



2015 ANNUAL NUNAVUT WATER BOARD

REPORT FOR CAM-M

FOR THE

North Warning System

Contract # W8485-100224/001/NX
CDRL 16.F.5.d

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Prepared for

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EXECUTIVE SUMMARY

This 2015 Annual Report for the Nunavut Water Board (NWB) has been prepared by Raytheon Canada Limited (RCL) for the Department of National Defence in order to meet the requirements of the Nunavut Water Board licence issued 10 September 2009 3BC-CAM0919 – Type “B”, Part B. General Conditions, paragraph 1. This report covers the period from 01 January to 31 December 2015.

RCL is the Operation and Maintenance (O&M) Contractor for the North Warning System (NWS), including CAM-M. CAM-M is the attended (manned) NWS radar site located at Cambridge Bay, Nunavut. The site population increases due to project activity at CAM-M or at other radar sites that CAM-M supports.

The water usage for CAM-M in 2015 was 2,087.2 cubic meters. This is an average of 5.7 cubic meters per day, below the maximum of 10 cubic meters per day allowed by the licence. On occasion, more than the daily maximum was drawn due to increased site activity. The licensee has made application to the NWB in order to change the water usage metric from a daily value to an annual value aligning the CAM-M NWB licence with the other 5 NWB licenced NWS sites.

Sewage at CAM-M is processed by the tertiary wastewater treatment system. Some of the treated effluent is recycled as on site urinal/toilet flush water. The discharged treated effluent is of potable water quality. A sample of the treated effluent was sent for laboratory analysis each month in 2015.

Samples of the water contained in the berms of fuel storage facilities was sent for laboratory analysis and confirmed to be within effluent quality limits of the NWB licence 3BC-CAM0919, Part D, item 10 before the water was pumped out of the berms.

Hazardous waste was removed from CAM-M for disposal outside of Nunavut. The waste went to Safety Kleen, 2730 boulevard Industriel, Chambly, QC, J3L 4V2. The hazardous waste consisted of 118 drums of assorted waste (oil, fuel, paint, etc.) and 2 crates of batteries.

Non-hazardous domestic solid waste was disposed of at the local landfill through a contract with the Hamlet of Cambridge Bay. RCL has documented authorization from the community for receiving the waste.

Two outdoor spills occurred at CAM-M in 2015. The spills were:

- a. NT-NU Spill Report # 15-054. On 17 Feb 2015, site personnel discovered that approximately 0.5 liters of hydraulic fluid had leaked from a loose connector on the loader. The hydraulic fluid was contained by ice and snow and did not penetrate to the ground. The impacted snow and ice were removed and placed in a container for future disposal at a licensed hazardous waste disposal facility outside of Nunavut.
- b. NT-NU Spill Report # 15-385. On 15 September 2015, site personnel found 2 L of glycol indoors and determined that the source was a loose clamp on the diesel generator. The clamp was tightened, stopping the leak. The spill was cleaned up indoors, staff checked under the building train, and found soil/gravel impacted by approximately 1 L of glycol. The impacted soil/gravel was placed in a container for future disposal at a licensed hazardous waste disposal facility outside of Nunavut.

The Spill Contingency Plan was successfully implemented.

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1.0 INTRODUCTION

This 2015 Annual Report for the Nunavut Water Board (NWB) has been prepared by Raytheon Canada Limited (RCL) for the Department of National Defence in order to meet the requirements of the licence issued 10 September 2009 3BC-CAM0919 – Type “B”, Part B. General Conditions, paragraph 1. This report covers the period from 01 January to 31 December 2015.

RCL is the Operation and Maintenance (O&M) Contractor for the North Warning System (NWS), including CAM-M. CAM-M is the attended (manned) NWS radar site located at Cambridge Bay, Nunavut. The site population increases due to project activity at CAM-M or at other radar sites that CAM-M supports.

1.1 REPORT DETAILS

Licensee: Department of National Defence, Government of Canada
Licence: 3BC-CAM0919 – Type “B”
Location: CAM-M North Warning System Site,
Cambridge Bay, Kitikmeot Region, Nunavut
Report prepared by: Raytheon Canada Limited, 17-Mar-2016
Time Period Covered: 01 January to 31 December 2015

2.0 WATER USE

The water usage from January to December averaged 5.7 cubic meters per day which is below the maximum of 10 cubic meters per day allowed by the licence. See Table 2-1 for raw water usage. On occasion, more than the daily maximum was drawn due to increased site activity. The daily maximum was exceeded due to:

1. the simultaneous occurrence of: the backwash of Cycle-let membranes, backwash of raw water treatment system membranes, and filling of the raw water tank; and
2. heavy site loading in April 2015.

The average daily usage is below the daily maximum and the licensee has made application to the NWB about changing the water usage metric from a daily value to an annual value aligning the CAM-M NWB licence with the other 5 NWB licenced NWS sites.

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Table 2-1 Monthly Raw Water Usage at CAM-M in 2015

Month	Raw water usage in cubic metres (m ³)
January	208.6
February	190.0
March	211.2
April	346.3
May	172.2
June	192.6
July	179.9
August	144.9
September	127.3
October	102.0
November	123.2
December	89.2
TOTAL	2,087.2

3.0 TREATED SEWAGE DISCHARGE

At CAM-M, the sewage and grey water were both processed through a *Cycle-let*® advanced tertiary wastewater treatment system. The system was maintained by RCL in 2015. Some of the treated water is recycled as urinal/toilet flush water; the remainder is discharged at the designated outfall and is potable water quality. See Table 3-1, for the volume of sewage and grey water treated by the *Cycle-let*® system.

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Table 3-1 Monthly and Annual Volume of Sewage and Grey Water Treated at CAM-M in 2015

Month	Volume of sewage and greywater treated then discharged or recycled in cubic metres (m ³)
January	108.8
February	98.3
March	108.8
April	105.3
May	108.8
June	105.3
July	108.8
August	108.8
September	154.0
October	132.5
November	135.9
December	118.2
Total	1,393.9

4.0 HAZARDOUS WASTE AND WASTE OIL DISPOSAL

Hazardous waste and waste oil were sent to an approved hazardous waste disposal site outside of Nunavut as required by the licence. The hazardous waste was shipped to Safety Kleen, 2730 boulevard Industriel, Chambly, QC, J3L 4V2.

See Table 4-1 for the list of items sent for disposal.

See **Annex A** for the shipping documents including the completed movement documents for waste regulated under the Transportation of Dangerous Goods Regulations (TDGR) and NWS Manifests for non-regulated waste.

Table 4-1 Hazardous Waste and Waste Oil Sent for Disposal from CAM-M in 2015

Site	Description, TDG shipping name	Quantity	Movement Document or Manifest #
CAM-M	Waste Activated Carbon Filter Not TDG Regulated	12 Drums	NWS Manifest 34344, 34346, 34358
CAM-M	Waste Batteries, Wet, Filled with Acid	1 Crate	Movement Document 2581510-1
CAM-M	Waste Batteries, Wet, Non-Spillable	1 Crate	Movement Document 2581510-1

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Site	Description, TDG shipping name	Quantity	Movement Document or Manifest #
CAM-M	Waste Glycol Not TDG Regulated	1 Drum	NWS Manifest 34341
CAM-M	Waste Jet A1 Fuel Waste Fuel, Aviation, Turbine Engine	10 Drums	Movement Document 2581509-3
CAM-M	Waste Jet A1 Fuel Filters Waste Solids Containing Flammable Liquid, N.O.S. (Fuel, Aviation, Turbine Engine)	3 Drums	Movement Document 2581509-3
CAM-M	Waste Jet A1 Fuel Impacted Soil Waste Solids Containing Flammable Liquid, N.O.S. (Fuel, Aviation, Turbine Engine)	1 Drum	Movement Document 2581509-3
CAM-M	Waste Jet A1 Fuel Mixture Waste Fuel, Aviation, Turbine Engine Mixture	1 Drum	Movement Document 2581509-3
CAM-M	Waste Lithium Batteries	1 Drum	Movement Document 2581510-1
CAM-M	Waste Oil Not TDG Regulated	60 Drums	NWS Manifest 34336, 34337, 34338, 34339, 34340, 34341, 34348, 34350, 34351, 34352, 34353, 34354, 34356, 34359, 34366, 34369
CAM-M	Waste Oil Filters	8 Drums	NWS Manifest 34333, 34334, 34335, 34361
CAM-M	Waste Oil Impacted Soil Not TDG Regulated	1 Drums	NWS Manifest 34368
CAM-M	Waste Oil Soaked Absorbent Not TDG Regulated	4 Drums	NWS Manifest 34333, 34361, 34368
CAM-M	Waste Oily Rags Waste Solids Containing Flammable Liquid, N.O.S. (Fuel, Aviation, Turbine Engine)	12 Drums ¹	Movement Document 2581509-3
CAM-M	Waste Paint	1 Drum	Movement Document 2581509-3
CAM-M	Waste Paint Related Materials	2 Drums	Movement Document 2581509-3
CAM-M	Waste Lighting Ballasts Containing PCBs Waste Polychlorinated Biphenyls, Solid	1 Drum	Movement Document 2581510-1

¹ 4 of these drums were sent as Not TDG Regulated as they contained no Jet A1 Fuel

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5.0 NON-HAZARDOUS SOLID WASTE DISPOSAL

Non-hazardous domestic solid waste was disposed of at the local landfill through a contract with the Municipality of Cambridge Bay. RCL has documented authorization from the community for receiving the waste. See Table 5-1 for the quantity of non-hazardous waste generated.

Table 5-1 Non-hazardous Domestic Solid Waste Sent for Disposal from CAM-M in 2015

Month	Waste Generated (kg)
January	717
February	1,204
March	1,257
April	953
May	1,445
June	1,100
July	1,125
August	1,125
September	906
October	1,237
November	1,132
December	840
Total	13,040

6.0 MONITORING PROGRAM

See **Annex B** for the location of the treated sewage effluent outfall, CDL-2, with co-ordinates.

See **Annex C** for analysis of the treated sewage effluent.

See **Annex D** for the list of bermed fuel storage facilities, CDL-3, with co-ordinates.

See **Annex E** for analysis of berm water (water contained in the berms of fuel storage facilities). The results were confirmed to be within effluent quality limits of the NWB licence 3BC-CAM0919, Part D, item 10 before the water was pumped out of the berms.

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7.0 SPILLS (UNAUTHORIZED DISCHARGES)

Table 7-1 Outdoor Spills Reported at CAM-M in 2015

Date, Spill #	Product	Quantity	Cause and follow-up action	On-site Location
17 Feb 2015, Spill # 15-054	Hydraulic Fluid	0.5 L	On 17 February 2015, site personnel discovered that approximately 0.5 L of hydraulic fluid had leaked from a loose connector on the loader. The hydraulic fluid was contained by ice and snow and did not penetrate to the ground. The impacted snow and ice were removed and placed in a container for future disposal at a licensed hazardous waste disposal facility outside of Nunavut.	Between A-Train and B-Train (69°06'09.94"N, 105°07'01.63"W)
15 Sep 2015, Spill # 15-385	Glycol	3 L	On 15 September 2015, Staff found 2 L of glycol indoors and determined that the source was a loose clamp on the diesel generator. The clamp was tightened, stopping the leak. The spill was cleaned up indoors, staff checked under the building train, and found soil/gravel impacted by approximately 1 L of glycol. The impacted soil/gravel was placed in a container for future disposal at a licensed hazardous waste disposal facility outside of Nunavut.	Under building Train (69°06'58.3"N 105°07'11.6"W)

8.0 REVISIONS TO THE SPILL CONTINGENCY PLAN

The Spill Contingency Plan was successfully implemented. There were no revisions to the Spill Contingency Plan in 2015.

9.0 PROGRESSIVE RECLAMATION WORK UNDERTAKEN

None undertaken.

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10.0 ACRONYMS

Acronym	Definition
CC&C	Care, Custody, and Control
DEG	Diesel Engine Generator
DND	Department of National Defence
NWB	Nunavut Water Board
NWS	North Warning System
NWSO	North Warning System Office
O&M	Operations and Maintenance
PCB	Polychlorinated Biphenyl
RCL	Raytheon Canada Limited
TDGR	Transportation of Dangerous Goods Regulations

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**MOVEMENT DOCUMENT / MANIFEST
DOCUMENT DE MOUVEMENT / MANIFESTE**

This document documents our compliance to all federal and provincial transport and environmental legislation. Ce document démontre notre conformité aux législations fédérale et provinciale sur l'environnement et le transport.

2581510-1

A Generator / consignor Producteur / expéditeur		Registration No. / Provincial ID No. N° d'enregistrement - d'Etat provincial		B Carrier Transporteur		Registration No. / Provincial ID No. N° d'enregistrement - d'Etat provincial		25 Reference No. of other documents (if any) / Numéro des autres documents (si les autres documents existent)																					
Company name / Nom de l'entreprise Department of National Defence <i>8 PCL</i>		NUG 100003		Company name / Nom de l'entreprise 2200 King Ridge, 109, Hornell Heights Postal code / Code postal P0H 1P0		Shipping address / Adresse postale City / Ville Province Postal code / Code postal Cambridge Bay NU X0B 0C0		25 Reference No. of other documents (if any) / Numéro des autres documents (si les autres documents existent)																					
Shipping address / Adresse postale NWS LSS - Cambridge Bay		City / Ville Province Postal code / Code postal Cambridge Bay NU X0B 0C0		Shipping address / Adresse postale City / Ville Province Postal code / Code postal 2200 King Ridge, 109, Hornell Heights Postal code / Code postal P0H 1P0		Shipping address / Adresse postale City / Ville Province Postal code / Code postal Cambridge Bay NU X0B 0C0		25 Reference No. of other documents (if any) / Numéro des autres documents (si les autres documents existent)																					
Intended Receiver / destinataire Récipient / destinataire prévu SAFETY KIEN 90		27011824-1		Intended Receiver / destinataire Récipient / destinataire prévu SAFETY KIEN 132 VILLE-STE-CATHERINE QC J5C 0B6		Intended Receiver / destinataire Récipient / destinataire prévu SAFETY KIEN 132 VILLE-STE-CATHERINE QC J5C 0B6		25 Reference No. / Provincial ID No. N° d'enregistrement - d'Etat provincial																					
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Receiving site address / Adresse du lieu de destination 2730 boulevard Industriel		Receiving site address / Adresse du lieu de destination 2730 boulevard Industriel		Receiving site address / Adresse du lieu de destination 2730 boulevard Industriel		Receiving site address / Adresse du lieu de destination 2730 boulevard Industriel		25 Reference No. / Provincial ID No. N° d'enregistrement - d'Etat provincial																					
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Shipping name / Appellation réglementaire Waste Batteries used Filled with Acid		4. Class / Classe Sub-classified / Sous-classifiée Chemical / Chimique		5. UN No. / N° UN 7794		6. Packing code / Gr. d'emballage Code de classe Dangerous goods / Substance explosive		7. Units Unité For Kg Unité Par Kg Unité		8. Packaging/Content Nbr / N° Codes Type Phys. state Etat physique																			
Waste Batteries used Filled with Acid		8		7794		187		KG 107		S																			
Waste Batteries used Non Spillable		8		7790		590		KG 107		S																			
Waste Polychlorinated Biphenyl Solid		9		33432		11		323		KG 101		S																	
Waste Lithium Metal Batteries		9		33490		11		52		KG 107		S																	
Notes No. N° de référence		Notes Line No. N° de ligne de la référence		Shipment Envoi		Off/Due Date d'expédition		D or Route Code de route		E code Code E		General Purp. UN or CDS Code Avisos Gén. de l'Etat ou Code CDS		H code Code H		Y code Code Y		Export Expédition		Import Importation		National code / Country of / Code du pays		Customs code(s) Code(s) douane		16			
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(xxx)		(xxx)		(xxx)		(xxx)		(xxx)		(xxx)		(xxx)		(xxx)		(xxx)		(xxx)		(xxx)		(xxx)		(xxx)		(xxx)		(xxx)	
(xxxi)		(xxxi)		(xxxi)		(xxxi)		(xxxi)		(xxxi)		(xxxi)		(xxxi)		(xxxi)		(xxxi)		(xxxi)		(xxxi)		(xxxi)		(xxxi)		(xxxi)	
(xxxii)		(xxxii)		(xxxii)		(xxxii)		(xxxii)		(xxxii)		(xxxii)		(xxxii)		(xxxii)		(xxxii)		(xxxii)		(xxxii)		(xxxii)		(xxxii)		(xxxii)	
(xxxiii)		(xxxiii)		(xxxiii)		(xxxiii)		(xxxiii)		(xxxiii)		(xxxiii)		(xxxiii)		(xxxiii)		(xxxiii)		(xxxiii)		(xxxiii)		(xxxiii)		(xxxiii)		(xxxiii)	
(xxxiv)		(xxxiv)		(xxxiv)		(xxxiv)		(xxxiv)		(xxxiv)		(xxxiv)		(xxxiv)		(xxxiv)		(xxxiv)		(xxxiv)		(xxxiv)		(xxxiv)		(xxxiv)		(xxxiv)	
(xxxv)		(xxxv)		(xxxv)		(xxxv)		(xxxv)		(xxxv)		(xxxv)		(xxxv)		(xxxv)		(xxxv)		(xxxv)		(xxxv)		(xxxv)		(xxxv)		(xxxv)	
(xxxvi)		(xxxvi)		(xxxvi)		(xxxvi)		(xxxvi)		(xxxvi)		(xxxvi)		(xxxvi)		(xxxvi)		(xxxvi)		(xxxvi)		(xxxvi)		(xxxvi)		(xxxvi)		(xxxvi)	
(xxxvii)		(xxxvii)		(xxxvii)		(xxxvii)		(xxxvii)		(xxxvii)		(xxxvii)		(xxxvii)		(xxxvii)		(xxxvii)		(xxxvii)		(xxxvii)		(xxxvii)		(xxxvii)		(xxxvii)	
(xxxviii)		(xxxviii)		(xxxviii)		(xxxviii)		(xxxviii)		(xxxviii)		(xxxviii)		(xxxviii)		(xxxviii)		(xxxviii)		(xxxviii)		(xxxviii)		(xxxviii)		(xxxviii)		(xxxviii)	
(xxxix)		(xxxix)		(xxxix)		(xxxix)		(xxxix)		(xxxix)		(xxxix)		(xxxix)		(xxxix)		(xxxix)		(xxxix)		(xxxix)		(xxxix)		(xxxix)		(xxxix)	
(xxxxi)		(xxxxi)		(xxxxi)		(xxxxi)		(xxxxi)		(xxxxi)		(xxxxi)		(xxxxi)		(xxxxi)		(xxxxi)		(xxxxi)		(xxxxi)		(xxxxi)		(xxxxi)		(xxxxi)	
(xxxii)		(xxxii)		(xxxii)		(xxxii)		(xxxii)		(xxxii)		(xxxii)		(xxxii)		(xxxii)		(xxxii)		(xxxii)		(xxxii)		(xxxii)		(xxxii)		(xxxii)	
(xxxiii)		(xxxiii)		(xxxiii)		(xxxiii)		(xxxiii)		(xxxiii)		(xxxiii)		(xxxiii)		(xxxiii)		(xxxiii)		(xxxiii)		(xxxiii)		(xxxiii)		(xxxiii)		(xxxiii)	
(xxxiv)		(xxxiv)		(xxxiv)		(xxxiv)		(xxxiv)		(xxxiv)		(xxxiv)		(xxxiv)		(xxxiv)		(xxxiv)		(xxxiv)		(xxxiv)		(xxxiv)		(xxxiv)		(xxxiv)	
(xxxv)		(xxxv)		(xxxv)		(xxxv)		(xxxv)		(xxxv)		(xxxv)		(xxxv)		(xxxv)		(xxxv)		(xxxv)		(xxxv)		(xxxv)		(xxxv)		(xxxv)	
(xxxvi)		(xxxvi)		(xxxvi)		(xxxvi)		(xxxvi)		(xxxvi)		(xxxvi)		(xxxvi)		(xxxvi)		(xxxvi)		(xxxvi)		(xxxvi)		(xxxvi)		(xxxvi)		(xxxvi)	
(xxxvii)		(xxxvii)		(xxxvii)		(xxxvii)		(xxxvii)		(xxxvii)		(xxxvii)		(xxxvii)		(xxxvii)		(xxxvii)		(xxxvii)		(xxxvii)		(xxxvii)		(xxxvii)		(xxxvii)	
(xxxviii)		(xxxviii)		(xxxviii)		(xxxviii)		(xxxviii)		(xxxviii)		(xxxviii)		(xxxviii)		(xxxviii)		(xxxviii)		(xxxviii)		(xxxviii)		(xxxviii)		(xxxviii)		(xxxviii)	
(xxxix)		(xxxix)		(xxxix)		(xxxix)		(xxxix)		(xxxix)		(xxxix)		(xxxix)		(xxxix)		(xxxix)		(xxxix)		(xxxix)		(xxxix)		(xxxix)		(xxxix)	
(xxxxi)		(xxxxi)		(xxxxi)		(xxxxi)		(xxxxi)		(xxxxi)		(xxxxi)		(xxxxi)		(xxxxi)		(xxxxi)		(xxxxi)		(xxxxi)		(xxxxi)		(xxxxi)		(xxxxi)	
(xxxii)		(xxxii)		(xxxii)		(xxxii)		(xxxii)		(xxxii)		(xxxii)		(xxxii)		(xxxii)		(xxxii)		(xxxii)		(xxxii)		(xxxii)		(xxxii)		(xxxii)	
(xxxiii)		(xxxiii)		(xxxiii)		(xxxiii)		(xxxiii)		(xxxiii)		(xxxiii)		(xxxiii)		(xxxiii)		(xxxiii)		(xxxiii)		(xxxiii)		(xxxiii)		(xxxiii)		(xxxiii)	
(xxxiv)		(xxxiv)		(xxxiv)		(xxxiv)		(xxxiv)		(xxxiv)		(xxxiv)		(xxxiv)		(xxxiv)		(xxxiv)		(xxxiv)		(xxxiv)		(xxxiv)		(xxxiv)		(xxxiv)	
(xxxv)		(xxxv)		(xxxv)		(xxxv)		(xxxv)		(xxxv)		(xxxv)		(xxxv)		(xxxv)		(xxxv)		(xxxv)		(xxxv)		(xxxv)		(xxxv)		(xxxv)	
(xxxvi)		(xxxvi)		(xxxvi)		(xxxvi)		(xxxvi)		(xxxvi)		(xxxvi)		(xxxvi)		(xxxvi)		(xxxvi)		(xxxvi)		(xxxvi)		(xxxvi)		(xxxvi)		(xxxvi)	
(xxxvii)		(xxxvii)		(xxxvii)		(xxxvii)		(xxxvii)		(xxxvii)		(xxxvii)		(xxxvii)		(xxxvii)		(xxxvii)		(xxxvii)		(xxxvii)		(xxxvii)		(xxxvii)		(xxxvii)	
(xxxviii)		(xxxviii)		(xxxviii)		(xxxviii)		(xxxviii)		(xxxviii)		(xxxviii)		(xxxviii)		(xxxviii)		(xxxviii)		(xxxviii)		(xxxviii)		(xxxviii)		(xxxviii)		(xxxviii)	
(xxxix)		(xxxix)		(xxxix)		(xxxix)		(xxxix)		(xxxix)		(xxxix)		(xxxix)		(xxxix)		(xxxix)		(xxxix)		(xxxix)		(xxxix)		(xxxix)		(xxxix)	
(xxxxi)		(xxxxi)		(xxxxi)		(xxxxi)		(xxxxi)		(xxxxi)		(xxxxi)		(xxxxi)		(xxxxi)		(xxxxi)		(xxxxi)		(xxxxi)		(xxxxi)		(xxxxi)		(xxxxi)	
(xxxii)		(xxxii)		(xxxii)		(xxxii)		(xxxii)		(xxxii)		(xxxii)		(xxxii)		(xxxii)		(xxxii)		(xxxii)		(xxxii)		(xxxii)		(xxxii)		(xxxii)	
(xxxiii)		(xxxiii)		(xxxiii)		(xxxiii)		(xxxiii)		(xxxiii)		(xxxiii)		(xxxiii)		(xxxiii)		(xxxiii)		(xxxiii)		(xxxiii)		(xxxiii)		(xxxiii)		(xxxiii)	
(xxxiv)		(xxxiv)		(xxxiv)		(xxxiv)		(xxxiv)		(xxxiv)		(xxxiv)		(xxxiv)		(xxxiv)		(xxxiv)		(xxxiv)		(xxxiv)		(xxxiv)		(xxxiv)		(xxxiv)	
(xxxv)		(xxxv)		(xxxv)		(xxxv)		(xxxv)		(xxxv)		(xxxv)		(xxxv)		(xxxv)		(xxxv)		(xxxv)		(xxxv)		(xxxv)		(xxxv)		(xxxv)	
(xxxvi)		(xxxvi)		(xxxvi)		(xxxvi)		(xxxvi)		(xxxvi)		(xxxvi)		(xxxvi)		(xxxvi)		(xxxvi)		(xxxvi)		(xxxvi)		(xxxvi)		(xxxvi)		(xxxvi)	
(xxxvii)		(xxxvii)		(xxxvii)		(xxxvii)		(xxxvii)		(xxxvii)		(xxxvii)		(xxxvii)		(xxxvii)		(xxxvii)		(xxxvii)		(xxxvii)		(xxxvii)		(xxxvii)		(xxxvii)	
(xxxviii)		(xxxviii)		(xxxviii)		(xxxviii)		(xxxviii)		(xxxviii)		(xxxviii)		(xxxviii)		(xxxviii)		(xxxviii)		(xxxviii)		(xxxviii)		(xxxviii)		(xxxviii)		(xxxviii)	
(xxxix)		(xxxix)		(xxxix)		(xxxix)		(xxxix)		(xxxix)		(xxxix)		(xxxix)		(xxxix)		(xxxix)		(xxxix)		(xxxix)		(xxxix)		(xxxix)		(xxxix)	
(xxxxi)		(xxxxi)		(xxxxi)		(xxxxi)		(xxxxi)		(xxxxi)		(xxxxi)		(xxxxi)		(xxxxi)		(xxxxi)		(xxxxi)		(xxxxi)		(xxxxi)		(xxxxi)		(xxxxi)	
(xxxii)		(xxxii)		(xxxii)																									

UNCONTROLLED WHEN PRINTED



UNCLASSIFIED

SOW REF: 16.F.5.d

SHIPPING MANIFEST

Suite 3000, 400 Cooper Street, Ottawa, ON K2P 2H6

NON NEGOTIABLE

Filled By: PSHEPPARD		Date: Jul 30, 2015 1:54 PM	TCN-34333		
Ship To: CLEAN HARBORS CANADA INC. 2730 BOULEVARD INDUSTRIEL CHAMBLY, QC, J3L 4V2 CA			From: LSS-C/CAM-M CAMBRIDGE BAY, DND Storeroom Raytheon Canada Limited, LSS Cambridge Bay: P.O. Box 1239 Cambridge Bay, NU, X0B 0C0 867-983-2112	Priority 0	
Attention:			Attention:		
Carrier: NEAS		Routing:	Waybill #:	Total Pcs. 1	Total Weight: 1267 LBS
QTY Order	Type	Line Weight	Item	Description	WO or PO B/Code or S/N Remarks
1	2002357		WASTE - FUEL CONTAMINATED SOIL	ASSET 327906	
1	3006639		WASTE - OIL SOAKED ABSORBENT	ASSET 330986	
1	2002356		WASTE - OIL FILTERS (DRUM)	ASSET 331174	
1	2003635		WASTE - FUEL FILTERS (DRUM)	ASSET 331309	

NOTE: All claims related to this shipment have to be filed with Raytheon within 45 hours of receipt.

Received By:	Date
Received By:	Date

SHIPPING MANIFEST

Suite 3000, 400 Cooper Street, Ottawa, ON K2P 2H6

NON NEGOTIABLE

Filled By: PSHEPPARD		Date: Jul 30, 2015 3:53 PM	TCN-34334		
Ship To: CLEAN HARBORS CANADA INC. 2730 BOULEVARD INDUSTRIEL CHAMBLY, QC, J3L 4V2 CA			From: LSS-C/CAM-M CAMBRIDGE BAY, DND Storeroom Raytheon Canada Limited, LSS Cambridge Bay: P.O. Box 1239 Cambridge Bay, NU, X0B 0C0 867-983-2112	Priority 0	
Attention:			Attention:		
Carrier: NEAS		Routing:	Waybill #:	Total Pcs. 1	Total Weight: 847 LBS
QTY Order	Type	Line Weight	Item	Description	WO or PO B/Code or S/N Remarks
1	2002356		WASTE - OIL FILTERS (DRUM)	ASSET 331518	
3	2002505		WASTE - OILY RAGS	ASSET 328573 / 331311 / 327905	

NOTE: All claims related to this shipment have to be filed with Raytheon within 45 hours of receipt.

Received By:	Date
Received By:	Date

UNCONTROLLED WHEN PRINTED



UNCLASSIFIED

SOW REF: 16.F.5.d

SHIPPING MANIFEST

Suite 3000, 400 Cooper Street, Ottawa, ON K2P 2H8

NON NEGOTIABLE

Filled By: PSHEPPARD	Date: Jul 30, 2015 4:03 PM	TCN-34335					
Ship To: CLEAN HARBORS CANADA INC. 2730 BOULEVARD INDUSTRIEL CHAMBLY, QC, J3L 4V2 CA	From: LSS-C/CAM-M CAMBRIDGE BAY, DND Storeroom Raytheon Canada Limited, LSS Cambridge Bay: P.O. Box 1239 Cambridge Bay, NU, X0B 0C0 867-983-2112	Priority 0					
Attention:	Attention:						
Carrier: NEAS	Routing:	Waybill #:	Total Pcs. 1	Total Weight: 847 LBS			
QTY Order	Type	Line Weight	Item	Description	WO or PO	B/Code or S/N	Remarks
4			2002356	WASTE - OIL FILTERS (DRUM)	ASSET 331310 / 326499 / 330443 / 327106		
NOTE: All claims related to this shipment have to be filed with Raytheon within 45 hours of receipt.					Received By:	Date	
					Received By:	Date	

SHIPPING MANIFEST

Suite 3000, 400 Cooper Street, Ottawa, ON K2P 2H8

NON NEGOTIABLE

Filled By: PSHEPPARD	Date: Jul 30, 2015 4:17 PM	TCN-34336					
Ship To: CLEAN HARBORS CANADA INC. 2730 BOULEVARD INDUSTRIEL CHAMBLY, QC, J3L 4V2 CA	From: LSS-C/CAM-M CAMBRIDGE BAY, DND Storeroom Raytheon Canada Limited, LSS Cambridge Bay: P.O. Box 1239 Cambridge Bay, NU, X0B 0C0 867-983-2112	Priority 0					
Attention:	Attention:						
Carrier: NEAS	Routing:	Waybill #:	Total Pcs. 1	Total Weight: 1816 LBS			
QTY Order	Type	Line Weight	Item	Description	WO or PO	B/Code or S/N	Remarks
4			2002406	WASTE - OIL (45 GALLON DRUM)	ASSET 329552 / 325609 / 329549 / 322269		
NOTE: All claims related to this shipment have to be filed with Raytheon within 45 hours of receipt.					Received By:	Date	
					Received By:	Date	

UNCONTROLLED WHEN PRINTED



UNCLASSIFIED

SOW REF: 16.F.5.d

SHIPPING MANIFEST

Suite 3000, 400 Cooper Street, Ottawa, ON K2P 2H8

NON NEGOTIABLE

Filled By: PSHEPPARD	Date: Jul 30, 2015 4:23 PM	TCN-34337					
Ship To: CLEAN HARBORS CANADA INC. 2730 BOULEVARD INDUSTRIEL CHAMBLY, QC, J3L 4V2 CA	From: LSS-C/CAM-M CAMBRIDGE BAY, DND Storeroom Raytheon Canada Limited, LSS Cambridge Bay: P.O. Box 1239 Cambridge Bay, NU, X0B 0C0 867-983-2112	Priority 0					
Attention:	Attention:						
Carrier: NEAS	Routing:	Waybill #:	Total Pcs. 1	Total Weight: 1553 LBS			
QTY Order	Type	Line Weight	Item	Description	WO or PO	B/Code or S/N	Remarks
4			2002406	WASTE - OIL (45 GALLON DRUM)	ASSET 327904 / 329548 / 326152 / 326262		

NOTE: All claims related to this shipment have to be filed with Raytheon within 45 hours of receipt.

Received By:	Date
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Received By:	Date
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SHIPPING MANIFEST

Suite 3000, 400 Cooper Street, Ottawa, ON K2P 2H8

NON NEGOTIABLE

Filled By: PSHEPPARD	Date: Jul 30, 2015 5:55 PM	TCN-34338					
Ship To: CLEAN HARBORS CANADA INC. 2730 BOULEVARD INDUSTRIEL CHAMBLY, QC, J3L 4V2 CA	From: LSS-C/CAM-M CAMBRIDGE BAY, DND Storeroom Raytheon Canada Limited, LSS Cambridge Bay: P.O. Box 1239 Cambridge Bay, NU, X0B 0C0 867-983-2112	Priority 0					
Attention:	Attention:						
Carrier: NEAS	Routing:	Waybill #:	Total Pcs. 1	Total Weight: 1573 LBS			
QTY Order	Type	Line Weight	Item	Description	WO or PO	B/Code or S/N	Remarks
4			2002406	WASTE - OIL (45 GALLON DRUM)	ASSET 330746 / 327247 / 328725 / 326533		

NOTE: All claims related to this shipment have to be filed with Raytheon within 45 hours of receipt.

Received By:	Date
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Received By:	Date
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UNCLASSIFIED

SOW REF: 16.F.5.d

SHIPPING MANIFEST

Suite 3000, 400 Cooper Street, Ottawa, ON K2P 2H8

NON NEGOTIABLE

Filled By: PSHEPPARD	Date: Jul 30, 2015 6:01 PM	TCN-34339			
Ship To: CLEAN HARBORS CANADA INC. 2730 BOULEVARD INDUSTRIEL CHAMBLY, QC, J3L 4V2 CA	From: LSS-C/CAM-M CAMBRIDGE BAY, DND Storeroom Raytheon Canada Limited, LSS Cambridge Bay: P.O. Box 1239 Cambridge Bay, NU, X0B 0C0 867-983-2112	Priority 0			
Attention:	Attention:				
Carrier: NEAS	Routing:	Waybill #:	Total Pcs. 1	Total Weight: 1688 LBS	
QTY Order	Type Line Weight	Item Description	WO or PO	B/Code or S/N	Remarks
4	2002406	WASTE - OIL (45 GALLON DRUM)	ASSET 331289 / 331290 / 331291 / 330713		

NOTE: All claims related to this shipment have to be filed with Raytheon within 45 hours of receipt.

Received By:	Date:
Received By:	Date:

SHIPPING MANIFEST

Suite 3000, 400 Cooper Street, Ottawa, ON K2P 2H8

NON NEGOTIABLE

Filled By: PSHEPPARD	Date: Jul 30, 2015 6:07 PM	TCN-34340			
Ship To: CLEAN HARBORS CANADA INC. 2730 BOULEVARD INDUSTRIEL CHAMBLY, QC, J3L 4V2 CA	From: LSS-C/CAM-M CAMBRIDGE BAY, DND Storeroom Raytheon Canada Limited, LSS Cambridge Bay: P.O. Box 1239 Cambridge Bay, NU, X0B 0C0 867-983-2112	Priority 0			
Attention:	Attention:				
Carrier: NEAS	Routing:	Waybill #:	Total Pcs. 1	Total Weight: 1740 LBS	
QTY Order	Type Line Weight	Item Description	WO or PO	B/Code or S/N	Remarks
4	2002406	WASTE - OIL (45 GALLON DRUM)	ASSET 330431 / 330433 / 330432 / 329551		

NOTE: All claims related to this shipment have to be filed with Raytheon within 45 hours of receipt.

Received By:	Date:
Received By:	Date:

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UNCLASSIFIED

SOW REF: 16.F.5.d

SHIPPING MANIFEST

Suite 3000, 400 Cooper Street, Ottawa, ON K2P 2H8

NON NEGOTIABLE

Filled By: PSHEPPARD		Date: Jul 30, 2015 6:14 PM	TCN-34341		
Ship To: CLEAN HARBORS CANADA INC. 2730 BOULEVARD INDUSTRIEL CHAMBLY, QC, J3L 4V2 CA		From: LSS-C/CAM-M CAMBRIDGE BAY, DND Storeroom Raytheon Canada Limited, LSS Cambridge Bay: P.O. Box 1239 Cambridge Bay, NU, X0B 0C0 867-983-2112	Priority 0		
Attention:		Attention:			
Carrier: NEAS		Routing:	Waybill #:	Total Pcs. 1	Total Weight: 1710 LBS
QTY Order	Type	Line Weight	Item	Description	WO or PO B/Code or S/N Remarks
1			2002344	WASTE - GLYCOL (DRUM)	ASSET 322452
3			2002406	WASTE - OIL (45 GALLON DRUM)	ASSET 330601 / 331295 / 330603
NOTE: All claims related to this shipment have to be filed with Raytheon within 45 hours of receipt.			Received By:	Date	
			Received By:	Date	

SHIPPING MANIFEST

Suite 3000, 400 Cooper Street, Ottawa, ON K2P 2H8

NON NEGOTIABLE

Filled By: PSHEPPARD		Date: Jul 31, 2015 10:47 AM	TCN-34344		
Ship To: CLEAN HARBORS CANADA INC. 2730 BOULEVARD INDUSTRIEL CHAMBLY, QC, J3L 4V2 CA		From: LSS-C/CAM-M CAMBRIDGE BAY, DND Storeroom Raytheon Canada Limited, LSS Cambridge Bay: P.O. Box 1239 Cambridge Bay, NU, X0B 0C0 867-983-2112	Priority 0		
Attention:		Attention:			
Carrier: NEAS		Routing:	Waybill #:	Total Pcs. 1	Total Weight: 1500 LBS
QTY Order	Type	Line Weight	Item	Description	WO or PO B/Code or S/N Remarks
4			2002351	WASTE - ACTIVATED CARBON FILTE	asset 331326 / 331054 / 331325 / 331327
NOTE: All claims related to this shipment have to be filed with Raytheon within 45 hours of receipt.			Received By:	Date	
			Received By:	Date	

UNCONTROLLED WHEN PRINTED



UNCLASSIFIED

SOW REF: 16.F.5.d

SHIPPING MANIFEST						
Suite 3000, 400 Cooper Street, Ottawa, ON K2P 2H8						
NON NEGOTIABLE						
Filled By: PSHEPPARD		Date: Jul 31, 2015 12:36 PM		TCN-34346		
Ship To: CLEAN HARBORS CANADA INC. 2730 BOULEVARD INDUSTRIEL CHAMBLY, QC, J3L 4V2 CA		From: LSS-C/CAM-M CAMBRIDGE BAY, DND Storeroom Raytheon Canada Limited, LSS Cambridge Bay: P.O. Box 1239 Cambridge Bay, NU, X0B 0C0 867-983-2112		Priority 0		
Attention:		Attention:				
Carrier: NEAS		Routing:		Waybill #:	Total Pcs.	
					1	
				Total Weight: 2218 LBS		
QTY Order	Type	Line Weight	Item	Description	WO or PO B/Code or S/N	Remarks
4			2002351	WASTE - ACTIVATED CARBON FILTE	ASSET 331053 / 327281 / 327820 / 328416	
NOTE: All claims related to this shipment have to be filed with Raytheon within 45 hours of receipt.				Received By:	Date	
				Received By:	Date	

SHIPPING MANIFEST						
Suite 3000, 400 Cooper Street, Ottawa, ON K2P 2H8						
NON NEGOTIABLE						
Filled By: PSHEPPARD		Date: Jul 31, 2015 12:58 PM		TCN-34348		
Ship To: CLEAN HARBORS CANADA INC. 2730 BOULEVARD INDUSTRIEL CHAMBLY, QC, J3L 4V2 CA		From: LSS-C/CAM-M CAMBRIDGE BAY, DND Storeroom Raytheon Canada Limited, LSS Cambridge Bay: P.O. Box 1239 Cambridge Bay, NU, X0B 0C0 867-983-2112		Priority 0		
Attention:		Attention:				
Carrier: NEAS		Routing:		Waybill #:	Total Pcs.	
					1	
				Total Weight: 1806 LBS		
QTY Order	Type	Line Weight	Item	Description	WO or PO B/Code or S/N	Remarks
4			2002406	WASTE - OIL (45 GALLON DRUM)	ASSET 330712 / 330710 / 330602 / 330711	
NOTE: All claims related to this shipment have to be filed with Raytheon within 45 hours of receipt.				Received By:	Date	
				Received By:	Date	

UNCONTROLLED WHEN PRINTED



UNCLASSIFIED

SOW REF: 16.F.5.d

SHIPPING MANIFEST

Suite 3000, 400 Cooper Street, Ottawa, ON K2P 2H8

NON NEGOTIABLE

Filled By: PSHEPPARD		Date: Jul 31, 2015 1:04 PM	TCN-34350		
Ship To: CLEAN HARBORS CANADA INC. 2730 BOULEVARD INDUSTRIEL CHAMBLY, QC, J3L 4V2 CA		From: LSS-C/CAM-M CAMBRIDGE BAY, DND Storeroom Raytheon Canada Limited, LSS Cambridge Bay: P.O. Box 1239 Cambridge Bay, NU, X0B 0C0 867-983-2112			Priority 0
Attention:		Attention:			
Carrier: NEAS		Routing:			Waybill #: 1 Total Pcs. 1610 LBS
QTY Order	Type	Line Weight	Item	Description	WO or PO B/Code or S/N Remarks
4			2002406	WASTE - OIL (45 GALLON DRUM)	ASSET 327282 / 330434 / 328685 / 330253

NOTE: All claims related to this shipment have to be filled with Raytheon within 45 hours of receipt.

Received By:	Date
Received By:	Date

SHIPPING MANIFEST

Suite 3000, 400 Cooper Street, Ottawa, ON K2P 2H8

NON NEGOTIABLE

Filled By: PSHEPPARD		Date: Jul 31, 2015 1:10 PM	TCN-34351		
Ship To: CLEAN HARBORS CANADA INC. 2730 BOULEVARD INDUSTRIEL CHAMBLY, QC, J3L 4V2 CA		From: LSS-C/CAM-M CAMBRIDGE BAY, DND Storeroom Raytheon Canada Limited, LSS Cambridge Bay: P.O. Box 1239 Cambridge Bay, NU, X0B 0C0 867-983-2112			Priority 0
Attention:		Attention:			
Carrier: NEAS		Routing:			Waybill #: 1 Total Pcs. 1640 LBS
QTY Order	Type	Line Weight	Item	Description	WO or PO B/Code or S/N Remarks
4			2002406	WASTE - OIL (45 GALLON DRUM)	ASSET 325028 / 328490 / 322221 / 327415

NOTE: All claims related to this shipment have to be filled with Raytheon within 45 hours of receipt.

Received By:	Date
Received By:	Date

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SHIPPING MANIFEST

Suite 3000, 400 Cooper Street, Ottawa, ON K2P 2H8

NON NEGOTIABLE

Filled By: PSHEPPARD		Date: Jul 31, 2015 1:19 PM	TCN-34352				
Ship To: CLEAN HARBORS CANADA INC. 2730 BOULEVARD INDUSTRIEL CHAMBLY, QC, J3L 4V2 CA		From: LSS-C/CAM-M CAMBRIDGE BAY, DND Storeroom Raytheon Canada Limited, LSS Cambridge Bay: P.O. Box 1239 Cambridge Bay, NU, X0B 0C0 867-983-2112			Priority 0		
Attention:		Attention:					
Carrier: NEAS		Routing:	Waybill #:	Total Pcs. 1	Total Weight: 1906 LBS		
QTY Order	Type	Line Weight	Item	Description	WO or PO	B/Code or S/N	Remarks
4			2002406	WASTE - OIL (45 GALLON DRUM)			ASSET 329550 / 325815 / 326325 / 325166
NOTE: All claims related to this shipment have to be filed with Raytheon within 45 hours of receipt.					Received By:	Date	
					Received By:	Date	

SHIPPING MANIFEST

Suite 3000, 400 Cooper Street, Ottawa, ON K2P 2H8

NON NEGOTIABLE

Filled By: PSHEPPARD		Date: Jul 31, 2015 1:26 PM	TCN-34353				
Ship To: CLEAN HARBORS CANADA INC. 2730 BOULEVARD INDUSTRIEL CHAMBLY, QC, J3L 4V2 CA		From: LSS-C/CAM-M CAMBRIDGE BAY, DND Storeroom Raytheon Canada Limited, LSS Cambridge Bay: P.O. Box 1239 Cambridge Bay, NU, X0B 0C0 867-983-2112			Priority 0		
Attention:		Attention:					
Carrier: NEAS		Routing:	Waybill #:	Total Pcs. 1	Total Weight: 1543 LBS		
QTY Order	Type	Line Weight	Item	Description	WO or PO	B/Code or S/N	Remarks
4			2002406	WASTE - OIL (45 GALLON DRUM)			ASSET 332017 / 331761 / 330191 / 332016
NOTE: All claims related to this shipment have to be filed with Raytheon within 45 hours of receipt.					Received By:	Date	
					Received By:	Date	

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Suite 3000, 400 Cooper Street, Ottawa, ON K2P 2H8

NON NEGOTIABLE

Filled By: PSHEPPARD	Date: Jul 31, 2015 1:31 PM	TCN-34354		
Ship To: CLEAN HARBORS CANADA INC. 2730 BOULEVARD INDUSTRIEL CHAMBLY, QC, J3L 4V2 CA	From: LSS-C/CAM-M CAMBRIDGE BAY, DND Storeroom Raytheon Canada Limited, LSS Cambridge Bay: P.O. Box 1239 Cambridge Bay, NU, X0B 0C0 867-983-2112	Priority 0		
Attention:	Attention:			
Carrier: NEAS	Routing:	Waybill #:	Total Pcs. 1	Total Weight: 1527 LBS
QTY Order	Type Line Weight	Item Description	WO or PO	BI/Code or S/N
4	2002406	WASTE - OIL (45 GALLON DRUM)	ASSET 326500 / 331755 / 331977 / 331473	

NOTE: All claims related to this shipment have to be filed with Raytheon within 45 hours of receipt.

Received By:	Date
Received By:	Date

SHIPPING MANIFEST

Suite 3000, 400 Cooper Street, Ottawa, ON K2P 2H8

NON NEGOTIABLE

Filled By: PSHEPPARD	Date: Jul 31, 2015 1:46 PM	TCN-34356		
Ship To: CLEAN HARBORS CANADA INC. 2730 BOULEVARD INDUSTRIEL CHAMBLY, QC, J3L 4V2 CA	From: LSS-C/CAM-M CAMBRIDGE BAY, DND Storeroom Raytheon Canada Limited, LSS Cambridge Bay: P.O. Box 1239 Cambridge Bay, NU, X0B 0C0 867-983-2112	Priority 0		
Attention:	Attention:			
Carrier: NEAS	Routing:	Waybill #:	Total Pcs. 1	Total Weight: 1515 LBS
QTY Order	Type Line Weight	Item Description	WO or PO	BI/Code or S/N
4	2002406	WASTE - OIL (45 GALLON DRUM)	ASSET 330747 / 331296 / 331923 / 331922	

NOTE: All claims related to this shipment have to be filed with Raytheon within 45 hours of receipt.

Received By:	Date
Received By:	Date

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NON NEGOTIABLE

Filled By: PSHEPPARD		Date: Jul 31, 2015 4:07 PM	TCN-34358		
Ship To: CLEAN HARBORS CANADA INC. 2730 BOULEVARD INDUSTRIEL CHAMBLY, QC, J3L 4V2 CA		From: LSS-C/CAM-M CAMBRIDGE BAY, DND Storeroom Raytheon Canada Limited, LSS Cambridge Bay: P.O. Box 1239 Cambridge Bay, NU, X0B 0C0 867-983-2112	Priority 0		
Attention:		Attention:			
Carrier: NEAS		Routing:	Waybill #:	Total Pcs. 1	Total Weight: 1315 LBS
QTY Order	Type	Line Weight	Item	Description	WO or PO B/Code or S/N Remarks
4			2002351	WASTE - ACTIVATED CARBON FILTE	ASSET 331055 / 331770 / 331771 / 331769

NOTE: All claims related to this shipment have to be filed with Raytheon within 45 hours of receipt.

Received By:	Date
Received By:	Date

SHIPPING MANIFEST

Suite 3000, 400 Cooper Street, Ottawa, ON K2P 2H8

NON NEGOTIABLE

Filled By: PSHEPPARD		Date: Jul 31, 2015 4:11 PM	TCN-34359		
Ship To: CLEAN HARBORS CANADA INC. 2730 BOULEVARD INDUSTRIEL CHAMBLY, QC, J3L 4V2 CA		From: LSS-C/CAM-M CAMBRIDGE BAY, DND Storeroom Raytheon Canada Limited, LSS Cambridge Bay: P.O. Box 1239 Cambridge Bay, NU, X0B 0C0 867-983-2112	Priority 0		
Attention:		Attention:			
Carrier: NEAS		Routing:	Waybill #:	Total Pcs. 1	Total Weight: 1270 LBS
QTY Order	Type	Line Weight	Item	Description	WO or PO B/Code or S/N Remarks
4			2002406	WASTE - OIL (45 GALLON DRUM)	ASSET 331943 / 320263 / 300442 / 331176

NOTE: All claims related to this shipment have to be filed with Raytheon within 45 hours of receipt.

Received By:	Date
Received By:	Date

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Filled By: PSHEPPARD		Date: Jul 31, 2015 4:23 PM	TCN-34361		
Ship To: CLEAN HARBORS CANADA INC. 2730 BOULEVARD INDUSTRIEL CHAMBLY, QC, J3L 4V2 CA			From: LSS-C/CAM-M CAMBRIDGE BAY, DND Storeroom Raytheon Canada Limited, LSS Cambridge Bay: P.O. Box 1239 Cambridge Bay, NU, X0B 0C0 867-983-2112	Priority 0	
Attention:		Attention:			
Carrier: NEAS	Routing:		Waybill #:	Total Pcs. 1	Total Weight: 1325 LBS
QTY Order	Type	Line Weight	Item	Description	WO or PO B/Code or S/N Remarks
2			3006639	WASTE - OIL SOAKED ABSORBENT	ASSET 330987 / 330988
2			2002356	WASTE - OIL FILTERS (DRUM)	ASSET 331571 / 331998

NOTE: All claims related to this shipment have to be filed with Raytheon within 45 hours of receipt.

Received By:	Date
Received By:	Date

SHIPPING MANIFEST

Suite 3000, 400 Cooper Street, Ottawa, ON K2P 2H8

NON NEGOTIABLE

Filled By: PSHEPPARD		Date: Aug 3, 2015 11:49 AM	TCN-34366		
Ship To: CLEAN HARBORS CANADA INC. 2730 BOULEVARD INDUSTRIEL CHAMBLY, QC, J3L 4V2 CA			From: LSS-C/CAM-M CAMBRIDGE BAY, DND Storeroom Raytheon Canada Limited, LSS Cambridge Bay: P.O. Box 1239 Cambridge Bay, NU, X0B 0C0 867-983-2112	Priority 0	
Attention:		Attention:			
Carrier: NEAS	Routing:		Waybill #:	Total Pcs. 1	Total Weight: 542 LBS
QTY Order	Type	Line Weight	Item	Description	WO or PO B/Code or S/N Remarks
1			2002406	WASTE - OIL (45 GALLON DRUM)	NON REGULATED ASSET 332020
NOTE: All claims related to this shipment have to be filed with Raytheon within 45 hours of receipt.			Received By:	Date	
			Received By:	Date	

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Suite 3000, 400 Cooper Street, Ottawa, ON K2P 2H8

NON NEGOTIABLE

Filled By: PSHEPPARD		Date: Aug 3, 2015 12:45 PM	TCN-34368		
Ship To: CLEAN HARBORS CANADA INC. 2730 BOULEVARD INDUSTRIEL CHAMBLY, QC, J3L 4V2 CA		From: LSS-C/CAM-M CAMBRIDGE BAY, DND Storeroom Raytheon Canada Limited, LSS Cambridge Bay: P.O. Box 1239 Cambridge Bay, NU, X0B 0C0 867-983-2112	Priority 0		
Attention:		Attention:			
Carrier: NEAS		Routing:	Waybill #:	Total Pcs.	Total Weight:
QTY Order	Type	Line Weight	Item	Description	WO or PO B/Code or S/N Remarks
1			2008310	WASTE - OIL CONTAMINATED SOIL	NON- REGULATED ASSET 331093
1			3006639	WASTE - OIL SOAKED ABSORBENT	NON- REGULATED ASSET 331094

NOTE: All claims related to this shipment have to be filed with Raytheon within 45 hours of receipt.

Received By:	Date
Received By:	Date

SHIPPING MANIFEST

Suite 3000, 400 Cooper Street, Ottawa, ON K2P 2H8

NON NEGOTIABLE

Filled By: PSHEPPARD		Date: Aug 3, 2015 12:52 PM	TCN-34369		
Ship To: CLEAN HARBORS CANADA INC. 2730 BOULEVARD INDUSTRIEL CHAMBLY, QC, J3L 4V2 CA		From: LSS-C/CAM-M CAMBRIDGE BAY, DND Storeroom Raytheon Canada Limited, LSS Cambridge Bay: P.O. Box 1239 Cambridge Bay, NU, X0B 0C0 867-983-2112	Priority 0		
Attention:		Attention:			
Carrier: NEAS		Routing:	Waybill #:	Total Pcs.	Total Weight:
QTY Order	Type	Line Weight	Item	Description	WO or PO B/Code or S/N Remarks
4			2002406	WASTE - OIL (45 GALLON DRUM)	NON- REGULATED ASSET 331021 / 331976 / 329898 / 331976

NOTE: All claims related to this shipment have to be filed with Raytheon within 45 hours of receipt.

Received By:	Date
Received By:	Date

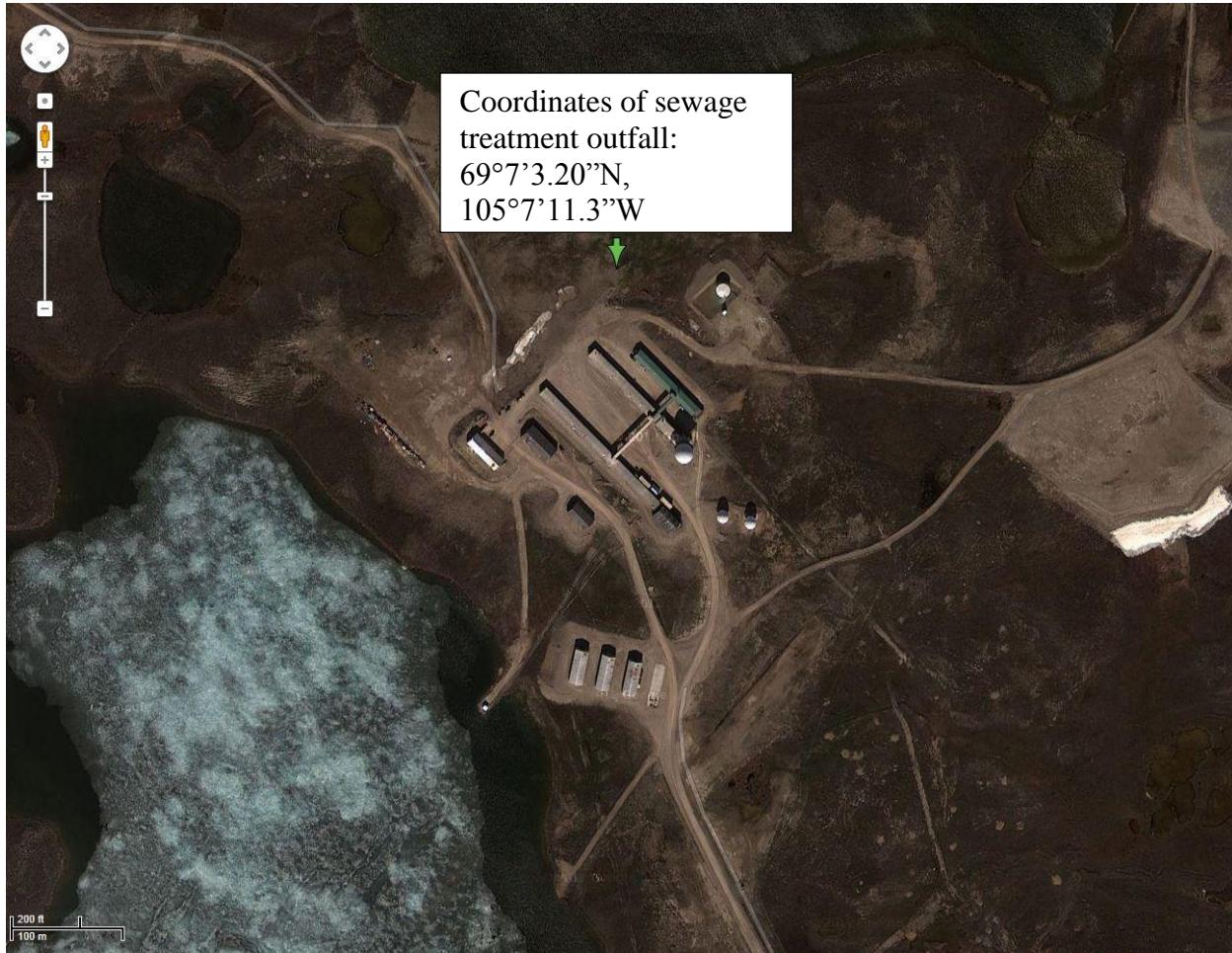
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SOW REF: 16.F.5.d

ANNEX B - TREATED SEWAGE EFFLUENT OUTFALL (CDL-2) LOCATION WITH COORDINATES



Coordinates of sewage treatment outfall: 69°7'3.20"N, 105°7'11.3"W

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ANNEX C - ANALYSIS OF TREATED SEWAGE EFFLUENT

Table C-1 Summary of Analysis of Treated Sewage Effluent at CAM-M in 2015

Sample Date	pH	Parameter			
		Oil and Grease (Present - P / Absent - A)	Biological Oxygen Demand (mg/L)	Total Suspended Solids (mg/L)	Faecal Coliforms ²
Maximum Concentration	6.0 to 9.0 (pH units)	No visible sheen	120 mg/L	180 mg/L	10,000 CFU/100 mL
20-Jan-2015	8.14	A	1	<2	Not available. ³
17-Feb-2015	7.74	A	2	<2	0.0
2-Mar-2015	7.88	A	2	<2	<10
20-Apr-2015	7.93	A	3	<2	143.0
19-May-2015	8.07	A	11	<1	1.3
25-Jun-2015	8.06	A	9	3	4.3
12-Aug-2015 ⁴	7.14	A	<1	<1	0.3
31-Aug-2015	7.28	A	<1	<3	2.3
24-Sep-2015	7.31	A	<1	<2	0.0
27-Oct-2015	7.24	A	<6	<2	32.0
24-Nov-2015	5.79 ⁵	A	<1	<2	13.3
14-Dec-2015	6.34	A	2	<3	7.0

² This column contains the average of the Cyclot 1A, Cyclot 1B, and Cyclot 1C.

³ Samples frozen solid when arrived at the laboratory, so the samples could not be analyzed for Faecal Coliforms.

⁴ Two sewage samples were taken in August 2015 as no samples were taken in July.

⁵ The INAC Water Resources Officer was notified of this result and the follow-up actions taken to correct it on 14Dec2015.

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January 2015 – Page 1 of 1.

EXOVA ENVIRONMENTAL ONTARIO

Certificate of Analysis



Client: Canadian Base Operators
400 Cooper St., Suite 3000
Ottawa, ON
K2P 2H8
Attention: Mr. Will Wyman
PO#:
Invoice to: Canadian Base Operators

Report Number: 1501455
Date Submitted: 2015-01-29
Date Reported: 2015-02-09
Project: CAM - MAIN
COC #: 177055

Group	Analyte	MRL	Units	Guideline	Lab I.D. Sample Matrix Sample Type Sampling Date Sample I.D.
General Chemistry	pH	1.00			1157525 Sewage
	Total Suspended Solids	2	mg/L		<2
Nutrients	BOD5	1	mg/L		1
	Oil & Grease - Mineral	1	mg/L		<1
	Oil & Grease - Non-mineral	1	mg/L		<1
Oil & Grease	Oil & Grease - Total	1	mg/L		<1
	Visible Sheen		P/A		A

Guideline = * = Guideline Exceedence
All analysis completed in Ottawa, Ontario (unless otherwise indicated by ** which indicates analysis was completed in Mississauga, Ontario).
Results relate only to the parameters tested on the samples submitted.
Methods references and/or additional QA/QC information available on request.

146 Colonnade Rd. Unit 8, Ottawa, ON K2E 7Y1

MRL = Method Reporting Limit, AO = Aesthetic Objective, OG = Operational Guideline, MAC = Maximum Acceptable Concentration, IMAC = Interim Maximum Acceptable Concentration, STD = Standard, PWQO = Provincial Water Quality Guideline, IPWQO = Interim Provincial Water Quality Objective, TDR = Typical Desired Range

Page 2 of 3

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February 2015 – Page 1 of 2

EXOVA ENVIRONMENTAL ONTARIO

Certificate of Analysis

Exova

Client: Raytheon Canada Limited Ottawa
400 Cooper St., Suite 3000
Ottawa, ON
K2P 2H8
Attention: Mr. Will Wyman
PO#:
Invoice to: Raytheon Canada Limited Ottawa

Report Number: 1503960
Date Submitted: 2015-03-16
Date Reported: 2015-03-23
Project: CAM-Main
COC #: 177038

Group	Analyte	MRL	Units	Guideline	
General Chemistry	pH	1.00			7.74
	Total Suspended Solids	2	mg/L		<2
Nutrients	BOD5	1	mg/L		2
Oil & Grease	Oil & Grease - Mineral	1	mg/L		<1
	Oil & Grease - Non-mineral	1	mg/L		<1
	Oil & Grease - Total	1	mg/L		<1
Visible Sheen	Visible Sheen		P/A		No

Guideline = * = Guideline Exceedence
All analysis completed in Ottawa, Ontario (unless otherwise indicated by ** which indicates analysis was completed in Mississauga, Ontario).
Results relate only to the parameters tested on the samples submitted.
Methods references and/or additional QA/QC information available on request.

146 Colonnade Rd. Unit 8, Ottawa, ON K2E 7Y1

MRL = Method Reporting Limit, AO = Aesthetic Objective, OG = Operational Guideline, MAC = Maximum Acceptable Concentration, IMAC = Interim Maximum Acceptable Concentration, STD = Standard, PWQO = Provincial Water Quality Guideline, IPWQO = Interim Provincial Water Quality Objective, TDR = Typical Desired Range

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February 2015 – Page 2 of 2

EXOVA ENVIRONMENTAL ONTARIO

Certificate of Analysis

Exova

Client: Raytheon Canada Limited Ottawa
400 Cooper St., Suite 3000
Ottawa, ON
K2P 2H8
Attention: Mr. Will Wyman
PO#:
Invoice to: Raytheon Canada Limited Ottawa

Report Number: 1503957
Date Submitted: 2015-03-16
Date Reported: 2015-03-19
Project: CAM-Main
COC #: 177038

Group	Analyte	MRL	Units	Guideline	Lab I.D. Sample Matrix Sample Type Sampling Date Sample I.D.	1164168 Sewage 2015-02-17 CAM-M Cyclet 1A	1164169 Sewage 2015-02-17 CAM-M Cyclet 1B	1164170 Sewage 2015-02-17 CAM-M Cyclet 1C
Microbiology	Faecal Coliforms	0	ct/100mL		0	0	0	

Guideline = * = Guideline Exceedence
All analysis completed in Ottawa, Ontario (unless otherwise indicated by ** which indicates analysis was completed in Mississauga, Ontario).
Results relate only to the parameters tested on the samples submitted.
Methods references and/or additional QA/QC information available on request.

146 Colonnade Rd. Unit 8, Ottawa, ON K2E 7Y1

MRL = Method Reporting Limit, AO = Aesthetic Objective, OG = Operational Guideline, MAC = Maximum Acceptable Concentration, IMAC = Interim Maximum Acceptable Concentration, STD = Standard, PWQO = Provincial Water Quality Guideline, IPWQO = Interim Provincial Water Quality Objective, TDR = Typical Desired Range

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March 2015 – Page 1 of 2

EXOVA ENVIRONMENTAL ONTARIO

Certificate of Analysis

Exova

Client: Raytheon Canada Limited Ottawa
400 Cooper St., Suite 3000
Ottawa, ON
K2P 2H8
Attention: Mr. Will Wyman
PO#:
Invoice to: Raytheon Canada Limited Ottawa

Report Number: 1503499
Date Submitted: 2015-03-06
Date Reported: 2015-03-19
Project: CAM-Main
COC #: 177056

Group	Analyte	MRL	Units	Guideline	Lab ID. Sample Matrix Sample Type Sampling Date Sample I.D.
General Chemistry	pH	1.00			1163080 Wastewater 2015-03-02 Cam-M-Cydet 1
	Total Suspended Solids	2	mg/L	<2	
Nutrients	BOD5	1	mg/L	2	
Oil & Grease	Oil & Grease - Mineral	1	mg/L	<1	
	Oil & Grease - Non-mineral	1	mg/L	<1	
	Oil & Grease - Total	1	mg/L	<1	
Visible Sheen	Visible Sheen		P/A		A

Guideline = * = Guideline Exceedence

All analysis completed in Ottawa, Ontario (unless otherwise indicated by ** which indicates analysis was completed in Mississauga, Ontario).

Results relate only to the parameters tested on the samples submitted.

Methods references and/or additional QA/QC information available on request.

146 Colonnade Rd. Unit 8, Ottawa, ON K2E 7Y1

ML = Method Reporting Limit, AO = Aesthetic Objective, OG = Operational Guideline, MAC = Maximum Acceptable Concentration, IMAC = Interim Maximum Acceptable Concentration, STD = Standard, PWQO = Provincial Water Quality Guideline, IPWQO = Interim Provincial Water Quality Objective, TDR = Typical Desired Range

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EXOVA ENVIRONMENTAL ONTARIO

Certificate of Analysis



Client: Raytheon Canada Limited Ottawa
400 Cooper St., Suite 3000
Ottawa, ON
K2P 2H8
Attention: Mr. Will Wyman
PO#:
Invoice to: Raytheon Canada Limited Ottawa

Report Number: 1503504
Date Submitted: 2015-03-06
Date Reported: 2015-03-19
Project: CAM-MAIN
COC #: 177056

Group	Analyte	MRL	Units	Guideline	Lab I.D. Sample Matrix Sample Type Sampling Date Sample I.D.	1163087 Sewage 2015-03-02 CAM-M Cyclet 1A	1163088 Sewage 2015-03-02 CAM-M Cyclet 1B	1163089 Sewage 2015-03-02 CAM-M Cyclet 1C
Microbiology	Faecal Coliforms	0	ct/100mL		<10	<10	10	

Guideline = * = Guideline Exceedence
All analysis completed in Ottawa, Ontario (unless otherwise indicated by ** which indicates analysis was completed in Mississauga, Ontario).
Results relate only to the parameters tested on the samples submitted.
Methods references and/or additional QA/QC information available on request.

146 Colonnade Rd. Unit 8, Ottawa, ON K2E 7Y1

Page 2 of 2

MRL = Method Reporting Limit, AO = Aesthetic Objective, OG = Operational Guideline, MAC = Maximum Acceptable Concentration, IMAC = Interim Maximum Acceptable Concentration, STD = Standard, PWQO = Provincial Water Quality Guideline, IPWQO = Interim Provincial Water Quality Objective, TDR = Typical Desired Range

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April 2015 – Page 1 of 2

EXOVA ENVIRONMENTAL ONTARIO

Certificate of Analysis

Exova

Client: Raytheon Canada Limited Ottawa
400 Cooper St., Suite 3000
Ottawa, ON
K2P 2H8
Attention: Mr. Will Wyman
PO#: 15-00345-OT
Invoice to: Raytheon Canada Limited Ottawa

Report Number: 1506743
Date Submitted: 2015-04-29
Date Reported: 2015-05-05
Project: CAM-Main
COC #: 177036

Group	Analyte	MRL	Units	Guideline	Lab I.D. Sample Matrix Sample Type Sampling Date Sample I.D.
General Chemistry	pH	1.00			1170963 Wastewater 2015-04-20 CAM-M Cycl 1
	Total Suspended Solids	2	mg/L		<2
Nutrients	BOD5	1	mg/L		3
Oil & Grease	Oil & Grease - Mineral	1	mg/L		<1
	Oil & Grease - Non-mineral	1	mg/L		<1
	Oil & Grease - Total	1	mg/L		<1
Visible Sheen	Visible Sheen		P/A		A

Guideline = * = Guideline Exceedence

All analysis completed in Ottawa, Ontario (unless otherwise indicated by ** which indicates analysis was completed in Mississauga, Ontario).
Results relate only to the parameters tested on the samples submitted.
Methods references and/or additional QA/QC information available on request.

146 Colonnade Rd. Unit 8, Ottawa, ON K2E 7Y1

Page 2 of 3

MRL = Method Reporting Limit, AO = Aesthetic Objective, OG = Operational Guideline, MAC = Maximum Acceptable Concentration, IMAC = Interim Maximum Acceptable Concentration, STD = Standard, PWQO = Provincial Water Quality Guideline, IPWQO = Interim Provincial Water Quality Objective, TDR = Typical Desired Range

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Document Number: FM-EHS-13

Revision No. 1

Effective Date: 17-Mar-2016

Page: 29 - 55

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EXOVA ENVIRONMENTAL ONTARIO

Certificate of Analysis



Client: Raytheon Canada Limited Ottawa
400 Cooper St., Suite 3000
Ottawa, ON
K2P 2H8
Attention: Mr. Will Wyman
PO#:
Invoice to: Raytheon Canada Limited Ottawa

Report Number: 1506732
Date Submitted: 2015-04-29
Date Reported: 2015-04-30
Project: CAM-Main
COC #: 177036

Group	Analyte	MRL	Units	Guideline	Lab I.D. Sample Matrix Sample Type Sampling Date Sample I.D.	1170938 Sewage 2015-04-20 Cam-M Cyclet 1A	1170939 Sewage 2015-04-20 Cam-M Cyclet 1B	1170940 Sewage 2015-04-20 Cam-M Cyclet 1C
Microbiology	Faecal Coliforms	0	ct/100mL			110	168	151

Guideline = * = Guideline Exceedence
All analysis completed in Ottawa, Ontario (unless otherwise indicated by * which indicates analysis was completed in Mississauga, Ontario).
Results relate only to the parameters tested on the samples submitted.
Methods references and/or additional QA/QC information available on request.

146 Colonnade Rd. Unit 8, Ottawa, ON K2E 7Y1

MRL = Method Reporting Limit, AO = Aesthetic Objective, OG = Operational Guideline, MAC = Maximum Acceptable Concentration, IMAC = Interim Maximum Acceptable Concentration, STD = Standard, PWQO = Provincial Water Quality Guideline, IPWQO = Interim Provincial Water Quality Objective, TDR = Typical Desired Range

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May 2015 – Page 1 of 2

EXOVA ENVIRONMENTAL ONTARIO

Certificate of Analysis

Exova

Client: Raytheon Canada Limited Ottawa
400 Cooper St.
Ottawa, ON
K2P 2H8
Attention: Mr. Will Wyman
PO#: 15-00345-OT
Invoice to: Raytheon Canada Limited

Report Number: 1509210
Date Submitted: 2015-05-29
Date Reported: 2015-09-28
Project: COC #: 177052

Group	Analyte	MRL	Units	Guideline	Lab I.D. Sample Matrix Sample Type Sampling Date Sample I.D.
General Chemistry	pH	1.00			1177517 Wastewater 2015-05-19 Cam Main Cyclct 1
	Total Suspended Solids	1	mg/L	<1	
Nutrients	BOD5	1	mg/L	11	
Oil & Grease	Oil & Grease - Mineral	1	mg/L	<1	
	Oil & Grease - Non-mineral	1	mg/L	2	
	Oil & Grease - Total	1	mg/L	2	
Visible Sheen	Visible Sheen		P/A		A

Guideline = * = Guideline Exceedence
All analysis completed in Ottawa, Ontario (unless otherwise indicated by ** which indicates analysis was completed in Mississauga, Ontario).
Results relate only to the parameters tested on the samples submitted.
Methods references and/or additional QA/QC information available on request.

146 Colonnade Rd. Unit 8, Ottawa, ON K2E 7Y1

MRL = Method Reporting Limit, AO = Aesthetic Objective, OG = Operational Guideline, MAC = Maximum Acceptable Concentration, IMAC = Interim Maximum Acceptable Concentration, STD = Standard, PWQO = Provincial Water Quality Guideline, IPWQO = Interim Provincial Water Quality Objective, TDR = Typical Desired Range

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May 2015 – Page 2 of 2

EXOVA ENVIRONMENTAL ONTARIO

Certificate of Analysis



Client: Raytheon Canada Limited Ottawa
400 Cooper St.
Ottawa, ON
K2P 2H8
Attention: Mr. Will Wyman
PO#:
Invoice to: Raytheon Canada Limited

Report Number: 1509211
Date Submitted: 2015-05-29
Date Reported: 2015-05-31
Project:
COC #: 177052

Group	Analyte	MRL	Units	Guideline	Lab I.D. Sample Matrix Sample Type Sampling Date Sample I.D.	1177518 Wastewater 2015-05-19 Cam Main Cyclct 1A	1177519 Wastewater 2015-05-19 Cam Main Cyclct 1B	1177520 Wastewater 2015-05-19 Cam Main Cyclct 1C
Microbiology	Faecal Coliforms	0	ct/100mL			3	1	0

Guideline = * = Guideline Exceedence

All analysis completed in Ottawa, Ontario (unless otherwise indicated by ** which indicates analysis was completed in Mississauga, Ontario).
Results relate only to the parameters tested on the samples submitted.
Methods references and/or additional QA/QC information available on request.

146 Colonnade Rd. Unit 8, Ottawa, ON K2E 7Y1

MRL = Method Reporting Limit, AO = Aesthetic Objective, OG = Operational Guideline, MAC = Maximum Acceptable Concentration, IMAC = Interim Maximum Acceptable Concentration, STD = Standard, PWQO = Provincial Water Quality Guideline, IPWQO = Interim Provincial Water Quality Objective, TDR = Typical Desired Range

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EXOVA ENVIRONMENTAL ONTARIO

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Exova

Client: Raytheon Canada Limited Ottawa
400 Cooper St.
Ottawa, ON
K2P 2H8
Attention: Mr. Will Wyman
PO#: 15-00345-OT
Invoice to: Raytheon Canada Limited Ottawa

Report Number: 1512222
Date Submitted: 2015-06-30
Date Reported: 2015-07-14
Project: CAM-Main
COC #: 177057

Group	Analyte	MRL	Units	Guideline	Lab ID Sample Matrix Sample Type Sampling Date Sample I.D.
General Chemistry	pH	1.00			1185470 Wastewater 2015-06-25 CAM-Main Cycle
	Total Suspended Solids	1	mg/L		3
Oil & Grease	Oil & Grease - Mineral	1.0	mg/L		<1.0
	Oil & Grease - Non-mineral	1.0	mg/L		<1.0
	Oil & Grease - Total	1.0	mg/L		<1.0
Subcontract	BOD5	1	mg/L		9

Guideline = * = **Guideline Exceedence**

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Results relate only to the parameters tested on the samples submitted.

Methods references and/or additional QA/QC information available on request.

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Client: Canadian Base Operators
400 Cooper St., Suite 3000
Ottawa, ON
K2P 2H8
Attention: Mr. Will Wyman
PO#:
Invoice to: Canadian Base Operators

Report Number: 1512074
Date Submitted: 2015-06-30
Date Reported: 2015-07-01
Project:
COC #: 177057

Group	Analyte	MRL	Units	Guideline	Lab I.D.	Sample Matrix	Sample Type	Sampling Date	Sample I.D.	1185128	1185129	1185130	
Microbiology	Faecal Coliforms	0	ct/100mL					2015-06-25	CAM-M Exact 1A	2015-06-25	CAM-M Exact 1B	2015-06-25	CAM-M Exact 1C

Guideline = * = Guideline Exceedence
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Page 2 of 2

MRL = Method Reporting Limit, AO = Aesthetic Objective, OG = Operational Guideline, MAC = Maximum Acceptable Concentration, iMAC = Interim Maximum Acceptable Concentration, STD = Standard, PWQO = Provincial Water Quality Guideline, iPWQO = Interim Provincial Water Quality Objective, TDR = Typical Desired Range

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July 2015 – Page 1 of 2

EXOVA ENVIRONMENTAL ONTARIO

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Exova

Client: Raytheon Canada Limited Ottawa
400 Cooper St.
Ottawa, ON
K2P 2H8
Attention: Mr. Will Wyman
PO#:
Invoice to: Raytheon Canada Limited Ottawa

Report Number: 1516523
Date Submitted: 2015-08-21
Date Reported: 2015-08-31
Project: CAM-MAIN
COC #: 178219

Group	Analyte	MRL	Units	Guideline	Lab I.D. Sample Matrix Sample Type Sampling Date Sample I.D.	1196895 Sewage 2015-08-12 CAM-MAIN Cyclst 1
General Chemistry	pH	1.00				7.14
	Total Suspended Solids	1	mg/L			<1
Subcontract	BOD5	1	mg/L			<1
	Oil & Grease - Mineral	1	mg/L			<1
	Oil & Grease - Non-mineral	1	mg/L			<1
	Oil & Grease - Total	1	mg/L			<1
Visible Sheen	Visible Sheen		P/A			A

Guideline = * = Guideline Exceedence

All analysis completed in Ottawa, Ontario unless otherwise indicated by ** which indicates analysis was completed in Mississauga, Ontario.
Results relate only to the parameters tested on the samples submitted.
Methods references and/or additional QA/QC information available on request.

146 Colonnade Rd. Unit 8, Ottawa, ON K2E 7Y1

MRL = Method Reporting Limit, AO = Aesthetic Objective, OG = Operational Guideline, MAC = Maximum Acceptable Concentration, IMAC = Interim Maximum Acceptable Concentration, STD = Standard, PWQO = Provincial Water Quality Guideline, IPWQO = Interim Provincial Water Quality Objective, TDR = Typical Desired Range

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Client: Canadian Base Operators
400 Cooper St., Suite 3000
Ottawa, ON
K2P 2H8
Attention: Mr. Will Wyman
PO#:
Invoice to: Canadian Base Operators

Report Number: 1516526
Date Submitted: 2015-08-21
Date Reported: 2015-08-22
Project: Cam-Main
COC #: 178219

Group	Analyte	MRL	Units	Guideline	Lab I.D. Sample Matrix Sample Type Sampling Date Sample I.D.	1196899 Water 2015-08-12 Cam-main Cydet 1A	1196900 Water 2015-08-12 Cam-main Cydet 1B	1196901 Water 2015-08-12 Cam-main Cydet 1C
Microbiology	Faecal Coliforms	0	ct/100mL			1	0	0

Guideline = * = Guideline Exceedence

All analysis completed in Ottawa, Ontario unless otherwise indicated by ** which indicates analysis was completed in Mississauga, Ontario.
Results relate only to the parameters tested on the samples submitted.
Methods references and/or additional QA/QC information available on request.

MRL = Method Reporting Limit, AO = Aesthetic Objective, OG = Operational Guideline, MAC = Maximum Acceptable Concentration, IMAC = Interim Maximum Acceptable Concentration, STD = Standard, PWQO = Provincial Water Quality Guideline, IPWQO = Interim Provincial Water Quality Objective, TDR = Typical Desired Range

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Client: Raytheon Canada Limited Ottawa
400 Cooper St.
Ottawa, ON
K2P 2H8
Attention: Mr. Will Wyman
PO#:
Invoice to: Raytheon Canada Limited Ottawa

Report Number: 1517893
Date Submitted: 2015-09-10
Date Reported: 2015-09-24
Project: COC #: 178216

Group	Analyte	MRL	Units	Guideline	Lab I.D. Sample Matrix Sample Type Sampling Date Sample I.D.
General Chemistry	pH	1.00			1200476 Sewage 2015-08-31 CAM-M-Cyclct 1
	Total Suspended Solids	3	mg/L	<3	
Subcontract	BOD5	1	mg/L	<1	
	Oil & Grease - Mineral	1	mg/L	<1	
	Oil & Grease - Non-mineral	1	mg/L	<1	
	Oil & Grease - Total	1	mg/L	<1	
Visible Sheen	Visible Sheen		P/A	A	

Guideline = * = Guideline Exceedence

All analysis completed in Ottawa, Ontario (unless otherwise indicated by ** which indicates analysis was completed in Mississauga, Ontario).

Results relate only to the parameters tested on the samples submitted.

Methods references and/or additional QA/QC information available on request.

146 Colonnade Rd. Unit 8, Ottawa, ON K2E 7Y1

MRL = Method Reporting Limit, AO = Aesthetic Objective, OG = Operational Guideline, MAC = Maximum Acceptable Concentration, IMAC = Interim Maximum Acceptable Concentration, STD = Standard, PWQO = Provincial Water Quality Guideline, IPWQO = Interim Provincial Water Quality Objective, TDR = Typical Desired Range

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EXOVA ENVIRONMENTAL ONTARIO

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Exova

Client: Raytheon Canada Limited Ottawa
400 Cooper St.
Ottawa, ON
K2P 2H8
Attention: Mr. Will Wyman
PO#:
Invoice to: Raytheon Canada Limited Ottawa

Report Number: 1517947
Date Submitted: 2015-09-10
Date Reported: 2015-09-11
Project:
COC #: 178216

Group	Analyte	MRL	Units	Guideline	Lab I.D. Sample Matrix Sample Type Sampling Date Sample I.D.	1200605 Water - 2015-08-31 CAM-M Cyclet 1A	1200606 Water - 2015-08-31 CAM-M Cyclet 1B	1200607 Water - 2015-08-31 CAM-M Cyclet 1C
Microbiology	Faecal Coliforms	0	ct/100mL		3	1	3	

Guideline = * = Guideline Exceedence

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Methods references and/or additional QA/QC information available on request.

146 Colonnade Rd. Unit 8, Ottawa, ON K2E 7Y1

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EXOVA ENVIRONMENTAL ONTARIO

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400 Cooper St.
Ottawa, ON
K2P 2H8
Attention: Mr. Will Wyman
PO#: 15-00345-OT
Invoice to: Raytheon Canada Limited Ottawa

Report Number: 1519293
Date Submitted: 2015-09-29
Date Reported: 2015-10-06
Project: CAM-MAIN
COC #: 178218

Group	Analyte	MRL	Units	Guideline
General Chemistry	pH	1.00		7.31
	Total Suspended Solids	2	mg/L	<2
Subcontract	BOD5	1	mg/L	<1
	Oil & Grease - Mineral	1	mg/L	<1
	Oil & Grease - Non-mineral	1	mg/L	<1
	Oil & Grease - Total	1	mg/L	<1
Visible Sheen	Visible Sheen		P/A	A

Guideline = * = Guideline Exceedence

All analysis completed in Ottawa, Ontario (unless otherwise indicated by ** which indicates analysis was completed in Mississauga, Ontario).

Results relate only to the parameters tested on the samples submitted.

Methods references and/or additional QA/QC information available on request.

146 Colonnade Rd. Unit 8, Ottawa, ON K2E 7Y1

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EXOVA ENVIRONMENTAL ONTARIO

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Ottawa, ON
K2P 2H8
Attention: Mr. Will Wyman
PO#: 15-00345-OT
Invoice to: Raytheon Canada Limited Ottawa

Report Number: 1519276
Date Submitted: 2015-09-29
Date Reported: 2015-09-30
Project: CAM-MAIN
COC #: 178218

Group	Analyte	MRL	Units	Guideline	Lab I.D. Sample Matrix Sample Type Sampling Date Sample I.D.	1204302 Sewage 2015-09-24 CAM-M Cycle 1A	1204303 Sewage 2015-09-24 CAM-M Cycle 1B	1204304 Sewage 2015-09-24 CAM-M Cycle 1C
Microbiology	Faecal Coliforms	0	ct/100mL		0	0	0	

Guideline = * = Guideline Exceedence

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Results relate only to the parameters tested on the samples submitted.
Methods references and/or additional QA/QC information available on request.

146 Colonnade Rd. Unit 8, Ottawa, ON K2E 7Y1

MRL = Method Reporting Limit, AO = Aesthetic Objective, OG = Operational Guideline, MAC = Maximum Acceptable Concentration, IMAC = Interim Maximum Acceptable Concentration, STD = Standard, PWQO = Provincial Water Quality Guideline, IPWQO = Interim Provincial Water Quality Objective, TDR = Typical Desired Range

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EXOVA ENVIRONMENTAL ONTARIO

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Client: Raytheon Canada Limited Ottawa
400 Cooper St.
Ottawa, ON
K2P 2H8
Attention: Mr. Will Wyman
PO#:
Invoice to: Raytheon Canada Limited Ottawa

Report Number: 1522126
Date Submitted: 2015-11-05
Date Reported: 2015-11-12
Project: CAM-Main
COC #: 178215

Group	Analyte	MRL	Units	Guideline	Lab I.D. Sample Matrix Sample Type Sampling Date Sample I.D.
General Chemistry	pH	1.00			1212122 Wastewater 2015-10-27 CAM-Main Cyclct 1
	Total Suspended Solids	1	mg/L		<2
Subcontract	BOD5	6	mg/L		<6
	Oil & Grease - Mineral	1	mg/L		<1
	Oil & Grease - Non-mineral	1	mg/L		<1
	Oil & Grease - Total	1	mg/L		<1
Visible Sheen	Visible Sheen		P/A		A

Guideline = * = **Guideline Exceedence**

All analysis completed in Ottawa, Ontario (unless otherwise indicated by ** which indicates analysis was completed in Mississauga, Ontario).
Results relate only to the parameters tested on the samples submitted.
Methods references and/or additional QA/QC information available on request.

MRL = Method Reporting Limit, AO = Aesthetic Objective, OG = Operational Guideline, MAC = Maximum Acceptable Concentration, IMAC = Interim Maximum Acceptable Concentration, STD = Standard, PWQO = Provincial Water Quality Guideline, IPWQO = Interim Provincial Water Quality Objective, TDR = Typical Desired Range

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Document Number: FM-EHS-13

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EXOVA ENVIRONMENTAL ONTARIO

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Client: Raytheon Canada Limited Ottawa
400 Cooper St.
Ottawa, ON
K2P 2H8
Attention: Mr. Will Wyman
PO#:
Invoice to: Raytheon Canada Limited Ottawa

Report Number: 1522153
Date Submitted: 2015-11-05
Date Reported: 2015-11-06
Project: Cam-Main
COC #: 176215

Group	Analyte	MRL	Units	Guideline	Lab I.D.	Sample Matrix	Sample Type	Sampling Date	Sample I.D.	1212188	1212189	1212190				
Microbiology	Faecal Coliforms	0	ct/100mL					2015-10-27	Cam-Main Cyclt 1A	Wastewater	2015-10-27	Cam-Main Cyclt 1B	Wastewater	2015-10-27	Cam-Main Cyclt 1C	Wastewater

Guideline = * = Guideline Exceedence
All analysis completed in Ottawa, Ontario (unless otherwise indicated by ** which indicates analysis was completed in Mississauga, Ontario).
Results relate only to the parameters tested on the samples submitted.
Methods references and/or additional QA/QC information available on request.

146 Colonnade Rd. Unit 8, Ottawa, ON K2E 7Y1

MRL = Method Reporting Limit, AO = Aesthetic Objective, OG = Operational Guideline, MAC = Maximum Acceptable Concentration, IMAC = Interim Maximum Acceptable Concentration, STD = Standard, PWQO = Provincial Water Quality Guideline, IPWQO = Interim Provincial Water Quality Objective, TDR = Typical Desired Range

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November 2015 – Page 1 of 3

EXOVA ENVIRONMENTAL ONTARIO

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Exova

Client: Raytheon Canada Limited Ottawa
400 Cooper St.
Ottawa, ON
K2P 2H8
Attention: Mr. Will Wyman
PO#: 15-00345-OT
Invoice to: Raytheon Canada Limited Ottawa

Report Number: 1523655
Date Submitted: 2015-12-01
Date Reported: 2015-12-08
Project: CAM-MAIN
COC #: 178212

Group	Analyte	MRL	Units	Guideline	Lab I.D. Sample Matrix Sample Type Sampling Date Sample I.D.
General Chemistry	pH	1.00			5.79
	Total Suspended Solids	1	mg/L		<2
Oil & Grease	Visible Sheen		A/P		A
Subcontract	BOD5	1	mg/L		<1
	Oil & Grease - Mineral	1	mg/L		<1
	Oil & Grease - Non-mineral	1	mg/L		2
	Oil & Grease - Total	1	mg/L		2

Guideline = * = Guideline Exceedence
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Results relate only to the parameters tested on the samples submitted.
Methods references and/or additional QA/QC information available on request.

146 Colonnade Rd. Unit 8, Ottawa, ON K2E 7Y1

MRL = Method Reporting Limit, AO = Aesthetic Objective, OG = Operational Guideline, MAC = Maximum Acceptable Concentration, IMAC = Interim Maximum Acceptable Concentration, STD = Standard, PWQO = Provincial Water Quality Guideline, IPWQO = Interim Provincial Water Quality Objective, TDR = Typical Desired Range

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EXOVA ENVIRONMENTAL ONTARIO

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400 Cooper St.
Ottawa, ON
K2P 2H8
Attention: Mr. Will Wyman
PO#:
Invoice to: Raytheon Canada Limited Ottawa

Report Number: 1523670
Date Submitted: 2015-12-01
Date Reported: 2015-12-02
Project: CAM-MAIN
COC #: 178212

Group	Analyte	MRL	Units	Guideline	Lab ID Sample Matrix Sample Type Sampling Date Sample I.D.	1217051 Sewage - 2015-11-24 CAM-MAIN Cydet 1A	1217052 Sewage - 2015-11-24 CAM-Main Cydet 1B	1217053 Sewage - 2015-11-24 CAM-Main Cydet 1C
Microbiology	Faecal Coliforms	0	ct/100mL	Water		12	13	15

Guideline = * = Guideline Exceedence

All analysis completed in Ottawa, Ontario (unless otherwise indicated by ** which indicates analysis was completed in Mississauga, Ontario).
Results relate only to the parameters tested on the samples submitted.
Methods references and/or additional QA/QC information available on request.

146 Colonnade Rd. Unit 8, Ottawa, ON K2E 7Y1

MRL = Method Reporting Limit, AO = Aesthetic Objective, OG = Operational Guideline, MAC = Maximum Acceptable Concentration, IMAC = Interim Maximum Acceptable Concentration, STD = Standard, PWQO = Provincial Water Quality Guideline, IPWQO = Interim Provincial Water Quality Objective, TDR = Typical Desired Range

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November 2015 – Page 3 of 3

Contact with INAC Water Resources Officer about the pH result including the follow-up actions



Re: CAM-M Sewage pH Nov 2015

Justin Hack to: william.wyman

Cc: IAN.CREIGHTON3, SCOTT.CHARLAND, don.beattie

12/14/2015 08:52 AM

[Show Details](#)

Thank you for the notification Will.

>>> <william.wyman@raytheon.com> 12/11/2015 6:59 AM >>>

Hello Justin,

Our staff were monitoring the sewage treatment plant at CAM-M and found that the pH probe was malfunctioning. A new pH probe was ordered and the pH was monitored on-site using pH test strips. Once the new pH probe arrived on-site it was installed and the system returned to normal. If the pH of the material in the treatment system is out of the acceptable range the pH probe calls for material to correct this (e.g. if the pH is low, the system will call for pH 12 liquid to correct this) allowing the biomass to most effectively treat the sewage.

As a result of the malfunctioning pH probe the pH for November was outside of the 6 to 9 range allowed by the site's water licence. The lab result for the pH was 5.79, but as above the system has returned to normal operation.

Please let me know if you have any questions about this.

Regards,

Will Wyman, EP(CEA)
Environmental Specialist
North Warning System
Raytheon Canada
Raytheon Company

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400 Cooper St.
Ottawa, ON
K2P 2H8
Attention: Mr. Will Wyman
PO#: 15-00345-OT
Invoice to: Raytheon Canada Limited Ottawa

Report Number: 1524879
Date Submitted: 2015-12-21
Date Reported: 2015-12-30
Project: CAM-MAIN
COC #: 178221

Group	Analyte	MRL	Units	Guideline	Lab I.D. Sample Matrix Sample Type Sampling Date Sample I.D.
General Chemistry	pH	1.00			6.34
PHC (Hydrocarbons)	Total Suspended Solids	1	mg/L		<3
Subcontract	Visible Sheen	0	A/P		A
	BOD5	1	mg/L		2
	Oil & Grease - Mineral	1	mg/L		<1
	Oil & Grease - Non-mineral	1	mg/L		<1
	Oil & Grease - Total	1	mg/L		<1

Guideline = * = Guideline Exceedence
All analysis completed in Ottawa, Ontario (unless otherwise indicated by ** which indicates analysis was completed in Mississauga, Ontario).
Results relate only to the parameters tested on the samples submitted.
Methods references and/or additional QA/QC information available on request.

MRL = Method Reporting Limit, AO = Aesthetic Objective, OG = Operational Guideline, MAC = Maximum Acceptable Concentration, IMAC = Interim Maximum Acceptable Concentration, STD = Standard, PWQO = Provincial Water Quality Guideline, IPWQO = Interim Provincial Water Quality Objective, TDR = Typical Desired Range

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Client: Raytheon Canada Limited Ottawa
400 Cooper St.
Ottawa, ON
K2P 2H8
Attention: Mr. Will Wyman
PO#:
Invoice to: Raytheon Canada Limited Ottawa

Report Number: 1524878
Date Submitted: 2015-12-21
Date Reported: 2015-12-22
Project: CAM-MAIN
COC #: 178221

Group	Analyte	MRL	Units	Guideline	Lab I.D. Sample Matrix Sample Type Sampling Date Sample I.D.	1220094 Sewage 2015-12-14 CAM-MAIN CYCLET A	1220095 Sewage 2015-12-14 CAM-MAIN CYCLET B	1220096 Sewage 2015-12-14 CAM-MAIN CYCLET C
Others	Faecal Coliforms	0	ct/100mL		3	8	10	

Guideline = * = Guideline Exceedence
All analysis completed in Ottawa, Ontario (unless otherwise indicated by ** which indicates analysis was completed in Mississauga, Ontario).
Results relate only to the parameters tested on the samples submitted.
Analytical Method: AMBCOLM1
additional QA/QC information available on request.

146 Colonnade Rd. Unit 8, Ottawa, ON K2E 7Y1

MRL = Method Reporting Limit, AO = Aesthetic Objective, OG = Operational Guideline, MAC = Maximum Acceptable Concentration, IMAC = Interim Maximum Acceptable Concentration, STD = Standard, PWQO = Provincial Water Quality Guideline, IPWQO = Interim Provincial Water Quality Objective, TDR = Typical Desired Range

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ANNEX D - LOCATION OF BERMED FUEL STORAGE FACILITIES WITH COORDINATES

Licence	Location	Monitoring Station # (Final discharge point of bermed fuel storage facility)	Berm's location on-site	Berm's coordinates
3BC- CAM0919 Type "B"	CAM-M North Warning System Site, Cambridge Bay, Victoria Island, Kitikmeot Region, Nunavut	CDL-3	Summit, berm of tank W22A	69° 07' 03" N 105° 07' 03" W
			Airfield (near hangar) berm of tanks W20B and W20C	69° 06' 12" N 105° 07' 35" W
			Beach, berm of tanks W20D and W22C	69° 06' 11" N 105° 05' 49" W

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ANNEX E - ANALYSIS OF BERM WATER (EFFLUENT FROM BERMED FUEL STORAGE FACILITIES)

Table E-1 Analysis of Berm Water at CAM-M in 2015

Site Berm	Maximum Concentration of any Grab Sample (µg/L)	CAM-M W22A 17-Jun- 2015	CAM-M W20B&C 17-Jun- 2015	CAM-M W20D&W22C 17-Jun-2015
pH	6 to 9	7.58	7.79	7.73
Oil and Grease (ug/L)	5000	<1000	<1000	<1000
Arsenic (total) (ug/L)	100	<20	<20	<20
Cadmium (dissolved) (ug/L)	10	<0.1	<0.1	<0.1
Chromium (dissolved) (ug/L)	100	<1	<1	<1
Cobalt (dissolved) (ug/L)	50	<0.2	<0.2	<0.2
Copper (dissolved) (ug/L)	200	5	5	8
Lead (dissolved) (ug/L)	50	<1	<1	<1
Mercury (total) (ug/L)	0.6	<0.1	<0.1	<0.1
Nickel (dissolved) (ug/L)	200	<5	<5	<5
PCB (total) (ug/L)	1000	<0.1	<0.1	<0.1
Phenols (ug/L)	20	<2	<2	<2
Zinc (total) (ug/L)	500	<40	80	<40
Benzene (ug/L)	370	<0.5	<0.5	<0.5
Toluene (ug/L)	2	<0.5	<0.5	<0.5
Ethyl benzene (ug/L)	90	<0.5	<0.5	<0.5

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17-Jun-2015

Summit, Berm of tank W22A

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EXOVA ENVIRONMENTAL ONTARIO

Certificate of Analysis

Exova

Client: Raytheon Canada Limited Ottawa
400 Cooper St.
Ottawa, ON
K2P 2H8
Attention: Mr. Will Wyman
PO#: 15-00345-OT
Invoice to: Raytheon Canada Limited Ottawa

Report Number: 1511734
Date Submitted: 2015-06-26
Date Reported: 2015-07-08
Project: W 22 A
COC #: 170392

Group	Analyte	MRL	Units	Guideline	Lab I.D. Sample Matrix Sample Type Sampling Date Sample I.D.
General Chemistry	pH	1.00			1184414 Wastewater 2015-06-17 ML-W 22 A-1
Mercury	Hg	0.0001	mg/L		<0.0001
Metals	Aqua-Regia Digest			Y	
	As	0.02	mg/L	<0.02	
	Zn	0.04	mg/L	<0.04	
Oil & Grease	Oil & Grease - Total	1	mg/L	<1	
PCBs	Polychlorinated Biphenyls (PCBs)	0.1	ug/L	<0.1	
Phenols-4AAP	Phenols	0.002	mg/L	<0.002	
VOCs	Benzene	0.5	ug/L	<0.5	
	Ethylbenzene	0.5	ug/L	<0.5	
	Toluene	0.5	ug/L	<0.5	
VOCs Surrogates (%)	Toluene-d8	0	%		93

Guideline = * = Guideline Exceedence
All analysis completed in Ottawa, Ontario (unless otherwise indicated by ** which indicates analysis was completed in Mississauga, Ontario).
Results relate only to the parameters tested on the samples submitted.
Methods references and/or additional QA/QC information available on request.

MRL = Method Reporting Limit, AO = Aesthetic Objective, OG = Operational Guideline, MAC = Maximum Acceptable Concentration, IMAC = Interim Maximum Acceptable Concentration, STD = Standard, PWQO = Provincial Water Quality Guideline, IPWQO = Interim Provincial Water Quality Objective, TDR = Typical Desired Range

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Summit, Berm of tank W22A

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EXOVA ENVIRONMENTAL ONTARIO

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Exova

Client: Raytheon Canada Limited Ottawa
400 Cooper St.
Ottawa, ON
K2P 2H8
Attention: Mr. Will Wyman
PO#: 15-00345-OT
Invoice to: Raytheon Canada Limited Ottawa

Report Number: 1511742
Date Submitted: 2015-06-26
Date Reported: 2015-07-02
Project: W 22 A
COC #: 170392

Group	Analyte	MRL	Units	Guideline	Lab I.D. Sample Matrix Sample Type Sampling Date Sample I.D.
Metals	Cd	0.0001	mg/L	<0.0001	1184422 Wastewater 2015-06-17 ML-W 22 A-1 Diss Metals
	Co	0.0002	mg/L	<0.0002	
	Cr	0.001	mg/L	<0.001	
	Cu	0.001	mg/L	0.005	
	Ni	0.005	mg/L	<0.005	
	Pb	0.001	mg/L	<0.001	

Guideline = * = Guideline Exceedence
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17-Jun-2015

Airfield (near hangar), Berm of tanks W20B and W20C

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EXOVA ENVIRONMENTAL ONTARIO

Certificate of Analysis

Exova

Client: Raytheon Canada Limited Ottawa
400 Cooper St.
Ottawa, ON
K2P 2H8
Attention: Mr. Will Wyman
PO#: 15-00345-OT
Invoice to: Raytheon Canada Limited Ottawa

Report Number: 1511735
Date Submitted: 2015-06-26
Date Reported: 2015-07-14
Project: W 22 A
COC #: 170382

Group	Analyte	MRL	Units	Guideline	Lab I.D. Sample Matrix Sample Type Sampling Date Sample I.D.
General Chemistry	pH	1.00			1184415 Wastewater 2015-06-17 ML-W 20 B C-1
Mercury	Hg	0.0001	mg/L		<0.0001
Metals	Aqua-Regia Digest				Y
	As	0.02	mg/L		<0.02
	Zn	0.04	mg/L		0.08
Oil & Grease	Oil & Grease - Total	1.0	mg/L		<1.0
PCBs	Polychlorinated Biphenyls (PCBs)	0.1	ug/L		<0.1
Phenols-4AAP	Phenols	0.002	mg/L		<0.002
VOCs	Benzene	0.5	ug/L		<0.5
	Ethylbenzene	0.5	ug/L		<0.5
	Toluene	0.5	ug/L		<0.5
	Toluene-d8	0	%		98
VOCs Surrogates (%)					

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Methods, References and/or additional QA/QC information available on request.

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17-Jun-2015

Airfield (near hangar), Berm of tanks W20B and W20C

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EXOVA ENVIRONMENTAL ONTARIO

Certificate of Analysis

Exova

Client: Raytheon Canada Limited Ottawa
400 Cooper St.
Ottawa, ON
K2P 2H8
Attention: Mr. Will Wyman
PO#: 15-00345-OT
Invoice to: Raytheon Canada Limited Ottawa

Report Number: 1511743
Date Submitted: 2015-06-26
Date Reported: 2015-07-02
Project: W 20 B
COC #: 170382

Group	Analyte	MRL	Units	Guideline	Lab I.D. Sample Matrix Sample Type Sampling Date Sample I.D.
Metals	Cd	0.0001	mg/L		<0.0001
	Co	0.0002	mg/L		<0.0002
	Cr	0.001	mg/L		<0.001
	Cu	0.001	mg/L		0.005
	Ni	0.005	mg/L		<0.005
	Pb	0.001	mg/L		<0.001

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Methods references and/or additional QA/QC information available on request.

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Beach, Berm of tanks W20D & W22C

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EXOVA ENVIRONMENTAL ONTARIO

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Exova

Client: Raytheon Canada Limited Ottawa
400 Cooper St.
Ottawa, ON
K2P 2H8
Attention: Mr. Will Wyman
PO#: 15-00345-OT
Invoice to: Raytheon Canada Limited Ottawa

Report Number: 1511733
Date Submitted: 2015-06-26
Date Reported: 2015-07-08
Project: W 20 D
COC #: 170387

Group	Analyte	MRL	Units	Guideline	Lab I.D. Sample Matrix Sample Type Sampling Date Sample I.D.
General Chemistry	pH	1.00			1184413 Wastewater 2015-06-17 ML-W 20 D W22 C-1
Mercury	Hg	0.0001	mg/L	<0.0001	
Metals	Aqua-Regia Digest			Y	
	As	0.02	mg/L	<0.02	
	Zn	0.04	mg/L	<0.04	
Oil & Grease	Oil & Grease - Total	1	mg/L	<1	
PCBs	Polychlorinated Biphenyls (PCBs)	0.1	ug/L	<0.1	
Phenols-4AAP	Phenols	0.002	mg/L	<0.002	
VOCs	Benzene	0.5	ug/L	<0.5	
	Ethylbenzene	0.5	ug/L	<0.5	
	Toluene	0.5	ug/L	<0.5	
VOCs Surrogates (%)	Toluene-d8	0	%	98	

Guideline = * = Guideline Exceedence
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EXOVA ENVIRONMENTAL ONTARIO

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Exova

Client: Raytheon Canada Limited Ottawa
400 Cooper St.
Ottawa, ON
K2P 2H8
Attention: Mr. Will Wyman
PO#: 15-00345-OT
Invoice to: Raytheon Canada Limited Ottawa

Report Number: 1511741
Date Submitted: 2015-08-26
Date Reported: 2015-07-02
Project: W 20 D
COC #: 170387

Group	Analyte	MRL	Units	Guideline	Lab I.D. Sample Matrix Sample Type Sampling Date Sample I.D.
Metals	Cd	0.0001	mg/L		<0.0001
	Co	0.0002	mg/L		<0.0002
	Cr	0.001	mg/L		<0.001
	Cu	0.001	mg/L		0.008
	Ni	0.005	mg/L		<0.005
	Pb	0.001	mg/L		<0.001

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