

National Energy
Board



Office national
de l'énergie

GOA LETTER with TERMS and CONDITIONS

Operation Identifier: 5554587
26 June 2014

Ms. Darlene Davis
Lead Canadian Consultancy
RPS
1310 Hollis Street, Suite 205
Halifax, NS B3J 3P3
Facsimile 902-425-0703

Dear Ms. Davis:

Geophysical Operations Authorization (GOA) for TGS-NOPEC Geophysical Company ASA (TGS), Petroleum GeoServices (PGS) and Multi Klient Invest AS (MKI) NorthEastern Canada 2D Seismic Survey (the Project)

The National Energy Board (Board) has considered TGS, PGS & MKI's application under paragraph 5(1)(b) of the COGOA for the Project. The Board has also considered the report and recommendations of Board Member David Hamilton pursuant to section 15 of the *National Energy Board Act*.

The Board has issued the GOA in Attachment I for the proposed Project activity over a period of five years. The GOA is subject to the terms and conditions provided in Attachment II. The Board has also prepared an Environmental Assessment Report, provided in Attachment III, to reflect its assessment of the environmental and socio-economic effects of the Project. The Board will post the GOA terms and conditions and Environmental Assessment Report on the Project's Public Registry.

TGS and MKI, a wholly-owned subsidiary of PGS, have entered into a joint venture to conduct the Project. MKI will be the Project operator. The authorized Project includes approximately 16,173 km of 2D seismic survey as well as collection of gravity data in Baffin Bay/Davis Strait region. The Operation Identifier No. **5554587** has been assigned to this Project and should be quoted on all future correspondence.

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<http://www.neb-one.gc.ca>
Telephone/Téléphone : 1-800-899-1265
Facsimile/Télocopieur : 1-877-288-8803

MKI, as the operator, is responsible for conducting this operation in accordance with all legislation applicable to this application including the *Canada Labour Code, Part II* and the *Oil and Gas Occupational Safety and Health Regulations*. MKI is expected to ensure all contractors are aware of and comply with the terms and conditions of the GOA.

Please provide the NEB with two weeks notice of any kick-off meeting, in the event that NEB inspectors plan to attend.

Please contact the Chief Conservation Officer at 403-221-3014 or Jamie.Kereliuk@neb-one.gc.ca with any questions.

Yours truly,

Original signed by L. George for

Sheri Young
Secretary of the Board

Att.: Attachment I - Geophysical Operations Authorization
Attachment II - Terms and Conditions
Attachment III - Environmental Assessment Report



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Terms and Conditions

IN THE MATTER OF the *Canada Oil and Gas Operations Act* (COGOA), and the Regulations made thereunder; and

IN THE MATTER OF an application dated 17 May 2011 for a Geophysical Operations Authorization, pursuant to paragraph 5(1)(b) of COGOA, for the NorthEastern Canada 2D Seismic Survey (the Project) filed with the National Energy Board (Board) under File OF-EP-GeopOp-M711-5554587 0201. TGS-NOPEC Geophysical Company ASA and Multi Klient Invest AS (MKI), a wholly-owned subsidiary of Petroleum GeoServices, have entered into a joint venture to conduct the Project, and MKI will be the Project operator.

1. MKI shall comply with all of the conditions contained in this geophysical operations authorization unless the Chief Conservation Officer (CCO) otherwise directs.
2. MKI shall implement or cause to be implemented all of the commitments, policies, practices, mitigative measures, recommendations and procedures for safety and the protection of the environment referred to in its Project application and subsequent filings.
3. MKI shall request approval from the CCO of any proposed changes or deviations to the authorized Project work or activities including but not limited to key personnel, the safety plan, the environmental mitigation measures and contingency plans.
4. MKI shall provide the CCO with 48 hours notice of Project start-up.
5. MKI shall file with the CCO, for approval, an environmental commitments tracking table that includes all of MKI's environmental commitments and mitigation measures 30 days prior to commencement of the Project. MKI shall also file a status update of the commitments following each operational season, annually by February 15. The commitments tracking status update shall be accessible to the public and provided to all of the parties MKI has consulted with.

6. MKI shall file with the CCO a fishing gear compensation plan 30 days prior to commencement of the Project, and provide copies to the Arctic Fisheries Alliance and the Baffin Fisheries Coalition. MKI shall notify the CCO of any claims made with respect to the fishing gear compensation plan and their outcomes as soon as practical.
7. MKI shall file with the CCO a report that describes how available Inuit Qaujimagatugangit (IQ) (Inuit Traditional Knowledge) has been considered and incorporated in the Project design 30 days prior to commencement of the Project for each operational season.
8. MKI shall file a Marine Mammal Observer (MMO) report with the CCO for each operational season, annually by February 15. MKI shall also file a Final MMO report by February 15 following the final operational season. All MMO reports shall be accessible to the public and provided to interested communities. The MMO reports shall include the following information at a minimum:
 - a. Number of shut downs
 - b. Reason for shut downs
 - c. Duration of shut down
 - d. Area of shut down zone
 - e. All marine mammal observations and approximate distances from the seismic vessel
 - f. Significant weather and visibility conditions
 - g. Sea bird observations
 - h. Level of MMO effort and active survey time
 - i. Results of the Passive Acoustic Monitoring Program and any correlation to marine mammal observations.
9. MKI shall provide an environmental assessment update to the CCO prior to each operational season that includes any changes in MKI's Species at Risk assessment and cumulative effects.
10. MKI shall conduct Project update meetings in interested communities following each operational season for the duration of the Project. MKI shall file with the CCO, and the communities, a summary of the meetings by February 15 for each operational season. The summary shall include the meeting minutes, identify concerns raised during the meetings and explain how MKI will address these concerns.

11. MKI shall notify the Chief Safety Officer by the most expedient communication means available, of any major incidents, accidents or any lost time occurrences. The NEB incident cell phone number is 403-807-9473.
12. MKI shall maintain valid insurance with the same terms and conditions for the duration of the Project and file updated insurance certificates with the CCO prior to their expiry.
13. Weekly status reports, which includes total kilometres completed and percentage of the program completed, are to be e-mailed to dailyreports@neb-one.gc.ca by Monday 8:30 am MT.
14. MKI shall provide the CCO with an updated operator contact list for this Project prior to Project commencement.
15. Within twelve months after the date of termination of the entire Project, MKI shall file one paper copy of the final report and one electronic copy (PDF-portable document format) with the CCO including:

Survey location data

Digital shot point location data in SEG-P1 or ASCII format is to be submitted along with a digital image (tiff format is preferred) and 2 prefolded paper copies of all location maps, shot point maps, at a suggested scale of 1:50,000.

2D type seismic final report

A reproducible digital image (.tiff or .pdf format is preferred) and a prefolded paper copy of each seismic line are to be submitted with the final report. The seismic lines should be suitably processed, migrated, and displayed at a vertical scale of ~3.75 inches per second for 6 seconds data or ~5.00 inches per second for 4 seconds data with a compatible horizontal scale.

Gravity survey final report

The final Bouguer / free air gravity map and a second order residual gravity map displayed with coloured contours are to be submitted at a suggested scale of 1:50,000.