

Harvey & Carolyn Shaffer  
1021 Wilfred Rd.  
Berthoud, CO 80513

303-775-0400

Re: Gunbarrel #1 well located in the SE/4 Sec. 8-Township 3 South-Range 50 West, 6<sup>th</sup> P.M.

Dear Mr. & Mrs. Shaffer,

IPT is handling permitting matters for St. Croix Operating, Inc., the operator of the referenced well. Per applicable Colorado Oil and Gas Conservation Commission regulations, and with your approval, St. Croix proposes to spread water-based bentonitic drilling fluids on nearby cropland owned by you. This is the water and and/or light drilling mud left over after the solids have been removed from the drilling fluid by mechanical or gravity segregation. We have summarized the applicable COGCC regulation below.

**COGCC Rule 907 (d) (3):**

*Water-based bentonitic drilling fluids may be disposed as follows:*

*B. Land application as follows:*

- i. Applicability. Acceptable methods of land application include, but are not limited to, production facility construction and maintenance, and lease road maintenance.*
- ii. Land application requirements. The average thickness of water-based bentonitic drilling fluid waste applied shall be no more than three (3) inches prior to incorporation. The waste shall be applied to prevent ponding or erosion and shall be incorporated as a beneficial amendment into the native soils within ten (10) days of application. The resulting concentrations shall not exceed those in Table 910-1.*
- iii. Surface owner approval. Operators shall obtain written authorization from the surface owner prior to land application of water-based bentonitic drilling fluids.*
- iv. Operator obligations. Operators shall maintain a record of the source, the volume, and the location where the land application of the water-based bentonitic drilling fluid occurred. Upon the Director's written request, this information shall be provided within five (5) business days, in a format readily reviewable by the Director. Operators with control and authority over the wells from which the water-based bentonitic drilling fluid wastes are obtained retain responsibility for the land application operation, and shall diligently cooperate with the Director in responding to complaints regarding land application of water-based bentonitic drilling fluids.*
- v. Approval. Prior Director approval is not required for reuse of water-based bentonitic drilling fluids for land application as a soil amendment.*



Prior to drilling the subject well, St. Croix Operating Inc. hereby agrees to pay you or your designated representative the sum **REDACTED** privilege of spreading the drilling fluids on your lands. In addition, St. Croix will pay for any soil sampling required by COGCC, plus reimburse you for any additional cost you may incur as a result of the beneficial application of the water-based drilling fluids from the subject well.

If you agree with the above, please date and sign below and return a copy to us in the enclosed envelope, or scan a copy to me at [paul.gottlob@iptenergyservices.com](mailto:paul.gottlob@iptenergyservices.com)

Please feel free to call Andy Peterson with any questions at 970-203-4263.

Respectfully,

Paul Gottlob  
IPT Regulatory & Engineering Technician  
Consultant to St. Croix Operating, Inc.

Dated this 17 day of November, 2018

  
Harvey Shaffer  
Carolyn Shaffer