



March 10, 2005

Project No.: CAM-2 (3.6)

VIA E-MAIL (LICENSING@NWB.NUNAVUT.CA)

Phyllis Beaulieu
Manager, Licensing
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU X0B 1J0

Dear Ms. Beaulieu:

RE: 2004 Annual Report: Water Use License NWB5GLA0308

UMA Engineering Ltd. is submitting the following annual report as per the requirements of Part B.1 of the above noted water use license. The report is being submitted on behalf of Defence Construction Canada and the Department of National Defence.

Water Usage

The following table provides a summary of the water usage from the Water Supply Lake and the effluent discharge to the sewage lagoon.

Month	Quantity of Water Obtained (cubic metres)	Quantity of Sewage Effluent Discharged (cubic metres)
June	19	15
July	350	280
August	375	300
September	215	172
TOTAL	959	767

A sewage lagoon was constructed in August 2003 to support the construction camp as per the specifications included in the water use licence application. Due to the coarse-grained nature of the material available at the CAM-2 site, the sewage lagoon did not retain the discharged effluent. All effluent discharged into the lagoon infiltrated the ground. No samples of the

sewage effluent were collected because there was an insufficient volume of effluent available to obtain a sample for analysis.

Summary of Completed Work

The following sections provide a summary of the work completed at the CAM-2 site in 2004. The work plan for 2005 will be to continue with the clean up activities, as described in the project description.

Demolition: At the end of the 2004 season, the following items had been demolished and placed in the Non-Hazardous Waste Landfill.

- Two billboards and associated feedhorns and waveguides
- Two communications dishes
- Two 65,000 US gallon fuel tanks from the beach POL
- One 6,000 US gallon Mogas tank from the beach POL
- One 500 US gallon day tank from the station area
- One 6,000 US gallon Mogas tank from the station area
- 90% of the power and communication cables
- 90% of the airstrip ancillary facilities
- Interior walls of the warehouse
- Asbestos materials from the module train
- Two utility poles
- The abandoned Short Range Radar fuel supply line

Removal of PAP materials from the module train is approximately 30% complete. The removed materials were placed in approved containers and moved to the PCB Storage Area, which was inspected by Environment Canada in the fall.

Non-Hazardous Waste (NHW) Landfill: The NHW Landfill construction is approximately 75% complete, including the northern, eastern and southern berms of the facility. The western berm of the facility is open and being used to stockpile Tier I contaminated soil to be used as intermediate cover for the demolition and debris materials being placed in the facility. The western berm of the landfill will be constructed in 2005, once the Tier I contaminated soil is placed in the landfill. It is anticipated that this landfill will be closed in 2005.

Tier II Soil Disposal Facility: The base and berms of the facility were constructed in 2004. The geomembrane liner is to be installed in 2005, after which the facility can begin receiving Tier II contaminated soils. It is anticipated that this landfill will be closed at the end of the 2005 construction season.

Landfarm: Construction of the landfarm was completed and the facility began receiving hydrocarbon-contaminated soils in 2004. Approximately 9,900 cubic metres of soil was placed in the facility in 2004. The landfarm will continue to be used in 2005.

Landfills: Excavation of the Airstrip Landfill is approximately 70% complete. It is expected the excavation and backfilling will be finished in 2005. Regrading at the Station Landfill is complete.

Spill Incidences

There were two spill incidences at the CAM-2 site in 2004. The spills were reported via telephone to the Spill Report Line and a written report was also submitted. In one spill, approximately 90 litres of diesel fuel were spilled because of a loose fuel filter and in the other spill, approximately 10 litres of hydraulic fluid was spilled because of a faulty seal. Soils impacted by the diesel fuel spill were scraped up and transported to the on-site landfarm for treatment. The hydraulic fluid impacted soil was placed into drums for disposal. Copies of the spill reports are included as an attachment.

Community Meetings

The contractor held a community meeting in Gjoa Haven to discuss the clean up program at CAM-2 prior to the start of the 2004 construction season. It is anticipated the contractor will hold a community meeting prior to the start of the 2005 season as well.

A drawing showing the project layout is attached.

March 10, 2005
Phyllis Beaulieu
Nunavut Water Board
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We trust the information provided is consistent with the requirements of Water Use Licence #NWB5GLA0308. Please feel free to contact the undersigned if you have any questions or comments.

Sincerely,

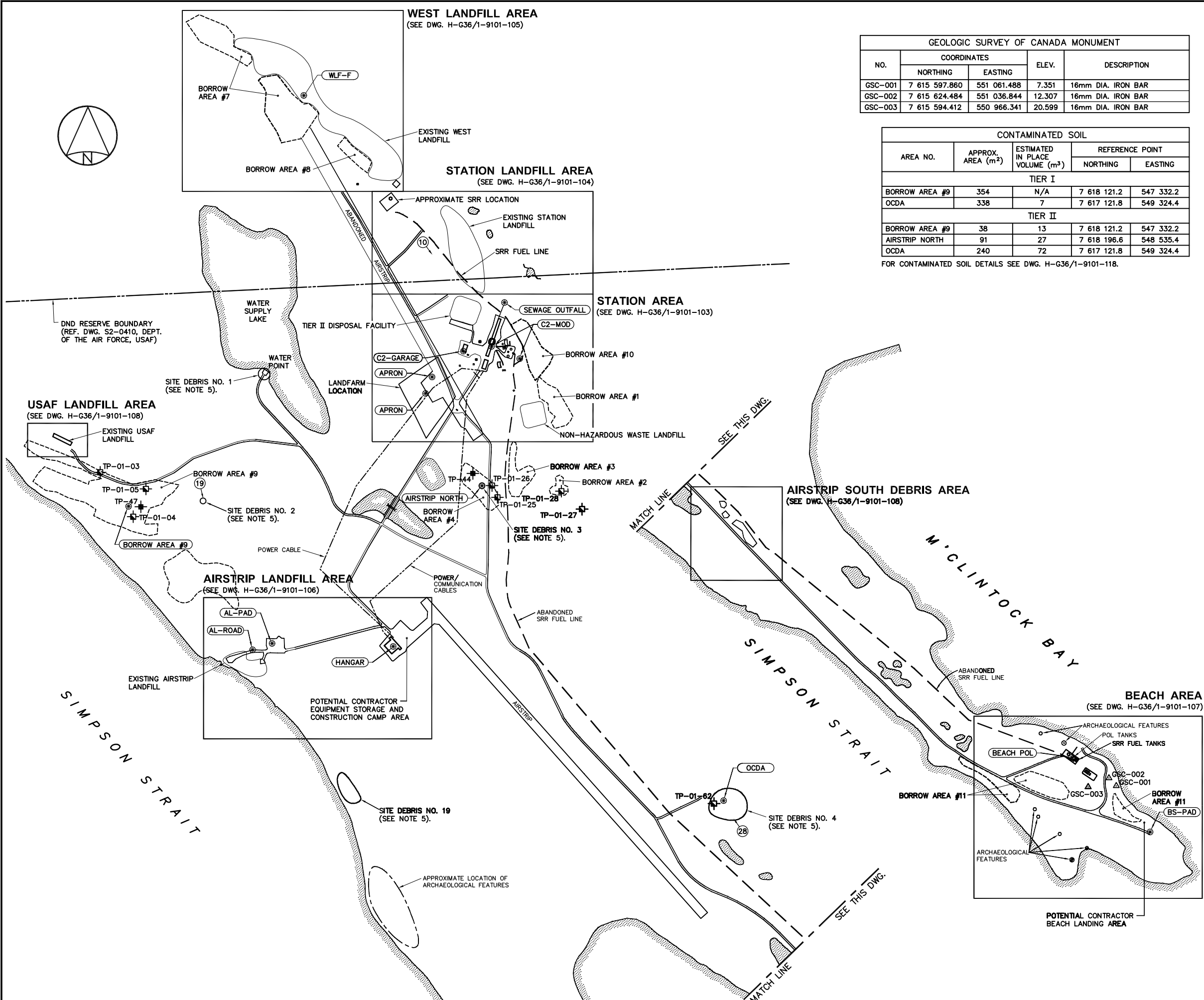
UMA ENGINEERING LTD.

A handwritten signature in black ink, appearing to read 'Eva Schulz', is positioned above the typed name.

Eva Schulz, P.Ag.
Environmental Scientist
eschulz@umagroup.com

Encl. Project Layout
Spill Reports


cc: Phil Warren, DCC
Jim Wall, NWB




GEOLOGIC SURVEY OF CANADA MONUMENT				
NO.	COORDINATES		ELEV.	DESCRIPTION
	NORTHING	EASTING		
GSC-001	7 615 597.860	551 061.488	7.351	16mm DIA. IRON BAR
GSC-002	7 615 624.484	551 036.844	12.307	16mm DIA. IRON BAR
GSC-003	7 615 594.412	550 966.341	20.599	16mm DIA. IRON BAR

CONTAMINATED SOIL				
AREA NO.	APPROX. AREA (m ²)	ESTIMATED IN PLACE VOLUME (m ³)	REFERENCE POINT	
			NORTHING	EASTING
TIER I				
BORROW AREA #9	354	N/A	7 618 121.2	547 332.2
OCDA	338	7	7 617 121.8	549 324.4
TIER II				
BORROW AREA #9	38	13	7 618 121.2	547 332.2
AIRSTRIIP NORTH	91	27	7 618 196.6	548 535.4
OCDA	240	72	7 617 121.8	549 324.4

FOR CONTAMINATED SOIL DETAILS SEE DWG. H-G36/1-9101-118.



National
Défense



Défense
nationale

Headquarters
Quartier général

General Notes:

- ALL COORDINATES ARE REFERENCED TO UTM ZONE 14N, NAD83.
- ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
- ARCHAEOLOGICAL FEATURES LOCATED AS PER ENVIRONMENTAL CLEAN UP STUDY OF 21 DEW LINE SITES IN CANADA, VOL. 14, UMA 1991.
- ALL SHORT RANGE RADAR (SRR) FACILITIES ARE CURRENTLY OPERATIONAL AND ARE NOT TO BE DISTURBED.
- DEBRIS AREAS: SEE DESCRIPTION IN TABLE 02219-1 IN SPECIFICATION. ALL NON-HAZARDOUS DEBRIS TO BE PLACED IN NON-HAZARDOUS WASTE LANDFILL.
- CONTAMINATED SOIL CLASSIFICATIONS ARE BASED ON DISPOSAL REQUIREMENTS.

Legend:

GSC-001

△

GEOLOGIC SURVEY OF CANADA MONUMENT

⊗

CONTAMINATED AREA

⊕

TEST PIT LOCATION (1993)

⊕

TEST PIT LOCATION (2001)

19

PHOTOGRAPHIC VIEWPOINT

○

BODY OF WATER

No.	DATE	REVISION	REVISION	APPR.

uma

SEE

SCALE - ÉCHELLE 100 50 0 100 200 300m

PROJECT - PROJET

CAM-2 GLADMAN POINT

DEW LINE CLEAN UP

© COPYRIGHT
HER MAJESTY THE QUEEN IN RIGHT OF CANADA 2003, AS REPRESENTED BY THE MINISTER OF NATIONAL DEFENCE.

TRADE - MÉTIER	SITING	DATE 2003-03-03
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SUBJECT - SUJET

PRODUCTION	CONCURRENCE - ASSENTIMENT	
DESIGNED ETUDIE ANP/KNS		DES OFF AGENT CONCEPT
DRAWN DESSINE RN/MH		SECT HD CHEF SECT
CHECKED VERIFIE RRM		DES MGR GEST CONCEPT
COORDINATION SMS		REVIEWED - REVU

DWG. NO. - DESSIN NO.
H-G36/1-9101-102

Canada



NWT SPILL REPORT

(Oil, Gas, Hazardous Chemicals or other Materials)

24 - Hour Report Line

Phone: (867) 920-8130

Fax: (867) 873-8924

A Report date and time July 09/04 16:00 HRS		B Date and time of spill (if known) July 09/04 12:00 HRS		C <input checked="" type="checkbox"/> Original report <input type="checkbox"/> Update no. _____		Spill number GP-1	
D Location and map coordinates (if known) and direction (if moving) CAN-Z, GLADMAN POINT, NU. - HANGATZ PASS - UTM ZONE 14 N 7617686 E 548257							
E Party responsible for spill KITNUKA PROJECTS INC. -> KING WILLIAM ISLAND							
F Product(s) spilled and estimated quantities (provide metric volumes/weights if possible) HYDRAULIC FLUID - APPROX 10 L							
G Cause of spill HITACHI 300 EXCAVATOR - PLANETARY WAS ISSING DRAINED AND FAULTY SEAL BETWEEN PLANETARY AND HYDRAULIC MOTOR LEAKED							
H Is spill terminated? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no		I If spill is continuing, give estimated rate		J Is further spillage possible? <input type="checkbox"/> yes <input checked="" type="checkbox"/> no		K Extent of contaminated area (in square metres if possible) 2 m ²	
L Factors affecting spill or recovery (weather conditions, terrain, snow cover, etc.) N/A				M Containment (natural depression, dikes, etc.) OIL YAT OLD STORAGE, ABSORBENT BAGS.			
N Action, if any, taken or proposed to contain, recover, clean up or dispose of product(s) and contaminated materials OIL-ABSORBENT BAGS WERE INITIALLY USED. A SMALL BACKHOE AND HAND SHOVELS WERE USED FOR STAINED SOILS. SOILS WERE BAGGED IN 6 GAL POLY BAGS FOR TEMPORARY STORAGE & WILL BE TRANSFERRED TO DUMPS.							
O Do you require assistance? <input checked="" type="checkbox"/> no <input type="checkbox"/> yes, describe:				P Possible hazards to persons, property, or environment; eg: fire, drinking water, fish or wildlife N/A			
Q Comments and/or recommendations - EXCAVATOR HOLDS ~ 68 L hydraulic fluid. 44 L were contained in 2 pails when work was taking place. 14 L was contained in a plastic drip pan. - Excavator needs new main seal replacement. Mechanic is ordering parts.						FOR SPILL LINE USE ONLY	
						Lead Agency	
						Spill significance	
						Lead Agency contact and time	
Reported by TIM STEVENS						Position, Employer, Location SITE SUPERVISOR, KITNUKA PROJECTS, GLADMAN POINT	
Reported to 11						Telephone	

NWT 12/20/01

P:1/1

10:922222186795837501
P.03/04

JUL 14 '04 10:55 FR DEFENCE CONST. CANADP613 998 0468 TO 140322700399
HUB-2/-2003 09:09 H-KUM:ARCTIC ALARM STATION 8736924



NWT SPILL REPORT

(Oil, Gas, Hazardous Chemicals or other Materials)

24 - Hour Report Line
Phone: (867) 920-8130
Fax: (867) 873-6924

A Report date and time July 09/04 16:00hrs		B Date and time of spill (if known) July 09/04 13:30hrs		C <input checked="" type="checkbox"/> Original report <input type="checkbox"/> Update no. _____		Spill number	
D Location and map coordinates (if known) and direction (if moving) CAM-2, GLADHAN, POINT, NU - BORTON PIT #9 - UTM ZONE 14 N 7618189 E 547328							
E Party responsible for spill KITUNA PROJECTS INC → KING WILLIAM ISLAND							
F Product(s) spilled and estimated quantities (provide metric volumes/weights if possible) DIESEL FUEL - APPROX 90 litres.							
G Cause of spill FUEL FILTER LOOSENED OFF TDZS DOZER							
H Is spill terminated? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no		I If spill is continuing, give estimated rate		J Is further spillage possible? <input type="checkbox"/> yes <input checked="" type="checkbox"/> no		K Extent of contaminated area (in square metres if possible) 25 m ²	
L Factors affecting spill or recovery (weather conditions, terrain, snow cover, etc.) N/A				M Containment (natural depression, dikes, etc.) DOZER PASS IN GRAVEL PIT			
N Action, if any, taken or proposed to contain, recover, clean up or dispose of product(s) and contaminated materials CONTAMINATED GRAVEL WAS PUSHED UP AND HAULED BY ROCK TRUCKS & PLACED IN A LANDFARM WHICH IS BEING CONSTRUCTED ON SITE TO TREAT HYDROCARBON CONTAMINATED SOILS.							
O Do you require assistance? <input checked="" type="checkbox"/> no <input type="checkbox"/> yes, describe:				P Possible hazards to persons, property, or environment, e.g. fire, drinking water, fish or wildlife N/A			
Q Comments and/or recommendations - PROJECT IS A NEW-LINE CLEAN-UP PROJECT & A HYDROCARBON LAND-FARM IS BEING CONSTRUCTED ON SITE TO DEAL WITH EXISTING HYDROCARBON "B" SOILS. - TDZS DOZER HAS NOT BEEN FUELED ON PREVIOUS EVENING, HAS BEEN WORKED FOR APPROX 16 HOURS AND STILL HAS 1/4 TANK OF FUEL WHEN SPILL OCCURRED. - OPERATORS HAVE BEEN INSTRUCTED TO REGULARLY CHECK FUEL FILTER.						FOR SPILL LINE USE ONLY	
						Lead Agency	
						Spill significance	
						Lead Agency contact and time	
Reported by JIM STEVENS						Position, Employer, Location KITUNA PROJECTS SITE SUPERINTENDENT, GLADHAN POINT	
Reported to 11						Telephone 600-701-0147	
Position, Employer, Location 11						Telephone 11	

NWT 12/00/01

P: 1-1-1 10: 92222218679837501

P: 04/04

10: 92222218679837501

JUL 14 '04 10:55 FR DEFENCE CONST. CANADA613 998 0468 TO 1402327003399

FROM: ARCTIC PLARM STATION 87369224

10: 92222218679837501