## Members of the Review Panel:

## **Re:** Proposed exploration and evaluation program

In other submissions, I have proposed that Shoal Point Energy be permitted an exploration and evaluation program to assess the Humber Arm shales in our exploration licences in western Newfoundland. This program would start with collection of baseline environmental data and include ongoing environmental monitoring. The program would include up to 4 well re-entries, up to 20 new wells, and a modern 3D seismic program.

The evaluation will provide key information about the geology, engineering, economics and environmental impact of the project. Assuming that the economics of the project look positive, the information obtained in the evaluation program will be critical to creating a Project Description that would describe full field development and provide the basis for a comprehensive Environmental Assessment.

This letter is in response to your request for more information about the proposed evaluation program. Much of my response will be conceptual in nature and some elements of the proposed program will be dependent upon early results. The proposed wells will not necessarily be drilled in the order in which they are numbered.

We would re-enter up to four existing well bores: 3K-39, 2K-39, K-39 and M-16. This would involve re-entering and conducting standard tests to establish whether the casing and cement are sound. In each case, if the well is in good shape, we would perform a completion using hydraulic fracturing and conduct a flow test. If the well is not in good shape, we would not attempt a completion, but would remediate the well and safely abandon it.

We would then purchase and reprocess select portions of several existing seismic lines and drill and complete up to 8 wells utilizing that seismic information.

If results at that point were encouraging enough, we would then conduct a 3D seismic survey and drill up to 12 more wells located on the basis of information provided by the seismic survey. The 12 wells would be drilled from 6 drill pads.

We think this incremental approach to exploring and evaluating the resource is the logical way to proceed. The exploration and evaluation program would be conducted over several years.



Yellow lines are existing seismic lines.

 $\bullet$  symbol shows bottom hole location of existing well bores that would be re-entered.

Blue lettering indicates re-entry wells.

indicates proposed drill pad locations (not to scale – actual drill pads would be smaller than indicated).

Red lettering indicates proposed new wells and red dots the bottom hole locations of the new wells.



Cross section of proposed re-entry of M-16 well and proposed new wells Long Point #1 and Long Point #2, located on seismic line PAP 96 500. Humber Arm formation is thick enough that horizontal wells would not be required in early stages of evaluation at this location.

Mark Jarvis CEO Shoal Point Energy