



October 24, 2003

By mail and fax (403) 215-2724

Votre réf. /Your ref.

Mr. Paul Einarsson
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Notre réf./Our ref.
9530-004-35-006
9530-004-35-007

**Subject: GSI Western Gulf of St. Lawrence and West of Anticosti Island
2D Seismic Projects**

Dear Sir,

Following your letter of August 18, 2003, Fisheries and Oceans Canada (DFO) has completed its assessment of the above-mentioned projects. This assessment is based on the following documents:

- August 18, 2003. GSI West Gulf of St. Lawrence Survey 2003. Environmental Assessment Report and Appendices. Report prepared by Canning & Pitt Associates inc., with the assistance of Robert Hamelin & Associés, for Geophysical Service Inc.
- September 11, 2003. Letter from H. Paul Einarsson (Geophysical Service Inc.) to Gordon Walsh (Fisheries and Oceans Canada). GSI Western Gulf of St. Lawrence 2003 2D seismic survey, West of Anticosti Island. Additional Information.
- September 26, 2003. Fax from H. Paul Einarsson (Geophysical Service Inc.) to T.M. Baker (National Energy Board). Geophysical Service Inc. Western Gulf of St. Lawrence Marine Seismic Program – Information Request No. 5.

You will find enclosed DFO's scientific advice on the above-mentioned projects.

DFO concludes that the Environmental Assessment Report prepared on the seismic exploration proposed in the western part of the Gulf of St. Lawrence, including West of Anticosti Island, still presents incomplete information even though many discussions have taken place between GSI representatives and DFO staff. The main gaps include the sound propagation model, the determination of the sound levels which marine living resources will be exposed to, as well as the lack of specific information on marine mammal distribution at the time of the proposed seismic surveys, including the determination of sensitive areas for their feeding and migration. The absence of an adequate sound propagation

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model applicable to this part of the St. Lawrence ecosystem is an important gap that prevents an adequate assessment of effects on marine resources, particularly marine mammals.

The main conclusions of the enclosed report are the following:

- Seismic surveys in or around the Laurentian Channel may result in a complete, temporary blockage of the main migration route of several species of marine mammals during their migration period or may affect their feeding patterns. Furthermore, it is possible to observe in this area the St. Lawrence beluga whale, the blue whale or the right whale: these are considered by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) as *endangered*, a status which will be shortly legalized by the new *Species at Risk Act*.
- The projects could have significant effects on snow crab, northern shrimp and lobster near Anticosti Island, particularly on egg-bearing females.
- Similarly, the proposed projects could have significant effects on the reproduction of redfish and the migration of cod. The fishery for cod is currently under a moratorium in the Gulf and this species is considered by COSEWIC as being at risk, the Northern Gulf population being *threatened* and the Southern Gulf population being of *special concern*.

To help reduce the effects, DFO has identified in the attached scientific advice other mitigation measures, in addition to the ones proposed in GSI's Environmental Assessment Report. With the implementation of all mitigation measures, the residual effects on fish and crustaceans would become acceptable. On the other hand, for marine mammals, DFO still concludes that residual effects are undetermined and potentially significant.

As major gaps in the available information prevent an adequate assessment of effects, as the proposed projects would be implemented in one of the most important areas for marine mammals in Eastern Canada, as species at risk present in the area are known to be sensitive to seismic surveys, and as negative effects on marine resources may not be adequately mitigated, DFO concludes that the projects as proposed have undetermined and potentially important effects on marine resources of the Gulf of St. Lawrence, particularly marine mammals.

Therefore, DFO is of the opinion that the proposed projects should be redesigned and additional work should be conducted in order to adequately assess and mitigate the effects on marine resources as identified in the attached advice.

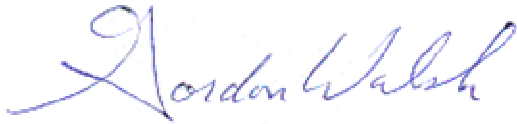
DFO proposes in the enclosed report that field tests and collection of additional information be conducted so as to reduce the uncertainty and significance of the effects on marine mammals. There is no guarantee that those measures will be sufficient to reduce the risk to marine resources to an acceptable level. If you choose to implement all the measures (mitigation, field tests and collection of information), we expect that your modified projects will be resubmitted to DFO for reassessment.

We recognize that your organization will need DFO's collaboration in order to resolve some of the issues mentioned in the attached document and we remain available to provide assistance in this regard.

Please note that DFO has provided the enclosed report to the National Energy Board as an expert advice for the environmental assessment that the NEB is conducting for the *Western Gulf Project* under the *Canadian Environmental Assessment Act*.

If you have any questions or concerns with respect to the present, please contact the undersigned.

Sincerely,



Gordon Walsh
Director, Fish Habitat Management Branch

Att.

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