RECEIVED
By ID Dept of Lands at 4:52 pm, Jun 30, 2025

CASCADE EXPLORATION

June 30, 2025

James Thum
Program Manager, Oil and Gas
Idaho Department of Lands
300 N. 6th St., Suite 103
Boise, Idaho 83702
Email: jthum@idl.idaho.gov

Re: Docket No. CC-2025-OGR-01-003; Application for order to establish a gas well spacing unit that consists of 239.15 net acres for a Stratigraphic Test Well in Section 25, 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 239.15 net acre tract described on the attached Exhibit A, and located in Section 25, Township 5 North, Range 4 West, Canyon County, Idaho. This well will be drilled for stratigraphic and geological information purposes only and will not be completed as a producing well. 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 C), 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 25, 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 239.15 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 D), 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") 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
- Declaration of Bronson Barrett, on behalf of Cascade Exploration, LLC, regarding Applicant's interest and ownership in the Proposed Unit
- 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 239.15 acres as described above) for the proposed Stratigraphic Test Well in Section 25, 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

A single tract consisting of the SW/4 SE/4 and portions of the SW/4 NW/4, SE/4 NW/4, SW/4 NE/4, SE/4 NE/4er, N/2 SW/4, and the NW/4 SE/4 and being more particularly described as follows: BEGINNING at the Southwest comer of the SW/4 SE/4, a found GL.O. brass cap monument; thence North 00° 06' 19" West along the West boundary of the SW/4 SE/4 a distance of 1321.37 feet to the Northwest comer of the SW/4 SE/4. a mag nail set with an aluminum washer stamped L.S. 3627 witnessed by a 5/8 x 30 inch. rebar set with plastic cap stamped LS. 3627 bearing North 0° 06' 18" West 5.00 feet; thence South 89° 51' 02" West along the South boundary of the N/2 SW/4 distance of 2605.87 feet to the Southwest comer of the N/2 SW/4, a found mag nail set in the bridge deck; thence North 00° 18' 08" East along the West boundary of the N/2 SW/4 a distance of 954.40 feet to a found 5/8 inch diameter rebar; thence North 89° 56' 33" East parallel with the North boundary of the N/2 SW/4 a distance of 747.26 feet to a found 5/8 inch rebar with a plastic cap stamped L.S. 3627; thence North 01° 26' 06" East a distance of 371.24 feet to a point on the North boundary of the N/2 SW/4, a found 5/8 inch diameter rebar with a plastic cap stamped L.S. 3627; thence North 89° 56 33" East along the North boundary of the N/2 SW/4 distance of 90.14 feet to a found 5/8 inch diameter rebar with a plastic cap stamped L.S. 3627; thence North 00° 06' 00" East parallel with the East boundary of the SW/4 NW/4 a distance of 423.03 feet to a point on the centerline of the Conway Drain Ditch witnessed by a found 5/8 inch diameter rebar with a plastic cap stamped L.S. 3627 bearing South 0° 06' 00" West. a distance of 30.00 feet; thence traversing the centerline of the Conway Drain Ditch as follows: South 82° 57' 48" East a distance of 140.99 feet; North 33° 08' 46" East a distance of 28.71 feet; North 06° 15' 52" East a distance of 203.31 feet; North 04° 12' 43" East a distance of 337.04 feet; North 17° 15' S 1" East a distance of 32.16 feet; North 68° 44' 32" East a distance of 35.22 feet; North 73° 11' 21" East a distance of 168.77 feet; North 74° 11' 38" East a distance of 221.90 feet; North 57° 40' 40" East a distance of 39.96 feet; North 36° 23' 31" East a distance of 230.85 feet to a point on the North boundary of the SE/4 NW/4, witnessed by a found 5/8 inch diameter rebar with a plastic cap stamped L.S. 3627 bearing North 89° 52' 32" East a distance of 31.12 feet; thence North 89° 52' 32" East along 1he North boundary of the SE/4 NW/4 a distance of 957.78 feet to the Northeast comer of the SE/4 NW/4, a 5/8 x 30 inch rebar set with a 2.5 inch aluminum cap stamped L.S. 3627; thence North 89" 51' 45" East along the North boundary of the SW/4 NE/4 a distance of 1293.57 feet to the Northeast corner of the SW/4 NE/4, a 5/8 x 30 inch rebar set with a 2.5 inch aluminum cap stamped L.S. 3627; thence North 89" 51' 45" East along the North boundary of the SE/4 NE/4 a distance of 278.06 feet to a point on the centerline of the Notus Canal witnessed by a found 5/8 inch diameter rebar with a plastic cap stamped L.S. 3627 bearing South 89° 51' 45" West a distance of 1824 feet; thence traversing the centerline the Notus Canal as follows: South 10° 25' 22" East a distance of 237.58 feet; Southwesterly 270.28 feet along the arc of a curve to the right having a radius of 229.00 feet, a central angle of 67° 37' 30" and a long chord bearing South 23° 23' 23" West a distance of 254.87 feet; South 57° 12' 08" West a distance of 400.37 feet; Southwesterly 437.67 feet along the arc of a curve to the left having a radius of 260.00 feet, a central angle of 96° 26' 55" and a long chord bearing South 08° 58' 40" West a distance of 387.79 feet; South 43° 11' 52" East a distance of 201.49 feet; Southeasterly 246.88 feet along the arc of a curve to the left having a radius of 240.00 feet, a central angle of 58° 56' 16" and a long chord bearing South 73° 52' 13" East a distance of236.14 feet; North 76° 39' 39" East a distance of 91.08 feet; Southeasterly 163.00 feet along the arc of a curve to the right having a radius of 135.00 feet, a central angle of 69° 18' 21" and a long chord bearing South 69° 41' 10" East a distance of 153.52 feet; South 34" 01' 59" East a distance of 18.18 feet to a point on the South boundary of the SE/4 NE/4 witnessed by a found 5/8 inch diameter rebar with a plastic cap stamped L.S.3627 bearing South 89" 55' 42" West a distance of 15.00 feet; thence South 89° 55' 42" West along the South boundary of the SE/4 NE/4 a distance of 422.19 feet to the Southwest comer of the SE/4 NE/4, a 3 x 30 inch aluminum pipe monument set with a 3.25 inch aluminum cap stamped L.S. 3627; thence South 00° 18' 14" East along the East boundary of the NW/4 SE/4 a distance of 1319.25 feet to the Southeast comer of the NW/4 SE/4, a 5/8 x 30 inch rebar set with a 2.5 inch aluminum cap stamped L.S. 3627; thence South 00° 18' 14" East along the East boundary of the SW/4 SE/4 a distance of 1319 .93 feet to the Southeast comer of the SW/4 SE/4, a found G.L.O brass cap 15 inches below the road surface over which is set a 3 x 30 inch aluminum pipe monument with a 3.25 inch aluminum cap stamped L.S. 3627 at the surface; thence South 89° 46' 16" West along the South boundary of the SW/4 SE/4 a distance of 1307 .45 feet to the POINT OF BEGINNING; EXCEPTING THEREFROM the following described parcel: This parcel is a portion of the SW/4 NE/4 and the NW/4 SE/4 more particularly described as follows: COMMENCING at the Southwest comer of the SW/4 NE/4 (C I/4 Comer, Section 25 a found 2 inch aluminum cap monument; thence North 89° 55' 42" East along the South boundary of the SW/4 NE/4 a distance of 530.01 feet to the TRUE POINT OF BEGINNING; thence North 01 ° 52' 26" East a distance of 57.72 feet to a 1/2 x 24 inch rebar set with a plastic cap stamped L.S. 3627; thence North 07° 45' 57" East 52.25 feet to a l/2 x 24 inch rebar set with a plastic cap stamped L.S. 3267; thence Northeasterly 64.13 feet along the arc of a curve to the right having a radius of 189.00 feet, a central angle of 19° 26' 31" and a long chord bearing North 16° 53' 11" East a distance of 63.83 feet to a 1/2 x 24 inch rebar set with a plastic cap stamped LS. 3627; thence North 24° 36' 27" East a distance of 54.72 feet to a 1/2 x 24 inch rebar set with a plastic cap stamped L.S. 3627; thence North 29" 3 2' 07" East a distance of 65.59 feet to a 1/2 x 24 inch rebar set with a plastic cap stamped L.S. 3627: thence Northeasterly 102.09 feet along the arc of a curve to the right having a radius of 642.00 feet, a central angle of 09° 06' 40" and a long chord bearing North 34° 52' 06" East a distance of 101.98 feet; thence Northeasterly 97.67 feet along the arc of a curve to the right having a radius of 143.00 feet, a central angle of 39° 07' 59" and a long chord bearing North 69° 15' 17" East a distance of 95.78 feet; thence North 86° 49' 52" East a distance of 52.02 feet to a 1/2 x 24 inch rebar set with a plastic cap stamped L.S.3627; thence South 00° 40' 31" West a distance of 451.51 feet to a 1/2 x 24 inch rebar set with a plastic cap stamped L.S. 3627; thence North 51° 31' 23" West a distance of 60.44 feet to a 1/2 x 24 inch rebar set with a plastic: cap stamped L.S. 3627; thence South 87° 55' 06" West a distance of 230.73 feet to a 1/2 x 24 inch rebar set with a plastic cap stamped L.S. 3627; thence North 01° 52' 26" East a distance of 24.44 feet to the TRUE POINT OF BEGINNING. SUBJECT to an easement for ingress/egress and utility purposes over and across the following described tract for the benefit of the remaining lands of the grantor BEGINNING at the Southwest comer of the SW/4 NE/4, {C 1/4 Comer, Section 25), a found 2 inch aluminum cap monument; thence North 89° 55' 42" East along the South boundary of the SW/4 NE/4 a distance of 535.00 feet; thence South 00° 06' 18" East parallel with the West boundary of the NW/4 SE/4 a distance of 30.00 feet; thence South 89° 55' 42" West parallel with the North boundary of the NW/4 SE/4 a distance of 490.00 feet; thence South 44° 54' 42" West a distance of 42.41 feet; thence South 00° 06' 18" East parallel with the West boundary of the Northwest Quarter of the Southeast Quarter a distance of 1261.35 feet to a point on the South boundary of the NW/4 SE/4, thence South 89° 50' 04" West along the South boundary of the NW/4 SE/4 a distance of 15.00 feet to the Southwest corner of the NW/4 SE/4, a mag nail set with an aluminum washer stamped L.S. 3627; thence South 89° 51' 02" West along the South boundary of the N/2 SW/4 a distance of 30.00 feet; thence North 26° 27' 04" East a distance of 33.55 feet; thence North 00°' 061 18" West parallel with the East boundary of the N/2 SW/4 a distance of 1291.40 feet to a point on the North boundary of the N/2 SW/4; thence North 89° S6' 23" East a distance of 15.00 feet to the TRUE POINT OF BEGINNING. ALSO EXCEPTING THEREFROM: This parcel is a portion of the SE/4 NE/4 being more particularly described as follows: BEGINNING at the southwest corner of the SE/4 NE/4 (CE 1/16 Corner, Section 25), a 2 ½ inch diameter aluminum cap monument; thence North 00 ° 18' 35" West along the west boundary of the SE ¼ NE ¼ a distance of 79.29 feet to a point on the centerline of the Notus Canal; thence traversing said centerline as follows: Southeasterly 187.85 feet along the arc of a curve to the Left having a radius of 240.00 feet and a central angle of 44 ° 50' 48" and a long chord which bears South 80° 54' 57'' East a distance of 183.09 feet; North 76° 39' 39" East a distance of 91.08 feet; Southeasterly 163.30 feet along the arc of a curve to the Right having a radius of 135.00 feet and a central angle of 69° 18' 21" and a long chord which bears South 68° 41' 10" East a distance of 153.52 feet; South 34 ° 01' 59" East a distance of 18.18 feet to a point on the south boundary of the SE/4 NE/4; thence South 89° 55' 42" West along said south boundary a distance of 422.19 feet to the POINT OF BEGINNING, containing .54 acres, more or less.

Exhibit B - Plat of Proposed Unit

Section 25-T5N-R4W
Canyon County, Idaho

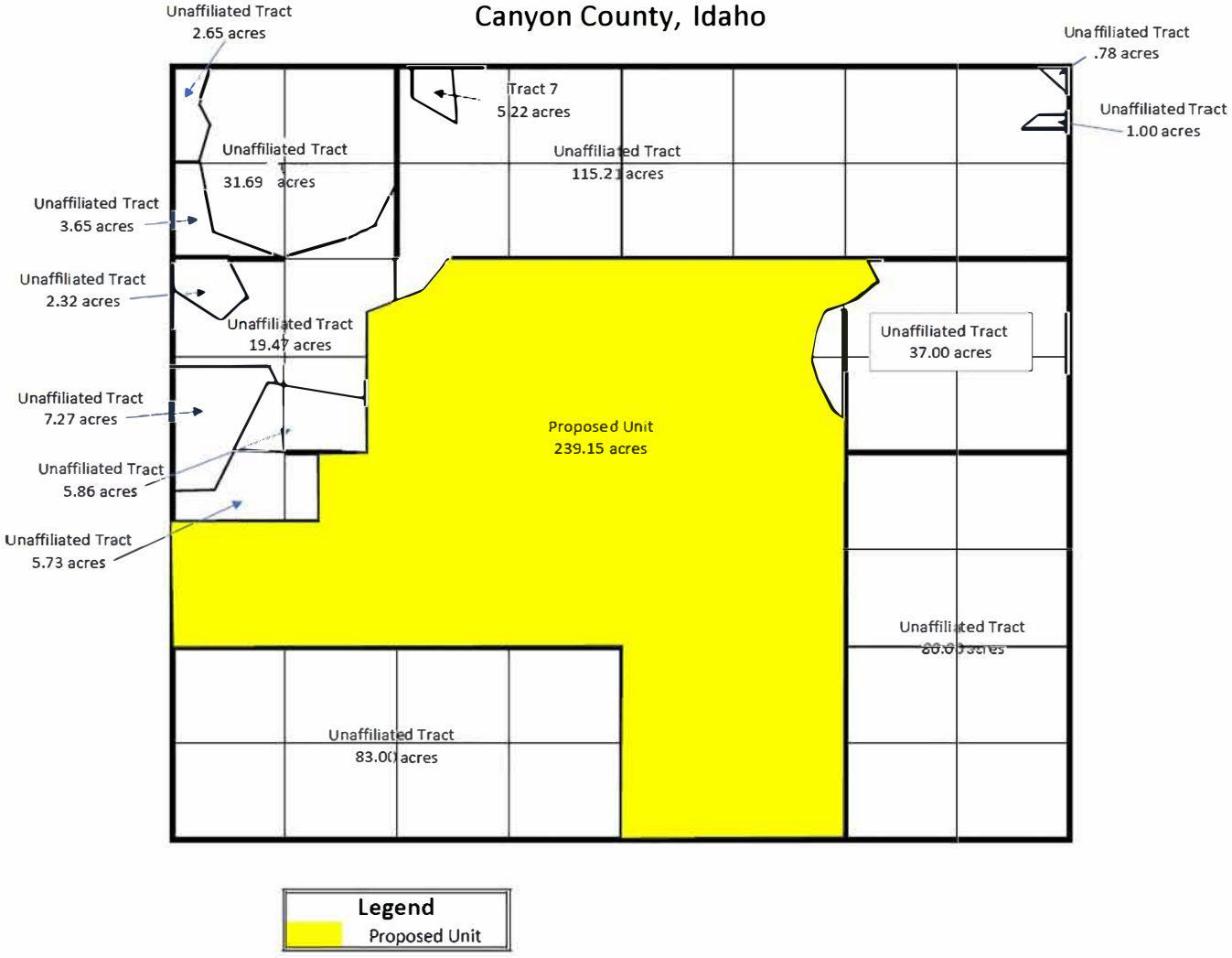


Exhibit C – Mineral Owners in Proposed Unit

Mineral Owner	Mineral Interest	Gross Acres	Net Acres	Leased (y/n)	Lessee	Lessor
Marchbanks Properties	100%	239.15	239.15	Yes	Cascade Exploration, LLC	Marchbanks Properties

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 239.15 net acres on lands situated in Section 25, Township 5 North, Range 4 West, Canyon County, Idaho	)	Docket No. CC-2025-OGR-01-003
Cascade Exploration, LLC as Applicant	)	

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 Section 25, 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 the pertinent Paid Up Subsurface Lease Agreement (the "Lease") or a summary of Cascade's mineral ownership are available and 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(Docket No. CC-2025-OGR-01-003).

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: June 30, 2025

Bronson Barrett

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 239.15 net acres on lands situated in Section 25, Township 5 North, Range 4 West, Canyon County, Idaho	)	Docket No. CC-2025-OGR-01-003
Cascade Exploration, LLC as Applicant	)	

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 Drilling Engineer with 20+ years of experience in the oil and gas industry, 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, and 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 and overseeing drilling operations for exploratory projects such as the proposed stratigraphic Test Well in Section 25, 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 investment and minimal surface impact compared to drilling full-fledged production wells across a broad area.

3. The proposed Test Well in Section 25 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 sustained 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 have 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.

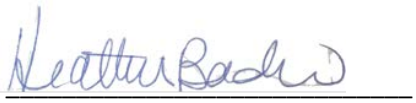
5. Although the Test Well will not produce oil or gas, the geological and petrophysical data collected will be crucial for planning any future development in this area. For instance, if the stratigraphic test confirms the presence of a reservoir with sufficient thickness and permeability, Cascade (or 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 239.15 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: June 30, 2025



Heather Bader