$ -	\$ -	\$ 11,700	\$ 11,700
	8350.422	Flowline Labor	\$ -	\$ -	\$ 35,100	\$ 35,100
	8350.420	Electrical Labor	\$ -	\$ -	\$ 61,900	\$ 61,900
	8350.404	Equipment Rental	\$ -	\$ -	\$ 31,000	\$ 31,000
	8350.419	Automation Labor	\$ -	\$ -	\$ 21,500	\$ 21,500
	8350.415	Engineering / Technical	\$ -	\$ -	\$ 38,700	\$ 38,700
	8350.417	Overhead Power Labor	\$ -	\$ -	\$ 24,600	\$ 24,600
	8350.413	Contingency	\$ -	\$ -	\$ 75,200	\$ 75,200
	8350.416	Supervision	\$ -	\$ -	\$ 29,600	\$ 29,600
	8350.421	Commissioning	\$ -	\$ -	\$ 3,500	\$ 3,500
	8350.410	Transportation/Trucking	\$ -	\$ -	\$ 24,500	\$ 24,500
	8350.418	Mechanical Labor	\$ -	\$ -	\$ 222,500	\$ 222,500
	8350.403	Roads/Location	\$ -	\$ -	\$ 85,100	\$ 85,100
<b>TOTAL INTANGIBLE COSTS &gt;&gt;&gt;</b>			\$ 3,126,247	\$ 6,056,928	\$ 664,900	\$ 9,848,075
<b>TOTAL PROJECT COSTS &gt;&gt;&gt;</b>			\$ 3,915,867	\$ 6,659,641	\$ 1,580,000	\$ 12,155,508
			<b>Drilling</b>	<b>Completion</b>	<b>Facility</b>	<b>Total</b>



**AUTHORIZATION FOR EXPENDITURE**

This Authority for Expenditure is based on cost estimates. Billing will reflect your proportionate share of the actual invoice costs.

**JOINT INTEREST APPROVAL:**

Company: \_\_\_\_\_ Working Interest: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

By: \_\_\_\_\_





### AUTHORIZATION FOR EXPENDITURE

**AFE: NM0589**

Date: June 04, 2024

Well Name: Sapphire 14 Federal Com #602H

Projected MD/TVD: 20973/10700

Target: 3BS

Spud to TD: 17.6

County: Lea

Lateral Length: 10000

State: NM

Stages: 64

SHL: S14-T19S-R33E 465' FNL, 1300' FWL

Total Proppant (ppf): 2500

BHL: S23-T19S-R33E 100' FSL, 1254' FWL

Total Fluid (gal/ft): 3000

#### PROJECT DESCRIPTION:

The proposed AFE is for the Sapphire 14 Federal Com #602H, a 2 section Bone Springs horizontal well to be drilled in Lea County, NM. The well is a 3 string casing design consisting of the following: 17.5" surface hole drilled on Fresh to 1250' and 13.375" 54.5# J-55 BTC casing will be set and cemented in place; 12.25" hole will then be drilled on Brine to 3500' and a string of 9.625" 40# J-55 BTC casing will be set and cemented in place; 8.75" production hole will then be drilled on OBM to 20973' and a string of 5.5" 20# P-110 HC GBCD casing will be set and cemented in place. There will be 10000' of treatable lateral and the completions design will consist of +/-64 stages at 2500 lbs/ft & 3000 gals/ft. AFE includes associated costs for initial gas lift installation.

	<u>TOTAL</u>
<b>DRILLING:</b>	<b>\$3,915,866.85</b>
<b>COMPLETIONS:</b>	<b>\$6,659,640.84</b>
<b>FACILITIES:</b>	<b>\$1,580,000.00</b>
<b>COMPLETED WELL COST:</b>	<b>\$12,155,507.69</b>

#### OPERATOR APPROVAL:



## AUTHORIZATION FOR EXPENDITURE

AFE: NM0589

Date: June 04, 2024

Well Name: Sapphire 14 Federal Com #602H

Projected MD/TVD: 20973/10700

Target: 3BS

Spud to TD: 17.6

County: Lea

Lateral Length: 10000

State: NM

Stages: 64

SHL: S14-T19S-R33E 465' FNL, 1300' FWL

Total Proppant (ppf): 2500

BHL: S23-T19S-R33E 100' FSL, 1254' FWL

Total Fluid (gal/ft): 3000

TANGIBLE COSTS			Drilling	Completion	Facility	Total
<b>Tangible Drilling</b>			\$ 789,620	\$ -	\$ -	\$ 789,620
	8400.340	Wellhead	\$ 56,835	\$ -	\$ -	\$ 56,835
	8400.302	Intrm 1&2 Casing	\$ 126,471	\$ -	\$ -	\$ 126,471
	8400.303	Production Casing	\$ 541,519	\$ -	\$ -	\$ 541,519
	8400.301	Surface Casing	\$ 64,795	\$ -	\$ -	\$ 64,795
<b>Tangible Completion</b>			\$ -	\$ 602,713	\$ -	\$ 602,713
	8400.352	Wellhead & Equipment	\$ -	\$ 44,205	\$ -	\$ 44,205
	8325.702	Tubing	\$ -	\$ 90,000	\$ -	\$ 90,000
	8325.704	Downhole Artificial Lift Eqpt	\$ -	\$ 350,000	\$ -	\$ 350,000
	8325.719	Contract Labor Install	\$ -	\$ 15,000	\$ -	\$ 15,000
	8325.711	Wellhead Equipment	\$ -	\$ 63,508	\$ -	\$ 63,508
	8325.705	ESP Equipment/Install	\$ -	\$ 40,000	\$ -	\$ 40,000
<b>Tangible Facility</b>			\$ -	\$ -	\$ 915,100	\$ 915,100
	8355.525	Containment	\$ -	\$ -	\$ 25,700	\$ 25,700
	8355.520	P/VF	\$ -	\$ -	\$ 146,000	\$ 146,000
	8355.550	Overhead Power Material	\$ -	\$ -	\$ 53,100	\$ 53,100
	8355.565	Flowline	\$ -	\$ -	\$ 49,100	\$ 49,100
	8355.530	Compressors	\$ -	\$ -	\$ 11,100	\$ 11,100
	8355.510	Tanks	\$ -	\$ -	\$ 128,400	\$ 128,400
	8355.515	Flare	\$ -	\$ -	\$ 32,000	\$ 32,000
	8355.500	Vessels	\$ -	\$ -	\$ 253,200	\$ 253,200
	8355.540	Electrical Supplies	\$ -	\$ -	\$ 68,800	\$ 68,800
	8355.555	Pump / Supplies	\$ -	\$ -	\$ 87,200	\$ 87,200
	8355.535	Instrumentation / Meters	\$ -	\$ -	\$ 60,500	\$ 60,500
<b>TOTAL TANGIBLE COSTS &gt;&gt;&gt;</b>			\$ 789,620	\$ 602,713	\$ 915,100	\$ 2,307,433

INTANGIBLE COSTS			Drilling	Completion	Facility	Total
<b>Intangible Drilling</b>			\$ 3,126,247	\$ -	\$ -	\$ 3,126,247
	8200.102	Drilling - Daywork	\$ 830,236	\$ -	\$ -	\$ 830,236
	8200.149	Legal, Title, Etc	\$ 10,525	\$ -	\$ -	\$ 10,525
	8200.170	Mud-Diesel	\$ 110,871	\$ -	\$ -	\$ 110,871
	8200.112	Location & Roads, Conductor	\$ 124,415	\$ -	\$ -	\$ 124,415
	8200.169	Mud-Brine	\$ 25,836	\$ -	\$ -	\$ 25,836
	8200.165	Safety/Environmental	\$ 2,577	\$ -	\$ -	\$ 2,577
	8200.119	Mud-Auxiliary	\$ 31,462	\$ -	\$ -	\$ 31,462
	8200.117	Mud & Chemicals	\$ 177,133	\$ -	\$ -	\$ 177,133
	8200.116	Drill Bits & BHA	\$ 68,801	\$ -	\$ -	\$ 68,801
	8200.125	Inspection	\$ 45,258	\$ -	\$ -	\$ 45,258
	8200.143	Geological Services	\$ 10,201	\$ -	\$ -	\$ 10,201
	8200.106	Transportation	\$ 95,387	\$ -	\$ -	\$ 95,387
	8200.162	Mancamp	\$ 46,357	\$ -	\$ -	\$ 46,357
	8200.113	Damages/Row	\$ 7,894	\$ -	\$ -	\$ 7,894
	8200.147	Drilling Overhead	\$ 5,351	\$ -	\$ -	\$ 5,351
	8200.164	Solids Control & Closed Loop	\$ 114,641	\$ -	\$ -	\$ 114,641
	8200.115	Mud-Drill Water	\$ 5,765	\$ -	\$ -	\$ 5,765
	8200.144	Company Supervision	\$ 2,400	\$ -	\$ -	\$ 2,400
	8200.111	Survey, Stake/Permit	\$ 5,263	\$ -	\$ -	\$ 5,263
	8200.103	Drilling - Rig Move	\$ 93,673	\$ -	\$ -	\$ 93,673
	8200.114	Disposal	\$ 192,723	\$ -	\$ -	\$ 192,723
	8200.167	Consulting Services	\$ 250,595	\$ -	\$ -	\$ 250,595
	8200.124	Equipment Rental	\$ 115,861	\$ -	\$ -	\$ 115,861
	8200.168	Roustabout Services	\$ 2,207	\$ -	\$ -	\$ 2,207
	8200.127	Contract Labor	\$ 27,255	\$ -	\$ -	\$ 27,255



## AUTHORIZATION FOR EXPENDITURE

	8200.152	Well Control Ins.	\$ 7,894	\$ -	\$ -	\$ 7,894
	8200.104	Fuel - Rig	\$ 193,963	\$ -	\$ -	\$ 193,963
	8200.137	Casing Services	\$ 72,199	\$ -	\$ -	\$ 72,199
	8200.128	Drilling - Directional	\$ 249,531	\$ -	\$ -	\$ 249,531
	8200.138	Cementing Services	\$ 199,975	\$ -	\$ -	\$ 199,975
<b>Intangible Completion</b>			\$ -	\$ 5,620,434	\$ -	\$ 5,620,434
	8300.212	Contract Labor	\$ -	\$ 10,678	\$ -	\$ 10,678
	8300.273	Flowback	\$ -	\$ 7,821	\$ -	\$ 7,821
	8300.214	Perforating & Plugs	\$ -	\$ 390,293	\$ -	\$ 390,293
	8300.210	Surface Rental Equip	\$ -	\$ 305,001	\$ -	\$ 305,001
	8300.277	Consulting Services	\$ -	\$ 116,828	\$ -	\$ 116,828
	8300.229	Transportation	\$ -	\$ 5,263	\$ -	\$ 5,263
	8300.203	Fuel	\$ -	\$ 683,704	\$ -	\$ 683,704
	8300.276	Safety & Environmental	\$ -	\$ 3,473	\$ -	\$ 3,473
	8300.240	Pump Down Services	\$ -	\$ 101,040	\$ -	\$ 101,040
	8300.271	Coil Tubing	\$ -	\$ 113,724	\$ -	\$ 113,724
	8300.248	Mancamp	\$ -	\$ 21,324	\$ -	\$ 21,324
	8300.270	Frac - Equipment	\$ -	\$ 1,692,841	\$ -	\$ 1,692,841
	8300.232	Disposal	\$ -	\$ 19,004	\$ -	\$ 19,004
	8300.220	Engineering & Supervision	\$ -	\$ 15,156	\$ -	\$ 15,156
	8300.279	Completions Overhead	\$ -	\$ 2,808	\$ -	\$ 2,808
	8300.205	Location & Roads	\$ -	\$ 5,288	\$ -	\$ 5,288
	8300.207	Fresh Water	\$ -	\$ 537,798	\$ -	\$ 537,798
	8300.243	Analysis	\$ -	\$ 9,473	\$ -	\$ 9,473
	8300.250	Downhole Rental Equip	\$ -	\$ 43,391	\$ -	\$ 43,391
	8300.209	Chemicals	\$ -	\$ 419,703	\$ -	\$ 419,703
	8300.274	Water Transfer	\$ -	\$ 99,015	\$ -	\$ 99,015
	8300.278	Roustabouts	\$ -	\$ 1,579	\$ -	\$ 1,579
	8300.275	Frac - Sand	\$ -	\$ 1,015,231	\$ -	\$ 1,015,231
<b>Intangible Artificial Lift</b>			\$ -	\$ 95,150	\$ -	\$ 95,150
	8320.625	Wellsite Supervision	\$ -	\$ 5,000	\$ -	\$ 5,000
	8320.621	Rental Equipment	\$ -	\$ 15,000	\$ -	\$ 15,000
	8320.611	Trucking/Vacuum/Transportation	\$ -	\$ 10,000	\$ -	\$ 10,000
	8320.617	Contract Labor/Roustabout	\$ -	\$ 15,887	\$ -	\$ 15,887
	8320.602	Workover Rig	\$ -	\$ 30,000	\$ -	\$ 30,000
	8320.628	Chemicals	\$ -	\$ 5,000	\$ -	\$ 5,000
	8320.610	Inspection & Testing	\$ -	\$ 4,000	\$ -	\$ 4,000
	8320.612	Kill Truck	\$ -	\$ 5,000	\$ -	\$ 5,000
	8320.605	Fuel / Power	\$ -	\$ 5,263	\$ -	\$ 5,263
<b>Intangible Flowback</b>			\$ -	\$ 341,344	\$ -	\$ 341,344
	8360.825	Rental Equipment	\$ -	\$ 190,000	\$ -	\$ 190,000
	8360.815	Trucking/Vacuum/Transp	\$ -	\$ 14,334	\$ -	\$ 14,334
	8360.805	Trucked Water Disposal	\$ -	\$ 21,464	\$ -	\$ 21,464
	8360.850	Safety / Environmental	\$ -	\$ 4,400	\$ -	\$ 4,400
	8360.845	Wellsite Supervision	\$ -	\$ 50,400	\$ -	\$ 50,400
	8360.820	Well Testing / Flowback	\$ -	\$ 60,746	\$ -	\$ 60,746
<b>Intangible Facility</b>			\$ -	\$ -	\$ 664,900	\$ 664,900
	8350.410	Transportation/Trucking	\$ -	\$ -	\$ 24,500	\$ 24,500
	8350.403	Roads/Location	\$ -	\$ -	\$ 85,100	\$ 85,100
	8350.404	Equipment Rental	\$ -	\$ -	\$ 31,000	\$ 31,000
	8350.415	Engineering / Technical	\$ -	\$ -	\$ 38,700	\$ 38,700
	8350.421	Commissioning	\$ -	\$ -	\$ 3,500	\$ 3,500
	8350.418	Mechanical Labor	\$ -	\$ -	\$ 222,500	\$ 222,500
	8350.422	Flowline Labor	\$ -	\$ -	\$ 35,100	\$ 35,100
	8350.420	Electrical Labor	\$ -	\$ -	\$ 61,900	\$ 61,900
	8350.416	Supervision	\$ -	\$ -	\$ 29,600	\$ 29,600
	8350.419	Automation Labor	\$ -	\$ -	\$ 21,500	\$ 21,500
	8350.411	Safety & Environmental	\$ -	\$ -	\$ 11,700	\$ 11,700
	8350.413	Contingency	\$ -	\$ -	\$ 75,200	\$ 75,200
	8350.417	Overhead Power Labor	\$ -	\$ -	\$ 24,600	\$ 24,600
<b>TOTAL INTANGIBLE COSTS &gt;&gt;&gt;</b>			\$ 3,126,247	\$ 6,056,928	\$ 664,900	\$ 9,848,075
<b>TOTAL PROJECT COSTS &gt;&gt;&gt;</b>			\$ 3,915,867	\$ 6,659,641	\$ 1,580,000	\$ 12,155,508
			<b>Drilling</b>	<b>Completion</b>	<b>Facility</b>	<b>Total</b>



**AUTHORIZATION FOR EXPENDITURE**

This Authority for Expenditure is based on cost estimates. Billing will reflect your proportionate share of the actual invoice costs.

**JOINT INTEREST APPROVAL:**

Company:	_____	Working Interest:	_____
Signature:	_____	Date:	_____
By:	_____		





### AUTHORIZATION FOR EXPENDITURE

**AFE: NM0590**

Date: June 04, 2024

Well Name: Sapphire 14 Federal Com #603H

Projected MD/TVD: 20973/10700

Target: 3BS

Spud to TD: 17.6

County: Lea

Lateral Length: 10000

State: NM

Stages: 64

SHL: S14-T19S-R33E 465' FNL, 1320' FWL

Total Proppant (ppf): 2500

BHL: S23-T19S-R33E 100' FSL, 2178' FWL

Total Fluid (gal/ft): 3000

#### PROJECT DESCRIPTION:

The proposed AFE is for the Sapphire 14 Federal Com #603H, a 2 section Bone Springs horizontal well to be drilled in Lea County, NM. The well is a 3 string casing design consisting of the following: 17.5" surface hole drilled on Fresh to 1250' and 13.375" 54.5# J-55 BTC casing will be set and cemented in place; 12.25" hole will then be drilled on Brine to 3500' and a string of 9.625" 40# J-55 BTC casing will be set and cemented in place; 8.75" production hole will then be drilled on OBM to 20973' and a string of 5.5" 20# P-110 HC GBCD casing will be set and cemented in place. There will be 10000' of treatable lateral and the completions design will consist of +/-64 stages at 2500 lbs/ft & 3000 gals/ft. AFE includes associated costs for initial gas lift installation.

	<u>TOTAL</u>
<b>DRILLING:</b>	<b>\$3,915,866.85</b>
<b>COMPLETIONS:</b>	<b>\$6,659,640.84</b>
<b>FACILITIES:</b>	<b>\$1,580,000.00</b>
<b>COMPLETED WELL COST:</b>	<b>\$12,155,507.69</b>

#### OPERATOR APPROVAL:



## AUTHORIZATION FOR EXPENDITURE

AFE: NM0590

Date: June 04, 2024

Well Name: Sapphire 14 Federal Com #603H

Projected MD/TVD: 20973/10700

Target: 3BS

Spud to TD: 17.6

County: Lea

Lateral Length: 10000

State: NM

Stages: 64

SHL: S14-T19S-R33E 465' FNL, 1320' FWL

Total Proppant (ppf): 2500

BHL: S23-T19S-R33E 100' FSL, 2178' FWL

Total Fluid (gal/ft): 3000

TANGIBLE COSTS			Drilling	Completion	Facility	Total
<b>Tangible Drilling</b>			\$ 789,620	\$ -	\$ -	\$ 789,620
	8400.303	Production Casing	\$ 541,519	\$ -	\$ -	\$ 541,519
	8400.301	Surface Casing	\$ 64,795	\$ -	\$ -	\$ 64,795
	8400.340	Wellhead	\$ 56,835	\$ -	\$ -	\$ 56,835
	8400.302	Intrm 1&2 Casing	\$ 126,471	\$ -	\$ -	\$ 126,471
<b>Tangible Completion</b>			\$ -	\$ 602,713	\$ -	\$ 602,713
	8400.352	Wellhead & Equipment	\$ -	\$ 44,205	\$ -	\$ 44,205
	8325.704	Downhole Artificial Lift Eqpt	\$ -	\$ 350,000	\$ -	\$ 350,000
	8325.702	Tubing	\$ -	\$ 90,000	\$ -	\$ 90,000
	8325.719	Contract Labor Install	\$ -	\$ 15,000	\$ -	\$ 15,000
	8325.711	Wellhead Equipment	\$ -	\$ 63,508	\$ -	\$ 63,508
	8325.705	ESP Equipment/Install	\$ -	\$ 40,000	\$ -	\$ 40,000
<b>Tangible Facility</b>			\$ -	\$ -	\$ 915,100	\$ 915,100
	8355.530	Compressors	\$ -	\$ -	\$ 11,100	\$ 11,100
	8355.540	Electrical Supplies	\$ -	\$ -	\$ 68,800	\$ 68,800
	8355.525	Containment	\$ -	\$ -	\$ 25,700	\$ 25,700
	8355.535	Instrumentation / Meters	\$ -	\$ -	\$ 60,500	\$ 60,500
	8355.565	Flowline	\$ -	\$ -	\$ 49,100	\$ 49,100
	8355.510	Tanks	\$ -	\$ -	\$ 128,400	\$ 128,400
	8355.555	Pump / Supplies	\$ -	\$ -	\$ 87,200	\$ 87,200
	8355.550	Overhead Power Material	\$ -	\$ -	\$ 53,100	\$ 53,100
	8355.500	Vessels	\$ -	\$ -	\$ 253,200	\$ 253,200
	8355.515	Flare	\$ -	\$ -	\$ 32,000	\$ 32,000
	8355.520	PVF	\$ -	\$ -	\$ 146,000	\$ 146,000
<b>TOTAL TANGIBLE COSTS &gt;&gt;&gt;</b>			\$ 789,620	\$ 602,713	\$ 915,100	\$ 2,307,433

INTANGIBLE COSTS			Drilling	Completion	Facility	Total
<b>Intangible Drilling</b>			\$ 3,126,247	\$ -	\$ -	\$ 3,126,247
	8200.128	Drilling - Directional	\$ 249,531	\$ -	\$ -	\$ 249,531
	8200.112	Location & Roads, Conductor	\$ 124,415	\$ -	\$ -	\$ 124,415
	8200.124	Equipment Rental	\$ 115,861	\$ -	\$ -	\$ 115,861
	8200.137	Casing Services	\$ 72,199	\$ -	\$ -	\$ 72,199
	8200.103	Drilling - Rig Move	\$ 93,673	\$ -	\$ -	\$ 93,673
	8200.152	Well Control Ins.	\$ 7,894	\$ -	\$ -	\$ 7,894
	8200.147	Drilling Overhead	\$ 5,351	\$ -	\$ -	\$ 5,351
	8200.104	Fuel - Rig	\$ 193,963	\$ -	\$ -	\$ 193,963
	8200.167	Consulting Services	\$ 250,595	\$ -	\$ -	\$ 250,595
	8200.106	Transportation	\$ 95,387	\$ -	\$ -	\$ 95,387
	8200.115	Mud-Drill Water	\$ 5,765	\$ -	\$ -	\$ 5,765
	8200.114	Disposal	\$ 192,723	\$ -	\$ -	\$ 192,723
	8200.168	Roustabout Services	\$ 2,207	\$ -	\$ -	\$ 2,207
	8200.162	Mancamp	\$ 46,357	\$ -	\$ -	\$ 46,357
	8200.165	Safety/Environmental	\$ 2,577	\$ -	\$ -	\$ 2,577
	8200.127	Contract Labor	\$ 27,255	\$ -	\$ -	\$ 27,255
	8200.143	Geological Services	\$ 10,201	\$ -	\$ -	\$ 10,201
	8200.164	Solids Control & Closed Loop	\$ 114,641	\$ -	\$ -	\$ 114,641
	8200.116	Drill Bits & BHA	\$ 68,801	\$ -	\$ -	\$ 68,801
	8200.149	Legal, Title, Etc	\$ 10,525	\$ -	\$ -	\$ 10,525
	8200.169	Mud-Brine	\$ 25,836	\$ -	\$ -	\$ 25,836
	8200.111	Survey, Stake/Permit	\$ 5,263	\$ -	\$ -	\$ 5,263
	8200.144	Company Supervision	\$ 2,400	\$ -	\$ -	\$ 2,400
	8200.113	Damages/Row	\$ 7,894	\$ -	\$ -	\$ 7,894
	8200.117	Mud & Chemicals	\$ 177,133	\$ -	\$ -	\$ 177,133



## AUTHORIZATION FOR EXPENDITURE

	8200.125	Inspection	\$ 45,258	\$ -	\$ -	\$ 45,258
	8200.102	Drilling - Daywork	\$ 830,236	\$ -	\$ -	\$ 830,236
	8200.138	Cementing Services	\$ 199,975	\$ -	\$ -	\$ 199,975
	8200.119	Mud-Auxiliary	\$ 31,462	\$ -	\$ -	\$ 31,462
	8200.170	Mud-Diesel	\$ 110,871	\$ -	\$ -	\$ 110,871
<b>Intangible Completion</b>			\$ -	\$ 5,620,434	\$ -	\$ 5,620,434
	8300.270	Frac - Equipment	\$ -	\$ 1,692,841	\$ -	\$ 1,692,841
	8300.207	Fresh Water	\$ -	\$ 537,798	\$ -	\$ 537,798
	8300.205	Location & Roads	\$ -	\$ 5,288	\$ -	\$ 5,288
	8300.212	Contract Labor	\$ -	\$ 10,678	\$ -	\$ 10,678
	8300.250	Downhole Rental Equip	\$ -	\$ 43,391	\$ -	\$ 43,391
	8300.248	Mancamp	\$ -	\$ 21,324	\$ -	\$ 21,324
	8300.275	Frac - Sand	\$ -	\$ 1,015,231	\$ -	\$ 1,015,231
	8300.209	Chemicals	\$ -	\$ 419,703	\$ -	\$ 419,703
	8300.278	Roustabouts	\$ -	\$ 1,579	\$ -	\$ 1,579
	8300.279	Completions Overhead	\$ -	\$ 2,808	\$ -	\$ 2,808
	8300.232	Disposal	\$ -	\$ 19,004	\$ -	\$ 19,004
	8300.276	Safety & Environmental	\$ -	\$ 3,473	\$ -	\$ 3,473
	8300.273	Flowback	\$ -	\$ 7,821	\$ -	\$ 7,821
	8300.214	Perforating & Plugs	\$ -	\$ 390,293	\$ -	\$ 390,293
	8300.274	Water Transfer	\$ -	\$ 99,015	\$ -	\$ 99,015
	8300.220	Engineering & Supervision	\$ -	\$ 15,156	\$ -	\$ 15,156
	8300.277	Consulting Services	\$ -	\$ 116,828	\$ -	\$ 116,828
	8300.210	Surface Rental Equip	\$ -	\$ 305,001	\$ -	\$ 305,001
	8300.271	Coil Tubing	\$ -	\$ 113,724	\$ -	\$ 113,724
	8300.203	Fuel	\$ -	\$ 683,704	\$ -	\$ 683,704
	8300.240	Pump Down Services	\$ -	\$ 101,040	\$ -	\$ 101,040
	8300.229	Transportation	\$ -	\$ 5,263	\$ -	\$ 5,263
	8300.243	Analysis	\$ -	\$ 9,473	\$ -	\$ 9,473
<b>Intangible Artificial Lift</b>			\$ -	\$ 95,150	\$ -	\$ 95,150
	8320.625	Wellsite Supervision	\$ -	\$ 5,000	\$ -	\$ 5,000
	8320.602	Workover Rig	\$ -	\$ 30,000	\$ -	\$ 30,000
	8320.610	Inspection & Testing	\$ -	\$ 4,000	\$ -	\$ 4,000
	8320.621	Rental Equipment	\$ -	\$ 15,000	\$ -	\$ 15,000
	8320.612	Kill Truck	\$ -	\$ 5,000	\$ -	\$ 5,000
	8320.605	Fuel / Power	\$ -	\$ 5,263	\$ -	\$ 5,263
	8320.628	Chemicals	\$ -	\$ 5,000	\$ -	\$ 5,000
	8320.611	Trucking/Vacuum/Transportation	\$ -	\$ 10,000	\$ -	\$ 10,000
	8320.617	Contract Labor/Roustabout	\$ -	\$ 15,887	\$ -	\$ 15,887
<b>Intangible Flowback</b>			\$ -	\$ 341,344	\$ -	\$ 341,344
	8360.820	Well Testing / Flowback	\$ -	\$ 60,746	\$ -	\$ 60,746
	8360.815	Trucking/Vacuum/Transp	\$ -	\$ 14,334	\$ -	\$ 14,334
	8360.805	Trucked Water Disposal	\$ -	\$ 21,464	\$ -	\$ 21,464
	8360.845	Wellsite Supervision	\$ -	\$ 50,400	\$ -	\$ 50,400
	8360.850	Safety / Environmental	\$ -	\$ 4,400	\$ -	\$ 4,400
	8360.825	Rental Equipment	\$ -	\$ 190,000	\$ -	\$ 190,000
<b>Intangible Facility</b>			\$ -	\$ -	\$ 664,900	\$ 664,900
	8350.410	Transportation/Trucking	\$ -	\$ -	\$ 24,500	\$ 24,500
	8350.417	Overhead Power Labor	\$ -	\$ -	\$ 24,600	\$ 24,600
	8350.421	Commissioning	\$ -	\$ -	\$ 3,500	\$ 3,500
	8350.420	Electrical Labor	\$ -	\$ -	\$ 61,900	\$ 61,900
	8350.415	Engineering / Technical	\$ -	\$ -	\$ 38,700	\$ 38,700
	8350.413	Contingency	\$ -	\$ -	\$ 75,200	\$ 75,200
	8350.403	Roads/Location	\$ -	\$ -	\$ 85,100	\$ 85,100
	8350.422	Flowline Labor	\$ -	\$ -	\$ 35,100	\$ 35,100
	8350.404	Equipment Rental	\$ -	\$ -	\$ 31,000	\$ 31,000
	8350.419	Automation Labor	\$ -	\$ -	\$ 21,500	\$ 21,500
	8350.411	Safety & Environmental	\$ -	\$ -	\$ 11,700	\$ 11,700
	8350.416	Supervision	\$ -	\$ -	\$ 29,600	\$ 29,600
	8350.418	Mechanical Labor	\$ -	\$ -	\$ 222,500	\$ 222,500
<b>TOTAL INTANGIBLE COSTS &gt;&gt;&gt;</b>			\$ 3,126,247	\$ 6,056,928	\$ 664,900	\$ 9,848,075
<b>TOTAL PROJECT COSTS &gt;&gt;&gt;</b>			\$ 3,915,867	\$ 6,659,641	\$ 1,580,000	\$ 12,155,508
			<b>Drilling</b>	<b>Completion</b>	<b>Facility</b>	<b>Total</b>



**AUTHORIZATION FOR EXPENDITURE**

This Authority for Expenditure is based on cost estimates. Billing will reflect your proportionate share of the actual invoice costs.

**JOINT INTEREST APPROVAL:**

Company:	_____	Working Interest:	_____
Signature:	_____	Date:	_____
By:	_____		





### AUTHORIZATION FOR EXPENDITURE

**AFE: NM0597**

Date: June 04, 2024

Well Name: Sapphire 14 Federal Com #604H

Projected MD/TVD: 20973/10700

Target: 3BS

Spud to TD: 17.6

County: Lea

Lateral Length: 10000

State: NM

Stages: 64

SHL: S14-T19S-R33E 190' FNL, 1280' FEL

Total Proppant (ppf): 2500

BHL: S23-T19S-R33E 100' FSL, 2178' FEL

Total Fluid (gal/ft): 3000

#### PROJECT DESCRIPTION:

The proposed AFE is for the Sapphire 14 Federal Com #604H, a 2 section Bone Springs horizontal well to be drilled in Lea County, NM. The well is a 3 string casing design consisting of the following: 17.5" surface hole drilled on Fresh to 1250' and 13.375" 54.5# J-55 BTC casing will be set and cemented in place; 12.25" hole will then be drilled on Brine to 3500' and a string of 9.625" 40# J-55 BTC casing will be set and cemented in place; 8.75" production hole will then be drilled on OBM to 20973' and a string of 5.5" 20# P-110 HC GBCD casing will be set and cemented in place. There will be 10000' of treatable lateral and the completions design will consist of +/-64 stages at 2500 lbs/ft & 3000 gals/ft. AFE includes associated costs for initial gas lift installation.

	<u>TOTAL</u>
<b>DRILLING:</b>	<b>\$3,915,866.85</b>
<b>COMPLETIONS:</b>	<b>\$6,659,640.84</b>
<b>FACILITIES:</b>	<b>\$1,580,000.00</b>
<b>COMPLETED WELL COST:</b>	<b>\$12,155,507.69</b>

#### OPERATOR APPROVAL:



## AUTHORIZATION FOR EXPENDITURE

AFE: NM0597

Date: June 04, 2024

Well Name: Sapphire 14 Federal Com #604H

Projected MD/TVD: 20973/10700

Target: 3BS

Spud to TD: 17.6

County: Lea

Lateral Length: 10000

State: NM

Stages: 64

SHL: S14-T19S-R33E 190' FNL, 1280' FEL

Total Proppant (ppf): 2500

BHL: S23-T19S-R33E 100' FSL, 2178' FEL

Total Fluid (gal/ft): 3000

TANGIBLE COSTS			Drilling	Completion	Facility	Total
<b>Tangible Drilling</b>			\$ 789,620	\$ -	\$ -	\$ 789,620
	8400.340	Wellhead	\$ 56,835	\$ -	\$ -	\$ 56,835
	8400.302	Intrm 1&2 Casing	\$ 126,471	\$ -	\$ -	\$ 126,471
	8400.301	Surface Casing	\$ 64,795	\$ -	\$ -	\$ 64,795
	8400.303	Production Casing	\$ 541,519	\$ -	\$ -	\$ 541,519
<b>Tangible Completion</b>			\$ -	\$ 602,713	\$ -	\$ 602,713
	8400.352	Wellhead & Equipment	\$ -	\$ 44,205	\$ -	\$ 44,205
	8325.705	ESP Equipment/Install	\$ -	\$ 40,000	\$ -	\$ 40,000
	8325.702	Tubing	\$ -	\$ 90,000	\$ -	\$ 90,000
	8325.711	Wellhead Equipment	\$ -	\$ 63,508	\$ -	\$ 63,508
	8325.704	Downhole Artificial Lift Eqpt	\$ -	\$ 350,000	\$ -	\$ 350,000
	8325.719	Contract Labor Install	\$ -	\$ 15,000	\$ -	\$ 15,000
<b>Tangible Facility</b>			\$ -	\$ -	\$ 915,100	\$ 915,100
	8355.530	Compressors	\$ -	\$ -	\$ 11,100	\$ 11,100
	8355.520	P/VF	\$ -	\$ -	\$ 146,000	\$ 146,000
	8355.525	Containment	\$ -	\$ -	\$ 25,700	\$ 25,700
	8355.565	Flowline	\$ -	\$ -	\$ 49,100	\$ 49,100
	8355.515	Flare	\$ -	\$ -	\$ 32,000	\$ 32,000
	8355.535	Instrumentation / Meters	\$ -	\$ -	\$ 60,500	\$ 60,500
	8355.550	Overhead Power Material	\$ -	\$ -	\$ 53,100	\$ 53,100
	8355.510	Tanks	\$ -	\$ -	\$ 128,400	\$ 128,400
	8355.540	Electrical Supplies	\$ -	\$ -	\$ 68,800	\$ 68,800
	8355.555	Pump / Supplies	\$ -	\$ -	\$ 87,200	\$ 87,200
	8355.500	Vessels	\$ -	\$ -	\$ 253,200	\$ 253,200
<b>TOTAL TANGIBLE COSTS &gt;&gt;&gt;</b>			\$ 789,620	\$ 602,713	\$ 915,100	\$ 2,307,433

INTANGIBLE COSTS			Drilling	Completion	Facility	Total
<b>Intangible Drilling</b>			\$ 3,126,247	\$ -	\$ -	\$ 3,126,247
	8200.125	Inspection	\$ 45,258	\$ -	\$ -	\$ 45,258
	8200.167	Consulting Services	\$ 250,595	\$ -	\$ -	\$ 250,595
	8200.113	Damages/Row	\$ 7,894	\$ -	\$ -	\$ 7,894
	8200.106	Transportation	\$ 95,387	\$ -	\$ -	\$ 95,387
	8200.168	Roustabout Services	\$ 2,207	\$ -	\$ -	\$ 2,207
	8200.170	Mud-Diesel	\$ 110,871	\$ -	\$ -	\$ 110,871
	8200.116	Drill Bits & BHA	\$ 68,801	\$ -	\$ -	\$ 68,801
	8200.103	Drilling - Rig Move	\$ 93,673	\$ -	\$ -	\$ 93,673
	8200.117	Mud & Chemicals	\$ 177,133	\$ -	\$ -	\$ 177,133
	8200.149	Legal, Title, Etc	\$ 10,525	\$ -	\$ -	\$ 10,525
	8200.102	Drilling - Daywork	\$ 830,236	\$ -	\$ -	\$ 830,236
	8200.111	Survey, Stake/Permit	\$ 5,263	\$ -	\$ -	\$ 5,263
	8200.165	Safety/Environmental	\$ 2,577	\$ -	\$ -	\$ 2,577
	8200.143	Geological Services	\$ 10,201	\$ -	\$ -	\$ 10,201
	8200.147	Drilling Overhead	\$ 5,351	\$ -	\$ -	\$ 5,351
	8200.112	Location & Roads, Conductor	\$ 124,415	\$ -	\$ -	\$ 124,415
	8200.152	Well Control Ins.	\$ 7,894	\$ -	\$ -	\$ 7,894
	8200.127	Contract Labor	\$ 27,255	\$ -	\$ -	\$ 27,255
	8200.124	Equipment Rental	\$ 115,861	\$ -	\$ -	\$ 115,861
	8200.128	Drilling - Directional	\$ 249,531	\$ -	\$ -	\$ 249,531
	8200.114	Disposal	\$ 192,723	\$ -	\$ -	\$ 192,723
	8200.138	Cementing Services	\$ 199,975	\$ -	\$ -	\$ 199,975
	8200.115	Mud-Drill Water	\$ 5,765	\$ -	\$ -	\$ 5,765
	8200.162	Mancamp	\$ 46,357	\$ -	\$ -	\$ 46,357
	8200.164	Solids Control & Closed Loop	\$ 114,641	\$ -	\$ -	\$ 114,641



## AUTHORIZATION FOR EXPENDITURE

	8200.169	Mud-Brine	\$ 25,836	\$ -	\$ -	\$ 25,836
	8200.144	Company Supervision	\$ 2,400	\$ -	\$ -	\$ 2,400
	8200.137	Casing Services	\$ 72,199	\$ -	\$ -	\$ 72,199
	8200.119	Mud-Auxiliary	\$ 31,462	\$ -	\$ -	\$ 31,462
	8200.104	Fuel - Rig	\$ 193,963	\$ -	\$ -	\$ 193,963
<b>Intangible Completion</b>			\$ -	\$ 5,620,434	\$ -	\$ 5,620,434
	8300.232	Disposal	\$ -	\$ 19,004	\$ -	\$ 19,004
	8300.243	Analysis	\$ -	\$ 9,473	\$ -	\$ 9,473
	8300.212	Contract Labor	\$ -	\$ 10,678	\$ -	\$ 10,678
	8300.273	Flowback	\$ -	\$ 7,821	\$ -	\$ 7,821
	8300.276	Safety & Environmental	\$ -	\$ 3,473	\$ -	\$ 3,473
	8300.220	Engineering & Supervision	\$ -	\$ 15,156	\$ -	\$ 15,156
	8300.209	Chemicals	\$ -	\$ 419,703	\$ -	\$ 419,703
	8300.229	Transportation	\$ -	\$ 5,263	\$ -	\$ 5,263
	8300.205	Location & Roads	\$ -	\$ 5,288	\$ -	\$ 5,288
	8300.214	Perforating & Plugs	\$ -	\$ 390,293	\$ -	\$ 390,293
	8300.250	Downhole Rental Equip	\$ -	\$ 43,391	\$ -	\$ 43,391
	8300.203	Fuel	\$ -	\$ 683,704	\$ -	\$ 683,704
	8300.270	Frac - Equipment	\$ -	\$ 1,692,841	\$ -	\$ 1,692,841
	8300.279	Completions Overhead	\$ -	\$ 2,808	\$ -	\$ 2,808
	8300.248	Mancamp	\$ -	\$ 21,324	\$ -	\$ 21,324
	8300.271	Coil Tubing	\$ -	\$ 113,724	\$ -	\$ 113,724
	8300.278	Roustabouts	\$ -	\$ 1,579	\$ -	\$ 1,579
	8300.275	Frac - Sand	\$ -	\$ 1,015,231	\$ -	\$ 1,015,231
	8300.277	Consulting Services	\$ -	\$ 116,828	\$ -	\$ 116,828
	8300.210	Surface Rental Equip	\$ -	\$ 305,001	\$ -	\$ 305,001
	8300.274	Water Transfer	\$ -	\$ 99,015	\$ -	\$ 99,015
	8300.240	Pump Down Services	\$ -	\$ 101,040	\$ -	\$ 101,040
	8300.207	Fresh Water	\$ -	\$ 537,798	\$ -	\$ 537,798
<b>Intangible Artificial Lift</b>			\$ -	\$ 95,150	\$ -	\$ 95,150
	8320.605	Fuel / Power	\$ -	\$ 5,263	\$ -	\$ 5,263
	8320.602	Workover Rig	\$ -	\$ 30,000	\$ -	\$ 30,000
	8320.617	Contract Labor/Roustabout	\$ -	\$ 15,887	\$ -	\$ 15,887
	8320.612	Kill Truck	\$ -	\$ 5,000	\$ -	\$ 5,000
	8320.628	Chemicals	\$ -	\$ 5,000	\$ -	\$ 5,000
	8320.621	Rental Equipment	\$ -	\$ 15,000	\$ -	\$ 15,000
	8320.625	Wellsite Supervision	\$ -	\$ 5,000	\$ -	\$ 5,000
	8320.611	Trucking/Vacuum/Transportation	\$ -	\$ 10,000	\$ -	\$ 10,000
	8320.610	Inspection & Testing	\$ -	\$ 4,000	\$ -	\$ 4,000
<b>Intangible Flowback</b>			\$ -	\$ 341,344	\$ -	\$ 341,344
	8360.805	Trucked Water Disposal	\$ -	\$ 21,464	\$ -	\$ 21,464
	8360.825	Rental Equipment	\$ -	\$ 190,000	\$ -	\$ 190,000
	8360.845	Wellsite Supervision	\$ -	\$ 50,400	\$ -	\$ 50,400
	8360.850	Safety / Environmental	\$ -	\$ 4,400	\$ -	\$ 4,400
	8360.820	Well Testing / Flowback	\$ -	\$ 60,746	\$ -	\$ 60,746
	8360.815	Trucking/Vacuum/Transp	\$ -	\$ 14,334	\$ -	\$ 14,334
<b>Intangible Facility</b>			\$ -	\$ -	\$ 664,900	\$ 664,900
	8350.413	Contingency	\$ -	\$ -	\$ 75,200	\$ 75,200
	8350.418	Mechanical Labor	\$ -	\$ -	\$ 222,500	\$ 222,500
	8350.416	Supervision	\$ -	\$ -	\$ 29,600	\$ 29,600
	8350.404	Equipment Rental	\$ -	\$ -	\$ 31,000	\$ 31,000
	8350.417	Overhead Power Labor	\$ -	\$ -	\$ 24,600	\$ 24,600
	8350.419	Automation Labor	\$ -	\$ -	\$ 21,500	\$ 21,500
	8350.415	Engineering / Technical	\$ -	\$ -	\$ 38,700	\$ 38,700
	8350.411	Safety & Environmental	\$ -	\$ -	\$ 11,700	\$ 11,700
	8350.422	Flowline Labor	\$ -	\$ -	\$ 35,100	\$ 35,100
	8350.410	Transportation/Trucking	\$ -	\$ -	\$ 24,500	\$ 24,500
	8350.421	Commissioning	\$ -	\$ -	\$ 3,500	\$ 3,500
	8350.403	Roads/Location	\$ -	\$ -	\$ 85,100	\$ 85,100
	8350.420	Electrical Labor	\$ -	\$ -	\$ 61,900	\$ 61,900
<b>TOTAL INTANGIBLE COSTS &gt;&gt;&gt;</b>			\$ 3,126,247	\$ 6,056,928	\$ 664,900	\$ 9,848,075
<b>TOTAL PROJECT COSTS &gt;&gt;&gt;</b>			\$ 3,915,867	\$ 6,659,641	\$ 1,580,000	\$ 12,155,508
			Drilling	Completion	Facility	Total



**AUTHORIZATION FOR EXPENDITURE**

This Authority for Expenditure is based on cost estimates. Billing will reflect your proportionate share of the actual invoice costs.

**JOINT INTEREST APPROVAL:**

Company: \_\_\_\_\_

Working Interest: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

By: \_\_\_\_\_





### AUTHORIZATION FOR EXPENDITURE

**AFE: NM0598**

Date: June 04, 2024

Well Name: Sapphire 14 Federal Com #605H

Projected MD/TVD: 20973/10700

Target: 3BS

Spud to TD: 17.6

County: Lea

Lateral Length: 10000

State: NM

Stages: 64

SHL: S14-T19S-R33E 190' FNL, 1260' FEL

Total Proppant (ppf): 2500

BHL: S23-T19S-R33E 100' FSL, 1254' FEL

Total Fluid (gal/ft): 3000

### PROJECT DESCRIPTION:

The proposed AFE is for the Sapphire 14 Federal Com #605H, a 2 section Bone Springs horizontal well to be drilled in Lea County, NM. The well is a 3 string casing design consisting of the following: 17.5" surface hole drilled on Fresh to 1250' and 13.375" 54.5# J-55 BTC casing will be set and cemented in place; 12.25" hole will then be drilled on Brine to 3500' and a string of 9.625" 40# J-55 BTC casing will be set and cemented in place; 8.75" production hole will then be drilled on OBM to 20973' and a string of 5.5" 20# P-110 HC GBCD casing will be set and cemented in place. There will be 10000' of treatable lateral and the completions design will consist of +/-64 stages at 2500 lbs/ft & 3000 gals/ft. AFE includes associated costs for initial gas lift installation.

	<u>TOTAL</u>
<b>DRILLING:</b>	<b>\$3,915,866.85</b>
<b>COMPLETIONS:</b>	<b>\$6,659,640.84</b>
<b>FACILITIES:</b>	<b>\$1,580,000.00</b>
<b>COMPLETED WELL COST:</b>	<b>\$12,155,507.69</b>

### OPERATOR APPROVAL:



## AUTHORIZATION FOR EXPENDITURE

AFE: NM0598

Date: June 04, 2024

Well Name: Sapphire 14 Federal Com #605H

Projected MD/TVD: 20973/10700

Target: 3BS

Spud to TD: 17.6

County: Lea

Lateral Length: 10000

State: NM

Stages: 64

SHL: S14-T19S-R33E 190' FNL, 1260' FEL

Total Proppant (ppf): 2500

BHL: S23-T19S-R33E 100' FSL, 1254' FEL

Total Fluid (gal/ft): 3000

TANGIBLE COSTS			Drilling	Completion	Facility	Total
<b>Tangible Drilling</b>			\$ 789,620	\$ -	\$ -	\$ 789,620
	8400.303	Production Casing	\$ 541,519	\$ -	\$ -	\$ 541,519
	8400.340	Wellhead	\$ 56,835	\$ -	\$ -	\$ 56,835
	8400.301	Surface Casing	\$ 64,795	\$ -	\$ -	\$ 64,795
	8400.302	Intrm 1&2 Casing	\$ 126,471	\$ -	\$ -	\$ 126,471
<b>Tangible Completion</b>			\$ -	\$ 602,713	\$ -	\$ 602,713
	8400.352	Wellhead & Equipment	\$ -	\$ 44,205	\$ -	\$ 44,205
	8325.702	Tubing	\$ -	\$ 90,000	\$ -	\$ 90,000
	8325.711	Wellhead Equipment	\$ -	\$ 63,508	\$ -	\$ 63,508
	8325.719	Contract Labor Install	\$ -	\$ 15,000	\$ -	\$ 15,000
	8325.705	ESF Equipment/Install	\$ -	\$ 40,000	\$ -	\$ 40,000
	8325.704	Downhole Artificial Lift Eqpt	\$ -	\$ 350,000	\$ -	\$ 350,000
<b>Tangible Facility</b>			\$ -	\$ -	\$ 915,100	\$ 915,100
	8355.510	Tanks	\$ -	\$ -	\$ 128,400	\$ 128,400
	8355.530	Compressors	\$ -	\$ -	\$ 11,100	\$ 11,100
	8355.565	Flowline	\$ -	\$ -	\$ 49,100	\$ 49,100
	8355.555	Pump / Supplies	\$ -	\$ -	\$ 87,200	\$ 87,200
	8355.540	Electrical Supplies	\$ -	\$ -	\$ 68,800	\$ 68,800
	8355.500	Vessels	\$ -	\$ -	\$ 253,200	\$ 253,200
	8355.515	Flare	\$ -	\$ -	\$ 32,000	\$ 32,000
	8355.520	PVF	\$ -	\$ -	\$ 146,000	\$ 146,000
	8355.535	Instrumentation / Meters	\$ -	\$ -	\$ 60,500	\$ 60,500
	8355.525	Containment	\$ -	\$ -	\$ 25,700	\$ 25,700
	8355.550	Overhead Power Material	\$ -	\$ -	\$ 53,100	\$ 53,100
<b>TOTAL TANGIBLE COSTS &gt;&gt;&gt;</b>			\$ 789,620	\$ 602,713	\$ 915,100	\$ 2,307,433

INTANGIBLE COSTS			Drilling	Completion	Facility	Total
<b>Intangible Drilling</b>			\$ 3,126,247	\$ -	\$ -	\$ 3,126,247
	8200.116	Drill Bits & BHA	\$ 68,801	\$ -	\$ -	\$ 68,801
	8200.124	Equipment Rental	\$ 115,861	\$ -	\$ -	\$ 115,861
	8200.115	Mud-Drill Water	\$ 5,765	\$ -	\$ -	\$ 5,765
	8200.125	Inspection	\$ 45,258	\$ -	\$ -	\$ 45,258
	8200.127	Contract Labor	\$ 27,255	\$ -	\$ -	\$ 27,255
	8200.147	Drilling Overhead	\$ 5,351	\$ -	\$ -	\$ 5,351
	8200.117	Mud & Chemicals	\$ 177,133	\$ -	\$ -	\$ 177,133
	8200.106	Transportation	\$ 95,387	\$ -	\$ -	\$ 95,387
	8200.138	Cementing Services	\$ 199,975	\$ -	\$ -	\$ 199,975
	8200.169	Mud-Brine	\$ 25,836	\$ -	\$ -	\$ 25,836
	8200.152	Well Control Ins.	\$ 7,894	\$ -	\$ -	\$ 7,894
	8200.168	Roustabout Services	\$ 2,207	\$ -	\$ -	\$ 2,207
	8200.143	Geological Services	\$ 10,201	\$ -	\$ -	\$ 10,201
	8200.111	Survey, Stake/Permit	\$ 5,263	\$ -	\$ -	\$ 5,263
	8200.137	Casing Services	\$ 72,199	\$ -	\$ -	\$ 72,199
	8200.119	Mud-Auxiliary	\$ 31,462	\$ -	\$ -	\$ 31,462
	8200.144	Company Supervision	\$ 2,400	\$ -	\$ -	\$ 2,400
	8200.170	Mud-Diesel	\$ 110,871	\$ -	\$ -	\$ 110,871
	8200.103	Drilling - Rig Move	\$ 93,673	\$ -	\$ -	\$ 93,673
	8200.162	Mancamp	\$ 46,357	\$ -	\$ -	\$ 46,357
	8200.167	Consulting Services	\$ 250,595	\$ -	\$ -	\$ 250,595
	8200.112	Location & Roads, Conductor	\$ 124,415	\$ -	\$ -	\$ 124,415
	8200.102	Drilling - Daywork	\$ 830,236	\$ -	\$ -	\$ 830,236
	8200.165	Safety/Environmental	\$ 2,577	\$ -	\$ -	\$ 2,577
	8200.149	Legal, Title, Etc	\$ 10,525	\$ -	\$ -	\$ 10,525



## AUTHORIZATION FOR EXPENDITURE

	8200.114	Disposal	\$ 192,723	\$ -	\$ -	\$ 192,723
	8200.128	Drilling - Directional	\$ 249,531	\$ -	\$ -	\$ 249,531
	8200.164	Solids Control & Closed Loop	\$ 114,641	\$ -	\$ -	\$ 114,641
	8200.104	Fuel - Rig	\$ 193,963	\$ -	\$ -	\$ 193,963
	8200.113	Damages/Row	\$ 7,894	\$ -	\$ -	\$ 7,894
<b>Intangible Completion</b>			\$ -	\$ 5,620,434	\$ -	\$ 5,620,434
	8300.273	Flowback	\$ -	\$ 7,821	\$ -	\$ 7,821
	8300.205	Location & Roads	\$ -	\$ 5,288	\$ -	\$ 5,288
	8300.278	Roustabouts	\$ -	\$ 1,579	\$ -	\$ 1,579
	8300.274	Water Transfer	\$ -	\$ 99,015	\$ -	\$ 99,015
	8300.277	Consulting Services	\$ -	\$ 116,828	\$ -	\$ 116,828
	8300.207	Fresh Water	\$ -	\$ 537,798	\$ -	\$ 537,798
	8300.275	Frac - Sand	\$ -	\$ 1,015,231	\$ -	\$ 1,015,231
	8300.240	Pump Down Services	\$ -	\$ 101,040	\$ -	\$ 101,040
	8300.279	Completions Overhead	\$ -	\$ 2,808	\$ -	\$ 2,808
	8300.229	Transportation	\$ -	\$ 5,263	\$ -	\$ 5,263
	8300.214	Perforating & Plugs	\$ -	\$ 390,293	\$ -	\$ 390,293
	8300.212	Contract Labor	\$ -	\$ 10,678	\$ -	\$ 10,678
	8300.232	Disposal	\$ -	\$ 19,004	\$ -	\$ 19,004
	8300.220	Engineering & Supervision	\$ -	\$ 15,156	\$ -	\$ 15,156
	8300.210	Surface Rental Equip	\$ -	\$ 305,001	\$ -	\$ 305,001
	8300.250	Downhole Rental Equip	\$ -	\$ 43,391	\$ -	\$ 43,391
	8300.248	Mancamp	\$ -	\$ 21,324	\$ -	\$ 21,324
	8300.209	Chemicals	\$ -	\$ 419,703	\$ -	\$ 419,703
	8300.203	Fuel	\$ -	\$ 683,704	\$ -	\$ 683,704
	8300.271	Coil Tubing	\$ -	\$ 113,724	\$ -	\$ 113,724
	8300.276	Safety & Environmental	\$ -	\$ 3,473	\$ -	\$ 3,473
	8300.270	Frac - Equipment	\$ -	\$ 1,692,841	\$ -	\$ 1,692,841
	8300.243	Analysis	\$ -	\$ 9,473	\$ -	\$ 9,473
<b>Intangible Artificial Lift</b>			\$ -	\$ 95,150	\$ -	\$ 95,150
	8320.611	Trucking/Vacuum/Transportation	\$ -	\$ 10,000	\$ -	\$ 10,000
	8320.628	Chemicals	\$ -	\$ 5,000	\$ -	\$ 5,000
	8320.602	Workover Rig	\$ -	\$ 30,000	\$ -	\$ 30,000
	8320.610	Inspection & Testing	\$ -	\$ 4,000	\$ -	\$ 4,000
	8320.625	Wellsite Supervision	\$ -	\$ 5,000	\$ -	\$ 5,000
	8320.605	Fuel / Power	\$ -	\$ 5,263	\$ -	\$ 5,263
	8320.612	Kill Truck	\$ -	\$ 5,000	\$ -	\$ 5,000
	8320.617	Contract Labor/Roustabout	\$ -	\$ 15,887	\$ -	\$ 15,887
	8320.621	Rental Equipment	\$ -	\$ 15,000	\$ -	\$ 15,000
<b>Intangible Flowback</b>			\$ -	\$ 341,344	\$ -	\$ 341,344
	8360.845	Wellsite Supervision	\$ -	\$ 50,400	\$ -	\$ 50,400
	8360.825	Rental Equipment	\$ -	\$ 190,000	\$ -	\$ 190,000
	8360.850	Safety / Environmental	\$ -	\$ 4,400	\$ -	\$ 4,400
	8360.815	Trucking/Vacuum/Transp	\$ -	\$ 14,334	\$ -	\$ 14,334
	8360.820	Well Testing / Flowback	\$ -	\$ 60,746	\$ -	\$ 60,746
	8360.805	Trucked Water Disposal	\$ -	\$ 21,464	\$ -	\$ 21,464
<b>Intangible Facility</b>			\$ -	\$ -	\$ 664,900	\$ 664,900
	8350.403	Roads/Location	\$ -	\$ -	\$ 85,100	\$ 85,100
	8350.416	Supervision	\$ -	\$ -	\$ 29,600	\$ 29,600
	8350.418	Mechanical Labor	\$ -	\$ -	\$ 222,500	\$ 222,500
	8350.422	Flowline Labor	\$ -	\$ -	\$ 35,100	\$ 35,100
	8350.420	Electrical Labor	\$ -	\$ -	\$ 61,900	\$ 61,900
	8350.421	Commissioning	\$ -	\$ -	\$ 3,500	\$ 3,500
	8350.411	Safety & Environmental	\$ -	\$ -	\$ 11,700	\$ 11,700
	8350.404	Equipment Rental	\$ -	\$ -	\$ 31,000	\$ 31,000
	8350.419	Automation Labor	\$ -	\$ -	\$ 21,500	\$ 21,500
	8350.417	Overhead Power Labor	\$ -	\$ -	\$ 24,600	\$ 24,600
	8350.413	Contingency	\$ -	\$ -	\$ 75,200	\$ 75,200
	8350.410	Transportation/Trucking	\$ -	\$ -	\$ 24,500	\$ 24,500
	8350.415	Engineering / Technical	\$ -	\$ -	\$ 38,700	\$ 38,700
<b>TOTAL INTANGIBLE COSTS &gt;&gt;&gt;</b>			\$ 3,126,247	\$ 6,056,928	\$ 664,900	\$ 9,848,075
<b>TOTAL PROJECT COSTS &gt;&gt;&gt;</b>			\$ 3,915,867	\$ 6,659,641	\$ 1,580,000	\$ 12,155,508
			<b>Drilling</b>	<b>Completion</b>	<b>Facility</b>	<b>Total</b>



**AUTHORIZATION FOR EXPENDITURE**

This Authority for Expenditure is based on cost estimates. Billing will reflect your proportionate share of the actual invoice costs.

**JOINT INTEREST APPROVAL:**

Company: \_\_\_\_\_ Working Interest: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

By: \_\_\_\_\_





### AUTHORIZATION FOR EXPENDITURE

**AFE: NM0599**

Date: June 04, 2024

Well Name: Sapphire 14 Federal Com #606H

Projected MD/TVD: 20973/10700

Target: 3BS

Spud to TD: 17.6

County: Lea

Lateral Length: 10000

State: NM

Stages: 64

SHL: S14-T19S-R33E 190' FNL, 1240' FEL

Total Proppant (ppf): 2500

BHL: S23-T19S-R33E 100' FSL, 330' FEL

Total Fluid (gal/ft): 3000

### PROJECT DESCRIPTION:

The proposed AFE is for the Sapphire 14 Federal Com #606H, a 2 section Bone Springs horizontal well to be drilled in Lea County, NM. The well is a 3 string casing design consisting of the following: 17.5" surface hole drilled on Fresh to 1250' and 13.375" 54.5# J-55 BTC casing will be set and cemented in place; 12.25" hole will then be drilled on Brine to 3500' and a string of 9.625" 40# J-55 BTC casing will be set and cemented in place; 8.75" production hole will then be drilled on OBM to 20973' and a string of 5.5" 20# P-110 HC GBCD casing will be set and cemented in place. There will be 10000' of treatable lateral and the completions design will consist of +/-64 stages at 2500 lbs/ft & 3000 gals/ft. AFE includes associated costs for initial gas lift installation.

	<u>TOTAL</u>
<b>DRILLING:</b>	<b>\$3,915,866.85</b>
<b>COMPLETIONS:</b>	<b>\$6,659,640.84</b>
<b>FACILITIES:</b>	<b>\$1,580,000.00</b>
<b>COMPLETED WELL COST:</b>	<b>\$12,155,507.69</b>

### OPERATOR APPROVAL:



## AUTHORIZATION FOR EXPENDITURE

AFE: NM0599

Date: June 04, 2024

Well Name: Sapphire 14 Federal Com #606H

Projected MD/TVD: 20973/10700

Target: 3BS

Spud to TD: 17.6

County: Lea

Lateral Length: 10000

State: NM

Stages: 64

SHL: S14-T19S-R33E 190' FNL, 1240' FEL

Total Proppant (ppf): 2500

BHL: S23-T19S-R33E 100' FSL, 330' FEL

Total Fluid (gal/ft): 3000

TANGIBLE COSTS			Drilling	Completion	Facility	Total
<b>Tangible Drilling</b>			\$ 789,620	\$ -	\$ -	\$ 789,620
	8400.340	Wellhead	\$ 56,835	\$ -	\$ -	\$ 56,835
	8400.303	Production Casing	\$ 541,519	\$ -	\$ -	\$ 541,519
	8400.302	Intrm 1&2 Casing	\$ 126,471	\$ -	\$ -	\$ 126,471
	8400.301	Surface Casing	\$ 64,795	\$ -	\$ -	\$ 64,795
<b>Tangible Completion</b>			\$ -	\$ 602,713	\$ -	\$ 602,713
	8400.352	Wellhead & Equipment	\$ -	\$ 44,205	\$ -	\$ 44,205
	8325.705	ESP Equipment/Install	\$ -	\$ 40,000	\$ -	\$ 40,000
	8325.704	Downhole Artificial Lift Eqpt	\$ -	\$ 350,000	\$ -	\$ 350,000
	8325.702	Tubing	\$ -	\$ 90,000	\$ -	\$ 90,000
	8325.711	Wellhead Equipment	\$ -	\$ 63,508	\$ -	\$ 63,508
	8325.719	Contract Labor Install	\$ -	\$ 15,000	\$ -	\$ 15,000
<b>Tangible Facility</b>			\$ -	\$ -	\$ 915,100	\$ 915,100
	8355.555	Pump / Supplies	\$ -	\$ -	\$ 87,200	\$ 87,200
	8355.525	Containment	\$ -	\$ -	\$ 25,700	\$ 25,700
	8355.535	Instrumentation / Meters	\$ -	\$ -	\$ 60,500	\$ 60,500
	8355.565	Flowline	\$ -	\$ -	\$ 49,100	\$ 49,100
	8355.500	Vessels	\$ -	\$ -	\$ 253,200	\$ 253,200
	8355.540	Electrical Supplies	\$ -	\$ -	\$ 68,800	\$ 68,800
	8355.510	Tanks	\$ -	\$ -	\$ 128,400	\$ 128,400
	8355.550	Overhead Power Material	\$ -	\$ -	\$ 53,100	\$ 53,100
	8355.530	Compressors	\$ -	\$ -	\$ 11,100	\$ 11,100
	8355.520	PV/F	\$ -	\$ -	\$ 146,000	\$ 146,000
	8355.515	Flare	\$ -	\$ -	\$ 32,000	\$ 32,000
<b>TOTAL TANGIBLE COSTS &gt;&gt;&gt;</b>			\$ 789,620	\$ 602,713	\$ 915,100	\$ 2,307,433

INTANGIBLE COSTS			Drilling	Completion	Facility	Total
<b>Intangible Drilling</b>			\$ 3,126,247	\$ -	\$ -	\$ 3,126,247
	8200.124	Equipment Rental	\$ 115,861	\$ -	\$ -	\$ 115,861
	8200.162	Mancamp	\$ 46,357	\$ -	\$ -	\$ 46,357
	8200.168	Roustabout Services	\$ 2,207	\$ -	\$ -	\$ 2,207
	8200.111	Survey, Stake/Permit	\$ 5,263	\$ -	\$ -	\$ 5,263
	8200.103	Drilling - Rig Move	\$ 93,673	\$ -	\$ -	\$ 93,673
	8200.119	Mud-Auxiliary	\$ 31,462	\$ -	\$ -	\$ 31,462
	8200.116	Drill Bits & BHA	\$ 68,801	\$ -	\$ -	\$ 68,801
	8200.169	Mud-Brine	\$ 25,836	\$ -	\$ -	\$ 25,836
	8200.144	Company Supervision	\$ 2,400	\$ -	\$ -	\$ 2,400
	8200.149	Legal, Title, Etc	\$ 10,525	\$ -	\$ -	\$ 10,525
	8200.106	Transportation	\$ 95,387	\$ -	\$ -	\$ 95,387
	8200.138	Cementing Services	\$ 199,975	\$ -	\$ -	\$ 199,975
	8200.128	Drilling - Directional	\$ 249,531	\$ -	\$ -	\$ 249,531
	8200.164	Solids Control & Closed Loop	\$ 114,641	\$ -	\$ -	\$ 114,641
	8200.117	Mud & Chemicals	\$ 177,133	\$ -	\$ -	\$ 177,133
	8200.137	Casing Services	\$ 72,199	\$ -	\$ -	\$ 72,199
	8200.104	Fuel - Rig	\$ 193,963	\$ -	\$ -	\$ 193,963
	8200.113	Damages/Row	\$ 7,894	\$ -	\$ -	\$ 7,894
	8200.112	Location & Roads, Conductor	\$ 124,415	\$ -	\$ -	\$ 124,415
	8200.115	Mud-Drill Water	\$ 5,765	\$ -	\$ -	\$ 5,765
	8200.102	Drilling - Daywork	\$ 830,236	\$ -	\$ -	\$ 830,236
	8200.167	Consulting Services	\$ 250,595	\$ -	\$ -	\$ 250,595
	8200.165	Safety/Environmental	\$ 2,577	\$ -	\$ -	\$ 2,577
	8200.114	Disposal	\$ 192,723	\$ -	\$ -	\$ 192,723
	8200.147	Drilling Overhead	\$ 5,351	\$ -	\$ -	\$ 5,351



## AUTHORIZATION FOR EXPENDITURE

	8200.125	Inspection	\$ 45,258	\$ -	\$ -	\$ 45,258
	8200.143	Geological Services	\$ 10,201	\$ -	\$ -	\$ 10,201
	8200.127	Contract Labor	\$ 27,255	\$ -	\$ -	\$ 27,255
	8200.152	Well Control Ins.	\$ 7,894	\$ -	\$ -	\$ 7,894
	8200.170	Mud-Diesel	\$ 110,871	\$ -	\$ -	\$ 110,871
<b>Intangible Completion</b>			\$ -	\$ 5,620,434	\$ -	\$ 5,620,434
	8300.248	Mancamp	\$ -	\$ 21,324	\$ -	\$ 21,324
	8300.279	Completions Overhead	\$ -	\$ 2,808	\$ -	\$ 2,808
	8300.212	Contract Labor	\$ -	\$ 10,678	\$ -	\$ 10,678
	8300.274	Water Transfer	\$ -	\$ 99,015	\$ -	\$ 99,015
	8300.240	Pump Down Services	\$ -	\$ 101,040	\$ -	\$ 101,040
	8300.250	Downhole Rental Equip	\$ -	\$ 43,391	\$ -	\$ 43,391
	8300.273	Flowback	\$ -	\$ 7,821	\$ -	\$ 7,821
	8300.220	Engineering & Supervision	\$ -	\$ 15,156	\$ -	\$ 15,156
	8300.278	Roustabouts	\$ -	\$ 1,579	\$ -	\$ 1,579
	8300.276	Safety & Environmental	\$ -	\$ 3,473	\$ -	\$ 3,473
	8300.271	Coil Tubing	\$ -	\$ 113,724	\$ -	\$ 113,724
	8300.270	Frac - Equipment	\$ -	\$ 1,692,841	\$ -	\$ 1,692,841
	8300.277	Consulting Services	\$ -	\$ 116,828	\$ -	\$ 116,828
	8300.210	Surface Rental Equip	\$ -	\$ 305,001	\$ -	\$ 305,001
	8300.275	Frac - Sand	\$ -	\$ 1,015,231	\$ -	\$ 1,015,231
	8300.203	Fuel	\$ -	\$ 683,704	\$ -	\$ 683,704
	8300.243	Analysis	\$ -	\$ 9,473	\$ -	\$ 9,473
	8300.232	Disposal	\$ -	\$ 19,004	\$ -	\$ 19,004
	8300.207	Fresh Water	\$ -	\$ 537,798	\$ -	\$ 537,798
	8300.229	Transportation	\$ -	\$ 5,263	\$ -	\$ 5,263
	8300.209	Chemicals	\$ -	\$ 419,703	\$ -	\$ 419,703
	8300.205	Location & Roads	\$ -	\$ 5,288	\$ -	\$ 5,288
	8300.214	Perforating & Plugs	\$ -	\$ 390,293	\$ -	\$ 390,293
<b>Intangible Artificial Lift</b>			\$ -	\$ 95,150	\$ -	\$ 95,150
	8320.612	Kill Truck	\$ -	\$ 5,000	\$ -	\$ 5,000
	8320.621	Rental Equipment	\$ -	\$ 15,000	\$ -	\$ 15,000
	8320.602	Workover Rig	\$ -	\$ 30,000	\$ -	\$ 30,000
	8320.625	Wellsite Supervision	\$ -	\$ 5,000	\$ -	\$ 5,000
	8320.628	Chemicals	\$ -	\$ 5,000	\$ -	\$ 5,000
	8320.610	Inspection & Testing	\$ -	\$ 4,000	\$ -	\$ 4,000
	8320.611	Trucking/Vacuum/Transportation	\$ -	\$ 10,000	\$ -	\$ 10,000
	8320.617	Contract Labor/Roustabout	\$ -	\$ 15,887	\$ -	\$ 15,887
	8320.605	Fuel / Power	\$ -	\$ 5,263	\$ -	\$ 5,263
<b>Intangible Flowback</b>			\$ -	\$ 341,344	\$ -	\$ 341,344
	8360.815	Trucking/Vacuum/Transp	\$ -	\$ 14,334	\$ -	\$ 14,334
	8360.850	Safety / Environmental	\$ -	\$ 4,400	\$ -	\$ 4,400
	8360.845	Wellsite Supervision	\$ -	\$ 50,400	\$ -	\$ 50,400
	8360.825	Rental Equipment	\$ -	\$ 190,000	\$ -	\$ 190,000
	8360.820	Well Testing / Flowback	\$ -	\$ 60,746	\$ -	\$ 60,746
	8360.805	Trucked Water Disposal	\$ -	\$ 21,464	\$ -	\$ 21,464
<b>Intangible Facility</b>			\$ -	\$ -	\$ 664,900	\$ 664,900
	8350.419	Automation Labor	\$ -	\$ -	\$ 21,500	\$ 21,500
	8350.410	Transportation/Trucking	\$ -	\$ -	\$ 24,500	\$ 24,500
	8350.415	Engineering / Technical	\$ -	\$ -	\$ 38,700	\$ 38,700
	8350.411	Safety & Environmental	\$ -	\$ -	\$ 11,700	\$ 11,700
	8350.416	Supervision	\$ -	\$ -	\$ 29,600	\$ 29,600
	8350.403	Roads/Location	\$ -	\$ -	\$ 85,100	\$ 85,100
	8350.404	Equipment Rental	\$ -	\$ -	\$ 31,000	\$ 31,000
	8350.418	Mechanical Labor	\$ -	\$ -	\$ 222,500	\$ 222,500
	8350.417	Overhead Power Labor	\$ -	\$ -	\$ 24,600	\$ 24,600
	8350.422	Flowline Labor	\$ -	\$ -	\$ 35,100	\$ 35,100
	8350.420	Electrical Labor	\$ -	\$ -	\$ 61,900	\$ 61,900
	8350.413	Contingency	\$ -	\$ -	\$ 75,200	\$ 75,200
	8350.421	Commissioning	\$ -	\$ -	\$ 3,500	\$ 3,500
<b>TOTAL INTANGIBLE COSTS &gt;&gt;&gt;</b>			\$ 3,126,247	\$ 6,056,928	\$ 664,900	\$ 9,848,075
<b>TOTAL PROJECT COSTS &gt;&gt;&gt;</b>			\$ 3,915,867	\$ 6,659,641	\$ 1,580,000	\$ 12,155,508
			<b>Drilling</b>	<b>Completion</b>	<b>Facility</b>	<b>Total</b>



**AUTHORIZATION FOR EXPENDITURE**

This Authority for Expenditure is based on cost estimates. Billing will reflect your proportionate share of the actual invoice costs.

**JOINT INTEREST APPROVAL:**

Company: \_\_\_\_\_ Working Interest: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

By: \_\_\_\_\_

Sapphire 14 Federal Com  
 #301H-#306H / #501H-#502H, #513H-#514H, #505H-#506H/ #601H-#606H

Avant Operating, LLC  
 Case No. 24849  
 Exhibit A-7



## Summary of Contacts

Owner Name	Sent Proposal	Tracking	Follow-up / Comments
T.H. McElvain Oil & Gas LLLP	6.27.24	9405 5036 9930 0697 5045 69 and emailed	JOA signed, Owner Committed
Devon Energy Production Company, L.P.	6.27.24 8.6.24	9405 5036 9930 0697 5045 45 9405 5036 9930 0704 7969 18	Well Proposals Received; Clarification Letter received, JOA sent, No further inquiries received.
Nuevo Seis Limited Partnership	8.5.24	9405503699300672435178 emailed updated documents	8/1 Morris called and left message; 8/5 called back and offered to send everything in one email: JOA, AFEs and Well Proposals 806-777-9005; tinman51@rocketman.com
Ball Oil and Gas, LLC	6/7/24	9405 5036 9930 0697 5045 07 and emailed	JOA signed, Owner Committed
Community Minerals, LLC	6.27.24	9405 5036 9930 0697 5045 38	Paul Berguila <paulb@communityminerals.com> emailed 8/5 confirming receipt of AFEs and JOA and will let us know their decision; No further inquiries received
James K. Lusk and Martha Lusk Trust, James K. Lusk, Trustee	6.27.24 8.6.24	9405 5036 9930 0697 5046 06 2nd attempt: 9405 5036 9930 0702 7148 46 3rd attempt: 9405 5036 9930 0711 9932 32 9405 5036 9930 0704 7968 19	2717 Onate Drive Roswell, NM 88201 also returned UNDELIVERD 9/12; James and Martha are both deceased; pulled Trustee info from County and attempting delivery to Daniel G Lusk, package was delivered but no further inquiries.
WTI Energy Partners LLC	6.27.24	9405 5036 9930 0697 5047 12 and emailed	JOA signed, Owner Committed
Lone Oak Capital LLC	6.27.24	9405 5036 9930 0697 5047 12 and emailed	JOA signed, Owner Committed
Winn Investments, Inc.	8.6.24	9405 5036 9930 0704 7968 71	
Earthstone Permian, LLC Permian Resources	6.27.24 8.4.24	9405 5036 9930 0697 5047 36 9405503699300704796840	Well Proposals Received; Clarification Letter received, JOA sent, No further inquiries received.
Ellipsis Oil & Gas Inc.	6.27.24 78.24	emailed packet to Pete	JOA signed, Owner Committed
Gregory J. Nibert and Carolyn S. Nibert, Co-Trustees of the DJS Trust Established under Trust Agreement dated 9/12/2005, as amended and restated	6.27.24 8.6.24	9405 5036 9930 0697 5045 83 9405 5036 9930 0704 7969 25	JOA signed, Owner Committed
Innoventions Inc.	6.27.24	9405503699300672435246 and email	JOA signed, Owner Committed
Williamson Enterprises	6.27.24 8.6.24	9405 5036 9930 0697 5046 99 9405 5036 9930 0704 7969 01	JOA signed, Owner Committed





Sapphire 14 Federal Com  
 #301H-#306H / #501H-#502H, #513H-#514H, #505H-#506H/ #601H-#606H

Avant Operating, LLC  
 Case No. 24849  
 Exhibit A-7



## Summary of Contacts continued

Owner Name	Sent Proposal	Tracking	Follow-up / Comments
Hutchings Oil Company	6.27.24 8.6.24	9405 5036 9930 0697 5045 52 9405 5036 9930 0704 7968 88	Well Proposals Received; Clarification Letter received, JOA sent, No further inquiries received.
PBEX, LLC	7.11.24 7.22.24	FedEx 777571360927	Brittany sent email 7.11.2024 w/ownership transfers back into PBEX; 7/22 I sent updated AFEs and Proposal, 7/23 sent copy of the same overnight mail bhull@pbex.com
Capco Resource Corporation	6.27.24 8.6.24	9405 5036 9930 0697 5045 21 9405 5036 9930 0704 7968 64	Well Proposals Received; Clarification Letter received, JOA sent, No further inquiries received.
Yates Energy Corporation	8.6.24	9405 5036 9930 0704 7968 57	JOA signed; Owner Committed
MRC Delaware Resources, LLC	6.27.24 8.6.24	9405 5036 9930 0697 5046 13 9405 5036 9930 0704 7968 95	Well Proposals Received; Clarification Letter received, JOA sent, 8/22 phone call w/Clay on potential trade; 9/15 potential deal sent via email, 9/23 sent email follow-up regarding trade idea



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

**APPLICATION OF AVANT OPERATING, LLC  
FOR APPROVAL OF A NON-STANDARD UNIT,  
AND COMPULSORY POOLING,  
LEA COUNTY, NEW MEXICO.**

**CASE NO. 24849**

**SELF-AFFIRMED STATEMENT OF JOSH PAYNE**

Josh Payne hereby states and declares as follows:

1. I am over the age of 18, I am a geologist for Avant Operating, LLC ("Avant"), and have personal knowledge of the matters stated herein. I have previously testified before the Oil Conservation Division ("Division") and my credentials as an expert petroleum geologist were accepted by the Division as a matter of record.

2. My area of responsibility at Avant includes the area of Lea County in New Mexico.

3. I am familiar with the application filed by Avant in this case.

4. **Exhibit B-1** is a locator map showing the approximate location of the proposed unit in relation to the Capitan Reef.

5. **Exhibit B-2** is a gun-barrel diagram showing Avant's development plan.

6. **Exhibit B-3** is a structure map of the base of the Bone Spring formation. The proposed spacing unit is identified by a red box. The proposed Sapphire 14 Federal Com Bone Spring wells are identified by the black-dashed lines. The contour interval used in this exhibit is 100 feet. This exhibit shows that the structure dips gently to the south. **Exhibit B-3** also includes a cross-section reference map that identifies four wells in the vicinity of the proposed wells, shown by a line of cross-section running from A to A'.

**Avant Operating, LLC  
Case No. 24849  
Exhibit B**

7. **Exhibit B-4** is a stratigraphic cross-section, and the well logs shown on the cross-section give a representative sample of the First Bone Spring formation in the area. The target zone for the Sapphire 14 Federal Com #301H, Sapphire 14 Federal Com #302H, Sapphire 14 Federal Com #303H, Sapphire 14 Federal Com #304H, Sapphire 14 Federal Com #305H, and Sapphire 14 Federal Com #306H wells, which are First Bone Spring wells, is identified by a red-dashed line and a box identifying the wells. In my opinion, the First Bone Spring formation is relatively consistent across the proposed unit.

8. **Exhibit B-5** is a structural cross-section, and the well logs shown on the cross-section give a representative sample of the First Bone Spring formation in the area. The target zone for the Sapphire 14 Federal Com #301H, Sapphire 14 Federal Com #302H, Sapphire 14 Federal Com #303H, Sapphire 14 Federal Com #304H, Sapphire 14 Federal Com #305H, and Sapphire 14 Federal Com #306H wells is identified by a red-dashed line and a box identifying the wells. In my opinion, the First Bone Spring formation dips to the south.

9. **Exhibit B-6** is a stratigraphic cross-section, and the well logs shown on the cross-section give a representative sample of the Second Bone Spring formation in the area. The target zone for the Sapphire 14 Federal Com #501H, Sapphire 14 Federal Com #502H, Sapphire 14 Federal Com #505H, Sapphire 14 Federal Com #506H, Sapphire 14 Federal Com #513H, and Sapphire 14 Federal Com #514H wells, which are Second Bone Spring wells, is identified by a red-dashed line and a box identifying the wells. In my opinion, the Second Bone Spring formation is relatively consistent across the proposed unit with subtle variations in lithology from well to well.

10. **Exhibit B-7** is a structural cross-section, and the well logs shown on the cross-section give a representative sample of the Second Bone Spring formation in the area. The target

zone for the Sapphire 14 Federal Com #501H, Sapphire 14 Federal Com #502H, Sapphire 14 Federal Com #505H, Sapphire 14 Federal Com #506H, Sapphire 14 Federal Com #513H, and Sapphire 14 Federal Com #514H wells is identified by a red-dashed line and a box identifying the wells. In my opinion, the Second Bone Spring formation is relatively consistent and dips to the south.

11. **Exhibit B-8** is a stratigraphic cross-section, and the well logs shown on the cross-section give a representative sample of the Third Bone Spring formation in the area. The target zone for the Sapphire 14 Federal Com #601H, Sapphire 14 Federal Com #602H, Sapphire 14 Federal Com #603H, Sapphire 14 Federal Com #604H, Sapphire 14 Federal Com #605H, and Sapphire 14 Federal Com #606H wells, which are Third Bone Spring wells, is identified by a red-dashed line and a box identifying the wells. In my opinion, the Third Bone Spring formation is relatively consistent with slight thickening southward in the proposed unit.

12. **Exhibit B-9** is a structural cross-section, and the well logs shown on the cross-section give a representative sample of the Third Bone Spring formation in the area. The target zone for the Sapphire 14 Federal Com #601H, Sapphire 14 Federal Com #602H, Sapphire 14 Federal Com #603H, Sapphire 14 Federal Com #604H, Sapphire 14 Federal Com #605H, and Sapphire 14 Federal Com #606H wells is identified by a red-dashed line and a box identifying the wells. In my opinion, the Third Bone Spring formation is relatively consistent and dips southward.

13. I conclude from the geology studies referenced above that:

- a. The horizontal spacing unit is justified from a geologic standpoint.
- b. There are no structural impediments or faulting that will interfere with horizontal development.

c. Each quarter-quarter section in the proposed unit will contribute more or less equally to production.

14. The preferred well orientation in this area is east/west because the stress orientation is approximately northeast.

15. In my opinion, the granting of this application is in the interests of conservation and the prevention of waste.

16. The exhibits to my self-affirmed statement were prepared by me, or compiled from company business records, or were prepared at my direction or supervision.

17. I attest under penalty of perjury the laws of the State of New Mexico that the information provided herein is correct and complete to the best of my knowledge and belief and I will adopt this testimony at the hearing in this matter.

*[Signature Page Follows]*



9-24-2024

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Date



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Josh Payne

## Regional Locator Map

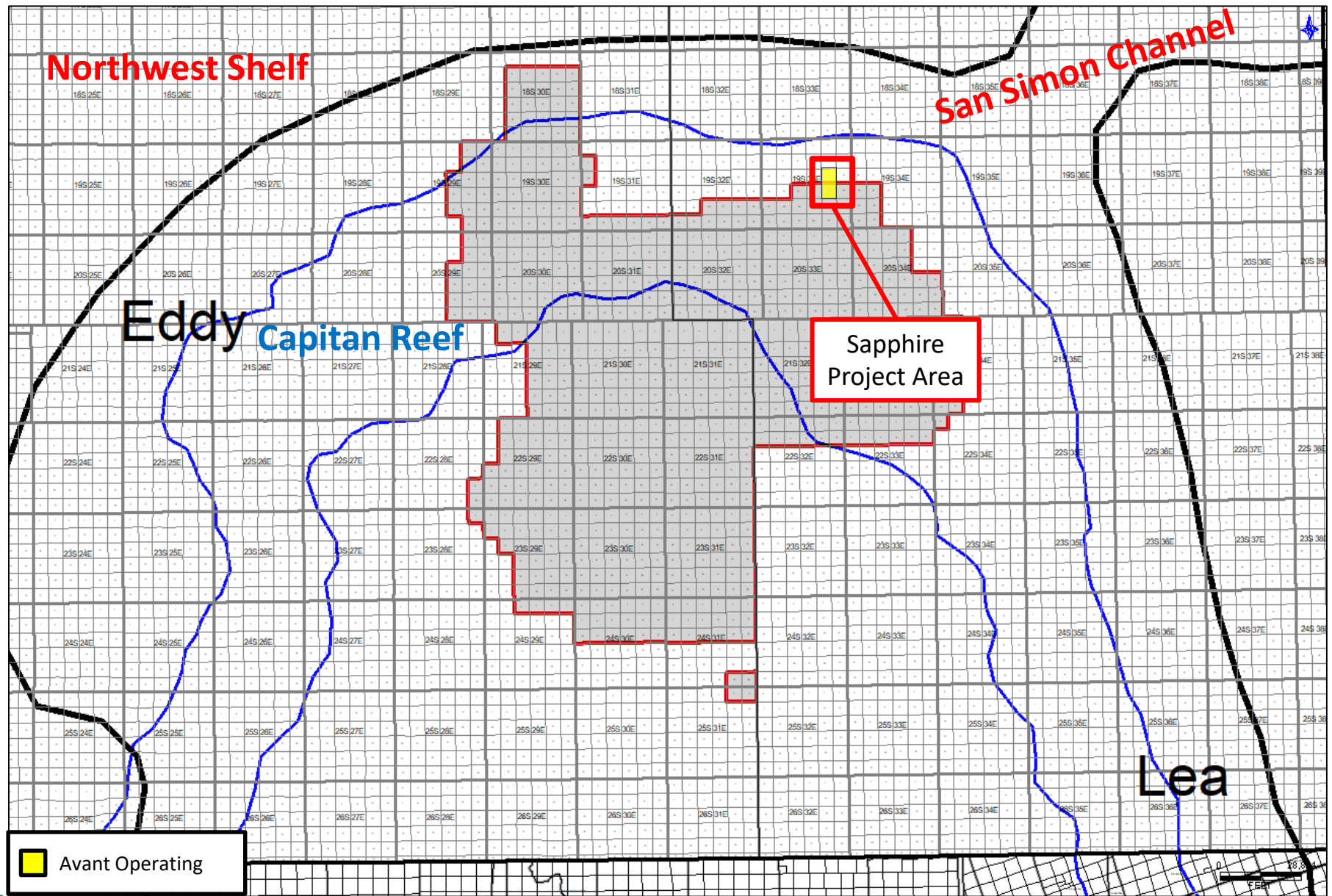
Sapphire Federal Com

#301H-#306H / #501H-#502H, #513H-#514H, #505H-#506H/ #601H-#606H

Avant Operating, LLC

Case Nos. 24849

Exhibit B-1



## Gun Barrel Development Plan

TBSG - SBSG - FBSG

Sapphire Federal Com

#301H-#306H / #501H-#502H, #513H-#514H, #505H-#506H/ #601H-#606H

Avant Operating, LLC

Case Nos. 24849

Exhibit B-2

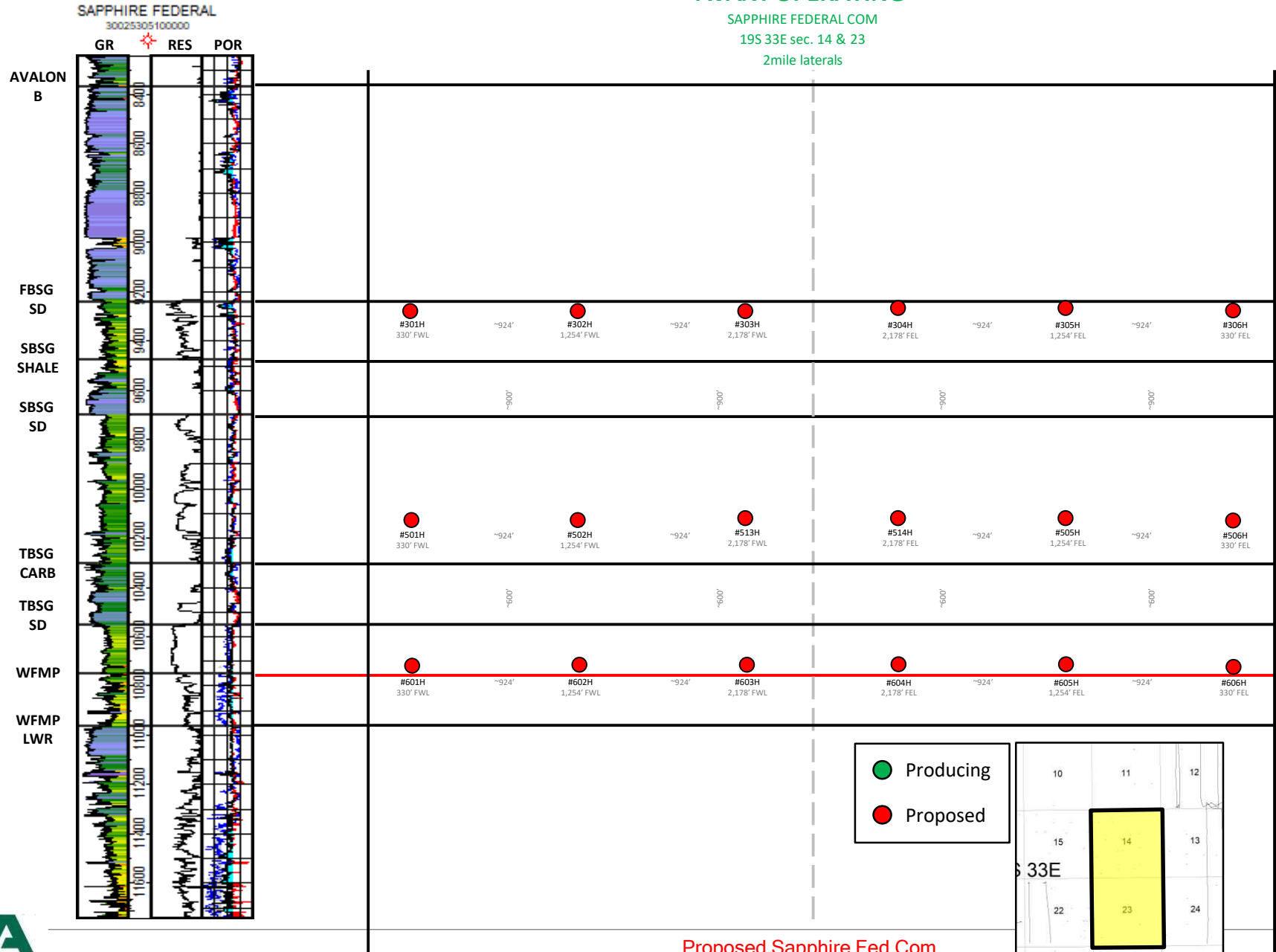


## AVANT OPERATING

SAPPHIRE FEDERAL COM

19S 33E sec. 14 &amp; 23

2mile laterals



Proposed Sapphire Fed Com

#301-306H

#501-502, 513-514, 505-506H,

#601-606H

OCD Examiner Hearing 10-3-24

Released to Imaging: 9/26/2024 1:36:25 PM

## Base Bone Spring Structure Map (TVDSS')

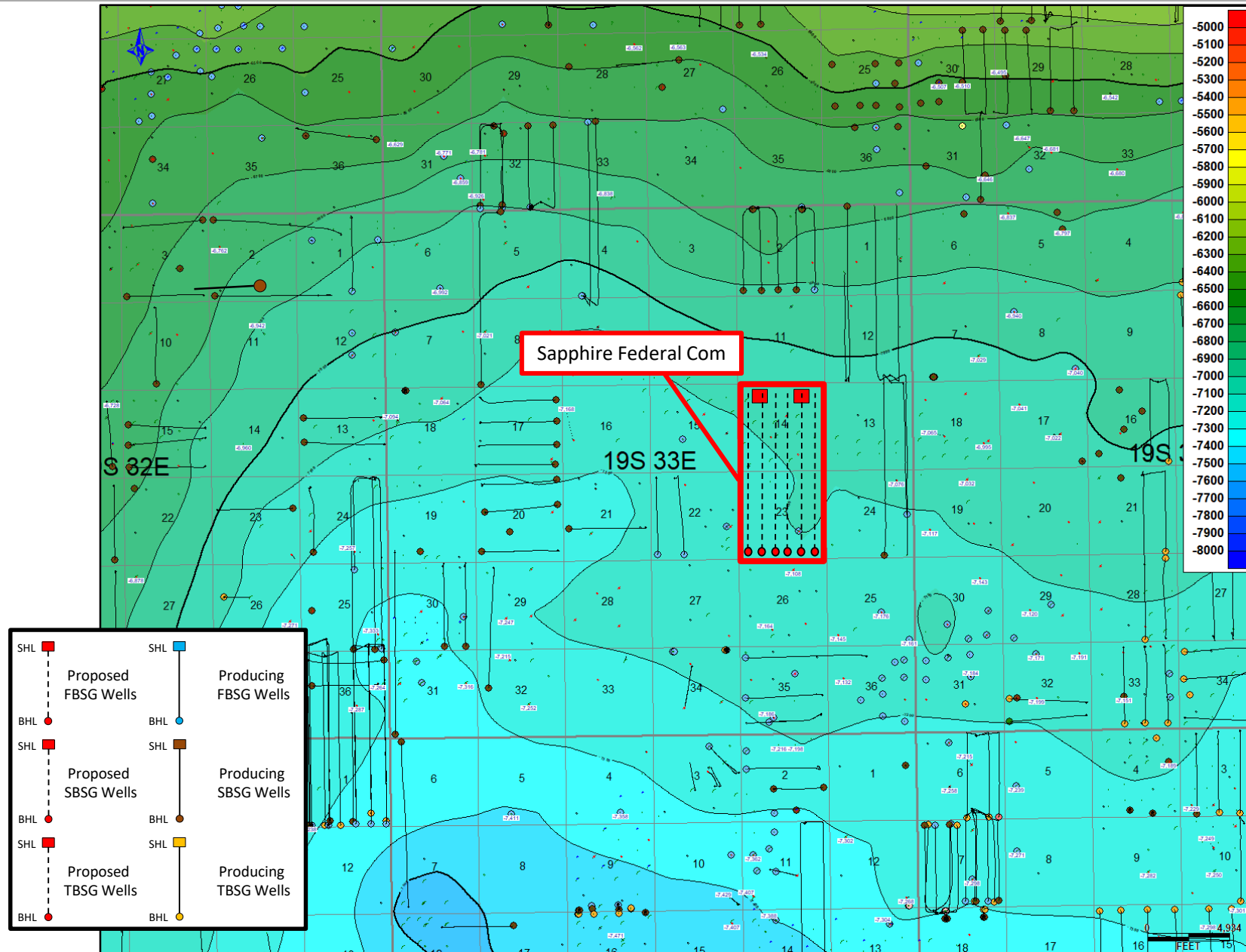
Sapphire Federal Com

#301H-#306H / #501H-#502H, #513H-#514H, #505H-#506H / #601H-#606H

Avant Operating, LLC

Case Nos. 24849

Exhibit B-3



## Cross-Section Locator Map (A-A')

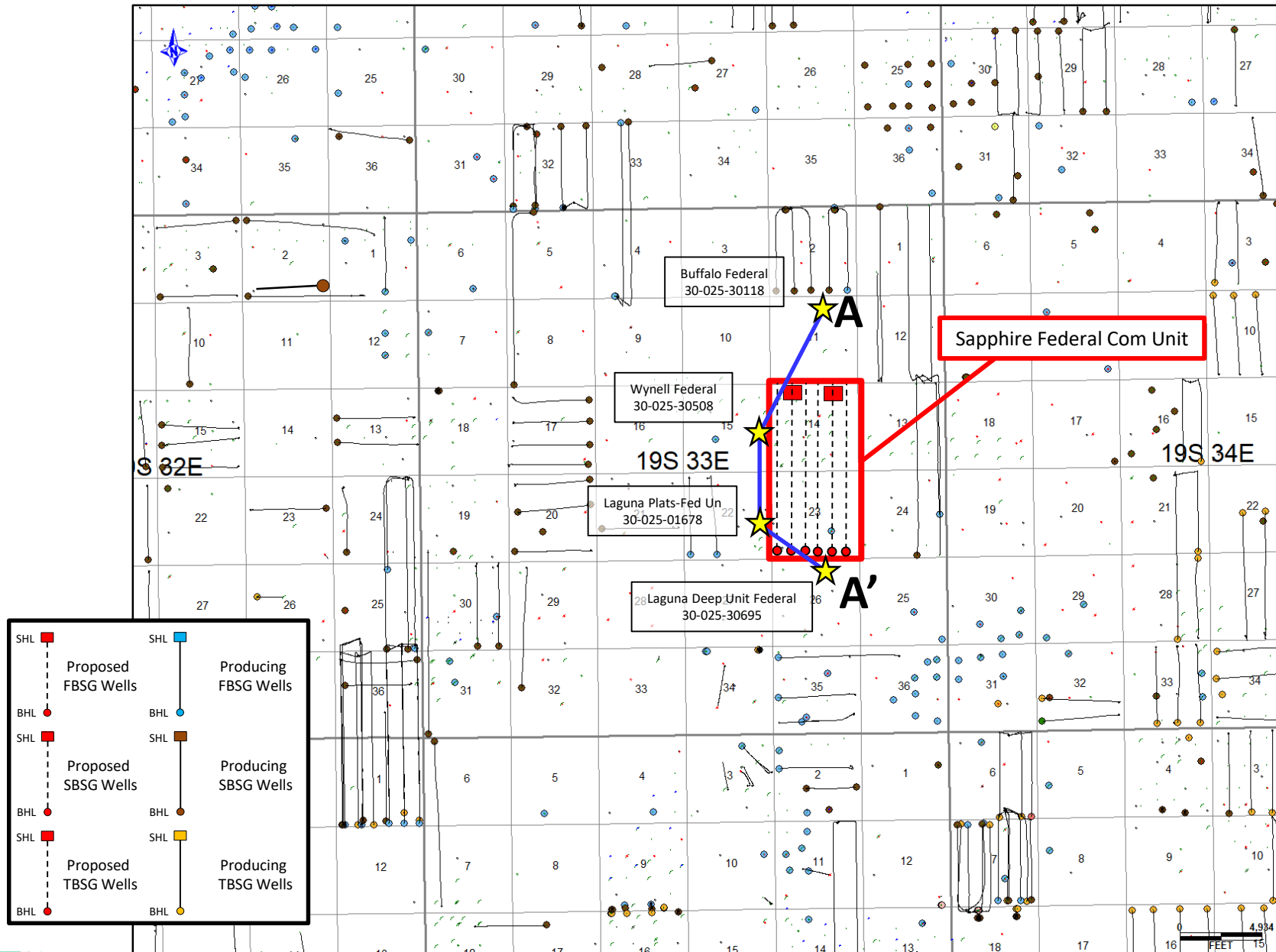
Sapphire Federal Com

#301H-#306H / #501H-#502H, #513H-#514H, #505H-#506H/ #601H-#606H

Avant Operating, LLC

Case Nos. 24849

Exhibit B-3





# Stratigraphic Cross-Section A-A'

Sapphire Federal Com #301H-#306H

Avant Operating, LLC  
Case Nos. 24849  
Exhibit B-4



A

A'

North

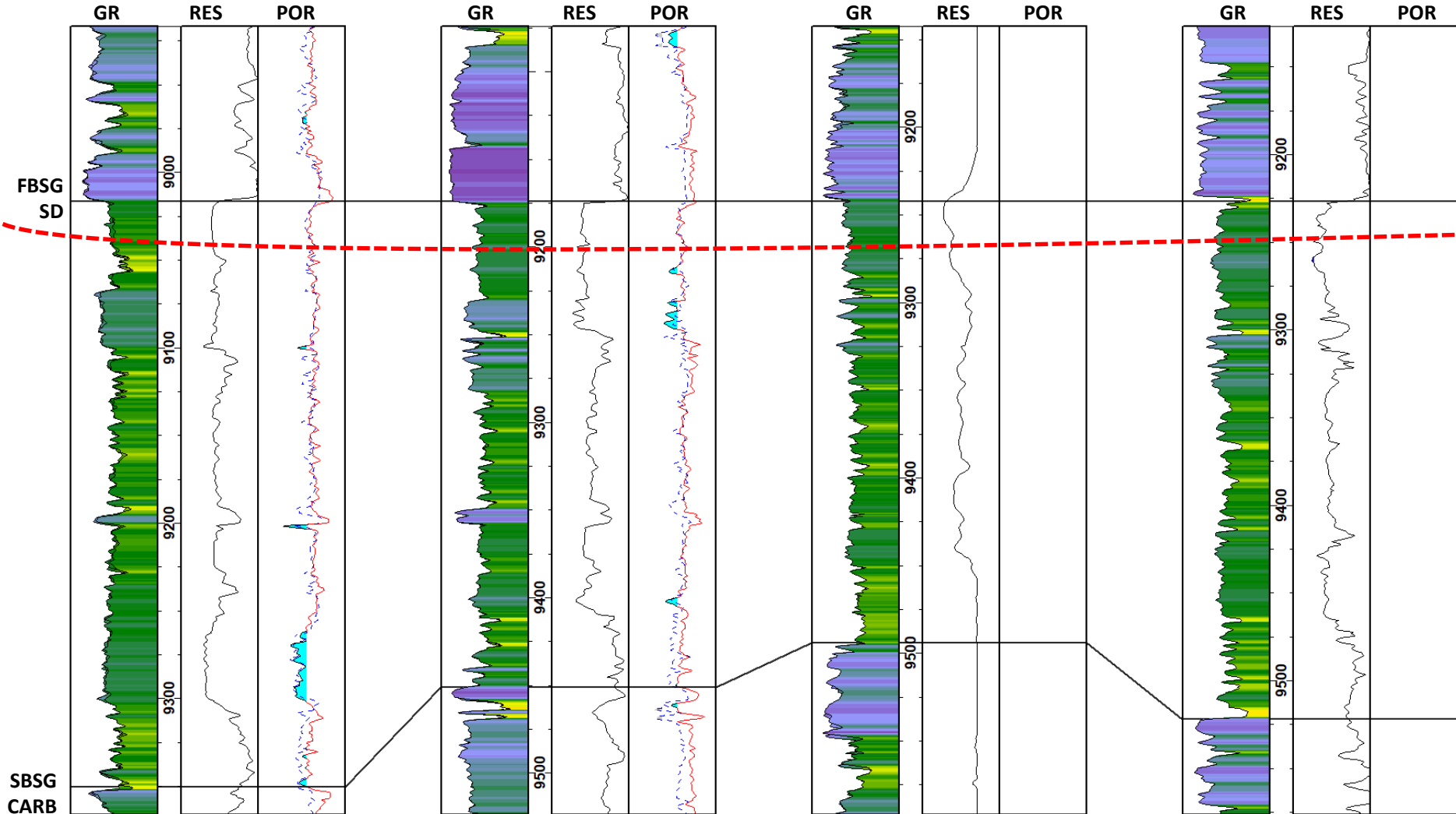
South

BUFFALO FEDERAL  
30025301180000

WYNELL FEDERAL  
30025305080000

LAGUNA PLATS-FED UN  
30025016780000

LAGUNA DEEP UNIT FEDERAL  
30025306950000



Sapphire  
Federal  
Com  
#301-  
306H



Log Scaling: GR(Gamma Ray): 0-150, RES(Resistivity): 0.2-20000 (log<sub>10</sub>), POR(Porosity): 30 to -10%

OCD Examiner Hearing 10-3-24

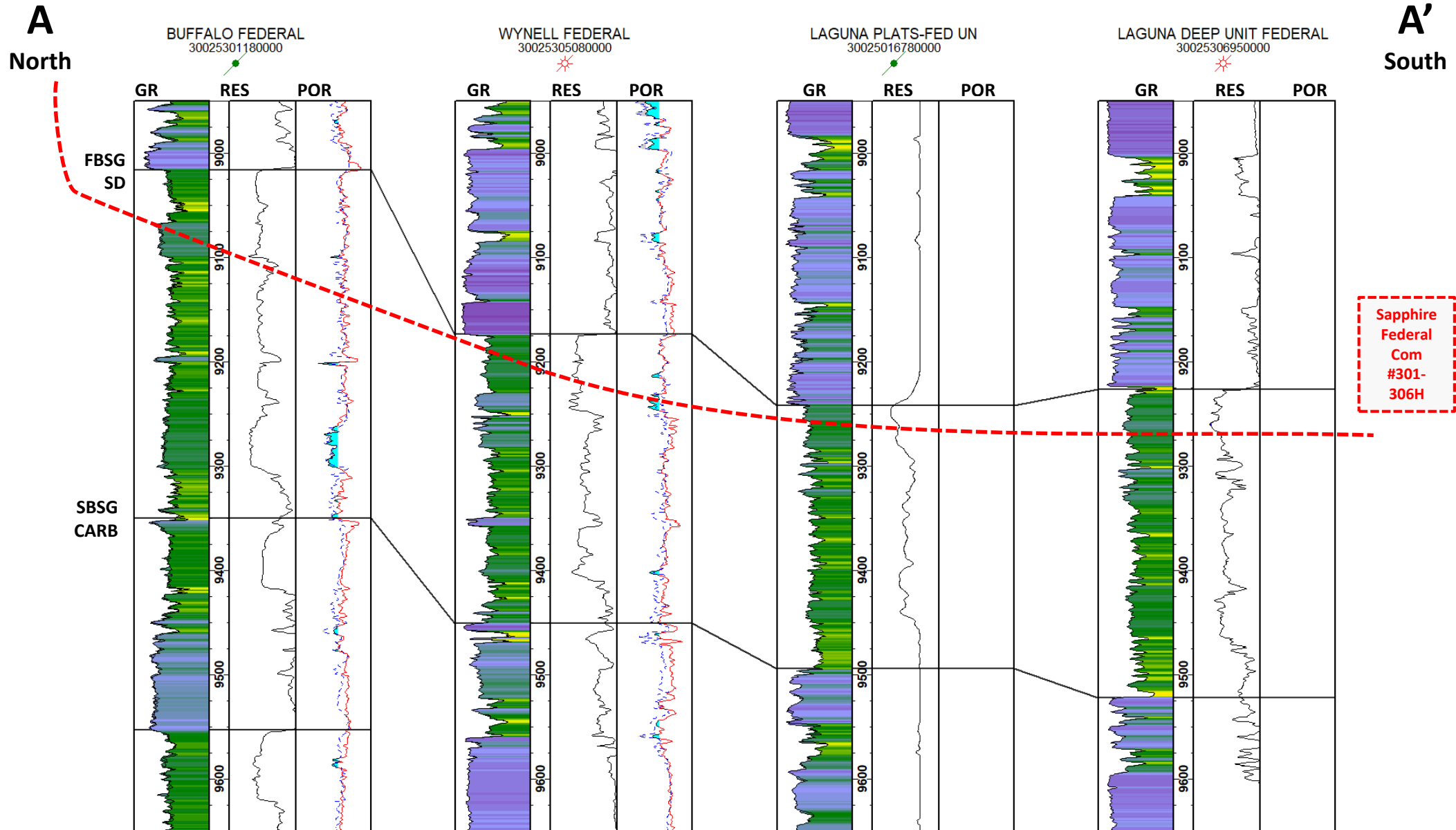
AVANT OPERATING, LLC

5

# Structural Cross-Section A-A'

Sapphire Federal Com #301H-#306H

Avant Operating, LLC  
Case Nos. 24849  
Exhibit B-5



Log Scaling: GR(Gamma Ray): 0-150, RES(Resistivity): 0.2-20000 (log<sub>10</sub>), POR(Porosity): 30 to -10%

OCD Examiner Hearing 10-3-24

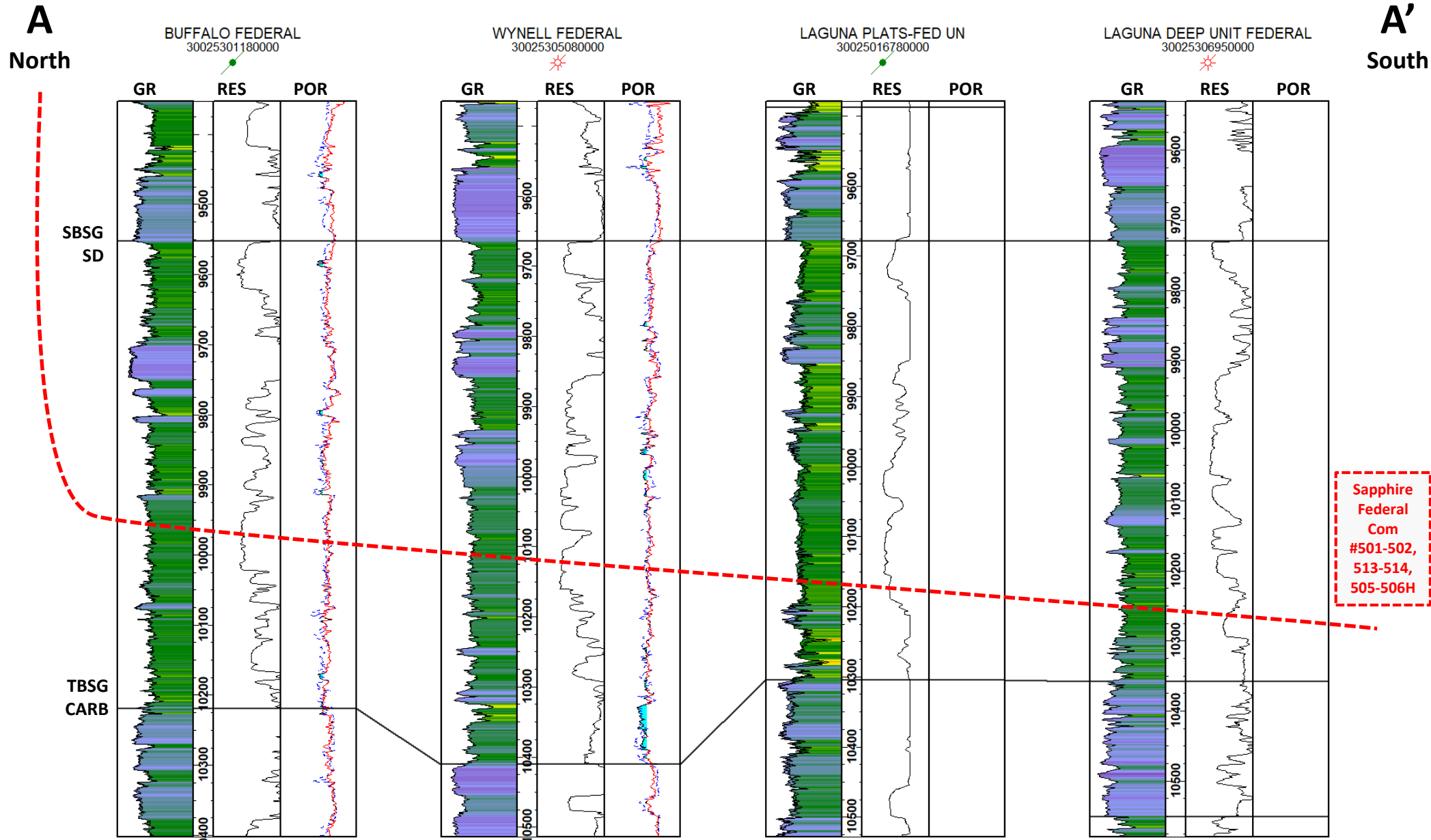
AVANT OPERATING, LLC

6

# Stratigraphic Cross-Section A-A'

Sapphire Federal Com #501-502, 513-514, 505-506H

Avant Operating, LLC  
Case Nos. 24849  
Exhibit B-6



Log Scaling: GR(Gamma Ray): 0-150, RES(Resistivity): 0.2-20000 (log<sub>10</sub>), POR(Porosity): 30 to -10%

OCD Examiner Hearing 10-3-24

AVANT OPERATING, LLC

7

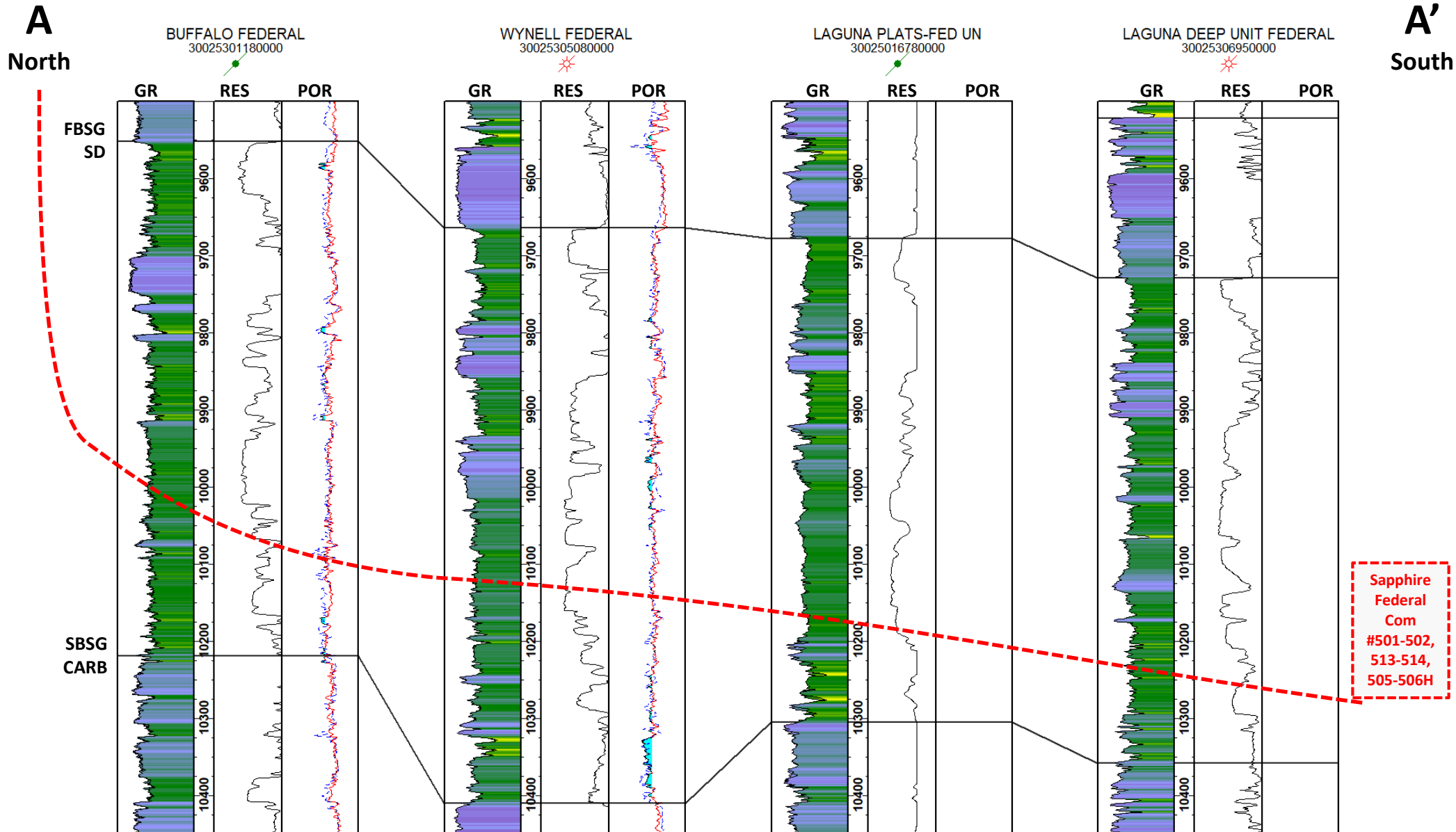
## Structural Cross-Section A-A'

Sapphire Federal Com #501-502, 513-514, 505-506H

Avant Operating, LLC

Case Nos. 24849

Exhibit B-7

Log Scaling: GR(Gamma Ray): 0-150, RES(Resistivity): 0.2-20000 (log<sub>10</sub>), POR(Porosity): 30 to -10%

OCD Examiner Hearing 10-3-24

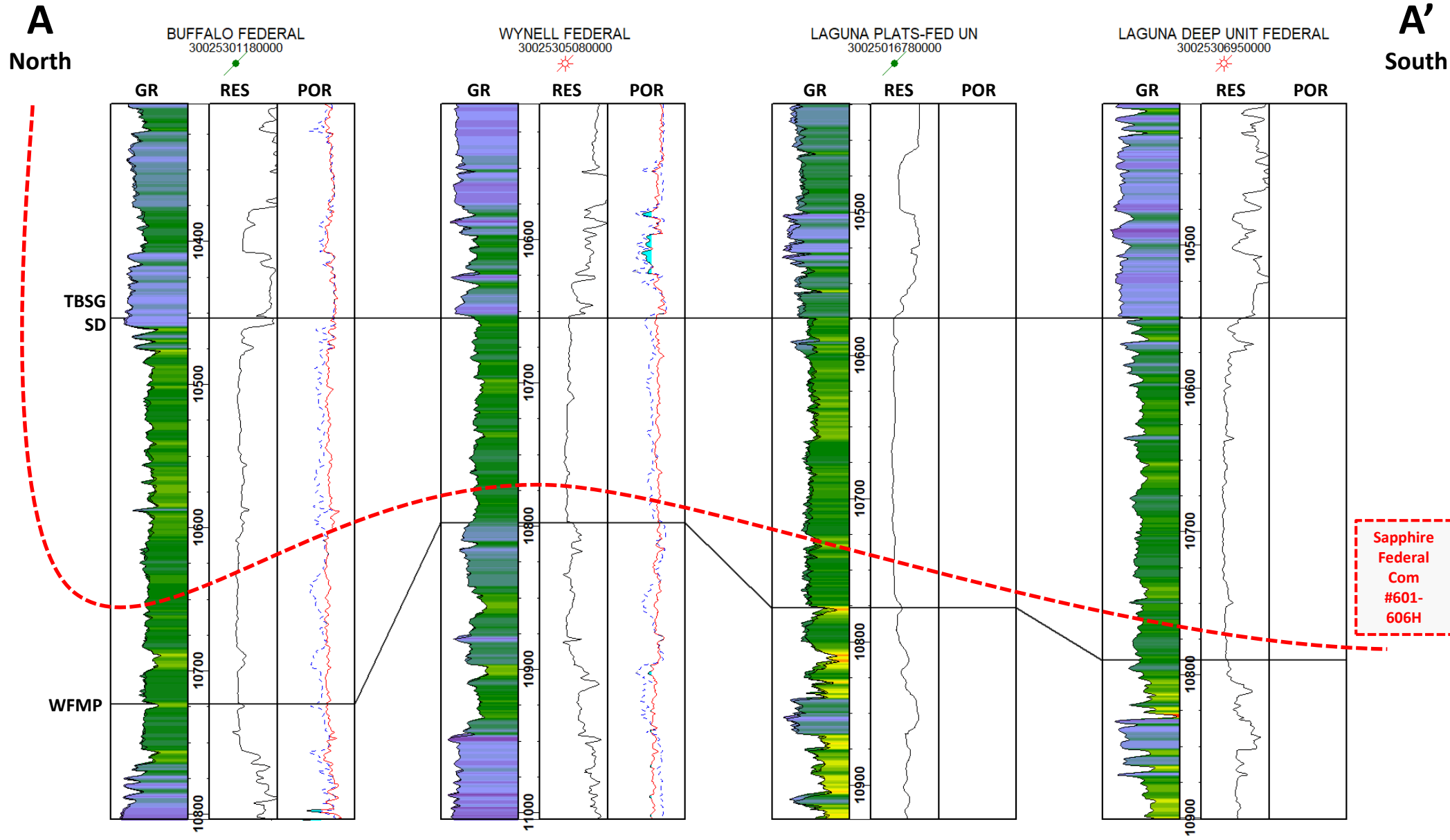
AVANT OPERATING, LLC

8

# Stratigraphic Cross-Section A-A'

Sapphire Federal Com #601H-#606H

Avant Operating, LLC  
Case Nos. 24849  
Exhibit B-8



Log Scaling: GR(Gamma Ray): 0-150, RES(Resistivity): 0.2-20000 (log<sub>10</sub>), POR(Porosity): 30 to -10%

OCD Examiner Hearing 10-3-24

AVANT OPERATING, LLC

9



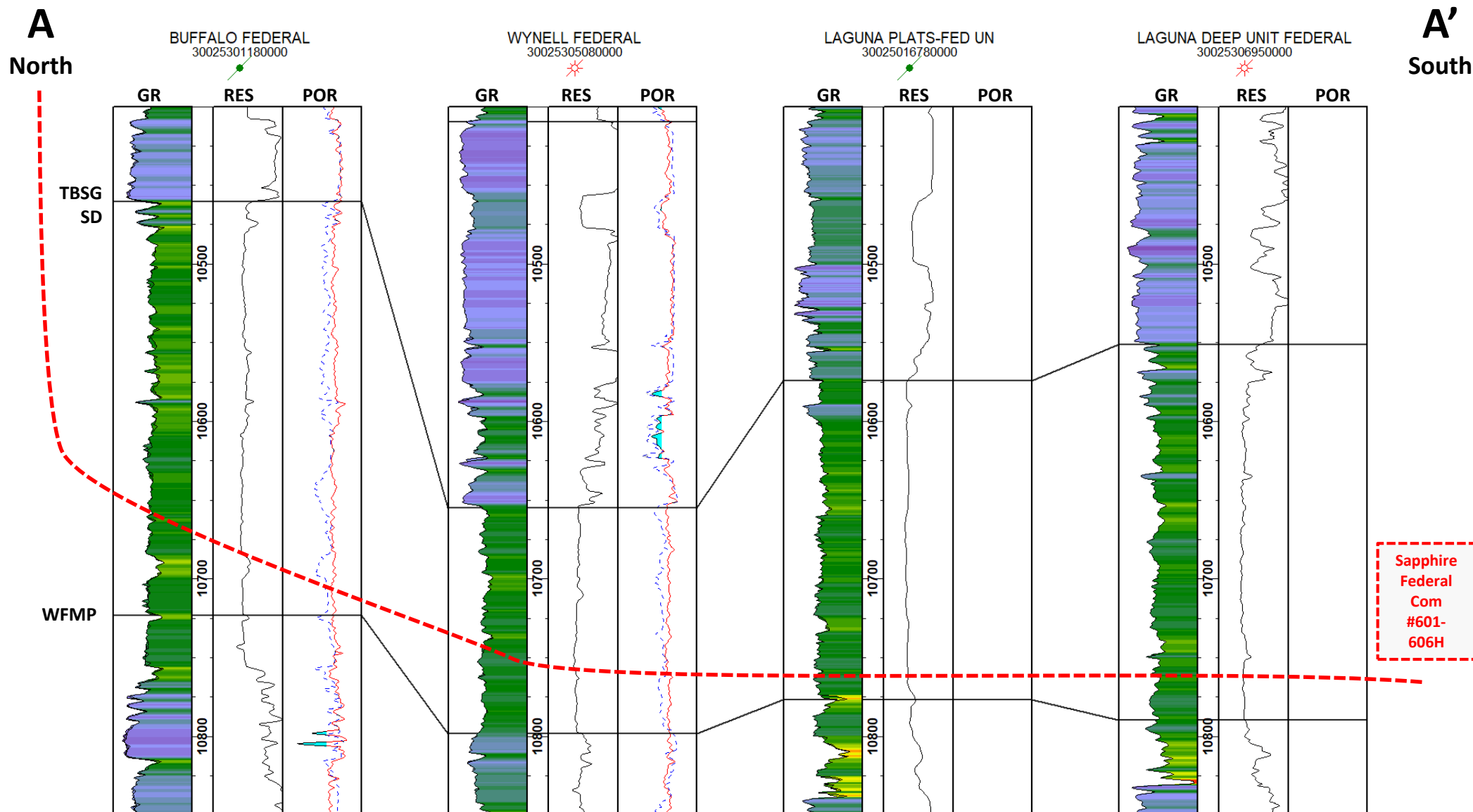
# Structural Cross-Section A-A'

Sapphire Federal Com #601H-#606H

Avant Operating, LLC  
Case Nos. 24849  
Exhibit B-9



**A'**  
**South**



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

**APPLICATION OF AVANT OPERATING, LLC  
FOR APPROVAL OF A NON-STANDARD UNIT  
AND COMPULSORY POOLING,  
LEA COUNTY, NEW MEXICO**

**CASE NO. 24849**

**SELF-AFFIRMED DECLARATION OF DEANA M. BENNETT**

Deana M. Bennett, attorney in fact and authorized representative of Avant Operating, LLC, the Applicant herein, declares as follows:

- 1) The above-referenced Application was provided under notice letter, dated September 12, 2024, attached hereto, as Exhibit C.1.
- 2) Exhibit C.2 is the mailing list, which show the notice letters were delivered to the USPS for mailing on September 12, 2024.
- 3) Exhibit C.3 is the certified mailing tracking information, which is automatically compiled by CertifiedPro, the software Modrall uses to track the mailings. This spreadsheet shows the names and addresses of the parties to whom notice was sent and the status of the mailing.
- 4) Exhibit C.4 is the Affidavit of Publication from the Hobbs News-Sun confirming that notice of the October 3, 2024 hearing was published on September 15, 2024.
- 5) I attest under penalty of perjury under the laws of the State of New Mexico that the information provided herein is correct and complete to the best of my knowledge and belief.

Dated: September 25, 2024

By: Deana M. Bennett  
Deana M. Bennett

**EXHIBIT C**



MODRALL SPERLING

L A W Y E R S

September 12, 2024

Deana M. Bennett  
505.848.1834  
dmb@modrall.com

**VIA CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**

**Re: APPLICATION OF AVANT OPERATING, LLC FOR  
APPROVAL OF A NON-STANDARD UNIT AND  
COMPULSORY POOLING, LEA COUNTY, NEW MEXICO**

**CASE NO. 24849****TO: AFFECTED PARTIES**

This letter is to advise you that Avant Operating, LLC ("Avant") has filed the enclosed application.

In Case No. 24849, Avant seeks an order from the Division approving a non-standard spacing unit and pooling all uncommitted interests within a 1280-acre, more or less, Bone Spring horizontal spacing unit comprised of Sections 14 and 23, Township 19 South, Range 33 East, N.M.P.M., Lea County, New Mexico. This spacing unit will be dedicated to the following wells: the **Sapphire 14 Federal Com #301H, Sapphire 14 Federal Com #302H, Sapphire 14 Federal Com #501H, Sapphire 14 Federal Com #502H, Sapphire 14 Federal Com #601H, and Sapphire 14 Federal Com #602H** wells with proposed surface hole locations in the NW/4 NW/4 (Unit D) of Section 14 and proposed bottom hole locations in the SW/4 SW/4 (Unit M) of Section 23; **Sapphire 14 Federal Com #303H and Sapphire 14 Federal Com #603H** wells with proposed first take points in the NE/4 NW/4 (Unit C) of Section 14 and proposed last take points in the SE/4 SW/4 (Unit N) of Section 23; **Sapphire 14 Federal Com #513H** well with a proposed surface hole location in the NW/4 NW/4 (Unit D) of Section 14 and a proposed bottom hole location in the SE/4 SW/4 (Unit N) of Section 23; **Sapphire 14 Federal Com #304H, and Sapphire 14 Federal Com #604H** wells with proposed surface hole locations in the NE/4 NE/4 (Unit A) of Section 14 and proposed bottom hole locations in the SW/4 SE/4 (Unit O) of Section 23; **Sapphire 14 Federal Com #514H** well with a proposed surface hole location in the NW/4 NE/4 (Unit B) of Section 14 and a proposed bottom hole location in the SW/4 SE/4 (Unit O) of Section 23; **Sapphire 14 Federal Com #505H, and Sapphire 14 Federal Com #506H** wells with proposed surface hole locations in the NW/4

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**EXHIBIT C.1**

Page 2

NE/4 (Unit B) of Section 14 and proposed bottom hole locations in the SE/4 SE/4 (Unit P) of Section 23; and the **Sapphire 14 Federal Com #305H, Sapphire 14 Federal Com #306H, Sapphire 14 Federal Com #605H, and Sapphire 14 Federal Com #606H** wells with proposed surface hole locations in the NE/4 NE/4 (Unit A) of Section 14 and proposed bottom hole locations in the SE/4 SE/4 (Unit P) of Section 23. The wells will be drilled at orthodox locations. The pool and pool code for Sections 14 and 23 is the Gem; Bone Spring, East Pool (Code 27230), which is an oil pool. Also to be considered will be the cost of drilling and completing said wells, the allocation of these costs as well as the actual operating costs and charges for supervision, designation of Avant Operating, LLC as operator of the wells, and a 200% charge for risk involved in drilling said wells. Said area is located approximately 23 miles west of Hobbs, New Mexico.

**The hearing is set for October 3, 2024 beginning at 8:30 a.m. The hearing will be conducted in a hybrid fashion, both in-person at the Energy, Minerals, Natural Resources Department, Wendell Chino Building, Pecos Hall, 1220 South St. Francis Drive, 1<sup>st</sup> Floor, Santa Fe, NM 87505 and via the WebEx virtual meeting platform. To participate in the electronic hearing, see the instructions posted on the docket for the hearing date: <https://www.emnrd.nm.gov/ocd/hearing-info/>.**

As a party who may be affected by this application, we are notifying you of your right to appear at the hearing and participate in this case, including the right to present evidence either in support of or in opposition to the application. Failure to appear at the hearing may preclude you from any involvement in this case at a later date.

You are further notified that if you desire to appear in this case, then you are requested to file a Pre-Hearing Statement with the Division at least four business days in advance of a scheduled hearing before the Division or the Commission, but in no event later than 5:00 p.m. mountain time, on the Thursday preceding the scheduled hearing date, with a copy delivered to the undersigned.

Sincerely,



Deana M. Bennett

*Attorney for Applicant*

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

**APPLICATION OF AVANT OPERATING, LLC  
FOR APPROVAL OF A NON-STANDARD UNIT  
AND COMPULSORY POOLING,  
LEA COUNTY, NEW MEXICO.**

**CASE NO. 24849**

**APPLICATION**

Avant Operating, LLC ("Avant"), OGRID Number 330396, through its undersigned attorneys, hereby files this application with the Oil Conservation Division ("Division") pursuant to the provisions of NMSA 1978, § 70-2-17, for an order (1) approving a non-standard unit, and (2) pooling all uncommitted mineral interests within a non-standard 1280-acre, more or less, Bone Spring horizontal spacing unit comprised of Sections 14 and 23, Township 19 South, Range 33 East, N.M.P.M., Lea County, New Mexico. In support of this application, Avant states as follows:

1. Avant has an interest in the subject lands and has a right to drill and operate a well thereon.
2. Avant seeks approval of the 1280-acre non-standard spacing as approval of this application will allow Avant to efficiently locate surface facilities, reduce surface disturbance, consolidate roads, tanks, and pipelines, and promote effective well spacing, which is consistent with Division rules. *See, e.g.,* Rule 19.15.16.7(P) NMAC; Rule 19.15.16.15(B)(8) NMAC; Rule 19.15.16.15(C)(7)(NMAC).
3. Avant seeks to dedicate all of Sections 14 and 23, Township 19 South, Range 33 East, N.M.P.M., Lea County, New Mexico to the following wells:
  - a. **Sapphire 14 Federal Com #301H, Sapphire 14 Federal Com #302H,  
Sapphire 14 Federal Com #501H, Sapphire 14 Federal Com #502H,  
Sapphire 14 Federal Com #601H, and Sapphire 14 Federal Com #602H**



wells with proposed surface hole locations in the NW/4 NW/4 (Unit D) of Section 14 and proposed bottom hole locations in the SW/4 SW/4 (Unit M) of Section 23;

- b. **Sapphire 14 Federal Com #303H and Sapphire 14 Federal Com #603H** wells with proposed first take points in the NE/4 NW/4 (Unit C) of Section 14 and proposed last take points in the SE/4 SW/4 (Unit N) of Section 23;
- c. **Sapphire 14 Federal Com #513H** well with a proposed surface hole location in the NW/4 NW/4 (Unit D) of Section 14 and a proposed bottom hole location in the SE/4 SW/4 (Unit N) of Section 23;
- d. **Sapphire 14 Federal Com #304H, and Sapphire 14 Federal Com #604H** wells with proposed surface hole locations in the NE/4 NE/4 (Unit A) of Section 14 and proposed bottom hole locations in the SW/4 SE/4 (Unit O) of Section 23;
- e. **Sapphire 14 Federal Com #514H** well with a proposed surface hole location in the NW/4 NE/4 (Unit B) of Section 14 and a proposed bottom hole location in the SW/4 SE/4 (Unit O) of Section 23;
- f. **Sapphire 14 Federal Com #505H, and Sapphire 14 Federal Com #506H** wells with proposed surface hole locations in the NW/4 NE/4 (Unit B) of Section 14 and proposed bottom hole locations in the SE/4 SE/4 (Unit P) of Section 23; and
- g. **Sapphire 14 Federal Com #305H, Sapphire 14 Federal Com #306H, Sapphire 14 Federal Com #605H, and Sapphire 14 Federal Com #606H** wells with proposed surface hole locations in the NE/4 NE/4 (Unit A) of Section 14 and proposed bottom hole locations in the SE/4 SE/4 (Unit P) of Section 23.

4. The wells will be horizontally drilled, and the producing areas for the wells are expected to be orthodox.

5. The pool and pool code for Sections 14 and 23 is the Gem; Bone Spring, East Pool (Code 27230), which is an oil pool.

6. Avant sought, but has been unable to obtain, a voluntary agreement from all interest owners in the Bone Spring formation underlying the proposed spacing unit to participate in the drilling of the wells or to otherwise commit their interests to the wells.

7. The pooling of all interests in the Bone Spring formation underlying the proposed unit will prevent the drilling of unnecessary wells, prevent waste and protect correlative rights.

WHEREFORE, Avant requests this application be set for hearing before an Examiner of the Oil Conservation Division on October 3, 2024, and after notice and hearing as required by law, the Division enter its order:

A. Approving the non-standard spacing unit;

B. Pooling all uncommitted interests in the Bone Spring formation underlying a horizontal spacing unit within Sections 14 and 23, Township 19 South, Range 33 East, N.M.P.M., Lea County, New Mexico;

C. Designating Avant as operator of this unit and the wells to be drilled thereon;

D. Authorizing Avant to recover its costs of drilling, equipping and completing the wells;

E. Approving actual operating charges and costs charged for supervision, together with a provision adjusting the rates pursuant to the COPAS accounting procedure; and

F. Setting a 200% charge for the risk involved in drilling and completing the wells in the event a working interest owner elects not to participate in the wells.

Respectfully submitted,

MODRALL, SPERLING, ROEHL, HARRIS  
& SISK, P.A.

By: /s/ Deana M. Bennett

Earl E. DeBrine, Jr.

Deana M. Bennett

Yarithza Peña

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*Attorneys for Avant Operating, LLC*

**CASE NO. 24849 : Application of Avant Operating, LLC for approval of a non-standard spacing unit and compulsory pooling, Lea County, New Mexico.** Applicant seeks an order from the Division approving a non-standard spacing unit and pooling all uncommitted interests within a 1280-acre, more or less, Bone Spring horizontal spacing unit comprised of Sections 14 and 23, Township 19 South, Range 33 East, N.M.P.M., Lea County, New Mexico. This spacing unit will be dedicated to the following wells: the **Sapphire 14 Federal Com #301H, Sapphire 14 Federal Com #302H, Sapphire 14 Federal Com #501H, Sapphire 14 Federal Com #502H, Sapphire 14 Federal Com #601H, and Sapphire 14 Federal Com #602H** wells with proposed surface hole locations in the NW/4 NW/4 (Unit D) of Section 14 and proposed bottom hole locations in the SW/4 SW/4 (Unit M) of Section 23; **Sapphire 14 Federal Com #303H and Sapphire 14 Federal Com #603H** wells with proposed first take points in the NE/4 NW/4 (Unit C) of Section 14 and proposed last take points in the SE/4 SW/4 (Unit N) of Section 23; **Sapphire 14 Federal Com #513H** well with a proposed surface hole location in the NW/4 NW/4 (Unit D) of Section 14 and a proposed bottom hole location in the SE/4 SW/4 (Unit N) of Section 23; **Sapphire 14 Federal Com #304H, and Sapphire 14 Federal Com #604H** wells with proposed surface hole locations in the NE/4 NE/4 (Unit A) of Section 14 and proposed bottom hole locations in the SW/4 SE/4 (Unit O) of Section 23; **Sapphire 14 Federal Com #514H** well with a proposed surface hole location in the NW/4 NE/4 (Unit B) of Section 14 and a proposed bottom hole location in the SW/4 SE/4 (Unit O) of Section 23; **Sapphire 14 Federal Com #505H, and Sapphire 14 Federal Com #506H** wells with proposed surface hole locations in the NW/4 NE/4 (Unit B) of Section 14 and proposed bottom hole locations in the SE/4 SE/4 (Unit P) of Section 23; and the **Sapphire 14 Federal Com #305H, Sapphire 14 Federal Com #306H, Sapphire 14 Federal Com #605H, and Sapphire 14 Federal Com #606H** wells with proposed surface hole locations in the NE/4 NE/4 (Unit A) of Section 14 and proposed bottom hole locations in the SE/4 SE/4 (Unit P) of Section 23. The wells will be drilled at orthodox locations. The pool and pool code for Sections 14 and 23 is the Gem; Bone Spring, East Pool (Code 27230), which is an oil pool. Also to be considered will be the cost of drilling and completing said wells, the allocation of these costs as well as the actual operating costs and charges for supervision, designation of Avant Operating, LLC as operator of the wells, and a 200% charge for risk involved in drilling said wells. Said area is located approximately 23 miles west of Hobbs, New Mexico.

Karlene Schuman  
Modrall Sperling Roehl Harris & Sisk P.A.  
500 Fourth Street, Suite 1000  
Albuquerque NM 87102

PS Form 3877

Type of Mailing: CERTIFIED MAIL  
09/12/2024

Firm Mailing Book ID: 272439

Line	USPS Article Number	Name, Street, City, State, Zip	Postage	Service Fee	RR Fee	Rest.Del.Fee	Reference Contents
1	9314 8699 0430 0125 8522 05	AmeriPermian Holdings, LLC 1733 Woodstead Court, Suite 206 The Woodlands TX 77380	\$1.77	\$4.85	\$2.62	\$0.00	10375.0003 sapph Notice
2	9314 8699 0430 0125 8522 12	Bob G. Howell P.O. Box 1249 Fresno CA 93715	\$1.77	\$4.85	\$2.62	\$0.00	10375.0003 sapph Notice
3	9314 8699 0430 0125 8522 29	Cavin Trust, Sealy H. Cavin Jr., Synda S. Cavin Trustees to Trust Agr. Dtd 8-28-13 P.O. Box 1216 Albuquerque NM 87103	\$1.77	\$4.85	\$2.62	\$0.00	10375.0003 sapph Notice
4	9314 8699 0430 0125 8522 36	Chad Barbe P.O. Box 2107 Roswell NM 88202	\$1.77	\$4.85	\$2.62	\$0.00	10375.0003 sapph Notice
5	9314 8699 0430 0125 8522 43	Cheryl Ann Nace f/k/a Cheryl A. Schellinger 129 Placita de Oro Santa Fe NM 87501	\$1.77	\$4.85	\$2.62	\$0.00	10375.0003 sapph Notice
6	9314 8699 0430 0125 8522 50	COG Operating, LLC Attn: Land Dept. 600 W. Illinois Ave. Midland TX 79701	\$1.77	\$4.85	\$2.62	\$0.00	10375.0003 sapph Notice
7	9314 8699 0430 0125 8522 67	Concho Oil & Gas LLC One Concho Center 600 West Illinois Avenue Midland TX 79701	\$1.77	\$4.85	\$2.62	\$0.00	10375.0003 sapph Notice
8	9314 8699 0430 0125 8522 74	Wing Resources VI, LLC 2100 McKinney Avenue, Suite 1540 Dallas TX 75201	\$1.77	\$4.85	\$2.62	\$0.00	10375.0003 sapph Notice
9	9314 8699 0430 0125 8522 81	Elk Royalties II, LP 2210 Farrington Street Dallas TX 75027	\$1.77	\$4.85	\$2.62	\$0.00	10375.0003 sapph Notice
10	9314 8699 0430 0125 8522 98	Grewal (Royalty) LLC 45 Rockefeller Plaza, Suite 2410 New York NY 10111	\$1.77	\$4.85	\$2.62	\$0.00	10375.0003 sapph Notice
11	9314 8699 0430 0125 8523 04	Innoventions, Inc. P.O. Box 40 Cedar Crest NM 87008	\$1.77	\$4.85	\$2.62	\$0.00	10375.0003 sapph Notice
12	9314 8699 0430 0125 8523 11	Jalapeno Corporation P.O. Box 1608 Albuquerque NM 87103	\$1.77	\$4.85	\$2.62	\$0.00	10375.0003 sapph Notice
13	9314 8699 0430 0125 8523 28	Show Goat Capital, LP P.O. Box 50576 Austin TX 78763	\$1.77	\$4.85	\$2.62	\$0.00	10375.0003 sapph Notice
14	9314 8699 0430 0125 8523 35	McMullen Minerals II, LP 2821 West 7th Street, Suite 515 Fort Worth TX 76147	\$1.77	\$4.85	\$2.62	\$0.00	10375.0003 sapph Notice

OCD Examiner Hearing 10-3-24

EXHIBIT C.2



Karlene Schuman  
Modrall Sperling Roehl Harris & Sisk P.A.  
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Albuquerque NM 87102

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Type of Mailing: CERTIFIED MAIL  
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Line	USPS Article Number	Name, Street, City, State, Zip	Postage	Service Fee	RR Fee	Rest.Del.Fee	Reference Contents
15	9314 8699 0430 0125 8523 42	Lawrence Anderson 6337 Foote Rd. Ceres CA 95307	\$1.77	\$4.85	\$2.62	\$0.00	10375.0003 sapph Notice
16	9314 8699 0430 0125 8523 59	MSH Family Real Estate Partnership II, LLC 1900 St. James Place, Suite 300 Houston TX 77056	\$1.77	\$4.85	\$2.62	\$0.00	10375.0003 sapph Notice
17	9314 8699 0430 0125 8523 66	Oline E. Groves 2507 Cimarron Midland TX 79705	\$1.77	\$4.85	\$2.62	\$0.00	10375.0003 sapph Notice
18	9314 8699 0430 0125 8523 73	Pegasus Resources, LLC 2821 West 7th Street, Suite 500 Fort Worth TX 76107	\$1.77	\$4.85	\$2.62	\$0.00	10375.0003 sapph Notice
19	9314 8699 0430 0125 8523 80	Platform Energy IV, LLC P.O. Box 2078 Abilene TX 79604	\$1.77	\$4.85	\$2.62	\$0.00	10375.0003 sapph Notice
20	9314 8699 0430 0125 8523 97	SMP Sidecar Titan Mineral Holdings, LP 4143 Maple Avenue, Suite 500 Dallas TX 75219	\$1.77	\$4.85	\$2.62	\$0.00	10375.0003 sapph Notice
21	9314 8699 0430 0125 8524 03	SMP Titan Flex, LP 4143 Maple Avenue, Suite 500 Dallas TX 75219	\$1.77	\$4.85	\$2.62	\$0.00	10375.0003 sapph Notice
22	9314 8699 0430 0125 8524 10	SMP Titan Mineral Holdings, LP 4143 Maple Avenue, Suite 500 Dallas TX 75219	\$1.77	\$4.85	\$2.62	\$0.00	10375.0003 sapph Notice
23	9314 8699 0430 0125 8524 27	Ball Oil and Gas, LLC P.O. Box 1401 Roswell NM 88202	\$1.77	\$4.85	\$2.62	\$0.00	10375.0003 sapph Notice
24	9314 8699 0430 0125 8524 34	Capco Resource Corporation 2922 E. Chapman Avenue, Suite 202 Orange CA 92869	\$1.77	\$4.85	\$2.62	\$0.00	10375.0003 sapph Notice
25	9314 8699 0430 0125 8524 41	Cibolo Resources, LLC Attn: Zach Privett 3600 Bee Cave Road, #102 West Lake Hills TX 78746	\$1.77	\$4.85	\$2.62	\$0.00	10375.0003 sapph Notice
26	9314 8699 0430 0125 8524 65	Devon Energy Production Company, L.P. 333 West Sheridan Avenue Oklahoma City OK 73102	\$1.77	\$4.85	\$2.62	\$0.00	10375.0003 sapph Notice
27	9314 8699 0430 0125 8524 89	Earthstone Permian LLC 1400 Woodloch Forest Drive, Suite 300 The Woodlands TX 77380	\$1.77	\$4.85	\$2.62	\$0.00	10375.0003 sapph Notice
28	9314 8699 0430 0125 8524 96	WTI Energy Partners, LLC 306 W. 7th Street, Suite #702 Fort Worth TX 76102	\$1.77	\$4.85	\$2.62	\$0.00	10375.0003 sapph Notice
29	9314 8699 0430 0125 8525 02	Lone Oak Capital, LLC 4208 Lone Oak Drive Fort Worth TX 76107	\$1.77	\$4.85	\$2.62	\$0.00	10375.0003 sapph Notice

OCD Examiner Hearing 10-3-24

Karlene Schuman  
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Albuquerque NM 87102

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Line	USPS Article Number	Name, Street, City, State, Zip	Postage	Service Fee	RR Fee	Rest.Del.Fee	Reference Contents
30	9314 8699 0430 0125 8525 19	Gregory Nibert & Carolyn Nibert, Co-Trustees DJS Trust under Trust Agr. Dtd 9-12-05 P.O. Box 1453 Roswell NM 88202	\$1.77	\$4.85	\$2.62	\$0.00	10375.0003 sapph Notice
31	9314 8699 0430 0125 8525 26	Hutchings Oil Company P.O. Box 1216 Albuquerque NM 87103	\$1.77	\$4.85	\$2.62	\$0.00	10375.0003 sapph Notice
32	9314 8699 0430 0125 8525 33	James K. Lusk and Martha Lusk Trust James K. Lusk, Trustee 605 Waterway Village Blvd, #31H Myrtle Beach SC 29579	\$1.77	\$4.85	\$2.62	\$0.00	10375.0003 sapph Notice
33	9314 8699 0430 0125 8525 40	MRC Delaware Resources, LLC 5400 LBJ Freeway, Suite 1500 Dallas TX 75240	\$1.77	\$4.85	\$2.62	\$0.00	10375.0003 sapph Notice
34	9314 8699 0430 0125 8525 57	Susan S. Murphy, Trustee of the SSM Trust 706 Brazos Street Roswell NM 88201	\$1.77	\$4.85	\$2.62	\$0.00	10375.0003 sapph Notice
35	9314 8699 0430 0125 8525 64	T.H. McElvain Oil & Gas, LLLP 1819 Denver West Drive #260 Lakewood CO 80401	\$1.77	\$4.85	\$2.62	\$0.00	10375.0003 sapph Notice
36	9314 8699 0430 0125 8525 71	Community Minerals Attn: Paul Berguila 2925 Richmond Avenue, Suite 1200 Houston TX 77098	\$1.77	\$4.85	\$2.62	\$0.00	10375.0003 sapph Notice
37	9314 8699 0430 0125 8525 88	Williamson Enterprises P.O. Box 3257 Santa Fe NM 87594	\$1.77	\$4.85	\$2.62	\$0.00	10375.0003 sapph Notice
38	9314 8699 0430 0125 8525 95	Yates Energy Corporation 400 North Pennsylvania Ave. Roswell NM 88201	\$1.77	\$4.85	\$2.62	\$0.00	10375.0003 sapph Notice
39	9314 8699 0430 0125 8526 01	PBEX, LLC 223 W. Wall Street, Suite 900 Midland TX 79701	\$1.77	\$4.85	\$2.62	\$0.00	10375.0003 sapph Notice
40	9314 8699 0430 0125 8526 18	Ellipsis Oi & Gas, Inc. Attn: Pete Marshall 3500 Maple Ave., Suite 350 Dallas TX 75219	\$1.77	\$4.85	\$2.62	\$0.00	10375.0003 sapph Notice
41	9314 8699 0430 0125 8526 25	Colgate Royalties, LP 306 West Wall Street, Suite 608 Midland TX 79701	\$1.77	\$4.85	\$2.62	\$0.00	10375.0003 sapph Notice
42	9314 8699 0430 0125 8526 32	Permian Resources (OPR) 300 N. Marienfeld St., Suite 100 Midland TX 79701	\$1.77	\$4.85	\$2.62	\$0.00	10375.0003 sapph Notice
43	9314 8699 0430 0125 8526 49	Raybaw Operating, LLC 2626 Cole Avenue, Suite 300 Dallas TX 75204	\$1.77	\$4.85	\$2.62	\$0.00	10375.0003 sapph Notice

OCD Examiner Hearing 10-3-24

Karlene Schuman  
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Line	USPS Article Number	Name, Street, City, State, Zip	Postage	Service Fee	RR Fee	Rest.Del.Fee	Reference Contents
44	9314 8699 0430 0125 8526 56	Magnum Hunter Production Inc. 600 East Las Colinas Blvd, Suite 1100 Irving TX 75039	\$1.77	\$4.85	\$2.62	\$0.00	10375.0003 sapph Notice
45	9314 8699 0430 0125 8526 63	Coterra Energy 840 Gessner Road, Site 1400 Houston TX 77024	\$1.77	\$4.85	\$2.62	\$0.00	10375.0003 sapph Notice
46	9314 8699 0430 0125 8526 70	Cimarex Energy Co. (Unit OPR) 6001 Deauville Blvd., Suite 300N Midland TX 79706	\$1.77	\$4.85	\$2.62	\$0.00	10375.0003 sapph Notice
47	9314 8699 0430 0125 8526 87	MEC Development LTD PO Box 4000 The Woodlands TX 77380	\$1.77	\$4.85	\$2.62	\$0.00	10375.0003 sapph Notice
48	9314 8699 0430 0125 8526 94	Occidental Permian LP 5 Greenway Plaza, Suite 110 Houston TX 77046	\$1.77	\$4.85	\$2.62	\$0.00	10375.0003 sapph Notice
49	9314 8699 0430 0125 8527 00	Eau Rouge, LLC PO Box 823085 Dallas TX 75382	\$1.77	\$4.85	\$2.62	\$0.00	10375.0003 sapph Notice
50	9314 8699 0430 0125 8527 17	Maverick Oil & Gas Corp PO Box 823085 Dallas TX 75382	\$1.77	\$4.85	\$2.62	\$0.00	10375.0003 sapph Notice
51	9314 8699 0430 0125 8527 24	Oxy USA, Inc 5 Greenway Plaza, Suite 110 Houston TX 77046	\$1.77	\$4.85	\$2.62	\$0.00	10375.0003 sapph Notice
52	9314 8699 0430 0125 8527 31	PXP Producing Co LLC 717 Texas St., Ste 2100 Houston TX 77002	\$1.77	\$4.85	\$2.62	\$0.00	10375.0003 sapph Notice
53	9314 8699 0430 0125 8527 48	Burlington Resources Oil & Gas Company PO Box 51810 Midland TX 79710	\$1.77	\$4.85	\$2.62	\$0.00	10375.0003 sapph Notice
54	9314 8699 0430 0125 8527 55	United States of America Bureau of Land Management 301 Dinosaur Trail Santa Fe NM 87508	\$1.77	\$4.85	\$2.62	\$0.00	10375.0003 sapph Notice
<b>Totals:</b>			<b>\$95.58</b>	<b>\$261.90</b>	<b>\$141.48</b>	<b>\$0.00</b>	
<b>Grand Total:</b>						<b>\$498.96</b>	

List Number of Pieces Listed by Sender	Total Number of Pieces Received at Post Office	Postmaster: Name of receiving employee	Dated:
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54

OCD Examiner Hearing 10-3-24

Released to Imaging: 9/26/2024 1:36:25 PM



Transaction Report Details - CertifiedPro.net Firm Mail Book ID= 272439 Generated: 9/24/2024 7:34:19 AM											
USPS Article Number	Date Created	Reference Number	Name 1	Name 2	City	State	Zip	Mailing Status	Service Options	Mail Delivery Date	
9314869904300125852755	2024-09-12 10:32 AM	10375.0003 sapph	United States of America	Bureau of Land Management	Santa Fe	NM	87508	Delivered	Return Receipt - Electronic, Certified Mail	2024-09-16 12:52 PM	
9314869904300125852748	2024-09-12 10:32 AM	10375.0003 sapph	Burlington Resources Oil & Gas Company		Midland	TX	79710	Mailed	Return Receipt - Electronic, Certified Mail		
9314869904300125852731	2024-09-12 10:32 AM	10375.0003 sapph	PXP Producing Co LLC		Houston	TX	77002	To be Returned	Return Receipt - Electronic, Certified Mail		
9314869904300125852724	2024-09-12 10:32 AM	10375.0003 sapph	Oxy USA, Inc		Houston	TX	77046	Delivered	Return Receipt - Electronic, Certified Mail		
9314869904300125852717	2024-09-12 10:32 AM	10375.0003 sapph	Maverick Oil & Gas Corp		Dallas	TX	75382	Delivered	Return Receipt - Electronic, Certified Mail	2024-09-17 8:44 AM	
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9314869904300125852694	2024-09-12 10:32 AM	10375.0003 sapph	Occidental Permian LP		Houston	TX	77046	Delivered	Return Receipt - Electronic, Certified Mail		
9314869904300125852687	2024-09-12 10:32 AM	10375.0003 sapph	MEC Development LTD		The Woodlands	TX	77380	Mailed	Return Receipt - Electronic, Certified Mail		
9314869904300125852670	2024-09-12 10:32 AM	10375.0003 sapph	Cimarex Energy Co. (Unit OPR)		Midland	TX	79706	Delivered	Return Receipt - Electronic, Certified Mail	2024-09-16 2:46 PM	
9314869904300125852663	2024-09-12 10:32 AM	10375.0003 sapph	Coterra Energy		Houston	TX	77024	Delivered	Return Receipt - Electronic, Certified Mail	2024-09-19 12:11 PM	
9314869904300125852656	2024-09-12 10:32 AM	10375.0003 sapph	Magnum Hunter Production Inc.		Irving	TX	75039	Forwarded	Return Receipt - Electronic, Certified Mail		
9314869904300125852649	2024-09-12 10:32 AM	10375.0003 sapph	Raybaw Operating, LLC		Dallas	TX	75204	Delivered	Return Receipt - Electronic, Certified Mail	2024-09-17 2:32 PM	
9314869904300125852632	2024-09-12 10:32 AM	10375.0003 sapph	Permian Resources (OPR)		Midland	TX	79701	Delivered	Return Receipt - Electronic, Certified Mail	2024-09-16 4:33 PM	
9314869904300125852625	2024-09-12 10:32 AM	10375.0003 sapph	Colgate Royalties, LP		Midland	TX	79701	To be Returned	Return Receipt - Electronic, Certified Mail		
9314869904300125852618	2024-09-12 10:32 AM	10375.0003 sapph	Ellipsis Oi & Gas, Inc.	Attn: Pete Marshall	Dallas	TX	75219	Delivered	Return Receipt - Electronic, Certified Mail	2024-09-16 1:06 PM	
9314869904300125852601	2024-09-12 10:32 AM	10375.0003 sapph	PBEX, LLC		Midland	TX	79701	Delivered	Return Receipt - Electronic, Certified Mail	2024-09-17 12:50 PM	
9314869904300125852595	2024-09-12 10:32 AM	10375.0003 sapph	Yates Energy Corporation		Roswell	NM	88201	Delivered	Return Receipt - Electronic, Certified Mail	2024-09-16 11:14 AM	
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9314869904300125852571	2024-09-12 10:32 AM	10375.0003 sapph	Community Minerals	Attn: Paul Berguila	Houston	TX	77098	Mailed	Return Receipt - Electronic, Certified Mail		
9314869904300125852564	2024-09-12 10:32 AM	10375.0003 sapph	T.H. McElvain Oil & Gas, LLLP		Lakewood	CO	80401	Mailed	Return Receipt - Electronic, Certified Mail		
9314869904300125852557	2024-09-12 10:32 AM	10375.0003 sapph	Susan S. Murphy, Trustee of the SSM Trust		Roswell	NM	88201	Delivered	Return Receipt - Electronic, Certified Mail	2024-09-16 5:37 PM	
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9314869904300125852519	2024-09-12 10:32 AM	10375.0003 sapph	Gregory Nibert & Carolyn Nibert, Co-Trustees	DJS Trust under Trust Agr. Dtd 9-12-05	Roswell	NM	88202	Delivered	Return Receipt - Electronic, Certified Mail	2024-09-17 9:38 AM	
9314869904300125852502	2024-09-12 10:32 AM	10375.0003 sapph	Lone Oak Capital, LLC		Fort Worth	TX	76107	Delivered	Return Receipt - Electronic, Certified Mail	2024-09-16 11:10 AM	
9314869904300125852496	2024-09-12 10:32 AM	10375.0003 sapph	WTI Energy Partners, LLC		Fort Worth	TX	76102	Delivered	Return Receipt - Electronic, Certified Mail	2024-09-16 11:39 AM	
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9314869904300125852441	2024-09-12 10:32 AM	10375.0003 sapph	Cibolo Resources, LLC	Attn: Zach Privett	West Lake Hills	TX	78746	Delivered	Return Receipt - Electronic, Certified Mail	2024-09-17 2:50 PM	
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9314869904300125852403	2024-09-12 10:32 AM	10375.0003 sapph	SMP Titan Flex, LP		Dallas	TX	75219	Delivered	Return Receipt - Electronic, Certified Mail	2024-09-17 11:38 AM	
9314869904300125852397	2024-09-12 10:32 AM	10375.0003 sapph	SMP Sidecar Titan Mineral Holdings, LP		Dallas	TX	75219	Delivered	Return Receipt - Electronic, Certified Mail	2024-09-17 11:38 AM	
9314869904300125852380	2024-09-12 10:32 AM	10375.0003 sapph	Platform Energy IV, LLC		Abilene	TX	79604	Delivered	Return Receipt - Electronic, Certified Mail	2024-09-16 10:39 AM	
9314869904300125852373	2024-09-12 10:32 AM	10375.0003 sapph	Pegasus Resources, LLC		Fort Worth	TX	76107	Delivered	Return Receipt - Electronic, Certified Mail	2024-09-17 1:43 PM	
9314869904300125852366	2024-09-12 10:32 AM	10375.0003 sapph	Oline E. Groves		Midland	TX	79705	Forwarded	Return Receipt - Electronic, Certified Mail		
9314869904300125852359	2024-09-12 10:32 AM	10375.0003 sapph	MSH Family Real Estate Partnership II, LLC		Houston	TX	77056	Mailed	Return Receipt - Electronic, Certified Mail		
9314869904300125852342	2024-09-12 10:32 AM	10375.0003 sapph	Lawrence Anderson		Ceres	CA	95307	Delivered	Return Receipt - Electronic, Certified Mail	2024-09-18 3:40 PM	
9314869904300125852335	2024-09-12 10:32 AM	10375.0003 sapph	McMullen Minerals II, LP		Fort Worth	TX	76147	Mailed	Return Receipt - Electronic, Certified Mail		
9314869904300125852328	2024-09-12 10:32 AM	10375.0003 sapph	Show Goat Capital, LP		Austin	TX	78763	Delivered	Return Receipt - Electronic, Certified Mail	2024-09-17 12:47 PM	
9314869904300125852311	2024-09-12 10:32 AM	10375.0003 sapph	Jalapeno Corporation		Albuquerque	NM	87103	Delivered	Return Receipt - Electronic, Certified Mail	2024-09-16 11:31 AM	
9314869904300125852304	2024-09-12 10:32 AM	10375.0003 sapph	Innoventions, Inc.		Cedar Crest	NM	87008	Delivered	Return Receipt - Electronic, Certified Mail	2024-09-16 11:48 AM	
9314869904300125852298	2024-09-12 10:32 AM	10375.0003 sapph	Grewal (Royalty) LLC		New York	NY	10111	Delivered	Return Receipt - Electronic, Certified Mail	2024-09-16 12:58 PM	
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9314869904300125852267	2024-09-12 10:32 AM	10375.0003 sapph	Concho Oil & Gas LLC	One Concho Center	Midland	TX	79701	Mailed	Return Receipt - Electronic, Certified Mail		
9314869904300125852250	2024-09-12 10:32 AM	10375.0003 sapph	COG Operating, LLC	Attn: Land Dept.	Midland	TX	79701	Delivered	Return Receipt - Electronic, Certified Mail	2024-09-17 7:55 AM	
9314869904300125852243	2024-09-12 10:32 AM	10375.0003 sapph	Cheryl Ann Nace f/k/a Cheryl A. Schellinger		Santa Fe	NM	87501	Delivered	Return Receipt - Electronic, Certified Mail	2024-09-16 4:40 PM	
9314869904300125852236	2024-09-12 10:32 AM	10375.0003 sapph	Chad Barbe		Roswell	NM	88202	Delivered	Return Receipt - Electronic, Certified Mail	2024-09-17 12:40 PM	
9314869904300125852229	2024-09-12 10:32 AM	10375.0003 sapph	Cavin Trust, Sealy H. Cavin Jr., Synda S. Cavin	Trusttes to Trust Agr. Dtd 8-28-13	Albuquerque	NM	87103	Delivered	Return Receipt - Electronic, Certified Mail	2024-09-17 2:18 PM	
9314869904300125852212	2024-09-12 10:32 AM	10375.0003 sapph	Bob G. Howell		Fresno	CA	93715	To be Returned	Return Receipt - Electronic, Certified Mail		
9314869904300125852205	2024-09-12 10:32 AM	10375.0003 sapph	AmeriPermian Holdings, LLC		The Woodlands	TX	77380	Mailed	Return Receipt - Electronic, Certified Mail		

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  
September 15, 2024  
and ending with the issue dated  
September 15, 2024.



Publisher

Sworn and subscribed to before me this  
15th day of September 2024.



Business Manager

My commission expires

January 29, 2027  
STATE OF NEW MEXICO  
(Seal) NOTARY PUBLIC  
GUSSIE RUTH BLACK  
COMMISSION # 1087526  
COMMISSION EXPIRES 01/29/2027

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 publication has been made.

## LEGAL NOTICE September 15, 2024

CASE NO. 24849: Notice to all affected parties, as well as heirs and devisees of: AmeriPermian Holdings, LLC, attn.: Land Department; Bob G. Howell; Cavin Trust, Sealy H. Cavin Jr., Synda S. Cavin and their successors, as Trustees under the Trust Agreement dtd 8-28-13; Chad Barbe; Cheryl Ann Nace f/k/a Cheryl A. Schellinger; Clayton Anderson; COG Operating, LLC, Attn: Land Department; Concho Oil & Gas LLC; Donna Anderson; Wing Resources VI, LLC; Elk Royalties, II, LP; Grewal (Royalty) LLC; Innoventions, Inc.; Jalapeno Corporation; Show Goat Capital, LP; McMullen Minerals II, LP; Lawrence Anderson; MSH Family Real Estate Partnership II, LLC; Oline E. Groves; Pegasus Resources, LLC; Platform Energy IV, LLC; SMP Sidecar Titan Mineral Holdings, LP; SMP Titan Flex, LP; SMP Titan Mineral Holdings, LP; Ball Oil and Gas, LLC; Capco Resource Corporation; Cibola Resources, LLC, Attn: Zack Privett; Devon Energy Production Company, L.P.; Earthstone Permian LLC; WTI Energy Partners, LLC; Lone Oak Capital LLC; Gregory J. Nibert and Carolyn S. Nibert, Co-Trustees of the DJS Trust Established under Trust Agreement dated September 12, 2005, as amended and restated; Hutchings Oil Company; James K. Lusk and Martha Lusk Trust, James K. Lusk, Trustee; MRC Delaware Resources, LLC; Susan S. Murphy, Trustee of the SSM Trust; T.H. McElvain Oil & Gas, L.L.P.; Community Minerals, Attn: Paul Bergulla; Williamson Enterprises; Yates Energy Corporation; PBEX, LLC; Ellipsis Oil & Gas, Inc., Attn: Pete Marshall; Colgate Royalties, LP; Permian Resources; Raybaw Operating, LLC; Magnum Hunter Production Inc.; Coterra Energy; Cimarex Energy Co.; MEC Development LTD; Occidental Permian LP; Eau Rouge, LLC; Maverick Oil & Gas Corp; Oxy USA, Inc.; PXP Producing Co LLC; Burlington Resources Oil & Gas Company; United States of America Bureau of Land Management of the Application of Avant Operating, LLC for approval of a non-standard spacing unit and compulsory pooling, Lea County, New Mexico. The State of New Mexico through its Oil Conservation Division hereby gives notice that the Division will conduct a public hearing at 8:30 a.m. on **October 3, 2024** to consider this application. The hearing will be conducted in a hybrid fashion, both in-person at the Energy, Minerals, Natural Resources Department, Wendell Chino Building, Pecos Hall, 1220 South St. Francis Drive, 1st Floor, Santa Fe, NM 87505 and via a virtual meeting platform. To participate in the electronic hearing, see the instructions posted on the docket for the hearing date: <https://www.emnrd.nm.gov/ocd/hearing-info/>. Applicant seeks an order from the Division approving a non-standard spacing unit and pooling all uncommitted interests within a 1280-acre, more or less, Bone Spring horizontal spacing unit comprised of Sections 14 and 23, Township 19 South, Range 33 East, N.M.P.M., Lea County, New Mexico. This spacing unit will be dedicated to the following wells: the **Sapphire 14 Federal Com #301H, Sapphire 14 Federal Com #302H, Sapphire 14 Federal Com #501H, Sapphire 14 Federal Com #502H, Sapphire 14 Federal Com #601H, and Sapphire 14 Federal Com #602H** wells with proposed surface hole locations in the NW/4 NW/4 (Unit D) of Section 14 and proposed bottom hole locations in the SW/4 SW/4 (Unit M) of Section 23; **Sapphire 14 Federal Com #303H and Sapphire 14 Federal Com #603H** wells with proposed first take points in the NE/4 NW/4 (Unit C) of Section 14 and proposed last take points in the SE/4 SW/4 (Unit N) of Section 23; **Sapphire 14 Federal Com #513H** well with a proposed surface hole location in the NW/4 NW/4 (Unit D) of Section 14 and a proposed bottom hole location in the SE/4 SW/4 (Unit N) of Section 23; **Sapphire 14 Federal Com #304H, and Sapphire 14 Federal Com #604H** wells with proposed surface hole locations in the NE/4 NE/4 (Unit A) of Section 14 and proposed bottom hole locations in the SW/4 SE/4 (Unit O) of Section 23; **Sapphire 14 Federal Com #514H** well with a proposed surface hole location in the NW/4 NE/4 (Unit B) of Section 14 and a proposed bottom hole location in the SW/4 SE/4 (Unit O) of Section 23; **Sapphire 14 Federal Com #505H, and Sapphire 14 Federal Com #506H** wells with proposed surface hole locations in the NW/4 NE/4 (Unit B) of Section 14 and proposed bottom hole locations in the SE/4 SE/4 (Unit P) of Section 23; and the **Sapphire 14 Federal Com #305H, Sapphire 14 Federal Com #306H, Sapphire 14 Federal Com #605H, and Sapphire 14 Federal Com #606H** wells with proposed surface hole locations in the NE/4 NE/4 (Unit A) of Section 14 and proposed bottom hole locations in the SE/4 SE/4 (Unit P) of Section 23. The wells will be drilled at orthodox locations. The pool and pool code for Sections 14 and 23 is the Gem; Bone Spring, East Pool (Code 27230), which is an oil pool. Also to be considered will be the cost of drilling and completing said wells, the allocation of these costs as well as the actual operating costs and charges for supervision, designation of Avant Operating, LLC as operator of the wells, and a 200% charge for risk involved in drilling said wells. Said area is located approximately 23 miles west of Hobbs, New Mexico.

#00294112

01104570

00294112

DOLORES SERNA  
MODRALL, SPERLING, ROEHL, HARRIS &  
P. O. BOX 2168  
ALBUQUERQUE, NM 87103-2168

EXHIBIT C.4



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

**APPLICATION OF AVANT OPERATING, LLC  
FOR APPROVAL OF A NON-STANDARD UNIT,  
AND COMPULSORY POOLING,  
LEA COUNTY, NEW MEXICO.**

**CASE NO. 24849**

**SELF-AFFIRMED STATEMENT OF ALEXEY ZAITSEV**

Alexey Zaitsev hereby states and declares as follows:

1. I am over the age of 18, I am a reservoir engineer for Avant Operating, LLC (“Avant”) and have personal knowledge of the matters stated herein. My area of responsibility includes the area of Lea County in New Mexico.

1. I have not previously testified before the Division. I attended Texas Tech University and received a B.S. in petroleum engineering. I have worked as a petroleum engineer for two years and as a reservoir engineer for an additional six years. My reservoir engineering work has supported active development programs in New Mexico with both APA Corporation and Avant Natural Resources. I have worked for Avant as a reservoir engineer since May 2024. My resume summarizing my educational and work experience is attached to this Declaration as **Exhibit D.1**.

2. I am familiar with the applications filed by Avant in these cases and the surface production facilities required to develop the oil underlying the subject acreage.

3. In this case, Avant seeks approval of a 1280-acre non-standard Bone Spring unit.

4. Avant seeks to minimize surface disturbance and costs by consolidating facilities and commingling production from the wells and future wells in the proposed non-standard spacing unit.

**Avant Operating, LLC  
Case No. 24849  
Exhibit D**

5. To allow the wells to be dedicated to the acreage subject to the desired Communitization Agreement, Avant requires approval of non-standard spacing unit.

6. **Exhibits D.2 and D.3** illustrate the benefit of the non-standard unit Avant is requesting.

7. If Avant has to develop the acreage using standard horizontal spacing unit, Avant will need a total of 3 units. Under Avant's requested non-standard unit application, however, Avant would only need a total of one unit.

8. **Exhibit D.2** compares the tank batteries and related surface production facilities that would be required if Avant had to develop this acreage using standard horizontal spacing units with the tank batteries and related surface production facilities that will be needed to develop the acreage using non-standard unit. The reduction in tank batteries and surface production facilities also results in a reduction of emissions.

9. As these exhibits show, if Avant must develop the acreage using standard spacing units, one additional tank battery will be required at a cost of approximately \$4,200,000 and require an additional surface disturbance of 3.5 acres. If the non-standard spacing unit is approved, the additional cost and surface disturbance required for the tank batteries will be avoided.

10. Approval of the non-standard unit will allow for commingling of production, which would not be possible if Avant has to move forward with standard units. Eliminating the additional tank batteries will also lower the operating cost for this acreage.

11. **Exhibit D.3** identifies the reduced cost savings and surface disturbance that will occur if the non-standard spacing units is not approved.

12. In my opinion, approval of Avant's non-standard unit application will allow Avant to efficiently locate surface facilities, reduce surface disturbance, reduce emissions and promote effective well spacing.

13. In my opinion, the granting of this application is in the interests of conservation and the prevention of waste.

14. The exhibits to my self-affirmed statement were prepared by me, or compiled from company business records, or were prepared at my direction or supervision.

15. I attest under penalty of perjury the laws of the State of New Mexico that the information provided herein is correct and complete to the best of my knowledge and belief and I will adopt this testimony at the hearing in this matter.

*[Signature page follows]*

9/24/2024

Date



Alexey Zaitsev

# Alexey Zaitsev

5680 Bryant St, Denver, CO 80221

(713) 992-1701

alexey.zaitsev@yahoo.com

## Education

Texas Tech University, Lubbock, Texas

B.S. in Petroleum Engineering, Magna Cum Laude, May 2016

## Experience

**Avant Natural Resources, Denver, CO** – Senior Reservoir Engineer **May 2024 – Present**

- Forecasted production and generated type curves for development programs & deal evaluations
- Evaluated well performance as it relates to completion designs, well spacing, and development timing
- Calculated project economics and performed prospective acreage & trade valuations
- Created presentation materials for potential deals and Avant's well development programs
- Assisted in creating hearing exhibit materials
- Evaluated well spacing for active well development programs
- Attended URTEC to further reservoir engineering knowledge & skillsets

**Truist Securities, Houston, TX** – A&D Engineering Associate **March 2023 – May 2024**

- Advised clients on \$2.8B in closed upstream and midstream A&D and M&A deals as lead engineer
- Presented & discussed projects with clients through the full cycle of transactions
- Led economic & engineering analyses, built presentation materials for 40+ buy-side and sell-side projects in Permian, Eagle Ford, DJ, Uinta, Appalachian, Anadarko, Williston and Haynesville plays
- Developed Spotfire tools to improve quality & efficiency in technical analyses & presentation materials
- Independently built ARIES databases, generated type curves & PDP forecasts, reconciled DB inputs with LOS, designed rig pace/order to target metrics & ran full-field economic analyses/sensitivities
- Constructed full Net Asset Value models in Microsoft Excel and generated inputs for such models, including type curves, inventory counts, rig pace, PDP forecasts, pricing, and economic assumptions
- Developed understanding of geology, CapEx / OpEx ranges and performance in L48 basins through economic valuations, LOS, Enverus reports, Investor Relations slide decks, market research, ect.
- Created and maintained Basin Studies and Operator Profiles to streamline inventory valuation
- Managed virtual data rooms for sell-side projects & performed due diligence on VDR data on buy-side
- Collaborated with Management, Coverage teams and counterparties on up to 5 simultaneous projects
- Interviewed, trained & mentored four A&D teammates as the team grew to record size and deal volume
- Generated reservoir quality & performance maps in QGIS to position assets for acquisition/divestiture
- Quantified inventory and generated type curves by leveraging geologic, leasehold and well data
- Forecasted midstream volumes and TIL activity using public and/or private data & Company guidance
- Implemented HBP requirements and continuous drilling clauses into economic analyses & databases

**Apache Corporation, San Antonio & Houston, TX** – Reservoir Engineer **August 2018 – February 2023**



- Economically appraised well development, 100+ non-operated well proposals and lease offers, mineral interest and leasehold A&D, leasing opportunities and strategic acreage trades in Permian assets
- Forecasted and booked 40+ MMBOE of reserves within SEC guidelines
- Set up ARIES databases with complex economic structures & managed reserves databases
- Optimized well spacing and completions in multiple Delaware Basin unconventional oil & gas fields through collaboration with geoscientists, numerical reservoir modeling, depletion analysis, neural net prediction, RTA/PTA, DCA, LFP/OGIP workflows, DFITs, PVT, frac modeling, risk analysis, and ARIES economic evaluation, resulting in the best well performance in field history & recent full-cycle P/I of 5+
- Generated & executed an FDP as the sole reservoir engineer for a gas field approaching 500 MMCFD

**Apache Corporation, Midland, Pecos, & San Antonio, TX – Engineer** **June 2016 – August 2018**

- Generated value in rotating Reservoir, Production, Completions, and Facility Engineering roles in both conventional and unconventional assets across the Permian Basin
- Initiated & led a company-wide transition to a novel frac plug drill-out method, reducing costs by 50%
- Wrote procedures and AFEs for frac jobs, facility repairs, ESP replacements, recompletions, etc.
- Supervised horizontal well fracture stimulations, designed data recording & Spotfire analysis tools
- Designed and managed construction of gas pipelines, injection facilities, CTBs & compressor stations
- Served as Completions Engineering Intern from May to August 2015, improved operations efficiencies

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**Technical software**

High proficiency in ARIES, ComboCurve PHDWin, Spotfire, Access, QGIS, Enverus, MS Excel & PowerPoint. Skilled in industry software including IHS Harmony, OFM, StimPlan, and others

Sapphire 14 Federal Com  
#301H-#306H / #501H-#502H, #513H-#514H, #505H-#506H/ #601H-#606H

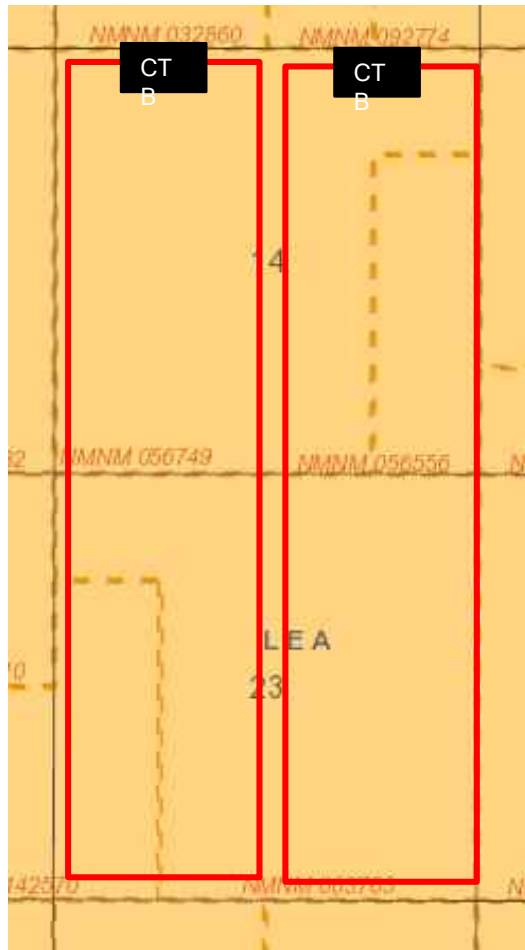
Avant Operating, LLC  
Case No. 24849  
Exhibit D-2



*NSU reduces surface facilities and surface impacts*

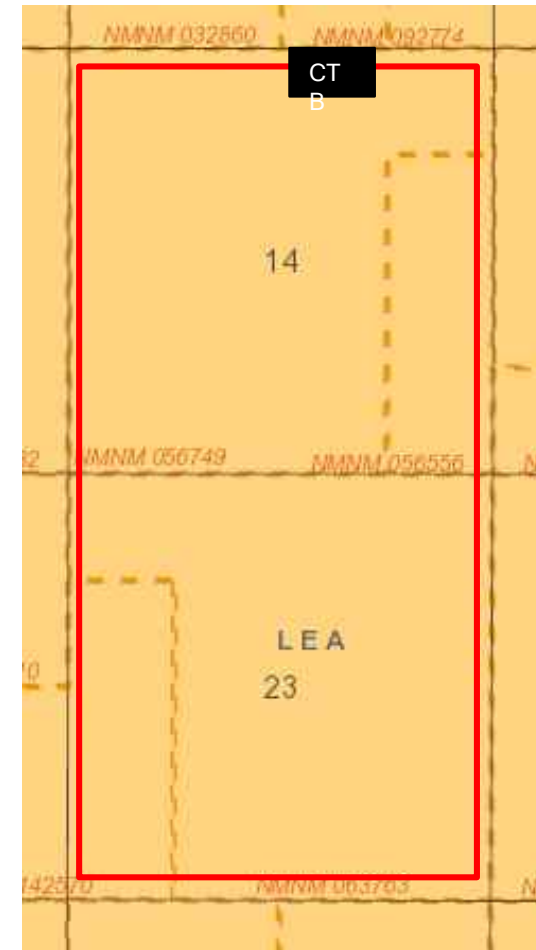
STANDARD UNIT DEVELOPMENT

2 CTBs



NON-STANDARD UNIT DEVELOPMENT

1 CTBs



Sapphire 14 Federal Com  
#301H-#306H / #501H-#502H, #513H-#514H, #505H-#506H/ #601H-#606H

Avant Operating, LLC  
Case No. 24849  
Exhibit D-3



## Financial Environmental Impact Table

Scenario	Design Basis Per CTB (BPOD)	CTB Cost (\$M)	Pipeline/Utilities Cost (\$M)	Total Capital (\$M)	CTB and Pipeline Disturbance (Acres)
Two Separate Facilities	8,000	\$13.7	\$3.0	\$16.7	7
Single Pooled Facility	19,000	\$9.5	\$1.5	\$11.0	3.5
SAVINGS		\$4	\$2	\$6	3.5

