

**REVOLVING GRANULAR STOCKPILE STUDY
KITIKMEOT REGION
RESULTS OF SUMMER EXPLORATION PROGRAM
TALOYOAK, NUNAVUT**

Submitted to:

Government of Nunavut
Department of Community and Government Services
Cambridge Bay, Nunavut

Submitted by:

AMEC Environment & Infrastructure
Calgary, Alberta

October 2011

YX00823

IMPORTANT NOTICE

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1.0 INTRODUCTION

As was requested by Department of Community and Government Services (DCGS), the Government of Nunavut, AMEC Environment & Infrastructure, a division of AMEC Americas Limited (AMEC) has undertaken an exploration program for prospective granular borrow sources in the community of Taloyoak, NU.

Authorization to proceed with the exploration program was received via email from Mr. So, Project Officer with DCGS, to Mr. Kevin Spencer, P. Eng., Associate Geotechnical Engineer.

2.0 SCOPE OF WORK

The purpose of the exploration program was to estimate quality and quantity of borrow materials in previously identified prospective borrow sites located near the community. The scope of work for the exploration program included the following:

- Excavate test pits within each of the prospective borrow sites with an excavator or loader (down to the permafrost table) and collect samples from representative granular material strata.
- Provide detailed logging of the test pits, including classification of the material and moisture conditions.
- Undertake a laboratory testing program consisting of sieve analyses.
- Roughly estimate granular material reserves (quantities) within the prospective borrow sites.
- Prepare a geotechnical report outlining field and laboratory findings, including the above, as well as grain size distribution curves for borrow materials within the identified borrow sites for the 5 mm minus, 20 mm minus, 25 mm minus, and 75 mm minus granular material specification and recommendations for improvement of the granular material properties by screening or washing.

3.0 IDENTIFICATION OF BORROW MATERIAL SITES

Selection of borrow sites was carried out following a review of this report:

“Background Review Aggregate Resources Evaluation, Taloyoak, Nunavut. Geotechnical Engineering Research and Investigation, Kitikmeot Region, Nunavut”, prepared by Nuna Burnside, dated July 2007.

Upon completion of the review, two prospective borrow sites previously identified as Site 4 and 5, presented in Figure 1, Appendix A, were selected. The selected borrow sites are eskers represented as boulderly ridges, 5m to 10m high relative to the surrounding tundra elevation with numerous shallow ponds. Ground vegetation on the ridges is sparse and consists mainly of lichen and grasses.

Regional stratigraphy for the study area comprises Holocene or Upper Pleistocene marine deposits over Pleistocene glacial deposits. Occasional gneiss/granite bedrock outcrops are also found in the vicinity of the community. The glacial deposits primarily consist of sand, gravel, cobbles and boulders. The marine deposits, formed in a shallow sea, consist of a mixture of silt and sand.

3.1 Prospective Borrow Sites

Site 4 is located approximately 2 km west from the community and is orientated in a southwest-northeast direction. The site is approximately 570 m long and 150 m wide. Initial field observations exhibited a boulder and gravel surface on the west side of the ridge and a gravel and cobble surface on the east side. The deposit is underlain by sand as seen from ground squirrel burrows. Several tent rings were observed in the area and the Senior Administrative Officer (SAO) confirmed that the Government of Nunavut has declared the site protected. As such, no test pits were dug on this site.

Site 5 is located approximately 350 m north of the community and is orientated in an east-west direction. This site has already been quarried from the east side and the developed area is 300 m long and 100 m wide. The undeveloped area is approximately 500 m long and 100 m wide. The west side of Site 5 is approximately 150 m from the towns' old garbage dump; the SAO advised that there is a protected area surrounding the dump.

Upon learning of the protected status of Site 4, Site 2 was investigated. Site 2 is located approximately 2 kilometres northwest from the community and is orientated in a north-south direction. The site is approximately 700 m long and 100 m wide. There is a cleared area in the centre of the site which was used as a pad for the crusher associated with the blasting to the southeast.

4.0 FIELD INVESTIGATION

The field phase of the exploration program was carried out between August 31 and September 2, 2010, under the supervision of Mr. Blake Brodland, EIT (geotechnical engineer-in-training) with the AMEC Calgary office. Mr. Brodland arrived in Taloyoak on August 31 and met with personnel from Lyall Construction Ltd. and the Hamlet to discuss details of the field program.

On September 1 and 2, 14 test pits were excavated (five test pits were dug with the use of an excavator and nine test pits were dug with a front end loader). Both machines were owned and operated by Lyall Construction Ltd..

The test pits were excavated to depths ranging from 0.6 m (by loader) to 2.3 m (by excavator) and were backfilled upon completion. The soil strata and composition encountered in the test pits were visually classified in accordance with the Modified Unified Soil Classification System (MUSCS). Disturbed samples from the test pits were collected at selected depths placed in five gallon pails and shipped to an AMEC soil laboratory for testing. The test pit logs and description of the terms and symbols used on the test pit logs are included in Appendix A.

4.1 Borrow Material Description

Materials encountered in the test pits at Site 5 were very similar to the currently quarried material. The surface material generally consisted of boulders and cobbles, which were underlain by washed cobbles, gravel, and sand. The existing quarry has been able to get to a depth of approximately 7m, apparently by quarrying in stages and allowing the permafrost to melt. Permafrost was encountered at depths ranging from 1.5m to 2m during test pit excavation.

Materials excavated within Site 2 were glacially deposited sand and gravel, underlain by uniform sand. Permafrost was encountered at an approximate depth of 0.7m.

5.0 LABORATORY TEST RESULTS

In total, 10 bulk samples were collected during the field exploration program. Sieve analyses were performed on all of the 10 samples obtained. It should be clear that cobbles and boulders were not included in the samples obtained from the test pits.

The granular gradations specifications used in the present report for comparison with results of the sieve analyses were obtained from the tender document titled "Construction Tender" (CT), Project No: 09-4403, Contract No: CT10-3006, Name of Project : Gjoa Haven – Revolving Granular Crushing Program, Project Location: Gjoa Haven, NU, Tender Issue Date: August 3, 2010.

Five granular gradation specifications (5 mm minus, 20 mm minus, 25 mm minus, 75 mm minus gravels) are provided in the CT document. The first four specified gradations were compared with the laboratory sieve results.

Laboratory results for each sieve analysis performed are presented in Appendix B. Table 1 below displays a summary of the sieve test results performed on each sample. It can be seen that the sieve analyses for all test pits are generally in close agreement with each other, and represent mixtures of gravel and sand. The one exception to the above statement is TP11-5 which consisted of 14 % gravel, 42 % sand and 44 % fines.

Table 5-1: Summary of Sieve Analysis Results

	Site 5					Site 2				
Sieve Size	TP11-1	TP11-2	TP11-3	TP11-4	TP11-5	TP11-8	TP11-9	TP11-10	TP11-13	TP11-14
mm	Percent Passing									
125	100	100	100	100	100	100	100	100	100	100
100	88	100	86	89	100	100	100	100	100	100
80	84	100	79	89	100	100	96	100	100	100
50	80	85	70	80	100	95	91	100	93	100
40	73	82	65	75	98	91	86	96	86	99
25	64	75	58	63	95	75	77	89	79	90
20	58	70	55	56	93	67	73	83	75	84
16	54	64	51	51	92	60	68	77	71	79
12.5	52	62	49	46	90	53	64	71	69	74
10	49	58	47	42	89	48	60	66	67	68
5	43	48	41	32	86	36	51	51	62	53
2.5	38	41	37	24	84	27	42	44	59	42
1.25	35	34	33	18	82	18	35	38	53	36
0.630	30	25	26	13	78	8	22	27	18	28
0.315	18	13	15	7	65	3	8	4	4	7
0.160	11.9	9.1	12.3	4.5	55.9	2.1	4.5	1.5	2.5	2.1
0.080	8.1	7.4	9.8	3.3	44.2	0.8	2.9	1.1	1.7	1.4

5 mm Minus Gravel.

Figure 5-1 presents a graphical comparison of the sieve test results with the specified gradation for 5 mm minus gravel and Table 5-2 below provides a numerical representation of Figure 5-1. Oversized materials above 5 mm in size were removed for the comparison.

Figure 5-1: Sieve Test Results Compared to 5 mm Minus Gravel Specification

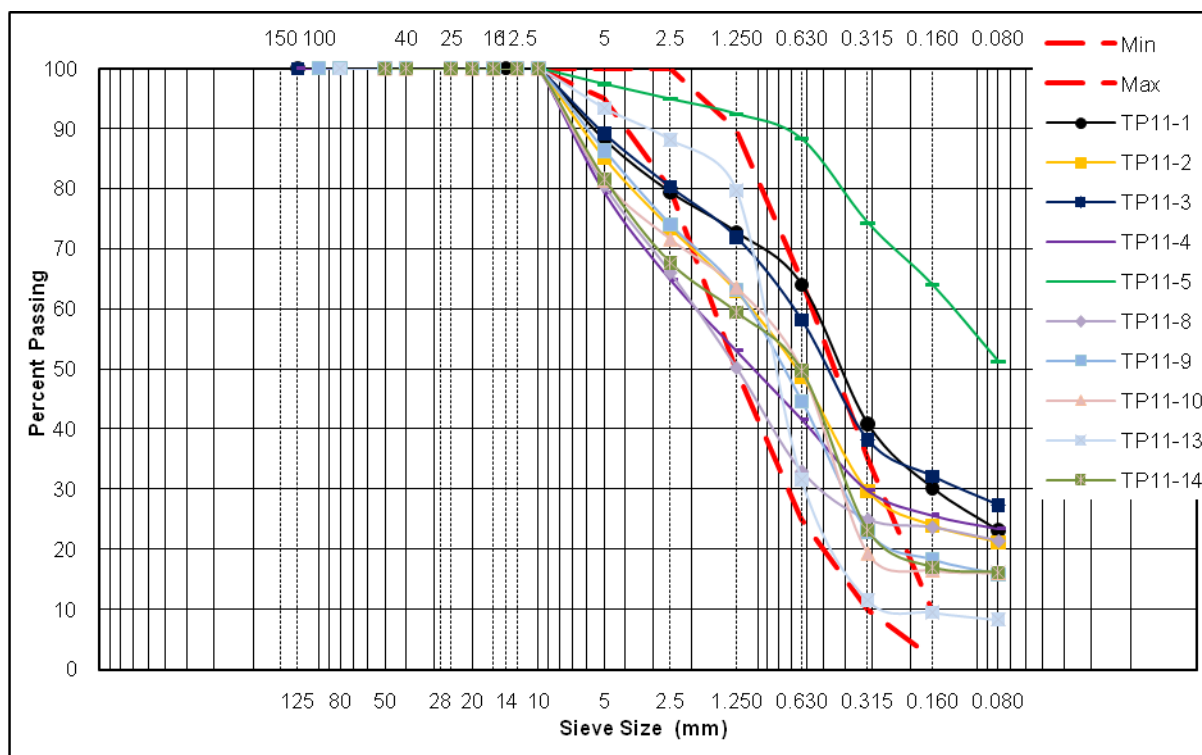


Table 5-2: 5 mm Minus Granular Specification and Modified Sieve Analysis Results

Sieve Size	Spec. Size	Site 5					Site 2				
		TP11-1	TP11-2	TP11-3	TP11-4	TP11-5	TP11-8	TP11-9	TP11-10	TP11-13	TP11-14
mm	5 mm Minus	Percent Passing									
10	100	100	100	100	100	100	100	100	100	100	100
5	95 to 100	88	85	89	79	97	81	86	81	93	82
2.5	80 to 100	79	73	80	65	95	66	74	72	88	68
1.25	50 to 90	73	63	72	53	92	50	63	64	80	59
0.630	25 to 65	64	49	58	42	88	33	45	50	32	50
0.315	10 to 35	41	30	38	30	74	25	23	19	12	23
0.160	2 to 10	30.2	23.9	32.1	25.7	64.1	23.7	18.2	16.4	9.5	17.0
0.080		23.1	21.1	27.3	23.5	51.3	21.5	15.8	16.0	8.3	16.1

*Note: All gravel particles greater than 5 mm in size were removed for the analysis.

Table 5-2 shows that the gradation of the samples taken in TP11-13 (with particles > 5 mm removed) generally lie within the specified gradation of the 5 mm minus gravel. The TP11-13 sample slightly falls short on the 5 mm specified percent passing envelope by 2 percent. The remaining samples deviate from the specification envelope mainly for fractions greater than 2.5 mm and smaller than 0.16 mm. For this specification, no more than 20% by weight should be larger than 1.25 mm, whereas the test pit samples have as much as 35% and 34% for Sites 5 and 2, respectively. No

more than 10% should be smaller in size than 0.160 mm, whereas the test pit samples have as much as 64% and 24% from site 5 and 6, respectively.

20 mm Minus Gravel.

Figure 5-2 presents a graphical comparison of the sieve test results with the specified gradation for 20 mm minus gravel and Table 5-3 below provides a numerical representation of Figure 5-2. Oversized materials above 20 mm in size were removed for the comparison.

Figure 5-2: Sieve Test Results Compared to 20 mm Minus Gravel

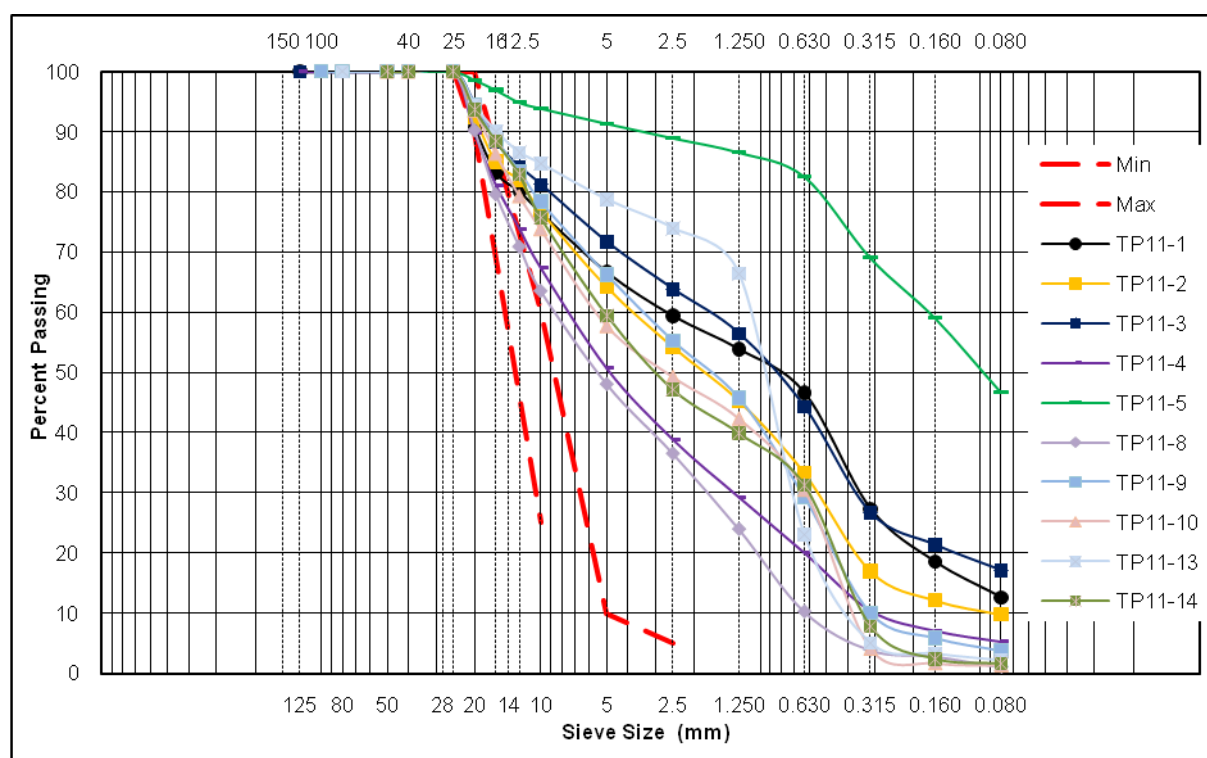


Table 5-3: 20 mm Minus Granular Specification and Modified Sieve Analysis Results

Sieve Size	Spec. Size	Site 5					Site 2				
		TP11-1	TP11-2	TP11-3	TP11-4	TP11-5	TP11-8	TP11-9	TP11-10	TP11-13	TP11-14
mm	25 mm Minus	Percent Passing									
25	100	100	100	100	100	100	100	100	100	100	100
20	90 to 100	91	93	95	90	99	90	95	94	94	94
16		83	85	88	81	97	80	89	86	90	88
12.5		80	82	84	74	95	71	83	79	87	83
10	25 to 60	77	77	81	67	94	64	78	74	85	76
5	0 to 10	67	64	72	51	91	48	66	58	79	59
2.5	0 to 5	59	54	64	39	89	37	55	49	74	47
1.25		54	45	56	29	87	24	46	42	66	40
0.630		47	33	44	20	83	10	29	30	23	31
0.315		27	17	27	10	69	4	10	4	5	8
0.160		18.5	12.2	21.3	7.1	59.1	2.8	5.9	1.6	3.2	2.3
0.080		12.6	9.8	17.1	5.3	46.7	1.1	3.8	1.3	2.1	1.6

*Note: All gravel particles greater than 20 mm in size were removed for the analysis.

Table 5-3 shows that the gradations of all of the samples vary significantly from the recommended gradation for the 20 mm minus gravel. Considerable screening of material within both of the sites would be required to remove most of the sand size particles to produce 20 mm minus gravel.

25 mm Minus Gravel.

Figure 5-3 shows a graph comparison of the sieve test results with the specified gradation for the 25 mm minus gravel and Table 5-4 provides a numerical representation of Figure 5-3. Oversized materials above 25 mm in size were removed for the comparison.

Figure 5-3: Sieve Test Results Compared to 25 mm Minus Gravel

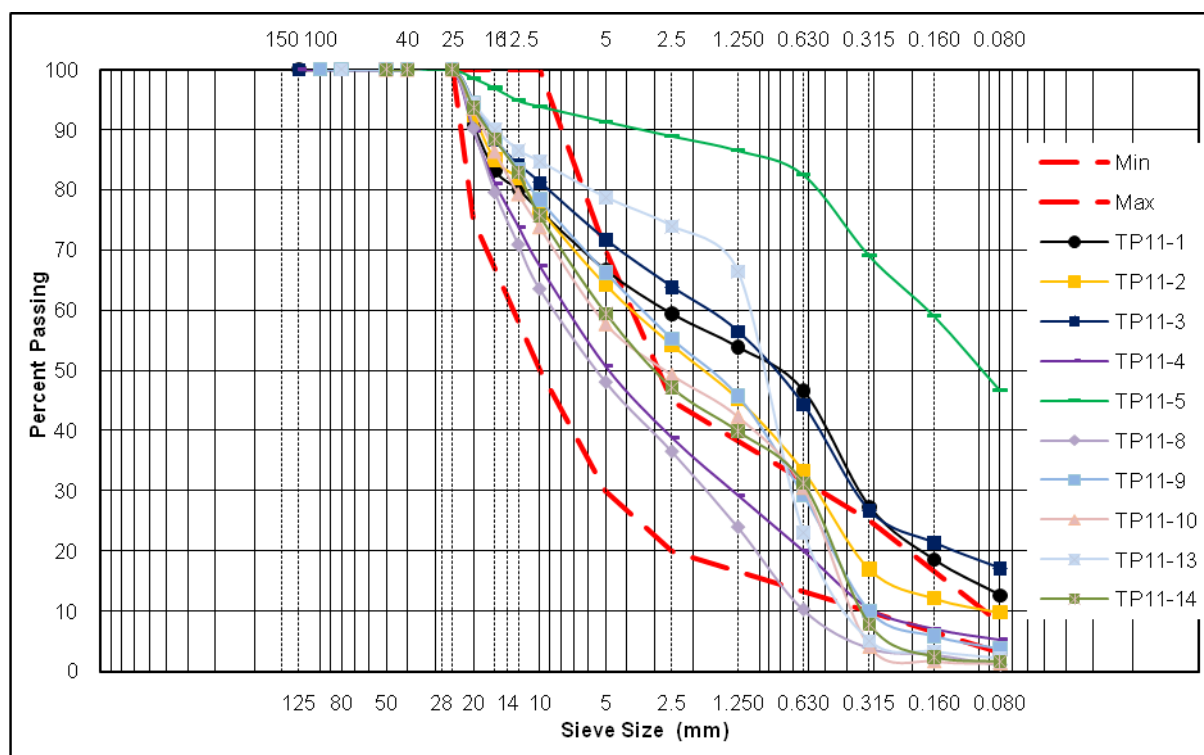


Table 5-4: 25 mm Minus Granular Specification and Modified Sieve Analysis Results

Sieve Size	Spec. Size	Site 5					Site 2				
		TP11-1	TP11-2	TP11-3	TP11-4	TP11-5	TP11-8	TP11-9	TP11-10	TP11-13	TP11-14
mm	25 mm Minus	Percent Passing									
25	100	100	100	100	100	100	100	100	100	100	100
20	75 to 100	91	93	95	90	99	90	95	94	94	94
16		83	85	88	81	97	80	89	86	90	88
12.5	50 to 100	80	82	84	74	95	71	83	79	87	83
10		77	77	81	67	94	64	78	74	85	76
5		67	64	72	51	91	48	66	58	79	59
2.5	20 to 45	59	54	64	39	89	37	55	49	74	47
1.25		54	45	56	29	87	24	46	42	66	40
0.630	10 to 25	47	33	44	20	83	10	29	30	23	31
0.315		27	17	27	10	69	4	10	4	5	8
0.160		19	12	21	7	59	3	6	2	3	2
0.080		13	10	17	5	47	1	4	1	2	1

*Note: All gravel particles greater than 25 mm in size were removed for the analysis.

The samples from test pits TP11-4 and TP11-9 fall within the specifications for 25 mm minus gravel. The samples from TP11-1, TP11-10 and TP11-14 are close to the specification and will require some screening to produce 25 mm minus gravel. The

remainder of the samples require considerable screening to eliminate the fine material in order to meet the specification.

75 mm Minus Gravel.

Figure 5-4 shows a graphical comparison of the sieve test results with the specified gradation for the 75 mm minus gravel and Table 5-5 shows a numerical comparison of the sieve test results with the specified gradation for the 75 mm minus gravel. Oversized materials above 75 mm in size were removed for the comparison.

Figure 5-4: Sieve Test Results Compared to 75 mm Minus Gravel

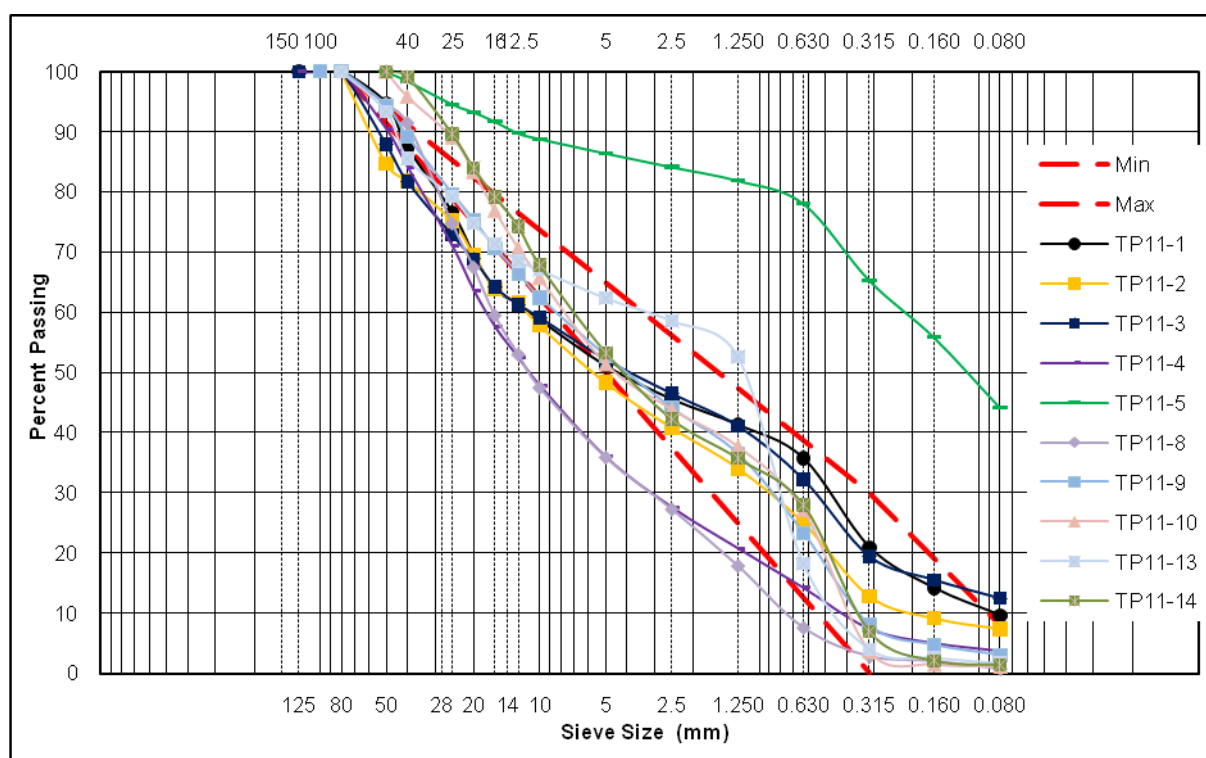


Table 5-5: 75 mm Minus Granular Specification and Modified Sieve Analysis Results

		Site 5					Site 2				
Sieve Size	Spec. Size	TP11-1	TP11-2	TP11-3	TP11-4	TP11-5	TP11-8	TP11-9	TP11-10	TP11-13	TP11-14
mm	75 mm Minus	Percent Passing									
80	100	100	100	100	100	100	100	100	100	100	100
50		95	85	88	90	100	95	94	100	93	100
40		87	82	82	84	98	91	89	96	86	99
25		77	75	73	71	95	75	80	89	79	90
20		70	70	69	64	93	67	75	83	75	84
16		64	64	64	58	92	60	71	77	71	79
12.5		61	62	61	52	90	53	66	71	69	74
10		59	58	59	48	89	48	62	66	67	68
5		51	48	52	36	86	36	53	51	62	53
2.5		46	41	46	28	84	27	44	44	59	42
1.25		41	34	41	21	82	18	36	38	53	36
0.630		36	25	32	14	78	8	23	27	18	28
0.315	0 – 30	21	13	19	7	65	3	8	4	4	7
0.160		14	9	16	5	55	2.1	5	1	3	2
0.080	0 – 8	10	7	12	4	44	0.8	3	1	2	1

*Note: All gravel particles greater than 75 mm in size were removed for the analysis.

The gradations for the samples taken from TP11-2, TP11-8, TP11-10, TP11-13 and TP11-14 lie within the relatively broad specified gradation envelope for the 75 mm minus gravel. All of the samples from Site 2 meet the specification, while only 2 of the 5 samples from Site 5 meet the specification. The samples from TP11-1, TP11-3 and TP11-5 contained 2%, 4% and 36% more fines (0.080 mm) than the specifications. The sample from TP11-5 contained 35% more sand (0.315 mm) than specifications.

6.0 GRANULAR MATERIAL RESERVES

AMEC did not implement a drill program to estimate the thickness of granular materials at Sites 2 and 5. However, using indirect morphological indicators (height and extent of the gravel ridges), it was considered that the thickness of the borrow materials likely corresponds to the minimum height of the gravel ridge relative to the tundra surface. In addition, GPS measurements of the lowest (tundra) and highest elevations (ridge summits) were taken for the two sites. The thickness of the deposits can be inferred from this data. The apparent thicknesses of the ridges are 5m and 12m for Site 2 and Site 5, respectively.

Site 2 has an area of approximately 70,000 m². The reserve of granular borrow materials is estimated to be approximately 158,000 m³ of sand and gravel. The upper portion of the deposit, approximately 0.2m thick, consisting of numerous cobbles and boulders were excluded from the reserve calculation. The borrow material can be used to produce 5 mm and 75 mm minus gravel relatively easily. The 20 mm and 25 mm

minus gravels can be produced by screening material to eliminate some of the finer fractions.

Site 5 has an area of approximately 29,000 m². The reserve of granular materials is estimated to be approximately 170,000 m³ of gravel (the top 0.5 m of the deposit consisted of approximately 40% cobbles and boulders and was excluded from the reserve calculation). The borrow material at this site can be used to produce 5 mm and 75 mm minus gravel relatively easily. The 20 mm and 25 mm minus gravels can be produced by screening to eliminate some of finer fractions.

In order to produce the required gravel specifications for 5 mm, 20 mm, 25 mm and 75 mm minus gravel screening must be done. Table 6-1 shows the average volume of oversized material at each site that would need to be screened. This assumes the top of the deposit, consisting of cobbles and boulders, has already been removed.

Table 6-1: Oversized Material Requiring Screening

Gravel Specification	Percent of Specification Oversized Material	
	Site 2	Site 5
5 mm	49.4	50.0
20 mm	23.6	33.6
25 mm	18.0	29.0
75 mm	0.8	9.6

At Site 2, nearly 50%, 24%, 18% and 1% of each cubic meter will need to be screened off and discarded to produce the 5 mm, 20 mm, 25 mm and 75 mm minus specification gravels, respectively. At Site 5, nearly 50%, 34%, 29% and 10% of each cubic meter will need to be screened off and discarded to produce the 5 mm, 20 mm, 25 mm and 75 mm minus specification gravels, respectively. Screening off the specification oversized material will increase the cost and time to produce the gravel.

7.0 RECOMMENDATIONS

It can be concluded that reserves from the identified borrow sites could supply the community's granular needs for 5 mm minus gravel, 20 mm minus gravel, 25 mm minus gravel and 75 mm minus gravel. Production of each gravel gradation will require considerable effort in regards to screening and, perhaps washing. It should be clear that crushing the source material to obtain the specified granular materials will also require considerable effort.

It is apparent that Site 2 contains less of the oversized material for each of the specified gravels than Site 5. As such, the cost to screen gravel to meet the specified gradations would be lower at Site 2. Once the oversized material has been removed, the material at Site 2 would require some further screening to meet the required

specifications. Site 2 has less gravel material available than Site 5; the difference in volumes is approximately 12,000 m³.

A cost comparison to produce the specified gravels for the selected sites and the blasting quarry, should be done. The cost of hauling the gravel, blasting, and screening/washing should be included in the cost comparison.

8.0 CLOSURE

This report was prepared on the basis of a review of available geotechnical reports, aerial photograph interpretation and the results of the laboratory test program performed on 10 gravel samples. Due to the limited field excavation and testing programs, the conclusions on the granular material reserves should be considered as preliminary.

This report has been prepared in accordance with generally accepted geotechnical engineering practices. No other warranty, express or implied, is made. The report has been prepared for The Government of Nunavut, Department of Community and Government Services, and their agents for the exclusive application to this project. The use of this report by any third party is done at the sole risk and responsibility of that party.

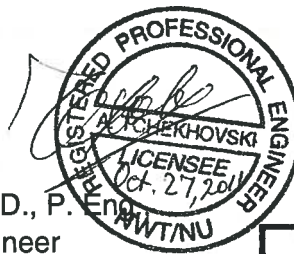
Yours truly,

AMEC Environment & Infrastructure
a Division of AMEC Americas Limited

Blake Brodland

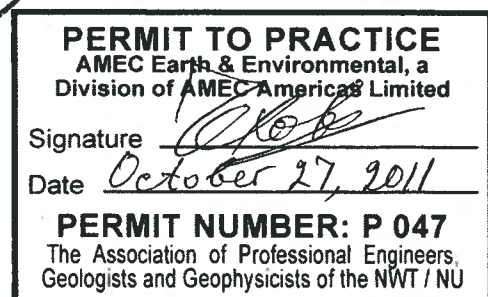
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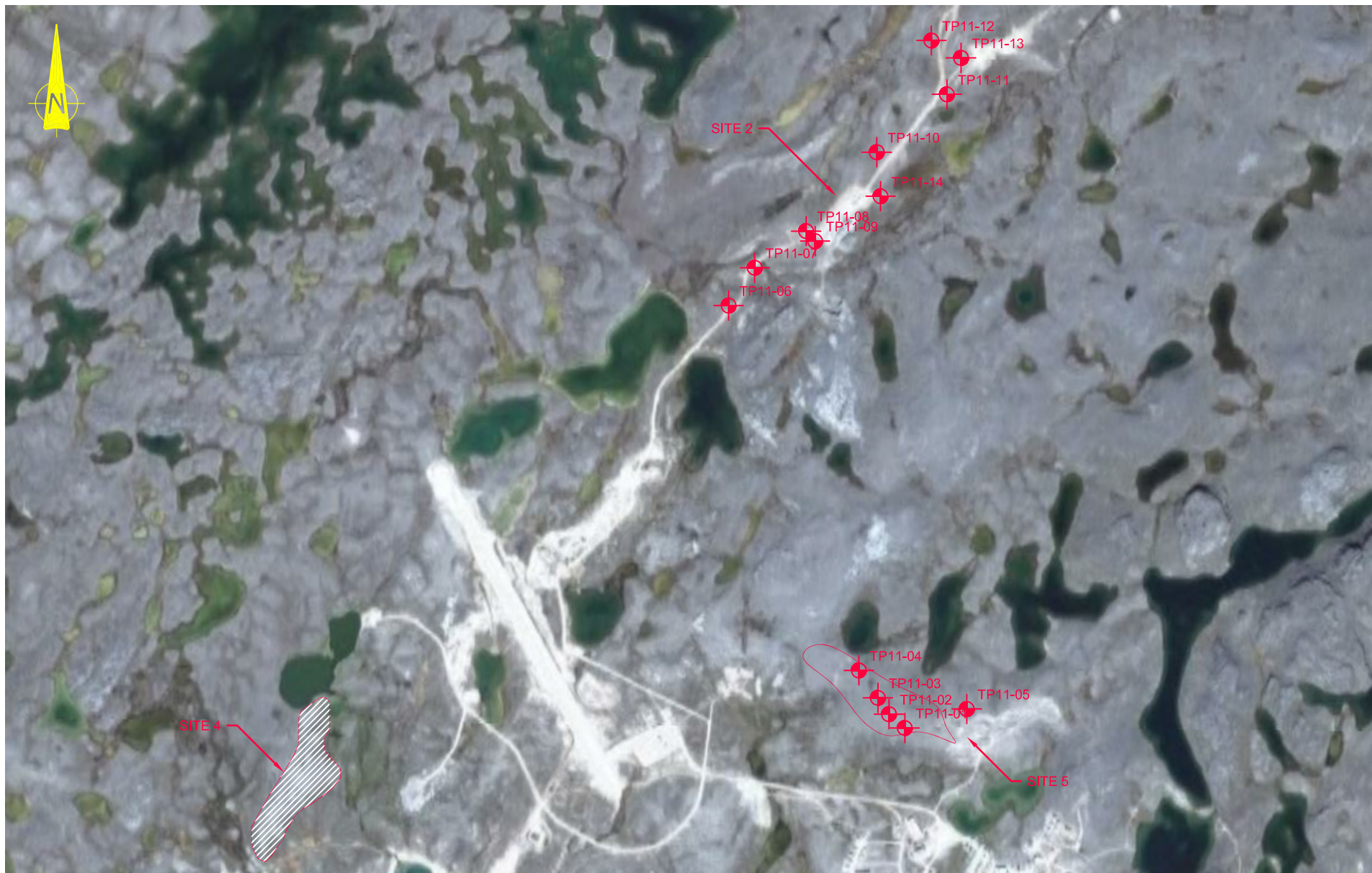
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Kevin Spencer, P. Eng.,
Associate Geotechnical Engineer



Appendix A

Figure 1 - Prospective Borrow Sources and Test Pit Location Plan Test Pit Logs Explanation of Terms and Symbols



SCALE
1:20 000
0 200 400 m



CLIENT:

THE GOVERNMENT OF NUNAVUT

PROJECT:

REVOLVING GRANULAR STOCKPILE STUDY

TITLE:

**PROSPECTIVE BORROW SOURCES AND
TEST PIT LOCATION PLAN**

DATE:

OCTOBER 2011

JOB No.:

YX00823

CAD FILE:

00823N01.dwg

FIGURE No.:

FIGURE 1

REV.

A

Project: Revolving Granular Stockpile Study		Area: Site 5		Test Pit No: TP11-01			
Client: The Government of Nunavut		Northing: 7715049		Project No: YX00823			
Test Pitting Equipment: Excavator		Easting: 478898		Elevation: 20.4 m			
SAMPLE TYPE ☒ Grab Sample							
BACKFILL TYPE ☐ Slough ☒ Soil Cuttings							
Depth (m)	PLASTIC M.C. LIQUID 20 40 60 80	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	COMMENTS	ELEVATION (m)
0			SAND AND GRAVEL - trace cobbles, trace boulders, loose, brown, moist		G1	Sieve Analysis: Gravel: 57% Sand: 34.9% Fines: 8.1% *Boulders and cobbles not sampled	20
			SAND - some gravel, some cobbles, dense, brown, moist				
			SAND - some cobbles, trace silt, dense, brown, wet				
			END OF TEST PIT at 1.8m -permafrost at bottom of test pit -Test pit backfilled with removed material -GPS accuracy 3m				
1							19
2							18
3							

YX00823_TALOYOAK.GPJ 11/10/25 02:20 PM (TEST PIT LOG)

Start Date: 9/1/2011

Completion Date: 9/1/2011

Completion Depth: 1.8 m

Logged By: BB

Reviewed By: AT

Draft #:

Page 1 of 1

Project: Revolving Granular Stockpile Study				Area: Site 5				Test Pit No: TP11-02			
Client: The Government of Nunavut				Northing: 7715100				Project No: YX00823			
Test Pitting Equipment: Excavator				Easting: 478840				Elevation: 24.1 m			
SAMPLE TYPE		☒ Grab Sample									
BACKFILL TYPE		☐ Slough ☒ Soil Cuttings									
Depth (m)	PLASTIC 20 40 60 80	M.C. ●	LIQUID	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	COMMENTS	ELEVATION (m)		
0					COBBLES AND BOULDERS- some gravel, loose, gneiss, dry			Sieve Analysis: Gravel: 52% Sand: 40.6% Fines: 7.4% *Boulders and cobbles not sampled	-24		
					SAND AND GRAVEL- trace cobbles, angular, loose, compact, brown, moist	G1			-23		
1					END OF TEST PIT at 1.5m -permafrost at bottom of test pit -Test pit backfilled with removed material -GPS accuracy 3m				-22		
2											
3											

Start Date: 9/1/2011

Completion Date: 9/1/2011

Completion Depth: 1.5 m

Logged By: BB

Reviewed By: AT

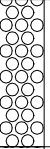
Draft #:

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Project: Revolving Granular Stockpile Study		Area: Site 5		Test Pit No: TP11-03			
Client: The Government of Nunavut		Northing: 7715160		Project No: YX00823			
Test Pitting Equipment: Excavator		Easting: 478799		Elevation: 25.3 m			
SAMPLE TYPE ☒ Grab Sample							
BACKFILL TYPE ☐ Slough ☒ Soil Cuttings							
Depth (m)	PLASTIC 20 40 60 80 M.C. LIQUID	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	COMMENTS	ELEVATION (m)
0			ORGANICS - some boulders, loose, black, moist				
			GRAVEL - sandy, some bobbles, trace boulders, trace silt, dense, light brown, moist				25
1							24
2			GRAVEL - sandy, very dense, grey, frozen	☒	G1	Sieve Analysis: Gravel: 59% Sand: 31.2% Fines: 9.8% *Boulders and cobbles not sampled	23
			END OF TEST PIT at 2.3m -permafrost at bottom of test pit -Test pit backfilled with removed material -GPS accuracy 3m				
3							

YX00823_TALOYOAK.GPJ 11/10/25 02:20 PM (TEST PIT LOG)



Project: Revolving Granular Stockpile Study		Area: Site 5		Test Pit No: TP11-04			
Client: The Government of Nunavut		Northing: 7715261		Project No: YX00823			
Test Pitting Equipment: Excavator		Easting: 478729		Elevation: 22.9 m			
SAMPLE TYPE ☒ Grab Sample							
BACKFILL TYPE ☐ Slough ☒ Soil Cuttings							
Depth (m)	PLASTIC M.C. LIQUID 20 40 60 80	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	COMMENTS	ELEVATION (m)
0			COBBLES AND BOULDERS - trace organics, loose, gneiss rock, dry				
			GRAVEL - sandy, compact, brown, moist				
					G1	Sieve Analysis: Gravel: 68% Sand: 28.7% Fines: 3.3% *Boulders and cobbles not sampled	22
1							
2			END OF TEST PIT at 1.8m -permafrost at bottom of test pit -Test pit backfilled with removed material -GPS accuracy 3m				21
3							20

YX00823_TALOYOAK.GPJ 11/10/25 02:20 PM (TEST PIT LOG)



Project: Revolving Granular Stockpile Study		Area: Site 5		Test Pit No: TP11-05			
Client: The Government of Nunavut		Northing: 7715119		Project No: YX00823			
Test Pitting Equipment: Excavator		Easting: 479126		Elevation: 17.4 m			
SAMPLE TYPE		☒ Grab Sample					
BACKFILL TYPE		☐ Slough ☒ Soil Cuttings					
Depth (m)	PLASTIC M.C. LIQUID 20 40 60 80	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	COMMENTS	ELEVATION (m)
0			ORGANICS AND COBBLES- bouldery, loose, black organics, gneiss rocks, moist				
			SAND AND SILT- some gravel, trace cobbles, compact, light yellow-brown, dry				17
1					G1	Sieve Analysis: Gravel: 14% Sand: 41.8% Fines: 44.2% *Boulders and cobbles not sampled	
							16
2			END OF TEST PIT at 1.5m -permafrost at bottom of test pit -Test pit backfilled with removed material -GPS accuracy 3m				
							15
3							

Start Date: 9/1/2011

Completion Date: 9/1/2011

Completion Depth: 1.5 m

Logged By: BB

Reviewed By: AT

Draft #:

Page 1 of 1

Project: Revolving Granular Stockpile Study		Area: Site 2		Test Pit No: TP11-06				
Client: The Government of Nunavut		Northing: 7716603		Project No: YX00823				
Test Pitting Equipment: Loader		Easting: 478250		Elevation: 21 m				
SAMPLE TYPE ☒ Grab Sample								
BACKFILL TYPE ☐ Slough ☒ Soil Cuttings								
Depth (m)	PLASTIC M.C. LIQUID 	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	COMMENTS	ELEVATION (m)	
0			ORGANICS AND SAND - trace gravel, loose, brown, dry					
			SAND - trace gravel, loose, brown, dry					
1			END OF TEST PIT at 1.0m -loader refusal -Test pit backfilled with removed material -GPS accuracy 3m					20
2								19
3								

YX00823_TALOYOAK.GPJ 11/10/25 02:20 PM (TEST PIT LOG)



Project: Revolving Granular Stockpile Study		Area: Site 2		Test Pit No: TP11-07			
Client: The Government of Nunavut		Northing: 7716742		Project No: YX00823			
Test Pitting Equipment: Loader		Easting: 478346		Elevation: 22.3 m			
SAMPLE TYPE ☒ Grab Sample							
BACKFILL TYPE ☐ Slough ☒ Soil Cuttings							
Depth (m)	PLASTIC 20 40 60 80 M.C. LIQUID	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	COMMENTS	ELEVATION (m)
0			ORGANICS AND SAND - trace gravel, loose, brown, dry				
			SAND - trace gravel, loose, brown, dry				22
			END OF TEST PIT at 0.6m -loader refusal -Test pit backfilled with removed material -GPS accuracy 3m				
1							21
2							20
3							

Start Date: 9/1/2011

Completion Date: 9/1/2011

Completion Depth: 0.6 m

Logged By: BB

Reviewed By: AT

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YX00823_TALOYOAK.GPJ 11/10/25 02:20 PM (TEST PIT LOG)

Project: Revolving Granular Stockpile Study		Area: Site 2		Test Pit No: TP11-08			
Client: The Government of Nunavut		Northing: 7716877		Project No: YX00823			
Test Pitting Equipment: Loader		Easting: 478535		Elevation: 28 m			
SAMPLE TYPE ☒ Grab Sample							
BACKFILL TYPE ☐ Slough ☒ Soil Cuttings							
Depth (m)	PLASTIC M.C. LIQUID 20 40 60 80	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	COMMENTS	ELEVATION (m)
0			SAND AND GRAVEL- trace organics, loose, subrounded, light to dark brown, dry				
			SAND AND GRAVEL- trace cobbles, loose, subrounded, light to dark brown, dry				
			END OF TEST PIT at 0.6m -loader refusal -Test pit backfilled with removed material -GPS accuracy 3m		G1	Sieve Analysis: Gravel: 64% Sand: 35.2% Fines: 0.8% *Boulders and cobbles not sampled	
1							27
2							26
3							

YX00823_TALOYOAK.GPJ 11/10/25 02:20 PM (TEST PIT LOG)

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Start Date: 9/1/2011

Completion Date: 9/1/2011

Completion Depth: 0.6 m

Logged By: BB

Reviewed By: AT

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Page 1 of 1

Project: Revolving Granular Stockpile Study		Area: Site 2		Test Pit No: TP11-09			
Client: The Government of Nunavut		Northing: 7716840		Project No: YX00823			
Test Pitting Equipment: Loader		Easting: 478568		Elevation: 25.6 m			
SAMPLE TYPE ☒ Grab Sample							
BACKFILL TYPE ☐ Slough ☒ Soil Cuttings							
Depth (m)	PLASTIC 20 40 60 80 M.C. LIQUID 	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	COMMENTS	ELEVATION (m)
0			SAND AND GRAVEL- trace organics, loose, subrounded, light to dark brown, dry				
			SAND AND GRAVEL- trace cobbles, loose, subrounded, orange-brown, dry				
			END OF TEST PIT at 0.6m -loader refusal -Test pit backfilled with removed material -GPS accuracy 3m		G1	Sieve Analysis: Gravel: 49% Sand: 48.1% Fines: 2.9% *Boulders and cobbles not sampled	25
1							
							24
2							
							23
3							

YX00823_TALOYOAK.GPJ 11/10/25 02:20 PM (TEST PIT LOG)

amec

Start Date: 9/1/2011

Logged By: BB

Completion Date: 9/1/2011

Reviewed By: AT

Completion Depth: 0.6 m

Draft #:

Page 1 of 1

Project: Revolving Granular Stockpile Study						Area: Site 2						Test Pit No: TP11-10					
Client: The Government of Nunavut						Northing: 7717167						Project No: YX00823					
Test Pitting Equipment: Loader						Easting: 478795						Elevation: 22.9 m					
SAMPLE TYPE ☒ Grab Sample																	
BACKFILL TYPE ☐ Slough ☒ Soil Cuttings																	
Depth (m)	PLASTIC M.C. LIQUID 20 40 60 80				SOIL SYMBOL	SOIL DESCRIPTION						SAMPLE TYPE	SAMPLE NO	COMMENTS		ELEVATION (m)	
0						SAND AND GRAVEL - some organics, loose, dark brown, moist						☒	G1	Sieve Analysis: Gravel: 49% Sand: 49.9% Fines: 1.1% *Boulders and cobbles not sampled		22	
						SAND AND GRAVEL - compact, subrounded, light brown, dry											
						SAND AND GRAVEL - compact, subrounded, well sorted, white, dry											
1						END OF TEST PIT at 0.9m -loader refusal -Test pit backfilled with removed material -GPS accuracy 3m											
2																21	
3																20	

Start Date: 9/1/2011

Completion Date: 9/1/2011

Completion Depth: 0.9 m

Logged By: BB

Reviewed By: AT

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Page 1 of 1

Project: Revolving Granular Stockpile Study		Area: Site 2		Test Pit No: TP11-11	
Client: The Government of Nunavut		Northing: 7717380		Project No: YX00823	
Test Pitting Equipment: Loader		Easting: 479053		Elevation: 27.1 m	
SAMPLE TYPE ☒ Grab Sample					
BACKFILL TYPE ☐ Slough ☒ Soil Cuttings					
Depth (m)	PLASTIC M.C. LIQUID 	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO
0			SAND - some organics, trace gravel, well sorted, coarse, stratified, loose, white, dry SAND - trace gravel, well sorted, coarse, stratified, loose, white, dry		
1			END OF TEST PIT at 0.6m -loader refusal -Test pit backfilled with removed material -GPS accuracy 3m		
2					
3					
			Start Date: 9/1/2011 Completion Date: 9/1/2011 Completion Depth: 0.6 m		
			Logged By: BB Reviewed By: AT Draft #:		

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Project: Revolving Granular Stockpile Study		Area: Site 2		Test Pit No: TP11-12			
Client: The Government of Nunavut		Northing: 7717578		Project No: YX00823			
Test Pitting Equipment: Loader		Easting: 478996		Elevation: 23.8 m			
SAMPLE TYPE ☒ Grab Sample							
BACKFILL TYPE ☐ Slough ☒ Soil Cuttings							
Depth (m)	PLASTIC M.C. LIQUID 	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	COMMENTS	ELEVATION (m)
0			SAND - some organics, trace gravel, loose, well sorted, coarse, stratified, white, dry				
			SAND - trace gravel, loose, well sorted, coarse, stratified, white, dry				
			END OF TEST PIT at 0.7m -loader refusal -Test pit backfilled with removed material -GPS accuracy 3m				23
1							
							22
2							
							21
3							

YX00823_TALOYOAK.GPJ 11/10/25 02:20 PM (TEST PIT LOG)

Start Date: 9/1/2011
 Completion Date: 9/1/2011
 Completion Depth: 0.7 m

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 Draft #:

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Project: Revolving Granular Stockpile Study		Area: Site 2		Test Pit No: TP11-13	
Client: The Government of Nunavut		Northing: 7717514		Project No: YX00823	
Test Pitting Equipment: Loader		Easting: 479105		Elevation: 33.5 m	
SAMPLE TYPE ☒ Grab Sample					
BACKFILL TYPE ☐ Slough ☒ Soil Cuttings					
Depth (m)	PLASTIC M.C. LIQUID 20 40 60 80	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE SAMPLE NO COMMENTS ELEVATION (m)	
0			SAND- some gravel, some organics	G1 Sieve Analysis: Gravel: 38% Sand: 60.3% Fines: 1.7% *Boulders and cobbles not sampled	
			SAND AND GRAVEL- some cobbles, loose, light brown, dry		
1			END OF TEST PIT at 0.8m -loader refusal -Test pit backfilled with removed material -GPS accuracy 3m		
2					
3					

Project: Revolving Granular Stockpile Study		Area: Site 2		Test Pit No: TP11-14					
Client: The Government of Nunavut		Northing: 7717005		Project No: YX00823					
Test Pitting Equipment: Loader		Easting: 478809		Elevation: 27.4 m					
SAMPLE TYPE ☒ Grab Sample									
BACKFILL TYPE ☐ Slough ☒ Soil Cuttings									
Depth (m)	PLASTIC M.C. LIQUID 20 40 60 80	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	COMMENTS	ELEVATION (m)		
0			SAND- some gravel, loose, dark brown, dry						
			SAND AND GRAVEL- loose, uniform, layered, white, dry						27
			END OF TEST PIT at 0.7m -loader refusal on gravel layer -Test pit backfilled with removed material -GPS accuracy 3m	☒	G1	Sieve Analysis: Gravel: 47% Sand: 51.6% Fines: 1.4% *Boulders and cobbles not sampled		26	
1									
									25
2									
3									

YX00823_TALOYOAK.GPJ 11/10/25 02:20 PM (TEST PIT LOG)

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Start Date: 9/1/2011

Logged By: BB

Completion Date: 9/1/2011

Reviewed By: AT

Completion Depth: 0.7 m

Draft #: Page 1 of 1

EXPLANATION OF TERMS AND SYMBOLS

The terms and symbols used on the borehole logs to summarize the results of field investigation and subsequent laboratory testing are described in these pages.

It should be noted that materials, boundaries and conditions have been established only at the borehole locations at the time of investigation and are not necessarily representative of subsurface conditions elsewhere across the site.

TEST DATA

Data obtained during the field investigation and from laboratory testing are shown at the appropriate depth interval.

Abbreviations, graphic symbols, and relevant test method designations are as follows:

*C	Consolidation test	*ST	Swelling test
D _R	Relative density	TV	Torvane shear strength
*k	Permeability coefficient	VS	Vane shear strength
*MA	Mechanical grain size analysis and hydrometer test	w	Natural Moisture Content (ASTM D2216)
N	Standard Penetration Test (CSA A119.1-60)	w _l	Liquid limit (ASTM D 423)
N _d	Dynamic cone penetration test	w _p	Plastic Limit (ASTM D 424)
NP	Non plastic soil	E _f	Unit strain at failure
pp	Pocket penetrometer strength	γ	Unit weight of soil or rock
*q	Triaxial compression test	γ _d	Dry unit weight of soil or rock
q _u	Unconfined compressive strength	ρ	Density of soil or rock
*SB	Shearbox test	ρ _d	Dry Density of soil or rock
SO ₄	Concentration of water-soluble sulphate	C _u	Undrained shear strength
		→	Seepage
		▼	Observed water level

* The results of these tests are usually reported separately

Soils are classified and described according to their engineering properties and behaviour.

The soil of each stratum is described using the Unified Soil Classification System¹ modified slightly so that an inorganic clay of "medium plasticity" is recognized.

The modifying adjectives used to define the actual or estimated percentage range by weight of minor components are consistent with the Canadian Foundation Engineering Manual².

Relative Density and Consistency:

Cohesionless Soils		Cohesive Soils		
Relative Density	SPT (N) Value	Consistency	Undrained Shear Strength c _u (kPa)	Approximate SPT (N) Value
Very Loose	0-4	Very Soft	0-12	0-2
Loose	4-10	Soft	12-25	2-4
Compact	10-30	Firm	25-50	4-8
Dense	30-50	Stiff	50-100	8-15
Very Dense	>50	Very Stiff	100-200	15-30
		Hard	>200	>30

Standard Penetration Resistance ("N" value)

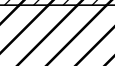
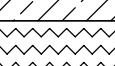
The number of blows by a 63.6kg hammer dropped 760 mm to drive a 50 mm diameter open sampler attached to "A" drill rods for a distance of 300 mm after an initial penetration of 150 mm.

¹ "Unified Soil Classification System", Technical Memorandum 36-357 prepared by Waterways Experiment Station, Vicksburg, Mississippi, Corps of Engineers, U.S. Army. Vol. 1 March 1953.

² "Canadian Foundation Engineering Manual", 3rd Edition, Canadian Geotechnical Society, 1992.

MODIFIED UNIFIED CLASSIFICATION SYSTEM FOR SOILS

MAJOR DIVISION			GROUP SYMBOL	GRAPH SYMBOL	COLOUR CODE	TYPICAL DESCRIPTION	LABORATORY CLASSIFICATION CRITERIA	
COARSE GRAINED SOILS (MORE THAN HALF BY WEIGHT LARGER THAN 75µm)	GRAVELS MORE THAN HALF THE COARSE FRACTION LARGER THAN 4.75mm	CLEAN GRAVELS (TRACE OR NO FINES)	GW		RED	WELL GRADED GRAVELS, GRAVEL-SAND MIXTURES, LITTLE OR NO FINES	$C_U = \frac{D_{60}}{D_{10}} > 4$; $C_C = \frac{(D_{30})^2}{D_{10} \times D_{60}} = 1 \text{ to } 3$	
			GP		RED	POORLY GRADED GRAVELS, GRAVEL-SAND MIXTURES, LITTLE OR NO FINES	NOT MEETING ABOVE REQUIREMENTS	
		DIRTY GRAVELS (WITH SOME FINES)	GM		YELLOW	SILTY GRAVELS, GRAVEL-SAND-SILT MIXTURES	CONTENT OF FINES EXCEEDS 12 %	ATTERBERG LIMITS BELOW "A" LINE OR P.I. LESS THAN 4
			GC		YELLOW	CLAYEY GRAVELS, GRAVEL-SAND-CLAY MIXTURES		ATTERBERG LIMITS ABOVE "A" LINE P.I. MORE THAN 7
	SANDS MORE THAN HALF THE COARSE FRACTION SMALLER THAN 4.75mm	CLEAN SANDS (TRACE OR NO FINES)	SW		RED	WELL GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES	$C_U = \frac{D_{60}}{D_{10}} > 6$; $C_C = \frac{(D_{30})^2}{D_{10} \times D_{60}} = 1 \text{ to } 3$	
			SP		RED	POORLY GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES	NOT MEETING ABOVE REQUIREMENTS	
		DIRTY SANDS (WITH SOME FINES)	SM		YELLOW	SILTY SANDS, SAND-SILT MIXTURES	CONTENT OF FINES EXCEEDS 12 %	ATTERBERG LIMITS BELOW "A" LINE OR P.I. LESS THAN 4
			SC		YELLOW	CLAYEY SANDS, SAND-CLAY MIXTURES		ATTERBERG LIMITS ABOVE "A" LINE P.I. MORE THAN 7

FINE-GRAINED SOILS (MORE THAN HALF BY WEIGHT SMALLER THAN 75µm)	SILTS BELOW "A" LINE NEGLECTIBLE ORGANIC CONTENT	$W_L < 50\%$	ML		GREEN	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY SANDS OF SLIGHT PLASTICITY	CLASSIFICATION IS BASED UPON PLASTICITY CHART (SEE BELOW)	
		$W_L < 50\%$	MH		BLUE	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS, FINE SANDS OR SILTY SOILS		
	CLAYS ABOVE "A" LINE NEGLECTIBLE ORGANIC CONTENT	$W_L < 30\%$	CL		GREEN	INORGANIC CLAYS OF LOW PLASTICITY, GRAVELLY, SANDY OR SILTY CLAYS, LEAN CLAYS		
		$30\% < W_L < 50\%$	CI		GREEN- BLUE	INORGANIC CLAYS OF MEDIUM PLASTICITY, SILTY CLAYS		
		$W_L > 50\%$	CH		BLUE	INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS		
	ORGANIC SILTS & CLAYS BELOW "A" LINE	$W_L < 50\%$	OL		GREEN	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY	WHENEVER THE NATURE OF THE FINES CONTENT HAS NOT BEEN DETERMINED, IT IS DESIGNATED BY THE LETTER "F", E.G. SF IS A MIXTURE OF SAND WITH SILT OR CLAY	
		$W_L > 50\%$	OH		BLUE	ORGANIC CLAYS OF HIGH PLASTICITY		
	HIGHLY ORGANIC SOILS			Pt		ORANGE	PEAT AND OTHER HIGHLY ORGANIC SOILS	STRONG COLOUR OR ODOUR, AND OFTEN FIBEROUS TEXTURE

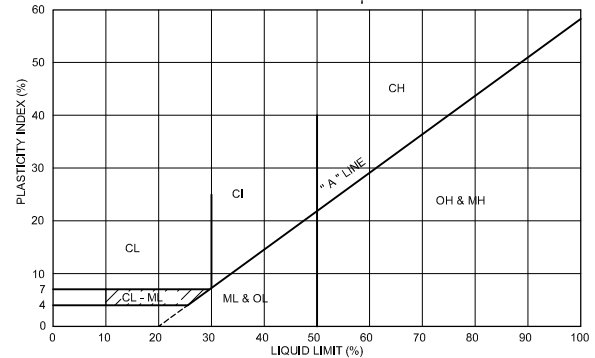
SPECIAL SYMBOLS

LIMESTONE		OILSAND	
SANDSTONE		SHALE	
SILTSTONE		FILL (UNDIFFERENTIATED)	

SOIL COMPONENTS

FRACTION	U.S. STANDARD SIEVE SIZE		DEFINING RANGES OF PERCENTAGE BY WEIGHT OF MINOR COMPONENTS	
	PASSING	RETAINED	PERCENT	DESCRIPTOR
GRAVEL	76mm	19mm	35-50	AND
	COARSE	19mm		
SAND	4.75mm	2.00mm	20-35	Y/EY
	FINE	4.75mm		
FINES (SILT OR CLAY BASED ON PLASTICITY)	75µm		1-10	TRACE

PLASTICITY CHART FOR SOILS PASSING 425 µm SIEVE



NOTES:

- ALL SIEVE SIZES MENTIONED ON THIS CHART ARE U.S. STANDARD A.S.T.M. E.11
- COARSE GRAIN SOILS WITH 5 TO 12% FINES GIVEN COMBINED GROUP SYMBOLS, E.G. GW-GC IS A WELL GRADED GRAVEL SAND MIXTURE WITH CLAY BINDER BETWEEN 5 AND 12% FINES.

OVERSIZED MATERIAL

ROUNDED OR SUBROUNDED: COBBLES 76mm TO 200mm BOULDERS > 200mm	NOT ROUNDED: ROCK FRAGMENTS > 76mm ROCKS > 0.76 CUBIC METRE IN VOLUME
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Appendix B

Laboratory Test Results (sieve analyses)

SIEVE ANALYSIS REPORT

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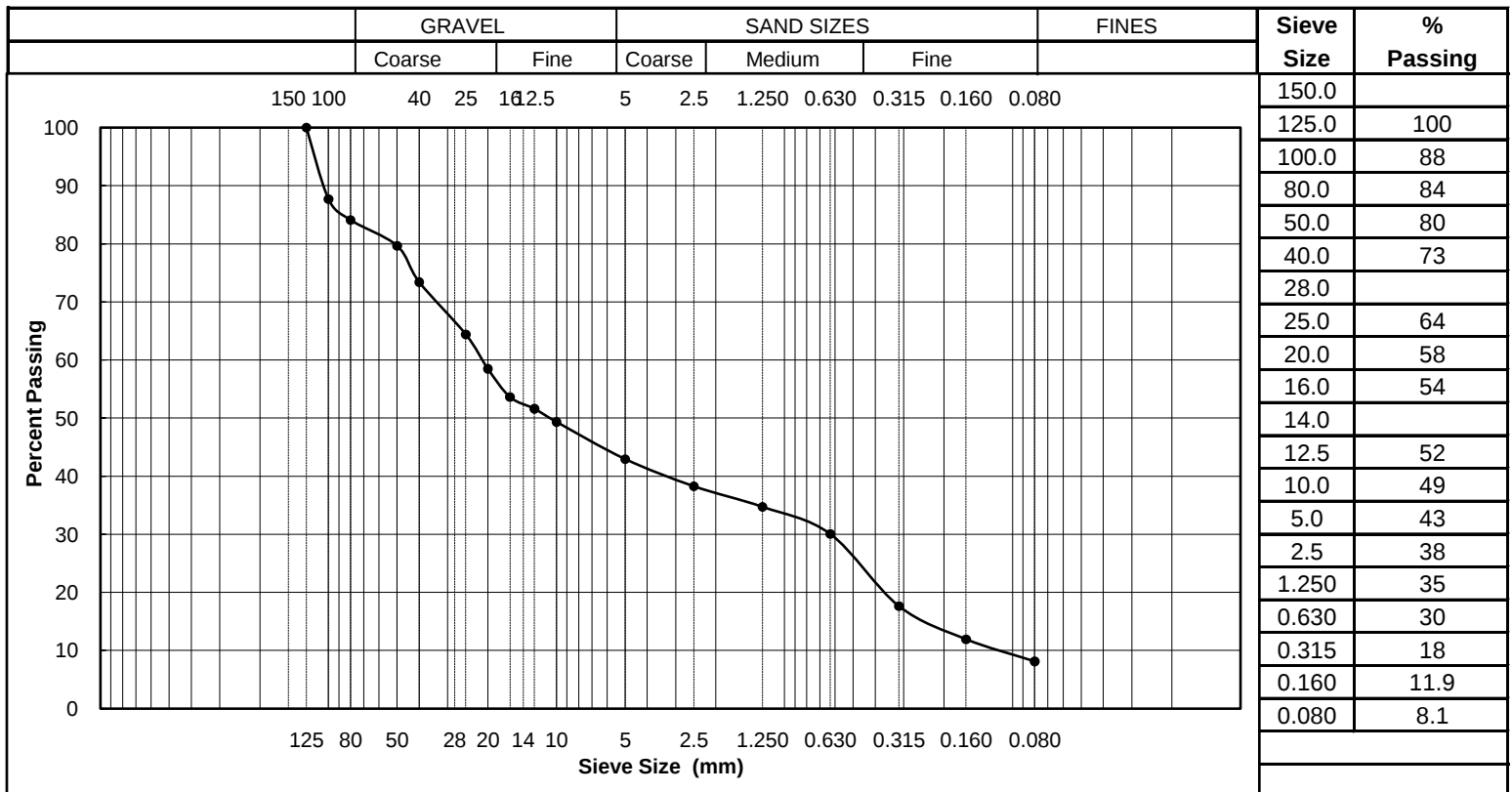
To: GNWT, Dept. of Community and Government Services
P.O Bag 200
Cambridge Bay, NU
X0B 0C0

Office : Calgary
Project No: YX00823
Client : GNWT, Dep. CGS
Copies to :

Attn: Stewart Rostant, Project Officer

Project: Revolving Granular Stockpile Study, Kitikmeot Region

Test Pit # TP11-01 **Sample Type:** **Sampled By:** AMEC
Date Sampled: N/A **Date Received:** Sept 7, 2011 **Date Tested:** Sept 7, 2011



Source: TP11-01, G1 @ 0.3 - 0.5 m

Sample Description:

Comments :

Gravel 57

Sand 35

Fines 8

AMEC Earth & Environmental
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Per: _____

SIEVE ANALYSIS REPORT

AMEC Earth & Environmental
a Division of AMEC Americas Limited



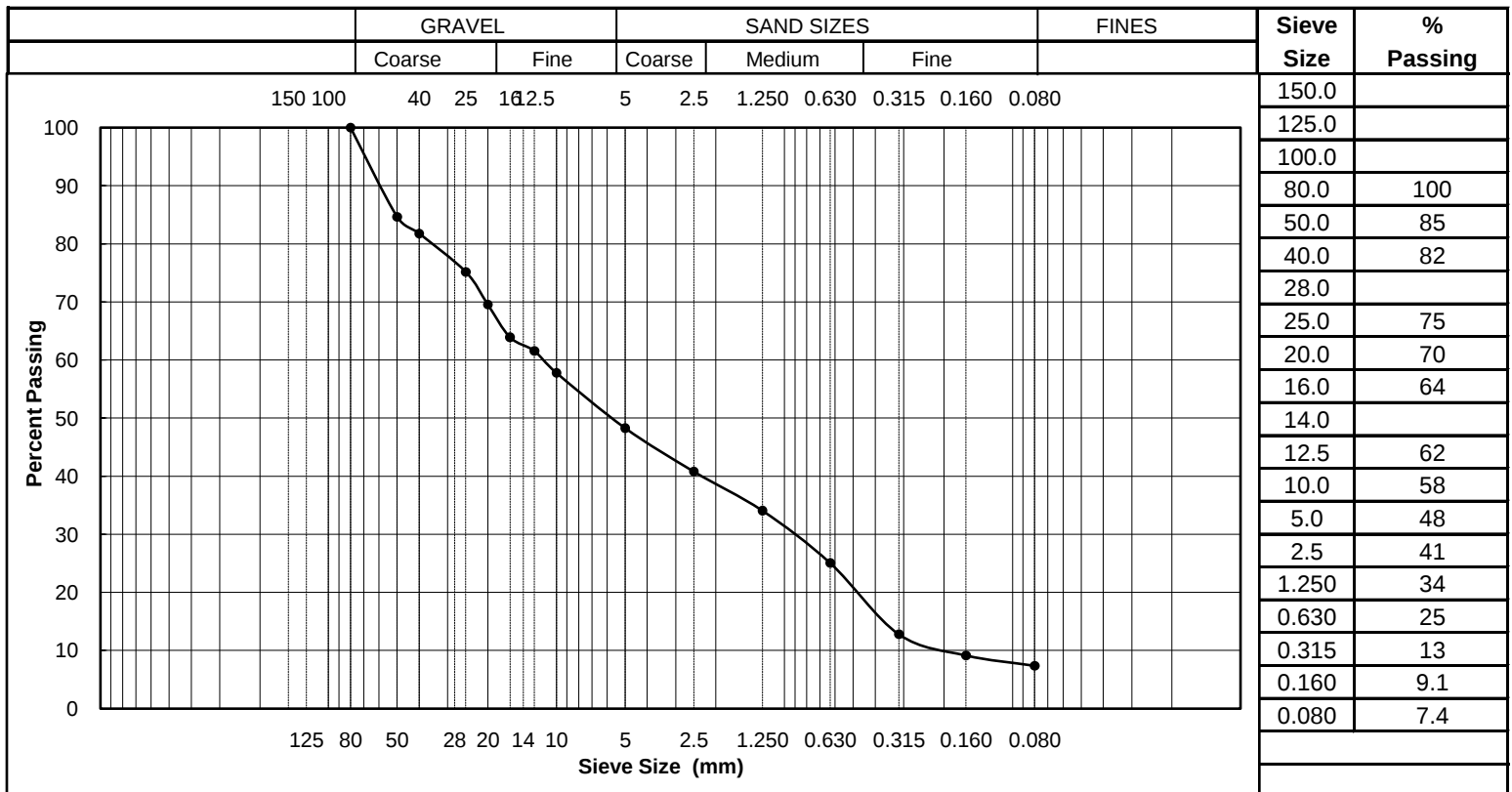
To: GNWT, Dept. of Community and Government Services
P.O Bag 200
Cambridge Bay, NU
X0B 0C0

Office : Calgary
Project No: YX00823
Client : GNWT, Dep. CGS
Copies to :

Attn: Stewart Rostant, Project Officer

Project: Revolving Granular Stockpile Study, Kitikmeot Region

Test Pit # TP11-02 **Sample Type:** **Sampled By:** AMEC
Date Sampled: N/A **Date Received:** Sept 7, 2011 **Date Tested:** Sept 7, 2011



Source: TP11-02, G1 @ 0.3 - 0.5 m

Sample Description:

Comments :

Gravel 52

Sand 41

Fines 7

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Per: _____

SIEVE ANALYSIS REPORT

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a Division of AMEC Americas Limited



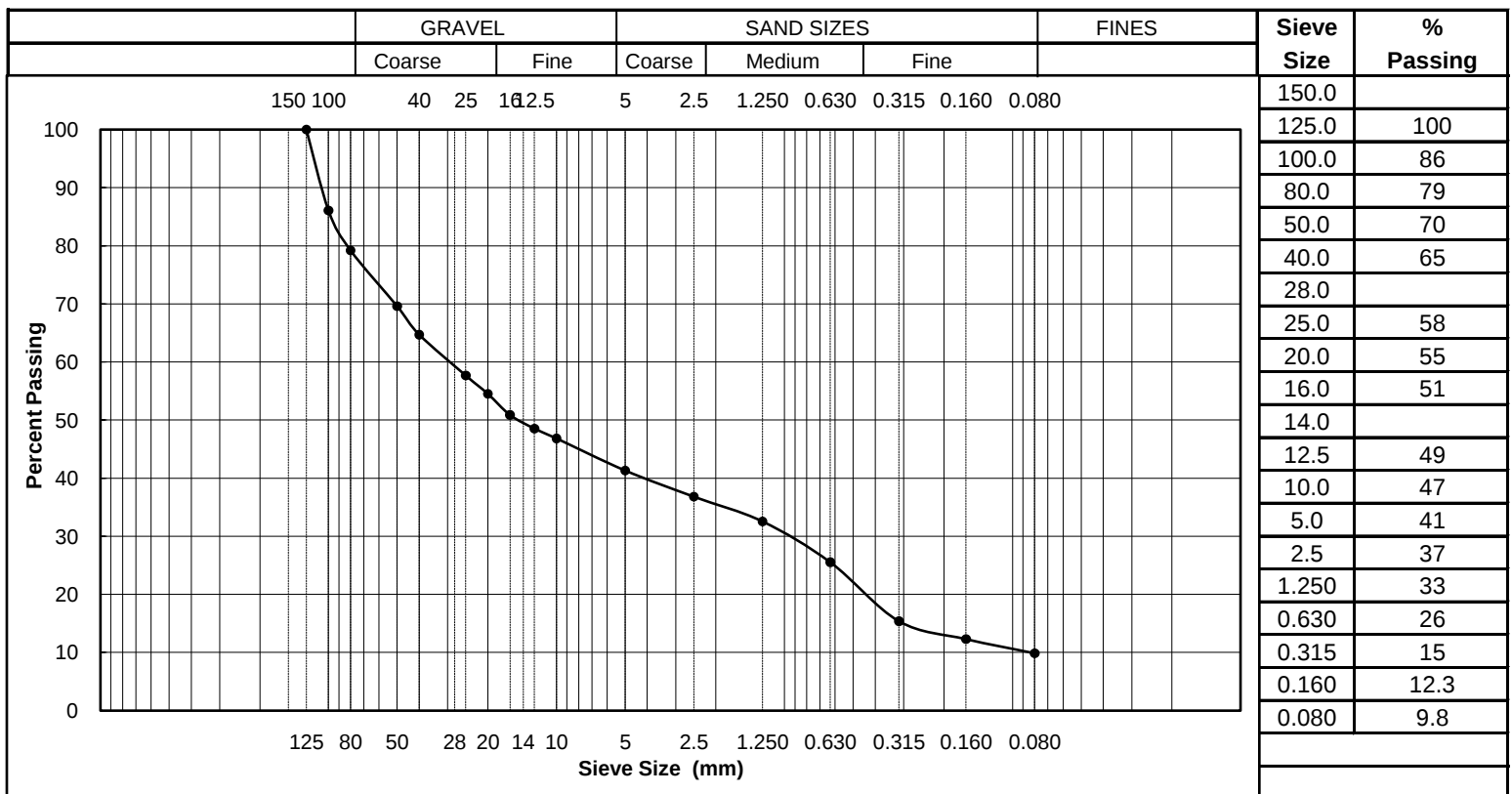
To: GNWT, Dept. of Community and Government Services
P.O Bag 200
Cambridge Bay, NU
X0B 0C0

Office : Calgary
Project No: YX00823
Client : GNWT, Dep. CGS
Copies to :

Attn: Stewart Rostant, Project Officer

Project: Revolving Granular Stockpile Study, Kitikmeot Region

Test Pit # TP11-03 **Sample Type:** **Sampled By:** AMEC
Date Sampled: N/A **Date Received:** Sept 7, 2011 **Date Tested:** Sept 7, 2011



Source: TP11-03, G1 @ 2.0 - 2.3 m

Sample Description:

Comments :

Gravel 59

Sand 31

Fines 10

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Per: _____

SIEVE ANALYSIS REPORT

AMEC Earth & Environmental
a Division of AMEC Americas Limited



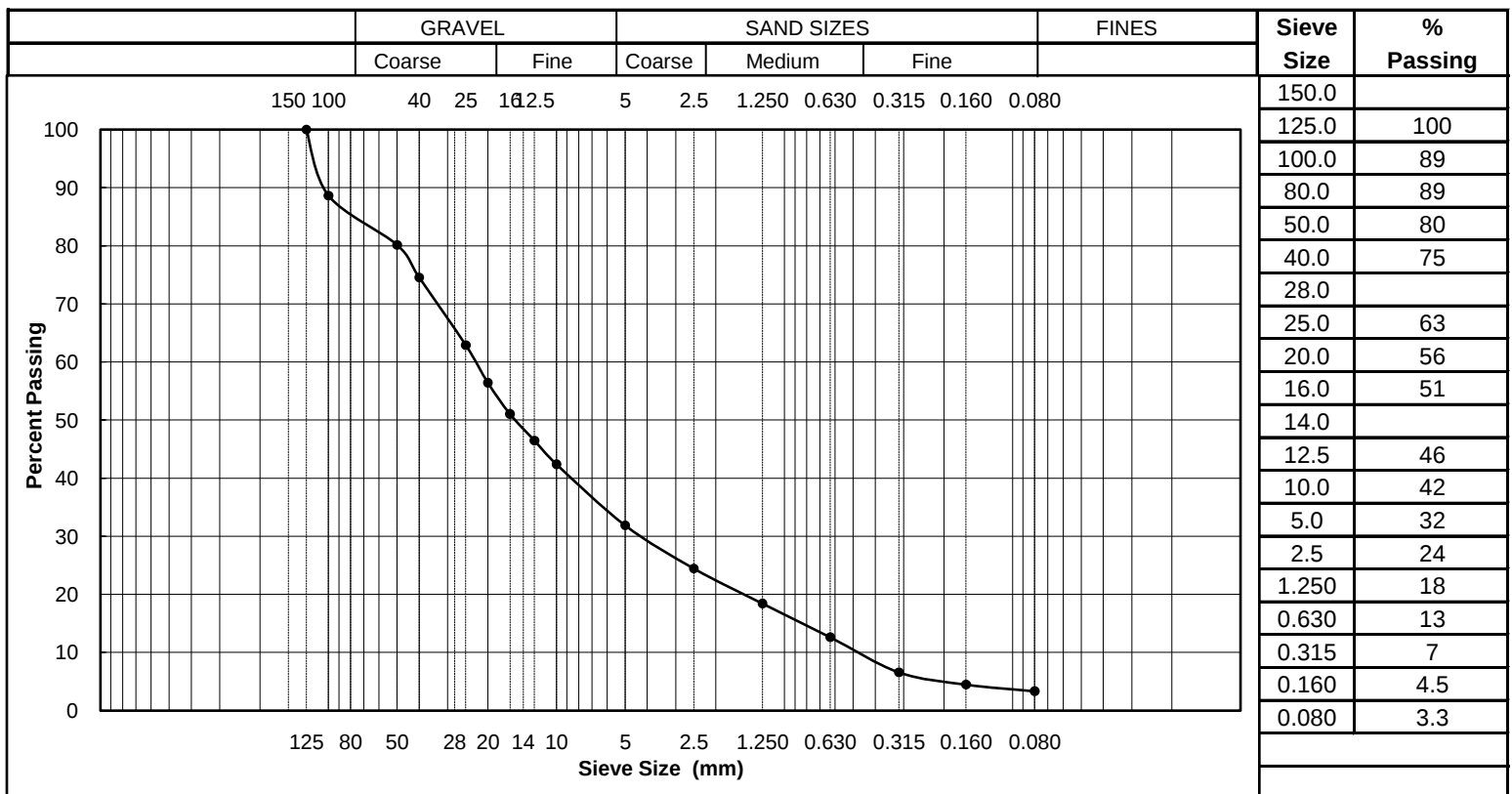
To: GNWT, Dept. of Community and Government Services
P.O Bag 200
Cambridge Bay, NU
X0B 0C0

Office : Calgary
Project No: YX00823
Client : GNWT, Dep. CGS
Copies to :

Attn: Stewart Rostant, Project Officer

Project: Revolving Granular Stockpile Study, Kitikmeot Region

Test Pit # TP11-04 **Sample Type:** **Sampled By:** AMEC
Date Sampled: N/A **Date Received:** Sept 7, 2011 **Date Tested:** Sept 7, 2011



Source: TP11-04, G1 @ 0.5 - 1.0 m

Sample Description:

Comments :

Gravel 68

Sand 29

Fines 3

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a Division of AMEC Americas Limited



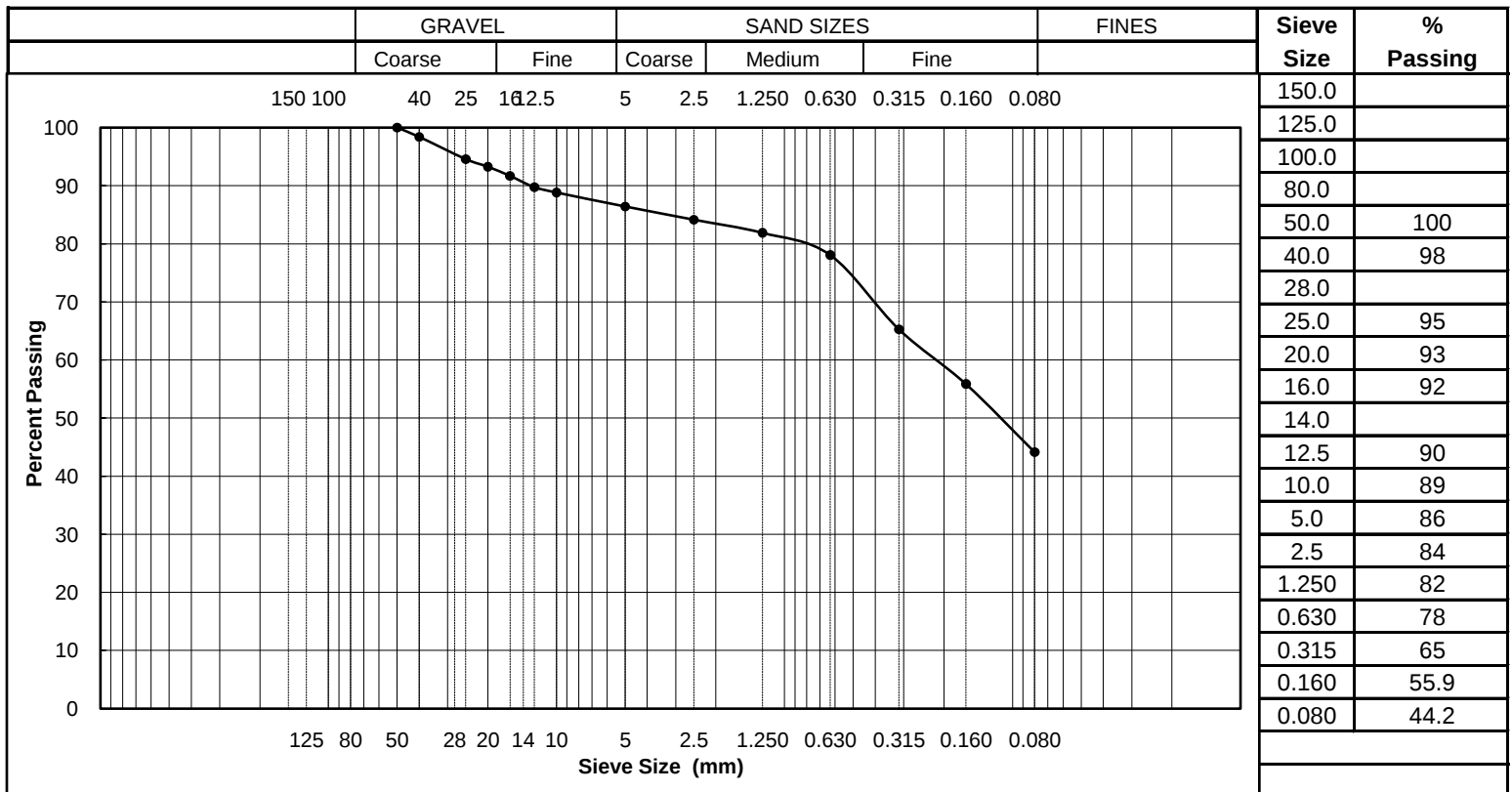
To: GNWT, Dept. of Community and Government Services
P.O Bag 200
Cambridge Bay, NU
X0B 0C0

Office : Calgary
Project No: YX00823
Client : GNWT, Dep. CGS
Copies to :

Attn: Stewart Rostant, Project Officer

Project: Revolving Granular Stockpile Study, Kitikmeot Region

Test Pit # TP11-05 **Sample Type:** **Sampled By:** AMEC
Date Sampled: N/A **Date Received:** Sept 7, 2011 **Date Tested:** Sept 7, 2011



Source: TP11-05, G1 @ 0.8 - 1.0 m

Sample Description:

Comments :

Gravel 14

Sand 42

Fines 44

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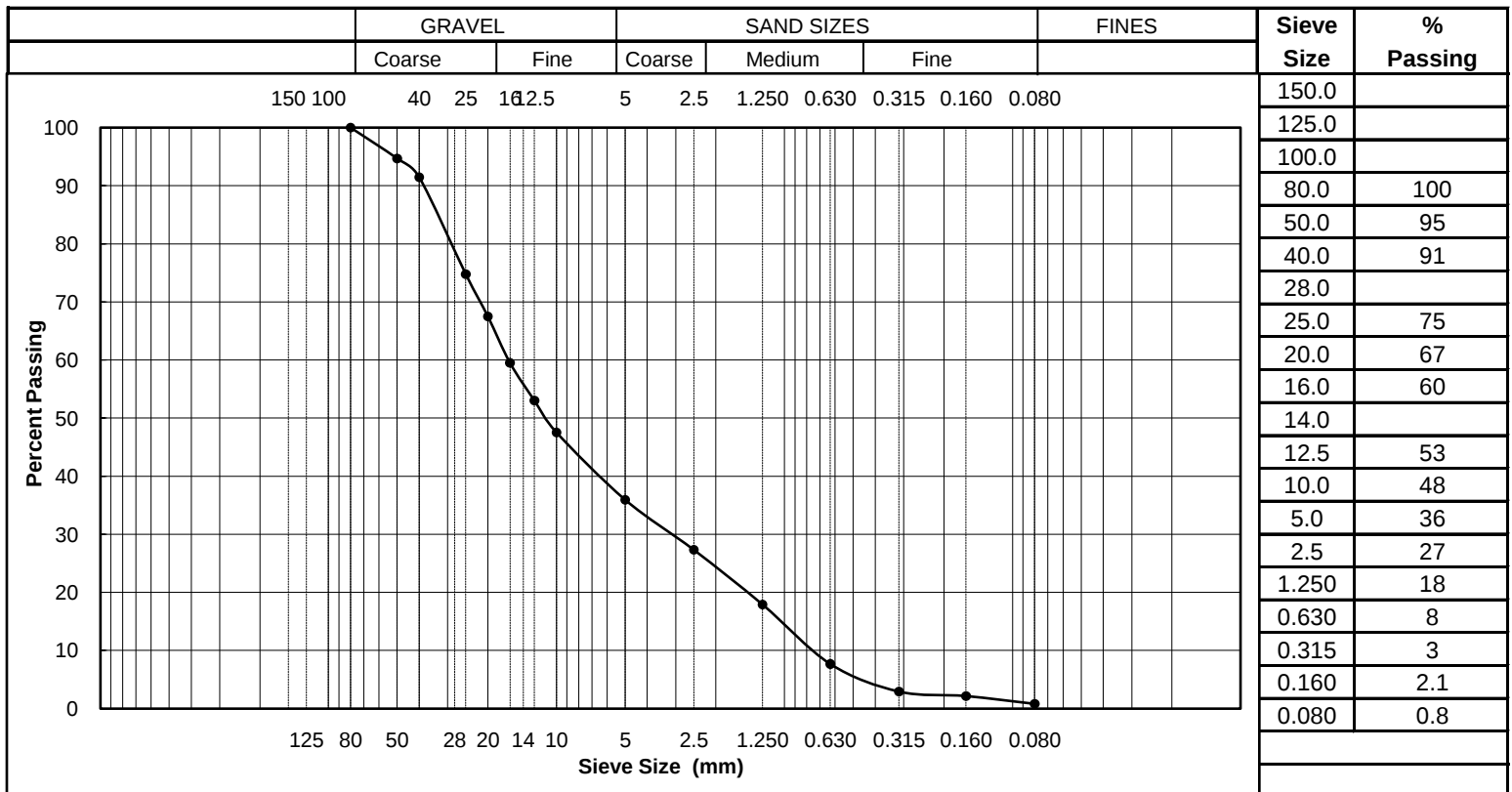
To: GNWT, Dept. of Community and Government Services
P.O Bag 200
Cambridge Bay, NU
X0B 0C0

Office : Calgary
Project No: YX00823
Client : GNWT, Dep. CGS
Copies to :

Attn: Stewart Rostant, Project Officer

Project: Revolving Granular Stockpile Study, Kitikmeot Region

Test Pit # TP11-05 **Sample Type:** **Sampled By:** AMEC
Date Sampled: N/A **Date Received:** Sept 7, 2011 **Date Tested:** Sept 8, 2011



Source: TP11-08, G1 @ 0.4 - 0.6 m

Sample Description:

Comments :

Gravel 64

Sand 35

Fines 1

AMEC Earth & Environmental
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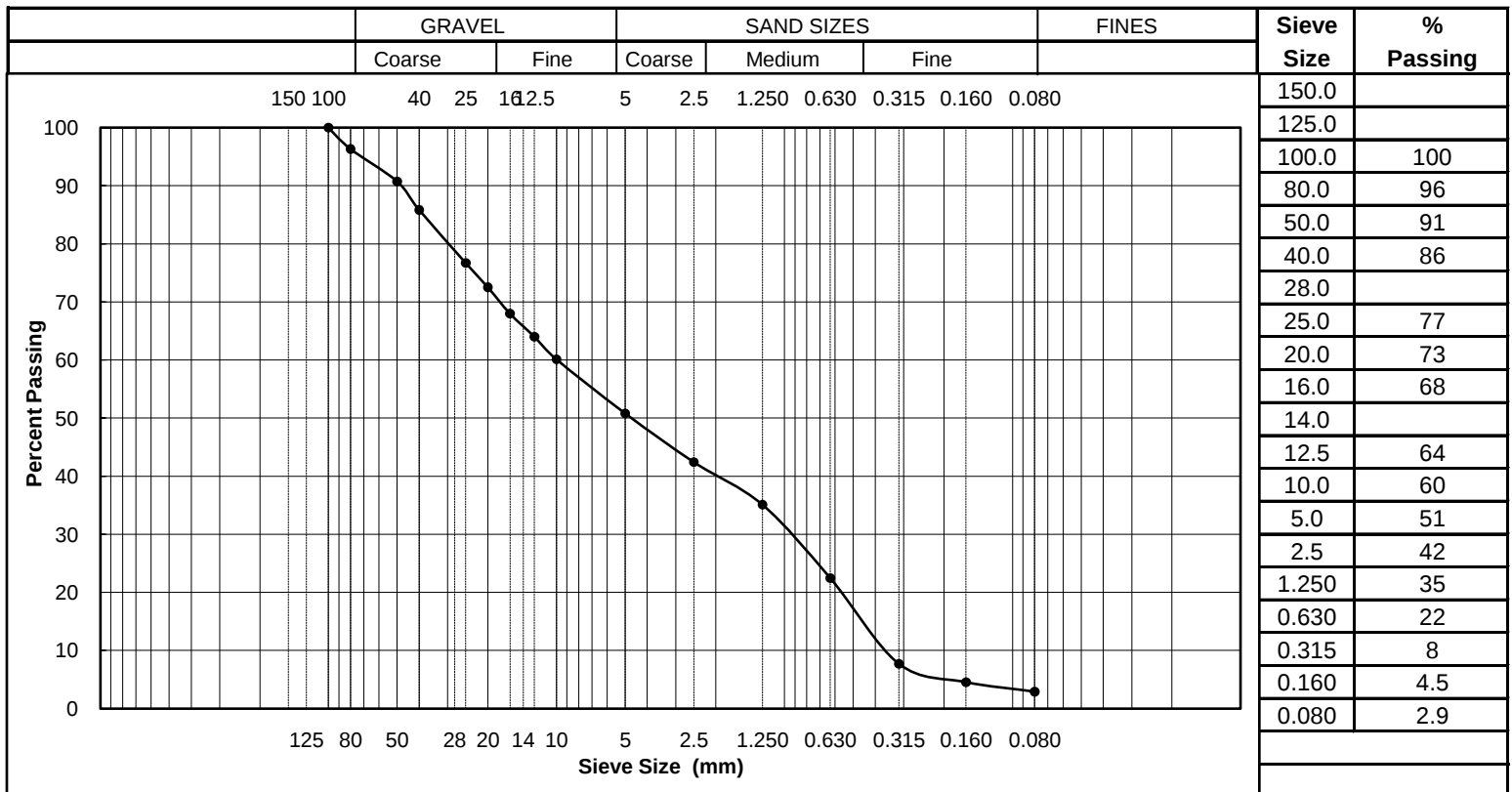
To: GNWT, Dept. of Community and Government Services
P.O Bag 200
Cambridge Bay, NU
X0B 0C0

Office : Calgary
Project No: YX00823
Client : GNWT, Dep. CGS
Copies to :

Attn: Stewart Rostant, Project Officer

Project: Revolving Granular Stockpile Study, Kitikmeot Region

Test Pit # TP11-09 **Sample Type:** **Sampled By:** AMEC
Date Sampled: N/A **Date Received:** Sept 7, 2011 **Date Tested:** Sept 7, 2011



Source: TP11-09, G1 @ 0.4 - 0.6 m

Sample Description:

Comments :

Gravel 49

Sand 48

Fines 3

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a Division of AMEC Americas Limited



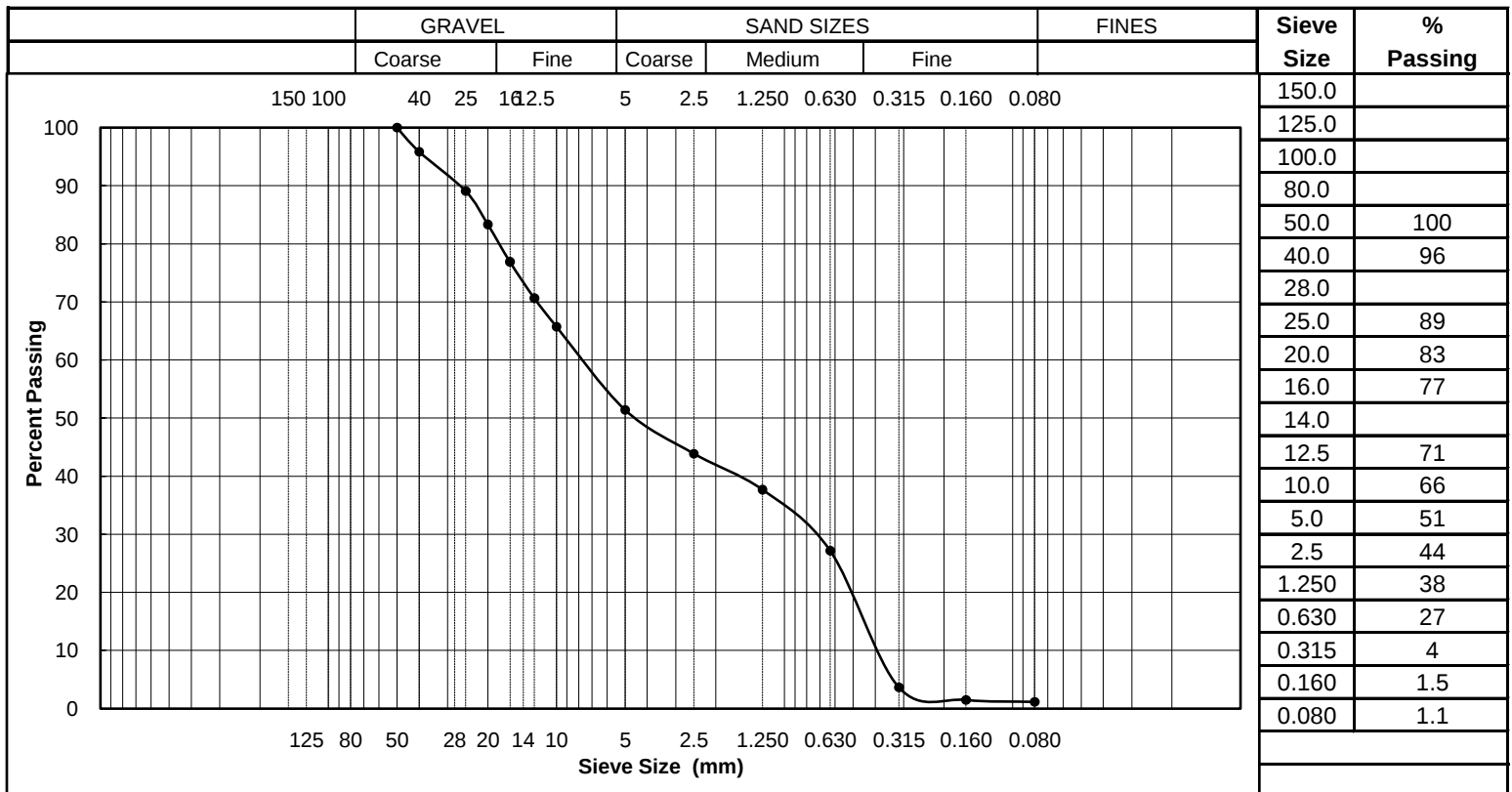
To: GNWT, Dept. of Community and Government Services
P.O Bag 200
Cambridge Bay, NU
X0B 0C0

Office : Calgary
Project No: YX00823
Client : GNWT, Dep. CGS
Copies to :

Attn: Stewart Rostant, Project Officer

Project: Revolving Granular Stockpile Study, Kitikmeot Region

Test Pit # TP11-10 **Sample Type:** **Sampled By:** AMEC
Date Sampled: N/A **Date Received:** Sept 7, 2011 **Date Tested:** Sept 7, 2011



Source: TP11-10, G1 @ 0.7 - 0.9 m

Sample Description:

Comments :

Gravel 49

Sand 50

Fines 1

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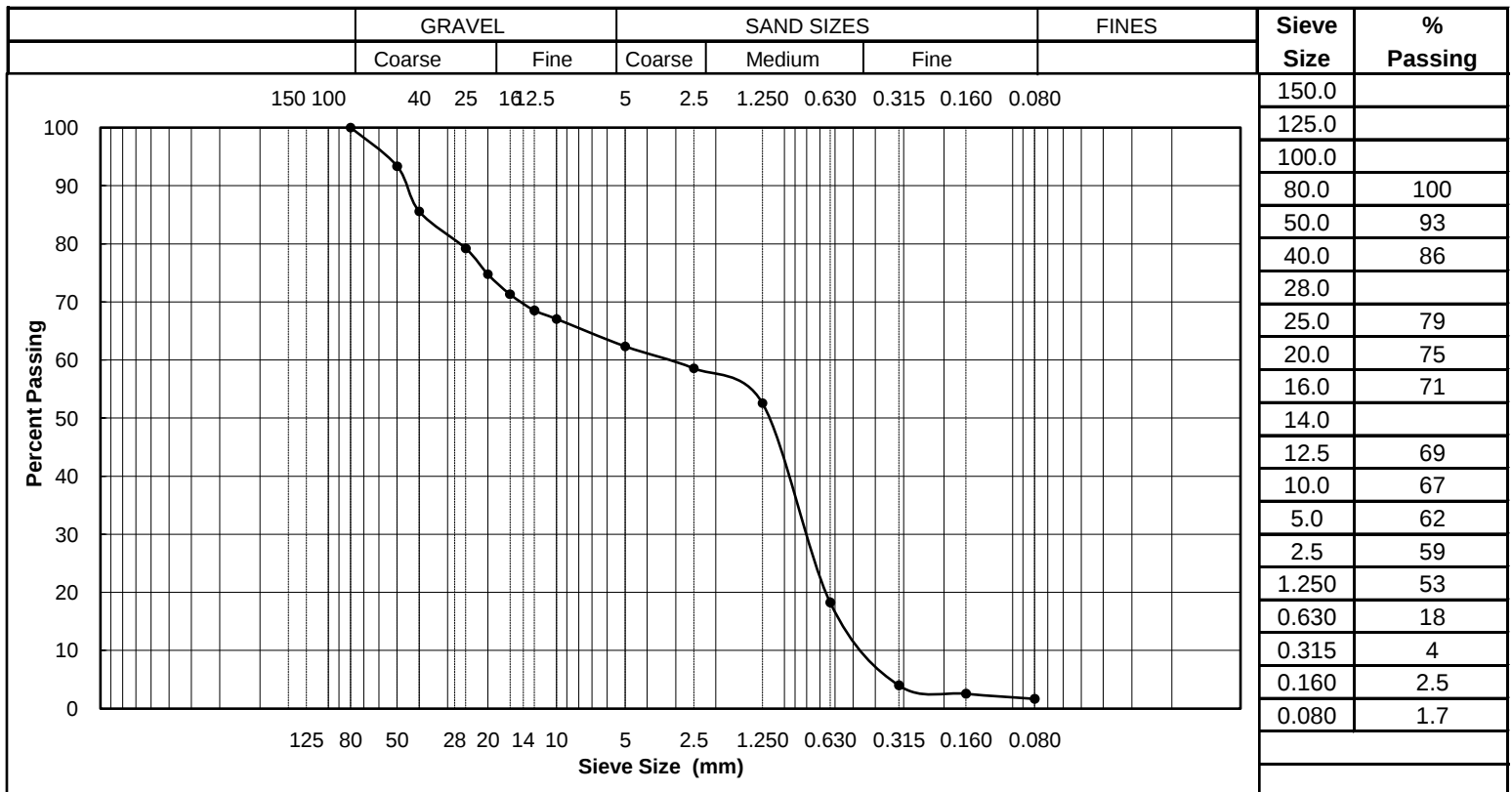
To: GNWT, Dept. of Community and Government Services
P.O Bag 200
Cambridge Bay, NU
X0B 0C0

Office : Calgary
Project No: YX00823
Client : GNWT, Dep. CGS
Copies to :

Attn: Stewart Rostant, Project Officer

Project: Revolving Granular Stockpile Study, Kitikmeot Region

Test Pit # TP11-13 **Sample Type:** **Sampled By:** AMEC
Date Sampled: N/A **Date Received:** Sept 7, 2011 **Date Tested:** Sept 7, 2011



Source: TP11-13, G1 @ 0.6 - 0.8 m

Sample Description:

Comments :

Gravel 38

Sand 61

Fines 2

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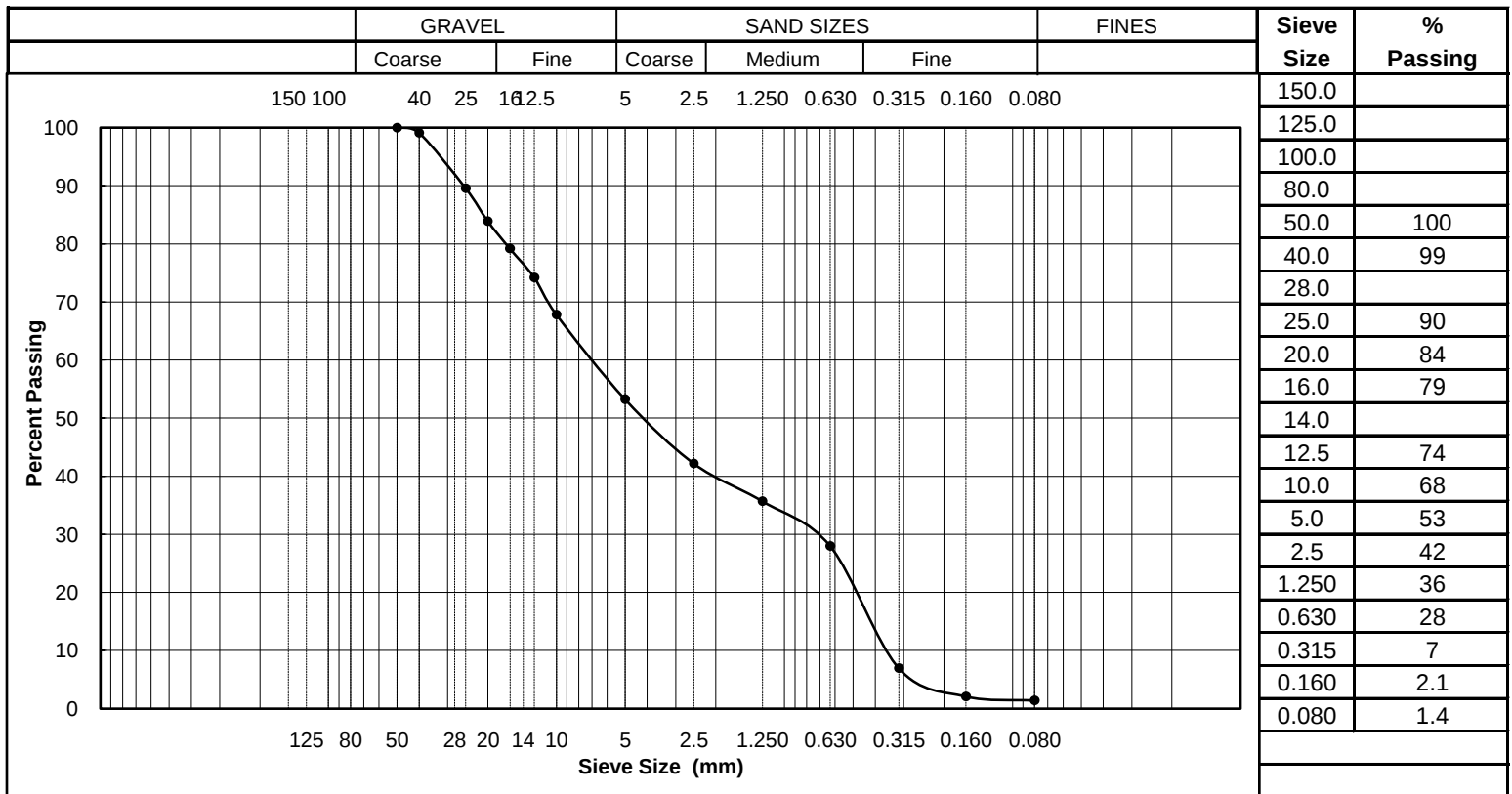
To: GNWT, Dept. of Community and Government Services
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Cambridge Bay, NU
X0B 0C0

Office : Calgary
Project No: YX00823
Client : GNWT, Dep. CGS
Copies to :

Attn: Stewart Rostant, Project Officer

Project: Revolving Granular Stockpile Study, Kitikmeot Region

Test Pit # TP11-14 **Sample Type:** **Sampled By:** AMEC
Date Sampled: N/A **Date Received:** Sept 7, 2011 **Date Tested:** Sept 8, 2011



Source: TP11-14, G1 @ 0.5 - 0.7 m

Sample Description:

Comments :

Gravel 47

Sand 52

Fines 1

AMEC Earth & Environmental
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Per: _____