

July 24, 2025



James Thum  
Program Manager, Oil and Gas  
Idaho Department of Lands  
300 N. 6<sup>th</sup> St., Suite 103  
Boise, Idaho 83702  
Email: [jthum@idl.idaho.gov](mailto:jthum@idl.idaho.gov)

Re: Docket No. CC-2025-OGR-01-004; Application for order to establish a gas well spacing unit that consists of 40 net acres for a Stratigraphic Test Well in the SENE of Section 26, Township 5 North, Range 4 West, Canyon County, Idaho.

Dear James:

This application is made pursuant to Idaho Code §47-317 and §47-328, and is supported by the attached exhibits. Cascade Exploration, LLC ("Applicant") hereby submits this application for an order establishing a gas well spacing unit smaller than the standard 640-acre unit required by Idaho Code §47-317(3)(b). Applicant intends to drill a Stratigraphic Test Well (the "Test Well") on a 40 net acre tract described on the attached Exhibit A, and located in Section 26, Township 5 North, Range 4 West, Canyon County, Idaho.

Idaho's regulations do not currently provide a distinct permit category for stratigraphic test wells, so Applicant is seeking to permit the Test Well as a gas well, which under existing law would normally require a 640-acre spacing unit. Applicant requests a spacing unit smaller than 640 acres for this non-producing Test Well for the reasons set forth below:

1. Idaho Code §47-317(1) – Authority to Establish Spacing Units: *"To prevent or assist in preventing the waste of oil and gas, to avoid drilling unnecessary wells or to protect correlative rights, the department may, on its own motion or on the application of an interested person, and after notice and opportunity for hearing, issue an order establishing spacing units..."* Pursuant to this statutory authority, Applicant seeks an order establishing an appropriately sized spacing unit for the Test Well. The purpose of the proposed spacing unit is to facilitate drilling a single exploratory stratigraphic test well while preventing waste and avoiding unnecessary wells. By obtaining critical geological data from this Test Well now, Applicant can avoid the need for multiple "wildcat" wells in the future, thereby serving the statute's goal of preventing unnecessary drilling. The Test Well is not intended to commercially produce gas, and establishing a full 640-acre unit would not protect correlative rights or prevent waste, as no drainage or production will occur from this Test Well. Instead, a smaller unit limited to the immediate vicinity of the Test Well will protect the correlative rights of other owners by ensuring that no production is allocated from lands where no actual extraction will take place. As demonstrated in the attached Declaration of Bronson Barrett (Exhibit D), Cascade Exploration, LLC is an "interested person" entitled to bring this application forward, as Applicant currently holds 100% of the leasehold mineral interest in the proposed spacing unit. Applicant is also an "owner" as defined in Idaho Code § 47-310(27) for the all tracts in the unit, by virtue of holding the right to drill into and produce from the pool (though no production is intended from this Test Well).

2. Idaho Code §47-317(2) – Spacing Unit Size, Location, and Shape: *“An order establishing spacing units shall specify the location, size, and shape of the unit, which, in the opinion of the department, shall result in the efficient and economical development of the pool as a whole. These units... shall be geographic... described in accordance with the public land survey system. The department shall issue an order establishing a spacing unit or units to determine the area that can be efficiently and economically drained by one (1) well for the orderly development of the pool.”* In compliance with these requirements, Applicant proposes a spacing unit consisting of a portion of Section 26, T5N, R4W, Canyon County, Idaho, as described on Exhibit A and depicted on the plat map attached as Exhibit B (the “Proposed Unit”). The Proposed Unit enables the Applicant to fully comply with the setback requirements as set by Idaho Code §47-317(3)(b), with the wellbore being 660 feet from the closest exterior boundary of the Proposed Unit, and 990 feet from any well drilled, completed, being drilled or being completed.
3. The Applicant’s Proposed Unit, which is comprised of 40 net acres, will promote the efficient and economic development of the potential pool because the Test Well will gather critical stratigraphic data required to understand the subsurface geologic and reservoir characteristics without draining or impacting any correlative rights. In the Declaration of Heather Bader (Exhibit E), a Senior Drilling Engineer explains that because the Proposed Unit for the Test Well directly aligns and contributes to the orderly and efficient development of the resource in the long term. If and when productive wells are drilled based on the data obtained, appropriate spacing units (which may be larger or differently configured) will be established at that time to reflect the actual drainage of those future wells. In summary, granting this reduced spacing unit for the Test Well will enable valuable geological data collection now while preserving the integrity of the spacing framework for true production operations later.
4. Idaho Code § 47-328(3)(b) – Notice and Procedural Compliance: Idaho Code § 47-328(3)(b) requires that for any application to establish or amend a spacing unit, *“the applicant shall send a copy of the application and supporting documents to all known and located uncommitted mineral interest owners, all working interest owners within the proposed spacing unit, and the respective city or county where the proposed unit is located.”* This notice must be sent by certified mail within seven (7) days of filing the application, and must include notice of the hearing date at which the application will be considered. Additionally, if there are any uncommitted owners or working interest owners who cannot be located, the statute requires the applicant to publish notice of the application, hearing, and response deadline *once* in a newspaper of general circulation in the county and to request that the Department post notice on its website within seven days of filing. Applicant will fully comply with these procedural requirements. Applicant’s Proposed Unit does not have any uncommitted owners. Within seven days of filing this Application, Applicant will send copies of the application and all exhibits via certified mail to all mineral interest owners, as identified in Exhibit C.
5. Stratigraphic Test Well – Special Conditions and Commitments: The Test Well that is the subject of this application will be drilled and managed with unique conditions that distinguish it from a producing gas well. Applicant commits that the Test Well will not be completed for production. No production casing will be set across any

prospective zones (except as needed for well control and safety), and no perforation, stimulation, or production will be conducted that would allow the well to commercially flow gas to the surface. The well will be drilled to a total vertical depth ("TVD") of 12,000 feet, which is sufficient to penetrate the target geological formations of interest and collect the necessary data (such as cores, cuttings, and open-hole geophysical logs). Within one (1) year of reaching TVD, the Applicant will plug and abandon the well in accordance with Idaho Department of Lands requirements (Idaho Admin. Code Rule 20.07.02, etc.), restoring the site and eliminating any long-term wellbore presence. The Test Well will not be connected to any sales point at any time. These conditions ensure that the Test Well remains purely exploratory in nature. In essence, the requested spacing unit is a procedural mechanism to allow the drilling of this exploratory Test Well; it will expire upon plugging of the well and will not hinder any future spacing or development plans by either Applicant or other operators in the area. Applicant's proposal to plug the well within one year of drilling total depth provides additional assurance that this operation is temporary and solely for data gathering. By granting this application, the Department will enable the collection of valuable subsurface data while imposing strict limits that protect correlative rights and prevent any waste or undue interference with the rights of other mineral owners.

Exhibits & Attachments:

- Exhibit A: Legal description of lands for the Proposed Unit
- Exhibit B: Plat Map showing the Proposed Unit
- Exhibit C: List of Mineral Interest Owners in the Proposed Unit
- Exhibit D: Declaration of Bronson Barrett, on behalf of Cascade Exploration, LLC, regarding Applicant's interest and ownership in the Proposed Unit
- Exhibit E: Declaration of Heather Bader, Applicant's drilling engineer – Technical support for Stratigraphic Test Well and spacing unit request.

Applicant has prepared the above exhibits and will submit them along with this application. Cascade Exploration, LLC respectfully requests that the Idaho Department of Lands issue an order establishing a spacing unit smaller than 640 acres (approximately 40 acres as described above) for the proposed Stratigraphic Test Well in Section 26, T5N, R4W, Canyon County, and granting such further relief as may be necessary to allow the drilling of this exploratory Test Well. This application demonstrates that the reduced spacing unit is consistent with Idaho Code § 47-317's objectives of preventing waste and protecting correlative rights, given the Test Wells non-producing nature, and that all procedural requirements of Idaho Code § 47-328 will be met. Thank you for your consideration.

Sincerely,

Cascade Exploration, LLC



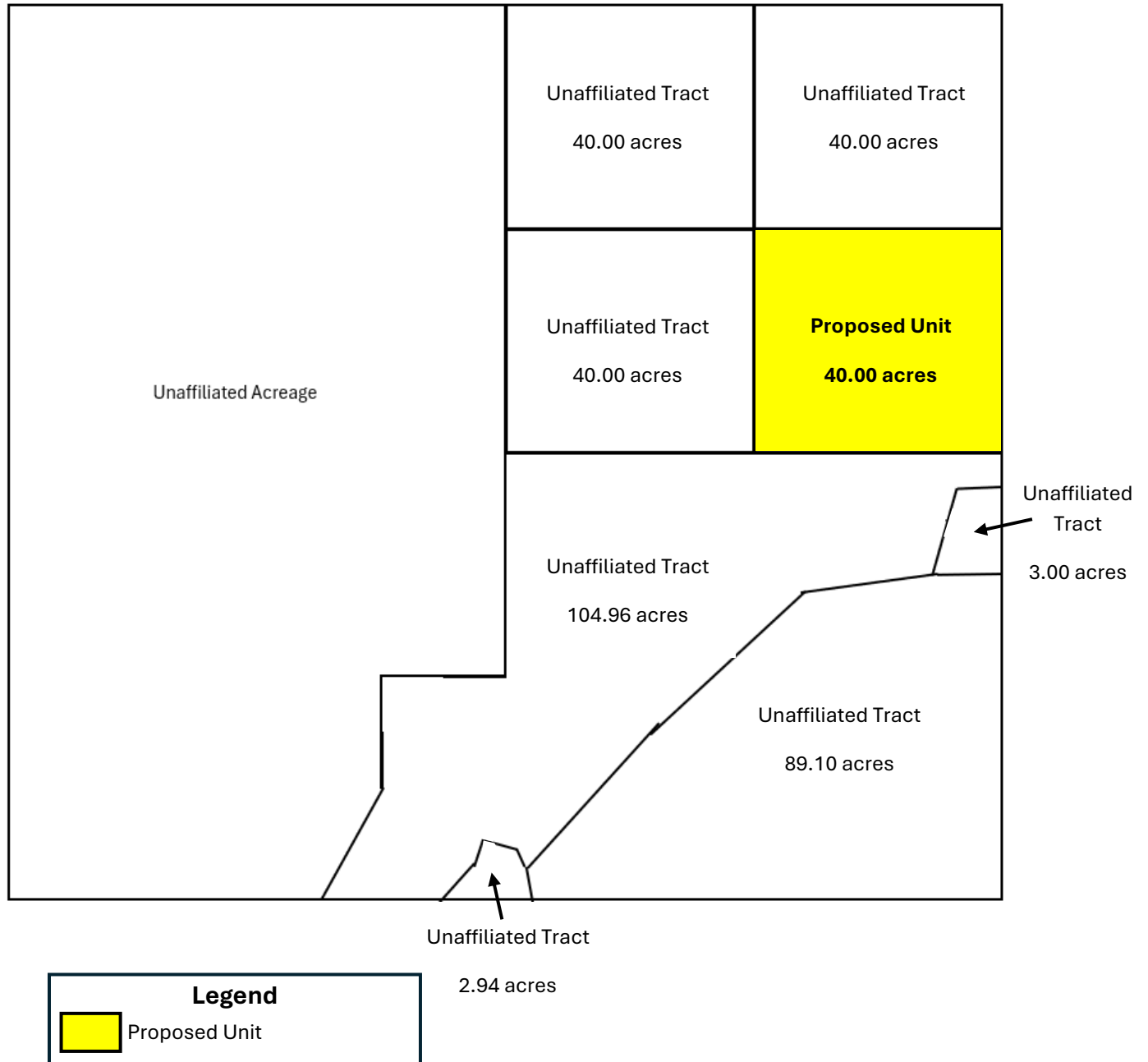
By: Bronson Barrett

**Exhibit A - Legal Description of Lands within Proposed Unit**

SE/4 NE/4 of Section 26, Township 5 North, Range 4 West, Canyon County, Idaho

**Exhibit B – Plat of Proposed Unit**

Section 26, T5N, R4W  
Canyon County, Idaho



**Exhibit C – Mineral Owners in Proposed Unit**

| <b>Mineral Owner</b> | <b>Mineral Interest</b> | <b>Gross Acres</b> | <b>Net Acres</b> | <b>Leased (y/n)</b> | <b>Lessee</b>            | <b>Lessor</b>       |
|----------------------|-------------------------|--------------------|------------------|---------------------|--------------------------|---------------------|
| David L. Marchbanks  | 100%                    | 40                 | 40               | Yes                 | Cascade Exploration, LLC | David L. Marchbanks |

**EXHIBIT D**

**Declaration of Bronson Barrett  
Cascade Resources, LLC Interest & Ownership**

In the Matter of Application of Cascade Exploration, LLC )  
for an Order establishing a Spacing Unit consisting of )  
40 net acres on lands situated in the SENE of Section 26, )  
Township 5 North, Range 4 West, Canyon County, Idaho )  
)  
Cascade Exploration, LLC as Applicant )

Docket No. CC-2025-OGR-01-004

State of Colorado }

County of Denver }

I, Bronson Barrett, declare under penalty of perjury under the laws of the State of Idaho:

1. I am a Senior Landman for Cascade Exploration, LLC ("Cascade"), the Applicant in the foregoing application. I have the authority to make this declaration on Cascade's behalf and am familiar with Cascade's mineral leasehold interests in Canyon County, Idaho.
2. Cascade is the Lessee of oil and gas interests underlying lands in the SENE of Section 26, Township 5 North, Range 4 West, Canyon County, Idaho, including 100% of the net mineral acres within the Proposed Unit defined in the Application and further described in Exhibit A and Exhibit B above. True and correct copies of Cascade's Paid Up Subsurface Lease Agreement (the "Lease") and a mineral ownership report covering the subject lands can be provided to the Department upon request.
3. By virtue of holding the Lease described above, Cascade is an "interested person" for purposes of Idaho Code §47-317(1) with respect to the establishment of a spacing unit covering those lands. Cascade is also an "owner" as defined in Idaho Code § 47-310(27) for each tract within the proposed spacing unit, as Cascade "has the right to drill into and produce from a pool and to appropriate the oil and gas that [it] produces therefrom, either for [it]self or for [it]self and others," under the terms of its Lease. Although Cascade does not intend to produce oil or gas from the exploratory Test Well described in the application, Cascade's Lease confers upon it the right to do so, satisfying the statutory definition of owner.
4. Cascade, as the sole working interest owner in the proposed spacing unit, consents to the establishment of the spacing unit as requested. All other interest owners within the unit are lessors under Cascade's leases (or their successors). Cascade will ensure that all mineral interest owners receive notice of the application and hearing in the manner described in the application and as required by law. A list of those owners is attached as Exhibit C to the application.

I declare under penalty of perjury under the laws of the State of Idaho that the foregoing is true and correct to the best of my knowledge.

Dated: July 24, 2025

  
Bronson Barrett

**EXHIBIT E**

## Declaration of Heather Bader

## Cascade Resources, LLC Drilling Engineer Technical Declaration in Support of Application

In the Matter of Application of Cascade Exploration, LLC )  
for an Order establishing a Spacing Unit consisting of )  
40 net acres on lands situated in the SENE of Section 26, )  
Township 5 North, Range 4 West, Canyon County, Idaho )  
)  
Cascade Exploration, LLC as Applicant )

Docket No. CC-2025-OGR-01-004

**State of Colorado** }

**County of Denver** }

I, Heather Bader, declare under penalty of perjury under the laws of the State of Idaho:

1. I am a Senior Drilling Engineer with 20+ years of experience in the oil, gas and mining industries, specializing in drilling engineering and well planning for both exploratory and development projects. My background includes the design and execution of stratigraphic test wells, exploratory wildcat wells, as well as development wells in various basins. I hold a B.S. in Chemical Engineering from the Colorado School of Mines in Golden, Colorado. I currently serve as a Senior Drilling Engineer for Cascade Resources, LLC, where my responsibilities include planning, executing and managing drilling operations for exploratory projects such as the proposed Stratigraphic Test Well in Section 26, T5N R4W, Canyon County, Idaho.
2. Stratigraphic test wells are exploratory wells drilled with the primary purpose of collecting geological information, rather than producing oil or gas. In gas exploration, stratigraphic test wells are used to penetrate rock formations of interest, retrieve core samples, and record detailed geophysical logs in order to understand the stratigraphy, lithology, fluid content, and reservoir potential of those formations. These wells are invaluable in areas with little or no existing well control data; they allow geologists and engineers to confirm the presence (or absence) of reservoir-quality rocks, hydrocarbons, nonhydrocarbons, calibrate seismic data to actual rock strata, and assess the thickness and properties of target formations. The goal of a stratigraphic test well is to gather data that will guide decisions on where and how to drill future production wells (if any), how to design those wells, and whether further exploration is justified. Importantly, a stratigraphic test well is not intended to produce hydrocarbons for sale – any fluid recovered during such a well’s drilling or testing operations is typically for evaluation purposes only (for example, fluids recovered during a brief drill stem test or from core samples). After obtaining the necessary information, stratigraphic wells are generally plugged and abandoned. This approach allows operators to explore and evaluate geological prospects with minimal surface impact allowing for reduced investment compared to drilling full-fledged production wells across a broad area.
3. The proposed Test Well in Section 26 will differ significantly from a conventional producing gas well in its design, operation, and lifecycle. First, the Test Well will not be completed in a manner capable of production – that is, we will not perforate casing in any gas-bearing zone, nor commercially stimulate any formation, nor install production tubing or surface production equipment. In a typical producing gas well, after drilling to the target depth, the well is completed to allow reservoir gas to flow into the wellbore, and wellhead and pipeline facilities are installed to produce and transport the

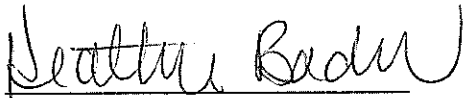
gas. By contrast, the wellbore for this Test Well will remain isolated from any potential gas-bearing formations (aside from the necessary open-hole exposure for testing, logging and coring). Cascade will take open-hole measurements and possibly sidewall cores or full core samples, then set plug(s) and/or cement the well without ever establishing a flow-path from the reservoir to the surface. Second, a producing gas well is typically connected to infrastructure – it has flow lines, separators, tanks or a pipeline connection – whereas this Test Well will not have surface production facilities required for commercial production. Third, a producing well remains active for years, draining gas from a reservoir; this Test Well will be short-lived, existing only for the time needed to drill, log, and plug it (on the order of a few weeks of drilling plus additional time for testing, and followed by plugging and site reclamation, all done in around one year as committed). Because the Test Well will not extract gas for sale, it will not generate royalties or affect the share of production for any mineral owner – it is purely a data acquisition endeavor.

4. Standard spacing units for gas wells (640 acres in Idaho for a vertical gas well) are predicated on the assumption that a producing well will drain a significant area of the gas reservoir, roughly on the order of one section (though actual drainage may vary). The spacing unit's size is meant to maximize efficient recovery from the reservoir by one well without leaving pockets of resources or requiring excessive wells. In the case of a stratigraphic test well that will not produce, this rationale for a large spacing unit does not apply. No drainage area exists for a well that is never put on production. Effectively, a stratigraphic test well will drain only the rock it physically contacts in the wellbore during coring or logging, which is negligible in volume and confined to the immediate wellbore vicinity. It is therefore not applicable to mandate a 640-acre spacing unit for such a well. Requiring a full-section spacing unit would force the operator to involve and potentially integrate numerous mineral interest owners across an entire section – even though the well will not extract any hydrocarbons from their acreage – resulting in unnecessary administrative complexity and potential conflict. It could also discourage the drilling of stratigraphic tests (which are low-impact exploratory tools) because of the added time and cost of securing an expansive unit. By allowing a smaller spacing unit, the Department can tailor the regulatory requirements to fit the impact of the well, which is minimal and localized. In my professional opinion, a smaller unit more than encompasses any conceivable influence of the Test Well. There is no technical need for a larger unit in this scenario, as the well will not leave an undrained portion of a reservoir or interfere with adjacent acreage.
5. Although the Test Well will not produce oil or gas, the geological and petrophysical data collected will be crucial for planning any future development in this area. For instance, if the stratigraphic test confirms the presence of a reservoir with sufficient thickness and permeability, Cascade (or other operators) can design a development plan with appropriately spaced production wells targeting that reservoir. The data from the core samples and logs will inform us about the extent and quality of the reservoir, pressure and fluid content, and other parameters needed to estimate drainage areas and recoverable resources. This means that when we eventually propose producing wells, we can do so with a high degree of confidence about how far apart they should be (i.e., what spacing is efficient) and what production techniques to use, thereby preventing waste of the resource. Conversely, if the Test Well indicates poor reservoir development or no hydrocarbons present, we can avoid drilling unnecessary production wells in this vicinity – which again aligns with the Idaho oil and gas statutes' goals of avoiding unnecessary wells and operations. In short, the Stratigraphic Test Well will provide valuable subsurface information that helps optimize any future oil and gas recovery while ensuring that spacing units for actual production wells are properly sized and located. This up-front exploratory work benefits not only Cascade's project economics but also the interests of mineral owners and the state, by facilitating more orderly and efficient development if resources are found. It bears emphasizing that granting a reduced spacing unit for this Test Well will *not* prejudice any future spacing considerations – any production well in the area would still be subject to the normal spacing rules or new spacing orders based on the data. Thus, the stratigraphic test is a low- risk, high-reward proposition from a regulatory and conservation standpoint: it yields knowledge to guide development, at the cost of a single small-footprint well that is abandoned shortly after use.

6. In my professional opinion, approving a spacing unit of 40 acres for the proposed Stratigraphic Test Well is technically sound and justified. The well's lack of production and limited scope make the standard 640-acre spacing unit unnecessary. A smaller spacing unit will fully accommodate the well's operations without impacting surrounding properties or correlative rights. Granting this application will enable Cascade Exploration, LLC to safely and efficiently obtain critical geological information. This information will directly support the proper design of any future drilling and spacing programs, thereby promoting the efficient development of Idaho's oil and gas resources and preventing waste. I affirm that the planned drilling and abandonment of the Test Well will be carried out in compliance with all applicable Idaho regulations and in a manner that protects surface and subsurface resources. For all the reasons stated above, I support the approval of the application to establish a reduced-size spacing unit for the Stratigraphic Test Well.

I declare under penalty of perjury under the laws of the State of Idaho that the foregoing is true and correct to the best of my knowledge.

Dated: July 24, 2025

A handwritten signature in black ink, appearing to read "Heather Bader", written over a horizontal line.

Heather Bader