

**ENVIRONMENTAL HEALTH AND SAFETY  
EMERGENCY RESPONSE AND  
SPILL CONTINGENCY PLAN**

Prepared for:

Undeveloped land located along Taylor Road,  
Southeast of Forrest Drive and  
East-southeast of Franklin Avenue  
City of Yellowknife, Northwest Territories

Prepared by:



**BluMetric Environmental Inc.**

4916 49th Street

Yellowknife, Northwest Territories X1A 1P3

Project Number: 230503

05 October 2023

## TABLE OF CONTENTS

<b>1. INTRODUCTION AND PROJECT DETAILS.....</b>	<b>1</b>
1.1 CONTACT INFORMATION .....	1
1.2 EFFECTIVE DATE OF THE SPILL CONTINGENCY PLAN .....	1
1.3 LAST REVISION TO SPILL CONTINGENCY PLAN.....	1
1.4 DISTRIBUTION LIST .....	1
1.5 PURPOSE AND SCOPE.....	2
1.6 COMPANY ENVIRONMENTAL POLICY.....	2
1.7 PROJECT DESCRIPTION: .....	2
1.8 SITE DESCRIPTION .....	2
1.9 LIST OF HAZARDOUS MATERIAL ON SITE.....	2
1.10 EXISTING PREVENTATIVE MEASURES.....	4
1.10.1 Spill Kit.....	4
1.10.2 Safe Handling Procedures .....	4
<b>2. RESPONSE ORGANIZATION:.....</b>	<b>4</b>
2.1 LIST OF CONTACT NUMBERS: .....	6
<b>3. ACTION PLAN .....</b>	<b>7</b>
3.1 POTENTIAL SPILL SIZES AND SOURCES .....	7
3.2 ENVIRONMENTAL IMPACTS .....	7
3.3 PROCEDURES FOR INITIAL ACTION .....	7
3.4 SPILL REPORTING PROCEDURES .....	8
3.5 PROCEDURES FOR CONTAINING AND CONTROLLING SPILLS ON LAND, WATER, SNOW AND ICE 10	
3.6 PROCEDURES FOR RECOVERY AND MANAGEMENT OF SPILLED MATERIAL AND RELATED WASTES 10	
3.7 PROCEDURES FOR RESTORING AFFECTED AREAS.....	10
<b>4. RESOURCE INVENTORY .....</b>	<b>11</b>
4.1 ON-SITE RESOURCES.....	11
4.2 OFF SITE RESOURCES .....	11
<b>5. TRAINING PROGRAM.....</b>	<b>11</b>



## LIST OF TABLES

Table 1:	Reportable Spill Thresholds.....	6
Table 2:	Potential Spill Sizes and Sources .....	7

## LIST OF FIGURES

Figure 1:	Site Map .....	3
Figure 2	Spill Response Procedures.....	5
Figure 3:	NT-NU Spill Report Form .....	9

## LIST OF APPENDICES

Appendix A: MSDS Sheet Diesel Fuel

Appendix B: 1:50,000 Scale Site Plan



## 1. INTRODUCTION AND PROJECT DETAILS

BluMetric Environmental Inc. (BluMetric®) with the City of Yellowknife has developed this Spill Contingency Plan for the Phase II Environmental Site Assessment (ESA) for undeveloped land located along Taylor Road, southeast of Forrest Drive and east-southeast of Franklin Avenue, in the City of Yellowknife, Northwest Territories (NWT) (herein referred to as the 'Site'). This plan is to demonstrate that BluMetric and contracted services have appropriate response capabilities to effectively address any potential spills in the area.

The work to be undertaken on the site involves the use of a diesel generated drilling rig. The MSDS sheet for diesel fuel is attached in Appendix A.

### 1.1 CONTACT INFORMATION

Vic Fontanilla  
Lands and Development Officer,  
City of Yellowknife  
[vfontanilla@yellowknife.ca](mailto:vfontanilla@yellowknife.ca)  
867-920-5673

Clem Hand, Manager  
Corporate Services & Risk Management  
City of Yellowknife  
[chand@yellowknife.ca](mailto:chand@yellowknife.ca)

### 1.2 EFFECTIVE DATE OF THE SPILL CONTINGENCY PLAN

Upon issuance of the Land Use Permit for this project.

### 1.3 LAST REVISION TO SPILL CONTINGENCY PLAN

This is the first version of the spill contingency plan.

### 1.4 DISTRIBUTION LIST

This plan has been distributed to:

Mackenzie Valley Land and Water Board 7<sup>th</sup> Floor, 4922 48<sup>th</sup> Street  
PO Box 2130  
Yellowknife, NT. X1A 2P6



## **1.5 PURPOSE AND SCOPE**

The purpose of this plan is to outline response actions for potential spills associated with the proposed Phase II investigations within the City of Yellowknife. The plan will identify key personnel roles and responsibilities as well as response procedures to mitigate impacts to people, property and the environment in the event of a spill.

## **1.6 COMPANY ENVIRONMENTAL POLICY**

This information will be provided once the successful contract has been awarded.

## **1.7 PROJECT DESCRIPTION:**

The City of Yellowknife is applying for a Land Use Permit (LUP) to conduct a Phase II ESA of the undeveloped land located along Taylor Road, southeast of Forrest Drive and east-southeast of Franklin Avenue, in the City of Yellowknife.

## **1.8 SITE DESCRIPTION**

The Site is located along Taylor Road (including lands on both north and south sides), southwest of Forrest Drive, and east-southeast of Franklin Avenue, in the City of Yellowknife, Northwest Territories. The Phase I Property comprises part of three undeveloped lots totaling approximately 21.1 hectares (ha) in size. The Phase I Property consists predominantly of wooded areas of mature trees and overgrown vegetation and includes a section of the Taylor Road right-of-way.

The Site does not have a municipal address. The Site is legally known as All of Lot 6, Block 164, of Plan of Survey 4824, Canada Lands Surveys Records (CLSR) Plan 111999; All of Lot 19, Block 133, Plan 2259, CLSR Plan 74205; and Part of Lot 2, Block 159, Plan of Survey 4070, CLSR Plan 91246.

The location and extent of the Site is depicted in Figure 1 with a 1:50,000 scale map in Appendix B.

## **1.9 LIST OF HAZARDOUS MATERIAL ON SITE**

There will be no Hazardous Materials stored on site.







 <div>City of Yellowknife Planning &amp; Lands Division</div>	PROJECT:	TAYLOR ROAD ENVIRONMENTAL ASSESSMENT AREA		SCALE:	1:NTS	CREATED BY:	VF
	TITLE:	SCHEDULE A		FILE:			
				DATE:	June 5, 2023		



## 1.10 EXISTING PREVENTATIVE MEASURES

### 1.10.1 Spill Kit

A drum style spill kit will be with the 450 L diesel fuel tank at all times.

This kit includes:

- Over pack Drum
- Polyethylene Liners
- Sorbent pads
- Disposal bags
- Sorbent booms
- Nitrile gloves
- Shovels
- Safety goggles

### 1.10.2 Safe Handling Procedures

The spill kit will be located with the 450L fuel tank at all times during this operation. Portable drip trays and adequately sized fuel transfer hoses/pumps will be used when refueling motorized equipment. This should avoid any leaks or drips to the ground during refueling operations.

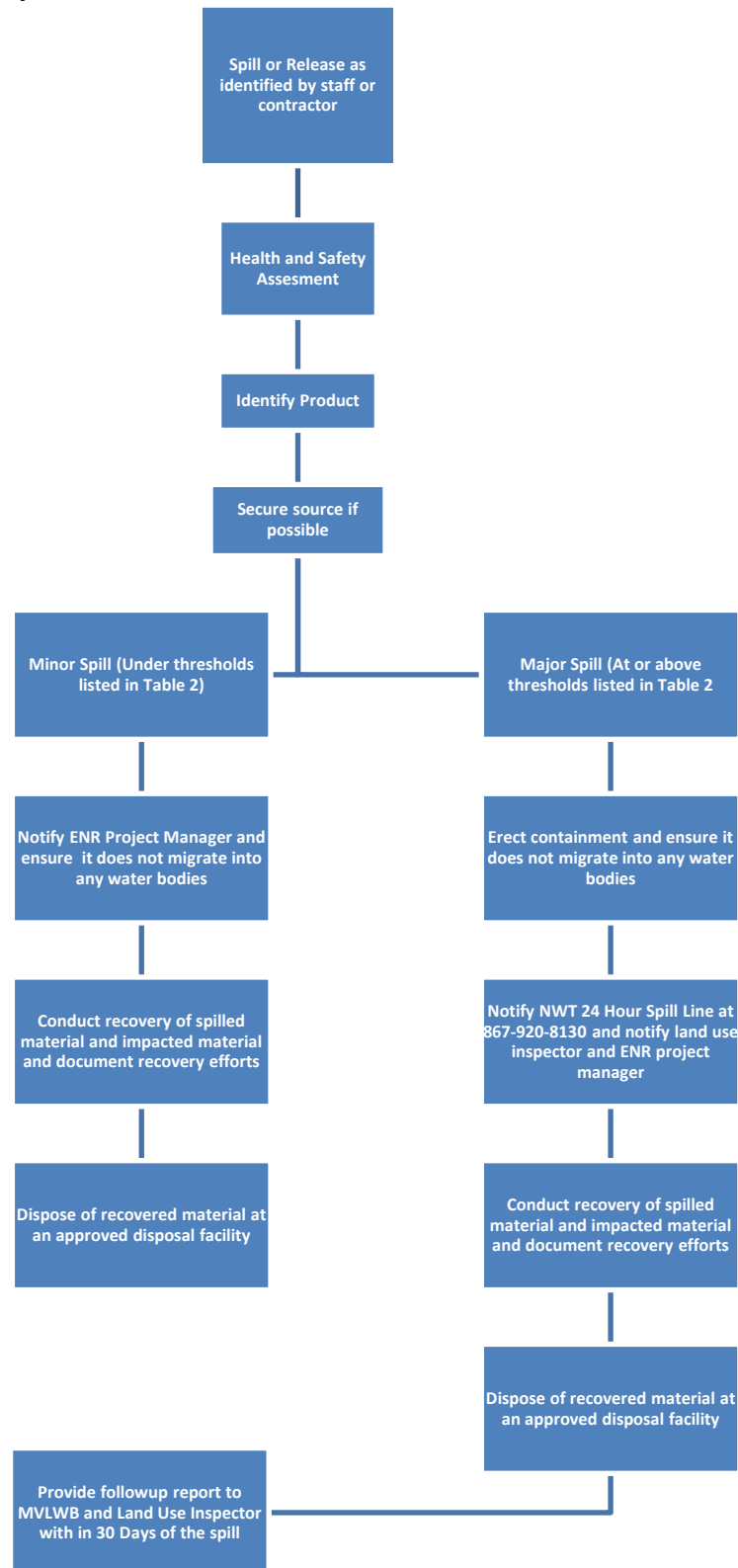
## 2. RESPONSE ORGANIZATION:

The flow chart listed below in Figure 2 identifies the response procedures to follow when addressing a spill.

Immediate reportable spills are defined in Table 1. Any spill that meets or exceeds the threshold listed in table 2 must be immediately reported to the Northwest Territories 24-Hour Spill Line (Spill Line) at 867-920-8130. Any spills that are below those thresholds must be tracked and documented by the Land Use Permit holder and provided to the Land Use Inspector at a pre-determined interval or upon their request.



**Figure 2 – Spill Response Procedures**





## 2.1 LIST OF CONTACT NUMBERS:

1. City of Yellowknife Project Manager – Vic Fontanilla,
  - a. 867-920-5673
2. Contractor – Great Slave Drilling and Exploration
  - a. 867-875-2922
3. NWT 24 Hour Spill Report Line
  - a. a. 867-920-8130
4. DOL Manager, Resource Management – Jarret Hardisty
  - a. T: 867-695-2626 Ext. 205
5. RCMP
  - a. 867-695-1111
6. Fire/Ambulance
  - a. 867-695-2222

**Table 1: Reportable Spill Thresholds**

Substance	Reportable Quantity	TDG Class
Explosives	Any amount	1.0
Compressed gas (toxic/corrosive)		2.3/2.4
Infectious substances		6.2
Sewage and Wastewater (unless otherwise authorized)		6.2
Radioactive materials		7.0
Unknown substance		None
Compressed gas (Flammable)	Any amount of gas from containers with a capacity greater than 100L	2.1
Compressed gas (Non-corrosive, non-flammable)		2.2
Flammable Liquid	≥100L	3.1/3.2/3.3
Flammable solid	≥25 kg	4.1
Substances liable to spontaneous combustion		4.2
Water reactant substances		4.3
Oxidizing Substances	≥50 L or 50 kg	5.1
Organic peroxides	≥1 L or 1 kg	5.2
Environmentally hazardous substances intended for disposal		9.0
Toxic substances	≥5 L or 5 kg	6.1
Corrosive substances		8.0
Miscellaneous products, substances or organisms		9.0
PCB mixtures of 5 or more ppm	≥0.5 L or 5 kg	9.0
Other contaminants – for example, crude oil, drilling fluid, produced water, waste or spent chemicals, used or waste oil, vehicle fluids, wastewater	≥ 100 L or 100 kg	None
Sour natural gas (ie., contains H <sub>2</sub> S)	Uncontrolled or sustained flow of 10 minutes or more	None
Sweet natural gas		



Substance	Reportable Quantity	TDG Class
Flammable liquid Vehicle fluid	≥ 20 L When released on a frozen water body that is being used as a working surface	3.1/3.2/3.3
Reported releases or potential releases of any size that: Are near or in an open water body; Are near or in a designated sensitive environment or habitat; Pose an imminent threat to human health or safety; or Pose an imminent threat to a listed species at risk or its critical habitat.	Any amount	None

### 3. ACTION PLAN

This section will provide information on potential spill sizes, impacts and recovery should a spill happen on site while work is being conducted.

#### 3.1 POTENTIAL SPILL SIZES AND SOURCES

Table 2 provides a list of potential discharge events that could occur while work is being undertaken on site. These potential events are based on a worst-case scenario event.

**Table 2: Potential Spill Sizes and Sources**

Material (Sources)	Potential Discharge Event	Discharge Volume (worst case)	Direction of Potential Discharge
Diesel Fuel (Drill rig or from refueling line/tank)	1. Over filling during refueling events 2. Leaks from drill rig 3. Large puncture/leaking fuel tank from refueling tank	450 L	Toward and nearby watercourses or water bodies in the area of refueling or drilling.

#### 3.2 ENVIRONMENTAL IMPACTS

Environmental impacts of diesel fuel may be harmful to wildlife and aquatic life. Diesel is not readily biodegradable and has bioaccumulation potential in the environment. Given the volumes proposed for this project the impact to the environment can be mitigated through efficient spill response and recovery of this volume of fuel. Discharge into any water courses or water bodies must be avoided.

#### 3.3 PROCEDURES FOR INITIAL ACTION





- Ensure the safety of all personnel.
- Conduct a Health and Safety Assessment.
  - Remove sources of ignition
  - Identify product spilled and take appropriate health and safety measures as defined in the Transport Canada 2016 Emergency Response Guidebook
- Secure the source of the spill if possible.
  - Terminate pumping operations; remove contents from compromised container to competent containment.
- Regardless of the volume, contact the Contractor Supervisor and ENR Project Manager
- Contain the spill using the contents of the spill kits that will be on site and or use the shovel and polyethylene liners to construct berms and interception trenches.

### 3.4 SPILL REPORTING PROCEDURES

In the case of a spill that exceeds the threshold set out in Table 1, the Spill Line must be contacted and the spill reported. This process must take place within 24 hours of the spill first being noticed. The Spill Line will notify all relevant Territorial and Federal Government Departments as per the Northwest Territories/Nunavut Spills Working agreement 2014. The proponent must also contact the Land Use Inspector with the Department of Lands with any details. Their number can be found in Section 2.1 of this plan. A spill report form, as shown in Figure 3 will be filed with the Northwest Territories 24 Hour Spill Line.

The spill kit will contain a copy of this Spill Contingency plan as well, copies will be held with the ENR Project Manager and the Contractor supervisor on site.

The report will be filed with the Spill Line by;

- Phone: 867-920-8130;
- Fax: 867-873-6924;
- Email: [spills@gov.nt.ca](mailto:spills@gov.nt.ca)



# NT-NU SPILL REPORT

OIL, GASOLINE, CHEMICALS AND  
OTHER HAZARDOUS MATERIALS



## NT-NU 24-HOUR SPILL REPORT LINE

Tel: (867) 920-8130 • Email: [spills@gov.nt.ca](mailto:spills@gov.nt.ca)

### REPORT LINE USE ONLY

A	Report Date:	MM	DD	YY	Report Time:	<input type="checkbox"/> Original Spill Report <b>OR</b> <input type="checkbox"/> Update # _____ to the Original Spill Report	Report Number:
	Occurrence Date:	MM	DD	YY	Occurrence Time:		
C	Land Use Permit Number (if applicable):				Water Licence Number (if applicable):		
D	Geographic Place Name or Distance and Direction from the Named Location:					Region: <input type="checkbox"/> NT <input type="checkbox"/> Nunavut <input type="checkbox"/> Adjacent Jurisdiction or Ocean	
E	Latitude:				Longitude:		
	_____ Degrees _____ Minutes _____ Seconds				_____ Degrees _____ Minutes _____ Seconds		
F	Responsible Party or Vessel Name:				Responsible Party Address or Office Location:		
G	Any Contractor Involved:				Contractor Address or Office Location:		
H	Product Spilled: <input type="checkbox"/> Potential Spill		Quantity in Litres, Kilograms or Cubic Metres:		U.N. Number:		
I	Spill Source:		Spill Cause:		Area of Contamination in Square Metres:		
J	Factors Affecting Spill or Recovery:		Describe Any Assistance Required:		Hazards to Persons, Property or Environment:		
K	Additional Information, Comments, Actions Proposed or Taken to Contain, Recover or Dispose of Spilled Product and Contaminated Materials:						
L	Reported to Spill Line by:		Position:	Employer:	Location Calling From:	Telephone:	
M	Any Alternate Contact:		Position:	Employer:	Alternate Contact Location:	Alternate Telephone:	

### REPORT LINE USE ONLY

N	Received at Spill Line by:	Position:	Employer:	Location Called:	Report Line Number:
Lead Agency: <input type="checkbox"/> EC <input type="checkbox"/> CCG/TCMSS <input type="checkbox"/> GNWT <input type="checkbox"/> GN <input type="checkbox"/> ILA <input type="checkbox"/> AANDC <input type="checkbox"/> NEB <input type="checkbox"/> Other: _____			Significance: <input type="checkbox"/> Minor <input type="checkbox"/> Major <input type="checkbox"/> Unknown		File Status: <input type="checkbox"/> Open <input type="checkbox"/> Closed
Agency:		Contact Name:	Contact Time:	Remarks:	
Lead Agency:					
First Support Agency:					
Second Support Agency:					
Third Support Agency:					



### 3.5 PROCEDURES FOR CONTAINING AND CONTROLLING SPILLS ON LAND, WATER, SNOW AND ICE

Spills on Land	Spills on Water
<ul style="list-style-type: none"> <li>• Determine what will be affected</li> <li>• Assess speed and direction of spill</li> <li>• Determine location of containment structure</li> <li>• Construct Containment               <ul style="list-style-type: none"> <li>○ Dykes (Soil)</li> <li>○ Trenches</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Determine what will be affected</li> <li>• Assess speed and direction of spill</li> <li>• Determine location of containment structure</li> <li>• Construct Containment               <ul style="list-style-type: none"> <li>○ Absorbent Booms</li> <li>○ Weirs</li> <li>○ Underflow dams</li> <li>○ Barriers (Containment Booms)</li> </ul> </li> </ul>
Spills on Snow	Spills on Ice
<ul style="list-style-type: none"> <li>• Determine what will be affected</li> <li>• Assess speed and direction of spill</li> <li>• Determine location of containment structure</li> <li>• Construct Containment               <ul style="list-style-type: none"> <li>○ Dykes (Snow)</li> <li>○ Trenches</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Determine what will be affected</li> <li>• Assess speed and direction of spill</li> <li>• Determine location of containment structure</li> <li>• Construct Containment               <ul style="list-style-type: none"> <li>○ Dykes (Snow)</li> </ul> </li> </ul>

Should the volume of the spilled material be expected to exceed the containment structure that is in place, additional containment will be constructed downstream of the initial containment measures.

### 3.6 PROCEDURES FOR RECOVERY AND MANAGEMENT OF SPILLED MATERIAL AND RELATED WASTES

Once containment measures are in place, the permit holder will need to address the recovery and management of the spilled material as well as any impacted material that may have resulted from the waste. This is broken down into 2 categories;

- Liquid material: Liquid material will be collected using sorbent pads and booms, skimmers and pumps. All collected material will be placed in competent containment and sent to an approved disposal facility.
- Solid Material (Soil, Snow, Ice): Solid material will be excavated by machinery or by hand. All collected material will be placed in competent containment and sent to an approved disposal facility.

### 3.7 PROCEDURES FOR RESTORING AFFECTED AREAS

Once the spilled material and associated waste has been collected and appropriately disposed of, the proponent will take confirmatory samples of the affected area and ensure they meet the applicable territorial guidelines for protection of human health and the environment. The Land



Use Inspector will be engaged throughout this process to ensure that remediation measures are approved and meet all regulatory requirements.

Should back filling be required, clean material will be placed in the remediated area and restored to surrounding topography. If any work is to take place near any water course or water bodies, sediment and erosion control measures will be implemented to the satisfaction of the Land Use Inspector.

## **4. RESOURCE INVENTORY**

### **4.1 ON-SITE RESOURCES**

As described in section 1.10.1 of this plan.

### **4.2 OFF SITE RESOURCES**

KBL Environmental would be utilized to address spills that could not be appropriately managed with resources on-site.

KBL Environmental  
PO Box 1108  
341A Old Airport Road  
Yellowknife, NT  
X1A 2N8  
[\(867\) 873-5263](tel:8678735263)

## **5. TRAINING PROGRAM**

The City of Yellowknife will update this plan and provide the spill training program of the successful contractor once the contract is awarded. The GNWT will ensure that the selected contractor has the appropriate training prior to commencing work at the site.





## APPENDIX A

### MSDS Diesel Fuel



# SAFETY DATA SHEET

## DIESEL FUEL

000003000395



Version 3.1

Revision Date 2017/04/20

Print Date 2017/04/20

### SECTION 1. IDENTIFICATION

Product name : DIESEL FUEL

Synonyms : Seasonal Diesel, #1 Diesel, #2 Heating Oil, #1 Heating Oil, D50, Arctic Diesel, Farm Diesel, Marine Diesel, Low Sulphur Diesel, LSD, Ultra Low Sulphur Diesel, ULSD, Mining Diesel, Naval Distillate, Dyed Diesel, Marked Diesel, Coloured Diesel, Furnace special, Biodiesel blend, B1, B2, B5, Diesel Low Cloud (LC), Marine Gas Oil, Marine Gas Oil Dyed.

Product code : 102762, 102763, 102755, 102302, 102744, 101801, 100678, 100677, 101802, 100107, 100668, 100658, 100911, 100663, 100652, 100460, 100065, 101796, 101793, 101795, 101792, 101794, 101791, 100768, 100643, 100642, 100103, 101798, 101800, 101797, 101788, 101789, 101787, 102531, 100734, 100733, 100640, 100997, 100995, 100732, 100731, 100994

Manufacturer or supplier's details  
Petro-Canada  
P.O. Box 2844, 150 - 6th Avenue South-West  
Calgary Alberta T2P 3E3  
Canada

Emergency telephone number  
Suncor Energy: +1 403-296-3000;  
Canutec Transportation: 1-888- 226-8832 (toll-free) or 613-996-6666;  
Poison Control Centre: Consult local telephone directory for emergency number(s).

#### Recommended use of the chemical and restrictions on use

Recommended use : Diesel fuels are distillate fuels suitable for use in high and medium speed internal combustion engines of the compression ignition type. Mining diesels, marine diesels, MDO and naval distillates may have a higher flash point requirement.

Prepared by : Product Safety: +1 905-804-4752

### SECTION 2. HAZARDS IDENTIFICATION

#### Emergency Overview

Appearance	Bright oily liquid.
Colour	Clear to yellow (This product may be dyed red for taxation purposes)
Odour	Mild petroleum oil like.

#### GHS Classification

Flammable liquids : Category 3

# SAFETY DATA SHEET

## DIESEL FUEL

000003000395



Version 3.1

Revision Date 2017/04/20

Print Date 2017/04/20

Acute toxicity (Inhalation)	: Category 4
Skin irritation	: Category 2
Carcinogenicity	: Category 2
Specific target organ toxicity - single exposure	: Category 3 (Central nervous system)
Specific target organ toxicity - repeated exposure	: Category 2 (Liver, thymus, Bone)
Aspiration hazard	: Category 1

### GHS label elements

Hazard pictograms



Signal word : Danger

Hazard statements : Flammable liquid and vapour.  
May be fatal if swallowed and enters airways.  
Causes skin irritation.  
Harmful if inhaled.  
May cause drowsiness or dizziness.  
Suspected of causing cancer.  
May cause damage to organs (Liver, thymus, Bone) through prolonged or repeated exposure.

Precautionary statements : **Prevention:**  
Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
Keep container tightly closed.  
Ground and bond container and receiving equipment.  
Use explosion-proof electrical/ ventilating/ lighting/ equipment.  
Use non-sparking tools.  
Take action to prevent static discharges.  
Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.  
Wash skin thoroughly after handling.  
Use only outdoors or in a well-ventilated area.  
Wear protective gloves/ protective clothing/ eye protection/ face protection.  
**Response:**  
IF SWALLOWED: Immediately call a POISON CENTER/doctor.  
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.  
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.  
IF exposed or concerned: Get medical advice/ attention.



# SAFETY DATA SHEET

## DIESEL FUEL

000003000395



Version 3.1

Revision Date 2017/04/20

Print Date 2017/04/20

Do NOT induce vomiting.  
If skin irritation occurs: Get medical advice/ attention.  
Take off contaminated clothing and wash it before reuse.  
In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

### **Storage:**

Store in a well-ventilated place. Keep container tightly closed.  
Store in a well-ventilated place. Keep cool.  
Store locked up.

### **Disposal:**

Dispose of contents/ container to an approved waste disposal plant.

### **Potential Health Effects**

#### Primary Routes of Entry

: Eye contact  
Ingestion  
Inhalation  
Skin contact  
Skin Absorption

#### Target Organs

: Skin  
Eyes  
Respiratory Tract

#### Inhalation

: May cause respiratory tract irritation.  
Inhalation may cause central nervous system effects.  
Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

#### Skin

: Causes skin irritation.

#### Eyes

: Causes eye irritation.

#### Ingestion

: Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.  
Aspiration hazard if swallowed - can enter lungs and cause damage.

#### Aggravated Medical Condition

: None known.

### **Other hazards**

None known.

### **IARC**

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

### **ACGIH**

Confirmed animal carcinogen with unknown relevance to humans

Fuel Oil No. 1

8008-20-6

# SAFETY DATA SHEET

## DIESEL FUEL

000003000395



Version 3.1

Revision Date 2017/04/20

Print Date 2017/04/20

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

#### Hazardous components

Chemical name	CAS-No.	Concentration
fuels, diesel	68334-30-5	70 - 100 %
fuel oil no. 2	68476-30-2	
kerosine (petroleum)	8008-20-6	
kerosine (petroleum), hydrodesulfurized	64742-81-0	
Alkanes, C10-20-branched and linear	928771-01-1	0 - 25 %
Soybean oil, Methyl ester	67784-80-9	0 - 5 %
Rape oil, Methyl ester	73891-99-3	
Fatty acids, tallow, Methyl esters	61788-61-2	

### SECTION 4. FIRST AID MEASURES

- If inhaled : Move to fresh air.  
Artificial respiration and/or oxygen may be necessary.  
Seek medical advice.
- In case of skin contact : In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.  
Wash skin thoroughly with soap and water or use recognized skin cleanser.  
Wash clothing before reuse.  
Seek medical advice.
- In case of eye contact : Remove contact lenses.  
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.  
Obtain medical attention.
- If swallowed : Rinse mouth with water.  
DO NOT induce vomiting unless directed to do so by a physician or poison control center.  
Never give anything by mouth to an unconscious person.  
Seek medical advice.
- Most important symptoms and effects, both acute and delayed : None known.
- Protection of first-aiders : First Aid responders should pay attention to self-protection and use the recommended protective clothing  
It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

# SAFETY DATA SHEET

## DIESEL FUEL

000003000395



Version 3.1

Revision Date 2017/04/20

Print Date 2017/04/20

---

### SECTION 5. FIREFIGHTING MEASURES

- |   |   |
|---|---|
| Suitable extinguishing media                  | : Dry chemical<br>Carbon dioxide (CO <sub>2</sub> )<br>Water fog.<br>Foam   |
| Unsuitable extinguishing media                | : Do NOT use water jet.   |
| Specific hazards during fire-fighting         | : Cool closed containers exposed to fire with water spray.  |
| Hazardous combustion products                 | : Carbon oxides (CO, CO <sub>2</sub> ), nitrogen oxides (NO <sub>x</sub> ), sulphur oxides (SO <sub>x</sub> ), sulphur compounds (H <sub>2</sub> S), smoke and irritating vapours as products of incomplete combustion. |
| Further information                           | : Prevent fire extinguishing water from contaminating surface water or the ground water system.   |
| Special protective equipment for firefighters | : Wear self-contained breathing apparatus for firefighting if necessary.  |

---

### SECTION 6. ACCIDENTAL RELEASE MEASURES

- |   |   |
|---|---|
| Personal precautions, protective equipment and emergency procedures | : Use personal protective equipment.<br>Ensure adequate ventilation.<br>Evacuate personnel to safe areas.<br>Material can create slippery conditions.   |
| Environmental precautions   | : If the product contaminates rivers and lakes or drains inform respective authorities.   |
| Methods and materials for containment and cleaning up               | : Prevent further leakage or spillage if safe to do so.<br>Remove all sources of ignition.<br>Soak up with inert absorbent material.<br>Non-sparking tools should be used.<br>Ensure adequate ventilation.<br>Contact the proper local authorities. |

---

### SECTION 7. HANDLING AND STORAGE

- |                         |  |
|-------------------------|--|
| Advice on safe handling | : For personal protection see section 8.<br>Smoking, eating and drinking should be prohibited in the application area.<br>Use only with adequate ventilation.<br>In case of insufficient ventilation, wear suitable respiratory equipment.<br>Avoid spark promoters. Ground/bond container and equipment. These alone may be insufficient to remove static electricity.<br>Avoid contact with skin, eyes and clothing.<br>Do not ingest. |
|-------------------------|--|

# SAFETY DATA SHEET

## DIESEL FUEL

000003000395



Version 3.1

Revision Date 2017/04/20

Print Date 2017/04/20

Keep away from heat and sources of ignition.

Keep container closed when not in use.

Conditions for safe storage : Store in original container.  
Containers which are opened must be carefully resealed and kept upright to prevent leakage.  
Keep in a dry, cool and well-ventilated place.  
Keep in properly labelled containers.  
To maintain product quality, do not store in heat or direct sunlight.

### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
kerosine (petroleum)	8008-20-6	TWA	200 mg/m <sup>3</sup> (total hydrocarbon vapor)	CA BC OEL
		TWA	200 mg/m <sup>3</sup> (total hydrocarbon vapor)	CA AB OEL
		TWA	200 mg/m <sup>3</sup> (total hydrocarbon vapor)	ACGIH
kerosine (petroleum), hydrodesulfurized	64742-81-0	TWA	200 mg/m <sup>3</sup> (As total hydrocarbon vapour)	ACGIH
		TWA	200 mg/m <sup>3</sup> (As total hydrocarbon vapour)	ACGIH

Engineering measures : Use only in well-ventilated areas.  
Ensure that eyewash station and safety shower are proximal to the work-station location.

#### Personal protective equipment

Respiratory protection : Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Filter type : organic vapour cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air-purifying respirators is limited. Use a positive-pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstances where air-purifying respirators may not provide adequate protection.



# SAFETY DATA SHEET

## DIESEL FUEL

000003000395



Version 3.1

Revision Date 2017/04/20

Print Date 2017/04/20

Hand protection	
Material	: neoprene, nitrile, polyvinyl alcohol (PVA), Viton(R). Consult your PPE provider for breakthrough times and the specific glove that is best for you based on your use patterns. It should be realized that eventually any material regardless of their imperviousness, will get permeated by chemicals. Therefore, protective gloves should be regularly checked for wear and tear. At the first signs of hardening and cracks, they should be changed.
Remarks	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
Eye protection	: Wear face-shield and protective suit for abnormal processing problems.
Skin and body protection	: Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.
Protective measures	: Wash contaminated clothing before re-use.
Hygiene measures	: Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash face, hands and any exposed skin thoroughly after handling.

### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Bright oily liquid.
Colour	: Clear to yellow (This product may be dyed red for taxation purposes)
Odour	: Mild petroleum oil like.
Odour Threshold	: No data available
pH	: No data available
Pour point	: No data available
Boiling point/boiling range	: 150 - 371 °C (302 - 700 °F)
Flash point	: > 40 °C (104 °F) Method: closed cup
Auto-Ignition Temperature	: 225 °C (437 °F)
Evaporation rate	: No data available
Flammability	: Flammable in presence of open flames, sparks and heat. Va-

# SAFETY DATA SHEET

## DIESEL FUEL

000003000395



Version 3.1

Revision Date 2017/04/20

Print Date 2017/04/20

	pours are heavier than air and may travel considerable distance to sources of ignition and flash back. This product can accumulate static charge and ignite.
Upper explosion limit	: 6 %(V)
Lower explosion limit	: 0.7 %(V)
Vapour pressure	: 7.5 mmHg (20 °C / 68 °F)
Relative vapour density	: 4.5
Relative density	: 0.8 - 0.88
Solubility(ies)	
Water solubility	: insoluble
Partition coefficient: n-octanol/water	: No data available
Viscosity	
Viscosity, kinematic	: 1.3 - 4.1 cSt (40 °C / 104 °F)
Explosive properties	: Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Runoff to sewer may create fire or explosion hazard.

### SECTION 10. STABILITY AND REACTIVITY

Possibility of hazardous reactions	: Hazardous polymerisation does not occur. Stable under normal conditions.
Conditions to avoid	: Extremes of temperature and direct sunlight.
Incompatible materials	: Reactive with oxidising agents and acids.
Hazardous decomposition products	: May release COx, NOx, SOx, H2S, smoke and irritating vapours when heated to decomposition.

### SECTION 11. TOXICOLOGICAL INFORMATION

#### Information on likely routes of exposure

Eye contact  
Ingestion  
Inhalation  
Skin contact  
Skin Absorption

#### Acute toxicity

# SAFETY DATA SHEET

## DIESEL FUEL

000003000395



Version 3.1

Revision Date 2017/04/20

Print Date 2017/04/20

### **Product:**

Acute oral toxicity : Remarks: No data available

Acute inhalation toxicity : Remarks: No data available

Acute dermal toxicity : Assessment: The substance or mixture has no acute dermal toxicity  
Remarks: No data available

### **Components:**

#### **fuels, diesel:**

Acute oral toxicity : LD50 (Rat): 7,500 mg/kg,

Acute dermal toxicity : LD50 (Mouse): 24,500 mg/kg,

#### **fuel oil no. 2:**

Acute oral toxicity : LD50 (Rat): 12,000 mg/kg,

Acute inhalation toxicity : LC50 (Rat): 4.1 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist

#### **kerosine (petroleum):**

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg,

Acute inhalation toxicity : LC50 (Rat): > 5 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg,

#### **kerosine (petroleum), hydrodesulfurized:**

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg,

Acute inhalation toxicity : LC50 (Rat): > 5.2 mg/l  
Exposure time: 4 hrs  
Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg,

### **Skin corrosion/irritation**

#### **Product:**

Remarks: No data available

### **Serious eye damage/eye irritation**

#### **Product:**

Remarks: No data available

### **Respiratory or skin sensitisation**

# SAFETY DATA SHEET

## DIESEL FUEL

000003000395



Version 3.1

Revision Date 2017/04/20

Print Date 2017/04/20

No data available

### **Germ cell mutagenicity**

No data available

### **Carcinogenicity**

No data available

### **Reproductive toxicity**

No data available

### **STOT - single exposure**

No data available

### **STOT - repeated exposure**

No data available

---

## SECTION 12. ECOLOGICAL INFORMATION

### **Ecotoxicity**

#### **Product:**

Toxicity to fish : Remarks: No data available

Toxicity to daphnia and other aquatic invertebrates : Remarks: No data available

Toxicity to algae : Remarks: No data available

Toxicity to bacteria : Remarks: No data available

### **Persistence and degradability**

#### **Product:**

Biodegradability : Remarks: No data available

### **Bioaccumulative potential**

No data available

### **Mobility in soil**

No data available

### **Other adverse effects**

No data available

---

## SECTION 13. DISPOSAL CONSIDERATIONS

### **Disposal methods**

Waste from residues : The product should not be allowed to enter drains, water



# SAFETY DATA SHEET

## DIESEL FUEL

000003000395



Version 3.1

Revision Date 2017/04/20

Print Date 2017/04/20

courses or the soil.  
Offer surplus and non-recyclable solutions to a licensed disposal company.  
Waste must be classified and labelled prior to recycling or disposal.  
Send to a licensed waste management company.  
Dispose of as hazardous waste in compliance with local and national regulations.  
Dispose of product residue in accordance with the instructions of the person responsible for waste disposal.

Contaminated packaging : Do not re-use empty containers.

### SECTION 14. TRANSPORT INFORMATION

#### International Regulations

##### IATA-DGR

UN/ID No. : UN 1202  
Proper shipping name : Diesel fuel  
Class : 3  
Packing group : III  
Labels : Class 3 - Flammable Liquid  
Packing instruction (cargo aircraft) : 366

##### IMDG-Code

UN number : UN 1202  
Proper shipping name : DIESEL FUEL  
  
Class : 3  
Packing group : III  
Labels : 3  
EmS Code : F-E, S-E  
Marine pollutant : no

#### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

#### National Regulations

##### TDG

UN number : UN 1202  
Proper shipping name : DIESEL FUEL  
  
Class : 3  
Packing group : III  
Labels : 3  
ERG Code : 128  
Marine pollutant : no

### SECTION 15. REGULATORY INFORMATION

# SAFETY DATA SHEET

## DIESEL FUEL

000003000395



Version 3.1

Revision Date 2017/04/20

Print Date 2017/04/20

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

**The components of this product are reported in the following inventories:**

<b>DSL</b>	On the inventory, or in compliance with the inventory
<b>TSCA</b>	All chemical substances in this product are either listed on the TSCA Inventory or are in compliance with a TSCA Inventory exemption.
<b>EINECS</b>	On the inventory, or in compliance with the inventory

### SECTION 16. OTHER INFORMATION

For Copy of SDS : Internet: [www.petro-canada.ca/msds](http://www.petro-canada.ca/msds)  
Canada-wide: telephone: 1-800-668-0220; fax: 1-800-837-1228  
For Product Safety Information: 1 905-804-4752

Prepared by : Product Safety: +1 905-804-4752

Revision Date : 2017/04/20

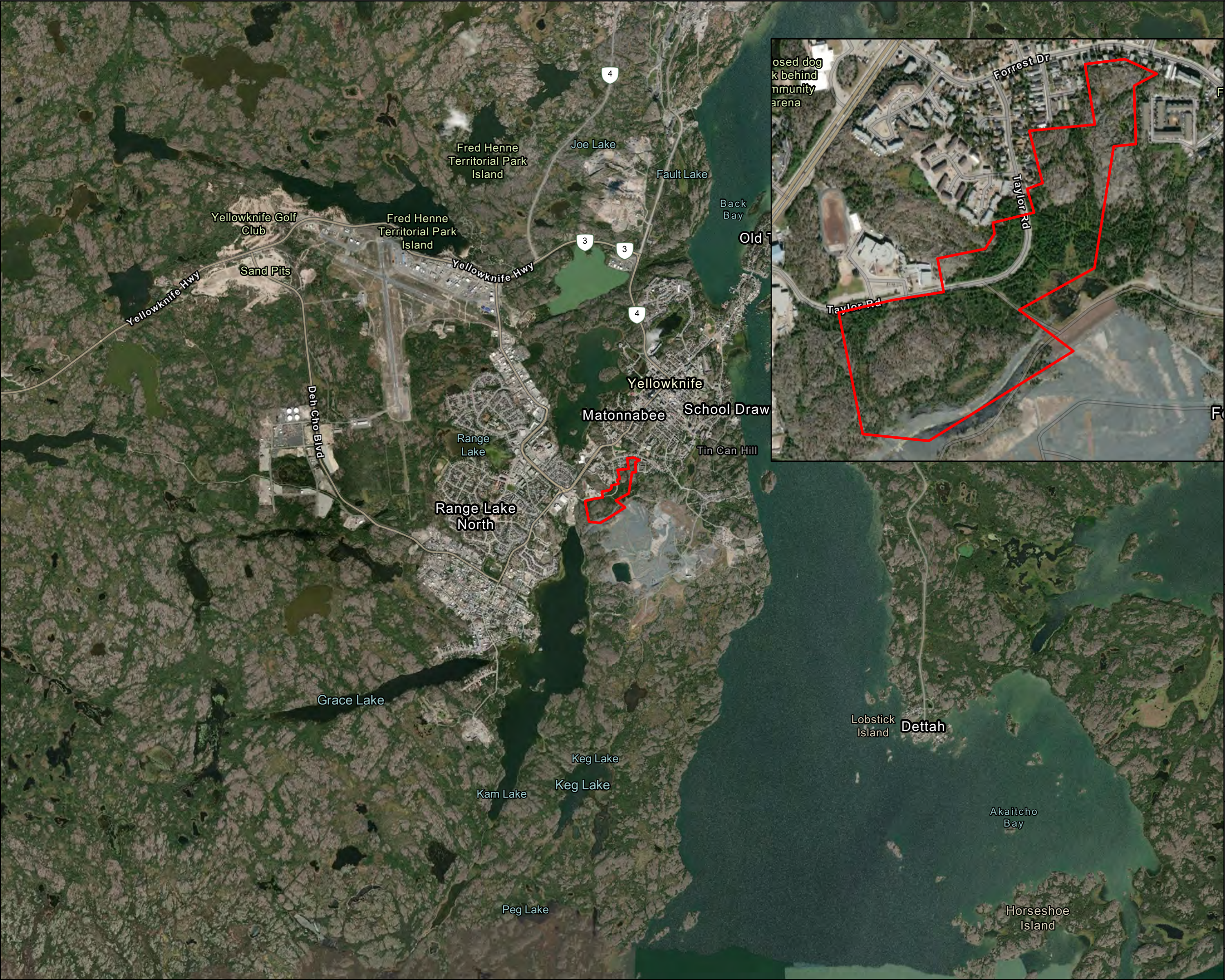
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

## **APPENDIX B**

1:50,000 Scale Site Plan







LEGEND

Environmental Site Assessment Area

1				
REV.	DESCRIPTION	YY/MM/DD	BY	CHK
<p>REFERENCES</p> <p>PROPRIETARY INFORMATION MAY NOT BE REPRODUCED OR DIVULGED WITHOUT PRIOR WRITTEN CONSENT OF BLUMETRIC ENVIRONMENTAL INC. DO NOT SCALE DRAWING. THIS DRAWING MAY HAVE BEEN REDUCED. ALL SCALE NOTATIONS INDICATED ARE BASED ON 11"x17" FORMAT DRAWINGS.</p> <div><div>01,0002,000Metres</div><div>1:50,000</div><div><div>N</div><div>E</div><div>S</div><div>W</div></div></div>				
<p>CLIENT</p> <p>City of Yellowknife</p>				
<p>PROJECT</p> <p>Taylor Road Environmental Assessment Area</p>				
<p>TITLE</p> <p>Site Location</p>				
<div><div><div><div></div><div>BluMetric™</div><div>Environmental</div></div><div><p>4916 49th Street, PO Box 11086 Yellowknife, NT, X1A 1P3 TEL: (867) 873-3500 FAX: (867) 873-3499 Email: info@blumetric.ca Web: http://www.blumetric.ca</p></div></div></div>				
PROJECT # 230503		DATE October 04, 2023		
DRAWN ZS	CHECKED JH	FIG NO. 01	REV 0	