

**SMITH + MALEK**  
ATTORNEYS

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Admitted in Idaho

May 26, 2020

Via Email & Hand Delivery

Mick Thomas, Administrator  
Minerals, Public Trust, and Oil and Gas Division  
Idaho Department of Lands  
c/o Kourtney Romine  
300 N. 6<sup>th</sup> Street, Suite 103  
Boise, ID 83702

**Re: Application of Snake River Oil and Gas, LLC to establish a spacing consisting the SE ¼ of Section 10, the SW ¼ of Section 11, the NW ¼ of Section 14, and the NE ¼ of Section 15, Township 8 North, Range 5 West, Boise Meridian, Payette County, Idaho**

**IOGCC Docket No: CC-2020-OGR-01-01-002**

Dear Administrator Thomas:

Pursuant to Idaho Code §47-318 and §47-328, Snake River Oil and Gas, LLC (“Applicant”), hereby applies for a spacing order consisting of the SE ¼ of Section 10, the SW ¼ of Section 11, the NW ¼ of Section 14, and the NE ¼ of Section 15, Township 8 North, Range 5 West, Boise Meridian, Payette County.

1. Size, shape and location of unit (Idaho Code § 47-318 (1), (2), (3)): Applicant requests a spacing order establishing an approximately 640 acre spacing unit consisting of the SE ¼ of Section 10, the SW ¼ of Section 11, the NW ¼ of Section 14, and the NE ¼ of Section 15, Township 8 North, Range 5 West, Boise Meridian, Payette County, which is a default drilling unit configuration for vertical gas wells set forth in Idaho Code §47-317(3)(b). Based on the information available to Applicant following seismic exploration of the area, and the drilling, completion and testing of the nearby Barlow #1-4 and Fallon #1-10 wells, the requested unit will result in the efficient and economical development of the pool, and is not smaller than the maximum area that can be efficiently and economically drained by one well. The shape of the unit is described by reference to the public land survey system, best matches the expected drainage area.

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2. Proposed unit is not smaller than the maximum area that can be efficiently and economically drained by one (1) well (Idaho Code § 47-318(2)): The Declaration of David Smith, setting forth facts supporting the conclusion that the proposed unit is not smaller than the maximum area that can be efficiently and economically drained by one well, is filed herewith.

3. No more than one well and location of well (Idaho Code § 47-318(4)): Pursuant to Idaho Code § 47-318(4), Applicant requests that the order establishing the spacing unit direct that no more than one (1) well shall be drilled to and produced from the common source of supply for the unit. A previous operator applied for a permit to drill the Fallon #1-11 in the proposed unit area, and Applicant anticipates filing a similar application upon spacing and any necessary integration of the proposed unit area.

4. Notice (Idaho Code §§ 47-317, 47-318, 47-328): Idaho Code § 47-318 does not provide for either application content or notice regarding an application to establish a spacing unit. Idaho Code § 47-328(3) provides: “Except as provided in section 47-316(1)(a), Idaho Code, and subsection (2) of this section, any request for an order related to oil and gas activities within the commission’s jurisdiction, other than a civil penalty proceeding pursuant to section 47-329, Idaho Code, or other enforcement action by the department of lands or the commission, shall be made by application to the department of lands and processed as provided in this section.” However, § 328 does not specifically address notice regarding applications for well spacing orders. Idaho Code § 47-328(3)(b) provides for notice requirements in the case of “applications involving an order regarding unit operations or integration of a drilling unit.” The reference to “unit operations” clearly refers to an application pursuant to Idaho Code § 47-321 (entitled “Unit Operations”) for an order allowing “unit operation of an entire pool or portion thereof, to increase ultimate recovery of oil and gas from that pool or portion thereof,” including potentially across multiple spacing units. Similar to an integration order, an order for unit operations under § 321 addresses operations within the defined unit area, including allocation of production within the unit, designation of an operator, and allocation of the risk and expenses of operation. This is distinct from drilling and spacing unit applications, which address unit configuration in relation to economic and efficient drainage area, not operations and allocation of production. Thus, §328(3)(b) does not apply to this application.<sup>[1]</sup>

If this application were treated as one for a drilling location pursuant to Idaho Code § 47-317, notice would be required as follows: “In addition to any other notice required by statute or rule, the operator shall provide notice of the proposed drilling unit by certified mail to all uncommitted owners within the proposed drilling unit.” Idaho Code § 47-317(3)(d). Applicant finds no other reference to additional notice requirements related to drilling or spacing unit applications within Idaho Code Title 47, Chapter 3. Applicant finds no provision of IDAPA 04.11.01 requiring it to provide notice to additional persons; IDAPA 04.11.01.158 provides for “interested persons” to request notice after a proceeding is commenced, and for the agency to serve notice on such persons.

Because of the lack of clarity in the statute, and in an exercise of caution in light of

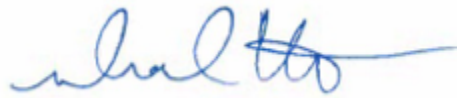
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the proceedings related to similar applications of the prior operator related to the existing Fallon #1-10 well to the west, Applicant will provide notice of this application by certified mail to all uncommitted mineral interest owners in the proposed spacing unit area, unless directed otherwise by the Department. While Idaho Code §§ 47-317, 47-318, and 47-328 provide no instruction as to the timing of notice for any application *not* subject to § 328(3)(b), again in an exercise of caution, Applicant will make such mailings within seven (7) days of the date of the filing of this application.

Applicant requests that the resulting Order of the Administrator be made applicable to any successor or assignee of all parties subject to the Order.

Sincerely,

SMITH+MALEK, PLLC



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MICHAEL R. CHRISTIAN

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[1] In addition, because an application for spacing potentially could cover an entire field, certified or regular mailing to every mineral interest owner over a several square mile area would be impractical and possibly prohibitively expensive.

**BEFORE THE OIL AND GAS CONSERVATION COMMISSION  
STATE OF IDAHO**

**In the Matter of Application of Snake River Oil )  
and Gas, LLS for Spacing Unit Consisting of the )  
SE ¼ of Section 10, the SW ¼ of Section 11, the )  
NW ¼ of Section 14, and the NE ¼ of Section 15, )  
Township 8 North, Range 5 West, Boise )  
Meridian, Payette County, Idaho )**

Docket No. CC-2020-OGR-01-002

**SNAKE RIVER OIL AND GAS, LLC, )  
Applicant. )  
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)  
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)**

**DECLARATION OF DAVID M. SMITH**

STATE OF TEXAS            )  
  ) ss  
County of Harris            )

I, David M. Smith, declare:

1. I have over 36 years' experience in domestic and international exploration, development and acquisitions/divestitures of oil and gas properties. I have been involved in Idaho oil and gas exploration since 2012. I worked in exploration at Paramount Petroleum and Torch Energy Advisors, Inc., and served as the Exploration Manager for Bellwether Exploration Company. I earned my Bachelor of Science in Geology from Virginia Tech. Included in my responsibilities are managing geophysical exploration, interpreting data from 2-D and 3-D seismic projects, identifying and evaluating likely pools based on interpretation of seismic data, and selecting drilling targets based on such interpretation and evaluation.

2. I designed and supervised the acquisition of a 3-dimensional (3-D) seismic survey with specific parameters to explore for oil and gas reservoirs, appropriate to the challenges of this sedimentary basin. The sediments are often complexly faulted. There are also numerous basalt flows, dikes and sills present in the subsurface. These conditions complicate geologic interpretations from geophysical data.

3. I interpreted these seismic data from a project which covered several sections in Township 8 North, Range 5 West, Payette County, Idaho, including the SE ¼ of Section 10, the SW ¼ of Section 11, the NW ¼ of Section 14, and the NE ¼ of Section 15 (“the subject spacing unit”).

4. The proposed well in the SE ¼ of Section 10 is a wildcat test targeting presumed sands in the Idaho Group. It is located in the northwestern part of the Western Snake River Plain (WSRP), a late Miocene-aged intra-cratonic rift basin. The basin is lightly explored, however numerous exploratory tests and shallow water wells have shows of natural gas.

5. The target reservoir sections are fluvial and lacustrine sands within the Poison Creek and Chalk Hills formations of the Idaho Group. These formations are the early sediments deposited in the WSRP as it began its downwarping and faulting. Potential top seal could be provided by claystones and tuffaceous silts of the overlying Glenn’s Ferry formation. These sediments represent later, deeper water lacustrine facies, deposited as the basin subsidence continued. Potential source rocks are dark gray carbonaceous shales and coals found in some of the deeper area wells (Chevron James #1, Champlin Deer Flat #11-19, etc.).

6. Local well control suggests significant variability of porosity, permeability and sand thickness in the target section. The Bridge May #1-13 well (1.9 miles east of the proposed

target) was drilled to 6512' and plugged and abandoned as a dry hole. It encountered a 40' sand at 3650' with average porosity of 15-20%. From 3700' to 4960', the well encountered various thin sands in an interval dominated by tuffaceous gray shales and siltstones (85%). The sands vary in porosity, but average 20-24%. The well encountered basalt from 4960' to 5200', below that, other sands were encountered with porosities of 18–24%. All of these sands were wet with none tested, and the well was plugged and abandoned.

7. 1.8 miles WSW of this prospect, Ore-Ida Foods drilled a geothermal test to 10,024'. The objective section in this well is dominated by gray claystone and siltstone, with subordinate amounts of sandstone.

8. 1.3 miles WNW of this prospect AM Idaho drilled the Fallon #1-10 well to 5434' MD. This well logged and tested gas condensate pay in Sand B @ 3815'-3835' MD. Sand D was encountered water bearing @ 4180-4244' MD.

9. One half mile to the south of this prospect AM Idaho drilled the Barlow #1-14 well to 4150' MD. This well logged pay and tested gas condensate from Sand D @ 3503'-3512'.

10. This prospect is targeting a presumed structural trap defined by seismic data. The top of the prospective section is expected to be approximately 3590' TVD. 3-D seismic data locates this prospective trap in the SE ¼ of Section 10, SW ¼ of Section 11, NE ¼ of Section 15 and NW ¼ of Section 14. Based on rigorous interpretation of the seismic data, I conclude that a unit encompassing the above described quarter sections is the best fit to cover the lands underlain by the presumed pool at the objective sand D, and that the proposed 640 acre unit is not smaller than the maximum area that could be efficiently and effectively drained by one well. The test well would be located near the center of the unit, in the SE ¼ of the SE ¼ of Section 10. My

interpretation of 3-D seismic data leads me to conclude that the target sand's down dip productive limit is likely contained within the proposed unit area. See the "Unit B: Amplitude Map Sand D" attached hereto as Exhibit A.

11. Seismic data indicates that the target Sand D reservoir is located in a separate fault block from the Sand D reservoir seen in the Barlow #1-14 well. The two reservoirs are separated by a down to the north fault with approximately 150' to 200' of throw, as clearly delineated by 3-D seismic.

12. In particular, the target sand D's productive limit likely does not extend into the remainder of Section 14 because of the faulting; thus, a unit overlapping the existing integrated drilling unit covering the entirety of Section 14, is appropriate, and mineral owners in the NW ¼ of Section 14 will be included in two units. Results from testing and production from similar sands to the east in the Willow-Hamilton area, as well as in this area, suggest that the pool likely will produce primarily a combination of natural gas and gas condensate, making a gas unit, limited on the east as described above, appropriate.

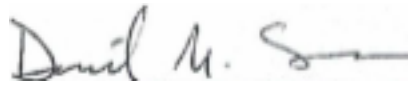
13. The primary Sand D to be targeted in the proposed unit correlates with a 40' sand encountered in the Bridge May #1-13 well (1.9 miles east of the proposed target) between 3650' and 3690' measured depth, where it is water bearing.

14. Based upon my review of the seismic data acquired in the area of the proposed unit, and based upon the similarity of the characteristics of the seismic data to the characteristics of seismic data acquired in the area of the Willow-Hamilton field and this area where we have drilled wells, in my opinion Sand D is likely prospective for hydrocarbons in the area of the proposed

unit. In the area of the proposed unit, the top of the prospective section is expected to be approximately 3590' TVD.

15. 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 this 26th day of May, 2020.

A handwritten signature in black ink, appearing to read "David M. Smith", is positioned above a horizontal line.

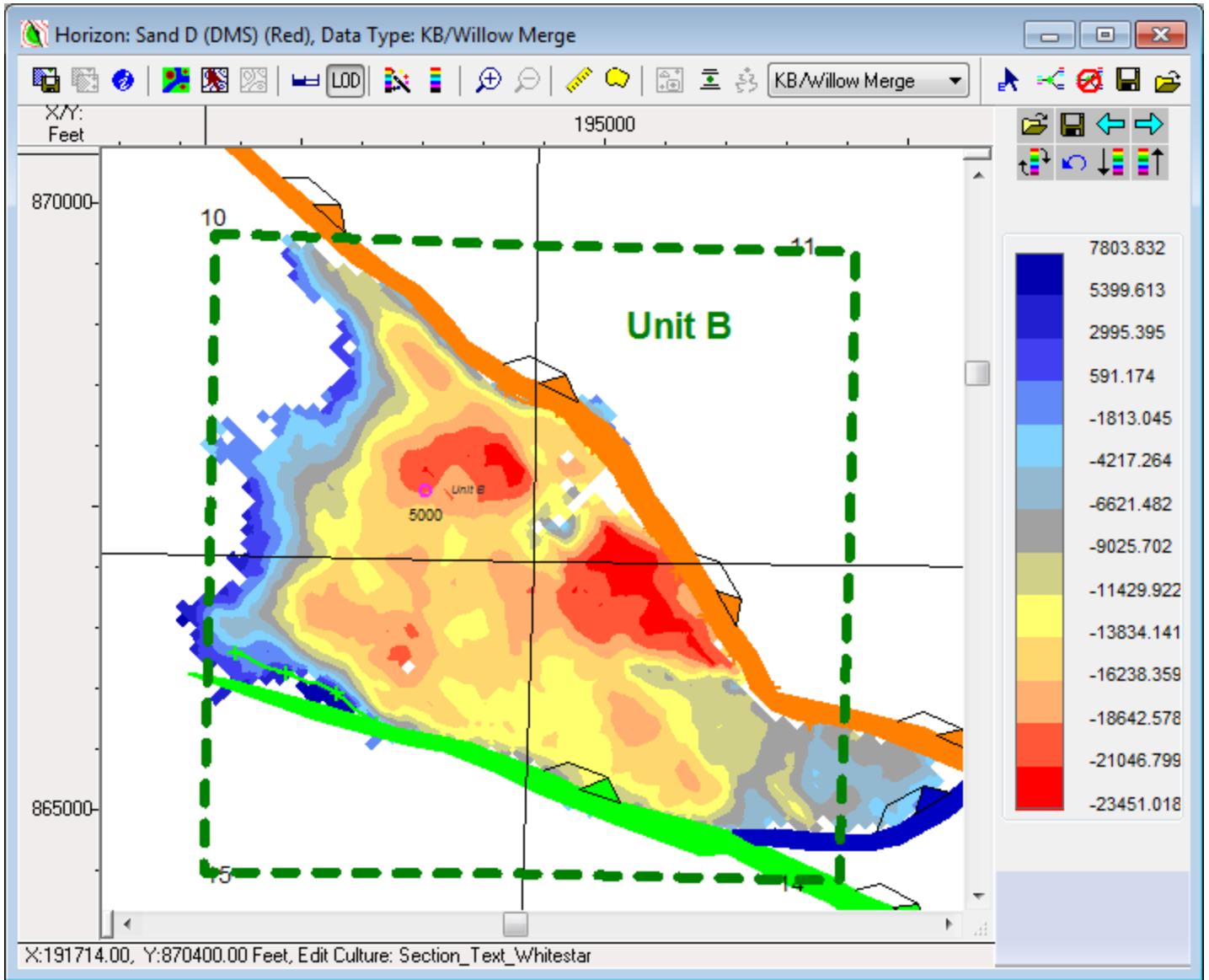
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David M. Smith



# EXHIBIT A

## Unit B: Amplitude Map Sand D



Scale: 1:12,000