

MULTI KLIENT INVEST AS

(A Company associated with Petroleum Geo-Science)



PROJECT DESCRIPTION FOR
2D MARINE SEISMIC SURVEY
OFFSHORE NORTHEAST COAST OF CANADA
Labrador Shelf

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1. Purpose of the Project Description

The purpose of this document is to provide a Project Description to the CN-LOPB as part of the environmental assessment to obtain a Geophysical Work authorization to acquire seismic exploration data within Labrador Shelf in 2011.

The Canadian Environmental Assessment Agency's Operational Policy Statement (OPS-EPO/5-2000) describes the purpose of the Project Description as twofold:

- 1) To determine the need for an environmental assessment. In other words, the Project Description assists a federal authority to determine whether it has a decision-making responsibility (e.g. to issue a permit) that triggers the need for an assessment of the project.

This program falls within the CNLOPB jurisdiction, The C-NLOPB is the designated federal representative mandated under the Atlantic Accord Implementation Acts as well as the CEAA. The CNLOPB acts as the federal environmental assessment coordinator in this context. Per the CNLOPB Geophysical, Geological, Environmental and Geotechnical Program Guidelines (May 2008), an authorization to conduct the planned survey is required from the CNLOPB respectively.

- 2) To promote efficient coordination of the environmental assessment, in other words, to identify the federal authorities that will be involved in the environmental assessment, either in a decision making role or as an expert department.

In addition to determining whether it will likely require an environmental assessment of the project under the CEAA, the federal authority receiving the

Project Description (in this case, the CNLOPB) also distributes the Description to other federal authorities which may also have a responsibility or interest, and therefore need to be notified under the regulations.

2. Project Description

The following project description follows the format and content recommended in the Agency’s Operational Policy Statement “Preparing Project Descriptions under the Canadian Environmental Assessment Act: (OPS-EPO/5-2000). Table 1 (Sample Outline of a Detailed Project Description), where relevant for the type of project proposed.

1. General Information	
Nature of the project	2D Marine Seismic Exploration Survey. TGS-NOPEC Geophysical Company ASA (TGS-NOPEC) & Multi Klient Invest AS a company associated with Petroleum Geo-Science (PGS) in a joint venture proposes to conduct a 2D marine seismic exploration survey project offshore Labrador Shelf within the regulatory jurisdiction of CNLOPB. Multi Klient Invest AS will be the Operator.
Project Name	PGS/TGS NOPEC 2011 Labrador Shelf
Proposed location	The proposed survey program covers a specific area offshore Labrador Shelf. The survey area is illustrated in Figure 1 – Full Survey area map. All lines within the CNLOPB jurisdiction and are outside the Canada 12 mile nautical limit. The lines do not enter the Labrador Settlement Zone.
Distribution List	Canada-Newfoundland and Labrador Offshore Petroleum Board 5th Floor, TD Place 140 Water Street St. John's, NL A1C 6H6 Tel: (709) 778-1400 Fax: (709) 778-1473
Information on Consultations	Consultations will commence as soon as possible with fisheries, fish companies, and relevant fisher organizations. During these meetings and presentations, information will be exchanged about the survey and area fisheries, and issues and mitigations identified for the assessment. Department of Fisheries (DFO), Environment Canada, One Ocean, Fish Food Allied Workers

	(FFAW), have been notified. Sikimuit Environmental Management will be sub-contracted to work with RPS Energy for consultations. (Bevin Le Drew).
Other applicable EA regimes	
Proponent/co-proponents	<p>TGS-NOPEC Geophysical Company ASA – Oslo Baarsrudveien 2, N-3478 Naersnes Norway Contact: Knut Agersborg Phone: 011-47-6676-9927 Cell: 011-47-9547-8142 Email: knut.agerborg@tgsnopec.com</p> <p>Multi Klient Invest AS 15150 Memorial Drive Houston, Texas, USA 77079 Contact: Gary Morrow Tel: (281) 509-8000 Email: Gary.Morrow@pgs.com]</p>
Contacts	<p><u>Operator and Work Authorization Applicant</u> Multi Klient Invest AS 15150 Memorial Drive Houston, Texas, USA 77079 Contact: Gary Morrow Tel: (281) 509-8000 Email: Gary.Morrow@pgs.com]</p> <p>Contact: <u>Lead Canadian Consultancy</u> RPS Energy 1545 Birmingham Street, 2nd Floor Halifax, Nova Scotia, B3J 2J6 Contact: Darlene Davis Tel: (902) 492-0281 Cell: (902) 790-1212 Email: davisd@rpsgroup.com</p>
Federal involvement (ownership of the land to be used)	Canadian offshore, not within 12 nautical miles of any coastline. No within the Labrador Settlement Zone.
Authorizations required	CNLOPB Geophysical Operations Authorization

2. Project Information	
Main project components	A conventional 2D seismic spread including a dedicated survey vessel using a single towed solid streamer, source array, and associated survey equipment and personnel.
Project size	The survey will be limited to the work area (Approx. 9,200km) defined by Figure 1,(Survey Area Map) over three years.
Project activities	2D Marine Seismic Exploration Survey
Schedule	<p>June 2011 through December 31, 2011 as a function of location, weather conditions, and vessel availability.</p> <p>The work is expected to commence in June 2011 and continue on a seasonal basis, requiring approximately 3 years to complete (the entire program 9200 km). It is anticipated that this work will commence approximately June 15, 2011, depending on the factors described above.</p>
On site land use	The vessel will make its initial Port Call in St. Johns, NF for MOB and CN-LOPB Safety Audit, and return to St. John's for Port Calls every 5 weeks and again upon completion of the program.
Resource /material requirements	<p>The resource/material requirements for the project will consist of those normal in vessel operations with a crew of approximately 35 professionals operations on a 24-hour basis.</p> <p>The vessel will carry a medic provided by AOMS and a Sikiuit Observer. As per discussions with Environment Canada a Marine Mammal Observer will be onboard the vessel trained in Seabird Observations/Protocol and a full report provided upon completion of the survey.</p>
Toxic/hazardous materials to be uses	Toxic and hazardous materials onboard the survey vessel will be those associated with normal vessel operations (i.e. paints, batteries, fuels, solvents, etc). All materials will be properly stored, handled, and managed, with Material Safety Data sheets (MSDS) retained onboard and at all pertinent workstations for crew

	<p>to have easy access to the hazard information for all the chemicals and other potentially harmful substances with which they work. All crew will have appropriate WHMIS training courses.</p>
Wastes produced	<p>The wastes generated during the survey will consist of those normal in vessel operations. These include; atmospheric emissions, ballast water, bilge water, deck drainage, grey and black water, and solid waste.</p>
Waste disposal procedures	<p>The survey vessel will comply with all applicable regulations concerning management of waste and discharges of materials into the marine environment.</p> <p>The survey will be conducted with a dedicated seismic research vessel. The vessel will have equipment, systems, and protocols in place for prevention of pollution by oil, sewage, and garbage in accordance with international standards and certification authorities. The vessel will be subject to pre-survey audits by the regulators and the operator in the port of mobilization prior to survey commencement.</p> <p>A project safety plan will be developed and presented for the project based on the model used for previous work authorization applications to the boards. The survey vessel will comply with all applicable regulations concerning the marine environment.</p>

3. Project Site Information	
Project Location	Northeast coast of Canada, Labrador Shelf. See Figure 1
Environmental features	<p>The environmental features relative to the proposed survey area fall under the physical and biological setting, and these will be discussed in the Environmental Assessment. These include the following;</p> <p><u>Physical Setting</u></p> <ul style="list-style-type: none"> • Geomorphology • Ocean Current and Temperature • Weather and Sea State • Ice <p><u>Biological Setting</u></p> <ul style="list-style-type: none"> • Marine Fish and Invertebrates • Fish Eggs and Larvae • Marine Mammals • Marine Birds • Plankton • Benthic Communities • Species at Risk
Human use (project and adjacent area)	<p>The human uses of the survey area may include:</p> <ul style="list-style-type: none"> • Fisheries • Shipping • Military • Exploration • Recreational • Research

Figure 1

