



MONITOR WELL RECORD

CLIENT Transport Canada

PROJECT No. 42513-01

LOCATION Gander International Airport

SITE - BH No. 16-MW 1

DATES (dd-mm-yy): BORING 09-03-98

WATER LEVEL 12-12-98

DATUM Geodetic

DEPTH (m)	ELEV. (m)	DESCRIPTION	STRATA PLOT	WATER LEVEL	SAMPLES				WELL CONSTRUCTION	CHEMICAL ANALYSES (mg/kg)												
					TYPE	NUMBER	RECOVERY	N-VALUE OR RQD		Laboratory												
										Benzene	Toluene	Ethyl Benzene	Xylene	TPH	Gas/Technor Levels (ppm)							
0	150.54	<p>ORGANICS: Loose, soft dark brown turf, grass mat, organics, moist.</p> <p>SAND and GRAVEL: Compact greyish brown silty SAND and GRAVEL, moist to wet, slight to moderate hydrocarbon odour.</p>					mm		<p>Flush-mounted Wellhead Enclosure</p> <p>No. 2 Silica Sand Bentonite</p> <p>50 mm No. 20 Slot PVC Screen</p> <p>No. 2 Silica Sand</p> <p>End Cap</p> <p>Cave In</p>													
	150.3				SS	1	455	13													375	
1					SS	2	305	17														475
2					SS	3	440	97/280														
3	147.4	End of Borehole																				
4		<p>NOTES:</p> <p>1) Laboratory analyses results on groundwater: Benzene: 2 ug/l Toluene: 7 ug/l Ethyl Benzene: nd Xylene: 8 ug/l TPH: 570 ug/l</p> <p>2) Refer to tables in appendix for additional soil and groundwater analyses for lead.</p>																				
5																						



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PROJECT No. 42513-01

LOCATION Gander International Airport

SITE - BH No. 16-M^v

DATES (dd-mm-yy): BORING 09-03-98

WATER LEVEL 12-12-98

DATUM Geodetic

DEPTH (m)	ELEV. (m)	DESCRIPTION	STRATA PLOT	WATER LEVEL	SAMPLES				WELL CONSTRUCTION	CHEMICAL ANALYSES (mg/kg)						
					TYPE	NUMBER	RECOVERY	N-VALUE OR RQD		Laboratory						
										Benzene	Toluene	Ethyl Benzene	Xylene	TPI	Gas Technor Levels (ppm)	
0	150.71	SAND and GRAVEL: Compact, medium brown (grey seams) silty SAND and GRAVEL, moist.					mm		Flush-mounted Wellhead Enclosure							125
1	149.8	SAND and GRAVEL: Very dense to dense greyish brown silty SAND and GRAVEL, moist to wet, strong hydrocarbon odour at 5.79 m to 6.40 m depth.							No. 2 Silica Sand							175
2									Bentonite							
3																350
4									50 mm No. 20 Slot PVC Screen							
																250
5									No. 2 Silica Sand							



MONITOR WELL RECORD

CLIENT Transport Canada

PROJECT No. 42513-01

LOCATION Gander International Airport

SITE - BH No. 16-MW 2

DATES (dd-mm-yy): BORING 09-03-98

WATER LEVEL 12-12-98

DATUM Geodetic

DEPTH (m)	ELEV. (m)	DESCRIPTION	STRATA PLOT	WATER LEVEL	SAMPLES				WELL CONSTRUCTION	CHEMICAL ANALYSES (mg/kg)								
					TYPE	NUMBER	RECOVERY	N-VALUE OR RQD		Laboratory								
										Benzene	Toluene	Ethyl Benzene	Xylene	TPH	Gas/techor Levels (ppm)			
5	145.71						mm											
6									End Cap									
	144.3				SS	5	510	48	Cave In	26.6	117	105	360	14610	6500			
7		End of Borehole NOTES: 1) 16-MW2 was originally named 16-BH1. 2) 2.80 m of free product on 12/12/98.																
8																		
9																		
10																		



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MONITOR WELL RECORD

13-MW-05

CLIENT Transport Canada

PROJECT No. 42513-01

LOCATION Gander International Airport

SITE - BH No. 16-MW

DATES (dd-mm-yy): BORING 27-06-98

WATER LEVEL 12-12-98

DATUM Geodetic

DEPTH (m)	ELEV. (m)	DESCRIPTION	STRATA PLOT	WATER LEVEL	SAMPLES				WELL CONSTRUCTION	CHEMICAL ANALYSES (mg/kg)						
					TYPE	NUMBER	RECOVERY	N VALUE OR RQD		Laboratory						
										Benzene	Toluene	Ethyl Benzene	Xylene	TPH	Gas Techlor Levels (ppm)	
0	150.89						mm									
	150.7	SAND and GRAVEL: Loose brown SAND and GRAVEL, trace silt; moist. SAND and GRAVEL: Compact to very dense greyish brown SAND and GRAVEL, some silt; dry to wet; moderate to strong hydrocarbon odour beyond 6.17 m depth.			SS	1	510	18	Flush-mounted Wellhead Enclosure							50
1									No. 2 Silica Sand							
2					SS	2	460	41	Bentonite							
3					SS	3	610	46								55
4																
5					SS	4	460	99	50 mm No. 20 Slot PVC Screen							



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MONITOR WELL RECORD

CLIENT Transport Canada

PROJECT No. 42513-01

LOCATION Gander International Airport

SITE - BH No. 16-MW 3

DATES (dd-mm-yy): BORING 27-06-98

WATER LEVEL 12-12-98

DATUM Geodetic

DEPTH (m)	ELEV. (m)	DESCRIPTION	STRATA PLOT	WATER LEVEL	SAMPLES				WELL CONSTRUCTION	CHEMICAL ANALYSES (mg/kg)									
					TYPE	NUMBER	RECOVERY	N-VALUE OR RQD		Laboratory									
										Benzene	Toluene	Ethyl Benzene	Xylene	TPH	Gas Technor Levels (ppm)				
5	145.89						mm												
6									No. 2 Silica Sand										
					SS	5	610	100			4.52	8.74	27.6	124	10100	2100			
									End Cap										
8					SS	6	535	26	Cave In										2100
	142.6	End of Borehole																	
		NOTES: 1) 0.06 m of free product on 12/12/98.																	
9																			
10																			



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MONITOR WELL RECORD

CLIENT Transport Canada

PROJECT No. 42513-01

LOCATION Gander International Airport

SITE - BH No. 16-MV

DATES (dd-mm-yy): BORING 27-06-98

WATER LEVEL 12-12-98

DATUM Geodetic

DEPTH (m)	ELEV. (m)	DESCRIPTION	STRATA PLOT	WATER LEVEL	SAMPLES				WELL CONSTRUCTION	CHEMICAL ANALYSES (mg/kg)								
					TYPE	NUMBER	RECOVERY	N VALUE OR RQD		Laboratory								
										Benzene	Toluene	Ethyl Benzene	Xylene	TPH	Gas/techlor Levels (ppm)			
0	150.59	<p>SAND and GRAVEL: Loose brown SAND and GRAVEL, trace silt; trace organics; grassmat; dry.</p> <p>SAND and GRAVEL: Compact to very dense greyish brown SAND and GRAVEL, some silt; occasional cobbles and boulders; dry to wet; moderate to strong hydrocarbon odour beyond 4.57 m depth.</p>																
	150.4					SS	1	405	17								100	
1																		
2						SS	2	460	22									3'
3																		
4					SS	3	610	70									125	
5					SS	4	610	38									3100	



MONITOR WELL RECORD

CLIENT Transport Canada
 LOCATION Gander International Airport
 DATES (dd-mm-yy): BORING 27-06-98 WATER LEVEL 12-12-98

PROJECT No. 42513-01
 SITE - BH No. 16-MW 4
 DATUM Geodetic

DEPTH (m)	ELEV. (m)	DESCRIPTION	STRATA PLOT	WATER LEVEL	SAMPLES				WELL CONSTRUCTION	CHEMICAL ANALYSES (mg/kg)								
					TYPE	NUMBER	RECOVERY	N-VALUE OR RQD		Laboratory								
										Benzene	Toluene	Ethyl Benzene	Xylene	TPH	Gas/Techeur Levels (ppm)			
5	145.59						mm											
6								No. 2 Silica Sand										
								End Cap										
					SS	5	460	39	Cave In	2.09	1.99	6.91	27.9	12600	4000			
7	143.7	End of Borehole NOTES: 1) 2.68 m of free product on 12/12/98. 2) Refer to tables in appendix for additional soil analyses for lead.																
8																		
9																		
10																		



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MONITOR WELL RECORD

CLIENT Transport Canada

PROJECT No. 42513-01

LOCATION Gander International Airport

SITE - BH No. 16-MW 5

DATES (dd-mm-yy): BORING 01-07-98

WATER LEVEL 14-07-98

DATUM Geodetic

DEPTH (m)	ELEV. (m)	DESCRIPTION	STRATA PILOT	WATER LEVEL	SAMPLES				WELL CONSTRUCTION	CHEMICAL ANALYSES (mg/kg)					
					TYPE	NUMBER	RECOVERY	N-VALUE OR RQD		Laboratory					
									Benzene	Toluene	Ethyl Benzene	Xylene	TPH	Gas Technor Levels (ppm)	
0	150.34														
	150.2	SAND and GRAVEL: Loose brown SAND and GRAVEL, trace silt; trace organics; grassmat; moist. SAND and GRAVEL: Compact to very dense greyish brown SAND and GRAVEL, some silt; occasional cobbles and boulders; dry to wet; strong hydrocarbon odour beyond 3.05 m depth.							mm						
					SS	1	355	8		Flush-mounted Wellhead Enclosure					65
										No. 2 Silica Sand					
										Bentonite					
1															
					SS	2	405	39							70
2															
3															
					SS	3	610	34		50 mm No. 20 Slot PVC Screen					280
4															
5										No. 2-Silica Sand					



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MONITOR WELL RECORD

CLIENT Transport Canada
 LOCATION Gander International Airport
 DATES (dd-mm-yy): BORING 01-07-98 WATER LEVEL 14-07-98

PROJECT No. 42513-01
 SITE - BH No. 16-MW 5
 DATUM Geodetic

DEPTH (m)	ELEV. (m)	DESCRIPTION	STRATA PLOT	WATER LEVEL	SAMPLES				WELL CONSTRUCTION	CHEMICAL ANALYSES (mg/kg)							
					TYPE	NUMBER	RECOVERY	N-VALUE OR RQD		Laboratory							
										Benzene	Toluene	Ethyl Benzene	Xylene	TPI	Gas Technol Levels (ppm)		
5	145.34				SS	4	560	74	 End Cap Cave In							2000	
6					SS	5	610	38									3700
7	143.5	End of Borehole NOTES: 1) 0.02 m of free product on 14/07/98.															
8																	
9																	
10																	



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MONITOR WELL RECORD

CLIENT Transport Canada

PROJECT No. 42513-01

LOCATION Gander International Airport

SITE - BH No. 16-MW

DATES (dd-mm-yy): BORING 05-10-98 WATER LEVEL 12-12-98

DATUM Geodetic

DEPTH (m)	ELEV. (m)	DESCRIPTION	STRATA PLOT	WATER LEVEL	SAMPLES				WELL CONSTRUCTION	CHEMICAL ANALYSES (mg/kg)					
					TYPE	NUMBER	RECOVERY	N-VALUE OR RQD		Laboratory					
									Benzene	Toluene	Ethyl Benzene	Xylene	TPH	Gas/Teclor Levels (ppm)	
0	150.76						mm								
	150.6	<p>SAND and GRAVEL: Loose brown SAND and GRAVEL, some silt; grassmat on surface; TOPSOIL: moist.</p> <p>SAND and GRAVEL: Compact to very dense greyish brown SAND and GRAVEL, some silt; occasional cobbles and boulders; moist to wet; moderate to strong hydrocarbon odour beyond 3.05 m depth.</p>			SS	1	330	15	Flush-mounted Wellhead Enclosure						75
1									No. 2 Silica Sand						
2					SS	2	610	29		Bentonite					
3					SS	3	510	69							325
4									50 mm No. 20 Slot PVC Screen						
5					SS	4	610	55							9.74 3.97 4.79 42.6 49000 2buu



MONITOR WELL RECORD

CLIENT Transport Canada

PROJECT No. 42513-01

LOCATION Gander International Airport

SITE - BH No. 16-MW 9

DATES (dd-mm-yy): BORING 05-10-98

WATER LEVEL 12-12-98

DATUM Geodetic

DEPTH (m)	ELEV. (m)	DESCRIPTION	STRATA PLOT	WATER LEVEL	SAMPLES				WELL CONSTRUCTION	CHEMICAL ANALYSES (mg/kg)								
					TYPE	NUMBER	RECOVERY	N-VALUE OR RQD		Laboratory								
										Benzene	Toluene	Ethyl Benzene	Xylene	TPH	Gas/Techlor Levels (ppm)			
5	145.76																	
6	144.7	End of Borehole NOTES: 1) 2.83 m of free product on 12/12/98.			SS	5	0	50/0		No. 2 Silica Sand								7000
7																		
8																		
9																		
10																		



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Client: PWGSC

Drilling Contractor: Lantech Drilling Services

Project No: 40441A

Drill Type: CME 55

Civic Address: Gander International Airport Drill Method: Solid Stem Auger

City & Province: Gander, NL

Logged By: Sheldon Adey

PID Number: N/A

TOC Elevation: N/A

UTM Easting: N/A

GL Elevation: N/A

UTM Northing: N/A

Final Depth: 7.62

Date Started: August 16, 2004

Depth to Water Strike: 5.2

Date Finished: August 18, 2004

Depth to Bedrock Not encountered



Monitor Well: 04-MW1

Depth (m)	Lithology	USCS Classification	Description	Elevation (mamsl)	Sample ID	Sample Type	N-Value/RQD (%)	Recovery (%)	Headspace (ppm/% LEL)	Analysis	Well Construction	Well Details
0.0				0.0								
0.0 - 2.0			Compact, grey silty sand and gravel; numerous cobbles; moist; odourless.	-1.0	SS1	SS	NA	NR	NHS		Flushmount enclosure Native backfill Bentonite seal	
2.0 - 7.62			Compact, grey silty sand and gravel; numerous cobbles; wet at approximately 5.2 mbgl; strong petroleum hydrocarbon odour.	-3.0							200 mm diameter PVC screen with silica sand pack	
5.0				-5.0	SS2	SS	NA	NR	NHS			Groundwater at approx. 5.2 mbgl
7.62				-7.62								End cap
8.0				-8.0								
9.0				-9.0								