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April 29, 2024

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Boise, Idaho 83702  
Email: [jthum@idl.idaho.gov](mailto:jthum@idl.idaho.gov)

Re: Docket No. CC-2024-OGR-01-001; Application for order to establish spacing unit consisting of the NE ¼ of Section 9 and the NW ¼ of Section 10, Township 8 North, Range 5 West, Payette County, Idaho

Dear James:

Pursuant to Idaho Code §47-317 and §47-328, Applicant Snake River Oil and Gas, LLC (“Applicant”) submits<sup>1</sup> this application for an order establishing a gas spacing unit consisting of the NE ¼ of Section 9 and the NW ¼ of Section 10, both in Township 8 North, Range 5 West, Payette County, Idaho. This application is based on the following:

1. Idaho Code §47-317(1): 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 on a statewide basis, or for defined areas within the state, or for oil and gas wells drilled to varying depths.

Applicant proposes a spacing unit consisting of the defined area of NE ¼ of Section 9 and the NW ¼ of Section 10, both in Township 8 North, Range 5 West, as illustrated on the plat map attached hereto as **Exhibit A**. The uncommitted mineral owners in the proposed unit area are set forth in the exhibit attached hereto as **Exhibit B**.

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<sup>1</sup> I am submitting this application to you as the Department’s Program Manager for Oil & Gas, as the position of Administrator for Minerals, Navigable Waters, and Oil & Gas is currently vacant.

As set forth in the Declaration of Richard Brown attached hereto as **Exhibit C**, Applicant is an “interested person” for purposes of Idaho Code § 47-317(1) by virtue of currently holding approximately 83.6875% of the net mineral acres in proposed spacing unit area by lease. Applicant is an “owner” as defined by Idaho Code § 47-310(27) as to each tract leased by it in the proposed spacing unit area, as by virtue of each lease Applicant is “the person who has the right to drill into and produce from a pool and to appropriate the oil and gas that he produces therefrom, either for himself or for himself and others.”

As set forth in the Declaration of David Smith attached hereto as **Exhibit D** and discussed below, Applicant submits that the proposed spacing unit configuration will prevent waste, avoid the drilling of unnecessary wells and protect correlative rights.

2. Idaho Code § 47-317(2): 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 established by the department shall be geographic. The geographic boundary of the unit shall be 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.

As set forth in Exhibit D, Applicant submits that the proposed spacing unit will result in the efficient and economical development of the pool as a whole. The proposed spacing unit is geographic and described in accordance with the public land survey system, and within that requirement describes the area that can be efficiently and economically drained by one well for the orderly development of the pool.

A standard spacing unit consisting of either all of Section 9 or all of Section 10 would not accomplish the orderly development of the pool or describe the area that can be economically or efficiently drained by one well, as large areas of either unit would be outside the drainage area of an anticipated well targeting Sand D. Compensation to owners of those areas would injure the correlative rights of owners of the minerals within the drainage area of the well. “Correlative rights” are defined in the Act to mean “the opportunity of each owner in a pool to produce his just and equitable share of oil and gas in a pool without waste.” Idaho Code § 47-310(8). Additionally, development according to standard spacing would result in inefficient drainage, could diminish the quantity of hydrocarbons ultimately produced from Sand D, and require unnecessary additional wells, causing waste. Idaho Code § 47-310(36)(a).

The proposed unit area is described by geographic subdivision as required by Idaho Code § 47-317(2). The proposed unit area is not required to exactly describe the outlines of the sand to be tested and produced. Idaho Courts in other states have erred on the side of the inclusion of questionable acreage when confronted with claims of barren acreage within a spacing unit. *See Amoco Production Co. v. Ware*, 602 S.W.2d 620 (Ark. 1981).

3. Idaho Code § 47-328(3)(b): For applications involving an order regarding establishment or amendment of 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. The mailing shall be sent by certified mail within seven (7) days of filing the application and include notice of the hearing date on which the administrator will consider the application. For any uncommitted owners and working interest owners who cannot be located, an applicant shall publish notice of any application for an order, notice of hearing and response deadline once in a newspaper of general circulation in the county in which the affected property is located and request the department publish notice on its website within seven (7) days of filing of the application.

Within seven days of the filing of this Application, Applicant will mail a copy of this application and its supporting exhibits, along with a notice of the hearing date on which the Administrator will hear the application according to the Department's regular hearing schedule, to all uncommitted mineral interest owners in the proposed spacing unit area, as listed on Exhibit B, as well as to all uncommitted mineral interest owners in properties contiguous with the proposed spacing unit area.<sup>2</sup> Applicant will separately file copies of mailing receipts with the Department following the mailing.

There are no unknown or unlocatable mineral interest owners in the proposed unit area, or as to the tracts immediately adjacent to the proposed unit area.

Applicant requests that this application be heard at the next regularly scheduled administrative hearing date listed on the Department's website, June 13, 2024.

Very truly yours,  
HARDEE, PINOL & KRACKE, PLLC



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Michael Christian

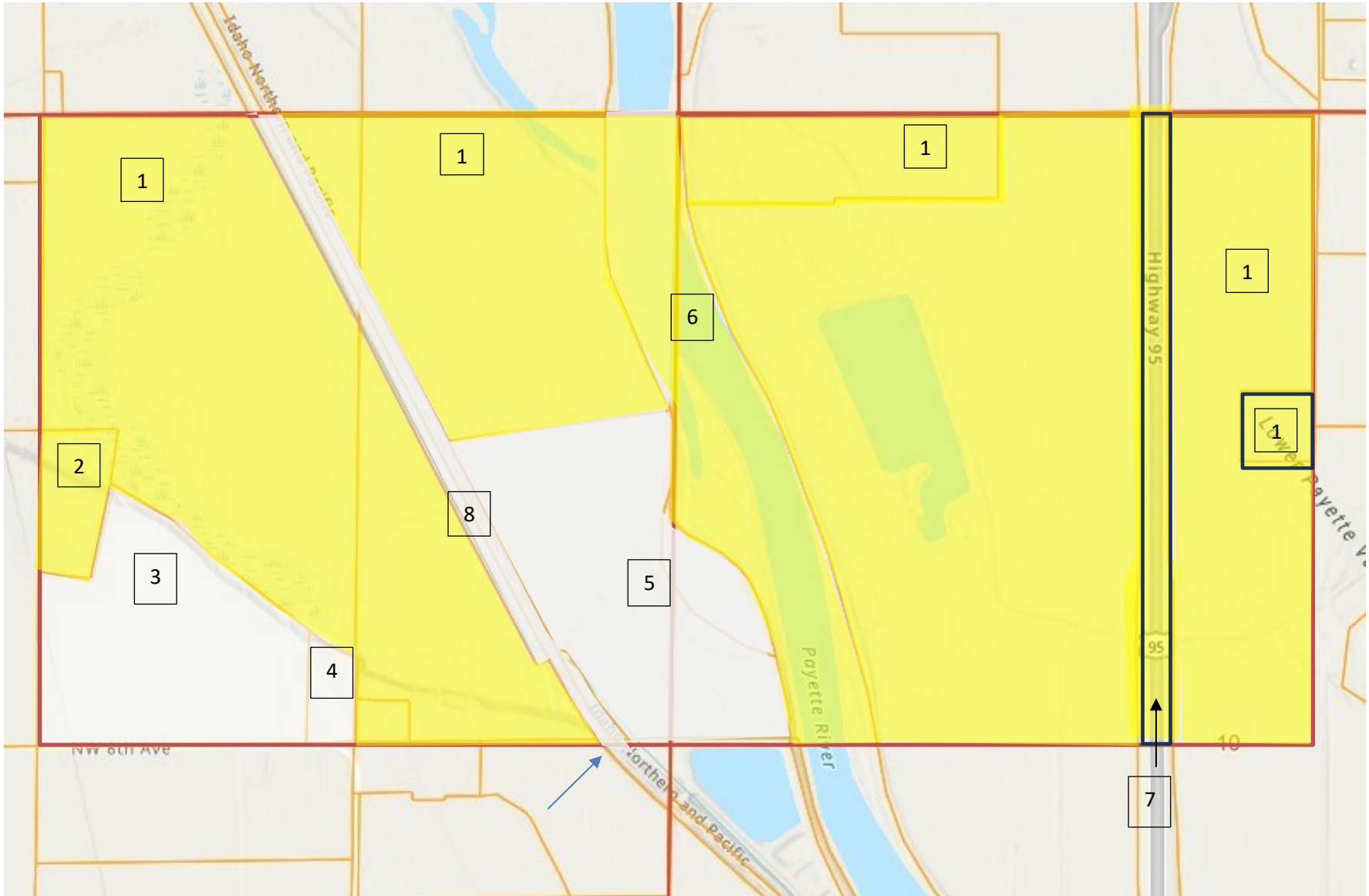
Attachments: Exhibit A (plat map)  
Exhibit B (list of mineral owners)  
Exhibit C (Declaration of Richard Brown)  
Exhibit D (Declaration of David Smith)

cc: Snake River Oil and Gas, LLC

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<sup>2</sup> § 328(3)(b) does not require notice to mineral owners outside the proposed unit area, but in an exercise of caution Applicant is noticing those uncommitted owners of tracts contiguous to the proposed unit area not already receiving notice by virtue of owning property inside the proposed unit area.

**EXHIBIT A**  
**The Northeast Quarter of Section 9 and The Northwest Quarter of Section**  
**10 Township 8 North, Range 5 West.**



**EXHIBIT B**

	Gross Acres		Open Net Acres	Leased Net Acres		Leased %	
	320		52.2	267.8		0.836875	
Map #	Tract	Parcel	Mineral Owner / Lessor	Current Lessee	Gross Acres	Interest	Net Acres
#1	08N05W-9&10-001	0316000100C; 03160008000A; 03160011000A; 03780009000A; 03780009000B	Fallon Enterprises Larry James		235.37	1	235.37
				Total Net Acres 235.37	Total Open Acres 0	Total Leased Acres 235.37	Total Leased % 100
#2	08N05W-9&10-002	37800160000	Garman & Sons, Inc.		4.1	1	4.1
				Total Net Acres 4.1	Total Open Acres 0	Total Leased Acres 4.1	Total Leased % 100
#3	08N05W-9&10-003	03780017000A	Fern Marie Robinette		20	1	20
				Total Net Acres 20	Total Open Acres 20	Total Leased Acres 0	Total Leased % 0
#4	08N05W-9&10-004	03780019000A	Robert and Sue Hewett		1.8	1	1.8
				Total Net Acres 1.8	Total Open Acres 1.8	Total Leased Acres 0	Total Leased % 0
#5	08N05W-9&10-005	F316000700A; F00000109997; F3780020000A	City of Fruitland		25.4	1	25.4
				Total Net Acres 25.4	Total Open Acres 25.4	Total Leased Acres 0	Total Leased % 0
#6	08N05W-10-006		Payette River		17.88	1	17.88
				Total Net Acres 22.8	Total Open Acres 0	Total Leased Acres 22.8	Total Leased % 100
#7	08N05W-9&10-007		Highway 95		7.2	1	7.2
				Total Net Acres 7.2	Total Open Acres 0	Total Leased Acres 7.2	Total Leased % 100
#6	08N05W-9&10-008		Payette River		3.25	1	3.25
				Total Net Acres 3.25	Total Open Acres 0	Total Leased Acres 3.25	Total Leased % 100
#8	08N05W-9&10-009		Idaho Northern & Pacific Railroad		5	1	5
				Total Net Acres 5	Total Open Acres 5	Total Leased Acres 0	Total Leased % 0

EXHIBIT C

BEFORE THE IDAHO DEPARTMENT OF LANDS

In the Matter of Application of Snake River Oil and Gas, LLC, for Order Establishing a Spacing Unit Consisting of the NE ¼ of Section 9 and the NW ¼ of Section 10, Township 8 North, Range 5 West, Boise Meridian, Payette County, Idaho )

Docket No. CC-2024-OGR-01-001

SNAKE RIVER OIL AND GAS, LLC, Applicant. )

**DECLARATION OF RICHARD BROWN**

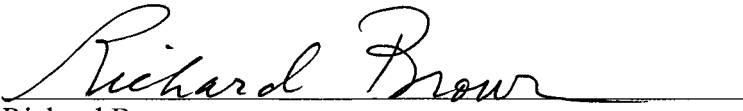
I, Richard Brown, declare under penalty of perjury under the laws of the State of Idaho:

1. I am over 18 years of age and competent to testify to the matters set forth in this Declaration, which I make based on my personal knowledge.

2. I am the manager of Applicant Snake River Oil and Gas, LLC (“Snake River”). I am also a partner in Weiser-Brown Oil Co., the sole member of Snake River. I have supervised the effort to lease mineral interests in the proposed spacing unit consisting of the NE ¼ of Section 9 and the NW ¼ of Section 10, Township 8 North, Range 5 West, Payette County, Idaho.

3. Snake River is an “interested person” under Idaho Code § 47-317(1) for purposes of the subject application for a spacing order by virtue of currently holding approximately 83.6875% of the net mineral acres in proposed spacing unit area by lease.

Dated this 29th day of April, 2024.

  
Richard Brown

**EXHIBIT D**

**BEFORE THE IDAHO DEPARTMENT OF LANDS**

**In the Matter of Application of Snake River Oil )  
and Gas, LLC for an Order establishing a )  
Spacing Unit Consisting of the NE ¼ of Section )  
9, and the NW ¼ of Section 10, Township 8 )  
North, Range 5 West, Boise Meridian, Payette )  
County, Idaho )  
)  
**SNAKE RIVER OIL AND GAS, LLC, )  
Applicant. )  
)  
)  
)  
)  
)****

Docket No. CC-2024-OGR-01-001

**DECLARATION OF DAVID M. SMITH**

STATE OF TEXAS )  
) ss  
County of Harris )

I, David M. Smith, declare:

1. I have over 40 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 served as the Vice President of Geosciences for Alta Mesa Holdings. I earned a Bachelor of Science in Geology from Virginia Tech. I am a working interest partner in and consult for Snake River Oil and Gas in Idaho. Included in my responsibilities are interpreting data from 2-D and 3-D seismic projects, identifying and evaluating likely pools based on interpretation of



seismic and geologic data, selecting drilling targets based on such interpretation and evaluation, and interpreting the geophysical logs acquired during drilling operations.

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 often 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 NE  $\frac{1}{4}$  of Section 9 and the NW  $\frac{1}{4}$  of Section 10 (“the subject spacing unit”).

4. My exploration approach in this basin is to rigorously interpret 3-D seismic data while incorporating and integrating subsurface knowledge gained from wells which we have previously drilled in the basin. The interpretation of these data is informed and guided by field work in the basin studying the sediments in outcrop and extensive review of previous geologists published work in the basin.

5. The time information contained in the 3-D seismic data can be used to estimate the depth of specific horizons of interest extrapolating away from well control into undrilled areas.

6. Immediately after drilling a well, we record (or “log”) multiple geophysical parameters of the rocks exposed in the open wellbore by lowering multiple instruments to the bottom of the hole and slowly withdrawing them back to the surface as we measure and record the responses from the rocks over every foot of section. These records are called “Open Hole Logs” or “OHL’s”.

7. One of the instruments in the OHL suite, the Sonic log, measures the transit time of a sound pulse through each rock type encountered at the varying depths in the wellbore. These measurements can be analyzed and compiled to produce a time-depth chart which estimates the time that a sound pulse from the surface would take to reach a known depth in that particular wellbore.

8. This time depth relationship can be utilized with the time information contained in the 3-D seismic and used to identify and “tie” specific reflections which are created by specific rock types or formations encountered in the wellbore.

9. The specific reflection or “horizon” of interest can then be mapped in the 3-D seismic volume laterally away from the wellbore into unexplored areas, and informed interpretations can then be made as to that horizons’ depth, and presence or absence at other locations within the 3-D survey.

10. Additionally, I study the seismic responses produced by the different rock types (lithologies) encountered and the seismic responses from sands with different thicknesses and fluid types (typically gas-saturated versus water-saturated sands of varying thicknesses). In certain settings, a gas-saturated sand can produce an anomalous seismic response which differs markedly from that produced by a water-saturated sand. The anomalous response is produced because the presence of gas in a sands pore spaces lowers its density and the transit time velocity of a sonic pulse. Mapping the area of the anomalous response can give a reasonable approximation of the area of the presumed gas reservoir.

11. The proposed well in the new unit would be an exploratory test targeting presumed sands in the Idaho Group.

12. The primary target reservoir sections are Sands A and B which are presumed fluvial and lacustrine sands within the Poison Creek and Chalk Hills formations of the Idaho Group. These sands are found productive and across a saddle in the Fallon #1-10 well (See Exhibit A) .

13. The Fallon #1-10 well is producing gas from Sand B and has a Gas/Water contact found at -1388' subsea. The proposed new well is targeting a separate pool to the north, with a proposed Gas Water contact interpreted from the seismic approximately 25 milliseconds or 100' structurally higher at approximately -1290' subsea. (See Exhibits A & B).

14. The trap for the presumed new pool is two down to the northeast faults bounding the pool on the north and east, and the stratigraphic termination of Sands A and B to the Northeast. Sand B has only been found locally in the Fallon 1-10 and the Barlow 2-14 wells and is not present to the east. The black-dashed line on Exhibit C represents the stratigraphic termination of Sand B.

15. 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

16. Local well control suggests significant variability of porosity, permeability and sand thickness in the target section.

17. This prospect is targeting a presumed structural and stratigraphic trap defined by seismic data. The top of the prospective Sand A is expected to be approximately -1140' subsea, and Sand B is expected at approximately -1250' subsea.

18. 3-D seismic data localizes this presumed new pool in the NE ¼ of Section 9 and the NW ¼ of Section 10 in Township 8 North, Range 5 West. Based on rigorous interpretation of the seismic data, I conclude that a 320 acre geographic unit encompassing the above described 2 quarter sections is the best fit to cover the lands underlain by the presumed pool at the primary

objective sand B, and that the proposed 320 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. 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 Exhibit C, which shows the areal extent of the reflection from the base of the postulated gas reservoir in relation to the proposed unit outline.

19. Based upon the similarity of the characteristics of the seismic responses in the proposed new unit to the characteristics of seismic responses associated with known gas productive sands in this area, in my opinion Sands A and B are likely prospective for hydrocarbons in the proposed unit area.

20. There is much to be learned about the geology of this basin, and our intention would be to drill some distance below the two primary objective sands and see the deeper section. Our intention would be to unitize these lands to all depths.

21. 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 29<sup>th</sup> day of April, 2024.

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David M. Smith

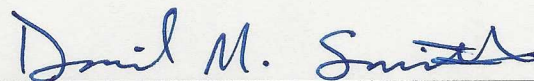
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20. There is much to be learned about the geology of this basin, and our intention would be to drill some distance below the two primary objective sands and see the deeper section. Our intention would be to unitize these lands to all depths.

21. 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 29<sup>th</sup> day of April, 2024.

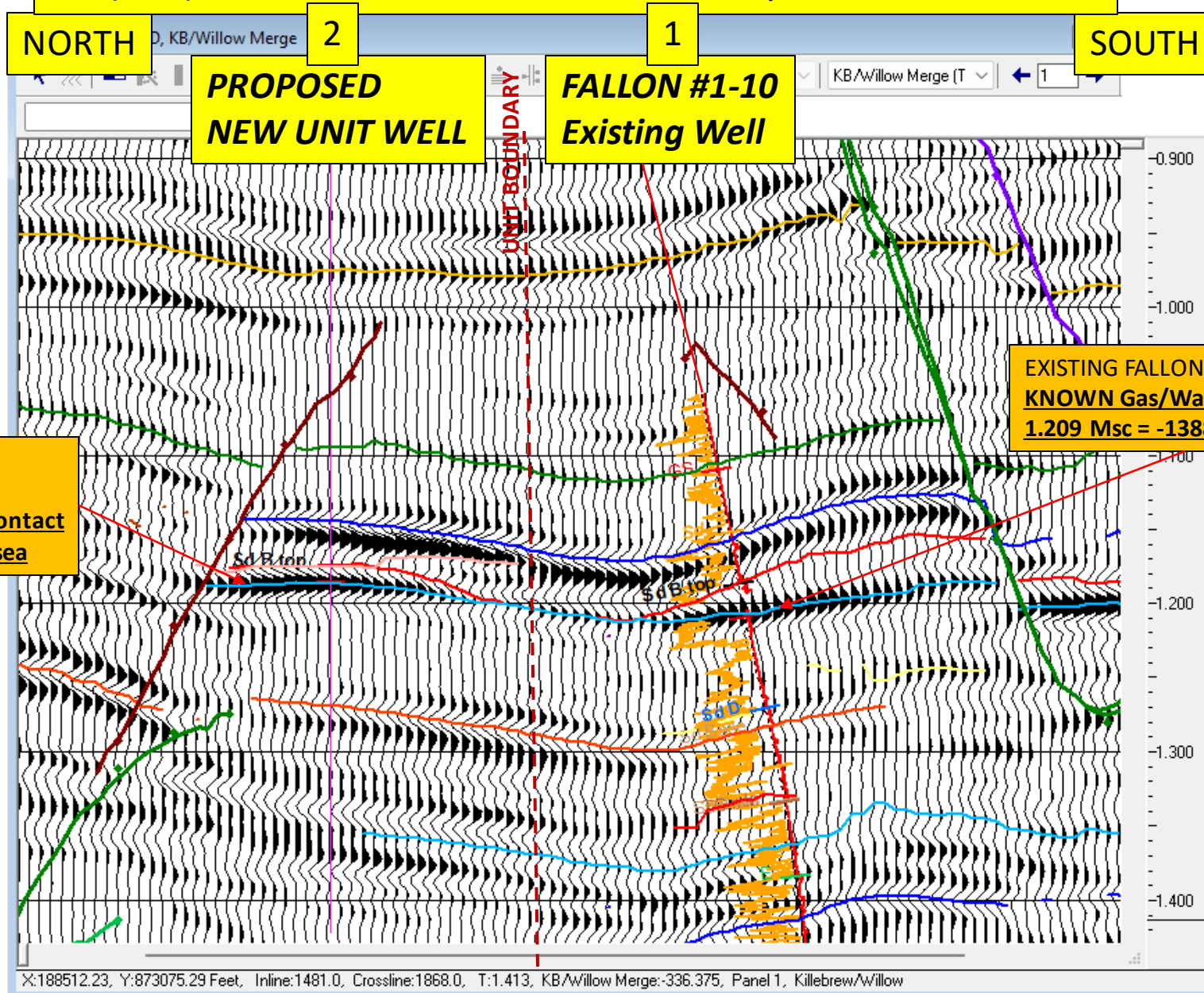


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David M. Smith

### North-South 3-D Seismic Line Showing:

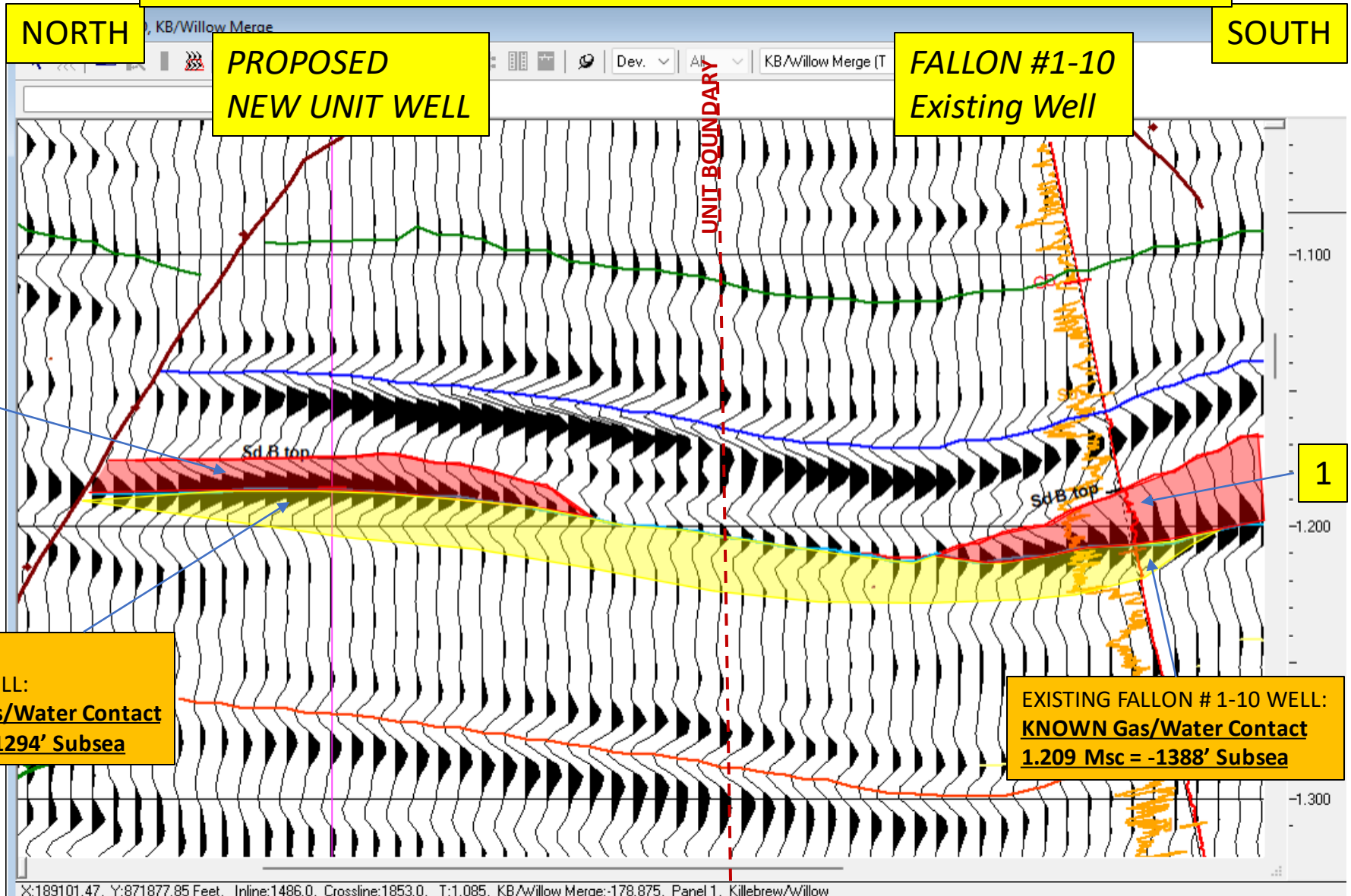
1. (Right) Known Sand B Gas Pool – South Unit, **Fallon #1-10**
2. (Left) Presumed Sand B Gas Pool – Proposed New Unit





North-South 3-D Seismic Line (Enlarged & Interpreted) Showing:

1. (Right) Known Sand B Gas Pool – South Unit, **Fallon #1-10**
2. (Left) Presumed Sand B Gas Pool – Proposed New Unit



PROPOSED  
NEW UNIT WELL:  
**Estimated Gas/Water Contact**  
**1.186 Msc = -1294' Subsea**

EXISTING FALLON # 1-10 WELL:  
**KNOWN Gas/Water Contact**  
**1.209 Msc = -1388' Subsea**

### Amplitude Map Showing Strength of Reflection from Base of:

1. Known Sand B Gas Pool – South Unit, Fallon #1-10
2. Presumed Sand B Gas Pool – Proposed New Unit
3. Location of 3-D Seismic Line in 2 Previous Slides (Red)

