



File 9222-H109-001E  
22 September 2006

Mr. Garry Bilous  
Husky Oil Operations Limited  
707 8<sup>th</sup> Avenue SW  
Calgary, AB T2P 3G7  
Fax 750-1994

Dear Mr. Bilous:

**Husky Oil Operations Limited - Airborne Gravity Survey  
Summit-Redstone Area of the Sahtu Region, NWT  
Operation Identifier No. 9222-H109-001E**

Please find attached a Geophysical Operation Authorization and the terms and conditions for the subject program. The program is authorized for an airborne gravity consisting of 11,330 km of grid lines in the Summit-Redstone area of the Sahtu Region, NWT. Please note that the Operation Identifier No. **9222-H109-001E** has been assigned to this operation and should be quoted on all future correspondence.


Husky Oil Operations Limited, 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*. You are strongly encouraged to ensure all contractors are aware of the terms and conditions of the approval.

Please provide the NEB with ample notice of start-up so that an inspector may be dispatched to view operations. Take note that the inspector may wish to attend the start-up/safety meeting.

As well, several report forms and information pages are attached for your information and use.

This survey is classified as **exclusive** and the data will fall under the five year rule for data confidentiality. Husky Oil Operations Limited must file a complete report to the National Energy Board as outlined in the *Geophysical Operations Regulations* **one year** after program completion.

Yours sincerely,

  
Bharat C. Dixit  
Chief Conservation Officer

444 Seventh Avenue SW  
Calgary, Alberta T2P 0X8

444, Septième Avenue S.-O.  
Calgary (Alberta) T2P 0X8

Canada

Telephone/Téléphone : (403) 292-4800  
Facsimile/Télécopieur : (403) 292-5503  
<http://www.neb-one.gc.ca>  
Telephone/Téléphone : 1-800-899-1265  
Facsimile/Télécopieur : 1-877-288-8803



# GEOPHYSICAL OPERATION AUTHORIZATION

Applicant: Husky Oil Operations Limited  
Operating Licence No.: 1145 Land Use Permit / Water Licence No.: S06B-005  
Geographical Area: \_\_\_\_\_  
Grids or NTS Map Sheets: 95M, 95N, 96C  
Interests Identifier: Exploration Licence 397, 423, 441  
Description of Operation: Airborne Gravity Survey

## SPECIFICS OF OPERATION

Exclusive ☒ For (if different from applicant): \_\_\_\_\_ Non-Exclusive ☐ Participation ☐ Purchase / Reprocessing ☐  
Proposed Commencement Date: 11/09/2006 Proposed Completion Date: 09/10/2006  
No. of Personnel: 5 No. of Crews: 1  
Data Acquisition Equipment: Helicopter - Eurocopter AS-350 B3 Estimated Kilometres: 11,360.00km  
Vessel / Aircraft Names / Registration Numbers: C-GSGH  
Energy Source: Select  
Depth: \_\_\_\_\_ m Charge Size: \_\_\_\_\_ kg  
Source Parameters: \_\_\_\_\_ Detector Parameters: \_\_\_\_\_

## OPERATIONAL CONTACT

Name: Garry Bilous, Manager Geophysical Operations Exploration  
Address: 707 - 8 Avenue S.W. (Box 6525, Station D) Calgary, Alberta T2p 3g7  
Telephone: (403)750-1421 Facsimile: (403)750-1994

## ESTIMATED EXPENDITURES

	On-Interest	Off-Interest
Field Work:	<u>\$1200000.00</u>	<u>\$</u>
Data Processing:	<u>\$50,000</u>	<u>\$</u>
Interpretation / Laboratory:	<u>\$</u>	<u>\$</u>

## CONTRACTORS

Data Acquisition: Sander Geophysics Ltd.  
Data Processing: ELS Consulting  
Data Interpretation / Laboratory Studies: \_\_\_\_\_

"I certify that I have complied with the notification, permitting and / or licensing requirements of all federal / territorial legislation that are applicable to this operation."

Signed: [Signature] Date: AUG 31 / 2006  
Responsible Officer  
Name: Garry Bilous Operator: Husky Oil Operations Limited  
Title: Manager Geophysical Operations Telephone: (403)750-1421

## NEB USE ONLY

This operation is authorized under Section 5.(1)(b) of the Canada Oil and Gas Operations Act (O-7) and is subject to the terms and conditions attached to this authorization.

Signed: [Signature] Date: Sept 22 / 06  
Chief Conservation Officer  
Operation Identifier: 92224109-001E Number of Attachments: \_\_\_\_\_

Encl: Geophysical Operations Authorization  
Terms and Conditions  
Canada Labour Code Part XVI Information on Reporting  
Hazardous Occurrence Investigation Report Form  
Weekly Progress Report Form  
NEB Contacts Form  
N.W.T. Spill Report Form

**Terms and conditions of the approval are as stated below:**

1. Unless otherwise directed by the Chief Conservation Officer, the operator shall implement or cause to be implemented all the policies, practices, mitigative measures, recommendations and procedures for operational safety and the protection of the environment included in or referred to in the operator's application and subsequent submissions.
2. The operator shall, within 30 days of the completion of the geophysical survey, file with the Chief Conservation Officer, a confirmation, by an officer of the company, that the approved Project was completed in compliance with all applicable conditions in the Geophysical Operation Authorization. If compliance with any of these conditions cannot be confirmed, the officer of the company shall file with the Chief Conservation Officer details as to why compliance cannot be confirmed.
3. The operator shall notify the NEB, by the most expedient communication means available, of any major incidents, accidents or any lost time occurrences. Telephone numbers are provided on the attached NEB contact list.
4. To promote additional safety and environmental protection, it is recommended that the spill response procedures and equipment needs be periodically reviewed and, where necessary, upgraded to ensure that these are adequate for the volumes of fuel or other materials to be stored or used.
5. Weekly status reports are to be emailed to [dailyreports@neb-one.gc.ca](mailto:dailyreports@neb-one.gc.ca) or faxed to the attention of the Chief Conservation Officer (fax number (403) 292-5876) by Monday 8:30 am. Please contact Lori-Ann Sharp (telephone (403) 299-1994) should there be any difficulty in delivery of the weekly status reports.
6. Final reports are required **within twelve months** following termination of field work, the format and content of which are described in Part V of the *Canada Oil and Gas Geophysical Operations Regulations* (COGGOR). The report is to include:
  - Digital location data in UKOA, SEG-P1 or any flat ANSI format is to be submitted along with a reproducible, mylar or suitable digital image (tif format is preferred) and 2 pre-folded paper copies of all location maps at a suggested scale of 1:50,000.
  - A reproducible, mylar or suitable digital image (tif format is preferred), and a prefolded paper copy of the final Bouguer gravity map and a second order residual gravity map displayed with coloured contours are to be submitted with the final report at a suggested scale of 1:50 000.

## **CANADA LABOUR CODE**

### **Oil and Gas Occupational Safety and Health Regulations**

#### **PART XVI**

#### **HAZARDOUS OCCURRENCE INVESTIGATION, RECORDING AND REPORTING**

[SOR/94-165, s. 59(F)]

##### **Interpretation**

16.1 In this Part,

"disabling injury" means an employment injury or an occupational disease that

(a) prevents an employee from reporting for work or from effectively performing all the duties connected with the employee's regular work on any day subsequent to the day on which the disabling injury occurred, whether or not that subsequent day is a working day for that employee,

(b) results in the loss by an employee of a body member or part thereof or in the complete loss of the usefulness of a body member or part thereof, or

(c) results in the permanent impairment of a body function of an employee;

"minor injury" means an employment injury or an occupational disease for which medical treatment is provided and excludes a disabling injury. (blessure légère) SOR/94-165, s. 60.

##### **Report by Employee**

16.2 Where an employee becomes aware of an accident or other occurrence arising in the course of or in connection with his work that has caused injury to him or to any other person, he shall without delay report the accident or other occurrence to his employer, orally or in writing.

##### **Investigation**

16.3 (1) Where an employer is aware of an accident, occupational disease or other hazardous occurrence affecting any of his employees in the course of employment, the employer shall, without delay,

(a) take necessary measures to prevent a recurrence of the hazardous occurrence;

(b) appoint a qualified person to carry out an investigation of the hazardous occurrence; and

(c) notify the safety and health committee or the safety and health representative, if either exists, of the hazardous occurrence and of the name of the person appointed to investigate it.

(2) In addition to the investigation referred to in paragraph (1)(b), where the hazardous occurrence referred to in subsection (1) is an accident involving a ship or aircraft or a motor vehicle on a public road, the employer shall investigate the accident by obtaining from the appropriate police or other investigating authority a copy of the report made by that authority in respect of the accident.

(3) As soon as possible after receipt of the report referred to in subsection (2), the employer shall provide a copy thereof to the safety and health committee or the safety and health representative, if either exists. SOR/94-165, s. 61.

### **Hazardous Occurrence Report**

[SOR/94-165, s. 62(F)]

16.4 (1) The employer shall report, by the most rapid means of communication available to the employer, the date, time, location and nature of any accident, occupational disease or other hazardous occurrence referred to in section 16.3 to a safety officer and to the safety and health committee or the safety and health representative, if either exists, as soon as possible but not later than 24 hours after becoming aware of the occurrence, where the occurrence resulted in one of the following circumstances:

- (a) the death of an employee;
- (b) a missing person;
- (c) a disabling injury to an employee;
- (d) the implementation of emergency rescue, revival or evacuation procedures;
- (e) a fire or explosion that threatened the safety or health of an employee;
- (f) the free fall of an elevating device that rendered the elevating device unsafe for use by an employee;
- (g) an accidental accumulation, spill or leak of a hazardous substance; or
- (h) the loss of or damage to support craft.

(2) A written report of the accident, occupational disease or other hazardous occurrence referred to in subsection (1) shall be submitted by the employer within 14 days after the occurrence to

- (a) the regional safety officer at the regional office; and
- (b) the safety and health committee or the safety and health representative, if either exists.

(3) The report referred to in subsection (2) shall be in the form set out in Schedule I to this Part and contain the information required by the form. SOR/88-199, s. 19; SOR/94-165, s. 63.

16.5 Where an investigation referred to in subsection 16.3(2) discloses that the accident resulted in a circumstance referred to in subsection 16.4(1), the employer shall, within 14 days after the receipt of the report of the accident made by the police or other investigating authority, submit a copy of the report to the regional safety officer at the regional office.

### **Minor Injury Record**

16.6 (1) Every employer shall keep a record of each minor injury of which he is aware that affected any of his employees in the course of employment.

(2) A record made pursuant to subsection (1) shall contain

- (a) the date, time and location of the occurrence that resulted in the minor injury;
- (b) the name of the injured or ill employee;
- (c) a brief description of the minor injury; and
- (d) the causes of the minor injury.

SCHEDULE 1 / ANNEXE 1  
(subsection 16.4(3) / paragraphe 16.4(3))  
HAZARDOUS OCCURRENCE INVESTIGATION  
REPORT

RAPPORT D'ENQUÊTE DE  
SITUATION COMPORTANT DES RISQUES

<b>1. Type of Occurrence / Genre de situation</b> <input type="checkbox"/> Explosion <input type="checkbox"/> Disabling injury / Blessure invalidante <input type="checkbox"/> Other (specify) / Autre (préciser)		<b>2. Department file no. / N° de dossier du ministère</b> Regional or district Office / Bureau régional ou de district Employer ID no. / Numéro d'identification de l'employeur	
<b>3. Employer name and mailing address / Nom et adresse postale de l'employeur</b>		Postal code / Code postal Telephone number / Numéro de téléphone	
<b>Site of hazardous occurrence / Lieu de la situation comportant des risques</b>		<b>Date and time of hazardous occurrence / Date et heure de la situation comportant des risques</b> Weather / Conditions météorologiques	
<b>Witnesses / Témoins</b>		Supervisor's name / Nom du surveillant Operator / Exploitant	
Identification of drilling rig, drilling unit, production facility or support craft / Identification de l'appareil de forage, installation de forage, installation de production ou du véhicule de service			
<b>4. Description of what happened / Description des événements</b>			
Brief description and estimated cost of property damage / Description sommaire et coût estimatif des dommages matériels		Operation in progress / Opération en cours	
<b>5. Injured employee's name (if applicable) / Nom de l'employé blessé (s'il y a lieu)</b>		Age / Age	Sex / Sexe
Occupation / Profession		Years of experience in occupation / Nombre d'années d'expérience dans la profession	
Description of injury / Description de la blessure			
Was training in accident prevention given to injured employee in relation to duties performed at the time of the hazardous occurrence? / L'employé blessé a-t-il reçu une formation en prévention des accidents relativement aux fonctions qu'il exerçait au moment de la situation comportant des risques? <input type="checkbox"/> Yes / Oui <input type="checkbox"/> No / Non    Specify / Préciser			
<b>6. Direct causes of hazardous occurrence / Causes directes de la situation hasardeuse</b>			
<b>7. Corrective measures and date employer will implement / Mesures correctives qui seront appliquées par l'employeur et date d'entrée en vigueur</b> Reasons for not taking corrective measures / Raisons pour lesquelles aucune mesure corrective n'a été prise Supplementary preventative measures / Mesures supplémentaires de prévention			
<b>8. Name of person investigating / Nom de la personne menant l'enquête</b>		Signature	Date
Title / Titre		Telephone number / Numéro de téléphone	
<b>9. Safety &amp; Health committee's or representative's comments / Observations du comité de sécurité et de santé ou du représentant en matière de sécurité et de santé</b>			
Committee member's or representative's name / Nom du membre du comité ou du représentant		Signature	Date
Title / Titre		Telephone number / Numéro de téléphone	



# WEEKLY PROGRESS REPORT

PROGRAM NAME: \_\_\_\_\_ PERIOD \_\_\_\_\_ TO \_\_\_\_\_

APPROVALS			
	NATIONAL ENERGY BOARD	INDIAN & NORTHERN AFFAIRS CANADA	SAHTU LAND & WATER BOARD
OPERATION ID#			
EXP. DATE			

COMPANY NAME: \_\_\_\_\_

SEISMIC CONTRACTOR: \_\_\_\_\_

## AUTHORIZED PROGRAM PARAMETERS

ALTERATION OR MODIFICATION OF THE APPROVED PARAMETERS REQUIRES APPROVAL FROM APPROPRIATE REGULATORY AGENCY

TOTAL # OF 2D Km APPROVED	<input type="text"/>	3D SIZE KM SQ APPROVED	<input type="text"/>	SOURCE TYPE	<input type="text"/>
TOTAL # OF LINES 2D APPROVED	<input type="text"/>	NUMBER 3D SOURCE LINES	<input type="text"/>	CHARGE SIZE/# VIBS	<input type="text"/>
RECEIVER WIDTH	<input type="text"/>	3D SOURCE Km	<input type="text"/>	SHOT HOLE DEPTH (m)	<input type="text"/>
SOURCE WIDTH	<input type="text"/>	NUMBER 3D REC. LINES	<input type="text"/>	CAP LEAD LENGTH (m)	<input type="text"/>
		3D RECEIVER Km	<input type="text"/>	CAP LEAD LENGTH ABOVE GROUND (m)	<input type="text"/>

UNDETONATED CHARGES:			
LOCATION: (NAD 27)			
REASON:			
INSPECTIONS: (INAC, NEB, ILA, DFO)			
OPERATIONAL ISSUES:			
SUMMARY OF INCIDENTS: (eg: fuel spills, vehicles breaking through ice)			
GENERAL COMMENTS:			
LAT. / LONG. STAGING AREAS			
LAT. / LONG. CAMP LOCATIONS			
DATE SUBMITTED TO:	INAC <input type="text"/>	NEB <input type="text"/>	<input type="text"/>
	For Sahtu >> descenes@inac.gc.ca	dailyreports@neb-one.gc.ca	

PARTY MANAGER: \_\_\_\_\_  
FIELD PHONE# \_\_\_\_\_

FIELD FAX \_\_\_\_\_  
FIELD E-MAIL \_\_\_\_\_

ACTIVITY DURING REPORTING PERIOD





### NEB Contacts for COGO Act-regulated Work or Activities

**INCIDENT PHONE NUMBERS**

\* Hazardous occurrences (under Part XVI of the *Canada Oil and Gas Occupational Safety and Health Regulations*) and incidents requiring medical evacuation are to be reported to the NEB immediately.

**NEB 24-hour Incident Cell:** (403) 807-9473  
**NWT/Nunavut Spill Line Phone:** (867) 920-8130  
**NWT/Nunavut Spill Line Fax:** (867) 873-6924  
**Transportation Safety Board Hotline:** (819) 997-7887

NEB Operations Staff	Internet	Telephone Numbers
<b>Rick Turner</b> Operations Specialist Safety & Conservation Officer	<a href="mailto:rturner@neb-one.gc.ca">rturner@neb-one.gc.ca</a>	Work: (403) 299-3868 Cell: (403) 540-3754 Home: (403) 257-0840
<b>Chris Knoechel</b> Petroleum Engineering Specialist Safety & Conservation Officer	<a href="mailto:cknoechel@neb-one.gc.ca">cknoechel@neb-one.gc.ca</a>	Work: (403) 299-3866 Cell: Home: (403) 241-0047
Environment and Spill Reporting	Internet	Telephone Numbers
<b>John Korec</b> Environmental Specialist Conservation Officer	<a href="mailto:jkorec@neb-one.gc.ca">jkorec@neb-one.gc.ca</a>	Work: (403) 292-6614 Cell: (403) 818-2403 Home: (403) 275-6256
<b>Anne-Marie Buchwald</b> Environmental Specialist	<a href="mailto:abuchwald@neb-one.gc.ca">abuchwald@neb-one.gc.ca</a>	Work: (403) 292-4931 Cell: Home: (403) 366-9899
<b>Pam Romanchuk</b> Environmental Specialist	<a href="mailto:promanchuk@neb-one.gc.ca">promanchuk@neb-one.gc.ca</a>	Work: (403) 299-3906 Cell: Home: (403) 253-3128
<b>Laura Van Ham</b> Environmental Specialist Conservation Officer	<a href="mailto:lvanh@neb-one.gc.ca">lvanh@neb-one.gc.ca</a>	Work: (403) 299-1996 Cell: Home: (403) 208-0267
Chief Conservation & Safety Officers	Internet	Telephone Numbers
<b>Bharat Dixit</b> Exploration and Production, Team Leader Chief Conservation Officer	<a href="mailto:bdixit@neb-one.gc.ca">bdixit@neb-one.gc.ca</a>	Work: (403) 299-2792 Cell: (403) 617-3887 Home: (403) 239-1093
<b>Alan Murray</b> Professional Leader, Engineering Chief Safety Officer	<a href="mailto:amurray@neb-one.gc.ca">amurray@neb-one.gc.ca</a>	Work: (403) 299-3903 Cell: (403) 815-6661 Home: (403) 282-5637
<b>NEB OPERATIONS PHONE NUMBERS</b>	Main Office: (403) 292-4800 Operations Fax: (403) 292-5876 Alternate Fax: (403) 292-5875	

(Oil, Gas, Hazardous Chemicals or other Materials)

Phone (403) 807-9473

Fax (403) 292-5876 or 292-5875

Phone (867) 920-8130

Fax (867) 873-6924

<b>A</b> Report date and time		<b>B</b> Date and time of spill (if known)		<b>C</b> Original Report Update Report		Fax (867) 873-6924 Spill number	
<b>D</b> Location and map coordinates (if known) and direction (if moving)							
<b>E</b> Party responsible for spill							
<b>F</b> Product(s) spilled and estimated quantities (provide metric volumes/weights if possible)							
<b>G</b> Cause of spill							
<b>H</b> Is Spill terminated?  yes    no		<b>I</b> If spill is continuing, give estimated rate		<b>J</b> Is further spillage possible?  yes    no		<b>K</b> Extent of contaminated area (m2)	
<b>L</b> Factors affecting spill recovery (weathering conditions, terrain, snow cover, etc.)				<b>M</b> Containment (natural depression, dykes, etc.)			
<b>N</b> Action, if any, taken or proposed to contain, recover, clean up or dispose of product(s) and contaminated materials							
<b>O</b> Do you require assistance?  no    yes, describe:				<b>P</b> Possible hazards to persons, property, or environment			
<b>Q</b> Comments and/or recommendations						<b>FOR SPILL LINE USE ONLY</b>	
						Lead Agency	
						Spill significance	
						Lead Agency contact and time	
						Is this file now closed?	
Reported by		Position, Employer, Location				Telephone	
Reported to		Position, Employer, Location				Telephone	