North Dakota Industrial Commission ATTN: Oil and Gas Research Program State Capitol – Fourteenth Floor 600 East Boulevard Bismarck, North Dakota

Dear Council Members:

Attached, you will find an application for a grant from the Oil and Gas Research Fund for \$600,000.00 to support a significant project in Sanish Field. The project involves simultaneously fracture stimulating two parallel horizontal Bakken wells drilled within a 1280 acre spacing unit. Should the Council Members grant the requested funds, Sinclair Oil and Gas commits to complete the project as described in the application. Thank you for your consideration.

Sincerely,

Ross B. Matthews President

Oil and Gas Research Fund Grant Application

Simultaneous Fracture Stimulation of Two Parallel
Horizontal Bakken Wells Within a 1280 Acre Spacing Unit
in Sanish Field, Mountrail County, North Dakota

Applicant – Sinclair Oil and Gas Company

Principal Investigator – Robert Taylor

May 28, 2008

This request is for \$600,000.00

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Abstract

Funds for this project will be used in support for the simultaneous fracture stimulation of two parallel horizontal Bakken wells drilled within a single 1280 acre spacing unit in the Sanish Field located in Mountrail County, North Dakota. To date, the majority of development in the Sanish Field has been pursued by drilling single lateral wells within a 1280 acre spacing unit followed by a multi-stage fracture stimulation. A sufficient number of wells have been completed using this method to reasonably determine the average expected reserves. It is expected that this project will demonstrate that additional ultimate recovery can be achieved through simultaneous stimulation. If successful, the method will generate additional tax revenues for the State and additional royalty payments which creates wealth. Other operators might be attracted to North Dakota to apply this technology in other areas of the state thereby creating new oil and gas jobs. As the first of its

kind in the Sanish Field, this project will establish a valuable baseline against which other future projects can be compared.

Project Description

Following the approval of a 1280 spacing unit consisting of Sections 24 and 25 of Township 153North, Range 91West, the first well will be commenced from a location in the NWNW of Section 24 with a projected bottom hole location in the SESW of Section 25. At the July NDIC hearing, approval will be sought to drill a second well within the unit. This well will be drilled from a location in the NWNE of Section 24 to a bottom hole location in the SESE of Section 25. The horizontal lateral in each well will be drilled within the Middle Bakken.

The wells will be drilled with a 13-1/2" hole to approximately 2100'. Casing (9-5/8") will be run and cemented with

approximately 860 sacks. An 8-3/4" hole will be drilled to the kick off point of approximately 8750' where wire line logs may be run. From that point, directional tools will be used to build angle at 14deg/100'. Seven inch casing will be run to approximately 9400' at an angle of 90deg and cemented to 4100' with 700 sacks. The lateral will be drilled to a total depth of approximately 19,000'. A 4-1/2' liner will be run to TD with seven swell packers and eight sliding sleeve subs and hung back into the 7" with a minimum 400' overlap. The drilling rig will be released.

After the batteries are built for each well, fracture stimulation equipment will move in and rig up at both locations. The sliding sleeve subs will be used to direct the fracture fluid to the most distant end of the lateral. Subsequently, a ball will be dropped in each well to seal off the prior frac stage, and shift the sleeve to the next stage. This process will be repeated until eight stages have been completed simultaneously in each well. The fracture propant

will be comprised of 100 mesh sand in a slick water solution followed 20/40 sand in cross linked gel solution per stage.

The wells will be shut in for the night and the flow back would start the following morning. Flow rates and pressures will be recorded on an hourly basis. At a later date, a packer and 2-7/8' tubing will be run.

Standards of Success

The data collected from these wells will yield a valuable baseline for comparison with other completion techniques. The success of this project will be determined by the initial flow rates and the calculated ultimate recovery for the wells as compared to the nearby single lateral 1280 acre spaced wells. The offset wells will include the Braaflat 11-11H, Weflen 11-15H, Locken 11-22H, Liffrig 11-27H and Locken 14-28H. An increase in ultimate

recovery will increase tax revenues for the State and create wealth through increased royalty payments.

If successful, this type of drilling and completion technique can be used, not only in other Sanish Field locations, but also in other Bakken development programs, as well as any other potential fracture stimulated horizontal drilling target. This technique can be used to enhance recovery from formations in areas that are currently not economic due to low ultimate recovery rates. By making it economic to develop resources in new areas, the technique will preserve the existing oil and gas jobs in the State and may increase them.

Background/Qualifications

Sinclair Oil and Gas Company and its primary partner in this project, Whiting Oil and Gas Corporation, have drilled numerous

horizontal wells in the Bakken formation. We have experimented with various drilling configurations and completion techniques. Whiting is currently the most active operator in the Sanish Field and will likely serve as the operator for this project. Robert Taylor has 35 years of experience as a Petroleum Engineer after graduating form the Colorado School of Mines and has been responsible for all of Sinclair's drilling and completion activity in the Bakken formation in North Dakota and Montana.

Management

Robert Taylor will work closely with his counterparts at Whiting to insure that the work is completed within the specified time table. Both Whiting and Sinclair will have a strong economic incentive to complete the work timely.

Timetable

The first well should spud by late June 2008 and will take about 50 days to drill. The rig will then move to the second well in late July 2008 and will complete drilling by early September 2008. Assuming that frac equipment can be contracted in a timely manner, both wells should be stimulated and start flowing back by the end of September 2008. Drilling reports will be available daily, as will the completion and flow back data. A minimum of three months production will be necessary to estimate the ultimate recovery. A quarterly update of the ultimate recovery will be provided.

Budget

The approximate cost for the project is \$11,800,000.00 for the drilling and completion of two wells. Each company will fund its

respective share of the cost. If the grant is approved, the data from this completion will be made available to the public.

Tax Liability

Sinclair Oil and Gas Company does not have any outstanding tax liability owed to the State of North Dakota nor to any of its political subdivisions.