

Yellowknife Geotechnical Evaluation Program Spill Contingency Plan

PRESENTED TO

Yellowknife Condominium Services Ltd.

JUNE 19, 2024 ISSUED FOR USE

FILE: 704-ENG.YARC03639-01

Revision History

Revision	Description	Revised By (Initials)	Revision Date	
1	Initial Version	Tetra Tech	2024-06-19	

Review and Approval

The following signatures indicate that the undersigned have read and agreed to the contents of this document, and that they approve and accept its distribution and use.

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ACRONYMS & ABBREVIATIONS

Acronyms/Abbreviations	Definition			
INAC	Indian and Northern Affairs Canada			
GNWT	Government of the Northwest Territories			
KBL	KBL Environmental Ltd. (Yellowknife)			
L.	litre			
m.	metre			
MVLWB	Mackenzie Valley Land and Water Board			
Plan	Spill Contingency Plan			
SCP	Spill Contingency Plan			
SPT	Standard Penetration Test			
Tetra Tech	Tetra Tech Canada Inc			
UCS	Unconfined Compressive Strength testing			
WSCC	Workers' Safety and Compensation Commission			

LIMITATIONS OF REPORT

This report and its contents are intended for the sole use of Century 21/Det'on Cho Management LP, on behalf of Yellowknife Condominium Services Ltd. and their agents. Tetra Tech Canada Inc. (Tetra Tech) does not accept any responsibility for the accuracy of any of the data, the analysis, or the recommendations contained or referenced in the report when the report is used or relied upon by any Party other than Century 21/Det'on Cho Management LP, or for any Project other than the proposed development at the subject site. Any such unauthorized use of this report is at the sole risk of the user. Use of this document is subject to the Limitations on the Use of this Document attached in the Appendix or Contractual Terms and Conditions executed by both parties.



1.0 INTRODUCTION

Century 21/Det'on Cho Management LP, on behalf of Yellowknife Condominium Services Ltd., has retained Tetra Tech Canada Inc. (Tetra Tech) to conduct a site investigation and provide a geotechnical evaluation report that contains recommendations for the design and construction of a proposed Office Building to be Located at Lot 1, Block 44, Plan 3697 located at 4901 52nd Avenue in Yellowknife.

Tetra Tech plans to drill four boreholes at the subject site within the proposed building footprint. . A track mounted auger drill operated by EnviroTech Drilling Solutions Ltd, from Yellowknife is proposed to conduct the drilling. The evaluation will include recording the nature of the materials encountered and collecting representative samples. Groundwater and/or possible ground ice conditions would also be noted.

Tetra Tech has prepared this Spill Contingency Plan (Plan) on behalf of Yellowknife Condominium Services Ltd., as a supporting document to the necessary Mackenzie Valley Land and Water Board (MVLWB) application for a Land Use Permit for the proposed site investigation and geotechnical evaluation program.

This Plan has been developed in general conformance with Indian and Northern Affairs Canada's Guidelines for Spill Contingency Planning (INAC 2007) and the Government of the Northwest Territories' (GNWT) Guide to the Spill Contingency Planning and Reporting Regulations (Environment and Natural Resources 2011) and is submitted to the Mackenzie Valley Land and Water Board (MVLWB) as part of the Land Use Permit Application process. The Plan will be posted at each of the Project sites and will be available for use by all employees and contractors participating in the geotechnical drilling program.

2.0 COMPANY NAME, CONTACT, AND EFFECTIVE DATE

Yellowknife Condominium Services Ltd. is the proponent for the proposed Geotechnical Evaluation Program Project. Key contact information for this Project is as follows:

Adrian Bell, Broker of Record Century 21 Prospect Realty 5124 48th Street, Yellowknife, NT, X1A 1N6

Email: adrian.bell@century21.ca

The information presented herein is current as of June 2024.

3.0 PROJECT DESCRIPTION

As previously noted Century 21/Det'on Cho Management LP, on behalf of Yellowknife Condominium Services Ltd., has retained Tetra Tech to conduct a site investigation and provide a geotechnical evaluation report that contains recommendations for the design and construction of a proposed Office Building to be Located at Lot 1, Block 44, Plan 3697 located at 4901 52nd Avenue in Yellowknife as shown in Figure 1 (Appendix A).

Tetra Tech plans to drill four boreholes at the subject site within the proposed building footprint as also shown in Figure 1. A track mounted auger drill operated by EnviroTech Drilling Solutions Ltd, from Yellowknife is proposed to conduct the drilling. The evaluation will include recording the nature of the materials encountered and collecting representative samples. Groundwater and/or possible ground ice conditions would also be noted.



The drilling program is expected to be carried out as follows:

- Monitor the drilling of four boreholes to 12 m or until bedrock is reached and log results;
- Record borehole locations with a hand-held GPS, along with approximate locations relative to landmarks if/as needed;
- Collect disturbed soil samples at 1.0 m to 1.5 m intervals or at changes in soil stratigraphy;
- Conduct Standard Penetration Tests (SPT's) in unfrozen soils, at selected intervals;
- Install two standpipe piezometers to permit groundwater levels to be measured;
- Backfill boreholes with drill cuttings, and if necessary, imported clean granular material;
- Return all collected samples to Tetra Tech's Yellowknife laboratory for testing purposes, including soil classification, and to determine engineering properties;
- Develop geotechnical recommendations in support of the foundation design, based on analysis of the results
 of the field investigation and subsequent laboratory testing; and
- Prepare an evaluation report that describes the findings from the site investigation, and associated recommendations for foundation design and construction, as well as geotechnical guidance for site development, and/or additional recommended work based on the findings of the review and/or site investigation.

The details of the site investigation may be modified to suit site conditions.

Before mobilizing to the site, Tetra Tech will develop a project-specific safety plan, in consultation with the drilling contractor so that the safety features and any potential hazards of the equipment being used on the project are included in the Plan. A WSCC Workplace Risk Assessment and Field Level Risk Assessment will be completed prior to commencing work. Any other legislation and public health orders will be adhered to.

Samples collected during the field investigation will be returned to Tetra Tech's Yellowknife geotechnical laboratory for the purposes of soil classification and determination of relevant engineering properties. Laboratory testing will include determination of moisture content, particle size analysis, determination of Atterberg limits, and bulk density.

In the unlikely event of a spill incident, the spill will be responded to and cleaned up in accordance with this Spill Contingency Plan. Any wastes generated by the Geotechnical drill program will be managed in accordance with the Project's Waste Management Plan.

4.0 POTENTIAL CONTAMINANTS (HAZARDOUS MATERIALS)

The only potential contaminants that could be spilled during the geotechnical drilling program would be as a result of a diesel fuel leak from the 100-litre capacity built-in fuel tank of the track mounted auger drill. No on-site refuelling will be required for this geotechnical drilling program. A Safety Data Sheet for diesel is provided in Appendix C.

5.0 POTENTIAL SPILL SIZES AND IMPACTS

Given the nature of the Project, it is most unlikely that a major spill could occur on site. All equipment fuel will be stored in the drilling equipment's fuel tank. More likely, if a spill incident was to occur, it would be of a small, chronic leak nature (<1 L). Section 9.0 of this Plan outlines the steps being taken to minimize spill risks.



The potential Impacts of a spill are dependent on the location of the spill, and whether or not the contaminant enters a body of water. Spills that enter a body of water typically have a greater potential for risk of impact. However, all proposed geotechnical drill sites will be at Lot 1, Block 44, Plan 3697 located at 4901 52nd Avenue in Yellowknife and this site is not located in the vicinity of a water body. In addition, any fuel spill would be immediately contained and recovered as described in Section 9.0 of this Plan.

6.0 POTENTIALLY IMPACTED COMMUNITIES

No potential impacts on third parties are anticipated to occur as a result of a spill incident occurring at Lot 1, Block 44, Plan 3697 located at 4901 52nd Avenue.

7.0 TRADITIONAL AND OTHER LAND USES

All drill sites will be located on \Lot 1, Block 44, Plan 3697 located at 4901 52nd Avenue in Yellowknife. Thus, impacts to traditional land uses and other land uses are not anticipated to occur from this Project.

8.0 RESPONSE ORGANIZATION

All spills will initially be reported to reported to Adrian Bell of Century 21 Prospect Realty. Mr. Bell will also be the main contact for any media or public enquiries.

Cell: (867) 446-9800 Email: adrian.bell@century21.ca

Due to the limited nature of the 2024 geotechnical evaluation program, the on-site spill response team will consist of the drill operator and Tetra Tech geotechnical personnel.

If a spill on site meets or exceeds the minimum reportable thresholds (Table 1), or is thought to exceed the minimum reportable thresholds, the spill will be reported to the NT-NU 24-Hour Spill Report Line.

24-Hour Spill Report Line:

Phone: 867.920.8130 Fax: 867.873.6924 Email: spills@gov.nt.ca

The NT-NU Spill Form (provided in Appendix B) will be completed for each reportable spill and transmitted by email as required.

The spill report will be completed in accordance with the Consolidation of Spill Contingency Planning and Reporting Regulations, and contain the following information:

- Date and time of spill;
- Type of contaminant spilled and quantity;
- Location of spill;
- Direction spill is moving;
- Name and phone number of a contact person close to the location of the spill;



- Cause of spill;
- Whether spill is continuing or has stopped;
- Description of existing contaminant;
- Action taken to contain, recover, clean up, and dispose of spilled contaminant;
- Name, address and phone number of person reporting the spill; and
- Name of person in charge of the management and control of contaminants at the time of the spill.

Table 1: External Reporting Volumes

TDGA Class	Description of Contaminant	Amount Spilled		
2.1	Compressed gas (flammable)	Any amount of gas from containers with a capacity greater than 100 L		
2.2	Compressed gas (non-corrosive, non-flammable)	Any amount of gas from containers with a capacity greater than 100 L		
2.3	Compressed gas (toxic)	Any amount		
2.4	Compressed gas (corrosive)	Any amount		
3.1, 3.2, 3.3	Flammable liquid	100 L		
4.1	Flammable solid	25 kilogram (kg)		
4.2	Spontaneously combustible solids	25 kg		
4.3	Water reactant solids	25 kg		
5.1	Oxidizing substances	50 L or 50 kg		
5.2	Organic Peroxides	1 L or 1 kg		
7	Radioactive	Any amount		
8	Corrosive substances	5 L or 5 kg		
9.1 (in part)	Miscellaneous products or substances,	50 L or 50 kg		
9.1 (in part)	PCB mixtures of five or more parts per million	0.5 L or 0.5 kg		
None	Other contaminants	100 L or 100 kg		

Source: INAC 2007

9.0 ACTION PLAN

9.1 Initial Actions

The following actions should be taken by the first person(s) who identifies a spill:

- 1. Be alert and consider your safety and the safety of others around you.
- 2. If possible, identify the spilled contaminant.
- 3. Assess the hazard to persons in the area of the spill.
- 4. If possible, without further assistance, control any danger to human life or the environment.
- 5. Assess whether the spill can be readily stopped or brought under control.



- 6. If safe to do so, and if possible, try to stop the spillage of contaminants.
- 7. Gather information about the status of the situation.
- 8. Report the spill immediately to Mr. Adrian Bell of Century 21, Cell: (867) 446-9800
- 9. Adrian Bell to report the spill to the 24-Hour Emergency Spill Report Line: **(867) 920.8130**. Receive instructions on the preferred collection, disposal (e.g., storage in sealed container(s), or deposition in a designated lined containment area), and remediation method from the appropriate regulatory agencies.
- 10. Resume any effective action to contain, clean up or stop the flow of spilled contaminant.

9.2 Fuel Spills on Land

- 1. Refer to Section 9.1 (above) for initial actions that should be taken by the first person(s) who identifies a spill.
- 2. First responder or his designate will obtain absorbent sheeting, Multi Sorb or other ultra-dry absorbent and plastic tarp(s) to contain diesel contaminated material.
- 3. If the spill is small, deploy Multi Sorb, other ultra-dry absorbents or hydrophobic (water repellent) absorbent pads on spill site. Hydrophobic pads readily absorb hydrocarbons.
- 4. If necessary a tarp will be placed in such a way that the fuel can pool for collection and If there is a large volume of spilled product, the contained liquid will be pumped into refuge containers. KBL Environmental Ltd. (KBL) will be retained to dispose of spilled product or as advised by the NT 24-Hour Spill Report Line.
- 5. Saturated material will be disposed of in a refuse container, which is then labelled and sealed. Alternatively, the pads may be wrung out into the refuse container(s) and the containers marked and then secured for eventual disposal at a facility off site that accepts hazardous wastes.

9.3 Fuel Spills on Snow and Ice

As this geotechnical evaluation program is planned to occur during the snow free season of 2024, a fuel spill on snow or ice is unlikely to occur. Nevertheless, actions to be undertaken during such conditions are provided for completeness.

- 1. If not already done so, refer to Section 9.1 for initial actions that should be taken by the first person(s) who identifies a spill.
- 2. Assess the nature of the spill. Necessary equipment might include shovels, plastic tarp(s), and refuge containers.
- 3. Construct a compacted-snow berm around the edge of the spill area.
- 4. Shovel or scrape contaminated snow and deposit in empty refuge containers.
- 5. If the spill is more extensive, install compacted snow berms with plastic over top, around the affected area. Although hard ice will retard or prevent fuel entry to the receiving waters below, all contaminated snow and ice, as well as objects embedded in the ice (such as gravel or frozen absorbent pads) must be scraped from the ice surface and disposed of in refuge container, which is then labelled and sealed. Wastes may be transferred in a secure container to a facility equipped for handling hazardous wastes.



10.0 SPILL RESPONSE EQUIPMENT

10.1 Spill Kit

A spill kit will be required to be on-site during implementation of the geotechnical drilling program. The contractor will be responsible for ensuring that a spill kit will be available for use if required and will be located at the worksite.

10.1.1 Spill Kit Contents

The following outlines the recommended minimum requirements for contents of a spill kit to be used during the Project. The spill kit will contain the following, at a minimum (in part from INAC 2007):

- One (1) 205 L open top steel drum with lid, bolting ring and gasket (spill kit container
- Ten (10) disposable large 5 mil polyethylene bags (dimensions 65 cm x 100 cm) with ties
- Ten (10) kg bags of sorbent particulate
- One hundred (100) sheets (1 bail) of 50 cm x 50 cm sorbent sheets
- Two (2) large (5 m x 5 m) plastic tarps
- One (1) roll duct tape
- One (1) utility knife
- One (1) field notebook and pencil
- One (1) rake
- One (1) pick-axe
- Three (3) spark-proof shovels
- Four (4) Tyvex® splash suits
- Four (4) pairs chemical-resistant gloves
- Four (4) pairs of splash protective goggles
- Instruction binder, including Spill Contingency Plan.

The entire spill kit contents, with the exception of the spark-proof shovels, can be stored within a 205 L steel drum. The drum will be sealed securely to protect the spill kit contents, though should always be accessible without the use of tools (i.e., finger tight bolt ring). The drum's bolt ring should be inspected regularly during inspections to ensure it turns freely and is lubricated.

Additional spill response materials may also be available for use from other parties in Yellowknife as may be needed.



11.0 PROCEDURES FOR CLEAN-UP AND RESTORING AFFECTED AREAS

Typically, following a spill, the following procedures are implemented.

- During clean-up, workers to be protected by wearing protective clothing, which may include rubber boots and chemical-resistant gloves.
- Collect all pads or other materials used for spill absorption and transfer to a labelled refuse container separated from other waste. Waste to be transferred to an approved facility that accepts hazardous wastes.
- Waste materials or different types are not to be mixed (e.g., sorbent pads and contaminated soil/snow to be stored separately).
- Spill area is to be re-examined for any sign of further contamination.



REFERENCES

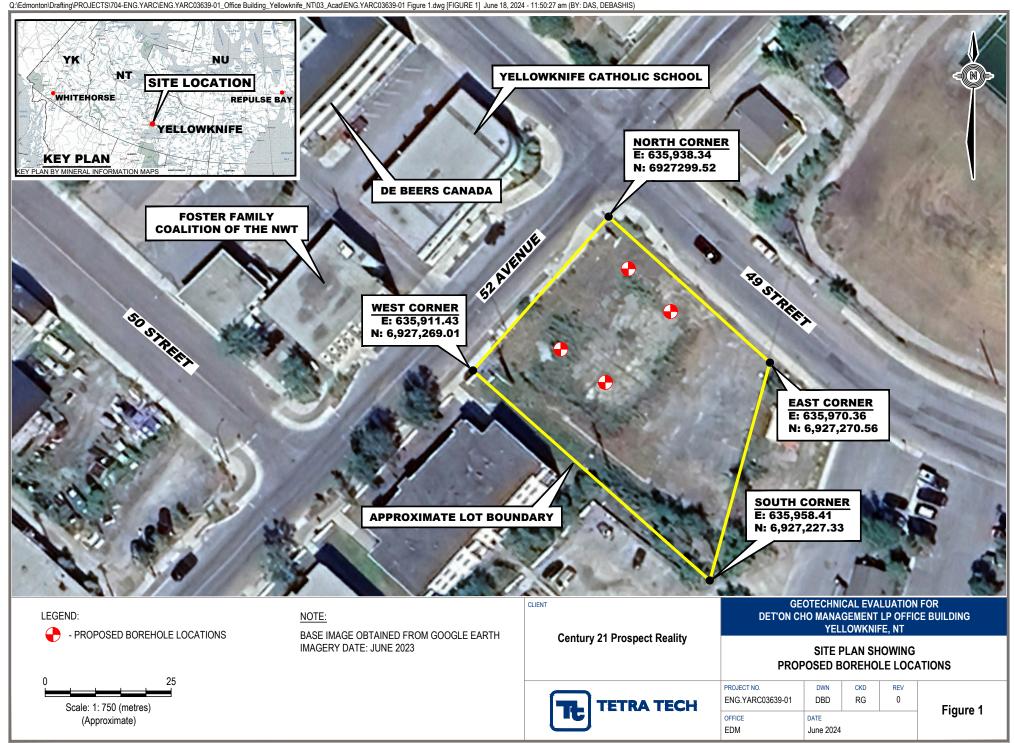
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APPENDIX A

MAP FIGURE FOR THE 2024 GEOTECHNICAL EVALUATION PROGRAM





APPENDIX B

NT-NU SPILL REPORT FORM



Appendix A
Schedule 1 - Reportable Quantities for NT-NU Spills

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	2.1
Compressed gas (Non-corrosive, non-flammable)	with a capacity greater than 100 L	2.2
Flammable liquid	≥ 100 L	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 parts per million	≥ 0.5 L or 0.5 kg	9.0
Other contaminants, e.g. crude oil, drilling fluid, produced water, waste or spent chemicals, used or waste oil, vehicle fluids, wastewater, etc.	≥ 100 L or 100 kg	None
Sour natural gas (i.e., contains H ₂ S)	Uncontrolled release or sustained	None
Sweet natural gas	flow of 10 minutes or more	
Flammable liquid	≥ 20 L	3.1/3.2/3.3
Vehicle fluids	When released on a frozen water body that is being used as a working surface	None
 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

Note: L = litre; kg = kilogram; PCB = Polychlorinated Biphenyls; ppm = parts per million

Appendix C





Instructions for Completing the NT-NU Spill Report Form



Spill reports to be phoned in immediately by calling collect at 867-920-8130. The NT/NU Spill Report Form can be filled out electronically and faxed to the Spill Report Line* at 867-873-6924. Forms can also be emailed as an attachment to spills@gov.nt.ca. Please verify receipt of email transmissions with a follow-up telephone call to 867-920-8130.

A. Report Date and Time	The actual date and time that the spill was reported to the Spill Report Line. If the spill is phoned in, the Spill Report Line will fill this out. <u>Please do not fill in the Report Number</u> . The Spill Report Line will assign a report number after the spill is reported.
B. Occurrence Date and Time	Indicate to the best of your knowledge the exact date and time that the spill occurred. This should not to be confused with the report date and time (Refer to Box A).
C. Land Use Permit Number and/or Water Licence Number	Fill this in only if a Land Use Permit and/or Water Licence has been issued.
D. Geographic Place Name	In most cases, this will be the name of the city or town where the spill occurred. For remote locations outside of communities, identify the most prominent geographic feature such as a named lake or mountain and/or the distance and direction from the nearest population centre. Please include the geographic coordinates for remote locations (Refer to Box E).
E. Geographic Coordinates	Only fill this out if the spill occurred outside of an established community (e.g. at a remote camp, mine site, road, highway or shipping route). State the location in degrees, minutes and seconds of Latitude and Longitude (e.g. 64°29′46″N; 110°16′24″W, where N = North Latitude and W = West Longitude).
F. Responsible Party or Ship/Vessel/Barge Name	The Responsible Party is the person who managed, controlled or owned the product when it spilled. For a spill from a ship/vessel/barge, record the ship/vessel/barge name, normally painted on one or more sides. Provide the full address, telephone number and email of the responsible party or the ship/vessel/barge operator, if known. Use box K if there is insufficient space. Product owners are responsible for product spills, regardless of who or what may have actually caused a spill.
G. Any Contractor Involved	Record the name and address/office location of any other parties or contractors involved with the spill (e.g. a construction company working for the owner of the spilled product and who may have contributed to or caused the spill and/or is responding to the spill on behalf of the owner).
H. Product Spilled	Identify the product spilled. Most commonly, it is gasoline, diesel fuel or sewage. Avoid using trade names for spilled products. Wherever possible, use the chemical name of the product and further identify the product using the four-digit UN number (e.g. UN1203 for Gasoline, UN1202 for Diesel Fuel and UN1863 for Jet A & Jet B fuel). URL www.en.wikipedia.org/wiki/List_of_UN_numbers
I. Spill Source	Identify the source of the spill, if known (e.g. ship/vessel/barge, storage tank, pipeline, truck, sewage lagoon, tailings pond, etc.) and the cause of the spill, if known (e.g. overfill, leak, rupture, grounding, collision, fire, flood, extreme weather, corrosion, equipment failure, human error, vandalism, etc.). Provide an estimate of the extent of the contaminated area (e.g. 10 m ² or 10 square metres).
J. Factors Affecting Spill	Identify factors that could make it difficult to control or clean up the spill (e.g. terrain, weather, access, visibility, dangerous work conditions, lack of equipment or personnel, ice, currents, tides etc.). Indicate if you require advice and/or assistance with the cleanup operation. Identify any hazards to persons, property or the environment.
K. Additional Information	Provide additional explanatory information and pertinent details about the spill (e.g. unusual hazards, properties or behaviour of the spilled product; a diagram of the spill site and affected areas; actions taken to contain, clean up and dispose of spilled material and notify affected parties; and problems or issues associated with the spill response). If necessary, append additional sheets to the spill report. Number the pages in the same format found in the lower right hand corner of the Spill Report Form (e.g. 'Page 1 of 2', 'Page 2 of 2', etc.). Please number the pages so recipients can determine if they received all pages.
L. Reported to Spill Report Line by	Provide your full name, employer, contact number and the location from which you are reporting the spill. Use box K if there is insufficient space.
M. Alternate Contact	Identify any alternate contacts. This information helps regulatory agencies obtain additional information if they are unable to contact the individual who reported the spill.
N. Spill Report Line Use Only	<u>Leave blank</u> . This box is for the <u>Spill Report Line's use only</u> .

NT-NU SPILL REPORT

OIL, GASOLINE, CHEMICALS AND

First Support Agency:

Second Support Agency:

Third Support Agency:









	867) 920-8130 • Fax: (8	,		rt Time:		Τ		_	i	RT LINE USE ONL\ t Number:
A	MM	I DD	YY			Original Spill Report OR		t	Порог	
В	Occurrence Date:	I DD	YY	rence Tim	me·			ginal Spill Report		
С	C Land Use Permit Number (if applicable):					Water Licen	ce Number	(if applicable):		
D	Geographic Place Name or Distance and Direction from the Named Location: Region: NT Nunavut Ad] Nunavut □ Adja	cent Jur	isdiction or Ocean		
Е	Latitude: Longitude:									
_	Degrees		_ Minutes		Seconds	D	egrees	Minutes	_	Seconds
F	Responsible Party or V	essel Nar	me:		Responsible P	arty Address o	r Office Loc	cation:		
G	Any Contractor Involved	d:			Contractor Add	dress or Office	Location:			
Н	Product Spilled: F	Potential S	Spill	Quanti	ty in Litres, Kilo	grams or Cubio	ubic Metres: U.N. Number:			
I	'			Spill C	Il Cause:		Area of Contamination in Square Metres:			
J				Descri	scribe Any Assistance Required:			Hazards to Persons, Property or Environment:		
K	Additional Information,	Comment	ts, Actions Pro	pposed or	Taken to Contai	n, Recover or	Dispose of	Spilled Product and	Contam	inated Materials:
L	Reported to Spill Line by: Position: En		Employer: Locati		cation Calling From:		Telephone:			
M	Any Alternate Contact: Position:			Employer:		Alteri	Alternate Contact Location:		Alternate Telephone	
REP	ORT LINE USE ONLY									
N	Received at Spill Line b	y: Po	sition:		Employer:		Location	n Called:	Repor	t Line Number:
Lead	d Agency: DEC C	CCG/TCM	ISS GNV	VT \square G	N 🗆 ILA	Significance:	☐ Minor		File St	atus: Dopen
	☐ AANDC	□ NEB	Other: _				□ Мајог	Unknown		☐ Closed
Age	ncy:	Contact	t Name:	C	ontact Name:		Remark	s:		
Lead	d Agency:									

DÉCLARATION DE DÉVERSEMENT AUX TNO ET AU NUNAVUT









PÉTROLE, ESSENCE, PRODUITS CHIMIQUES ET AUTRES MATIÈRES DANGEREUSES

LIGNE TÉLÉPHONIQUE SOS DÉVERSEMENT DES TNO ET DU NUNAVUT Tél. : 867-920-8130 • Téléc. : 867-873-6924 • Courriel : spills@gov.nt.ca

À L'USAGE DE SOS DÉVERSEMENT SEULEMENT

Α	Date de la déclaration :	A MM JJ	Heure de l	a déclaration :		Déclaration de déversement original		uméro e la déclaration :	
В	Date de l'incident :	A MM JJ	Heure de l'incident :		Ou Mise à	à jour de la déclaration n°			
С	C No de permis d'utilisation des terres (s'il y a lieu) : No de permis d'utilisation des eaux (s'il y a lieu) :								
D	Nom du lieu géographique ou distance et direction d'un lieu nommé : Région : TNO Nunavut Cocéan, province ou territoire adjac								
Е	Latitude : Logrés Log					Longitude : Degrés Minutes Secondes			
F	Partie responsable ou nom du navire : Adresse ou emplacement du bureau de la partie responsable :								
G	Entrepreneur impliqué (s'il y	y a lieu) :		Adresse ou emp	lacement du l	oureau de l'entrepreneu	r:		
Н	Type de contaminant :	Déversement p	otentiel	Quantité en litres	s, en kilogram	mes ou en mètres cube	es : Nº ONU	:	
I	Source du déversement : Cause du déversement : Superficie contaminée en mètres carrés :							n mètres carrés :	
J	Facteurs qui influent sur le déversement ou sur la réhabilitation du site : Description de l'aide requise : Risques pour les gens, les biens ou l'environnement :							es biens ou	
	Renseignements, commentaires ou mesures proposées ou prises qui ont permis de contenir, de récupérer ou d'éliminer le contaminant déversé et les matières contaminées :								
K									
L	Le signalement fait par :	Poste :		Employeur :	Prove	enance de l'appel :		Téléphone :	
М	Autre personne-ressource :	Poste :		Employeur:	Lieu où se trouve la personne-ressource :		Téléphone :		
À L'l	JSAGE DE SOS DÉVERSE	MENT SEULEM	ENT		<u>'</u>				
N	Le signalement reçu par :	Poste :		Employeur :		Nom de la collectivité :	N° de té	él. de sos déversment :	
Orga					ossier : Ouvert				
Orga	anisme : Pe	rsonne-ressour	ce :	Heure du signaler	ment :	Commentaires :			
	inisme responsable :								
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APPENDIX C

SAFETY DATA SHEET FOR DIESEL



DIESEL FUEL



000003000395

Version 6.1 Revision Date 2021/05/05 Print Date 2021/08/26

SECTION 1. IDENTIFICATION

Product name : DIESEL FUEL

Synonyms : Seasonal Diesel, #2 Diesel, #1 Diesel, #2 Heating Oil, #1

Heating Oil, OSX, 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, Renewable Diesel blend (RX where X is 2-50, X is representative of volume %), Diesel Low Cloud (LC), Ma-

rine Gas Oil, Marine Gas Oil Dyed.

Product code : 103204, 103180, 103179, 103193, 103178, 103136, 103135,

103134, 103133, 103132, 103131, 101799, 102907, 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, Telephone: 1-866-786-2671

Emergency telephone num-

ber

CHEMTREC: 1-800-424-9300 (toll free) or +1 703-527-3887;

Suncor Energy: +1 403-296-3000

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

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

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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.

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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

Aggravated Medical Condi-

tion

: None known.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

Chemical name	CAS-No.	Concentration
Kerosine (petroleum), hydrodesulfurized; Kerosine — unspecified	64742-81-0	48 - 100 %
Kerosine (petroleum); Straight run kerosine	8008-20-6	
Fuels, diesel; Gasoil — unspecified	68334-30-5	
Alkanes, C10-20-branched and linear	928771-01-1	0 - 50 %
Fatty acids, C16-18 and C18-unsatd., Me esters	67762-38-3	0 - 20 %

All above concentrations are in percent by weight.

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.

: Remove contact lenses.

Internet: www.petro-canada.ca/msds Petro-Canada is a Suncor Energy business.

In case of eye contact

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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 physi-

cian 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

: Harmful if inhaled.

Respiratory, skin and eye irritation; nausea; cancer.

Notes to physician : Treat symptomatically.

For specialist advice physicians should contact the Poisons

Information Service.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Dry chemical

Carbon dioxide (CO2)

Water fog. 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 prod-

ucts

: Carbon oxides (CO, CO2), nitrogen oxides (NOx), sulphur

oxides (SOx), smoke and irritating vapours as products of incomplete combustion.

Further information : Prevent fire extinguishing

: 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 nec-

essary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protec-

tive equipment and emer-

gency procedures

: For personal protection see section 8.

Ensure adequate ventilation. Evacuate personnel to safe areas.

Material can create slippery conditions.

: If the product contaminates rivers and lakes or drains inform

respective authorities.

Methods and materials for

Environmental precautions

containment and cleaning up

: Prevent further leakage or spillage if safe to do so.

Remove all sources of ignition.

Soak up with inert absorbent material. Non-sparking tools should be used. Ensure adequate ventilation.

Contact the proper local authorities.

SECTION 7. HANDLING AND STORAGE

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Advice on safe handling : For personal protection see section 8.

Smoking, eating and drinking should be prohibited in the ap-

plication area.

Use only with adequate ventilation.

In case of insufficient ventilation, wear suitable respiratory

equipment.

Avoid spark promoters. Ground/bond container and equipment. These alone may be insufficient to remove static elec-

tricity.

Avoid contact with skin, eyes and clothing.

Do not ingest.

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 sun-

light.

Ensure the storage containers are grounded/bonded.

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), hydrodesulfurized; Kerosine — unspecified	64742-81-0	TWA	200 mg/m3 (As total hydro- carbon vapour)	ACGIH
		TWA	200 mg/m3 (total hydrocarbon vapor)	CA AB OEL
		TWA	525 mg/m3	CA ON OEL
		TWA	200 mg/m3 (As total hydro- carbon vapour)	ACGIH
		TWA	200 mg/m3 (total hydrocarbon vapor)	ACGIH
Kerosine (petroleum); Straight run kerosine	8008-20-6	TWA	200 mg/m3 (total hydrocarbon vapor)	CA BC OEL
		TWA	200 mg/m3 (total hydrocarbon vapor)	CA AB OEL
		TWA	200 mg/m3 (total hydrocarbon vapor)	ACGIH
Fuels, diesel; Gasoil — un- specified	68334-30-5	TWA	100 mg/m3 (total hydrocar- bons)	CA AB OEL
		TWA (Va-	100 mg/m3	CA BC OEL

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	pour and inhalable aerosols)	(total hydrocar- bons)	
	TWA (Inhal- able fraction and vapor)	100 mg/m3 ACGIH (total hydrocarbons)	

Engineering measures

: Adequate ventilation to ensure that Occupational Exposure

Limits are not exceeded.

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 Concentration in air determines protection needed.

> 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.

organic vapour cartridge or canister may be permissible un-Filter type

der 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 ade-

quate protection.

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 nec-

essary.

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 concen-

tration and amount of dangerous substances, and to the spe-

cific work-place.

Protective measures Wash contaminated clothing before re-use.

Hygiene measures Remove and wash contaminated clothing and gloves, includ-

ing the inside, before re-use.

Wash face, hands and any exposed skin thoroughly after

handling.

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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
Melting point : No data available

Boiling point/boiling range : 150 - 371 °C (302 - 700 °F)

Decomposition temperature No data available

Flash point : > 40 °C (104 °F) Method: closed cup

....

Auto-Ignition Temperature : 204 °C (399 °F)

Evaporation rate : No data available

Flammability : Flammable in presence of open flames, sparks and heat. Va-

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 : $7.5 \text{ mmHg} (20 \,^{\circ}\text{C} / 68 \,^{\circ}\text{F})$

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)

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Reactivity : Stable at normal ambient temperature and pressure.

Chemical stability : Stable under normal conditions.

Possibility of hazardous reac- : Hazardous polymerisation does not occur.

tions

Conditions to avoid : Extremes of temperature and direct sunlight. Incompatible materials : Reactive with oxidising agents and acids.

Hazardous decomposition : May release COx, NOx, SOx, smoke and irritating vapours

products when heated to decomposition.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Eye contact Ingestion Inhalation Skin contact

Acute toxicity

Product:

Acute oral toxicity : Remarks: Based on available data, the classification criteria

are not met.

Acute inhalation toxicity : Acute toxicity estimate: 1.5 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist Method: Calculation method

Assessment: The component/mixture is moderately toxic after

short term inhalation.
Remarks: Harmful if inhaled.

Acute dermal toxicity : Assessment: The substance or mixture has no acute dermal

toxicity

Components:

Kerosine (petroleum), hydrodesulfurized; Kerosine — unspecified:

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,

Kerosine (petroleum); Straight run kerosine:

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,

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Fuels, diesel; Gasoil — unspecified:

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

Acute inhalation toxicity : LC50 (Rat): 4.1 mg/l

Exposure time: 4 h

Test atmosphere: vapour

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

Skin corrosion/irritation

Product:

Remarks: Causes skin irritation.

Serious eye damage/eye irritation

Product:

Remarks: Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation

Product:

Remarks: Based on available data, the classification criteria are not met.

Germ cell mutagenicity

Product:

Germ cell mutagenicity-

Based on available data, the classification criteria are not

Assessment met.

Carcinogenicity

Product:

Carcinogenicity - As-

sessment

Suspected of causing cancer.

Reproductive toxicity

Product:

Reproductive toxicity -

Based on available data, the classification criteria are not

Assessment met.

STOT - single exposure

Product:

Target Organs: Central nervous system Remarks: May cause drowsiness or dizziness.

STOT - repeated exposure

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Product:

Target Organs: Liver, thymus, Bone

Remarks: May cause damage to organs through prolonged or repeated exposure.

No data available

Aspiration toxicity

Product:

May be fatal if swallowed and enters airways.

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

courses or the soil.

Offer surplus and non-recyclable solutions to a licensed dis-

posal 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.

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Dispose of product residue in accordance with the instructions

of the person responsible for waste disposal.

Contaminated packaging : Contact local or business unit authorities for guidance on dis-

posal of product.

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 : 366

aircraft)

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 : yes

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 : yes

SECTION 15. REGULATORY INFORMATION

This product has been classified according to the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all of the information required by the HPR.

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

DSL On the inventory, or in compliance with the inventory

SECTION 16. OTHER INFORMATION

For Copy of SDS : Internet: www.petro-canada.ca/msds

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Canada-wide: telephone: 1-800-668-0220; fax: 1-800-837-

1228

For Product Safety Information: 1 905-804-4752

Prepared by : Product Safety

Revision Date : 2021/05/05

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 D

LIMITATIONS ON THE USE OF THIS DOCUMENT



LIMITATIONS ON USE OF THIS DOCUMENT

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