IDAHO DEPARTMENT OF LANDS DIRECTOR'S OFFICE 300 N. 6th Street Suite 103 PO Box 83720 Boise, ID 83720-0050 Phone (208) 334-0200 Fax (208) 334-5342



MICK THOMAS, DIVISION ADMINISTRATOR SECRETARY TO THE COMMISSION IDAHO OIL AND GAS CONSERVATION COMMISSION Betty Coppersmith, Chair Ray Hinchcliff, Vice Chair Jim Classen Dustin Miller Jennifer Riebe

September 10, 2022

Nathan Caldwell Snake River Oil and Gas /NWGP Weiser Brown Operating 117 E. Calhoun St. (Box 500) Magnolia, Arkansas 71753 via e-mail: caldwell.nathan@weiser-brown.com

Re: Permit to Drill #11-075-20039, Irvin #1-19, Payette County Idaho

Dear Mr. Caldwell:

The Idaho Department of Lands (IDL) has completed our review of this permit to drill for oil and gas. Enclosed is a copy of the approved permit. This permit was approved with the following stipulations:

- The conductor pipe shall be cemented to the surface as required by IDAPA 20.07.02.310.04. Permittee shall use ready mix cement unless water is encountered, in which case an appropriate slurry mix will be used.
- 2. During drilling and logging of the hole for the production casing, the permittee shall identify any water bearing zones and isolate those zones in the annular space during cementing or completion activities.
- 3. The permittee shall be required to submit an affidavit covering the initial BOP pressure test after installation signed by the operator or contractor attesting to the satisfactory pressure test.
- 4. The permittee shall ensure tanks are adequately sized, designed, and constructed for the reception and confinement of mud and cuttings and to prevent contamination of streams and potable water.
- 5. Drilled holes cannot be used for any other purposes unless they are constructed according to the applicable well construction standards administered by the Idaho Department of Water Resources.
- 6. Applicant will obtain any needed water rights from Idaho Department of Water Resources if nearby wells will be used to supply water for the drilling operations.

Nathan Caldwell September 10, 2022 Page 2

- 7. This permit allows for an additional one hundred fifty (150) feet of drill hole below the permitted depth of the well for purposes of logging and casing, but no well completion nor production will be allowed to occur below the permitted depth without authorization from the Department.
- 8. All well information required by Idaho Code § 47-324(4), IDAPA 20.07.02.340 and 341 will be submitted to IDL within 30 days of the logs being run.
- 9. Well Log information shall be submitted in paper and electronic formats as required by IDAPA 20.07.07.340.05. Paper copies shall be submitted on a minimum of 24 lb. Premium Pre-Fold Bond Paper. All log copies shall be the final processed logs as provided by the service company. No field / preliminary copies shall be accepted.
- 10. Idaho Department of Lands inspectors shall have 24-hour, unencumbered access for compliance and regulatory purposes.
- 11. All cementing operations shall be in accordance with IDAPA 20.07.02.310. Cement will be returned to surface on the surface casing via the pump and plug method or other method as approved by the Department.
- 12. This permit does not grant the right for ingress or egress nor does this application grant the right to production from unleased lands.
- 13. If potential hydrocarbon-bearing zones are encountered other than the proposed targets described in the Geologic Prognosis of the submitted APD (Sand C, 4090' Sand and 4370' Sand), no production may occur from these zones without authorization from the Department. Any production that occurs in the target sands is subject to the limitations set forth in the Integration Order for Docket CC-2016-OGR-01-002, dated August 5, 2016.

Please ensure that all operations are conducted in accordance with the requirements of IDAPA 20.07.02 (Rules Governing Conservation of Oil and Natural Gas in the State of Idaho). The potential for fires in the state of Idaho are always a possibility, especially in the drier summer and autumn months. To prevent human-caused fires, please review the guidelines on the Idaho Department of Lands website for operating vehicles and equipment in a safe manner:

https://www.idl.idaho.gov/fire-management/fire-prevention-and-preparedness/preventunwanted-human-caused-wildfires/ Nathan Caldwell September 10, 2022 Page 3

This permit will be administered by IDL staff and possibly a contractor hired by IDL. We will be inspecting the drilling operation. Please contact me at 208-334-0298 if you have any questions.

Sincerely,

Mink Chanas

Mick Thomas Division Administrator Minerals, Public Trust, Oil & Gas Idaho Department of Lands

Enc.\1 Irvin #1-19 Approved APD

ecc: Patti Nitz, Payette County Chad Hersley, IDWR Michael Christian, Hardee Piñol & Kracke, PLLC James Thum, Idaho Dept. of Lands Clint Harman, Consultant



Phone Number 870-234-3080

P.O. Box 500 Magnolia, Arkansas 71754-0500

Fax Number 870-234-3839

8-25-22 Subject: Amendment to Idaho APD SROG Irvin #1-19

Dear James,

Please find enclosed/attached an amended copy of the subject well APD. Edits have been made to reflect movement of the well location 100' due north which removes any necessary exemptions in regard to irrigation canals. Necessary footage edits have been made to the following accordingly.

-APD form footage calls -Survey plat

-Aerial survey

-Proposed geologic tops

Additionally attached is an updated Bond Rider and schedule reflecting addition of recently drilled and upcoming wells and correspondence with Mr. David Kerr in regard to delivery of Hard copies and signature pages.

Should you have any questions or concerns, please feel free to contact me anytime.

Truly yours,

Nate Caldwell

$Am \not E H D \not ED S \mid 25 \mid 22$ $Am \not E H D \not ED S \mid 25 \mid 22$ $Am \not E H D \not ED S \mid 25 \mid 22$ $APPLICATION TO: Drill ($2,000) Deepen ($500) Plug Back ($500)$ $NAME OF OPERATOR: SHAK \not E S U \not E T O S = S \mid 25 \mid 10 \cdot 22$ $Address: P \mid Bo K S \circ 0$ $City: MAE rlo U \not A State: AR Zip Code: 11753 Telephone: Y \mid 2 - 234 - 30 \cdot 20$ $City: MAE rlo U \not A State: AR Zip Code: 11753 Telephone: Y \mid 2 - 234 - 30 \cdot 20$ $Contact Name: HAT \not E CAT(L \not E Well Address: Cold u \in II. Anth a f Que i s i s r - b \cdot rown \cdot (um emergency Contact Name/Phone: HAT \not E Ch \perp D u \not L \ L L Hu \land morl 7 \mid 3 - 822 - 3 \mid U \mid$ $Mell Location: Section: 1^{\text{M}} Township: Y \mid Range: HW (or block and survey) (Give footage from Section lines): 9 \cup 1' F \mid 2 \cdot 2 \cdot 5' F \lor U$ $Latitude/Longitude (Dec Degrees NADB3 minimum requirement): H4H^{0} \circ 0' 18 \cdot 326'' / Will (^{c} 52'(11, 983'') Datum: WGS84 MADB3 MAD27 Other: County: PAT \not ET feld and Reservoir (fill wildcat, so state): U \in U \cap D \cap F (-1) Fill fill fill fill fill fill fill fill$	IDAHO OIL AND GAS CONSERVATION COMMISSION
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NAME OF OPERATOR: SHAKE F\$VER_05L36A5	
Address: P0 BoX State: AK Zip Code: Y1753 Telephone: Y10-234-3080 Contact Name: Hhític CALD WELL Email Address: Caldwell. And Land Weiser-brown.cvn Emergency Contact Name/Phone: HATE CALD WELL Email Address: Caldwell. And Land Weiser-brown.cvn Emergency Contact Name/Phone: MATE CALD WELL CALD WELL AND LEASE Elevation (ground): Z142' Well Location: Section: 119 Township: 18M Range: 4W (or block and survey) (Give footage from Section lines): 194' FSL 92.5' FWL Datum: WGS84 MAD83 INAD27 Other: County: PATETE Field and Reservoir (if wildcat, so state): WILDCAT County: PATETE Feet Names of Lease; MAE feet Nearest distance from proposed location to property or lease line: 101 / 40 acre unit Other/Docket No. CC-201C-062************************************	APPLICATION TO: 🗹 Drill (\$2,000) 🗌 Deepen (\$500) 🗍 Plug Back (\$500)
Address: P0 BoX State: AK Zip Code: Y1753 Telephone: Y10-234-3080 Contact Name: Hhític CALD WELL Email Address: Caldwell. And Land Weiser-brown.cvn Emergency Contact Name/Phone: HATE CALD WELL Email Address: Caldwell. And Land Weiser-brown.cvn Emergency Contact Name/Phone: MATE CALD WELL CALD WELL AND LEASE Elevation (ground): Z142' Well Location: Section: 119 Township: 18M Range: 4W (or block and survey) (Give footage from Section lines): 194' FSL 92.5' FWL Datum: WGS84 MAD83 INAD27 Other: County: PATETE Field and Reservoir (if wildcat, so state): WILDCAT County: PATETE Feet Names of Lease; MAE feet Nearest distance from proposed location to property or lease line: 101 / 40 acre unit Other/Docket No. CC-201C-062************************************	NAME OF OPERATOR: SHAKE PAUER DIL3 GAS Date: 8/25/2022
Contact Name: HATE CALD VELL	Address: PO BOX SOO
Contact Name: <u>MAIE CAUD WEYL</u> Email Address: <u>Callwell</u> . Att <u>An Dweiser-brown</u> . (un Emergency Contact Name/Phone: <u>MATE CAUDUEL / CLIMT HAR MON</u> 713-822-3161 DESCRIPTION OF WELL AND LEASE Name of Lease: <u>JRUIH CATLE</u> Well Number: <u>1-19</u> Elevation (ground): <u>Z142</u> Well Location: Section: <u>19</u> Township: <u>18</u> M Range: <u>4</u> W (or block and survey) (Give footage from Section lines): <u>9D4' FSL</u> 92.5′ FWL Latitude/Longitude (Dec Degrees NAD83 minimum requirement): <u>M4H9 vo</u> '48,326″ / <u>W116' 52' 11,983″</u> Datum: <u>CMS84 CMAD83 CMAD27 COther</u> Field and Reservoir (if wildcat, so state): <u>wILDCA</u> Distance, in miles, and direction from nearest town or post office: <u>3.2 mILLS 10 FRUITLAND</u> Nearest distance from proposed location to property or lease line: <u>9D4</u> feet Nearest producing well: <u>8660</u> feet Type of Test/Unit: <u>Cas / 640</u> acre unit <u>Cas / 160</u> acre unit <u>Cother/Docket No. CC-20L-0062</u> -00 ₂₀ 2 Is Operator requesting a well location to exception? <u>Yes</u> <u>No</u> <u>Confidential Well Status Request?</u> <u>Wes</u> <u>No</u> Distance, from proposed location to nearest drilling, completed or applied for on the same lease: <u>MA</u> feet Proposed depth: <u>5091WJM0</u> Approx. date work will start: <u>\$59122</u> Number of acres in lease(s): <u>640</u> Number of wells on lease, including this well, completed in or drilling to this reservoir: <u>OHE (·)</u> If lease purchased with one or more wells drilled, completed in or drilling to this reservoir. Purchased from (Name): <u>A M IDAH0 LUC</u> Address of above: <u>15981 KAT1 ftW4 SU216' 400 HUS10H TX 17094</u> Bond Type and Number: <u>1DH40 DCCC 30H0 4 Ro (c00016''</u> ,5 Surface Rights Owner (At proposed surface location): Name <u>3204H CM1(LUC</u> <u>Phone: 2.0 K - 141-2105</u> Does the drilling unit contain state leases? ¹ If yes, check all that apply: <u>UDL</u> <u>IDFG</u> <u>IDT</u> <u>PUNDE COCC 30H0 4 Ro (c00016''</u> ,5 Surface Rights Owner (At proposed surface location? Hyes, check all that apply: <u>Does the drilling unit contain state leases?</u> ¹ If yes, check all that apply: <u>DOes this application include the following action</u>	City: MAD HOUTA State: AR Zip Code: 71753 Telephone: 870-234-3080
Emergency Contact Name/Phone: NATE CALDWILL / CLINET HARLAND LEASE DESCRIPTION OF WELL AND LEASE Name of Lease: JRUIH CATILE Well Location: Section: 'Yell Valle' Section: 'Yell And Reservoir (if wildcat, so state): WILDCAT 'Yell of Section Innes): Yell 'Yell' 'Yell of Section: Section: 'Yell of Section: Section: <td< td=""><td>Contact Name: HATE CALD WELL Email Address: caldwell, nothan Dweiser-brown. Com</td></td<>	Contact Name: HATE CALD WELL Email Address: caldwell, nothan Dweiser-brown. Com
Name of Lease: <u>ILUIM CATILE</u> Well Number: I-A Elevation (ground): <u>ZIAZ</u> Well Location: Section: <u>A</u> Township: <u>IM</u> Range: <u>HW</u> (or block and survey) (Give footage from Section lines): <u>DU</u> <u>FSL</u> <u>QLS</u> <u>FWL</u> Latitude/Longitude (Dec Degrees NAD83 minimum requirement): <u>HH4P</u> <u>vo</u> <u>48</u> , <u>326</u> <u>JUIC 52</u> (<u>1</u> , <u>483</u>) Datum: UNOS84 <u>MADD33</u> <u>INAD27</u> <u>Cther:</u>	Emergency Contact Name/Phone: NATE CALDWELL / CLEHT HARMON 713-822-3167
Well Location: Section: 19 Township: 18H Range: 4W (or block and survey) (Give footage from Section lines): 904/FSL 92.5′ FWL Latitude/Longitude (Dec Degrees NAD83 minimum requirement): 1444° v0′48.326″ / WILC 52′(1.983″ Datum: WGS84 MAD83 NAD27 Other: Field and Reservoir (if wildcat, so state): WILDCA1 County: PAYETTE Distance, in miles, and direction from nearest town or post office: 9.2 witt5/10 ft.01/10.4116 Nearest distance from proposed location to property or lease line: 904/feet Nearest producing well: 8640 Soperator requesting a well location exception? [Yes No Control regression of the same lease: NA feet Proposed depth: 500104/00 Approx. date work will start: 9150/22 Number of acres in lease(s): Of wells on lease, including this well, completed or applied for on the same lease: NA feet Proposed depth: 500104/00 Approx. date work will start: 9150/22 Number of acres in lease(s): 640 Number of wells on lease, including this well, completed the following information: Purchased from (Name): Am 10 AH0 LUC Address of above: 15001 KAT1 ft.WY 50/12 400 H00510 H TX 77094 Bond Type and Number: 10 H +0 DECL BOHD 4 Re 6000169.5 Sufface Rights Owner (At proposed surface location): Name 3205H CAT(U) Phone: 20 X - 74(1- 210 5 Cose the drilling unit cont	DESCRIPTION OF WELL AND LEASE
Well Location: Section: 19 Township: 18H Range: 4W (or block and survey) (Give footage from Section lines): 904 / FSL 92.5 / FWL Latitude/Longitude (Dec Degrees NAD83 minimum requirement): 1444 % v0 /48.326 // / WII6 5.2 /11.983 // Datum: WGS84 MAD83 NAD27 Other: Field and Reservoir (if wildcat, so state): WILDCA1 County: PATETTE Distance, in miles, and direction from nearest town or post office: 3.2 miLits 10 ftrut(LAHD Nearest distance from proposed location to property or lease line: 904 feet Nearest producing well: 8665 feet Type of Test/Unit: Gas / 640 acre unit Gas / 160 acre unit Oil / 40 acre unit Other/Docket No. 62-2016-062-061-062 Is Operator requesting a well location exception? Yes No Control requesting a well location exception? Yes No Control requesting a well location to property or lease line: 9104 for on the same lease: NA Proposed depth: 500100/M J Approx. date work will start: \$13022 Number of acres in lease(s): 640 Number of wells on lease, including this well, completed the following information: Purchased from (Name): Am JDAHO LUCC Address of above: 15001 KAT1 fRW1 50216 480 Hou510 H TX 97094 Bond Type and Number: 10Ph HO DECL BOHD 4 Re6000169.5 Surface Rights Owner (At proposed surface location): Name 31044 LitC Other Distance from include the following actions? If yes, check all that apply: UDL <	Name of Lease: <u>JRUIH CATILE</u> Well Number: <u>I-19</u> Elevation (ground): <u>2192</u>
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Distance, in miles, and direction from nearest town or post office: <u>3,2 mítúš 10 fitosítunt0</u> Nearest distance from proposed location to property or lease line: <u>904</u> feet Nearest producing well: <u>8660</u> feet Type of Test/Unit: <u>Gas / 640</u> acre unit <u>Gas / 160</u> acre unit <u>Oil / 40</u> acre unit <u>Other/Docket No. <u>CC-2016-062</u>-01-002 Is Operator requesting a well location exception? <u>Yes</u> <u>No</u> Confidential Well Status Request? <u>Yes</u> <u>No</u> Distance from proposed location to nearest drilling, completed or applied for on the same lease: <u>NA</u> feet Proposed depth: <u>500100 A0</u> Approx. date work will start: <u>8/30/22</u> Number of acres in lease(s): <u>649</u> Number of wells on lease, including this well, complete the following information: Purchased from (Name): <u>AM JDAHU LUC</u> Address of above: <u>15051</u> <u>KAT1 fRWJ SUSTE 480 HUUSTUM TX 77094</u> Bond Type and Number: <u>100 H00 GCCC BOHD</u> <u>Ro 6000160,5</u> Surface Rights Owner (At proposed surface location): Name <u>1005H CH1(U)</u> Phone: <u>20 X - 741-210 5</u> Does the drilling unit contain state leases? ¹ If yes, check all that apply: <u>IDL</u> IDFG IDT Public Trust Other: <u>Well Treatment</u> Pit construction Include the following actions? If yes, check all that apply: <u>Well Treatment</u> Pit construction Directional or Horizontal Drilling Applications that include well treatments, pit construction, and directional drilling must provide attachments with the information required from the respective sections of <i>IDAPA</i> 20.07.02 and Idaho Code § 47-3. <i>If these activities are not included in this application, then a</i> separate application and approval will be required prior to commencement of any of these activities. Remarks: (If this is an application to deepen or plug back, briefly describe work to be done, giving present producing zone</u>	Datum: 🗌 WGS84 🖉 NAD83 🔲 NAD27 🗍 Other:
Nearest distance from proposed location to property or lease line: <u>904</u> feet Nearest producing well: <u>8660</u> feet Type of Test/Unit: <u>Gas / 640</u> acre unit <u>Gas / 160</u> acre unit <u>Oil / 40</u> acre unit <u>Other/Docket No. <u>CC-2016-002</u> 01-002 Is Operator requesting a well location exception? <u>Yes</u> <u>No</u> Confidential Well Status Request? <u>Yes</u> <u>No</u> Distance from proposed location to nearest drilling, completed or applied for on the same lease: <u>NA</u> feet Proposed depth: <u>5500100/m0</u> Approx. date work will start: <u>8/30/22</u> Number of acres in lease(s): <u>640</u> Number of wells on lease, including this well, completed in or drilling to this reservoir: <u>0+76 (1)</u> If lease purchased with one or more wells drilled, complete the following information: Purchased from (Name): <u>10×40 0600 0040 € Ro600016055</u> Surface Rights Owner (At proposed surface location): Name <u>X0×14 C×1(L0</u> Phone: <u>20 & 741-2105</u> Does the drilling unit contain state leases? If yes, check all that apply: [] IDL IDFG [] Public Trust Other: [] Well Treatment Pit construction [] Directional or Horizontal Drilling Applications that include well treatments, pit construction, and directional drilling must provide attachments with the information required from the respective sections of IDAPA 20.07.02 and Idaho Code § 47-3. If these activities. Remarks: (If this is an application to deepen or plug back, briefly describe work to be done, giving present producing zone <!--</u--></u>	Field and Reservoir (if wildcat, so state): WILDLAT County: PATERTE
Type of Test/Unit: Gas / 640 acre unit □Gas / 160 acre unit □Oil / 40 acre unit □Other/Docket No. <u>CC-2016-062-01-062</u> Is Operator requesting a well location exception? □Yes □No Confidential Well Status Request? □Yes □No Distance from proposed location to nearest drilling, completed or applied for on the same lease:	
Is Operator requesting a well location exception? ☐Yes ☐No Confidential Well Status Request? ⊡Yes ☐No Distance from proposed location to nearest drilling, completed or applied for on the same lease:	
Distance from proposed location to nearest drilling, completed or applied for on the same lease:	Type of Test/Unit: Gas / 640 acre unit Gas / 160 acre unit Oil / 40 acre unit Other/Docket No. <u>CC-2016-06R-01-052</u>
Proposed depth: 500100 m0 Approx. date work will start: 83022 Number of acres in lease(s): 640 Number of wells on lease, including this well, completed in or drilling to this reservoir: 0rt (1) If lease purchased with one or more wells drilled, complete the following information: Purchased from (Name): 1 M IDAHU LUC Address of above: 15001 KATI FRWT SUSTE 400 HOUSTON TX 17014 Bond Type and Number: 10 KATI FRWT SUSTE 400 HOUSTON TX 17014 Bond Type and Number: 10 KATI FRWT SUSTE 400 HOUSTON TX 17014 Bond Type and Number: 10 KATI FRWT SUSTE 400 HOUSTON TX 17014 Bond Type and Number: 10 KATI FRWT SUSTE 400 HOUSTON TX 17014 Bond Type and Number: 10 KATI FRWT SUSTE 400 HOUSTON TX 17014 Bond Type and Number: 10 KATI FRWT SUSTE 400 HOUSTON TX 17014 Bond Type and Number: 10 KATI FRWT SUSTE 400 HOUSTON TX 17014 Bond Type and Number: 10 KATI FRWT SUSTE 400 HOUSTON TX 17014 Bond Type and Number: 10 KATI FRWT SUSTE 400 HOUSTON TX 17014 Bond Type and Number: 10 KATI FRWT SUSTE 400 HOUSTON TX 17014 Bond Type and Number: 10 KATI FRWT SUSTE 400 HOUSTON TX 17014 Bond Type and Number: 10 KATI FRWT SUSTE 400 HOUSTON TX 17014 Bond Type and Number: 10 KATI FRWT SUSTE 400 HOUSTON TX 17014 Bond Type and Number: 10 KATI FRWT SUSTE 400 HOUSTON TX 17014 Bond Type and Number: 10 KATI FRWT SUSTE 400 HOUSTON TX 170104 Bond Type and Number: 10	Is Operator requesting a well location exception? 🗌 Yes 🗹 No 🛛 Confidential Well Status Request? 🗹 Yes 🗌 No
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f lease purchased with one or more wells drilled, complete the following information: Purchased from (Name):	Proposed depth: <u>5501107M</u> Approx. date work will start: <u>830/22</u> Number of acres in lease(s): <u>690</u>
Purchased from (Name): 1 D AHU LUC Address of above: 15001 KATY FRWY SUSTE 400 HOUSTON TX 17094 Bond Type and Number: 1 D AHU DECC BOND 4 REDUDINGS Surface Rights Owner (At proposed surface location): Name ADVEN CATILE Phone: 208 - 741-2105 Does the drilling unit contain state leases? 1 fyes, check all that apply: Phone: 208 - 741-2105 Does the drilling unit contain state leases? 1 fyes, check all that apply: Other: Phone: 208 - 741-2105 Does this application include the following actions? If yes, check all that apply: Other: Phone: Directional or Horizontal Drilling Applications that include well treatments, pit construction, and directional drilling must provide attachments with the information required from the respective sections of IDAPA 20.07.02 and Idaho Code § 47-3. If these activities are not included in this application, then a separate application and approval will be required prior to commencement of any of these activities. Remarks: (If this is an application to deepen or plug back, briefly describe work to be done, giving present producing zone	Number of wells on lease, including this well, completed in or drilling to this reservoir:ヽゼビ (+)
Address of above: 15021 KATY FRWY SUFIE 400 HOUSTOM TX T7094 Bond Type and Number: 10A HO 0 GCC Bonk 9 Ro GOOGLOGS Surface Rights Owner (At proposed surface location): Name 10VFM CMILU Phone: 20 & ~ 741 - 210 S Does the drilling unit contain state leases? If yes, check all that apply: Phone: 20 & ~ 741 - 210 S Does this application include the following actions? If yes, check all that apply: Other: Phone: 20 & ~ 741 - 210 S Does this application include the following actions? If yes, check all that apply: Other: Phone:	If lease purchased with one or more wells drilled, complete the following information:
Bond Type and Number: IDA HO DGCC BOHD IROCHORIS Surface Rights Owner (At proposed surface location): Name IROCHORIC Phone: 208 ~ 741-2105 Does the drilling unit contain state leases? If yes, check all that apply: Phone: 208 ~ 741-2105 Does the drilling unit contain state leases? IDT Public Trust Other:	
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IDAHO OIL AND GAS CONSERVATION COMMISSION



Application For Permit to Drill, Deepen, or Plug Back



Applicant(s) should be familiar with and adhere to IDAPA 20.07.02, Rules Governing Conservation of Oil and Natural Gas in the State of Idaho, and Idaho Code § 47-3, Oil and Gas Wells--Geologic Information and Prevention of Waste.

Please check the boxes below to indicate that you have supplied the required information.

Maps Required

- Attach a survey plat or map, preferably on a scale of one (1) inch equals one thousand (1,000) feet, prepared by a licensed surveyor or engineer. All maps and plats should include a bar scale for reference.
- The plat must show:

Distance of the proposed surface location to the nearest occupied structure and the nearest highway.
 The proposed well location. For directional wells, both surface and bottom hole locations should be marked.
 The location of the well with reference to the nearest lines of an established public survey.
 All leased tracts held by the applicant within the drilling unit. Distances of the proposed well from the two

The location of the nearest structure with a water supply, or the nearest water well as shown on the IDWR registry of water rights or well log database. The location of the nearest canal, ditch, or ordinary high-water mark of surface waters (§47-319(1)).

Other Required Information

Estimated depth to the top of the important geologic markers.

Estimated depth to the top of the target formations.

 \Box Information on the type of tools to be used.

Proposed logging program.

Proposed casing program, including size and weight of casing and the depth at which each casing type is to be set.

- Type and amount of cement to be used, and the intervals cemented.
- MInformation on the drilling plan (drill pad and rig set up, etc).
- Schematic diagram of the BOP and well head assemblies, including the minimum size and pressure rating of _____all components of the BOP and well head assemblies.
- $\underline{\mathcal{T}}$ Best management practices to be used for erosion and sediment control.

Plan for interim reclamation of the drill site after the well is completed, and a plan for final reclamation of the drill site following plugging and abandonment of the well. These plans must contain the information needed to implement reclamation as described in IDAPA 20.07.02 subsection 310.16 and section 510.

CERTIFICATION: 1, HATE CALDWELL	the undersigned, state that I am the <u>DPEDATSONS</u> MARAFER
of SMAKE READER OIL 3 GAS	(company) and that I am authorized by said company to make this
application, and that this application was pre	epared under my supervision and direction, and that the facts stated herein are
true, correct and complete to the best of my	knowledge.
true, correct and complete to the best of my Date: 8/25/22	Signature: N
NOTICE: Before submitting thi	is form, be sure that you have given all information requested.
IDL Office Use Only: Approval Date: 9/10/2022	MICT I AL I.
Approval Date: Ap	proved by: Much Thomas / Administrator Signature and Title
11-075-20039	
US Well Number:	Operator Number (if known):

Snake River Oil and Gas, LLC

IDL Permit Supplement Irvin 1-19 Payette County, ID July 21, 2022

Payette County, ID July 21 , 2021

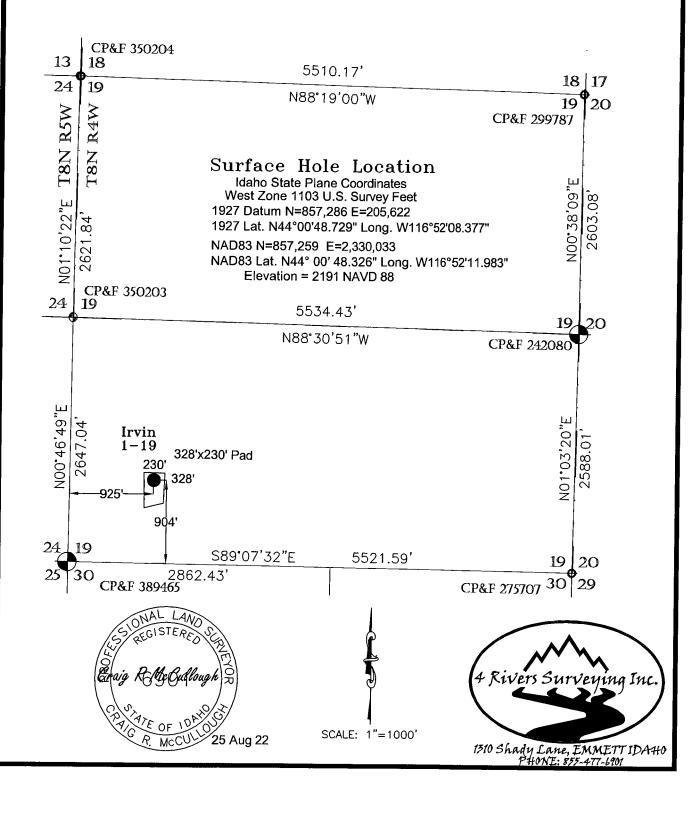
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Surveyors Well Plat and Aerial Photo Lease Exhibit Geologic Prognosis Site Preparation Well Construction Cementing Program Rig Location Plat Blowout Preventer (BOP) Schematic Drilling Plan Logging Plan Wellhead Wellbore Schematic

EXHIBIT MAP OF Irvin 1-19

LOCATED IN A PORTION OF THE SOUTHWEST 1/4, OF SECTION 19, TOWNSHIP 8 NORTH, RANGE 4 WEST, B.M., PAYETTE COUNTY, IDAHO -2022-





IDL Permit Supplement Irvin 1-19 Leasing Exhibit

Payette County, ID July 21, 2022

_The 640-acre drilling unit was spaced and integrated under Idaho OGCC Order CC-2016-01-002

IDL Permit Supplement

Irvin #1-19

Geologic Prognosis

Payette County, ID July 21, 2022

Prospect

The Irvin #1-19 well is designed to test Sand C as the primary objective. Sand C presence is inferred at this location from seismic data and has only been encountered in one well previously (Dutch Lane 1-13). Other secondary objective sands are expected to be encountered below C Sand.

Proposed Well

The well is to be drilled as a straight hole to a depth of 5500' MD. The surface and bottomhole location will be in section 19, T8N R4W in Payette County, Idaho.

Estimated Geologic Formation Tops

Claystone +/- 3600' of claystone expected with occasional thin sandstones and siltstones of Glenns Ferry/Chalk Hills Formations Undifferentiated from 200' to 3600' MD.

Sands A & B Not Present
Sand C 3606' MD
Secondary objective sands 4090' MD & 4370'MD
Basalt 5065' MD
Proposed Total Depth 5500' MD

Payette County, ID July 21, 2022

Site Preparation

Erosion Control

Appropriate grading, mechanical stabilization (rip-rap or hay bales), chemical stabilization (soil cement) and silt fencing will be used to prevent soil erosion. All cut and fill slopes are designed with a minimum 2:1 grade to minimize runoff erosion and ensure mechanical stability. Should resident request retaining topsoil for Agricultural practices, these volumes will be stored in berms around perimeter of location. Also note irrigation ditch to south of proposed location. Earthen barricading with be placed accordingly to prevent run-off.

<u>Sump</u>

The location will have a 2' deep trench on downhill sides where the spoil from that trench will be used to construct an earthen berm around the location. The trench will act as a sump to collect rain and wash water for controlled release or appropriate disposal as required.

Payette County, ID July 21, 2022

Well Construction

Well Interval	<u>Bit/Hole</u>	<u>CSG, Grade/Wt</u>	<u>CSG Depth</u>	<u>TOC</u>	CMT Type/Volume
Conductor	20"	16"/H-40/65#/ft	120'	Surface	200 SKS A/C
Surface	12.25″	9-5/8"/K55/40#/ft	1125'	Surface	Lead-247 sks TypeIII-RC Econolite Plus. Tail-80sks TypeIII-RC Gas Bond.
Production	8.5″	5.5"/J/K-55/17#/ft	5500'	Surface	Lead-394 sks ClassG-RC Gas Bond. Tail-400 sks ClassG-RC Gas Bond.

Surface Casing Detail

-9 5/8" float shoe

-1 full length joint 9 5/8" 40# K-55 STC for shoe track - centralized

-9 5/8" float collar

-9 5/8" 40# K-55 STC Casing jts to surface

-Cement basket for 9 5/8" casing approx. 80' below surface.

-Centralization - Install 1 cent /jt

Production Casing Detail

-5 1⁄2" float shoe

-2 full length jts 5 $\%^{\prime\prime}$ 17# K-55 LTC for shoe track – centralized

-5 1⁄2" float collar

-5 ½ 17# K-55 LTC csg with 1 centralizer / joint to surface (turbolizers and scratchers placement TBD).

Payette County, ID July 21, 2022

Cementing Program

Conductor: 200 sks Class A or C - surface to 120'

Surface Casing: 9 5/8" (Excess 150%)

Stage	<u>Volume</u>	Yield	Density	Description
Spacer	20 bbls	N/A	8.54 ppg	20 bbls 4% KCL
Lead Cement	768 ft3	3.11 ft3/sk	11.0 ppg	247 sks Type III - RC Econolite Plus
Tail Cement	100 ft3	1.36 ft3/sk	14.8 ppg	80 sks Type III - RC Surface Tail
Displacement	80 bbls	N/A	9-10 ppg	Drilling fluids/Water
T/O CMT	102 ft3	1.36 ft3/sk	14.8 ppg	75 sks Type III - RC Surface Tail
*Depth: 1,125' I	VID Hole Size	: 12 ¼" Mud wei	ight: 8.7 ppg	

Production Casing (Excess 20%)

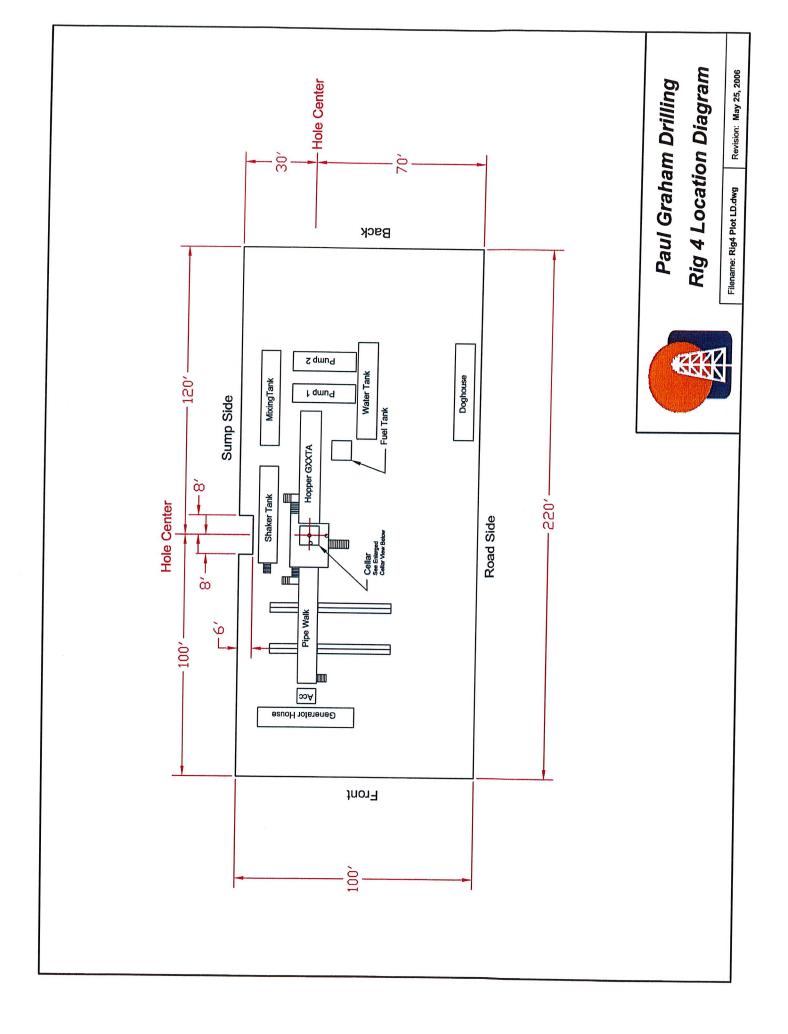
Stage	<u>Volume</u>	Yield	<u>Density</u>	Description
Spacer	20 bbls	N/A	8.34 pg	10 bbls mud flush
Spacer	40 bbls	N/A	12 ppg	40 bbls 4% KCL weighted spacer
Lead Cement	677 ft3	1.72 ft3/sk	13.0 ppg	394 sks Class G - RC Gas Bond Lead
Tail Cement	528 ft3	1.32 ft3/sk	14.2 ppg	400 sks Class G - RC Gas Bond Tail
Displacement	102 bbls	N/A	8.54 ppg	102 bbls 4% KCL

Depth: 5,500' MD Hole Size: 8 1/2" Mud weight: 11.5 ppg

Payette County, ID July 21, 2022

Rig Location Plat

See Paul Graham Drilling Rig 4 Location Diagram.



Payette County, ID July 21, 2022

Types of Tools to be Used

BHA #1 Pendulum Drilling Assembly

12 ¼" Mill tooth bit
Bit sub w/ float
1 (8") Drill Collar (DC)
12 ¼" Weld Blade Stabilizer (1/8" UG)
1 - 8" Drill Collar
12 ¼" Weld Blade Stabilizer (1/8" UG)
X/O (if needed)
15 - 4" HWDP
Drilling Jars
5 - 4" HWDP
X/O to 4" Drill Pipe (if needed)

BHA #2 Straight hole Drilling Assembly

-8 ½" Smith FDS bit or equivalent
-1 - 6 ¾" float sub
-8" Spiral integral blade stabilizer
-6 ¾" mule shoe sub
-6 ¾" non-mag drill collar (MWD)
-6 ¾" non-mag drill collar
-X/O (if needed)
-15 - 4" Heavy weight drill pipe
-Drilling jar assembly
-5 - 4" Heavy weight drill pipe
-4" 14.00 #/ft XH Drill pipe

Payette County, ID July 21, 2022

Drilling Plan

Drilling Plan expected to include but not limited to:

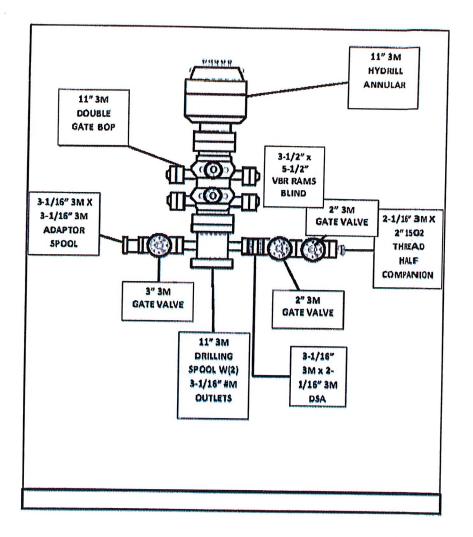
- 1. Drill 20" hole to 120' with water well rig and run 16" casing, set same with cement back to surface.
- 2. Move in drilling rig.
- 3. Drill 12 ¼" hole with drilling rig to 1,125' and run 9 5/8" casing setsame with cement back to surface.
- 4. Drill 8 ½" hole to 5,500' and run open hole logs. If logs look good, run 5 ½" casing to TD and cement back to surface.
- 5. Move out drilling rig.

Payette County, ID July 21, 2022

Blowout Preventer (BOP) Schematic

Stack from bottom up; pipe rams, mud cross, blind rams and annular. Pressure control equipment to include upper Kelly cock, Kelly, lower Kelly valve, stand-by full opening drill string valve (TIW), stand-by drill string inside BOP (Gray).

See diagram



BOP Diagram

IDL Permit Supplement

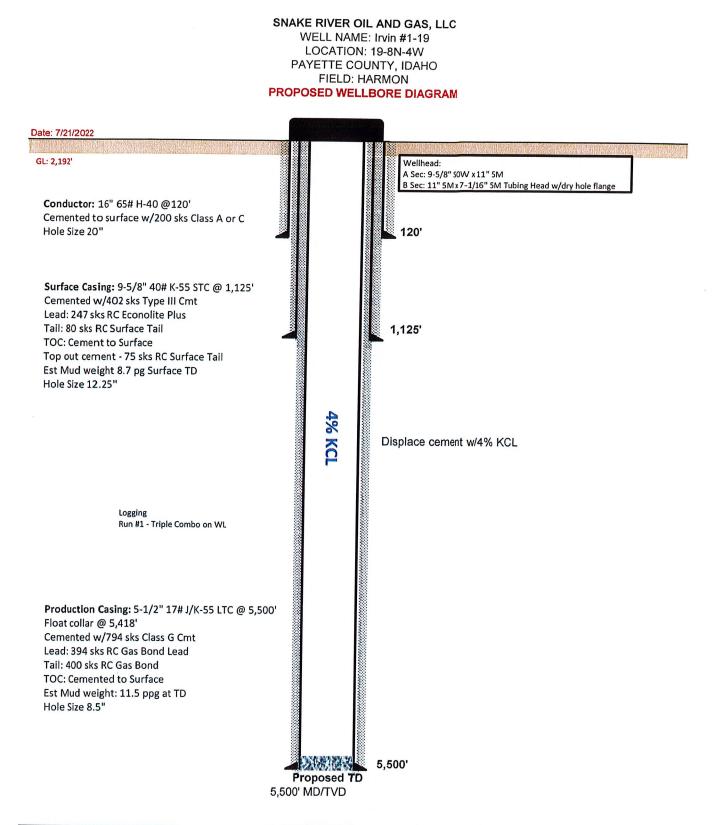
Irvin #1-19

Payette County, ID

July 21, 2022

Logging Plan

- 1. Mud loggers will collect and analyze the lithology of drill cuttings from below the conductor casing shoe to Total Depth of the well (+/- 120' to 5500' MD).
- 2. Open Hole Logging Program: 1125' to 5500' MD
- 3. Run 1: TD to surface casing shoe (5500' to +/- 1125' MD) Quad Combo Induction, Gamma Ray, Sonic and Neutron/Density Porosity Tools.
- 4. Run 2: Optional may run wireline SWC's or other diagnostic logs if warranted



Well Name: Irvin #1-19	Field: Harmon	
County: Payette	State: ID	
Total Depth (MD): 5,500'	TVD: 5,500	

Payette County, ID July 21, 2022

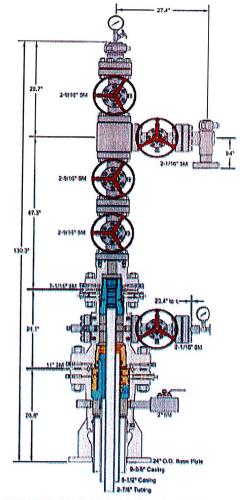
Wellhead

See surface Wellhead System Diagram.

See surface Wellhead system with Wellhead Assembly Diagram.



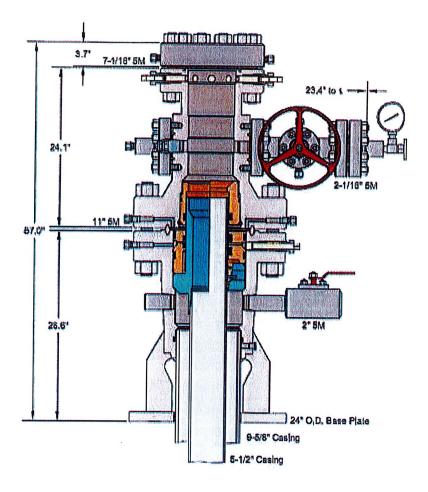
Payette County, ID July 21, 2022



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	APPRV	KN	29APR14	
9-5/8" x 5-1/2" x 2-7/8" 5M SH2-R Wellhead	DRAWN	VJK	29APR14	
n denha is te manare d'60 GA Gles Presuro Cortol LP en à considered confernal di litera africete agressi entre Elevitive d'explante nu be sent, comet, comet, termande e recentre se qui brite ser (appose d'60 GMA Gles Presene Cortol LP 	SNAKE F	SNAKE RIVER OIL AND GAS, LLC DAVETTE COUNTY		

Payette County, ID July 21, 2022

Surface Wellhead System



Payette County, ID July 21, 2022

Reclamation

Reclamation will be conducted in accordance with IDAPA 20.07.02.310.16;.510. To achieve those requirements, Snake River Oil and Gas, LLC proposes to address reclamation through a multistep process which is outlined below. As provided for in IDAPA 20.07.02.510.08, Snake River Oil and Gas, LLC may enter

into a Surface Use Agreement with the landowner the terms of which will ensure that the site is left in stable,

non-eroding condition as required.

1. Interim drill site clean-up: Debris and waste materials including, but not limited to, concrete, sack bentonite and other drilling mud additives, sand, plastic, pipe, and cable associated with the drilling, re-entry, or completion operations shall be removed and disposed of properly.

2. Re-establish slope stability, surface stability, and desired topographic diversity.

a. Reconstruct the landscape to the approximate original contour unless otherwise provided for in the Surface Use Agreement.

- b. Maximize geomorphic stability and topographic diversity of the reclaimed topography.
- c. Eliminate high walls, cut slopes, and/or topographic depressions on site, unless otherwise approved.

d. Minimize sheet and rill erosion on the reclaimed area. Eliminate mass wasting, head cutting, large rills or gullies, down cutting in drainages, or overall slope instability on the reclaimed area.

3. Maintain the integrity of the topsoil and subsoil (where appropriate and not otherwise dictated by the Surface Use Agreement).

- a. Identify salvaged topsoil and subsoil.
- b. Segregation of salvaged soils to protect those materials from erosion, degradation, and contamination.
- c. Incorporate stored soil material into the disturbed landscape to the extent practicable.

d. Stockpiled soils to be stored beyond one growing season shall be stabilized with appropriate vegetation.

e. Record location and approximate volumes of stockpiles.

4. Prepare site for revegetation upon completion of well activities - plugging/abandonment.

- a. Redistribute soil materials in a manner similar to the original vertical profile.
- b. Reduce compaction to an appropriate depth (generally below the root zone) prior to redistribution of topsoil, to accommodate appropriate site-specific plant species.

c. Provide suitable conditions to support the long-term establishment and viability of the desired plant community.

d. Protect seed and seedling establishment (e.g. erosion control matting, mulching, hydroseeding, surface roughening, fencing, etc.) to be determined based upon site specific conditions.

5. Establish a desired self-perpetuating native plant community based upon region specific guidance available from NRCS.

a. Establish species composition, diversity, structure, and total ground cover appropriate for the desired plant community.

- b. Select genetically appropriate and locally adapted native plant materials based on the site characteristic and setting
 - i. Seed mixtures shall be selected based on soil type, site conditions and intended final

use.

- ii. Seed shall not be used later than one year after the test date that appears on the

label.

iii. The bags of seed shall be clearly labeled indicating test date, weed percentage or % Pure Live Seed (PLS), viability or germination percentage, and inert material.

c. Select non-native plants only as a short term and non-persistent alternative to native plant materials. Ensure the non-natives are designed to aid in the re-establishment of native plant

communities. Revegetate in accordance with best practices described below:

- i. Re-spread topsoil to a minimum depth of 4 inches.
- ii. Prepare a friable but firm and weed free seedbed that is not compacted by prior construction work.
- iii. Appropriate firmness can be estimated when a person leaves about a ¼ inch deep footprint.
- iv. Remove rocks, twigs, concrete, foreign material and clods over 2 inches that can't be broken down.

v. Soil moisture content shall be at least 30% soil capacity (estimated). Do not seed into undesirable moisture conditions (e.g. "dust" or "mud").

d. Plant communities shall be evaluated annually for two years to ensure revegetation success as determined by IDAPA 20.07.02.510.07.

i. Repair and reseed areas that have erosion damage as necessary.

ii. If a stand has less than 70% ground cover after two years, re-evaluate the choice of plant materials, methods and available light and moisture. Re-establish the stand with modifications based the evaluation.

6. Reestablish initial visual composition.

a. Ensure the reclaimed landscape features conform to the prior conditions of the site.