APPENDIX Q

APPENDIX Q GRANULAR MATERIAL ASSESSMENT, YELLOWKNIFE GOLD PROJECT, NT REPORT PREPARED BY EBA ENGINEERING CONSULTANTS LTD. FOR TYHEE NWT CORP, NOVEMBER 2008

Tyhee NWT Corp

ISSUED FOR USE

GRANULAR MATERIAL ASSESSMENT
YELLOWKNIFE GOLD PROJECT, NT

Y14101117

November 2008

EBA Engineering Consultants Ltd.
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1.0 INTRODUCTION

1.1 GENERAL

This report presents the findings of a granular material assessment conducted at the Tyhee NWT Corp's (Tyhee's) Yellowknife Gold Project, 80 km northeast of Yellowknife, NT. The primary objective of this assessment was to identify areas of granular material along an esker 2 km southeast of the proposed mine site. The esker deposit is about 3 km long.

EBA Engineering Consultants Ltd. (EBA) submitted a proposal to Mr. Hugh Wilson of Tyhee on July 8, 2008, which outlined the proposed scope, schedule, and budget. Approval to proceed was provided by fax on July 11, 2008. The purchase order number is PO# 0009.

1.2 SCOPE OF WORK

EBA understood the required scope of work to include the following:

- Map areas of potentially available granular materials using air photos, topographic maps, and satellite imagery;
- Travel to the proposed site to ground truth the identified areas;
- Sample the materials encountered and submit for laboratory analysis, including grain size analysis and Atterberg Limits for fine grained material; and
- Prepare a report that documents the results of the site investigation and identify potential source areas for granular material.

2.0 METHOD OF INVESTIGATION

The methodology that EBA used to complete the scope of work is described briefly below:

- Available resources were collected in order to identify potential areas of granular material in the area of the proposed mine site. Resources include: air photos, topographic maps, satellite imagery, and sketches of the surrounding area. Areas of interest were identified on a map and a site investigation program was developed to optimize the time on site.
- Mr. Richard Zavitz of EBA travelled to the site on August 14, 2008 to conduct a site investigation with the intention of collecting representative samples for analysis in the laboratory. Upon arrival on site, Mr. Zavitz reviewed the area of investigation with Mr. Rod McKay, Tyhee Camp Manager, to determine site access and needed equipment. After reviewing the itinerary with the helicopter pilot, Mr. Zavitz and Mr. McKay surveyed the area of investigation by air and landed to continue the survey on foot.

- While walking the area of investigation, shallow test pits were dug with a trowel to reveal the upper stratigraphy directly under the overburden. This provided a general indication of the materials along the esker and allowed for a detailed sampling plan to be developed upon returning to the camp. In addition, observations of the general landscape were made to identify possible access routes to the borrow areas. GPS waypoints were taken along the length of the survey as well as photos of the test pits and general landscape.
- The following day, Mr. Zavitz along with an assistant from Tyhee, sampled the identified areas of interest. A cache of buckets was placed at a central location and buckets were left at the sample site for later pick up in the helicopter's sling net. Samples were collected from a depth of about 75 cm and a field description of the stratigraphy was recorded. In total 12 samples were collected for laboratory analysis.
- Samples were shipped to EBA's Yellowknife laboratory from the mine site. Granular samples were dried, washed, and sieved to determine the grain size distribution. One fine grained sample was collected. A sieve analysis and Atterberg limits were performed to identify the characteristics of the material.
- Based on the laboratory results, observations in the field, and estimated material requirements, potential areas of granular material were identified and available quantities were estimated.
- A summary report was prepared to document the results of the site investigation and identify potential source areas for granular material.

3.0 REGIONAL OVERVIEW

3.1 SURFICIAL GEOLOGY AND RELIEF FEATURES

The Giauque Lake-Nicholas Lake region is characteristic of the terrain of the Canadian Shield within northern boreal forest. Elongate rounded rocky hills and ridges with abundant outcrop exposures are separated by numerous lakes, ponds, rivers, creeks and swamps. Cliffs and steep bluffs up to a few tens of metres in height commonly occur along the side or end of these hills. Strong linear features several kilometres long defined by depressions between ridges are common. Topographic relief ranges from about 265 m above sea level (masl) (surface of Giauque Lake) to broad flat hills over 350 masl near Nicholas Lake. The land rises above 350 masl locally west of the Giauque Lake and the Yellowknife Gold Project property.

Overburden is typically a thin sandy layer of till. Small sandy eskers occur locally. The upland areas are generally moss and lichen-covered rounded rock outcrops with scattered to dense pine, birch, tamarack and spruce trees. The many low-lying areas are covered with a combination of water and muskeg swamp with local spruce trees and deciduous underbrush. Drainages are clogged with glacial debris and vegetation and are generally very slow-moving. General water flow on the property runs into Giauque Lake and then

eastward to Thistlethwaite Lake, which is part of the McCrae River system that flows into the Yellowknife River and Great Slave Lake.

3.2 BEDROCK GEOLOGY

The Slave Province is an Archean craton that makes up a major part of the northwestern Canadian Shield. It consists mainly of Archean granitic and metasedimentary rocks and is bound by Paleoproterozoic orogenic belts on the east and west. The tectonic evolution of northern Canada involved a series of accretionary events alternating with periods of continental extension.

During the Late Wisconsinan the area was covered by the Laurentide ice sheet that covered the Canadian Shield until about 8 ka ago. During the last glaciation, the entire shield has been extensively scoured to create thousands of lake basins. Till and glacial structures such as eskers, drumlins, and moraines can be found throughout the region in varying sizes and configurations.

3.3 SITE ACCESS

The mine site is accessible by a seasonal winter road and year round by aircraft. The 1,100 m long gravel airstrip is able to accommodate small cargo and passenger airplanes. Giauque Lake provides float plane access to the property by means of a wharf connected to the camp by an all season gravel road.

The regional terrain surrounding the project area is flat-lying with numerous shallow fresh water lakes. Locally, rock ridges up to tens of metres high are common, typically separated by swampy lows. The trees are small and shrubs are abundant. Vehicle travel would require clearing of trees and backfilling a route with a suitable base material.

4.0 SITE INVESTIGATION

4.1 GENERAL OBSERVATIONS

The area of interest is about 2 km southeast of the Proposed Yellowknife Gold Project mine site. No access roads or quad trails lead to this area so a helicopter was used to access the region. A helicopter landing area was located centrally along the esker and was used as a cache for the sampling supplies and a central pick-up and drop-off spot for the helicopter. Travel by foot was possible on the esker as tree cover was sparse. Local areas of low-lying dense shrubs made certain areas difficult to traverse. The elevation varied by about 20 m along the traverse, though slopes were only moderately steep and did not limit travel.

The ground was covered generally with a thin layer of lichen interspaced with shrubs and bushes about 5 to 10 cm thick. Tree cover was generally sparse and includes pine and birch species. Previous activities by others indicate that some trails were cleared resulting in remnants of numerous tree stumps. Also, the evidence of a foot path or animal trail was

visible along some sections of the traverse. These could have been from the time when the historic Discovery Mine was in operation or a result of earlier exploration activities

Two areas along the traverse have previously been developed as a borrow source. Both areas were in proximity to Giauque Lake at the northern tip of the traverse. The history of these borrow sources was not known by Tyhee at the time of the site investigation. A significant quantity of material remains on site. There are no access roads to the area and it is assumed that a winter road was constructed to access these borrow sources.

Figure 1 outlines the observations made during the site traverse and identifies areas of suspected granular material and the two existing borrow sources.

4.2 SAMPLE COLLECTION

Granular material samples were taken at eleven locations along the 3 km area of interest based on observations made during the traverse. Figure 2 details the area of interest including sample locations. A 20 L plastic pail was used to collect a sample from each location. Test pits were advanced by hand to about 75 cm below grade. A limited view of the stratigraphy was logged and site observations were made to estimate an approximate volume of material available in the vicinity.

Silty clay was found in the vicinity of sample S-12. This low lying marshy area would be expected to have variable water levels throughout the year. During the site investigation the site was relatively dry. A think layer of organics covered the site consisting of sphagnum and tree roots. The silty clay was very stiff and uniform. A sample was taken about 25 cm into the material. The test pit could not be advanced any further. The thickness of the material was estimated to be 50 cm to 1.5 m.

5.0 LABORATORY TESTING

5.1 GRANULAR BORROW MATERIAL TYPE

Eleven samples were submitted to the Yellowknife materials laboratory for grain size analysis. A summary of the results is presented below in Table 1. Laboratory reports are included in Appendix A.

TABLE 1: GRAIN SIZE DISTRIBUTION OF GRANULAR SAMPLES				
Sample	Gravel	Sand	Fines	Description
S-01	0%	66%	34%	SAND, silty
S-02	52%	44%	4%	GRAVEL and SAND, trace silt
S-03	9%	89%	2%	SAND, trace gravel, trace silt
S-04	64%	32%	4%	GRAVEL, sandy, trace silt, trace cobbles
S-05	74%	23%	3%	GRAVEL, sandy, some cobbles, trace silt
S-06	3%	93%	4%	SAND, trace silt, trace gravel
S-07	27%	71%	2%	SAND, gravelly, trace silt
S-08	59%	34%	7%	GRAVEL and SAND, trace silt, trace cobbles
S-09	32%	56%	12%	SAND, gravelly, some silt, trace cobbles
S-10	11%	88%	1%	SAND, some gravel, some cobbles, trace silt
S-11	10%	85%	5%	SAND, trace gravel, trace silt

Gravel, sand, and fines are defined by the size of the individual particle. The size of a gravel particle is between 80 mm and 5 mm, sand is between 5 mm and 80 µm, and fines are particles smaller than 80 µm.

Gravel was predominant at sample location S-04 and S-05. Sand was predominant at sample location S-01, S-03, S-06, S-07, S-09, S-10, and S-11. Both sand and gravel were identified at sample location S-02 and S-08.

Samples S-01 and S-09 both have a significant amount of fines (>10%), whereas the other samples are relatively clean (< 10% fines).

The suitability of the sample locations being used as a borrow source is discussed in Section 6.1 below.

5.2 COHESIVE MATERIAL TYPE

One sample of clay was submitted for both grain size analysis and Atterberg Limits. A summary of the results is presented below in Table 2. Laboratory reports are included in Appendix A.

TABLE 2: GRAIN SIZE DISTRIBUTION AND ATTERBERG LIMITS OF COHESIVE SAMPLE								
Sample	Gravel	Sand	Fines	MC	PL	LL	PI	Description
S-12	0%	10%	90%	32	25	33	8	CLAY, silty, trace sand, medium plastic

The Atterberg Limits are used to describe the fine material based on its behaviour at certain moisture contents. The plastic limit (PL) refers to the moisture content below which the material starts to crumble, and the liquid limit (LL) refers to the moisture content above which the material starts to flow. The plasticity index (PI) is the difference between the LL and the PL and gives the spread of moisture contents where the material behaves as a plastic (i.e. is workable). Clay generally has a high PI whereas silt generally has a low PI.

From the laboratory tests, the material is medium plastic with a natural moisture content close to the liquid limit of the material creating potential issues with workability. A further investigation including laboratory testing may be warranted when the material requirements are known.

The suitability of the sample location being used as a borrow source is discussed in Section 6.4 below.

6.0 POTENTIAL BORROW SITES

6.1 DESIRED USE AND MATERIAL CRITERIA

At the time of the investigation, the material requirements for Tyhee's proposed Yellowknife Gold Project were not specifically known. A development plan for future operations includes the construction of access roads, containment dams, and concrete infrastructure. It is assumed then that granular material would be needed for all three of these endeavours.

The criteria for the needed materials will depend on the feature being constructed and the design. Because specific requirements are not yet known, it is not possible at this time to give recommendations for the development of specific borrow sources.

As a result, general guidelines will be adopted to classify the borrow material encountered on site. The American Association of State Highways and Transportation Officials (AASHTO) classification system rates a material based on its suitability as a road subgrade using criteria for the material gradation and behaviour of the fine fraction. Seven subgroups are identified and a general rating of excellent, good, fair, and poor are assigned. The AASHTO classification can be used to qualify the suitability of the material for use as a road fill.

The Canadian Standards Association Concrete Materials and Methods of Concrete Construction (CSA) standards govern the properties of aggregate material that can be used

for concrete. In addition to gradation requirements for coarse and fine aggregate, a collection of other testing is required to determine the suitability of a material for use as concrete aggregate. For the purpose of this assessment, the material gradation is the only criteria used, though if concrete is required on site, further testing is recommended as per the CSA standard.

The governing factor in selecting materials for use in embankment construction is control of the phreatic surface and the control of the construction material for stability and effective containment. Specific gradation requirements are needed for the selection of an appropriate granular material, though are dependant on the material being contained and the other materials used in the construction of the embankment structure. Therefore it is not possible to provide specific recommendations at this time as designs have not yet been completed for the proposed embankment structures. General requirements for the granular material include limited frost susceptibility, non-organic, and limited natural moisture.

6.2 REQUIRED QUANTITY

Because the requirements for granular material at the Tyhee Mine site are not yet defined, it is not possible to know the quantity of material needed on site. As a result, an estimate of available material is provided for the area around each sample location.

6.3 POTENTIAL GRANULAR BORROW SOURCES AND QUANTITY

Based on the adopted criteria, to preliminarily assess the quality of the granular material a rating system of 1 to 5 (1 being excellent and 5 being poor) was used to rate the material for suitability as concrete fine aggregate or coarse aggregate. The qualitative rating of the AASHTO classification was used to identify the suitability for use as a road base. Table 3 below summarizes the results of the assessment as well as the estimated quantity of material available in the vicinity of each sample.

TABLE 3: SUITABILITY OF GRANULAR MATERIAL				
Sample Location	Estimated Volume (m^3)	Concrete Fine Aggregate (CSA)	Concrete Coarse Aggregate (CSA)	Road Base (AASHTO)
S-01	5,000	5 (fine)	5 (fine)	Good A-2
S-02	20,000	3 (fine)	4 (fine)	Excellent (A-1a)
S-03	90,000 (combined with S-07)	1 (meets requirements)	5 (fine)	Good A-3
S-04	24,000 (combined with S-05)	4 (fine)	3 (out of gradation)	Excellent (A-1a)
S-05	24,000 (combined with S-04)	4 (fine)	3 (slightly out of gradation, need to split at < 5mm)	Excellent (A-1a)
S-06	20,000	5 (fine)	5 (fine)	Good A-3
S-07	90,000 (combined with S-03)	2 (gradation slightly out)	4 (fine)	Excellent (A-1a)
S-08	11,250	4 (too many fines)	5 (coarse)	Excellent A-1a
S-09	7,500	5 (too many fines)	4 (gap graded)	Good A-2
S-10	78,000 (combined with S-11)	1 (meets requirements)	5 (too fine)	Good A-3/ A-1b
S-11	78,000 (combined with S-10)	3 (too many fines)	5 (too fine)	Good A-3

It should be noted that the quantity estimates are based on surficial observations of the landscape and an approximation of the depth. Further assessment with an excavator would be needed to increase the accuracy of the estimates.

For concrete fine aggregate, samples S-03 and S-10 both meet the CSA criteria. Sample S-07 was slightly out of gradation though a more detailed investigation would be warranted in this area due to its proximity to samples S-03 and the potential for a large quantity of material. The other samples did not meet requirements as the amount of fine material (< 80 μm) was higher than the criteria.

One sample was identified for concrete coarse aggregate. Sample S-05 was only slightly off the gradation criteria, though only when the material less than 5 mm was removed from the sample. The removed material does not meet the gradation criteria for fine aggregate as there are too many fines. Washing the material may be an option to remove the fines, though would require large amounts of water and effort.

All of the samples were identified as either excellent or good for use as a road base based on the AASHTO criteria.

6.4 POTENTIAL COHESIVE MATERIAL SOURCES AND QUANTITY

Clay was found in the area of sample S-12 in a low-lying area in proximity to Giauque Lake. The estimated area of available material is 15,000 m^2 and the depth of available material is expected to be about a metre. The suitability of the material for use at the mine site is dependant on the desired use of the material. A further investigation may be warranted when the material requirements are known.

6.5 ACCESS TO POTENTIAL SITES

The terrain in the area is generally undulating with thick tree growth in the low ground and sparse tree growth on the high ground. Trails would need to be cleared to access the majority of the sites in the area of interest. A road base would be needed to provide access for trucks, though tracked equipment could travel over the terrain after only clearing the brush.

A winter road from the mine site across Giauque Lake could be built to access the areas in proximity to samples S-10, S-11, and S-12. Minimal clearing would be required to access the areas around S-10 and S-11 as these areas have previously been used as a borrow source. A large quantity of material is expected to remain for further use.

To access the area in proximity to S-12 from the lake, about 100 m of trails would need to be cleared.

EBA understands that baseline biophysical data including an Archaeology Study has been completed on the area investigated, which has been incorporated into the project description report currently under review by the regulators.

7.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the site observations, laboratory tests, and the unknown material requirements on site EBA recommends the following:

- Construct a winter road to the northern area of interest in proximity to sample S-10 and S-11 to conduct a detailed site investigation. This will serve to accurately determine the quality and quantity of the available material. The investigation would involve mobilizing an excavator to the area in order to advance tests pits and take samples at varying depths. A test pit program could also be extended to the area in proximity to S-12 to determine the quality and quantity of available cohesive material. Though due to the high natural moisture content of sample S-12, the area may not be penetrable until the ground thaws in late spring.

- After the material requirements are known for Tyhee's proposed Yellowknife Gold Project, a more detailed site investigation would be undertaken based on the type of material needed. A trail would need to be cleared for an excavator to access the area.

8.0 LIMITATIONS

This report presents the findings of a granular materials assessment at the Tyhee's Yellowknife Gold Project site. The area investigated is an approximate 3 km long esker located approximately 2 km southeast of the proposed mine site.

This report has been prepared for the exclusive use of the Tyhee Development Corporation, and their agents for specific application described in Section 1 of this report. It has been prepared in accordance with generally accepted geotechnical engineering interpretation methods. This report incorporates and is subject to the General Conditions that are attached as Appendix A for your review. No other warranty is made, either expressed or implied.

9.0 CLOSURE

We trust that this submission meets your present requirements. If you have any questions, please contact the undersigned.

Respectfully submitted,
EBA Engineering Consultants Ltd.

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Bowles, Joseph E. (1979) Physical and geotechnical properties of soils. McGraw-Hill Inc.

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FIGURES

Giauque Lake

Giauque Lake

Yellowknife Gold
Project Camp

300

300

Existing
Borrow
Pits

Giauque Lake

Main
helicopter
drop

Winter Lake

300

300

300

LEGEND

- Traverse route
- Helicopter drop
- Rocky terrain
- Granular material
- Swampy terrain

0 600

NOTES

Background image copyright DMTI Spatial Inc. (2003)

CLIENT

Tyhee NWT Corp

TYHEE GRANULAR MATERIALS ASSESSMENT

TRAVERSE ROUTE AND GENERAL SITE OBSERVATIONS

EBA Engineering Consultants Ltd.

PROJECT NO.	DWN	CKD	REV
Y14101117	WRZ	TEH	1
OFFICE: EBA-YEL	DATE: October 2008		

Figure 1

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Waste

Giauque Lake

Giauque Lake

Yellowknife Gold
Project Camp

350

300

300

300

300

300

S-10

S-11

S-12

S-06

S-04

S-05

S-02

S-01

S-03

S-07

S-09

S-08

Giauque Lak

Giauque Lak

LEGEND

Esker
Possible sand sources
Possible gravel sources
Possible clay sources

NOTES

Background image copyright DMTI Spatial Inc. (2003)

0 600

CLIENT

Tyhee NWT Corp

THYEE GRANULAR MATERIAL ASSESSMENT

SAMPLING PLAN AND POSSIBLE GRANULAR SOURCES

EBA Engineering Consultants Ltd.

PROJECT NO.	DWN	CKD	REV
Y14101117	WRZ	TEH	1

OFFICE: EBA-YEL

DATE: October 2008

Figure 2

Q:\Yellowknife\Drafting\Y14\Y14101117 - Granular Study\Figure_Tyhee_October2008.dwg [FIGURE 2] October 30, 2008 - 1:24:15 pm (BY: RICHARD ZAVITZ)

PHOTOGRAPHS

Photo 1
Existing borrow source at S-10

Photo 2
Existing borrow source at S-10

Photo 3
Sand and gravel at S-04

Photo 4
Typical terrain around S-04

Photo 5
Gravel at S-02

Photo 6
Typical terrain at S-02

Photo 7
Sand at S-03

Photo 8
Sand at S-07

APPENDIX

APPENDIX A: LABORATORY DATA SHEETS

EBA Engineering Consultants Ltd.

AGGREGATE ANALYSIS REPORT

Project: Granular Materials Assessment
Address: Yellowknife Gold Project, NT

Project Number: Y14101117
Date Tested: 25-Aug-08
Client: Tyhee NWT Corp

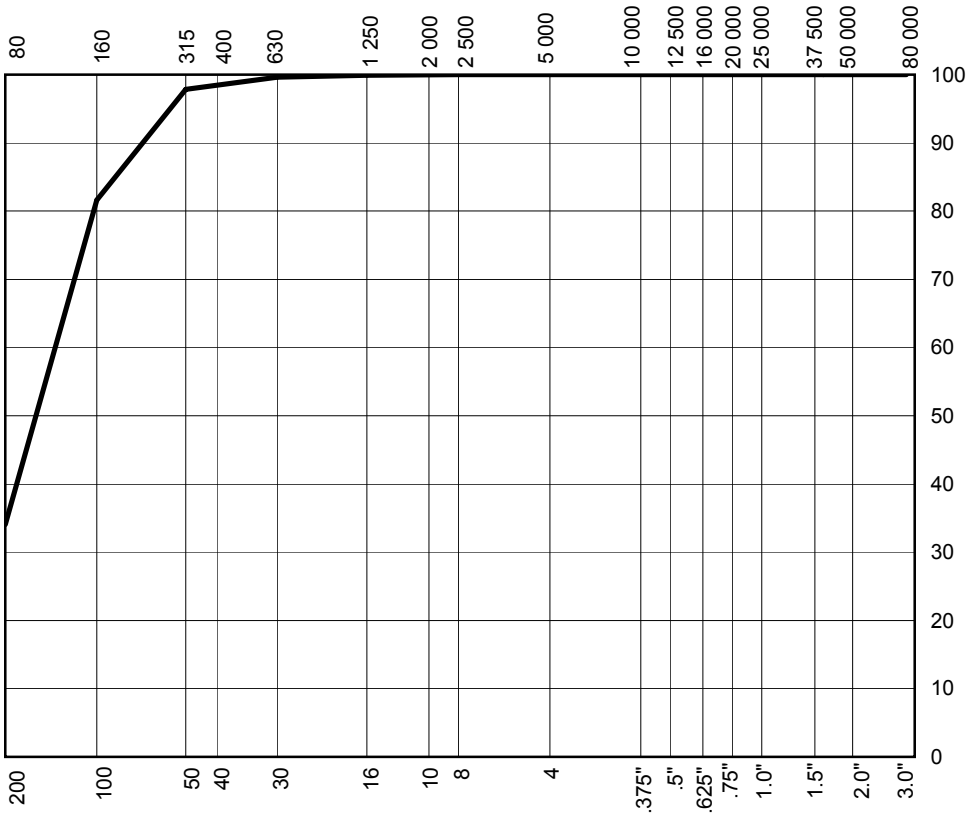
Attention: Hugh Wilson

Lab Number: 5019-1
Sample Description: SAND, silty

Sample # S-01
Natural Moisture Content: 5.0%
Colour Plate No.: n/d
Bulk Relative Density: n/d
Apparent Relative Density (SSD): n/d
Aparent Relative Density: n/d
Absorption: n/d

Sieve Sizes		%
U.S.	Metric	Passing
3"	80 000	
2"	50 000	
1.5"	37 500	
1"	25 000	
.75"	20 000	
.625"	16 000	
.5"	12 500	
.375"	10 000	
No. 4	5 000	
No. 8	2 500	100
16	1250	100
30	630	100
50	315	98
100	160	82
200	80	34.1

Metric Sieve Size (C.G.S.B. Spec. 8-GP-2M)



U.S. Standard Sieve Size - approximate (A.S.T.M. Des. E 11)

Remarks:

Reviewed By: P.Eng.

EBA Engineering Consultants Ltd.

AGGREGATE ANALYSIS REPORT

Project: Granular Materials Assessment
Address: Yellowknife Gold Project, NT

Project Number: Y14101117
Date Tested: 10-Sep-08
Client: Tyhee NWT Corp

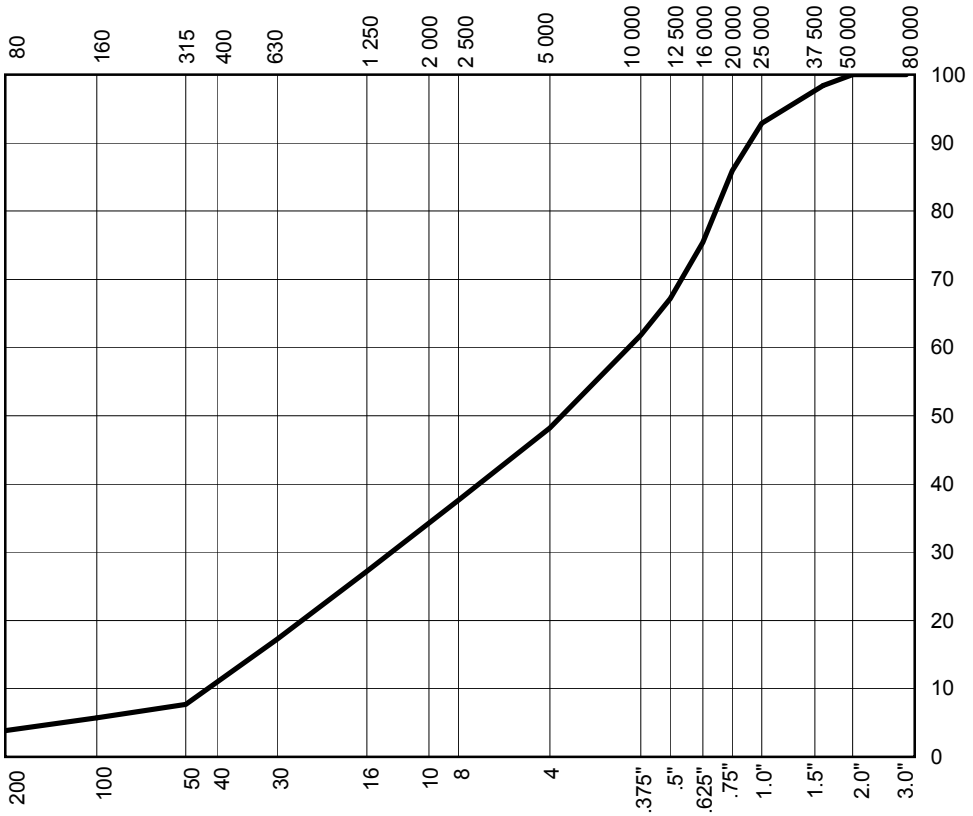
Attention: Hugh Wilson

Lab Number: 5019-2
Sample Description: GRAVEL and SAND, trace silt

Sample # S-02
Natural Moisture Content: 3.2%
Colour Plate No.: n/d
Bulk Relative Density: n/d
Apparent Relative Density (SSD): n/d
Aparent Relative Density: n/d
Absorption: n/d

Sieve Sizes		%
U.S.	Metric	Passing
3"	80 000	
2"	50 000	100
1.5"	37 500	98
1"	25 000	93
.75"	20 000	86
.625"	16 000	75
.5"	12 500	67
.375"	10 000	62
No. 4	5 000	48
No. 8	2 500	38
16	1250	27
30	630	17
50	315	8
100	160	6
200	80	3.8

Metric Sieve Size (C.G.S.B. Spec. 8-GP-2M)



U.S. Standard Sieve Size - approximate (A.S.T.M. Des. E 11)

Remarks:

Reviewed By: P.Eng.

EBA Engineering Consultants Ltd.

AGGREGATE ANALYSIS REPORT

Project: Granular Materials Assessment
Address: Yellowknife Gold Project, NT

Project Number: Y14101117
Date Tested: 25-Aug-08
Client: Tyhee NWT Corp

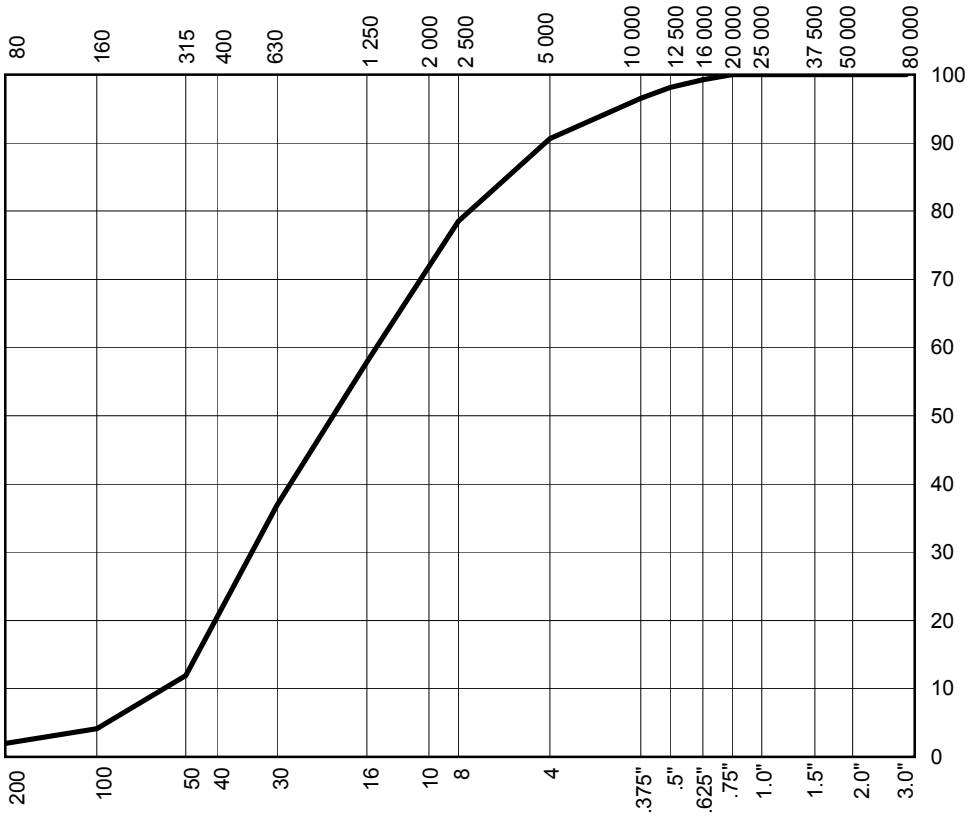
Attention: Hugh Wilson

Lab Number: 5019-3
Sample Description: SAND, trace gravel, trace silt

Sample # S-03
Natural Moisture Content: 2.7%
Colour Plate No.: n/d
Bulk Relative Density: n/d
Apparent Relative Density (SSD): n/d
Aparent Relative Density: n/d
Absorption: n/d

Sieve Sizes		%
U.S.	Metric	Passing
3"	80 000	
2"	50 000	
1.5"	37 500	
1"	25 000	
.75"	20 000	100
.625"	16 000	99
.5"	12 500	98
.375"	10 000	97
No. 4	5 000	91
No. 8	2 500	79
16	1250	58
30	630	37
50	315	12
100	160	4
200	80	2.0

Metric Sieve Size (C.G.S.B. Spec. 8-GP-2M)



U.S. Standard Sieve Size - approximate (A.S.T.M. Des. E 11)

Remarks:

Reviewed By: P.Eng.

EBA Engineering Consultants Ltd.

AGGREGATE ANALYSIS REPORT

Project: Granular Materials Assessment
Address: Yellowknife Gold Project, NT

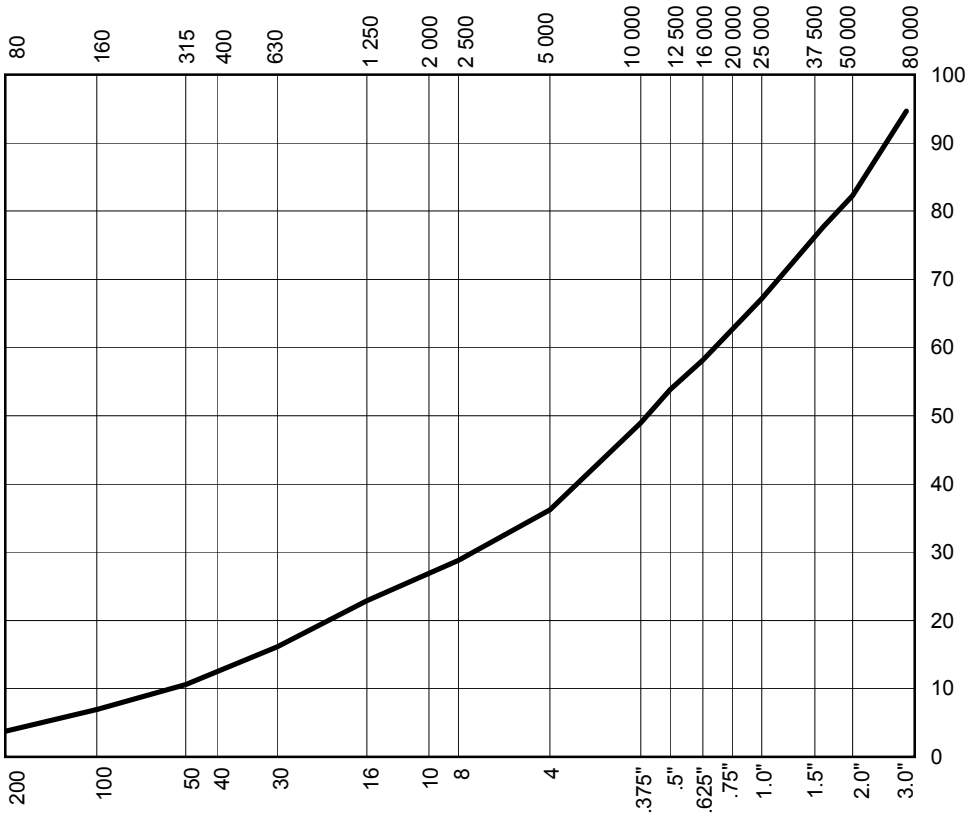
Project Number: Y14101117
Date Tested: 25-Aug-08
Client: Tyhee NWT Corp

Attention: Hugh Wilson

Lab Number: 5019-4
Sample Description: GRAVEL, sandy, trace silt trace cobbles
Sample # S-04
Natural Moisture Content: 2.0%
Colour Plate No.: n/d
Bulk Relative Density: n/d
Apparent Relative Density (SSD): n/d
Aparent Relative Density: n/d
Absorption: n/d

Sieve Sizes		%
U.S.	Metric	Passing
3"	80 000	95
2"	50 000	82
1.5"	37 500	78
1"	25 000	67
.75"	20 000	63
.625"	16 000	58
.5"	12 500	54
.375"	10 000	49
No. 4	5 000	36
No. 8	2 500	29
16	1250	23
30	630	16
50	315	11
100	160	7
200	80	3.8

Metric Sieve Size (C.G.S.B. Spec. 8-GP-2M)



U.S. Standard Sieve Size - approximate (A.S.T.M. Des. E 11)

Remarks:

Reviewed By: P.Eng.

EBA Engineering Consultants Ltd.

AGGREGATE ANALYSIS REPORT

Project: Granular Materials Assessment
Address: Yellowknife Gold Project, NT

Project Number: Y14101117
Date Tested: 31-Aug-08
Client: Tyhee NWT Corp

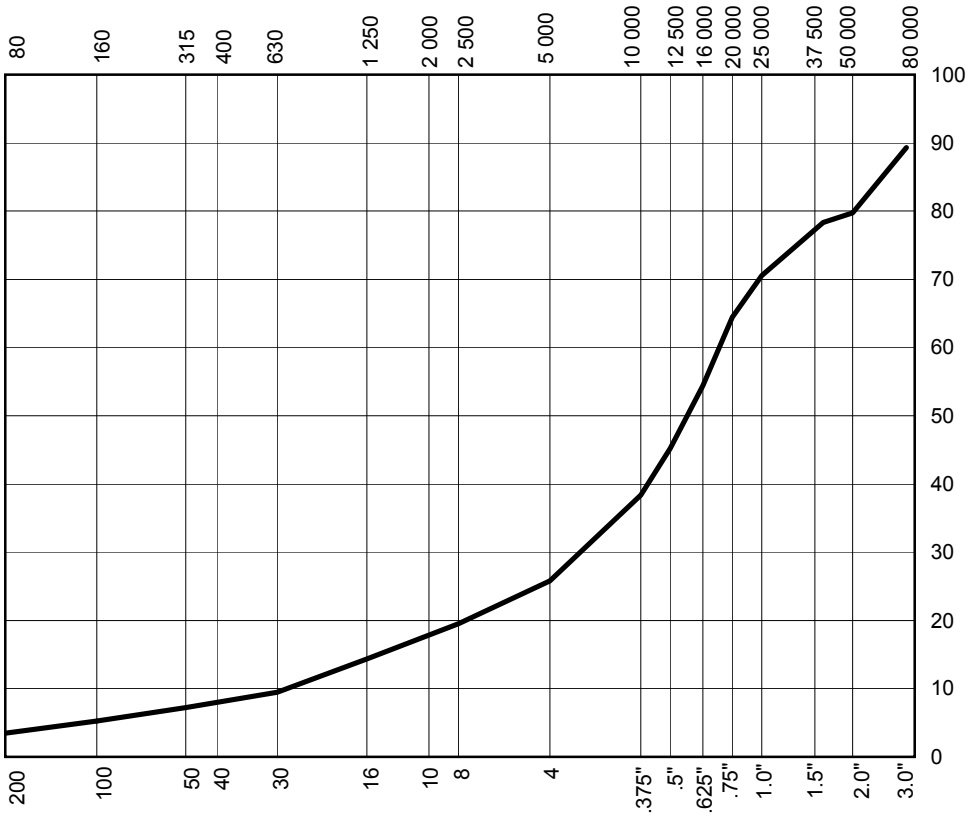
Attention: Hugh Wilson

Lab Number: 5019-5
Sample Description: GRAVEL, sandy, trace silt some cobbles

Sample # S-05
Natural Moisture Content: 2.9%
Colour Plate No.: n/d
Bulk Relative Density: n/d
Apparent Relative Density (SSD): n/d
Aparent Relative Density: n/d
Absorption: n/d

Sieve Sizes		%
U.S.	Metric	Passing
3"	80 000	89
2"	50 000	80
1.5"	37 500	78
1"	25 000	71
.75"	20 000	64
.625"	16 000	54
.5"	12 500	45
.375"	10 000	38
No. 4	5 000	26
No. 8	2 500	19
16	1250	14
30	630	9
50	315	7
100	160	5
200	80	3.5

Metric Sieve Size (C.G.S.B. Spec. 8-GP-2M)



U.S. Standard Sieve Size - approximate (A.S.T.M. Des. E 11)

Remarks:

Reviewed By: P.Eng.

EBA Engineering Consultants Ltd.

AGGREGATE ANALYSIS REPORT

Project: Granular Materials Assessment
Address: Yellowknife Gold Project, NT

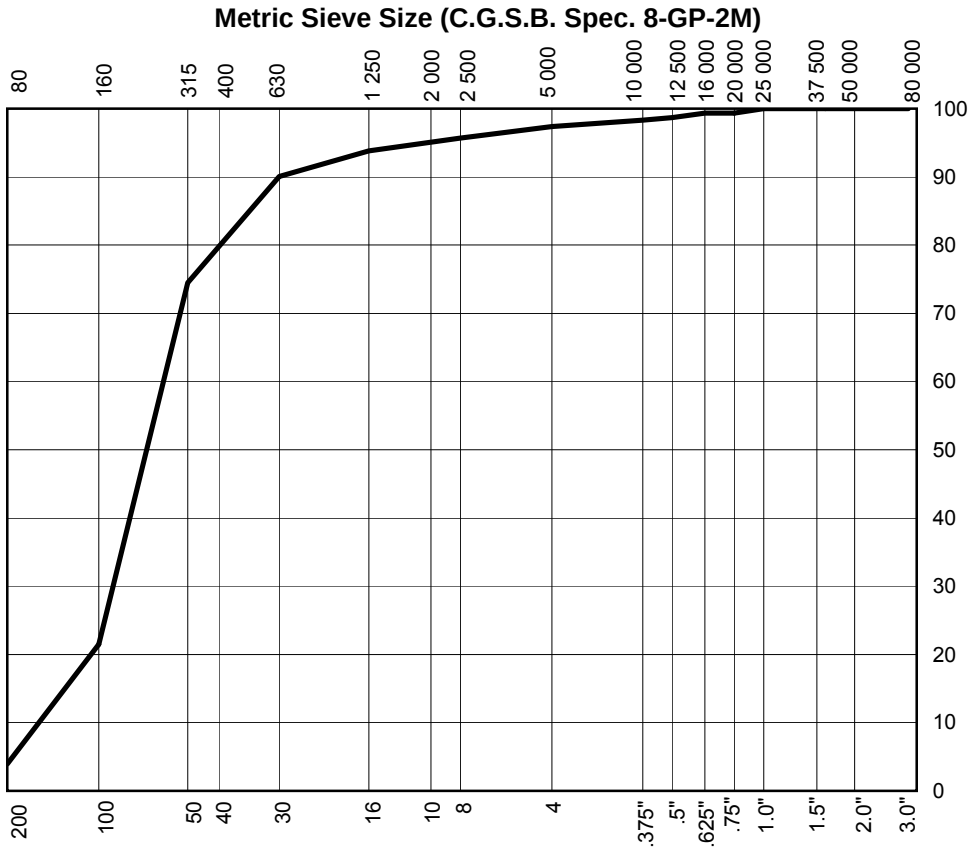
Project Number: Y14101117
Date Tested: 31-Aug-08
Client: Tyhee NWT Corp

Attention: Hugh Wilson

Lab Number: 5019-6
Sample Description: SAND, trace silt, trace gravel

Sample # S-06
Natural Moisture Content: 5.2%
Colour Plate No.: n/d
Bulk Relative Density: n/d
Apparent Relative Density (SSD): n/d
Aparent Relative Density: n/d
Absorption: n/d

Sieve Sizes		%
U.S.	Metric	Passing
3"	80 000	
2"	50 000	
1.5"	37 500	
1"	25 000	100
.75"	20 000	99
.625"	16 000	99
.5"	12 500	99
.375"	10 000	98
No. 4	5 000	97
No. 8	2 500	96
16	1250	94
30	630	90
50	315	74
100	160	21
200	80	3.9



Remarks:

Reviewed By: P.Eng.

EBA Engineering Consultants Ltd.

AGGREGATE ANALYSIS REPORT

Project: Granular Materials Assessment
Address: Yellowknife Gold Project, NT

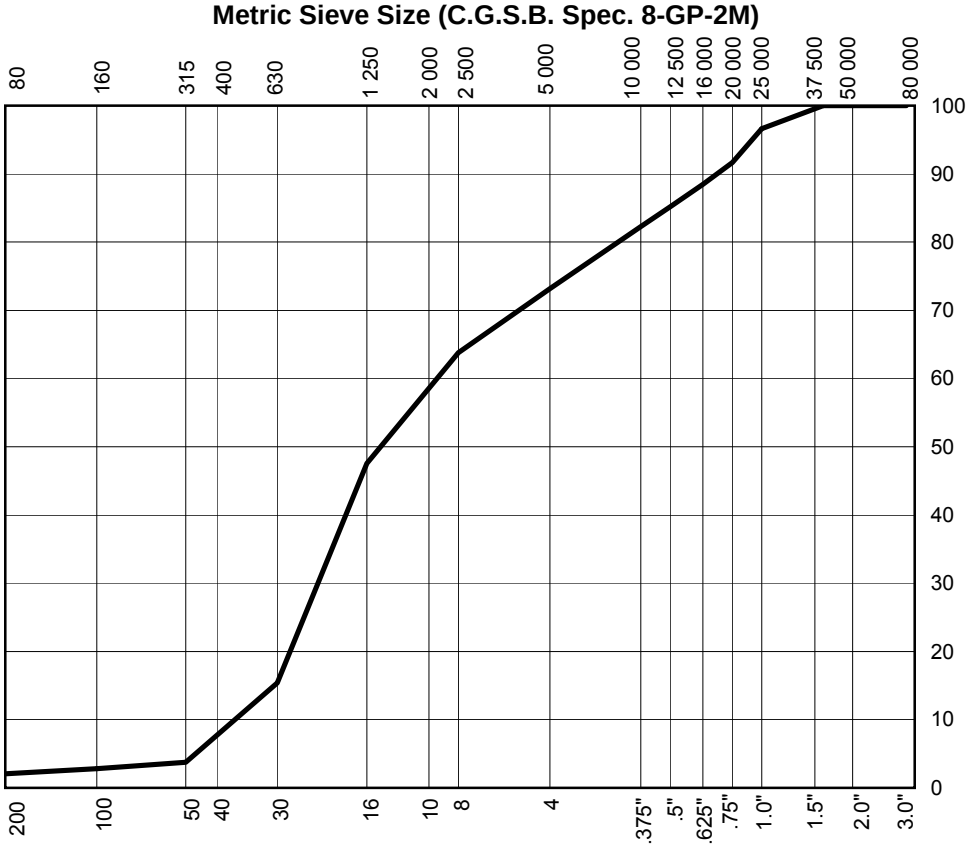
Project Number: Y14101117
Date Tested: 31-Aug-08
Client: Tyhee NWT Corp

Attention: Hugh Wilson

Lab Number: 5019-7
Sample Description: SAND, gravelly, trace silt

Sample # S-07
Natural Moisture Content: 3.2%
Colour Plate No.: n/d
Bulk Relative Density: n/d
Apparent Relative Density (SSD): n/d
Aparent Relative Density: n/d
Absorption: n/d

Sieve Sizes		%
U.S.	Metric	Passing
3"	80 000	
2"	50 000	
1.5"	37 500	100
1"	25 000	97
.75"	20 000	92
.625"	16 000	88
.5"	12 500	85
.375"	10 000	82
No. 4	5 000	73
No. 8	2 500	64
16	1250	48
30	630	15
50	315	4
100	160	3
200	80	2.1



Remarks:

Reviewed By: P.Eng.

EBA Engineering Consultants Ltd.

AGGREGATE ANALYSIS REPORT

Project: Granular Materials Assessment
Address: Yellowknife Gold Project, NT

Project Number: Y14101117
Date Tested: 31-Aug-08
Client: Tyhee NWT Corp

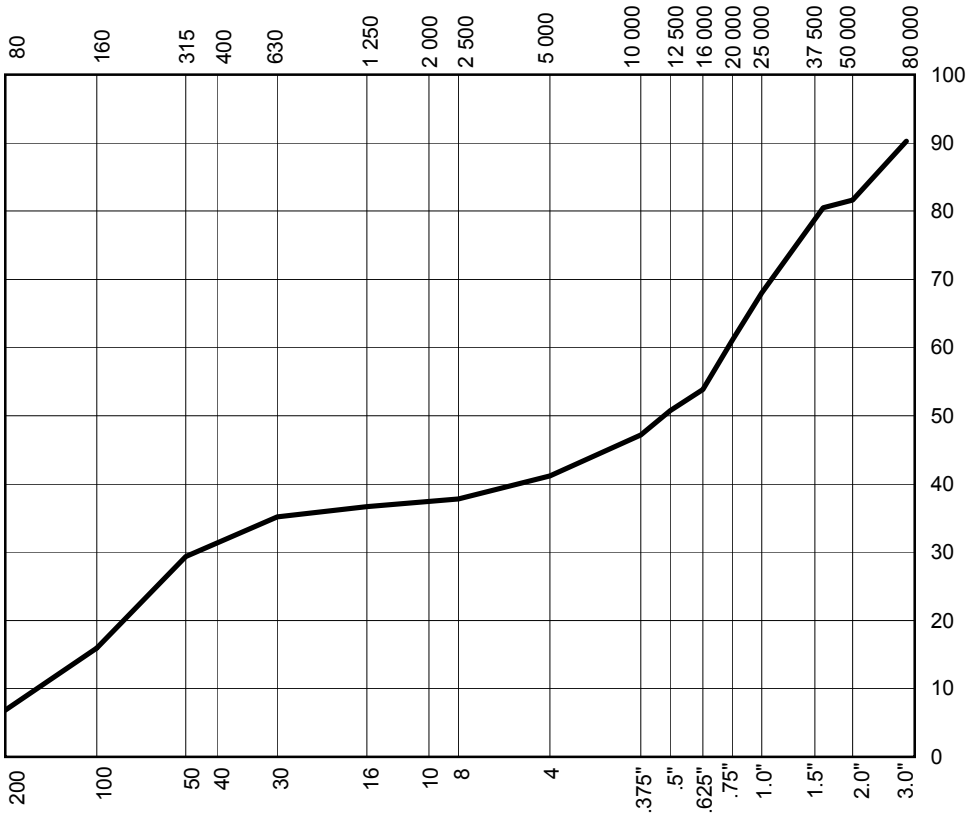
Attention: Hugh Wilson

Lab Number: 5019-8
Sample Description: GRAVEL and SAND, trace silt trace cobbles

Sample # S-08
Natural Moisture Content: 4.3%
Colour Plate No.: n/d
Bulk Relative Density: n/d
Apparent Relative Density (SSD): n/d
Aparent Relative Density: n/d
Absorption: n/d

Sieve Sizes		%
U.S.	Metric	Passing
3"	80 000	90
2"	50 000	82
1.5"	37 500	80
1"	25 000	68
.75"	20 000	61
.625"	16 000	54
.5"	12 500	51
.375"	10 000	47
No. 4	5 000	41
No. 8	2 500	38
16	1250	37
30	630	35
50	315	29
100	160	16
200	80	6.8

Metric Sieve Size (C.G.S.B. Spec. 8-GP-2M)



U.S. Standard Sieve Size - approximate (A.S.T.M. Des. E 11)

Remarks:

Reviewed By: P.Eng.

EBA Engineering Consultants Ltd.

AGGREGATE ANALYSIS REPORT

Project: Granular Materials Assessment
Address: Yellowknife Gold Project, NT

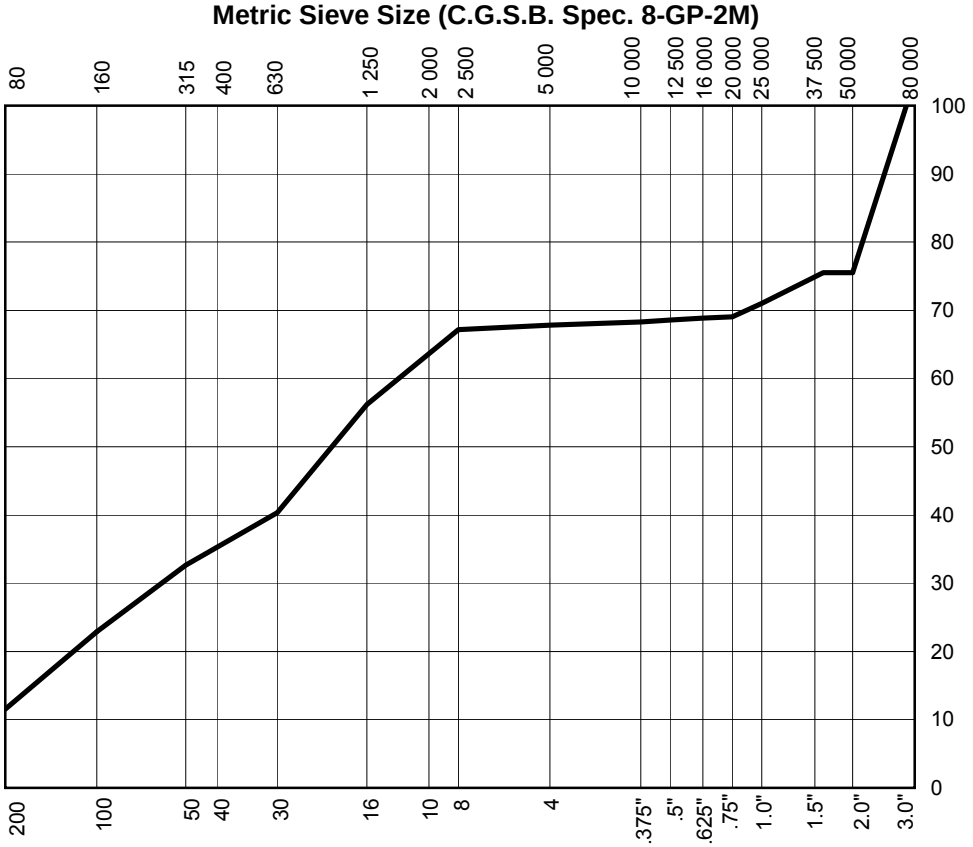
Project Number: Y14101117
Date Tested: 31-Aug-08
Client: Tyhee NWT Corp

Attention: Hugh Wilson

Lab Number: 5019-9
Sample Description: SAND, gravelly, some silt trace cobbles

Sample # S-09
Natural Moisture Content: 5.6%
Colour Plate No.: n/d
Bulk Relative Density: n/d
Apparent Relative Density (SSD): n/d
Aparent Relative Density: n/d
Absorption: n/d

Sieve Sizes		%
U.S.	Metric	Passing
3"	80 000	100
2"	50 000	75
1.5"	37 500	75
1"	25 000	71
.75"	20 000	69
.625"	16 000	69
.5"	12 500	69
.375"	10 000	68
No. 4	5 000	68
No. 8	2 500	67
16	1250	56
30	630	40
50	315	33
100	160	23
200	80	11.5



Remarks:

Reviewed By: P.Eng.

EBA Engineering Consultants Ltd.

AGGREGATE ANALYSIS REPORT

Project: Granular Materials Assessment
Address: Yellowknife Gold Project, NT

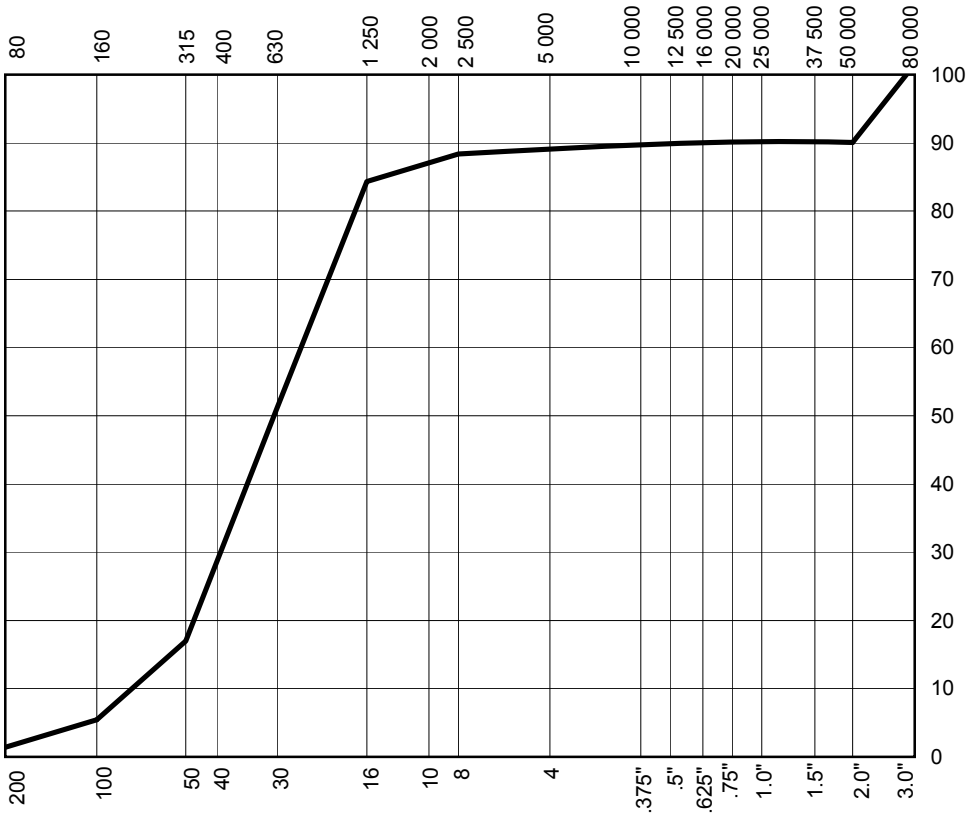
Project Number: Y14101117
Date Tested: 31-Aug-08
Client: Tyhee NWT Corp

Attention: Hugh Wilson

Lab Number: 5019-10
Sample Description: SAND, some gravel, trace silt some cobbles
Sample # S-10
Natural Moisture Content: 2.5%
Colour Plate No.: n/d
Bulk Relative Density: n/d
Apparent Relative Density (SSD): n/d
Aparent Relative Density: n/d
Absorption: n/d

Sieve Sizes		%
U.S.	Metric	Passing
3"	80 000	100
2"	50 000	90
1.5"	37 500	90
1"	25 000	90
.75"	20 000	90
.625"	16 000	90
.5"	12 500	90
.375"	10 000	90
No. 4	5 000	89
No. 8	2 500	88
16	1250	84
30	630	51
50	315	17
100	160	5
200	80	1.4

Metric Sieve Size (C.G.S.B. Spec. 8-GP-2M)



U.S. Standard Sieve Size - approximate (A.S.T.M. Des. E 11)

Remarks:

Reviewed By: P.Eng.

EBA Engineering Consultants Ltd.

AGGREGATE ANALYSIS REPORT

Project: Granular Materials Assessment
Address: Yellowknife Gold Project, NT

Project Number: Y14101117
Date Tested: 31-Aug-08
Client: Tyhee NWT Corp

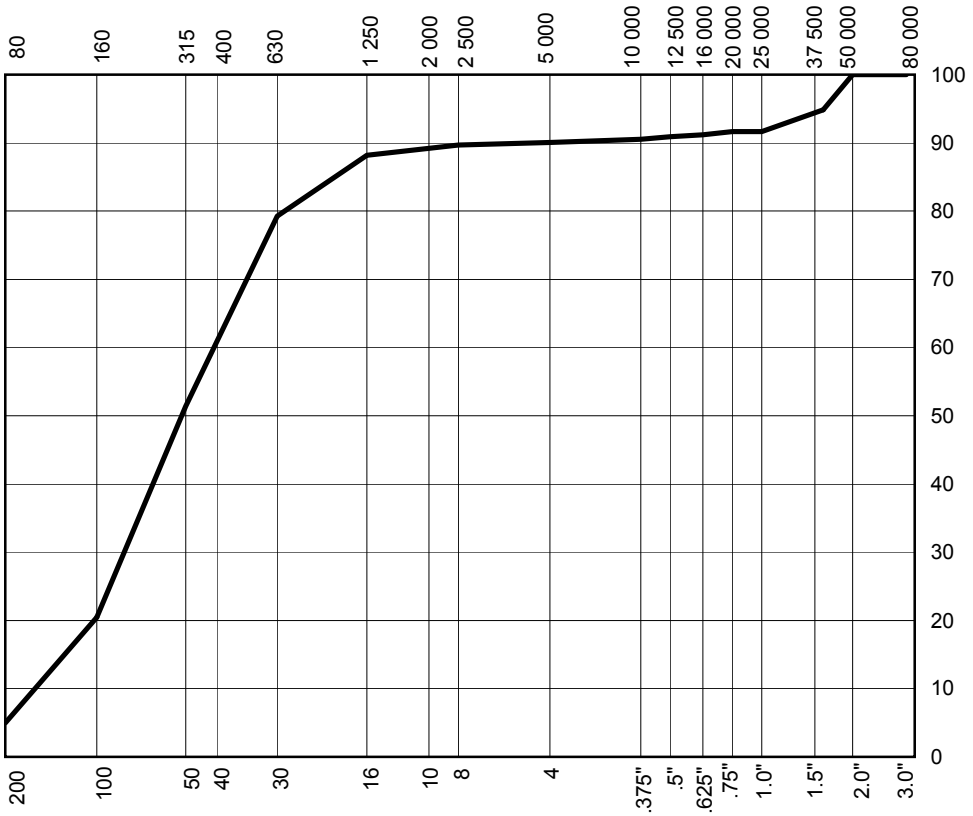
Attention: Hugh Wilson

Lab Number: 5019-11
Sample Description: SAND, trace gravel, trace silt

Sample # S-11
Natural Moisture Content: 4.5%
Colour Plate No.: n/d
Bulk Relative Density: n/d
Apparent Relative Density (SSD): n/d
Aparent Relative Density: n/d
Absorption: n/d

Sieve Sizes		%
U.S.	Metric	Passing
3"	80 000	
2"	50 000	100
1.5"	37 500	95
1"	25 000	92
.75"	20 000	92
.625"	16 000	91
.5"	12 500	91
.375"	10 000	91
No. 4	5 000	90
No. 8	2 500	90
16	1250	88
30	630	79
50	315	51
100	160	20
200	80	4.9

Metric Sieve Size (C.G.S.B. Spec. 8-GP-2M)



U.S. Standard Sieve Size - approximate (A.S.T.M. Des. E 11)

Remarks:

Reviewed By: P.Eng.

EBA Engineering Consultants Ltd.

AGGREGATE ANALYSIS REPORT

Project: Granular Materials Assessment
Address: Yellowknife Gold Project, NT

Project Number: Y14101117
Date Tested: 10-Sep-08
Client: Tyhee NWT Corp

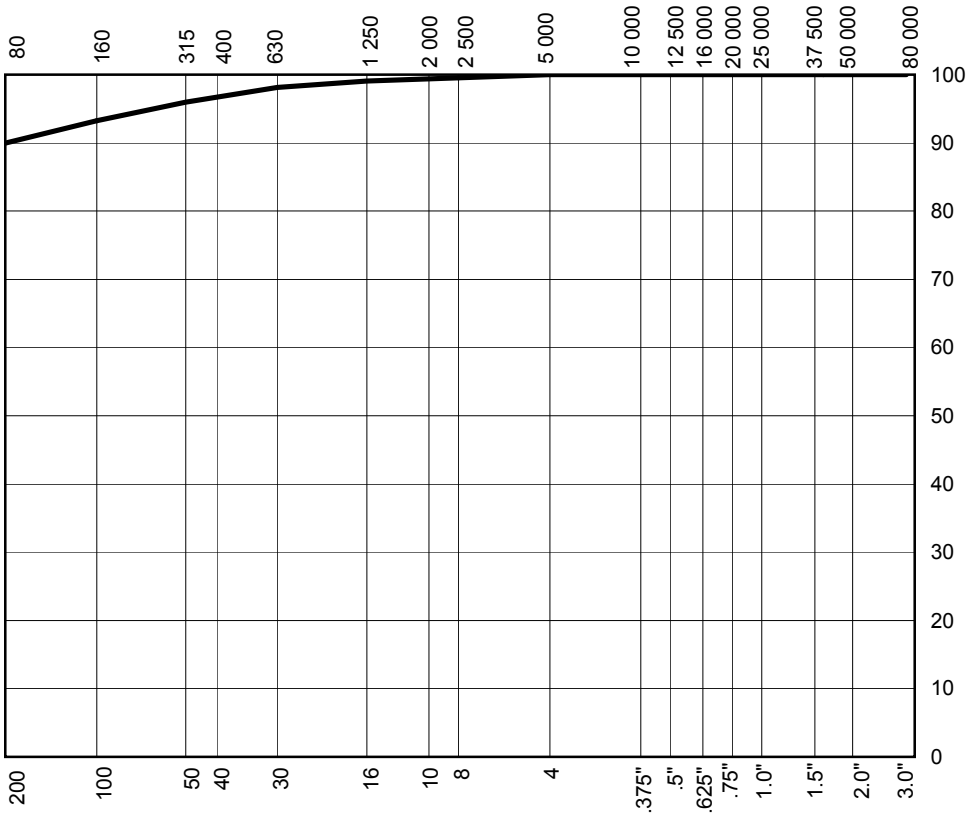
Attention: Hugh Wilson

Lab Number: 5019-12
Sample Description: CLAY, silty, trace sand

Sample # S-13
Natural Moisture Content: 0.0%
Colour Plate No.: n/d
Bulk Relative Density: n/d
Apparent Relative Density (SSD): n/d
Aparent Relative Density: n/d
Absorption: n/d

Sieve Sizes		%
U.S.	Metric	Passing
3"	80 000	
2"	50 000	
1.5"	37 500	
1"	25 000	
.75"	20 000	
.625"	16 000	
.5"	12 500	
.375"	10 000	
No. 4	5 000	100
No. 8	2 500	100
16	1250	99
30	630	98
50	315	96
100	160	93
200	80	90.0

Metric Sieve Size (C.G.S.B. Spec. 8-GP-2M)



U.S. Standard Sieve Size - approximate (A.S.T.M. Des. E 11)

Remarks:

Reviewed By: P.Eng.

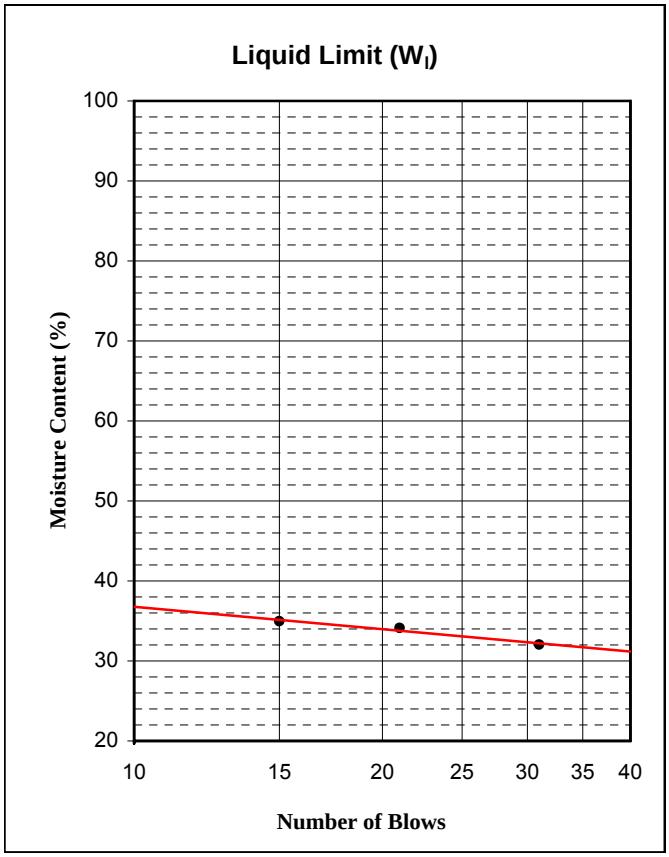
Atterberg Limits Test Form

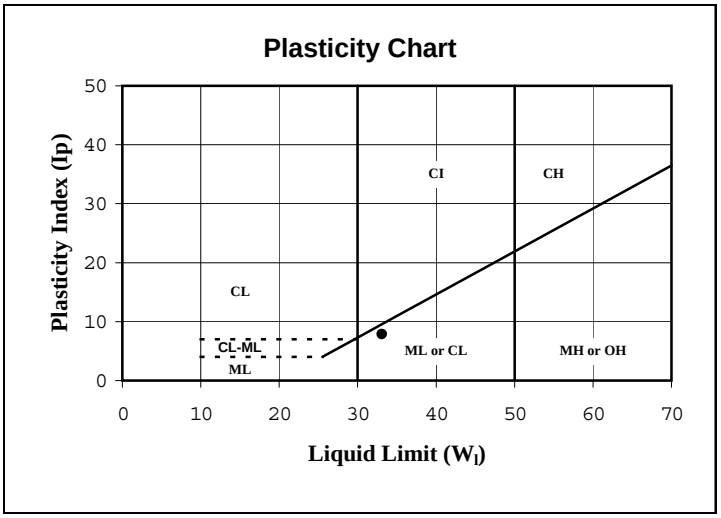
ASTM D4318

Project:	Tyhee NWT Corp	Sample Number:	5019-2
	Yellowknife Gold Project, NT	Borehole Number:	S-12
Project Number:	Y14101117	Depth:	
Sample Description:	Silty Clay	Date Sampled:	15-Aug-08
		Sampled By:	WRZ
		Date Tested:	Oct 8/08
		Tested By:	TB

Plastic Limit Test			Natural Moisture
Trial Number	1	2	
Tare Number	H7	157	K11
Mass Wet Soil + Tare	23.00	18.70	6273.00
Mass Dry Soil + Tare	19.10	15.80	4919.00
Mass of Tare	4.00	4.00	733.00
Mass of Water	3.90	2.90	1354.0
Mass of Dry Soil	15.10	11.80	4186.0
Moisture Content (%)	25.8	24.6	32.3

Liquid Limit Test			
Trial Number	1	2	3
No. of Blows	15	21	31
Tare Number	T2	T40	R110
Mass Wet Soil + Tare	51.10	54.60	65.80
Mass Dry Soil + Tare	38.90	41.70	50.80
Mass of Tare	4.00	3.90	4.00
Mass of Water	12.20	12.90	15.00
Mass of Dry Soil	34.90	37.80	46.80
Moisture Content (%)	35.0	34.1	32.1





Natural Moisture (%)	32.3
Liquid Limit (%)	33
Plastic Limit (%)	25
PLASTICITY INDEX (%)	**8**

Soil Description: Medium Plasticity

USCS Symbol: **CI**

Remarks:

EBA Engineering Consultants Ltd.

APPENDIX

APPENDIX B: GENERAL CONDITIONS

GEOTECHNICAL REPORT – GENERAL CONDITIONS

This report incorporates and is subject to these "General Conditions".

1.0 USE OF REPORT AND OWNERSHIP

This geotechnical report pertains to a specific site, a specific development and a specific scope of work. It is not applicable to any other sites nor should it be relied upon for types of development other than that to which it refers. Any variation from the site or development would necessitate a supplementary geotechnical assessment.

This report and the recommendations contained in it are intended for the sole use of EBA's client. EBA does not accept any responsibility for the accuracy of any of the data, the analyses or the recommendations contained or referenced in the report when the report is used or relied upon by any party other than EBA's client unless otherwise authorized in writing by EBA. Any unauthorized use of the report is at the sole risk of the user.

This report is subject to copyright and shall not be reproduced either wholly or in part without the prior, written permission of EBA. Additional copies of the report, if required, may be obtained upon request.

2.0 NATURE AND EXACTNESS OF SOIL AND ROCK DESCRIPTIONS

Classification and identification of soils and rocks are based upon commonly accepted systems and methods employed in professional geotechnical practice. This report contains descriptions of the systems and methods used. Where deviations from the system or method prevail, they are specifically mentioned.

Classification and identification of geological units are judgmental in nature as to both type and condition. EBA does not warrant conditions represented herein as exact, but infers accuracy only to the extent that is common in practice.

Where subsurface conditions encountered during development are different from those described in this report, qualified geotechnical personnel should revisit the site and review recommendations in light of the actual conditions encountered.

3.0 LOGS OF TESTHOLES

The testhole logs are a compilation of conditions and classification of soils and rocks as obtained from field observations and laboratory testing of selected samples. Soil and rock zones have been interpreted. Change from one geological zone to the other, indicated on the logs as a distinct line, can be, in fact, transitional. The extent of transition is interpretive. Any circumstance which requires precise definition of soil or rock zone transition elevations may require further investigation and review.

4.0 STRATIGRAPHIC AND GEOLOGICAL INFORMATION

The stratigraphic and geological information indicated on drawings contained in this report are inferred from logs of test holes and/or soil/rock exposures. Stratigraphy is known only at the locations of the test hole or exposure. Actual geology and stratigraphy between test holes and/or exposures may vary from that shown on these drawings. Natural variations in geological conditions are inherent and are a function of the historic environment. EBA does not represent the conditions illustrated as exact but recognizes that variations will exist. Where knowledge of more precise locations of geological units is necessary, additional investigation and review may be necessary.

5.0 SURFACE WATER AND GROUNDWATER CONDITIONS

Surface and groundwater conditions mentioned in this report are those observed at the times recorded in the report. These conditions vary with geological detail between observation sites; annual, seasonal and special meteorologic conditions; and with development activity. Interpretation of water conditions from observations and records is judgmental and constitutes an evaluation of circumstances as influenced by geology, meteorology and development activity. Deviations from these observations may occur during the course of development activities.

6.0 PROTECTION OF EXPOSED GROUND

Excavation and construction operations expose geological materials to climatic elements (freeze/thaw, wet/dry) and/or mechanical disturbance which can cause severe deterioration. Unless otherwise specifically indicated in this report, the walls and floors of excavations must be protected from the elements, particularly moisture, desiccation, frost action and construction traffic.

7.0 SUPPORT OF ADJACENT GROUND AND STRUCTURES

Unless otherwise specifically advised, support of ground and structures adjacent to the anticipated construction and preservation of adjacent ground and structures from the adverse impact of construction activity is required.

8.0 INFLUENCE OF CONSTRUCTION ACTIVITY

There is a direct correlation between construction activity and structural performance of adjacent buildings and other installations. The influence of all anticipated construction activities should be considered by the contractor, owner, architect and prime engineer in consultation with a geotechnical engineer when the final design and construction techniques are known.

9.0 OBSERVATIONS DURING CONSTRUCTION

Because of the nature of geological deposits, the judgmental nature of geotechnical engineering, as well as the potential of adverse circumstances arising from construction activity, observations during site preparation, excavation and construction should be carried out by a geotechnical engineer. These observations may then serve as the basis for confirmation and/or alteration of geotechnical recommendations or design guidelines presented herein.

10.0 DRAINAGE SYSTEMS

Where temporary or permanent drainage systems are installed within or around a structure, the systems which will be installed must protect the structure from loss of ground due to internal erosion and must be designed so as to assure continued performance of the drains. Specific design detail of such systems should be developed or reviewed by the geotechnical engineer. Unless otherwise specified, it is a condition of this report that effective temporary and permanent drainage systems are required and that they must be considered in relation to project purpose and function.

11.0 BEARING CAPACITY

Design bearing capacities, loads and allowable stresses quoted in this report relate to a specific soil or rock type and condition. Construction activity and environmental circumstances can materially change the condition of soil or rock. The elevation at which a soil or rock type occurs is variable. It is a requirement of this report that structural elements be founded in and/or upon geological materials of the type and in the condition assumed. Sufficient observations should be made by qualified geotechnical personnel during construction to assure that the soil and/or rock conditions assumed in this report in fact exist at the site.

12.0 SAMPLES

EBA will retain all soil and rock samples for 30 days after this report is issued. Further storage or transfer of samples can be made at the client's expense upon written request, otherwise samples will be discarded.

13.0 STANDARD OF CARE

Services performed by EBA for this report have been conducted in a manner consistent with the level of skill ordinarily exercised by members of the profession currently practising under similar conditions in the jurisdiction in which the services are provided. Engineering judgement has been applied in developing the conclusions and/or recommendations provided in this report. No warranty or guarantee, express or implied, is made concerning the test results, comments, recommendations, or any other portion of this report.

14.0 ENVIRONMENTAL AND REGULATORY ISSUES

Unless stipulated in the report, EBA has not been retained to investigate, address or consider and has not investigated, addressed or considered any environmental or regulatory issues associated with development on the subject site.

15.0 ALTERNATE REPORT FORMAT

Where EBA submits both electronic file and hard copy versions of reports, drawings and other project-related documents and deliverables (collectively termed EBA's instruments of professional service), the Client agrees that only the signed and sealed hard copy versions shall be considered final and legally binding. The hard copy versions submitted by EBA shall be the original documents for record and working purposes, and, in the event of a dispute or discrepancies, the hard copy versions shall govern over the electronic versions. Furthermore, the Client agrees and waives all future right of dispute that the original hard copy signed version archived by EBA shall be deemed to be the overall original for the Project.

The Client agrees that both electronic file and hard copy versions of EBA's instruments of professional service shall not, under any circumstances, no matter who owns or uses them, be altered by any party except EBA. The Client warrants that EBA's instruments of professional service will be used only and exactly as submitted by EBA.

The Client recognizes and agrees that electronic files submitted by EBA have been prepared and submitted using specific software and hardware systems. EBA makes no representation about the compatibility of these files with the Client's current or future software and hardware systems.