

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

**In the Matter of Application of Snake River Oil )  
and Gas, LLC, for an order establishing a )  
spacing unit for Fallon #1-10 well consisting of )  
the E ½ of the SE ¼ of Section 9, SW ¼ of )  
Section 10, N ½ of the N ½ of the NW ¼ of )  
Section 15, and the N ½ of the NE ¼ of the NE )  
¼ of Section 16, Township 8 North, Range 5 )  
West, Boise Meridian, Payette County, Idaho )  
)  
**SNAKE RIVER OIL AND GAS, LLC, )  
Applicant. )  
)****

Docket No. CC-2020-OGR-01-001

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**SUPPLEMENTAL DECLARATION OF JAMES L. ALLEN**

STATE OF TEXAS            )  
  ) ss  
County of Harris            )

James L. Allen declares:


1. I am a geophysicist consulting for the Applicant, Snake River Oil and Gas, LLC.
2. I make this declaration to supplement my initial declaration filed in this matter.
3. There is a significant variability of presence, thickness, porosity and permeability of sands in the target section. A geologic cross section, attached hereto as Exhibit A, correlates the Ore-Ida #1 well, the Fallon #1-10 well, the Barlow #1-14 well, and the Bridge May #1-13 well. The well log sections are displayed west to east. The cross section shows the variation in sand thickness and quality for the Fallon A and B Sands, and the Barlow Sand (present in the Barlow

#1-14 well) across a distance of four miles. Siltstones predominate the section above the Barlow Sand, but the high-porosity, high-permeability Fallon B Sand has a significant presence. To the east of the Barlow well, claystone predominates above the Barlow Sand.

4. Attached hereto as Exhibit B is a cross section based on seismic information, oriented northwest to southeast, illustrating the extent of the Fallon Sand B reservoir tank below the gas-water contact in the Fallon #1-10 reservoir, and suggesting why the reservoir may be water-drive. The volume of the reservoir tank is considerably larger than that mentioned in my original declaration, where I stated it could be 126,000 ac-ft. That figure was based on a pinchout of the sand to the northeast and southeast, a fault on the southwest, and a syncline on the northwest. Remapping the Fallon sand demonstrated that the syncline does not cut off the reservoir volume. Instead, the sand unit extends downdip to the end of the 3D data, as illustrated on the NW-SE seismically-derived cross-section. Assuming the sand thickness and porosity continue to the northwest provides a total volume at least 200,000 ac-ft. with the ultimate size unknown. This volume size is comparable to that of the reservoir tank for the Kaufman #1-34 well. However, this does not affect my conclusions regarding the likely drainage area for the Fallon #1-10 well, because the extension of the reservoir tank to the northwest is below the gas-water contact level.

5. 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 28th day of February, 2020.

  
\_\_\_\_\_  
James L. Allen

# A

## EXHIBIT A

# A'

West



7500 ft.



8100 ft.



6600 ft.



East




### Cross-Section Harmon Field, Idaho Snake River Oil & Gas

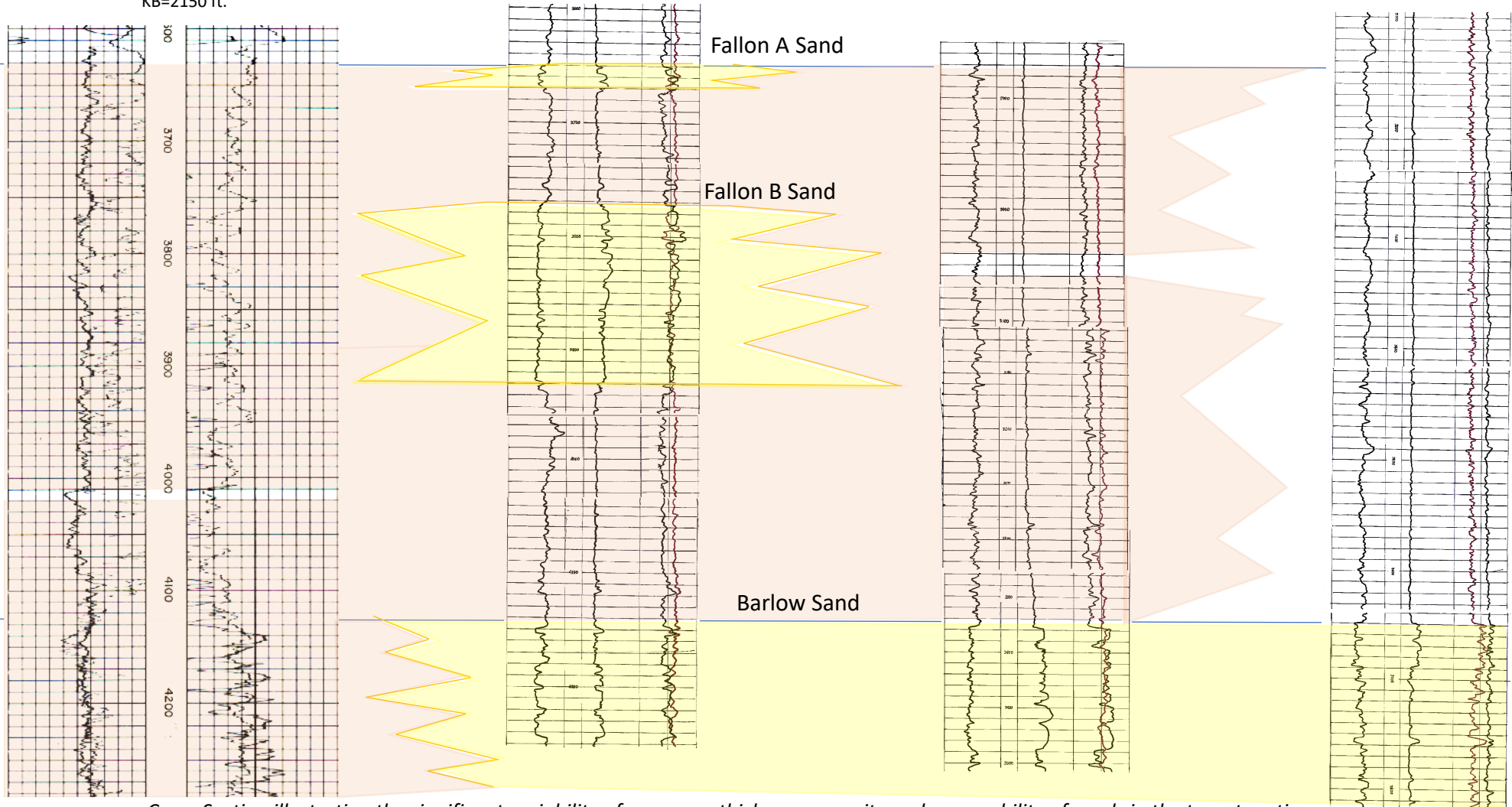
36-045-90001-0000  
Sec. 3, T18S, 47E, OREGON  
ORE-IDA FOODS  
ORE-IDA #1  
KB=2150 ft.

11-075-20032-0000  
Sec. 10, T8N, 5W, IDAHO  
SNAKE RIVER O&G  
FALLON #1-10  
KB=2300 ft.

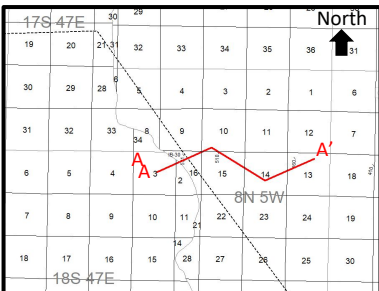
11-075-20033-0000  
Sec. 14, T8N, 5W, IDAHO  
SNAKE RIVER O&G  
BARLOW #1-14  
KB=2178 ft.

11-075-20017-0000  
Sec. 13, T8N, 5W, IDAHO  
BRIDGE ENERGY  
MAY #1-13  
KB=2187 ft.

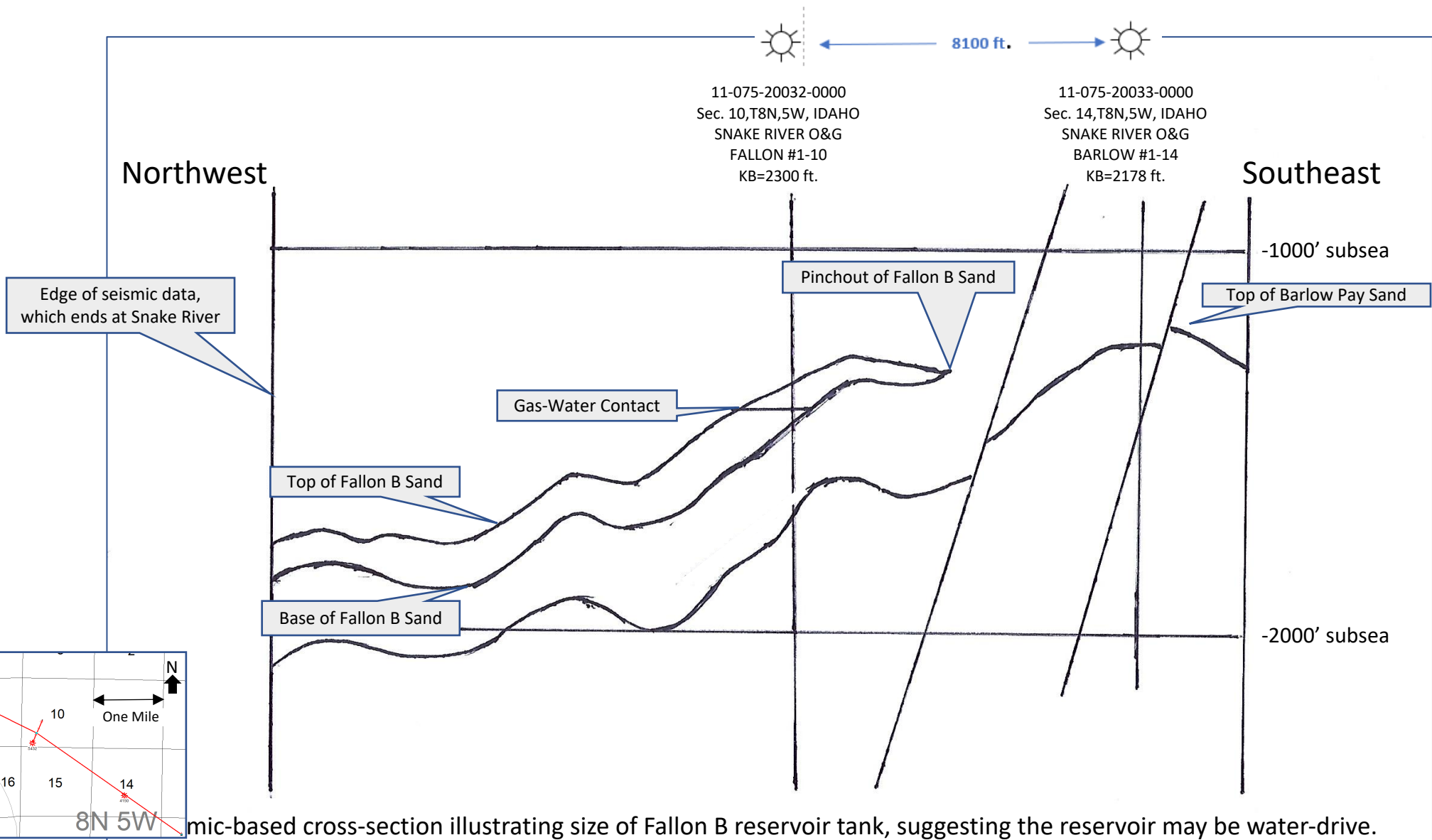
-  Sandstone
-  Siltstone
-  Claystone



#### Index Map



Cross-Section illustrating the significant variability of presence, thickness, porosity and permeability of sands in the target section.



Seismic-based cross-section illustrating size of Fallon B reservoir tank, suggesting the reservoir may be water-drive. The tank extends northwesterly from the well to the edge of the 3D seismic data at the OR-ID border but pinches out southeast of the Fallon 1-10 well between it and the Barlow 1-14 well.

**EXHIBIT B**