

Eagle Gold Project

Project Proposal for Executive Committee Review

Pursuant to the Yukon Environmental and Socio-economic Assessment Act

Appendix 6: Environmental Baseline Report: Surficial Geology, Terrain, and Soils

APPENDIX 6

Environmental Baseline Report: Surficial Geology, Terrain, and Soils

EAGLE GOLD PROJECT

Environmental Baseline Report: Surficial Geology, Terrain, and Soils

FINAL REPORT



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EXECUTIVE SUMMARY

This report presents background information, methods, and results for the baseline surficial geology, terrain, and soils studies conducted during 2009 for Victoria Gold's Eagle Gold Project (the Project). This report also summarizes relevant historical studies that have been conducted in the Project area, and provides updated mapping and additional laboratory analysis to better characterize terrain and soil conditions. In addition, this report presents detailed geohazard identification and terrain stability analysis, which have been developed to aid in mine design and proposed road upgrades. Finally, this report provides information on soil physical and chemical properties, to identify suitable materials for use in reclamation, and to support the development of a site soil-handling plan.

Three study areas were established for the baseline report: (1) the local study area (LSA), defined by the Dublin Gulch watershed, which encompasses the area of proposed development; (2) the regional study area (RSA), defined by an expanded area around the Dublin Gulch watershed, to provide a broader context for the LSA; and (3) the road corridor study area (RCSA), which encompasses the area potentially affected by proposed upgrades to the mine site access road.

The surficial material of the LSA is primarily weathered bedrock; of the RSA primarily colluvium, and of the RCSA largely fluvial deposits. Terrain in all three study areas is generally stable with limited and isolated potentially unstable and unstable sites

Permafrost is present in large areas of the LSA, resulting in Cryosols and inclusions of Brunisols. Despite over 200,000 years of soil development, pedogenic processes have been slow due to the cold climate and short growing season for vegetation.

Soil in the LSA is limited for reclamation suitability primarily by high coarse-fragment content, due to development of soils from weathered bedrock. Rooting depths are on average 50 cm, but can reach depths of over 120 cm. Baseline arsenic levels are naturally high in the soil, but do not limit soil reclamation suitability.

ABBREVIATIONS AND ACRONYMS

asl.....	above sea level
BC	British Columbia
DDH	diamond drill hole
DEM	digital elevation model
f asl.....	feet above sea level
ha	hectares
HCAR.....	Haggart Creek Access Road
HD-MAPP.....	high definition mapping and applications
IEE	Initial Environmental Evaluation
ka BP.....	thousand years before present
Ma BP	Million years before present
LIDAR.....	Light Detection and Ranging
LSA	local study area
m asl.....	metres above sea level
PAG.....	Potential Acid Generation
QA/QC.....	quality assurance/quality control
RCSA	road corridor study area
RISC.....	Resource Information Standards Committee
RSA	regional study area
SIL.....	survey intensity level
SMR	South McQuesten Road
TEM.....	Terrestrial Ecosystem Mapping
TDR.....	Technical Data Report

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1 INTRODUCTION

This report presents background information, methods, and results for the baseline surficial geology, terrain, and soils studies conducted during 2009 for Victoria Gold’s Eagle Gold Project (the Project). This report also summarizes relevant studies that were conducted in the Project area in the past - of particular importance are an Initial Environmental Evaluation (IEE - Hallam Knight Piésold Ltd. 1996a); and a detailed geotechnical test hole program (SITKA Corp. 1996). In addition, two analyses of gaps in the existing data were conducted and were instrumental in shaping the current baseline study—a gap analysis completed during 2007 by Jacques Whitford AXYS (now Stantec) for StrataGold in support of their Dublin Gulch Gold Project, and an analysis completed by Madrone in 1996.

The gap analyses identified data deficiencies in the surficial geology mapping, terrain stability, and soils information required for a project proposal submission under the *Yukon Environmental and Socio-Economic Assessment Act*. Primary identified deficiencies were that the pre-existing data were not digital, did not identify standards followed, and required updating to the standards of the Resource Information Standards Committee (RISC) (1998, 2000). It was further determined that to assist with soil mapping and reclamation planning for the mine site, greater detail in terrain mapping was required. Some spatially limited soil information exists from 1995 (Hallam Knight Piésold 1996a), and meets current standards for soil classification. However, this soil information was insufficient to support environmental assessment, decommissioning, and reclamation planning. Table 1 summarizes gaps identified by the 2007 analysis, and how these gaps are addressed in this baseline report.

Table 1: Terrain and Soil Gap Analysis

2007 Gap Analysis Topics	2009 Baseline Update Analysis
Surficial Geology Maps	Mapped surficial geology of the mine site, regional study area, and proposed road upgrade corridor following BC RISC standards (1998, 2000)
Terrain Stability Hazards	Updated geomorphic processes, geohazards, and slope analysis of the mine site, the regional study area, and the proposed road upgrade corridor.
Soil Map	Created soil-map units to characterize the mine site.
Soil Laboratory Analysis	Completed soil analyses focused on metals in soils (rather than nutrients) due to the mineralized nature of the mine site.
Soil Characterization for Reclamation	Rated soil for reclamation suitability and topsoil depths. Although not identified in the gap analysis, overburden materials were also included in this baseline study, due to their potential use in site reclamation.

A glossary of terms specific to surficial geology, terrain, and soils, including key abbreviations used in the data collection, is contained in Appendix A.

2 METHODS

Surficial geology, terrain and soils resources have been characterized through a combination of research techniques including a literature review, field inventory programs, and detailed mapping of terrain and soils.

2.1 Review of Existing Literature

Literature review focused on existing mapping of the study area, and on regional mapping. Historical data specific to the Dublin Gulch watershed was incorporated into the current baseline dataset, and included information from trench sites, auger holes, drill logs, and soil survey sites.

2.1.1 Mapping Review

Review of existing mapping focused on surficial geology mapping, biophysical mapping that incorporated terrain attributes, and regional soil mapping. This review was divided into two broad categories:

1. A review of existing mapping in the Yukon and British Columbia, to establish a repeatable mapping approach that meets existing inventory and mapping standards and is compatible with previous studies in the Project area.
2. A review of background geology and surficial geology information of the Project area. This information was compiled primarily from regional studies. As a result, background data were obtained from a much larger area and scale, which provides general context rather than detailed information for the study area.

Several sources provided background information related to surficial geology and bioterrain mapping:

- Regional-scale (1:250,000), digital surficial geology mapping for the Project area (Bond 1998a, b)
- Digital geology mapping of the Project area (Gordey and Makepeace 2003)
- Surficial geology mapping of the Watson Lake area; used as background information for surficial geology mapping and as an example of the bioterrain mapping approach in the Yukon (Lipovsky, et al. 2005; Lipovsky and McKenna 2005)
- Regional-scale (1:253,440) surficial geology of Larsen Creek; also used for background information (Vernon and Hughes 1965).

Regional soil mapping was used to create soil map legends and descriptions of soil map units in the Mayo area, and also provided context on soil types and soil suitability for various land uses (Rostad, et al. 1977). Pedogenic processes that occur both in unglaciated soils, permafrost, and soils developed from the Reid glaciations were also reviewed to aid in developing soil map units (Bond and Sanborn 2006; Dampier et al. 2009; and Smith et al. 1986).

In the absence of Yukon Territory terrain-mapping standards, the baseline Project-area mapping used the following:

- Terrain Classification System for British Columbia (Howes and Kenk 1997)
- Standards for Terrestrial Ecosystem Mapping in British Columbia (Resource Inventory Standards Committee 1998, 2000)
- *Mapping and Assessing Terrain Stability Guidebook, 2nd Edition* (BC Forest Service and BC Environment 1999)
- Guidelines and Standards to Terrain Mapping in British Columbia (RISC 1996)
- *Guidelines for Terrain Stability Assessments in the Forest Sector* (Association of Professional Engineers and Geoscientists of British Columbia 2003)
- Ecoregions of the Yukon Territory and the Yukon Ecological Land Classification and Mapping – Strategic Framework, Yukon Department of Environment and Department of Energy.

2.1.2 Historical Site Data Review

As stated earlier, a number of relevant environmental studies have been completed in the Dublin Gulch watershed prior to the current baseline work. An Initial Environmental Evaluation (IEE - Hallam Knight Piésold Ltd. 1996a; and b), and a detailed geotechnical test hole program (SITKA Corp. 1996) were both completed in 1996.

The 1996 IEE involved 1:25,000 terrain mapping (Appendix B), which identified areas affected by debris flow, avalanche, and solifluction. In addition, the IEE presented information on soil physical and chemical properties (including soil nutrients, salinity and baseline metals) from analyses of soil samples collected at 18 sites. The 1996 test hole program included completion of 251 test pits and auger holes, which provide map-attribute information on depth of topsoil and overburden, and on geoprocesses such as presence of permafrost. In addition, 203 diamond-drill holes provided information on depth to bedrock.

2.1.3 Recent Yukon Mining Projects Review

Methods from other recent Yukon mining projects (e.g., Yukon Zinc's Wolverine Project 2005) were reviewed for field and mapping methods, and baseline descriptions for surficial geology, terrain, and soils.

2.2 Study Area Boundaries

The Project area was divided into three study areas defined by the proposed development footprint and by terrain features. These three areas are defined below.

2.2.1 Local Study Area

The local study area (LSA) encompasses the proposed development area, and is 1,606 hectares in size. The LSA is the Dublin Gulch watershed, with extensions to capture proposed development footprint outside the watershed at the northwestern corner (near Ann Gulch), and north of the confluence of Dublin Gulch and Haggart Creek (Figure 2-1). The LSA is the only study area applicable to the soil baseline.

2.2.2 Regional Study Area

The regional study area (RSA) encompasses the 1,606 ha LSA plus an additional 5,932 ha surrounding the LSA, for a total of 7,538 ha. The RSA provides broader context for the LSA, and provides baseline information for the vegetation and wildlife disciplines. The RSA is defined by the heights of land to the west and east of the Dublin Gulch watershed, and by Haggart Creek to the north and Lynx Creek to the south (Figure 2-2).

2.2.3 Road Corridor Study Area

The road corridor study area (RCSA) encompasses the proposed road upgrade corridor for the South McQuesten Road (SMR) and the Haggart Creek Access Road (HCAR). This corridor is approximately 44.8 km long and 1 km wide (500 m either side of the road centreline), or 4,579 ha. (Figure 2-3).

2.3 Field Programs

Three separate field programs were completed for the baseline study in 2009. They are described below.

Reconnaissance Program (July 2009)

An initial helicopter over-flight was conducted to gain an overview of the project area, to collect preparatory information for the biophysical field program, to identify landform features of importance, and to identify areas where potentially unstable and unstable terrain may exist. The flight was also used to confirm pre-site selection for the terrain and vegetation joint field program, and to broadly identify the type and extent of mass wasting for the LSA and RSA.

Biophysical Field Program (August 2009)

The biophysical field program was a shared survey program between the vegetation, terrain, and soils disciplines. The field team included a senior vegetation ecologist and a terrestrial scientist with skill in surficial geology, terrain, and soils. The survey was conducted within the LSA, RSA, and RCSA. Soil data and sample collection were confined primarily to the LSA.

The objectives of the program within the LSA and RSA were to describe the surficial geology, characterize terrain conditions and identify any natural geohazards. Within the LSA, full soil profile descriptions – including soil sampling and characterization for reclamation suitability – were completed, in addition to the surficial geology, terrain and geohazard survey.

Three types of inspections were conducted during the biophysical program:

1. **Detailed ground plots** – included excavation of a soil pit at each site; a comprehensive description of soil, terrain, and surficial material conditions; and collection of soil samples (in the LSA).
2. **Reconnaissance ground inspections** – included characterization of surficial geology, terrain, and soils, but in less detail than for the plots described above.
3. **Visual inspections** – conducted by ground or air, and used to confirm landscape units and provide general information required to support bioterrain mapping.

Trenching Program (July to August 2009)

The trenching program carried out by the geotechnical team from BGC Engineering Inc. characterized surficial materials (overburden) that may be stripped during mining activities and thus be available for reclamation use. This program was confined to proposed development areas related to mining activities within the LSA. The information gathered from this program supports reclamation suitability ratings, development of soil handling plans, and mine design.

2.3.1 Survey Intensity Level

The precision required and delivered by biophysical mapping is defined by the Survey Intensity Level (SIL). For the LSA, the field program was designed to meet a SIL 2, assuming at least one inspection per 20 ha. Reconnaissance and exploratory-level SILs of 3 and 5 were met for the RSA and RCSA, respectively. The designed level of survey detail is reduced for these study areas, as ground disturbance will be limited and reclamation is not required. Table 2 provides the type and number of survey sites in each study area, and Table 3 summarizes the SIL for the LSA, RSA, and RCSA.

Table 2: Survey Sites within the Local Study Area

Plot Type and Year	Number of Field Plots in the LSA	Number of Samples Analyzed in LSA	Number of Field Plots in the RSA	Number of Samples Analyzed in RSA	Number of Field Plots in the RCSA
Soil and Terrain Plots 2009	72	16	47	0	23
BGC Trench Sites 2009	69	18	0	0	0
Sitka Soil Sites 1995	14	14	4	4	0
Sitka Auger Holes 1996	19	0	0	0	0
Sitka Test Pits 1996	203	0	29	0	0
Diamond Drill Holes 1995	203	0	0	0	0
TOTAL	580	48	80	4	23

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Table 3: Survey Sites contributing to Terrain and Soil Survey Intensity Level

Study Area	Number of Sites	Total Area (Ha)	Inspection per Hectares ^b
Local Study Area	86 ^a	1606	19
Regional Study Area	80	5932 ^c	74
RCSA Study Area	23	4579	199

NOTES:

^a Contributing sites include 2009 plots and 1995 Sitka soil sites. Sitka auger holes, test pits, and diamond drill holes were not counted as sites due to the limited information on terrain and soil conditions available from the drill logs.

^b Plots per hectare, used for survey intensity level (SIL), is calculated in accordance with CANSIS and BC standards.

^c Excludes total area of the LSA

2.3.2 Data Collection

Objectives were to:

- Collect data to verify the preliminary terrain, terrain stability, and soil classifications
- Close data gaps in the existing literature and verify published baseline data
- Collect sufficient data for the assessment of potential Project effects on surficial geology, terrain and soils, for mitigation (reclamation) planning, and to support mine design.

Surficial Geology and Terrain Information

Surficial geology and terrain data were collected for the following parameters:

- Slope gradient and length
- Topographic position
- Surficial material
- Surface expression
- Texture of surface material
- Surface stoniness
- Percentage of coarse fragments and coarse fragment description
- Drainage
- Geomorphic processes and qualifiers including presence of permafrost
- Slope position
- Terrain stability
- Erosion at site
- Aspect
- Drainage
- Surface stoniness
- Land use.

Soil Information

For the soil pit at each inspection site, soil horizons were described using criteria established by the Soil Classification Working Group (1998) and according to national standards established by the Expert Committee on Soil Survey (1983). The following information was collected for each horizon at detailed ground plots:

- Horizon depth
- Horizon boundaries
- Texture
- Colour
- Structure
- pH
- Coarse fragment content
- Carbonates
- Extent of mottling
- Rooting depth, size and abundance, and root restrictions
- Cryoturbation and depth to permafrost
- Presence and depth of seepage
- Presence and depth of bedrock.

Soil Sampling

Soil samples were collected from various horizons within a soil profile at a select number of plots dispersed throughout the LSA (collected samples are listed in Appendix B). Samples were analyzed in laboratory for the following properties:

- Particle size (texture and coarse fragments)
- pH
- Metals and trace element concentrations (completed for soil and overburden).

Ten percent of analyzed samples were blind duplicates, as an assurance on analytical quality and consistency. Soil sampling methods and results from 2009 are contained in Appendix C.

In addition to the above analyses, soil nutrient and metals data from analyses completed during the 1995 soil survey were utilized, where possible, to reduce duplication of effort.

2.3.3 Data Collection Quality Assurance and Quality Control

The first step in data-collection quality assurance and quality control was field correlation, which occurred at the onset of the field program. The leader of the study worked with other field staff to ensure a shared understanding of the purpose of the program and the use of standardized data

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collection methods. Geology, parent materials, soil catena, soil horizon sequences, geomorphic processes, and soil subgroups common in the area were discussed prior to field work. During the field program, field plot cards and site survey/sampling locations were reviewed nightly. After the field program, the compiled database was scanned for errors and omissions, and a select number of sites were checked by the discipline lead.

A professional geoscientist also reviewed existing baseline data and compared it to mapping to verify accuracy of mapped surficial material, surface expressions, geohazards, geoproceses, and terrain stability. Sign-off from the reviewing professional is attached in Appendix D.

2.4 Data Analysis

The methods used to prepare surficial geology and terrain mapping, and soil mapping interpretations are described in the following section.

2.4.1 Surficial Geology and Terrain Mapping

Surficial geology and terrain mapping, and subsequent stratification into ecosystem units, form the basis of biophysical mapping. Bioterrain mapping integrates surficial geology and terrain conditions (slope, landscape position, drainage, and geomorphic processes) with ecological factors (vegetation community and structure, and soil moisture and nutrient regimes). This mapping approach has been shown to be effective in providing biophysical information for integrated resource management and land-use planning activities, and for cumulative effects management (Lipovsky and McKenna 2005).

The design of the spatial mapping approach for terrain drew upon several sources including Yukon Territory manuals, existing Territorial mapping (e.g., Watson Lake), and precedents from other recent Yukon mining projects (e.g., Wolverine). The mapping approach also adopts relevant portions of the British Columbia provincial standard manuals as per Yukon surficial mapping (Lipovsky and Bond, 2008).

Mapping was based on both black-and-white and colour aerial photographs of the study areas. The LSA and the RSA had 1:40,000 colour and 1:10,000 black-and-white aerial photographs, both captured in 1995. Mapping for the RCSA was completed on 1:20,000 black-and-white aerial photographs captured in 1996.

Surficial geology and terrain mapping were completed at 1:20,000 within the RSA and the RCSA. More detailed 1:10,000 mapping was undertaken within the LSA. The mapping was completed using softcopy HD-MAPP system for the LSA and RSA. Stereoscope methods were used for the RCSA.

The landscape was subdivided into terrain polygons. These polygons were based on attributes such as surficial material(s), surface expression, slope, geomorphic processes, drainage and terrain stability. Within each polygon there were a minimum of one to a maximum of three labels that could be applied.

The key terrain attributes identified in the delineation and classification process are outlined below.

2.4.1.1 Surficial Materials

Surficial materials are defined as non-lithified, unconsolidated sediments. They form by weathering of local bedrock materials; deposition of sediments by ice, water; and wind; biological accumulation; volcanic activity; and human activity. Surficial materials are classified according to their mode of formation, transport, and deposition (Howes and Kenk, 1997). Table 4 lists the surficial materials mapped for the study areas.

Table 4: Surficial Material Types

Symbol	Surficial Material ¹	Description
A	Anthropogenic	Artificial materials, man-made disturbed areas
C	Colluvium	Material moved downslope as a result of gravity. Large-scale landslides are generally mapped on the basis of parent materials, but are indicated on the alignment sheets by an on-site symbol.
D	Weathered Bedrock	Debris produced by mechanical weathering typically consists of angular fragments, although plutonic rock fragments may be converted in situ to subrounded forms by spheroidal weathering. Also includes bedrock that has been altered by chemical weathering that usually contains a high proportion of residual silts and clays.
F	Fluvial	Materials transported and deposited by streams and rivers
FG	Glaciofluvial	Materials that exhibit clear evidence of having been deposited by glacial meltwater rivers
LG	Glaciolacustrine	Lacustrine materials deposited in or along the margins of temporary glacial lakes
M	Moraine	Material deposited directly by glacier ice without modification by any other agent of transportation, either through basal lodgement or melting/ablation of ice.
N	Water	Water (e.g., lakes, rivers)
O	Organic	Sediments composed largely of organic material resulting from the accumulation of vegetative matter; contain at least 30 percent organic matter by weight
R	Rock	Bedrock outcrops and rock covered by thin mantle (up to 10cm thick) of unconsolidated or organic material

NOTE:

¹Defined in Terrain Classification System for British Columbia (Howes and Kenk 1997)

2.4.1.2 Surface Expression

Surface expression refers to the form (assemblage of slopes) and pattern of forms expressed by the land surface (landforms and geomorphology). Surface expression symbols may also describe how unconsolidated surficial materials relate to the underlying unit (Howes and Kenk 1997). Table 5 lists the surface expressions used for terrain mapping.

Table 5: Surface Expression Classes

Symbol	Surface Expression ¹	Definition
a	Moderate slope	Slope 27–49 percent
b	Blanket	Surface material >1m thick
c	Cone	Fan-shaped, slope >26 percent
d	Depression	Hollow
f	Fan	Fan-shaped, slope <26 percent
h	Hummocky	Non-linear rises and hollows, most slopes >26 percent
j	Gentle slope	Slope 6–26 percent
k	Moderately steep slope	Slope 50–70 percent
m	Rolling	Elongate rises and hollows
p	Plain	Slope 0–5 percent
r	Ridged	Elongate rises
s	Steep slope	Slope >70 percent
t	Terrace	Stepped topography
u	Undulating	Non-linear rises and hollows, most slopes <26 percent
v	Veneer	Surface material > 20cm but <1 m thick
w	Mantle of variable thickness	Surface material of variable thickness ranging from 2cm to >1m
x	Thin veneer	Surface material <20cm thick

NOTE:

¹Defined in Terrain Classification System for British Columbia (Howes and Kenk 1997)

2.4.1.3 Slope Analysis

Slope analysis was based on nine slope classes (Table 6). The purpose of the slope classes is to combine both important soil-erosion breaks and terrain-stability breaks. For example, at slope gradients of 2%, water flows along a surface, and at 60%, most terrain features are potentially unstable.

The slope analysis was based on Light Detection and Ranging (LiDAR) contour intervals within the LSA. The 10-metre contour intervals were converted into slope classes within the bioterrain mapping and assigned a primary, secondary, and tertiary slope within each polygon. For both the RSA and RCSA, less precision and accuracy is required, allowing for a simpler procedure in which the 20-foot contour interval from the Digital Elevation Model (DEM) was subdivided into the slope classes.

Table 6: Slope Classes

Slope Class	Slope Range (%)	Slope Description
1	0-2	Level
2	>2-5	Nearly Level Slopes
3	>5-9	Very Gentle Slopes
4	>9-15	Gentle Slopes
5	>15-30	Moderate Slopes
6	>30-45	Strong Slopes
7	>45-60	Very Strong Slopes
8	>60-85	Extreme slopes
9	>85	Steep Slopes

2.4.1.4 Geomorphic Processes

Geomorphic processes are natural mechanisms of weathering, erosion and deposition that result in the modification of surficial materials and terrain features (Howes and Kenk 1997). Table 7 lists the geomorphic modifying process classes commonly used in terrain mapping. Permafrost was identified by photo interpretation, soil pits, and trench-log data from 2009.

Table 7: Geomorphic Processes

Label	Geomorphic Modifying Process ¹
E	Channelled by meltwater
F	Slow mass movement
H	Kettled
L	Surface seepage
M	Meandering channel
N	Nivation
P	Piping
R	Rapid mass movement
S	Solifluction
U	Inundation
V	Gully erosion
X	General permafrost processes
Z	Periglacial processes
—	Denotes initiation zone

NOTE:

¹Defined in Terrain Classification System for British Columbia (Howes and Kenk, 1997)

2.4.1.5 Terrain Stability Classification

The LSA and RSA were classified for terrain stability during bioterrain mapping. This classification was adapted from British Columbia terrain-stability mapping standards (BC Ministry of Forests and BC Ministry of Environment 1999). The terrain-stability classification was designed to address specific conditions encountered in the study areas (Table 8).

Table 8: Terrain Stability Classification

Terrain Stability Class	Definition
V	<p>Unstable terrain:</p> <ul style="list-style-type: none"> ▪ Contains existing rapid mass movement initiation zones ▪ Solifluction may occur
IV	<p>Potentially unstable terrain:</p> <ul style="list-style-type: none"> ▪ Contains areas where fine-textured colluvium , or weathered bedrock >70 percent ▪ May apply to glaciofluvial and fine-textured colluvium and weathered bedrock regions with slopes of 50–70 percent, typically rapid to well drained. Contains areas where rubbly and/or blocky colluvial slopes >80 percent ▪ Contains areas where rockfall initiation is ongoing ▪ May contain areas where shallow surface landslides occur ▪ Solifluction may occur
III	<p>Moderately stable terrain:</p> <ul style="list-style-type: none"> ▪ Contains areas of slopes 40–60 percent with moderate to poor drainage ▪ Contains areas of slopes 20–40 percent with poor drainage and/or north-facing slopes where piping/water saturation may occur ▪ There is a potential for mass movement, though occurrences are infrequent ▪ Solifluction may occur
II	<p>Generally stable terrain:</p> <ul style="list-style-type: none"> ▪ Contains areas of slopes 40–60 percent that are well to rapidly drained ▪ Contains areas of slopes 15–40 percent that are imperfect to moderately-well drained ▪ Mass movement is unlikely to occur, with the exception of solifluction on north-facing slopes
I	<p>Stable terrain:</p> <ul style="list-style-type: none"> ▪ Contains areas of slopes 0–26 percent that are well to rapidly drained ▪ Contains slopes <15 percent that are very poor to moderately-well drained ▪ Potential for mass movement is negligible, though solifluction may occur on north-facing slopes, or slopes in the alpine
Solifluction	<ul style="list-style-type: none"> ▪ Refers to the creep of unfrozen unconsolidated material, on moderately gentle to steep slopes

2.4.2 Soil Mapping Interpretations

The purpose of the soil mapping was to characterize the type of soils that occur (e.g. frozen soils, well-developed soils, wet soils) and these in turn were used to generalize the amount of topsoil available by soil type, and provide a basis for rating the soils for reclamation suitability.

For the soil baseline study, soil map units were developed based on field data and terrain conditions. A soil map unit is a “defined and named repetitive grouping of soil bodies occurring together in an individual and characteristic pattern over the soil landscape” (Gregorich, et al. 2001). Soil map units for the Project area were based on the dominant terrain characteristics in a bioterrain polygon. In some instances, the soil map unit may consist of a single soil type, but more commonly consists of a compound unit comprised of a dominant soil type with the inclusion of other soil types. Soil types are listed in Table 9. The soil map units were also used in conjunction with plot data to determine estimates for topsoil depths (Table 10).

Soil map units were developed for the LSA. No soil map units were developed for the RSA and RCSA because either soil disturbance from the Project will be non-existent or minimal in these areas, or any road upgrades that result in soil disturbance within the RCSA can be readily managed by best management practices.

Table 9: Soil Map Unit Symbol Descriptions for the Local Study Area

Parent Material	Soil Map Unit	Surface Expression	Geology	Geoprocess	Drainage							Soil Subgroup
					X	R	W	M	I	P	V	
Colluvial	C1	x,v,w,s	-		x	x	x	x	-	-	-	Orthic Dystric Brunisol/Orthic Regosol (Orthic Eutric Brunisol)
	C2	a,b,j,k	-		x	x	x	-	-	-	Orthic Dystric Brunisol (Orthic Eutric Brunisol/Brunisolic Gray Luvisol/Orthic Gray Luvisol)	
	C3x	all	-	X, S, Z	-	-	-	x	x	x	Orthic Dystric Turbic Cryosol/Brunisolic Dystric Turbic Cryosol (Brunisolic Eutric Turbic Cryosol, Regosolic Turbic Cryosol)	
	C4	all							x	x	Gleyed Brunisols and Rego Gleysols	
Residuum (Weathered Bedrock)	D1	all	Granodiorite		x	x	x	x	-	-	-	Orthic Dystric Brunisol
	D2	all				x	x	x				Orthic Eutric Brunisol
	D3x	all	Granodiorite	X, S, Z	-	-	-	x	x	x	-	Histic Dystric Turbic Cryosol/Histic Dystric Static Cryosol
	D4x	all		X,S,Z	-	-	-	x	x	x	-	Histic Eutric Turbic Cryosol/Histic Eutric Static Cryosol
Fluvial	F1	f,t,v			-	x	x	x	-	-	-	Orthic Dystric Brunisol/Brunisolic Gray Luvisol (Orthic Eutric Brunisol)
	F2	j,p,v			-	-	-	-	x	x	-	Orthic Humic Gleysol/Rego Humic Gleysol (Gleyed Cumulic Humic Regosol)
Morainal (Till)	M1	v,w,x			-	x	x	x	-	-	-	Orthic Dystric Brunisol/Orthic Eutric Brunisol (Brunisolic Gray Luvisol)
	M3	a,b,j,m,p,u			-	x	x	x	-	-	-	Orthic Eutric Brunisol/Brunisolic Gray Luvisol/Orthic Gray Luvisol (Orthic Dystric Brunisol)
	M4	b,j,p,t,u			-	-	-	-	x	x	-	Rego Humic Gleysol/Orthic Humic Gleysol/Orthic Gleysol
	M5x	all		X,S,C				x	x	x		Turbic Histic Dystric Cryosol/Turbic Histic Eutric Cryosol (Orthic Dystric Static Cryosol, Orthic Eutric Static Cryosol)
Organic	O2	v (b,p with poor drainage)	-	-	-	-	-	-	x	x	Terric Fibrisol/Terric Mesisol	
Bedrock	R1	all	-	-	-	-	-	-	-	-	Rock	
Anthropogenic	DL										Disturbed Land	

NOTE:

Definitions for surface expression, drainage and geoprocess are contained in Appendix A

Table 10: Topsoil Depth by Soil Map Unit for the Local Study Area

Parent Material	Soil Map Unit	Soil Subgroup	Topsoil Depth (cm) ¹
Colluvial	C1	Orthic Dystric Brunisol/Orthic Regosol (Orthic Eutric Brunisol)	10
	C2	Orthic Dystric Brunisol (Orthic Eutric Brunisol/Brunisolic Gray Luvisol/Orthic Gray Luvisol)	10
	C3x	Orthic Dystric Turbic Cryosol/Brunisolic Dystric Turbic Cryosol (Brunisolic Eutric Turbic Cryosol, Regosolic Turbic Cryosol)	15
	C4	Gleyed Brunisols and Rego Gleysols	10
Residuum (Weathered Bedrock)	D1	Orthic Dystric Brunisol	10
	D2	Orthic Eutric Brunisol	10
	D3x	Histic Dystric Turbic Cryosol/ Histic Dystric Static Cryosol	15
	D4x	Histic Eutric Turbic Cryosol/ Histic Eutric Static Cryosol	15
Fluvial	F1	Orthic Dystric Brunisol/Brunisolic Gray Luvisol (Orthic Eutric Brunisol)	10
	F2	Orthic Humic Gleysol/Rego Humic Gleysol (Gleyed Cumulic Humic Regosol)	10
Morainal (Till)	M1	Orthic Dystric Brunisol/Orthic Eutric Brunisol (Brunisolic Gray Luvisol)	10
	M3	Orthic Eutric Brunisol/Brunisolic Gray Luvisol/Orthic Gray Luvisol (Orthic Dystric Brunisol)	10
	M4	Rego Humic Gleysol/Orthic Humic Gleysol/Orthic Gleysol	10
	M5x	Turbic Histic Dystric Cryosol/Turbic Histic Eutric Cryosol (Orthic Dystric Static Cryosol, Orthic Eutric Static Cryosol)	20
Organic	O2	Terric Fibrisol/ Terric Mesisol	70
Bedrock	R1	Rock	0
Anthropogenic	DL	Disturbed Land	0

NOTE:

¹Topsoil depths include A, AB and LFH/O horizons

2.4.3 Soil Metal Analysis

Soil metal analyses were completed to provide pre-disturbance soil information, and to contribute to the evaluation of reclamation suitability. Areas that contain ore bodies often have mineralized soil associated with them, and thus have naturally elevated concentrations of some metals associated with the ore bodies. In order to assess if baseline soil conditions are affecting vegetation growth, both vegetation tissue and soil samples are collected. The baseline metals will also assist in determining whether mining activities may affect baseline soil quality.

Total recoverable concentrations of 30 elements were determined for 15 overburden samples collected during geological trenching, and 19 surface soil samples collected from soil pits and three

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trenches. Overburden samples were collected at depths between 0.5 and 6 meters, and surface-soil samples were collected at depths between 0 and 0.5 m.

Laboratory analytical methods are outlined in Appendix C. Analytical results were checked for exceedance of the Soil Quality Guidelines of the Canadian Council of Ministers of the Environment (CCME - CCME 1999) and Yukon Contaminated Sites Regulation (Yukon CSR - Yukon O.I.C.2002/171) for Agricultural and Parkland soils (Table 11)¹.

Table 11: CCME and Yukon Agriculture and Parkland Guidelines for Soil Metals

Element	CCME (mg/kg)		Yukon CSR (mg/kg)	
	Agriculture	Parkland	Agriculture	Parkland
Antimony (Sb)	20	20	20	20
Arsenic (As)	12	12	15	15
Barium (Ba)	750	500	750	500
Beryllium (Be)	4	4	4	4
Cadmium (Cd)	1.4	10	1.5	1.5
Chromium (Cr)	64	64	50	60
Cobalt (Co)	40	50	40	50
Copper (Cu)	63	63	90	90
Lead (Pb)	70	140	100	100
Mercury (Hg)	6.6	6.6	0.6	15
Molybdenum (Mo)	5	10	5	10
Nickel (Ni)	50	50	150	100
Selenium (Se)	1	1	2	3
Silver (Ag)	20	20	20	20
Thallium (Tl)	1	1	2	-
Tin (Sn)	5	50	5	50
Vanadium (V)	130	130	200	200
Zinc (Zn)	200	200	150	150

¹ Parkland guidelines are set for land uses that include wildlife and recreational use by humans, and are most applicable to the expected land uses at this site. Agricultural guidelines are set for land uses including growing food for human consumption and grazing by livestock. The Agricultural guidelines are the most stringent guidelines; metals below this guideline are within acceptable limits for all possible land uses. The most sensitive receptor listed under each land use (e.g., accidental soil ingestion by livestock, groundwater drainage, etc.) was used to establish the maximum allowable concentration for each land use category.

2.4.4 Soil Reclamation Suitability

Reclamation suitability is an assessment of the value of soil materials for salvage prior to disturbance and replacement as growth media in the post-disturbance landscape. The availability of suitable reclamation material is an important factor affecting the capability of a site to return to its former productivity following disturbance. Reclamation suitability ratings are used in conjunction with soil-pit and trench-log depth data to provide an estimate of suitable materials available for soil salvage and replacement. Reclamation suitability ratings of “good” or “fair” indicate materials that can be used for reclamation with no or minimal preparation. Soils rated as “poor” can be used for reclamation only after more intensive management, or possibly as a supplement if sufficient volumes of better quality soils are not available to meet reclamation specifications. The reclamation suitability ratings also provide a measure of soil quality, which helps to quantify Project effects on soil resources.

The rating system for reclamation suitability utilized in both British Columbia and Alberta was originally developed by Alberta Agriculture, Food and Rural Development in the *Soil Quality Criteria Relative to Disturbance and Reclamation* document for Alberta’s Eastern Slopes (AAFRD 1987 – see also *Guide to Preparing a Mine Permit Application under the British Columbia Mines Act* [Ministry of Energy, Mines, and Petroleum Resources 2006]). This rating system indexes many characteristics that affect soil suitability for reclamation purposes, including texture, structure, coarse-fragment content, available water storage capacity, nutrient-holding capacity, salt and sodium content. The assessment of mineral soil suitability as reclamation material for this Project is based on the structure of the AAFRD rating system, but has been adapted to be specific to the pre-mining soils of the LSA, as summarized in Table 12, and described below.

2.4.4.1 Site-specific Soil Reclamation Suitability Rating

Site-specific reclamation suitability ratings were created to account for the soil conditions within the LSA, based on soil profile information collected in July and August 2009 by Stantec and BGC Engineering Inc.

The primary limitation for reclamation suitability for Project area soils is coarse-fragment content: many of the soils present in the LSA have high cobble and boulder contents and, while these soils have the capability to support sparse spruce and scrub brush vegetation communities, they are not suitable for salvage due to the mechanical difficulty they present, nor are they appreciably different from projected properties of mine waste materials.

Chemical properties such as reaction (pH), salinity, sodicity, and calcium carbonate (CaCO₃) were not considered as affecting reclamation suitability ratings for soils in the Project area, because the parent material and site-use history do not suggest they would be limiting factors (i.e., salinity tests on soils in 1996 did not show limitations to vegetation growth). Field testing for carbonates in soil showed absent to weak reaction in the surface soil (one strong reaction was recorded in till beneath permafrost at one trench site), and pH was found to be within normal forest soil range (tending toward neutral).

Moisture and nutrient-holding capacities, and soil consistency were also not considered explicitly in the suitability ratings, because each of those properties is subject to substantial changes from

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salvage and handling procedures, and can be qualitatively approximated by soil texture and amount of organic matter in the salvaged materials.

As chemical properties were not deemed to be the most limiting factors, the reclamation suitability for Project soils was based on the most limiting soil physical properties of soil texture, coarse-fragment content, and stoniness.

Table 12: Soil Reclamation Suitability in the Local Study Area

Rating/Property	Good (G)	Fair (F)	Poor (P)	Unsuitable (U)
Coarse Fragments ¹ (percent Volume)	<30 ² ; <15 ³	30–50 ² ; 15–30 ³	50–70 ² ; 30–50 ³	>70 ² ; >50 ³
Stoniness (percent Volume) ⁴	<15 ⁵	<15 ⁶	15–30	>30
Matrix Texture	L, SiCL, SCL, SL	CL, SiL, SC, SiC, LS, S	Fractured bedrock	Consolidated bedrock

NOTES:

Adapted from: Criteria for Evaluating the Suitability of Root Zone Material in the Eastern Slopes Region of Alberta (Soil quality criteria relative to disturbance and reclamation (revised), 2004, Alberta Soils Advisory Committee, Alberta Agriculture, Food and Rural development, Edmonton, Alberta).

¹ > 0.2 to 25 cm diameter fragments in the soil material

² Matrix texture finer than sandy loam

³ Matrix texture sandy loam and coarser

⁴ Fragments of cobble size or greater (>8 cm in diameter)

⁵ Fragments 8 – 25 cm in diameter

⁶ Fragments >25 cm in diameter

Soils rated “~~good~~” or “~~fair~~” for reclamation are those soils present on the site that contain less than 15% by volume cobbles or boulders (but may have up to 50% total coarse-fragment content where gravel is the remainder of the fragment volume). Soils were given ratings of “~~poor~~” or “~~unsuitable~~” based primarily on stoniness. Organic materials overlying mineral materials were not rated for suitability, but were occasionally classified as “~~unsuitable~~” for salvage where boulders were present at the surface.

3 RESULTS

The following sections begin with a description of RSA and LSA physiography, and then present results for surficial material, slopes, geohazards and geoprocesses, terrain stability, soil map units, topsoil depths, and reclamation suitability for each study area.

3.1 Physiography

3.1.1 Regional Physiography

The Eagle Gold Property lies within the Yukon Plateau North Ecoregion, which encompasses the Stewart, Macmillan and Pelly plateaus, (Government of Canada 2002). The Yukon Plateau drains to the southwest by several prominent watercourses, including the Pelly, Ross, North and South McMillan, Hess, Stewart, and North and South McQuesten rivers (Bostock 1965) Nearly all the terrain in this ecoregion lies above 900 m asl, mostly ranging between 1,200 and 1,700 m asl.

The terrain dominantly consists of rolling upland plateaus and small mountain groups with nearly level tablelands dissected by deeply cut, broad U-shaped valleys. The topography of the glaciated and unglaciated portions of the Yukon Plateau is strikingly different. The unglaciated portion in the west of the Plateau has deep, narrow, V-shaped valleys and rounded upland surfaces, a type of dissection that is much less common in the glaciated areas.

The Project is within the Stewart Plateau subdivision, between two physiographically prominent, parallel northwest-southeast trending lineaments—the Ogilvie Mountain Range to the north and the steep sided Tintina Trench to the south.

All of the Stewart Plateau is broken into tablelands by a network of deeply cut broad valleys. While some of these tablelands are remarkably level and little dissected, with streams flowing at relatively gentle gradients in open valleys, the areas north of the McQuesten River, which are mainly unglaciated, are deeply and intricately dissected (Bostock 1965). The plateau itself is represented mainly by long connected ridges, with very even, though narrow, summits. The valleys are deep and narrow to the head of the stream, where they rise steeply and end abruptly. This type of dissection is typical of the unglaciated regions of the Stewart Plateau, but is lacking in the glaciated areas.

3.1.2 Local Study Area Physiography

The LSA, which encompasses the Dublin Gulch watershed, was not glaciated during the most recent glaciation, approximately 20,000 years ago. The watershed has not been glaciated for more than 200,000 years and has since been modified by freeze-thaw action, gravity, and water. Despite the extensive time since glaciations, evidence of glacial-ice action is still visible. In the Dublin Gulch watershed there is evidence of former cirques still recognizable in the northwest portion of the study area. However, many of these historical cirques have been subject to mass-movement processes such that the original “armchair” cirque shape is no longer recognizable. Cloverleaf patterns are visible in the headscarps of landslides, particularly in the eastern portion of the LSA. The large landslides that have modified the cirques appear to be geologically old features.

The landforms created through over-steepening of the cirques by landslides are now identified as gulches within the LSA. These gulches have been modified by rockslide, debris-slide, and ongoing rock-fall activity on the sides of many of the historic landslides. Smaller landslide scarps within larger ones are likely more recent. A few show modern activity, most readily visible in Olive and Dublin Gulches.

3.2 Surficial Geology

Two major episodes of glaciation in the Quaternary Period have affected the geomorphology and sedimentary record of the LSA. These glaciation episodes are: the pre-Reid (~2.5 Ma-400 Ka BP) and the Reid (~ 200 Ka BP) (Bond 1997; 1998a; b). In each case, ice likely originated from the Ogilvie and Wernecke mountains, and glaciation was most extensive during the pre-Reid. Thus, Quaternary deposits in the LSA consist of glacial and interglacial sediments of various ages and origins. Ice from the latest glaciation, the McConnell, which occurred approximately 20,000 years ago, did not enter the LSA, but did enter the Lynx Creek Valley (Bond 1997; 1998a; b; 1999) that lies within the RSA.

Preservation of pre-Reid glacial deposits and landforms is rare, and, aside from a few intact deposit sequences, diorite erratics at high elevation are the only record left (Bond 1998a). Landforms and sediment from the Reid glaciation are moderately preserved. Cordilleran ice advanced from the northeast, attaining a maximum height of 4400 f asl. (Bond 1998a). Ice flowed southeast down the Lynx/Haggart Creek valley, and north up the Haggart Creek valley to its headwaters (Bond 1999). Wisconsinan to Holocene organics, and alluvial and colluvial sediments drape glacial and interglacial sediments throughout the area.

3.2.1 Surficial Material Descriptions

Table 13 provides a summary of the surficial materials found within the LSA, RSA and RCSA; these are described in detail below. The percent coverage is derived from up to three parent material types per polygon (e.g., 60 percent Colluvium, 30 percent Organic, and 10 percent Bedrock) and is based on mapping completed at 1:20,000 scale within the RSA and RCSA, and 1:10,000 for the LSA.

The majority of the LSA is characterized as weathered bedrock and colluviums. The morainal, fluvial and glaciofluvial materials are confined to the lower sections of the gulches. The area of anthropogenic material is mostly a result of placer mining in Dublin Gulch and Haggart Creek. Figure 3-1 shows the distribution of surficial material within the LSA.

The RSA, which extends north to Haggart Creek and south to Lynx Creek, is mostly colluviums (Figure 3-2).

Glaciofluvial and fluvial material become more apparent in the RCSA, where the access road follows along Haggart Creek and the McQuesten River (Figure 3-3). Here, a series of alluvial (fluvial) fans occur along the meandering channel. These waterways also have active fluvial plains, and areas of organic material can accumulate in backwater channels and low-lying areas where drainage is impeded.

Organic material makes up very little of the surficial material in all study areas, likely due to the steep terrain conditions (which limit accumulation) and cold climate (which limits vegetation growth). Bedrock outcrops are rare. Sufficient geologic time has passed that surficial bedrock has weathered or has been moved by gravity, forming veneers and blankets over underlying bedrock.

Detailed descriptions of all surficial materials in the study areas are presented in the sections that follow.

Table 13: Summary of Surficial Materials

LSA			RSA			RCSA		
Surficial Material	Area (ha)	Percent (%)	Surficial Material	Area (ha)	Percent (%)	Surficial Material	Area (ha)	Percent (%)
Anthropogenic	247.2	15.4	Anthropogenic	338.1	4.5	Anthropogenic	232.2	5.1
Colluvium	538.0	33.5	Colluvium	4018.6	53.3	Colluvium	543.5	11.8
Weathered Bedrock	623.7	38.8	Weathered Bedrock	1683.8	22.3	Weathered Bedrock	50.7	1.1
Fluvial	31.7	1.9	Fluvial	736.3	9.8	Fluvial	1321.3	28.8
Glaciofluvial	0.9	0.1	Glaciofluvial	138.3	1.8	Glaciofluvial	1109.5	24.2
Moraine	123.2	7.7	Moraine	237.6	3.2	Moraine	930.1	20.3
Organic	1.1	0.1	Organic	138.5	1.8	Organic	315.1	6.9
Bedrock	40.2	2.5	Bedrock	246.8	3.3	Bedrock	13.7	0.3
Water	0.04	0	Water	0.1	0	Water	70.7	1.5
TOTAL	1,606.0	100.0	TOTAL	7,538.1	100.0	TOTAL	4,586.1	100.0

3.2.1.1 Weathered Bedrock

Weathered bedrock is mapped in 38% of the LSA, 22% of the RSA, and 1% of the RCSA. Because most of these study areas have not been glaciated in the last 200,000 years, bedrock has been exposed to the elements (wind and water) for a very long time. This chemical and mechanical erosion has resulted in the formation of weathered bedrock, or residuum. Properties of this material depend on the underlying bedrock source. In metasedimentary regions, the weathered bedrock typically has a silty clay loam matrix, and contains 20-60% angular to subangular pebble- to boulder-sized clasts. Mica is usually a component of the matrix. In granitic regions, the weathered bedrock tends to have a silty sand matrix, with 20 – 60% subangular to angular pebble- to boulder-sized clasts. Mineral grains are often present in the matrix. These sediments are generally moderately to well-drained, though drainage can be rapid on steeper slopes.

3.2.1.2 Colluvial deposits

Colluvial deposits are mapped in 33% of the LSA, 53% of the RSA, and 12% of the RCSA. Colluvium is formed when rock or other surficial materials such as moraine (till) move downslope. This downslope movement is caused by gravity, and water may be a factor. Colluvial deposits consist predominately of massive to crudely stratified sandy-silt to silty-sand with 0-70% angular to subangular granule- to boulder-sized clasts. In some areas, colluvial deposits consist of only angular to subangular pebble- to boulder-sized clasts, with no matrix. The clast lithologies are local, meaning that they are derived from the bedrock found within the study areas. Colluvial deposits are likely derived from weathered bedrock or bedrock, and tend to lie on slopes >30%. There are a few isolated deposits within the LSA and RSA where historic moraine (till) has moved downslope. Areas

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of colluviated till can be found, for example, in the lower reaches of Anne and Stuttle Gulches. Drainage is generally moderate to well-drained, though it can be rapid on steeper slopes.

3.2.1.3 Fluvial Sediments

Fluvial sediments have been mapped in 2% of the LSA, 10% of the RSA, and 30% of the RCSA. Since most of the region was not glaciated during the McConnell Glaciation, fluvial sediments have been depositing in most of the valleys for approximately 200,000 years and longer (i.e., prior to and following the Reid Glaciation). The deposition has occurred primarily during the last interglacial period (between the Reid and the pre-Reid), and these fluvial systems are mostly inactive now. The fluvial sediments commonly consist of a cap of very fine sand to silt, overlying silty-sandy gravel with 10 – 50% rounded to subrounded pebbles to boulders. Sediments are usually bedded, and well to moderately sorted.

Fluvial fans form at the junction of steeper slopes and flat areas, when water draining the steeper areas flows in channels during low-flow periods or as sheet floods during high-flow periods. Erosion and deposition on the fan surface thus vary with time and space. Fluvial fans are commonly affected by debris flows that interfinger with the fluvial sediments. Debris-flow deposits tend to be poorly sorted, containing a wide range of clast sizes, and most are generally massive. Over time, fluvial and/or debris-flow channels migrate laterally across the fan surface, resulting in some areas becoming inactive, while others are undergoing active erosive and depositional processes. As a result, buried organic horizons are common within the fluvial fan deposits. Lateral channel migration later buries the organics or soils and preserves them.

The fluvial fans have a low slope gradient, typically 5 – 25%. Drainage on fluvial fans ranges from well-drained to imperfect, reflecting the dominant particle sizes of the sediments.

Fluvial sediments were also deposited in the Holocene epoch. These fluvial sediments are situated along and within the modern creeks and streams. The RCSA, which follows Haggart Creek and McQuesten River, consists mainly of this type of fluvial sediments.

3.2.1.4 Moraine (Till) Sediments

Moraine (till) sediments have been mapped in 8% of the LSA, 3% of the RSA, and 20% of the RCSA. Moraine refers to sediment that has been deposited directly by a glacier. Morainal sediment in the study area was deposited during the Reid glaciation. These moraine (till) sediments are usually found at lower elevations, often below 3,400 feet or 1,040 m asl, and consist of poorly sorted silt, sand, clay, and gravels.

Morainal sediments are particularly common along the upper HCAR portion of the RCSA. These sediments exhibit moderate to imperfect drainage, due to fine-textured sediment and landscape position. Slow mass-movement slumps and slides are very common. These sediments can also contain permafrost and experience soil creep and solifluction, particularly on north slopes and sheltered areas.

3.2.1.5 Bedrock

Bedrock outcrops occur in 2% of the RSA, 3% of the LSA, and less than 1% of the RCSA. In the LSA, bedrock can be comprised of granodiorites, and metasedimentary rock. Most of the bedrock exposures occur at higher elevations along ridges or over-steepened slopes, but most often shallow bedrock is covered by thin veneers of weathered bedrock and colluvium.

3.2.1.6 Glaciofluvial Sediments

Glaciofluvial sediments have been mapped in less than 1% of the LSA, 2% of the RSA, and 24% of the RCSA. These sediments were deposited by glacial meltwater during the Reid Glaciation. The sediments are typically poorly to very poorly sorted and crudely stratified, due to the rapid debris flows at the time of deposition. They occur mainly as terraces along Haggart Creek. The sediments consist of 30 – 50% subangular to subrounded pebble- to boulder-sized clasts in a silty sand matrix.

3.2.1.7 Organic Deposits

Organic materials were mapped in less than 1% of the LSA, 2% of the RSA and 7% of the RCSA. These deposits form by vegetation growth, decay, and accumulation in and around closed basins or on gentle slopes where the rate of accumulation exceeds that of decay. These materials are generally fibric to mesic (weakly to moderately decomposed) and tend to be less than 1 m thick. Drainage in areas of organic accumulation is generally poor to very poor. In most areas, permafrost and/or ice granules were found within deep, black spruce bog organic deposits.

3.2.1.8 Anthropogenic Deposits

Anthropogenic deposits are mapped in 15% of the LSA, 4% of the RSA, and 5% of the RCSA. These are sediments that have been disturbed primarily by placer mining activity, as well as mining exploration trails and trenches, and road construction.

3.3 Slope Analysis

Table 14 identifies the slope classes found within the LSA, RSA, and RCSA. The LSA has some of the most extreme slopes, although they are limited in extent. Gentle slopes are associated with the higher-elevation plateau on the eastern side of the LSA (Figure 3-4). The RSA has very gentle to level slopes along Lynx Creek. The steeper slopes are at higher elevations in the incised narrow valleys that feed into Haggart Creek (Figure 3-5). Along the RCSA, the slopes are steeper at the HCAR section of the access road and are gentle to nearly level for most of the SMR section where the road follows along the river (Figure 3-6).

Within the LSA, most of the slopes are moderate, between 15 and 30%, or slope class 5. Gentle slopes (slope class 4) generally occur in the Potato Hills area along the broad plateau in the eastern portion of the LSA. Very strong slopes and extreme slopes are at a higher risk of mass movement and are inherently less stable. These slopes comprise just over 10% of the LSA. These steeper slopes are associated with gulch side-walls and are found within the upper reaches of Dublin Gulch, Bawn-Boy Gulch, and Eagle Gulch.

Most of the RSA is comprised of slope classes 5 and 6, or moderate to strong slopes. The very gentle to gentle slopes are primarily confined to the creek bottoms and are concentrated in the southern portion of the RSA.

The RCSA is largely comprised of level to gentle slopes with 45% of the area at 0-2% slope where the road follows along the McQuesten River. Extreme slopes (>60 to 85%) are also common at just under half of the RCSA (45.3%) and mostly occur on the northern end and western side of the HCAR.

Table 14: Summary of Slope Classes

LSA			RSA			RCSA		
Slope Class and (%)	Area (ha)	Percent (%)	Slope Class and (%)	Area (ha)	Percent (%)	Slope Class and (%)	Area (ha)	Percent (%)
1 (0-2%)	13.8	0.9	1 (0-2%)	15.3	0.2	1 (0-2%)	2079.3	45.3
2 (2-5%)	0	0	2 (2-5%)	769.4	10.2	2 (2-5%)	448.1	9.8
3 (>5-9%)	13.6	0.8	3 (>5-9%)	205.4	2.7	3 (>5-9%)	653.6	14.2
4 (>9-15%)	386.1	24.0	4 (>9-15%)	686.0	9.1	4 (>9-15%)	291.6	6.4
5 (>15-30%)	695.0	43.3	5 (>15-30%)	2685.1	35.6	5 (>15-30%)	910.7	19.9
6 (>30-45%)	321.2	20.0	6 (>30-45%)	2329.6	30.9	6 (>30-45%)	200.5	4.4
7 (>45-60%)	149.2	9.3	7 (>45-60%)	756.4	10.0	7 (>45-60%)	3.1	0.1
8 (>60-85%)	27.2	1.7	8 (>60-85%)	91.0	1.2	8 (>60-85%)	2079.3	45.3
9 (>85%)	0	0	9 (>85%)	15.3	0.2	9 (>85%)	448.1	9.8
TOTAL	1,606.1	100.0	TOTAL	7,538.1	100.0	TOTAL	4,586.9	100.0

3.4 Geomorphic Modifying Processes

Geomorphologic processes modify the landscape by erosion, deposition, and movement of surficial material and rock. Some of these processes pose additional stability concerns and are termed geohazards. Geomorphic processes such as seepage and rock fall are considered geohazards.

3.4.1 Previous Terrain Study

As part of the IEE in 1996, the previous project study area was assessed for debris flow, avalanches, and solifluction (Hallam Knight Piésold Ltd. 1996a). The authors determined that:

- There were very few ancient debris flows with no evidence of recent occurrences
- Only one rock slump was identified, at the confluence of Haggart and Lynx Creeks
- Only one avalanche track was observed, NE and outside of their study area
- Solifluction was not particularly evident in their study area; only minor areas along the north and south slopes of Lynx Creek were identified.

3.4.2 Current Terrain Study

All geomorphic modifying processes, both active and inactive, were identified during terrain mapping. This classification was based on British Columbia terrain stability mapping standards. Processes identified include slow and rapid mass movements (slide, debris flow, rock fall, slump, tension cracks) as well as permafrost (including solifluction and nivation), gullyng, seepage and inundation. Table 15, 16 and 17 provide summaries for the LSA, RSA and RCSA, respectively. The tables identify each process that has been mapped. Note that this assessment is an overestimate of total geomorphic processes, because the entire polygon area has been counted, rather than the specific area within the polygon that is directly affected. Additionally, some polygons where multiple processes occur have been counted twice.

Table 15: Geomorphic Processes within the Local Study Area

Geomorphic Process		Area (ha)	Percent
Rapid Mass Movement	Total Rapid Mass Movement	130.7	12.6
	▪ debris flow	0.6	0.1
	▪ rock fall	48.5	4.7
	▪ rock slide	81.6	7.9
Seepage		87.2	8.4
Piping		12.3	1.2
Inundation		6.8	0.7
Permafrost processes		707.0	68.0
Solifluction		63.7	6.1
Nivation		14.1	1.4
Gullyng		15.8	1.5
Meandering stream		2.0	0.2
TOTAL		1,039.6	100.0

NOTE:

The remaining area of the study area has no observable (mappable) geomorphic processes.

Table 16: Geomorphic Processes within the Regional Study Area

Geomorphic Process		Area (ha)	Percent
Rapid mass movement	Total Rapid Mass Movement	424.3	15.6
	▪ debris flow	97.1	3.6
	▪ rock fall	129.3	4.8
	▪ rock slide	197.9	7.3
Seepage		351.6	12.9
Piping		12.3	0.5
Inundation		172.5	6.3
Permafrost processes		1,261.3	46.3

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Geomorphic Process	Area (ha)	Percent
Solifluction	89.0	3.3
Nivation	14.1	0.5
Gullying	236.4	8.7
Meandering stream	161.7	5.9
TOTAL	2,723.2	100.0

NOTE:

The remaining area of the study area has no observable (mappable) geomorphic processes.

Table 17: Geomorphic Processes within the Road Corridor Study Area

Geomorphic Process	Area (ha)	Percent
Slow mass movement	Total slow mass movement	189.9
	▪ surficial slump	57.0
	▪ surficial slide	75.6
	▪ creep	43.8
	▪ tension cracks	13.6
Rapid mass movement	Total rapid mass movement	222.9
	▪ debris flow	15.1
	▪ rock fall	43.8
	▪ rock slide	42.2
	▪ bedrock slump	52.7
	▪ multiple	69.2
Seepage	173.3	8.4
Inundation	655.7	31.9
Permafrost processes	103.253	5.1
Gullying	327.7	15.9
Meandering stream	382.9	18.6
TOTAL	2,055.7	100.0

NOTE:

The remaining area of the study area has no observable (mappable) geomorphic processes.

3.4.2.1 Geomorphic Processes within the Local Study Area

Of the observed (mapped) geomorphic processes, the dominant one within the LSA is permafrost, including solifluction and nivation (75% of mapped geomorphic processes) (Figure 3-7). Permafrost is primarily concentrated in three locations: south of the confluence of Dublin Gulch and Haggart Creek, the plateau to the east, and a small area at the head of Anne Gulch.

Eight percent of the area of geomorphic processes is subject to seepage. Seepage occurs mostly along Haggart Creek and the lower reaches of Gulches, particularly Stuttle and Platinum. The least amount of noted geomorphic processes was within Stuttle Gulch, which contains both permafrost and seepage in the lower reaches. Platinum Gulch contains some gully erosion and permafrost, but no evidence of rapid mass movements.

Almost 13% of the observed geomorphic processes within the LSA is rapid mass movements such as rock slides and rock falls. Eagle Gulch is the most active in terms of modifying processes. Eagle Gulch contains both rock falls and rock slides, gully erosion, landslides, solifluction at the higher elevations, and permafrost and seepage in the lower reaches.

Only 2% of the geomorphic processes are gullies. These areas are at risk for small failures, as well as variable periods and intensity of water flow in ephemeral stream channels. Notable gullies were mapped within Cascallen, Stewart, Anne, and Platinum Gulch. Eagle Gulch contains the highest concentration of gullies.

3.4.2.2 Geomorphic Processes within the Regional Study Area

The dominant geomorphic process within the RSA is permafrost, including solifluction and nivation, which comprises half of the mapped geomorphic processes (Figure 3-8). Approximately 13% of the geomorphic processes within the RSA is seepage, which is often associated with mid and lower slopes.

Approximately 16% of the mapped geomorphic processes within the RSA is subject to active rapid mass movements. These rapid mass movements occur as debris flows mostly in the Lynx Valley. However, they are found also as landslides and rockslides throughout the RSA.

Nine percent of the mapped geomorphic processes within the RSA is gullies. These areas are at risk for small failures, as well as variable periods and intensity of water flow. Gil Gulch has a high density of gullies and there are gullies to the north that flow into Haggart Creek.

Six percent of the mapped geomorphic processes within the RSA are areas of flooding. Inundation, or flooding, occurs along the creek and stream beds. The areas are small and are most commonly found along stretches of Lynx and Haggart Creek.

3.4.2.3 Geomorphic Processes within the Road Corridor Study Area

The dominant geomorphic process within the RCSA is inundation, which represents 31% of the mapped geomorphic processes (Figure 3-9). This geomorphic process refers to potential flooding of the Haggart Creek and McQuesten River floodplains. Inundation becomes a geohazard when development occurs within the floodplain.

Sixteen percent of geomorphic processes within the RCSA are mapped as gullies. These areas are at risk for small failures, as well as variable periods and intensity of water flow.

The RCSA currently experiences active mass wasting. Eleven percent of the mapped geomorphic processes within the RCSA are subject to active rapid mass movements. The rapid mass movements are absent from the southern portion of the access road and are highly concentrated to

the North and northwest side of the current access road between Lynx Creek and just south of Secret Creek. Nine percent of the mapped geomorphic processes within the RCSA are subject to active slow mass movements. These occur again in a similar location to the rapid mass movements but occur primarily on the south and southwest side of the current access road where there are more alluvial fans. Eight percent of the RCSA is subject to seepage, mostly in regions of slow mass movement. Additional seepage is found in the southern portions of the RCSA, and areas adjacent to creeks and the McQuesten River.

3.5 Terrain Stability

The study areas were classified for terrain stability (TSM) using a 5-class system that is assigned to mapped terrain polygons. The purpose of terrain stability mapping in land-use and development planning is to interpret the stability of terrain polygons where existing and/or anticipated land development may be affected by landslide hazards, and where land development may affect slope stability. These areas include land on steeper slopes, at breaks in slope, along the base of slopes, and land on colluvial and alluvial fans. Table 18 denotes the area and percentage of each class (I-V) in the study areas.

Table 18: Summary of Terrain Stability Classes

LSA			RSA			RCSA		
TSM Class	Area (ha)	Percent (%)	TSM Class	Area (ha)	Percent (%)	TSM Class	Area (ha)	Percent (%)
I	144.3	9.0	I	1,125.9	14.9	I	1,988.9	43.5
II	942.4	58.7	II	3,631.3	48.2	II	1,590.5	34.8
III	375.1	23.3	III	1,890.4	25.2	III	641.0	14.0
IV	95.2	5.9	IV	671.2	8.9	IV	184.3	4.0
V	49.0	3.1	V	209.0	2.8	V	164.1	3.6
Total	1606.0	100.0	Total	7,527.8	100.0	Total	4,568.8	100.0

3.5.1 Terrain Stability in the Local Study Area

Almost 60% of the LSA is classified as generally stable terrain (TSM class II terrain) (Figure 10). This terrain typically consists of slopes with a gradient between 20 – 60%, depending on drainage and aspect. Almost a quarter of the LSA is mapped as TSM class III. These moderately stable areas generally exhibit poorer drainage, and are commonly found on valley walls of the many small drainages within the LSA. Class I terrain occurs within 8% of the LSA. This stable terrain is generally flat-lying, and is situated on the plateau, as well as along parts of Platinum Gulch and Haggart Creek.

Six percent of the LSA is mapped as TSM class IV, defined as potentially unstable terrain. This terrain usually consists of slopes with a gradient between 50 – 70%, although sometimes it can be greater than 70% if draped by thin, well to rapidly drained material. Three percent of the LSA is

mapped as TSM class V. This unstable terrain includes very steep slopes, as well as all rapid mass movement initiation regions of class IV and class V terrain. This unstable terrain occurs mainly along the upper reaches of Eagle Gulch, Stewart Gulch, Olive Gulch, Bawn-Boy Gulch, and a lower section of Anne Gulch, with the largest unstable areas occurring within Dublin Gulch.

3.5.2 Terrain Stability in the Regional Study Area

The RSA is dominated by TSM class II terrain (48%) (Figure 3-11). This terrain generally consists of slopes with a gradient between 20 – 60%, depending on drainage and aspect. One quarter of the RSA is mapped as TSM class III. These moderately stable areas generally exhibit poorer drainage, and are commonly found on mid and upper slopes, and adjacent to side-slope drainage channels. Class I terrain occurs within 15% of the RSA. This stable terrain is generally flat-lying, and is situated on the plateau, as well as a large section along the bottom of Lynx Creek. Nearly ten percent of the RSA is mapped as TSM class IV, and 3% as class V. This potentially unstable and unstable terrain is on upper slopes of Haggart and Lynx Creek valley walls. Gulches, such as Ray Gulch and Lynx Creek, which feed into Lynx and Haggart Creeks, respectively, also contain unstable terrain.

3.5.3 Terrain Stability in the Road Corridor Study Area

Class I terrain comprises 43% of the RCSA (Figure 3-12). This stable terrain is typically flat-lying, consisting of fluvial sediments, and situated along parts of Haggart Creek and McQuesten River. Generally stable terrain (TSM class II) makes up 35% of the RCSA. This terrain typically consists of slopes with a gradient between 20 and 60%, depending on drainage and aspect.

Fourteen percent of the RCSA is mapped as TSM class III. These moderately stable areas generally exhibit poorer drainage, and are commonly found on the south and west side of Haggart Creek opposite Secret Creek. Four percent of the RCSA is mapped as TSM class IV – potentially unstable terrain. This terrain usually consists of slopes with a gradient between 50 – 70%, with slopes greater than 70% possible if draped by thin, well to rapidly drained material. Regions of TSM class IV mainly occur along Haggart Creek on either side of Secret Creek and are sensitive to ground disturbance.

Four percent of the RCSA is mapped as TSM class V. This unstable terrain includes very steep slopes, as well as all rapid mass movement initiation zones and areas exhibiting recent mass movement activity. Regions of TSM class V occur between Secret Creek and Lynx Creek on the north and west side of the road. These areas are very sensitive to ground disturbance.

3.6 Soil

In the LSA, soils have developed on a variety of surficial materials. Although the relatively cold climate has limited soil development, the last glaciations have occurred over 200,000 years BP and that time has allowed soil to develop, particularly on weathered bedrock. This section presents both the historic soil information from the Hallam Knight Piésold IEE (1996a) and the 2009 soil interpretations.

3.6.1 1995/1996 Soil Survey

The 1996 IEE from Hallam Knight Piésold classified soils in the Dublin Gulch area as Turbic Cryosols with a sandy loam texture. In general, the soils were described as being of colluvial nature on slopes averaging from 16 to 32%. This soil classification was based on a compilation of soil survey mapping of aerial photography and LANDSAT (satellite) imagery. This mapping was conducted at a scale of approximately 1:50,000 on topographic base maps, using a recognized terrain classification system and data obtained from field studies, soil samples and laboratory analyses. Generally, Eutric and Dystric Brunisols, and Turbic Cryosols, occurred on various materials from lowland to alpine environments. Podzols occurred in the alpine, though they were infrequent. Minor areas of Luvisols occurred on fine-textured glaciolacustrine deposits. Chernozemic soils and soils transitional to Chernozems occurred on steep south-facing slopes at lower elevations, but were rare.

Specifically, soils in the Dublin Gulch area were comprised of Orthic Eutric Brunisols and Dystric Brunisols, and were characterized by weak to very weak soil development. In all cases, soil profiles were characterized as consisting of thin dark-brown to black organic layers (Om Layer) overlying a shallow, moderately wet grey-brown to reddish-brown Bf Horizon, consisting of broken or angular rock fragments and gravel within a sandy-silt to silty-sand loam matrix. Described soils in the Dublin Gulch area contained little or no A Horizon. Rooting depths were observed to be between 0.2 and 0.3 m in depth.

3.6.2 2009 Soil Survey

Soil map units were derived using the bioterrain mapping and geology mapping, with soil subgroups selected for map units based on plot data. Details of the plot data used in developing the soil map units are contained in Appendix E.

Within the LSA, permafrost is present in the plateau and in the lower valley bottoms adjacent to Haggart Creek and Dublin Gulch (Figure 3-13). As a result, the areas mapped as permafrost had soil within the LSA classified as Cryosolic (Table 19), as was found in the 1996 IEE. Permafrost was at times encountered within the upper 50 cm of the profile; however, in many instances, the presence of ice was not detected and the presence of permafrost relied heavily on evidence of cryoturbation, tilted trees, and trench logs that contained data to 2 m depth.

Brunisols were encountered that had a very well developed Bm horizon that could potentially develop into a Bf horizon over time. The distinction between Eutric and Dystric Brunisols is difficult to make due to the complexity of the mineral material that the soils have formed on. The soil map units formed on weathered bedrock were determined with greater accuracy using detailed geology mapping available for Dublin Gulch. Brunisols that form from weathered granodiorites can be distinguished from the finer textured soils formed on metasedimentary weathered bedrock. Minor areas of Luvisols occurred on the finer textured moraine. Fluvial material varied from silt to sand material formed from reworked coarse-textured debris flows. Areas of poorly and imperfectly drained soils were classified as Gleysols, but they comprise less than one percent of the LSA. Like the 1996 study, the majority of the soil textures in the LSA were sandy-silt to silty-sand loam matrix with angular or tabular (flat lying) coarse fragments ranging from gravel to boulders.

Table 19: Soil Map Units with the Local Study Area

Soil Map Unit	Soil Subgroups	Area (ha)	Percent (%)
C1	Orthic Dystric Brunisol/Orthic Regosol (Orthic Eutric Brunisol)	272.4	17.0
C2	Orthic Dystric Brunisol (Orthic Eutric Brunisol/Brunisolic Gray Luvisol/Orthic Gray Luvisol)	235.9	14.7
C3x	Orthic Dystric Turbic Cryosol/Brunisolic Dystric Turbic Cryosol (Brunisolic Eutric Turbic Cryosol, Regosolic Turbic Cryosol)	75.2	4.7
C4	Gleyed Brunisols and Rego Gleysols	9.8	0.6
D1	Orthic Dystric Brunisol	38.1	2.4
D2	Orthic Eutric Brunisol	92.0	5.7
D3x	Histic Dystric Turbic Cryosol/ Histic Dystric Static Cryosol	312.9	19.5
D4x	Histic Eutric Turbic Cryosol/ Histic Eutric Static Cryosol	161.0	10.0
F1	Orthic Dystric Brunisol/Brunisolic Gray Luvisol (Orthic Eutric Brunisol)	18.8	1.2
F2	Orthic Humic Gleysol/Rego Humic Gleysol (Gleyed Cumulic Humic Regosol)	0.2	0.0
M1	Orthic Dystric Brunisol/Orthic Eutric Brunisol (Brunisolic Gray Luvisol)	0.0	0.0
M3	Orthic Eutric Brunisol/Brunisolic Gray Luvisol/Orthic Gray Luvisol (Orthic Dystric Brunisol)	10.3	0.6
M4	Rego Humic Gleysol/Orthic Humic Gleysol/Orthic Gleysol	2.2	0.1
M5x	Turbic Histic Dystric Cryosol/Turbic Histic Eutric Cryosol (Orthic Dystric Static Cryosol, Orthic Eutric Static Cryosol)	102.9	6.4
O2	Terric Fibrisol/ Terric Mesisol	1.2	0.1
R1	Rock	26.1	1.6
DL	Disturbed Land	247.2	15.4
Total		1,606.0	100.0

Topsoil depths, within the LSA, are predominantly between 10 to 15 cm, which includes the A (mineral), and LFH or O (organic) horizons (Table 20). The shallower soils are generally at higher elevation and on steeper slopes (Figure 3-14). Average organic-horizon thickness is 8 cm, with correspondingly thin A horizons. In the LSA the average depth of salvageable soil material (including both topsoil and subsoil) is approximately 50 cm, which corresponds to a similar average rooting depth (although the maximum measured depth of root penetration was 120 cm). Though most rooting was concentrated in the organic materials and organic-enriched mineral soil horizons in the top 10 to 30 cm, plant roots frequently penetrated past the organic and developed mineral soil layers into the parent materials beneath.

Table 20: Topsoil Depths within the Local Study Area

Topsoil Depths (cm)	Area (ha)	Percent (%)
0 (mostly disturbed)	273.3	17.0
10	679.6	42.3
15	549.1	34.2
20	102.9	6.4
70 (organic soil)	1.2	0.1
Total	1,606.0	100.0

3.6.3 Soil Baseline Element Concentrations

The results of the soil elemental analyses are summarized in Tables 21 to 24, below (see Appendix F for soil exceedence results). Arsenic was above all guidelines in almost all soil and overburden samples. The significance of the arsenic results will be discussed separately below. For the remainder of the analyzed elements, three soil samples, and four overburden samples, had Cd, Cu, Pb, Mo, Ni, or Se concentrations which met or exceeded the lowest of the soil quality guidelines, which was often the CCME agriculture guideline limit (Tables 22 and 23).

Table 21: Surface Soil Sample Metal Exceedances

Sample	Depth (m)	Element	Concentration (mg/kg)	Guideline Limit (mg/kg)	Guideline
EGL8 NT-1	0 – 0.04	Cd	1.4	1.4	CCME Agriculture
EGL17 NT-1	0 – 0.06	Ni	54	50	CCME Agriculture, Parkland
HL6-8 S1	0.3	Se	1.3	1	CCME Agriculture, Parkland

Table 22: Overburden Sample Metal Exceedances

Sample	Depth (m)	Element	Concentration (mg/kg)	Guideline Limit (mg/kg)	Guideline
P4 S2	1.8 – 2	Cu	81	63	CCME Agriculture, Parkland
		Se	1	1	CCME Agriculture, Parkland
WR3 S1	2	Mo	5.7	5	CCME and Yukon CSR Agriculture
HL5-7 S3	2.2 – 2.5	Pb	85.8	70	CCME Agriculture
		Mo	7.8	5	CCME and Yukon CSR Agriculture
HL6 -1 S3	5 – 5.5	Ni	57	50	CCME Agriculture, Parkland
WR1 S3	6	Cu	84	63	CCME Agriculture, Parkland
		Se	1.2	1	CCME Agriculture, Parkland

A set of 18 historic soil samples from 1995 were also collected and analyzed for total Cu, Fe, Pb, Zn, Mo, and Hg; and evaluated against the above guidelines (full soil analysis results, see Appendix B). All samples were found to be below guideline limits for the assessed elements.

Arsenic

The soil and overburden of the LSA are highly enriched with arsenic (As), and most baseline samples collected have arsenic concentrations well above the CCME and Yukon CSR guidelines for Agriculture and Parkland soils. Only 2 of the soil samples, and none of the overburden samples, had a total arsenic concentration below CCME and Yukon CSR summary guidelines (12 and 15 mg/kg, respectively). The mean concentration of As in soils (0 – 50 cm depth) was 193 mg/kg, with a range of 2.4 to 880 mg/kg. In overburden, the mean As concentration was 320 mg/kg, ranging from 23.7 to 1350 mg/kg.

When compared to the receptor-specific guidelines provided in the Yukon CSR (Tables 23 and 24, respectively), the natural arsenic content of the soils and overburdens in the footprint are above the values considered to pose a risk to livestock, soil invertebrates, plants, and even humans. More than half of the soil samples collected are above the 50-mg/kg guideline recommended to prevent toxicity to soil invertebrates and plants, and all but one are above the limit recommended to prevent illness in livestock ingesting soil while grazing.

Table 23: Soil Arsenic Values Compared to Yukon Contaminated Sites Regulation Receptor-Specific Guidelines

Number that Exceed Guideline	Guideline Limit	Receptor
9	25	Livestock ingesting soil or fodder
7	50	Toxicity to soil invertebrates or plants
5	100	Human ingestion of soil

Table 24: Overburden Arsenic Values Compared to Yukon Contaminated Sites Regulation Receptor-Specific Guidelines

Number that Exceed Guideline	Guideline Limit	Receptor
13	25	Livestock ingesting soil or fodder
11	50	Toxicity to soil invertebrates or plants
8	100	Human ingestion of soil

The total As concentration in the soils exceeds the thresholds recommended for the protection of soil biota and vegetation by orders of magnitude (see Figure 3-15 Soil Baseline Metals and Appendix F). It is important to document these elevated pre-disturbance soil arsenic levels, so that post-closure soils analyses do not erroneously attribute elevated arsenic levels to the effects of Project development. These elevated As levels will also require consideration in planning soil handling for reclamation, and for post-closure assessment of reclamation success.

3.6.4 Soil Reclamation Suitability

Soil reclamation suitability ratings were calculated for plot data using the upper soil, and excluding overburden. The plot reclamation ratings are contained in Appendix E. The plot-specific ratings were developed for soil map units by looking at plot-specific soil types and parent material, and by assigning the rating to equivalent map units. The ratings for soil map units are listed in Table 25.

Table 25: Reclamation Suitability by Soil Map Unit for the Local Study Area

Parent Material	Soil Map Unit	Soil Subgroup	Reclamation Suitability ¹
Colluvial	C1	Orthic Dystric Brunisol/Orthic Regosol (Orthic Eutric Brunisol)	U
	C2	Orthic Dystric Brunisol (Orthic Eutric Brunisol/Brunisolic Gray Luvisol/Orthic Gray Luvisol)	P
	C3x	Orthic DystricTurbic Cryosol/Brunisolic Dystric Turbic Cryosol (Brunisolic Eutric Turbic Cryosol, Regosolic Turbic Cryosol)	G
	C4	Gleyed Brunisols and Rego Gleysols	P
Residuum (Weathered Bedrock)	D1	Orthic Dystric Brunisol	U
	D2	Orthic Eutric Brunisol	U
	D3x	Histic Dystric Turbic Cryosol/ Histic Dystric Static Cryosol	U
	D4x	Histic Eutric Turbic Cryosol/ Histic Eutric Static Cryosol	U
Fluvial	F1	Orthic Dystric Brunisol/Brunisolic Gray Luvisol (Orthic Eutric Brunisol)	G
	F2	Orthic Humic Gleysol/Rego Humic Gleysol (Gleyed Cumulic Humic Regosol)	G
Morainal (Till)	M1	Orthic Dystric Brunisol/Orthic Eutric Brunisol (Brunisolic Gray Luvisol)	F-G
	M3	Orthic Eutric Brunisol/Brunisolic Gray Luvisol/Orthic Gray Luvisol (Orthic Dystric Brunisol)	F-G
	M4	Rego Humic Gleysol/Orthic Humic Gleysol/Orthic Gleysol	F-G
	M5x	Turbic Histic Dystric Cryosol/Turbic Histic Eutric Cryosol (Orthic Dystric Static Cryosol, Orthic Eutric Static Cryosol)	G-F
Organic	O2	Terric Fibrisol/ Terric Mesisol	NRO
Bedrock	R1	Rock	U
Anthropogenic	DL	Disturbed Land	NRA

NOTE:

¹Reclamation Suitability Categories: U= Unsuitable, P=Poor, F= Fair, G= Good, NRO= Not Rated Organic, NRA= Not Rated Anthropogenic

The majority of the LSA is comprised of soil unsuitable for reclamation (Table 26). The reason for the unsuitable rating is excessive stoniness, due to soil development from weathered bedrock. Broken and weathered cobbles and boulders in these materials have limited the quality of available soils. The soil that has developed in the fine fraction of these materials is suitable for reclamation use, and reclamation suitability of these materials could be improved by sorting/screening. The good and fair

ratings within the LSA comprise just over 12% of the Project area, and are from fluvial and morainal materials found in the lower gulches and valleys (Figure 3-16).

The unrated soil map units could possibly be acceptable as reclamation material. The anthropogenic or disturbed material is mostly related to placer mining, and may be usable for reclamation, but is limited in quality by coarse textures. Organic material is less than 1% within the LSA, but is also acceptable material for reclamation purposes. During salvage operations, overburden may prove essential as reclamation material due to the limited availability of suitable soil as reclamation material, and due to the accessibility of this material during pit stripping operations.

Table 26: Soil Reclamation Suitability for the Local Study Area

Reclamation Suitability ¹	Area (ha)	Percent (%)
F-G	12.4	0.8
G	94.2	5.9
G-F	102.9	6.4
NRA	247.2	15.4
NRO	1.2	0.1
P	245.7	15.3
U	902.4	56.2
Total	1,606.0	100.0

NOTE:

¹Reclamation Suitability Categories: U= Unsuitable, P=Poor, F= Fair, G= Good, NRO= Not Rated Organic, NRA= Not Rated Anthropogenic

Arsenic concentrations were not considered in the reclamation suitability ratings because high arsenic levels were ubiquitous. All soils with high As content were considered salvageable, as the purpose of reclamation is not to improve site conditions, but to ensure that the average baseline land capability is not reduced in the post-closure landscape.

4 CLOSURE

Stantec has prepared this report for the sole benefit of Victoria Gold, for the purpose of documenting baseline conditions in anticipation of an environmental assessment under the Yukon Territory *Environmental and Socio-Economic Assessment Act*. The report may not be relied upon by any other person or entity, other than for its intended purposes, without the express written consent of Stantec and Victoria Gold. Any use of this report by a third party, or any reliance on decisions made based upon it, are the responsibility of such third parties.

The information provided in this report was compiled from existing documents and data provided by Victoria Gold, field data compiled by Stantec (formerly Jacques Whitford AXYS Ltd.). This report represents the best professional judgment of our personnel available at the time of its preparation.

Eagle Gold Project

Environmental Baseline Report:
Surficial Geology, Terrain, and Soils
Final Report
Section 5: References

Stantec reserves the right to modify the contents of this report, in whole or in part, to reflect any new information that becomes available. If any conditions become apparent that differ significantly from our understanding of conditions as presented in this report, we request that we be notified immediately to reassess the conclusions provided herein.

5 REFERENCES

- Alberta Agriculture Food and Rural Development (AAFRD). 1987. Soil Quality Criteria Relative to Disturbance and Reclamation. Edmonton, Alberta, Canada.
- Alberta Soils Advisory Committee, Alberta Agriculture, Food and Rural development, Edmonton, Alberta. 2004. Criteria for Evaluating the Suitability of Root Zone Material in the Eastern Slopes Region of Alberta (Soil quality criteria relative to disturbance and reclamation (revised).
- Alexco Resources Corp. 2009. Brewery Creek Mine Site Assessment Report.
- Association of Professional Engineers and Geoscientists of British Columbia. 2003. Guidelines for Terrain Stability Assessments in the Forest Sector.
- BC Forest Service and BC Environment. 1999. Mapping and assessing Terrain Stability guidebook. Second Ed. Forest Practices Code of British Columbia.
- Bond, J.D. 1997. The glacial History and Placer Gold Potential of the North McQuesten River (116A/1), Dublin Gulch (106D/4) and Keno Hill (105M/14) map areas, Mayo Mining District, Central Yukon. In: LeBarge, W.P. and Roots, C.F., (editors), 1997. Yukon Quaternary Geology, Volume 2, Exploration and Geological Services Division, Northern Affairs Program, Yukon region, P.30-43.
- Bond, J.D. and P.T. Sanborn. 2006. Morphology and geochemistry of soils formed on colluviated weathered bedrock: Case studies from unglaciated upland slopes in west-central Yukon. University of Northern British Columbia. OPEN FILE 2006-19
- Bond. 1998a. Surficial geology of North McQuesten River, central Yukon, NTS 116A/1 (1:250000 scale). Exploration and Geological Services Division ygsftp.gov.yk.ca/publications/openfile/1999/of1999_13.pdf
- Bond. 1998b. Surficial geology of Keno Hill, Central Yukon, NTS 105M14. Exploration and Geological Services Division
- Bond, J.D., 1999. The Quaternary history and till geochemistry of the Anvil District, east-central Yukon. In: Yukon Exploration and Geology 1998, C.F. Roots and D.S. Emond (eds.), Exploration and Geological Services Division, Yukon Region, Indian and Northern Affairs Canada, p. 105-116.
- Bostock. 1965. Physiography of the Canadian Cordillera with Special Reference to the area North of the Fifty-fifth Parallel. Department of Energy and Mines. Geological Survey of Canada. ME247

- Canadian Council of Ministers of the Environment (CCME), 1999. Canadian Environmental Quality Guidelines (updated to 2007). Canadian Council of Ministers of the Environment, Winnipeg, MB.
- Dampier, L., Sanborn, P., Bond, J., Clague, J.J. and Smith, S., 2009. Soil genesis in relation to glacial history in central Yukon. *In: Yukon Exploration and Geology 2008*, L.H. Weston, L.R. Blackburn and L.L. Lewis (eds.), Yukon Geological Survey, p. 113-123.
- Expert Committee on Soil Survey. 1983. Canada Soil Information System (CANSIS) Manual for describing soils in the field 1982 revised. (ed.) J.H. Day. LRRR Contribution Number 82.52.
- First Dynasty Mines Ltd. (FDM) 1996. Dublin Gulch Project, Initial Environmental Evaluation Volume II: Environmental Setting Draft
- Gordey, S.P. and Makepeace, A.J. 2003: Yukon Digital Geology, version 2.0, S.P.Gordey and A.J. Makepeace (comp); Geological Survey of Canada, Open file 1749 and Yukon.
- Geological Survey, Open file 2003-9 (D).Gregorich, E.G., L.W. Turchenek, M.R. Carter and D.A. Angers. 2001. Soil and environmental science dictionary. CRC Press, Boca Raton.
- Hallam Knight Piésold. 1996a. *Dublin Gulch Initial Environmental Evaluation – Volume II Environmental Setting*. Report prepared for First Dynasty Mines Ltd., Denver Colorado.
- Hallam Knight Piésold. 1996b. Report on 1995 Geotechnical Investigations for Four Potential Heap Leach Facility Site Alternatives, First Dynasty Mines, Dublin Gulch Property.
- Mines, Dublin Gulch Property. (Knight Piésold, 1996b)
- Howes, D.E. and E. Kenk. 1997. Terrain Classification System for British Columbia. British Columbia Ministry of Environment, Victoria, BC.
- Jacques Whitford AXYS. 2007. *Data Gap Analysis for Dublin Gulch*. Report prepared for StrataGold Corp., Vancouver, BC by Jacques Whitford AXYS, Burnaby, BC.
- Lipovsky, P.S. and Bond, J.D., 1999. Surficial geology and till geochemistry of Mount Mye (105K/6 E), Central Yukon.
- Lipovsky, P.S. and McKenna, K., 2005. Local-scale biophysical mapping for integrated resource management, Watson Lake area (NTS 105A/2), Yukon. Yukon Geological Survey, Open File 2005-6, report and CD-ROM, 74 p.
- Lipovsky, P.S., McKenna, K. and Huscroft, C.A., 2005. Surficial geology of Watson Lake area (NTS 105A/2), Yukon (1: 50,000 scale). Yukon Geological Survey, Open File 2005-7.
- Madrone Environmental Services Ltd. 2006. Dublin Gulch Project. *Gap Analysis: Environmental Baseline Information*. Prepared for Strata Gold Corporation. September, 2006.
- Ministry of Energy, Mines, and Petroleum Resources. 2006. Guide to Preparing a Mine Permit Application Under the *British Columbia Mines Act*. Prepared by T. Hall and Associates for Mining and Minerals Division, Ministry of Energy, Mines, and Petroleum Resources. Victoria, BC. iii + 34 pp.

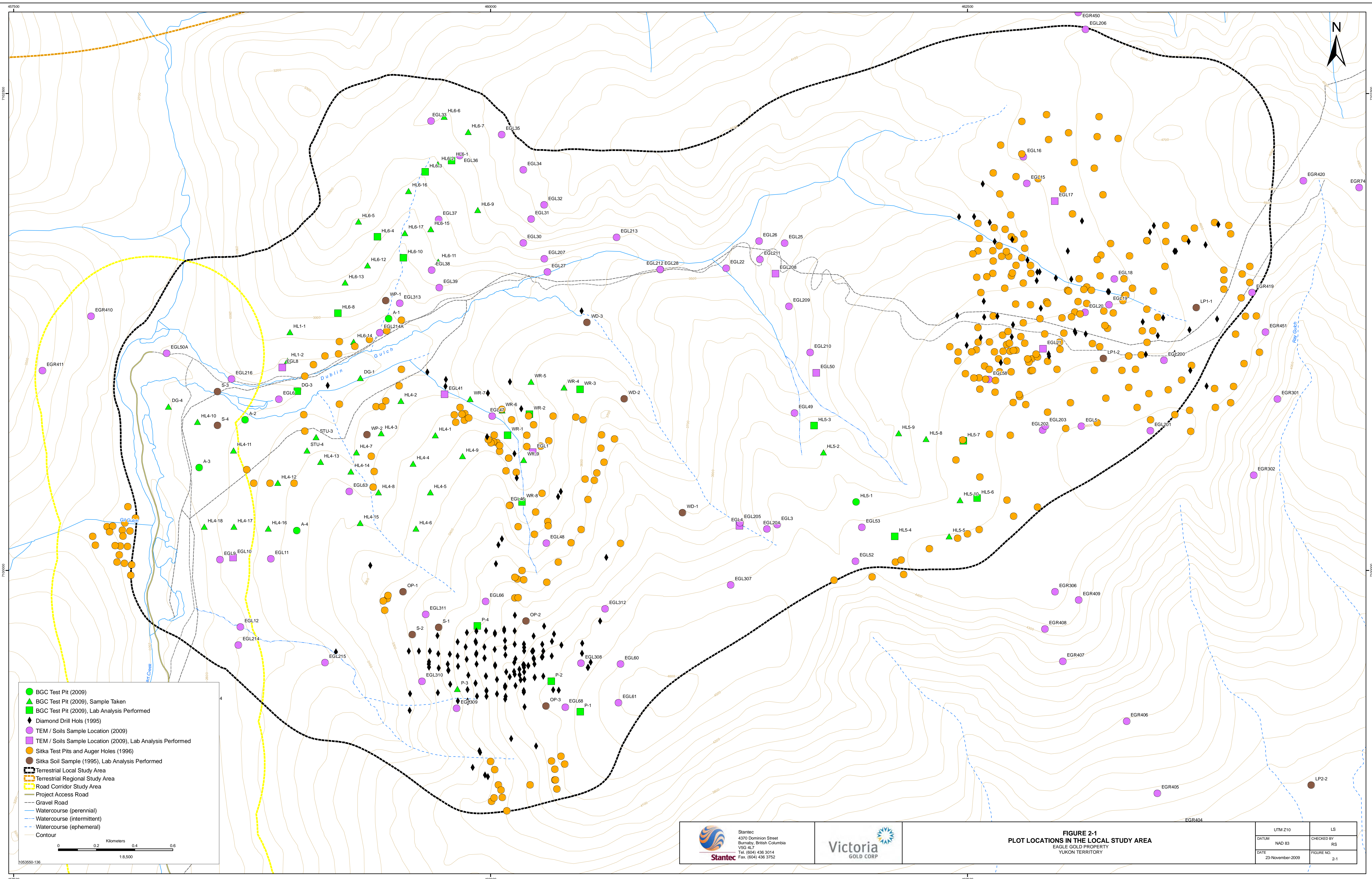
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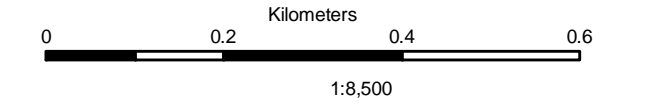
- Resource Inventory Committee (RIC). 1998. Standards for terrestrial ecosystem mapping British Columbia. British Columbia Ministry of Forests and British Columbia Ministry of Environment, Victoria, B.C.
- Resources Inventory Committee. 1996. Guidelines and Standards to Terrain Mapping in British Columbia. Surficial Geology Task Group, Earth Sciences Task Force British Columbia.
- Resource Inventory Committee (RISC). 2000. Prepared by Ecological Data Committee Ecosystems Working Group/Terrestrial Ecosystems Task Force. Standards for Terrestrial Ecosystem Mapping – Digital Data Capture in British Columbia. Version 3.0.
- Rostad, H.P.W., L.M. Kozak and D.F. Acton. 1977. Soil Survey and Land Evaluation of the Yukon Territory. Saskatchewan Institute of Pedology Publications. S174.
- SITKA Corp. 1996. Field Investigation Data Report, Dublin Gulch Project, New Millennium Mining
- Soil Classification Working Group. 1998. The Canadian System of Soil Classification. Agriculture and Agri-Food Canada Publication 1646. 3rd Edition (revised).
- Vernon, P. And Hughes, O.L. 1965. Surficial geology, Larsen Creek, Yukon Territory. Geological Survey of Canada. Map 1171A. Scale 1:253,440.
- Yukon O.I.C. 2002/171. Contaminated Sites Regulation, Environment Act. Available at:
http://www.gov.yk.ca/legislation/regs/oic2002_171.pdf
- Yukon Zinc Corporation 2005. *Wolverine Project Environmental Assessment Report*.

6 FIGURES

Please see the following pages.



- BGC Test Pit (2009)
- ▲ BGC Test Pit (2009), Sample Taken
- BGC Test Pit (2009), Lab Analysis Performed
- ◆ Diamond Drill Hols (1995)
- TEM / Soils Sample Location (2009)
- TEM / Soils Sample Location (2009), Lab Analysis Performed
- Sitka Test Pits and Auger Holes (1996)
- Sitka Soil Sample (1995), Lab Analysis Performed
- Terrestrial Local Study Area
- Terrestrial Regional Study Area
- Road Corridor Study Area
- Project Access Road
- Gravel Road
- Watercourse (perennial)
- - - Watercourse (intermittent)
- · - · Watercourse (ephemeral)
- Contour

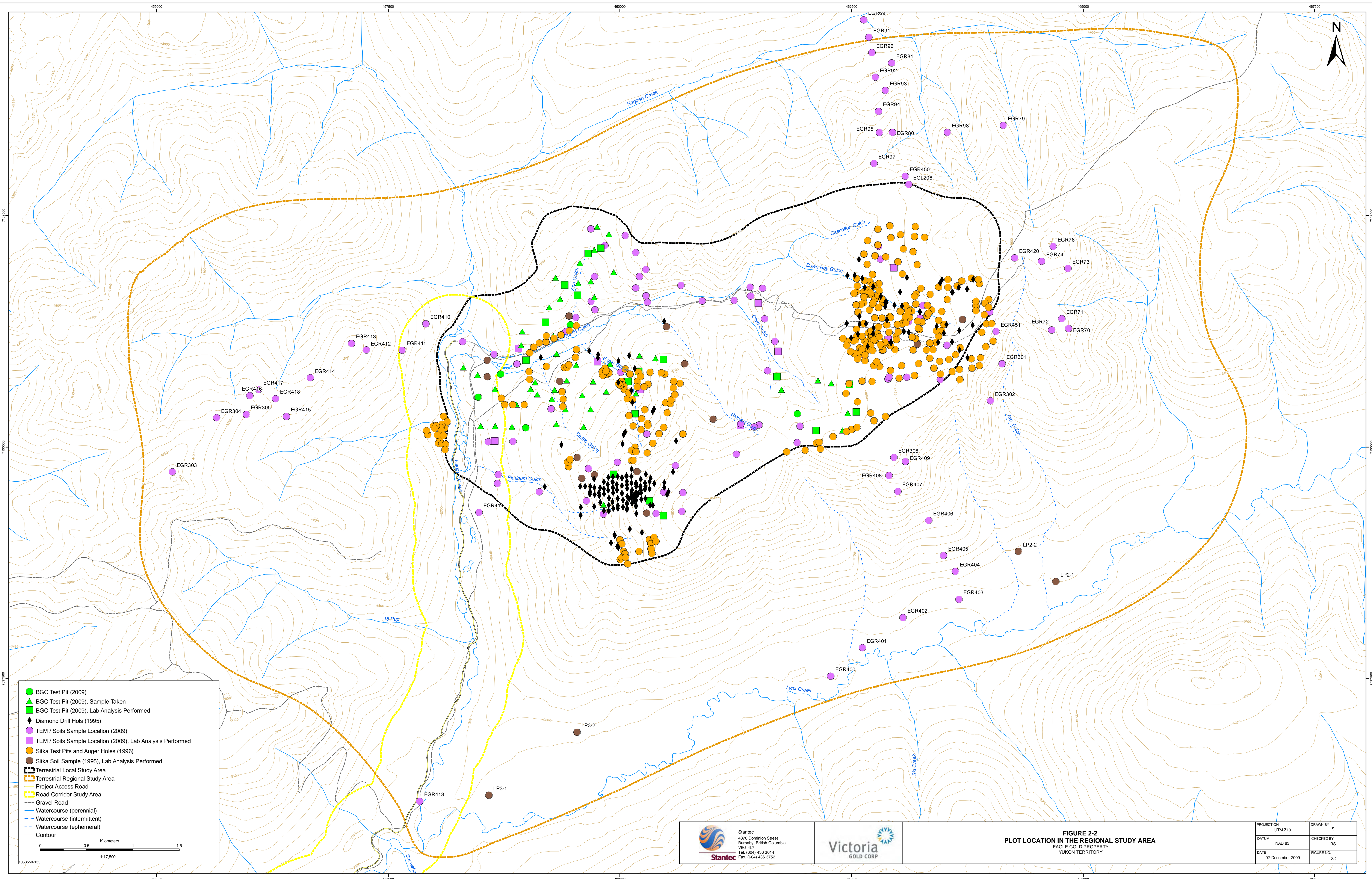


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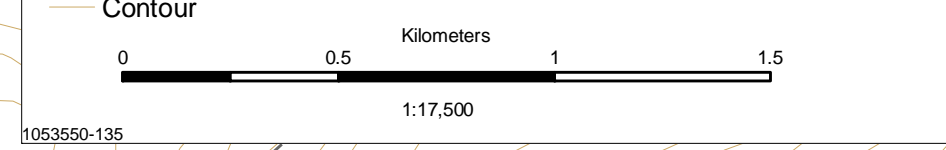
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FIGURE 2-1
PLOT LOCATIONS IN THE LOCAL STUDY AREA
 EAGLE GOLD PROPERTY
 YUKON TERRITORY

DATUM	UTM Z10	CHECKED BY	LS
DATE	NAD 83	FIGURE NO.	RS
	23-November-2009		2-1



- BGC Test Pit (2009)
- ▲ BGC Test Pit (2009), Sample Taken
- BGC Test Pit (2009), Lab Analysis Performed
- ◆ Diamond Drill Hols (1995)
- TEM / Soils Sample Location (2009)
- TEM / Soils Sample Location (2009), Lab Analysis Performed
- Sitka Test Pits and Auger Holes (1996)
- Sitka Soil Sample (1995), Lab Analysis Performed
- Terrestrial Local Study Area
- Terrestrial Regional Study Area
- Project Access Road
- Road Corridor Study Area
- Gravel Road
- Watercourse (perennial)
- Watercourse (intermittent)
- Watercourse (ephemeral)
- Contour



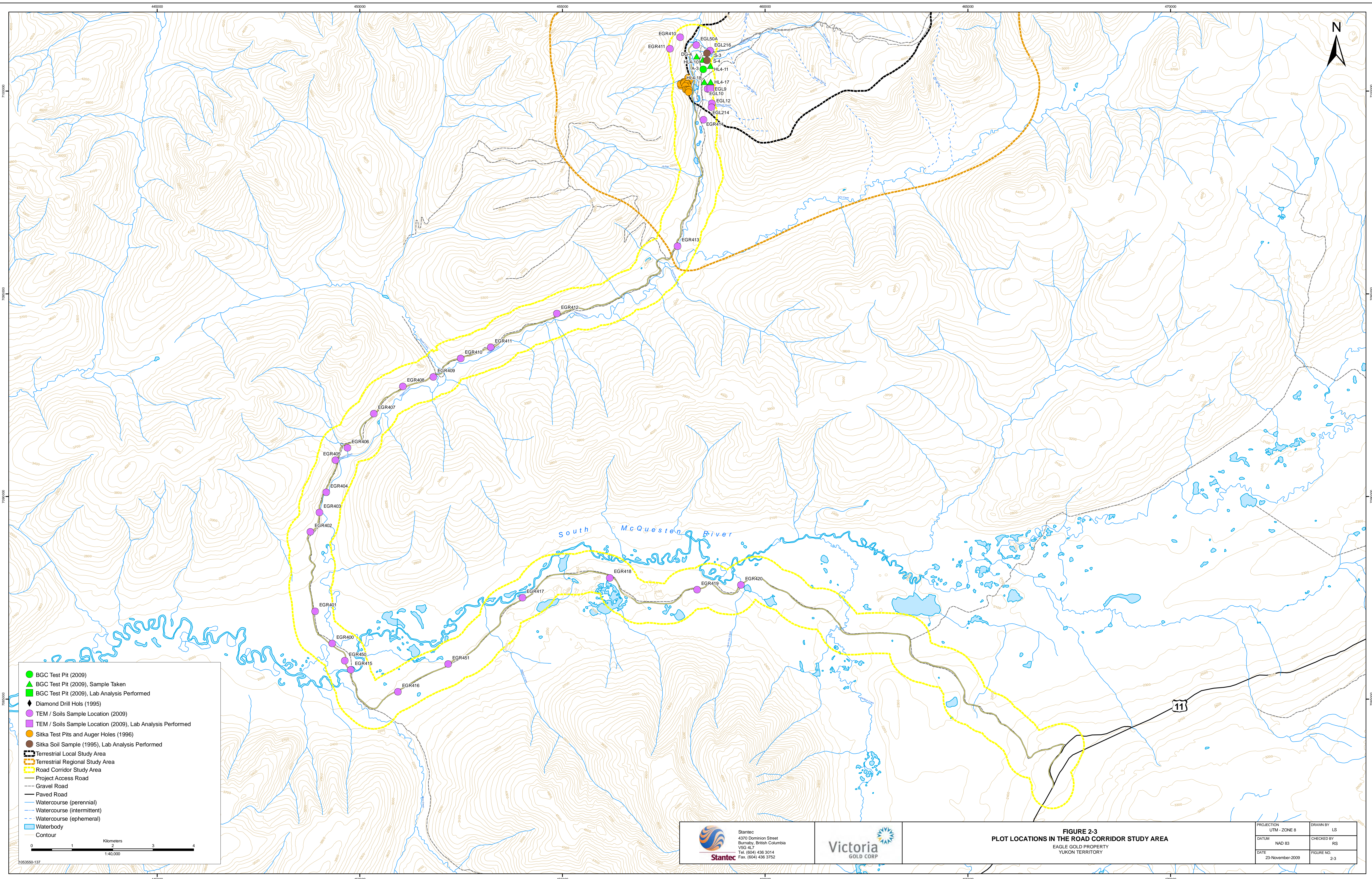
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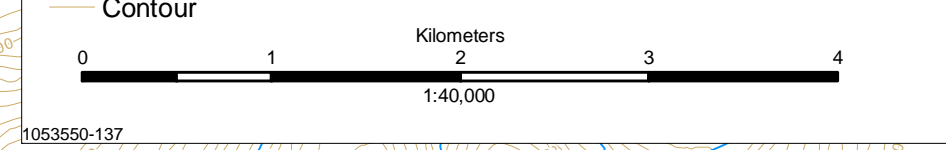
FIGURE 2-2
PLOT LOCATION IN THE REGIONAL STUDY AREA
 EAGLE GOLD PROPERTY
 YUKON TERRITORY

PROJECTION	UTM Z10	DRAWN BY	LS
DATUM	NAD 83	CHECKED BY	RS
DATE	02-December-2009	FIGURE NO.	2-2

Data Sources: Government of Canada, Victoria Gold Corp.



- BGC Test Pit (2009)
- ▲ BGC Test Pit (2009), Sample Taken
- ▲ BGC Test Pit (2009), Lab Analysis Performed
- ◆ Diamond Drill Hols (1995)
- TEM / Soils Sample Location (2009)
- ▲ TEM / Soils Sample Location (2009), Lab Analysis Performed
- Sitka Test Pits and Auger Holes (1996)
- Sitka Soil Sample (1995), Lab Analysis Performed
- Terrestrial Local Study Area
- Terrestrial Regional Study Area
- Road Corridor Study Area
- Project Access Road
- Gravel Road
- Paved Road
- Watercourse (perennial)
- Watercourse (intermittent)
- Watercourse (ephemeral)
- Waterbody
- Contour

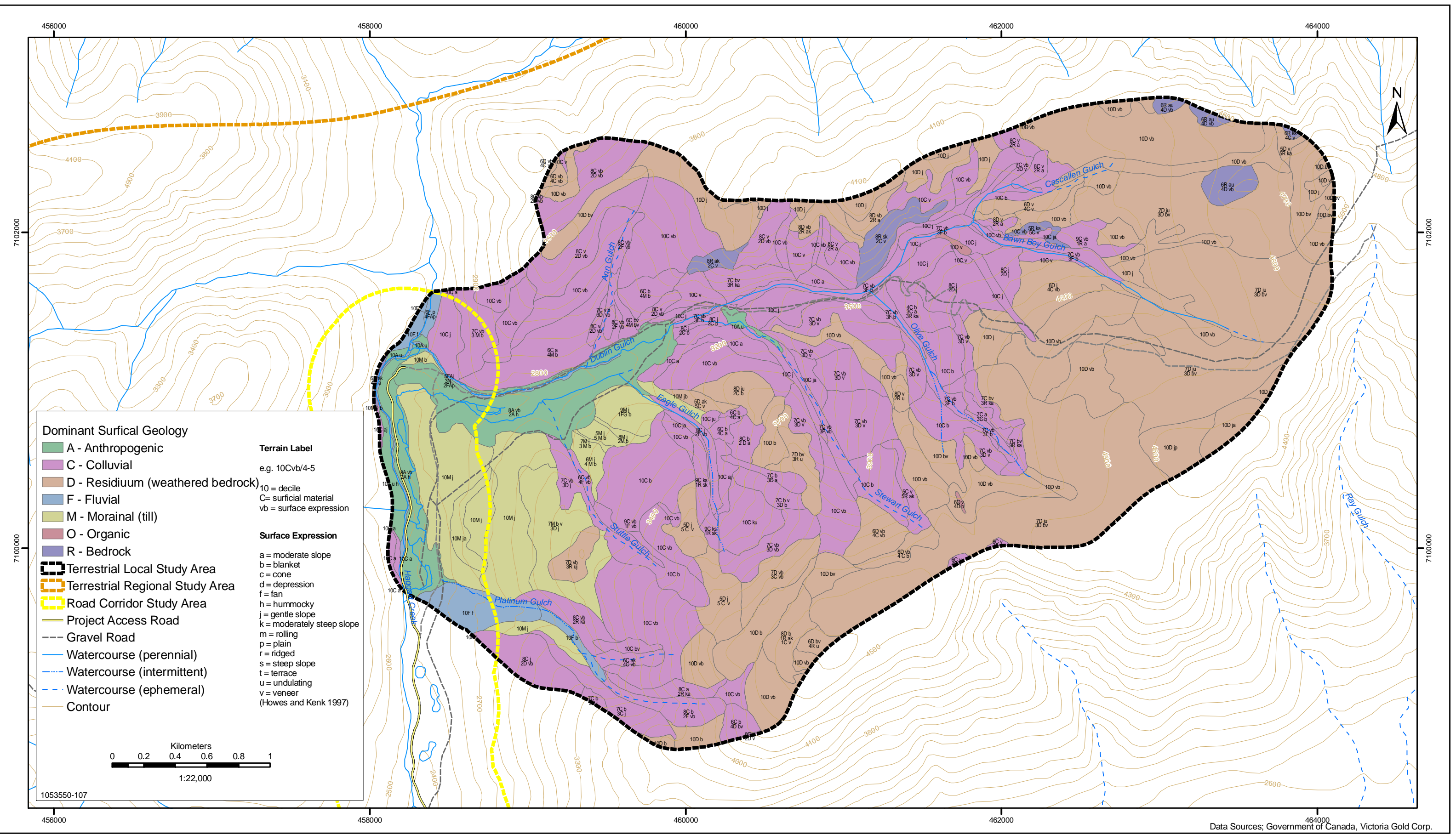


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FIGURE 2-3
PLOT LOCATIONS IN THE ROAD CORRIDOR STUDY AREA
 EAGLE GOLD PROPERTY
 YUKON TERRITORY

PROJECTION UTM - ZONE 8	DRAWN BY LS
DATUM NAD 83	CHECKED BY RS
DATE 23-November-2009	FIGURE NO. 2-3



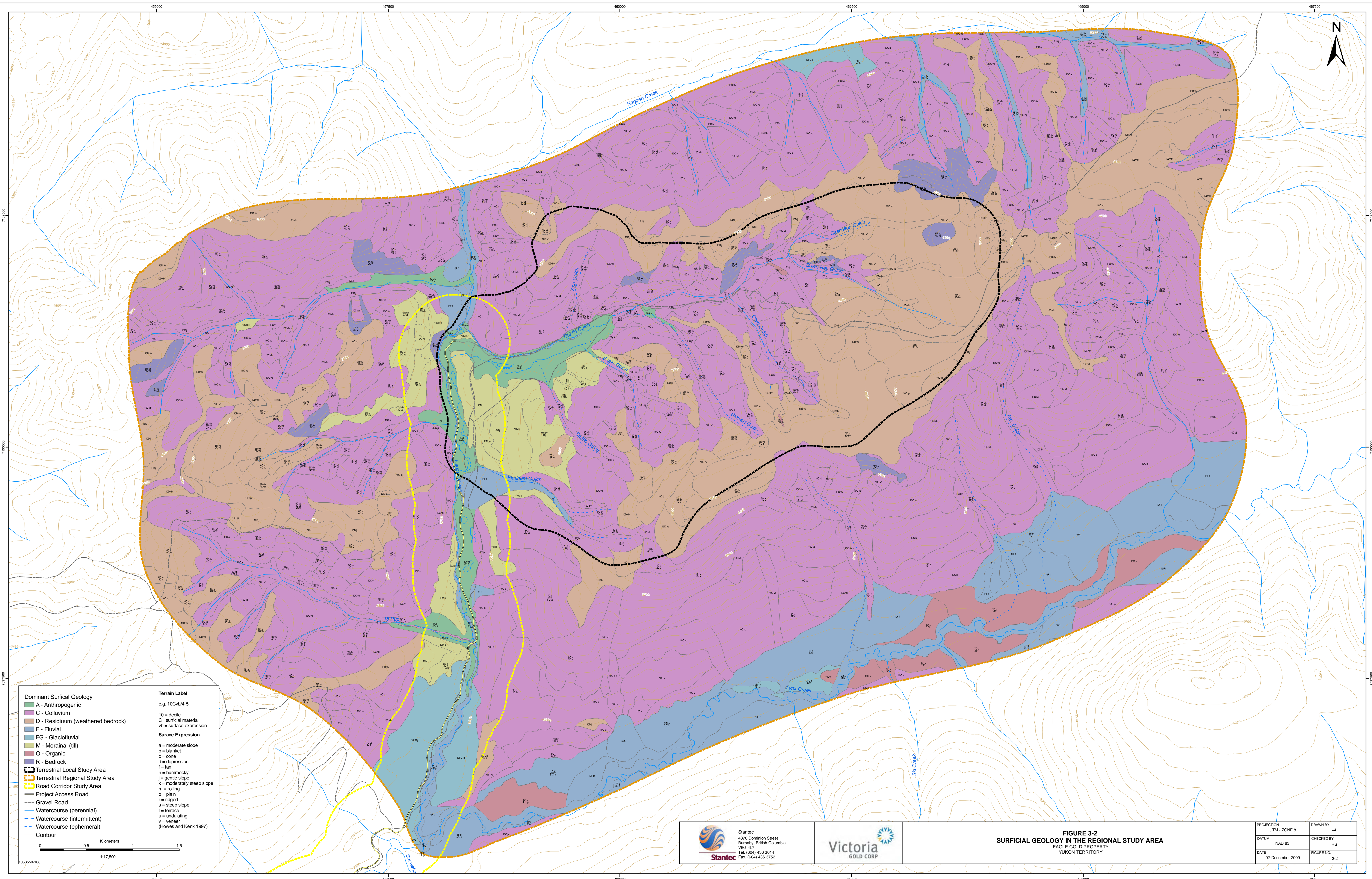
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FIGURE 3-1
SURFICIAL GEOLOGY IN THE LOCAL STUDY AREA
EAGLE GOLD PROPERTY
YUKON TERRITORY

PROJECTION UTM - ZONE 8	DRAWN BY RS
DATUM NAD 83	CHECKED BY
DATE 23-November-2009	FIGURE NO. 3-1



Dominant Surficial Geology

- A - Anthropogenic
- C - Colluvium
- D - Residuum (weathered bedrock)
- F - Fluvial
- FG - Glaciofluvial
- M - Morainal (till)
- O - Organic
- R - Bedrock

Terrain Label
e.g. 10Cvb/4-5

10 = decile
C = surficial material
vb = surface expression

Surface Expression

- a = moderate slope
- b = blanket
- c = cone
- d = depression
- f = fan
- h = hummocky
- j = gentle slope
- k = moderately steep slope
- m = rolling
- p = plain
- r = ridged
- s = steep slope
- t = terrace
- u = undulating
- v = veneer (Howes and Kenk 1997)

Other Symbols

- Terrestrial Local Study Area
- Terrestrial Regional Study Area
- Road Corridor Study Area
- Project Access Road
- Gravel Road
- Watercourse (perennial)
- Watercourse (intermittent)
- Watercourse (ephemeral)
- Contour

0 0.5 1 1.5 Kilometers
1:17,500

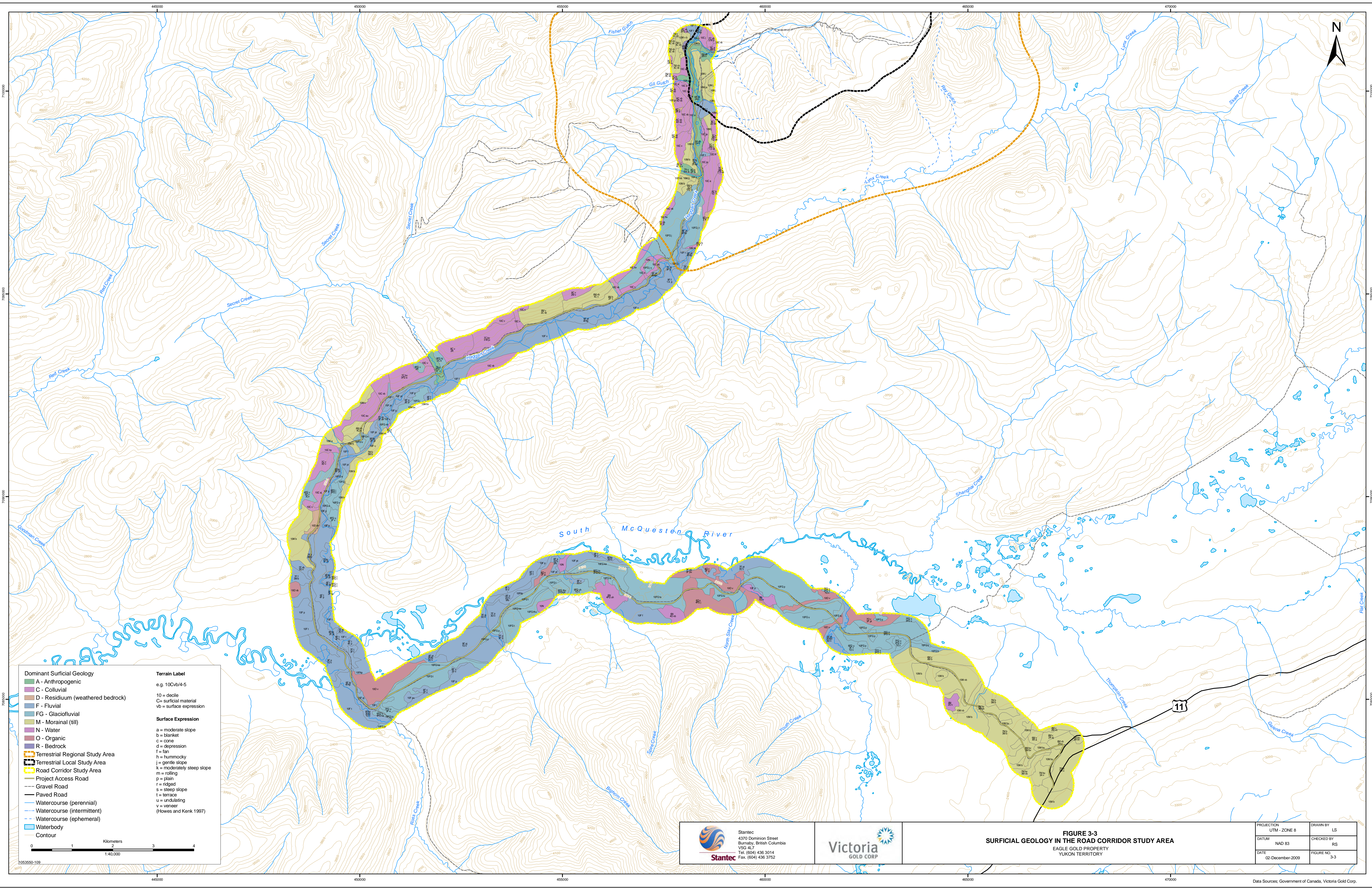
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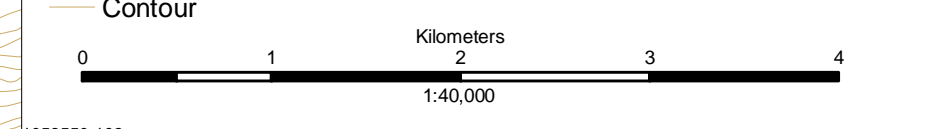
FIGURE 3-2
SURFICIAL GEOLOGY IN THE REGIONAL STUDY AREA
EAGLE GOLD PROPERTY
YUKON TERRITORY

PROJECTION UTM - ZONE 8	DRAWN BY LS
DATUM NAD 83	CHECKED BY RS
DATE 02-December-2009	FIGURE NO. 3-2

Data Sources: Government of Canada, Victoria Gold Corp.



Dominant Surficial Geology		Terrain Label	
 A - Anthropogenic		e.g. 10Cb/4-5	
 C - Colluvial		10 = decile	
 D - Residuum (weathered bedrock)		Cb = surficial material	
 F - Fluvial		vb = surface expression	
 FG - Glaciofluvial			
 M - Morainal (till)		Surface Expression	
 N - Water		a = moderate slope	
 O - Organic		b = blanket	
 R - Bedrock		c = cone	
 Terrestrial Regional Study Area		d = depression	
 Terrestrial Local Study Area		f = fan	
 Road Corridor Study Area		h = hummocky	
 Project Access Road		j = gentle slope	
 Gravel Road		k = moderately steep slope	
 Paved Road		m = rolling	
 Watercourse (perennial)		p = plain	
 Watercourse (intermittent)		r = ridged	
 Watercourse (ephemeral)		s = steep slope	
 Waterbody		t = terrace	
 Contour		u = undulating	
		v = veneer	
		(Howes and Kenk 1997)	



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FIGURE 3-3
SURFICIAL GEOLOGY IN THE ROAD CORRIDOR STUDY AREA
 EAGLE GOLD PROPERTY
 YUKON TERRITORY

PROJECTION	UTM - ZONE 8	DRAWN BY	LS
DATUM	NAD 83	CHECKED BY	RS
DATE	02-December-2009	FIGURE NO.	3-3

Data Sources: Government of Canada, Victoria Gold Corp.

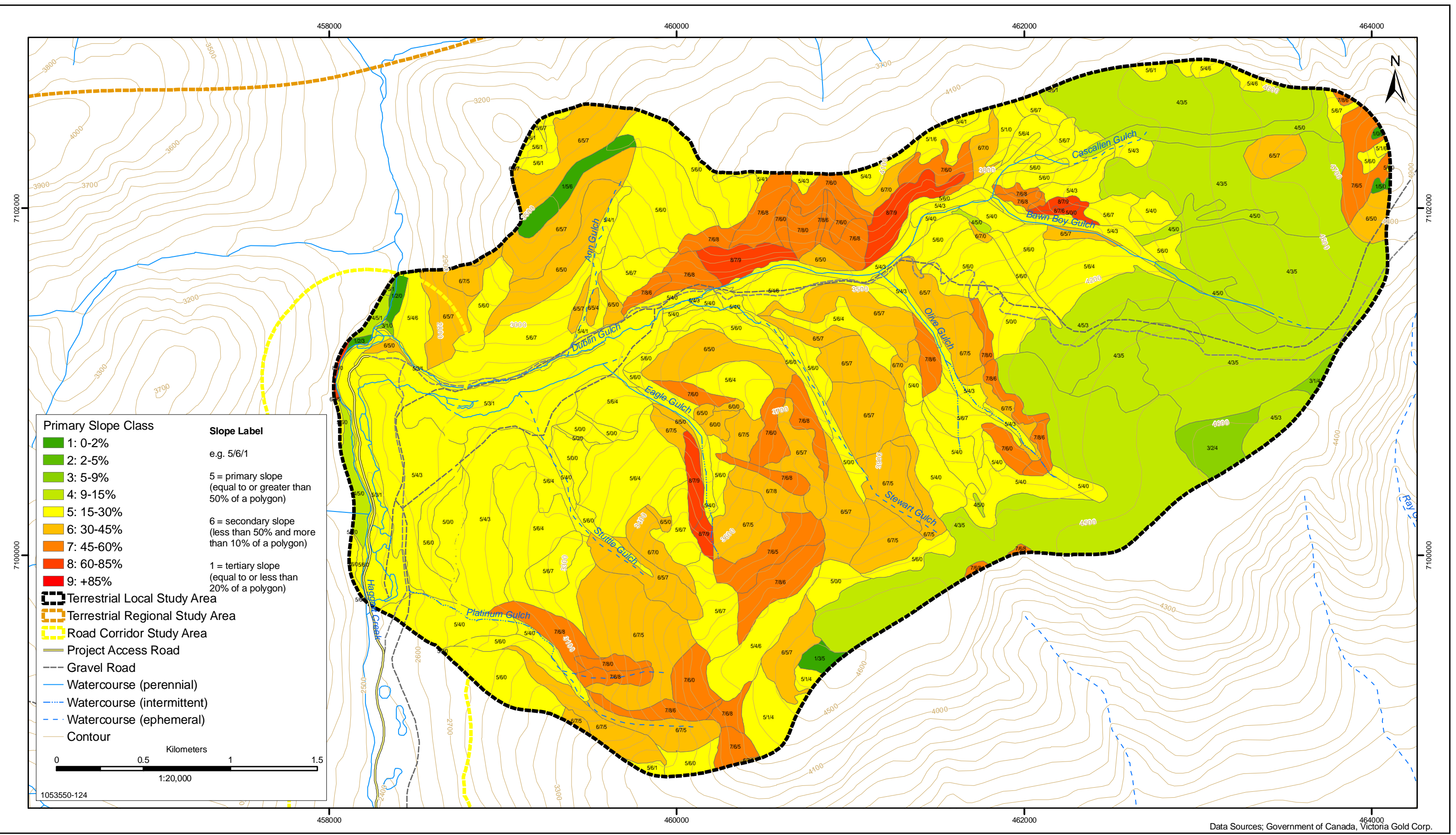


FIGURE 3-4
PRIMARY SLOPES IN THE LOCAL STUDY AREA
EAGLE GOLD PROPERTY
YUKON TERRITORY

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PROJECTION UTM - ZONE 8	DRAWN BY LS
DATUM NAD 83	CHECKED BY RS
DATE 23-November-2009	FIGURE NO. 3-4

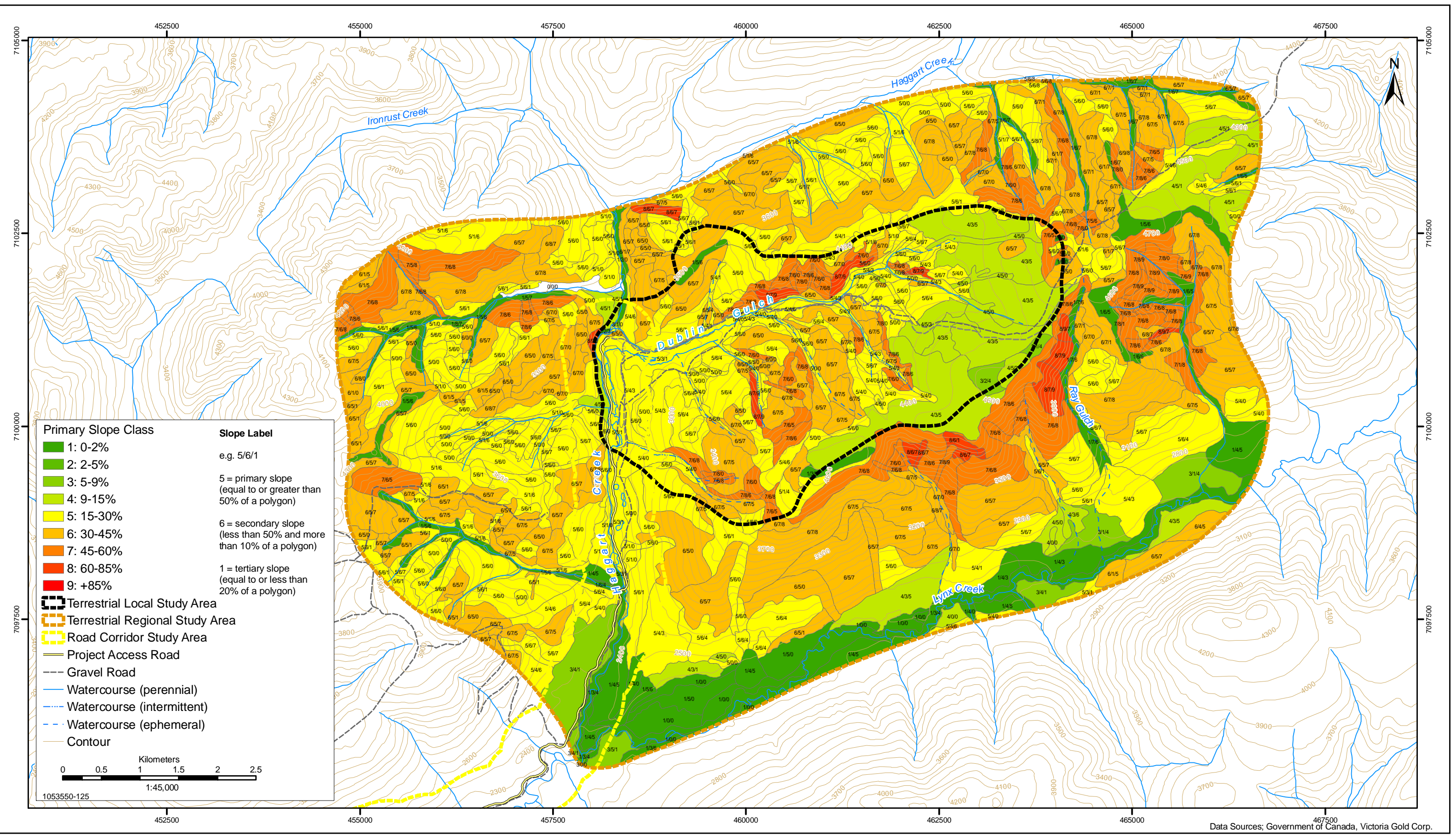



FIGURE 3-5
PRIMARY SLOPES IN THE REGIONAL STUDY AREA
EAGLE GOLD PROPERTY
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PROJECTION	UTM - ZONE 8	DRAWN BY	LS
DATUM	NAD 83	CHECKED BY	RS
DATE	02-December-2009	FIGURE NO.	3-5

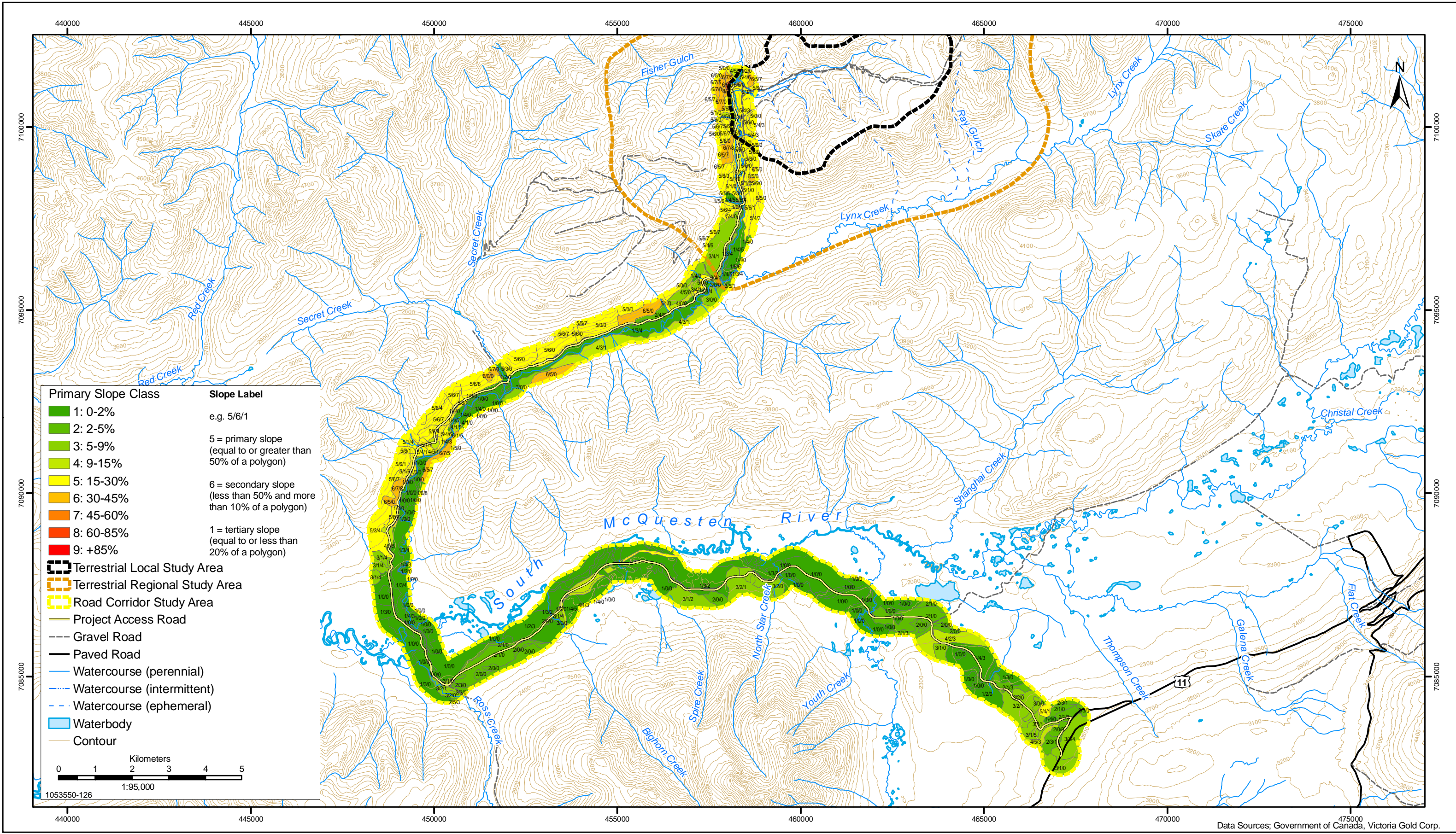
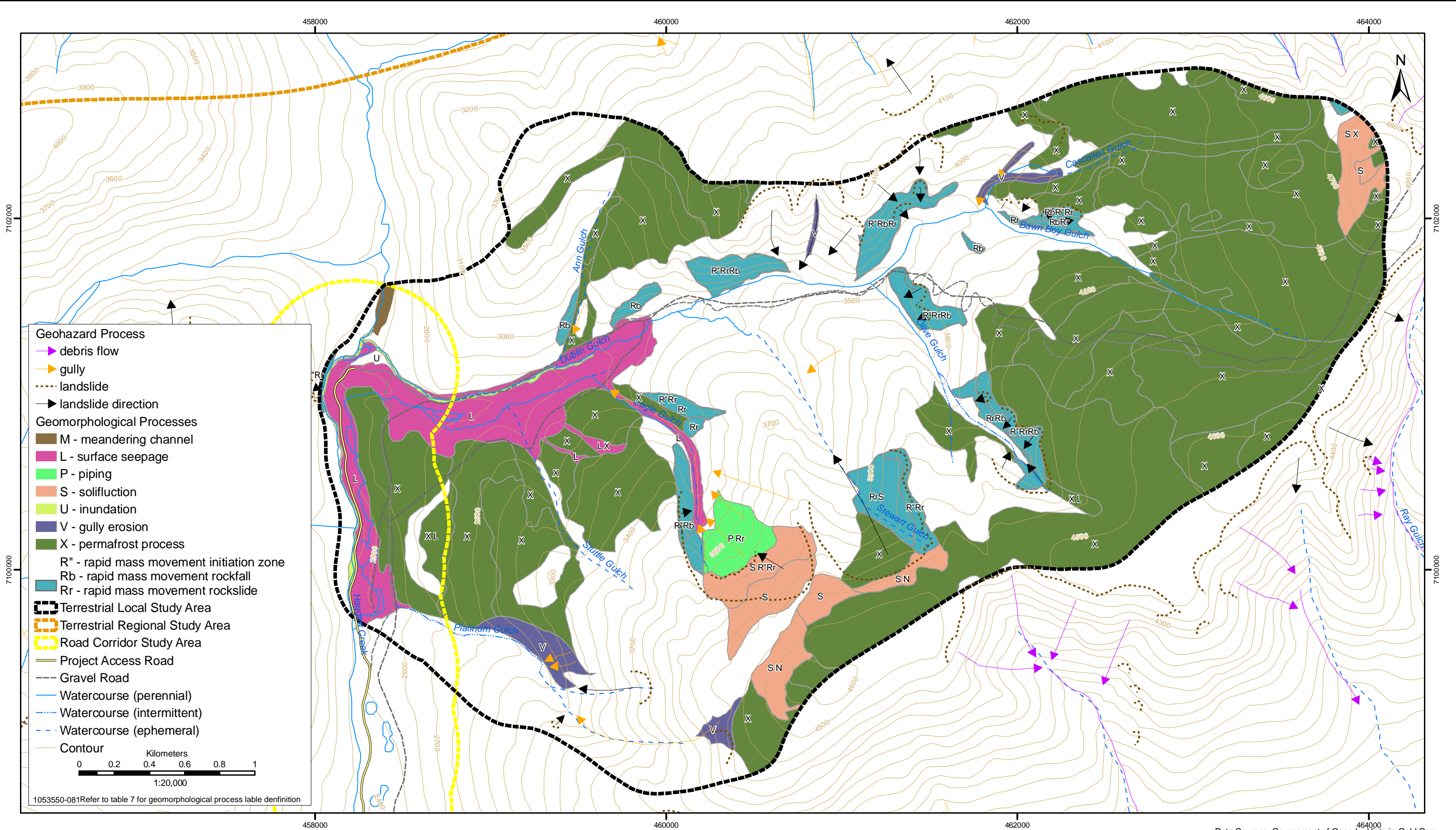


FIGURE 3-6
PRIMARY SLOPES IN THE ROAD CORRIDOR STUDY AREA
 EAGLE GOLD PROPERTY
 YUKON TERRITORY



- Geohazard Process**
- debris flow
 - gully
 - landslide
 - landslide direction
- Geomorphological Processes**
- M - meandering channel
 - L - surface seepage
 - P - piping
 - S - solifluction
 - U - inundation
 - V - gully erosion
 - X - permafrost process
- Rapid Mass Movement**
- Rⁿ - rapid mass movement initiation zone
 - Rb - rapid mass movement rockfall
 - Rr - rapid mass movement rockslide
- Study Areas**
- Terrestrial Local Study Area
 - Terrestrial Regional Study Area
 - Road Corridor Study Area
- Infrastructure**
- Project Access Road
 - Gravel Road
- Watercourses**
- Watercourse (perennial)
 - Watercourse (intermittent)
 - Watercourse (ephemeral)
- Contour**
- 0 0.2 0.4 0.6 0.8 1
Kilometers
1:20,000
- 1053550-081 Refer to table 7 for geomorphological process label definition

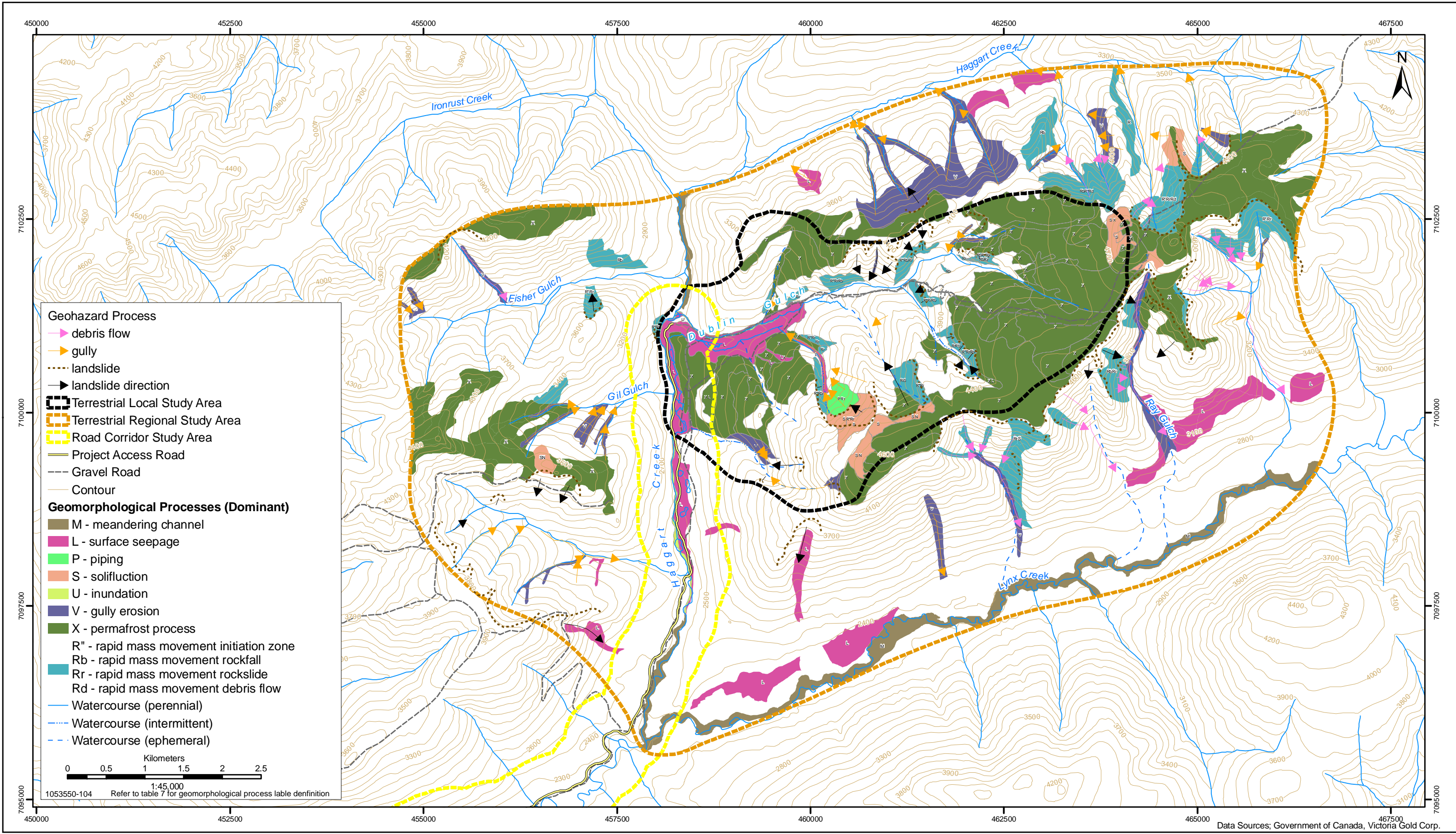
**FIGURE 3-7
GEOHAZARDS AND GEOMORPHOLOGICAL PROCESSES
IN THE LOCAL STUDY AREA**
EAGLE GOLD PROPERTY
YUKON TERRITORY

Data Sources: Government of Canada, Victoria Gold Corp.

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PROJECTION UTM - ZONE 8	DRAWN BY LS
DATUM NAD 83	CHECKED BY RS
DATE 23-November-2009	FIGURE NO. 3-7



**FIGURE 3-8
GEOHAZARDS AND GEOMORPHOLOGICAL PROCESSES
IN THE REGIONAL STUDY AREA**
EAGLE GOLD PROPERTY
YUKON TERRITORY

PROJECTION UTM - ZONE 8	DRAWN BY LS
DATUM NAD 83	CHECKED BY RS
DATE 02-December-2009	FIGURE NO. 3-8


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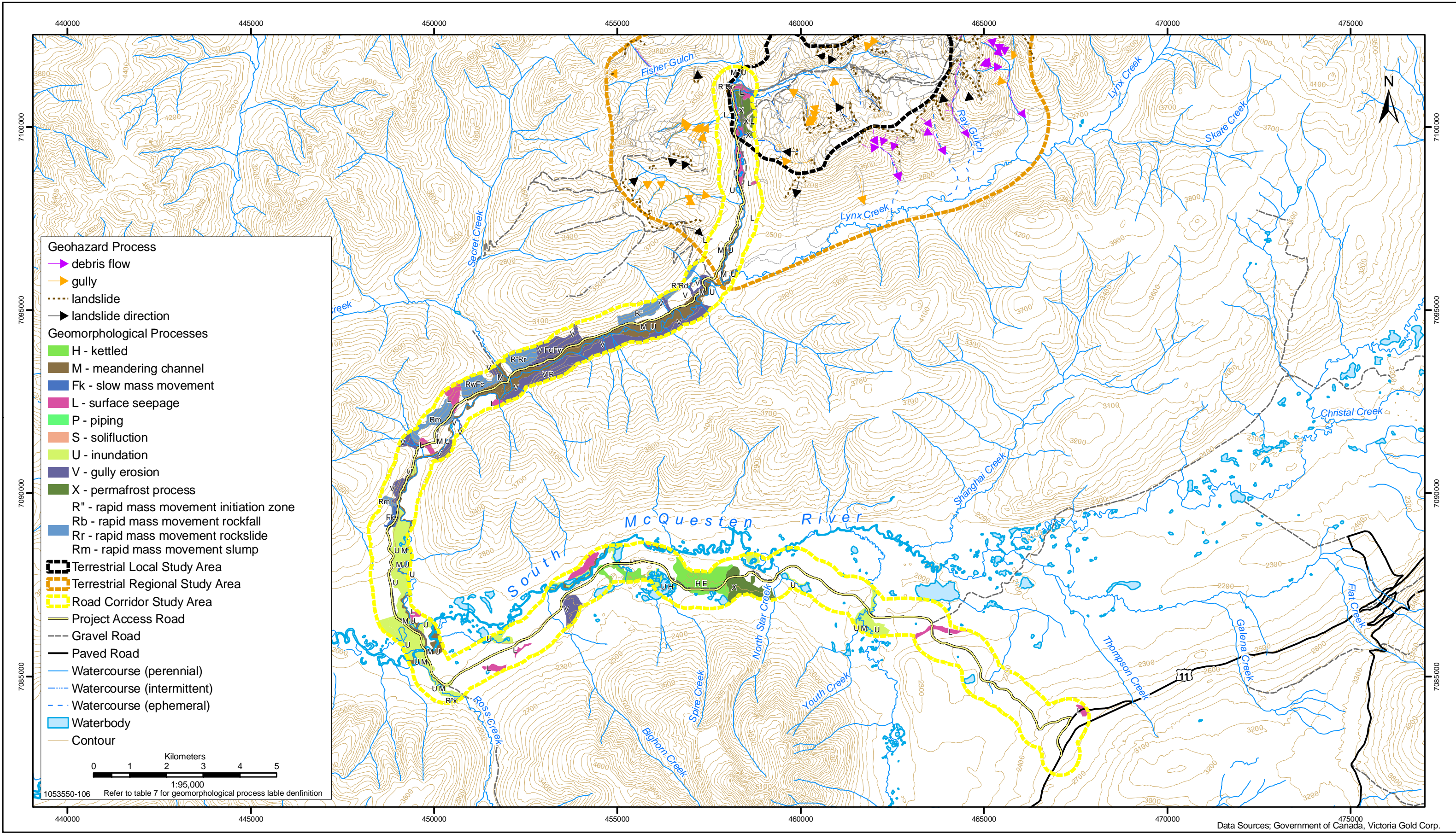
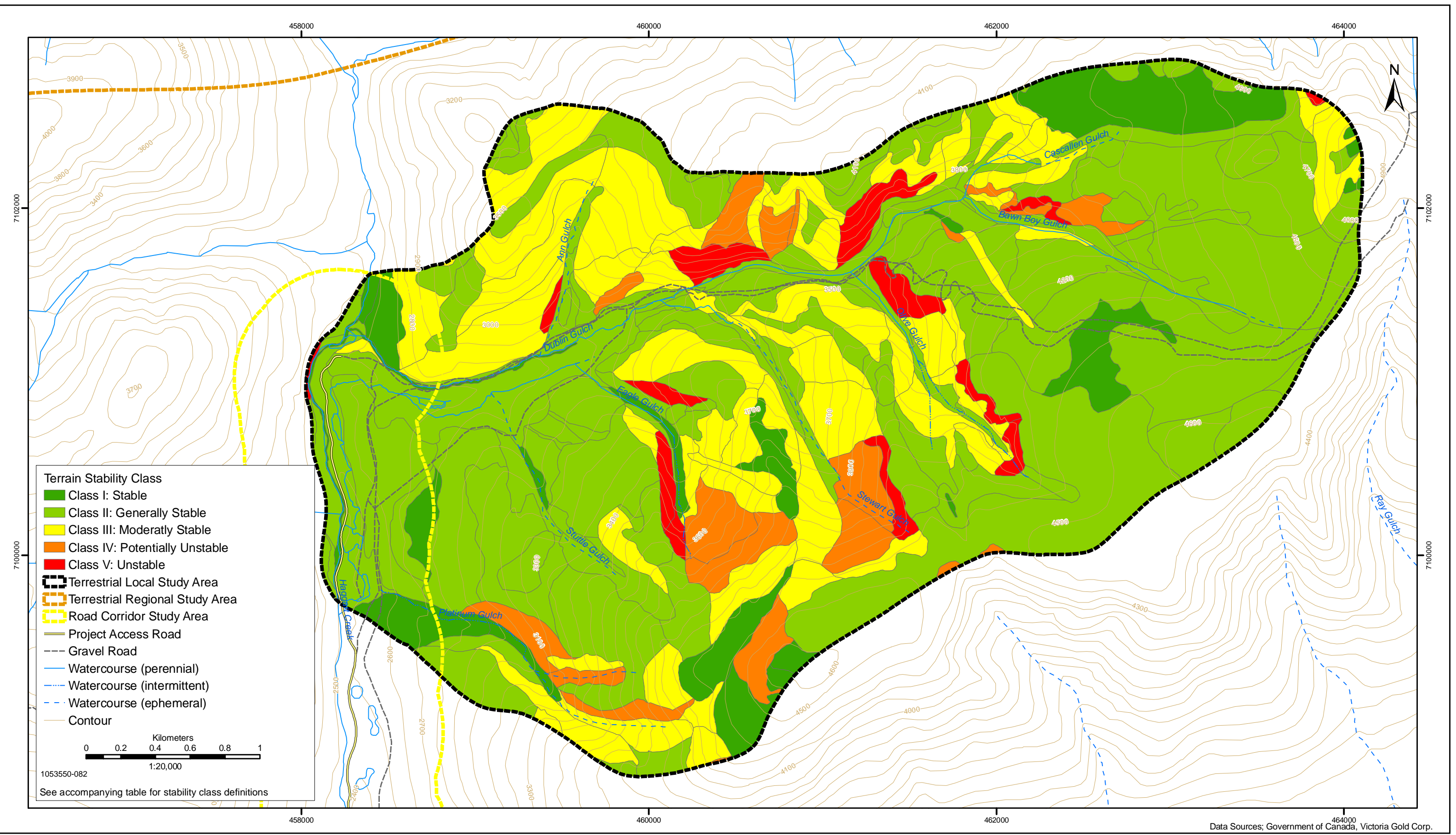


FIGURE 3-9
GEOHAZARDS AND GEOMORPHOLOGICAL PROCESSES
IN THE ROAD CORRIDOR STUDY AREA
 EAGLE GOLD PROPERTY
 YUKON TERRITORY

PROJECTION	UTM - ZONE 8	DRAWN BY	LS
DATUM	NAD 83	CHECKED BY	RS
DATE	02-December-2009	FIGURE NO.	3-9



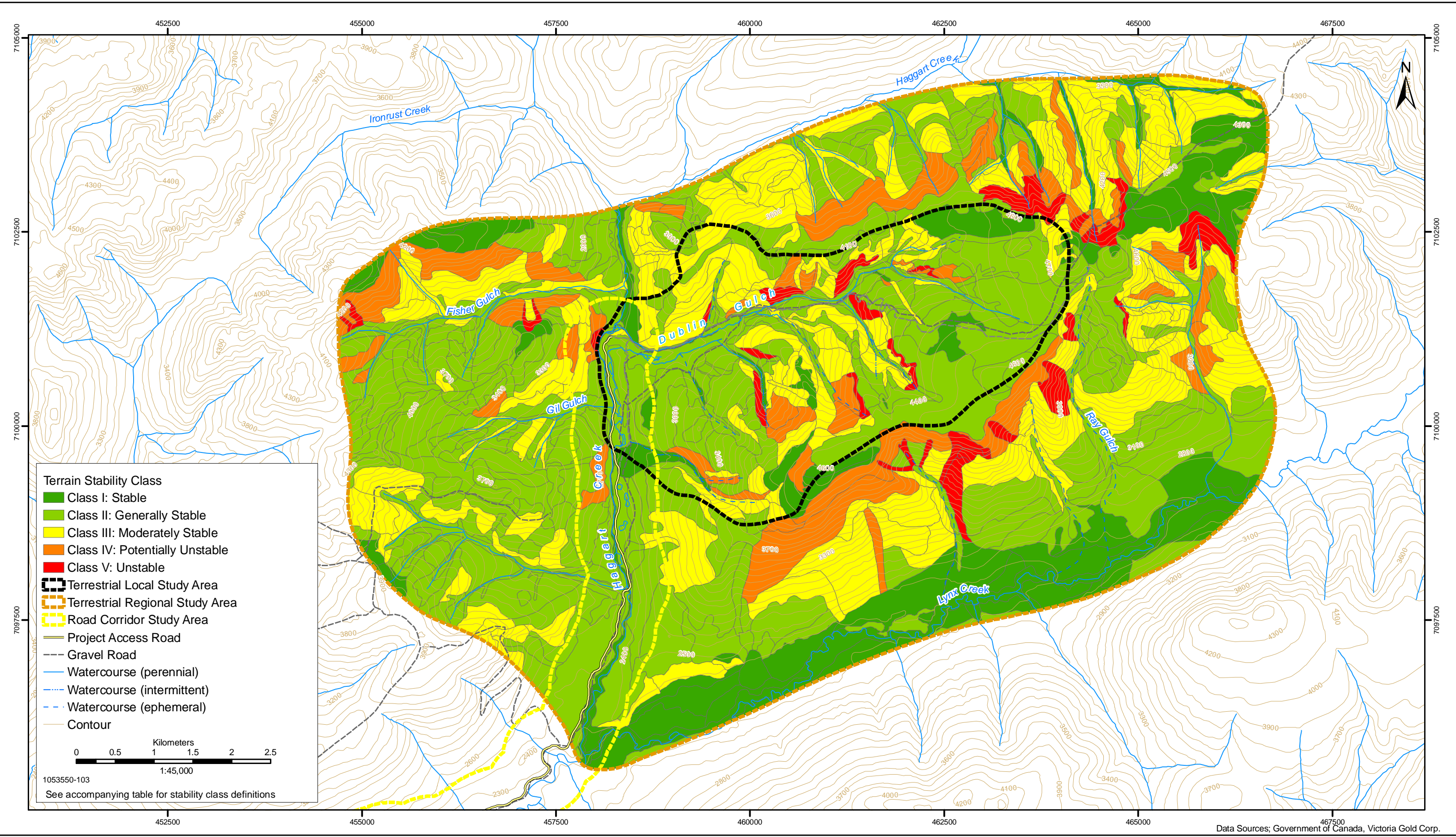
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FIGURE 3-10:
TERRAIN STABILITY IN THE LOCAL STUDY AREA
 EAGLE GOLD PROPERTY
 YUKON TERRITORY

PROJECTION UTM - ZONE 8	DRAWN BY LS
DATUM NAD 83	CHECKED BY RS
DATE 23-November-2009	FIGURE NO. 3-10



**FIGURE 3-11
TERRAIN STABILITY IN THE REGIONAL STUDY AREA**

EAGLE GOLD PROPERTY
YUKON TERRITORY

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PROJECTION UTM - ZONE 8	DRAWN BY LS
DATUM NAD 83	CHECKED BY RS
DATE 02-December-2009	FIGURE NO. 3-11

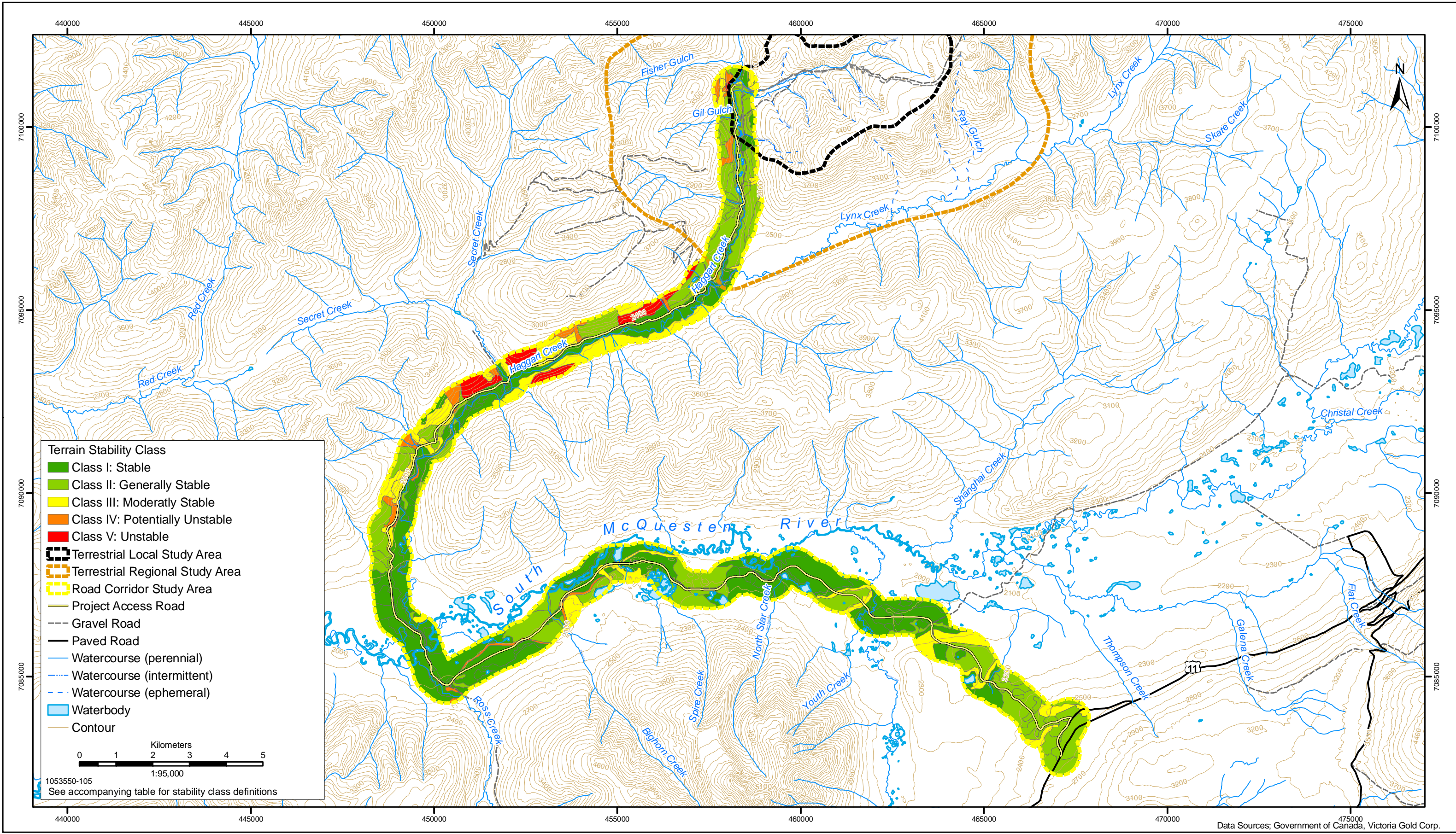


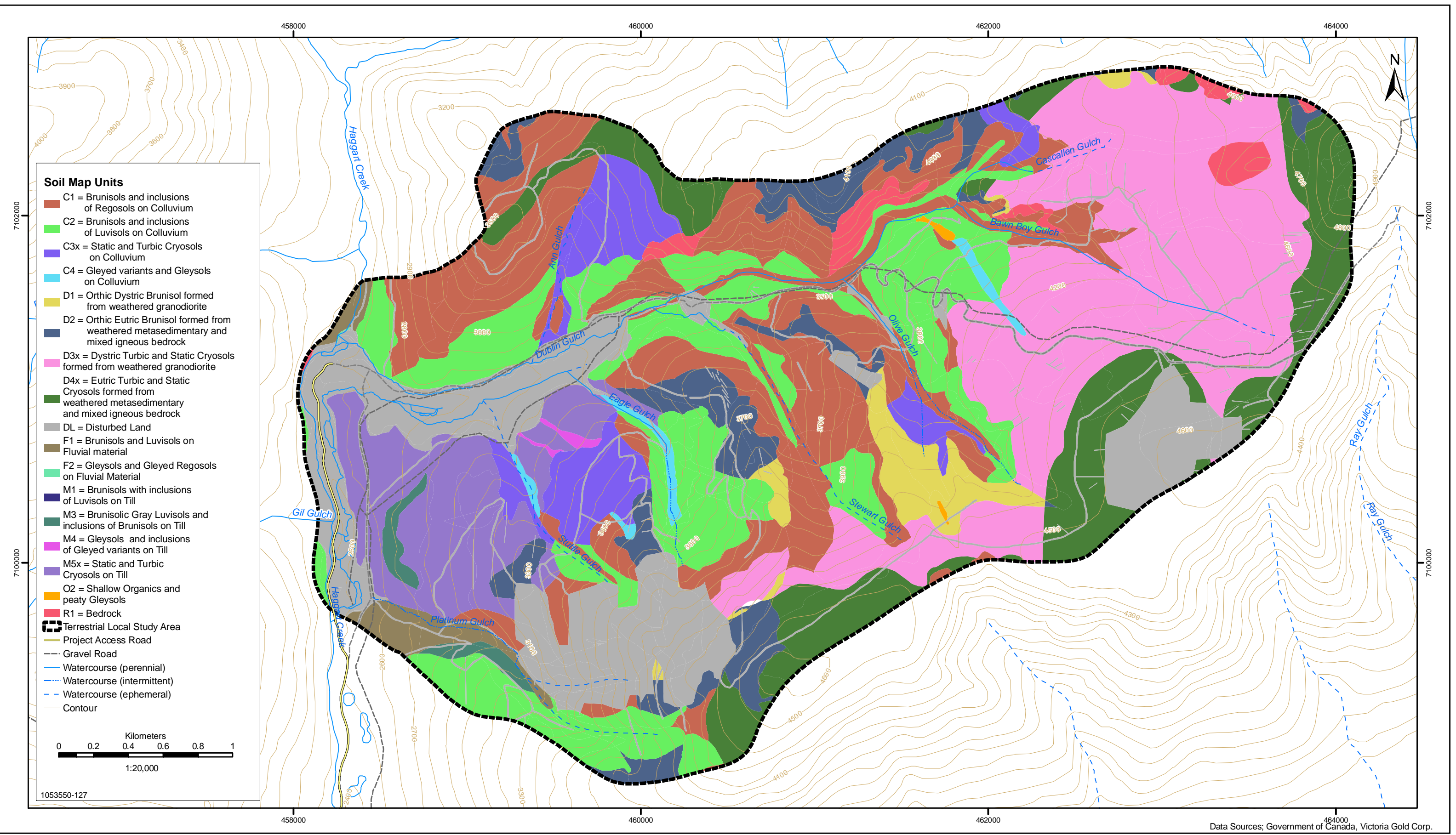
FIGURE 3-12:
TERRAIN STABILITY IN THE ROAD CORRIDOR STUDY AREA
 EAGLE GOLD PROPERTY
 YUKON TERRITORY

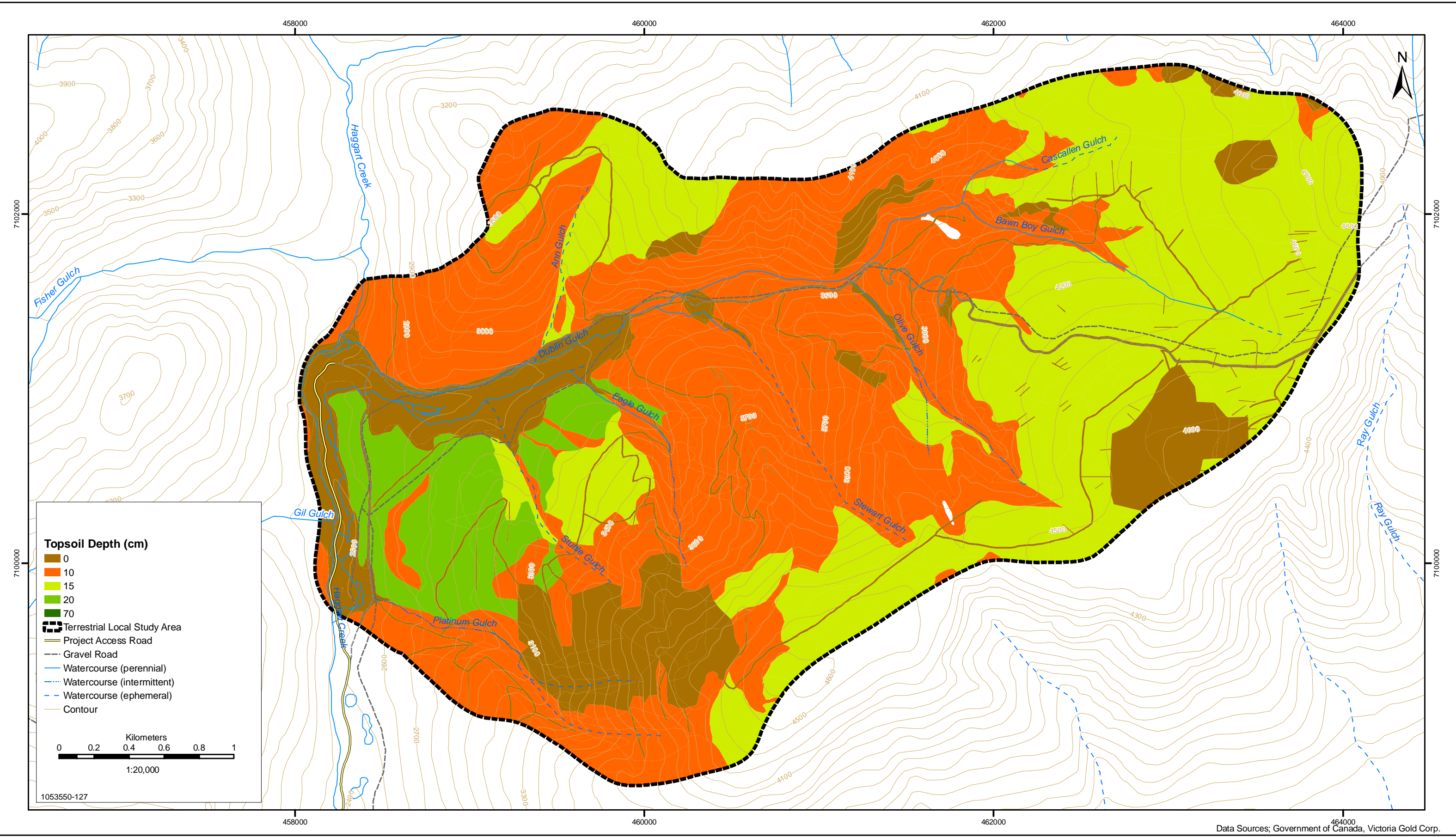
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PROJECTION	UTM - ZONE 8	DRAWN BY	LS
DATUM	NAD 83	CHECKED BY	RS
DATE	02-December-2009	FIGURE NO.	3-12

Data Sources: Government of Canada, Victoria Gold Corp.





Data Sources: Government of Canada, Victoria Gold Corp.

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FIGURE 3-14:
TOPSOIL DEPTHS IN THE LOCAL STUDY AREA
 EAGLE GOLD PROPERTY
 YUKON TERRITORY

PROJECTION UTM - ZONE 8	DRAWN BY NP
DATUM NAD 83	CHECKED BY LS
DATE 02-December-2009	FIGURE NO. 3-14

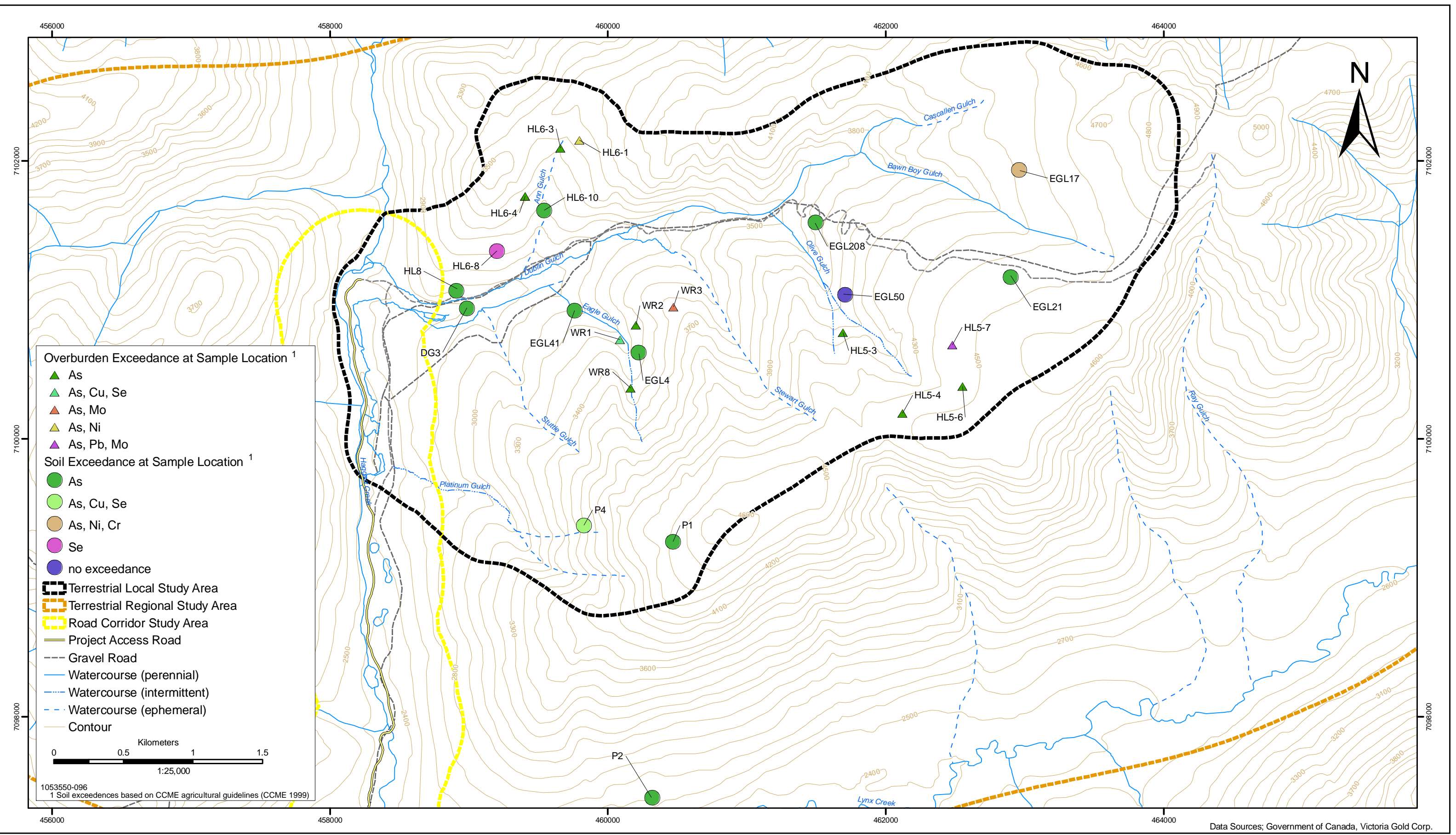


FIGURE 3-15
SOIL BASELINE METALS IN THE LOCAL STUDY AREA
 EAGLE GOLD PROPERTY
 YUKON TERRITORY

PROJECTION	UTM - ZONE 8	DRAWN BY	RS
DATUM	NAD 83	CHECKED BY	
DATE	06-January-2010	FIGURE NO.	3-15

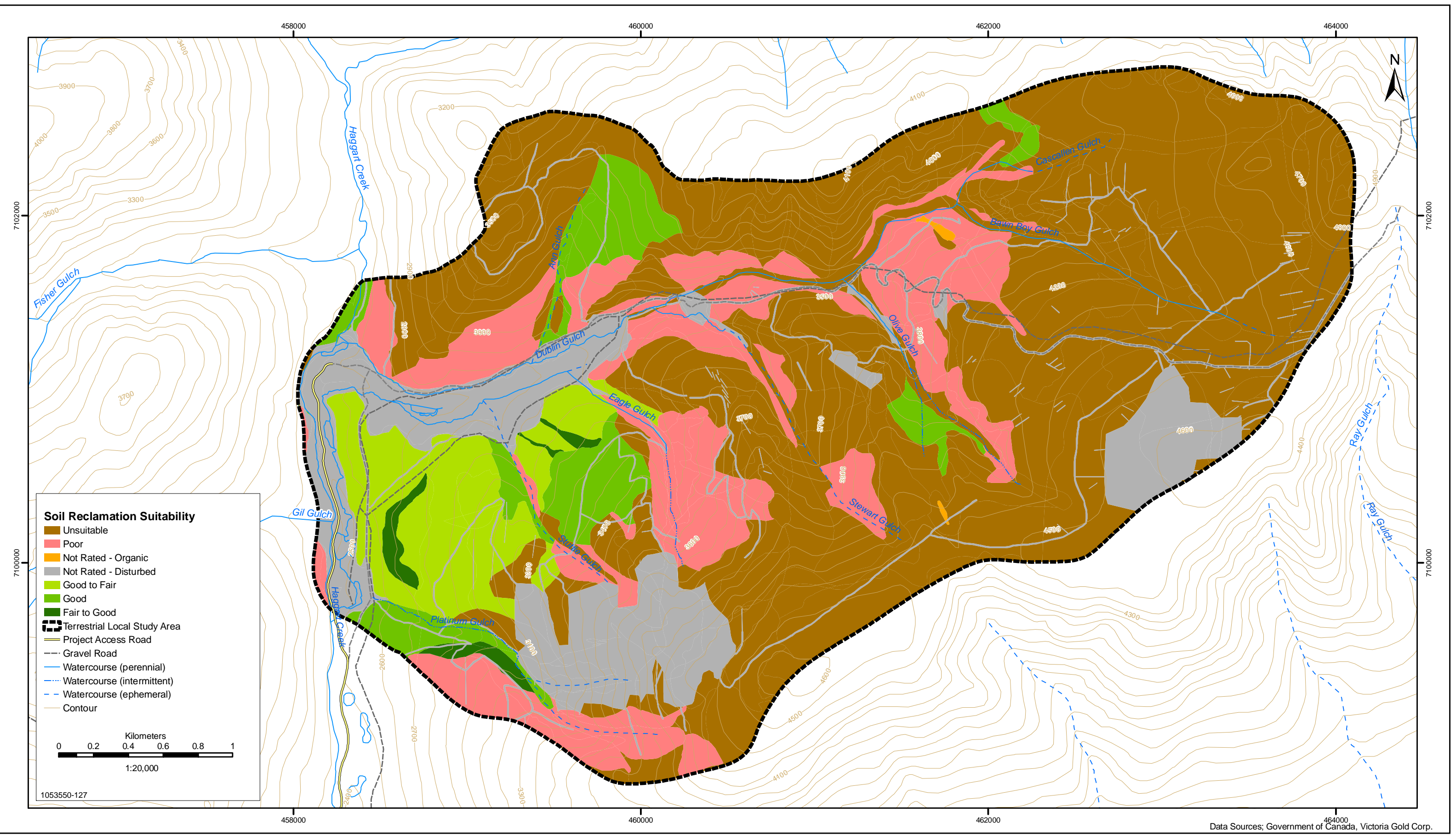



FIGURE 3-16:
RECLAMATION SUITABILITY IN THE LOCAL STUDY AREA
 EAGLE GOLD PROPERTY
 YUKON TERRITORY

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PROJECTION UTM - ZONE 8	DRAWN BY NP
DATUM NAD 83	CHECKED BY LS
DATE 02-December-2009	FIGURE NO. 3-16



APPENDIX A

Terrain and Soil Glossary

Glossary¹

Terrain Glossary

Alluvial fan: A fan-shaped deposit of sand and gravel, usually located at the mouth of a tributary valley. Material is transported and deposited by concentrated running water. Typically formed by a combination of stream flood and debris flow activity.

Anthropogenic: Relating to, or resulting from, the influence of human beings on nature.

Bedrock: Bedrock outcrops and bedrock covered by a thin mantle (up to 10 cm thick) of unconsolidated or organic material.

Bog: An area with an acidic substrate covered or filled with wet, spongy, peat material, sphagnum mosses and stunted spruce trees. The groundwater table is usually near the surface and the drainage is characterized as very poor.

Blanket: A layer of unconsolidated material thick enough to mask minor irregularities of the surface of the underlying material, but still conforms to the general underlying topography. A blanket is greater than 1 m thick and possesses no constructional landforms indicative of the material's genesis; outcrops of the underlying units are rare.

Cirque: A steep-walled, half bowl-like recess, horseshoe-shaped or semi-circular in plan view, situated high on the side of a mountain and produced by the erosive activity of an alpine glacier.

Clast: An individual constituent or fragment of a sediment or rock, produced by the weathering of a larger rock mass. Synonyms include stone and fragment.

Clay: A detrital particle having a diameter of less than 0.002 mm. Also used to describe the clay minerals, such as bentonite and montmorillonite.

Colluvium, colluvial materials: Materials deposited as a result of downslope movements due to gravity, such as rockfall, landslides, and debris flows, including talus slopes and mantles of weathered bedrock.

Cone: A cone-shaped landform or a sector of one with a relatively smooth surface, mostly steeper than 26 percent and displaying a longitudinal profile that is straight, slightly concave or convex.

Debris flow: Rapid flow of slurry of saturated debris, including some or all of soil, surficial materials, bedrock, and plant debris. A general designation for all types of rapid downslope flow, including mudflows, rapid earthflows and debris torrents. Whether saturated or dry, behaves much as a viscous fluid when moving.

Debris slide: Downslope sliding of a mass of soil or surficial material; initial displacement is along one or several surfaces of rupture. Composed of comparatively dry and largely unconsolidated earthy material and producing an irregular, hummocky deposit.

Debris torrent: Rapid flow of a mixture of water, earth and vegetation debris down a steep, well-defined channel.

Deep-seated landslide: An area where a large amount of landslide material has moved downslope either as a relatively cohesive mass (rotational slides and translational block slides) or as an irregular,

¹ Definitions are from Howes and Kenk (1997), Leet (1982) or Whittow (1984)

hummocky mass (earthflow). The failure surface is generally deeper than about 2 m and is usually well exposed at the head scarp. Vegetation on rotational and translational slides is relatively undisturbed. Tension cracks, scarps and shallow slides may be superimposed throughout the slide mass.

Delta: A landform that is commonly flat-topped and triangular or fan-shaped, made up of gravel, sand and/or finer sediments that are deposited by a river discharging into a lake or the ocean.

Depression: Circular or irregular area of lower elevation (hollow) than the surrounding terrain and delimited by an abrupt break in slope; side slopes within the depression are steeper than the surrounding terrain; generally are two or more metres in depth.

Diamicton: Very poorly sorted sediment, composed of a particle sizes ranging from silt/clay to boulders. Coarse fragments are contained within a fine-grained matrix.

Digital Elevation Model (DEM): Digital representation of the ground surface topography, commonly built using remote sensing techniques to produce a relief map.

Drainage: Refers to the speed and extent of water removal from the soil by runoff (surface drainage) and downward flow through the soil profile (internal drainage).

Earthflow: The process, associated sediments or resultant landforms characterized by slow to rapid types of flow, dominated by downslope movement of soil, rock, and mud and behaving as a viscous fluid when moving.

Escarpment: A steep slope that is usually much wider than it is high, such as the risers of river terraces and steep faces associated with eroded stratified rocks. Escarpments are produced by erosion and faulting and topographically interrupt or break the general continuity of more gently sloping land surfaces.

Fan: A relatively smooth section of a cone with a slope gradient from apex to toe up to and including 26 percent, and a longitudinal profile that is either straight, or slightly concave or convex.

Floodplain: Flat land that is subject to flooding bordering a river; consists primarily of unconsolidated depositional material derived from sediments being transported by the river.

Fluvial deposits: Sediments transported by streams and rivers, and deposited as landforms such as floodplains, fluvial terraces, fans and deltas; synonymous with alluvial.

Geomorphological process: Natural mechanisms of weathering, erosion and deposition that result in the modification of surficial materials and landforms at the earth's surface.

Glaciofluvial deposits: Material moved by glaciers and subsequently sorted and deposited by streams flowing from the melting ice. The deposits are stratified and may occur in the form of outwash plains, deltas, kames, eskers, and kame terraces.

Glaciolacustrine deposits: Sediments transported by glacial meltwater streams and deposited in or along the margins of glacial lakes. Also includes the sediments that were released by the melting of floating ice.

Gully erosion: The modification of unconsolidated and consolidated surfaces by various processes such as running water, mass movement and snow avalanche, resulting in the formation of parallel and sub-parallel long, narrow ravines or depressions.

HD-MAPP (High Definition Mapping and Applications) System: Mapping system that allows visualization of aerial photography in three dimensions on a computer monitor with the aid of specialized 3D glasses. Digital terrain mapping can be done very accurately using this system.

Holocene: The epoch of the Quaternary Period of geologic time following the Pleistocene Epoch (from present to about 10 to 12 thousand years ago).

Hummocky: The surficial expression of an area with steep-sided hillocks and hollows with multidirectional slopes dominantly between 26 and 70%. Local relief is greater than a meter.

Interbedding: Beds lying between or alternating with others of different character; especially rock material or sediments laid down in sequence between other beds, such as “interbedded” sand and gravel.

Kettle: Steep-sided depressions formed by ice melt beneath sediments (most commonly beneath glaciofluvial sediments). A kettle with water in it is a kettle lake.

Landslide (mass wasting): A general term for the downslope movement of large masses of earth material and the resulting landforms, caused by gravitational forces and which may or may not involve saturated materials.

Massive: A homogeneous structure, without stratification, flow-banding, foliation, or bedding.

Matrix: The fine-grained part of a sedimentary or glacial deposit in which the coarser material is embedded.

Meander: One of a series of regular, freely developing sinuous curves, bends or loops in the course of a stream.

Meltwater channel: A channel eroded by glacial meltwater either under the glacier or along its side.

Moraine: Poorly sorted diamicton deposited by directly from glacier ice (synonymous with till). The mineralogical, textural, structural and topographic characteristics of till deposits are highly variable and depend upon both the source of material incorporated into the glacier and the mode of deposition.

Outwash: Glaciofluvial sediments transported and deposited by meltwater streams beyond the margins of glaciers and ice sheets.

Organic deposits: Sediments composed largely of organic materials resulting from the accumulation of vegetative matter. They contain at least 30 percent organic matter by weight (17 percent or more organic carbon).

Palaeozoic: The era of geologic time from 570 to 225 million years ago, from the end of the Precambrian to the beginning of the Mesozoic.

Parent material: The original source from which a soil is chiefly derived, generally consisting of bedrock or sediment.

Piping: Subterranean erosion of surficial materials by flowing water that results in the formation of tubular conduits because of the removal of particulate matter.

Plain: A comparatively flat, level or slightly undulating tract of land, bedrock features commonly are masked by overlying sediments.

Polygon: A mapped area whose size and boundaries are determined by the occurrence of similar attributes or characteristics.

Quaternary Period: The younger of the two Cenozoic era Periods. It comprises two epochs, the Pleistocene and the Holocene (Recent).

Ridge: A long narrow elevation of the surface, usually sharp crested with steep sides. Ridges may be parallel, subparallel or intersecting.

Rockfall: The process, associated sediments or resultant landform characterized by a very rapid type of fall dominated by downslope movement of detached rock bodies which fall freely through the air.

Sand: A detrital particle having a diameter in the range of 0.06 to 2 mm.

Seepage: Water passing laterally and downslope through the soil.

Silt: A detrital particle having a diameter in the range of 0.002 to 0.06 mm.

Slope: An inclined surface, where the gradient is measured in percent by the amount of its inclination from the horizontal, and the length of which is determined by the inclined distance between its crest and its foot.

Sorting: Refers to the variation of particle sizes within a sedimentary unit; statistically it is a measure of the spread of the particle size distribution of either side of the mean. Well-sorted particles have a uniform size while poorly sorted ones display a wide variation of particle size.

Slump: The downward slipping of a mass of rock or unconsolidated material of any size, moving as a unit or as several subsidiary units, usually with backward rotation on a more or less horizontal axis parallel to the cliff or slope from which it descends.

Surface expression: Refers to the form (assemblage of slopes) and pattern of forms expressed by a surficial material at the land surface. This three-dimensional shape of the material is equivalent to "landform" used in a non-genetic sense.

Surficial geology: A category of geology concerned with the description of the types and distributions of unconsolidated sediments across the landscape; includes the study of material textures, stratification, geomorphology (surface expression), geomorphic processes, genetic interpretation, Quaternary history, etc.

Talus: An accumulation of sharp, angular rock fragments at the base of a cliff, produced by frost action and other processes from an exposed bedrock slope.

Terrace: Any relatively level or gently inclined surface, generally less broad than a plain, and bounded on one side by a steep descending slope or scarp and along the other by a steep ascending slope or scarp.

Terrain: The physical characteristics of the natural features of an area, e.g. its landforms.

Terrain mapping: The graphic representation of the physical characteristics of an area on a plane surface, showing the distribution of surficial materials, landforms and geomorphic processes on the earth surface.

Texture: Pertains to the grain sizes, shape, and arrangement of particles in a sedimentary unit.

Till: See moraine.

Topographic position: Refers to where a site is located relative to a slope/elevation. Examples include midslope, toeslope, etc.

Undulating: A very regular sequence of gentle slopes that extend from rounded, sometimes confined concavities to broad, rounded convexities producing a wave like pattern of local relief.

Universal transverse mercator (UTM): A map projection system commonly used for global mapping in North America. The UTM projection divides the world into 60 zones, each of 6 degrees longitude wide, extending from 80 degrees latitude south to 84 degrees latitude North.

Veneer: A mantle of unconsolidated sediment too thin to mask the minor irregularities of the surface of the underlying material; between about 10 cm to 1 m thick and possessing no constructional form indicative of the deposit's genesis.

Wisconsinan: The last glacial period was the most recent glacial period within the current ice age, occurring in the Pleistocene epoch. It began about 110,000 years ago and ended about 9,600 - 9,700 BC. During this period there were several changes between glacier advance and retreat. The maximum extent of glaciation was approximately 18,000 years ago.

Soil Abbreviations from Field Site Data

The following abbreviations are used in the project soils database to describe site, terrain and soil characteristics.

Horizontal and vertical curvature: CC – concave; L – level; CV – convex

Land use: WL – woodland; HL – hayland; NP – native pasture; Ur – urban; IP – improved pasture; Ab – abandoned land; GP – gravel pit; Wt – wetland; DL – disturbed land; CB – cutblock; Cr – Crop; NR – not rated; Lk – Lake

Landscape slope class (%): 1 – <0.05; 2 – 0.06-2; 3 – 3-5; 4 – 6-10; 5 – 11-15; 6 – 16-26; 7 – 27-49; 8 – 50-70; 9 – 70-100; 10 – >100

Moisture regime: VX – very xeric; X – xeric; SX – subxeric; SM – submesic; M – mesic; SH – subhygric; H – hygric; SD – subhydric; HD – hydric

Nutrient regime: VP – very poor; P – poor; M – medium; R – rich; VR – very rich

Site drainage: X – very rapid; R – rapid; M – moderately well; I – imperfect; P – poor; VP – very poor

Slope length (m): 1 - 0-25; 2 - 25-50; 3 - 50-100; 4 - 100-500; 5 - 500-1000; 6 - >1000

Slope position: C – crest; D – depression; E - level; L – lower; M – mid; T- toe ; U – upper

Soil horizon: Horizon types include Ah, Ae, Ahe, Bt, Btg, Btj, Bm, Bhf, Bf, Bfgj, Bmgj, Btgj, Btjgj, Ck, Csa, Cs, Cg, Cgj, Of, and Om as defined by the Soil Classification Working Group (1998). See horizon, soil below.

Soil structure: Grade: W – weak; M – moderate; S – strong.

Class: F – fine; M – medium; C – coarse

Kind: BL – angular blocky; CO - columnar, GR - granular, MA – massive; PL – platy; PR – prismatic; SB – subangular blocky; SG – single grain.

See structure, soil for definitions.

Soil texture: S – sand; LS – loamy sand; SL – sandy loam; SCL – sandy clay loam; SC – sandy clay; Si – silt; SiL – silt loam; L – loam; CL – clay loam; SiCL – silty clay loam; C – clay; SiC – silty clay C – clay; HC – heavy clay

FSCL - fine sandy clay loam; GCL - gravelly clay loam.

VP refers to the von Post degree of humification as described by Soil Classification Working Group (1998). See texture, soil and von Post for details.

Surface expression: F -fluted ; L - level; I - inclined; Ro - rolling; Ri - ridged; S - steep; T - terraced; U - undulating; H – hummocky

Surface stoniness (%): 0 – <0.01; 1 – 0.01-0.1; 2 – 0.1-3; 3 – 3-15; 4 – 15-50; 5 – >50

Soil Definitions of Terms

Most of the definitions are taken directly or adapted from *Soil and Environmental Science Dictionary* (Gregorich et al. 2001).

Acid soil: A soil having a pH of less than 7.0.

Acidity: Amount of weak and strong acids expressed as millimoles of a strong base necessary to neutralize those acids.

Alkaline soil: A soil having a pH greater than 7.0.

Alluvium, alluvial deposit: A general term for all detrital material deposited or in transit by streams, including gravel, sand, silt, clay and organic debris, and all variations and mixtures of these.

Aspect: The compass direction toward which a slope faces (expressed in units of degrees with zero degrees indicating north).

Available nutrients: That portion of any element or compound in the soil that can readily be absorbed and assimilated by growing plants.

B, Bt, Bm, Bg, Btg: See horizon, soil.

Bedrock: The solid rock (harder than 3 on Moh's scale of hardness) underlying soils and the regolith in depths ranging from zero (where exposed to erosion) to several hundred metres.

Block field: A surficial layer of angular shattered rocks formed in either modern or Pleistocene periglacial environments.

Brunisolic: A soil order of sufficient development to exclude it from the Regosolic order, but without sufficient development to include it in any other order. These soils develop under various climates and vegetation and are often characterized by a reddish colour.

C, Ck, Cg, Ckg: See horizon, soil.

calcareous soil: Soil containing sufficient calcium carbonate, often with magnesium carbonate, to effervesce visibly when treated with cold 0.1N hydrochloric acid.

Calcareousness: The degree to which carbonates occur in the soil.

Cation exchange: The interchange between a cation in solution and another on the surface of any surface-active material in the soil such as clay or organic matter.

Cation exchange capacity: The total amount of exchangeable cations that a soil can adsorb, expressed in centimoles (positive charge) per kg of soil (cmol_c/kg).

Classification, soil: The systematic arrangement of soils into categories according to their inherent characteristics, or on some interpretation of those properties for various uses. Broad groupings are made based on general characteristics and subdivisions are made according to more detailed differences in specific properties. The Canadian system describes soils hierarchically, using five categories: order, great group, subgroup, family and series.

Clay: (i) As a particle size term: a size fraction less than 0.002 mm equivalent diameter, or some other limit (geology or engineering). (ii) As a rock term: a natural, earthy, fine grained material that develops plasticity with a small amount of water. (iii) As a soil term: a textural class. See also 'texture, soil'. (iv) As a

soil separate: a material usually consisting largely of clay minerals but commonly also of amorphous free oxides (sesquioxides) and primary minerals.

coarse fragments (CF): Rock or mineral particles (harder than 3 on Moh's scale of hardness) larger than 2 mm in diameter. Coarse fragments in soils are: gravels or channers (up to 0.08 m in diameter or 0.15 m in length), cobbles or flags (0.08-0.25 m diameter or 0.15-0.38 m length), and stones (greater than 0.25 m diameter or 0.38 m length).

Colour: See Munsell colour system.

Compaction: Increase in soil bulk density because of mechanical forces, involving the translocation and resorting of textural components in the soil (sand, silt, and clay particles), destruction of soil aggregates, and collapse of aeration pores. Compaction is assisted by high moisture contents. The effects of compaction and rutting are manifested by changes in water infiltration rates, soil heat flux, root penetration and oxygen supply in the soil. All of these conditions may influence soil quality and, ultimately, soil productivity. The extent of the effect on the soils depends on soil wetness, applied stress and number of passes with machinery.

Conservation practices factor: Applicable to the calculation of water erosion risk. Accounts for the reduction in soil loss achieved by good conservation practices. Specifically defined as the ratio of soil loss with specific support practices to the loss from a field with up-and-down slope cultivation. Conservation practices such as contour tillage, mulching and terracing slow runoff of water and reduce soil transport.

Consistence: (i) The resistance of a material to deformation or rupture. (ii) The degree of cohesion or adhesion of the soil mass. Terms used for describing consistence at various soil moisture contents are:

wet soil - nonsticky, slightly sticky, sticky, and very sticky

moist soil - loose, very friable, friable, firm, and very firm

dry soil - loose, soft, slightly hard, hard, very hard and extremely hard

Cryosolic: An order of soils in the Canadian taxonomic system. Cryosolic soils are mineral or organic soils that have perennially frozen material within 1 m of the surface in some part of the soil body. The mean annual soil temperature is less than 0°C. They may or may not be markedly affected by cryoturbation (q.v.).

Cryoturbation: Frost action that causes churning, heaving, and considerable structural modification of the soil and subsoil.

Deglaciation: The uncovering of an area from beneath glacier ice because of melting.

Deposition, deposit: The accumulation of material left in a new position by a natural transporting agent such as water, wind, ice or gravity; or by human activity.

Depressional: Describing an area with elevation lower than that of the surrounding area; any hollow, basin, or flat, low-lying area in the landscape.

Disturbed area: See *disturbed land*.

Disturbed land: Area where vegetation, topsoil, or overburden is removed, or where topsoil, spoil, and processed waste are placed (as in mining).

Drainage: The removal of excess surface water or groundwater from land by natural runoff and percolation, or by surface or subsurface drains.

Drainage class: The conditions of water movement, over the surface of the land and in the soil (surface drainage and internal drainage). Surface drainage conditions are described in terms such as “excessive”, where a large percentage of precipitation is shed at the soil surface, to “slight”, where very little runoff occurs. Seven drainage classes of internal soil drainage consider the duration of soil moisture contents above field capacity following additions of water.

Very rapidly drained – water is removed from the soil very rapidly in relation to supply. Excess water flows downward very rapidly if underlying material is pervious.

Rapidly drained – remains only immediately after water additions.

Well drained – remains for a minor part of the year.

Moderately well drained – remains for a small but substantial period of the year.

Imperfectly drained – remains in subsurface horizons for moderately long periods during the year.

Poorly drained – remains in all horizons for a large part of the year.

Very poorly drained – free water remains at or within 0.3 m of the surface most of the year.

Drift, glacial: All material moved by glaciers and by the action of meltwater streams and associated lakes

Electrical conductivity: The ability of water to conduct an electric current, measured as current per unit area divided by the voltage drop per unit length. Commonly used as an index of salinity, and usually measured as deciSiemens per metre (dS/m).

Eluvial horizon: A soil horizon that has been formed by the process of eluviation.

Eluviation: The transportation of soil material in suspension or in solution in the soil by the downward or lateral movement of water.

Erosion: (i) The wearing away of the land surface by running water, wind, ice, or other geological agents, including such processes as gravitational creep. (ii) Detachment and movement of soil or rock by water, wind, ice or gravity.

Erosion hazard: Infiltration capacity and structural stability are regarded as the most important factors in controlling water erosion. Soil erosion hazard decreases as clay, sand or silt content increases. As organic matter depth and vegetation cover increase, erosion hazard decreases.

Fen: A peat-covered or peat-filled wetland with a high water table which is usually at or above the surface. The peat materials are derived primarily from sedges and brown mosses with inclusions of partially decayed stems of shrubs formed in a eutrophic environment because of the close association of the material with mineral-rich waters.

Fen peat: Peat material constituting fens, composed of the partially decayed remains of sedges, brown mosses, and small amounts of leaves, stems and trunks of trees and shrubs such as black spruce and tamarack.

Fertility, soil: The status of a soil with respect to the amount and availability to plants of elements necessary for plant growth. Also *nutrient regime*.

Fibric: Organic materials containing large amounts of weakly decomposed fibres whose botanical origins are readily identifiable; fibric material has 40% or more of rubbed fibre by volume (or weight of rubbed fibre retained on a 100-mesh sieve) and is classified in the von Post scale of decomposition as class 1 to class 4. See also *horizon, soil*.

Floodplain: The land bordering a stream, comprising sediments from overflow of the stream and subject to inundation when the stream is at flood stage.

Fluvial (alluvial) material: All sediments deposited by flowing water.

Forest peat: Peat materials derived mainly from trees such as black spruce, ericaceous shrubs and feathermosses.

Glacial: (i) Of or relating to the presence and activities of ice or glaciers, such as glacial erosion. (ii) Pertaining to distinctive features and materials produced by or derived from glaciers and ice sheets, such as glacial lakes. (iii) Pertaining to an ice age or region of glaciation. (Gary et al. 1972.)

Glaciofluvial Material moved by glaciers and subsequently deposited by streams flowing from the melting ice. The deposits may be unsorted or sorted. Sorted deposits are stratified and may be in the form of outwash plains, deltas, kames, eskers and kame terraces.

Glaciolacustrine: Fine-grained sediment deposited in proglacial lake environments. It is composed of suspended material brought by meltwater streams flowing into lakes bordering glaciers.

Gley, gleying: A chemical reduction process that takes place in soils that are saturated with water for long periods of time. The horizon of most intense reduction is characterized by a gray, commonly mottled appearance, which (on drying) shows numerous rusty brown iron stains or streaks.

Gleysolic soil: Soil developed under wet conditions resulting in reduction of iron (i.e., rust) and other elements and in gray colours and mottles. An order in the Canadian system of soil classification.

Gravel: (i) As a deposit term: it refers to glaciofluvial or fluvial materials with 60 percent or more coarse fragments, usually sub-rounded to rounded and of variable size. (ii) As a particle size term: it refers to a size fraction between 2 and 75 mm diameter with rounded, sub-rounded, angular or irregular shapes.

Gravelly: Containing appreciable amounts of rounded or sub-rounded rock or mineral fragments 0.002 m to 0.08 m in diameter. Angular gravelly refers to fragments that are less rounded.

Great group: A category in the Canadian system of soil classification. It is a taxonomic grouping of soils having certain morphological features in common and a similar pedogenic environment.

Ground inspection: Detailed survey conducted at specific sites within a project area. Used to gather in depth information on soil characteristics at a small spatial scale.

Groundwater: Water that is passing through or standing in the soil and the underlying strata in the zone of saturation. Gravity governs its motion.

Horizon, soil: A layer of soil or soil material nearly parallel to the land surface; it differs from adjacent genetically related layers in properties such as colour, structure, texture, consistence and chemical, biological and mineralogical composition. A list of the designations and some of the properties of soil horizons and layers follows. More detailed definitions of some horizons and layers may be found in The System of Soil Classification for Canada (Agriculture Canada Expert Committee on Soil Survey 1987).

Mineral horizons and layers

Mineral horizons and layers contain less than 17 percent organic carbon. Four main horizons are recognized:

A - A mineral horizon formed at or near the surface in the zone of removal of materials in solution and suspension, or maximum in situ accumulation of organic carbon, or both.

B - A mineral horizon characterized by one or more of the following:

(i) An enrichment in silicate clay, iron, aluminum or humus.

(ii) A prismatic or columnar structure that exhibits pronounced coatings or stainings associated with substantial amounts of exchangeable sodium.

(iii) An alteration of hydrolysis, reduction, or oxidation to give a change in colour or structure from the horizons above or below, or both.

C - A mineral horizon comparatively unaffected by the pedogenic processes operative in A and B, except gleying, and the accumulation of carbonates and more soluble salts.

R - Underlying consolidated bedrock that is too hard to break with the hands or to dig when moist. Roman numerals are prefixed to horizon designations to show unconsolidated lithologic discontinuities in the profile. Roman numeral "I" is understood for the uppermost material and usually is not written. Subsequent contrasting materials are numbered consecutively in the order in which they are encountered downward; that is, II, III, and so on.

Lowercase Suffixes

ca - A horizon of secondary carbonate enrichment in which the concentration of lime exceeds that in the unenriched parent material.

e - A horizon characterized by removal of clay, iron, aluminum or organic matter alone or in combination and higher in colour value by one or more units when dry than an underlying B horizon. It is used with A (Ae).

f - A horizon

g - A horizon characterized by gray colours, or prominent mottling indicative of permanent or periodic intense reduction, or both; for example, Aeg, Btg, Bg or Cg.

h - A horizon enriched with organic matter.

Ah - An A horizon of organic matter accumulation. It contains less than 17 percent organic carbon. It is one Munsell unit of colour value darker than the layer immediately below, or it has at least 0.5 percent more organic carbon than the IC, or both.

Ahe - This horizon has been degraded, as evidenced by streaks and splotches of light and dark gray material and often by platy structure.

j - This is used as a modifier of suffixes (e.g., n, e and t) to denote an expression of, but failure to meet, the specified limits of the suffix it modifies; for example, Aej is an eluvial horizon that is thin, discontinuous, or faintly discernible.

k - Presence of carbonate.

m - A horizon slightly altered by hydrolysis, oxidation, or solution, or all three, to give a change in colour, or structure, or both.

t - A horizon enriched with silicate clay, as shown by a higher clay content (by specified amounts) than the overlying eluvial horizon, a thickness of at least 0.05 m, oriented clay in some pores, or on ped surfaces, or both, and usually a higher ratio of fine (less than 0.2 μm) to total clay than in the IC horizon.

z - A perennially frozen layer.

Organic horizons

Organic layers possess 17 percent or more organic carbon. Two groups of these layers are recognized:

O - An organic layer developed mainly from mosses, rushes and woody materials.

Of - The least decomposed organic layer, containing large amounts of well-preserved fibre, and called the fibric layer.

Om - An intermediately decomposed organic layer containing less fibre than an Of layer and called the mesic layer.

Oh - The most decomposed organic layer, containing only small amounts of raw fibre and called the humic layer.

L,F,H - Organic layers developed primarily from leaves, twigs, and woody materials, with a minor component of mosses.

L - The original structures of the organic material are easily recognized.

F - The accumulated organic material is partly decomposed.

H - The original structures of the organic material are unrecognizable.

Horizontal: A type of surface expression of peatland terrain consisting of a flat peat surface not broken by any marked elevations or depressions.

Humic: Organic material that is at an advanced stage of decomposition. It has the lowest amount of fibre, the highest bulk density and the lowest saturated water-holding capacity of the organic materials; it is physically and chemically stable over time, unless it is drained; the rubbed fibre content is less than 10 percent by volume and the material usually is classified in the von Post scale of decomposition as class 7 or higher. See also horizon, soil.

Humification: The processes by which organic matter decomposes to form humus.

Hummocky: A complex sequence of slopes extending from somewhat rounded depressions or kettles of various sizes to irregular to conical knolls or knobs. There is a lack of concordance between knolls and depressions. Slopes are generally 9 to 70 percent.

Hummocky moraine: Ridge or mound like feature formed by deposition of glacial till with a surface covered in smaller low mounds or knolls.

Humus: (i) The fraction of the soil organic matter that remains after most of the added plant and animal residues have decomposed. It is usually dark coloured. (ii) Humus is also used in a broader sense to designate the humus forms referred to as forest humus. (iii) All the dead organic material on and in the soil that undergoes continuous breakdown, change and synthesis.

Illuvial horizon: A soil horizon in which material carried from an overlying layer has been precipitated from solution or deposited from suspension as a layer of accumulation.

Illuviation: The process of depositing material that has been transported in suspension or solution from one horizon in the soil to another, usually from an upper to a lower horizon in the profile. Illuviated substances include silicate clay, hydrous iron and aluminum oxides and organic matter.

Impeded drainage: A condition which hinders the movement of water through soils under the influence of gravity.

Impeding horizon: A horizon that hinders the movement of water by the influence of gravity through soils.

Inclined: A sloping, unidirectional surface of at least 300 metres in length and not broken by marked irregularities. Slopes can be 2 to 70%.

Inclusion: In natural resources mapping, a soil, terrain or other feature that constitutes up to 15 or 20% of a unit. Some map units contain several inclusions that together add up to a substantial percentage

Infiltration: The downward entry of water into the soil.

Kame: A depositional feature, an irregularly shaped hill or mound composed chiefly of poorly sorted sand and gravel deposited by a sub-glacial stream.

Lacustrine: Material deposited in lake water and later exposed either by lowering the water table or by uplift of the land. The sediments range in texture from sands to clays.

Landforms: The various shapes of the land surface resulting from a variety of actions such as deposition or sedimentation (eskers, lacustrine basins), erosion (gullies, canyons), and earth crust movements (mountains). Landforms are considered to have two basic attributes, genetic material and surface expression.

Leaching: The downward movement in the soil of materials in solution.

Level: A flat or very gently sloping, unidirectional surface with a generally constant slope not broken by marked elevations and depressions. It refers to slopes generally less than 2%.

LFH: See horizon, soil.

Lithic: A general term referring to soils with consolidated bedrock within 1 m.

Litter: Accumulation of leaves, needles, twigs and other woody materials on the surface of a site.

Lowland: Land that is saturated with water long enough to promote wetland or aquatic processes, shown by poorly drained soils and hydrophytic vegetation.

Luviosolic: An order of soils that have eluvial (Ae) horizons, and illuvial (Bt) horizons in which silicate clay is the main accumulation product. It refers generally to soils developed under forest or forest-grassland transition in a moderate to cool climate. The Gray Luvisol great group is the most common in western Canada.

Map unit: A combination of kinds of soil, terrain, or other feature that can be shown at a specified scale on a map, for the defined purpose and objectives of a particular survey.

Marsh: A marsh is a mineral or a peat-filled wetland which is periodically inundated by standing or slowly moving, nutrient-rich water. Water levels may fluctuate seasonally, with declining levels exposing drawdown zones of matted vegetation or mud flats. The substratum usually consists dominantly of mineral material, although some marshes are associated with peat deposits. The associated soils are dominantly Gleysols with some Humisols and Mesisols. Marshes characteristically show a zonal or mosaic surface pattern of vegetation comprising unconsolidated grass and sedge sods, often interspersed with channels or pools of open water. Marshes may be bordered by bands of trees and shrubs, but the predominant vegetation consists of emergent non-woody plants such as rushes, reeds, reed-grasses and sedges. Where open water areas occur, a variety of submerged and floating aquatic plants flourish.

Meltwater channel: A large channel formed by water derived from melting of glacial ice. In the prairie region, these channels are often referred to as coulees.

Mesic: Organic materials at a stage of decomposition between that of fibric and humic materials; peat soil material with greater than 10% and less than 40% rubbed fibres; mesic peat usually is classified in the von Post scale as class 5 or 6.

Mineral soil: A soil consisting predominantly of, and having its properties determined predominantly by, mineral matter. Usually contains less than 30% organic matter, but may contain an organic surface layer up to 0.3 m thick.

Morainal: Of or pertaining to moraine.

Moraine: A mound, ridge, or other distinct accumulation of unsorted, unstratified drift, predominantly till, deposited chiefly by direct action of glacier ice in a variety of topographic landforms that are independent of control by the surface on which the drift lies (Gary et al. 1972). It is now commonly used as a geomorphologic name for a landform composed mainly of till that has been deposited by a glacier.

Morphology, soil: (i) This term refers to the physical constitution, particularly the structural properties, of a soil profile as exhibited by the kinds, thickness, and arrangement of the horizons in the profile, and by the texture, structure, consistence, and porosity of each horizon. (ii) It also refers to the structural characteristics of the soil or any of its parts.

Moss: A small leafy plant lacking any true vascular system or roots.

Mottles, mottling: Spots or blotches of different colour or shades of colour interspersed with the dominant colour of a soil; formed mainly by the effects of impeded drainage.

Munsell colour system: A colour designation system specifying the relative degrees of the three simple variables of colour: hue, value and chroma. For example, 10YR6/4 is the colour of a soil having a hue of 10YR, value of 6, and chroma of 4. These notations can be translated into several different systems of colour names.

Muskeg: This is a North American term often employed for peatland. The word is of Algonquin Indian origin and is applied in ordinary speech to natural and undisturbed areas covered more or less with *Sphagnum* mosses, tussocky sedges, and an open growth of scrubby trees. (In this report, the words *peatland* and *muskeg* are used interchangeably).

Nutrient regime: Amount of essential nutrients that are available for plant growth. The determination of nutrient regime requires the integration of many environmental and biotic parameters. Soil nutrient regime is rated on a relative scale ranging from very poor to very rich. Nutrient regime classes are: very poor, poor, medium, rich and very rich.

Of: See horizon, soil.

Om: See horizon, soil.

Oh: See horizon, soil.

Order, soil: A category in the Canadian system of soil classification. All the soils within an order have one or more characteristics in common.

Organic soil: An order of soils that have developed dominantly from organic deposits. The majority of Organic soils are saturated for most of the year, unless artificially drained, but some of them are not usually saturated for more than a few days. They contain 17% or more organic carbon, and: (i) if the surface layer consists of fibric organic material and the bulk density is less than 0.1 [with or without a mesic or humic Op less than 0.15 m thick], the organic material must extend to a depth of at least 0.6 m; or (ii) if the surface layer consists of organic material with a bulk density of 0.1 or more, the organic material must extend to a depth of at least 0.4 m; or if a lithic contact occurs at a depth shallower than stated in 1) or 2) above, the organic material must extend to a depth of at least 0.1 m.

Organic carbon, soil: The percent by weight of soil carbon in organic forms determined by the difference between total carbon and inorganic carbon.

Organic cryosol: An organic soil having a surface layer containing more than 17% organic carbon by weight, with permafrost within 1 m below the surface. In the Canadian system of soil classification,

Organic Cryosol is more than 0.4 m thick, or more than 0.1 m thick over a *lithic* contact, or more than 0.1 m thick over an ice layer that is at least 0.3 m thick.

Organic matter, soil: The organic fraction of the soil; included are plant and animal residues at various stages of decomposition, cells and tissues of soil organisms and substances synthesized by the soil organism population.

Organic soil: An order in the Canadian system of soil classification consisting of soils that have developed dominantly from organic deposits. The majority of Organic soils are saturated for most of the year. They contain 17% or more organic carbon, and consist of at least 0.4 m peat if it is mesic or humic, at least 0.6 m peat if it is fibric, or at least 0.1 m peat if it overlies bedrock.

Orthic: A subgroup referring to the modal or central concept of various great groups in the Brunisolic, Chernozemic, Cryosolic, Gleysolic, Luvisolic, Podzolic and Regosolic orders of the Canadian system of soil classification.

Outcrop: That part of a geologic formation or structure that appears at the surface of the earth.

Outwash: Stratified sediments (chiefly sand and gravel) deposited by meltwater streams in front of the end moraine or the margin of an active glacier.

Overburden: Materials of any nature, consolidated or unconsolidated, that overlie a deposit of useful, generally mineable, materials.

Parent material: The unconsolidated and more or less chemically weathered mineral or organic matter from which the solum of a soil has developed by pedogenic processes.

Particle size: The effective diameter (grain size) of a particle measured by sedimentation, sieving or micrometric methods.

Particle-size distribution: The amounts of the various soil separates in a soil sample, usually expressed as percentage of sand, silt and clay.

Peat: Material constituting peatlands, exclusive of live plant cover, consisting largely of organic residues accumulated because of incomplete decomposition of dead plant constituents under conditions of excessive moisture.

Peatland: A general term for any tract of land covered with a layer of soil containing a high percentage of peat.

pH, soil: The negative logarithm of the hydrogen-ion activity of a soil solution. The degree of acidity or alkalinity of a soil, as determined by a suitable electrode or indicator at a specified moisture content or soil-water (or CaCl₂ solution) ratio and expressed in terms of the pH scale.

Phase, soil: A subdivision of a soil type, based on a variation in a property or characteristic such as depth of lime, degree of erosion, content of stones and peat surface.

Physiography: The physical nature of the land; it includes topography (the relief and contours of the land), elevation, aspect, slope, surface pattern of landforms and drainage.

Plain: An extensive tract of flat land or an undulating terrain without prominent hills or depressions

Platy: Consisting of soil aggregates that have developed predominantly along the horizontal axis; laminated; flaky.

Polygon, map: A map delineation that represents a tract of land with certain landform, soil, hydrologic, vegetation or other features.

Poor fen: An ecosite that is transitional between fen and bog. A poor fen is intermediate in nutrient regime and is similar floristically to the fen and bog. Sedges and peat moss, golden and brown mosses compose the majority of the organic matter content. See also rich fen.

Pore: A void or space in a soil or rock not occupied by solid mineral material.

Porosity, soil: The volume percentage of the total bulk not occupied by solid particles.

Productivity, soil: The capacity of a soil, in its normal environment, to produce a specified plant or sequence of plants under a specified system of management.

Quaternary: The second period of the *Cenozoic* era. The latest period of geologic time, covering the most-recent 2,000,000 years of the Earth's history, and divided into two epochs: the Pleistocene - 2 million years ago to about 10,000 years ago - and the Holocene - the period from about 10,000 years ago to the present.

Reaction, soil: The degree of acidity or alkalinity of a soil, usually expressed as a pH value. Descriptive terms used here with certain ranges in pH are: acid, less than 5.5; neutral, 5.5-7.4; alkaline, greater than 7.4.

Recent (deposits): Surficial deposits of late post-glacial age, i.e., within the last few hundred to few thousand years.

Recharge: The process by which water is absorbed and added to the subsurface zone of saturation (groundwater).

Regosolic: An order of soils having no horizon development or development of the A and B horizons is insufficient to meet the requirements of the other orders.

Relief: The topographical difference in elevation between the high and low points in a landscape.

Residual material (Residuum): Unconsolidated and partly weathered (physically and chemically) mineral materials formed by the disintegration of consolidated rock in place. Includes *saprolite*.

Rich fen: A peatland with moderate to well-decomposed sedge, grass, reed and brown moss peat material formed in eutrophic environments. Mineral-rich waters are at or just above the fen surface. *Sphagnum* is usually absent or subordinate to other mosses.

Ridged: A type of surface expression of mineral landforms, characterized by a long, narrow elevation of the surface, usually sharp crested with steep sides. Ridges may be parallel, subparallel or intersecting.

Rock: Any naturally formed, consolidated or unconsolidated material, other than soil, composed of two or more minerals, or occasionally of one mineral, and having some degree of chemical and mineralogical constancy.

Rutting hazard: See compaction hazard

Salinity, soil: The amount of soluble salts in a soil, expressed as electrical conductivity in deciSiemens per meter (dS/m) and measured by the saturated paste method or equivalent.

Sand: (i) As a particle size term: a size fraction between 0.05 and 2.0 mm equivalent diameter, or some other limit (geology or engineering). (ii) As a soil term: a textural class with abundant sand-sized particles.

Scour: Erosion by moving water or ice.

Sedge: A grass-like herb that grows in marshy places.

Sediment: Solid particles of material that have been derived from rock weathering. They are transported and deposited from water, ice or air as layers at the earth's surface.

Seep: An area, generally small, where water percolates slowly to the land surface. Synonymous with spring where the flow of water is substantial but includes flows that are very small (Gary et al. 1972).

Series, soil: A category (or level) in the Canadian system of soil classification. A subdivision of soil subgroup classification level, this is the basic unit of soil classification, and consists of soils that are essentially alike in all major profile characteristics except the surface texture.

Shrub: A woody perennial plant differing from a tree by its low stature and by generally producing several basal shoots instead of a single trunk.

Silt: (i) As a particle size term: a size fraction between 0.002 and 0.05 mm equivalent diameter, or some other limit (geology or engineering). (ii) As a soil term: a textural class with abundant silt sized particles.

Slope: The degree of deviation of a surface from horizontal, measured in a numerical ratio, percent and degree.

Sloping: A type of surface expression associated with peatlands, consisting of a peat surface with a generally constant slope not broken by marked irregularities.

Soil: The naturally occurring, unconsolidated mineral or organic material at least 0.1 m thick that occurs at the earth's surface and is capable of supporting plant growth. Soil extends from the earth's surface through the genetic horizons, if present, into the underlying material to the depth of the control section (normally about 1 to 2 m). Soil development involves climatic factors and organisms, conditioned by relief and water regime, acting through time on geological materials, and thus modifying the properties of the parent material (Agriculture Canada Expert Committee on Soil Survey 1987).

Soil map: A map showing the distribution of soil types, classes, or other soil mapping units in relation to the prominent physical and cultural features of the earth's surface.

Soil drainage classes: Seven classes that describe the overall natural drainage of soils, taking into account factors of external (surface runoff) and internal (perviousness) soil drainage in relation to supply of water. The classes from driest to wettest are very rapidly, rapidly, well, moderately well, imperfectly, poorly, and very poorly drained. Each describes water removal from the soil in relation to supply and can be equated with a range in available water storage capacity (Agriculture Canada Expert Committee on Soil Survey 1983).

Soil horizon: See horizon, soil.

Soil landscape models: Predictive models that assign soil characteristics to sites within the project area.

Soil temperature limitations: Soil temperature is related to seedling growth and survival. In cold soils, the rate of root development and the ability of plants to uptake water is considerably reduced. Opportunities exist to increase soil temperatures using various site preparation methods that loosen and expose mineral soil to the sun.

Steep: A type of surface expression of mineral landforms, consisting of erosional slopes, greater than 70% (35°), occurring on consolidated and unconsolidated materials.

Stones: Rock fragments greater than 0.25 m in diameter, if rounded, and greater than 0.38 m along the greater axis, if flat.

Stoniness/gravel classes: Categories of density of coarse fragments (q.v.) in surface soil.

- 0 - non-stony (coarse fragments greater than 30 m apart)
- 1 - slightly stony (coarse fragments 10 to 30 m apart)
- 2 - moderately stony (coarse fragments 2 to 10 m apart)
- 3 - very stony (coarse fragments 1 to 2 m apart)
- 4 - exceedingly stony (coarse fragments 0.1 m to 1 m apart)
- 5 - gravelly (coarse fragments 0.05 to 0.1 m apart)
- 6 - very gravelly (coarse fragments less than 0.05 m apart).

Stratification: The arrangement of sediments in layers or strata marked by a change in colour, texture, size of particles and composition.

Structure, soil: The combination or arrangement of primary soil particles into secondary particles, units or peds. These peds may be, but usually are not, arranged in the profile in such a manner as to give a distinctive characteristic pattern. The peds are characterized and classified based on size, shape, and degree of distinctness into classes, types, and grades. The soil structure classes are described below (from The System of Soil Classification for Canada, Agriculture Canada Expert Committee on Soil Survey 1987).

Types, Kinds and Classes of Soil Structure

Type	Kind	Class	Size (mm)
1. Structureless - no observable aggregation or no definite orderly arrangement around natural lines of weakness	A. Single grain - loose, incoherent mass of individual particles as in sands. B. Amorphous (massive) - a coherent mass showing no evidence of any distinct arrangement of soil particles.		
2. Blocklike - soil particles arranged around a point and bounded by flat or rounded surfaces.	A. Blocky (angular blocky) - faces rectangular and flattened, vertices sharply angular. B. Subangular blocky - faces subrectangular, vertices mostly oblique, or subrounded. C. Granular-spheroidal - characterized by rounded vertices	Fine blocky Medium blocky Coarse blocky Very coarse blocky Fine subangular blocky Medium subangular blocky Coarse subangular blocky Very coarse subangular blocky Fine granular Medium granular Coarse granular	<10 10 - 20 20 - 50 >50 <10 10 - 20 20 - 50 >50 <2 2 - 5 5 - 10
3. Platelike - soil particles arranged around a horizontal plane and generally bounded by relatively flat horizontal surfaces	A. Platy - horizontal planes more or less developed.	Fine platy Medium platy Coarse platy	<2 2 - 5 >5
4. Prismlike - soil particles arranged around a vertical axis and bounded by relatively flat vertical surfaces.	A. Prismatic - vertical faces well defined and edges sharp. B. Columnar - vertical edges near top of columns not sharp. (Columns may be flat-topped, round-topped, or irregular).	Fine prismatic Medium prismatic Coarse prismatic Very coarse prismatic Fine columnar	<20 20 - 50 50 - 100 >100 <20

Type	Kind	Class	Size (mm)
		Medium columnar	20 - 50
		Coarse columnar	50 - 100
		Very coarse columnar	>100

Subgroup, soil: A category in the Canadian system of soil classification. These soils are subdivisions of the great groups and, therefore are defined more specifically.

Subsoil: The B horizons of soils with distinct profiles. In soils with weak profile development, the subsoil can be defined as the soil below the plowed soil (or its equivalent of surface soil) in which roots normally grow.

Surface expression: The form (assemblage of slopes) and pattern of forms of parent genetic materials

Surface stoniness: See stoniness/gravel classes.

Terrace: A nearly level, usually narrow plain bordering a river or lake. Rivers sometimes are bordered by a number of terraces at different levels.

Terrain: The landscape, or lay of the land. The physical features of a tract of land; e.g., landform (or surface expression), active and inactive processes that modify material and form, slope, aspect and drainage conditions. Terrain analysis is the identification of the above land surface features, to a more or less defined depth and determining their areal extent. The identification of special features such as permafrost, erosion, and landforms indicating subsurface structures are included in such analyses.

Texture, soil: The relative proportions of the various soil separates in a soil, as described by the classes of soil texture. The limits of the various classes and subclasses are given below:

S–sand Soil material that contains 85% or more sand.

LS–loamy sand Soil material that usually contains 70 to 85% sand but may contain as much as 90% sand depending upon the amount of clay present.

SL–sandy loam Soil material that usually contains 52 to 70% sand but may contain as much as 85% and as little as 43% sand, depending upon the content of clay.

L–loam Soil material that contains 7 to 27% clay, 28 to 50% silt, and less than 52% sand.

SiL–silt loam Soil material that contains 50% or more silt and 12 to 27% clay, or 50 to 80% silt and less than 12% clay.

Si–silt Soil material that contains 80% or more silt and less than 12% clay.

SCL–sandy clay loam Soil material than contains 20 to 35% clay, less than 28% silt, and 45% or more sand.

CL–clay loam Soil material that contains 27 to 40% clay and 20 to 45% sand.

SiCL–silty clay loam Soil material that contains 27 to 40% clay and less than 20% sand.

SC–sandy clay Soil material that contains 35% or more clay and 45% or more sand.

SiC–silty clay Soil material that contains 40% or more clay and 40% or more silt.

C–clay Soil material that contains 40% or more clay, less than 45% sand, and less than 40% silt.

HC–heavy clay Soil material that contains more than 60% clay.

Till: Unsorted and unstratified drift (morainal material), consisting of clay, silt, sand, gravel and boulders intermingled in any proportion, deposited by and underneath a glacier without subsequent reworking by glacial meltwater.

Topography: The physical features of a district or region, such as those represented on a map, taken collectively; especially the relief and contours of the land. On most soil maps topography may also mean topography classes that describe slopes according to standard ranges of percent gradient.

Topsoil: (i) The layer of soil that includes the LFH horizon and the .A or AB horizon. The topsoil represents the most fertile portion of the soil profile and has often been organic enriched and may be a zone of eluviation.

Undulating: A wave-like pattern of very gentle slopes with low local relief. Slope length is generally less than 0.5 km and slope gradients are commonly 2-5%.

Upper lift: A surface soil layer of specified thickness that is selectively removed, stored, and replaced as topsoil in the reclamation process.

Von post: Humification scale describing peat moss in varying stages of decomposition ranging from H1, which is completely undecomposed, to H10, which is completely decomposed. It is determined by squeezing a peat sample in the hand; criteria are described below.

Decomposition Degree (VP)	Colour of Water After Squeezing	Peat Amount Extruded Between Fingers	Nature of Residue
1	Clear, colourless	None	Unaltered, fibrous
2	Clear, yellow brown	None	Almost unaltered
3	Turbid, slight brown	None	Slightly altered, plant remains distinct
4	Turbid, brown	Almost none	Somewhat mushy, plant remains easily identifiable
5	Very turbid, dark	Very little	Very mushy, plant remains difficult to identify
6	Muddy, dark	about 1/3	Strongly mushy, plant remains indistinct, scarcely identifiable
7	Very muddy, dark	About 1/2	Very soupy, plant remains scarcely identifiable
8	Little free water, very dark and muddy	About 2/3	Very soupy, very few identifiable plant remains
9	No free water	Almost all	Homogeneous, little or no plant remains
10	No free water	All	Completely amorphous, no plant remains

Water holding capacity: The percentage of water remaining in the soil material after having been saturated and after drainage of free water has practically ceased.

Water logged: Saturated with water.

Water table: (i) The upper surface of groundwater or that level below which the soil is saturated with water. (ii) groundwater surface or elevation at which the pressure in the water is zero with respect to atmospheric pressure.

Weakly developed: Refers to calcareous profiles, rego profiles, and profiles that are thinner than normal.

Weathering: The physical and chemical disintegration, alteration and decomposition of rocks and minerals at or near the earth's surface by atmospheric agents.

Wetland: Land having the water table at, near, or above the land surface or which is saturated for a long enough period to promote wetland or aquatic processes as shown by hydric soils, hydrophytic vegetation and various kinds of biological activity which are adapted to the wet environment.



APPENDIX B

Historical Terrain and Soil Data

Soil Samples Collected and Analyzed from 1995

Site	Vegetative Cover	Cover Depth	A horizon Depth	A Color	B Depth	B color	Coarse Frags	B texture	pH	buffered pH	salts (mmhos/cm)	Cu (ppm)	Zn (ppm)	Fe (ppm)	Lead (ug/g)	Molybdenum (ug/g)	Mercury (ug/g)
OP1	moss	5.1	1.3	brown	22.5	brown	80	sz	4.8	6	0.18	1.5	1.2	130	12	<4	0.025
OP2	moss	3.8	1.3	black	25	red-brown	74.9	s with z	4.6	5.8	0.18	1.9	0.9	240	9	<4	0.016
OP3	moss	5.1	5.1	black	25	gray-brown	39.7	zs	4.7	6.1	0.22	1.6	1.1	240	23	<4	0.023
LP1-1	moss/lichen	7.6	5.1	black	17.5	gray-brown	0	sz	4.7	5.9	0.2	1.5	0.4	130	13	<4	0.037
LP1-2	moss	5.1	2.5	black	30	gray-brown	47.4	sz	5.5	6.7	0.2	2.9	1.9	100	34	<4	0.035
LP2-1	moss	11.4	3.8	black	20	gray-brown	0	zs	5.3	6.6	0.2	4.1	2.1	250	14	<4	0.024
LP2-2	moss/lichen	5.1	2.5	black	22.5	red-brown	60.1	sz	5.3	6.7	0.18	1.2	0.4	70	9	<4	0.014
LP3-1	moss/litter	12.7	2.5	brown	25	light brown	41.4	sz	5.3	6.4	0.24	2.4	1.9	120	12	<4	0.023
LP3-2	moss/lichen	8.9	5.1	black	25	light brown	42.8	sz	5.4	6.8	0.18	1.8	1.5	170	12	<4	0.025
WP1	lichen	2.5	5.1	black	20	gray-brown	58.9	zs	5.3	6.7	0.2	4.3	1.6	170	6	<4	0.014
WP2	lichen/moss	6.4	5.1	black	15	red-brown	42.6	sz	5.3	6.4	0.16	5.2	3.7	300	37	<4	0.057
WD1	moss/lichen	7.6	1.3	black	25	brown-gray	36.9	sz	5.1	6.4	0.16	3.2	1.4	160	20	<4	0.054
WD2	moss	5.1	8.9	black	20	brown-gray	24	sz with c	5.0	6.2	0.16	4	2.9	205	20	<4	0.055
WD3	moss/lichen	7.6	1.3	black	20	gray-brown	68.9	sz	5.0	6.3	0.2	2.2	1.9	115	8	<4	0.022
95-S-1	disturbed	-	-	-	-	-	58.8	-	-	6.2	0.34	3.9	3.8	170	30	<4	0.033
95-S-2	disturbed	-	-	-	-	-	65.9	-	-	6	0.34	2.8	2.1	80	27	<4	0.027
95-S-3	disturbed	-	-	-	-	-	34.3	-	-	6.1	0.22	2	1.9	95	18	<4	0.025
95-S-4	disturbed	-	-	-	-	-	54.9	-	-	6.9	6.6	6.7	3.6	390	16	<4	0.048



Water Resources Division
Northern Affairs Program
345-300 Main Street
Whitehorse, Yukon
Y1A 2B5

Your file Votre référence

Our file Notre référence

October 25, 1995

To: Distribution List

Re: **Compilation of Baseline Environmental Information - McQuesten River Watershed.**

Attached, for your information, is a draft version of a compilation of baseline environmental information about the McQuesten River Watershed. Water Resources Division commissioned this report as the first step in an ecosystem based watershed planning project for the McQuesten watershed.

We recognize that the information compiled may be useful for other planning and environmental assessment purposes. In order to make the report available as soon as possible, we are circulating the draft version of the report now. We expect to finalize the report in the next six weeks and we will circulate the final report when it is available. You will note that the current draft is missing the appendices. These are complete but I will circulate them with the final draft. The contractor is currently completing an annotated bibliography for inclusion with the final report.

In the meantime, I hope that you find the information in the report useful. If you identify any concerns with the report, please forward them to me (phone: 667-3234) and I will try to address them in the final version.

Sincerely,

Bill Slater
Water Resources Planner

EXECUTIVE SUMMARY

The McQuesten River and its tributaries drain an area of about 4,800 kilometres² in the central Yukon. From its headwaters in the Ogilvie Mountains and McQuesten Lake, the McQuesten River flows south-west until it joins the Stewart River. The Stewart River flows into the Yukon River.

This report is a compilation of environmental information pertaining to the McQuesten River watershed. Information on the quality of existing data, the need to fill identified gaps and the next steps in management planning is also reported.

Water Resources Branch, Northern Affairs Program commissioned this project as the first step in an ecosystem management planning approach that the department intends to apply to the watershed. In the past, research and planning in the watershed has occurred in reaction to land use and water licence applications and development projects. Water Resources Division is now planning a more proactive approach that will include the Nacho Nyak Dun First Nation, Mayo Renewable Resources Council, and other stakeholders.

The Nacho Nyak Dun First Nation has title to about 865 kilometres² contained in 19 parcels within the study area. This means that the First Nation will have an increased role as a land owner, resource user and developer in the watershed.

The *First Nation of Nacho Nyak Dun Final Agreement* is important to future activities in the McQuesten River watershed. Under this agreement, the water quality and rate of flow must remain substantially unaltered on settlement land. This right is subject to laws of general application and compensation.

Mining activity has had measurable impacts on several resources including land, water, forests, fish, and wildlife. As water uses and waste discharge for placer mining and the discharge of water from hard rock mining activity have the biggest impact on the watershed, these uses have so far predominated management discussions and been the cause for most research projects.

Mining activity in the area began in the late 1800s, continues today, and is expected to increase in the future. The area is heavily mineralized, and gold and silver showings continue to attract the interest of small and large mining companies.

The existing United Keno Hill Mines Limited mill at Elsa is now closed, but the company expects to reopen in 1996. The future of other major projects depends on several factors including exploration results and feasibility studies.

The largest proposed project is the First Dynasty Limited project at Dublin Gulch. If it proceeds, it has the potential to have significant effects on the area.

Most research on the area's water resources is site specific and relates to mining activity, though the McQuesten was included in the 1983 *Water Quality, Yukon River Basin* study. There is limited information on wildlife and fish.

There are many data gaps to fill for successful watershed management planning to occur. Resource managers and planners must solicit public participation in establishing goals and objectives and identifying indicators of ecosystem health.

The McQuesten River watershed supports many uses including mining, fishing, hunting, recreation, residential, forestry, and transportation. As activities associated with each use increase, land and water use conflicts may also increase.

This report also identifies twelve key data gaps. These relate to baseline data on water quantity and quality, traditional ecological knowledge, water-rock/sediment interactions, the cumulative impacts of mining and related activity, utilization by salmon, utilization by the Clear Creek Caribou Herd, locating heritage sites, the cumulative effects of contaminants, vegetation and habitat information, the effects of permafrost, and the availability of an annotated bibliography.

2.0 DESCRIPTION OF THE STUDY AREA

First Nation people have engaged in subsistence activities in the study area for countless generations. Area rivers were important travel corridors. The impact of these activities on the environment was minimal.

The study area is contained within one of the Yukon's 23 ecoregions, the Yukon Plateau North. This ecoregion is within the Boreal Cordillera ecozone.

The McQuesten River was named after Leroy (Napoleon) Jack McQuesten, an explorer, trader, trapper, and prospector who travelled through parts of the study area in the late 1800s. In 1884, McQuesten travelled to the area with Thomas Boswell and operated a trading post at Steamboat Bar for several years. Steamboat Bar is on the Stewart downstream from the McQuesten River. The miners working on Steamboat Bar named the river the McQuesten and Frederick Schwatka later confirmed the naming.

The study area is heavily mineralized and the presence of silver, gold, and zinc have attracted prospectors and mining companies to the area. Mining activity and supporting development have had major impacts on the McQuesten River watershed.

Mining activity began in the area in the late 1800s and continues today. Exploration activities, operating open pit and underground hard rock mines, and placer mining have occurred mostly in the southern half of the area. However, the impacts of associated road and trail construction, logging and milling, and discharges into area rivers and creeks mean the impacts of mining activity are evident far from the point source.

The Selwyn Mountains, a high seismic zone, lies to the northeast of the study area. The study area has a moderate risk of experiencing a major earthquake and lies within acceleration and velocity zones 3 or 4 (Basham et al, 1985).

There are five named lakes in the study area:

- McQuesten Lake
- Hanson Lakes

- Steamboat Lake
- Eagle Lake
- John Lake.

McQuesten Lake, about 19 kilometres north of Elsa, has been a popular hunting and fishing area for Elsa residents. Canada geese and other waterfowl are present seasonally on the lake. McQuesten Lake contains Arctic grayling, northern pike and at one time, may have supported lake trout.

Hanson Lakes are a chain of lakes on the northeast side of the study area just south of McQuesten Lake. There were efforts in the early 1960s to stock Hanson Lake with rainbow trout. The stocking program included poisoning existing fish populations with toxaphene. Only northern pike survived the poisoning and the stocking effort failed.

The federal government established cottage lots on Hanson Lake to meet the recreational needs of people in Elsa. The lake also has a territorial campground with a boat launch.

Information available on Eagle and Steamboat Lakes is from Rick Furniss whose outfitting concession includes the northeast part of the study area. He says the area is accessible only by float plane and is part of a wetland area that supports healthy wildlife populations.

John Lake is a small lake with a high recreational features rating.

Much of the study area provides good moose, caribou, Black Bear, and grizzly bear habitat. Moose are present in greater abundance and regularity than caribou and their presence creates good hunting opportunities, particularly to the north.

Outfitter Rick Furniss reports seeing a 40-member group of caribou in the area, though sightings are intermittent. The Mayo Renewable Resources Council reports that these caribou are part of the distinct Clear Creek herd, not the Hart River herd as reported by Yukon Renewable Resources.

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2.1 Watershed Description

The study area is the McQuesten River watershed as shown on map 1. The watershed drains an area of about 4,800 kilometres² and has a perimeter of about 485 kilometres.

The study area consists of mostly upland areas with elevations that range from 1,200 to 1,500 metres. These upland areas form part of the Stewart Plateau, a division of the Yukon Plateau. Within the study area, there are several mountain peaks and ranges divided by river valleys 500 metres or more below the plateau.

The main tributaries of the McQuesten River are the North McQuesten, East McQuesten, and South McQuesten Rivers. The East McQuesten flows into the North McQuesten and the North and South McQuesten combine to form the McQuesten River.

The East McQuesten flows south from the edge of the Ogilvie Mountains, by Eagle Lake, and then west to join the North McQuesten. The North McQuesten River flows southeast from the Ogilvie Mountains, then south to join the McQuesten mainstem.

The South McQuesten River flows from McQuesten Lake, the largest in a series of lakes surrounded by mountain ranges to the north and south. Some of the smaller lakes near McQuesten Lake and Hanson Lakes are thermokarst lakes, and the area is underlain with permafrost.

The South McQuesten flows southeasterly until it joins with the North McQuesten to form the McQuesten River. The McQuesten River flows east southwest until it reaches the Stewart River at the Tintina Trench.

The study area contains many creeks. However, indicative of its upland character, there are only four larger lakes in the area and only two of these cover more than 25 hectares.

2.2 Climate and Vegetation

The study area has a continental climate with low precipitation and wide temperature range. Deep river valleys within the area create local weather patterns. Winters are generally long and cold with short, cooler summers in which there are sudden changes in temperature and weather. Frost may occur at any time during the summer.

Showers are frequent and largely confined to areas around the higher peaks. Plateaus in the area are generally snow free by mid-June. In late August and early September, rainstorms with snow at higher elevations are common. Due to the influence of the Tintina Trench on local weather patterns, lightning frequently strikes in the study area.

Black spruce, white spruce, alpine fir and willows are common in the study area. Aspen poplar, balsam poplar, white birch, and alder are less common. The treeline is about 1,200 metres.

White spruce, aspen and balsam poplar dominate on southfacing slopes and gravel terraces in the larger valleys. Because much of the area has a fire history and has been extensively logged to supply mines with timber, few stands of spruce larger than 24 inches in diameter now exist.

On the northfacing slopes and in areas underlain with permafrost, there is a thick moss covering with small, stunted black spruce. With the thawing of the permafrost in the larger valleys, trees have tilted creating patches of drunken forest.

Approaching the treeline, alpine fir mixes with spruce, then becomes the dominant species at higher elevations. In the smaller valleys, dense willow thickets are common. Moss and lichen with scattered dwarf birch are present in the higher uplands.

2.2.1 Fire History

Part of the study area, near the Tintina Trench in the southwest, is the most active fire area in the Mayo Forest District (Leary, personal communication). The

Tintina Trench creates a local area weather pattern for much of the study area that generates frequent thunderstorms. Lightning strikes starting spot fires less than five hectares commonly occur. Despite the frequency of fire, other factors combined to cause the development of a good forest inventory, most of which was logged in the second half of this century.

Bostock (1979) reports a raging forest fire in 1947 up the North McQuesten. DIAND Forest Resources in Whitehorse mapped only six fires since 1971. However, the Mayo District office reports many more fires; for the five year period ending in 1994, 13 large and 14 spot fires. This is cause for believing that there have been many more fires than Forest Resources has mapped. The large fires were:

- 1971, a 485 hectare fire in the upper reaches of Morrison Creek, a tributary of Seattle Creek
- 1972, a 4,312 hectare fire west of Seattle Creek on the hillside of the South McQuesten
- May 14, 1989, a 1,500 hectare fire in the upper reaches of Morrison Creek
- May 18, 1989, a 3,500 hectare fire on the north end of McQuesten Lake
- July 11, 1989, Rodin Creek, 450 hectares, lightning strike
- July 13, 1989, McQuesten River, 10 kilometres upstream from the Stewart River, 450 hectares, lightning strike
- July 13, 1989, on mountain north of McQuesten Lake, 3,500 hectares, lightning strike
- 1990, no large fires
- 1991, no large fires
- 1992, no large fires
- June 16, 1993, Ballard Creek, 150 hectares, lightning strike
- June 17, 1993, Eagle Creek 10 kilometres upstream from North McQuesten, 700 hectares, lightning strike
- June 17, 1993, Ballard Creek, 600 hectares, lightning strike

- July to December 1994, a major fire on the west side of McQuesten Lake, about 1,000 hectares
- July 12, 1994, near mouth of North McQuesten River, 1,250 hectares, lightning strike
- July 13, 1994, on mountain north of McQuesten Lake, 300 hectares, lightning strike
- July 31, 1994, on the north side of the North McQuesten River, about 10 kilometres downstream from the East McQuesten, 3,600 hectares, lightning strike
- August 1, 1994, north side of South McQuesten River downstream from and near Shanghai Creek, 150 hectares, lightning strike.

The spot fires were:

- 1963, on the North McQuesten, near the fork of the East McQuesten
- 1966, on the upper reaches of Flat Creek
- 1989, Christal Creek, 1.5 hectares, lightning strike
- 1989, Fisher Creek, 68 hectares, lightning strike
- 1989, McQuesten River upstream from Shanghai Creek, 2 hectares, lightning strike
- 1989, Castnor Creek, 2 hectares, lightning strike
- 1989, north side of South McQuesten downstream from Shanghai Creek, 2 hectares, lightning strike
- 1990, McQuesten River, 10 kilometres upstream from the Stewart River, 22 hectares, lightning strike
- 1991, Field Hill, 0.1 hectare, lightning strike
- 1992, no spot fires
- 1993, Tintina Trench near Stewart River, 3 hectares, lightning strike
- 1993, East McQuesten on ridge near Eagle Lake, 10 hectares, lightning strike
- 1993, South Bear Creek, 1.0 hectare, lightning strike
- 1993, Christie Creek, 2.5 hectares, lightning strike
- 1993, Corky Creek, 1 hectare, human caused
- 1994, south side of McQuesten River opposite Vancouver Creek, 0.2 hectares.

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2.3 Physiography and Glaciation

The McQuesten watershed is within the Stewart Plateau, a subdivision of the Yukon Plateau (Green, 1971). Plateau elevations range between 1,200 and 1,500 metres and the plateau surface is characterized by broad, smooth uplands from which higher mountains rise.

The Tintina Trench, a fault in the earth's crust and one of the Yukon's main geographic features, extends from the Yukon River basin in Alaska to Washington State. It crosses the study area on the southwest.

The area is part of the Omineca belt, comprised of "a series of northwesterly aligned structural culminations and depressions which give a discontinuous character to the trend of its surface expression" (Gabrielse et al, page 21).

On the west side of the Tintina Trench, the Omineca Belt thrust sheets plates have shifted, causing movement in a northeasterly direction estimated at 450 kilometres (Don Murphy, personal communication).

To the east of the Tintina Trench, landforms were created by a series of plate movements causing folds in the earth's surface. The folds created the mountain ranges to the north and east of the study area. Thrust faults, named from north to south, the Dawson, Tombstone and Robert Service, are structurally complex and south-dipping (Gordey and Thompson, 1992). The area is mostly underlain with Precambrian rock of sandstone and shale.

Glaciation, which postdates development of the plateau surface, produced most of the steeper slopes. Drainage in the watershed is in wide, flat-bottomed valleys dividing the plateau surface into isolated blocks. A U-shaped cross section is characteristic of the main valleys that have been altered by glaciation (Green, 1971).

There is evidence of four progressively less extensive glaciations in the study area; from oldest to youngest, the preReid, Reid and McConnel glaciations (Hughes et al, 1989). The preReid glaciation was thought to consist of two glaciations, but new evidence suggests there were

actually four. The earliest glaciation is believed to have been the most extensive, but little evidence of it remains (Bostock 1948).

Highly subdued surface morphology make differentiation of the oldest glacial periods difficult and so they are grouped as the preReid glaciations. These glaciations are more than 800,000 years before present (BP). The most extensive of the preReid glaciations reached elevations ranging from about 1,200 to 1,400 metres. Local cirque glaciers developed in the Syenite Range west of the study area, in the West and East Ranges, and on Red Mountain within the study area.

Ice in the Reid glaciation, about 200,000 years BP, was confined to the largest river valleys. Termination of McQuesten Valley ice was near the mouth of the McQuesten River. The outwash terraces forming bluffs along the McQuesten River are examples of the Reid glacial landforms well preserved in the study area.

The McConnell glaciation, about 20,000 years BP, was the least extensive glaciation recorded in the Yukon. During that glaciation, the ice terminated in the Stewart River Valley to the south of the study area. Only a small portion of surficial deposits in the area are related to the McConnell advance.

The study area is within a zone of discontinuous permafrost. Features associated with permafrost have had a marked effect on the physiographic development of the area. In lowland riparian areas, black muck and moss cover the surficial deposits and "extensive areas of muskeg are common in the valley bottoms." (Green, 1971)

Where vegetation cover has been removed or disturbed by human activity or fire in areas of ice-rich permafrost, the permafrost begins to thaw and becomes unstable. This instability may cause thaw slumping, destroying vegetation and increase stream loading. Thaw slumps may enlarge for many years or stabilize within a few thaw seasons (Burn and Lewkowicz, 1990).

Some of the small lakes north of McQuesten Lake and in the South McQuesten River valley are

thermokarst lakes. (Chris Burn, personal communication). For a report on area thermokarst lakes, see Burn and Smith, 1990). Characteristic of thermokarst lakes in areas of ice-rich permafrost, are collapsing shorelines and drunken forests around the shoreline. Hanson Lake has these characteristics.

The Selwyn Mountains, a high seismic zone, lies to the northeast of the study area. The study area has a moderate risk of experiencing a major earthquake and lies within acceleration and velocity zones 3 or 4 (Basham et al, 1985).

2.4 Geology

The oldest known rocks in the McQuesten area belong to the Yukon group (Bostock 1948). The eastern portion of the study area around Hanson Lakes is largely covered with overburden, except on the northerly slopes and mountain summits (Geological Survey of Canada, 1960). Mineralization in the study area has been primarily associated with the Keno Hill Quartzite.

The study area is heavily mineralized with silver, zinc, gold, and lead. A search of the Yukon Minfile revealed about 80 reports in the study area.

2.5 Biophysical Resources

Most faunal species present in the central Yukon are present in the study area, but populations are low except in the area around McQuesten Lake. That area provides good habitat for moose and is an important wetland that provides a staging area for migratory waterfowl.

There is a long history of trapping for small furbearers in the watershed (Green, 1971). Spruce grouse and ptarmigan are common. Less common are blue grouse, ruffed grouse and sharp-tailed grouse. Ducks and geese are present in the lake and wetland areas in the northeastern portion of the study area during the summer, and Hanson Lake is a staging areas for geese.

The study area contains part of one of the Yukon's 47 wetlands of significance which has a wetland notation. A

wetland notation is an indicator of interest considered by the federal and territorial government staff when they review land use applications.

The wetland area stretches from the south end of McQuesten Lake through to Clark Lakes outside the study area on the east. Appendix 7 contains a list of avian species in the study area.

Rick Furniss who operates an outfitting concession in the northeast of the study area reports signs that the area once supported a higher population of caribou than at present. Small numbers of caribou now mostly use the river valleys and lowland areas in the winter. Caribou populations are higher to the north and west of the study area.

Fish resources in the McQuesten watershed closely resemble most other tributaries of the Yukon Stewart River. The only anomaly is the now extirpated Squanga whitefish.

APPENDIX 1: Bibliography

- Benthal, G., and I. Soroka, *Compliance Evaluation of United Keno Hill Mines Ltd., Elsa, Yukon Territory*. Environment Canada, Environmental Protection Service, Regional Program Report:81-23, March,, 1981.
- Bisset, K., (Northern Design Consultants), *A History of Logging in the Yukon*, Prepared for the Canada/Yukon Economic Development Agreement, Government of the Yukon, Whitehorse. 1993
- Bodaly, R. A., J. W. Clayton, and C. C. Lindsey, *Status of the Squanga Whitefish, (Coregonus species), in the Yukon Territory, Canada*. Canadian Field Naturalist 102(1):114-125.1988
- Bostock, H.S., *Geology, McQuesten River, Yukon Territory*. Geological Survey of Canada, Map 1143A. 1964
- Bostock, H.S., *Physiography of the Canadian Cordillera with Special Reference to the Area North of the Fifty-fifth Parallel*, Department of Energy, Mines and Resources, Geological Survey. Can. Me. 247. 1965
- Bostock, H. S., *Packhorse Tracks*, Yukon Geoscience Forum, Whitehorse, Yukon, 1979
- Boyle, R. W., C. T. Illsley, and R. N. Green, *Geochemical Investigation of the Heavy Metal Content of Stream and Spring Waters in the Keno Hill-Galena Hill Area, Yukon, Territory*. Geological Survey of Canada Bulletin 32, Department of Mines and Technical Surveys, 1955.
- Boyle, W. R., E. L. Pekar, and P. R. Patterson, *Geochemical Investigation of Heavy Metal Content of Streams and Springs in the Galena Hill-Mount Haldane Area, Yukon, Territory*. Geological Survey of Canada Bulletin 36, Department of Mines and Technical Surveys. 1956.
- Burn, C. R., "Implications for Palaeoenvironmental Reconstruction of Recent Ice-Wedge Development at Mayo, Yukon Territory," in *Permafrost and Periglacial Processes*, Vol 1: 3-14, 1990.
- Burn, C. R., "Development of Thermokarst Lakes During the Holocene at Sites Near Mayo, Yukon Territory," in *Permafrost and Periglacial Processes*, Vol 1: 161-176, 1990.
- Burn, C. R., "Recent Ground Warming inferred from the Temperature in Permafrost Near Mayo, Yukon Territory," in *Periglacial Geomorphology*, Edited by J. C. Dixon and A. D. Abrahams, John Wiley and Sons Ltd, 1992.
- Burn, C. R., and M. W. Smith, *Thermokarst Lakes at Mayo, Yukon Territory*, Geotechnical Sciences Laboratories, Carleton University, Ottawa, Ontario
- Burns, B. E., *Environmental Quality of Receiving Waters at UKHM Mines Ltd. Elsa, Yukon*. Regional Program Report (draft), Dept. of Env. Env. Protection, Pacific Region, Yukon Branch, April 1992.

DRAFT

Burns, B., *Water Quality Investigations of Placer Gold Mining Streams in the Yukon Territory*, Environmental Protection Service, Whitehorse, Yukon. 1980

Carey, J., *Sheep Relocation to Keno Hill*, Yukon Fish and Wildlife Branch, 1992.

Davidge, D. and G. Mackenzie-Grieve, *Environmental Quality of Receiving Waters at United Keno Hill Mines Ltd., Elsa, Yukon*. Regional Report no. 89-04. Dept. of Environment Environmental Protection, Pacific Region, Yukon Branch. September 1989.

EBA Engineering Consultants Ltd. *Permanent Abandonment Plan for United Keno Hill Mines Ltd., Elsa, Yukon*. working Document Submitted to: Yukon Territory Water Board, Whitehorse, Yukon Territory. Prepared by, EBA Engineering Consultants Ltd., July, 1990

EBA Engineering Consultants Ltd. *Temporary Abandonment Plan for United Keno Hill Mines Ltd., Elsa, Yukon*. Submitted to: Yukon Territory Water Board, Whitehorse, Yukon Territory. Prepared by, EBA Engineering Consultants Ltd., August 1988.

Elson, M. S. and L. W. Steigenberger, *A Collection of Fisheries Information From Water Bodies Associated with Pipeline Routes in the Yukon Territory from Dawson City to Watson Lake*, prepared for the Department of Fisheries and Environment by Northern Natural Resources Services Ltd., Vancouver, BC. 1977

Emond, D. S., *Geology, Mineralogy, and Petrogenesis of Tin-Bearing Breccial Veins at Oliver Creek, McQuesten River Area, Yukon*, MSc. Thesis, Carleton University, Ottawa, Ontario. 1985

Emond, D. S., "Tin and Tungsten Veins and Skarns in the McQuesten River Area, Central Yukon," in *Yukon Geology, Vol. 1*, Exploration and Geological Services Division, DIAND, pages 113-118, 1986

Emond, D. S., "Petrology and Geochemistry of Tin and Tungsten Mineralized Plutons, McQuesten River Region, Central Yukon," in *Yukon Geology, Vol. 3*, Exploration and Geological Services Division, DIAND, pages 167-195, 1992

Environcon Ltd., *Yukon Mapping Project: Placer Mining and Fish Resources*, prepared for the Department of Indian Affairs and Northern Development by Environcon Ltd., Vancouver, BC. 1980

Environmental Protection Service, Yukon Branch, Environment Canada, *Assessment of the Water Quality and Biological Conditions in Watersheds Surrounding the United Keno Hill Mine, Elsa, Yukon, During the Summers of 1974 and 1975*. Fisheries and Environment Canada Environmental Protection Service, Yukon Branch, Pacific Region, Regional Program Report:78-14, June 1978.

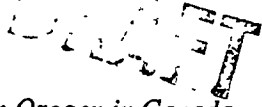
Environmental Protection Service, Yukon Branch, Environment Canada, *Compliance Evaluation of United Keno Hill Mines Ltd., Elsa, Yukon*, prepared by G. Bethell and I. Soroka, Regional Program Report 81-23, March 1981.

Environmental Protection Service, Yukon Branch, Environment Canada, *Environmental Quality of Receiving Waters at United Keno Hills Mines Ltd., Elsa, Yukon*, prepared by D. Davidge and G. Mackenzie-Grieve, Regional Program Report 89-04, September 1989.

Gabrielse, H. and C. J. Yorath, Editors, *Geology of the Cordilleran Orogen in Canada*, Minister of Supply and Services, Government of Canada, Ottawa. Volume G-2 in a series, the Geology of North America, Volume G-2. 1991

Geological Survey of Canada, *Regional Stream Sediment and Water Geochemical Data, Central Yukon*, Open File 1650, Geological Survey of Canada, 1988

Gordey, S. P., and R. I. Thompson, "ancestral North America," in *Geology of the Cordilleran Orogen in Canada*, Geological Survey of Canada, Minister of Supply and Services, 1992



* Gormican S., P. Vonk, R. Firth, W. Duval and S. Skey, Yukon Placer Mining Study, Volume II, Reports of Principle Investigators. Prepared for the Yukon Placer Implementation Review Committee, Whitehorse, Yukon, by Seakem Group in association with Northwest Hydraulic Consultants Ltd., Aquatic Environments Ltd. and ARA Consulting Group. July, 1992.

Government of Canada, *EARP Level I Screening and Decision Report, United Keno Hill Mines Ltd. Reserve Development Program and Adit De-watering*, Northern Affairs Program, Water Resources Branch, Whitehorse, November 1994.

Government of Canada, Department of Fisheries and Oceans, *DFO/MOEP Fish Habitat Inventory and Information Program, Stream Information Summary*, DFO Whitehorse, Yukon. 1990

Government of Canada, *The Yukon Placer Authorization and Supporting Documents*, Applicable to Placer Mining in the Yukon Territory, Government of Canada, Ottawa, Canada. June, 1993.

* Government of the Yukon, *Recreation Features Inventory*, prepared for the Department of Renewable Resources by J. S. Peepre and Associates and Juan de Fuca Environmental Consultants, Whitehorse, Yukon, 1988

Government of the Yukon, *Silver Trail Tourism Development Plan*, prepared by the Department of Tourism, Whitehorse, Yukon, 1989

Green, R. N., R. W. Boyle and C. T. Illsley, *Report of Geochemical Investigation of the Heavy Metal Content of Streams and Spring Waters in the Keno Hill-Galena Area*, 34 pages with maps.

Hallam Knight and Piesold Ltd. *First Dynasty Mines Ltd. Dublin Gulch Project, Data Report, Field Program 1993/4*. By Hallam Knight and Piesold Ltd., Vancouver BC, March 1995.

Health and Welfare Canada, *Guidelines for Canadian Drinking Water Quality*, Supply and Services Canada, 1987

Inland Waters Directorate, "Guidelines for Surface Water Quality," Volume 1 *Inorganic Chemical Substances*, Environment Canada, Ottawa, 1980.

Kennedy, C., and K. Asquith, *Vegetation and Habitat Survey: McArthur Mountains and Ethel Lake Study Area*, Government of the Yukon, 1989.

Kostaschuk, R., S. Pentz and J. Venditti, *A Preliminary Report on the Impact of Placer Mining on Suspended Sediment Concentration in McQuesten River*, ongoing research at the Geography Department, University of Guelph.

Kwong, John, J. T., C. Roots, and Wayne Kettley, *Lithochemistry and Aqueous Metal Transport in the Keno Hill Mining District, Central Yukon Territory*, in Current Research 1994-E; Geological Survey of Canada, p. 7-15. 1994.

Laberge Environmental Services, *Environmental Data Compilation and Initial monitoring at United Keno Hill Mine Area*, a report prepared for UKHM, Whitehorse, Yukon. 1994

Leverton and Associates, *Benthic Fauna Sampling Program, 1985*. Report prepared for United Keno Hill Mines Ltd. by Leverton and Associates Northern Consulting Ltd. Whitehorse Yukon, February, 1986

Lockhart, W. L., R. Wagemann, B. Tracy, D. Sutherland and D. J. Thomas, *Presence and Implications of Chemical Contaminants in the Freshwaters of the Canadian Arctic*. The Science of the Total Environment, 122 (1992) 165-243, Elsevier Science Publishers B. V., Amsterdam.

Mathers, J. S., N. O. West and B. Burns, *Aquatic and Wildlife Resources of Seven Yukon Streams Subject to Placer Mining*, Government of Canada, 1981

Mayo Historical Society, *Gold and Galena*, Mayo Historical Society, Mayo, Yukon, 1990.

McLaren, R. E., and K. C. Lucas, *Pollution of Streams in the Mayo District, Yukon Territory, December 7, 1954*. From DFO Whitehorse Yukon files, unreferenced report.

McNeely, R. N., V. P. Neimanis and L. Dwyer, *Water Quality Resource Book: A Guide to Water Quality Parameters*, Inland Waters Directorate, Ottawa, Ontario. 1979

Milligan, P. A., W. O. Ruble, D. D. Cornett, and R. A. C. Johnston. 1984. *The distribution and abundance of chinook salmon (Oncorhynchus tshawytscha) in the Upper Yukon River Basin as determined by a radio-tagging and spaghetti tagging program: 1982-1983*. Yukon River Basin Study, Fisheries Work Group Project No. 5a. Dept. of Fisheries and Oceans, Whitehorse, Yukon.

Montreal Engineering Company Limited, *Waste Management of Yukon Base Metal Mines*, a report prepared for DIAND, 73 pages

Murphy, D.C. and D. Héon, *Geology and Mineral Occurrences of Seattle Creek Map Area (115P/16), Western Selwyn Basin, Yukon*, Canada/Yukon Geoscience Office, Yukon Government, Whitehorse, Yukon. 1995

Pendray, T., *Stream Habitat Inventory and Evaluation for Two Study Areas Within the Yukon River Basin*. Yukon River Basin Study Project Report: Fisheries No. 3. 55pp. + Alps.. November 1983.

Petrovich, D. J., and W. G. Johnston, *United Keno Hill Mines Ltd. 1986 Benthic Fauna Sampling Program, Flat Creek and South McQuesten River*. For United Keno Hill Mines Ltd., by Northern Biomes Ltd. Whitehorse Yukon, 1986.

Scott, W. B., and E. J. Crossman, *Freshwater Fishes of Canada*, Fisheries Research Board of Canada, Bulletin 184, Ottawa, 1973.

Seakem Group Ltd., *Yukon Placer Mining Study; Volume I Executive Summary*. Prepared for Yukon Placer Mining Implementation Review Committee by the Seakem Group, Ltd. in association with Northwest Hydraulic Consultants, Ltd., North/South Consultants Inc., and ARA Consulting Group Inc., July, 1992.

Seakem Group, *Yukon Placer Mining Study, Volume III (part A) Data Appendices*. Prepared for Yukon Placer Mining Implementation and Review Committee.. Prepared by Seakem Group Ltd. in association with: Northwest Hydraulic Consultants, Ltd., North-South Consultants Inc., and ARA Consulting Group Inc.. July, 1992.

Seakem Group, *Yukon Placer Mining Study, Volume III (part B) Data Appendices*. Prepared for Yukon Placer Mining Implementation and Review Committee.. Prepared by Seakem Group Ltd. in association with: Northwest Hydraulic Consultants, Ltd., North-South Consultants Inc., and ARA Consulting Group Inc.. July, 1992.

Singleton, G. A., K. Weagle, D. Weir and O. A. Steen, *Fish and Wildlife Habitat Recovery in Placer Mined Areas of the Yukon Territory*, prepared for the Department of Indian Affairs and Northern Development by Hardy and Associates Ltd., Vancouver, BC. 1980?

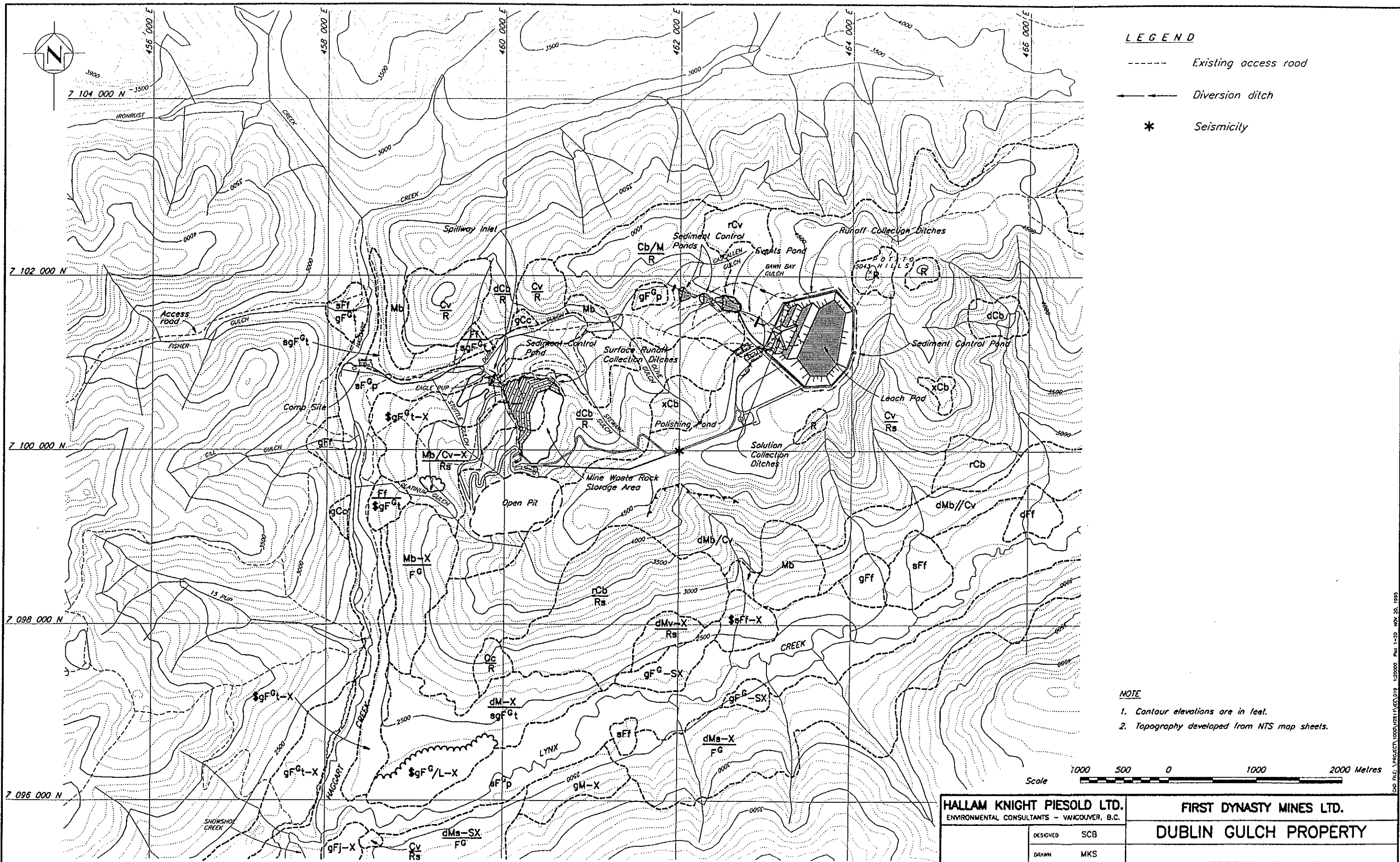
UKHM Limited, *Assessment of the Water Quality and Biological Conditions in Watersheds Surrounding the United Keno Hill Mine*, 1975

Unknown, *Mining History of the Yukon to 1926*, a report made available to the Northern Affairs Information Centre courtesy of UKHM Exploration Department. Call #0055-21760, TN27, .N5, M87

Ward, R., *Summary of the 1993 Mayo Moose Survey*, Yukon Fish and Wildlife Branch, 1994.

Wright, Allen A., *Prelude to Bonanza; The Discovery and Exploration of the Yukon*, Gray's Publishing Ltd., Sidney, British Columbia, Canada. 1976

10/19/95



DRG. NO.	DESCRIPTION	REV.	DATE	DESCRIPTION	APPROVED	REV.	DATE	DESCRIPTION	APPROVED
	REFERENCE DRAWINGS			REVISIONS				REVISIONS	

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DESIGNED	SCB
DRAWN	MKS
CHECKED	
APPROVED	

FIRST DYNASTY MINES LTD.	
DUBLIN GULCH PROPERTY	
TERRAIN ANALYSIS FIGURE 2.1	
DATE	JAN. 8, 1996
SCALE	AS SHOWN
DRG. NO.	H2811
REV.	--

CAD FILE: V:\PROJECT\1800\2811\AES\219_128000_Plan 1-20_May 20_1995

TEXTURE			
Symbol	Name	Size(mm)	Other Characteristics
a	blacks	>256	angular particles
b	boulders	>256	rounded & subrounded particles
k	cobbles	64-256	rounded & subrounded particles
p	pebbles	2-64	rounded & subrounded particles
s	sand	.062-2	
f	silt	.002-.062	
c	clay	<.002	
d	mixed fragments	>2	mix of rounded and angular particles
g	gravel	>2	mix of boulders, cobbles and pebbles
x	angular fragments	>2	mix of rubble and blocks
r	rubble	2-256	angular particles
m	mud	<.062	mix of clay and silt
y	shells	-	shell or shell fragments
e	fibric		well-preserved fibre; (40%) identified after rubbing
u	mesic		intermediate decomposition between fibric and mesic
h	humic		decomposed organic material; (10%) identified after rubbing

SURFACE EXPRESSION		
Symbol	Name	Description
o	moderate slope	Unidirectional surface; >15' to <26'
b	blanket	A mantle of unconsolidated material; >1m thick
c	cone	A cone or segment of a cone; >15'
d	depression	A lower area enclosed by higher surrounding terrain
f	fan	A segment of a cone; up to 15'
h	hummocky	Hillocks and hollows, irregular in plan; 15-35'
j	gentle slope	Unidirectional surface; >3' and <15'
k	moderately steep	Unidirectional surface; >26' and <35'
m	rolling	Elongate hillocks; 3 to 15'; parallel forms in plan
p	plain	Unidirectional surface; up to 3'
r	ridged	Elongate hillocks; 15 to 35'; parallel forms in plan
s	steep	Steep slopes; >35'
t	terraced	Step-like topography
u	undulating	Hillocks and hollows; up to <15'; irregular in plan
v	veneer	Mantle of unconsolidated material; 10cm to 1m thick

SURFICIAL MATERIALS			
Symbol	Name	(Assumed Status of Formative Process)	Description
A	anthropogenic	(A)	Man-made or man-modified materials
C	colluvial	(A)	Products of mass wastage
D	weathered bedrock	(A)	In situ, decomposed bedrock
E	eolian	(I)	Materials deposited by wind action
F	fluvial	(I)	River deposits
FG	glaciofluvial	(I)	Ice contact fluvial materials
I	ice	(A)	Permanent snow, glaciers and icefields
L	locustrine	(I)	Lake sediments; includes wave deposits
LG	glacialacustrine	(I)	Ice contact locustrine materials
M	marinal	(I)	Material deposited directly by glaciers
O	organic	(-)	Accumulation/decay of vegetative matter
R	bedrock	(-)	Outcrops/rock covered by less than 10cm
U	undifferentiated	(-)	Layered sequence; three materials or more
V	volcanic	(I)	Unconsolidated pyroclastic sediments
W	marine	(I)	Marine sediments; includes wave deposits
WG	glaciomarine	(I)	Ice contact marine sediments

GEOLOGICAL PROCESSES			
Symbol	Name	(Assumed Process Status)	Description
A	avalanches	(A)	Terrain modified by snow avalanches
B	braiding	(A)	Diverging/converging channels; unvegetated bars
C	cryoturbation	(A)	Sediments modified by frost heaving and churning
D	deflation	(A)	Removal of sand and silt by wind action
E	channelled	(I)	Channel formation by meltwater
F	slow mass movement	(A)	Slow downslope movement of masses of cohesive or non-cohesive material and/or bedrock
H	kettled	(I)	Depressions due to the melting of buried glacier ice
I	irregular channel	(A)	A single, clearly defined main channel displaying irregular turns and bends
J	anastomosing channel	(A)	A channel zone where channels diverge and converge converge around many vegetated islands
K	karst	(A)	Processes associated with the solution of carbonates
M	meandering channel	(A)	Channel characterized by a regular pattern of bends with uniform amplitude and wave length
N	nivation	(A)	Erosion beneath and along the margin of snow patches
P	pipng	(A)	Subterranean erosion by flowing water
R	rapid mass movement	(A)	Rapid downslope movement of dry, moist or saturated debris
S	solifluction	(A)	Slow downslope movement of saturated overburden across a frozen or otherwise impermeable substrate
U	inundation	(A)	Seasonally under water due to high water table
V	gully erosion	(A)	Parallel/subparallel ravines due to running water
W	washing	(A)	Modification by wave action
X	permafrost	(A)	Processes controlled by the presence of permafrost
Z	periglacial processes	(A)	Solifluction, cryoturbation and nivation processes occurring within a single unit

MAP UNIT LETTER NOTATION

A terrain map unit symbol is composed of a combination of letters which designate different characteristics of the terrain. The relative position of letters within the symbol indicates the characteristics that they represent.

SAMPLE TERRAIN UNIT SYMBOL

qualifying descriptor

surficial material

texture

surficial material

g

FG

st

-

V

surface expression

qualifying descriptor

geological process

This map unit consists of a gravelly glaciofluvial terrace that overlies sandy lacustrine materials and is modified by gullies that are no longer active.

Explanatory Notes

- Units consisting of two or more types of terrain are designated by two or more groups of letters separated by slashes and/or dots

ON-SITE SYMBOLS	
drumlin	snow avalanches
crag and tail	landslide headwall (large)
rockes moutenees	landslide headwall area (large)
striae	landslide headwall (small)
undifferentiated lineations	landslide scar/track (small)
maraine ridge (major)	tension cracks
maraine ridge (minor)	sackung (sagging slopes)
esker	dunes (active/inactive)
kettle holes (small/large)	escarpment
meltwater channel (large)	strandline
meltwater channel (small)	pipng depression
cirques	karst depression
blockfield	gully
rock glaciers	spring
tors	gravel pit
gravel occurrence	Quaternary fossil site
observation site (frozen ground)	Observation site (ground/air)
stratigraphic site	¹⁴ C site
anthropogenic site	mine/quarry
	cinder cone

QUALIFYING DESCRIPTORS		
Symbol	Name	Description
G	glacial	Used to qualify surficial materials where there is evidence that glacier ice affected the mode of deposition of materials
A	active	Used to qualify surficial materials and geological processes with regard to their current state of activity
I	inactive	

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DESIGNED	MBS	DUBLIN GULCH PROPERTY	
DRAWN	WAL	TERRAIN CLASSIFICATION LEGEND FIGURE 2.2	
CHECKED			
APPROVED			
DATE	JAN. 9, 1996	SCALE	AS SHOWN
DRG. NO.	H2811	REV.	A

DRG. NO.	DESCRIPTION	REV.	DATE	DESCRIPTION	APPROVED	REV.	DATE	DESCRIPTION	APPROVED
	REFERENCE DRAWINGS			REVISIONS				REVISIONS	



APPENDIX C

Soil Laboratory Data

Analysis Report



REPORT ON: Analysis of Soil Samples

REPORTED TO: Stantec
11-2042 Mills Rd
Sidney, BC
V8L 5X4

Att'n: Natalie Tashe

PROJECT NAME: Eagle Gold

NUMBER OF SAMPLES: 20

REPORT DATE: October 8, 2009

DATE SUBMITTED: September 14, 2009

GROUP NUMBER: 100915028

SAMPLE TYPE: Soil

NOTE: Results contained in this report refer only to the testing of samples as submitted. Other information is available on request.

TEST METHODS:

pH in Soil or Solid - analysis was performed based on procedures described in the "Manual on Soil Sampling and Methods of Analysis" (1993) published by the Canadian Society of Soil Science. The test was performed using a deionized water leach with measurement by pH meter.

Particle Size Analysis - The particle size distribution is determined in accordance with Methods of Soil Analysis Part 1-Physical and Mineralogical Methods(2nd Ed), UBC Methods Manual for Soil Analysis(1981) and Soil Sampling and Methods of Analysis(1993). The % gravel, sand, silt and clay are determined by a combination of a standard dry sieve, wet sieve and pipetting techniques. Particle size limits used to define size fractions are based according to Canadian Soil Survey Committee(CSSC) and U.S. Department of Agriculture(USDA) classification scheme. Winnipeg Lab D-675 Berry St. Wpg, MB R3H1A7

CSSC Textural Category - C = Clay, S = Sand, SI = Silt, L = Loam, CL = Clay Loam, SC = Sandy Clay, SIL = Silt Loam, SIC = Silty Clay, LS = Loamy Sand, SL = Sandy Loam, HC = Heavy Clay, SCL = Sandy Clay Loam, SICL = Silty Clay Loam.Performed at Cantest Ltd Winnipeg, Unit-D Berry St, Winnipeg, Manitoba R3H 1A7.

Silver in Soil - analysis was performed using Inductively Coupled Plasma Mass Spectrometry (ICP/MS).

Arsenic in Soil - analysis was performed using Inductively Coupled Plasma Mass Spectrometry (ICP/MS).

Cadmium in Soil - analysis was performed using Inductively Coupled Plasma Mass Spectrometry (ICP/MS).

Mercury in Soil - analysis was performed using Cold Vapour Atomic Fluorescence.

(Continued)

CANTEST LTD.

Anna Becalska, PhD
Trace Metals Coordinator

REPORTED TO: Stantec
REPORT DATE: October 8, 2009
GROUP NUMBER: 100915028



Molybdenum in Soil - analysis was performed using an acid digestion followed by determination using Inductively Coupled Plasma Mass Spectrometry (ICP/MS).

Strong Acid Leachable Metals in Soil - analysis was performed using B.C. MOELP Method "Strong Acid Leachable Metals in Soil, Version 1.0". The method involves drying the sample at 60 C, sieving using a 2 mm (10 mesh) sieve and digestion using a mixture of hydrochloric and nitric acids. Analysis was performed using Inductively Coupled Argon Plasma Spectroscopy (ICAP) or by specific techniques as described.

Selenium in Soil - analysis was using Inductively Coupled Plasma Mass Spectrometry (ICP/MS).

Thallium in Soil - analysis was performed using Inductively Coupled Plasma Mass Spectrometry (ICP/MS).

Particle Size Analysis - Standard - This analysis is appropriate for most samples. These particle size limits are used to define the size fractions: gravel, coarse to medium sand, fine sand, silt and clay, according to the CSSC and USDA Classification schemes. Soil texture is determined according to CSSC definition of texture. The size fractions that are analyzed are 2.0, 0.250, 0.125, 0.053 and 0.002 mm. The % Sand, % Silt and % Clay are based on the <2mm fraction of the sample by weight. Analysis was performed at CANTEST LTD., Unit "D" 675 Berry Steet, Winnipeg, Manitoba R3H 1A7.

COMMENTS:

The samples submitted were received at a temperature of 22.9 degrees Celsius. Temperature related changes may mean that the samples as analyzed do not reflect the samples at the time of collection. kdd - Sept 15, 2009

TEST RESULTS:

(See following pages)

REPORTED TO: Stantec
REPORT DATE: October 8, 2009
GROUP NUMBER: 100915028



Conventional Parameters in Soil

CLIENT SAMPLE IDENTIFICATION:	SAMPLE DATE	CANTEST ID	pH
WR1-S3	Jul 21/09	909150085	7.8
WR2-S2	Jul 21/09	909150088	7.1
WR3-S1	Jul 21/09	909150090	7.3
WR8-S2	Jul 23/09	909150091	7.0
P4-S2	Aug 4/09	909150092	7.2
P2-S2	Aug 4/09	909150093	6.5
P1-S2	Aug 4/09	909150095	6.6
HL5-6 S3	Jul 27/09	909150096	6.5
HL5-4 S3	Jul 26/09	909150097	7.0
HL5-7 S3	Jul 27/09	909150098	6.8
HL5-3 S3	Jul 20/09	909150100	6.6
HL6-4 S3	Jul 28/09	909150103	7.8
HL6-8 S1	N/A	909150108	8.2
HL6-1 S3	Jul 28/09	909150110	7.1
HL6-10 S1	Jul 31/09	909150111	4.8
HL6-4 S4	Jul 28/09	909150112	7.8
HL6-3 S4	Jul 28/09	909150113	7.1
DG3 S1	Aug 8/09	909150115	5.9
HL5-6 S3 BLND	N/A	909150118	6.6
HL6-1 S3 BLND	N/A	909150121	7.0
REPORTING LIMIT UNITS			0.1 pH units

REPORTED TO: Stantec

REPORT DATE: October 8, 2009

GROUP NUMBER: 100915028



Strong Acid Soluble Metals in Soil

CLIENT SAMPLE IDENTIFICATION:		WR1-S3	WR2-S2	WR3-S1	WR8-S2	
DATE SAMPLED:		Jul 21/09	Jul 21/09	Jul 21/09	Jul 23/09	
CANTEST ID:		909150085	909150088	909150090	909150091	REPORTING LIMIT
Antimony	Sb	11.4	3.8	5.8	2.4	0.1
Arsenic	As	212	170	189	241	0.1
Barium	Ba	67	248	10	131	1
Beryllium	Be	1	<	<	<	1
Cadmium	Cd	<	0.4	<	0.7	0.2
Chromium	Cr	8	23	4	19	2
Cobalt	Co	30	12	14	8	1
Copper	Cu	84	30	21	17	1
Lead	Pb	18.1	31.2	12.1	37.7	0.2
Mercury	Hg	0.33	0.03	0.06	0.05	0.01
Molybdenum	Mo	1.6	1.0	5.7	1.7	0.1
Nickel	Ni	42	28	43	19	2
Selenium	Se	1.2	0.4	0.5	0.6	0.2
Silver	Ag	0.2	0.1	<	0.2	0.1
Thallium	Tl	0.3	0.3	<	0.3	0.1
Tin	Sn	<	<	<	<	5
Vanadium	V	87	27	3	24	1
Zinc	Zn	93	102	95	113	1
Aluminum	Al	4100	13900	3590	7440	10
Boron	B	1	1	1	1	1
Calcium	Ca	3920	2370	1740	2830	1
Iron	Fe	62500	29300	24300	21800	2
Magnesium	Mg	2250	4710	1660	3900	1
Manganese	Mn	924	487	94	298	1
Phosphorus	P	630	560	190	599	20
Potassium	K	1210	3330	891	1290	10
Sodium	Na	31	63	25	95	5
Strontium	Sr	33	20	22	28	1
Titanium	Ti	16	563	3	726	1
Zirconium	Zr	9	9	3	2	1

Results expressed as micrograms per gram, on a dry weight basis. (µg/g)

< = Less than reporting limit

REPORTED TO: Stantec

REPORT DATE: October 8, 2009

GROUP NUMBER: 100915028



Strong Acid Soluble Metals in Soil

CLIENT SAMPLE IDENTIFICATION:		P4-S2	P2-S2	P1-S2	HL5-6 S3	
DATE SAMPLED:		Aug 4/09	Aug 4/09	Aug 4/09	Jul 27/09	
CANTEST ID:		909150092	909150093	909150095	909150096	REPORTING LIMIT
Antimony	Sb	8.1	10.5	5.4	0.9	0.1
Arsenic	As	903	78.3	148	49.3	0.1
Barium	Ba	376	374	155	272	1
Beryllium	Be	<	<	1	<	1
Cadmium	Cd	0.3	0.5	<	<	0.2
Chromium	Cr	26	26	46	40	2
Cobalt	Co	14	13	29	10	1
Copper	Cu	81	27	46	10	1
Lead	Pb	13.7	14.5	11.5	9.0	0.2
Mercury	Hg	0.02	0.02	0.01	<	0.01
Molybdenum	Mo	1.5	1.0	0.9	0.4	0.1
Nickel	Ni	21	29	42	20	2
Selenium	Se	1.0	0.6	0.4	0.4	0.2
Silver	Ag	0.2	0.1	<	<	0.1
Thallium	Tl	0.4	0.2	0.6	0.6	0.1
Tin	Sn	<	<	<	<	5
Vanadium	V	29	36	49	40	1
Zinc	Zn	46	75	92	63	1
Aluminum	Al	13900	11000	20400	17500	10
Boron	B	1	1	<	<	1
Calcium	Ca	4230	2600	3400	2820	1
Iron	Fe	23900	25300	32900	27900	2
Magnesium	Mg	8160	4740	7560	8460	1
Manganese	Mn	228	461	947	419	1
Phosphorus	P	577	733	314	791	20
Potassium	K	4840	1940	8980	7630	10
Sodium	Na	94	85	91	85	5
Strontium	Sr	24	23	25	20	1
Titanium	Ti	869	561	639	2090	1
Zirconium	Zr	5	3	2	3	1

Results expressed as micrograms per gram, on a dry weight basis. (µg/g)

< = Less than reporting limit

REPORTED TO: Stantec

REPORT DATE: October 8, 2009

GROUP NUMBER: 100915028



Strong Acid Soluble Metals in Soil

CLIENT SAMPLE IDENTIFICATION:		HL5-4 S3	HL5-7 S3	HL5-3 S3	HL6-4 S3	
DATE SAMPLED:		Jul 26/09	Jul 27/09	Jul 20/09	Jul 28/09	REPORTING LIMIT
CANTEST ID:		909150097	909150098	909150100	909150103	
Antimony	Sb	0.5	17.6	5.9	5.5	0.1
Arsenic	As	45.4	777	486	1350	0.1
Barium	Ba	338	68	163	69	1
Beryllium	Be	<	<	<	<	1
Cadmium	Cd	<	1.0	0.9	<	0.2
Chromium	Cr	30	8	28	22	2
Cobalt	Co	9	10	9	14	1
Copper	Cu	3	18	12	51	1
Lead	Pb	5.7	85.8	41.3	13.3	0.2
Mercury	Hg	<	0.22	0.02	0.02	0.01
Molybdenum	Mo	1.1	7.8	3.2	0.4	0.1
Nickel	Ni	25	23	18	30	2
Selenium	Se	0.5	0.4	0.6	0.8	0.2
Silver	Ag	<	0.4	0.2	0.1	0.1
Thallium	Tl	0.5	0.2	0.2	0.4	0.1
Tin	Sn	<	<	<	<	5
Vanadium	V	35	7	33	28	1
Zinc	Zn	40	144	125	54	1
Aluminum	Al	14200	2520	8410	8070	10
Boron	B	<	1	<	<	1
Calcium	Ca	3410	1040	3080	2250	1
Iron	Fe	23300	25000	22500	32800	2
Magnesium	Mg	8060	957	5250	3720	1
Manganese	Mn	300	560	571	483	1
Phosphorus	P	827	280	674	332	20
Potassium	K	6980	1180	1680	2990	10
Sodium	Na	93	17	86	85	5
Strontium	Sr	17	40	20	19	1
Titanium	Ti	1620	49	996	221	1
Zirconium	Zr	2	7	2	10	1

Results expressed as micrograms per gram, on a dry weight basis. (µg/g)

< = Less than reporting limit

REPORTED TO: Stantec

REPORT DATE: October 8, 2009

GROUP NUMBER: 100915028



Strong Acid Soluble Metals in Soil

CLIENT SAMPLE IDENTIFICATION:		HL6-8 S1	HL6-1 S3	HL6-10 S1	HL6-4 S4	
DATE SAMPLED:			Jul 28/09	Jul 31/09	Jul 28/09	REPORTING LIMIT
CANTEST ID:		909150108	909150110	909150111	909150112	
Antimony	Sb	2.4	2.4	16.7	0.7	0.1
Arsenic	As	9.4	42.3	226	23.7	0.1
Barium	Ba	107	120	114	69	1
Beryllium	Be	<	1	<	2	1
Cadmium	Cd	0.3	0.3	<	<	0.2
Chromium	Cr	9	27	15	26	2
Cobalt	Co	6	20	9	15	1
Copper	Cu	21	45	25	50	1
Lead	Pb	8.2	9.6	26.9	10.8	0.2
Mercury	Hg	0.06	0.01	0.02	<	0.01
Molybdenum	Mo	0.3	0.9	0.9	1.3	0.1
Nickel	Ni	17	57	20	30	2
Selenium	Se	1.3	0.6	0.7	0.5	0.2
Silver	Ag	0.2	<	0.1	<	0.1
Thallium	Tl	0.1	0.5	0.1	0.4	0.1
Tin	Sn	<	<	<	<	5
Vanadium	V	10	29	25	27	1
Zinc	Zn	44	97	53	90	1
Aluminum	Al	5650	15900	7060	14800	10
Boron	B	3	<	<	<	1
Calcium	Ca	34700	1630	956	1760	1
Iron	Fe	15000	49600	25800	48000	2
Magnesium	Mg	5090	5940	2340	6540	1
Manganese	Mn	658	658	294	261	1
Phosphorus	P	411	303	340	296	20
Potassium	K	1110	5960	748	5310	10
Sodium	Na	32	126	33	77	5
Strontium	Sr	176	16	12	12	1
Titanium	Ti	35	443	175	302	1
Zirconium	Zr	4	9	<	24	1

Results expressed as micrograms per gram, on a dry weight basis. (µg/g)

< = Less than reporting limit

REPORTED TO: Stantec

REPORT DATE: October 8, 2009

GROUP NUMBER: 100915028



Strong Acid Soluble Metals in Soil

CLIENT SAMPLE IDENTIFICATION:		HL6-3 S4	DG3 S1	HL5-6 S3 BLND	HL6-1 S3 BLND	
DATE SAMPLED:		Jul 28/09	Aug 8/09			
CANTEST ID:		909150113	909150115	909150118	909150121	REPORTING LIMIT
Antimony	Sb	4.6	10.1	1.0	2.3	0.1
Arsenic	As	97.4	438	45.9	42.6	0.1
Barium	Ba	74	128	264	128	1
Beryllium	Be	1	<	<	2	1
Cadmium	Cd	<	0.4	<	0.3	0.2
Chromium	Cr	34	20	39	29	2
Cobalt	Co	19	15	11	19	1
Copper	Cu	57	39	10	49	1
Lead	Pb	11.9	38.4	8.5	10.5	0.2
Mercury	Hg	0.02	0.02	<	0.01	0.01
Molybdenum	Mo	0.9	0.8	0.3	0.9	0.1
Nickel	Ni	48	35	21	58	2
Selenium	Se	0.7	0.7	0.4	0.6	0.2
Silver	Ag	0.1	0.2	<	0.1	0.1
Thallium	Tl	0.5	0.3	0.6	0.6	0.1
Tin	Sn	<	<	<	<	5
Vanadium	V	25	26	38	30	1
Zinc	Zn	81	108	63	98	1
Aluminum	Al	11500	7430	17100	18100	10
Boron	B	<	1	<	<	1
Calcium	Ca	1730	2070	2800	1820	1
Iron	Fe	43200	31400	26900	51700	2
Magnesium	Mg	5050	3530	8400	6730	1
Manganese	Mn	390	286	411	668	1
Phosphorus	P	363	494	732	306	20
Potassium	K	4550	1970	7500	6400	10
Sodium	Na	86	64	88	154	5
Strontium	Sr	19	22	20	18	1
Titanium	Ti	370	342	2040	492	1
Zirconium	Zr	11	13	2	9	1

Results expressed as micrograms per gram, on a dry weight basis. (µg/g)

< = Less than reporting limit

REPORTED TO: Stantec
REPORT DATE: October 8, 2009
GROUP NUMBER: 100915028



Type of Particle Size Analysis in Soil

CLIENT SAMPLE IDENTIFICATION:	SAMPLE DATE	CANTEST ID	PSA Standard
WR1-S3	Jul 21/09	909150085	COMPLETE
P4-S2	Aug 4/09	909150092	COMPLETE
HL5-6 S3	Jul 27/09	909150096	COMPLETE
HL5-4 S3	Jul 26/09	909150097	COMPLETE
HL6-4 S3	Jul 28/09	909150103	COMPLETE
HL6-1 S3	Jul 28/09	909150110	COMPLETE
REPORTING LIMIT UNITS			- -

- = text or without units

REPORTED TO: Stantec

REPORT DATE: October 8, 2009

GROUP NUMBER: 100915028



Percent Passing on Sieves and Pipettes in Soil

CLIENT SAMPLE IDENTIFICATION:	WR1-S3	P4-S2	HL5-6 S3	HL5-4 S3	
DATE SAMPLED:	Jul 21/09	Aug 4/09	Jul 27/09	Jul 26/09	REPORTING LIMIT
CANTEST ID:	909150085	909150092	909150096	909150097	
Pipette Size 0.053 mm	17.17	7.64	10.78	9.00	-
Pipette Size 0.002 mm	3.83	1.75	1.49	1.94	-
Sieve 2 mm, ASTM #10	32.55	23.57	48.82	39.87	-
Sieve 0.250mm, 250um, #60	22.77	12.55	24.72	18.96	-
Sieve 0.125mm, 125um, #120	19.75	10.11	17.39	13.56	-

Results expressed as percent passing (PCTP)

REPORTED TO: Stantec
REPORT DATE: October 8, 2009
GROUP NUMBER: 100915028



Percent Passing on Sieves and Pipettes in Soil

CLIENT SAMPLE IDENTIFICATION:	HL6-4 S3	HL6-1 S3	
DATE SAMPLED:	Jul 28/09	Jul 28/09	REPORTING LIMIT
CANTEST ID:	909150103	909150110	
Pipette Size 0.053 mm	24.44	13.64	-
Pipette Size 0.002 mm	5.34	2.12	-
Sieve 2 mm, ASTM #10	50.21	35.17	-
Sieve 0.250mm, 250um, #60	33.06	21.29	-
Sieve 0.125mm, 125um, #120	29.66	17.98	-

Results expressed as percent passing (PCTP)

REPORTED TO: Stantec

REPORT DATE: October 8, 2009

GROUP NUMBER: 100915028



Percent Retained on Sieves - % By Weight in Soil

CLIENT SAMPLE IDENTIFICATION:	WR1-S3	P4-S2	HL5-6 S3	HL5-4 S3	
DATE SAMPLED:	Jul 21/09	Aug 4/09	Jul 27/09	Jul 26/09	REPORTING LIMIT
CANTEST ID:	909150085	909150092	909150096	909150097	
>2.00 mm	67.45	76.43	51.18	60.13	-
<2.00 mm & >0.053 mm	15.39	15.93	38.04	30.86	-
<0.053 mm & >0.002 mm	13.34	5.88	9.29	7.06	-
<0.002 mm	3.83	1.75	1.49	1.94	-

Results expressed as percent, on a weight basis (%)

REPORTED TO: Stantec
REPORT DATE: October 8, 2009
GROUP NUMBER: 100915028



Percent Retained on Sieves - % By Weight in Soil

CLIENT SAMPLE IDENTIFICATION:	HL6-4 S3	HL6-1 S3	
DATE SAMPLED:	Jul 28/09	Jul 28/09	REPORTING LIMIT
CANTEST ID:	909150103	909150110	
>2.00 mm	49.79	64.83	-
<2.00 mm & >0.053 mm	25.76	21.53	-
<0.053 mm & >0.002 mm	19.10	11.52	-
<0.002 mm	5.34	2.12	-

Results expressed as percent, on a weight basis (%)

REPORTED TO: Stantec

REPORT DATE: October 8, 2009

GROUP NUMBER: 100915028



%Sand, %Silt and %Clay in Soil

CLIENT SAMPLE IDENTIFICATION:	WR1-S3	P4-S2	HL5-6 S3	HL5-4 S3	REPORTING LIMIT	UNITS
DATE SAMPLED:	Jul 21/09	Aug 4/09	Jul 27/09	Jul 26/09		
CANTEST ID:	909150085	909150092	909150096	909150097		
CSSC Textural Category	L	SL	LS	LS	-	-
%Sand <2.00 mm & >0.053 mm	47.27	67.60	77.92	77.42	-	%
%Silt <0.053 mm & >0.002 mm	40.97	24.97	19.03	17.71	-	%
%Clay <0.002 mm	11.77	7.43	3.05	4.87	-	%

- = text or without units

% = percent, on a weight basis

REPORTED TO: Stantec
REPORT DATE: October 8, 2009
GROUP NUMBER: 100915028



%Sand, %Silt and %Clay in Soil

CLIENT SAMPLE IDENTIFICATION:	HL6-4 S3	HL6-1 S3		
DATE SAMPLED:	Jul 28/09	Jul 28/09		
CANTEST ID:	909150103	909150110	REPORTING LIMIT	UNITS
CSSC Textural Category	L	SL	-	-
%Sand <2.00 mm & >0.053 mm	51.32	61.22	-	%
%Silt <0.053 mm & >0.002 mm	38.04	32.75	-	%
%Clay <0.002 mm	10.64	6.03	-	%

- = text or without units

% = percent, on a weight basis

REPORTED TO: Stantec

REPORT DATE: October 8, 2009

GROUP NUMBER: 100915028



Batch Quality Control for Percent Passing on Sieves and Pipettes in Soil (QC# 127711)

Parameter	Soil Pipette Verif % < 53um (% Recovery) 909150085	Soil Pipette Verif % < 53um Limits	Soil Pipette Verif % < 53um (% Recovery) 909150092	Soil Pipette Verif % < 53um Limits	Soil Pipette Verif % < 53um (% Recovery) 909150096	Soil Pipette Verif % < 53um Limits
Pipette Size 0.053 mm	99	95 - 105	100	95 - 105	99	95 - 105

PCTP = percent passing

REPORTED TO: Stantec

REPORT DATE: October 8, 2009

GROUP NUMBER: 100915028



Batch Quality Control for Percent Passing on Sieves and Pipettes in Soil (QC# 127711)

Parameter	Soil Pipette Verif % < 53um (% Recovery) 909150097	Soil Pipette Verif % < 53um Limits	Soil Pipette Verif % < 53um (% Recovery) 909150103	Soil Pipette Verif % < 53um Limits	Soil Pipette Verif % < 53um (% Recovery) 909150110	Soil Pipette Verif % < 53um Limits
Pipette Size 0.053 mm	99	95 - 105	100	95 - 105	100	95 - 105

PCTP = percent passing

REPORTED TO: Stantec

REPORT DATE: October 8, 2009

GROUP NUMBER: 100915028



Batch Quality Control for Strong Acid Soluble Metals in Soil (QC# 126835)

Parameter		Blank (ug/g)	Blank Limits	CAN MET Till-1 (% Recovery)	CAN MET Till-1 Limits	Duplicate (R.P.D.) 909150092	Duplicate Limits
Antimony	Sb	< 0.1	10	-	-	-	-
Arsenic	As	-	-	-	-	0.1	30
Barium	Ba	< 1	1	92	74 - 120	0.5	30
Beryllium	Be	< 1	1	20	10.4 - 30.4	NC	30
Cadmium	Cd	< 0.2	0.2	61	3 - 197	PASS	30
Chromium	Cr	< 2	0.2	83	73 - 113	7.7	30
Cobalt	Co	< 1	1	92	70 - 142	22.2	30
Copper	Cu	< 1	0.2	88	75 - 113	8.7	30
Lead	Pb	< 0.2	5	108	65 - 171	6.6	30
Mercury	Hg	-	-	88	33 - 174	0	30
Molybdenum	Mo	< 0.1	4	30	5 - 90	20.7	30
Nickel	Ni	< 2	2	89	49 - 149	9.5	30
Selenium	Se	< 0.2	0.2	-	-	20	30
Silver	Ag	-	-	-	-	PASS	30
Thallium	Tl	< 0.1	0.001	-	-	PASS	30
Tin	Sn	< 5	5	-	-	NC	30
Vanadium	V	< 1	1	104	69 - 152	3.4	30
Zinc	Zn	< 1	1	84	79 - 114	2.2	30
Aluminum	Al	< 10	10	-	-	0	30
Boron	B	< 1	1	-	-	PASS	30
Calcium	Ca	< 1	1	65	51 - 106	5.7	30
Iron	Fe	< 2	2	-	-	0.4	30
Magnesium	Mg	< 1	1	-	-	1.7	30
Manganese	Mn	< 1	1	-	-	13.6	30
Phosphorus	P	< 20	20	-	-	3.6	30
Potassium	K	< 10	10	-	-	1.2	30
Sodium	Na	< 5	5	-	-	2.1	30
Strontium	Sr	< 1	1	-	-	4.3	30
Titanium	Ti	< 1	1	-	-	4.8	30
Zirconium	Zr	< 1	1	-	-	PASS	30

ug/g = micrograms per gram

R.P.D. = Relative Percent Difference

PASS = Duplicate sample results were in the range of one to five times the detection limit. R.P.D. calculation is not applicable in this range. Acceptance criteria is a maximum difference between the duplicates equivalent to the value of the detection limit.

NC = Not Calculated. Duplicate sample results were less than the detection limit. Relative Percent Difference calculation is not defined for analyte levels of less than detection limit.

REPORTED TO: Stantec

REPORT DATE: October 8, 2009

GROUP NUMBER: 100915028



Batch Quality Control for Strong Acid Soluble Metals in Soil (QC# 126835)

Parameter		Duplicate (R.P.D.) 909150111	Duplicate Limits	Duplicate (R.P.D.) 909150355	Duplicate Limits	Duplicate (R.P.D.) 909150559	Duplicate Limits
Arsenic	As	7.1	30	-	-	-	-
Barium	Ba	3.5	30	-	-	-	-
Beryllium	Be	NC	30	-	-	-	-
Cadmium	Cd	NC	30	-	-	-	-
Chromium	Cr	0	30	-	-	-	-
Cobalt	Co	10.5	30	-	-	-	-
Copper	Cu	3.9	30	-	-	-	-
Lead	Pb	6.3	30	-	-	-	-
Mercury	Hg	0	30	0	30	1.1	30
Molybdenum	Mo	10.5	30	-	-	-	-
Nickel	Ni	5.1	30	-	-	-	-
Selenium	Se	PASS	30	-	-	-	-
Silver	Ag	PASS	30	-	-	-	-
Thallium	Tl	PASS	30	-	-	-	-
Tin	Sn	NC	30	-	-	-	-
Vanadium	V	4.1	30	-	-	-	-
Zinc	Zn	1.9	30	-	-	-	-
Aluminum	Al	0.1	30	-	-	-	-
Boron	B	NC	30	-	-	-	-
Calcium	Ca	3.7	30	-	-	-	-
Iron	Fe	0.8	30	-	-	-	-
Magnesium	Mg	0.4	30	-	-	-	-
Manganese	Mn	5.1	30	-	-	-	-
Phosphorus	P	0.6	30	-	-	-	-
Potassium	K	1.5	30	-	-	-	-
Sodium	Na	0	30	-	-	-	-
Strontium	Sr	0	30	-	-	-	-
Titanium	Ti	7.4	30	-	-	-	-
Zirconium	Zr	NC	30	-	-	-	-

ug/g = micrograms per gram

R.P.D. = Relative Percent Difference

PASS = Duplicate sample results were in the range of one to five times the detection limit. R.P.D. calculation is not applicable in this range. Acceptance criteria is a maximum difference between the duplicates equivalent to the value of the detection limit.

NC = Not Calculated. Duplicate sample results were less than the detection limit. Relative Percent Difference calculation is not defined for analyte levels of less than detection limit.

REPORTED TO: Stantec

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GROUP NUMBER: 100915028



Batch Quality Control for Strong Acid Soluble Metals in Soil (QC# 126835)

Parameter	Duplicate (R.P.D.) 909160030	Duplicate Limits	Duplicate (R.P.D.) 909160450	Duplicate Limits	Duplicate (R.P.D.) 909160474	Duplicate Limits
Mercury Hg	0	30	0	30	NC	30

ug/g = micrograms per gram

R.P.D. = Relative Percent Difference

NC = Not Calculated. Duplicate sample results were less than the detection limit. Relative Percent Difference calculation is not defined for analyte levels of less than detection limit.

REPORTED TO: Stantec
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Batch Quality Control for Strong Acid Soluble Metals in Soil (QC# 126835)

Parameter	Duplicate (R.P.D.) 909160487	Duplicate Limits	Duplicate (R.P.D.) 909160503	Duplicate Limits
Mercury Hg	22.2	30	NC	30

ug/g = micrograms per gram

R.P.D. = Relative Percent Difference

NC = Not Calculated. Duplicate sample results were less than the detection limit. Relative Percent Difference calculation is not defined for analyte levels of less than detection limit.

REPORTED TO: Stantec
REPORT DATE: October 8, 2009
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Batch Quality Control Frequency Summary

SALM in Soil Digestion (Batch# 126835)

QC Type	No. Samples
CAN MET Till-1	1
Blank	3
Duplicate	10

Particle Size Prep - Winnipeg (Batch# 127711)

QC Type	No. Samples
Soil Pipette Verif % < 53um	6

SALM Metals in Soil Sieve (Batch# 126824)

QC Type	No. Samples
Batch Size	103

SALM in Soil Digestion (Batch# 126835)

QC Type	No. Samples
Batch Size	103

Particle Size Prep - Winnipeg (Batch# 127711)

QC Type	No. Samples
Batch Size	6

Analysis Report



REPORT ON: Analysis of Soil, Tissue Samples

REPORTED TO: Stantec
11-2042 Mills Rd
Sidney, BC
V8L 5X4

Att'n: Natalie Tashe

PROJECT NAME: Eagle Gold

PROJECT NUMBER: 153550.03

NUMBER OF SAMPLES: 39

REPORT DATE: October 7, 2009

DATE SUBMITTED: September 4, 2009

GROUP NUMBER: 100905040

SAMPLE TYPE: Tissue, Soil

NOTE: Results contained in this report refer only to the testing of samples as submitted. Other information is available on request.

TEST METHODS:

pH in Soil or Solid - analysis was performed based on procedures described in the "Manual on Soil Sampling and Methods of Analysis" (1993) published by the Canadian Society of Soil Science. The test was performed using a deionized water leach with measurement by pH meter.

Mercury in Tissue - samples were digested using a nitric acid-hydrogen peroxide digestion procedure based on EPA Method 200.3. Analysis was performed using Cold Vapour Atomic Absorption Spectrophotometry or Cold Vapour Atomic Fluorescence Spectrophotometry.

Metals in Tissue - samples were digested using a nitric acid-hydrogen peroxide digestion procedure based on EPA Method 200.3. Analysis was performed using Inductively Coupled Argon Plasma Spectroscopy (ICP), or ICP Mass Spectrometry (ICP/MS).

Particle Size Analysis - The particle size distribution is determined in accordance with Methods of Soil Analysis Part 1-Physical and Mineralogical Methods(2nd Ed), UBC Methods Manual for Soil Analysis(1981) and Soil Sampling and Methods of Analysis(1993). The % gravel, sand, silt and clay are determined by a combination of a standard dry sieve, wet sieve and pipetting techniques. Particle size limits used to define size fractions are based according to Canadian Soil Survey Committee(CSSC) and U.S. Department of Agriculture(USDA) classification scheme. Winnipeg Lab D-675 Berry St. Wpg, MB R3H1A7

CSSC Textural Category - C = Clay, S = Sand, SI = Silt, L = Loam, CL = Clay Loam, SC = Sandy Clay, SIL = Silt Loam, SIC = Silty Clay, LS = Loamy Sand, SL = Sandy Loam, HC = Heavy Clay, SCL = Sandy Clay Loam, SICL = Silty Clay Loam. Performed at Cantest Ltd Winnipeg, Unit-D Berry St, Winnipeg, Manitoba R3H 1A7.

(Continued)

CANTEST LTD.

Anna Becalska, PhD
Trace Metals Coordinator

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REPORTED TO: Stantec
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Silver in Soil - analysis was performed using Inductively Coupled Plasma Mass Spectrometry (ICP/MS).

Arsenic in Soil - analysis was performed using Inductively Coupled Plasma Mass Spectrometry (ICP/MS).

Cadmium in Soil - analysis was performed using Inductively Coupled Plasma Mass Spectrometry (ICP/MS).

Mercury in Soil - analysis was performed using Cold Vapour Atomic Fluorescence.

Molybdenum in Soil - analysis was performed using an acid digestion followed by determination using Inductively Coupled Plasma Mass Spectrometry (ICP/MS).

Strong Acid Leachable Metals in Soil - analysis was performed using B.C. MOELP Method "Strong Acid Leachable Metals in Soil, Version 1.0". The method involves drying the sample at 60 C, sieving using a 2 mm (10 mesh) sieve and digestion using a mixture of hydrochloric and nitric acids. Analysis was performed using Inductively Coupled Argon Plasma Spectroscopy (ICAP) or by specific techniques as described.

Selenium in Soil - analysis was using Inductively Coupled Plasma Mass Spectrometry (ICP/MS).

Thallium in Soil - analysis was performed using Inductively Coupled Plasma Mass Spectrometry (ICP/MS).

Particle Size Analysis - Standard - This analysis is appropriate for most samples. These particle size limits are used to define the size fractions: gravel, coarse to medium sand, fine sand, silt and clay, according to the CSSC and USDA Classification schemes. Soil texture is determined according to CSSC definition of texture. The size fractions that are analyzed are 2.0, 0.250, 0.125, 0.053 and 0.002 mm. The % Sand, % Silt and % Clay are based on the <2mm fraction of the sample by weight. Analysis was performed at CANTEST LTD., Unit "D" 675 Berry Steet, Winnipeg, Manitoba R3H 1A7.

TEST RESULTS:

(See following pages)

REPORTED TO: Stantec
REPORT DATE: October 7, 2009
GROUP NUMBER: 100905040



Conventional Parameters in Soil

CLIENT SAMPLE IDENTIFICATION:	SAMPLE DATE	CANTEST ID	pH
EGL17-NT-1	Aug 11/09	909050225	3.9
EGL8-NT-1	Aug 16/09	909050226	5.1
EGL4-NT-2	Aug 12/09	909050227	4.8
EGL1-MT-2	Aug 14/09	909050229	5.7
EGL41-NT-1	Aug 16/09	909050230	4.7
EGL17-NT-2	Aug 11/09	909050233	4.2
EGL8-NT-2	Aug 16/09	909050234	5.6
EGL41-NT-2	Aug 16/09	909050235	4.6
EGL10-MT-2	Aug 16/09	909050236	4.6
EGL50-NT-1	Aug 15/09	909050238	3.7
EGL208-NT-2	Aug 15/09	909050239	4.4
EGL21-NT-1	Aug 11/09	909050240	3.8
EGL50-NT-2	Aug 15/09	909050243	4.6
EGL21-NT-2	Aug 11/09	909050244	4.4
EGL208-NT-1	Aug 15/09	909050245	4.0
EGL41-NT-1B	Aug 16/09	909050246	4.8
EGL4-NT-2B	Aug 12/09	909050247	4.9
EGL4-NT-1?	Aug 12/09	909050248	4.4
REPORTING LIMIT UNITS			0.1 pH units

REPORTED TO: Stantec

REPORT DATE: October 7, 2009

GROUP NUMBER: 100905040



Strong Acid Soluble Metals in Soil

CLIENT SAMPLE IDENTIFICATION:		EGL17-NT-1	EGL8-NT-1	EGL41-NT-1	EGL50-NT-1	REPORTING LIMIT
DATE SAMPLED:		Aug 11/09	Aug 16/09	Aug 16/09	Aug 15/09	
CANTEST ID:		909050225	909050226	909050230	909050238	
Antimony	Sb	1.4	6.0	7.6	<	0.1
Arsenic	As	43.7	34.0	148	2.4	0.1
Barium	Ba	98	209	135	58	1
Beryllium	Be	<	<	<	<	1
Cadmium	Cd	<	1.4	<	0.8	0.2
Chromium	Cr	105	31	31	14	2
Cobalt	Co	4	16	10	1	1
Copper	Cu	9	33	23	4	1
Lead	Pb	9.6	25.9	31.5	2.1	0.2
Mercury	Hg	0.10	0.15	0.04	0.16	0.01
Molybdenum	Mo	2.1	0.7	0.9	3.1	0.1
Nickel	Ni	54	35	26	8	2
Selenium	Se	0.3	0.5	0.4	0.3	0.2
Silver	Ag	0.2	2.0	0.2	0.2	0.1
Thallium	Tl	0.1	<	0.1	<	0.1
Tin	Sn	<	<	<	<	5
Vanadium	V	24	13	24	4	1
Zinc	Zn	34	72	66	55	1
Aluminum	Al	6000	7300	8080	1720	10
Boron	B	2	1	<	<	1
Calcium	Ca	1310	11200	1570	1850	1
Iron	Fe	11500	22000	21100	2560	2
Magnesium	Mg	1240	2510	2990	257	1
Manganese	Mn	155	2040	234	24	1
Phosphorus	P	1010	819	504	700	20
Potassium	K	749	890	633	383	10
Sodium	Na	50	34	41	37	5
Strontium	Sr	15	83	13	14	1
Titanium	Ti	56	38	230	96	1
Zirconium	Zr	<	1	2	<	1

Results expressed as micrograms per gram, on a dry weight basis. (µg/g)

< = Less than reporting limit

REPORTED TO: Stantec

REPORT DATE: October 7, 2009

GROUP NUMBER: 100905040



Strong Acid Soluble Metals in Soil

CLIENT SAMPLE IDENTIFICATION:		EGL21-NT-1	EGL208-NT-1	EGL41-NT-1	EGL4-NT-1?	REPORTING LIMIT
DATE SAMPLED:		Aug 11/09	Aug 15/09	Aug 16/09	Aug 12/09	
CANTEST ID:		909050240	909050245	909050246	909050248	
Antimony	Sb	1.4	8.3	5.3	3.1	0.1
Arsenic	As	88.9	75.3	182	880	0.1
Barium	Ba	76	103	163	196	1
Beryllium	Be	<	<	<	<	1
Cadmium	Cd	<	0.2	<	0.8	0.2
Chromium	Cr	17	22	22	28	2
Cobalt	Co	4	7	10	10	1
Copper	Cu	9	16	27	18	1
Lead	Pb	11.5	37.8	35.3	53.7	0.2
Mercury	Hg	0.06	0.08	0.05	0.03	0.01
Molybdenum	Mo	1.1	1.6	0.9	1.0	0.1
Nickel	Ni	10	16	22	26	2
Selenium	Se	0.3	0.4	0.6	0.2	0.2
Silver	Ag	0.1	0.2	0.2	0.2	0.1
Thallium	Tl	0.1	0.2	0.2	0.2	0.1
Tin	Sn	<	<	<	<	5
Vanadium	V	31	40	30	28	1
Zinc	Zn	35	60	77	147	1
Aluminum	Al	8110	10600	9630	12500	10
Boron	B	<	<	<	<	1
Calcium	Ca	562	1410	1810	3430	1
Iron	Fe	16400	26400	24600	25100	2
Magnesium	Mg	1790	3080	3640	4690	1
Manganese	Mn	122	266	262	471	1
Phosphorus	P	632	617	545	667	20
Potassium	K	389	1090	741	549	10
Sodium	Na	33	47	46	46	5
Strontium	Sr	7	16	15	29	1
Titanium	Ti	80	202	256	193	1
Zirconium	Zr	<	<	2	<	1

Results expressed as micrograms per gram, on a dry weight basis. (µg/g)
 < = Less than reporting limit

REPORTED TO: Stantec
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 GROUP NUMBER: 100905040



Type of Particle Size Analysis in Soil

CLIENT SAMPLE IDENTIFICATION:	SAMPLE DATE	CANTEST ID	PSA Standard
EGL17-NT-1	Aug 11/09	909050225	COMPLETE
EGL8-NT-1	Aug 16/09	909050226	COMPLETE
EGL4-NT-2	Aug 12/09	909050227	COMPLETE
EGL8-NT-3	Aug 16/09	909050228	COMPLETE
EGL1-MT-2	Aug 14/09	909050229	COMPLETE
EGL41-NT-1	Aug 16/09	909050230	COMPLETE
EGL21-NT-3	Aug 11/09	909050232	COMPLETE
EGL17-NT-2	Aug 11/09	909050233	COMPLETE
EGL8-NT-2	Aug 16/09	909050234	COMPLETE
EGL41-NT-2	Aug 16/09	909050235	COMPLETE
EGL10-MT-2	Aug 16/09	909050236	COMPLETE
EGL21-NT-4	Aug 11/09	909050237	COMPLETE
EGL50-NT-1	Aug 15/09	909050238	COMPLETE
EGL208-NT-2	Aug 15/09	909050239	COMPLETE
EGL21-NT-1	Aug 11/09	909050240	COMPLETE
EGL1-MT-3	Aug 14/09	909050241	COMPLETE
EGL208-NT-3	Aug 15/09	909050242	COMPLETE
EGL50-NT-2	Aug 15/09	909050243	COMPLETE
EGL21-NT-2	Aug 11/09	909050244	COMPLETE
EGL208-NT-1	Aug 15/09	909050245	COMPLETE
EGL41-NT-1B	Aug 16/09	909050246	COMPLETE
EGL4-NT-2B	Aug 12/09	909050247	COMPLETE
EGL4-NT-1?	Aug 12/09	909050248	COMPETE
REPORTING LIMIT UNITS			- -

- = text or without units

REPORTED TO: Stantec

REPORT DATE: October 7, 2009

GROUP NUMBER: 100905040



Percent Passing on Sieves and Pipettes in Soil

CLIENT SAMPLE IDENTIFICATION:	EGL17-NT-1	EGL8-NT-1	EGL4-NT-2	EGL8-NT-3	
DATE SAMPLED:	Aug 11/09	Aug 16/09	Aug 12/09	Aug 16/09	
CANTEST ID:	909050225	909050226	909050227	909050228	REPORTING LIMIT
Pipette Size 0.053 mm	47.77	70.09	16.19	26.05	-
Pipette Size 0.002 mm	9.25	21.99	4.51	3.79	-
Sieve 2 mm, ASTM #10	72.57	87.59	49.65	59.46	-
Sieve 0.250mm, 250um, #60	57.70	78.41	24.80	36.60	-
Sieve 0.125mm, 125um, #120	54.15	75.00	20.75	31.73	-

Results expressed as percent passing (PCTP)

REPORTED TO: Stantec

REPORT DATE: October 7, 2009

GROUP NUMBER: 100905040



Percent Passing on Sieves and Pipettes in Soil

CLIENT SAMPLE IDENTIFICATION:	EGL1-MT-2	EGL41-NT-1	EGL21-NT-3	EGL17-NT-2	
DATE SAMPLED:	Aug 14/09	Aug 16/09	Aug 11/09	Aug 11/09	
CANTEST ID:	909050229	909050230	909050232	909050233	REPORTING LIMIT
Pipette Size 0.053 mm	58.73	49.92	66.96	20.33	-
Pipette Size 0.002 mm	21.33	7.16	10.37	2.54	-
Sieve 2 mm, ASTM #10	66.75	80.20	82.90	51.43	-
Sieve 0.250mm, 250um, #60	64.50	66.39	77.39	30.38	-
Sieve 0.125mm, 125um, #120	63.28	60.76	75.91	27.26	-

Results expressed as percent passing (PCTP)

REPORTED TO: Stantec

REPORT DATE: October 7, 2009

GROUP NUMBER: 100905040



Percent Passing on Sieves and Pipettes in Soil

CLIENT SAMPLE IDENTIFICATION:	EGL8-NT-2	EGL41-NT-2	EGL10-MT-2	EGL21-NT-4	
DATE SAMPLED:	Aug 16/09	Aug 16/09	Aug 16/09	Aug 11/09	
CANTEST ID:	909050234	909050235	909050236	909050237	REPORTING LIMIT
Pipette Size 0.053 mm	24.05	69.75	39.25	43.04	-
Pipette Size 0.002 mm	3.68	9.57	6.08	5.11	-
Sieve 2 mm, ASTM #10	59.35	95.37	64.23	85.57	-
Sieve 0.250mm, 250um, #60	34.03	86.44	51.86	60.86	-
Sieve 0.125mm, 125um, #120	29.25	81.48	48.94	54.38	-

Results expressed as percent passing (PCTP)

REPORTED TO: Stantec

REPORT DATE: October 7, 2009

GROUP NUMBER: 100905040



Percent Passing on Sieves and Pipettes in Soil

CLIENT SAMPLE IDENTIFICATION:	EGL50-NT-1	EGL208-NT-2	EGL21-NT-1	EGL1-MT-3	
DATE SAMPLED:	Aug 15/09	Aug 15/09	Aug 11/09	Aug 14/09	
CANTEST ID:	909050238	909050239	909050240	909050241	REPORTING LIMIT
Pipette Size 0.053 mm	70.35	56.35	34.22	20.17	-
Pipette Size 0.002 mm	23.93	10.87	7.52	5.38	-
Sieve 2 mm, ASTM #10	81.82	77.45	46.86	36.30	-
Sieve 0.250mm, 250um, #60	78.12	68.41	40.37	26.04	-
Sieve 0.125mm, 125um, #120	75.15	65.75	38.06	23.95	-

Results expressed as percent passing (PCTP)

REPORTED TO: Stantec

REPORT DATE: October 7, 2009

GROUP NUMBER: 100905040



Percent Passing on Sieves and Pipettes in Soil

CLIENT SAMPLE IDENTIFICATION:	EGL208-NT-3	EGL50-NT-2	EGL21-NT-2	EGL208-NT-1	
DATE SAMPLED:	Aug 15/09	Aug 15/09	Aug 11/09	Aug 15/09	
CANTEST ID:	909050242	909050243	909050244	909050245	REPORTING LIMIT
Pipette Size 0.053 mm	22.52	31.44	64.56	83.12	-
Pipette Size 0.002 mm	3.98	6.65	10.03	17.79	-
Sieve 2 mm, ASTM #10	35.58	73.63	90.34	97.62	-
Sieve 0.250mm, 250um, #60	28.12	43.87	80.80	93.58	-
Sieve 0.125mm, 125um, #120	26.63	38.96	77.93	91.53	-

Results expressed as percent passing (PCTP)

REPORTED TO: Stantec

REPORT DATE: October 7, 2009

GROUP NUMBER: 100905040



Percent Passing on Sieves and Pipettes in Soil

CLIENT SAMPLE IDENTIFICATION:	EGL41-NT-1 B	EGL4-NT-2B	EGL4-NT-1?	
DATE SAMPLED:	Aug 16/09	Aug 12/09	Aug 12/09	
CANTEST ID:	909050246	909050247	909050248	REPORTING LIMIT
Pipette Size 0.053 mm	51.30	15.99	35.58	-
Pipette Size 0.002 mm	7.04	4.16	10.22	-
Sieve 2 mm, ASTM #10	80.93	47.05	69.55	-
Sieve 0.250mm, 250um, #60	67.34	24.52	46.12	-
Sieve 0.125mm, 125um, #120	62.10	20.53	41.72	-

Results expressed as percent passing (PCTP)

REPORTED TO: Stantec
REPORT DATE: October 7, 2009
GROUP NUMBER: 100905040



Percent Retained on Sieves - % By Weight in Soil

CLIENT SAMPLE IDENTIFICATION:	EGL17-NT-1	EGL8-NT-1	EGL4-NT-2	EGL8-NT-3	
DATE SAMPLED:	Aug 11/09	Aug 16/09	Aug 12/09	Aug 16/09	REPORTING LIMIT
CANTEST ID:	909050225	909050226	909050227	909050228	
>2.00 mm	27.43	12.41	50.35	40.54	-
<2.00 mm & >0.053 mm	24.81	17.50	33.46	33.41	-
<0.053 mm & >0.002 mm	38.51	48.11	11.68	22.25	-
<0.002 mm	9.25	21.99	4.51	3.79	-

Results expressed as percent, on a weight basis (%)

REPORTED TO: Stantec
REPORT DATE: October 7, 2009
GROUP NUMBER: 100905040



Percent Retained on Sieves - % By Weight in Soil

CLIENT SAMPLE IDENTIFICATION:	EGL1-MT-2	EGL41-NT-1	EGL21-NT-3	EGL17-NT-2	
DATE SAMPLED:	Aug 14/09	Aug 16/09	Aug 11/09	Aug 11/09	REPORTING LIMIT
CANTEST ID:	909050229	909050230	909050232	909050233	
>2.00 mm	33.25	19.80	17.10	48.57	-
<2.00 mm & >0.053 mm	8.02	30.28	15.94	31.10	-
<0.053 mm & >0.002 mm	37.40	42.75	56.59	17.79	-
<0.002 mm	21.33	7.16	10.37	2.54	-

Results expressed as percent, on a weight basis (%)

REPORTED TO: Stantec

REPORT DATE: October 7, 2009

GROUP NUMBER: 100905040



Percent Retained on Sieves - % By Weight in Soil

CLIENT SAMPLE IDENTIFICATION:	EGL8-NT-2	EGL41-NT-2	EGL10-MT-2	EGL21-NT-4	
DATE SAMPLED:	Aug 16/09	Aug 16/09	Aug 16/09	Aug 11/09	
CANTEST ID:	909050234	909050235	909050236	909050237	REPORTING LIMIT
>2.00 mm	40.65	4.63	35.77	14.43	-
<2.00 mm & >0.053 mm	35.30	25.62	24.98	42.53	-
<0.053 mm & >0.002 mm	20.37	60.18	33.18	37.93	-
<0.002 mm	3.68	9.57	6.08	5.11	-

Results expressed as percent, on a weight basis (%)

REPORTED TO: Stantec
REPORT DATE: October 7, 2009
GROUP NUMBER: 100905040



Percent Retained on Sieves - % By Weight in Soil

CLIENT SAMPLE IDENTIFICATION:	EGL50-NT-1	EGL208-NT-2	EGL21-NT-1	EGL1-MT-3	
DATE SAMPLED:	Aug 15/09	Aug 15/09	Aug 11/09	Aug 14/09	
CANTEST ID:	909050238	909050239	909050240	909050241	REPORTING LIMIT
>2.00 mm	18.18	22.55	53.14	63.70	-
<2.00 mm & >0.053 mm	19.91	21.10	12.64	16.14	-
<0.053 mm & >0.002 mm	37.99	45.48	26.70	14.78	-
<0.002 mm	23.93	10.87	7.52	5.38	-

Results expressed as percent, on a weight basis (%)

REPORTED TO: Stantec
REPORT DATE: October 7, 2009
GROUP NUMBER: 100905040



Percent Retained on Sieves - % By Weight in Soil

CLIENT SAMPLE IDENTIFICATION:	EGL208-NT-3	EGL50-NT-2	EGL21-NT-2	EGL208-NT-1	
DATE SAMPLED:	Aug 15/09	Aug 15/09	Aug 11/09	Aug 15/09	REPORTING LIMIT
CANTEST ID:	909050242	909050243	909050244	909050245	
>2.00 mm	64.42	26.37	9.66	2.38	-
<2.00 mm & >0.053 mm	13.05	42.20	25.78	14.50	-
<0.053 mm & >0.002 mm	18.54	24.79	54.53	65.33	-
<0.002 mm	3.98	6.65	10.03	17.79	-

Results expressed as percent, on a weight basis (%)

REPORTED TO: Stantec
REPORT DATE: October 7, 2009
GROUP NUMBER: 100905040



Percent Retained on Sieves - % By Weight in Soil

CLIENT SAMPLE IDENTIFICATION:	EGL41-NT-1 B	EGL4-NT-2B	EGL4-NT-1?	
DATE SAMPLED:	Aug 16/09	Aug 12/09	Aug 12/09	
CANTEST ID:	909050246	909050247	909050248	REPORTING LIMIT
>2.00 mm	19.07	52.95	30.45	-
<2.00 mm & >0.053 mm	29.63	31.06	33.97	-
<0.053 mm & >0.002 mm	44.26	11.83	25.36	-
<0.002 mm	7.04	4.16	10.22	-

Results expressed as percent, on a weight basis (%)

REPORTED TO: Stantec
REPORT DATE: October 7, 2009
GROUP NUMBER: 100905040



%Sand, %Silt and %Clay in Soil

CLIENT SAMPLE IDENTIFICATION:	EGL17-NT-1	EGL8-NT-1	EGL4-NT-2	EGL8-NT-3		
DATE SAMPLED:	Aug 11/09	Aug 16/09	Aug 12/09	Aug 16/09		
CANTEST ID:	909050225	909050226	909050227	909050228	REPORTING LIMIT	UNITS
CSSC Textural Category	SIL	SIL	SL	SL	-	-
%Sand <2.00 mm & >0.053 mm	34.18	19.98	67.39	56.19	-	%
%Silt <0.053 mm & >0.002 mm	53.07	54.92	23.53	37.43	-	%
%Clay <0.002 mm	12.75	25.10	9.08	6.38	-	%

- = text or without units

% = percent, on a weight basis

REPORTED TO: Stantec
REPORT DATE: October 7, 2009
GROUP NUMBER: 100905040



%Sand, %Silt and %Clay in Soil

CLIENT SAMPLE IDENTIFICATION:	EGL1-MT-2	EGL41-NT-1	EGL21-NT-3	EGL17-NT-2		
DATE SAMPLED:	Aug 14/09	Aug 16/09	Aug 11/09	Aug 11/09		
CANTEST ID:	909050229	909050230	909050232	909050233	REPORTING LIMIT	UNITS
CSSC Textural Category	SICL	SIL	SIL	SL	-	-
%Sand <2.00 mm & >0.053 mm	12.01	37.76	19.23	60.47	-	%
%Silt <0.053 mm & >0.002 mm	56.03	53.31	68.26	34.60	-	%
%Clay <0.002 mm	31.96	8.93	12.51	4.93	-	%

- = text or without units

% = percent, on a weight basis

REPORTED TO: Stantec
REPORT DATE: October 7, 2009
GROUP NUMBER: 100905040



%Sand, %Silt and %Clay in Soil

CLIENT SAMPLE IDENTIFICATION:	EGL8-NT-2	EGL41-NT-2	EGL10-MT-2	EGL21-NT-4		
DATE SAMPLED:	Aug 16/09	Aug 16/09	Aug 16/09	Aug 11/09		
CANTEST ID:	909050234	909050235	909050236	909050237	REPORTING LIMIT	UNITS
CSSC Textural Category	SL	SIL	SIL	SL	-	-
%Sand <2.00 mm & >0.053 mm	59.48	26.86	38.89	49.71	-	%
%Silt <0.053 mm & >0.002 mm	34.32	63.10	51.65	44.33	-	%
%Clay <0.002 mm	6.21	10.04	9.46	5.97	-	%

- = text or without units

% = percent, on a weight basis

REPORTED TO: Stantec
REPORT DATE: October 7, 2009
GROUP NUMBER: 100905040



%Sand, %Silt and %Clay in Soil

CLIENT SAMPLE IDENTIFICATION:	EGL50-NT-1	EGL208-NT-2	EGL21-NT-1	EGL1-MT-3	REPORTING LIMIT	UNITS
DATE SAMPLED:	Aug 15/09	Aug 15/09	Aug 11/09	Aug 14/09		
CANTEST ID:	909050238	909050239	909050240	909050241		
CSSC Textural Category	CL	SIL	SIL	L	-	-
%Sand <2.00 mm & >0.053 mm	24.33	27.24	26.97	44.45	-	%
%Silt <0.053 mm & >0.002 mm	46.42	58.72	56.97	40.73	-	%
%Clay <0.002 mm	29.24	14.04	16.06	14.83	-	%

- = text or without units

% = percent, on a weight basis

REPORTED TO: Stantec
REPORT DATE: October 7, 2009
GROUP NUMBER: 100905040



%Sand, %Silt and %Clay in Soil

CLIENT SAMPLE IDENTIFICATION:	EGL208-NT-3	EGL50-NT-2	EGL21-NT-2	EGL208-NT-1	REPORTING LIMIT	UNITS
DATE SAMPLED:	Aug 15/09	Aug 15/09	Aug 11/09	Aug 15/09		
CANTEST ID:	909050242	909050243	909050244	909050245		
CSSC Textural Category	SIL	SL	SIL	SIL	-	-
%Sand <2.00 mm & >0.053 mm	36.69	57.31	28.54	14.86	-	%
%Silt <0.053 mm & >0.002 mm	52.12	33.66	60.36	66.92	-	%
%Clay <0.002 mm	11.19	9.03	11.10	18.22	-	%

- = text or without units

% = percent, on a weight basis

REPORTED TO: Stantec
REPORT DATE: October 7, 2009
GROUP NUMBER: 100905040



%Sand, %Silt and %Clay in Soil

CLIENT SAMPLE IDENTIFICATION:	EGL41-NT-1 B	EGL4-NT-2B	EGL4-NT-1?	REPORTING LIMIT	UNITS
DATE SAMPLED:	Aug 16/09	Aug 12/09	Aug 12/09		
CANTEST ID:	909050246	909050247	909050248		
CSSC Textural Category	SIL	SL	L	-	-
%Sand <2.00 mm & >0.053 mm	36.61	66.02	48.84	-	%
%Silt <0.053 mm & >0.002 mm	54.69	25.14	36.46	-	%
%Clay <0.002 mm	8.70	8.84	14.70	-	%

- = text or without units

% = percent, on a weight basis

REPORTED TO: Stantec

REPORT DATE: October 7, 2009

GROUP NUMBER: 100905040



Metals Analysis in Tissue

CLIENT SAMPLE IDENTIFICATION:		EGL8-Salix	EGL208-Salix	EGL41-Grass	EGL10-Salix	REPORTING LIMIT
DATE SAMPLED:		Aug 16/09	Aug 15/09	Aug 16/09	Aug 16/09	
CANTEST ID:		909050199	909050210	909050211	909050212	
Aluminum	Al	5.6	13.5	8.4	12.7	0.5
Antimony	Sb	<	<	0.1	<	0.1
Arsenic	As	0.1	<	0.1	0.2	0.1
Barium	Ba	3.1	9.4	11.9	14.5	0.1
Beryllium	Be	<	<	<	<	0.02
Boron	B	2	<	<	3	2
Cadmium	Cd	0.52	0.39	<	1.46	0.02
Calcium	Ca	2790	2000	950	2160	1
Chromium	Cr	<	<	<	<	0.1
Cobalt	Co	0.1	1	<	1	0.1
Copper	Cu	0.9	1	1.6	1.4	0.1
Iron	Fe	22	28	12	42	5
Lead	Pb	<	<	0.1	<	0.1
Magnesium	Mg	1190	405	485	903	0.5
Manganese	Mn	92.5	223	84.6	418	0.1
Mercury	Hg	<	<	<	<	0.01
Molybdenum	Mo	<	<	<	0.1	0.1
Nickel	Ni	0.6	1.3	0.5	1	0.1
Phosphorus	P	220	996	200	485	0.5
Potassium	K	1960	5600	3000	2560	1
Selenium	Se	<	<	<	<	0.2
Silicon	Si	20	28	331	26	10
Silver	Ag	<	<	<	<	0.01
Sodium	Na	4	2	7	13	1
Strontium	Sr	16.6	15	5.11	18.4	0.05
Tellurium	Te	<	<	<	<	0.1
Thallium	Tl	<	<	<	<	0.02
Tin	Sn	<	<	0.1	<	0.1
Titanium	Ti	0.4	0.8	0.6	0.5	0.3
Uranium	U	<	<	<	<	0.04
Vanadium	V	<	<	<	<	0.5
Zinc	Zn	34.9	33.4	16.6	78.9	0.5
Zirconium	Zr	<	<	<	<	3

Results expressed as micrograms per gram, dry basis (µg/g)

< = Less than reporting limit

REPORTED TO: Stantec

REPORT DATE: October 7, 2009

GROUP NUMBER: 100905040



Metals Analysis in Tissue

CLIENT SAMPLE IDENTIFICATION:		EGL10-Grass	EGL21-Fest	EGL4-Grass	EGL25-Grass	REPORTING LIMIT
DATE SAMPLED:		Aug 16/09	Aug 11/09	Aug 12/09	Aug 15/09	
CANTEST ID:		909050213	909050214	909050215	909050216	
Aluminum	Al	14.3	11.3	3.7	4	0.5
Antimony	Sb	0.2	<	0.1	<	0.1
Arsenic	As	0.4	<	0.2	0.1	0.1
Barium	Ba	24.4	12.6	15	11.2	0.1
Beryllium	Be	<	<	<	<	0.02
Boron	B	<	<	<	<	2
Cadmium	Cd	0.04	<	0.03	<	0.02
Calcium	Ca	1090	752	1230	1110	1
Chromium	Cr	<	<	<	<	0.1
Cobalt	Co	<	<	<	<	0.1
Copper	Cu	1.7	0.7	1.1	1.2	0.1
Iron	Fe	30	15	9	14	5
Lead	Pb	<	<	0.2	0.1	0.1
Magnesium	Mg	463	341	258	392	0.5
Manganese	Mn	144	459	92.8	128	0.1
Mercury	Hg	<	<	<	<	0.01
Molybdenum	Mo	0.1	<	<	0.2	0.1
Nickel	Ni	0.4	0.1	0.2	0.5	0.1
Phosphorus	P	268	384	225	302	0.5
Potassium	K	3650	4640	5040	3270	1
Selenium	Se	<	<	<	<	0.2
Silicon	Si	242	384	153	329	10
Silver	Ag	<	<	0.01	<	0.01
Sodium	Na	10	3	5	6	1
Strontium	Sr	9.72	4.88	7.39	6.2	0.05
Tellurium	Te	<	<	<	<	0.1
Thallium	Tl	<	<	<	<	0.02
Tin	Sn	<	<	0.1	<	0.1
Titanium	Ti	0.7	0.5	0.3	0.4	0.3
Uranium	U	<	<	<	<	0.04
Vanadium	V	<	<	<	<	0.5
Zinc	Zn	15.6	7.8	19.5	16.3	0.5
Zirconium	Zr	<	<	<	<	3

Results expressed as micrograms per gram, dry basis (µg/g)
 < = Less than reporting limit

REPORTED TO: Stantec

REPORT DATE: October 7, 2009

GROUP NUMBER: 100905040



Metals Analysis in Tissue

CLIENT SAMPLE IDENTIFICATION:		EGL208-Gra ss	EGL25-SP	EGL21-Sali x	EGL8-Carex	
DATE SAMPLED:		Aug 15/09	Aug 15/09	Aug 11/09	Aug 16/09	REPORTING LIMIT
CANTEST ID:		909050217	909050218	909050219	909050220	
Aluminum	Al	5.7	5.2	43.2	9.4	0.5
Antimony	Sb	0.2	<	<	0.3	0.1
Arsenic	As	<	<	<	0.1	0.1
Barium	Ba	10.7	14.5	18.1	8.3	0.1
Beryllium	Be	<	<	<	<	0.02
Boron	B	<	<	<	<	2
Cadmium	Cd	<	1.23	0.26	0.03	0.02
Calcium	Ca	512	4840	2030	1380	1
Chromium	Cr	<	<	<	<	0.1
Cobalt	Co	<	0.5	1.1	<	0.1
Copper	Cu	0.7	0.9	2	1.1	0.1
Iron	Fe	17	26	32	29	5
Lead	Pb	<	<	<	<	0.1
Magnesium	Mg	253	1230	649	559	0.5
Manganese	Mn	280	316	222	162	0.1
Mercury	Hg	<	<	<	<	0.01
Molybdenum	Mo	<	0.1	<	0.1	0.1
Nickel	Ni	0.1	1.5	1.5	0.7	0.1
Phosphorus	P	322	825	728	270	0.5
Potassium	K	4030	3280	3210	3590	1
Selenium	Se	<	<	<	<	0.2
Silicon	Si	306	29	26	293	10
Silver	Ag	<	<	<	<	0.01
Sodium	Na	11	6	1	7	1
Strontium	Sr	2.92	26.8	25.7	7.81	0.05
Tellurium	Te	<	<	<	<	0.1
Thallium	Tl	<	<	<	<	0.02
Tin	Sn	<	<	<	<	0.1
Titanium	Ti	0.5	0.8	0.6	0.6	0.3
Uranium	U	<	<	<	<	0.04
Vanadium	V	<	<	<	<	0.5
Zinc	Zn	6.2	50	17.9	21.9	0.5
Zirconium	Zr	<	<	<	<	3

Results expressed as micrograms per gram, dry basis (µg/g)

< = Less than reporting limit

REPORTED TO: Stantec

REPORT DATE: October 7, 2009

GROUP NUMBER: 100905040



Metals Analysis in Tissue

CLIENT SAMPLE IDENTIFICATION:		EGL1-Salix	EGL41-SP	EGL50-Salix	EGL4-Salix	
DATE SAMPLED:		Aug 14/09	Aug 16/09	Aug 15/09	Aug 12/09	REPORTING LIMIT
CANTEST ID:		909050221	909050222	909050223	909050224	
Aluminum	Al	7.3	10.8	9.3	5	0.5
Antimony	Sb	<	<	<	<	0.1
Arsenic	As	0.2	0.2	<	0.1	0.1
Barium	Ba	11.4	8.5	23.7	7.6	0.1
Beryllium	Be	<	<	<	<	0.02
Boron	B	3	2	<	3	2
Cadmium	Cd	2.67	0.81	0.33	3	0.02
Calcium	Ca	4000	2420	3210	2940	1
Chromium	Cr	<	<	<	<	0.1
Cobalt	Co	0.1	0.6	0.2	0.3	0.1
Copper	Cu	1.1	1.1	0.9	1.3	0.1
Iron	Fe	24	35	13	19	5
Lead	Pb	<	<	<	<	0.1
Magnesium	Mg	804	996	873	425	0.5
Manganese	Mn	121	237	65.5	240	0.1
Mercury	Hg	<	<	<	<	0.01
Molybdenum	Mo	<	<	0.4	<	0.1
Nickel	Ni	0.4	1.1	0.7	0.9	0.1
Phosphorus	P	227	336	349	746	0.5
Potassium	K	3210	2180	4320	5860	1
Selenium	Se	<	<	<	<	0.2
Silicon	Si	27	26	21	18	10
Silver	Ag	<	<	<	<	0.01
Sodium	Na	7	6	4	5	1
Strontium	Sr	16.9	13.3	22	15.4	0.05
Tellurium	Te	<	<	<	<	0.1
Thallium	Tl	<	<	<	<	0.02
Tin	Sn	<	<	<	<	0.1
Titanium	Ti	0.6	0.7	0.4	0.5	0.3
Uranium	U	<	<	<	<	0.04
Vanadium	V	<	<	<	<	0.5
Zinc	Zn	98.8	46.7	15.2	117	0.5
Zirconium	Zr	<	<	<	<	3

Results expressed as micrograms per gram, dry basis (µg/g)
 < = Less than reporting limit

REPORTED TO: Stantec
REPORT DATE: October 7, 2009
GROUP NUMBER: 100905040



Batch Quality Control for Percent Passing on Sieves and Pipettes in Soil (QC# 127662)

Parameter	Duplicate (R.P.D.) 909050225	Duplicate Limits	Duplicate (R.P.D.) 909050236	Duplicate Limits	Duplicate (R.P.D.) 909050247	Duplicate Limits
Pipette Size 0.053 mm	0.5	20	0.3	20	2	20
Pipette Size 0.002 mm	4.1	20	0.5	20	2.7	20
Sieve 0.250mm, 250um, #60	1.2	20	0.6	20	1.4	20
Sieve 0.125mm, 125um, #120	1.8	20	0.6	20	1.4	20

PCTP = percent passing
 R.P.D. = Relative Percent Difference

REPORTED TO: Stantec
REPORT DATE: October 7, 2009
GROUP NUMBER: 100905040



Batch Quality Control for Percent Passing on Sieves and Pipettes in Soil (QC# 127662)

Parameter	Soil Pipette Verif % <53um (% Recovery) 909050225	Soil Pipette Verif % <53um Limits	Soil Pipette Verif % <53um (% Recovery) 909050227	Soil Pipette Verif % <53um Limits	Soil Pipette Verif % <53um (% Recovery) 909050228	Soil Pipette Verif % <53um Limits
Pipette Size 0.053 mm	100	95 - 105	100	95 - 105	100	95 - 105

PCTP = percent passing

REPORTED TO: Stantec

REPORT DATE: October 7, 2009

GROUP NUMBER: 100905040



Batch Quality Control for Percent Passing on Sieves and Pipettes in Soil (QC# 127662)

Parameter	Soil Pipette Verif % <53um (% Recovery) 909050229	Soil Pipette Verif % <53um Limits	Soil Pipette Verif % <53um (% Recovery) 909050230	Soil Pipette Verif % <53um Limits	Soil Pipette Verif % <53um (% Recovery) 909050232	Soil Pipette Verif % <53um Limits
Pipette Size 0.053 mm	100	95 - 105	99	95 - 105	99	95 - 105

PCTP = percent passing

REPORTED TO: Stantec
REPORT DATE: October 7, 2009
GROUP NUMBER: 100905040



Batch Quality Control for Percent Passing on Sieves and Pipettes in Soil (QC# 127662)

Parameter	Soil Pipette Verif % < 53um (% Recovery) 909050233	Soil Pipette Verif % < 53um Limits	Soil Pipette Verif % < 53um (% Recovery) 909050234	Soil Pipette Verif % < 53um Limits	Soil Pipette Verif % < 53um (% Recovery) 909050235	Soil Pipette Verif % < 53um Limits
Pipette Size 0.053 mm	100	95 - 105	100	95 - 105	99	95 - 105

PCTP = percent passing

REPORTED TO: Stantec

REPORT DATE: October 7, 2009

GROUP NUMBER: 100905040



Batch Quality Control for Percent Passing on Sieves and Pipettes in Soil (QC# 127662)

Parameter	Soil Pipette Verif % < 53um (% Recovery) 909050236	Soil Pipette Verif % < 53um Limits	Soil Pipette Verif % < 53um (% Recovery) 909050237	Soil Pipette Verif % < 53um Limits	Soil Pipette Verif % < 53um (% Recovery) 909050239	Soil Pipette Verif % < 53um Limits
Pipette Size 0.053 mm	100	95 - 105	99	95 - 105	99	95 - 105

PCTP = percent passing

REPORTED TO: Stantec

REPORT DATE: October 7, 2009

GROUP NUMBER: 100905040



Batch Quality Control for Percent Passing on Sieves and Pipettes in Soil (QC# 127662)

Parameter	Soil Pipette Verif % <53um (% Recovery) 909050240	Soil Pipette Verif % <53um Limits	Soil Pipette Verif % <53um (% Recovery) 909050241	Soil Pipette Verif % <53um Limits	Soil Pipette Verif % <53um (% Recovery) 909050242	Soil Pipette Verif % <53um Limits
Pipette Size 0.053 mm	97	95 - 105	100	95 - 105	100	95 - 105

PCTP = percent passing

REPORTED TO: Stantec

REPORT DATE: October 7, 2009

GROUP NUMBER: 100905040



Batch Quality Control for Percent Passing on Sieves and Pipettes in Soil (QC# 127662)

Parameter	Soil Pipette Verif % <53um (% Recovery) 909050243	Soil Pipette Verif % <53um Limits	Soil Pipette Verif % <53um (% Recovery) 909050244	Soil Pipette Verif % <53um Limits	Soil Pipette Verif % <53um (% Recovery) 909050245	Soil Pipette Verif % <53um Limits
Pipette Size 0.053 mm	100	95 - 105	100	95 - 105	97	95 - 105

PCTP = percent passing

REPORTED TO: Stantec

REPORT DATE: October 7, 2009

GROUP NUMBER: 100905040



Batch Quality Control for Percent Passing on Sieves and Pipettes in Soil (QC# 127662)

Parameter	Soil Pipette Verif % <53um (% Recovery) 909050246	Soil Pipette Verif % <53um Limits	Soil Pipette Verif % <53um (% Recovery) 909050247	Soil Pipette Verif % <53um Limits	Soil Pipette Verif % <53um (% Recovery) 909050248	Soil Pipette Verif % <53um Limits
Pipette Size 0.053 mm	100	95 - 105	100	95 - 105	99	95 - 105

PCTP = percent passing

REPORTED TO: Stantec

REPORT DATE: October 7, 2009

GROUP NUMBER: 100905040



Batch Quality Control for Strong Acid Soluble Metals in Soil (QC# 126444)

Parameter	Blank (ug/g)	Blank Limits	CAN MET Till-1 (% Recovery)	CAN MET Till-1 Limits	Duplicate (R.P.D.) 909040165	Duplicate Limits
Antimony Sb	< 0.1	10	-	-	-	-
Arsenic As	-	-	-	-	5.8	30
Barium Ba	< 1	1	95	74 - 120	6.1	30
Beryllium Be	< 1	1	17	10.4 - 30.4	NC	30
Cadmium Cd	< 0.2	0.2	61	3 - 197	PASS	30
Chromium Cr	< 2	0.2	90	73 - 113	11.5	30
Cobalt Co	< 1	1	100	70 - 142	8.7	30
Copper Cu	< 1	0.2	90	75 - 113	4.7	30
Lead Pb	< 0.2	5	123	65 - 171	21.4	30
Mercury Hg	< 0.01	0.001	93	33 - 174	3.4	30
Molybdenum Mo	< 0.1	4	35	5 - 90	6.3	30
Nickel Ni	< 2	2	94	49 - 149	9	30
Selenium Se	< 0.2	0.2	-	-	PASS	30
Silver Ag	-	-	-	-	PASS	30
Thallium Tl	< 0.1	0.001	-	-	NC	30
Tin Sn	< 5	5	-	-	NC	30
Vanadium V	< 1	1	110	69 - 152	6.6	30
Zinc Zn	< 1	1	86	79 - 114	11.9	30
Aluminum Al	< 10	10	-	-	3	30
Boron B	< 1	1	-	-	14.7	30
Calcium Ca	< 1	1	73	51 - 106	7.1	30
Iron Fe	< 2	2	-	-	5.6	30
Magnesium Mg	< 1	1	-	-	2.7	30
Manganese Mn	< 1	1	-	-	3.9	30
Phosphorus P	< 20	20	-	-	11	30
Potassium K	< 10	10	-	-	9.2	30
Sodium Na	< 5	5	-	-	6.4	30
Strontium Sr	< 1	1	-	-	12.7	30
Titanium Ti	< 1	1	-	-	14.1	30
Zirconium Zr	< 1	1	-	-	0	30

ug/g = micrograms per gram

R.P.D. = Relative Percent Difference

PASS = Duplicate sample results were in the range of one to five times the detection limit. R.P.D. calculation is not applicable in this range. Acceptance criteria is a maximum difference between the duplicates equivalent to the value of the detection limit.

NC = Not Calculated. Duplicate sample results were less than the detection limit. Relative Percent Difference calculation is not defined for analyte levels of less than detection limit.

REPORTED TO: Stantec

REPORT DATE: October 7, 2009

GROUP NUMBER: 100905040



Batch Quality Control for Strong Acid Soluble Metals in Soil (QC# 126444)

Parameter		Duplicate (R.P.D.) 909040176	Duplicate Limits	Duplicate (R.P.D.) 909040201	Duplicate Limits	Duplicate (R.P.D.) 909040247	Duplicate Limits
Arsenic	As	11.4	30	8.7	30	-	-
Barium	Ba	6.4	30	9.8	30	-	-
Beryllium	Be	NC	30	NC	30	-	-
Cadmium	Cd	NC	30	NC	30	-	-
Chromium	Cr	18.5	30	11	30	-	-
Cobalt	Co	6.1	30	6.5	30	-	-
Copper	Cu	0	30	8.3	30	-	-
Lead	Pb	0.7	30	9	30	-	-
Mercury	Hg	0	30	0	30	4.4	30
Molybdenum	Mo	PASS	30	0	30	-	-
Nickel	Ni	11.5	30	9.8	30	-	-
Selenium	Se	PASS	30	NC	30	-	-
Silver	Ag	NC	30	NC	30	-	-
Thallium	Tl	NC	30	NC	30	-	-
Tin	Sn	NC	30	NC	30	-	-
Vanadium	V	4.1	30	9.2	30	-	-
Zinc	Zn	1.4	30	8	30	-	-
Aluminum	Al	2.8	30	10.8	30	-	-
Boron	B	11.8	30	PASS	30	-	-
Calcium	Ca	3.2	30	12.3	30	-	-
Iron	Fe	2.5	30	8.7	30	-	-
Magnesium	Mg	5.2	30	6.7	30	-	-
Manganese	Mn	5.6	30	8.6	30	-	-
Phosphorus	P	6	30	6.8	30	-	-
Potassium	K	4.5	30	12.2	30	-	-
Sodium	Na	7.4	30	13.6	30	-	-
Strontium	Sr	7.4	30	12.3	30	-	-
Titanium	Ti	2.3	30	20.4	30	-	-
Zirconium	Zr	13.3	30	15.4	30	-	-

ug/g = micrograms per gram

R.P.D. = Relative Percent Difference

PASS = Duplicate sample results were in the range of one to five times the detection limit. R.P.D. calculation is not applicable in this range. Acceptance criteria is a maximum difference between the duplicates equivalent to the value of the detection limit.

NC = Not Calculated. Duplicate sample results were less than the detection limit. Relative Percent Difference calculation is not defined for analyte levels of less than detection limit.

REPORTED TO: Stantec

REPORT DATE: October 7, 2009

GROUP NUMBER: 100905040



Batch Quality Control for Strong Acid Soluble Metals in Soil (QC# 126444)

Parameter		Duplicate (R.P.D.) 909040389	Duplicate Limits	Duplicate (R.P.D.) 909050240	Duplicate Limits
Arsenic	As	-	-	1.9	30
Barium	Ba	-	-	2.6	30
Beryllium	Be	-	-	NC	30
Cadmium	Cd	-	-	NC	30
Chromium	Cr	-	-	11.8	30
Cobalt	Co	-	-	PASS	30
Copper	Cu	-	-	0	30
Lead	Pb	-	-	3.5	30
Mercury	Hg	0	30	0	30
Molybdenum	Mo	-	-	0	30
Nickel	Ni	-	-	PASS	30
Selenium	Se	-	-	PASS	30
Silver	Ag	-	-	PASS	30
Thallium	Tl	-	-	PASS	30
Tin	Sn	-	-	NC	30
Vanadium	V	-	-	3.3	30
Zinc	Zn	-	-	0	30
Aluminum	Al	-	-	2	30
Boron	B	-	-	NC	30
Calcium	Ca	-	-	2.3	30
Iron	Fe	-	-	0.6	30
Magnesium	Mg	-	-	9.5	30
Manganese	Mn	-	-	4.9	30
Phosphorus	P	-	-	0.3	30
Potassium	K	-	-	8	30
Sodium	Na	-	-	0	30
Strontium	Sr	-	-	0	30
Titanium	Ti	-	-	10	30
Zirconium	Zr	-	-	NC	30

ug/g = micrograms per gram

R.P.D. = Relative Percent Difference

PASS = Duplicate sample results were in the range of one to five times the detection limit. R.P.D. calculation is not applicable in this range. Acceptance criteria is a maximum difference between the duplicates equivalent to the value of the detection limit.

NC = Not Calculated. Duplicate sample results were less than the detection limit. Relative Percent Difference calculation is not defined for analyte levels of less than detection limit.

REPORTED TO: Stantec

REPORT DATE: October 7, 2009

GROUP NUMBER: 100905040



Batch Quality Control for Dissolved Metals Analysis in Tissue (QC# 126868)

Parameter		Blank (ug/g)	Blank Limits	Duplicate (R.P.D.) 909050199	Duplicate Limits	Duplicate (R.P.D.) 909050219	Duplicate Limits
Aluminum	Al	< 0.5	0.2	14.3	20	12	20
Antimony	Sb	< 0.1	0.001	NC	20	NC	20
Arsenic	As	< 0.1	0.002	PASS	20	NC	20
Barium	Ba	< 0.1	0.001	0	20	8.8	20
Beryllium	Be	< 0.02	0.001	NC	20	NC	20
Boron	B	< 2	0.02	PASS	20	NC	20
Cadmium	Cd	< 0.02	0.0004	1.9	20	3.9	20
Calcium	Ca	< 1	0.3	2.2	20	7.9	20
Chromium	Cr	< 0.1	0.001	NC	20	NC	20
Cobalt	Co	< 0.1	0.001	PASS	20	8.7	20
Copper	Cu	< 0.1	0.001	0	20	PASS	20
Iron	Fe	< 5	0.05	PASS	20	18.8	20
Lead	Pb	< 0.1	0.002	NC	20	NC	20
Magnesium	Mg	< 0.5	0.2	5	20	1.8	20
Manganese	Mn	< 0.1	0.01	2.3	20	8.5	20
Mercury	Hg	< 0.01	0.01	NC	20	NC	20
Molybdenum	Mo	< 0.1	0.002	NC	20	NC	20
Nickel	Ni	< 0.1	0.003	0	20	13.3	20
Phosphorus	P	< 0.5	0.1	2.7	20	10.4	20
Potassium	K	< 1	0.3	3.6	20	4.7	20
Selenium	Se	< 0.2	0.004	NC	20	NC	20
Silver	Ag	< 0.01	0.001	NC	20	NC	20
Sodium	Na	< 1	0.5	PASS	20	PASS	20
Strontium	Sr	< 0.05	0.002	0	20	2.3	20
Tellurium	Te	< 0.1	0.002	NC	20	NC	20
Thallium	Tl	< 0.02	0.002	NC	20	NC	20
Tin	Sn	< 0.1	0.01	NC	20	NC	20
Titanium	Ti	< 0.3	0.01	PASS	20	PASS	20
Uranium	U	< 0.04	0.002	NC	20	NC	20
Vanadium	V	< 0.5	0.002	NC	20	NC	20
Zinc	Zn	< 0.5	0.04	2	20	8.9	20
Zirconium	Zr	< 3	0.04	NC	20	NC	20

ug/g = micrograms per gram, dry basis

R.P.D. = Relative Percent Difference

PASS = Duplicate sample results were in the range of one to five times the detection limit. R.P.D. calculation is not applicable in this range. Acceptance criteria is a maximum difference between the duplicates equivalent to the value of the detection limit.

NC = Not Calculated. Duplicate sample results were less than the detection limit. Relative Percent Difference calculation is not defined for analyte levels of less than detection limit.

REPORTED TO: Stantec

REPORT DATE: October 7, 2009

GROUP NUMBER: 100905040



Batch Quality Control for Dissolved Metals Analysis in Tissue (QC# 126868)

Parameter		NIST1570a Spinach Leaves (% Recovery)	NIST1570a Spinach Leaves Limits	NIST1573a Tomato Leaves (% Recovery)	NIST1573a Tomato Leaves Limits
Aluminum	Al	36	17 - 93	31	7 - 91
Arsenic	As	-	-	179	80 - 283
Boron	B	101	63 - 143	96	62 - 142
Cadmium	Cd	84	39 - 114	82	30 - 124
Calcium	Ca	88	60 - 120	93	60 - 120
Chromium	Cr	-	-	50	28 - 97
Cobalt	Co	103	50 - 150	105	50 - 150
Copper	Cu	90	62 - 124	81	59 - 125
Iron	Fe	-	-	78	52 - 167
Manganese	Mn	92	53 - 134	89	62 - 131
Mercury	Hg	97	59 - 119	94	88.24 - 111.8
Nickel	Ni	84	58 - 126	63	28 - 143
Phosphorus	P	89	60 - 120	89	60 - 120
Potassium	K	96	60 - 120	85	60 - 120
Sodium	Na	97	60 - 120	88	60 - 120
Strontium	Sr	108	60 - 120	-	-
Vanadium	V	70	50 - 150	55	50 - 150
Zinc	Zn	81	48 - 110	77	49 - 109

ug/g = micrograms per gram, dry basis

REPORTED TO: Stantec

REPORT DATE: October 7, 2009

GROUP NUMBER: 100905040



Instrument Quality Control for the Mercury Monitor (QC# 246428)

QC Type: Calibration Verification

Parameter		% Recovery	Limits
Mercury	Hg	108	90 - 110

REPORTED TO: Stantec
REPORT DATE: October 7, 2009
GROUP NUMBER: 100905040



Batch Quality Control Frequency Summary

SALM in Soil Digestion (Batch# 126444)

QC Type	No. Samples
CAN MET Till-1	1
Blank	3
Duplicate	6

Metals Plant Tissue Digestion (Batch# 126868)

QC Type	No. Samples
NIST1570a Spinach Leaves	1
NIST1573a Tomato Leaves	1
Blank	2
Duplicate	2

Particle Size Prep - Winnipeg (Batch# 127662)

QC Type	No. Samples
Duplicate	3
Soil Pipette Verif % < 53um	21

SALM Metals in Soil Sieve (Batch# 126426)

QC Type	No. Samples
Batch Size	67

SALM in Soil Digestion (Batch# 126444)

QC Type	No. Samples
Batch Size	67

(Continued on next page)

REPORTED TO: Stantec
REPORT DATE: October 7, 2009
GROUP NUMBER: 100905040



Batch Quality Control Frequency Summary

Metals Plant Tissue Digestion (Batch# 126868)

QC Type	No. Samples
Batch Size	16

Particle Size Prep - Winnipeg (Batch# 127662)

QC Type	No. Samples
Batch Size	23



APPENDIX D

Professional Geoscientist Sign-off

Memo



Stantec

To:	Natalie Tashe	From:	Anne Sommerville, Shirley McCuaig and Dennis O'Leary
	Sidney		Edmonton
File:	1053550	Date:	Nov. 24, 2009

Reference: Dublin Gulch Geohazard Assessment

A geohazard assessment of the Dublin Gulch area has been completed using HD-MAPP. HD-MAPP allows surficial geologists to zoom down from original air photo scales such as 1:30,000 to scales as large as 1:2,000, thereby enabling the geologist to identify and delineate features relevant to slope stability. The aim of the assessment was to identify any areas which are currently unstable, areas which may have been unstable in the past but are now stable, and any areas that may be potentially unstable. Although the assessment concentrated on the six heap leach options, the entire regional study area (RSA) was reviewed.

In general, the area is relatively stable, with shallow surficial deposits and bedrock exposed at the surface near the tops of the hills. During the last glaciation, the Dublin Gulch area was unaffected by glacial ice. It is thought that the last time this area was glaciated was sometime between 80,000 and 300,000 years ago and it has been subjected to landscape modification processes ever since. There is evidence of former cirques in the area, and some of these are still fairly recognizable (in the northwest). However, many cirques have experienced mass movement, with the result that the original cirque is no longer recognizable (typical landslide cloverleaf patterns visible in the landslide headscarps that have been mapped in the east). The large landslides that have modified the cirques appear to be old features, but the oversteepening of the cirques (gulches) by landslides has led to rockslide, debris slide and possibly some rockfall activity that is younger than the larger landslides and is ongoing on the sides of many of the landslides. Smaller landslide scarps within larger ones are thus likely more recent and a few show modern activity. The rockfall/rockslide debris mixes with sediment, vegetation and creek water at the base of some of the larger features, forming debris flows that feed alluvial fans (map unit Ff) in the south. The rockslide gullies are mapped as debris flow to keep things simple, and as they feed the debris flows, it makes sense to do so. It's important to keep in mind that much of the alluvial fan material is likely debris flow material, and although the fans themselves are not considered unstable in the BCTS mapping classification system, they can experience creek flood and more likely debris flow conditions at any time. The alluvial fans and the debris flows feeding them are outside of the local study area [LSA].

One Team. Infinite Solutions.

Reference: Dublin Gulch Geohazard Assessment

Surficial deposits in the area are dominated by colluvium, weathered material (likely weathered bedrock and colluvium) and bedrock. Glacial till and glaciofluvial sediments comprise the older deposits in the valleys, while alluvial fan, fluvial and organic units in the valleys and colluvial deposits on the slopes make up the younger ones.

The colluvium and weathered material in the project area are both moving slowly downslope as a result of natural processes; however, there are some areas, especially on steeper slopes and those landslide areas described above, where mass movement has been identified. These areas are classified as unstable. Potentially unstable areas have been identified where there are moderately steep or steep slopes without evidence of mass movement, or where there are gullies with steep slopes present. Snow avalanches are associated with the steeper entrenched gullies.

The geohazard assessment of the heap leach areas has identified two potential location options. Options 3 and 5 have been identified as the most stable areas with the lowest amount of geohazards. Both areas are relatively flat but they do contain the headwaters of Bawn Boy Gulch (Option 3) and Olive Gulch (Option 5). Option 3 is the preferred location for the heap leach operation as there is a larger area of flatter land within this location and Bawn Boy Gulch is less entrenched. Although Ann Gulch (Option 6) is much closer to the mine site, the southeast facing slope of the gully is moderately steep and any failure of this slope or of the retaining wall that would be required to contain the material could contaminate Dublin Gulch, Haggart Creek and areas downstream of the project area.

The open pit site was also assessed for geohazards as it has been suggested that this slope may have collapsed in the past. Geotechnical and hydrogeological investigations in the open pit area were completed by Knight Piésold Ltd. in 1996. They identified a thin veneer of heavily weathered and decomposed rock. The weathered material is described as cohesionless silty sand to sand-like material, between one and two metres thick and overlying coarser heavily fractured bedrock. The open pit slope is steep and given the texture of the weathered material, Knight Piésold Ltd. (1996) suggest that shallower slopes will be required in this material to maintain the long-term stability of the slope. In addition, at the top of the slope, there is a large northeast-southwest trending normal fault, which dips northwest. There is a possibility of failure along this fault if the toe of the slope to the west and northwest of it is excavated. From a geomorphology perspective, the current open pit slope does not appear to have failed in the past; however, it is suggested that further terrain work be undertaken to determine the surficial material within this area, as well as geotechnical studies to determine the dip of the bedrock layers and associated faults/joints and their susceptibility to failure.

Permafrost was identified in areas northwest and southwest of the open pit site (Knight Piésold Ltd., 1996). The aerial photograph interpretation did not identify any areas with permafrost issues; however, some permafrost features such as solifluction lobes can only be seen on the ground. Further fieldwork is suggested for these areas, in order to

Stantec

November 24, 2009

Natalie Tashe

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Reference: Dublin Gulch Geohazard Assessment

determine if the permafrost would have any bearing on slope stability, or if melting of the permafrost might occur due to infrastructure development.

Reference:

Knight Piésold Ltd. (1996) Dublin Gulch Project. Initial Environmental Evaluation, Volume II, Environmental Setting. Prepared for First Dynasty Mines Ltd.

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APPENDIX E

2009 Terrain and Soil Field Data

SiteNO	Survey Type	Province	Zone	Slope %	Surveyors	Survey Date	Easting	Northing	Elevation	Surf.Stone	Slope Position (site)	Landscape Slope	Slope Length	Horizon Curvature	Vertical Curvature	Land Use	Erosion	Erosion Severity	Seepage Depth Flag	Seepage Depth	Permafrost Depth Flag
EGL63	D	BC	8	35	NT/JS	8/16/2009	459259	7100415	933	<0.01%	U	30 - 45%	100-500	LN	CV	Fo			0		0
EGL216	V	BC	8	30	NT, JS	8/16/2009	458642	7101004	811		T	30 - 45%	50-100	LN	LV	Fo	W	moderate	0		0
EGR94	D	BC	8	55	NT/JS	9/13/2009	462791	7103626	1147	0.1 - 3%	M	45-70%		LN	LN	Fo	W	moderate	0	13	0
EGR93	D	BC	8	60	NT/JS	8/13/2009	462866	7103852	1096	15 - 50%	M	45-70%	100-500	LN	LN	Fo			0		0
EGR92	D	BC	8	25	NT/JS	8/13/2009	462758	7103994	1028	<0.01%	L	15 - 30%	100-500	CC	LN	Fo	W	moderate	0	22	0
EGR69	V	BC	8	2	NT/JS	8/13/2009	462632	7104613	921		L	2 - 5%							0		0
EGL8	D	BC	8	15	NT/JS	8/16/2009	458909	7101065	846	0.01 - 0.1%	L	9 -15%				Fo			0		0
EGL6	V	BC	8	0	NT/JS	8/16/2009	458890	7100898	831			9 -15%				DL	W	moderate	0		0
EGL41	D	BC	8	30	NT/JS	8/16/2009	459759	7100924	925	<0.01%	L			LN	LV	Fo			0	19	0
EGL200	D	BC	8	8	NT/SW	8/11/2009	463530	7101102	0	<0.01%	M	5 - 9%	100-500	LN	LN	SA	W	slight	0		0
EGR96	D	BC	8	25	NT, JS	8/13/2009	462720	7104258	981	<0.01%			100-500	CC	LN	Fo			1	10	1
EGL16	D	BC	8	10	NT/SW	8/11/2009	462792	7102169	1316	15 - 50%	M	9 -15%	100-500	LN	LN	SA	W	slight	0		0
EGR91	D	BC	8	18	NT, JS	8/13/2009	462687	7104425	944		L	15 - 30%		CV	LN	Fo	W	moderate	1		0
EGR79	D	BC	8	0	NT, JS	8/13/2009	464138	7103475	0										0		0
EGR98	V	BC	8	65	NT, JS	8/13/2009	463534	7103399											0		0
EGL15	D	BC	8	27	NT/SW	8/11/2009	462811	7102030	0	3 - 15%	M	15 - 30%	100-500	LN	LN	Fo	W	moderate	0		0
EGL17	D	BC	8	17	NT/SW	8/11/2009	462958	7101937	1329	3 - 15%	L	15 - 30%	25-50	LN	CN	Fo	W	slight	0		0
EGL39	D	BC	8	70	NT, JS	8/14/2009	459731	7101483	0	0.1 - 3%	U	45-70%		LN	LV	Fo			0		0
EGL38	D	BC	8	18	NT, JS	8/14/2009	459691	7101575	954	<0.01%	M	15 - 30%	50-100	LN	LN	Fo	W	slight	0		0
EGL37	D	BC	8	28	NT, JS	8/14/2009	459728	7101841	989	0.01 - 0.1%	M	15 - 30%	100-500	LN	LN	Fo			0		0
EGL36	D	BC	8	18	NT, JS	8/14/2009	459838	7102176	1053	<0.01%	M	9 -15%	100-500	LN	LN	Fo			0		0
EGL207	V	BC	8	80	NT, JS	8/14/2009	460282	7101635	1013	15 - 50%				LN	LN	Fo	W	moderate	0		0
EGL18	D	BC	8	18	NT/SW	8/11/2009	463270	7101529	1356	0.1 - 3%	M	15 - 30%	50-100	LN	LN	Fo	W	slight	0		0
EGL33	D	BC	8	8	NT, JS	8/14/2009	459688	7102357	1062		U	5 - 9%	50-100	LN	LV				0		0
EGL19	D	BC	8	18	NT/SW	8/11/2009	463242	7101394	1351	0.01 - 0.1%	T	15 - 30%	50-100			Sc	W	slight	0	37	0
EGL20	D	BC	8	22	NT/SW	8/11/2009	463116	7101354	1352	3 - 15%	M	15 - 30%	50-100	LN	LN				0		0
EGL201	D	BC	8	14	NT/SW	8/11/2009	463459	7100733	1433	15 - 50%	U	15 - 30%	50-100	LN	LV	SA			0		0
EGL5	D	BC	8	8	NT/SW	8/11/2009	463097	7100757	1411	15 - 50%	L	9 -15%	100-500	LN	LN	Sc			0		0
EGL202	V	BC	8	7	NT/SW	8/11/2009	462894	7100736	1405	3 - 15%	L	5 - 9%		LN	LN	Sc			0		0
EGL203	V	BC	8	4	NT/SW	8/11/2009	462908	7100758	1402		L		50-100	LN	LN	DL			0		0
EGL58	D	BC	8	0	NT/SW	8/11/2009	462612	7101002	1363	3 - 15%	D	2 - 5%	50-100	CN	CN	Wt	W	slight	0	10	0
EGL52	D	BC	8	10	NT/JS	8/12/2009	461913	7100049	1359	3 - 15%	U	9 -15%	25-50	CV	LN	DL	W	slight	0		0
EGL53	D	BC	8	10	NT/JS	8/12/2009	461946	7100227	1356	3 - 15%	U	9 -15%	100-500	CV	LN	Sc	W	slight	0		0

SiteNO	Survey Type	Province	Zone	Slope %	Surveyors	Survey Date	Easting	Northing	Elevation	Surf.Stone	Slope Position (site)	Landscape Slope	Slope Length	Horizon Curvature	Vertical Curvature	Land Use	Erosion	Erosion Severity	Seepage Depth Flag	Seepage Depth	Permafrost Depth Flag
EGL3	D	BC	8	15	NT/JS	8/12/2009	461502	7100241	1333	3 - 15%	U	15 - 30%	25-50	CV	LN	Fo	W	slight	0		0
EGL204	D	BC	8	60	NT/JS	8/12/2009	461449	7100218	1310	3 - 15%	M	45-70%	50-100	LN	LN	Fo	W	moderate	0		0
EGL4	D	BC	8	25	NT/JS	8/12/2009	461305	7100234	1261	3 - 15%	L	15 - 30%	50-100			Fo	W	slight	0		0
EGL205	D	BC	8	25	NT/JS	8/12/2009	461307	7100251	1261	3 - 15%	T	15 - 30%	100-500	LN	CN	Fo	W	severe	0	60	0
EGL60	D	BC	8	35	NT/JS	8/12/2009	460681	7099510	1389	15 - 50%	U	30 - 45%	100-500	LN	LV	Sc			0		0
EGL61	D	BC	8	35	NT/JS	8/12/2009	460670	7099307	1403	15 - 50%	U	30 - 45%	100-500	CV	LN	Sc	W	moderate	0		0
EGL68	D	BC	8	20	NT/JS	8/12/2009	460392	7099284	1329	3 - 15%	M	15 - 30%	100-500	LN	LN	Fo	W	slight	0		0
EGL206	D	BC	8	2	NT/JS	8/13/2009	463119	7102837	1361	15 - 50%	C	2 - 5%	25-50	CV	LV	Sc			0		0
EGR206	D	BC	8	50	NT/JS	8/13/2009	463081	7102926	1337	15 - 50%	U	45-70%	50-100			Al	W	moderate	0		0
EGR97	D	BC	8	10	NT/JS	8/13/2009	462742	7103063	1281	0.1 - 3%	T	9 -15%	50-100	CN	LN	Fo	W	moderate	1	43	1
EGR95	D	BC	8	35	NT/JS	8/13/2009	462800	7103396	1215	3 - 15%	M	30 - 45%	100-500	LN	LN	Fo	W	slight	0		0
EGR80	D	BC	8	45	NT/JS	8/13/2009	462942	7103398	1213	0.1 - 3%	M	45-70%	50-100	LN	LN	Fo	W	slight	0		0
EGL27	V	BC	8	5	NT/JS	8/14/2009	460298	7101566	965	>50%	L	5 - 9%	>1000	LN	LN	Rp			1	0	0
EGL12	D	BC	8	9	NT/JS	8/15/2009	458688	7099705	828	0.1 - 3%				CN	CN	Rp			1	45	0
EGL215	D	BC	8	35	NT/JS	8/15/2009	459132	7099518			M	30 - 45%		LN	LV	Fo			0		1
EGL22	D	BC	8	15	NT/JS	8/15/2009	461235	7101585	1075	0.1 - 3%	L	9 -15%	>1000	LN	LN	Rp	W	moderate	0		0
EGL211	V	BC	8	0	NT/JS	8/15/2009	461412	7101631	1127							Sc			0		0
EGL26	D	BC	8	30	NT/JS	8/15/2009	461407	7101728	1109	0.1 - 3%	M	30 - 45%	100-500	CN	LN	Fo	W	moderate	0		1
EGL49	V	BC	8		NT/JS	8/15/2009	461593	7100826	0			30 - 45%	500-1000			Fo	W	slight	0		0
EGL25	D	BC	8	30	NT/JS	8/15/2009	461541	7101717	1140	0.1 - 3%	M	30 - 45%	100-500	LN	LV	Fo			0		0
EGL210	D	BC	8	0	NT/JS	8/15/2008	461675	7101144	1192		U					Fo			0		0
EGL208	D	BC	8	28	NT/JS	8/15/2009	461494	7101557	1153	0.01 - 0.1%				LN	LV	Sc	W	slight	0		0
EGL209	D	BC	8	35	NT/JS	8/15/2009	461564	7101385	1160	0.1 - 3%	M	30 - 45%		LN	LN	Fo	W	slight	0		0
EGL50	D	BC	8	35	NT/JS	8/15/2009	461708	7101037	1213		M			LN	LN	Sc			0		0
EGL28	D	BC	8	0	NT/JS	8/15/2009	460889	7101578	1041		U					Sc			0		0
EGL212	D	BC	8	35	NT/JS	8/15/2009	460889	7101578	1011	<0.01%	M	30 - 45%	100-500	LN	CN	Fo			0		0
EGL213	V	BC	8	55	NT/JS	8/15/2009	460660	7101747			M	45-70%	500-1000			Fo			0		0
EGL214	D	BC	8	10	NT/JS	8/15/2009	458678	7099609	836	<0.01%	L	9 -15%	500-1000	CN	LN	Fo	W	moderate	1	15	1
EGL214A	V	BC	8	0	NT/JS	8/15/2009	459419	7101247								DL			0		0
EGL50A	V	BC	8	0	NT/JS	8/15/2009	458302	7101139			L		100-500			Sc			0		0
EGL35	D	BC	8	20	NT/JS	8/14/2009	460058	7102286	1116		U	15 - 30%	100-500	CV	LV	Fo	W	slight	0		0

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EGL34	D	BC	8	20	NT/JS	8/14/2009	460172	7102101	1142		U	15 - 30%		CV	LV	Fo	W	slight	0		0
EGL32	D	BC	8	30	NT/JS	8/14/2009	460281	7101918	1146		U	30 - 45%	100-500	LN	LN	Sc	W	moderate	0		0
EGL31	D	BC	8	45	NT/JS	8/14/2009	460212	7101843	1107	3 - 15%	M	45-70%	100-500	LN	LN	Fo			0		0
EGL30	D	BC	8	65	NT/JS	8/14/2009	460171	7101718	1053	3 - 15%	M	45-70%	100-500	LN	LN	Fo			0		0
EGR81	D	BC	8	30	NT/JS	8/13/2009	462935	7104148	1016			15 - 30%		LN	LN	Fo			1	12	1
EGR73	R	BC	8	40	MT/BF	8/11/2009	464837	7101929			U	30 - 45%	50-100			Fo			0		0
ERG115	R	BC	8	30	MT/BF	8/12/2009	457906	7101333	0		M	30 - 45%	50-100			Fo			0		0
EGL9	R	BC	8	35	NT/BF	8/16/2009	458581	7100058	799	<0.01%	M	30 - 45%	25-Jan	LN	LV	Fo			0		0
EGR306	V	BC	8	8	MT/BF	8/13/2009	462959	7099889	1383		M	5 - 9%	25-50			Fo			0		0
ERG114	R	BC	8	55	MT/BF	8/13/2009	463083	7099846	0		U	45-70%	50-100			Fo			0		0
EGR76	R	BC	8	24	MT/BF	8/11/2009	464676	7102168	1530			15 - 30%	50-100			Fo			0		0
EGR113		BC	8	55	MT/BF	8/13/2009	462906	7099694	0			45-70%	50-100			Fo			0		0
EGL10	R	BC	8	10	MT/BF	8/16/2009	458651	7100068	850	<0.01%	E	9 - 15%	25-50	LN	LN	Fo			0		1
EGR14	R	BC	8	38	MT/BF	8/11/2009	464261	7102044			M	30 - 45%	50-100			Fo			0		0
EGR112	R	BC	8	65	MT/BF	8/13/2009	463000	7099524	0			45-70%	50-100			Fo			0		0
EGL11	R	BC	8	18	MT/BF	8/16/2009	458848	7100062	864	<0.01%	L	15 - 30%	50-100	LN	LV	Fo			0		0
EGR13	V	BC	8	5	MT/BF	8/11/2009	463992	7101458	0		M	5 - 9%	100-500			Fo			0		0
EGL307	V	BC	8	33	MT/BF	8/14/2009	461259	7099925	1357		M	30 - 45%	25-50			Fo			0		0
EGR111		BC	8	45	MT/BF	8/12/2009	463334	7099210	0		L	30 - 45%	50-100			Fo			0		0
EGR304	R	BC	8	40	MT/BF	8/12/2009	455649	7100318	1213		U	30 - 45%	50-100			Fo			0		0
EGL309	R	BC	8	50	MT/BF	8/14/2009	459822	7099278	1167		L	45-70%	50-100			Fo			0		0
EGR110	D	BC	8	26	MT/BF	8/13/2009	463495	7098832	0		M	15 - 30%	50-100			Fo			0		0
EGL46	V	BC	8		MT/BF	8/14/2009	460101	7100342				45-70%	50-100			Fo			0		0
EGR305	R	BC	8	18	MT/BF	8/12/2009	455968	7100355	1118		M	15 - 30%	50-100			Fo			0		0
EGR412	R	BC	8	60	MT/BF	8/15/2009	454863	7094515	693		M	45-70%	50-100			Fo	W	slight	0		0
EGR124	R	BC	8	28	MT/BF	8/12/2009	456006	7100557	1135		U	15 - 30%	50-100			Fo			0		0
EGR109	R	BC	8	30	MT/BF	8/13/2009	463620	7098660	0		M	30 - 45%	50-100			Fo			0		0
EGR414	R	BC	8	30	MT/BF	8/16/2009	458480	7099297	783		L					Fo			0		0
EGR125	R	BC	8	18	MT/BF	8/12/2009	456103	7100623	1124		M	15 - 30%	50-100			Fo			0		0

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EGR415	R	BC	8	1	MT/BF	8/16/2009	449778	7085727	612		E	0.05 - 2%	50-100			Wt			0		0
EGR107	R	BC	8	5	MT/BF	8/13/2009	463661	7098359	0		E	2 - 5%	500-1000			Wt			0		0
EGR416	R	BC	8	1	MT/BF	8/16/2009	450943	7085182	687	<0.01%	E	0.05 - 2%	100-500	LN	LN	Fo			0		0
EGR106	R	BC	8	20	MT/BF	8/13/2009	463057	7098161	0		M	15 - 30%	25-50			Fo			0		0
EGR126	V	BC	8	9	MT/BF	8/12/2009	456284	7100524	1105		M	5 - 9%	25-50			Fo			0		0
EGR417	R	BC	8	0	MT/BF	8/16/2009	454012	7087505	641		E	0.05 - 2%	50-100			Fo			0		0
EGR105	V	BC	8		MT/BF	8/13/2009	462619	7097835	777			30 - 45%	25-Jan			Fo			0		0
EGR418	R	BC	8	7	MT/BF	8/16/2009	456167	7087995	640		T	5 - 9%	25-50			Fo			0		0
EGR123	R	BC	8	35	MT/BF	8/12/2009	456402	7100333	1087		U	30 - 45%	50-100			Fo			0		0
EGR419	R	BC	8	2	MT/BF	8/16/2009	458323	7087705	596		E	0.05 - 2%	50-100			Wt			0		0
EGR420	V	BC	8	0	MT/BF	8/15/2009	459402	7087820	629		D	0 - 0.05%				Wt			0		0
EGR411	R	BC	8	22	MT/BF	8/15/2009	453232	7093681	685		L	15 - 30%	50-100			Fo			0		0
EGR122	R	BC	8	28	MT/BF	8/12/2009	456661	7100749	1012		U	15 - 30%	50-100						0		0
EGR410	V	BC	8		MT/BF	8/15/2009	452489	7093409	670							Fo			0		0
EGR409	R	BC	8	2	MT/BF	8/15/2009	451814	7092951	676		E	0.05 - 2%	50-100			Wt			0		0
EGR120	R	BC	8	7	MT/BF	8/12/2009	457104	7101122	1120		C	5 - 9%	100-500						0		0
EGR408	R	BC	8	35	MT/BF	8/15/2009	451063	7092718	724		M	30 - 45%	25-50			Fo			0		0
EGR119	R	BC	8	28	MT/BF	8/12/2009	457265	7101049	1084		M	30 - 45%	50-100			Fo			0		0
EGL308	V	BC	8	15	MT/BF	8/14/2009	460474	7099514	1330		M	9 - 15%	25-50			Fo			0		0
EGR118	R	BC	8	38	MT/BF	8/12/2009	457651	7101048	936		M	30 - 45%				Fo			0		0
EGL66	R	BC	8	35	MT/BF	8/14/2009	459974	7099838	1154		M	30 - 45%	50-100	LN	LV	Fo	W	slight	0		0
EGR303	D	BC	8	10	MT/BF	8/12/2009	455171	7099733		<0.01%	C	9 - 15%	25-50	CV	LV	Fo			0		0
EGL310	R	BC	8	50	MT/BF	8/14/2009	459640	7099420	1051	<0.01%	M	15 - 30%	50-100	LN	LN	Fo			0		0
EGL311	V	BC	8	25	MT/BF	8/14/2009	459660	7099770	1067		M	15 - 30%	50-100			Fo			0		0
EGL48	R	BC	8	0	MT/BF	8/14/2009	460292	7100144	1115		M	0 - 0.05%	25-Jan			Fo			0		0
EGL312	V	BC	8		MT/BF	8/14/2009	460600	7099800			M	45-70%	25-50			DL			0		0
EGL47	R	BC	8	25	MT/BF	8/14/2009	460009	7100810	1080	<0.01%	M	15 - 30%	25-50	CV	LN	Fo			0		0
EGL1	D	BC	8	30	MT/BF	8/14/2008	460221	7100621	0	<0.01%	M	15 - 30%	25-50		LN	Fo	W	slight	0		0
EGL313	R	BC		35	MT/BF	8/14/2008	459524	7101401	0	3 - 15%	U	30 - 45%	25-Jan	CV	LV	Fo			0		0
EGR400	R	BC	8	3	MT/BF	8/15/2008	449319	7086377	621	<0.01%	E	2 - 5%	50-100	LN	LN	Fo			0		0
EGR70	R	BC	8	48	MT/BF	8/11/2009	464843	7101282	0		U	45-70%	25-50			Fo			0		0

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EGR72	R	BC	8	30	MT/BF	8/11/2009	464660	7101266	0		U	30 - 45%	50-100			Fo			0		0
EGR401	R	BC	8	2	MT/BF	8/15/2008	448898	7087172	630		E	2 - 5%	25-50			Fo			0		0
EGR74	R	BC	8	28	MT/BF	8/11/2009	464553	7102008	1469		M	15 - 30%	50-100			Fo			0		0
EGR102	V	BC	8	0	MT/BF	8/13/2009	462277	7097530	742		E	0.05 - 2%	500-1000			Wt			0		0
EGR405	R	BC	8	50	MT/BF	8/15/2009	449399	7090898	685		L					Fo			0		0
EGR406	R	BC	8	10	MT/BF	8/15/2008	449694	7091202	662	<0.01%				CV	LV	Fo			0		0
EGR404	R	BC	8	0	MT/BF	8/15/2009	449171	7090107	643	<0.01%	E			LN	LN	Fo			0		0
EGR403	R	BC	8	50	MT/BF	8/15/2009	449007	7089609	672		L	45-70%	25-50			Fo			0		0
EGR407	R	BC	8	45	MT/BF	8/15/2008	450348	7092047	720	<0.01%	L	30 - 45%	25-50	CN	LN	Fo			0		0
EGR300	V	BC	8	70	MT/BF	8/11/2009	464062	7101250	0		U	45-70%	50-100			Fo			0		0
EGR402	R	BC	8	67	MT/BF	8/15/2009	448780	7089130	692		L	45-70%	25-50						0		0
EGR413	R	BC	8	3	MT/BF	8/15/2008	457840	7096179	727		E	2 - 5%	25-50			Fo			0		0
EGR301	V	BC	8	50	MT/BF	8/11/2009	464125	7100900	0		M	30 - 45%	50-100			Fo			0		0
EGL21	D	BC	8	14	MT/BF/NT/S	8/11/2009	462896	7101163	1372	<0.01%	M	9 -15%	50-100	LN	LV	Fo			0		0
EGR302		BC	8	70	MT/BF	8/11/2009	464000	7100500	0			45-70%	50-100			Fo			0		0
EGR71	R	BC	8	8	MT/BF	8/11/2009	464771	7101387	0		C	5 - 9%	25-50			Fo			0		0
TPA1	R	BC	8	9	Straker	7/18/2009	459464	7101321			L	5 - 9%	500-1000			Fo			0		1
TPA3	R	BC	8	7	Straker	7/19/2009	458474	7100551			T	5 - 9%				Fo			0		1
TPA4	R	BC	8	20	Straker	7/19/2009	458978	7100215			M	15 - 30%	100-500			Fo			0		1
EGR451	Q	BC	8	5	JS/NT	9/16/2009	452180	7085869	639		U					Fo			0		0
EGR450	Q	BC	8		JS/NT	9/16/2009	449630	7085952	614		D								0		0

SiteNO	Permafrost Depth	Organic Soil Drainage	Drainage	Depth to Bedrock	Depth to Water	TSM	EP	Site Note	Vegetation Note	Mass Movement Indicator
EGL63				0	0				Open Lichen Spruce, woodland. Lichen (Clad ste) dominant ground cover. Thin band of S! different colour than matrix?	Tension Cracks and Soil Creep. TSC = III to IV
EGL216				0	0			Cut in road adjacent to Dublin Creek, Placer Mining disturbance exposes fractured bedrock.	Aspen stand DV/R / CV/R	
EGR94				0	13	P	High	site deep, steep + wet high failure risk L = subsurface seepage soils are generally, not rubble or boulders		
EGR93					0	P		open lichen fir forest frost heave		rock slides apparent IV
EGR92	60			0	0			Site in active seepage track at surface and at depth outside of rock	Pice mar, Alnucris, Salix, Spharub, Rubucha, Hierspl, Rhizonmium	surface seepage + shallow eroded drainage
EGR69				0	0			Active stream tributary to Haggart Creek		
EGL8				0	0			SR pebbles to cobbles mostly pebble size	Sb, Hylo, Cladina, Ledum, Equisyl, Petasag, Mert, Empenig, Vaccit	
EGL6				0	0	S	Low	exposed piles, some have been sorted to finer piles	Salix, Balsam poplar, Aspen, fireweed, dandelion REVEG all 2 m height	Rill erosion along cutslopes adjacent to Placer
EGL41	100			0	0			soil like pudding where seepage drier below		TSC=III
EGL200				200	0			No rocks at surface	Abieslas, Betugla, Poly, Pleur, Cladina, ground cover Heath vegetation	
EGR96	30			0	0	P	Medium	Permafrost collapse scars w/ standing water	Open drunken forest, lichen and sphagnum dominant understory. Pice mar, Ledu gro, Ledu dec, Erio, Clad stel, sphag, Empinig, Betu gla, salix	Melting Permafrost
EGL16			Imperfect	200	0	P	Low	Large boulders at surface coarse grained igneous intrusive Fc microscale in plot bare mineral soil moving downslope	Betugla, Abieslas	~ 10 cm wide in areas of soil creep
EGR91				0	0	S	Low			
EGR79				0	0			Frost heave bedrock ridge above site some	Open lichen fir woodland.	
EGR98				0	0			Small rock slides shallow bedrock visible	Fir/Lichen open forest	
EGL15				0	0	P	Medium	Evidence of water flowing through stand originating on road visible water upslope from site L <12% of polygon	Abieslas, trees, Empenig, Pleusch	drainage channels
EGL17				0	0		Low	Seepage flowing water downslope ~10 m (out of plot) toe slope	Betugla, Abieslas, Empenig	FC
EGL39				0	0	P	Medium	Shallow slumps, Grown over. Weathered bedrock with rock near surface. EGR39A good cross profile	Aspen/Birch overstory, White Spruce subcanopy forb & litter understory. Geocaulon, acc it, Rosaaci, Ledugro, Empinig	Slumps in profile > historic eg reestablished. Class IV
EGL38				0	0	S	Low	Evidence of charcoal in profile. Some subrounded gravel cobbles. Check extent of Minarea.	Open lichen woodland Pice mar, Cladina, Cladonia, Vaccit, Ledugro	TS Class II
EGL37				0	0			Bedrock visible > ery weathered & broken from cut upslope in road	Fir / B. Spruce forest, Pleursch, Cladinastel, Vaccit, Ledugro	
EGL36				0	0	S	Low	SA to SR clasts photo taken plus mica flakes pea size. M likely over D or R	open abies las forest, ledugro, betugla, accolig, empinig, cladstel, pleursch	
EGL207				0	0	P	Medium	boulders at surface rock slides lichen covered in stand	Sw, Abies las, Shepcan, Birch, Aspen, Vaccit,	Rocks piled at tree trunks
EGL18				0	0			Ingenous intrusive and meta sed rocks.	Betugla, Abielas, Anemone, Cladina, Cladonia, Pleusch, Polytrichum, Lazulapar, Juncbal	exposed mineral + soil creep
EGL33				0	0	S	Low		Open fir forest, Betugla, Ledugro, Lycopod, Vaccoli, Cladina, Vaccit	TSM II
EGL19				0	0		Medium	Site appears to be near small test pit site (blue flagging). Can hear water downslope.	Salixpul, Betugla, Salixret, diverse understory.	
EGL20				0	0		Medium	Boulder field visible on surface. Coarse sand contains pea size gravel in C horizon.		
EGL201				0	0	S		highly disturbed area need updated disturbance layer for LSA portion of the polygon Angular rubble at surface + throughout site Frost heave at site.		
EGL5				0	0			highly disturbed polygon could be split out from main large polygon		
EGL202				0	0			Part of Krich Feldspar/Granite coarse grained	Betugla, Abielas, Pleusch, Cladina, Cladonia	
EGL203				0	0			Some foliated rock that cleaves into flat sheets. C material intact but A & B buried some C removed & pushed / windrowed.	No vegetation at site	
EGL58				0	0			Collapse scars from ice meltout exposed soil in areas. Bedrock residual material closer to bedrock texture gets coarser.	Salixpal, Betugla, Abieslas, Carex spp.	
EGL52				200	0	P	Medium	head water of gulch adjacent to boulder/bedrock outcrop. Slope steepens over short distance. Burn site Should break out bedrock from polygon	Salix, Betugla, Calamagrostis, burned spruce, Abies las	downward movement fc. from frost boils class III
EGL53				0	0	P	Low	Boulder field some exposed granite boulders at surface Frost shatter & boils on site	Betugla, Salixpul, Cladina, Pleusch, Polytrichum, Festuca, acc it, Casstet	soil creep FC Class II

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EGL3				200	0	P	Medium	Some boulders at surface site adjacent to steep gully sharp drop off ~30 m	Abieslas, Empinig, Cladina, Betugla, Salipul, Pleusch, Polyjun	soil creep FC class III
EGL204				0	0	P	High	Pull polygon out as a unit No buried horizon tonguing in soil horizon boundaries Movement in profile e ident exposed mineral soil from shallow micro slumps	Abieslas, Empinig, Epilang, Cass (heather) lichen dominant co er, Spir bea	FC Class IV
EGL4				0	0	P	Medium		Abieslas, Picegla, Hylospl, Lupialp, heather, Betugla, Salipal, Saliret	bare soil minor slump Fc
EGL205				0	0	U	High	eroded surface in gully bottom Stewart Gulch areas of ponding deposition of sand occurs		eroded soil, dislodged boulders
EGL60				100	0	P		some rock fall near road downslope into plot. No eg in those areas or topsoil or fines Frost shatter in areas exposed slope.	Betugla, Salipal, Vaccoli, Abieslas	rock slide from road patterned rocks
EGL61				0	0		Medium	D with some C movement of boulders in areas	Betugla, Salipal, Abieslas, Empenig, Casstet, Vacc it, Cladina, Cladonia, Polyjun	soil creep
EGL68				0	0		Low	some cobbles visible on surface, rocks broken on natural planes & aligned in horizontal position	past burn Abies las ~ 10 m high, Empenig, Cladina, Cladonia dominant co er on ground	none noted
EGL206				100	0	U	Low	Exposed weathered bedrock on crest Frost hea e + shatter at site	Betugla, ledudec, Cladina, Salixarc, Vacc it, Salixgla, Arctrub	
EGR206				100	0	U	High	Frost hea e + rock slide	Ericaceous shrubs + lichen community Salix gla, Ledu dec, Betu gla, Cass tet, Cladina, Cladonia, Dryas ala	rock slide initiating from frost hea e
EGR97	200			0	0		Medium	Abies las, drunken forst collapse areas + drainage channels e ident of standing water high gra el content as well	Hylospl, Pleusch, Nephroma, Cladstel, Cladarb, Vacc it, Ledudec, Sphag,	Meltout channels throughout stand erosion feature
EGR95				0	0	P	Medium	Gra els, cobbles, boulders at site	open lichen forest e idence of snow loading Abies las, cladina, Cladonia, Empe nig	
EGR80				100	0	P	High	Shattered rock planar + rod shaped horizontal rock layers in profile No egetation on recent slide and slump ~ 10 m across	Abieslas, Cladinaste, Cladrang, Betupum, Ledugro open woodland lichen dominant	recent shallow slump + 2nd rock slide ~ 200 m upslope of plot
EGL27				0	0		Medium	clast supported matrix Coarse sand photos taken active flowing channel disturbed by Placer mining	Salix, Alnus	Shoreline erosion
EGL12				0	0	S	Medium		Sb forest, Salix, Betugla, Cared pod	eroded stream channel TSM II
EGL215	200			0	0			broken horizons tipping/dying top spruce likely due to permafrost check drill logs in area	Sb forest open moss/lichen understory	
EGL22				0	0		Medium		Abies las, Pice mar, Ledu gro, Empe nig, Vacc oli, Salix pau, Salix gla, Rubus arc, Pleu sch, Peltigera	TSM II
EGL211				0	0	P		D & C is o er Rock Failures if they ocur will be shallow. Root restriction is lithic contact.	Betu gla, Vacc it, Ledu gro, Cladina.	TSM III
EGL26	31			0	0	P	Medium	Some tilted trees not many May be due to snow loading Some surface drainage channels sedimentation surface	Fir, spruce (Pice mar) forest, sphagnum, Hylo spl, Rubus cham, Empe nig, Equi syl	cut trail shows instability slumps trees on site but adjacent to rock slide
EGL49				0	0	P		upslope from bedrock outcrops	mature spruce/fir forest	
EGL25				0	0		Medium	Broken metased material	Abies las, Pice mar, Pice gla, Hylo spl, Vacc oli, Ledu gro, Equi syl, Nephroma, Clad stel, Betu gla Main shrub is Salix pau	TSM III
EGL210				0	0				fir/spruce forest	TSM II
EGL208				0	0		Low	broken horixon profile slow downward movement of material historically Cobbles to stones mostly with gra el		
EGL209				0	0	U	High	Meta sed on 45 degree angle Two lithologies may be near bedrock contact	Abies, Betu gla	Rock & Debris slides photos
EGL50				0	0	U		bedrock cliffs abo e site pull out rock cliffs separate from boulder slides	Vacc it, Hylo spl, Cladina, Cladonia, Crustose lichen, Salix gla, Betu gla, Ledu, Salix pau, Empe nig	exposed bedrock cliff/bolder slides
EGL28				0	0			exposed rock slide but historic as lichen co er on rocks	ery few trees, mostly shrub dominant Betu gla, Abies las, Cladina ste, Vacc it, Ledu dec	TSC III
EGL212				0	0	S	Medium	mixed lithology of gra els flat, angular, subangular, arious shapes due to lithology more than transport	old growth forest of Abies las, Ledu gro, Pleu sch, mostly Clad stel. some Vacc it + Nephroma	TSM II Piping
EGL213				0	0	U	High	Fines ob ious in the slide area Ob ious recent slides weathered bedrock exposed deep & wet soil consistency of pudding hole collapsing as digging tilled forest circular	Mixed forest Aspen, spruce, birch	4 shallow slides slumps o er bedrock
EGL214	100			0	0	P	Medium	collapse scars (egetated) in site	open Sb forest Ledu gro, Cladina, Cladonia dominant	TSM III
EGL214A				0	0			Silt appears as rock flower likely part of high energy deposition short distance tra el due to angularity then cycles of lower energy deposition silts	Mixed deciduous Salix, Birch	
EGL50A				0	0			rock slides filling bottom of Oli e Gulch shallow slides bedrock isible upslope	shrub restricted trees due to boulders recei ing slide area	rock slide tracks upslope
EGL35				0	0			No rocks at surface some channel surface flow, but egetation relati ely intact	Open fir forest. Abies las, Betugra, Clad ste, Nephroma, Ledu gro, Cladonia, Poly tri	r

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EGL34				0	0		Low	M likely o er D or R	Abies las, Vacc oli, Vacc it, Ledu gro, Nephroma, Empi nig	
EGL32				0	0	P	Medium		Open Betu gla shrubland	microtopography indicators historic slumps shallow / small
EGL31				200	0	U	High	Historic + shallow recent slides exposed mineral soil ~ 5 x 3 m	Aspen fir + Sw. In understory Juni com, Ledu gro, Vacc it, Arct u a, Vacc uli	Exposed mineral soil trending downslope
EGL30				200	0	P	Medium	Large boulders protruding at surface	Mature old fir/white spruce Geoc li, Hylo spl, Linn bor, Vacc it	boulders
EGR81	30			0	0	P	Medium	subsurface seepage abo e ice	open forst lichen dominant	melting, permafrost
EGR73				0	0	P	Low	Just started to get in clump of trees, open forest/parkland Patches of frost shattered R, possibly due to permafrost sorting, SE aspect though. TSM III		
ERG115				0	0	S	Low	Walked down slope from last, onto a bench (~30m wide), with a steep scarp to NE, then slightly up and off a ways to the side. Hole ~50 60% peb sml cob, SR A SA TSM = 11		
EGL9				0	0	P	Low	111 dep. how thick, no e id. of mo ement.		
EGR306				0	0	S	Low	matrix FSL, . poorly sorted, few poorly sorted areas (MS cs)		
EGR306				0	0	S	Low	L matrix, with 20 35%. Any blocky gr to sm cobble, all psammites(or arenites) TSM=II		
EGR306				0	0	S	Low	Unsure Re: permafrost		
EGR306				0	0	S	Low	a few rocks oc around. probably see on airphotos EP med high watch channeled water old burn, all the way down this slope; not alley/slope to NE/E TSM=III IV check		
ERG114				0	0	P	Medium	slope model fire didn't cause slides; dry likely thin.		
EGR76			Well	0	0	S	Low	Slope undulates a lot. TSM II Separate 74 and 76 by aspect instead of how now?		
EGR113				0	0	P	Medium	walked ~ along contour to this site, Mix of stuff. Once cross into this one, way more actual rock at surface. Most somewhat frost hea e of shatter. are just NW (~8m) of what looks like an old R"r, about 5m deep, with ra @ bottom of slope		
EGL10	57			0	0	S	Low	Poorly sorted, massi e diamict; afs matrix, occasionally areas that are a bit more sorted (more mc sand). Clasta area A SA, minor SR. Mostly granule to pebble, only ~ 15 Y., ablation till or poss. debris flow (btw alley + glacier).		
EGR14			Rapid	0	0	S	Low	Abundant frost shattered A peb 5m boulder in ery rough solifluction lobes. Only 5% 20 30 cm wide mud boils. Practically R, just frost shattered. TSM = II b.c thin shattered R, r drained		
EGR112				0	0	P	Medium	burnt, steepish slope. fire didn't cause slide; TSM IVR (too steep for road) but dry, seems stable other than minor creep.		
EGL11				0	0	S	Low	Is there a source for C abo e? Not a good till, but a small possibility		TSM=II
EGR13			Moderate W€	0	0	S	Low	TSM = II		
EGL307				0	0	S	Medium	see notes for BGE on separate sheet. They thin may be scarp of ery old slide but nothing ob ious to support that. There is a it of a conca ity, but could be due to ni ation in the past. Reid glaciation just got to edge of top debuttre during melt =		just Soli
EGR111				0	0	S	Low	pretty steep all the way down to this site site just upslope (sideways) from small treed gully. TSM II		
EGR304			Rapid	0	0	S	Medium	Since last site, walking on ridge. Pull out as separate poly, with aryng amounts of shattered R. TSM = II as decent slope, dry, somewhat undulating ertical rather than straight (could be III on opposite aspect)		
EGL309				0	0	P	High	Few Fk e edge of fill Area x cut by roads, etc. Shows ~ 5 10 m of C. Competant R isible in few areas		small amounts of piping causing small failures TSM IV R; their fill slopes are/ha e failed. No major landslide due to disturbance.
EGR110				0	0	S	Low	abundant moss/peat/burnt duff eg + soil samples taken check photos to see if drape or if material makes slope TSM=II		
EGL46				0	0	U	Low	check photos if R old (R"r)		Talus
EGR305			Moderate W€	0	0	S	Low	Hole is 30cm deep; then too rocky, but rocks break easily. No idea how thick. No rocks on surface, just moss/lichen. TSM = II (low slope, ok drainage)		
EGR412				0	0	S	Medium	small areas with a tiny bit of piping, tiny bit of trees leaning e er so slightly. Not enough to include in map label though. Rocks poke out in a few spots. Other spots moss is up to 30 cm thick		TSM= IV (slope, wetter) Minor soil creep
EGR124			Well	0	0	S	Medium	Open forest, mostly shrub birch, lichen/moss. SiL matrix with 20% friable tabular phyllite granules to 5m pebbles, plus 15% more competant, tabular, ang clasts. TSM III. Unsure D or C, going D and C. Unsure thickness.		
EGR109				0	0	S	Low	hole = 0 21 or w 2fs with ~2%gr sm pebble, SA SR, almost magic mud 21 35+ dirty m es matrix with ~ 30 40% granule sm cobble. Most A SA, few SR inc 1 med cobble @ surface		
EGR414				0	0		Medium	LG o er FG o er Till		minor flows
EGR125			Moderate W€	0	0	S	Low	Slope has minor undulations, probably relict solifluction. Permafrost likely still here, but not acti ely creating landforms. TSM = II.		

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EGR415				0	0	S	Low	minor sed in patches on tops Horsetails + trees		
EGR107				0	0	S	Low	TSM = I 0.8m peat hummock H2O ~ 0.9m depth then = grey, cold SiCL with ~15% grit(granules only)wet, dense		
EGR416				0	0	S	Low	20 cm fs, no clasts or ~ 1.5 m + z fs with ~ 40% R pebble to cobble		
EGR106				0	0	S	Low	TSM = II due to slope, could be I		
EGR126				0	0	S	Low	TSM = II. Basically same as 125 for terrain.		
EGR417				0	0	S	Low	surface has minor undulations matrix = SL		TSM= 1
EGR105						S	Low	gully walls are ~ 35% peat in bottom now, tiny bit of possible effemeral H2O right e bottom Poss merge poly c rest of fan, or at least tighten to draw		TSM=II
EGR418				0	0	S	Low	side slopes ~ 20 35% kettle hole in terrace		
EGR123				0	0	P	Medium	EP Could erode quickly if slope mat as LSA where gullied from off of road. Is a zd, with 30 35% gr sm pebble. More diam like than before. Clasts are A SA mix of green pelite, orange pelite, some qtz, bit granite. Unsure if all could be D. Poss C. or e en		
EGR419				0	0	S	Low	permafrost @ 60 cm depth May be mineral e base, but no auger and it's frozen solid		TSM=1
EGR420				0	0	S	Low	check photos/polygon for deciles		
EGR411				0	0	U	Low	toe slope has a few piping holes whole hillside seems to be saturated + slowly slumping/creeping		numerous tilted , leaning spruce TSM= III IV
EGR122				0	0	S	Medium	Open spruce forest, lichen/ moss. Magic mud@20cm depth seepage. Sed is a zfsd, med brown, 20 25% gr lg pebble, A mostly, but some SA. Mostly tabular phyllite, some blockier harder rock. Till or could be V weathered C. TSM = III due to H2O.		
EGR410				0	0			section ~ 15 20 m of crude stratified sz with some gra el beds older fan? much steeper thicker than alley		
EGR409				0	0	S	Low	f= fsz, no clasts, interbeddedw buried humic to mesic beds 2 5 cm thick		TSM=1
EGR120				0	0	S	Low	20cm of SiL matrix with 40% A peb. small cobble, all tabular and same lithology (not sure, but strong elongated fabric).		TSM = I II
EGR408				0	0	U	Medium	slope has several small (0.5m) scarps. Didn't walk up to top. Small gully just R of site (~ 1 m wide)	eg says trees ~ 100 yrs old	titled trees (up+down slope) undulating slope unsure where scarp is Roadcut failed more recently
EGR119			Well	0	0	P	Medium	Open spruce forest, lichen and moss. TSM = II III		
EGL308				0	0	S	Medium	check drill logs for depth matrix is zfs (L)		roads ha e caused some sed to run into forest TSM = I II
EGR118			Well			P	Medium	Open forest, walked past one open area (lichen o er rock) that could be an old (small) slide runout check photos. Hole = grey brown SiCL matrix, dry and loose with 30 40% A SA SR (sm lg) peb and granules. Unsure depth, Slope so may just be a d??? (b).		
EGL66				0	0		Medium	Check drill logs for depth		minor rill (~ 50 cm wide, > 5 m long), likely due to water erosion (runoff from road abo e TSM= II III (depends on thickness)
EGR303			Moderate We	0	0	S	Low	all clasts are ery angular, all appear to be granitic, up with depth, granules to med pebbles (slate nearby on trail). dif D than yesterday, as dif R that it's eri ed from. No idea how thick.		TSM = II.
EGL310				0	0	P	Medium	mixed mostly deciduous forest Is a small rock oc/frost head ~ 10 m to NW		TSM = III
EGL311						S	Medium	unsure of spatial extent		
EGL48				0	0	S	Medium	und to humm topo landslide runout material?		TSM = I
EGL312						P	Low	mostly talus (shattered R) mo ed a bit by solif Scarp must be quite old o ergrowan		S Old scarp TSM = IV
EGL47				0	0	S	Low	road cut,		TSM = II
EGL1			Imperfect	0	0	S	Medium	Gully 20m downslope, only 1 2m wide.		
EGL313				0	0	S	Low	Seems to be an R Coned ridge. 2 holes dug encountered numerous phyllite pieces @ 20cm depth, with few intact pieces. SL matrix. Crest (old road) co ered by numerous frost shattered pebbles (square, flat)		
EGR400			Imperfect	0	0	S	Low	+60cm of SL, mottled grey and brown, unsure if laminated. Are a few Fs beds therefore crude stratification. Spruce and cottonwood, equi sp, ibuedu, rosaaci, some moss.		TSM = 1
EGR70				0	0	P	Medium	poss steeper slope break below SiL TSM=V unsure C/D thickness fen slumps along slope, just upslope from site. Pull out if can't get ID elsewhere		

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EGR72				0	0	P		slope is ~ 70 80%, egetated with patches of tabular rock near surface. All clasts oriented II to slope. TSM II III > R not that competent; unsure how deep to solid.		bit of collu ium
EGR401				0	0	S	Low	C1 20cm of z fs, appears massi e, no clasts. C2 30cm+ of (sm lg) pebble gra el (35 45%) in a m cs granule poorly sorted matrix. Clasts are R, mix of litho		TSM = 1
EGR74						S		At least on N NW facing side, are some rudimentary sorted circles/mud boild with A cobbles . Few solifluction lobes Cant tell D or C is soliflucted D now C/ Some slope to pro ice C		TSM=II (but solifluction)
EGR102						S	Low	O g 50 80 cm o er SL grey, no clasts		TSM = I
EGR405								road cut is partially weathered R, o er 3 m of mostly competent R Phyllite to slate c some qtc eins Minor road cut Rsr		
EGR406			Imperfect	0	0	S	Medium	Old placer acti ity. One large roadcut exposes 5m of dk grey SL, inerbedded with f ms. Contains 2 3 peat beds with some large root pieces for Lisa (paleo). Lots of old wood in placer stuff.		
EGR404						S	Low	Recent flooding/thin silt co er o er eg	Alder, Equi sp.	
EGR403						P	Low	rock exposed in road cut. Estimate D is 1 3 m thick Hole = 60% A phyllite pieces in a SL matrix. Mica in matrix too		small Fk, Fc (likely due to road undercutting toe slope. Could cause surface slide) TSM = IV
EGR407				0	0	P	Low	Slump block. Site is just down from R side of scarp, unsure how far it goes. Scarp is 2 3m high. Trees are 30 50 years old. Caution when digging toe as could re acti ate. Trees are happy and upright looks stable now.		
EGR300				0	0	U	Medium	TSM = V Slides likely old, but as fill sed could fail again		looks like old R'r
EGR402						S	Low	where site is, road cuts show > 3 m of FG to west and 4 20 of FG/R to east at site hillis all stg. Is this a terrace scarp? looks like a large bump	Veg is open aspen; likely outlines feature	TSM = III (slope but dry/stable)
EGR413						S	Low	2.5m up from ri er base.	TSM=1	
EGR301				0	0	P	Low	TSM = III split from upper as more egetated eg co ered poss few R outcrops 1m high shrub birch, scattered spruce, moss. Gentle slope, some mud boils therefore permafrost. Not C, as no source area or dif material. Small depression below site has scattered A boulders.		
EGL21			Moderate Wε	0	0	S	Low			
EGR302				0	0	U	Low	TSM V Same as ERG300, old slides, but may fill + slide again		
EGR71				0	0	S	Low	alpine, moss scattered sm. boulders TSM=II		
TPA1	52							3rd sample is "OS" org. soft want part size + O.M. content		Cb
TPA3	50			0	0					
TPA4	53			0	0					solifluction, maybe inacti e
EGR451			Well					by road		
EGR450		peraquic	Very Poor						fen sedge on periphery horsetail in centre surrounded by bog water at surface all egetated	

SiteNO	QC By	QC Complete	Root Restricting Layer Depth	Root Restricting Layer Type	Soil Code	Series Code	Phase	Soil Notes	Landscape Drainage	Constraints	Topsoil Depth	Site Location
EGL63		0	0		CHER-DB-			Fining upward sequence broken horizons from soil creep			12	Eagle Gold, YK, Abo e Stuttle Gulch
EGL216	nTashe	1	20		BRUN-DYB-O			likely mix of Regosols and thin Brunisols on site. Silty Sand seepage flowing through pit Dissected landscape start of gentle drainage to creek			6	Eagle Gold, YK, Abo e Dublin Gulch
EGR94		0			REGO--O	O.R.						Eagle Gold, Yukon
EGR93		0	30	L	BRUN-DYB-O	O.DB		o er half the profile is rock no alignment			6	Eagle Gold, Yukon
EGR92		0	60	Z	CRYO-SC-HR	Cryosol		phase: pt Lenses of silt + sand Do not appear as layers Bands of silt + sand found in Of layer Some flat pans rocks in profile			17	Eagle Gold, Yukon
EGR69	nTashe	1			--							Eagle Gold, Yukon
EGL8	nTashe	1			GLE-Y-G-O			likely R.G + GL.R in polygon + GL.OB Ah too thin to sample			14	Eagle Gold, YK, adjacent to Dublin Gulch
EGL6	nTashe	1			REGO-R-O			Some depressions w water but o erall dry site			0	Eagle Gold, YK Dublin Placer
EGL41	nTashe	1	100	Z	GLE-Y--R	R.G.		phase: pt likely roots restricted by ice some tilted trees, ery stunted, cold soil likely Cryosol at site check drill logs for permafrost			25	Eagle Gold YK, SW side of Eagle Gulch
EGL200		0			BRUN-EB-E	E.EB		C too coarse to dig cannot cho el or auger Flat lying rocks Mine material			2	Eagle Gold, YK
EGR96		0	30	Z	CRYO-TC-HR		p	discontinuous Ah <2cm. Strongly cryoturbated layer of. Phase modifier = pt Augered holes BC structure indicati e of former ice contact causing dessication resulting in structure			20	Eagle Gold, YK
EGL16		0			BRUN-EB-O	O.EB						Eagle Gold YK
EGR91	nTashe	1			REGO-R-CU						12	Eagle Gold, YK
EGR79		0			--							Eagle Gold, YK
EGR98		0			--							Eagle Gold, YK
EGL15	nTashe	1			BRUN-DYB-GL	GL.DB		Moist area, some parts of polygon e idence of surface drainage			10	Eagle Gold, Yukon
EGL17	nTashe	1			BRUN-DYB-E	E.DB		Verify texture's pH to determine if Brunisol s. Lu isol Heap leach option 3			11	Eagle Gold, YK
EGL39	nTashe	1			LUV-GL-BR			Rocks and unstable slope angle limit soil depth. ariety of fragments gra el to cobbles			14	Eagle Gold, YK, Anne Gulch Mouth
EGL38		0			CHER-DB-			mica like shads of glass difficult to texture Almost a lu isoil			10	Eagle Gold, YK, Base of Anne Gulch
EGL37	nTashe	1			BRUN-DYB-O			Soil shows pre ious ice contact by granulated structure at depth in C. Charcoal in profile			14	TSM II
EGL36		0			--			some gra el is SA to SR				Eagle Gold, YK, Upper Anne Gulch
EGL207		0			ORG--			weak Ae may some E.DB in more stable areas			5	Eagle Gold, YK, Abo e Dublin Gulch
EGL18	nTashe	1			BRUN-EB-O	O.EB		Not elu iated as not thick enough Broken horizon Platey structure from historic ice contact *weathered bedrock produces linear stration of mottle colours			10	Eagle Gold, YK
EGL33		0			ORG--			Thin dicontinuous Ahe (<2cm). 33 Auger/Sho el refusal large stone. Some SA gra el at depth			4	Eagle Gold, YK, Headwaters of Anne Gulch
EGL19	nTashe	1			BRUN-EB-GL						10	Eagle Gold, Yukon
EGL20		0			BRUN-DYB-O	O.DB		C.F. content, but nice fine matrix for reclamation			14	Eagle Gold Yukon
EGL201		0	25	L	BRUN-DYB-O	O.DB		High coarse fragment makes unsuitable reclamation material. Well de eloped fines as noted by organic enrichment. C? Cannot dig or auger Organic enrichment old soil.			7	Eagle Gold, Yukon
EGL5	nTashe	1	100	X	BRUN-DYB-O	O.DB		So many boulder, stones near surface, went to cut created by road to describe soils. Topsoil from site.			12	Eagle Gold Yukon
EGL202		0		X	BRUN-DYB-O	O.DB		BC some colour imparted based on what is isible from disturbed areas			7	Eagle Gold YK
EGL203		0			--	ZDL		Compacted all subsoil & topsoil pushed (unidirectional but mixed) past e idence of permafrost no longer present in soil profile. boulders at surface			0	Eagle Gold YK
EGL58	nTashe	1	20	W	GLE-Y--O	O.G					3	Eagle Gold YK
EGL52	nTashe	1			BRUN-DYB-O	O.DB		gentle then steepens to gulch/gully mottles from bedrock weathering not water table. frost boils exposed soil trends downward			7	Eagle Gold YK
EGL53		0	45	X	BRUN-DYB-O	O.DB		Ah thin & discontinuous ~ 3 cm			3	Eagle Gold YK

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EGL3		0			BRUN-DYB-O	O.DB		Mottles from wathering rock only Mix of coarse fragments from pea gra el to boulders in silt loam matrix. Auger/sho el refusal at 50 3rd pit attempt due to rocks			10	Eagle Gold, YK
EGL204		0			BRUN-DYB-E	E.DB		High degree of mixing in soil profile No 'C' horizon			33	Eagle Gold, YK
EGL4		0		X	BRUN-DYB-O	O.DB					11	Eagle Gold, YK
EGL205	nTashe	1	60	L	REGO--O	O.R					8	Eagle Gold, YK
EGL60		0		L	BRUN-DYB-O	O.DB		x shallow cannot assess C horizon depth is estimate			3	Eagle Gold, YK
EGL61	nTashe	1			BRUN-DYB-O	O.DB		x shallow Ahe 0 2 Too high C.F. to fully assess soil Some soil is just rock to surface flat lying rocks			6	Eagle Gold, YK
EGL68		0			BRUN-DYB-O	O.DB		lots of deadfall on ground no charcoal in soil may be O.R weak structure mostly held together by roots			8	Eagle Gold, YK
EGL206		0			BRUN-DYB-O	O.DB		too many C.F. to sho el C horiz skeletal soil flat lying planar rock			7	Eagle Gold, YK
EGR206		0	100	L	BRUN-DYB-O			skeletal soil			4	Eagle Gold YK
EGR97		0	65	W	CRYO-TC-GL			sample of water taken pH 6.3 limited cryoturbation Ice within 2 metres will also be root restricting.			10	Eagle Gold, YK
EGR95	nTashe	1	60	L	REGO--O	O.R		Boulders at surface			6	Eagle Gold, YK
EGR80		0			BRUN-DYB-O	O.DB		Ahe discontinuous + bedrock outcrop upslope ~ 20 m			6	Eagle Gold, YK
EGL27		0			REGO--O	O.R		variable clast size May be some Cu.R			2	Eagle Gold YK (stream of Dublin Gulch)
EGL12		0	56	W	GLE-Y-HG-O			Cg is filled in with water from seepage Ahe 2 cm but too thin to sample. May be some Hu. Lu ic Gleysols on site. Humic Gleysol.			11	Eagle Gold, YK Drainage channel of Platinum Gulch
EGL215	nTashe	1	200	X	CRYO-TC-HD	O.DB		Sequence of silts o er gra els likely continues at depth Broken horizons likely influenced by ice in past			14	Eagle Gold, YK S side of Plantinum Gulch
EGL22		0			GLE-Y--R	R.G		flood sequence			7	Eagle Gold, YK, Oli e Gulch
EGL211		0			--							Eagle Gold, YK, Dublin Gulch
EGL26		0		Z	CRYO--	Cryosol	p	Bedrock noted near side trail Phyllite highly weathered & fractured			17	Eagle Gold, YK side of Dublin Gulch
EGL49		0			--						0	Eagle Gold S side Oli e Gulch
EGL25		0			BRUN-DYB-O	O.DB		mid to upper slope difficult to texture as high broken rock fragments May be Lu osols in polygon			8	Eagle Gold, YK side of Dublin Gulch
EGL210		0			LUV-GL-O	O.GL		likely O.DB in polygon as well Some met. sed in profile, mostly granodronite				Eagle Gold, YK Oli e Gulch
EGL208		0			BRUN-DYB-E			skeletal soil			10	Eagle Gold, Oli e Gulch
EGL209		0			BRUN-DYB-E	E.DB/O.DB		meta sed SiL / igneous SL/LS			7	Eagle Gold, YK Oli e Gulch
EGL50		0			--			coarse sand w gra el			15	Eagle Gold, YK NE side of Oli e Gulch
EGL28		0			--							Eagle Gold, YK S side of Dublin Gulch
EGL212	nTashe	1			BRUN-DYB-O	O.DB		1 cobble near surface, all else is consistently gra el in the profile			7	Eagle Gold, YK N side of Dublin Gulch
EGL213		0			--							Eagle Gold, YK N side of Dublin Gulch
EGL214		0	100	Z	CRYO--	Cryosol, R.HG					10	Eagle Gold, YK Adjacent to drainage Platinum Gulch
EGL214A		0			--							Eagle Gold YK N side of Dublin Placer Mines
EGL50A		0			--							Eagle Gold, YK Oli e Gulch
EGL35	nTrommele	1			BRUN-DYB-O	O.DB		high amount of gra el & mica in profile			4	Eagle Gold, Yk headwater of Anne Gulch

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EGL34	nTashe	1			LUV-GL-O			likely O.GL/E.DB both in polygons			11	Eagle Gold, YK headwaters of Anne Gulch
EGL32		0			BRUN-DYB-E	E.DB		may be Lu isols in more stable areas				Eagle Gold, YK Anne Gulch
EGL31		0			REGO--O	O.R		cannot dig deeper than 40 cm due to high CF Some exposed stones/boulders on site Gra el in matrix			2	Eagle Gold, YK Anne Gulch
EGL30		0			BRUN-DYB-O	O.DB		bare soil under trees downslope only tonguing horizons			9	Eagle Gold YK Heapleach 4
EGR81	nTashe	1	30	Z	CRYO-SC-HE		p	phase modifiers pt if Brunisols in area				Eagle Gold, YK
EGR73		0			--							Upper Slope
ERG115		0			--							Above camp on a hill somewhere
EGL9		0		N	BRUN-DYB-O			no auger, can't check for ice O.EB or O.DYB			12	Scarp of kame terrace
EGR306		0			--							
ERG114		0			--							SE facing upper slope
EGR76		0			--							near top of bump
EGR113		0			--							Rocky broken outcrop, not burnt
EGL10		0	42	Z	CRYO--						18	gently sloping bench (kame terrace)
EGR14		0			--							mid of potato hill
EGR112		0			--							burnt slope, mostly straight + minor undulations
EGL11		0		N	BRUN-DYB-O	O.EB or O.DYB		O.EB or O.DYB			15	down from road in forest
EGR13		0			--							On flat just off road
EGL307		0			--							on slope just off road (alpine)
EGR111		0			--							Sm treed patch a small gully
EGR304		0			--							Upper slope of ridge
EGL309		0			--							on slope just NW of Platinum Gulch
EGR110		0		N	BRUN-MB-O			or O.SB				midslope, burnt a while ago
EGL46		0			--							steep, rockfall geo site F
EGR305		0			--							off crest poly, in start of forest
EGR412		0			--							on steep slope above road
EGR124		0			--							Upper slope, straight, N facing
EGR109		0			--							burnt slope
EGR414		0			--							quick peak at sections near road
EGR125		0			--							Just a bit lower in more prod. forest

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EGR415		0			--			some buried horizons				just off road onto terrace
EGR107		0			GLEY--O			O.G or R.G				Valley Bottom, Lynz creek
EGR416		0		N	BRUN-DYB-O			O.DYB or O.EB			11	high terrace For F6 see relative elevations
EGR106		0			--			burnt fen, Lynx Valley				
EGR126		0			--			gentle slope				
EGR417		0			--			terrace off road				
EGR105		0			--			small mostly inactive draw				
EGR418		0			--			hole in terrace				
EGR123		0			--			undulating side slope				
EGR419		0			--			peat tussocks, spruce bog				
EGR420		0			--			beside road				
EGR411		0			--			just up from road				
EGR122		0			--			upper side slope				
EGR410		0			--			road cut				
EGR409		0			--			spruce bog, off road			72	
EGR120		0			--			ridge top, flat to gently undulating				
EGR408		0			--			just up from road cut in forest, Haggart Valley				
EGR119		0			--			forested upper slope				
EGL308		0			--			bench, somewhat forested, lots of roads/drill				
EGR118		0			--			lower slope, aspen, birch, white spruce				
EGL66		0			BRUN-DYB-O			O.DYB to O.EB Ae thicker upslope than downslope			12	just below road pit face, forest
EGR303		0			BRUN--			top of ridge, forested (open lichen/moss)			7	
EGL310		0		N	BRUN-DYB-O			O.DYB or O.EB			7	on a forested slope, some roads nearby
EGL311		0		N	BRUN--			basially same as M, C, D parent materials			19	road cut; eg plot in forest above
EGL48		0			--			near alley head of Eagle Gulch				
EGL312		0			--			head of eagle gulch (upper)				
EGL47		0			--			just up from road			18	
EGL1		0			--			IIC hard to texture due to clast content. Ah too thin to sample.			12	bottom(ish) of Eagle Gulch
EGL313		0	20	L	BRUN-DYB-O			Rock at 20cm. Soil code O.EB or O.DYB			4	Ridge, lichen covered
EGR400		0		N	REGO--GLCU			Soil Code GLCU.R (likely)			12	Off road, vegetated floodplain
EGR70		0			--			forest slide slope, upper gully				

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EGR72		0			--							forest, side slope, RSA
EGR401		0			REGO--CU			Soil code CU.R	Moderate Well		6	Off road, egetated ft
EGR74		0			--							Undulating slope, up from road
EGR102		0			--							alley bottom, barely burnt
EGR405		0			--							road cut, eg plot abo e
EGR406		0			REGO--GLCU			Soil Code GLCU.R			21	Fan/in forest
EGR404		0		N	REGO--CU							just up from creek, off road
EGR403		0	10	L	REGO--O							abo e roadcut
EGR407		0		L	REGO--O			Soil code O.R Root restricting layer: rock at some unknown depth.			4	Abo e road
EGR300		0			--							across gully to other side, from 72
EGR402		0			--							road cut 3.5 m high
EGR413		0			--							In RSA, terrace of Haggart Creek
EGR301		0			--							across alley from 72
EGL21		0			BRUN-EB-O	O.EB		Soil code O.EB Structure and clour due (partially?) to weathering of R			13	Subalpine
EGR302		0			--							across from alley 72
EGR71		0			--							upper flat, near road
TPA1		0	52	Z	--			wood in underlying till total hole depth ~ 6 ft all sal agable mix of clay masses + collu ium				NS Dublin Gulch Rd
TPA3		0	0.5	Z	--			silt till, low c.f. interbedded w 30 cm gra elly layers all sal eagable ice to 1.3 m may or may not be permafrost to 4 m SiS Mb then to SiS gray, unoxidized samples samples PM3+ PM4 both strangely effer esent, esp PM3 BM2 = PM1 gra elly bars PM2				off pit road bottom of HLOPT4 wrap
TPA4		0	53	Z	--			All sal eageable underlying material is Cb w slope wash C o erlying pre ious surface soil No e idenc eof carbonates in this Cb sample PM1 frozen Cb total depth > 2.5 m				Below pit, upper HLOPT4 wrap
EGR451		0			BRUN-DYB-O							
EGR450		0	20		GLEYS--R	Rego Gleysol		likely lenses of silt not isible due to high water table				

SiteID	SiteNo	Decile	SMCode	SMQua Code	SMTxt Code	SE Code	SSM Code	SSMQu a Code	SSMTxt Code	SSE Code	Geo Pro Code	Geo ProS Code	Drai n ID	slope	Clasts Percentage	Clasts Size	Clasts Shape	Clasts Roundness	Clasts Lithology	Bedding Sorting	SiteID2	Project ID	Site No3	Prov Code	Survey Type	Province	
4	EGL63	8	FG		zsg	b							3		50	P	flat blocky	SR	Metased local source	silt over gravel shallow surface move, no angular frgmnts, mix lyrs	4	1	EGL63	BC	D	BC	
4	EGL63	2	C			v							2									4	1	EGL63	BC	D	BC
4	EGL63	0																				4	1	EGL63	BC	D	BC
5	EGL216	6	D		sxr	v							2		65		tabular and blocky	A	Metased with quartzile phyllites		5	1	EGL216	BC	V	BC	
5	EGL216	3	C		br	v							2									5	1	EGL216	BC	V	BC
5	EGL216	1	R		/	a							1									5	1	EGL216	BC	V	BC
6	EGR94	10	M		zsg	m,w					L				25	G	flat + square		mixed lithology, metamorphic sed		6	1	EGR94	BC	D	BC	
6	EGR94	0																				6	1	EGR94	BC	D	BC
6	EGR94	0																				6	1	EGR94	BC	D	BC
7	EGR93	10	C		zxb	v					R	s	2		55	b	irregular	A	metamorphic sedimentary w quartz intrusions		7	1	EGR93	BC	D	BC	
7	EGR93	0																				7	1	EGR93	BC	D	BC
7	EGR93	0																				7	1	EGR93	BC	D	BC
8	EGR92	6	C			b					L											8	1	EGR92	BC	D	BC
8	EGR92	4	F			v					V		6		15	G	SA	SR	mixed		8	1	EGR92	BC	D	BC	
8	EGR92	0									X											8	1	EGR92	BC	D	BC
9	EGR69	10	F			v,b	FG								60	SR	R		metamprhic igneous		9	1	EGR69	BC	V	BC	
9	EGR69	0																				9	1	EGR69	BC	V	BC
9	EGR69	0																				9	1	EGR69	BC	V	BC
10	EGL8	6	F		zsd	j							5		35	P	mixed	SA	mixed igneous, phyllite, mica		10	1	EGL8	BC	D	BC	
10	EGL8	4	F			v,b							4									10	1	EGL8	BC	D	BC
10	EGL8	0																				10	1	EGL8	BC	D	BC
11	EGL6	10	A		rb	h							2		75	P-B	variable Round-Blocky	Rounded-Angular	Granodiarite Metamorphic mix		11	1	EGL6	BC	V	BC	
11	EGL6	0																				11	1	EGL6	BC	V	BC
11	EGL6	0																				11	1	EGL6	BC	V	BC
12	EGL41	10	F		szg	j					L	x	5		25	P	flat to sub-blocky	A-SA	meta sed mica	no obviious sorting	12	1	EGL41	BC	D	BC	
12	EGL41	0									X											12	1	EGL41	BC	D	BC

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12	EGL41	0																			12	1	EGL41	BC	D	BC
13	EGL200	10	D		zr	j							3		30	C	Ax	Igneous intrusive			13	1	EGL200	BC	D	BC
13	EGL200	0																			13	1	EGL200	BC	D	BC
13	EGL200	0																			13	1	EGL200	BC	D	BC
14	EGR96	10	F		sgz	f				X		6		10	g	SR	g	Mica grains visible in gravel	gravels sand overthick silt		14	1	EGR96	BC	D	BC
14	EGR96	0																			14	1	EGR96	BC	D	BC
14	EGR96	0																			14	1	EGR96	BC	D	BC
15	EGL16	6	D		zb	j				F	c	3		50	B		A	igneous intrusive			15	1	EGL16	BC	D	BC
15	EGL16	4	D		zr	j							3								15	1	EGL16	BC	D	BC
15	EGL16	0																			15	1	EGL16	BC	D	BC
16	EGR91	10	F		gsz	f				A		5		10	g	sr	mixed	light/dark bands of silt	layers of sand & fine gravel		16	1	EGR91	BC	D	BC
16	EGR91	0																			16	1	EGR91	BC	D	BC
16	EGR91	0																			16	1	EGR91	BC	D	BC
17	EGR79	7	D		xb	v				R	s	3									17	1	EGR79	BC	D	BC
17	EGR79	2	R			v,r															17	1	EGR79	BC	D	BC
17	EGR79	1	C		b	v						2									17	1	EGR79	BC	D	BC
18	EGR98	7	C		xb	v,x				R	s	2							frost heave		18	1	EGR98	BC	V	BC
18	EGR98	3	R		/	k,s						1									18	1	EGR98	BC	V	BC
18	EGR98	0																			18	1	EGR98	BC	V	BC
19	EGL15	9	D		rzs	a,j								40	C	SA - A		igneous intrusive, quartz/granite			19	1	EGL15	BC	D	BC
19	EGL15	1	D		rzs	a,j				L		5		40	S	SA-A		igneous intr.			19	1	EGL15	BC	D	BC
19	EGL15	0																			19	1	EGL15	BC	D	BC
20	EGL17	9	D		szr	j				F	c	3		40	G-S	A		igneous granite			20	1	EGL17	BC	D	BC
20	EGL17	1	D		zsr	j				L		5		40	G-C	A		igneous intrusive			20	1	EGL17	BC	D	BC
20	EGL17	0																			20	1	EGL17	BC	D	BC
21	EGL39	9	C			v,b				R	m,w	3		40	c	tabular	A	meta sedimentary	biotite flakes and quartzite		21	1	EGL39	BC	D	BC

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21	EGL39	1	D		ll	v							2								21	1	EGL39	BC	D	BC
21	EGL39	0																			21	1	EGL39	BC	D	BC
22	EGL38	10	M		dsz	v,s,d							3		25	g	SR	mixed stripes	mica shads, quartzite	metasedimentary	22	1	EGL38	BC	D	BC
22	EGL38	0																			22	1	EGL38	BC	D	BC
22	EGL38	0																			22	1	EGL38	BC	D	BC
23	EGL37	10	D		zxd	v,b							3		30	C	tabular	A	Meta sed with quartzite & micas	mica flakes in fines	23	1	EGL37	BC	D	BC
23	EGL37	0																			23	1	EGL37	BC	D	BC
23	EGL37	0																			23	1	EGL37	BC	D	BC
24	EGL36	10	M		zgs	b							3		15	C-G	varied	SR-SA	Mixed both igneous and metased		24	1	EGL36	BC	D	BC
24	EGL36	0																			24	1	EGL36	BC	D	BC
24	EGL36	0																			24	1	EGL36	BC	D	BC
25	EGL207	8	C		rb	v					R	"s,r	1		60	C	A	Tabular	mixed meta and sed		25	1	EGL207	BC	V	BC
25	EGL207	2	C		bzr	v,b							2								25	1	EGL207	BC	V	BC
25	EGL207	0																			25	1	EGL207	BC	V	BC
26	EGL18	10	D		szr	j					F	c	3		35	C		A	igneous intusive & metal sed		26	1	EGL18	BC	D	BC
26	EGL18	0																			26	1	EGL18	BC	D	BC
26	EGL18	0																			26	1	EGL18	BC	D	BC
27	EGL33	10	D		zxd	v,b							3		40	p-c	like shards	A	metased with mica and quartzite		27	1	EGL33	BC	D	BC
27	EGL33	0																			27	1	EGL33	BC	D	BC
27	EGL33	0																			27	1	EGL33	BC	D	BC
28	EGL19	9	D		szr	j					L		5		40	C		SA	k rich, feldspar, phyllite rich granite		28	1	EGL19	BC	D	BC
28	EGL19	1	D		szr	j							4								28	1	EGL19	BC	D	BC
28	EGL19	0																			28	1	EGL19	BC	D	BC
29	EGL20	8	D		zsb	b							3		40	B		SA	granite, ign. int.		29	1	EGL20	BC	D	BC
29	EGL20	2	D		zsr	b							3								29	1	EGL20	BC	D	BC

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29	EGL20	0																			29	1	EGL20	BC	D	BC
30	EGL201	6	D		zr								2		60	S	flat	angular	Igneous intr.		30	1	EGL201	BC	D	BC
30	EGL201	3	D		zb	v,b							1		45	boulders		SA			30	1	EGL201	BC	D	BC
30	EGL201	1	A																		30	1	EGL201	BC	D	BC
31	EGL5	6	D		zbr	b,v									45	S		A	Ign. Int.		31	1	EGL5	BC	D	BC
31	EGL5	4	A												45	S		A	Ign. Int.		31	1	EGL5	BC	D	BC
31	EGL5	0																			31	1	EGL5	BC	D	BC
32	EGL202	6	A			b							3		45	C		A	Ign. Int. slow cooling		32	1	EGL202	BC	V	BC
32	EGL202	4	D		szr	b							3		45	C		A	Ign. Int. slow cooling		32	1	EGL202	BC	V	BC
32	EGL202	0																			32	1	EGL202	BC	V	BC
33	EGL203	6	A		szr										50	C		A	ign. int.		33	1	EGL203	BC	V	BC
33	EGL203	4	D																		33	1	EGL203	BC	V	BC
33	EGL203	0																			33	1	EGL203	BC	V	BC
34	EGL58	9	D		zr	v,b					L		6		30	S		A	feldspar rich granite		34	1	EGL58	BC	D	BC
34	EGL58	1	O		e	v	D		zr				7		30	S		A	feldspar rich granite		34	1	EGL58	BC	D	BC
34	EGL58	0																			34	1	EGL58	BC	D	BC
35	EGL52	10	D		szr	b,v					F	c	3		35	C		SA	granite		35	1	EGL52	BC	D	BC
35	EGL52	0																			35	1	EGL52	BC	D	BC
35	EGL52	0																			35	1	EGL52	BC	D	BC
36	EGL53	8	D		zrb	b					F	c	3		40	b		SA	Granite, Feldspar, Quartz		36	1	EGL53	BC	D	BC

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36	EGL53	2	D		szr	b							3								36	1	EGL53	BC	D	BC
36	EGL53	0																			36	1	EGL53	BC	D	BC
37	EGL3	7	D		szr	v,b					F	c	2								37	1	EGL3	BC	D	BC
37	EGL3	3	C		zrb	v							2								37	1	EGL3	BC	D	BC
37	EGL3	0																			37	1	EGL3	BC	D	BC
38	EGL204	10	C		szr	v,b					V		2		45	C		A	granite		38	1	EGL204	BC	D	BC
38	EGL204	0									F	c									38	1	EGL204	BC	D	BC
38	EGL204	0																			38	1	EGL204	BC	D	BC
39	EGL4	10	C		szr	b					V		3		35	C		A	granite		39	1	EGL4	BC	D	BC
39	EGL4	0									F	c									39	1	EGL4	BC	D	BC
39	EGL4	0																			39	1	EGL4	BC	D	BC
40	EGL205	9	C			v,b					V		4		35	b		SA	granite (limited layers of sand in ponded areas)		40	1	EGL205	BC	D	BC
40	EGL205	1	F			v							5		25	G		SR	granite, igneous		40	1	EGL205	BC	D	BC
40	EGL205	0																			40	1	EGL205	BC	D	BC
41	EGL60	7	C		rb	v,b					R	r	2		60	b		A	Granite	none	41	1	EGL60	BC	D	BC
41	EGL60	3	C		zrb	b					N		2								41	1	EGL60	BC	D	BC
41	EGL60	0																			41	1	EGL60	BC	D	BC
42	EGL61	6	D		zrb	b,v							2		60	c-b		A	mixed igneous intrusive		42	1	EGL61	BC	D	BC
42	EGL61	4	C		zrb	v							2								42	1	EGL61	BC	D	BC

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42	EGL61	0																			42	1	EGL61	BC	D	BC
43	EGL68	10	D		szr	b							3		50	c		A	igneous intrusive		43	1	EGL68	BC	D	BC
43	EGL68	0																			43	1	EGL68	BC	D	BC
43	EGL68	0																			43	1	EGL68	BC	D	BC
44	EGL206	10	D		zbx	v					N		2		60	S	planar	A	metadedimentary until quartz veins		44	1	EGL206	BC	D	BC
44	EGL206	0									Z										44	1	EGL206	BC	D	BC
44	EGL206	0																			44	1	EGL206	BC	D	BC
45	EGR206	10	C		zbr	v					R	r	1		60	S	square + planar	A	metamorphic bands evident w igneous intrusions		45	1	EGR206	BC	D	BC
45	EGR206	0									Z										45	1	EGR206	BC	D	BC
45	EGR206	0																			45	1	EGR206	BC	D	BC
46	EGR97	10	M		src	b					L		6		30	C		SR	Mixed met & igneous		46	1	EGR97	BC	D	BC
46	EGR97	0									X										46	1	EGR97	BC	D	BC
46	EGR97	0																			46	1	EGR97	BC	D	BC
47	EGR95	10	C		sxd	b							2			C	mostly planar	A	mixed metamorphic		47	1	EGR95	BC	D	BC
47	EGR95	0																			47	1	EGR95	BC	D	BC
47	EGR95	0																			47	1	EGR95	BC	D	BC
48	EGR80	10	C		zxd	v,b					R	s,x			45	C	planar, rod	A	metamorphic iron rich		48	1	EGR80	BC	D	BC
48	EGR80	0																			48	1	EGR80	BC	D	BC
48	EGR80	0																			48	1	EGR80	BC	D	BC
49	EGL27	10	F	A	sb	p,j					I		4		65	b		SR-SA	chaners, mixed to boulders		49	1	EGL27	BC	V	BC
49	EGL27	0																			49	1	EGL27	BC	V	BC
49	EGL27	0																			49	1	EGL27	BC	V	BC
50	EGL12	10	F		zgs	j					V		6		25	P		SR	Mixed lithology	poorly sorted silts, clays - not readily visible	50	1	EGL12	BC	D	BC

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50	EGL12	0																			50	1	EGL12	BC	D	BC	
50	EGL12	0																				50	1	EGL12	BC	D	BC
51	EGL215	8	F		zsg	b					F	c	4		30	P	block	SR	mixed metamorphic + igneous	silt over sandy gravel	51	1	EGL215	BC	D	BC	
51	EGL215	2	F	l		b					X											51	1	EGL215	BC	D	BC
51	EGL215	0																				51	1	EGL215	BC	D	BC
52	EGL22	10	F	A	gs	v,b					U		5		40	P	round	SR-SA	mixed	coarse/fine flood sequence	52	1	EGL22	BC	D	BC	
52	EGL22	0									l											52	1	EGL22	BC	D	BC
52	EGL22	0																				52	1	EGL22	BC	D	BC
53	EGL211	6	D		xza	v							2		65		tabular to blocky	A	met. sed.		53	1	EGL211	BC	V	BC	
53	EGL211	4	C		r	v							3									53	1	EGL211	BC	V	BC
53	EGL211	0																				53	1	EGL211	BC	V	BC
54	EGL26	10	C		zsg						X				45	var. size	var. shape	SA	quartzite, phyllite, meta. sed.		54	1	EGL26	BC	D	BC	
54	EGL26	0																				54	1	EGL26	BC	D	BC
54	EGL26	0																				54	1	EGL26	BC	D	BC
55	EGL49	10	C		zb					b			2		80	Boulders		A			55	1	EGL49	BC	V	BC	
55	EGL49	0																				55	1	EGL49	BC	V	BC
55	EGL49	0																				55	1	EGL49	BC	V	BC
56	EGL25	10	C		zsr	v,b									25	c	flat, planar	A	meta. sed		56	1	EGL25	BC	D	BC	
56	EGL25	0																				56	1	EGL25	BC	D	BC
56	EGL25	0																				56	1	EGL25	BC	D	BC
57	EGL210	10	C		25	v							3									57	1	EGL210	BC	D	BC
57	EGL210	0																				57	1	EGL210	BC	D	BC
57	EGL210	0																				57	1	EGL210	BC	D	BC
58	EGL208	10	C		zxd	v,b							3		35	C						58	1	EGL208	BC	D	BC
58	EGL208	0																				58	1	EGL208	BC	D	BC

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58	EGL208	0																			58	1	EGL208	BC	D	BC
59	EGL209	6	C		zxr	b					R	m,r	3		60	C	blocky, tabular	A	mixed both ign + meta sed, slate + granodiorite		59	1	EGL209	BC	D	BC
59	EGL209	4	C		sgb	v					R		2		70	B	blocky	A	igneous		59	1	EGL209	BC	D	BC
59	EGL209	0																			59	1	EGL209	BC	D	BC
60	EGL50	6	C		xb					v,b	R	r	2		85	b	blocky	angular	granodiorite		60	1	EGL50	BC	D	BC
60	EGL50	4	R							a,k			1								60	1	EGL50	BC	D	BC
60	EGL50	0																			60	1	EGL50	BC	D	BC
61	EGL28	10	C		xr	v					R	r	2		65		tabular to blocky	A	meta sed		61	1	EGL28	BC	D	BC
61	EGL28	0																			61	1	EGL28	BC	D	BC
61	EGL28	0																			61	1	EGL28	BC	D	BC
62	EGL212	10	F		zsg	v,b							3		35	P	various - flat to bl	SA	mixed quartite + meta. sed.		62	1	EGL212	BC	D	BC
62	EGL212	0																			62	1	EGL212	BC	D	BC
62	EGL212	0																			62	1	EGL212	BC	D	BC
63	EGL213	9	C			v,b					R	x,s	2						meta. sed.		63	1	EGL213	BC	V	BC
63	EGL213	1	R								R	m									63	1	EGL213	BC	V	BC
63	EGL213	0																			63	1	EGL213	BC	V	BC
64	EGL214	10	F		cgz	j					L		5								64	1	EGL214	BC	D	BC
64	EGL214	0									X										64	1	EGL214	BC	D	BC
64	EGL214	0																			64	1	EGL214	BC	D	BC
65	EGL214A	10	F		sg	b					F		3		60	G	flat to blocky	SA	mixed met. + igneous	weakly banded SA gravels inter bedded w silt	65	1	EGL214A	BC	V	BC
65	EGL214A	0																			65	1	EGL214A	BC	V	BC
65	EGL214A	0																			65	1	EGL214A	BC	V	BC
66	EGL50A	10	C		b	b					R	s	3			b	blocky		granitic intrusive visible		66	1	EGL50A	BC	V	BC
66	EGL50A	0																			66	1	EGL50A	BC	V	BC

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66	EGL50A	0																			66	1	EGL50A	BC	V	BC	
67	EGL35	8	D		zrx	b							2		45	C-S		A-SA	mixed meta. sed.		67	1	EGL35	BC	D	BC	
67	EGL35	2	D			b							3								67	1	EGL35	BC	D	BC	
67	EGL35	0																			67	1	EGL35	BC	D	BC	
68	EGL34	10	M		sdz	v,b							3		30	P	var. shape	SA - SR	mixed meta. sed. + igneous		68	1	EGL34	BC	D	BC	
68	EGL34	0																			68	1	EGL34	BC	D	BC	
68	EGL34	0																			68	1	EGL34	BC	D	BC	
69	EGL32	10	C		g	v,b				R	"x	3	27-49%		45	L	Pebbles	SA	mixed metased + igneous		69	1	EGL32	BC	D	BC	
69	EGL32	0																			69	1	EGL32	BC	D	BC	
69	EGL32	0																			69	1	EGL32	BC	D	BC	
70	EGL31	10	C		szr	v,b				R	e,r	2			40	C	tabular	A	metased w quartzite		70	1	EGL31	BC	D	BC	
70	EGL31	0																			70	1	EGL31	BC	D	BC	
70	EGL31	0																			70	1	EGL31	BC	D	BC	
71	EGL30	10	C			b,v							2		40	G-C	tabular - angular		meta sed + igneous intrusive		71	1	EGL30	BC	D	BC	
71	EGL30	0																			71	1	EGL30	BC	D	BC	
71	EGL30	0																			71	1	EGL30	BC	D	BC	
72	EGR81	8	M		sgz	v,b				X		5			20	G-C					72	1	EGR81	BC	D	BC	
72	EGR81	2	M			b,v				L		4									72	1	EGR81	BC	D	BC	
72	EGR81	0																			72	1	EGR81	BC	D	BC	
73	EGR73	10	C		zr	v,b							2		30-40	A	Cob - Peb, few rocks				73	1	EGR73	BC	R	BC	
73	EGR73	0																			73	1	EGR73	BC	R	BC	
73	EGR73	0																			73	1	EGR73	BC	R	BC	
74	ERG115	10	FG		zsd	b,v							4							matrix with dirty gravel tones		74	1	ERG115	BC	R	BC
74	ERG115	0																			74	1	ERG115	BC	R	BC	

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74	ERG115	0																			74	1	ERG115	BC	R	BC
75	EGL9	10	FG		zsg	a							4		40	gr - m peb	blocky	SR most (some SA)		crude	75	1	EGL9	BC	R	BC
75	EGL9	0											3								75	1	EGL9	BC	R	BC
75	EGL9	0																			75	1	EGL9	BC	R	BC
76	EGR306	10	D		rz	v,b							4								76	1	EGR306	BC	V	BC
76	EGR306	0																			76	1	EGR306	BC	V	BC
76	EGR306	0																			76	1	EGR306	BC	V	BC
77	ERG114	10	C		zsr	v,b							2		35%	A-SA blocky		arenites		most 11 to slope	77	1	ERG114	BC	R	BC
77	ERG114	0																			77	1	ERG114	BC	R	BC
77	ERG114	0																			77	1	ERG114	BC	R	BC
78	EGR76	10	D		zr	v,b				X			3		60% rock	peb to 5m					78	1	EGR76	BC	R	BC
78	EGR76	0																			78	1	EGR76	BC	R	BC
78	EGR76	0																			78	1	EGR76	BC	R	BC
79	EGR113	5	C		sr	v				R	r	2						psannite		bedded, some sillminite	79	1	EGR113	BC		BC
79	EGR113	5	R			a,k															79	1	EGR113	BC		BC

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79	EGR113	0																			79	1	EGR113	BC		BC
80	EGL10	10	FG		zds	j					X		5			G-P		A-SA, minor SR		poor sorting	80	1	EGL10	BC	R	BC
80	EGL10	0									Z										80	1	EGL10	BC	R	BC
80	EGL10	0																			80	1	EGL10	BC	R	BC
81	EGR14	8	D		Ab	v					X		2		60-70	0-5m bld				z matrix (SiL)	81	1	EGR14	BC	R	BC
81	EGR14	2	D		zr	v							2								81	1	EGR14	BC	R	BC
81	EGR14	0																			81	1	EGR14	BC	R	BC
82	EGR112	10	C		rs	v,b							2		40	peb-boulde	A-SA blocky		metaseds	some kyanite and mica	82	1	EGR112	BC	R	BC
82	EGR112	0																			82	1	EGR112	BC	R	BC
82	EGR112	0																			82	1	EGR112	BC	R	BC
83	EGL11	10	M		zds								4		20-25	G-P	blocky	A-SA, SR	meta sed quartzite	massive	83	1	EGL11	BC	R	BC
83	EGL11	0																			83	1	EGL11	BC	R	BC
83	EGL11	0																			83	1	EGL11	BC	R	BC
84	EGR13	10	D			v,b					X		4								84	1	EGR13	BC	V	BC
84	EGR13	0																			84	1	EGR13	BC	V	BC
84	EGR13	0																			84	1	EGR13	BC	V	BC

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85	EGL307	10	D		zsr	v,b					S		3			blocky to tabular		A-SA	metased	L matrix	85	1	EGL307	BC	V	BC
85	EGL307	0																			85	1	EGL307	BC	V	BC
85	EGL307	0																			85	1	EGL307	BC	V	BC
86	EGR111	10	C		rzs	b							3								86	1	EGR111	BC		BC
86	EGR111	0																			86	1	EGR111	BC		BC
86	EGR111	0																			86	1	EGR111	BC		BC
87	EGR304	6	C		zr	v,b							2		30-40	peb to cob				SiL matrix	87	1	EGR304	BC	R	BC
87	EGR304	4	D			v,b							3								87	1	EGR304	BC	R	BC
87	EGR304	0																			87	1	EGR304	BC	R	BC
88	EGL309	6	C		rz	a,k							2								88	1	EGL309	BC	R	BC
88	EGL309	4	C		rz	v,b							2								88	1	EGL309	BC	R	BC
88	EGL309	0																			88	1	EGL309	BC	R	BC
89	EGR110	10	C		zds	a							5								89	1	EGR110	BC	D	BC
89	EGR110	0																			89	1	EGR110	BC	D	BC

SiteID	SiteNo	Decile	SMCode	SMQua Code	SMTxt Code	SE Code	SSM Code	SSMQu a Code	SSMTxt Code	SSE Code	Geo Pro Code	Geo ProS Code	Drai n ID	slope	Clasts Percentage	Clasts Size	Clasts Shape	Clasts Roundness	Clasts Lithology	Bedding Sorting	SiteID2	Project ID	Site No3	Prov Code	Survey Type	Province
89	EGR110	0																			89	1	EGR110	BC	D	BC
90	EGL46	9	C		r	k,s							2								90	1	EGL46	BC	V	BC
90	EGL46	1	R			k,s							1								90	1	EGL46	BC	V	BC
90	EGL46	0																			90	1	EGL46	BC	V	BC
91	EGR305	10	D		xz	v,b							4	40	sm peb	tabular			matrix = SiL		91	1	EGR305	BC	R	BC
91	EGR305	0																			91	1	EGR305	BC	R	BC
91	EGR305	0																			91	1	EGR305	BC	R	BC
92	EGR412	10	M		cds	v	D		r				3		pebble		A-R				92	1	EGR412	BC	R	BC
92	EGR412	0											2								92	1	EGR412	BC	R	BC
92	EGR412	0																			92	1	EGR412	BC	R	BC
93	EGR124	10	D		xz	v,b					X		3	35-40	A, tabular	gran to peb	Phyllite to slate		n/a		93	1	EGR124	BC	R	BC
93	EGR124	0																			93	1	EGR124	BC	R	BC
93	EGR124	0																			93	1	EGR124	BC	R	BC
94	EGR109	10	C		zgs	a							5								94	1	EGR109	BC	R	BC
94	EGR109	0																			94	1	EGR109	BC	R	BC

SiteID	SiteNo	Decile	SMCode	SMQua Code	SMTxt Code	SE Code	SSM Code	SSMQu a Code	SSMTxt Code	SSE Code	Geo Pro Code	Geo ProS Code	Drai n ID	slope	Clasts Percentage	Clasts Size	Clasts Shape	Clasts Roundness	Clasts Lithology	Bedding Sorting	SiteID2	Project ID	Site No3	Prov Code	Survey Type	Province
94	EGR109	0																			94	1	EGR109	BC	R	BC
95	EGR414	10	FG		sg	b	M		dcz	k											95	1	EGR414	BC	R	BC
95	EGR414	0																			95	1	EGR414	BC	R	BC
95	EGR414	0																			95	1	EGR414	BC	R	BC
96	EGR125	10	D		xz	v,b					X		4	35	gr to peb	A, tabular			phyllite to pelite	SiL matrix abundant mica	96	1	EGR125	BC	R	BC
96	EGR125	0																			96	1	EGR125	BC	R	BC
96	EGR125	0																			96	1	EGR125	BC	R	BC
97	EGR415	10	F	A	zs	t,p					U		6								97	1	EGR415	BC	R	BC
97	EGR415	0																			97	1	EGR415	BC	R	BC
97	EGR415	0																			97	1	EGR415	BC	R	BC
98	EGR107	10	O		e	v							7								98	1	EGR107	BC	R	BC
98	EGR107	0																			98	1	EGR107	BC	R	BC
98	EGR107	0																			98	1	EGR107	BC	R	BC
99	EGR416	10	FG		sg	t							4	40-30	peb to cob						99	1	EGR416	BC	R	BC
99	EGR416	0																			99	1	EGR416	BC	R	BC
99	EGR416	0																			99	1	EGR416	BC	R	BC
100	EGR106	10	F		rzs	f							4	5	peb-sm.cob	A-SA blocky			APD ears massive		100	1	EGR106	BC	R	BC
100	EGR106	0																			100	1	EGR106	BC	R	BC
100	EGR106	0																			100	1	EGR106	BC	R	BC
101	EGR126	10	D		xz	v,b							4								101	1	EGR126	BC	V	BC
101	EGR126	0																			101	1	EGR126	BC	V	BC
101	EGR126	0																			101	1	EGR126	BC	V	BC
102	EGR417	10	FG		zgs	t,p							4	20-30	blocky to egg	R-SR		mixed			102	1	EGR417	BC	R	BC
102	EGR417	0											3								102	1	EGR417	BC	R	BC
102	EGR417	0																			102	1	EGR417	BC	R	BC
103	EGR105	10	F			a	C						3								103	1	EGR105	BC	V	BC
103	EGR105	0																			103	1	EGR105	BC	V	BC

SiteID	SiteNo	Decile	SMCode	SMQua Code	SMTxt Code	SE Code	SSM Code	SSMQu a Code	SSMTxt Code	SSE Code	Geo Pro Code	Geo ProS Code	Drai n ID	slope	Clasts Percentage	Clasts Size	Clasts Shape	Clasts Roundness	Clasts Lithology	Bedding Sorting	SiteID2	Project ID	Site No3	Prov Code	Survey Type	Province
103	EGR105	0																			103	1	EGR105	BC	V	BC
104	EGR418	10	FG		zgs	t					H		4		15-20	peb-cob		R			104	1	EGR418	BC	R	BC
104	EGR418	0																			104	1	EGR418	BC	R	BC
104	EGR418	0																			104	1	EGR418	BC	R	BC
105	EGR123	10	M		dz								3		A-SA	gran to peb				z coating some clasts	105	1	EGR123	BC	R	BC
105	EGR123	0																			105	1	EGR123	BC	R	BC
105	EGR123	0																			105	1	EGR123	BC	R	BC
106	EGR419	10	O		e	v	FG			t	X		6								106	1	EGR419	BC	R	BC
106	EGR419	0																			106	1	EGR419	BC	R	BC
106	EGR419	0																			106	1	EGR419	BC	R	BC
107	EGR420	10	N								U										107	1	EGR420	BC	V	BC
107	EGR420	0	O			v															107	1	EGR420	BC	V	BC
107	EGR420	0																			107	1	EGR420	BC	V	BC
108	EGR411	10	M		dcz	j,u					F	w	5		15-20			A-R	mixed		108	1	EGR411	BC	R	BC
108	EGR411	0																			108	1	EGR411	BC	R	BC
108	EGR411	0																			108	1	EGR411	BC	R	BC
109	EGR122	10	M		dzs								4		20-25	gr to peb	A, SA				109	1	EGR122	BC	R	BC
109	EGR122	0																			109	1	EGR122	BC	R	BC

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109	EGR122	0																			109	1	EGR122	BC	R	BC
110	EGR410	10	F		gsz								3								110	1	EGR410	BC	V	BC
110	EGR410	0											2								110	1	EGR410	BC	V	BC
110	EGR410	0																			110	1	EGR410	BC	V	BC
111	EGR409	10	O		e	v	F		sz	f			6								111	1	EGR409	BC	R	BC
111	EGR409	0																			111	1	EGR409	BC	R	BC
111	EGR409	0																			111	1	EGR409	BC	R	BC
112	EGR120	10	D		zr	v,b							3								112	1	EGR120	BC	R	BC
112	EGR120	0																			112	1	EGR120	BC	R	BC
112	EGR120	0																			112	1	EGR120	BC	R	BC
113	EGR408	10	M		zds	a,u							4	20	pebble		SA-SR	mixed	poorly sorted/ can't tell if bedded	113	1	EGR408	BC	R	BC	
113	EGR408	0											3								113	1	EGR408	BC	R	BC
113	EGR408	0																			113	1	EGR408	BC	R	BC
114	EGR119	10	D		zr	v,b							3	40-50	peb to cob	A	tabular	blocky rocks	L matrix	114	1	EGR119	BC	R	BC	
114	EGR119	0																			114	1	EGR119	BC	R	BC
114	EGR119	0																			114	1	EGR119	BC	R	BC
115	EGL308	10	D		zr	v,b							4	30-40		blocky-tabular	ang-SA	metased		115	1	EGL308	BC	V	BC	
115	EGL308	0																			115	1	EGL308	BC	V	BC
115	EGL308	0																			115	1	EGL308	BC	V	BC
116	EGR118	10	M		dzs	b							3								116	1	EGR118	BC	R	BC

SiteID	SiteNo	Decile	SMCode	SMQua Code	SMTxt Code	SE Code	SSM Code	SSMQu a Code	SSMTxt Code	SSE Code	Geo Pro Code	Geo ProS Code	Drai n ID	slope	Clasts Percentage	Clasts Size	Clasts Shape	Clasts Roundness	Clasts Lithology	Bedding Sorting	SiteID2	Project ID	Site No3	Prov Code	Survey Type	Province
116	EGR118	0																			116	1	EGR118	BC	R	BC
116	EGR118	0																			116	1	EGR118	BC	R	BC
117	EGL66	10	C		srz								3		30-40	gr-cob	blocky-tabular lamin	A-SA	metased to qtzite		117	1	EGL66	BC	R	BC
117	EGL66	0																			117	1	EGL66	BC	R	BC
117	EGL66	0																			117	1	EGL66	BC	R	BC
118	EGR303	10	D		rz	v,b							4		15-May	Gr-Peb		A	granitic		118	1	EGR303	BC	D	BC
118	EGR303	0																			118	1	EGR303	BC	D	BC
118	EGR303	0																			118	1	EGR303	BC	D	BC
119	EGL310	10	C		rs	v,b							2		15-May	p - cob		SA-A	granite	appears massive	119	1	EGL310	BC	R	BC
119	EGL310	0											3								119	1	EGL310	BC	R	BC
119	EGL310	0																			119	1	EGL310	BC	R	BC
120	EGL311	10	M		zds	v,b							4		30-40		blocky to tabular	A-SA	qtzite		120	1	EGL311	BC	V	BC
120	EGL311	0											3								120	1	EGL311	BC	V	BC
120	EGL311	0																			120	1	EGL311	BC	V	BC
121	EGL48	10	C		rz	u,h					R	m	3			p-b		A-SA			121	1	EGL48	BC	R	BC
121	EGL48	0									P										121	1	EGL48	BC	R	BC
121	EGL48	0																			121	1	EGL48	BC	R	BC
122	EGL312	10	D		r	v,b					S		2								122	1	EGL312	BC	V	BC
122	EGL312	0									R	m									122	1	EGL312	BC	V	BC
122	EGL312	0																			122	1	EGL312	BC	V	BC
123	EGL47	10	D		zr	b,v							4		30-40	R cobble	tabular to blocky	A - SA	qtzite	none obvious	123	1	EGL47	BC	R	BC
123	EGL47	0																			123	1	EGL47	BC	R	BC
123	EGL47	0																			123	1	EGL47	BC	R	BC
124	EGL1	10	F		zsg	a					P		5		40	pebbles	SA-A	tabular		not obvious	124	1	EGL1	BC	D	BC
124	EGL1	0																			124	1	EGL1	BC	D	BC
124	EGL1	0																			124	1	EGL1	BC	D	BC

SiteID	SiteNo	Decile	SMCode	SMQua Code	SMTxt Code	SE Code	SSM Code	SSMQu a Code	SSMTxt Code	SSE Code	Geo Pro Code	Geo ProS Code	Drai n ID	slope	Clasts Percentage	Clasts Size	Clasts Shape	Clasts Roundness	Clasts Lithology	Bedding Sorting	SiteID2	Project ID	Site No3	Prov Code	Survey Type	Province
125	EGL313	10	FG		zgs	r							3								125	1	EGL313	BC	R	BC
125	EGL313	0																			125	1	EGL313	BC	R	BC
125	EGL313	0																			125	1	EGL313	BC	R	BC
126	EGR400	10	F		zfs	p							5		0					Can't tell, too many roots	126	1	EGR400	BC	R	BC
126	EGR400	0																			126	1	EGR400	BC	R	BC
126	EGR400	0																			126	1	EGR400	BC	R	BC
127	EGR70	10	C		rz	v,b	R			r			3		40-50	cob-bould	A		metasediments		127	1	EGR70	BC	R	BC
127	EGR70	0																			127	1	EGR70	BC	R	BC
127	EGR70	0																			127	1	EGR70	BC	R	BC
128	EGR72	9	C		zr	v,b							3		50%	peb-sm. bo	Tabular A		slate to phyllite		128	1	EGR72	BC	R	BC
128	EGR72	1	R			u							1								128	1	EGR72	BC	R	BC
128	EGR72	0																			128	1	EGR72	BC	R	BC
129	EGR401	10	F		sg	t							4								129	1	EGR401	BC	R	BC

SiteID	SiteNo	Decile	SMCode	SMQua Code	SMTxt Code	SE Code	SSM Code	SSMQu a Code	SSMTxt Code	SSE Code	Geo Pro Code	Geo ProS Code	Drai n ID	slope	Clasts Percentage	Clasts Size	Clasts Shape	Clasts Roundness	Clasts Lithology	Bedding Sorting	SiteID2	Project ID	Site No3	Prov Code	Survey Type	Province
129	EGR401	0																			129	1	EGR401	BC	R	BC
129	EGR401	0																			129	1	EGR401	BC	R	BC
130	EGR74	10	D		zr	v,b	C				X		3								130	1	EGR74	BC	R	BC
130	EGR74	0									S										130	1	EGR74	BC	R	BC
130	EGR74	0																			130	1	EGR74	BC	R	BC
131	EGR102	10	O		e	v							7		0						131	1	EGR102	BC	V	BC
131	EGR102	0																			131	1	EGR102	BC	V	BC
131	EGR102	0																			131	1	EGR102	BC	V	BC
132	EGR405	10	FG		sgz	v	D		r	v			3	30	P-C		A-R mixed		poorly sorted thin 0.3 = 1 m on top of crdely stat		132	1	EGR405	BC	R	BC
132	EGR405	0																			132	1	EGR405	BC	R	BC
132	EGR405	0																			132	1	EGR405	BC	R	BC
133	EGR406	10	F		zs								5						finely laminated		133	1	EGR406	BC	R	BC
133	EGR406	0																			133	1	EGR406	BC	R	BC
133	EGR406	0																			133	1	EGR406	BC	R	BC
134	EGR404	10	F	A	sg	p					U		5	40	P				poorly sorted		134	1	EGR404	BC	R	BC
134	EGR404	0																			134	1	EGR404	BC	R	BC
134	EGR404	0																			134	1	EGR404	BC	R	BC
135	EGR403	10	D		zsr	v,b	R			k	F	k,w	2	60					phyllite to schiztose rock		135	1	EGR403	BC	R	BC
135	EGR403	0																			135	1	EGR403	BC	R	BC
135	EGR403	0																			135	1	EGR403	BC	R	BC

SiteID	SiteNo	Decile	SMCode	SMQua Code	SMTxt Code	SE Code	SSM Code	SSMQu a Code	SSMTxt Code	SSE Code	Geo Pro Code	Geo ProS Code	Drai n ID	slope	Clasts Percentage	Clasts Size	Clasts Shape	Clasts Roundness	Clasts Lithology	Bedding Sorting	SiteID2	Project ID	Site No3	Prov Code	Survey Type	Province
136	EGR407	10	C		zr	a,u					R		3		30-40	peb-sm cob	A			zfs matrix	136	1	EGR407	BC	R	BC
136	EGR407	0																			136	1	EGR407	BC	R	BC
136	EGR407	0																			136	1	EGR407	BC	R	BC
137	EGR300	7	C			v,b							2								137	1	EGR300	BC	V	BC
137	EGR300	3	R			k,s							1								137	1	EGR300	BC	V	BC
137	EGR300	0																			137	1	EGR300	BC	V	BC
138	EGR402	10	FG		zgs	k							2	Oct-50	R-P-MC				crude horz stratification	138	1	EGR402	BC	R	BC	
138	EGR402	0																			138	1	EGR402	BC	R	BC
138	EGR402	0																			138	1	EGR402	BC	R	BC
139	EGR413	10	F		zfs	t							4		na				can't tell	139	1	EGR413	BC	R	BC	
139	EGR413	0																			139	1	EGR413	BC	R	BC
139	EGR413	0																			139	1	EGR413	BC	R	BC
140	EGR301	10	C			v,b							2								140	1	EGR301	BC	V	BC
140	EGR301	0																			140	1	EGR301	BC	V	BC
140	EGR301	0																			140	1	EGR301	BC	V	BC
141	EGL21	10	D		rz	v,b							4	10-May	gr-sm peb	A-SA		Mica in matrix	60cm depth	141	1	EGL21	BC	D	BC	
141	EGL21	0																			141	1	EGL21	BC	D	BC
141	EGL21	0																			141	1	EGL21	BC	D	BC

SiteID	SiteNo	Decile	SMCode	SMQua Code	SMTxt Code	SE Code	SSM Code	SSMQu a Code	SSMTxt Code	SSE Code	Geo Pro Code	Geo ProS Code	Drai n ID	slope	Clasts Percentage	Clasts Size	Clasts Shape	Clasts Roundness	Clasts Lithology	Bedding Sorting	SiteID2	Project ID	Site No3	Prov Code	Survey Type	Province
142	EGR302	6	C			v,b							2								142	1	EGR302	BC		BC
142	EGR302	4	R			s,k							1								142	1	EGR302	BC		BC
142	EGR302	0																			142	1	EGR302	BC		BC
143	EGR71	10	D		zr	v,b							4	50%	cob-boulde	A		slate to phyllite		143	1	EGR71	BC	R	BC	
143	EGR71	0																			143	1	EGR71	BC	R	BC
143	EGR71	0																			143	1	EGR71	BC	R	BC
144	TPA1	10	C		rsz	b,j							3					angular, foliated		144	1	TPA1	BC	R	BC	
144	TPA1	0																			144	1	TPA1	BC	R	BC
144	TPA1	0																			144	1	TPA1	BC	R	BC
145	TPA3	10	M		z	b,j							4		small			subrounded		145	1	TPA3	BC	R	BC	
145	TPA3	0																			145	1	TPA3	BC	R	BC
145	TPA3	0																			145	1	TPA3	BC	R	BC
146	TPA4	10	C		m	b,j				S			4					angular, foliated		146	1	TPA4	BC	R	BC	
146	TPA4	0																			146	1	TPA4	BC	R	BC
146	TPA4	0																			146	1	TPA4	BC	R	BC
147	EGR451	10	FG		zsg	t							3	35-70							147	1	EGR451	BC	Q	BC
147	EGR451	0																			147	1	EGR451	BC	Q	BC
147	EGR451	0																			147	1	EGR451	BC	Q	BC
148	EGR450	10	O		e	v	F	zgs	p	U			7								148	1	EGR450	BC	Q	BC
148	EGR450	0																			148	1	EGR450	BC	Q	BC
148	EGR450	0																			148	1	EGR450	BC	Q	BC

SiteID	SiteNo	Soil Corr		Surveyors	Survey Date	Easting	Northing	Elevation	Surface Expression	Surf.Stone	Slope Position (site)	Slope Position (PEL)	Landscape Slope	Slope Length	Horizon Curvature	Vertical Curvature	Land Use	Erosion	Erosion Severity	Seepage				
		Zone	Area																	Slope %	Seepage Depth Flag	Seepage Depth	Permafrost Depth Flag	Permafrost Depth
4	EGL63	8		35	nt, js	8/16/2009	459259	7100415	933	<0.01%	U		30 - 45%	100-500	LN	CV	Fo				0		0	
4	EGL63	8		35	nt, js	8/16/2009	459259	7100415	933	<0.01%	U		30 - 45%	100-500	LN	CV	Fo				0		0	
4	EGL63	8		35	nt, js	8/16/2009	459259	7100415	933	<0.01%	U		30 - 45%	100-500	LN	CV	Fo				0		0	
5	EGL216	8		30	NT, JS	8/16/2009	458642	7101004	811		T		30 - 45%	50-100	LN	LV	Fo	W	moderate		0		0	
5	EGL216	8		30	NT, JS	8/16/2009	458642	7101004	811		T		30 - 45%	50-100	LN	LV	Fo	W	moderate		0		0	
5	EGL216	8		30	NT, JS	8/16/2009	458642	7101004	811		T		30 - 45%	50-100	LN	LV	Fo	W	moderate		0		0	
6	EGR94	8		55	NT/JS	9/13/2009	462791	7103626	1147	0.1 - 3%	M		45-70%		LN	LN	Fo	W	moderate		0	13	0	
6	EGR94	8		55	NT/JS	9/13/2009	462791	7103626	1147	0.1 - 3%	M		45-70%		LN	LN	Fo	W	moderate		0	13	0	
6	EGR94	8		55	NT/JS	9/13/2009	462791	7103626	1147	0.1 - 3%	M		45-70%		LN	LN	Fo	W	moderate		0	13	0	
7	EGR93	8		60	NT/JS	8/13/2009	462866	7103852	1096	15 - 50%	M		45-70%	100-500	LN	LN	Fo				0		0	
7	EGR93	8		60	NT/JS	8/13/2009	462866	7103852	1096	15 - 50%	M		45-70%	100-500	LN	LN	Fo				0		0	
7	EGR93	8		60	NT/JS	8/13/2009	462866	7103852	1096	15 - 50%	M		45-70%	100-500	LN	LN	Fo				0		0	
8	EGR92	8		25	NT/JS	8/13/2009	462758	7103994	1028	<0.01%	L		15 - 30%	100-500	CC	LN	Fo	W	moderate		0	22	0	60
8	EGR92	8		25	NT/JS	8/13/2009	462758	7103994	1028	<0.01%	L		15 - 30%	100-500	CC	LN	Fo	W	moderate		0	22	0	60
8	EGR92	8		25	NT/JS	8/13/2009	462758	7103994	1028	<0.01%	L		15 - 30%	100-500	CC	LN	Fo	W	moderate		0	22	0	60
9	EGR69	8		2	NT/JS	8/13/2009	462632	7104613	921		L		2 - 5%								0		0	
9	EGR69	8		2	NT/JS	8/13/2009	462632	7104613	921		L		2 - 5%								0		0	
9	EGR69	8		2	NT/JS	8/13/2009	462632	7104613	921		L		2 - 5%								0		0	
10	EGL8	8		15	NT/JS	8/16/2009	458909	7101065	846	0.01 - 0.1%	L		9 - 15%				Fo				0		0	
10	EGL8	8		15	NT/JS	8/16/2009	458909	7101065	846	0.01 - 0.1%	L		9 - 15%				Fo				0		0	
10	EGL8	8		15	NT/JS	8/16/2009	458909	7101065	846	0.01 - 0.1%	L		9 - 15%				Fo				0		0	
11	EGL6	8		0	NT/JS	8/16/2009	458890	7100898	831				9 - 15%				DL	W	moderate		0		0	
11	EGL6	8		0	NT/JS	8/16/2009	458890	7100898	831				9 - 15%				DL	W	moderate		0		0	
11	EGL6	8		0	NT/JS	8/16/2009	458890	7100898	831				9 - 15%				DL	W	moderate		0		0	
12	EGL41	8		30	NT/JS	8/16/2009	459759	7100924	925	<0.01%	L				LN	LV	Fo				0	19	0	100
12	EGL41	8		30	NT/JS	8/16/2009	459759	7100924	925	<0.01%	L				LN	LV	Fo				0	19	0	100

SiteID	SiteNo	Soil Corr		Surveyors	Survey Date	Easting	Northing	Elevation	Surface Expression	Surf.Stone	Slope Position (site)	Slope Position (PEL)	Landscape Slope	Slope Length	Horizon Curvature	Vertical Curvature	Land Use	Erosion	Erosion Severity	Seepage				
		Zone	Area																	Slope %	Depth Flag	Seepage Depth	Permafrost Depth Flag	Permafrost Depth
12	EGL41	8		30	NT/JS	8/16/2009	459759	7100924	925		<0.01%	L				LN	LV	Fo			0	19	0	100
13	EGL200	8		8	NT/SW	8/11/2009	463530	7101102	0		<0.01%	M	5 - 9%	100-500		LN	LN	SA	W	slight	0		0	
13	EGL200	8		8	NT/SW	8/11/2009	463530	7101102	0		<0.01%	M	5 - 9%	100-500		LN	LN	SA	W	slight	0		0	
13	EGL200	8		8	NT/SW	8/11/2009	463530	7101102	0		<0.01%	M	5 - 9%	100-500		LN	LN	SA	W	slight	0		0	
14	EGR96	8		25	NT, JS	8/13/2009	462720	7104258	981		<0.01%			100-500		CC	LN	Fo			1	10	1	30
14	EGR96	8		25	NT, JS	8/13/2009	462720	7104258	981		<0.01%			100-500		CC	LN	Fo			1	10	1	30
14	EGR96	8		25	NT, JS	8/13/2009	462720	7104258	981		<0.01%			100-500		CC	LN	Fo			1	10	1	30
15	EGL16	8		10	NT/SW	8/11/2009	462792	7102169	1316		15 - 50%	M	9 - 15%	100-500		LN	LN	SA	W	slight	0		0	
15	EGL16	8		10	NT/SW	8/11/2009	462792	7102169	1316		15 - 50%	M	9 - 15%	100-500		LN	LN	SA	W	slight	0		0	
15	EGL16	8		10	NT/SW	8/11/2009	462792	7102169	1316		15 - 50%	M	9 - 15%	100-500		LN	LN	SA	W	slight	0		0	
16	EGR91	8		18	NT, JS	8/13/2009	462687	7104425	944			L	15 - 30%			CV	LN	Fo	W	moderate	1		0	
16	EGR91	8		18	NT, JS	8/13/2009	462687	7104425	944			L	15 - 30%			CV	LN	Fo	W	moderate	1		0	
16	EGR91	8		18	NT, JS	8/13/2009	462687	7104425	944			L	15 - 30%			CV	LN	Fo	W	moderate	1		0	
17	EGR79	8		0	NT, JS	8/13/2009	464138	7103475	0												0		0	
17	EGR79	8		0	NT, JS	8/13/2009	464138	7103475	0												0		0	
17	EGR79	8		0	NT, JS	8/13/2009	464138	7103475	0												0		0	
18	EGR98	8		65	NT, JS	8/13/2009	463534	7103399													0		0	
18	EGR98	8		65	NT, JS	8/13/2009	463534	7103399													0		0	
18	EGR98	8		65	NT, JS	8/13/2009	463534	7103399													0		0	
19	EGL15	8		27	NT/SW	8/11/2009	462811	7102030	0		3 - 15%	M	15 - 30%	100-500		LN	LN	Fo	W	moderate	0		0	
19	EGL15	8		27	NT/SW	8/11/2009	462811	7102030	0		3 - 15%	M	15 - 30%	100-500		LN	LN	Fo	W	moderate	0		0	
19	EGL15	8		27	NT/SW	8/11/2009	462811	7102030	0		3 - 15%	M	15 - 30%	100-500		LN	LN	Fo	W	moderate	0		0	
20	EGL17	8		17	NT/SW	8/11/2009	462958	7101937	1329		3 - 15%	L	15 - 30%	25-50		LN	CN	Fo	W	slight	0		0	
20	EGL17	8		17	NT/SW	8/11/2009	462958	7101937	1329		3 - 15%	L	15 - 30%	25-50		LN	CN	Fo	W	slight	0		0	
20	EGL17	8		17	NT/SW	8/11/2009	462958	7101937	1329		3 - 15%	L	15 - 30%	25-50		LN	CN	Fo	W	slight	0		0	
21	EGL39	8		70	NT, JS	8/14/2009	459731	7101483	0		0.1 - 3%	U	45-70%			LN	LV	Fo			0		0	

SiteID	SiteNo	Soil Corr		Surveyors	Survey Date	Easting	Northing	Elevation	Surface Expression	Surf.Stone	Slope Position (site)	Slope Position (PEL)	Landscape Slope	Slope Length	Horizon Curvature	Vertical Curvature	Land Use	Erosion	Erosion Severity	Seepage		Permafrost Depth Flag	Permafrost Depth
		Zone	Area																	Depth Flag	Depth		
21	EGL39	8	70	NT, JS	8/14/2009	459731	7101483	0		0.1 - 3%	U		45-70%		LN	LV	Fo			0		0	
21	EGL39	8	70	NT, JS	8/14/2009	459731	7101483	0		0.1 - 3%	U		45-70%		LN	LV	Fo			0		0	
22	EGL38	8	18	NT, JS	8/14/2009	459691	7101575	954		<0.01%	M		15 - 30%	50-100	LN	LN	Fo	W	slight	0		0	
22	EGL38	8	18	NT, JS	8/14/2009	459691	7101575	954		<0.01%	M		15 - 30%	50-100	LN	LN	Fo	W	slight	0		0	
22	EGL38	8	18	NT, JS	8/14/2009	459691	7101575	954		<0.01%	M		15 - 30%	50-100	LN	LN	Fo	W	slight	0		0	
23	EGL37	8	28	NT, JS	8/14/2009	459728	7101841	989		0.01 - 0.1%	M		15 - 30%	100-500	LN	LN	Fo			0		0	
23	EGL37	8	28	NT, JS	8/14/2009	459728	7101841	989		0.01 - 0.1%	M		15 - 30%	100-500	LN	LN	Fo			0		0	
23	EGL37	8	28	NT, JS	8/14/2009	459728	7101841	989		0.01 - 0.1%	M		15 - 30%	100-500	LN	LN	Fo			0		0	
24	EGL36	8	18	NT, JS	8/14/2009	459838	7102176	1053		<0.01%	M		9 -15%	100-500	LN	LN	Fo			0		0	
24	EGL36	8	18	NT, JS	8/14/2009	459838	7102176	1053		<0.01%	M		9 -15%	100-500	LN	LN	Fo			0		0	
24	EGL36	8	18	NT, JS	8/14/2009	459838	7102176	1053		<0.01%	M		9 -15%	100-500	LN	LN	Fo			0		0	
25	EGL207	8	80	NT, JS	8/14/2009	460282	7101635	1013		15 - 50%					LN	LN	Fo	W	moderate	0		0	
25	EGL207	8	80	NT, JS	8/14/2009	460282	7101635	1013		15 - 50%					LN	LN	Fo	W	moderate	0		0	
25	EGL207	8	80	NT, JS	8/14/2009	460282	7101635	1013		15 - 50%					LN	LN	Fo	W	moderate	0		0	
26	EGL18	8	18	NT/SW	8/11/2009	463270	7101529	1356		0.1 - 3%	M		15 - 30%	50-100	LN	LN	Fo	W	slight	0		0	
26	EGL18	8	18	NT/SW	8/11/2009	463270	7101529	1356		0.1 - 3%	M		15 - 30%	50-100	LN	LN	Fo	W	slight	0		0	
26	EGL18	8	18	NT/SW	8/11/2009	463270	7101529	1356		0.1 - 3%	M		15 - 30%	50-100	LN	LN	Fo	W	slight	0		0	
27	EGL33	8	8	NT, JS	8/14/2009	459688	7102357	1062			U		5 - 9%	50-100	LN	LV				0		0	
27	EGL33	8	8	NT, JS	8/14/2009	459688	7102357	1062			U		5 - 9%	50-100	LN	LV				0		0	
27	EGL33	8	8	NT, JS	8/14/2009	459688	7102357	1062			U		5 - 9%	50-100	LN	LV				0		0	
28	EGL19	8	18	NT/SW	8/11/2009	463242	7101394	1351		0.01 - 0.1%	T		15 - 30%	50-100			Sc	W	slight	0	37	0	
28	EGL19	8	18	NT/SW	8/11/2009	463242	7101394	1351		0.01 - 0.1%	T		15 - 30%	50-100			Sc	W	slight	0	37	0	
28	EGL19	8	18	NT/SW	8/11/2009	463242	7101394	1351		0.01 - 0.1%	T		15 - 30%	50-100			Sc	W	slight	0	37	0	
29	EGL20	8	22	NT/SW	8/11/2009	463116	7101354	1352		3 - 15%	M		15 - 30%	50-100	LN	LN				0		0	
29	EGL20	8	22	NT/SW	8/11/2009	463116	7101354	1352		3 - 15%	M		15 - 30%	50-100	LN	LN				0		0	

SiteID	SiteNo	Soil Corr		Surveyors	Survey Date	Easting	Northing	Elevation	Surface Expression	Surf.Stone	Slope Position (site)	Slope Position (PEL)	Landscape Slope	Slope Length	Horizon Curvature	Vertical Curvature	Land Use	Erosion			Seepage		Permafrost		
		Zone	Area															Slope %	Erosion	Severity	Depth Flag	Seepage Depth	Depth Flag	Permafrost Depth	
29	EGL20	8		22	NT/SW	8/11/2009	463116	7101354	1352		3 - 15%	M	15 - 30%	50-100	LN	LN					0		0		
30	EGL201	8		14	NT/SW	8/11/2009	463459	7100733	1433		15 - 50%	U	15 - 30%	50-100	LN	LV	SA					0		0	
30	EGL201	8		14	NT/SW	8/11/2009	463459	7100733	1433		15 - 50%	U	15 - 30%	50-100	LN	LV	SA					0		0	
30	EGL201	8		14	NT/SW	8/11/2009	463459	7100733	1433		15 - 50%	U	15 - 30%	50-100	LN	LV	SA					0		0	
31	EGL5	8		8	NT/SW	8/11/2009	463097	7100757	1411		15 - 50%	L	9 - 15%	100-500	LN	LN	Sc					0		0	
31	EGL5	8		8	NT/SW	8/11/2009	463097	7100757	1411		15 - 50%	L	9 - 15%	100-500	LN	LN	Sc					0		0	
31	EGL5	8		8	NT/SW	8/11/2009	463097	7100757	1411		15 - 50%	L	9 - 15%	100-500	LN	LN	Sc					0		0	
32	EGL202	8		7	NT/SW	8/11/2009	462894	7100736	1405		3 - 15%	L	5 - 9%		LN	LN	Sc					0		0	
32	EGL202	8		7	NT/SW	8/11/2009	462894	7100736	1405		3 - 15%	L	5 - 9%		LN	LN	Sc					0		0	
32	EGL202	8		7	NT/SW	8/11/2009	462894	7100736	1405		3 - 15%	L	5 - 9%		LN	LN	Sc					0		0	
33	EGL203	8		4	NT/SW	8/11/2009	462908	7100758	1402			L		50-100	LN	LN	DL					0		0	
33	EGL203	8		4	NT/SW	8/11/2009	462908	7100758	1402			L		50-100	LN	LN	DL					0		0	
33	EGL203	8		4	NT/SW	8/11/2009	462908	7100758	1402			L		50-100	LN	LN	DL					0		0	
34	EGL58	8		0	NT/SW	8/11/2009	462612	7101002	1363		3 - 15%	D	2 - 5%	50-100	CN	CN	Wt	W	slight			0	10	0	
34	EGL58	8		0	NT/SW	8/11/2009	462612	7101002	1363		3 - 15%	D	2 - 5%	50-100	CN	CN	Wt	W	slight			0	10	0	
34	EGL58	8		0	NT/SW	8/11/2009	462612	7101002	1363		3 - 15%	D	2 - 5%	50-100	CN	CN	Wt	W	slight			0	10	0	
35	EGL52	8		10	NT/JS	8/12/2009	461913	7100049	1359		3 - 15%	U	9 - 15%	25-50	CV	LN	DL	W	slight			0		0	
35	EGL52	8		10	NT/JS	8/12/2009	461913	7100049	1359		3 - 15%	U	9 - 15%	25-50	CV	LN	DL	W	slight			0		0	
35	EGL52	8		10	NT/JS	8/12/2009	461913	7100049	1359		3 - 15%	U	9 - 15%	25-50	CV	LN	DL	W	slight			0		0	
36	EGL53	8		10	NT/JS	8/12/2009	461946	7100227	1356		3 - 15%	U	9 - 15%	100-500	CV	LN	Sc	W	slight			0		0	

SiteID	SiteNo	Soil Corr		Surveyors	Survey Date	Easting	Northing	Elevation	Surface Expression	Surf.Stone	Slope Position (site)	Slope Position (PEL)	Landscape Slope	Slope Length	Horizon Curvature	Vertical Curvature	Land Use	Erosion	Erosion Severity	Seepage Depth Flag	Seepage Depth	Permafrost Depth Flag	Permafrost Depth
		Zone	Area																				
36	EGL53	8	10	NT/JS	8/12/2009	461946	7100227	1356		3 - 15%	U		9 - 15%	100-500	CV	LN	Sc	W	slight	0		0	
36	EGL53	8	10	NT/JS	8/12/2009	461946	7100227	1356		3 - 15%	U		9 - 15%	100-500	CV	LN	Sc	W	slight	0		0	
37	EGL3	8	15	NT/JS	8/12/2009	461502	7100241	1333		3 - 15%	U		15 - 30%	25-50	CV	LN	Fo	W	slight	0		0	
37	EGL3	8	15	NT/JS	8/12/2009	461502	7100241	1333		3 - 15%	U		15 - 30%	25-50	CV	LN	Fo	W	slight	0		0	
37	EGL3	8	15	NT/JS	8/12/2009	461502	7100241	1333		3 - 15%	U		15 - 30%	25-50	CV	LN	Fo	W	slight	0		0	
38	EGL204	8	60	NT/JS	8/12/2009	461449	7100218	1310		3 - 15%	M		45-70%	50-100	LN	LN	Fo	W	moderate	0		0	
38	EGL204	8	60	NT/JS	8/12/2009	461449	7100218	1310		3 - 15%	M		45-70%	50-100	LN	LN	Fo	W	moderate	0		0	
38	EGL204	8	60	NT/JS	8/12/2009	461449	7100218	1310		3 - 15%	M		45-70%	50-100	LN	LN	Fo	W	moderate	0		0	
39	EGL4	8	25	NT/JS	8/12/2009	461305	7100234	1261		3 - 15%	L		15 - 30%	50-100			Fo	W	slight	0		0	
39	EGL4	8	25	NT/JS	8/12/2009	461305	7100234	1261		3 - 15%	L		15 - 30%	50-100			Fo	W	slight	0		0	
39	EGL4	8	25	NT/JS	8/12/2009	461305	7100234	1261		3 - 15%	L		15 - 30%	50-100			Fo	W	slight	0		0	
40	EGL205	8	25	NT/JS	8/12/2009	461307	7100251	1261		3 - 15%	T		15 - 30%	100-500	LN	CN	Fo	W	severe	0	60	0	
40	EGL205	8	25	NT/JS	8/12/2009	461307	7100251	1261		3 - 15%	T		15 - 30%	100-500	LN	CN	Fo	W	severe	0	60	0	
40	EGL205	8	25	NT/JS	8/12/2009	461307	7100251	1261		3 - 15%	T		15 - 30%	100-500	LN	CN	Fo	W	severe	0	60	0	
41	EGL60	8	35	NT/JS	8/12/2009	460681	7099510	1389		15 - 50%	U		30 - 45%	100-500	LN	LV	Sc			0		0	
41	EGL60	8	35	NT/JS	8/12/2009	460681	7099510	1389		15 - 50%	U		30 - 45%	100-500	LN	LV	Sc			0		0	
41	EGL60	8	35	NT/JS	8/12/2009	460681	7099510	1389		15 - 50%	U		30 - 45%	100-500	LN	LV	Sc			0		0	
42	EGL61	8	35	NT/JS	8/12/2009	460670	7099307	1403		15 - 50%	U		30 - 45%	100-500	CV	LN	Sc	W	moderate	0		0	
42	EGL61	8	35	NT/JS	8/12/2009	460670	7099307	1403		15 - 50%	U		30 - 45%	100-500	CV	LN	Sc	W	moderate	0		0	

SiteID	SiteNo	Soil Corr		Surveyors	Survey Date	Easting	Northing	Elevation	Surface Expression	Surf.Stone	Slope Position (site)	Slope Position (PEL)	Landscape Slope	Slope Length	Horizon Curvature	Vertical Curvature	Land Use	Erosion	Erosion Severity	Seepage					
		Zone	Area																	Slope %	Seepage Depth Flag	Seepage Depth	Permafrost Depth Flag	Permafrost Depth	
42	EGL61	8		35	NT/JS	8/12/2009	460670	7099307	1403		15 - 50%	U	30 - 45%	100-500	CV	LN	Sc	W	moderate	0		0			
43	EGL68	8		20	NT/JS	8/12/2009	460392	7099284	1329		3 - 15%	M	15 - 30%	100-500	LN	LN	Fo	W	slight	0		0			
43	EGL68	8		20	NT/JS	8/12/2009	460392	7099284	1329		3 - 15%	M	15 - 30%	100-500	LN	LN	Fo	W	slight	0		0			
43	EGL68	8		20	NT/JS	8/12/2009	460392	7099284	1329		3 - 15%	M	15 - 30%	100-500	LN	LN	Fo	W	slight	0		0			
44	EGL206	8		2	NT/JS	8/13/2009	463119	7102837	1361		15 - 50%	C	2 - 5%	25-50	CV	LV	Sc				0		0		
44	EGL206	8		2	NT/JS	8/13/2009	463119	7102837	1361		15 - 50%	C	2 - 5%	25-50	CV	LV	Sc				0		0		
44	EGL206	8		2	NT/JS	8/13/2009	463119	7102837	1361		15 - 50%	C	2 - 5%	25-50	CV	LV	Sc				0		0		
45	EGR206	8		50	NT/JS	8/13/2009	463081	7102926	1337		15 - 50%	U	45-70%	50-100			Al	W	moderate	0		0			
45	EGR206	8		50	NT/JS	8/13/2009	463081	7102926	1337		15 - 50%	U	45-70%	50-100			Al	W	moderate	0		0			
45	EGR206	8		50	NT/JS	8/13/2009	463081	7102926	1337		15 - 50%	U	45-70%	50-100			Al	W	moderate	0		0			
46	EGR97	8		10	NT/JS	8/13/2009	462742	7103063	1281		0.1 - 3%	T	9 -15%	50-100	CN	LN	Fo	W	moderate	1	43	1	200		
46	EGR97	8		10	NT/JS	8/13/2009	462742	7103063	1281		0.1 - 3%	T	9 -15%	50-100	CN	LN	Fo	W	moderate	1	43	1	200		
46	EGR97	8		10	NT/JS	8/13/2009	462742	7103063	1281		0.1 - 3%	T	9 -15%	50-100	CN	LN	Fo	W	moderate	1	43	1	200		
47	EGR95	8		35	NT/JS	8/13/2009	462800	7103396	1215		3 - 15%	M	30 - 45%	100-500	LN	LN	Fo	W	slight	0		0			
47	EGR95	8		35	NT/JS	8/13/2009	462800	7103396	1215		3 - 15%	M	30 - 45%	100-500	LN	LN	Fo	W	slight	0		0			
47	EGR95	8		35	NT/JS	8/13/2009	462800	7103396	1215		3 - 15%	M	30 - 45%	100-500	LN	LN	Fo	W	slight	0		0			
48	EGR80	8		45	NT/JS	8/13/2009	462942	7103398	1213		0.1 - 3%	M	45-70%	50-100	LN	LN	Fo	W	slight	0		0			
48	EGR80	8		45	NT/JS	8/13/2009	462942	7103398	1213		0.1 - 3%	M	45-70%	50-100	LN	LN	Fo	W	slight	0		0			
48	EGR80	8		45	NT/JS	8/13/2009	462942	7103398	1213		0.1 - 3%	M	45-70%	50-100	LN	LN	Fo	W	slight	0		0			
49	EGL27	8		5	NT/JS	8/14/2009	460298	7101566	965		>50%	L	5 - 9%	>1000	LN	LN	Rp				1	0	0		
49	EGL27	8		5	NT/JS	8/14/2009	460298	7101566	965		>50%	L	5 - 9%	>1000	LN	LN	Rp				1	0	0		
49	EGL27	8		5	NT/JS	8/14/2009	460298	7101566	965		>50%	L	5 - 9%	>1000	LN	LN	Rp				1	0	0		
50	EGL12	8		9	NT/JS	8/15/2009	458688	7099705	828		0.1 - 3%				CN	CN	Rp				1	45	0		

SiteID	SiteNo	Soil Corr		Surveyors	Survey Date	Easting	Northing	Elevation	Surface Expression	Surf.Stone	Slope Position (site)	Slope Position (PEL)	Landscape Slope	Slope Length	Horizon Curvature	Vertical Curvature	Land Use	Erosion			Seepage		Permafrost		
		Zone	Area															Slope %	Severity	Depth Flag	Depth	Depth Flag	Depth		
50	EGL12	8		9	NT/JS	8/15/2009	458688	7099705	828							CN	CN	Rp			1	45	0		
50	EGL12	8		9	NT/JS	8/15/2009	458688	7099705	828							CN	CN	Rp			1	45	0		
51	EGL215	8		35	NT/JS	8/15/2009	459132	7099518			M		30 - 45%		LN	LV	Fo			0			1	200	
51	EGL215	8		35	NT/JS	8/15/2009	459132	7099518			M		30 - 45%		LN	LV	Fo			0			1	200	
51	EGL215	8		35	NT/JS	8/15/2009	459132	7099518			M		30 - 45%		LN	LV	Fo			0			1	200	
52	EGL22	8		15	NT/JS	8/15/2009	461235	7101585	1075	0.1 - 3%	L		9 - 15%	>1000	LN	LN	Rp	W	moderate	0			0	0	
52	EGL22	8		15	NT/JS	8/15/2009	461235	7101585	1075	0.1 - 3%	L		9 - 15%	>1000	LN	LN	Rp	W	moderate	0			0	0	
52	EGL22	8		15	NT/JS	8/15/2009	461235	7101585	1075	0.1 - 3%	L		9 - 15%	>1000	LN	LN	Rp	W	moderate	0			0	0	
53	EGL211	8		0	NT/JS	8/15/2009	461412	7101631	1127									Sc			0			0	0
53	EGL211	8		0	NT/JS	8/15/2009	461412	7101631	1127									Sc			0			0	0
53	EGL211	8		0	NT/JS	8/15/2009	461412	7101631	1127									Sc			0			0	0
54	EGL26	8		30	NT/JS	8/15/2009	461407	7101728	1109	0.1 - 3%	M		30 - 45%	100-500	CN	LN	Fo	W	moderate	0			1	31	
54	EGL26	8		30	NT/JS	8/15/2009	461407	7101728	1109	0.1 - 3%	M		30 - 45%	100-500	CN	LN	Fo	W	moderate	0			1	31	
54	EGL26	8		30	NT/JS	8/15/2009	461407	7101728	1109	0.1 - 3%	M		30 - 45%	100-500	CN	LN	Fo	W	moderate	0			1	31	
55	EGL49	8			NT/JS	8/15/2009	461593	7100826	0				30 - 45%	500-1000			Fo	W	slight	0			0	0	
55	EGL49	8			NT/JS	8/15/2009	461593	7100826	0				30 - 45%	500-1000			Fo	W	slight	0			0	0	
55	EGL49	8			NT/JS	8/15/2009	461593	7100826	0				30 - 45%	500-1000			Fo	W	slight	0			0	0	
56	EGL25	8		30	NT/JS	8/15/2009	461541	7101717	1140	0.1 - 3%	M		30 - 45%	100-500	LN	LV	Fo			0			0	0	
56	EGL25	8		30	NT/JS	8/15/2009	461541	7101717	1140	0.1 - 3%	M		30 - 45%	100-500	LN	LV	Fo			0			0	0	
56	EGL25	8		30	NT/JS	8/15/2009	461541	7101717	1140	0.1 - 3%	M		30 - 45%	100-500	LN	LV	Fo			0			0	0	
57	EGL210	8		0	NT/JS	8/15/2008	461675	7101144	1192		U							Fo			0			0	0
57	EGL210	8		0	NT/JS	8/15/2008	461675	7101144	1192		U							Fo			0			0	0
57	EGL210	8		0	NT/JS	8/15/2008	461675	7101144	1192		U							Fo			0			0	0
58	EGL208	8		28	NT/JS	8/15/2009	461494	7101557	1153	0.01 - 0.1%					LN	LV	Sc	W	slight	0			0	0	
58	EGL208	8		28	NT/JS	8/15/2009	461494	7101557	1153	0.01 - 0.1%					LN	LV	Sc	W	slight	0			0	0	

SiteID	SiteNo	Soil Corr		Surveyors	Survey Date	Easting	Northing	Elevation	Surface Expression	Surf.Stone	Slope Position (site)	Slope Position (PEL)	Landscape Slope	Slope Length	Horizon Curvature	Vertical Curvature	Land Use	Erosion	Erosion Severity	Seepage				
		Zone	Area																	Slope %	Depth Flag	Seepage Depth	Permafrost Depth Flag	Permafrost Depth
58	EGL208	8		28	NT/JS	8/15/2009	461494	7101557	1153	0.01 - 0.1%					LN	LV	Sc	W	slight	0		0		
59	EGL209	8		35	NT/JS	8/15/2009	461564	7101385	1160	0.1 - 3%	M		30 - 45%		LN	LN	Fo	W	slight	0		0		
59	EGL209	8		35	NT/JS	8/15/2009	461564	7101385	1160	0.1 - 3%	M		30 - 45%		LN	LN	Fo	W	slight	0		0		
59	EGL209	8		35	NT/JS	8/15/2009	461564	7101385	1160	0.1 - 3%	M		30 - 45%		LN	LN	Fo	W	slight	0		0		
60	EGL50	8		35	NT/JS	8/15/2009	461708	7101037	1213		M				LN	LN	Sc			0		0		
60	EGL50	8		35	NT/JS	8/15/2009	461708	7101037	1213		M				LN	LN	Sc			0		0		
60	EGL50	8		35	NT/JS	8/15/2009	461708	7101037	1213		M				LN	LN	Sc			0		0		
61	EGL28	8		0	NT/JS	8/15/2009	460889	7101578	1041		U						Sc			0		0		
61	EGL28	8		0	NT/JS	8/15/2009	460889	7101578	1041		U						Sc			0		0		
61	EGL28	8		0	NT/JS	8/15/2009	460889	7101578	1041		U						Sc			0		0		
62	EGL212	8		35	NT/JS	8/15/2009	460889	7101578	1011	<0.01%	M		30 - 45%	100-500	LN	CN	Fo			0		0		
62	EGL212	8		35	NT/JS	8/15/2009	460889	7101578	1011	<0.01%	M		30 - 45%	100-500	LN	CN	Fo			0		0		
62	EGL212	8		35	NT/JS	8/15/2009	460889	7101578	1011	<0.01%	M		30 - 45%	100-500	LN	CN	Fo			0		0		
63	EGL213	8		55	NT/JS	8/15/2009	460660	7101747			M		45-70%	500-1000			Fo			0		0		
63	EGL213	8		55	NT/JS	8/15/2009	460660	7101747			M		45-70%	500-1000			Fo			0		0		
63	EGL213	8		55	NT/JS	8/15/2009	460660	7101747			M		45-70%	500-1000			Fo			0		0		
64	EGL214	8		10	NT/JS	8/15/2009	458678	7099609	836	<0.01%	L		9 -15%	500-1000	CN	LN	Fo	W	moderate	1	15	1	100	
64	EGL214	8		10	NT/JS	8/15/2009	458678	7099609	836	<0.01%	L		9 -15%	500-1000	CN	LN	Fo	W	moderate	1	15	1	100	
64	EGL214	8		10	NT/JS	8/15/2009	458678	7099609	836	<0.01%	L		9 -15%	500-1000	CN	LN	Fo	W	moderate	1	15	1	100	
65	EGL214A	8		0	NT/JS	8/15/2009	459419	7101247									DL			0		0		
65	EGL214A	8		0	NT/JS	8/15/2009	459419	7101247									DL			0		0		
65	EGL214A	8		0	NT/JS	8/15/2009	459419	7101247									DL			0		0		
66	EGL50A	8		0	NT/JS	8/15/2009	458302	7101139			L			100-500			Sc			0		0		
66	EGL50A	8		0	NT/JS	8/15/2009	458302	7101139			L			100-500			Sc			0		0		

SiteID	SiteNo	Soil Corr		Surveyors	Survey Date	Easting	Northing	Elevation	Surface Expression	Surf.Stone	Slope Position (site)	Slope Position (PEL)	Landscape Slope	Slope Length	Horizon Curvature	Vertical Curvature	Land Use	Erosion	Erosion Severity	Seepage				
		Zone	Area																	Slope %	Depth Flag	Seepage Depth	Permafrost Depth Flag	Permafrost Depth
66	EGL50A	8		0	NT/JS	8/15/2009	458302	7101139			L			100-500			Sc				0		0	
67	EGL35	8		20	NT/JS	8/14/2009	460058	7102286	1116		U		15 - 30%	100-500	CV	LV	Fo	W	slight		0		0	
67	EGL35	8		20	NT/JS	8/14/2009	460058	7102286	1116		U		15 - 30%	100-500	CV	LV	Fo	W	slight		0		0	
67	EGL35	8		20	NT/JS	8/14/2009	460058	7102286	1116		U		15 - 30%	100-500	CV	LV	Fo	W	slight		0		0	
68	EGL34	8		20	NT/JS	8/14/2009	460172	7102101	1142		U		15 - 30%		CV	LV	Fo	W	slight		0		0	
68	EGL34	8		20	NT/JS	8/14/2009	460172	7102101	1142		U		15 - 30%		CV	LV	Fo	W	slight		0		0	
68	EGL34	8		20	NT/JS	8/14/2009	460172	7102101	1142		U		15 - 30%		CV	LV	Fo	W	slight		0		0	
69	EGL32	8		30	NT/JS	8/14/2009	460281	7101918	1146		U		30 - 45%	100-500	LN	LN	Sc	W	moderate		0		0	
69	EGL32	8		30	NT/JS	8/14/2009	460281	7101918	1146		U		30 - 45%	100-500	LN	LN	Sc	W	moderate		0		0	
69	EGL32	8		30	NT/JS	8/14/2009	460281	7101918	1146		U		30 - 45%	100-500	LN	LN	Sc	W	moderate		0		0	
70	EGL31	8		45	NT/JS	8/14/2009	460212	7101843	1107	3 - 15%	M		45-70%	100-500	LN	LN	Fo				0		0	
70	EGL31	8		45	NT/JS	8/14/2009	460212	7101843	1107	3 - 15%	M		45-70%	100-500	LN	LN	Fo				0		0	
70	EGL31	8		45	NT/JS	8/14/2009	460212	7101843	1107	3 - 15%	M		45-70%	100-500	LN	LN	Fo				0		0	
71	EGL30	8		65	NT/JS	8/14/2009	460171	7101718	1053	3 - 15%	M		45-70%	100-500	LN	LN	Fo				0		0	
71	EGL30	8		65	NT/JS	8/14/2009	460171	7101718	1053	3 - 15%	M		45-70%	100-500	LN	LN	Fo				0		0	
71	EGL30	8		65	NT/JS	8/14/2009	460171	7101718	1053	3 - 15%	M		45-70%	100-500	LN	LN	Fo				0		0	
72	EGR81	8		30	NT/JS	8/13/2009	462935	7104148	1016	15 - 30%					LN	LN	Fo				1	12	1	30
72	EGR81	8		30	NT/JS	8/13/2009	462935	7104148	1016	15 - 30%					LN	LN	Fo				1	12	1	30
72	EGR81	8		30	NT/JS	8/13/2009	462935	7104148	1016	15 - 30%					LN	LN	Fo				1	12	1	30
73	EGR73	8		40	MT/BF	8/11/2009	464837	7101929			U		30 - 45%	50-100			Fo				0		0	
73	EGR73	8		40	MT/BF	8/11/2009	464837	7101929			U		30 - 45%	50-100			Fo				0		0	
73	EGR73	8		40	MT/BF	8/11/2009	464837	7101929			U		30 - 45%	50-100			Fo				0		0	
74	ERG115	8		30	MT/BF	8/12/2009	457906	7101333	0		M		30 - 45%	50-100			Fo				0		0	
74	ERG115	8		30	MT/BF	8/12/2009	457906	7101333	0		M		30 - 45%	50-100			Fo				0		0	

SiteID	SiteNo	Soil Corr		Surveyors	Survey Date	Easting	Northing	Elevation	Surface Expression	Surf.Stone	Slope Position (site)	Slope Position (PEL)	Landscape Slope	Slope Length	Horizon Curvature	Vertical Curvature	Land Use	Erosion Severity	Seepage		Permafrost Depth Flag	Permafrost Depth
		Zone	Area																Depth Flag	Depth		
74	ERG115	8	30	MT/BF	8/12/2009	457906	7101333	0			M		30 - 45%	50-100			Fo		0		0	
75	EGL9	8	35	NT/BF	8/16/2009	458581	7100058	799	<0.01%		M		30 - 45%	25-Jan	LN	LV	Fo		0		0	
75	EGL9	8	35	NT/BF	8/16/2009	458581	7100058	799	<0.01%		M		30 - 45%	25-Jan	LN	LV	Fo		0		0	
75	EGL9	8	35	NT/BF	8/16/2009	458581	7100058	799	<0.01%		M		30 - 45%	25-Jan	LN	LV	Fo		0		0	
76	EGR306	8	8	MT/BF	8/13/2009	462959	7099889	1383			M		5 - 9%	25-50			Fo		0		0	
76	EGR306	8	8	MT/BF	8/13/2009	462959	7099889	1383			M		5 - 9%	25-50			Fo		0		0	
76	EGR306	8	8	MT/BF	8/13/2009	462959	7099889	1383			M		5 - 9%	25-50			Fo		0		0	
77	ERG114	8	55	MT/BF	8/13/2009	463083	7099846	0			U		45-70%	50-100			Fo		0		0	
77	ERG114	8	55	MT/BF	8/13/2009	463083	7099846	0			U		45-70%	50-100			Fo		0		0	
77	ERG114	8	55	MT/BF	8/13/2009	463083	7099846	0			U		45-70%	50-100			Fo		0		0	
78	EGR76	8	24	MT/BF	8/11/2009	464676	7102168	1530					15 - 30%	50-100			Fo		0		0	
78	EGR76	8	24	MT/BF	8/11/2009	464676	7102168	1530					15 - 30%	50-100			Fo		0		0	
78	EGR76	8	24	MT/BF	8/11/2009	464676	7102168	1530					15 - 30%	50-100			Fo		0		0	
79	EGR113	8	55	MT/BF	8/13/2009	462906	7099694	0					45-70%	50-100			Fo		0		0	
79	EGR113	8	55	MT/BF	8/13/2009	462906	7099694	0					45-70%	50-100			Fo		0		0	

SiteID	SiteNo	Zone	Soil Corr Area	Slope %	Surveyors	Survey Date	Easting	Northing	Elevation	Surface Expression	Surf.Stone	Slope Position (site)	Slope Position (PEL)	Landscape Slope	Slope Length	Horizon Curvature	Vertical Curvature	Land Use	Erosion Severity	Seepage Depth Flag	Seepage Depth	Permafrost Depth Flag	Permafrost Depth
79	EGR113	8		55	MT/BF	8/13/2009	462906	7099694	0					45-70%	50-100			Fo		0		0	
80	EGL10	8		10	MT/BF	8/16/2009	458651	7100068	850	<0.01%		E		9 -15%	25-50	LN	LN	Fo		0		1	57
80	EGL10	8		10	MT/BF	8/16/2009	458651	7100068	850	<0.01%		E		9 -15%	25-50	LN	LN	Fo		0		1	57
80	EGL10	8		10	MT/BF	8/16/2009	458651	7100068	850	<0.01%		E		9 -15%	25-50	LN	LN	Fo		0		1	57
81	EGR14	8		38	MT/BF	8/11/2009	464261	7102044				M		30 - 45%	50-100			Fo		0		0	
81	EGR14	8		38	MT/BF	8/11/2009	464261	7102044				M		30 - 45%	50-100			Fo		0		0	
81	EGR14	8		38	MT/BF	8/11/2009	464261	7102044				M		30 - 45%	50-100			Fo		0		0	
82	EGR112	8		65	MT/BF	8/13/2009	463000	7099524	0					45-70%	50-100			Fo		0		0	
82	EGR112	8		65	MT/BF	8/13/2009	463000	7099524	0					45-70%	50-100			Fo		0		0	
82	EGR112	8		65	MT/BF	8/13/2009	463000	7099524	0					45-70%	50-100			Fo		0		0	
83	EGL11	8		18	MT/BF	8/16/2009	458848	7100062	864	<0.01%		L		15 - 30%	50-100	LN	LV	Fo		0		0	
83	EGL11	8		18	MT/BF	8/16/2009	458848	7100062	864	<0.01%		L		15 - 30%	50-100	LN	LV	Fo		0		0	
83	EGL11	8		18	MT/BF	8/16/2009	458848	7100062	864	<0.01%		L		15 - 30%	50-100	LN	LV	Fo		0		0	
84	EGR13	8		5	MT/BF	8/11/2009	463992	7101458	0			M		5 - 9%	100-500			Fo		0		0	
84	EGR13	8		5	MT/BF	8/11/2009	463992	7101458	0			M		5 - 9%	100-500			Fo		0		0	
84	EGR13	8		5	MT/BF	8/11/2009	463992	7101458	0			M		5 - 9%	100-500			Fo		0		0	

SiteID	SiteNo	Soil Corr		Surveyors	Survey Date	Easting	Northing	Elevation	Surface Expression	Surf.Stone	Slope Position (site)	Slope Position (PEL)	Landscape Slope	Slope Length	Horizon Curvature	Vertical Curvature	Land Use	Erosion Severity	Seepage		Permafrost	
		Zone	Area																Depth Flag	Seepage Depth	Depth Flag	Permafrost Depth
85	EGL307	8	33	MT/BF	8/14/2009	461259	7099925	1357			M		30 - 45%	25-50			Fo		0		0	
85	EGL307	8	33	MT/BF	8/14/2009	461259	7099925	1357			M		30 - 45%	25-50			Fo		0		0	
85	EGL307	8	33	MT/BF	8/14/2009	461259	7099925	1357			M		30 - 45%	25-50			Fo		0		0	
86	EGR111	8	45	MT/BF	8/12/2009	463334	7099210	0			L		30 - 45%	50-100			Fo		0		0	
86	EGR111	8	45	MT/BF	8/12/2009	463334	7099210	0			L		30 - 45%	50-100			Fo		0		0	
86	EGR111	8	45	MT/BF	8/12/2009	463334	7099210	0			L		30 - 45%	50-100			Fo		0		0	
87	EGR304	8	40	MT/BF	8/12/2009	455649	7100318	1213			U		30 - 45%	50-100			Fo		0		0	
87	EGR304	8	40	MT/BF	8/12/2009	455649	7100318	1213			U		30 - 45%	50-100			Fo		0		0	
87	EGR304	8	40	MT/BF	8/12/2009	455649	7100318	1213			U		30 - 45%	50-100			Fo		0		0	
88	EGL309	8	50	MT/BF	8/14/2009	459822	7099278	1167			L		45-70%	50-100			Fo		0		0	
88	EGL309	8	50	MT/BF	8/14/2009	459822	7099278	1167			L		45-70%	50-100			Fo		0		0	
88	EGL309	8	50	MT/BF	8/14/2009	459822	7099278	1167			L		45-70%	50-100			Fo		0		0	
89	EGR110	8	26	MT/BF	8/13/2009	463495	7098832	0			M		15 - 30%	50-100					0		0	
89	EGR110	8	26	MT/BF	8/13/2009	463495	7098832	0			M		15 - 30%	50-100					0		0	

SiteID	SiteNo	Soil Corr		Surveyors	Survey Date	Easting	Northing	Elevation	Surface Expression	Surf.Stone	Slope Position (site)	Slope Position (PEL)	Landscape Slope	Slope Length	Horizon Curvature	Vertical Curvature	Land Use	Erosion Severity	Seepage			
		Zone	Area																Slope %	Depth Flag	Seepage Depth	Permafrost Depth Flag
89	EGR110	8		26	MT/BF	8/13/2009	463495	7098832	0		M		15 - 30%	50-100						0		0
90	EGL46	8			MT/BF	8/14/2009	460101	7100342					45-70%	50-100			Fo			0		0
90	EGL46	8			MT/BF	8/14/2009	460101	7100342					45-70%	50-100			Fo			0		0
90	EGL46	8			MT/BF	8/14/2009	460101	7100342					45-70%	50-100			Fo			0		0
91	EGR305	8		18	MT/BF	8/12/2009	455968	7100355	1118		M		15 - 30%	50-100			Fo			0		0
91	EGR305	8		18	MT/BF	8/12/2009	455968	7100355	1118		M		15 - 30%	50-100			Fo			0		0
91	EGR305	8		18	MT/BF	8/12/2009	455968	7100355	1118		M		15 - 30%	50-100			Fo			0		0
92	EGR412	8		60	MT/BF	8/15/2009	454863	7094515	693		M		45-70%	50-100			Fo	W slight		0		0
92	EGR412	8		60	MT/BF	8/15/2009	454863	7094515	693		M		45-70%	50-100			Fo	W slight		0		0
92	EGR412	8		60	MT/BF	8/15/2009	454863	7094515	693		M		45-70%	50-100			Fo	W slight		0		0
93	EGR124	8		28	MT/BF	8/12/2009	456006	7100557	1135		U		15 - 30%	50-100			Fo			0		0
93	EGR124	8		28	MT/BF	8/12/2009	456006	7100557	1135		U		15 - 30%	50-100			Fo			0		0
93	EGR124	8		28	MT/BF	8/12/2009	456006	7100557	1135		U		15 - 30%	50-100			Fo			0		0
94	EGR109	8		30	MT/BF	8/13/2009	463620	7098660	0		M		30 - 45%	50-100			Fo			0		0
94	EGR109	8		30	MT/BF	8/13/2009	463620	7098660	0		M		30 - 45%	50-100			Fo			0		0

SiteID	SiteNo	Soil Corr		Surveyors	Survey Date	Easting	Northing	Elevation	Surface Expression	Surf.Stone	Slope Position (site)	Slope Position (PEL)	Landscape Slope	Slope Length	Horizon Curvature	Vertical Curvature	Land Use	Erosion				Seepage		Permafrost	
		Zone	Area															Slope %	Erosion Severity	Depth Flag	Seepage Depth	Permafrost Depth Flag	Permafrost Depth		
94	EGR109	8		30	MT/BF	8/13/2009	463620	7098660	0		M		30 - 45%	50-100			Fo			0		0		0	
95	EGR414	8		30	MT/BF	8/16/2009	458480	7099297	783		L									0		0		0	
95	EGR414	8		30	MT/BF	8/16/2009	458480	7099297	783		L									0		0		0	
95	EGR414	8		30	MT/BF	8/16/2009	458480	7099297	783		L									0		0		0	
96	EGR125	8		18	MT/BF	8/12/2009	456103	7100623	1124		M		15 - 30%	50-100			Fo			0		0		0	
96	EGR125	8		18	MT/BF	8/12/2009	456103	7100623	1124		M		15 - 30%	50-100			Fo			0		0		0	
96	EGR125	8		18	MT/BF	8/12/2009	456103	7100623	1124		M		15 - 30%	50-100			Fo			0		0		0	
97	EGR415	8		1	MT/BF	8/16/2009	449778	7085727	612		E		0.05 - 2%	50-100			Wt			0		0		0	
97	EGR415	8		1	MT/BF	8/16/2009	449778	7085727	612		E		0.05 - 2%	50-100			Wt			0		0		0	
97	EGR415	8		1	MT/BF	8/16/2009	449778	7085727	612		E		0.05 - 2%	50-100			Wt			0		0		0	
98	EGR107	8		5	MT/BF	8/13/2009	463661	7098359	0		E		2 - 5%	500-1000			Wt			0		0		0	
98	EGR107	8		5	MT/BF	8/13/2009	463661	7098359	0		E		2 - 5%	500-1000			Wt			0		0		0	
98	EGR107	8		5	MT/BF	8/13/2009	463661	7098359	0		E		2 - 5%	500-1000			Wt			0		0		0	
99	EGR416	8		1	MT/BF	8/16/2009	450943	7085182	687	<0.01%	E		0.05 - 2%	100-500	LN	LN	Fo			0		0		0	
99	EGR416	8		1	MT/BF	8/16/2009	450943	7085182	687	<0.01%	E		0.05 - 2%	100-500	LN	LN	Fo			0		0		0	
99	EGR416	8		1	MT/BF	8/16/2009	450943	7085182	687	<0.01%	E		0.05 - 2%	100-500	LN	LN	Fo			0		0		0	
100	EGR106	8		20	MT/BF	8/13/2009	463057	7098161	0		M		15 - 30%	25-50						0		0		0	
100	EGR106	8		20	MT/BF	8/13/2009	463057	7098161	0		M		15 - 30%	25-50						0		0		0	
100	EGR106	8		20	MT/BF	8/13/2009	463057	7098161	0		M		15 - 30%	25-50						0		0		0	
101	EGR126	8		9	MT/BF	8/12/2009	456284	7100524	1105		M		5 - 9%	25-50			Fo			0		0		0	
101	EGR126	8		9	MT/BF	8/12/2009	456284	7100524	1105		M		5 - 9%	25-50			Fo			0		0		0	
101	EGR126	8		9	MT/BF	8/12/2009	456284	7100524	1105		M		5 - 9%	25-50			Fo			0		0		0	
102	EGR417	8		0	MT/BF	8/16/2009	454012	7087505	641		E		0.05 - 2%	50-100			Fo			0		0		0	
102	EGR417	8		0	MT/BF	8/16/2009	454012	7087505	641		E		0.05 - 2%	50-100			Fo			0		0		0	
102	EGR417	8		0	MT/BF	8/16/2009	454012	7087505	641		E		0.05 - 2%	50-100			Fo			0		0		0	
103	EGR105	8			MT/BF	8/13/2009	462619	7097835	777				30 - 45%	25-Jan			Fo			0		0		0	
103	EGR105	8			MT/BF	8/13/2009	462619	7097835	777				30 - 45%	25-Jan			Fo			0		0		0	

SiteID	SiteNo	Soil Corr		Surveyors	Survey Date	Easting	Northing	Elevation	Surface Expression	Surf.Stone	Slope Position (site)	Slope Position (PEL)	Landscape Slope	Slope Length	Horizon Curvature	Vertical Curvature	Land Use	Erosion Severity	Seepage		
		Zone	Area																Slope %	Depth Flag	Seepage Depth
103	EGR105	8		MT/BF	8/13/2009	462619	7097835	777					30 - 45%	25-Jan			Fo		0		0
104	EGR418	8		MT/BF	8/16/2009	456167	7087995	640			T		5 - 9%	25-50			Fo		0		0
104	EGR418	8		MT/BF	8/16/2009	456167	7087995	640			T		5 - 9%	25-50			Fo		0		0
104	EGR418	8		MT/BF	8/16/2009	456167	7087995	640			T		5 - 9%	25-50			Fo		0		0
105	EGR123	8		MT/BF	8/12/2009	456402	7100333	1087			U		30 - 45%	50-100			Fo		0		0
105	EGR123	8		MT/BF	8/12/2009	456402	7100333	1087			U		30 - 45%	50-100			Fo		0		0
105	EGR123	8		MT/BF	8/12/2009	456402	7100333	1087			U		30 - 45%	50-100			Fo		0		0
106	EGR419	8		MT/BF	8/16/2009	458323	7087705	596			E		0.05 - 2%	50-100			Wt		0		0
106	EGR419	8		MT/BF	8/16/2009	458323	7087705	596			E		0.05 - 2%	50-100			Wt		0		0
106	EGR419	8		MT/BF	8/16/2009	458323	7087705	596			E		0.05 - 2%	50-100			Wt		0		0
107	EGR420	8		MT/BF	8/15/2009	459402	7087820	629			D		0 - 0.05%				Wt		0		0
107	EGR420	8		MT/BF	8/15/2009	459402	7087820	629			D		0 - 0.05%				Wt		0		0
107	EGR420	8		MT/BF	8/15/2009	459402	7087820	629			D		0 - 0.05%				Wt		0		0
108	EGR411	8		MT/BF	8/15/2009	453232	7093681	685			L		15 - 30%	50-100			Fo		0		0
108	EGR411	8		MT/BF	8/15/2009	453232	7093681	685			L		15 - 30%	50-100			Fo		0		0
108	EGR411	8		MT/BF	8/15/2009	453232	7093681	685			L		15 - 30%	50-100			Fo		0		0
109	EGR122	8		MT/BF	8/12/2009	456661	7100749	1012			U		15 - 30%	50-100					0		0
109	EGR122	8		MT/BF	8/12/2009	456661	7100749	1012			U		15 - 30%	50-100					0		0

SiteID	SiteNo	Soil Corr		Surveyors	Survey Date	Easting	Northing	Elevation	Surface Expression	Surf.Stone	Slope Position (site)	Slope Position (PEL)	Landscape Slope	Slope Length	Horizon Curvature	Vertical Curvature	Land Use	Erosion Severity	Seepage		Permafrost Depth Flag	Permafrost Depth
		Zone	Area																Depth Flag	Depth		
109	EGR122	8	28	MT/BF	8/12/2009	456661	7100749	1012			U		15 - 30%	50-100						0		0
110	EGR410	8		MT/BF	8/15/2009	452489	7093409	670									Fo			0		0
110	EGR410	8		MT/BF	8/15/2009	452489	7093409	670									Fo			0		0
110	EGR410	8		MT/BF	8/15/2009	452489	7093409	670									Fo			0		0
111	EGR409	8	2	MT/BF	8/15/2009	451814	7092951	676			E		0.05 - 2%	50-100			Wt			0		0
111	EGR409	8	2	MT/BF	8/15/2009	451814	7092951	676			E		0.05 - 2%	50-100			Wt			0		0
111	EGR409	8	2	MT/BF	8/15/2009	451814	7092951	676			E		0.05 - 2%	50-100			Wt			0		0
112	EGR120	8	7	MT/BF	8/12/2009	457104	7101122	1120			C		5 - 9%	100-500						0		0
112	EGR120	8	7	MT/BF	8/12/2009	457104	7101122	1120			C		5 - 9%	100-500						0		0
112	EGR120	8	7	MT/BF	8/12/2009	457104	7101122	1120			C		5 - 9%	100-500						0		0
113	EGR408	8	35	MT/BF	8/15/2009	451063	7092718	724			M		30 - 45%	25-50			Fo			0		0
113	EGR408	8	35	MT/BF	8/15/2009	451063	7092718	724			M		30 - 45%	25-50			Fo			0		0
113	EGR408	8	35	MT/BF	8/15/2009	451063	7092718	724			M		30 - 45%	25-50			Fo			0		0
114	EGR119	8	28	MT/BF	8/12/2009	457265	7101049	1084			M		30 - 45%	50-100			Fo			0		0
114	EGR119	8	28	MT/BF	8/12/2009	457265	7101049	1084			M		30 - 45%	50-100			Fo			0		0
114	EGR119	8	28	MT/BF	8/12/2009	457265	7101049	1084			M		30 - 45%	50-100			Fo			0		0
115	EGL308	8	15	MT/BF	8/14/2009	460474	7099514	1330			M		9 -15%	25-50			Fo			0		0
115	EGL308	8	15	MT/BF	8/14/2009	460474	7099514	1330			M		9 -15%	25-50			Fo			0		0
115	EGL308	8	15	MT/BF	8/14/2009	460474	7099514	1330			M		9 -15%	25-50			Fo			0		0
116	EGR118	8	38	MT/BF	8/12/2009	457651	7101048	936			M		30 - 45%				Fo			0		0

SiteID	SiteNo	Soil Corr		Surveyors	Survey Date	Easting	Northing	Elevation	Surface Expression	Surf.Stone	Slope Position (site)	Slope Position (PEL)	Landscape Slope	Slope Length	Horizon Curvature	Vertical Curvature	Land Use	Erosion		Seepage Depth Flag	Seepage Depth	Permafrost Depth Flag	Permafrost Depth
		Zone	Area															Slope %	Erosion				
116	EGR118	8	38	MT/BF	8/12/2009	457651	7101048	936			M		30 - 45%				Fo			0		0	
116	EGR118	8	38	MT/BF	8/12/2009	457651	7101048	936			M		30 - 45%				Fo			0		0	
117	EGL66	8	35	MT/BF	8/14/2009	459974	7099838	1154			M		30 - 45%	50-100	LN	LV	Fo	W	slight	0		0	
117	EGL66	8	35	MT/BF	8/14/2009	459974	7099838	1154			M		30 - 45%	50-100	LN	LV	Fo	W	slight	0		0	
117	EGL66	8	35	MT/BF	8/14/2009	459974	7099838	1154			M		30 - 45%	50-100	LN	LV	Fo	W	slight	0		0	
118	EGR303	8	10	MT/BF	8/12/2009	455171	7099733			<0.01%	C		9 -15%	25-50	CV	LV	Fo			0		0	
118	EGR303	8	10	MT/BF	8/12/2009	455171	7099733			<0.01%	C		9 -15%	25-50	CV	LV	Fo			0		0	
118	EGR303	8	10	MT/BF	8/12/2009	455171	7099733			<0.01%	C		9 -15%	25-50	CV	LV	Fo			0		0	
119	EGL310	8	50	MT/BF	8/14/2009	459640	7099420	1051		<0.01%	M		15 - 30%	50-100	LN	LN	Fo			0		0	
119	EGL310	8	50	MT/BF	8/14/2009	459640	7099420	1051		<0.01%	M		15 - 30%	50-100	LN	LN	Fo			0		0	
119	EGL310	8	50	MT/BF	8/14/2009	459640	7099420	1051		<0.01%	M		15 - 30%	50-100	LN	LN	Fo			0		0	
120	EGL311	8	25	MT/BF	8/14/2009	459660	7099770	1067			M		15 - 30%	50-100			Fo			0		0	
120	EGL311	8	25	MT/BF	8/14/2009	459660	7099770	1067			M		15 - 30%	50-100			Fo			0		0	
120	EGL311	8	25	MT/BF	8/14/2009	459660	7099770	1067			M		15 - 30%	50-100			Fo			0		0	
121	EGL48	8	0	MT/BF	8/14/2009	460292	7100144	1115			M		0 - 0.05%	25-Jan			Fo			0		0	
121	EGL48	8	0	MT/BF	8/14/2009	460292	7100144	1115			M		0 - 0.05%	25-Jan			Fo			0		0	
121	EGL48	8	0	MT/BF	8/14/2009	460292	7100144	1115			M		0 - 0.05%	25-Jan			Fo			0		0	
122	EGL312	8		MT/BF	8/14/2009	460600	7099800				M		45-70%	25-50			DL			0		0	
122	EGL312	8		MT/BF	8/14/2009	460600	7099800				M		45-70%	25-50			DL			0		0	
122	EGL312	8		MT/BF	8/14/2009	460600	7099800				M		45-70%	25-50			DL			0		0	
123	EGL47	8	25	MT/BF	8/14/2009	460009	7100810	1080		<0.01%	M		15 - 30%	25-50	CV	LN	Fo			0		0	
123	EGL47	8	25	MT/BF	8/14/2009	460009	7100810	1080		<0.01%	M		15 - 30%	25-50	CV	LN	Fo			0		0	
123	EGL47	8	25	MT/BF	8/14/2009	460009	7100810	1080		<0.01%	M		15 - 30%	25-50	CV	LN	Fo			0		0	
124	EGL1	8	30	MT/BF	8/14/2008	460221	7100621	0		<0.01%	M		15 - 30%	25-50		LN	Fo	W	slight	0		0	
124	EGL1	8	30	MT/BF	8/14/2008	460221	7100621	0		<0.01%	M		15 - 30%	25-50		LN	Fo	W	slight	0		0	
124	EGL1	8	30	MT/BF	8/14/2008	460221	7100621	0		<0.01%	M		15 - 30%	25-50		LN	Fo	W	slight	0		0	

SiteID	SiteNo	Zone	Soil Corr Area	Slope %	Surveyors	Survey Date	Easting	Northing	Elevation	Surface Expression	Surf.Stone	Slope Position (site)	Slope Position (PEL)	Landscape Slope	Slope Length	Horizon Curvature	Vertical Curvature	Land Use	Erosion Severity	Seepage Depth Flag	Seepage Depth	Permafrost Depth Flag	Permafrost Depth
125	EGL313			35	MT/BF	8/14/2008	459524	7101401	0		3 - 15%	U		30 - 45%	25-Jan	CV	LV	Fo		0		0	
125	EGL313			35	MT/BF	8/14/2008	459524	7101401	0		3 - 15%	U		30 - 45%	25-Jan	CV	LV	Fo		0		0	
125	EGL313			35	MT/BF	8/14/2008	459524	7101401	0		3 - 15%	U		30 - 45%	25-Jan	CV	LV	Fo		0		0	
126	EGR400	8		3	MT/BF	8/15/2008	449319	7086377	621		<0.01%	E		2 - 5%	50-100	LN	LN	Fo		0		0	
126	EGR400	8		3	MT/BF	8/15/2008	449319	7086377	621		<0.01%	E		2 - 5%	50-100	LN	LN	Fo		0		0	
126	EGR400	8		3	MT/BF	8/15/2008	449319	7086377	621		<0.01%	E		2 - 5%	50-100	LN	LN	Fo		0		0	
127	EGR70	8		48	MT/BF	8/11/2009	464843	7101282	0			U		45-70%	25-50			Fo		0		0	
127	EGR70	8		48	MT/BF	8/11/2009	464843	7101282	0			U		45-70%	25-50			Fo		0		0	
127	EGR70	8		48	MT/BF	8/11/2009	464843	7101282	0			U		45-70%	25-50			Fo		0		0	
128	EGR72	8		30	MT/BF	8/11/2009	464660	7101266	0			U		30 - 45%	50-100			Fo		0		0	
128	EGR72	8		30	MT/BF	8/11/2009	464660	7101266	0			U		30 - 45%	50-100			Fo		0		0	
128	EGR72	8		30	MT/BF	8/11/2009	464660	7101266	0			U		30 - 45%	50-100			Fo		0		0	
129	EGR401	8		2	MT/BF	8/15/2008	448898	7087172	630			E		2 - 5%	25-50			Fo		0		0	

SiteID	SiteNo	Soil Corr		Surveyors	Survey Date	Easting	Northing	Elevation	Surface Expression	Surf.Stone	Slope Position (site)	Slope Position (PEL)	Landscape Slope	Slope Length	Horizon Curvature	Vertical Curvature	Land Use	Erosion Severity	Seepage		
		Zone	Area																Slope %	Depth Flag	Seepage Depth
129	EGR401	8		2	MT/BF	8/15/2008	448898	7087172	630		E		2 - 5%	25-50			Fo		0		0
129	EGR401	8		2	MT/BF	8/15/2008	448898	7087172	630		E		2 - 5%	25-50			Fo		0		0
130	EGR74	8		28	MT/BF	8/11/2009	464553	7102008	1469		M		15 - 30%	50-100			Fo		0		0
130	EGR74	8		28	MT/BF	8/11/2009	464553	7102008	1469		M		15 - 30%	50-100			Fo		0		0
130	EGR74	8		28	MT/BF	8/11/2009	464553	7102008	1469		M		15 - 30%	50-100			Fo		0		0
131	EGR102	8		0	MT/BF	8/13/2009	462277	7097530	742		E		0.05 - 2%	500-1000			Wt		0		0
131	EGR102	8		0	MT/BF	8/13/2009	462277	7097530	742		E		0.05 - 2%	500-1000			Wt		0		0
131	EGR102	8		0	MT/BF	8/13/2009	462277	7097530	742		E		0.05 - 2%	500-1000			Wt		0		0
132	EGR405	8		50	MT/BF	8/15/2009	449399	7090898	685		L						Fo		0		0
132	EGR405	8		50	MT/BF	8/15/2009	449399	7090898	685		L						Fo		0		0
132	EGR405	8		50	MT/BF	8/15/2009	449399	7090898	685		L						Fo		0		0
133	EGR406	8		10	MT/BF	8/15/2008	449694	7091202	662	<0.01%					CV	LV	Fo		0		0
133	EGR406	8		10	MT/BF	8/15/2008	449694	7091202	662	<0.01%					CV	LV	Fo		0		0
133	EGR406	8		10	MT/BF	8/15/2008	449694	7091202	662	<0.01%					CV	LV	Fo		0		0
134	EGR404	8		0	MT/BF	8/15/2009	449171	7090107	643	<0.01%	E				LN	LN	Fo		0		0
134	EGR404	8		0	MT/BF	8/15/2009	449171	7090107	643	<0.01%	E				LN	LN	Fo		0		0
134	EGR404	8		0	MT/BF	8/15/2009	449171	7090107	643	<0.01%	E				LN	LN	Fo		0		0
135	EGR403	8		50	MT/BF	8/15/2009	449007	7089609	672		L		45-70%	25-50			Fo		0		0
135	EGR403	8		50	MT/BF	8/15/2009	449007	7089609	672		L		45-70%	25-50			Fo		0		0
135	EGR403	8		50	MT/BF	8/15/2009	449007	7089609	672		L		45-70%	25-50			Fo		0		0

SiteID	SiteNo	Soil Corr		Surveyors	Survey Date	Easting	Northing	Elevation	Surface Expression	Surf.Stone	Slope Position (site)	Slope Position (PEL)	Landscape Slope	Slope Length	Horizon Curvature	Vertical Curvature	Land Use	Erosion Severity	Seepage		
		Zone	Area																Slope %	Depth Flag	Seepage Depth
136	EGR407	8	45	MT/BF	8/15/2008	450348	7092047	720	<0.01%		L		30 - 45%	25-50	CN	LN	Fo		0		0
136	EGR407	8	45	MT/BF	8/15/2008	450348	7092047	720	<0.01%		L		30 - 45%	25-50	CN	LN	Fo		0		0
136	EGR407	8	45	MT/BF	8/15/2008	450348	7092047	720	<0.01%		L		30 - 45%	25-50	CN	LN	Fo		0		0
137	EGR300	8	70	MT/BF	8/11/2009	464062	7101250	0			U		45-70%	50-100			Fo		0		0
137	EGR300	8	70	MT/BF	8/11/2009	464062	7101250	0			U		45-70%	50-100			Fo		0		0
137	EGR300	8	70	MT/BF	8/11/2009	464062	7101250	0			U		45-70%	50-100			Fo		0		0
138	EGR402	8	67	MT/BF	8/15/2009	448780	7089130	692			L		45-70%	25-50					0		0
138	EGR402	8	67	MT/BF	8/15/2009	448780	7089130	692			L		45-70%	25-50					0		0
138	EGR402	8	67	MT/BF	8/15/2009	448780	7089130	692			L		45-70%	25-50					0		0
139	EGR413	8	3	MT/BF	8/15/2008	457840	7096179	727			E		2 - 5%	25-50			Fo		0		0
139	EGR413	8	3	MT/BF	8/15/2008	457840	7096179	727			E		2 - 5%	25-50			Fo		0		0
139	EGR413	8	3	MT/BF	8/15/2008	457840	7096179	727			E		2 - 5%	25-50			Fo		0		0
140	EGR301	8	50	MT/BF	8/11/2009	464125	7100900	0			M		30 - 45%	50-100			Fo		0		0
140	EGR301	8	50	MT/BF	8/11/2009	464125	7100900	0			M		30 - 45%	50-100			Fo		0		0
140	EGR301	8	50	MT/BF	8/11/2009	464125	7100900	0			M		30 - 45%	50-100			Fo		0		0
141	EGL21	8	14	MT/BF/NT/S	8/11/2009	462896	7101163	1372	<0.01%		M		9 - 15%	50-100	LN	LV	Fo		0		0
141	EGL21	8	14	MT/BF/NT/S	8/11/2009	462896	7101163	1372	<0.01%		M		9 - 15%	50-100	LN	LV	Fo		0		0
141	EGL21	8	14	MT/BF/NT/S	8/11/2009	462896	7101163	1372	<0.01%		M		9 - 15%	50-100	LN	LV	Fo		0		0

SiteID	SiteNo	Soil Corr		Surveyors	Survey Date	Easting	Northing	Elevation	Surface Expression	Surf.Stone	Slope Position (site)	Slope Position (PEL)	Landscape Slope	Slope Length	Horizon Curvature	Vertical Curvature	Land Use	Erosion Severity	Seepage		
		Zone	Area																Slope %	Depth Flag	Seepage Depth
142	EGR302	8		70	MT/BF	8/11/2009	464000	7100500	0				45-70%	50-100			Fo		0		0
142	EGR302	8		70	MT/BF	8/11/2009	464000	7100500	0				45-70%	50-100			Fo		0		0
142	EGR302	8		70	MT/BF	8/11/2009	464000	7100500	0				45-70%	50-100			Fo		0		0
143	EGR71	8		8	MT/BF	8/11/2009	464771	7101387	0		C		5 - 9%	25-50			Fo		0		0
143	EGR71	8		8	MT/BF	8/11/2009	464771	7101387	0		C		5 - 9%	25-50			Fo		0		0
143	EGR71	8		8	MT/BF	8/11/2009	464771	7101387	0		C		5 - 9%	25-50			Fo		0		0
144	TPA1	8		9	Straker	7/18/2009	459464	7101321			L		5 - 9%	500-1000			Fo		0	1	52
144	TPA1	8		9	Straker	7/18/2009	459464	7101321			L		5 - 9%	500-1000			Fo		0	1	52
144	TPA1	8		9	Straker	7/18/2009	459464	7101321			L		5 - 9%	500-1000			Fo		0	1	52
145	TPA3	8		7	Straker	7/19/2009	458474	7100551			T		5 - 9%				Fo		0	1	50
145	TPA3	8		7	Straker	7/19/2009	458474	7100551			T		5 - 9%				Fo		0	1	50
145	TPA3	8		7	Straker	7/19/2009	458474	7100551			T		5 - 9%				Fo		0	1	50
146	TPA4	8		20	Straker	7/19/2009	458978	7100215			M		15 - 30%	100-500			Fo		0	1	53
146	TPA4	8		20	Straker	7/19/2009	458978	7100215			M		15 - 30%	100-500			Fo		0	1	53
146	TPA4	8		20	Straker	7/19/2009	458978	7100215			M		15 - 30%	100-500			Fo		0	1	53
147	EGR451	8		5	JS/NT	9/16/2009	452180	7085869	639		U						Fo		0		0
147	EGR451	8		5	JS/NT	9/16/2009	452180	7085869	639		U						Fo		0		0
147	EGR451	8		5	JS/NT	9/16/2009	452180	7085869	639		U						Fo		0		0
148	EGR450	8			JS/NT	9/16/2009	449630	7085952	614		D								0		0
148	EGR450	8			JS/NT	9/16/2009	449630	7085952	614		D								0		0
148	EGR450	8			JS/NT	9/16/2009	449630	7085952	614		D								0		0

SiteID	SiteNo	Depth to Bedrock	Depth to Water	TSM	EP	Ecosite/Site Series	Site Note	Vegetation Note	QC By	QC Complete	Root Restricting Layer Depth	Root Restricting Layer Type	Soil Code	Series Code	Phase	Soil Notes
4	EGL63	0	0			/		Open Lichen Spruce, woodland. Lichen (Clad ste) dominant ground cover. Thin band of S! different colour than matrix?		0	0		CHER-DB-			Fining upward sequence broken horizons from soil creep
4	EGL63	0	0			/		Open Lichen Spruce, woodland. Lichen (Clad ste) dominant ground cover. Thin band of S! different colour than matrix?		0	0		CHER-DB-			Fining upward sequence broken horizons from soil creep
4	EGL63	0	0			/		Open Lichen Spruce, woodland. Lichen (Clad ste) dominant ground cover. Thin band of S! different colour than matrix?		0	0		CHER-DB-			Fining upward sequence broken horizons from soil creep
5	EGL216	0	0			/	Cut in road adjacent to Dublin Creek, Placer Mining disturbance exposes fractured bedrock.	Aspen stand DV/R / CV/R	nTashe	1	20		BRUN-DYB-O			likely mix of Regosols and thin Brunisols on site. Silty Sand
5	EGL216	0	0			/	Cut in road adjacent to Dublin Creek, Placer Mining disturbance exposes fractured bedrock.	Aspen stand DV/R / CV/R	nTashe	1	20		BRUN-DYB-O			likely mix of Regosols and thin Brunisols on site. Silty Sand
5	EGL216	0	0			/	Cut in road adjacent to Dublin Creek, Placer Mining disturbance exposes fractured bedrock.	Aspen stand DV/R / CV/R	nTashe	1	20		BRUN-DYB-O			likely mix of Regosols and thin Brunisols on site. Silty Sand
6	EGR94	0	13	P	High	/	site deep, steep + wet high failure risk L = subsurface seepage soils are gravelly, not rubble or boulders			0			REGO--O	O.R.		seepage flowing through pit Dissected landscape start of gentle drainage to creek
6	EGR94	0	13	P	High	/	site deep, steep + wet high failure risk L = subsurface seepage soils are gravelly, not rubble or boulders			0			REGO--O	O.R.		seepage flowing through pit Dissected landscape start of gentle drainage to creek
6	EGR94	0	13	P	High	/	site deep, steep + wet high failure risk L = subsurface seepage soils are gravelly, not rubble or boulders			0			REGO--O	O.R.		seepage flowing through pit Dissected landscape start of gentle drainage to creek
7	EGR93		0	P		/	open lichen fir forest frost heave			0	30	L	BRUN-DYB-O	O.DB		over half the profile is rock no alignment
7	EGR93		0	P		/	open lichen fir forest frost heave			0	30	L	BRUN-DYB-O	O.DB		over half the profile is rock no alignment
7	EGR93		0	P		/	open lichen fir forest frost heave			0	30	L	BRUN-DYB-O	O.DB		over half the profile is rock no alignment
8	EGR92	0	0			/	Site in active seepage track at surface and at depth outside of rock	Picemar, Alnucris, Salix, Spharub, Rubucha, Hierspl, Rhizonmium		0	60	Z	CRYO-SC-HR	Cryosol		phase: pt Lenses of silt + sand Do not appear as layers Bands of silt + sand found in Of layer Some flat
8	EGR92	0	0			/	Site in active seepage track at surface and at depth outside of rock	Picemar, Alnucris, Salix, Spharub, Rubucha, Hierspl, Rhizonmium		0	60	Z	CRYO-SC-HR	Cryosol		phase: pt Lenses of silt + sand Do not appear as layers Bands of silt + sand found in Of layer Some flat
8	EGR92	0	0			/	Site in active seepage track at surface and at depth outside of rock	Picemar, Alnucris, Salix, Spharub, Rubucha, Hierspl, Rhizonmium		0	60	Z	CRYO-SC-HR	Cryosol		phase: pt Lenses of silt + sand Do not appear as layers Bands of silt + sand found in Of layer Some flat
9	EGR69	0	0			/	Active stream tributary to Haggart Creek		nTashe	1			--			
9	EGR69	0	0			/	Active stream tributary to Haggart Creek		nTashe	1			--			
9	EGR69	0	0			/	Active stream tributary to Haggart Creek		nTashe	1			--			
10	EGL8	0	0			/	SR pebbles to cobbles mostly pebble size	Sb, Hylo, Cladina, Ledum, Equisyl, Petasag, Mert, Empenig, Vacoli, Vaccit	nTashe	1			GLEY-G-O			likely R.G + GL.R in polygon + GL.OB Ah too thin to sample
10	EGL8	0	0			/	SR pebbles to cobbles mostly pebble size	Sb, Hylo, Cladina, Ledum, Equisyl, Petasag, Mert, Empenig, Vacoli, Vaccit	nTashe	1			GLEY-G-O			likely R.G + GL.R in polygon + GL.OB Ah too thin to sample
10	EGL8	0	0			/	SR pebbles to cobbles mostly pebble size	Sb, Hylo, Cladina, Ledum, Equisyl, Petasag, Mert, Empenig, Vacoli, Vaccit	nTashe	1			GLEY-G-O			likely R.G + GL.R in polygon + GL.OB Ah too thin to sample
11	EGL6	0	0	S	Low	/	exposed piles, some have been sorted to finer piles	Salix, Balsam poplar, Aspen, fireweed, dandelion REVEG all 2 m height	nTashe	1			REGO-R-O			Some depressions w water but overall dry site
11	EGL6	0	0	S	Low	/	exposed piles, some have been sorted to finer piles	Salix, Balsam poplar, Aspen, fireweed, dandelion REVEG all 2 m height	nTashe	1			REGO-R-O			Some depressions w water but overall dry site
11	EGL6	0	0	S	Low	/	exposed piles, some have been sorted to finer piles	Salix, Balsam poplar, Aspen, fireweed, dandelion REVEG all 2 m height	nTashe	1			REGO-R-O			Some depressions w water but overall dry site
12	EGL41	0	0			/	soil like pudding where seepage drier below		nTashe	1	100	Z	GLEY--R	R.G.		phase: pt likely roots restricted by ice some tilted trees, very stunted, cold soil likely Cryosol at site check
12	EGL41	0	0			/	soil like pudding where seepage drier below		nTashe	1	100	Z	GLEY--R	R.G.		phase: pt likely roots restricted by ice some tilted trees, very stunted, cold soil likely Cryosol at site check

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12	EGL41	0	0			/	soil like pudding where seepage drier below		nTashe	1	100	Z	GLEYS-R	R.G.		phase: pt likely roots restricted by ice some tilted trees, very stunted, cold soil likely Cryosol at site check
13	EGL200	200	0			/	No rocks at surface	Abieslas, Betugla, Poly, Pleur, Cladina, ground cover Heath vegetation		0			BRUN-EB-E	E.EB		C too coarse to dig cannot choose or auger Flat lying rocks Mine material
13	EGL200	200	0			/	No rocks at surface	Abieslas, Betugla, Poly, Pleur, Cladina, ground cover Heath vegetation		0			BRUN-EB-E	E.EB		C too coarse to dig cannot choose or auger Flat lying rocks Mine material
13	EGL200	200	0			/	No rocks at surface	Abieslas, Betugla, Poly, Pleur, Cladina, ground cover Heath vegetation		0			BRUN-EB-E	E.EB		C too coarse to dig cannot choose or auger Flat lying rocks Mine material
14	EGR96	0	0	P	Medium	/	Permafrost sllapse scars w/ standing water	Open drunken forest, lichen and sphagnum dominant understory. Pice mar, Ledu gro, Ledu dec, Erio, Clad stel, sphag, Empi nig,		0	30	Z	CRYO-TC-HR		p	discontinuous Ah <2cm. Strongly cryoturbated layer of. Phase modifier = pt
14	EGR96	0	0	P	Medium	/	Permafrost sllapse scars w/ standing water	Open drunken forest, lichen and sphagnum dominant understory. Pice mar, Ledu gro, Ledu dec, Erio, Clad stel, sphag, Empi nig,		0	30	Z	CRYO-TC-HR		p	discontinuous Ah <2cm. Strongly cryoturbated layer of. Phase modifier = pt
14	EGR96	0	0	P	Medium	/	Permafrost sllapse scars w/ standing water	Open drunken forest, lichen and sphagnum dominant understory. Pice mar, Ledu gro, Ledu dec, Erio, Clad stel, sphag, Empi nig,		0	30	Z	CRYO-TC-HR		p	discontinuous Ah <2cm. Strongly cryoturbated layer of. Phase modifier = pt
15	EGL16	200	0	P	Low	/	Large boulders at surface coarse grained igneous intrusive Fc microscale in plot bare mineral soil moing downslope	Betugla, Abieslas		0			BRUN-EB-O	O.EB		Augered holes BC structure indicative of former ice contact causing dessication resulting in structure
15	EGL16	200	0	P	Low	/	Large boulders at surface coarse grained igneous intrusive Fc microscale in plot bare mineral soil moing downslope	Betugla, Abieslas		0			BRUN-EB-O	O.EB		Augered holes BC structure indicative of former ice contact causing dessication resulting in structure
15	EGL16	200	0	P	Low	/	Large boulders at surface coarse grained igneous intrusive Fc microscale in plot bare mineral soil moing downslope	Betugla, Abieslas		0			BRUN-EB-O	O.EB		Augered holes BC structure indicative of former ice contact causing dessication resulting in structure
16	EGR91	0	0	S	Low	/			nTashe	1			REGO-R-CU			
16	EGR91	0	0	S	Low	/			nTashe	1			REGO-R-CU			
16	EGR91	0	0	S	Low	/			nTashe	1			REGO-R-CU			
17	EGR79	0	0			/	Frost heave bedrock ridge above site some	Open lichen fir woodland.		0			--			
17	EGR79	0	0			/	Frost heave bedrock ridge above site some	Open lichen fir woodland.		0			--			
17	EGR79	0	0			/	Frost heave bedrock ridge above site some	Open lichen fir woodland.		0			--			
18	EGR98	0	0			/	Small rock slides shallow bedrock visible	Fir/Lichen open forest		0			--			
18	EGR98	0	0			/	Small rock slides shallow bedrock visible	Fir/Lichen open forest		0			--			
18	EGR98	0	0			/	Small rock slides shallow bedrock visible	Fir/Lichen open forest		0			--			
19	EGL15	0	0	P	Medium	/	Evidence of water flowing through stand originating on road visible water upslope from site L <12% of polygon	Abieslas, trees, Empenig, Pleusch	nTashe	1			BRUN-DYB-GL	GL.DB		Moist area, some parts of polygon evidence of surface drainage
19	EGL15	0	0	P	Medium	/	Evidence of water flowing through stand originating on road visible water upslope from site L <12% of polygon	Abieslas, trees, Empenig, Pleusch	nTashe	1			BRUN-DYB-GL	GL.DB		Moist area, some parts of polygon evidence of surface drainage
19	EGL15	0	0	P	Medium	/	Evidence of water flowing through stand originating on road visible water upslope from site L <12% of polygon	Abieslas, trees, Empenig, Pleusch	nTashe	1			BRUN-DYB-GL	GL.DB		Moist area, some parts of polygon evidence of surface drainage
20	EGL17	0	0		Low	/	Seepage flowing water downslope ~10 m (out of plot) toe slope	Betugla, Abieslas, Empenig	nTashe	1			BRUN-DYB-E	E.DB		Verify texture's pH to determine if Brunisol s. Lu isol Heap leach
20	EGL17	0	0		Low	/	Seepage flowing water downslope ~10 m (out of plot) toe slope	Betugla, Abieslas, Empenig	nTashe	1			BRUN-DYB-E	E.DB		Verify texture's pH to determine if Brunisol s. Lu isol Heap leach
20	EGL17	0	0		Low	/	Seepage flowing water downslope ~10 m (out of plot) toe slope	Betugla, Abieslas, Empenig	nTashe	1			BRUN-DYB-E	E.DB		Verify texture's pH to determine if Brunisol s. Lu isol Heap leach
21	EGL39	0	0	P	Medium	/	Shallow slumps, Grown over weathered bedrock with rock near surface. EGR39A good cross profile	Aspen/Birch overstory, White Spruce subcanopy forb & litter understory. Geocaulon, accit, Rosaaci, Ledugro,	nTashe	1			LUV-GL-BR			Rocks and unstable slope angle limit soil depth. variety of fragments gra el to cobbles

SiteID	SiteNo	Depth to Bedrock	Depth to Water	TSM	EP	Ecosite/Site Series	Site Note	Vegetation Note	QC By	QC Complete	Root Restricting Layer Depth	Root Restricting Layer Type	Soil Code	Series Code	Phase	Soil Notes
21	EGL39	0	0	P	Medium	/	Shallow slumps, Grown over. Weathered bedrock with rock near surface. EGR39A good cross profile	Aspen/Birch overstory, White Spruce subcanopy forb & litter understory. Geocaulon, Vaccit, Rosaaci, Ledugro,	nTashe	1			LUV-GL-BR			Rocks and unstable slope angle limit soil depth. variety of fragments gravel to cobbles
21	EGL39	0	0	P	Medium	/	Shallow slumps, Grown over. Weathered bedrock with rock near surface. EGR39A good cross profile	Aspen/Birch overstory, White Spruce subcanopy forb & litter understory. Geocaulon, Vaccit, Rosaaci, Ledugro,	nTashe	1			LUV-GL-BR			Rocks and unstable slope angle limit soil depth. variety of fragments gravel to cobbles
22	EGL38	0	0	S	Low	/	evidence of charcoal in profile. Some subrounded gravel cobbles. Check extent of Minarea.	Open lichen woodland Picemar, Cladina, Cladonia, Vaccit, Ledugro		0			CHER-DB-			mica like shades of glass difficult to texture Almost a lu isoil
22	EGL38	0	0	S	Low	/	evidence of charcoal in profile. Some subrounded gravel cobbles. Check extent of Minarea.	Open lichen woodland Picemar, Cladina, Cladonia, Vaccit, Ledugro		0			CHER-DB-			mica like shades of glass difficult to texture Almost a lu isoil
22	EGL38	0	0	S	Low	/	evidence of charcoal in profile. Some subrounded gravel cobbles. Check extent of Minarea.	Open lichen woodland Picemar, Cladina, Cladonia, Vaccit, Ledugro		0			CHER-DB-			mica like shades of glass difficult to texture Almost a lu isoil
23	EGL37	0	0			/	Bedrock visible > ery weathered & broken from cut upslope in road	Fir / B. Spruce forest, Pleursch, Cladinastel, Vaccit, Ledugro	nTashe	1			BRUN-DYB-O			Soil shows previous ice contact by granulated structure at depth in C.
23	EGL37	0	0			/	Bedrock visible > ery weathered & broken from cut upslope in road	Fir / B. Spruce forest, Pleursch, Cladinastel, Vaccit, Ledugro	nTashe	1			BRUN-DYB-O			Soil shows previous ice contact by granulated structure at depth in C.
23	EGL37	0	0			/	Bedrock visible > ery weathered & broken from cut upslope in road	Fir / B. Spruce forest, Pleursch, Cladinastel, Vaccit, Ledugro	nTashe	1			BRUN-DYB-O			Soil shows previous ice contact by granulated structure at depth in C.
24	EGL36	0	0	S	Low	/	SA to SR clasts photo taken plus mica flakes pea size. M likely over D or R	open abies las forest, ledugro, betugla, accolig, empinig, cladstel, pleursch		0			--			some gravel is SA to SR
24	EGL36	0	0	S	Low	/	SA to SR clasts photo taken plus mica flakes pea size. M likely over D or R	open abies las forest, ledugro, betugla, accolig, empinig, cladstel, pleursch		0			--			some gravel is SA to SR
24	EGL36	0	0	S	Low	/	SA to SR clasts photo taken plus mica flakes pea size. M likely over D or R	open abies las forest, ledugro, betugla, accolig, empinig, cladstel, pleursch		0			--			some gravel is SA to SR
25	EGL207	0	0	P	Medium	/	boulders at surface rock slides lichen covered in stand	Sw, Abies las, Shepcan, Birch, Aspen, Vaccit,		0			ORG--			weak Ae may some E.DB in more stable areas
25	EGL207	0	0	P	Medium	/	boulders at surface rock slides lichen covered in stand	Sw, Abies las, Shepcan, Birch, Aspen, Vaccit,		0			ORG--			weak Ae may some E.DB in more stable areas
25	EGL207	0	0	P	Medium	/	boulders at surface rock slides lichen covered in stand	Sw, Abies las, Shepcan, Birch, Aspen, Vaccit,		0			ORG--			weak Ae may some E.DB in more stable areas
26	EGL18	0	0			/	Ingenous intrusive and meta sed rocks.	Betugla, Abielas, Anemone, Cladina, Cladonia, Pleusch, Polytrichum, Lazulapar, Juncbal	nTashe	1			BRUN-EB-O	O.EB		Broken horizon Platey structure from historic ice contact *weathered bedrock produces linear stration of mottle colours
26	EGL18	0	0			/	Ingenous intrusive and meta sed rocks.	Betugla, Abielas, Anemone, Cladina, Cladonia, Pleusch, Polytrichum, Lazulapar, Juncbal	nTashe	1			BRUN-EB-O	O.EB		Broken horizon Platey structure from historic ice contact *weathered bedrock produces linear stration of mottle colours
26	EGL18	0	0			/	Ingenous intrusive and meta sed rocks.	Betugla, Abielas, Anemone, Cladina, Cladonia, Pleusch, Polytrichum, Lazulapar, Juncbal	nTashe	1			BRUN-EB-O	O.EB		Broken horizon Platey structure from historic ice contact *weathered bedrock produces linear stration of mottle colours
27	EGL33	0	0	S	Low	/		Open fir forest, Betugla, Ledugro, Lycopod, Vaccoli, Cladina, Vaccit		0			ORG--			Thin dicontinuous Ahe (<2cm). 33 Auger/Shovel refusal large stone.
27	EGL33	0	0	S	Low	/		Open fir forest, Betugla, Ledugro, Lycopod, Vaccoli, Cladina, Vaccit		0			ORG--			Thin dicontinuous Ahe (<2cm). 33 Auger/Shovel refusal large stone.
27	EGL33	0	0	S	Low	/		Open fir forest, Betugla, Ledugro, Lycopod, Vaccoli, Cladina, Vaccit		0			ORG--			Thin dicontinuous Ahe (<2cm). 33 Auger/Shovel refusal large stone.
28	EGL19	0	0		Medium	/	Site appears to be near small test pit site (blue flagging). Can hear water downslope.	Salixpul, Betugla, Salixret, di erse understory.	nTashe	1			BRUN-EB-GL			
28	EGL19	0	0		Medium	/	Site appears to be near small test pit site (blue flagging). Can hear water downslope.	Salixpul, Betugla, Salixret, di erse understory.	nTashe	1			BRUN-EB-GL			
28	EGL19	0	0		Medium	/	Site appears to be near small test pit site (blue flagging). Can hear water downslope.	Salixpul, Betugla, Salixret, di erse understory.	nTashe	1			BRUN-EB-GL			
29	EGL20	0	0		Medium	/	Boulder field visible on surface. Coarse sand contains pea size gravel in C horizon.			0			BRUN-DYB-O	O.DB		C.F. content, but nice fine matrix for reclamation
29	EGL20	0	0		Medium	/	Boulder field visible on surface. Coarse sand contains pea size gravel in C horizon.			0			BRUN-DYB-O	O.DB		C.F. content, but nice fine matrix for reclamation

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29	EGL20	0	0			Medium /	Boulder field visible on surface. Coarse sand contains pea size gravel in C horizon.			0			BRUN-DYB-O	O.DB		C.F. content, but nice fine matrix for reclamation
30	EGL201	0	0	S		/	highly disturbed area need updated disturbance layer for LSA portion of the polygon Angular rubble at surface + throughout site Frost heave at site.			0	25	L	BRUN-DYB-O	O.DB		unsuitable reclamation material. Well developed fines as noted by organic enrichment. C? Cannot dig or auger Organic enrichment old soil.
30	EGL201	0	0	S		/	highly disturbed area need updated disturbance layer for LSA portion of the polygon Angular rubble at surface + throughout site Frost heave at site.			0	25	L	BRUN-DYB-O	O.DB		unsuitable reclamation material. Well developed fines as noted by organic enrichment. C? Cannot dig or auger Organic enrichment old soil.
30	EGL201	0	0	S		/	highly disturbed area need updated disturbance layer for LSA portion of the polygon Angular rubble at surface + throughout site Frost heave at site.			0	25	L	BRUN-DYB-O	O.DB		unsuitable reclamation material. Well developed fines as noted by organic enrichment. C? Cannot dig or auger Organic enrichment old soil.
31	EGL5	0	0			/	highly disturbed polygon could be split out from main large polygon		nTashe	1	100	X	BRUN-DYB-O	O.DB		So many boulder, stones near surface, went to cut created by road
31	EGL5	0	0			/	highly disturbed polygon could be split out from main large polygon		nTashe	1	100	X	BRUN-DYB-O	O.DB		So many boulder, stones near surface, went to cut created by road
31	EGL5	0	0			/	highly disturbed polygon could be split out from main large polygon		nTashe	1	100	X	BRUN-DYB-O	O.DB		So many boulder, stones near surface, went to cut created by road
32	EGL202	0	0			/	Part of Krich Feldspar/Granite coarse grained	Betugla, Abielas, Pleusch, Cladina, Cladonia		0		X	BRUN-DYB-O	O.DB		BC some colour imparted based on what is visible from disturbed areas
32	EGL202	0	0			/	Part of Krich Feldspar/Granite coarse grained	Betugla, Abielas, Pleusch, Cladina, Cladonia		0		X	BRUN-DYB-O	O.DB		BC some colour imparted based on what is visible from disturbed areas
32	EGL202	0	0			/	Part of Krich Feldspar/Granite coarse grained	Betugla, Abielas, Pleusch, Cladina, Cladonia		0		X	BRUN-DYB-O	O.DB		BC some colour imparted based on what is visible from disturbed areas
33	EGL203	0	0			/	Some foliated rock that cleaves into flat sheets. C material intact but A & B buried some C removed & pushed / windrowed.	No vegetation at site		0			--	ZDL		Compacted all subsoil & topsoil pushed (unidirectional but mixed)
33	EGL203	0	0			/	Some foliated rock that cleaves into flat sheets. C material intact but A & B buried some C removed & pushed / windrowed.	No vegetation at site		0			--	ZDL		Compacted all subsoil & topsoil pushed (unidirectional but mixed)
33	EGL203	0	0			/	Some foliated rock that cleaves into flat sheets. C material intact but A & B buried some C removed & pushed / windrowed.	No vegetation at site		0			--	ZDL		Compacted all subsoil & topsoil pushed (unidirectional but mixed)
34	EGL58	0	0			/	Collapse scars from ice meltout exposed soil in areas. Bedrock residual material closer to bedrock texture gets coarser.	Salixpal, Betugla, Abieslas, Carex spp.	nTashe	1	20	W	GLEJ--O	O.G		past evidence of permafrost no longer present in soil profile. boulders at surface
34	EGL58	0	0			/	Collapse scars from ice meltout exposed soil in areas. Bedrock residual material closer to bedrock texture gets coarser.	Salixpal, Betugla, Abieslas, Carex spp.	nTashe	1	20	W	GLEJ--O	O.G		past evidence of permafrost no longer present in soil profile. boulders at surface
34	EGL58	0	0			/	Collapse scars from ice meltout exposed soil in areas. Bedrock residual material closer to bedrock texture gets coarser.	Salixpal, Betugla, Abieslas, Carex spp.	nTashe	1	20	W	GLEJ--O	O.G		past evidence of permafrost no longer present in soil profile. boulders at surface
35	EGL52	200	0	P		Medium /	head water of gulch adjacent to boulder/bedrock outcrop. Slope steepens over short distance. Burn site Should break out bedrock from polygon	Salix, Betugla, Calamagrostis, burned spruce, Abies las	nTashe	1			BRUN-DYB-O	O.DB		gentle then steepens to gulch/gully mottles from bedrock weathering not water table. frost boils exposed soil trends downward
35	EGL52	200	0	P		Medium /	head water of gulch adjacent to boulder/bedrock outcrop. Slope steepens over short distance. Burn site Should break out bedrock from polygon	Salix, Betugla, Calamagrostis, burned spruce, Abies las	nTashe	1			BRUN-DYB-O	O.DB		gentle then steepens to gulch/gully mottles from bedrock weathering not water table. frost boils exposed soil trends downward
35	EGL52	200	0	P		Medium /	head water of gulch adjacent to boulder/bedrock outcrop. Slope steepens over short distance. Burn site Should break out bedrock from polygon	Salix, Betugla, Calamagrostis, burned spruce, Abies las	nTashe	1			BRUN-DYB-O	O.DB		gentle then steepens to gulch/gully mottles from bedrock weathering not water table. frost boils exposed soil trends downward
36	EGL53	0	0	P		Low /	Boulder field some exposed granite boulders at surface Frost shatter & boils on site	Betugla, Salixpul, Cladina, Pleusch, Polytrichum, Festuca, accit, Casstet		0	45	X	BRUN-DYB-O	O.DB		Ah thin & discontinuous ~ 3 cm

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36	EGL53	0	0	P	Low	/	Boulder field some exposed granite boulders at surface Frost shatter & boils on site	Betugla, Salixpul, Cladina, Pleusch, Polytrichum, Festuca, acc it, Casstet		0	45	X	BRUN-DYB-O	O.DB		Ah thin & discontinuous ~ 3 cm
36	EGL53	0	0	P	Low	/	Boulder field some exposed granite boulders at surface Frost shatter & boils on site	Betugla, Salixpul, Cladina, Pleusch, Polytrichum, Festuca, acc it, Casstet		0	45	X	BRUN-DYB-O	O.DB		Ah thin & discontinuous ~ 3 cm
37	EGL3	200	0	P	Medium	/	Some boulders at surface site adjacent to steep gully sharp drop off ~30 m	Abieslas, Empinig, Cladina, Betugla, Salipul, Pleusch, Polyjun		0			BRUN-DYB-O	O.DB		of coarse fragments from pea gra el to boulders in silt loam matrix. Auger/sho el refusal at 50 3rd pit attempt due to rocks
37	EGL3	200	0	P	Medium	/	Some boulders at surface site adjacent to steep gully sharp drop off ~30 m	Abieslas, Empinig, Cladina, Betugla, Salipul, Pleusch, Polyjun		0			BRUN-DYB-O	O.DB		of coarse fragments from pea gra el to boulders in silt loam matrix. Auger/sho el refusal at 50 3rd pit attempt due to rocks
37	EGL3	200	0	P	Medium	/	Some boulders at surface site adjacent to steep gully sharp drop off ~30 m	Abieslas, Empinig, Cladina, Betugla, Salipul, Pleusch, Polyjun		0			BRUN-DYB-O	O.DB		of coarse fragments from pea gra el to boulders in silt loam matrix. Auger/sho el refusal at 50 3rd pit attempt due to rocks
38	EGL204	0	0	P	High	/	Pull polygon out as a unit No buried horizon tonguing in soil horizon boundaries Mo ement in profile e ident exposed mineral soil from shallow micro slumps	Abieslas, Empinig, Epilang, Cass (heather) lichen dominant co er, Spir bea		0			BRUN-DYB-E	E.DB		High degree of mixing in soil profile No 'C' horizon
38	EGL204	0	0	P	High	/	Pull polygon out as a unit No buried horizon tonguing in soil horizon boundaries Mo ement in profile e ident exposed mineral soil from shallow micro slumps	Abieslas, Empinig, Epilang, Cass (heather) lichen dominant co er, Spir bea		0			BRUN-DYB-E	E.DB		High degree of mixing in soil profile No 'C' horizon
38	EGL204	0	0	P	High	/	Pull polygon out as a unit No buried horizon tonguing in soil horizon boundaries Mo ement in profile e ident exposed mineral soil from shallow micro slumps	Abieslas, Empinig, Epilang, Cass (heather) lichen dominant co er, Spir bea		0			BRUN-DYB-E	E.DB		High degree of mixing in soil profile No 'C' horizon
39	EGL4	0	0	P	Medium	/		Abieslas, Picegla, Hylospl, Lupialp, heather, Betugla, Salipal, Saliret		0		X	BRUN-DYB-O	O.DB		
39	EGL4	0	0	P	Medium	/		Abieslas, Picegla, Hylospl, Lupialp, heather, Betugla, Salipal, Saliret		0		X	BRUN-DYB-O	O.DB		
39	EGL4	0	0	P	Medium	/		Abieslas, Picegla, Hylospl, Lupialp, heather, Betugla, Salipal, Saliret		0		X	BRUN-DYB-O	O.DB		
40	EGL205	0	0	U	High	/	eroded surface in gully bottom Stewart Gulch areas of ponding deposition of sand occurs		nTashe	1	60	L	REGO--O	O.R		
40	EGL205	0	0	U	High	/	eroded surface in gully bottom Stewart Gulch areas of ponding deposition of sand occurs		nTashe	1	60	L	REGO--O	O.R		
40	EGL205	0	0	U	High	/	eroded surface in gully bottom Stewart Gulch areas of ponding deposition of sand occurs		nTashe	1	60	L	REGO--O	O.R		
41	EGL60	100	0	P		/	some rock fall near road downslope into plot. No eg in those areas or topsoil or fines Frost shatter in areas exposed slope.	Betugla, Salipal, Vaccoli, Abieslas		0		L	BRUN-DYB-O	O.DB		x shallow cannot assess C horizon depth is estimate
41	EGL60	100	0	P		/	some rock fall near road downslope into plot. No eg in those areas or topsoil or fines Frost shatter in areas exposed slope.	Betugla, Salipal, Vaccoli, Abieslas		0		L	BRUN-DYB-O	O.DB		x shallow cannot assess C horizon depth is estimate
41	EGL60	100	0	P		/	some rock fall near road downslope into plot. No eg in those areas or topsoil or fines Frost shatter in areas exposed slope.	Betugla, Salipal, Vaccoli, Abieslas		0		L	BRUN-DYB-O	O.DB		x shallow cannot assess C horizon depth is estimate
42	EGL61	0	0		Medium	/	D with some C mo ement of boulders in areas	Betugla, Salipal, Abieslas, Empinig, Casstet, Vacc it, Cladina, Cladonia, Polyjun	nTashe	1			BRUN-DYB-O	O.DB		x shallow Ahe 0 2 Too high C.F. to fully assess soil Some soil is just rock to surface flat lying rocks
42	EGL61	0	0		Medium	/	D with some C mo ement of boulders in areas	Betugla, Salipal, Abieslas, Empinig, Casstet, Vacc it, Cladina, Cladonia, Polyjun	nTashe	1			BRUN-DYB-O	O.DB		x shallow Ahe 0 2 Too high C.F. to fully assess soil Some soil is just rock to surface flat lying rocks

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42	EGL61	0	0			Medium /	D with some C moement of boulders in areas	Betugla, Salipal, Abieslas, Empenig, Cass tet, Vacc it, Cladina, Cladonia, Polyjun nTashe	nTashe	1			BRUN-DYB-O	O.DB		x shallow Ahe 0 2 Too high C.F. to fully assess soil Some soil is just rock to surface flat lying rocks
43	EGL68	0	0			Low /	some cobbles isible on surface, rocks broken on natural planes & aligned in horizontal position	past burn Abies las ~ 10 m high, Empenig, Cladina, Cladonia dominant co er on ground		0			BRUN-DYB-O	O.DB		lots of deadfall on ground no charcoal in soil may be O.R weak structure mostly held together by
43	EGL68	0	0			Low /	some cobbles isible on surface, rocks broken on natural planes & aligned in horizontal position	past burn Abies las ~ 10 m high, Empenig, Cladina, Cladonia dominant co er on ground		0			BRUN-DYB-O	O.DB		lots of deadfall on ground no charcoal in soil may be O.R weak structure mostly held together by
43	EGL68	0	0			Low /	some cobbles isible on surface, rocks broken on natural planes & aligned in horizontal position	past burn Abies las ~ 10 m high, Empenig, Cladina, Cladonia dominant co er on ground		0			BRUN-DYB-O	O.DB		lots of deadfall on ground no charcoal in soil may be O.R weak structure mostly held together by
44	EGL206	100	0	U		Low /	Exposed weathered bedrock on crest Frost hea e + shatter at site	Betugla, ledudec, Cladina, Salixarc, Vacc it, Salixgla, Arctrub		0			BRUN-DYB-O	O.DB		too many C.F. to sho el C horiz skeletal soil flat lying planar rock
44	EGL206	100	0	U		Low /	Exposed weathered bedrock on crest Frost hea e + shatter at site	Betugla, ledudec, Cladina, Salixarc, Vacc it, Salixgla, Arctrub		0			BRUN-DYB-O	O.DB		too many C.F. to sho el C horiz skeletal soil flat lying planar rock
44	EGL206	100	0	U		Low /	Exposed weathered bedrock on crest Frost hea e + shatter at site	Betugla, ledudec, Cladina, Salixarc, Vacc it, Salixgla, Arctrub		0			BRUN-DYB-O	O.DB		too many C.F. to sho el C horiz skeletal soil flat lying planar rock
45	EGR206	100	0	U		High /	Frost hea e + rock slide	Ericaceous shrubs + lichen community Salix gla, Ledu dec, Betu gla, Cass tet, Cladina, Cladonia, Dryas ala		0	100	L	BRUN-DYB-O			skeletal soil
45	EGR206	100	0	U		High /	Frost hea e + rock slide	Ericaceous shrubs + lichen community Salix gla, Ledu dec, Betu gla, Cass tet,		0	100	L	BRUN-DYB-O			skeletal soil
45	EGR206	100	0	U		High /	Frost hea e + rock slide	Ericaceous shrubs + lichen community Salix gla, Ledu dec, Betu gla, Cass tet,		0	100	L	BRUN-DYB-O			skeletal soil
46	EGR97	0	0			Medium /	Abies las, drunken forst collapse areas + drainage channels e ident of standing water high gra el content as well	Hylospl, Pleusch, Nephroma, Cladstel, Cladarb, Vacc it, Ledudec, Sphag,		0	65	W	CRYO-TC-GL			sample of water taken pH 6.3 limited cryoturbation Ice within 2 metres will also be root restricting.
46	EGR97	0	0			Medium /	Abies las, drunken forst collapse areas + drainage channels e ident of standing water high gra el content as well	Hylospl, Pleusch, Nephroma, Cladstel, Cladarb, Vacc it, Ledudec, Sphag,		0	65	W	CRYO-TC-GL			sample of water taken pH 6.3 limited cryoturbation Ice within 2 metres will also be root restricting.
46	EGR97	0	0			Medium /	Abies las, drunken forst collapse areas + drainage channels e ident of standing water high gra el content as well	Hylospl, Pleusch, Nephroma, Cladstel, Cladarb, Vacc it, Ledudec, Sphag,		0	65	W	CRYO-TC-GL			sample of water taken pH 6.3 limited cryoturbation Ice within 2 metres will also be root restricting.
47	EGR95	0	0	P		Medium /	Gra els, cobbles, boulders at site	open lichen forest e idence of snow loading Abies las, cladina, Cladonia, Empe nig nTashe	nTashe	1	60	L	REGO--O	O.R		Boulders at surface
47	EGR95	0	0	P		Medium /	Gra els, cobbles, boulders at site	open lichen forest e idence of snow loading Abies las, cladina, Cladonia, Empe nig nTashe	nTashe	1	60	L	REGO--O	O.R		Boulders at surface
47	EGR95	0	0	P		Medium /	Gra els, cobbles, boulders at site	open lichen forest e idence of snow loading Abies las, cladina, Cladonia, Empe nig nTashe	nTashe	1	60	L	REGO--O	O.R		Boulders at surface
48	EGR80	100	0	P		High /	Shattered rock planar + rod shaped horizontal rock layers in profile No egetation on recent slide and slump ~ 10 m across	Abieslas, Cladinaste, Cladrang, Betupum, Ledugro open woodland lichen dominant		0			BRUN-DYB-O	O.DB		Ahe discontinuous + bedrock outcrop upslope ~ 20 m
48	EGR80	100	0	P		High /	Shattered rock planar + rod shaped horizontal rock layers in profile No egetation on recent slide and slump ~ 10 m across	Abieslas, Cladinaste, Cladrang, Betupum, Ledugro open woodland lichen dominant		0			BRUN-DYB-O	O.DB		Ahe discontinuous + bedrock outcrop upslope ~ 20 m
48	EGR80	100	0	P		High /	Shattered rock planar + rod shaped horizontal rock layers in profile No egetation on recent slide and slump ~ 10 m across	Abieslas, Cladinaste, Cladrang, Betupum, Ledugro open woodland lichen dominant		0			BRUN-DYB-O	O.DB		Ahe discontinuous + bedrock outcrop upslope ~ 20 m
49	EGL27	0	0			Medium /	clast supported matrix Coarse sand photos taken acti e flowing channel disturbed by Placer mining	Salix, Alnus		0			REGO--O	O.R		ariable clast size May be some Cu.R
49	EGL27	0	0			Medium /	clast supported matrix Coarse sand photos taken acti e flowing channel disturbed by Placer mining	Salix, Alnus		0			REGO--O	O.R		ariable clast size May be some Cu.R
49	EGL27	0	0			Medium /	clast supported matrix Coarse sand photos taken acti e flowing channel disturbed by Placer mining	Salix, Alnus		0			REGO--O	O.R		ariable clast size May be some Cu.R
50	EGL12	0	0	S		Medium /		Sb forest, Salix, Betugla, Cared pod		0	56	W	GLEY-HG-O			Cg is filled in with water from seepage Ahe 2 cm but too thin to sample. May be some Hu. Lu ic

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50	EGL12	0	0	S	Medium	/		Sb forest, Salix, Betugla, Cared pod		0	56	W	GLEY-HG-O			Cg is filled in with water from seepage. Ahe 2 cm but too thin to sample. May be some Hu. Lu ic
50	EGL12	0	0	S	Medium	/		Sb forest, Salix, Betugla, Cared pod		0	56	W	GLEY-HG-O			Cg is filled in with water from seepage. Ahe 2 cm but too thin to sample. May be some Hu. Lu ic
51	EGL215	0	0			/	broken horizons tipping/dying top spruce likely due to permafrost check drill logs in area	Sb forest open moss/lichen understory	nTashe	1	200	X	CRYO-TC-HD	O.DB		Sequence of silts o er gra els likely continues at depth Broken horizons likely influenced by ice in past
51	EGL215	0	0			/	broken horizons tipping/dying top spruce likely due to permafrost check drill logs in area	Sb forest open moss/lichen understory	nTashe	1	200	X	CRYO-TC-HD	O.DB		Sequence of silts o er gra els likely continues at depth Broken horizons likely influenced by ice in past
51	EGL215	0	0			/	broken horizons tipping/dying top spruce likely due to permafrost check drill logs in area	Sb forest open moss/lichen understory	nTashe	1	200	X	CRYO-TC-HD	O.DB		Sequence of silts o er gra els likely continues at depth Broken horizons likely influenced by ice in past
52	EGL22	0	0		Medium	/		Abies las, Pice mar, Ledu gro, Empe nig, Vacc oli, Salix pau, Salix gla, Rubus arc,		0			GLEY--R	R.G		flood sequence
52	EGL22	0	0		Medium	/		Abies las, Pice mar, Ledu gro, Empe nig, Vacc oli, Salix pau, Salix gla, Rubus arc,		0			GLEY--R	R.G		flood sequence
52	EGL22	0	0		Medium	/		Abies las, Pice mar, Ledu gro, Empe nig, Vacc oli, Salix pau, Salix gla, Rubus arc,		0			GLEY--R	R.G		flood sequence
53	EGL211	0	0	P		/	D & C is o er Rock Failures if they occur will be shallow. Root restriction is lithic contact.	Betu gla, Vacc it, Ledu gro, Cladina.		0			--			
53	EGL211	0	0	P		/	D & C is o er Rock Failures if they occur will be shallow. Root restriction is lithic contact.	Betu gla, Vacc it, Ledu gro, Cladina.		0			--			
53	EGL211	0	0	P		/	D & C is o er Rock Failures if they occur will be shallow. Root restriction is lithic contact.	Betu gla, Vacc it, Ledu gro, Cladina.		0			--			
54	EGL26	0	0	P	Medium	/	Some tilted trees not many May be due to snow loading Some surface drainage channels sedimentation surface	Fir, spruce (Pice mar) forest, sphagnum, Hylo spl, Rubus cham, Empe nig, Equi syl		0		Z	CRYO--	Cryosol	p	Bedrock noted near side trail Phyllite highly weathered & fractured
54	EGL26	0	0	P	Medium	/	Some tilted trees not many May be due to snow loading Some surface drainage channels sedimentation surface	Fir, spruce (Pice mar) forest, sphagnum, Hylo spl, Rubus cham, Empe nig, Equi syl		0		Z	CRYO--	Cryosol	p	Bedrock noted near side trail Phyllite highly weathered & fractured
54	EGL26	0	0	P	Medium	/	Some tilted trees not many May be due to snow loading Some surface drainage channels sedimentation surface	Fir, spruce (Pice mar) forest, sphagnum, Hylo spl, Rubus cham, Empe nig, Equi syl		0		Z	CRYO--	Cryosol	p	Bedrock noted near side trail Phyllite highly weathered & fractured
55	EGL49	0	0	P		/	upslope from bedrock outcrops	mature spruce/fir forest		0			--			
55	EGL49	0	0	P		/	upslope from bedrock outcrops	mature spruce/fir forest		0			--			
55	EGL49	0	0	P		/	upslope from bedrock outcrops	mature spruce/fir forest		0			--			
56	EGL25	0	0		Medium	/	Broken metased material	Abies las, Pice mar, Pice gla, Hylo spl, Vacc oli, Ledu gro, Equi syl, Nephroma, Clad stel, Betu gla Main shrub is Salix pau		0			BRUN-DYB-O	O.DB		mid to upper slope difficult to texture as high broken rock fragments May be Lu osols in polygon
56	EGL25	0	0		Medium	/	Broken metased material	Abies las, Pice mar, Pice gla, Hylo spl, Vacc oli, Ledu gro, Equi syl, Nephroma, Clad stel, Betu gla Main shrub is Salix pau		0			BRUN-DYB-O	O.DB		mid to upper slope difficult to texture as high broken rock fragments May be Lu osols in polygon
56	EGL25	0	0		Medium	/	Broken metased material	Abies las, Pice mar, Pice gla, Hylo spl, Vacc oli, Ledu gro, Equi syl, Nephroma, Clad stel, Betu gla Main shrub is Salix pau		0			BRUN-DYB-O	O.DB		mid to upper slope difficult to texture as high broken rock fragments May be Lu osols in polygon
57	EGL210	0	0			/		fir/spruce forest		0			LUV-GL-O	O.GL		likely O.DB in polygon as well Some met. sed in profile, mostly
57	EGL210	0	0			/		fir/spruce forest		0			LUV-GL-O	O.GL		likely O.DB in polygon as well Some met. sed in profile, mostly
57	EGL210	0	0			/		fir/spruce forest		0			LUV-GL-O	O.GL		likely O.DB in polygon as well Some met. sed in profile, mostly
58	EGL208	0	0		Low	/	broken horixon profile slow downward movement of material historically Cobbles to stones mostly with gra el			0			BRUN-DYB-E			skeletal soil
58	EGL208	0	0		Low	/	broken horixon profile slow downward movement of material historically Cobbles to stones mostly with gra el			0			BRUN-DYB-E			skeletal soil

SiteID	SiteNo	Depth to Bedrock	Depth to Water	TSM	EP	Ecosite/Site Series	Site Note	Vegetation Note	QC By	QC Complete	Root Restricting Layer Depth	Root Restricting Layer Type	Soil Code	Series Code	Phase	Soil Notes
58	EGL208	0	0		Low	/	broken horizon profile slow downward movement of material historically Cobbles to stones mostly with gravel			0			BRUN-DYB-E			skeletal soil
59	EGL209	0	0	U	High	/	Meta sed on 45 degree angle Two lithologies may be near bedrock contact	Abies, Betula		0			BRUN-DYB-E	E.DB/O.DB		meta sed SiL / igneous SL/LS
59	EGL209	0	0	U	High	/	Meta sed on 45 degree angle Two lithologies may be near bedrock contact	Abies, Betula		0			BRUN-DYB-E	E.DB/O.DB		meta sed SiL / igneous SL/LS
59	EGL209	0	0	U	High	/	Meta sed on 45 degree angle Two lithologies may be near bedrock contact	Abies, Betula		0			BRUN-DYB-E	E.DB/O.DB		meta sed SiL / igneous SL/LS
60	EGL50	0	0	U		/	bedrock cliffs above site pull out rock cliffs separate from boulder slides	Vaccinium, Hylocomium, Cladonia, Cladonia, Crustose lichen, Salix glauca, Betula, Ledum		0			--			coarse sand w gravel
60	EGL50	0	0	U		/	bedrock cliffs above site pull out rock cliffs separate from boulder slides	Vaccinium, Hylocomium, Cladonia, Cladonia, Crustose lichen, Salix glauca, Betula, Ledum		0			--			coarse sand w gravel
60	EGL50	0	0	U		/	bedrock cliffs above site pull out rock cliffs separate from boulder slides	Vaccinium, Hylocomium, Cladonia, Cladonia, Crustose lichen, Salix glauca, Betula, Ledum		0			--			coarse sand w gravel
61	EGL28	0	0			/	exposed rock slide but historic as lichen cover on rocks	very few trees, mostly shrub dominant Betula glauca, Abies lasiocarpa, Cladonia, Vaccinium, Ledum		0			--			
61	EGL28	0	0			/	exposed rock slide but historic as lichen cover on rocks	very few trees, mostly shrub dominant Betula glauca, Abies lasiocarpa, Cladonia, Vaccinium, Ledum		0			--			
61	EGL28	0	0			/	exposed rock slide but historic as lichen cover on rocks	very few trees, mostly shrub dominant Betula glauca, Abies lasiocarpa, Cladonia, Vaccinium, Ledum		0			--			
62	EGL212	0	0	S	Medium	/	mixed lithology of gravels flat, angular, subangular, various shapes due to lithology more than transport	old growth forest of Abies lasiocarpa, Ledum, Pleurozium, mostly Cladonia, some Vaccinium + Nephroma	nTashe	1			BRUN-DYB-O	O.DB		1 cobble near surface, all else is consistently gravel in the profile
62	EGL212	0	0	S	Medium	/	mixed lithology of gravels flat, angular, subangular, various shapes due to lithology more than transport	old growth forest of Abies lasiocarpa, Ledum, Pleurozium, mostly Cladonia, some Vaccinium + Nephroma	nTashe	1			BRUN-DYB-O	O.DB		1 cobble near surface, all else is consistently gravel in the profile
62	EGL212	0	0	S	Medium	/	mixed lithology of gravels flat, angular, subangular, various shapes due to lithology more than transport	old growth forest of Abies lasiocarpa, Ledum, Pleurozium, mostly Cladonia, some Vaccinium + Nephroma	nTashe	1			BRUN-DYB-O	O.DB		1 cobble near surface, all else is consistently gravel in the profile
63	EGL213	0	0	U	High	/	Fines obvious in the slide area Obvious recent slides weathered bedrock exposed	Mixed forest Aspen, spruce, birch		0			--			
63	EGL213	0	0	U	High	/	Fines obvious in the slide area Obvious recent slides weathered bedrock exposed	Mixed forest Aspen, spruce, birch		0			--			
63	EGL213	0	0	U	High	/	Fines obvious in the slide area Obvious recent slides weathered bedrock exposed	Mixed forest Aspen, spruce, birch		0			--			
64	EGL214	0	0	P	Medium	/	deep & wet soil consistency of pudding hole collapsing as digging tilled forest circular collapse scars (egetated) in site	open Sb forest Ledum, Cladonia, Cladonia dominant		0	100	Z	CRYO--	Cryosol, R.HG		
64	EGL214	0	0	P	Medium	/	deep & wet soil consistency of pudding hole collapsing as digging tilled forest circular collapse scars (egetated) in site	open Sb forest Ledum, Cladonia, Cladonia dominant		0	100	Z	CRYO--	Cryosol, R.HG		
64	EGL214	0	0	P	Medium	/	deep & wet soil consistency of pudding hole collapsing as digging tilled forest circular collapse scars (egetated) in site	open Sb forest Ledum, Cladonia, Cladonia dominant		0	100	Z	CRYO--	Cryosol, R.HG		
65	EGL214A	0	0			/	Silt appears as rock flour likely part of high energy deposition short distance travel due to angularity then cycles of lower energy deposition silts	Mixed deciduous Salix, Birch		0			--			
65	EGL214A	0	0			/	Silt appears as rock flour likely part of high energy deposition short distance travel due to angularity then cycles of lower energy deposition silts	Mixed deciduous Salix, Birch		0			--			
65	EGL214A	0	0			/	Silt appears as rock flour likely part of high energy deposition short distance travel due to angularity then cycles of lower energy deposition silts	Mixed deciduous Salix, Birch		0			--			
66	EGL50A	0	0			/	rock slides filling bottom of Olie Gulch shallow slides bedrock visible upslope	shrub restricted trees due to boulders receiving slide area		0			--			
66	EGL50A	0	0			/	rock slides filling bottom of Olie Gulch shallow slides bedrock visible upslope	shrub restricted trees due to boulders receiving slide area		0			--			

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66	EGL50A	0	0			/	rock slides filling bottom of Oli e Gulch shallow slides bedrock isible upslope	shrub restricted trees due to boulders recei ing slide area		0			--			
67	EGL35	0	0			/	No rocks at surface some channel surface flow, but egeatation relati ely intact	Open fir forest. Abies las, Betugra, Clad ste, Nephroma, Ledu gro, Cladonia, Poly tri	mTrommelen	1			BRUN-DYB-O	O.DB		high amount of gra el & mica in profile
67	EGL35	0	0			/	No rocks at surface some channel surface flow, but egeatation relati ely intact	Open fir forest. Abies las, Betugra, Clad ste, Nephroma, Ledu gro, Cladonia, Poly tri	mTrommelen	1			BRUN-DYB-O	O.DB		high amount of gra el & mica in profile
67	EGL35	0	0			/	No rocks at surface some channel surface flow, but egeatation relati ely intact	Open fir forest. Abies las, Betugra, Clad ste, Nephroma, Ledu gro, Cladonia, Poly tri	mTrommelen	1			BRUN-DYB-O	O.DB		high amount of gra el & mica in profile
68	EGL34	0	0		Low	/	M likely o er D or R	Abies las, Vacc oli, Vacc it, Ledu gro, Nephroma, Empi nig	nTashe	1			LUV-GL-O			likely O.GL/E.DB both in polygons
68	EGL34	0	0		Low	/	M likely o er D or R	Abies las, Vacc oli, Vacc it, Ledu gro, Nephroma, Empi nig	nTashe	1			LUV-GL-O			likely O.GL/E.DB both in polygons
68	EGL34	0	0		Low	/	M likely o er D or R	Abies las, Vacc oli, Vacc it, Ledu gro, Nephroma, Empi nig	nTashe	1			LUV-GL-O			likely O.GL/E.DB both in polygons
69	EGL32	0	0	P	Medium	/		Open Betu gla shrubland		0			BRUN-DYB-E	E.DB		may be Lu isols in more stable areas
69	EGL32	0	0	P	Medium	/		Open Betu gla shrubland		0			BRUN-DYB-E	E.DB		may be Lu isols in more stable areas
69	EGL32	0	0	P	Medium	/		Open Betu gla shrubland		0			BRUN-DYB-E	E.DB		may be Lu isols in more stable areas
70	EGL31	200	0	U	High	/	Historic + shallow recent slides exposed mineral soil ~ 5 x 3 m	Aspen fir + Sw. In understory Juni com, Ledu gro, Vacc it, Arct u a, Vacc uli		0			REGO--O	O.R		cannot dig deeper than 40 cm due to high CF Some exposed stones/boulders on site Gra el in
70	EGL31	200	0	U	High	/	Historic + shallow recent slides exposed mineral soil ~ 5 x 3 m	Aspen fir + Sw. In understory Juni com, Ledu gro, Vacc it, Arct u a, Vacc uli		0			REGO--O	O.R		cannot dig deeper than 40 cm due to high CF Some exposed stones/boulders on site Gra el in
70	EGL31	200	0	U	High	/	Historic + shallow recent slides exposed mineral soil ~ 5 x 3 m	Aspen fir + Sw. In understory Juni com, Ledu gro, Vacc it, Arct u a, Vacc uli		0			REGO--O	O.R		cannot dig deeper than 40 cm due to high CF Some exposed stones/boulders on site Gra el in
71	EGL30	200	0	P	Medium	/	Large boulders protruding at surface	Mature old fir/white spruce Geoc li , Hylo spl, Linn bor, Vacc it		0			BRUN-DYB-O	O.DB		bare soil under trees downslope only tonguing horizons
71	EGL30	200	0	P	Medium	/	Large boulders protruding at surface	Mature old fir/white spruce Geoc li , Hylo spl, Linn bor, Vacc it		0			BRUN-DYB-O	O.DB		bare soil under trees downslope only tonguing horizons
71	EGL30	200	0	P	Medium	/	Large boulders protruding at surface	Mature old fir/white spruce Geoc li , Hylo spl, Linn bor, Vacc it		0			BRUN-DYB-O	O.DB		bare soil under trees downslope only tonguing horizons
72	EGR81	0	0	P	Medium	/	subsurface seepage abo e ice	open forst lichen dominant	nTashe	1	30	Z	CRYO-SC-HE		p	phase modifiers pt if Brunisols in
72	EGR81	0	0	P	Medium	/	subsurface seepage abo e ice	open forst lichen dominant	nTashe	1	30	Z	CRYO-SC-HE		p	phase modifiers pt if Brunisols in
72	EGR81	0	0	P	Medium	/	subsurface seepage abo e ice	open forst lichen dominant	nTashe	1	30	Z	CRYO-SC-HE		p	phase modifiers pt if Brunisols in
73	EGR73	0	0	P	Low	/	Just started to get in clump of trees, open forest/parkland Patches of frost shattered R, possibly due to permafrost sorting, SE aspect though. TSM III			0			--			
73	EGR73	0	0	P	Low	/	Just started to get in clump of trees, open forest/parkland Patches of frost shattered R, possibly due to permafrost sorting, SE aspect though. TSM III			0			--			
73	EGR73	0	0	P	Low	/	Just started to get in clump of trees, open forest/parkland Patches of frost shattered R, possibly due to permafrost sorting, SE aspect though. TSM III			0			--			
74	ERG115	0	0	S	Low	/	Walked down slope from last, onto a bench (~30m wide), with a steep scarp to NE, then slightly up and off a ways to the side. Hole ~50 60% peb sml cob, SR A SA TSM = 11 111 dep. how thick, no e id. of mo ement.			0			--			
74	ERG115	0	0	S	Low	/	Walked down slope from last, onto a bench (~30m wide), with a steep scarp to NE, then slightly up and off a ways to the side. Hole ~50 60% peb sml cob, SR A SA TSM = 11 111 dep. how thick, no e id. of mo ement.			0			--			

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74	ERG115	0	0	S	Low	/	Walked down slope from last, onto a bench (~30m wide), with a steep scarp to NE, then slightly up and off a ways to the side. Hole ~50 60% peb sml cob, SR A SA TSM = 11 111 dep. how thick, no e id. of mo ement.			0			--			
75	EGL9	0	0	P	Low	/	matrix FSL, . poorly sorted, few poorly sorted areas (MS cs)			0		N	BRUN-DYB-O			no auger, can't check for ice O.EB or O.DYB
75	EGL9	0	0	P	Low	/	matrix FSL, . poorly sorted, few poorly sorted areas (MS cs)			0		N	BRUN-DYB-O			no auger, can't check for ice O.EB or O.DYB
75	EGL9	0	0	P	Low	/	matrix FSL, . poorly sorted, few poorly sorted areas (MS cs)			0		N	BRUN-DYB-O			no auger, can't check for ice O.EB or O.DYB
76	EGR306	0	0	S	Low	/	L matrix, with 20 35%. Any blocky gr to sm cobble, all psammites(or arenites) TSM=II Unsure Re: permafrost			0			--			
76	EGR306	0	0	S	Low	/	L matrix, with 20 35%. Any blocky gr to sm cobble, all psammites(or arenites) TSM=II Unsure Re: permafrost			0			--			
76	EGR306	0	0	S	Low	/	L matrix, with 20 35%. Any blocky gr to sm cobble, all psammites(or arenites) TSM=II Unsure Re: permafrost			0			--			
77	ERG114	0	0	P	Medium	/	a few rocks oc around. probably see on airphotos EP med high watch channeled water old burn, all the way down this slope; not alley/slope to NE/E TSM=III IV check slope model fire didn't cause slides; dry likely thin.			0			--			
77	ERG114	0	0	P	Medium	/	a few rocks oc around. probably see on airphotos EP med high watch channeled water old burn, all the way down this slope; not alley/slope to NE/E TSM=III IV check slope model fire didn't cause slides; dry likely thin.			0			--			
77	ERG114	0	0	P	Medium	/	a few rocks oc around. probably see on airphotos EP med high watch channeled water old burn, all the way down this slope; not alley/slope to NE/E TSM=III IV check slope model fire didn't cause slides; dry likely thin.			0			--			
78	EGR76	0	0	S	Low	/	Slope undulates a lot. TSM II Separate 74 and 76 by aspect instead of how now?			0			--			
78	EGR76	0	0	S	Low	/	Slope undulates a lot. TSM II Separate 74 and 76 by aspect instead of how now?			0			--			
78	EGR76	0	0	S	Low	/	Slope undulates a lot. TSM II Separate 74 and 76 by aspect instead of how now?			0			--			
79	EGR113	0	0	P	Medium	/	walked ~ along contour to this site, Mix of stuff. Once cross into this one, way more actual rock at surface. Most somewhat frost hea e of shatter. are just NW (~8m) of what looks like an old R*r, about 5m deep, with ra @ bottom of slope			0			--			
79	EGR113	0	0	P	Medium	/	walked ~ along contour to this site, Mix of stuff. Once cross into this one, way more actual rock at surface. Most somewhat frost hea e of shatter. are just NW (~8m) of what looks like an old R*r, about 5m deep, with ra @ bottom of slope			0			--			

SiteID	SiteNo	Depth to Bedrock	Depth to Water	TSM	EP	Ecosite/Site Series	Site Note	Vegetation Note	QC By	QC Complete	Root Restricting Layer Depth	Root Restricting Layer Type	Soil Code	Series Code	Phase	Soil Notes	
79	EGR113	0	0	P	Medium	/	walked ~ along contour to this site. Mix of stuff. Once cross into this one, way more actual rock at surface. Most somewhat frost heave of shatter. are just NW (~8m) of what looks like an old R"r, about 5m deep, with ra @ bottom of slope			0			--				
80	EGL10	0	0	S	Low	/	Poorly sorted, massive diamict; afs matrix, occasionally areas that are a bit more sorted (more mc sand). Clasts area A SA, minor SR. Mostly granule to pebble, only ~ 15 Y., ablation till or poss. debris flow (btw alley + glacier).			0	42	Z	CRYO--				
80	EGL10	0	0	S	Low	/	Poorly sorted, massive diamict; afs matrix, occasionally areas that are a bit more sorted (more mc sand). Clasts area A SA, minor SR. Mostly granule to pebble, only ~ 15 Y., ablation till or poss. debris flow (btw alley + glacier).			0	42	Z	CRYO--				
80	EGL10	0	0	S	Low	/	Poorly sorted, massive diamict; afs matrix, occasionally areas that are a bit more sorted (more mc sand). Clasts area A SA, minor SR. Mostly granule to pebble, only ~ 15 Y., ablation till or poss. debris flow (btw alley + glacier).			0	42	Z	CRYO--				
81	EGR14	0	0	S	Low	/	Abundant frost shattered A peb 5m boulder in very rough solifluction lobes. Only 5% 20 30 cm wide mud boils. Practically R, just frost shattered. TSM = II b.c thin shattered R, r drained			0			--				
81	EGR14	0	0	S	Low	/	Abundant frost shattered A peb 5m boulder in very rough solifluction lobes. Only 5% 20 30 cm wide mud boils. Practically R, just frost shattered. TSM = II b.c thin shattered R, r drained			0			--				
81	EGR14	0	0	S	Low	/	Abundant frost shattered A peb 5m boulder in very rough solifluction lobes. Only 5% 20 30 cm wide mud boils. Practically R, just frost shattered. TSM = II b.c thin shattered R, r drained			0			--				
82	EGR112	0	0	P	Medium	/	burnt, steepish slope. fire didn't cause slide; TSM IVR (too steep for road) but dry, seems stable other than minor creep.			0			--				
82	EGR112	0	0	P	Medium	/	burnt, steepish slope. fire didn't cause slide; TSM IVR (too steep for road) but dry, seems stable other than minor creep.			0			--				
82	EGR112	0	0	P	Medium	/	burnt, steepish slope. fire didn't cause slide; TSM IVR (too steep for road) but dry, seems stable other than minor creep.			0			--				
83	EGL11	0	0	S	Low	/	Is there a source for C above? Not a good till, but a small possibility			0		N	BRUN-DYB-O	O.EB or O.DYB		O.EB or O.DYB	
83	EGL11	0	0	S	Low	/	Is there a source for C above? Not a good till, but a small possibility			0		N	BRUN-DYB-O	O.EB or O.DYB		O.EB or O.DYB	
83	EGL11	0	0	S	Low	/	Is there a source for C above? Not a good till, but a small possibility			0		N	BRUN-DYB-O	O.EB or O.DYB		O.EB or O.DYB	
84	EGR13	0	0	S	Low	/	TSM = II			0			--				
84	EGR13	0	0	S	Low	/	TSM = II			0			--				
84	EGR13	0	0	S	Low	/	TSM = II			0			--				

SiteID	SiteNo	Depth to Bedrock	Depth to Water	TSM	EP	Ecosite/Site Series	Site Note	Vegetation Note	QC By	QC Complete	Root Restricting Layer Depth	Root Restricting Layer Type	Soil Code	Series Code	Phase	Soil Notes	
85	EGL307	0	0	S	Medium	/	see notes for BGE on separate sheet. They thin may be scarp of very old slide but nothing obvious to support that. There is a bit of a concavity, but could be due to ni ation in the past. Reid glaciation just got to edge of top debuttress during melt =			0			--				
85	EGL307	0	0	S	Medium	/	see notes for BGE on separate sheet. They thin may be scarp of very old slide but nothing obvious to support that. There is a bit of a concavity, but could be due to ni ation in the past. Reid glaciation just got to edge of top debuttress during melt =			0			--				
85	EGL307	0	0	S	Medium	/	see notes for BGE on separate sheet. They thin may be scarp of very old slide but nothing obvious to support that. There is a bit of a concavity, but could be due to ni ation in the past. Reid glaciation just got to edge of top debuttress during melt =			0			--				
86	EGR111	0	0	S	Low	/	pretty steep all the way down to this site site just upslope (sideways) from small treed gully. TSM II			0			--				
86	EGR111	0	0	S	Low	/	pretty steep all the way down to this site site just upslope (sideways) from small treed gully. TSM II			0			--				
86	EGR111	0	0	S	Low	/	pretty steep all the way down to this site site just upslope (sideways) from small treed gully. TSM II			0			--				
87	EGR304	0	0	S	Medium	/	Since last site, walking on ridge. Pull out as separate poly, with varying amounts of shattered R. TSM = II as decent slope, dry, somewhat undulating ertical rather than straight (could be III on opposite aspect)			0			--				
87	EGR304	0	0	S	Medium	/	Since last site, walking on ridge. Pull out as separate poly, with varying amounts of shattered R. TSM = II as decent slope, dry, somewhat undulating ertical rather than straight (could be III on opposite aspect)			0			--				
87	EGR304	0	0	S	Medium	/	Since last site, walking on ridge. Pull out as separate poly, with varying amounts of shattered R. TSM = II as decent slope, dry, somewhat undulating ertical rather than straight (could be III on opposite aspect)			0			--				
88	EGL309	0	0	P	High	/	Few Fk e edge of fill Area x cut by roads, etc. Shows ~ 5 10 m of C. Competant R isible in few areas			0			--				
88	EGL309	0	0	P	High	/	Few Fk e edge of fill Area x cut by roads, etc. Shows ~ 5 10 m of C. Competant R isible in few areas			0			--				
88	EGL309	0	0	P	High	/	Few Fk e edge of fill Area x cut by roads, etc. Shows ~ 5 10 m of C. Competant R isible in few areas			0			--				
89	EGR110	0	0	S	Low	/	abundant moss/peat/burnt duff eg + soil samples taken check photos to see if drape or if material makes slope TSM=II			0		N	BRUN-MB-O				or O.SB
89	EGR110	0	0	S	Low	/	abundant moss/peat/burnt duff eg + soil samples taken check photos to see if drape or if material makes slope TSM=II			0		N	BRUN-MB-O				or O.SB

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89	EGR110	0	0	S	Low	/	abundant moss/peat/burnt duff eg + soil samples taken check photos to see if drape or if material makes slope TSM=II			0		N	BRUN-MB-O			or O.SB
90	EGL46	0	0	U	Low	/	check photos if R old (R"r)			0			--			
90	EGL46	0	0	U	Low	/	check photos if R old (R"r)			0			--			
90	EGL46	0	0	U	Low	/	check photos if R old (R"r)			0			--			
91	EGR305	0	0	S	Low	/	Hole is 30cm deep; then too rocky, but rocks break easily. No idea how thick. No rocks on surface, just moss/lichen. TSM = II (low slope, ok drainage)			0			--			
91	EGR305	0	0	S	Low	/	Hole is 30cm deep; then too rocky, but rocks break easily. No idea how thick. No rocks on surface, just moss/lichen. TSM = II (low slope, ok drainage)			0			--			
91	EGR305	0	0	S	Low	/	Hole is 30cm deep; then too rocky, but rocks break easily. No idea how thick. No rocks on surface, just moss/lichen. TSM = II (low slope, ok drainage)			0			--			
92	EGR412	0	0	S	Medium	/	small areas with a tiny bit of piping, tiny bit of trees leaning e er so slightly. Not enough to include in map label though. Rocks poke out in a few spots. Other spots moss is up to 30 cm thick			0			--			
92	EGR412	0	0	S	Medium	/	small areas with a tiny bit of piping, tiny bit of trees leaning e er so slightly. Not enough to include in map label though. Rocks poke out in a few spots. Other spots moss is up to 30 cm thick			0			--			
92	EGR412	0	0	S	Medium	/	small areas with a tiny bit of piping, tiny bit of trees leaning e er so slightly. Not enough to include in map label though. Rocks poke out in a few spots. Other spots moss is up to 30 cm thick			0			--			
93	EGR124	0	0	S	Medium	/	Open forest, mostly shrub birch, lichen/moss. SiL matrix with 20% friable tabular phyllite granules to 5m pebbles, plus 15% more competant, tabular, ang clasts. TSM III. Unsure D or C, going D and C. Unsure thickness.			0			--			
93	EGR124	0	0	S	Medium	/	Open forest, mostly shrub birch, lichen/moss. SiL matrix with 20% friable tabular phyllite granules to 5m pebbles, plus 15% more competant, tabular, ang clasts. TSM III. Unsure D or C, going D and C. Unsure thickness.			0			--			
93	EGR124	0	0	S	Medium	/	Open forest, mostly shrub birch, lichen/moss. SiL matrix with 20% friable tabular phyllite granules to 5m pebbles, plus 15% more competant, tabular, ang clasts. TSM III. Unsure D or C, going D and C. Unsure thickness.			0			--			
94	EGR109	0	0	S	Low	/	hole = 0 21 or w 2fs with ~2%gr sm pebble, SA SR, almost magic mud 21 35+ dirty m es matrix with ~ 30 40% granule sm cobble. Most A SA, few SR inc 1 med cobble @ surface			0			--			
94	EGR109	0	0	S	Low	/	hole = 0 21 or w 2fs with ~2%gr sm pebble, SA SR, almost magic mud 21 35+ dirty m es matrix with ~ 30 40% granule sm cobble. Most A SA, few SR inc 1 med cobble @ surface			0			--			

SiteID	SiteNo	Depth to Bedrock	Depth to Water	TSM	EP	Ecosite/Site Series	Site Note	Vegetation Note	QC By	QC Complete	Root Restricting Layer Depth	Root Restricting Layer Type	Soil Code	Series Code	Phase	Soil Notes
94	EGR109	0	0	S	Low	/	hole = 0 21 or w 2fs with ~2%gr sm pebble, SA SR, almost magic mud			0			--			
95	EGR414	0	0		Medium	/	21 35+ dirty m es matrix with ~ 30 40% granule sm cobble. Most A SA, few SR inc 1 med cobble @ surface			0			--			
95	EGR414	0	0		Medium	/	LG o er FG o er Till			0			--			
95	EGR414	0	0		Medium	/	LG o er FG o er Till			0			--			
96	EGR125	0	0	S	Low	/	Slope has minor undulations, probably relict solifluction. Permafrost likely still here, but not acti ely creating landforms. TSM = II.			0			--			
96	EGR125	0	0	S	Low	/	Slope has minor undulations, probably relict solifluction. Permafrost likely still here, but not acti ely creating landforms. TSM = II.			0			--			
96	EGR125	0	0	S	Low	/	Slope has minor undulations, probably relict solifluction. Permafrost likely still here, but not acti ely creating landforms. TSM = II.			0			--			
97	EGR415	0	0	S	Low	/	minor sed in patches on tops Horsetails + trees			0			--			some buried horizons
97	EGR415	0	0	S	Low	/	minor sed in patches on tops Horsetails + trees			0			--			some buried horizons
97	EGR415	0	0	S	Low	/	minor sed in patches on tops Horsetails + trees			0			--			some buried horizons
98	EGR107	0	0	S	Low	/	TSM = I 0.8m peat hummock H2O ~ 0.9m depth then = grey, cold SiCL with ~15% grit(granules only)wet, dense			0			GLEY--O			O.G or R.G
98	EGR107	0	0	S	Low	/	TSM = I 0.8m peat hummock H2O ~ 0.9m depth then = grey, cold SiCL with ~15% grit(granules only)wet, dense			0			GLEY--O			O.G or R.G
98	EGR107	0	0	S	Low	/	TSM = I 0.8m peat hummock H2O ~ 0.9m depth then = grey, cold SiCL with ~15% grit(granules only)wet, dense			0			GLEY--O			O.G or R.G
99	EGR416	0	0	S	Low	/	20 cm fs, no clasts o er ~ 1.5 m + z fs with ~ 40% R pebble to cobble			0		N	BRUN-DYB-O			O.DYB or O.EB
99	EGR416	0	0	S	Low	/	20 cm fs, no clasts o er ~ 1.5 m + z fs with ~ 40% R pebble to cobble			0		N	BRUN-DYB-O			O.DYB or O.EB
99	EGR416	0	0	S	Low	/	20 cm fs, no clasts o er ~ 1.5 m + z fs with ~ 40% R pebble to cobble			0		N	BRUN-DYB-O			O.DYB or O.EB
100	EGR106	0	0	S	Low	/	TSM = II due to slope, could be I			0			--			
100	EGR106	0	0	S	Low	/	TSM = II due to slope, could be I			0			--			
100	EGR106	0	0	S	Low	/	TSM = II due to slope, could be I			0			--			
101	EGR126	0	0	S	Low	/	TSM = II. Basically same as 125 for terrain.			0			--			
101	EGR126	0	0	S	Low	/	TSM = II. Basically same as 125 for terrain.			0			--			
101	EGR126	0	0	S	Low	/	TSM = II. Basically same as 125 for terrain.			0			--			
102	EGR417	0	0	S	Low	/	surface has minor undulations matrix = SL			0			--			
102	EGR417	0	0	S	Low	/	surface has minor undulations matrix = SL			0			--			
102	EGR417	0	0	S	Low	/	surface has minor undulations matrix = SL			0			--			
103	EGR105			S	Low	/	gully walls are ~ 35% peat in bottom now, tiny bit of possible effemeral H2O right e bottom Poss merge poly c rest of fan, or at least tighten to draw			0			--			
103	EGR105			S	Low	/	gully walls are ~ 35% peat in bottom now, tiny bit of possible effemeral H2O right e bottom Poss merge poly c rest of fan, or at least tighten to draw			0			--			

SiteID	SiteNo	Depth to Bedrock	Depth to Water	TSM	EP	Ecosite/Site Series	Site Note	Vegetation Note	QC By	QC Complete	Root Restricting Layer Depth	Root Restricting Layer Type	Soil Code	Series Code	Phase	Soil Notes
103	EGR105			S	Low	/	gully walls are ~ 35% peat in bottom now, tiny bit of possible effemeral H2O right e bottom Poss merge poly c rest of fan, or at least tighten to draw			0			--			
104	EGR418	0	0	S	Low	/	side slopes ~ 20 35% kettle hole in terrace			0			--			
104	EGR418	0	0	S	Low	/	side slopes ~ 20 35% kettle hole in terrace			0			--			
104	EGR418	0	0	S	Low	/	side slopes ~ 20 35% kettle hole in terrace			0			--			
105	EGR123	0	0	P	Medium	/	EP Could erode quickly if slope mat as LSA where gullied from off of road. Is a zd, with 30 35% gr sm pebble. More diam like than before. Clasts are A SA mix of green pelite, orange pelite, some qtz, bit granite. Unsure if all could be D. Poss C. or e en			0			--			
105	EGR123	0	0	P	Medium	/	EP Could erode quickly if slope mat as LSA where gullied from off of road. Is a zd, with 30 35% gr sm pebble. More diam like than before. Clasts are A SA mix of green pelite, orange pelite, some qtz, bit granite. Unsure if all could be D. Poss C. or e en			0			--			
105	EGR123	0	0	P	Medium	/	EP Could erode quickly if slope mat as LSA where gullied from off of road. Is a zd, with 30 35% gr sm pebble. More diam like than before. Clasts are A SA mix of green pelite, orange pelite, some qtz, bit granite. Unsure if all could be D. Poss C. or e en			0			--			
106	EGR419	0	0	S	Low	/	permafrost @ 60 cm depth May be mineral e base, but no auger and it's frozen solid			0			--			
106	EGR419	0	0	S	Low	/	permafrost @ 60 cm depth May be mineral e base, but no auger and it's frozen solid			0			--			
106	EGR419	0	0	S	Low	/	permafrost @ 60 cm depth May be mineral e base, but no auger and it's frozen solid			0			--			
107	EGR420	0	0	S	Low	/	check photos/polygon for deciles			0			--			
107	EGR420	0	0	S	Low	/	check photos/polygon for deciles			0			--			
107	EGR420	0	0	S	Low	/	check photos/polygon for deciles			0			--			
108	EGR411	0	0	U	Low	/	toe slope has a few piping holes whole hillside seems to be satureated + slowly slumping/creeping			0			--			
108	EGR411	0	0	U	Low	/	toe slope has a few piping holes whole hillside seems to be satureated + slowly slumping/creeping			0			--			
108	EGR411	0	0	U	Low	/	toe slope has a few piping holes whole hillside seems to be satureated + slowly slumping/creeping			0			--			
109	EGR122	0	0	S	Medium	/	Open spruce forest, lichen/ moss. Magic mud@20cm depth seepage. Sed is a zfsd, med brown, 20 25% gr lg pebble, A mostly, but some SA. Mostly tabular phyllite, some blockier harder rock. Till or could be V weathered C. TSM = III due to H2O.			0			--			
109	EGR122	0	0	S	Medium	/	Open spruce forest, lichen/ moss. Magic mud@20cm depth seepage. Sed is a zfsd, med brown, 20 25% gr lg pebble, A mostly, but some SA. Mostly tabular phyllite, some blockier harder rock. Till or could be V weathered C. TSM = III due to H2O.			0			--			

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109	EGR122	0	0	S	Medium	/	Open spruce forest, lichen/ moss. Magic mud@20cm depth seepage. Sed is a zfsd, med brown, 20 25% gr lg pebble, A mostly, but some SA. Mostly tabular phyllite, some blockier harder rock. Till or could be V weathered C. TSM = III due to H2O.			0			--				
110	EGR410	0	0			/	section ~ 15 20 m of crude stratified sz with some gra el beds older fan? much steeper thicker than alley			0			--				
110	EGR410	0	0			/	section ~ 15 20 m of crude stratified sz with some gra el beds older fan? much steeper thicker than alley			0			--				
110	EGR410	0	0			/	section ~ 15 20 m of crude stratified sz with some gra el beds older fan? much steeper thicker than alley			0			--				
111	EGR409	0	0	S	Low	/	f= fsz, no clasts, interbeddedw buried humic to mesic beds 2 5 cm thick			0			--				
111	EGR409	0	0	S	Low	/	f= fsz, no clasts, interbeddedw buried humic to mesic beds 2 5 cm thick			0			--				
111	EGR409	0	0	S	Low	/	f= fsz, no clasts, interbeddedw buried humic to mesic beds 2 5 cm thick			0			--				
112	EGR120	0	0	S	Low	/	20cm of SiL matrix with 40% A peb. small cobble, all tabular and same lithology (not sure, but strong elongated fabric).			0			--				
112	EGR120	0	0	S	Low	/	20cm of SiL matrix with 40% A peb. small cobble, all tabular and same lithology (not sure, but strong elongated fabric).			0			--				
112	EGR120	0	0	S	Low	/	20cm of SiL matrix with 40% A peb. small cobble, all tabular and same lithology (not sure, but strong elongated fabric).			0			--				
113	EGR408	0	0	U	Medium	/	slope has se eral small (0.5m) scarps. Didn't walk up to top. Small gully just R of site (~ 1 m wide)	eg says trees ~ 100 yrs old		0			--				
113	EGR408	0	0	U	Medium	/	slope has se eral small (0.5m) scarps. Didn't walk up to top. Small gully just R of site (~ 1 m wide)	eg says trees ~ 100 yrs old		0			--				
113	EGR408	0	0	U	Medium	/	slope has se eral small (0.5m) scarps. Didn't walk up to top. Small gully just R of site (~ 1 m wide)	eg says trees ~ 100 yrs old		0			--				
114	EGR119	0	0	P	Medium	/	Open spruce forest, lichen and moss. TSM = II III			0			--				
114	EGR119	0	0	P	Medium	/	Open spruce forest, lichen and moss. TSM = II III			0			--				
114	EGR119	0	0	P	Medium	/	Open spruce forest, lichen and moss. TSM = II III			0			--				
115	EGL308	0	0	S	Medium	/	check drill logs for depth matrix is zfs (L)			0			--				
115	EGL308	0	0	S	Medium	/	check drill logs for depth matrix is zfs (L)			0			--				
115	EGL308	0	0	S	Medium	/	check drill logs for depth matrix is zfs (L)			0			--				
116	EGR118			P	Medium	/	Open forest, walked past one open area (lichen o er rock) that could be an old (small) slide runout check photos. Hole = grey brown SiCL matrix, dry and loose with 30 40% A SA SR (sm lg) peb and granules. Unsure depth, Slope so may just be a d??? (b).			0			--				

SiteID	SiteNo	Depth to Bedrock	Depth to Water	TSM	EP	Ecosite/Site Series	Site Note	Vegetation Note	QC By	QC Complete	Root Restricting Layer Depth	Root Restricting Layer Type	Soil Code	Series Code	Phase	Soil Notes
116	EGR118			P	Medium	/	Open forest, walked past one open area (lichen on rock) that could be an old (small) slide runout check photos. Hole = grey brown SiCL matrix, dry and loose with 30-40% A SA SR (small) pebbles and granules. Unsure depth, Slope so may just be a d??? (b).			0			--			
116	EGR118			P	Medium	/	Open forest, walked past one open area (lichen on rock) that could be an old (small) slide runout check photos. Hole = grey brown SiCL matrix, dry and loose with 30-40% A SA SR (small) pebbles and granules. Unsure depth, Slope so may just be a d??? (b).			0			--			
117	EGL66	0	0		Medium	/	Check drill logs for depth			0			BRUN-DYB-O			O.DYB to O.EB Ae thicker upslope
117	EGL66	0	0		Medium	/	Check drill logs for depth			0			BRUN-DYB-O			O.DYB to O.EB Ae thicker upslope
117	EGL66	0	0		Medium	/	Check drill logs for depth			0			BRUN-DYB-O			O.DYB to O.EB Ae thicker upslope
118	EGR303	0	0	S	Low	/	all clasts are very angular, all appear to be granitic, up with depth, granules to med pebbles (slate nearby on trail). dif D than yesterday, as dif R that it's eroded from. No idea how thick.			0			BRUN--			
118	EGR303	0	0	S	Low	/	all clasts are very angular, all appear to be granitic, up with depth, granules to med pebbles (slate nearby on trail). dif D than yesterday, as dif R that it's eroded from. No idea how thick.			0			BRUN--			
118	EGR303	0	0	S	Low	/	all clasts are very angular, all appear to be granitic, up with depth, granules to med pebbles (slate nearby on trail). dif D than yesterday, as dif R that it's eroded from. No idea how thick.			0			BRUN--			
119	EGL310	0	0	P	Medium	/	mixed mostly deciduous forest Is a small rock outcrop/frost head ~ 10 m to NW			0		N	BRUN-DYB-O			O.DYB or O.EB
119	EGL310	0	0	P	Medium	/	mixed mostly deciduous forest Is a small rock outcrop/frost head ~ 10 m to NW			0		N	BRUN-DYB-O			O.DYB or O.EB
119	EGL310	0	0	P	Medium	/	mixed mostly deciduous forest Is a small rock outcrop/frost head ~ 10 m to NW			0		N	BRUN-DYB-O			O.DYB or O.EB
120	EGL311			S	Medium	/	unsure of spatial extent			0		N	BRUN--			basially same as M, C, D parent
120	EGL311			S	Medium	/	unsure of spatial extent			0		N	BRUN--			basially same as M, C, D parent
120	EGL311			S	Medium	/	unsure of spatial extent			0		N	BRUN--			basially same as M, C, D parent
121	EGL48	0	0	S	Medium	/	und to humm topo landslide runout material?			0			--			
121	EGL48	0	0	S	Medium	/	und to humm topo landslide runout material?			0			--			
121	EGL48	0	0	S	Medium	/	und to humm topo landslide runout material?			0			--			
122	EGL312			P	Low	/	mostly talus (shattered R) modified a bit by solif Scarp must be quite old overgrown			0			--			
122	EGL312			P	Low	/	mostly talus (shattered R) modified a bit by solif Scarp must be quite old overgrown			0			--			
122	EGL312			P	Low	/	mostly talus (shattered R) modified a bit by solif Scarp must be quite old overgrown			0			--			
123	EGL47	0	0	S	Low	/	road cut,			0			--			
123	EGL47	0	0	S	Low	/	road cut,			0			--			
123	EGL47	0	0	S	Low	/	road cut,			0			--			
124	EGL1	0	0	S	Medium	/	Gully 20m downslope, only 1.2m wide.			0			--			IIC hard to texture due to clast content. Ah too thin to sample.
124	EGL1	0	0	S	Medium	/	Gully 20m downslope, only 1.2m wide.			0			--			IIC hard to texture due to clast content. Ah too thin to sample.
124	EGL1	0	0	S	Medium	/	Gully 20m downslope, only 1.2m wide.			0			--			IIC hard to texture due to clast content. Ah too thin to sample.

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125	EGL313	0	0	S	Low	/	Seems to be an R Coned ridge. 2 holes dug encountered numerous phyllite pieces @ 20cm depth, with few intact pieces. SL matrix. Crest (old road) covered by numerous frost shattered pebbles (square, flat)			0	20	L	BRUN-DYB-O				Rock at 20cm. Soil code O.EB or O.DYB
125	EGL313	0	0	S	Low	/	Seems to be an R Coned ridge. 2 holes dug encountered numerous phyllite pieces @ 20cm depth, with few intact pieces. SL matrix. Crest (old road) covered by numerous frost shattered pebbles (square, flat)			0	20	L	BRUN-DYB-O				Rock at 20cm. Soil code O.EB or O.DYB
125	EGL313	0	0	S	Low	/	Seems to be an R Coned ridge. 2 holes dug encountered numerous phyllite pieces @ 20cm depth, with few intact pieces. SL matrix. Crest (old road) covered by numerous frost shattered pebbles (square, flat)			0	20	L	BRUN-DYB-O				Rock at 20cm. Soil code O.EB or O.DYB
126	EGR400	0	0	S	Low	/	+60cm of SL, mottled grey and brown, unsure if laminated. Are a few Fs beds therefore crude stratification. Spruce and cottonwood, equi sp, ibuedu, rosaaci, some moss.			0		N	REGO--GLCU				Soil Code GLCU.R (likely)
126	EGR400	0	0	S	Low	/	+60cm of SL, mottled grey and brown, unsure if laminated. Are a few Fs beds therefore crude stratification. Spruce and cottonwood, equi sp, ibuedu, rosaaci, some moss.			0		N	REGO--GLCU				Soil Code GLCU.R (likely)
126	EGR400	0	0	S	Low	/	+60cm of SL, mottled grey and brown, unsure if laminated. Are a few Fs beds therefore crude stratification. Spruce and cottonwood, equi sp, ibuedu, rosaaci, some moss.			0		N	REGO--GLCU				Soil Code GLCU.R (likely)
127	EGR70	0	0	P	Medium	/	poss steeper slope break below SiL TSM=V unsure C/D thickness fen slumps along slope, just upslope from site. Pull out if can't get ID elsewhere			0			--				
127	EGR70	0	0	P	Medium	/	poss steeper slope break below SiL TSM=V unsure C/D thickness fen slumps along slope, just upslope from site. Pull out if can't get ID elsewhere			0			--				
127	EGR70	0	0	P	Medium	/	poss steeper slope break below SiL TSM=V unsure C/D thickness fen slumps along slope, just upslope from site. Pull out if can't get ID elsewhere			0			--				
128	EGR72	0	0	P		/	slope is ~ 70 80%, egetated with patches of tabular rock near surface. All clasts oriented II to slope. TSM II III > R not that competant; unsure how deep to solid.			0			--				
128	EGR72	0	0	P		/	slope is ~ 70 80%, egetated with patches of tabular rock near surface. All clasts oriented II to slope. TSM II III > R not that competant; unsure how deep to solid.			0			--				
128	EGR72	0	0	P		/	slope is ~ 70 80%, egetated with patches of tabular rock near surface. All clasts oriented II to slope. TSM II III > R not that competant; unsure how deep to solid.			0			--				
129	EGR401	0	0	S	Low	/	C1 20cm of z fs, appears massi e, no clasts. C2 30cm+ of (sm lg) pebble gra el (35 45%) in a m cs granule poorly sorted matrix. Clasts are R, mix of litho			0			REGO--CU				Soil code CU.R

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129	EGR401	0	0	S	Low	/	C1 20cm of z fs, appears massive, no clasts. C2 30cm+ of (sm lg) pebble gravel (35-45%) in a matrix granule poorly sorted matrix. Clasts are R, mix of litho			0			REGO--CU			Soil code CU.R
129	EGR401	0	0	S	Low	/	C1 20cm of z fs, appears massive, no clasts. C2 30cm+ of (sm lg) pebble gravel (35-45%) in a matrix granule poorly sorted matrix. Clasts are R, mix of litho			0			REGO--CU			Soil code CU.R
130	EGR74			S		/	At least on N NW facing side, are some rudimentary sorted circles/mud boils with A cobbles. Few solifluction lobes. Can't tell D or C is soliflucted D now C/ Some slope to pro ice C			0			--			
130	EGR74			S		/	At least on N NW facing side, are some rudimentary sorted circles/mud boils with A cobbles. Few solifluction lobes. Can't tell D or C is soliflucted D now C/ Some slope to pro ice C			0			--			
130	EGR74			S		/	At least on N NW facing side, are some rudimentary sorted circles/mud boils with A cobbles. Few solifluction lobes. Can't tell D or C is soliflucted D now C/ Some slope to pro ice C			0			--			
131	EGR102			S	Low	/	Og 50-80 cm over SL grey, no clasts			0			--			
131	EGR102			S	Low	/	Og 50-80 cm over SL grey, no clasts			0			--			
131	EGR102			S	Low	/	Og 50-80 cm over SL grey, no clasts			0			--			
132	EGR405					/	road cut is partially weathered R, over 3 m of mostly competent R. Phyllite to slate c some quartz veins. Minor road cut Rsr			0			--			
132	EGR405					/	road cut is partially weathered R, over 3 m of mostly competent R. Phyllite to slate c some quartz veins. Minor road cut Rsr			0			--			
132	EGR405					/	road cut is partially weathered R, over 3 m of mostly competent R. Phyllite to slate c some quartz veins. Minor road cut Rsr			0			--			
133	EGR406	0	0	S	Medium	/	Old placer activity. One large roadcut exposes 5m of dk grey SL, interbedded with fms. Contains 2-3 peat beds with some large root pieces for Lisa (paleo). Lots of old wood in placer stuff.			0			REGO--GLCU			Soil Code GLCU.R
133	EGR406	0	0	S	Medium	/	Old placer activity. One large roadcut exposes 5m of dk grey SL, interbedded with fms. Contains 2-3 peat beds with some large root pieces for Lisa (paleo). Lots of old wood in placer stuff.			0			REGO--GLCU			Soil Code GLCU.R
133	EGR406	0	0	S	Medium	/	Old placer activity. One large roadcut exposes 5m of dk grey SL, interbedded with fms. Contains 2-3 peat beds with some large root pieces for Lisa (paleo). Lots of old wood in placer stuff.			0			REGO--GLCU			Soil Code GLCU.R
134	EGR404			S	Low	/	Recent flooding/thin silt cover over eg	Alder, Equi sp.		0		N	REGO--CU			
134	EGR404			S	Low	/	Recent flooding/thin silt cover over eg	Alder, Equi sp.		0		N	REGO--CU			
134	EGR404			S	Low	/	Recent flooding/thin silt cover over eg	Alder, Equi sp.		0		N	REGO--CU			
135	EGR403			P	Low	/	rock exposed in road cut. Estimate D is 1-3 m thick. Hole = 60% A phyllite pieces in a SL matrix. Mica in matrix too			0	10	L	REGO--O			
135	EGR403			P	Low	/	rock exposed in road cut. Estimate D is 1-3 m thick. Hole = 60% A phyllite pieces in a SL matrix. Mica in matrix too			0	10	L	REGO--O			
135	EGR403			P	Low	/	rock exposed in road cut. Estimate D is 1-3 m thick. Hole = 60% A phyllite pieces in a SL matrix. Mica in matrix too			0	10	L	REGO--O			

SiteID	SiteNo	Depth to Bedrock	Depth to Water	TSM	EP	Ecosite/Site Series	Site Note	Vegetation Note	QC By	QC Complete	Root Restricting Layer Depth	Root Restricting Layer Type	Soil Code	Series Code	Phase	Soil Notes
136	EGR407	0	0	P	Low	/	Slump block. Site is just down from R side of scarp, unsure how far it goes. Scarp is 2.3m high. Trees are 30-50 years old. Caution when digging toe as could react. Trees are happy and upright looks stable now.			0		L	REGO--O			Soil code O.R Root restricting layer: rock at some unknown depth.
136	EGR407	0	0	P	Low	/	Slump block. Site is just down from R side of scarp, unsure how far it goes. Scarp is 2.3m high. Trees are 30-50 years old. Caution when digging toe as could react. Trees are happy and upright looks stable now.			0		L	REGO--O			Soil code O.R Root restricting layer: rock at some unknown depth.
136	EGR407	0	0	P	Low	/	Slump block. Site is just down from R side of scarp, unsure how far it goes. Scarp is 2.3m high. Trees are 30-50 years old. Caution when digging toe as could react. Trees are happy and upright looks stable now.			0		L	REGO--O			Soil code O.R Root restricting layer: rock at some unknown depth.
137	EGR300	0	0	U	Medium	/	TSM = V Slides likely old, but as fill sed could fail again			0			--			
137	EGR300	0	0	U	Medium	/	TSM = V Slides likely old, but as fill sed could fail again			0			--			
137	EGR300	0	0	U	Medium	/	TSM = V Slides likely old, but as fill sed could fail again			0			--			
138	EGR402				S	Low	/	where site is, road cuts show > 3 m of FG to west and 4.20 of FG/R to east at site hillis all stg. Is this a terrace scarp? looks like a large bump		0			--			Veg is open aspen; likely outlines feature
138	EGR402				S	Low	/	where site is, road cuts show > 3 m of FG to west and 4.20 of FG/R to east at site hillis all stg. Is this a terrace scarp? looks like a large bump		0			--			Veg is open aspen; likely outlines feature
138	EGR402				S	Low	/	where site is, road cuts show > 3 m of FG to west and 4.20 of FG/R to east at site hillis all stg. Is this a terrace scarp? looks like a large bump		0			--			Veg is open aspen; likely outlines feature
139	EGR413				S	Low	/	2.5m up from river base.		0			--			TSM=1
139	EGR413				S	Low	/	2.5m up from river base.		0			--			TSM=1
139	EGR413				S	Low	/	2.5m up from river base.		0			--			TSM=1
140	EGR301	0	0	P	Low	/	TSM = III split from upper as more egetated eg co ered poss few R outcrops			0			--			
140	EGR301	0	0	P	Low	/	TSM = III split from upper as more egetated eg co ered poss few R outcrops			0			--			
140	EGR301	0	0	P	Low	/	TSM = III split from upper as more egetated eg co ered poss few R outcrops			0			--			
141	EGL21	0	0	S	Low	/	1m high shrub birch, scattered spruce, moss. Gentle slope, some mud boils therefore permafrost. Not C, as no source area or dif material. Small depression below site has scattered A boulders.			0			BRUN-EB-O	O.EB		Soil code O.EB Structure and clour due (partially?) to weathering of R
141	EGL21	0	0	S	Low	/	1m high shrub birch, scattered spruce, moss. Gentle slope, some mud boils therefore permafrost. Not C, as no source area or dif material. Small depression below site has scattered A boulders.			0			BRUN-EB-O	O.EB		Soil code O.EB Structure and clour due (partially?) to weathering of R
141	EGL21	0	0	S	Low	/	1m high shrub birch, scattered spruce, moss. Gentle slope, some mud boils therefore permafrost. Not C, as no source area or dif material. Small depression below site has scattered A boulders.			0			BRUN-EB-O	O.EB		Soil code O.EB Structure and clour due (partially?) to weathering of R

SiteID	SiteNo	Depth to Bedrock	Depth to Water	TSM	EP	Ecosite/Site Series	Site Note	Vegetation Note	QC By	QC Complete	Root Restricting Layer Depth	Root Restricting Layer Type	Soil Code	Series Code	Phase	Soil Notes
142	EGR302	0	0	U	Low	/	TSM V Same as ERG300, old slides, but may fill + slide again			0			--			
142	EGR302	0	0	U	Low	/	TSM V Same as ERG300, old slides, but may fill + slide again			0			--			
142	EGR302	0	0	U	Low	/	TSM V Same as ERG300, old slides, but may fill + slide again			0			--			
143	EGR71	0	0	S	Low	/	alpine, moss scattered sm. boulders TSM=II			0			--			
143	EGR71	0	0	S	Low	/	alpine, moss scattered sm. boulders TSM=II			0			--			
143	EGR71	0	0	S	Low	/	alpine, moss scattered sm. boulders TSM=II			0			--			
144	TPA1					/	3rd sample is "OS" org. soft want part size + O.M. content			0	52	Z	--			wood in underlying till total hole depth ~ 6 ft all sal agable mix of
144	TPA1					/	3rd sample is "OS" org. soft want part size + O.M. content			0	52	Z	--			wood in underlying till total hole depth ~ 6 ft all sal agable mix of
144	TPA1					/	3rd sample is "OS" org. soft want part size + O.M. content			0	52	Z	--			wood in underlying till total hole depth ~ 6 ft all sal agable mix of
145	TPA3	0	0			/				0	0.5	Z	--			gra elly layers all sal eagable ice to 1.3 m may or may not be permafrost to 4 m SiS Mb then to SiS gray, unoxidized samples samples PM3+ PM4 both strangely effer esent, esp PM3 BM2 = PM1 gra elly bars PM2
145	TPA3	0	0			/				0	0.5	Z	--			gra elly layers all sal eagable ice to 1.3 m may or may not be permafrost to 4 m SiS Mb then to SiS gray, unoxidized samples samples PM3+ PM4 both strangely effer esent, esp PM3 BM2 = PM1 gra elly bars PM2
145	TPA3	0	0			/				0	0.5	Z	--			gra elly layers all sal eagable ice to 1.3 m may or may not be permafrost to 4 m SiS Mb then to SiS gray, unoxidized samples samples PM3+ PM4 both strangely effer esent, esp PM3 BM2 = PM1 gra elly bars PM2
146	TPA4	0	0			/				0	53	Z	--			is Cb w slope wash C o erlying pre ious surface soil No e idenc eof carbonates in this Cb sample PM1 frozen Cb total depth > 2.5 m
146	TPA4	0	0			/				0	53	Z	--			is Cb w slope wash C o erlying pre ious surface soil No e idenc eof carbonates in this Cb sample PM1 frozen Cb total depth > 2.5 m
146	TPA4	0	0			/				0	53	Z	--			is Cb w slope wash C o erlying pre ious surface soil No e idenc eof carbonates in this Cb sample PM1 frozen Cb total depth > 2.5 m
147	EGR451					/	by road			0			BRUN-DYB-O			
147	EGR451					/	by road			0			BRUN-DYB-O			
147	EGR451					/	by road			0			BRUN-DYB-O			
148	EGR450					/		fen sedge on periphery horsetail in centre surrounded by bog water at surface all		0	20		GLEY--R	Rego Gleysol		likely lenses of silt not isible due to high water table
148	EGR450					/		fen sedge on periphery horsetail in centre surrounded by bog water at surface all		0	20		GLEY--R	Rego Gleysol		likely lenses of silt not isible due to high water table
148	EGR450					/		fen sedge on periphery horsetail in centre surrounded by bog water at surface all		0	20		GLEY--R	Rego Gleysol		likely lenses of silt not isible due to high water table

SiteID	SiteNo	ProfileID	Horizon	DpthStart	DpthEnd	PriMatCode	MoistCode	Color	CFPct	cfpct1	cfpct2	CFSHpCode	cfshpl	cfshp code2	CFTyp Code	cftyp code2	Txt Code	Struc Grd Code	strucgrdl	struc grd code2	Struc Cls Code	strucclsl	strucclsl code2	Struc Kind Code	struc kindl	struc kind code2	Cons ID	Roots ACode	rootsal	rootsa code2	Roots SCode	
8	EGR92	17	Cgz	60	61	-			0								SCL															
10	EGL8	18	LFH	10	0	-			0																			A			C	
10	EGL8	19	Ah	0	4	-	M	10YR 2/2									SiCL	W			M			PL				A			M	
10	EGL8	20	Bg	4	14	-	M	2.5Y 3/2	0								SCL	M			M			SB				F			M	
10	EGL8	21	BCg	14	41	-	M	2.5Y 3/3	0								SCL	M			M			SB				F			M	
11	EGL6	22	C	0	0	GLFL-VC			75			SR			S		S							SG				F			C	
12	EGL41	23	Of	25	0	-			0																			A			M	
12	EGL41	24	Cg	0	16	FLUV-ME	W	2.5Y 4/4	25			SA			CG		SiL							MA				P			M	
12	EGL41	25	Cg	16	50	FLUV-ME	W	2.5YR 4/2	25			SA			CG		SiL							MA				F			F	
13	EGL200	26	LFH	7	0	-			0																			A			M	
13	EGL200	27	Ahe	0	5	-	M	10YR 4/2	20			A			G			M					F		PR			A			M	
13	EGL200	28	Bm	5	29	-	M	2.5Y 4/3	0			A			C			M					M		BL			P			M	
13	EGL200	29	BC	29	51	-	M	2.5Y 5/4	0			A			C			M					M		BL			F			F	
13	EGL200	30	C	0	0	-			45			A			S																	
14	EGR96	31	Of	20	0	-			0																			A			C	

SiteID	SiteNo	ProfileID	Horizon	DpthStart	DpthEnd	PriMatCode	MoistCode	Color	CFPct	cfpct1	cfpct2	CFSHpCode	cfshpl	cfshp code2	CFTyp Code	cftyp code2	Txt Code	Struc Grd Code	strucgrdl code2	struc grd code2	Struc Cls Code	struccls code2	Struc Kind Code	struc kind code2	Cons ID	Roots ACode	rootsal code2	rootsa code2	Roots SCode		
14	EGR96	33	Cgy	0	30	FLUV-ME		5Y 3/2	15			SR			G		SIL							MA							
14	EGR96	319	Cz	30	0	-			0																						
15	EGL16	35	LFH	7	0	-			0																	A			M		
15	EGL16	40	Ah	0	7	RESID-	M	10YR 2/2	50			A			B		SIL	M			M			GR		A			M		
15	EGL16	41	Bm	10	30	RESID-	M	10YR 4/4	50			A			B		SIL	M			M			GR		P			F		
15	EGL16	42	BC	30	60	RESID-	M	10YR 5/4	50			A			B		L	S			F			BL		F			F		
16	EGR91	34	Of	12	0	-			0																						
16	EGR91	36	C1	0	20	-	M		0								SIL														
16	EGR91	37	Of2	20	40	-	M		0																						
16	EGR91	38	C2	40	50	-	M		0								LS														
16	EGR91	39	C3	50	60	-	M		0								SIL														
19	EGL15	43	LFH	3	0	-			20			SA			G											A				C	
19	EGL15	44	Ah	0	7	RESID-	M	10YR 2/2	20			A			G		SL	M			M			GR		P			M		
19	EGL15	45	Bm	7	61	RESID-	M	10YR 4/4	20			A			C		SL	M			M			SB		F			F		
19	EGL15	46	Bg	61	65	RESID-	M	10YR 5/4	45			A			S		SL	W			F			SB		F			F		
19	EGL15	47	Cg	0	0	-			0																						
20	EGL17	48	LFH	5	0	-			0																	A				C	
20	EGL17	49	Ahe	0	6	RESID-	M	10YR 5/2	25			A			C		SIL	M			M			GR		A			F		

SiteID	SiteNo	ProfileID	Horizon	DpthStart	DpthEnd	PriMatCode	MoistCode	Color	CFPct	cfpct1	cfpct2	CFSHpCode	cfshpl	cfshp code2	CFTyp Code	cftyp code2	Txt Code	Struc Grd Code	strucgrdl code2	struc grd Code	Struc Cls code2	strucclsl code2	strucclsl code2	Struc Kind Code	struc kind code2	struc kind code2	Cons ID	Roots ACode	rootsal code2	rootsa code2	Roots SCode
20	EGL17	50	Bm	6	13	RESID-	M	10YR 3/4	30			A			C		SL	M			M			BL				P			M
21	EGL39	51	LFH	7	0	-			0																			A			C
21	EGL39	52	Ae	0	7	COLL-ME	D	10YR 7/3	15			A			G		SiCL	M			M			GR				A			C
21	EGL39	53	Bm	7	33	COLL-ME	D	10YR 4/4	25			A			CG		SiCL	W			F			GR				A			M
21	EGL39	54	Bt	33	37	COLL-ME	D	10YR 4/4	40			A			C		SiC	M			M			PL			P			M	
21	EGL39	55	BC	37	57	COLL-ME			40			A			C		SiCL	W			F			SB			F			F	
22	EGL38	56	LFH	6	0	-			0																			A			C
22	EGL38	57	Ahe	0	4	-	D	10YR 4/2	15			SR			G		SiCL	M			M			GR			A			M	
22	EGL38	58	Bt	4	27	MORA-	M	10YR 4/3	15			SA			G		SiCL	M			M			PL			P			M	
22	EGL38	59	BC	27	42	MORA-	M	10YR 4/3	15			SA			G		SiL	W			M			SB			F			M	
22	EGL38	60	C	42	63	MORA-	M	10YR 4/4	25			SA			C		SiL							MA			F			F	
23	EGL37	61	LFH	8	0	-			0																			A			
23	EGL37	62	Ahe	0	6	-	M	10YR 4/4	30			A			G		SiL	M			F			GR			A			C	
23	EGL37	63	Bm	6	20	-	M	10YR 4/4	30			A			C		SiL	M			M			SB			F			M	
23	EGL37	64	BC	20	50	-	M	10YR 4/4	30			A			C		SiCL	M			F			GR			F			F	

SiteID	SiteNo	ProfileID	Horizon	DpthStart	DpthEnd	PriMatCode	MoistCode	Color	CFPct	cfpct1	cfpct2	CFSHpCode	cfshpl	cfshp code2	CFTyp Code	cftyp code2	Txt Code	Struc Grd Code	strucgrdl code2	struc grd Code	Struc Cls Code	struccls code2	Struc Kind Code	struc kind code2	Cons ID	Roots ACode	rootsal code2	rootsa Code2	Roots SCode	
27	EGL33	79	Bm	0	8	-		10YR 3/4	15			SA			G		SIL	M			M			PL			A		M	
27	EGL33	80	BC	8	30	-		10YR 3/4	15			A			G		SIL	W			M			SB			F		F	
27	EGL33	81	C	30	0	-		10YR 4/4	45			A			C		SiCL							MA			F		F	
28	EGL19	82	LFH	3	0	-			0																	A		C		
28	EGL19	83	AB	0	7	RESID-	M	10YR 3/3	15			A			G		SIL	M			F			GR			A		M	
28	EGL19	84	Bm	7	29	RESID-	M	10YR 4/3	15			SA			C		SIL	M			C			SB			P		F	
28	EGL19	85	Bgj	29	37	RESID-	W	2.5Y 4/4	20			SA			C		SIL	M			M			SB			F		F	
28	EGL19	86	Cgj	37	42	-	W	2.5Y 5/4	50			A			S															
29	EGL20	87	LFH	5	0	-			0																		A		C	
29	EGL20	88	Ah	0	9	RESID-	M	10YR 2/2	15			SA			G		L	M			M			GR			A		M	
29	EGL20	89	Bm	9	25	RESID-	M	10YR 3/4	15			SA			S		L	M			M			SB			P		F	
29	EGL20	90	Bm	25	55	RESID-	M	2.5Y 5/4	30			SA			S		SIL	M			F			SB			F		F	
29	EGL20	91	C	55	70	RESID-		2.5Y 5/4	40			SA			B		L							MA						
30	EGL201	92	LFH	2	0	-			0																					
30	EGL201	93	Ah	0	5	RESID-	M	10YR 2/2	40			A			S		SIL	M			F			GR			P		M	

SiteID	SiteNo	ProfileID	Horizon	DpthStart	DpthEnd	PriMatCode	MoistCode	Color	CFPct	cfpct1	cfpct2	CFSHpCode	cfshpl	cfshp code2	CFTyp Code	cftyp code2	Txt Code	Struc Grd Code	strucgrdl code2	Struc Grd Code	Struc Cls Code	struccls code2	Struc Kind Code	struc kind code2	Cons ID	Roots ACode	rootsal code2	Roots SCode	
30	EGL201	94	Bm	5	25	RESID-	M	10YR 3/4	60			A			S		SIL	W			M			SB			F		F
30	EGL201	95	Bm	25	40	-			0																				
31	EGL5	96	LFH	4	0	-			0																				
31	EGL5	97	Ah	0	8	RESID-	M	10YR 3/2	40			A			S		SIL	M			M			GR		P		M	
31	EGL5	98	Bm	8	25	RESID-	M	10YR 3/4	45			A			C		SIL	M			M			SB		A		C	
31	EGL5	99	BC	25	60	RESID-	M	2.5Y 5/3	45			A			C		SiL							MA		F		F	
32	EGL202	100	LFH	4	0	-			0																	A		M	
32	EGL202	101	Ah	0	3	RESID-	M	10YR 3/2	20			SA			G		SIL	M			F			GR		A		M	
32	EGL202	102	Bm	3	26	RESID-	M	10YR 3/3	30			SA			C		SiL	M			M			SB		P		M	
32	EGL202	103	BC	26	45	RESID-	M	10YR 3/4	45			A			C		SiL							MA		F		F	
33	EGL203	104	C	0	100	RESID-	D	10YR 5/4	50			A			C		SiL							MA					
33	EGL203	105	C	0	0	-	M	10YR 4/4	0																				
34	EGL58	106	LFH	0	0	-			0																	A		M	
34	EGL58	107	Ahg	0	2	RESID-	W	2.5Y 2.5/1	20			A			G		SCL	W			F			GR		P		F	

SiteID	SiteNo	ProfileID	Horizon	DpthStart	DpthEnd	PriMatCode	MoistCode	Color	CFPct	cfpct1	cfpct2	CFSHpCode	cfshpl	cfshp code2	CFTyp Code	cftyp code2	Txt Code	Struc Grd Code	strucgrdl code2	struc grd code2	Struc Cls Code	struccls code2	Struc Kind Code	struc kind code2	Cons ID	Roots ACode	rootsal code2	rootsa code2	Roots SCode
34	EGL58	108	Bg	2	40	RESID-	W	2.5Y 4/2	30			A		G			SCL						MA			P			F
34	EGL58	109	Cg	40	60	RESID-	W	2.5Y 4/4	40			A		C			LS					MA							
35	EGL52	110	LFH	4	0	-			0																	A			M
35	EGL52	111	Ah	0	3	RESID-	M	10YR 3/2	20			SA		G			L W				F		GR			P			F
35	EGL52	112	Bm	3	49	RESID-	M	10YR 4/3	20			SA		C			L M				M		SB			P			F
35	EGL52	113	BC	49	82	RESID-	M	10YR 4/4	25			SA		C			L W				M					F			F
35	EGL52	114	C	82	100	RESID-	M	10YR 4/4	30			SA		S			L						MA						
36	EGL53	115	LFH	30	0	-			0																	A			C
36	EGL53	116	Bm	0	15	RESID-	M	10YR 3/4	25			SA		S			L M				M		SB			P			M
36	EGL53	117	BC	15	41	RESID-	M	10YR 4/4	30			SA		B			L W				F		SB			F			F
36	EGL53	118	C	41	45	RESID-	M	10YR 4/4	45			SA		B			L						MA						
37	EGL3	119	LFH	3	0	-			0																	A			C

SiteID	SiteNo	ProfileID	Horizon	DpthStart	DpthEnd	PriMatCode	MoistCode	Color	CFPct	cfpct1	cfpct2	CFSHpCode	cfshpl	cfshp code2	CFTyp Code	cftyp code2	Txt Code	Struc Grd Code	strucgrdl code2	struc grd code2	Struc Cls Code	struccls code2	Struc Kind Code	struc kind code2	Cons ID	Roots ACode	rootsal code2	rootsa code2	Roots SCode	
37	EGL3	120	Ah	0	7	RESID-	M	10YR 2/2	30			SA			G		L	W			F		GR				A			M
37	EGL3	121	Bm	7	20	RESID-	M	10YR 3/4	30			SA			C		L	M			M		SB				A			F
37	EGL3	122	BC	20	40	RESID-	M	10YR 4/4	30			SA			C		L	M			F		SB				P			F
37	EGL3	123	C	40	50	RESID-	M	10YR 4/4	45			SA			S		L						MA							
38	EGL204	124	LFH	3	0	-			0																		A			M
38	EGL204	125	Ahe	0	10	COLL-ME	D	10YR 4/2	40			SA			G		SiL	W			F		GR				A			F
38	EGL204	126	AB	10	20	COLL-ME	D	10YR 4/3	40			SA			G		SiL	W			M		PL				A			F
38	EGL204	127	Bm	20	75	COLL-ME	M	10YR 4/4	40			A			C		L	W			F		GR				P			F
39	EGL4	128	LFH	7	0	-			0																		A			C
39	EGL4	129	Ah	0	4	COLL-ME	M	10YR 3/3	30			A			C		L	M			M		GR				A			C
39	EGL4	130	Bm	4	51	COLL-MC	M	10YR 3/3	30			A			C		SL	M			F		SB				P			M
39	EGL4	131	BC	51	80	COLL-MC	M	10YR 3/3	60			A			S		SL	W			F		SB				P			M

SiteID	SiteNo	ProfileID	Horizon	DpthStart	DpthEnd	PriMatCode	MoistCode	Color	CFPct	cfpct1	cfpct2	CFSHpCode	cfshpl	cfshp code2	CFTyp Code	cftyp code2	Txt Code	Struc Grd Code	strucgrdl	struc grd code2	Struc Cls Code	struccls code2	Struc Kind Code	struc kind code2	Cons ID	Roots ACode	rootsal code2	rootsa code2	Roots SCode
40	EGL205	132	LFH	3	0	-			0																		A		M
40	EGL205	133	Ah	0	5	FLUV-ME	W	10YR 2/2	30			A			G		SIL	M			M						A		F
40	EGL205	134	C1	5	30	FLUV-MC	W	10YR 4/4	30			A			C		SL										A		VF
40	EGL205	135	C2	30	50	-	W	10YR 5/4	60			A			C		LS												
41	EGL60	136	LFH	3	0	-			0																		A		M
41	EGL60	137	Bm	0	6	COLL-ME		10YR 3/3	65			A			C		L	W			F						F		M
41	EGL60	138	C	6	100	-			70			A			B														
42	EGL61	139	LFH	4	0	-			0																				
42	EGL61	140	Ahe	0	2	-	M	10YR 5/2	45			A			S		L												
42	EGL61	141	Bm	2	40	-	M	10YR 4/4	30			A			S		L												
42	EGL61	142	C	40	0	-			65			A			S		L												
43	EGL68	143	LFH	6	0	-			0																		A		C
43	EGL68	144	Ah	0	2	RESID-	M	10YR 2/2	30			A			C		SiL	W			F						A		C
43	EGL68	145	Bm	2	19	RESID-	M	10YR 4/3	40			A			C		SiL	W			M						A		M
43	EGL68	146	C	19	55	RESID-	M	10YR 4/3	50			A			C		L										P		M

SiteID	SiteNo	ProfileID	Horizon	DpthStart	DpthEnd	PriMatCode	MoistCode	Color	CFPct	cfpct1	cfpct2	CFSHpCode	cfshpl	cfshp code2	CFTyp Code	cftyp code2	Txt Code	Struc Grd Code	strucgrdl code2	Struc Cls Code	struccls code2	Struc Kind Code	struc kind code2	Cons ID	Roots ACode	rootsal code2	Roots SCode	
54	EGL26	176	LFH	17	0	-			0																	A		M
54	EGL26	177	Bm	0	11	COLL-MF	W	10YR 3/3	20			SA		G		SiCL	S			F		GR				P		F
54	EGL26	178	Cz	11	31	COLL-MF	W	10YR 5/4	25			SA		G		SCL						MA						
56	EGL25	179	LFH	6	0	-			0																	A		M
56	EGL25	180	Ahe	0	2	-	W	10YR 4/2	25			A		G		SIL	M			M		GR				A		M
56	EGL25	181	Bm	2	33	COLL-MF	W	10YR 4/4	25			A		C		SCL	M			M		SB				P		F
56	EGL25	182	BC	33	50	COLL-MF	W	10YR 4/4	40			A		C			W			F		SB						
57	EGL210	183	LFH	9	0	-			0																			
57	EGL210	184	Ahe	0	5	-			0								SIL	M			M		GR					
57	EGL210	185	Bt	5	15	-			0								SiCL	M			M		BL					
57	EGL210	186	BC	15	29	-			0								SCL	W			M		BL					
57	EGL210	187	C	29	0	-			0								LS					SG						
58	EGL208	188	LFH	6	0	-			0																	A		M
58	EGL208	189	Ahe	0	4	COLL-ME	M	10YR 4/2	25			A		G		L	M			M		GR				A		M

SiteID	SiteNo	ProfileID	Horizon	DpthStart	DpthEnd	PriMatCode	MoistCode	Color	CFPct	cfpct1	cfpct2	CFSHpCode	cfshpl	cfshp code2	CFTyp Code	cftyp code2	Txt Code	Struc Grd Code	strucgrdl code2	Struc Cls Code	struccls code2	Struc Kind Code	struc kind code2	Cons ID	Roots ACode	rootsal code2	Roots SCode	
58	EGL208	190	Bm	4	19	COLL-MF	M	10YR 4/6	35			A			S		SCL	M			M		SB			A		C
58	EGL208	191	C	19	50	COLL-MF	M	10YR 5/4	40			A			C		SCL	W			F		GR			P		M
59	EGL209	192	LFH	3	0	-			0																			
59	EGL209	193	Ahe	0	4	COLL-ME	M		0								SIL											
59	EGL209	194	Bm	7	15	COLL-ME	M		0								SIL											
59	EGL209	195	C	15	0	COLL-MF			0								SiCL											
60	EGL50	196	LFH	0	0	-			0																	A		M
60	EGL50	197	Ahe	0	0	-			15			A			G		SL	M			M		PL			A		M
60	EGL50	198	Bm	0	0	-		10YR /	50			A			C		LS	W			M		GR			F		F
60	EGL50	199	C	0	0	-			75			A			B		LS						SG					
62	EGL212	200	LFH	5	0	-			0																	A		M
62	EGL212	201	Ahe	0	2	FLUV-MF	W	10YR 4/1	50			SA			CG		SCL	M			F		GR			A		M
62	EGL212	202	Bm	2	18	FLUV-MC	W	10YR 4/4	50			SA			CG		SL	M			F		SB			P		M
62	EGL212	203	C	18	50	FLUV-MF	W	10YR 5/4	50			SA			CG		SCL						SG			F		F

SiteID	SiteNo	ProfileID	Horizon	DpthStart	DpthEnd	PriMatCode	MoistCode	Color	CFPct	cfpct1	cfpct2	CFSHpCode	cfshpl	cfshp code2	CFTyp Code	cftyp code2	Txt Code	Struc Grd Code	strucgrdl code2	Struc Cls Code	struccls code2	Struc Kind Code	struc kind code2	Cons ID	Roots ACode	rootsal code2	Roots SCode		
64	EGL214	204	LFH	3	0	-			0																	A		M	
64	EGL214	205	Ah	0	7	-	W		25			SA			CG		SiCL	M				M				GR		P	M
64	EGL214	206	C	7	50	FLUV-MF	W		25			SA			CG		SiCL											MA	
67	EGL35	207	LFH	4	0	-			0																				
67	EGL35	208	Bm	0	30	-			45			A			C														
68	EGL34	209	LFH	5	0	-			0																	A		M	
68	EGL34	210	Ahe	0	6	TILL-ME	M	10YR 5/2	25			SA			G		SiL	S				M				PL		A	C
68	EGL34	211	Bt	6	18	TILL-MF	M	10YR 4/4	25			SR			CG		SiCL	S				M				PL		P	M
68	EGL34	212	BC	18	35	TILL-MF	M	10YR 4/4	30			SA			CG		SiCL	M				F				SB		P	M
69	EGL32	213	LFH	11	0	-			0																				
69	EGL32	214	Ahe	0	5	-	M	10YR 3/2	30			A			CG			W				M				PL			
69	EGL32	215	AB	5	30	COLL-MF	M	10YR 3/4	30			SA			CG			M								PL			
69	EGL32	216	B	30	35	COLL-MF	M	10YR 4/4	40			SA			CG			M				M				SB			
69	EGL32	217	C	35	59	COLL-MF	M	10YR 4/4	45			A			C			W				F				GR			
70	EGL31	218	LFH	0	2	-			0																				
70	EGL31	219	C	2	40	TILL-ME	D	10YR 4/6	40			A			C		SiL									A		C	
71	EGL30	220	LFH	5	0	-			0																	A		C	
71	EGL30	221	Ae	0	4	COLL-ME	M		0			A			C		SiL	M				F			GR		A	C	
71	EGL30	222	Bm	4	30	COLL-MF	M	10YR 4/4	0			A			G		SCL	W				F			GR		A	M	
71	EGL30	223	BC	30	45	COLL-MF	M		0			A			C		SiCL									F		M	

SiteID	SiteNo	ProfileID	Horizon	DpthStart	DpthEnd	PriMatCode	MoistCode	Color	CFPct	cfpct1	cfpct2	CFSHpCode	cfshpl	cfshp code2	CFTyp Code	cftyp code2	Txt Code	Struc Grd Code	strucgrdl	struc grd code2	Struc Cls Code	strucclsl	strucclsl code2	Struc Kind Code	struc kind code2	Cons ID	Roots ACode	rootsal code2	rootsa code2	Roots SCode	
72	EGR81	224	Of	18	0	ORG-			0																						
72	EGR81	225	Bm1	0	15	TILL-MF	M	10YR 3/3	15			A			G		SIL														
72	EGR81	226	Bm2	15	30	TILL-MF	W	10YR 3/4	20			A			G		SIL														
72	EGR81	318	Cz	30	0	TILL-MF			0																						
75	EGL9	227	LFH	9	0	-			0																		P			C	
75	EGL9	228	A	0	3	GLFL-MC	M		30			SR		SA	G		SL											F		F	
75	EGL9	229	C	3	45	GLFL-MC	M		40			SR		SA	G		SL													MA	
80	EGL10	230	LFH	15	0	-			0																						
80	EGL10	231	AB	0	3	GLFL-MC	M		10			SA		SR	G		SL													MA	
80	EGL10	232	C	3	42	GLFL-MC	M		15			SA		SR	G		SL													MA	
80	EGL10	233	Cz	42	0	-			0																						
83	EGL11	234	LFH	12	0	-			0																		P			M	
83	EGL11	235	Ah	0	3	TILL-MC	M		15			A		SA	G		SL											F		F	
83	EGL11	236	BC	3	45	TILL-MF	M		20	25		A		SA	G		SiCL												MA	F	F

SiteID	SiteNo	ProfileID	Horizon	DpthStart	DpthEnd	PriMatCode	MoistCode	Color	CFPct	cfpct1	cfpct2	CFSHpCode	cfshpl	cfshp code2	CFTyp Code	cftyp code2	Txt Code	Struc Grd Code	strucgrdl code2	struc grd Code	Struc Cls code2	struccls code2	Struc Kind Code	struc kind code2	Cons ID	Roots ACode	rootsal code2	rootsa code2	Roots SCode		
89	EGR110	237	LFH	20	0	-	M		0																		P			C	
89	EGR110	238	Ah	0	15	-	M		0								SiL										P			M	
89	EGR110	239	Bm	15	48	-	M		30			A		R	CG		SiCL						MA				F			F	
97	EGR415	240	C	0	50	FLUV-MC	M		0								SL					MA									
99	EGR416	241	LFH	8	0	-			0																		P			C	
99	EGR416	242	Ae	0	3	GLFL-VC	D		0								S	W					PL				P			M	
99	EGR416	243	Bm	3	20	GLFL-VC	D		0								S					MA				F			F		
99	EGR416	244	C	20	30	GLFL-MC	D		30	40		R			G	S	SL					MA									
108	EGR411	245	LFH	15	0	-			0																		F			M	
108	EGR411	246	AB	0	2	TILL-MF			15	20		A		R	G		CL										F			F	
108	EGR411	247	C	2	50	TILL-MF			15	20		A		R	G		CL					MA									
111	EGR409	248	LFH	60	0	ORG-			0																		P			F	
111	EGR409	249	Ah	0	12	FLUV-MC	M		0								SL										F			F	
111	EGR409	250	C	12	40	FLUV-MC	M		0								SL					MA									
117	EGL66	251	LFH	4	0	-			0																						
117	EGL66	252	Ae	0	10	COLL-ME	D		15			A		SA	G		L					GR					P			M	
117	EGL66	253	Bm	10	50	COLL-MF	M		30	40		A		SA	G	S	SiCL	M			M		SB				F			F	

SiteID	SiteNo	ProfileID	Horizon	DpthStart	DpthEnd	PriMatCode	MoistCode	Color	CFPct	cfpct1	cfpct2	CFSHpCode	cfshpl	cfshp code2	CFTyp Code	cftyp code2	Txt Code	Struc Grd Code	strucgrdl code2	Struc Cls Code	struccls code2	Struc Kind Code	struc kindl	struc kind code2	Cons ID	Roots ACode	rootsal code2	rootsa code2	Roots SCode	
118	EGR303	255	LFH	5	0	-			0																					
118	EGR303	257	Ah	0	2	-	M		5			A			G		L							GR			P			F
118	EGR303	258	Bm	2	14	-	M		5			A			G		L							MA			F			F
118	EGR303	260	C	14	50	-	M		15			A			G		SiL							MA						
119	EGL310	254	LFH	4	0	-			0																					
119	EGL310	256	Ae	0	3	COLL-VC	D		5			SA		SR	G		S							SG			P			F
119	EGL310	259	Bmj	3	45	COLL-MC	D		15			SA		SR	G		SL							SG			P			F
120	EGL311	261	LFH	4	0	-			0																					
120	EGL311	262	Ae	0	15	TILL-ME	D		10			A		SA	G		L							PL			P			M
120	EGL311	263	BC	15	200	TILL-MF	D		30	40		A		SA	G		S		SiCL								F			F
123	EGL47	264	LFH	15	0	-			0																					
123	EGL47	265	Ae	0	3	-	M		20			A		SA	G		S	SL	W					PL			P			M
123	EGL47	266	Bm	3	0	-	M		30	40		A		SA	G		S	SiCL									F			F
124	EGL1	267	LFH	10	0	-			0																					
124	EGL1	268	Ah	0	2	FLUV-MC	M		5			SA			G		SL										P			F
124	EGL1	269	IC	2	20	FLUV-MC	M		10			A			G		SL							MA			P			F
124	EGL1	270	IIC	20	50	FLUV-MF	M		40			A			G		SiCL							MA						

SiteID	SiteNo	ProfileID	Horizon	DpthStart	DpthEnd	PriMatCode	MoistCode	Color	CFPct	cfpct1	cfpct2	CFSHpCode	cfshpl	cfshp code2	CFTyp Code	cftyp code2	Txt Code	Struc Grd Code	strucgrdl	struc grd code2	Struc Cls Code	struccls code2	Struc Kind Code	struc kind code2	Cons ID	Roots ACode	rootsal code2	rootsa SCode	Roots SCode	
125	EGL313	271	LFH	3	0	-			0																		P		M	
125	EGL313	272	Ae	0	1	GLFL-MC	D		10			SA		G		SL											F		F	
125	EGL313	273	Bm	1	40	GLFL-MC	D		10			SA		G		SL														
126	EGR400	274	LFH	10	0	-			0																		P		M	
126	EGR400	275	AB	0	2	FLUV-MC	D		0							SL	W						PL			P		F		
126	EGR400	276	C	2	60	FLUV-MC	D		0							SL							MA			P		M		
129	EGR401	277	LFH	4	0	-			0																					
129	EGR401	278	AB	0	2	FLUV-MC	D		0							SL	W						PL			P		M		

SiteID	SiteNo	ProfileID	Horizon	DpthStart	DpthEnd	PriMatCode	MoistCode	Color	CFPct	cfpct1	cfpct2	CFSHpCode	cfshpl	cfshp code2	CFTyp Code	cftyp code2	Txt Code	Struc Grd Code	strucgrdl	struc grd code2	Struc Cls Code	strucclsl	struccls code2	Struc Kind Code	struc kindl	struc kind code2	Cons ID	Roots ACode	rootsal	rootsa code2	Roots SCode
129	EGR401	279	IC	2	22	FLUV-MC	D		0								SL							MA				F		F	
129	EGR401	280	IIC	22	35	FLUV-VC	D		35			R			G		S							MA							
133	EGR406	281	LFH	15	0	-			0																						
133	EGR406	282	Ah	0	6	FLUV-MC	M		0								SL											F		F	
133	EGR406	283	C	6	60	FLUV-MC	M		0								SL														
134	EGR404	284	C	0	40	FLUV-VC	M		40			SR			G		S							SG				F		M	
135	EGR403	285	LFH	12	0	-			0																			P		M	
135	EGR403	286	Ae	0	10	RESID-	D		30			A		SA	G		SL	W						GR				F		F	
135	EGR403	287	R	10	25	RESID-	D		60			A			G		SL														
136	EGR407	288	LFH	4	0	-			0																			P		M	

SiteID	SiteNo	rootssl	rootss code2	Carb Code	Mot Color	MotA Code	motal	mota code2	Mot Con Code	motconl	motcon code2	MotS Code	motsl	mots code2	HBDist Code	HB Form Code	pH	Salt Code	Sam Col	sam Label	Display Order	Site ID2	Project ID	Site No3	Survey Type	Province	Zone	Soil Corr Area	Slope %	Surveyors	Survey Date	Easting
4	EGL63																0		0		1	4	1	EGL63	D	BC	8		35	nt, js	8/16/2009	459259
4	EGL63														G	I	0		0		2	4	1	EGL63	D	BC	8		35	nt, js	8/16/2009	459259
4	EGL63														C	B	4		0		3	4	1	EGL63	D	BC	8		35	nt, js	8/16/2009	459259
4	EGL63																0		0		4	4	1	EGL63	D	BC	8		35	nt, js	8/16/2009	459259
4	EGL63																0		0		5	4	1	EGL63	D	BC	8		35	nt, js	8/16/2009	459259
5	EGL216																0		0		1	5	1	EGL216	V	BC	8		30	NT, JS	8/16/2009	458642
5	EGL216																0		0		2	5	1	EGL216	V	BC	8		30	NT, JS	8/16/2009	458642
5	EGL216																0		0		3	5	1	EGL216	V	BC	8		30	NT, JS	8/16/2009	458642
6	EGR94																0		0		1	6	1	EGR94	D	BC	8		55	NT/JS	9/13/2009	462791
6	EGR94																0		0		2	6	1	EGR94	D	BC	8		55	NT/JS	9/13/2009	462791
7	EGR93																0		0		1	7	1	EGR93	D	BC	8		60	NT/JS	8/13/2009	462866
7	EGR93																0		0		2	7	1	EGR93	D	BC	8		60	NT/JS	8/13/2009	462866
7	EGR93																0		0		3	7	1	EGR93	D	BC	8		60	NT/JS	8/13/2009	462866
8	EGR92																0		0		1	8	1	EGR92	D	BC	8		25	NT/JS	8/13/2009	462758
8	EGR92					F			F			F					6.3		0	water tested	2	8	1	EGR92	D	BC	8		25	NT/JS	8/13/2009	462758

SiteID	SiteNo	rootssl	rootss code2	Carb Code	Mot Color	MotA Code	motal	mota code2	Mot Con Code	motconl	motcon code2	MotS Code	motsl	mots code2	HBDist Code	HB Form Code	pH	Salt Code	Sam Col	sam Label	Display Order	Site ID2	Project ID	Site No3	Survey Type	Province	Zone	Soil Corr Area	Slope %	Surveyors	Survey Date	Easting
8	EGR92																0		0		3	8	1	EGR92	D	BC	8		25	NT/JS	8/13/2009	462758
10	EGL8																0		0		1	10	1	EGL8	D	BC	8		15	NT/JS	8/16/2009	458909
10	EGL8														C	W	0		0	EGR8 NT 1	2	10	1	EGL8	D	BC	8		15	NT/JS	8/16/2009	458909
10	EGL8					C			D			F			C	W	0		0	EGR8 NT 2	3	10	1	EGL8	D	BC	8		15	NT/JS	8/16/2009	458909
10	EGL8					F			P			F			C	W	0		0	EGR8 NT 3	4	10	1	EGL8	D	BC	8		15	NT/JS	8/16/2009	458909
11	EGL6																0		0		1	11	1	EGL6	V	BC	8		0	NT/JS	8/16/2009	458890
12	EGL41																0		0		1	12	1	EGL41	D	BC	8		30	NT/JS	8/16/2009	459759
12	EGL41				10YR 4/6	C			P			F			C	I	4.7		0	EGL41 NT 1	2	12	1	EGL41	D	BC	8		30	NT/JS	8/16/2009	459759
12	EGL41				10YR 4/4	M			P			M					4.6		0	EGL41 NT 2	3	12	1	EGL41	D	BC	8		30	NT/JS	8/16/2009	459759
13	EGL200																0		0		1	13	1	EGL200	D	BC	8		8	NT/SW	8/11/2009	463530
13	EGL200																0		0		2	13	1	EGL200	D	BC	8		8	NT/SW	8/11/2009	463530
13	EGL200																6		0		3	13	1	EGL200	D	BC	8		8	NT/SW	8/11/2009	463530
13	EGL200																0		0		4	13	1	EGL200	D	BC	8		8	NT/SW	8/11/2009	463530
13	EGL200																0		0		5	13	1	EGL200	D	BC	8		8	NT/SW	8/11/2009	463530
14	EGR96																0		0		1	14	1	EGR96	D	BC	8		25	NT, JS	8/13/2009	462720

SiteID	SiteNo	rootssl	rootss code2	Carb Code	Mot Color	MotA Code	motal	mota code2	Mot Con Code	motconl	motcon code2	MotS Code	motsl	mots code2	HBDist Code	HB Form Code	pH	Salt Code	Sam Col	sam Label	Display Order	Site ID2	Project ID	Site No3	Survey Type	Province	Zone	Soil Corr Area	Slope %	Surveyors	Survey Date	Easting
14	EGR96				10YR 3/3												0		1	EGR96NT 1	2	14	1	EGR96	D	BC	8		25	NT, JS	8/13/2009	462720
14	EGR96																0		0		3	14	1	EGR96	D	BC	8		25	NT, JS	8/13/2009	462720
15	EGL16																0		0		1	15	1	EGL16	D	BC	8		10	NT/SW	8/11/2009	462792
15	EGL16														C	S	0		0		2	15	1	EGL16	D	BC	8		10	NT/SW	8/11/2009	462792
15	EGL16														C	S	5.7		0		3	15	1	EGL16	D	BC	8		10	NT/SW	8/11/2009	462792
15	EGL16																0		0		4	15	1	EGL16	D	BC	8		10	NT/SW	8/11/2009	462792
16	EGR91																0		0		1	16	1	EGR91	D	BC	8		18	NT, JS	8/13/2009	462687
16	EGR91																0		0		2	16	1	EGR91	D	BC	8		18	NT, JS	8/13/2009	462687
16	EGR91																0		0		3	16	1	EGR91	D	BC	8		18	NT, JS	8/13/2009	462687
16	EGR91																0		0		4	16	1	EGR91	D	BC	8		18	NT, JS	8/13/2009	462687
16	EGR91																0		0		5	16	1	EGR91	D	BC	8		18	NT, JS	8/13/2009	462687
19	EGL15																0		0		1	19	1	EGL15	D	BC	8		27	NT/SW	8/11/2009	462811
19	EGL15																0		0		2	19	1	EGL15	D	BC	8		27	NT/SW	8/11/2009	462811
19	EGL15														C	S	5		0		3	19	1	EGL15	D	BC	8		27	NT/SW	8/11/2009	462811
19	EGL15				10YR 3/4	M			D			F			C	S	0		0		4	19	1	EGL15	D	BC	8		27	NT/SW	8/11/2009	462811
19	EGL15														C	S	0		0		5	19	1	EGL15	D	BC	8		27	NT/SW	8/11/2009	462811
20	EGL17																0		0		1	20	1	EGL17	D	BC	8		17	NT/SW	8/11/2009	462958
20	EGL17																0		0	EGL17NT 1	2	20	1	EGL17	D	BC	8		17	NT/SW	8/11/2009	462958

SiteID	SiteNo	rootssl	rootss code2	Carb Code	Mot Color	MotA Code	motal	mota code2	Mot Con Code	motconl	motcon code2	MotS Code	motsl	mots code2	HBDist Code	HB Form Code	pH	Salt Code	Sam Col	sam Label	Display Order	Site ID2	Project ID	Site No3	Survey Type	Province	Zone	Soil Corr Area	Slope %	Surveyors	Survey Date	Easting
20	EGL17																4.2		0	EGL17NT 2	3	20	1	EGL17	D	BC	8		17	NT/SW	8/11/2009	462958
21	EGL39																0		0		1	21	1	EGL39	D	BC	8		70	NT, JS	8/14/2009	459731
21	EGL39														D	W	0		0		2	21	1	EGL39	D	BC	8		70	NT, JS	8/14/2009	459731
21	EGL39																0		0		3	21	1	EGL39	D	BC	8		70	NT, JS	8/14/2009	459731
21	EGL39														B		0		0		4	21	1	EGL39	D	BC	8		70	NT, JS	8/14/2009	459731
21	EGL39																0		0		5	21	1	EGL39	D	BC	8		70	NT, JS	8/14/2009	459731
22	EGL38																0		0		1	22	1	EGL38	D	BC	8		18	NT, JS	8/14/2009	459691
22	EGL38																0		0		2	22	1	EGL38	D	BC	8		18	NT, JS	8/14/2009	459691
22	EGL38																0		0		3	22	1	EGL38	D	BC	8		18	NT, JS	8/14/2009	459691
22	EGL38																0		0		4	22	1	EGL38	D	BC	8		18	NT, JS	8/14/2009	459691
22	EGL38																0		0		5	22	1	EGL38	D	BC	8		18	NT, JS	8/14/2009	459691
23	EGL37																0		0		1	23	1	EGL37	D	BC	8		28	NT, JS	8/14/2009	459728
23	EGL37																0		0		2	23	1	EGL37	D	BC	8		28	NT, JS	8/14/2009	459728
23	EGL37																4.5		0		3	23	1	EGL37	D	BC	8		28	NT, JS	8/14/2009	459728
23	EGL37																5		0		4	23	1	EGL37	D	BC	8		28	NT, JS	8/14/2009	459728

SiteID	SiteNo	rootssl	rootss code2	Carb Code	Mot Color	MotA Code	motal	mota code2	Mot Con Code	motconl	motcon code2	MotS Code	motsl	mots code2	HBDist Code	HB Form Code	pH	Salt Code	Sam Col	sam Label	Display Order	Site ID2	Project ID	Site No3	Survey Type	Province	Zone	Soil Corr Area	Slope %	Surveyors	Survey Date	Easting
23	EGL37																0		0		5	23	1	EGL37	D	BC	8		28	NT, JS	8/14/2009	459728
24	EGL36																0		0		1	24	1	EGL36	D	BC	8		18	NT, JS	8/14/2009	459838
24	EGL36																0		0		2	24	1	EGL36	D	BC	8		18	NT, JS	8/14/2009	459838
24	EGL36																0		0		3	24	1	EGL36	D	BC	8		18	NT, JS	8/14/2009	459838
24	EGL36																0		0		4	24	1	EGL36	D	BC	8		18	NT, JS	8/14/2009	459838
25	EGL207																0		0		1	25	1	EGL207	V	BC	8		80	NT, JS	8/14/2009	460282
25	EGL207																0		0		2	25	1	EGL207	V	BC	8		80	NT, JS	8/14/2009	460282
25	EGL207																0		0		3	25	1	EGL207	V	BC	8		80	NT, JS	8/14/2009	460282
26	EGL18																0		0		1	26	1	EGL18	D	BC	8		18	NT/SW	8/11/2009	463270
26	EGL18																		0		2	26	1	EGL18	D	BC	8		18	NT/SW	8/11/2009	463270
26	EGL18														C	B	6		0		3	26	1	EGL18	D	BC	8		18	NT/SW	8/11/2009	463270
26	EGL18														C	B	5.5		0		4	26	1	EGL18	D	BC	8		18	NT/SW	8/11/2009	463270
26	EGL18																0		0		5	26	1	EGL18	D	BC	8		18	NT/SW	8/11/2009	463270
27	EGL33																0		0		1	27	1	EGL33	D	BC	8		8	NT, JS	8/14/2009	459688

SiteID	SiteNo	rootssl	Carb	Mot	MotA	mota	Mot	motconl	motcon	MotS	motsl	mots	HBDist	HB	pH	Salt	Sam	Sam	Label	Display	Site	Project	Site	Survey	Province	Zone	Soil	Corr	Slope	Surveyors	Survey	Easting
		code2	Code	Color	Code	code2	Code	code2	code2	Code	code2	code2	Code	Code		Code	Col			Order	ID2	ID	No3	Type			Area	%		Date		
27	EGL33														0		0			2	27	1	EGL33	D	BC	8		8	NT, JS	8/14/2009	459688	
27	EGL33														0		0			3	27	1	EGL33	D	BC	8		8	NT, JS	8/14/2009	459688	
27	EGL33														0		0			4	27	1	EGL33	D	BC	8		8	NT, JS	8/14/2009	459688	
28	EGL19														0		0			1	28	1	EGL19	D	BC	8		18	NT/SW	8/11/2009	463242	
28	EGL19														0		0			2	28	1	EGL19	D	BC	8		18	NT/SW	8/11/2009	463242	
28	EGL19														0		0			3	28	1	EGL19	D	BC	8		18	NT/SW	8/11/2009	463242	
28	EGL19			2.5Y 4/6	C		D			F					0		0			4	28	1	EGL19	D	BC	8		18	NT/SW	8/11/2009	463242	
28	EGL19														0		0			5	28	1	EGL19	D	BC	8		18	NT/SW	8/11/2009	463242	
29	EGL20														0		0			1	29	1	EGL20	D	BC	8		22	NT/SW	8/11/2009	463116	
29	EGL20														0		0			2	29	1	EGL20	D	BC	8		22	NT/SW	8/11/2009	463116	
29	EGL20												C	I	5.5		0			3	29	1	EGL20	D	BC	8		22	NT/SW	8/11/2009	463116	
29	EGL20														0		0			4	29	1	EGL20	D	BC	8		22	NT/SW	8/11/2009	463116	
29	EGL20														0		0			5	29	1	EGL20	D	BC	8		22	NT/SW	8/11/2009	463116	
30	EGL201														0		0			1	30	1	EGL201	D	BC	8		14	NT/SW	8/11/2009	463459	
30	EGL201														0		0			2	30	1	EGL201	D	BC	8		14	NT/SW	8/11/2009	463459	

SiteID	SiteNo	rootssl	rootss code2	Carb Code	Mot Color	MotA Code	motal	mota code2	Mot Con Code	motconl	motcon code2	MotS Code	motsl	mots code2	HBDist Code	HB Form Code	pH	Salt Code	Sam Col	sam Label	Display Order	Site ID2	Project ID	Site No3	Survey Type	Province	Zone	Soil Corr Area	Slope %	Surveyors	Survey Date	Easting
30	EGL201																5		0		3	30	1	EGL201	D	BC	8		14	NT/SW	8/11/2009	463459
30	EGL201																0		0		4	30	1	EGL201	D	BC	8		14	NT/SW	8/11/2009	463459
31	EGL5																0		0		1	31	1	EGL5	D	BC	8		8	NT/SW	8/11/2009	463097
31	EGL5																0		0		2	31	1	EGL5	D	BC	8		8	NT/SW	8/11/2009	463097
31	EGL5																5		0		3	31	1	EGL5	D	BC	8		8	NT/SW	8/11/2009	463097
31	EGL5																0		0		4	31	1	EGL5	D	BC	8		8	NT/SW	8/11/2009	463097
32	EGL202																0		0		1	32	1	EGL202	V	BC	8		7	NT/SW	8/11/2009	462894
32	EGL202																0		0		2	32	1	EGL202	V	BC	8		7	NT/SW	8/11/2009	462894
32	EGL202																5		0		3	32	1	EGL202	V	BC	8		7	NT/SW	8/11/2009	462894
32	EGL202																0		0		4	32	1	EGL202	V	BC	8		7	NT/SW	8/11/2009	462894
33	EGL203																0		0		1	33	1	EGL203	V	BC	8		4	NT/SW	8/11/2009	462908
33	EGL203																0		0		2	33	1	EGL203	V	BC	8		4	NT/SW	8/11/2009	462908
34	EGL58																0		0		1	34	1	EGL58	D	BC	8		0	NT/SW	8/11/2009	462612
34	EGL58																0		0		2	34	1	EGL58	D	BC	8		0	NT/SW	8/11/2009	462612

SiteID	SiteNo	rootssl	rootss code2	Carb Code	Mot Color	MotA Code	motal	mota code2	Mot Con Code	motconl	motcon code2	MotS Code	motsl	mots code2	HBDist Code	HB Form Code	pH	Salt Code	Sam Col	sam Label	Display Order	Site ID2	Project ID	Site No3	Survey Type	Province	Zone	Soil Corr Area	Slope %	Surveyors	Survey Date	Easting
34	EGL58																5.5		0		3	34	1	EGL58	D	BC	8		0	NT/SW	8/11/2009	462612
34	EGL58																0		0		4	34	1	EGL58	D	BC	8		0	NT/SW	8/11/2009	462612
35	EGL52																0		0		1	35	1	EGL52	D	BC	8		10	NT/JS	8/12/2009	461913
35	EGL52														C	S	0		0		2	35	1	EGL52	D	BC	8		10	NT/JS	8/12/2009	461913
35	EGL52														C	S	0		0		3	35	1	EGL52	D	BC	8		10	NT/JS	8/12/2009	461913
35	EGL52														C	S	0		0		4	35	1	EGL52	D	BC	8		10	NT/JS	8/12/2009	461913
35	EGL52														C	S	0		0		5	35	1	EGL52	D	BC	8		10	NT/JS	8/12/2009	461913
36	EGL53																0		0		1	36	1	EGL53	D	BC	8		10	NT/JS	8/12/2009	461946
36	EGL53																5		0		2	36	1	EGL53	D	BC	8		10	NT/JS	8/12/2009	461946
36	EGL53																0		0		3	36	1	EGL53	D	BC	8		10	NT/JS	8/12/2009	461946
36	EGL53																0		0		4	36	1	EGL53	D	BC	8		10	NT/JS	8/12/2009	461946
37	EGL3																0		0		1	37	1	EGL3	D	BC	8		15	NT/JS	8/12/2009	461502

SiteID	SiteNo	rootssl	rootss code2	Carb Code	Mot Color	MotA Code	motal	mota code2	Mot Con Code	motconl	motcon code2	MotS Code	motsl	mots code2	HBDist Code	HB Form Code	pH	Salt Code	Sam Col	sam Label	Display Order	Site ID2	Project ID	Site No3	Survey Type	Province	Zone	Soil Corr Area	Slope %	Surveyors	Survey Date	Easting
37	EGL3																0		0		2	37	1	EGL3	D	BC	8		15	NT/JS	8/12/2009	461502
37	EGL3																5		0		3	37	1	EGL3	D	BC	8		15	NT/JS	8/12/2009	461502
37	EGL3																5.5		0		4	37	1	EGL3	D	BC	8		15	NT/JS	8/12/2009	461502
37	EGL3																0		0		5	37	1	EGL3	D	BC	8		15	NT/JS	8/12/2009	461502
38	EGL204																0		0		1	38	1	EGL204	D	BC	8		60	NT/JS	8/12/2009	461449
38	EGL204											A	B				0		0		2	38	1	EGL204	D	BC	8		60	NT/JS	8/12/2009	461449
38	EGL204											A	B				0		0		3	38	1	EGL204	D	BC	8		60	NT/JS	8/12/2009	461449
38	EGL204											A	B				5		0		4	38	1	EGL204	D	BC	8		60	NT/JS	8/12/2009	461449
39	EGL4																0		0		1	39	1	EGL4	D	BC	8		25	NT/JS	8/12/2009	461305
39	EGL4																0		0	limited sample EGL4	2	39	1	EGL4	D	BC	8		25	NT/JS	8/12/2009	461305
39	EGL4																0		0	EGL4 NT 2	3	39	1	EGL4	D	BC	8		25	NT/JS	8/12/2009	461305
39	EGL4																0		0	too many coarse frag	4	39	1	EGL4	D	BC	8		25	NT/JS	8/12/2009	461305

SiteID	SiteNo	rootssl	rootss code2	Carb Code	Mot Color	MotA Code	motal	mota code2	Mot Con Code	motconl	motcon code2	MotS Code	motsl	mots code2	HBDist Code	HB Form Code	pH	Salt Code	Sam Col	sam Label	Display Order	Site ID2	Project ID	Site No3	Survey Type	Province	Zone	Soil Corr Area	Slope %	Surveyors	Survey Date	Easting
40	EGL205																0		0		1	40	1	EGL205	D	BC	8		25	NT/JS	8/12/2009	461307
40	EGL205																0		0		2	40	1	EGL205	D	BC	8		25	NT/JS	8/12/2009	461307
40	EGL205																0		0		3	40	1	EGL205	D	BC	8		25	NT/JS	8/12/2009	461307
40	EGL205																0		0		4	40	1	EGL205	D	BC	8		25	NT/JS	8/12/2009	461307
41	EGL60																0		0		1	41	1	EGL60	D	BC	8		35	NT/JS	8/12/2009	460681
41	EGL60																0		0		2	41	1	EGL60	D	BC	8		35	NT/JS	8/12/2009	460681
41	EGL60																0		0		3	41	1	EGL60	D	BC	8		35	NT/JS	8/12/2009	460681
42	EGL61																0		0		1	42	1	EGL61	D	BC	8		35	NT/JS	8/12/2009	460670
42	EGL61																0		0		2	42	1	EGL61	D	BC	8		35	NT/JS	8/12/2009	460670
42	EGL61																0		0		3	42	1	EGL61	D	BC	8		35	NT/JS	8/12/2009	460670
42	EGL61																0		0		4	42	1	EGL61	D	BC	8		35	NT/JS	8/12/2009	460670
43	EGL68																0		0		1	43	1	EGL68	D	BC	8		20	NT/JS	8/12/2009	460392
43	EGL68																0		0		2	43	1	EGL68	D	BC	8		20	NT/JS	8/12/2009	460392
43	EGL68														C	W	5		0		3	43	1	EGL68	D	BC	8		20	NT/JS	8/12/2009	460392
43	EGL68																0		0		4	43	1	EGL68	D	BC	8		20	NT/JS	8/12/2009	460392

SiteID	SiteNo	rootssl	rootss code2	Carb Code	Mot Color	MotA Code	motal	mota code2	Mot Con Code	motconl	motcon code2	MotS Code	motsl	mots code2	HBDist Code	HB Form Code	pH	Salt Code	Sam Col	sam Label	Display Order	Site ID2	Project ID	Site No3	Survey Type	Province	Zone	Soil Corr Area	Slope %	Surveyors	Survey Date	Easting
44	EGL206																0		0		1	44	1	EGL206	D	BC	8		2	NT/JS	8/13/2009	463119
44	EGL206																0		0		2	44	1	EGL206	D	BC	8		2	NT/JS	8/13/2009	463119
45	EGR206																0		0		1	45	1	EGR206	D	BC	8		50	NT/JS	8/13/2009	463081
45	EGR206																0		0		2	45	1	EGR206	D	BC	8		50	NT/JS	8/13/2009	463081
46	EGR97																0		0		1	46	1	EGR97	D	BC	8		10	NT/JS	8/13/2009	462742
46	EGR97														C	W	6.3		0		2	46	1	EGR97	D	BC	8		10	NT/JS	8/13/2009	462742
46	EGR97				10YR 5/6	C			P			M			D	W	6.3		0		3	46	1	EGR97	D	BC	8		10	NT/JS	8/13/2009	462742
46	EGR97				10YR 5/8	C			P			M					0		0		4	46	1	EGR97	D	BC	8		10	NT/JS	8/13/2009	462742
46	EGR97																0		0		5	46	1	EGR97	D	BC	8		10	NT/JS	8/13/2009	462742
47	EGR95																0		0		1	47	1	EGR95	D	BC	8		35	NT/JS	8/13/2009	462800
47	EGR95																0		0		2	47	1	EGR95	D	BC	8		35	NT/JS	8/13/2009	462800
48	EGR80																0		0		1	48	1	EGR80	D	BC	8		45	NT/JS	8/13/2009	462942
48	EGR80														C	B	0		0		2	48	1	EGR80	D	BC	8		45	NT/JS	8/13/2009	462942
48	EGR80																0		0		3	48	1	EGR80	D	BC	8		45	NT/JS	8/13/2009	462942
49	EGL27																0		0		1	49	1	EGL27	V	BC	8		5	NT/JS	8/14/2009	460298

SiteID	SiteNo	rootssl	rootss code2	Carb Code	Mot Color	MotA Code	motal	mota code2	Mot Con Code	motconl	motcon code2	MotS Code	motsl	mots code2	HBDist Code	HB Form Code	pH	Salt Code	Sam Col	sam Label	Display Order	Site ID2	Project ID	Site No3	Survey Type	Province	Zone	Soil Corr Area	Slope %	Surveyors	Survey Date	Easting
49	EGL27																0		0		2	49	1	EGL27	V	BC	8		5	NT/JS	8/14/2009	460298
50	EGL12																0		0		1	50	1	EGL12	D	BC	8		9	NT/JS	8/15/2009	458688
50	EGL12				10YR 3/3	C			F			F			G	W	0		1	EGLIZ NT 1	2	50	1	EGL12	D	BC	8		9	NT/JS	8/15/2009	458688
50	EGL12				7.5YR 3/4	F			P			M			G	W	0		1	EGL12 NT 2	3	50	1	EGL12	D	BC	8		9	NT/JS	8/15/2009	458688
50	EGL12					F			D			M					0		1	EGL12 NT 3	4	50	1	EGL12	D	BC	8		9	NT/JS	8/15/2009	458688
51	EGL215																0		0		1	51	1	EGL215	D	BC	8		35	NT/JS	8/15/2009	459132
51	EGL215														A	B	5.5		0		2	51	1	EGL215	D	BC	8		35	NT/JS	8/15/2009	459132
51	EGL215																0		0		3	51	1	EGL215	D	BC	8		35	NT/JS	8/15/2009	459132
52	EGL22																0		0		1	52	1	EGL22	D	BC	8		15	NT/JS	8/15/2009	461235
52	EGL22					C			P			C					0		0		2	52	1	EGL22	D	BC	8		15	NT/JS	8/15/2009	461235
52	EGL22					C			P			C					0		0		3	52	1	EGL22	D	BC	8		15	NT/JS	8/15/2009	461235
52	EGL22				7.5YR 3/4	C			P			F					0		0		4	52	1	EGL22	D	BC	8		15	NT/JS	8/15/2009	461235
52	EGL22					C						F					0		0		5	52	1	EGL22	D	BC	8		15	NT/JS	8/15/2009	461235

SiteID	SiteNo	rootssl	rootss code2	Carb Code	Mot Color	MotA Code	motal	mota code2	Mot Con Code	motconl	motcon code2	MotS Code	motsl	mots code2	HBDist Code	HB Form Code	pH	Salt Code	Sam Col	sam Label	Display Order	Site ID2	Project ID	Site No3	Survey Type	Province	Zone	Soil Corr Area	Slope %	Surveyors	Survey Date	Easting
54	EGL26																0		0		1	54	1	EGL26	D	BC	8		30	NT/JS	8/15/2009	461407
54	EGL26																0		0		2	54	1	EGL26	D	BC	8		30	NT/JS	8/15/2009	461407
54	EGL26																0		0		3	54	1	EGL26	D	BC	8		30	NT/JS	8/15/2009	461407
56	EGL25																0		0		1	56	1	EGL25	D	BC	8		30	NT/JS	8/15/2009	461541
56	EGL25																0		0		2	56	1	EGL25	D	BC	8		30	NT/JS	8/15/2009	461541
56	EGL25																0		1	EGL25 NT 1	3	56	1	EGL25	D	BC	8		30	NT/JS	8/15/2009	461541
56	EGL25																0		0		4	56	1	EGL25	D	BC	8		30	NT/JS	8/15/2009	461541
57	EGL210																0		0		1	57	1	EGL210	D	BC	8		0	NT/JS	8/15/2008	461675
57	EGL210																0		0		2	57	1	EGL210	D	BC	8		0	NT/JS	8/15/2008	461675
57	EGL210																0		0		3	57	1	EGL210	D	BC	8		0	NT/JS	8/15/2008	461675
57	EGL210																0		0		4	57	1	EGL210	D	BC	8		0	NT/JS	8/15/2008	461675
57	EGL210																0		0		5	57	1	EGL210	D	BC	8		0	NT/JS	8/15/2008	461675
58	EGL208																0		0		1	58	1	EGL208	D	BC	8		28	NT/JS	8/15/2009	461494
58	EGL208														G	B	0		1	EGL208 NT 1	2	58	1	EGL208	D	BC	8		28	NT/JS	8/15/2009	461494

SiteID	SiteNo	rootssl	rootss code2	Carb Code	Mot Color	MotA Code	motal	mota code2	Mot Con Code	motconl	motcon code2	MotS Code	motsl	mots code2	HBDist Code	HB Form Code	pH	Salt Code	Sam Col	sam Label	Display Order	Site ID2	Project ID	Site No3	Survey Type	Province	Zone	Soil Corr Area	Slope %	Surveyors	Survey Date	Easting
58	EGL208														G	I	5		1	EGL208 NT 2	3	58	1	EGL208	D	BC	8		28	NT/JS	8/15/2009	461494
58	EGL208																0		1	EGL208 NT 3	4	58	1	EGL208	D	BC	8		28	NT/JS	8/15/2009	461494
59	EGL209																0		0		1	59	1	EGL209	D	BC	8		35	NT/JS	8/15/2009	461564
59	EGL209																0		0		2	59	1	EGL209	D	BC	8		35	NT/JS	8/15/2009	461564
59	EGL209																0		0		3	59	1	EGL209	D	BC	8		35	NT/JS	8/15/2009	461564
59	EGL209																0		0		4	59	1	EGL209	D	BC	8		35	NT/JS	8/15/2009	461564
60	EGL50																0		0		1	60	1	EGL50	D	BC	8		35	NT/JS	8/15/2009	461708
60	EGL50																0		1	EGL50 NT 1	2	60	1	EGL50	D	BC	8		35	NT/JS	8/15/2009	461708
60	EGL50																0		0		3	60	1	EGL50	D	BC	8		35	NT/JS	8/15/2009	461708
60	EGL50																0		0		4	60	1	EGL50	D	BC	8		35	NT/JS	8/15/2009	461708
62	EGL212																0		0		1	62	1	EGL212	D	BC	8		35	NT/JS	8/15/2009	460889
62	EGL212																0		0		2	62	1	EGL212	D	BC	8		35	NT/JS	8/15/2009	460889
62	EGL212																0		0		3	62	1	EGL212	D	BC	8		35	NT/JS	8/15/2009	460889
62	EGL212																0		0		4	62	1	EGL212	D	BC	8		35	NT/JS	8/15/2009	460889

SiteID	SiteNo	rootssl	rootss code2	Carb Code	Mot Color	MotA Code	motal	mota code2	Mot Con Code	motconl	motcon code2	MotS Code	motsl	mots code2	HBDist Code	HB Form Code	pH	Salt Code	Sam Col	sam Label	Display Order	Site ID2	Project ID	Site No3	Survey Type	Province	Zone	Soil Corr Area	Slope %	Surveyors	Survey Date	Easting
64	EGL214																0		0		1	64	1	EGL214	D	BC	8		10	NT/JS	8/15/2009	458678
64	EGL214																0		0		2	64	1	EGL214	D	BC	8		10	NT/JS	8/15/2009	458678
64	EGL214																0		0		3	64	1	EGL214	D	BC	8		10	NT/JS	8/15/2009	458678
67	EGL35																0		0		1	67	1	EGL35	D	BC	8		20	NT/JS	8/14/2009	460058
67	EGL35																0		0		2	67	1	EGL35	D	BC	8		20	NT/JS	8/14/2009	460058
68	EGL34																0		0		1	68	1	EGL34	D	BC	8		20	NT/JS	8/14/2009	460172
68	EGL34																0		0		2	68	1	EGL34	D	BC	8		20	NT/JS	8/14/2009	460172
68	EGL34																0		0		3	68	1	EGL34	D	BC	8		20	NT/JS	8/14/2009	460172
68	EGL34																0		0		4	68	1	EGL34	D	BC	8		20	NT/JS	8/14/2009	460172
69	EGL32																0		0		1	69	1	EGL32	D	BC	8		30	NT/JS	8/14/2009	460281
69	EGL32																0		0		2	69	1	EGL32	D	BC	8		30	NT/JS	8/14/2009	460281
69	EGL32																0		0		3	69	1	EGL32	D	BC	8		30	NT/JS	8/14/2009	460281
69	EGL32																0		0		4	69	1	EGL32	D	BC	8		30	NT/JS	8/14/2009	460281
69	EGL32																0		0		4	69	1	EGL32	D	BC	8		30	NT/JS	8/14/2009	460281
70	EGL31																0		0		1	70	1	EGL31	D	BC	8		45	NT/JS	8/14/2009	460212
70	EGL31																0		0		2	70	1	EGL31	D	BC	8		45	NT/JS	8/14/2009	460212
71	EGL30																0		0		1	71	1	EGL30	D	BC	8		65	NT/JS	8/14/2009	460171
71	EGL30																0		0		2	71	1	EGL30	D	BC	8		65	NT/JS	8/14/2009	460171
71	EGL30																5		0		3	71	1	EGL30	D	BC	8		65	NT/JS	8/14/2009	460171
71	EGL30																0		0		4	71	1	EGL30	D	BC	8		65	NT/JS	8/14/2009	460171

SiteID	SiteNo	rootssl	rootss code2	Carb Code	Mot Color	MotA Code	motal	mota code2	Mot Con Code	motconl	motcon code2	MotS Code	motsl	mots code2	HBDist Code	HB Form Code	pH	Salt Code	Sam Col	sam Label	Display Order	Site ID2	Project ID	Site No3	Survey Type	Province	Zone	Soil Corr Area	Slope %	Surveyors	Survey Date	Easting
72	EGR81																0		0		1	72	1	EGR81	D	BC	8		30	NT/JS	8/13/2009	462935
72	EGR81														C	S	5.6		0		2	72	1	EGR81	D	BC	8		30	NT/JS	8/13/2009	462935
72	EGR81														C	S	5.6		0		3	72	1	EGR81	D	BC	8		30	NT/JS	8/13/2009	462935
72	EGR81																0		0		4	72	1	EGR81	D	BC	8		30	NT/JS	8/13/2009	462935
75	EGL9																		0		1	75	1	EGL9	R	BC	8		35	NT/BF	8/16/2009	458581
75	EGL9																0		0		2	75	1	EGL9	R	BC	8		35	NT/BF	8/16/2009	458581
75	EGL9																0		0		3	75	1	EGL9	R	BC	8		35	NT/BF	8/16/2009	458581
80	EGL10																0		0		1	80	1	EGL10	R	BC	8		10	MT/BF	8/16/2009	458651
80	EGL10																0		0		2	80	1	EGL10	R	BC	8		10	MT/BF	8/16/2009	458651
80	EGL10																0		1	EGL10 MT 2	3	80	1	EGL10	R	BC	8		10	MT/BF	8/16/2009	458651
80	EGL10																0		0		4	80	1	EGL10	R	BC	8		10	MT/BF	8/16/2009	458651
83	EGL11																0		0		1	83	1	EGL11	R	BC	8		18	MT/BF	8/16/2009	458848
83	EGL11																0		0		2	83	1	EGL11	R	BC	8		18	MT/BF	8/16/2009	458848
83	EGL11																0		0		3	83	1	EGL11	R	BC	8		18	MT/BF	8/16/2009	458848

SiteID	SiteNo	rootssl	rootss code2	Carb Code	Mot Color	MotA Code	motal	mota code2	Mot Con Code	motconl	motcon code2	MotS Code	motsl	mots code2	HB Dist Code	HB Form Code	pH	Salt Code	Sam Col	sam Label	Display Order	Site ID2	Project ID	Site No3	Survey Type	Province	Zone	Soil Corr Area	Slope %	Surveyors	Survey Date	Easting
89	EGR110																0		0		1	89	1	EGR110	D	BC	8		26	MT/BF	8/13/2009	463495
89	EGR110																0		1	EGR110 MT 1	2	89	1	EGR110	D	BC	8		26	MT/BF	8/13/2009	463495
89	EGR110																0		1	EGR110 MT 2	3	89	1	EGR110	D	BC	8		26	MT/BF	8/13/2009	463495
97	EGR415																0		0		1	97	1	EGR415	R	BC	8		1	MT/BF	8/16/2009	449778
99	EGR416																0		0		1	99	1	EGR416	R	BC	8		1	MT/BF	8/16/2009	450943
99	EGR416																0		0		2	99	1	EGR416	R	BC	8		1	MT/BF	8/16/2009	450943
99	EGR416																0		0		3	99	1	EGR416	R	BC	8		1	MT/BF	8/16/2009	450943
99	EGR416																0		0		4	99	1	EGR416	R	BC	8		1	MT/BF	8/16/2009	450943
108	EGR411																0		0		1	108	1	EGR411	R	BC	8		22	MT/BF	8/15/2009	453232
108	EGR411																0		0		2	108	1	EGR411	R	BC	8		22	MT/BF	8/15/2009	453232
108	EGR411					F						C					0		0		3	108	1	EGR411	R	BC	8		22	MT/BF	8/15/2009	453232
111	EGR409																0		0		1	111	1	EGR409	R	BC	8		2	MT/BF	8/15/2009	451814
111	EGR409																0		0		2	111	1	EGR409	R	BC	8		2	MT/BF	8/15/2009	451814
111	EGR409																0		0		3	111	1	EGR409	R	BC	8		2	MT/BF	8/15/2009	451814
117	EGL66																0		0		1	117	1	EGL66	R	BC	8		35	MT/BF	8/14/2009	459974
117	EGL66																0		0		2	117	1	EGL66	R	BC	8		35	MT/BF	8/14/2009	459974
117	EGL66																0		0		3	117	1	EGL66	R	BC	8		35	MT/BF	8/14/2009	459974

SiteID	SiteNo	rootssl	rootss code2	Carb Code	Mot Color	MotA Code	motal	mota code2	Mot Con Code	motconl	motcon code2	MotS Code	motsl	mots code2	HBDist Code	HB Form Code	pH	Salt Code	Sam Col	sam Label	Display Order	Site ID2	Project ID	Site No3	Survey Type	Province	Zone	Soil Corr Area	Slope %	Surveyors	Survey Date	Easting
118	EGR303																0		0		1	118	1	EGR303	D	BC	8		10	MT/BF	8/12/2009	455171
118	EGR303																0		0		2	118	1	EGR303	D	BC	8		10	MT/BF	8/12/2009	455171
118	EGR303																0		0		3	118	1	EGR303	D	BC	8		10	MT/BF	8/12/2009	455171
118	EGR303																0		0		4	118	1	EGR303	D	BC	8		10	MT/BF	8/12/2009	455171
119	EGL310																0		0		1	119	1	EGL310	R	BC	8		50	MT/BF	8/14/2009	459640
119	EGL310																0		0		2	119	1	EGL310	R	BC	8		50	MT/BF	8/14/2009	459640
119	EGL310																0		0		3	119	1	EGL310	R	BC	8		50	MT/BF	8/14/2009	459640
120	EGL311																0		0		1	120	1	EGL311	V	BC	8		25	MT/BF	8/14/2009	459660
120	EGL311																0		0		2	120	1	EGL311	V	BC	8		25	MT/BF	8/14/2009	459660
120	EGL311																0		0		3	120	1	EGL311	V	BC	8		25	MT/BF	8/14/2009	459660
123	EGL47																0		0		1	123	1	EGL47	R	BC	8		25	MT/BF	8/14/2009	460009
123	EGL47																0		0		2	123	1	EGL47	R	BC	8		25	MT/BF	8/14/2009	460009
123	EGL47																0		0		3	123	1	EGL47	R	BC	8		25	MT/BF	8/14/2009	460009
124	EGL1																0		0		1	124	1	EGL1	D	BC	8		30	MT/BF	8/14/2008	460221
124	EGL1																0		0		2	124	1	EGL1	D	BC	8		30	MT/BF	8/14/2008	460221
124	EGL1																0		1	EGL1 MT 2	3	124	1	EGL1	D	BC	8		30	MT/BF	8/14/2008	460221
124	EGL1																0		1	EGL1 MT 3	4	124	1	EGL1	D	BC	8		30	MT/BF	8/14/2008	460221

SiteID	SiteNo	rootssl	rootss code2	Carb Code	Mot Color	MotA Code	motal	mota code2	Mot Con Code	motconl	motcon code2	MotS Code	motsl	mots code2	HBDist Code	HB Form Code	pH	Salt Code	Sam Col	sam Label	Display Order	Site ID2	Project ID	Site No3	Survey Type	Province	Zone	Soil Corr Area	Slope %	Surveyors	Survey Date	Easting
125	EGL313																0		0		1	125	1	EGL313	R	BC		35	MT/BF	8/14/2008	459524	
125	EGL313																0		0		2	125	1	EGL313	R	BC		35	MT/BF	8/14/2008	459524	
125	EGL313																0		0		3	125	1	EGL313	R	BC		35	MT/BF	8/14/2008	459524	
126	EGR400																0		0		1	126	1	EGR400	R	BC	8	3	MT/BF	8/15/2008	449319	
126	EGR400																0		0		2	126	1	EGR400	R	BC	8	3	MT/BF	8/15/2008	449319	
126	EGR400					A						M					0		0		3	126	1	EGR400	R	BC	8	3	MT/BF	8/15/2008	449319	
129	EGR401																0		0		1	129	1	EGR401	R	BC	8	2	MT/BF	8/15/2008	448898	
129	EGR401																0		0		2	129	1	EGR401	R	BC	8	2	MT/BF	8/15/2008	448898	

SiteID	SiteNo	rootssl	rootss code2	Carb Code	Mot Color	MotA Code	motal	mota code2	Mot Con Code	motconl	motcon code2	MotS Code	motsl	mots code2	HBDist Code	HB Form Code	pH	Salt Code	Sam Col	sam Label	Display Order	Site ID2	Project ID	Site No3	Survey Type	Province	Zone	Soil Corr Area	Slope %	Surveyors	Survey Date	Easting
129	EGR401																0		0		3	129	1	EGR401	R	BC	8		2	MT/BF	8/15/2008	448898
129	EGR401																0		0		4	129	1	EGR401	R	BC	8		2	MT/BF	8/15/2008	448898
133	EGR406																0		0		1	133	1	EGR406	R	BC	8		10	MT/BF	8/15/2008	449694
133	EGR406																0		0		2	133	1	EGR406	R	BC	8		10	MT/BF	8/15/2008	449694
133	EGR406					F						F					0		0		3	133	1	EGR406	R	BC	8		10	MT/BF	8/15/2008	449694
134	EGR404																0		0		1	134	1	EGR404	R	BC	8		0	MT/BF	8/15/2009	449171
135	EGR403																		0		1	135	1	EGR403	R	BC	8		50	MT/BF	8/15/2009	449007
135	EGR403																		0		2	135	1	EGR403	R	BC	8		50	MT/BF	8/15/2009	449007
135	EGR403																		0		3	135	1	EGR403	R	BC	8		50	MT/BF	8/15/2009	449007
136	EGR407																0		0		1	136	1	EGR407	R	BC	8		45	MT/BF	8/15/2008	450348

SiteID	SiteNo	rootssl	Carb	Mot	MotA	mota	Mot	motconl	motcon	MotS	motsl	mots	HBDist	HB	Salt	Sam	Sam	Label	Display	Site	Project	Survey	Province	Zone	Soil Corr	Slope	Surveyors	Survey	Easting
code2	Code	Code	Code	Code	code2	Code	code2	Code	code2	Code	code2	Code	Code	pH	Code	Col		Order	ID2	ID	Site No3	Type		Area	%		Date		
136	EGR407													0	0			2	136	1	EGR407	R	BC	8	45	MT/BF	8/15/2008	450348	
139	EGR413													0	0			1	139	1	EGR413	R	BC	8	3	MT/BF	8/15/2008	457840	
139	EGR413													0	0			2	139	1	EGR413	R	BC	8	3	MT/BF	8/15/2008	457840	
139	EGR413													0	0			3	139	1	EGR413	R	BC	8	3	MT/BF	8/15/2008	457840	
141	EGL21													0	0			1	141	1	EGL21	D	BC	8	14	MT/BF/NT/S	8/11/2009	462896	
141	EGL21													0	0			2	141	1	EGL21	D	BC	8	14	MT/BF/NT/S	8/11/2009	462896	
141	EGL21													6	0			3	141	1	EGL21	D	BC	8	14	MT/BF/NT/S	8/11/2009	462896	
141	EGL21													6.5	0			4	141	1	EGL21	D	BC	8	14	MT/BF/NT/S	8/11/2009	462896	
141	EGL21													0	1	EGL21 NT 4		5	141	1	EGL21	D	BC	8	14	MT/BF/NT/S	8/11/2009	462896	
144	TPA1													0	0			1	144	1	TPA1	R	BC	8	9	Straker	7/18/2009	459464	

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144	TPA1																		1	TP20 BM1	2	144	1	TPA1	R	BC	8		9	Straker	7/18/2009	459464
144	TPA1																0		1	TP20 BM2	3	144	1	TPA1	R	BC	8		9	Straker	7/18/2009	459464
145	TPA3																		0		1	145	1	TPA3	R	BC	8		7	Straker	7/19/2009	458474
145	TPA3																		1	TPA3 BM1	2	145	1	TPA3	R	BC	8		7	Straker	7/19/2009	458474
145	TPA3																		0		3	145	1	TPA3	R	BC	8		7	Straker	7/19/2009	458474
145	TPA3																		1	TPA3 Bm2	4	145	1	TPA3	R	BC	8		7	Straker	7/19/2009	458474
146	TPA4																0		0		1	146	1	TPA4	R	BC	8		20	Straker	7/19/2009	458978
146	TPA4																0		0		2	146	1	TPA4	R	BC	8		20	Straker	7/19/2009	458978

SiteID	SiteNo	rootssl	rootss code2	Carb Code	Mot Color	MotA Code	motal	mota code2	Mot Con Code	motconl	motcon code2	MotS Code	motsl	mots code2	HBDist Code	HB Form Code	pH	Salt Code	Sam Col	Sam Label	Display Order	Site ID2	Project ID	Site No3	Survey Type	Province	Zone	Soil Corr Area	Slope %	Surveyors	Survey Date	Easting
146	TPA4																		0		3	146	1	TPA4	R	BC	8		20	Straker	7/19/2009	458978
146	TPA4																		1	BM1	4	146	1	TPA4	R	BC	8		20	Straker	7/19/2009	458978
146	TPA4																		0		5	146	1	TPA4	R	BC	8		20	Straker	7/19/2009	458978
146	TPA4																		1	Bm2	6	146	1	TPA4	R	BC	8		20	Straker	7/19/2009	458978
147	EGR451																0	0			1	147	1	EGR451	Q	BC	8		5	JS/NT	9/16/2009	452180
147	EGR451																0	0			2	147	1	EGR451	Q	BC	8		5	JS/NT	9/16/2009	452180
147	EGR451																0	0			3	147	1	EGR451	Q	BC	8		5	JS/NT	9/16/2009	452180
148	EGR450																6.3	0			1	148	1	EGR450	Q	BC	8			JS/NT	9/16/2009	449630
148	EGR450																	0			2	148	1	EGR450	Q	BC	8			JS/NT	9/16/2009	449630
148	EGR450																	0			3	148	1	EGR450	Q	BC	8			JS/NT	9/16/2009	449630

SiteID	SiteNo	Northing	Elevation	Surface Expressi on	Surf.Stone	Slope Position (site)	Slope Position (PEL)	Landscape Slope	Camera ID	Pit Site	Slope Length	Horizon Curvature	Vertical Curvature	Land Use	Erosion	Erosion Severity	% Bare Ground	Seepage Depth Flag	Seepage Depth	Permafrost Depth Flag	Permafrost Depth
4	EGL63	7100415	933		<0.01%	U		30 - 45%			100-500	LN	CV	Fo				0		0	
4	EGL63	7100415	933		<0.01%	U		30 - 45%			100-500	LN	CV	Fo				0		0	
4	EGL63	7100415	933		<0.01%	U		30 - 45%			100-500	LN	CV	Fo				0		0	
4	EGL63	7100415	933		<0.01%	U		30 - 45%			100-500	LN	CV	Fo				0		0	
4	EGL63	7100415	933		<0.01%	U		30 - 45%			100-500	LN	CV	Fo				0		0	
5	EGL216	7101004	811			T		30 - 45%			50-100	LN	LV	Fo	W	moderate		0		0	
5	EGL216	7101004	811			T		30 - 45%			50-100	LN	LV	Fo	W	moderate		0		0	
5	EGL216	7101004	811			T		30 - 45%			50-100	LN	LV	Fo	W	moderate		0		0	
6	EGR94	7103626	1147		0.1 - 3%	M		45-70%				LN	LN	Fo	W	moderate		0	13	0	
6	EGR94	7103626	1147		0.1 - 3%	M		45-70%				LN	LN	Fo	W	moderate		0	13	0	
7	EGR93	7103852	1096		15 - 50%	M		45-70%			100-500	LN	LN	Fo				0		0	
7	EGR93	7103852	1096		15 - 50%	M		45-70%			100-500	LN	LN	Fo				0		0	
7	EGR93	7103852	1096		15 - 50%	M		45-70%			100-500	LN	LN	Fo				0		0	
8	EGR92	7103994	1028		<0.01%	L		15 - 30%			100-500	CC	LN	Fo	W	moderate		0	22	0	60
8	EGR92	7103994	1028		<0.01%	L		15 - 30%			100-500	CC	LN	Fo	W	moderate		0	22	0	60

SiteID	SiteNo	Northing	Elevation	Surface Expressi on	Surf.Stone	Slope Position (site)	Slope Position (PEL)	Landscape Slope	Camera ID	Pit	Site	Slope Length	Horizon Curvature	Vertical Curvature	Land Use	Erosion	Erosion Severity	% Bare Ground	Seepage Depth Flag	Seepage Depth	Permafrost Depth Flag	Permafrost Depth
8	EGR92	7103994	1028		<0.01%	L		15 - 30%				100-500	CC	LN	Fo	W	moderate		0	22	0	60
10	EGL8	7101065	846		0.01 - 0.1%	L		9 -15%							Fo				0		0	
10	EGL8	7101065	846		0.01 - 0.1%	L		9 -15%							Fo				0		0	
10	EGL8	7101065	846		0.01 - 0.1%	L		9 -15%							Fo				0		0	
10	EGL8	7101065	846		0.01 - 0.1%	L		9 -15%							Fo				0		0	
11	EGL6	7100898	831					9 -15%							DL	W	moderate		0		0	
12	EGL41	7100924	925		<0.01%	L							LN	LV	Fo				0	19	0	100
12	EGL41	7100924	925		<0.01%	L							LN	LV	Fo				0	19	0	100
12	EGL41	7100924	925		<0.01%	L							LN	LV	Fo				0	19	0	100
13	EGL200	7101102	0		<0.01%	M		5 - 9%				100-500	LN	LN	SA	W	slight		0		0	
13	EGL200	7101102	0		<0.01%	M		5 - 9%				100-500	LN	LN	SA	W	slight		0		0	
13	EGL200	7101102	0		<0.01%	M		5 - 9%				100-500	LN	LN	SA	W	slight		0		0	
13	EGL200	7101102	0		<0.01%	M		5 - 9%				100-500	LN	LN	SA	W	slight		0		0	
13	EGL200	7101102	0		<0.01%	M		5 - 9%				100-500	LN	LN	SA	W	slight		0		0	
14	EGR96	7104258	981		<0.01%							100-500	CC	LN	Fo				1	10	1	30

SiteID	SiteNo	Northing	Elevation	Surface Expressi on	Surf.Stone	Slope Position (site)	Slope Position (PEL)	Landscape Slope	Camera ID	Pit Site	Slope Length	Horizon Curvature	Vertical Curvature	Land Use	Erosion	Erosion Severity	% Bare Ground	Seepage Depth Flag	Seepage Depth	Permafrost Depth Flag	Permafrost Depth
14	EGR96	7104258	981		<0.01%						100-500	CC	LN	Fo				1	10	1	30
14	EGR96	7104258	981		<0.01%						100-500	CC	LN	Fo				1	10	1	30
15	EGL16	7102169	1316		15 - 50%	M		9 -15%			100-500	LN	LN	SA	W	slight		0		0	
15	EGL16	7102169	1316		15 - 50%	M		9 -15%			100-500	LN	LN	SA	W	slight		0		0	
15	EGL16	7102169	1316		15 - 50%	M		9 -15%			100-500	LN	LN	SA	W	slight		0		0	
15	EGL16	7102169	1316		15 - 50%	M		9 -15%			100-500	LN	LN	SA	W	slight		0		0	
16	EGR91	7104425	944			L		15 - 30%				CV	LN	Fo	W	moderate		1		0	
16	EGR91	7104425	944			L		15 - 30%				CV	LN	Fo	W	moderate		1		0	
16	EGR91	7104425	944			L		15 - 30%				CV	LN	Fo	W	moderate		1		0	
16	EGR91	7104425	944			L		15 - 30%				CV	LN	Fo	W	moderate		1		0	
16	EGR91	7104425	944			L		15 - 30%				CV	LN	Fo	W	moderate		1		0	
19	EGL15	7102030	0		3 - 15%	M		15 - 30%			100-500	LN	LN	Fo	W	moderate		0		0	
19	EGL15	7102030	0		3 - 15%	M		15 - 30%			100-500	LN	LN	Fo	W	moderate		0		0	
19	EGL15	7102030	0		3 - 15%	M		15 - 30%			100-500	LN	LN	Fo	W	moderate		0		0	
19	EGL15	7102030	0		3 - 15%	M		15 - 30%			100-500	LN	LN	Fo	W	moderate		0		0	
19	EGL15	7102030	0		3 - 15%	M		15 - 30%			100-500	LN	LN	Fo	W	moderate		0		0	
20	EGL17	7101937	1329		3 - 15%	L		15 - 30%			25-50	LN	CN	Fo	W	slight		0		0	
20	EGL17	7101937	1329		3 - 15%	L		15 - 30%			25-50	LN	CN	Fo	W	slight		0		0	

SiteID	SiteNo	Northing	Elevation	Surface Expressi on	Surf.Stone	Slope Position (site)	Slope Position (PEL)	Landscape Slope	Camera ID	Pit Site	Slope Length	Horizon Curvature	Vertical Curvature	Land Use	Erosion	Erosion Severity	% Bare Ground	Seepage Depth Flag	Seepage Depth	Permafrost Depth Flag	Permafrost Depth
20	EGL17	7101937	1329		3 - 15%	L		15 - 30%			25-50	LN	CN	Fo	W	slight		0		0	
21	EGL39	7101483	0		0.1 - 3%	U		45-70%				LN	LV	Fo				0		0	
21	EGL39	7101483	0		0.1 - 3%	U		45-70%				LN	LV	Fo				0		0	
21	EGL39	7101483	0		0.1 - 3%	U		45-70%				LN	LV	Fo				0		0	
21	EGL39	7101483	0		0.1 - 3%	U		45-70%				LN	LV	Fo				0		0	
21	EGL39	7101483	0		0.1 - 3%	U		45-70%				LN	LV	Fo				0		0	
22	EGL38	7101575	954		<0.01%	M		15 - 30%			50-100	LN	LN	Fo	W	slight		0		0	
22	EGL38	7101575	954		<0.01%	M		15 - 30%			50-100	LN	LN	Fo	W	slight		0		0	
22	EGL38	7101575	954		<0.01%	M		15 - 30%			50-100	LN	LN	Fo	W	slight		0		0	
22	EGL38	7101575	954		<0.01%	M		15 - 30%			50-100	LN	LN	Fo	W	slight		0		0	
22	EGL38	7101575	954		<0.01%	M		15 - 30%			50-100	LN	LN	Fo	W	slight		0		0	
23	EGL37	7101841	989		0.01 - 0.1%	M		15 - 30%			100-500	LN	LN	Fo				0		0	
23	EGL37	7101841	989		0.01 - 0.1%	M		15 - 30%			100-500	LN	LN	Fo				0		0	
23	EGL37	7101841	989		0.01 - 0.1%	M		15 - 30%			100-500	LN	LN	Fo				0		0	
23	EGL37	7101841	989		0.01 - 0.1%	M		15 - 30%			100-500	LN	LN	Fo				0		0	

SiteID	SiteNo	Northing	Elevation	Surface Expressi on	Surf.Stone	Slope Position (site)	Slope Position (PEL)	Landscape Slope	Camera ID	Pit Site	Slope Length	Horizon Curvature	Vertical Curvature	Land Use	Erosion	Erosion Severity	% Bare Ground	Seepage Depth Flag	Seepage Depth	Permafrost Depth Flag	Permafrost Depth
23	EGL37	7101841	989		0.01 - 0.1%	M		15 - 30%			100-500	LN	LN	Fo				0		0	
24	EGL36	7102176	1053		<0.01%	M		9 - 15%			100-500	LN	LN	Fo				0		0	
24	EGL36	7102176	1053		<0.01%	M		9 - 15%			100-500	LN	LN	Fo				0		0	
24	EGL36	7102176	1053		<0.01%	M		9 - 15%			100-500	LN	LN	Fo				0		0	
24	EGL36	7102176	1053		<0.01%	M		9 - 15%			100-500	LN	LN	Fo				0		0	
25	EGL207	7101635	1013		15 - 50%							LN	LN	Fo	W	moderate		0		0	
25	EGL207	7101635	1013		15 - 50%							LN	LN	Fo	W	moderate		0		0	
25	EGL207	7101635	1013		15 - 50%							LN	LN	Fo	W	moderate		0		0	
26	EGL18	7101529	1356		0.1 - 3%	M		15 - 30%			50-100	LN	LN	Fo	W	slight		0		0	
26	EGL18	7101529	1356		0.1 - 3%	M		15 - 30%			50-100	LN	LN	Fo	W	slight		0		0	
26	EGL18	7101529	1356		0.1 - 3%	M		15 - 30%			50-100	LN	LN	Fo	W	slight		0		0	
26	EGL18	7101529	1356		0.1 - 3%	M		15 - 30%			50-100	LN	LN	Fo	W	slight		0		0	
27	EGL33	7102357	1062			U		5 - 9%			50-100	LN	LV					0		0	

SiteID	SiteNo	Northing	Elevation	Surface Expressi on	Surf.Stone	Slope Position (site)	Slope Position (PEL)	Landscape Slope	Camera ID	Pit Site	Slope Length	Horizon Curvature	Vertical Curvature	Land Use	Erosion	Erosion Severity	% Bare Ground	Seepage Depth Flag	Seepage Depth	Permafrost Depth Flag	Permafrost Depth
27	EGL33	7102357	1062			U		5 - 9%			50-100	LN	LV					0		0	
27	EGL33	7102357	1062			U		5 - 9%			50-100	LN	LV					0		0	
27	EGL33	7102357	1062			U		5 - 9%			50-100	LN	LV					0		0	
28	EGL19	7101394	1351		0.01 - 0.1%	T		15 - 30%			50-100			Sc	W	slight		0	37	0	
28	EGL19	7101394	1351		0.01 - 0.1%	T		15 - 30%			50-100			Sc	W	slight		0	37	0	
28	EGL19	7101394	1351		0.01 - 0.1%	T		15 - 30%			50-100			Sc	W	slight		0	37	0	
28	EGL19	7101394	1351		0.01 - 0.1%	T		15 - 30%			50-100			Sc	W	slight		0	37	0	
28	EGL19	7101394	1351		0.01 - 0.1%	T		15 - 30%			50-100			Sc	W	slight		0	37	0	
29	EGL20	7101354	1352		3 - 15%	M		15 - 30%			50-100	LN	LN					0		0	
29	EGL20	7101354	1352		3 - 15%	M		15 - 30%			50-100	LN	LN					0		0	
29	EGL20	7101354	1352		3 - 15%	M		15 - 30%			50-100	LN	LN					0		0	
29	EGL20	7101354	1352		3 - 15%	M		15 - 30%			50-100	LN	LN					0		0	
29	EGL20	7101354	1352		3 - 15%	M		15 - 30%			50-100	LN	LN					0		0	
30	EGL201	7100733	1433		15 - 50%	U		15 - 30%			50-100	LN	LV	SA				0		0	
30	EGL201	7100733	1433		15 - 50%	U		15 - 30%			50-100	LN	LV	SA				0		0	

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30	EGL201	7100733	1433		15 - 50%	U		15 - 30%			50-100	LN	LV	SA				0		0	
30	EGL201	7100733	1433		15 - 50%	U		15 - 30%			50-100	LN	LV	SA				0		0	
31	EGL5	7100757	1411		15 - 50%	L		9 - 15%			100-500	LN	LN	Sc				0		0	
31	EGL5	7100757	1411		15 - 50%	L		9 - 15%			100-500	LN	LN	Sc				0		0	
31	EGL5	7100757	1411		15 - 50%	L		9 - 15%			100-500	LN	LN	Sc				0		0	
31	EGL5	7100757	1411		15 - 50%	L		9 - 15%			100-500	LN	LN	Sc				0		0	
32	EGL202	7100736	1405		3 - 15%	L		5 - 9%				LN	LN	Sc				0		0	
32	EGL202	7100736	1405		3 - 15%	L		5 - 9%				LN	LN	Sc				0		0	
32	EGL202	7100736	1405		3 - 15%	L		5 - 9%				LN	LN	Sc				0		0	
32	EGL202	7100736	1405		3 - 15%	L		5 - 9%				LN	LN	Sc				0		0	
33	EGL203	7100758	1402			L					50-100	LN	LN	DL				0		0	
33	EGL203	7100758	1402			L					50-100	LN	LN	DL				0		0	
34	EGL58	7101002	1363		3 - 15%	D		2 - 5%			50-100	CN	CN	Wt	W	slight		0	10	0	
34	EGL58	7101002	1363		3 - 15%	D		2 - 5%			50-100	CN	CN	Wt	W	slight		0	10	0	

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34	EGL58	7101002	1363		3 - 15%	D		2 - 5%			50-100	CN	CN	Wt	W	slight		0	10		0
34	EGL58	7101002	1363		3 - 15%	D		2 - 5%			50-100	CN	CN	Wt	W	slight		0	10		0
35	EGL52	7100049	1359		3 - 15%	U		9 -15%			25-50	CV	LN	DL	W	slight		0			0
35	EGL52	7100049	1359		3 - 15%	U		9 -15%			25-50	CV	LN	DL	W	slight		0			0
35	EGL52	7100049	1359		3 - 15%	U		9 -15%			25-50	CV	LN	DL	W	slight		0			0
35	EGL52	7100049	1359		3 - 15%	U		9 -15%			25-50	CV	LN	DL	W	slight		0			0
35	EGL52	7100049	1359		3 - 15%	U		9 -15%			25-50	CV	LN	DL	W	slight		0			0
36	EGL53	7100227	1356		3 - 15%	U		9 -15%			100-500	CV	LN	Sc	W	slight		0			0
36	EGL53	7100227	1356		3 - 15%	U		9 -15%			100-500	CV	LN	Sc	W	slight		0			0
36	EGL53	7100227	1356		3 - 15%	U		9 -15%			100-500	CV	LN	Sc	W	slight		0			0
36	EGL53	7100227	1356		3 - 15%	U		9 -15%			100-500	CV	LN	Sc	W	slight		0			0
37	EGL3	7100241	1333		3 - 15%	U		15 - 30%			25-50	CV	LN	Fo	W	slight		0			0

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37	EGL3	7100241	1333		3 - 15%	U		15 - 30%				25-50	CV	LN	Fo	W	slight		0		0	
37	EGL3	7100241	1333		3 - 15%	U		15 - 30%				25-50	CV	LN	Fo	W	slight		0		0	
37	EGL3	7100241	1333		3 - 15%	U		15 - 30%				25-50	CV	LN	Fo	W	slight		0		0	
37	EGL3	7100241	1333		3 - 15%	U		15 - 30%				25-50	CV	LN	Fo	W	slight		0		0	
38	EGL204	7100218	1310		3 - 15%	M		45-70%				50-100	LN	LN	Fo	W	moderate		0		0	
38	EGL204	7100218	1310		3 - 15%	M		45-70%				50-100	LN	LN	Fo	W	moderate		0		0	
38	EGL204	7100218	1310		3 - 15%	M		45-70%				50-100	LN	LN	Fo	W	moderate		0		0	
38	EGL204	7100218	1310		3 - 15%	M		45-70%				50-100	LN	LN	Fo	W	moderate		0		0	
39	EGL4	7100234	1261		3 - 15%	L		15 - 30%				50-100			Fo	W	slight		0		0	
39	EGL4	7100234	1261		3 - 15%	L		15 - 30%				50-100			Fo	W	slight		0		0	
39	EGL4	7100234	1261		3 - 15%	L		15 - 30%				50-100			Fo	W	slight		0		0	
39	EGL4	7100234	1261		3 - 15%	L		15 - 30%				50-100			Fo	W	slight		0		0	

SiteID	SiteNo	Northing	Elevation	Surface Expressi on	Surf.Stone	Slope Position (site)	Slope Position (PEL)	Landscape Slope	Camera ID	Pit Site	Slope Length	Horizon Curvature	Vertical Curvature	Land Use	Erosion	Erosion Severity	% Bare Ground	Seepage Depth Flag	Seepage Depth	Permafrost Depth Flag	Permafrost Depth
40	EGL205	7100251	1261		3 - 15%	T		15 - 30%			100-500	LN	CN	Fo	W	severe		0	60	0	
40	EGL205	7100251	1261		3 - 15%	T		15 - 30%			100-500	LN	CN	Fo	W	severe		0	60	0	
40	EGL205	7100251	1261		3 - 15%	T		15 - 30%			100-500	LN	CN	Fo	W	severe		0	60	0	
40	EGL205	7100251	1261		3 - 15%	T		15 - 30%			100-500	LN	CN	Fo	W	severe		0	60	0	
41	EGL60	7099510	1389		15 - 50%	U		30 - 45%			100-500	LN	LV	Sc				0		0	
41	EGL60	7099510	1389		15 - 50%	U		30 - 45%			100-500	LN	LV	Sc				0		0	
41	EGL60	7099510	1389		15 - 50%	U		30 - 45%			100-500	LN	LV	Sc				0		0	
42	EGL61	7099307	1403		15 - 50%	U		30 - 45%			100-500	CV	LN	Sc	W	moderate		0		0	
42	EGL61	7099307	1403		15 - 50%	U		30 - 45%			100-500	CV	LN	Sc	W	moderate		0		0	
42	EGL61	7099307	1403		15 - 50%	U		30 - 45%			100-500	CV	LN	Sc	W	moderate		0		0	
42	EGL61	7099307	1403		15 - 50%	U		30 - 45%			100-500	CV	LN	Sc	W	moderate		0		0	
43	EGL68	7099284	1329		3 - 15%	M		15 - 30%			100-500	LN	LN	Fo	W	slight		0		0	
43	EGL68	7099284	1329		3 - 15%	M		15 - 30%			100-500	LN	LN	Fo	W	slight		0		0	
43	EGL68	7099284	1329		3 - 15%	M		15 - 30%			100-500	LN	LN	Fo	W	slight		0		0	
43	EGL68	7099284	1329		3 - 15%	M		15 - 30%			100-500	LN	LN	Fo	W	slight		0		0	

SiteID	SiteNo	Northing	Elevation	Surface Expressi on	Surf.Stone	Slope Position (site)	Slope Position (PEL)	Landscape Slope	Camera ID	Pit	Site	Slope Length	Horizon Curvature	Vertical Curvature	Land Use	Erosion	Erosion Severity	% Bare Ground	Seepage Depth Flag	Seepage Depth	Permafrost Depth Flag	Permafrost Depth
44	EGL206	7102837	1361		15 - 50%	C		2 - 5%				25-50	CV	LV	Sc				0		0	
44	EGL206	7102837	1361		15 - 50%	C		2 - 5%				25-50	CV	LV	Sc				0		0	
45	EGR206	7102926	1337		15 - 50%	U		45-70%				50-100			Al	W	moderate		0		0	
45	EGR206	7102926	1337		15 - 50%	U		45-70%				50-100			Al	W	moderate		0		0	
46	EGR97	7103063	1281		0.1 - 3%	T		9 -15%				50-100	CN	LN	Fo	W	moderate		1	43	1	200
46	EGR97	7103063	1281		0.1 - 3%	T		9 -15%				50-100	CN	LN	Fo	W	moderate		1	43	1	200
46	EGR97	7103063	1281		0.1 - 3%	T		9 -15%				50-100	CN	LN	Fo	W	moderate		1	43	1	200
46	EGR97	7103063	1281		0.1 - 3%	T		9 -15%				50-100	CN	LN	Fo	W	moderate		1	43	1	200
46	EGR97	7103063	1281		0.1 - 3%	T		9 -15%				50-100	CN	LN	Fo	W	moderate		1	43	1	200
47	EGR95	7103396	1215		3 - 15%	M		30 - 45%				100-500	LN	LN	Fo	W	slight		0		0	
47	EGR95	7103396	1215		3 - 15%	M		30 - 45%				100-500	LN	LN	Fo	W	slight		0		0	
48	EGR80	7103398	1213		0.1 - 3%	M		45-70%				50-100	LN	LN	Fo	W	slight		0		0	
48	EGR80	7103398	1213		0.1 - 3%	M		45-70%				50-100	LN	LN	Fo	W	slight		0		0	
48	EGR80	7103398	1213		0.1 - 3%	M		45-70%				50-100	LN	LN	Fo	W	slight		0		0	
49	EGL27	7101566	965		>50%	L		5 - 9%				>1000	LN	LN	Rp				1	0	0	

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49	EGL27	7101566	965		>50%	L		5 - 9%			>1000	LN	LN	Rp				1	0	0	
50	EGL12	7099705	828		0.1 - 3%							CN	CN	Rp				1	45	0	
50	EGL12	7099705	828		0.1 - 3%							CN	CN	Rp				1	45	0	
50	EGL12	7099705	828		0.1 - 3%							CN	CN	Rp				1	45	0	
50	EGL12	7099705	828		0.1 - 3%							CN	CN	Rp				1	45	0	
50	EGL12	7099705	828		0.1 - 3%							CN	CN	Rp				1	45	0	
51	EGL215	7099518				M		30 - 45%				LN	LV	Fo				0		1	200
51	EGL215	7099518				M		30 - 45%				LN	LV	Fo				0		1	200
51	EGL215	7099518				M		30 - 45%				LN	LV	Fo				0		1	200
52	EGL22	7101585	1075		0.1 - 3%	L		9 -15%			>1000	LN	LN	Rp	W	moderate		0		0	
52	EGL22	7101585	1075		0.1 - 3%	L		9 -15%			>1000	LN	LN	Rp	W	moderate		0		0	
52	EGL22	7101585	1075		0.1 - 3%	L		9 -15%			>1000	LN	LN	Rp	W	moderate		0		0	
52	EGL22	7101585	1075		0.1 - 3%	L		9 -15%			>1000	LN	LN	Rp	W	moderate		0		0	
52	EGL22	7101585	1075		0.1 - 3%	L		9 -15%			>1000	LN	LN	Rp	W	moderate		0		0	

SiteID	SiteNo	Northing	Elevation	Surface Expressi on	Surf.Stone	Slope Position (site)	Slope Position (PEL)	Landscape Slope	Camera ID	Pit	Site	Slope Length	Horizon Curvature	Vertical Curvature	Land Use	Erosion	Erosion Severity	% Bare Ground	Seepage Depth	Seepage Flag	Permafrost Depth	Permafrost Flag	Permafrost Depth
54	EGL26	7101728	1109		0.1 - 3%	M		30 - 45%				100-500	CN	LN	Fo	W	moderate		0		1		31
54	EGL26	7101728	1109		0.1 - 3%	M		30 - 45%				100-500	CN	LN	Fo	W	moderate		0		1		31
54	EGL26	7101728	1109		0.1 - 3%	M		30 - 45%				100-500	CN	LN	Fo	W	moderate		0		1		31
56	EGL25	7101717	1140		0.1 - 3%	M		30 - 45%				100-500	LN	LV	Fo				0		0		0
56	EGL25	7101717	1140		0.1 - 3%	M		30 - 45%				100-500	LN	LV	Fo				0		0		0
56	EGL25	7101717	1140		0.1 - 3%	M		30 - 45%				100-500	LN	LV	Fo				0		0		0
56	EGL25	7101717	1140		0.1 - 3%	M		30 - 45%				100-500	LN	LV	Fo				0		0		0
57	EGL210	7101144	1192			U									Fo				0		0		0
57	EGL210	7101144	1192			U									Fo				0		0		0
57	EGL210	7101144	1192			U									Fo				0		0		0
57	EGL210	7101144	1192			U									Fo				0		0		0
57	EGL210	7101144	1192			U									Fo				0		0		0
58	EGL208	7101557	1153		0.01 - 0.1%								LN	LV	Sc	W	slight		0		0		0
58	EGL208	7101557	1153		0.01 - 0.1%								LN	LV	Sc	W	slight		0		0		0

SiteID	SiteNo	Northing	Elevation	Surface Expressi on	Surf.Stone	Slope Position (site)	Slope Position (PEL)	Landscape Slope	Camera ID	Pit	Site	Slope Length	Horizon Curvature	Vertical Curvature	Land Use	Erosion	Erosion Severity	% Bare Ground	Seepage Depth Flag	Seepage Depth	Permafrost Depth Flag	Permafrost Depth
58	EGL208	7101557	1153		0.01 - 0.1%								LN	LV	Sc	W	slight		0		0	
58	EGL208	7101557	1153		0.01 - 0.1%								LN	LV	Sc	W	slight		0		0	
59	EGL209	7101385	1160		0.1 - 3%	M		30 - 45%					LN	LN	Fo	W	slight		0		0	
59	EGL209	7101385	1160		0.1 - 3%	M		30 - 45%					LN	LN	Fo	W	slight		0		0	
59	EGL209	7101385	1160		0.1 - 3%	M		30 - 45%					LN	LN	Fo	W	slight		0		0	
59	EGL209	7101385	1160		0.1 - 3%	M		30 - 45%					LN	LN	Fo	W	slight		0		0	
60	EGL50	7101037	1213			M							LN	LN	Sc				0		0	
60	EGL50	7101037	1213			M							LN	LN	Sc				0		0	
60	EGL50	7101037	1213			M							LN	LN	Sc				0		0	
60	EGL50	7101037	1213			M							LN	LN	Sc				0		0	
62	EGL212	7101578	1011		<0.01%	M		30 - 45%				100-500	LN	CN	Fo				0		0	
62	EGL212	7101578	1011		<0.01%	M		30 - 45%				100-500	LN	CN	Fo				0		0	
62	EGL212	7101578	1011		<0.01%	M		30 - 45%				100-500	LN	CN	Fo				0		0	
62	EGL212	7101578	1011		<0.01%	M		30 - 45%				100-500	LN	CN	Fo				0		0	

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64	EGL214	7099609	836		<0.01%	L		9 -15%			500-1000	CN	LN	Fo	W	moderate		1	15	1	100
64	EGL214	7099609	836		<0.01%	L		9 -15%			500-1000	CN	LN	Fo	W	moderate		1	15	1	100
64	EGL214	7099609	836		<0.01%	L		9 -15%			500-1000	CN	LN	Fo	W	moderate		1	15	1	100
67	EGL35	7102286	1116			U		15 - 30%			100-500	CV	LV	Fo	W	slight		0		0	
67	EGL35	7102286	1116			U		15 - 30%			100-500	CV	LV	Fo	W	slight		0		0	
68	EGL34	7102101	1142			U		15 - 30%				CV	LV	Fo	W	slight		0		0	
68	EGL34	7102101	1142			U		15 - 30%				CV	LV	Fo	W	slight		0		0	
68	EGL34	7102101	1142			U		15 - 30%				CV	LV	Fo	W	slight		0		0	
68	EGL34	7102101	1142			U		15 - 30%				CV	LV	Fo	W	slight		0		0	
69	EGL32	7101918	1146			U		30 - 45%			100-500	LN	LN	Sc	W	moderate		0		0	
69	EGL32	7101918	1146			U		30 - 45%			100-500	LN	LN	Sc	W	moderate		0		0	
69	EGL32	7101918	1146			U		30 - 45%			100-500	LN	LN	Sc	W	moderate		0		0	
69	EGL32	7101918	1146			U		30 - 45%			100-500	LN	LN	Sc	W	moderate		0		0	
69	EGL32	7101918	1146			U		30 - 45%			100-500	LN	LN	Sc	W	moderate		0		0	
70	EGL31	7101843	1107		3 - 15%	M		45-70%			100-500	LN	LN	Fo				0		0	
70	EGL31	7101843	1107		3 - 15%	M		45-70%			100-500	LN	LN	Fo				0		0	
71	EGL30	7101718	1053		3 - 15%	M		45-70%			100-500	LN	LN	Fo				0		0	
71	EGL30	7101718	1053		3 - 15%	M		45-70%			100-500	LN	LN	Fo				0		0	
71	EGL30	7101718	1053		3 - 15%	M		45-70%			100-500	LN	LN	Fo				0		0	
71	EGL30	7101718	1053		3 - 15%	M		45-70%			100-500	LN	LN	Fo				0		0	

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72	EGR81	7104148	1016					15 - 30%					LN	LN	Fo				1	12	1		30
72	EGR81	7104148	1016					15 - 30%					LN	LN	Fo				1	12	1		30
72	EGR81	7104148	1016					15 - 30%					LN	LN	Fo				1	12	1		30
72	EGR81	7104148	1016					15 - 30%					LN	LN	Fo				1	12	1		30
75	EGL9	7100058	799		<0.01%	M		30 - 45%				25-Jan	LN	LV	Fo				0				0
75	EGL9	7100058	799		<0.01%	M		30 - 45%				25-Jan	LN	LV	Fo				0				0
75	EGL9	7100058	799		<0.01%	M		30 - 45%				25-Jan	LN	LV	Fo				0				0
80	EGL10	7100068	850		<0.01%	E		9 -15%				25-50	LN	LN	Fo				0			1	57
80	EGL10	7100068	850		<0.01%	E		9 -15%				25-50	LN	LN	Fo				0			1	57
80	EGL10	7100068	850		<0.01%	E		9 -15%				25-50	LN	LN	Fo				0			1	57
80	EGL10	7100068	850		<0.01%	E		9 -15%				25-50	LN	LN	Fo				0			1	57
83	EGL11	7100062	864		<0.01%	L		15 - 30%				50-100	LN	LV	Fo				0				0
83	EGL11	7100062	864		<0.01%	L		15 - 30%				50-100	LN	LV	Fo				0				0
83	EGL11	7100062	864		<0.01%	L		15 - 30%				50-100	LN	LV	Fo				0				0

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89	EGR110	7098832	0			M		15 - 30%				50-100							0		0		0
89	EGR110	7098832	0			M		15 - 30%				50-100							0		0		0
89	EGR110	7098832	0			M		15 - 30%				50-100							0		0		0
97	EGR415	7085727	612			E		0.05 - 2%				50-100			Wt				0		0		0
99	EGR416	7085182	687		<0.01%	E		0.05 - 2%				100-500	LN	LN	Fo				0		0		0
99	EGR416	7085182	687		<0.01%	E		0.05 - 2%				100-500	LN	LN	Fo				0		0		0
99	EGR416	7085182	687		<0.01%	E		0.05 - 2%				100-500	LN	LN	Fo				0		0		0
99	EGR416	7085182	687		<0.01%	E		0.05 - 2%				100-500	LN	LN	Fo				0		0		0
108	EGR411	7093681	685			L		15 - 30%				50-100			Fo				0		0		0
108	EGR411	7093681	685			L		15 - 30%				50-100			Fo				0		0		0
108	EGR411	7093681	685			L		15 - 30%				50-100			Fo				0		0		0
111	EGR409	7092951	676			E		0.05 - 2%				50-100			Wt				0		0		0
111	EGR409	7092951	676			E		0.05 - 2%				50-100			Wt				0		0		0
111	EGR409	7092951	676			E		0.05 - 2%				50-100			Wt				0		0		0
117	EGL66	7099838	1154			M		30 - 45%				50-100	LN	LV	Fo	W	slight		0		0		0
117	EGL66	7099838	1154			M		30 - 45%				50-100	LN	LV	Fo	W	slight		0		0		0
117	EGL66	7099838	1154			M		30 - 45%				50-100	LN	LV	Fo	W	slight		0		0		0

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118	EGR303	7099733			<0.01%	C		9 -15%			25-50	CV	LV	Fo				0		0	
118	EGR303	7099733			<0.01%	C		9 -15%			25-50	CV	LV	Fo				0		0	
118	EGR303	7099733			<0.01%	C		9 -15%			25-50	CV	LV	Fo				0		0	
118	EGR303	7099733			<0.01%	C		9 -15%			25-50	CV	LV	Fo				0		0	
119	EGL310	7099420	1051		<0.01%	M		15 - 30%			50-100	LN	LN	Fo				0		0	
119	EGL310	7099420	1051		<0.01%	M		15 - 30%			50-100	LN	LN	Fo				0		0	
119	EGL310	7099420	1051		<0.01%	M		15 - 30%			50-100	LN	LN	Fo				0		0	
120	EGL311	7099770	1067			M		15 - 30%			50-100			Fo				0		0	
120	EGL311	7099770	1067			M		15 - 30%			50-100			Fo				0		0	
120	EGL311	7099770	1067			M		15 - 30%			50-100			Fo				0		0	
123	EGL47	7100810	1080		<0.01%	M		15 - 30%			25-50	CV	LN	Fo				0		0	
123	EGL47	7100810	1080		<0.01%	M		15 - 30%			25-50	CV	LN	Fo				0		0	
123	EGL47	7100810	1080		<0.01%	M		15 - 30%			25-50	CV	LN	Fo				0		0	
124	EGL1	7100621	0		<0.01%	M		15 - 30%			25-50		LN	Fo	W	slight		0		0	
124	EGL1	7100621	0		<0.01%	M		15 - 30%			25-50		LN	Fo	W	slight		0		0	
124	EGL1	7100621	0		<0.01%	M		15 - 30%			25-50		LN	Fo	W	slight		0		0	
124	EGL1	7100621	0		<0.01%	M		15 - 30%			25-50		LN	Fo	W	slight		0		0	

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125	EGL313	7101401	0		3 - 15%	U		30 - 45%				25-Jan	CV	LV	Fo				0		0		0
125	EGL313	7101401	0		3 - 15%	U		30 - 45%				25-Jan	CV	LV	Fo				0		0		0
125	EGL313	7101401	0		3 - 15%	U		30 - 45%				25-Jan	CV	LV	Fo				0		0		0
126	EGR400	7086377	621		<0.01%	E		2 - 5%				50-100	LN	LN	Fo				0		0		0
126	EGR400	7086377	621		<0.01%	E		2 - 5%				50-100	LN	LN	Fo				0		0		0
126	EGR400	7086377	621		<0.01%	E		2 - 5%				50-100	LN	LN	Fo				0		0		0
129	EGR401	7087172	630			E		2 - 5%				25-50			Fo				0		0		0
129	EGR401	7087172	630			E		2 - 5%				25-50			Fo				0		0		0

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129	EGR401	7087172	630			E		2 - 5%			25-50			Fo				0		0	
129	EGR401	7087172	630			E		2 - 5%			25-50			Fo				0		0	
133	EGR406	7091202	662		<0.01%							CV	LV	Fo				0		0	
133	EGR406	7091202	662		<0.01%							CV	LV	Fo				0		0	
133	EGR406	7091202	662		<0.01%							CV	LV	Fo				0		0	
134	EGR404	7090107	643		<0.01%	E						LN	LN	Fo				0		0	
135	EGR403	7089609	672			L		45-70%			25-50			Fo				0		0	
135	EGR403	7089609	672			L		45-70%			25-50			Fo				0		0	
135	EGR403	7089609	672			L		45-70%			25-50			Fo				0		0	
136	EGR407	7092047	720		<0.01%	L		30 - 45%			25-50	CN	LN	Fo				0		0	

SiteID	SiteNo	Northing	Elevation	Surface Expressi on	Surf.Stone	Slope Position (site)	Slope Position (PEL)	Landscape Slope	Camera ID	Pit	Site	Slope Length	Horizon Curvature	Vertical Curvature	Land Use	Erosion	Erosion Severity	% Bare Ground	Seepage Depth Flag	Seepage Depth	Permafrost Depth Flag	Permafrost Depth	
136	EGR407	7092047	720		<0.01%	L		30 - 45%				25-50	CN	LN	Fo					0		0	
139	EGR413	7096179	727			E		2 - 5%				25-50			Fo					0		0	
139	EGR413	7096179	727			E		2 - 5%				25-50			Fo					0		0	
139	EGR413	7096179	727			E		2 - 5%				25-50			Fo					0		0	
141	EGL21	7101163	1372		<0.01%	M		9 -15%				50-100	LN	LV	Fo					0		0	
141	EGL21	7101163	1372		<0.01%	M		9 -15%				50-100	LN	LV	Fo					0		0	
141	EGL21	7101163	1372		<0.01%	M		9 -15%				50-100	LN	LV	Fo					0		0	
141	EGL21	7101163	1372		<0.01%	M		9 -15%				50-100	LN	LV	Fo					0		0	
141	EGL21	7101163	1372		<0.01%	M		9 -15%				50-100	LN	LV	Fo					0		0	
144	TPA1	7101321				L		5 - 9%				500-1000			Fo					0		1	52

SiteID	SiteNo	Northing	Elevation	Surface Expressi on	Surf.Stone	Slope Position (site)	Slope Position (PEL)	Landscape Slope	Camera ID	Pit Site	Slope Length	Horizon Curvature	Vertical Curvature	Land Use	Erosion Severity	% Bare Ground	Seepage Depth Flag	Seepage Depth	Permafrost Depth Flag	Permafrost Depth
144	TPA1	7101321				L		5 - 9%			500-1000			Fo			0		1	52
144	TPA1	7101321				L		5 - 9%			500-1000			Fo			0		1	52
145	TPA3	7100551				T		5 - 9%						Fo			0		1	50
145	TPA3	7100551				T		5 - 9%						Fo			0		1	50
145	TPA3	7100551				T		5 - 9%						Fo			0		1	50
145	TPA3	7100551				T		5 - 9%						Fo			0		1	50
146	TPA4	7100215				M		15 - 30%			100-500			Fo			0		1	53
146	TPA4	7100215				M		15 - 30%			100-500			Fo			0		1	53

SiteID	SiteNo	Northing	Elevation	Surface Expressi on	Surf.Stone	Slope Position (site)	Slope Position (PEL)	Landscape Slope	Camera ID	Pit Site	Slope Length	Horizon Curvature	Vertical Curvature	Land Use	Erosion	Erosion Severity	% Bare Ground	Seepage Depth Flag	Seepage Depth	Permafrost Depth Flag	Permafrost Depth
146	TPA4	7100215				M		15 - 30%			100-500			Fo				0		1	53
146	TPA4	7100215				M		15 - 30%			100-500			Fo				0		1	53
146	TPA4	7100215				M		15 - 30%			100-500			Fo				0		1	53
146	TPA4	7100215				M		15 - 30%			100-500			Fo				0		1	53
147	EGR451	7085869	639			U								Fo				0		0	
147	EGR451	7085869	639			U								Fo				0		0	
147	EGR451	7085869	639			U								Fo				0		0	
148	EGR450	7085952	614			D												0		0	
148	EGR450	7085952	614			D												0		0	
148	EGR450	7085952	614			D												0		0	

SiteID	SiteNo	Organic Surface	Organic Drainage	Organic Soil Drainage	Nutrient Regime	Moisture Regime	Humus Form	Depth to Bedrock	Depth to Water	TSM	EP	Ecosite/Site Series	Site Note	Vegetation Note	QC By	QC Complete	Root Restricting Layer Depth	Root Restricting Layer Type	Soil Code	Series Code	Phase	Soil Notes
4	EGL63							0	0			/		Open Lichen Spruce, woodland. Lichen (Clad ste) dominant ground co er. Thin band of S! different colour than matrix?		0	0		CHER-DB-			Fining upward sequence broken horizons from soil creep
4	EGL63							0	0			/		Open Lichen Spruce, woodland. Lichen (Clad ste) dominant ground co er. Thin band of S! different colour than matrix?		0	0		CHER-DB-			Fining upward sequence broken horizons from soil creep
4	EGL63							0	0			/		Open Lichen Spruce, woodland. Lichen (Clad ste) dominant ground co er. Thin band of S! different colour than matrix?		0	0		CHER-DB-			Fining upward sequence broken horizons from soil creep
4	EGL63							0	0			/		Open Lichen Spruce, woodland. Lichen (Clad ste) dominant ground co er. Thin band of S! different colour than matrix?		0	0		CHER-DB-			Fining upward sequence broken horizons from soil creep
4	EGL63							0	0			/		Open Lichen Spruce, woodland. Lichen (Clad ste) dominant ground co er. Thin band of S! different colour than matrix?		0	0		CHER-DB-			Fining upward sequence broken horizons from soil creep
5	EGL216							0	0			/	Cut in road adjacent to Dublin Creek, Placer Mining distrbance exposes fractured bedrock.	Aspen stand DV/R / CV/R	nTashe	1	20		BRUN-DYB-O			likely mix of Regosols and thin Brunisols on site. Silty Sand
5	EGL216							0	0			/	Cut in road adjacent to Dublin Creek, Placer Mining distrbance exposes fractured bedrock.	Aspen stand DV/R / CV/R	nTashe	1	20		BRUN-DYB-O			likely mix of Regosols and thin Brunisols on site. Silty Sand
5	EGL216							0	0			/	Cut in road adjacent to Dublin Creek, Placer Mining distrbance exposes fractured bedrock.	Aspen stand DV/R / CV/R	nTashe	1	20		BRUN-DYB-O			likely mix of Regosols and thin Brunisols on site. Silty Sand
6	EGR94							0	13	P	High	/	site deep, steep + wet high failure risk L = subsurface seepage soils are gra elly, not rubble or boulders			0			REGO--O	O.R.		seepage flowing through pit Dissected landscape start of gentle drainage to creek
6	EGR94							0	13	P	High	/	site deep, steep + wet high failure risk L = subsurface seepage soils are gra elly, not rubble or boulders			0			REGO--O	O.R.		seepage flowing through pit Dissected landscape start of gentle drainage to creek
7	EGR93								0	P		/	open lichen fir forest frost hea e			0	30	L	BRUN-DYB-O	O.DB		o er half the profile is rock no alignment
7	EGR93								0	P		/	open lichen fir forest frost hea e			0	30	L	BRUN-DYB-O	O.DB		o er half the profile is rock no alignment
7	EGR93								0	P		/	open lichen fir forest frost hea e			0	30	L	BRUN-DYB-O	O.DB		o er half the profile is rock no alignment
8	EGR92							0	0			/	Site in acti e seepage track at surface and at depth outside of rock	Picemar, Alnucri, Salix, Spharub, Rubucha, Hierspl, Rhizonmium		0	60	Z	CRYO-SC-HR	Cryosol		phase: pt Lenses of silt + sand Do not appear as layers Bands of silt + sand found in Of layer Some flat pans rocks in profile
8	EGR92							0	0			/	Site in acti e seepage track at surface and at depth outside of rock	Picemar, Alnucri, Salix, Spharub, Rubucha, Hierspl, Rhizonmium		0	60	Z	CRYO-SC-HR	Cryosol		phase: pt Lenses of silt + sand Do not appear as layers Bands of silt + sand found in Of layer Some flat pans rocks in profile

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8	EGR92							0	0			/	Site in active seepage track at surface and at depth outside of rock	Picemar, Alnucri, Salix, Spharub, Rubucha, Hierspl, Rhizonmium		0	60	Z	CRYO-SC-HR	Cryosol		phase: pt Lenses of silt + sand Do not appear as layers Bands of silt + sand found in Of layer Some flat pans rocks in profile
10	EGL8							0	0			/	SR pebbles to cobbles mostly pebble size	Sb, Hyl, Cladina, Ledum, Equisyl, Petasag, Mert, Empenig, Vacoli, Vacc it	nTashe	1			GLEY-G-O			likely R.G + GL.R in polygon + GL.OB Ah too thin to sample
10	EGL8							0	0			/	SR pebbles to cobbles mostly pebble size	Sb, Hyl, Cladina, Ledum, Equisyl, Petasag, Mert, Empenig, Vacoli, Vacc it	nTashe	1			GLEY-G-O			likely R.G + GL.R in polygon + GL.OB Ah too thin to sample
10	EGL8							0	0			/	SR pebbles to cobbles mostly pebble size	Sb, Hyl, Cladina, Ledum, Equisyl, Petasag, Mert, Empenig, Vacoli, Vacc it	nTashe	1			GLEY-G-O			likely R.G + GL.R in polygon + GL.OB Ah too thin to sample
10	EGL8							0	0			/	SR pebbles to cobbles mostly pebble size	Sb, Hyl, Cladina, Ledum, Equisyl, Petasag, Mert, Empenig, Vacoli, Vacc it	nTashe	1			GLEY-G-O			likely R.G + GL.R in polygon + GL.OB Ah too thin to sample
11	EGL6							0	0	S	Low	/	exposed piles, some have been sorted to finer piles	Salix, Balsam poplar, Aspen, fireweed, dandelion REVEG	nTashe	1			REGO-R-O			Some depressions w water but overall dry site
12	EGL41							0	0			/	soil like pudding where seepage drier below		nTashe	1	100	Z	GLEY--R	R.G.		phase: pt likely roots restricted by ice some tilted trees, very stunted, cold soil likely Cryosol at site check drill logs for permafrost
12	EGL41							0	0			/	soil like pudding where seepage drier below		nTashe	1	100	Z	GLEY--R	R.G.		phase: pt likely roots restricted by ice some tilted trees, very stunted, cold soil likely Cryosol at site check drill logs for permafrost
12	EGL41							0	0			/	soil like pudding where seepage drier below		nTashe	1	100	Z	GLEY--R	R.G.		phase: pt likely roots restricted by ice some tilted trees, very stunted, cold soil likely Cryosol at site check drill logs for permafrost
13	EGL200							200	0			/	No rocks at surface	Abieslas, Betugla, Poly, Pleur, Cladina, ground cover Heath vegetation		0			BRUN-EB-E	E.EB		C too coarse to dig cannot cho el or auger Flat lying rocks Mine material
13	EGL200							200	0			/	No rocks at surface	Abieslas, Betugla, Poly, Pleur, Cladina, ground cover Heath vegetation		0			BRUN-EB-E	E.EB		C too coarse to dig cannot cho el or auger Flat lying rocks Mine material
13	EGL200							200	0			/	No rocks at surface	Abieslas, Betugla, Poly, Pleur, Cladina, ground cover Heath vegetation		0			BRUN-EB-E	E.EB		C too coarse to dig cannot cho el or auger Flat lying rocks Mine material
13	EGL200							200	0			/	No rocks at surface	Abieslas, Betugla, Poly, Pleur, Cladina, ground cover Heath vegetation		0			BRUN-EB-E	E.EB		C too coarse to dig cannot cho el or auger Flat lying rocks Mine material
13	EGL200							200	0			/	No rocks at surface	Abieslas, Betugla, Poly, Pleur, Cladina, ground cover Heath vegetation		0			BRUN-EB-E	E.EB		C too coarse to dig cannot cho el or auger Flat lying rocks Mine material
14	EGR96							0	0	P	Medium	/	Permafrost sillapse scars w standing water	Open drunken forest, lichen and sphagnum dominant understory. Pice mar, Ledu gro, Ledu dec, Erio, Clad stel, sphag, Empi nig, Betu gla, salix		0	30	Z	CRYO-TC-HR		p	discontinuous Ah <2cm. Strongly cryoturbated layer of. Phase modifier = pt

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14	EGR96							0	0	P	Medium	/	Permafrost sllapse scars w/ standing water	Open drunken forest, lichen and sphagnum dominant understory. Pice mar, Ledu gro, Ledu dec, Erio, Clad stel, sphag, Empi nig, Betu gla, salix	nTashe	0	30	Z	CRYO-TC-HR		p	discontinuous Ah <2cm. Strongly cryoturbated layer of. Phase modifier = pt
14	EGR96							0	0	P	Medium	/	Permafrost sllapse scars w/ standing water	Open drunken forest, lichen and sphagnum dominant understory. Pice mar, Ledu gro, Ledu dec, Erio, Clad stel, sphag, Empi nig, Betu gla, salix	nTashe	0	30	Z	CRYO-TC-HR		p	discontinuous Ah <2cm. Strongly cryoturbated layer of. Phase modifier = pt
15	EGL16							200	0	P	Low	/	Large boulders at surface coarse grained igneous intrusi e Fc microscale in plot bare mineral soil mo ing downslope	Betugla, Abieslas	nTashe	0			BRUN-EB-O	O.EB		Augered holes BC structure indicati e of former ice contact causing dessication resulting in structure
15	EGL16							200	0	P	Low	/	Large boulders at surface coarse grained igneous intrusi e Fc microscale in plot bare mineral soil mo ing downslope	Betugla, Abieslas	nTashe	0			BRUN-EB-O	O.EB		Augered holes BC structure indicati e of former ice contact causing dessication resulting in structure
15	EGL16							200	0	P	Low	/	Large boulders at surface coarse grained igneous intrusi e Fc microscale in plot bare mineral soil mo ing downslope	Betugla, Abieslas	nTashe	0			BRUN-EB-O	O.EB		Augered holes BC structure indicati e of former ice contact causing dessication resulting in structure
15	EGL16							200	0	P	Low	/	Large boulders at surface coarse grained igneous intrusi e Fc microscale in plot bare mineral soil mo ing downslope	Betugla, Abieslas	nTashe	0			BRUN-EB-O	O.EB		Augered holes BC structure indicati e of former ice contact causing dessication resulting in structure
16	EGR91		Imperfect					0	0	S	Low	/			nTashe	1			REGO-R-CU			
16	EGR91		Imperfect					0	0	S	Low	/			nTashe	1			REGO-R-CU			
16	EGR91		Imperfect					0	0	S	Low	/			nTashe	1			REGO-R-CU			
16	EGR91		Imperfect					0	0	S	Low	/			nTashe	1			REGO-R-CU			
16	EGR91		Imperfect					0	0	S	Low	/			nTashe	1			REGO-R-CU			
19	EGL15							0	0	P	Medium	/	E idence of water flowing through stand originating on road isible water upslope from site L <12% of polygon	Abieslas, trees, Empenig, Pleusch	nTashe	1			BRUN-DYB-GL	GL.DB		Moist area, some parts of polygon e idence of surface drainage
19	EGL15							0	0	P	Medium	/	E idence of water flowing through stand originating on road isible water upslope from site L <12% of polygon	Abieslas, trees, Empenig, Pleusch	nTashe	1			BRUN-DYB-GL	GL.DB		Moist area, some parts of polygon e idence of surface drainage
19	EGL15							0	0	P	Medium	/	E idence of water flowing through stand originating on road isible water upslope from site L <12% of polygon	Abieslas, trees, Empenig, Pleusch	nTashe	1			BRUN-DYB-GL	GL.DB		Moist area, some parts of polygon e idence of surface drainage
19	EGL15							0	0	P	Medium	/	E idence of water flowing through stand originating on road isible water upslope from site L <12% of polygon	Abieslas, trees, Empenig, Pleusch	nTashe	1			BRUN-DYB-GL	GL.DB		Moist area, some parts of polygon e idence of surface drainage
19	EGL15							0	0	P	Medium	/	E idence of water flowing through stand originating on road isible water upslope from site L <12% of polygon	Abieslas, trees, Empenig, Pleusch	nTashe	1			BRUN-DYB-GL	GL.DB		Moist area, some parts of polygon e idence of surface drainage
20	EGL17							0	0		Low	/	Seepage flowing water downslope ~10 m (out of plot) toe slope	Betugla, Abieslas, Empenig	nTashe	1			BRUN-DYB-E	E.DB		Verify texture's pH to determine if Brunisol s. Lu isol Heap leach option 3
20	EGL17							0	0		Low	/	Seepage flowing water downslope ~10 m (out of plot) toe slope	Betugla, Abieslas, Empenig	nTashe	1			BRUN-DYB-E	E.DB		Verify texture's pH to determine if Brunisol s. Lu isol Heap leach option 3

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20	EGL17								0	0		Low	/	Seepage flowing water downslope ~10 m (out of plot) toe slope	Betugla, Abieslas, Empenig	nTashe	1			BRUN-DYB-E	E.DB		Verify texture's pH to determine if Brunisol s. Lu isol Heap leach option 3
21	EGL39								0	0	P	Medium	/	Shallow slumps, Grown over. Weathered bedrock with rock near surface. EGR39A good cross profile	Aspen/Birch overstory, White Spruce subcanopy forb & litter understory. Geocaulon, acc it, Rosaaci, Ledugro, Empinig	nTashe	1			LUV-GL-BR			Rocks and unstable slope angle limit soil depth. variety of fragments gravel to cobbles
21	EGL39								0	0	P	Medium	/	Shallow slumps, Grown over. Weathered bedrock with rock near surface. EGR39A good cross profile	Aspen/Birch overstory, White Spruce subcanopy forb & litter understory. Geocaulon, acc it, Rosaaci, Ledugro, Empinig	nTashe	1			LUV-GL-BR			Rocks and unstable slope angle limit soil depth. variety of fragments gravel to cobbles
21	EGL39								0	0	P	Medium	/	Shallow slumps, Grown over. Weathered bedrock with rock near surface. EGR39A good cross profile	Aspen/Birch overstory, White Spruce subcanopy forb & litter understory. Geocaulon, acc it, Rosaaci, Ledugro, Empinig	nTashe	1			LUV-GL-BR			Rocks and unstable slope angle limit soil depth. variety of fragments gravel to cobbles
21	EGL39								0	0	P	Medium	/	Shallow slumps, Grown over. Weathered bedrock with rock near surface. EGR39A good cross profile	Aspen/Birch overstory, White Spruce subcanopy forb & litter understory. Geocaulon, acc it, Rosaaci, Ledugro, Empinig	nTashe	1			LUV-GL-BR			Rocks and unstable slope angle limit soil depth. variety of fragments gravel to cobbles
21	EGL39								0	0	P	Medium	/	Shallow slumps, Grown over. Weathered bedrock with rock near surface. EGR39A good cross profile	Aspen/Birch overstory, White Spruce subcanopy forb & litter understory. Geocaulon, acc it, Rosaaci, Ledugro, Empinig	nTashe	1			LUV-GL-BR			Rocks and unstable slope angle limit soil depth. variety of fragments gravel to cobbles
22	EGL38								0	0	S	Low	/	evidence of charcoal in profile. Some subrounded gravel cobbles. Check extent of Minarea.	Open lichen woodland Picemar, Cladina, Cladonia, Vacc it, Ledugro		0			CHER-DB-			mica like shads of glass difficult to texture Almost a lu isoil
22	EGL38								0	0	S	Low	/	evidence of charcoal in profile. Some subrounded gravel cobbles. Check extent of Minarea.	Open lichen woodland Picemar, Cladina, Cladonia, Vacc it, Ledugro		0			CHER-DB-			mica like shads of glass difficult to texture Almost a lu isoil
22	EGL38								0	0	S	Low	/	evidence of charcoal in profile. Some subrounded gravel cobbles. Check extent of Minarea.	Open lichen woodland Picemar, Cladina, Cladonia, Vacc it, Ledugro		0			CHER-DB-			mica like shads of glass difficult to texture Almost a lu isoil
22	EGL38								0	0	S	Low	/	evidence of charcoal in profile. Some subrounded gravel cobbles. Check extent of Minarea.	Open lichen woodland Picemar, Cladina, Cladonia, Vacc it, Ledugro		0			CHER-DB-			mica like shads of glass difficult to texture Almost a lu isoil
22	EGL38								0	0	S	Low	/	evidence of charcoal in profile. Some subrounded gravel cobbles. Check extent of Minarea.	Open lichen woodland Picemar, Cladina, Cladonia, Vacc it, Ledugro		0			CHER-DB-			mica like shads of glass difficult to texture Almost a lu isoil
23	EGL37								0	0			/	Bedrock visible > ery weathered & broken from cut upslope in road	Fir / B. Spruce forest, Pleursch, Cladinastel, Vacc it, Ledugro	nTashe	1			BRUN-DYB-O			Soil shows previous ice contact by granulated structure at depth in C. Charcoal in profile
23	EGL37								0	0			/	Bedrock visible > ery weathered & broken from cut upslope in road	Fir / B. Spruce forest, Pleursch, Cladinastel, Vacc it, Ledugro	nTashe	1			BRUN-DYB-O			Soil shows previous ice contact by granulated structure at depth in C. Charcoal in profile
23	EGL37								0	0			/	Bedrock visible > ery weathered & broken from cut upslope in road	Fir / B. Spruce forest, Pleursch, Cladinastel, Vacc it, Ledugro	nTashe	1			BRUN-DYB-O			Soil shows previous ice contact by granulated structure at depth in C. Charcoal in profile
23	EGL37								0	0			/	Bedrock visible > ery weathered & broken from cut upslope in road	Fir / B. Spruce forest, Pleursch, Cladinastel, Vacc it, Ledugro	nTashe	1			BRUN-DYB-O			Soil shows previous ice contact by granulated structure at depth in C. Charcoal in profile

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23	EGL37							0	0			/	Bedrock visible > ery weathered & broken from cut upslope in road	Fir / B. Spruce forest, Pleusch, Cladinastel, Vaccit, Ledugro	nTashe	1			BRUN-DYB-O				Soil shows previous ice contact by granulated structure at depth in C. Charcoal in profile
24	EGL36							0	0	S	Low	/	SA to SR clasts photo taken plus mica flakes pea size. M likely o er D or R	open abies las forest, ledugro, betugla, accolig, empinig, cladstel, pleursch		0			--				some gra el is SA to SR
24	EGL36							0	0	S	Low	/	SA to SR clasts photo taken plus mica flakes pea size. M likely o er D or R	open abies las forest, ledugro, betugla, accolig, empinig, cladstel, pleursch		0			--				some gra el is SA to SR
24	EGL36							0	0	S	Low	/	SA to SR clasts photo taken plus mica flakes pea size. M likely o er D or R	open abies las forest, ledugro, betugla, accolig, empinig, cladstel, pleursch		0			--				some gra el is SA to SR
24	EGL36							0	0	S	Low	/	SA to SR clasts photo taken plus mica flakes pea size. M likely o er D or R	open abies las forest, ledugro, betugla, accolig, empinig, cladstel, pleursch		0			--				some gra el is SA to SR
25	EGL207							0	0	P	Medium	/	boulders at surface rock slides lichen covered in stand	Sw, Abies las, Shepcan, Birch, Aspen, Vaccit,		0			ORG--				weak Ae may some E.DB in more stable areas
25	EGL207							0	0	P	Medium	/	boulders at surface rock slides lichen covered in stand	Sw, Abies las, Shepcan, Birch, Aspen, Vaccit,		0			ORG--				weak Ae may some E.DB in more stable areas
25	EGL207							0	0	P	Medium	/	boulders at surface rock slides lichen covered in stand	Sw, Abies las, Shepcan, Birch, Aspen, Vaccit,		0			ORG--				weak Ae may some E.DB in more stable areas
26	EGL18							0	0			/	Ingenous intrusive and meta sed rocks.	Betugla, Abielas, Anemone,Cladina, Cladonia, Pleusch, Polytrichum, Lazulapar, Juncbal	nTashe	1			BRUN-EB-O	O.EB			Not elu iated as not thick enough Broken horizon Platey structure from historic ice contact *weathered bedrock produces linear stration of mottle colours
26	EGL18							0	0			/	Ingenous intrusive and meta sed rocks.	Betugla, Abielas, Anemone,Cladina, Cladonia, Pleusch, Polytrichum, Lazulapar, Juncbal	nTashe	1			BRUN-EB-O	O.EB			Not elu iated as not thick enough Broken horizon Platey structure from historic ice contact *weathered bedrock produces linear stration of mottle colours
26	EGL18							0	0			/	Ingenous intrusive and meta sed rocks.	Betugla, Abielas, Anemone,Cladina, Cladonia, Pleusch, Polytrichum, Lazulapar, Juncbal	nTashe	1			BRUN-EB-O	O.EB			Not elu iated as not thick enough Broken horizon Platey structure from historic ice contact *weathered bedrock produces linear stration of mottle colours
26	EGL18							0	0			/	Ingenous intrusive and meta sed rocks.	Betugla, Abielas, Anemone,Cladina, Cladonia, Pleusch, Polytrichum, Lazulapar, Juncbal	nTashe	1			BRUN-EB-O	O.EB			Not elu iated as not thick enough Broken horizon Platey structure from historic ice contact *weathered bedrock produces linear stration of mottle colours
26	EGL18							0	0			/	Ingenous intrusive and meta sed rocks.	Betugla, Abielas, Anemone,Cladina, Cladonia, Pleusch, Polytrichum, Lazulapar, Juncbal	nTashe	1			BRUN-EB-O	O.EB			Not elu iated as not thick enough Broken horizon Platey structure from historic ice contact *weathered bedrock produces linear stration of mottle colours
27	EGL33							0	0	S	Low	/		Open fir forest, Betugla, Ledugro, Lycopod, Vaccoli, Cladina, Vaccit		0			ORG--				Thin dicontinuous Ahe (<2cm). 33 Auger/Sho el refusal large stone. Some SA gra el at depth

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27	EGL33							0	0	S	Low	/		Open fir forest, Betugla, Ledugro, Lycopod, Vaccoli, Cladina, Vaccit		0			ORG--			Thin discontinuous Ahe (<2cm). 33 Auger/Shovel refusal large stone. Some SA gravel at depth
27	EGL33							0	0	S	Low	/		Open fir forest, Betugla, Ledugro, Lycopod, Vaccoli, Cladina, Vaccit		0			ORG--			Thin discontinuous Ahe (<2cm). 33 Auger/Shovel refusal large stone. Some SA gravel at depth
27	EGL33							0	0	S	Low	/		Open fir forest, Betugla, Ledugro, Lycopod, Vaccoli, Cladina, Vaccit		0			ORG--			Thin discontinuous Ahe (<2cm). 33 Auger/Shovel refusal large stone. Some SA gravel at depth
28	EGL19							0	0		Medium	/	Site appears to be near small test pit site (blue flagging). Can hear water downslope.	Salixpul, Betugla, Salixret, dierse understory.	nTashe	1			BRUN-EB-GL			
28	EGL19							0	0		Medium	/	Site appears to be near small test pit site (blue flagging). Can hear water downslope.	Salixpul, Betugla, Salixret, dierse understory.	nTashe	1			BRUN-EB-GL			
28	EGL19							0	0		Medium	/	Site appears to be near small test pit site (blue flagging). Can hear water downslope.	Salixpul, Betugla, Salixret, dierse understory.	nTashe	1			BRUN-EB-GL			
28	EGL19							0	0		Medium	/	Site appears to be near small test pit site (blue flagging). Can hear water downslope.	Salixpul, Betugla, Salixret, dierse understory.	nTashe	1			BRUN-EB-GL			
28	EGL19							0	0		Medium	/	Site appears to be near small test pit site (blue flagging). Can hear water downslope.	Salixpul, Betugla, Salixret, dierse understory.	nTashe	1			BRUN-EB-GL			
29	EGL20							0	0		Medium	/	Boulder field visible on surface. Coarse sand contains pea size gravel in C horizon.			0			BRUN-DYB-O	O.DB		C.F. content, but nice fine matrix for reclamation
29	EGL20							0	0		Medium	/	Boulder field visible on surface. Coarse sand contains pea size gravel in C horizon.			0			BRUN-DYB-O	O.DB		C.F. content, but nice fine matrix for reclamation
29	EGL20							0	0		Medium	/	Boulder field visible on surface. Coarse sand contains pea size gravel in C horizon.			0			BRUN-DYB-O	O.DB		C.F. content, but nice fine matrix for reclamation
29	EGL20							0	0		Medium	/	Boulder field visible on surface. Coarse sand contains pea size gravel in C horizon.			0			BRUN-DYB-O	O.DB		C.F. content, but nice fine matrix for reclamation
29	EGL20							0	0		Medium	/	Boulder field visible on surface. Coarse sand contains pea size gravel in C horizon.			0			BRUN-DYB-O	O.DB		C.F. content, but nice fine matrix for reclamation
30	EGL201							0	0	S		/	highly disturbed area need updated disturbance layer for LSA portion of the polygon Angular rubble at surface + throughout site Frost heave at site.			0	25	L	BRUN-DYB-O	O.DB		High coarse fragment makes unsuitable reclamation material. Well developed fines as noted by organic enrichment. C? Cannot dig or auger Organic enrichment old soil.
30	EGL201							0	0	S		/	highly disturbed area need updated disturbance layer for LSA portion of the polygon Angular rubble at surface + throughout site Frost heave at site.			0	25	L	BRUN-DYB-O	O.DB		High coarse fragment makes unsuitable reclamation material. Well developed fines as noted by organic enrichment. C? Cannot dig or auger Organic enrichment old soil.

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30	EGL201							0	0	S		/	highly disturbed area need updated disturbance layer for LSA portion of the polygon Angular rubble at surface + throughout site Frost heave at site.			0	25	L	BRUN-DYB-O	O.DB		High coarse fragment makes unsuitable reclamation material. Well developed fines as noted by organic enrichment. C? Cannot dig or auger Organic enrichment old soil.
30	EGL201							0	0	S		/	highly disturbed area need updated disturbance layer for LSA portion of the polygon Angular rubble at surface + throughout site Frost heave at site.			0	25	L	BRUN-DYB-O	O.DB		High coarse fragment makes unsuitable reclamation material. Well developed fines as noted by organic enrichment. C? Cannot dig or auger Organic enrichment old soil.
31	EGL5							0	0			/	highly disturbed polygon could be split out from main large polygon		nTashe	1	100	X	BRUN-DYB-O	O.DB		So many boulder, stones near surface, went to cut created by road to describe soils. Topsoil from site.
31	EGL5							0	0			/	highly disturbed polygon could be split out from main large polygon		nTashe	1	100	X	BRUN-DYB-O	O.DB		So many boulder, stones near surface, went to cut created by road to describe soils. Topsoil from site.
31	EGL5							0	0			/	highly disturbed polygon could be split out from main large polygon		nTashe	1	100	X	BRUN-DYB-O	O.DB		So many boulder, stones near surface, went to cut created by road to describe soils. Topsoil from site.
31	EGL5							0	0			/	highly disturbed polygon could be split out from main large polygon		nTashe	1	100	X	BRUN-DYB-O	O.DB		So many boulder, stones near surface, went to cut created by road to describe soils. Topsoil from site.
32	EGL202							0	0			/	Part of Krich Feldspar/Granite coarse grained	Betugla, Abielas, Pleusch, Cladina, Cladonia		0		X	BRUN-DYB-O	O.DB		BC some colour imparted based on what is visible from disturbed areas
32	EGL202							0	0			/	Part of Krich Feldspar/Granite coarse grained	Betugla, Abielas, Pleusch, Cladina, Cladonia		0		X	BRUN-DYB-O	O.DB		BC some colour imparted based on what is visible from disturbed areas
32	EGL202							0	0			/	Part of Krich Feldspar/Granite coarse grained	Betugla, Abielas, Pleusch, Cladina, Cladonia		0		X	BRUN-DYB-O	O.DB		BC some colour imparted based on what is visible from disturbed areas
32	EGL202							0	0			/	Part of Krich Feldspar/Granite coarse grained	Betugla, Abielas, Pleusch, Cladina, Cladonia		0		X	BRUN-DYB-O	O.DB		BC some colour imparted based on what is visible from disturbed areas
33	EGL203							0	0			/	Some foliated rock that cleaves into flat sheets. C material intact but A & B buried some C removed & pushed / windrowed.	No vegetation at site		0			--	ZDL		Compacted all subsoil & topsoil pushed (unidirectional but mixed)
33	EGL203							0	0			/	Some foliated rock that cleaves into flat sheets. C material intact but A & B buried some C removed & pushed / windrowed.	No vegetation at site		0			--	ZDL		Compacted all subsoil & topsoil pushed (unidirectional but mixed)
34	EGL58							0	0			/	Collapse scars from ice meltout exposed soil in areas. Bedrock residual material closer to bedrock texture gets coarser.	Salixpal, Betugla, Abieslas, Carex spp.	nTashe	1	20	W	GLEJ--O	O.G		past evidence of permafrost no longer present in soil profile. boulders at surface
34	EGL58							0	0			/	Collapse scars from ice meltout exposed soil in areas. Bedrock residual material closer to bedrock texture gets coarser.	Salixpal, Betugla, Abieslas, Carex spp.	nTashe	1	20	W	GLEJ--O	O.G		past evidence of permafrost no longer present in soil profile. boulders at surface

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34	EGL58							0	0			/	Collapse scars from ice meltout exposed soil in areas. Bedrock residual material closer to bedrock texture gets coarser.	Salixpal, Betugla, Abieslas, Carex spp.	nTashe	1	20	W	GLEJ--O	O.G		past evidence of permafrost no longer present in soil profile. boulders at surface
34	EGL58							0	0			/	Collapse scars from ice meltout exposed soil in areas. Bedrock residual material closer to bedrock texture gets coarser.	Salixpal, Betugla, Abieslas, Carex spp.	nTashe	1	20	W	GLEJ--O	O.G		past evidence of permafrost no longer present in soil profile. boulders at surface
35	EGL52							200	0	P	Medium	/	head water of gulch adjacent to boulder/bedrock outcrop. Slope steepens over short distance. Burn site Should break out bedrock from polygon	Salix, Betugla, Calamagrostis, burned spruce, Abies las	nTashe	1			BRUN-DYB-O	O.DB		gentle then steepens to gulch/gully mottles from bedrock weathering not water table. frost boils exposed soil trends downward
35	EGL52							200	0	P	Medium	/	head water of gulch adjacent to boulder/bedrock outcrop. Slope steepens over short distance. Burn site Should break out bedrock from polygon	Salix, Betugla, Calamagrostis, burned spruce, Abies las	nTashe	1			BRUN-DYB-O	O.DB		gentle then steepens to gulch/gully mottles from bedrock weathering not water table. frost boils exposed soil trends downward
35	EGL52							200	0	P	Medium	/	head water of gulch adjacent to boulder/bedrock outcrop. Slope steepens over short distance. Burn site Should break out bedrock from polygon	Salix, Betugla, Calamagrostis, burned spruce, Abies las	nTashe	1			BRUN-DYB-O	O.DB		gentle then steepens to gulch/gully mottles from bedrock weathering not water table. frost boils exposed soil trends downward
35	EGL52							200	0	P	Medium	/	head water of gulch adjacent to boulder/bedrock outcrop. Slope steepens over short distance. Burn site Should break out bedrock from polygon	Salix, Betugla, Calamagrostis, burned spruce, Abies las	nTashe	1			BRUN-DYB-O	O.DB		gentle then steepens to gulch/gully mottles from bedrock weathering not water table. frost boils exposed soil trends downward
35	EGL52							200	0	P	Medium	/	head water of gulch adjacent to boulder/bedrock outcrop. Slope steepens over short distance. Burn site Should break out bedrock from polygon	Salix, Betugla, Calamagrostis, burned spruce, Abies las	nTashe	1			BRUN-DYB-O	O.DB		gentle then steepens to gulch/gully mottles from bedrock weathering not water table. frost boils exposed soil trends downward
36	EGL53							0	0	P	Low	/	Boulder field some exposed granite boulders at surface Frost shatter & boils on site	Betugla, Salixpul, Cladina, Pleusch, Polytrichum, Festuca, acc it, Casstet		0	45	X	BRUN-DYB-O	O.DB		Ah thin & discontinuous ~ 3 cm
36	EGL53							0	0	P	Low	/	Boulder field some exposed granite boulders at surface Frost shatter & boils on site	Betugla, Salixpul, Cladina, Pleusch, Polytrichum, Festuca, acc it, Casstet		0	45	X	BRUN-DYB-O	O.DB		Ah thin & discontinuous ~ 3 cm
36	EGL53							0	0	P	Low	/	Boulder field some exposed granite boulders at surface Frost shatter & boils on site	Betugla, Salixpul, Cladina, Pleusch, Polytrichum, Festuca, acc it, Casstet		0	45	X	BRUN-DYB-O	O.DB		Ah thin & discontinuous ~ 3 cm
36	EGL53							0	0	P	Low	/	Boulder field some exposed granite boulders at surface Frost shatter & boils on site	Betugla, Salixpul, Cladina, Pleusch, Polytrichum, Festuca, acc it, Casstet		0	45	X	BRUN-DYB-O	O.DB		Ah thin & discontinuous ~ 3 cm
37	EGL3							200	0	P	Medium	/	Some boulders at surface site adjacent to steep gully sharp drop off ~30 m	Abieslas, Empinig, Cladina, Betugla, Salipul, Pleusch, Polyjun		0			BRUN-DYB-O	O.DB		Mottles from wathering rock only Mix of coarse fragments from pea gravel to boulders in silt loam matrix. Auger/shovel refusal at 50 3rd pit attempt due to rocks

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37	EGL3							200	0	P	Medium	/	Some boulders at surface site adjacent to steep gully sharp drop off ~30 m	Abieslas, Empinig, Cladina, Betugla, Salipul, Pleusch, Polyjun		0			BRUN-DYB-O	O.DB		Mottles from wathering rock only Mix of coarse fragments from pea gravel to boulders in silt loam matrix. Auger/shovel refusal at 50 3rd pit attempt due to rocks
37	EGL3							200	0	P	Medium	/	Some boulders at surface site adjacent to steep gully sharp drop off ~30 m	Abieslas, Empinig, Cladina, Betugla, Salipul, Pleusch, Polyjun		0			BRUN-DYB-O	O.DB		Mottles from wathering rock only Mix of coarse fragments from pea gravel to boulders in silt loam matrix. Auger/shovel refusal at 50 3rd pit attempt due to rocks
37	EGL3							200	0	P	Medium	/	Some boulders at surface site adjacent to steep gully sharp drop off ~30 m	Abieslas, Empinig, Cladina, Betugla, Salipul, Pleusch, Polyjun		0			BRUN-DYB-O	O.DB		Mottles from wathering rock only Mix of coarse fragments from pea gravel to boulders in silt loam matrix. Auger/shovel refusal at 50 3rd pit attempt due to rocks
37	EGL3							200	0	P	Medium	/	Some boulders at surface site adjacent to steep gully sharp drop off ~30 m	Abieslas, Empinig, Cladina, Betugla, Salipul, Pleusch, Polyjun		0			BRUN-DYB-O	O.DB		Mottles from wathering rock only Mix of coarse fragments from pea gravel to boulders in silt loam matrix. Auger/shovel refusal at 50 3rd pit attempt due to rocks
38	EGL204							0	0	P	High	/	Pull polygon out as a unit No buried horizon tonguing in soil horizon boundaries Moisture in profile identified exposed mineral soil from shallow micro slumps	Abieslas, Empinig, Epilang, Cass (heather) lichen dominant cover, Spiraea		0			BRUN-DYB-E	E.DB		High degree of mixing in soil profile No 'C' horizon
38	EGL204							0	0	P	High	/	Pull polygon out as a unit No buried horizon tonguing in soil horizon boundaries Moisture in profile identified exposed mineral soil from shallow micro slumps	Abieslas, Empinig, Epilang, Cass (heather) lichen dominant cover, Spiraea		0			BRUN-DYB-E	E.DB		High degree of mixing in soil profile No 'C' horizon
38	EGL204							0	0	P	High	/	Pull polygon out as a unit No buried horizon tonguing in soil horizon boundaries Moisture in profile identified exposed mineral soil from shallow micro slumps	Abieslas, Empinig, Epilang, Cass (heather) lichen dominant cover, Spiraea		0			BRUN-DYB-E	E.DB		High degree of mixing in soil profile No 'C' horizon
38	EGL204							0	0	P	High	/	Pull polygon out as a unit No buried horizon tonguing in soil horizon boundaries Moisture in profile identified exposed mineral soil from shallow micro slumps	Abieslas, Empinig, Epilang, Cass (heather) lichen dominant cover, Spiraea		0			BRUN-DYB-E	E.DB		High degree of mixing in soil profile No 'C' horizon
39	EGL4							0	0	P	Medium	/		Abieslas, Picegl, Hylosp, Lupialp, heather, Betugla, Salipal, Saliret		0		X	BRUN-DYB-O	O.DB		
39	EGL4							0	0	P	Medium	/		Abieslas, Picegl, Hylosp, Lupialp, heather, Betugla, Salipal, Saliret		0		X	BRUN-DYB-O	O.DB		
39	EGL4							0	0	P	Medium	/		Abieslas, Picegl, Hylosp, Lupialp, heather, Betugla, Salipal, Saliret		0		X	BRUN-DYB-O	O.DB		
39	EGL4							0	0	P	Medium	/		Abieslas, Picegl, Hylosp, Lupialp, heather, Betugla, Salipal, Saliret		0		X	BRUN-DYB-O	O.DB		

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40	EGL205							0	0	U	High	/	eroded surface in gully bottom Stewart Gulch areas of ponding deposition of sand occurs		nTashe	1	60	L	REGO--O	O.R		
40	EGL205							0	0	U	High	/	eroded surface in gully bottom Stewart Gulch areas of ponding deposition of sand occurs		nTashe	1	60	L	REGO--O	O.R		
40	EGL205							0	0	U	High	/	eroded surface in gully bottom Stewart Gulch areas of ponding deposition of sand occurs		nTashe	1	60	L	REGO--O	O.R		
40	EGL205							0	0	U	High	/	eroded surface in gully bottom Stewart Gulch areas of ponding deposition of sand occurs		nTashe	1	60	L	REGO--O	O.R		
41	EGL60							100	0	P		/	some rock fall near road downslope into plot. No eg in those areas or topsoil or fines Frost shatter in areas exposed slope.	Betugla, Salipal, Vaccoli, Abieslas		0		L	BRUN-DYB-O	O.DB		x shallow cannot assess C horizon depth is estimate
41	EGL60							100	0	P		/	some rock fall near road downslope into plot. No eg in those areas or topsoil or fines Frost shatter in areas exposed slope.	Betugla, Salipal, Vaccoli, Abieslas		0		L	BRUN-DYB-O	O.DB		x shallow cannot assess C horizon depth is estimate
41	EGL60							100	0	P		/	some rock fall near road downslope into plot. No eg in those areas or topsoil or fines Frost shatter in areas exposed slope.	Betugla, Salipal, Vaccoli, Abieslas		0		L	BRUN-DYB-O	O.DB		x shallow cannot assess C horizon depth is estimate
42	EGL61							0	0		Medium	/	D with some C mo ement of boulders in areas	Betugla, Salipal, Abieslas, Empenig, Casstet, Vacc it, Cladina, Cladonia, Polyjun	nTashe	1			BRUN-DYB-O	O.DB		x shallow Ahe 02 Too high C.F. to fully assess soil Some soil is just rock to surface flat lying rocks
42	EGL61							0	0		Medium	/	D with some C mo ement of boulders in areas	Betugla, Salipal, Abieslas, Empenig, Casstet, Vacc it, Cladina, Cladonia, Polyjun	nTashe	1			BRUN-DYB-O	O.DB		x shallow Ahe 02 Too high C.F. to fully assess soil Some soil is just rock to surface flat lying rocks
42	EGL61							0	0		Medium	/	D with some C mo ement of boulders in areas	Betugla, Salipal, Abieslas, Empenig, Casstet, Vacc it, Cladina, Cladonia, Polyjun	nTashe	1			BRUN-DYB-O	O.DB		x shallow Ahe 02 Too high C.F. to fully assess soil Some soil is just rock to surface flat lying rocks
42	EGL61							0	0		Medium	/	D with some C mo ement of boulders in areas	Betugla, Salipal, Abieslas, Empenig, Casstet, Vacc it, Cladina, Cladonia, Polyjun	nTashe	1			BRUN-DYB-O	O.DB		x shallow Ahe 02 Too high C.F. to fully assess soil Some soil is just rock to surface flat lying rocks
43	EGL68							0	0		Low	/	some cobbles isible on surface, rocks broken on natural planes & aligned in horizontal position	past burn Abies las ~ 10 m high, Empenig, Cladina, Cladonia dominant co er on ground		0			BRUN-DYB-O	O.DB		lots of deadfall on ground no charcoal in soil may be O.R weak structure mostly held together by roots
43	EGL68							0	0		Low	/	some cobbles isible on surface, rocks broken on natural planes & aligned in horizontal position	past burn Abies las ~ 10 m high, Empenig, Cladina, Cladonia dominant co er on ground		0			BRUN-DYB-O	O.DB		lots of deadfall on ground no charcoal in soil may be O.R weak structure mostly held together by roots
43	EGL68							0	0		Low	/	some cobbles isible on surface, rocks broken on natural planes & aligned in horizontal position	past burn Abies las ~ 10 m high, Empenig, Cladina, Cladonia dominant co er on ground		0			BRUN-DYB-O	O.DB		lots of deadfall on ground no charcoal in soil may be O.R weak structure mostly held together by roots
43	EGL68							0	0		Low	/	some cobbles isible on surface, rocks broken on natural planes & aligned in horizontal position	past burn Abies las ~ 10 m high, Empenig, Cladina, Cladonia dominant co er on ground		0			BRUN-DYB-O	O.DB		lots of deadfall on ground no charcoal in soil may be O.R weak structure mostly held together by roots

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44	EGL206							100	0	U	Low	/	Exposed weathered bedrock on crest + shatter at site	Betugla, ledudec, Cladina, Salixarc, Vacc it, Salixgla, Arctrub		0			BRUN-DYB-O	O.DB		too many C.F. to show el C horizon skeletal soil flat lying planar rock
44	EGL206							100	0	U	Low	/	Exposed weathered bedrock on crest + shatter at site	Betugla, ledudec, Cladina, Salixarc, Vacc it, Salixgla, Arctrub		0			BRUN-DYB-O	O.DB		too many C.F. to show el C horizon skeletal soil flat lying planar rock
45	EGR206							100	0	U	High	/	Frost heave + rock slide	Ericaceous shrubs + lichen community Salix gla, Ledu dec, Betu gla, Cass tet, Cladina, Cladonia, Dryas ala		0	100	L	BRUN-DYB-O			skeletal soil
45	EGR206							100	0	U	High	/	Frost heave + rock slide	Ericaceous shrubs + lichen community Salix gla, Ledu dec, Betu gla, Cass tet, Cladina, Cladonia, Dryas ala		0	100	L	BRUN-DYB-O			skeletal soil
46	EGR97							0	0		Medium	/	Abies las, drunken forst collapse areas + drainage channels e ident of standing water high gra el content as well	Hylospl, Pleusch, Nephroma, Cladstel, Cladarb, Vacc it, Ledudec, Sphag,		0	65	W	CRYO-TC-GL			sample of water taken pH 6.3 limited cryoturbation Ice within 2 metres will also be root restricting.
46	EGR97							0	0		Medium	/	Abies las, drunken forst collapse areas + drainage channels e ident of standing water high gra el content as well	Hylospl, Pleusch, Nephroma, Cladstel, Cladarb, Vacc it, Ledudec, Sphag,		0	65	W	CRYO-TC-GL			sample of water taken pH 6.3 limited cryoturbation Ice within 2 metres will also be root restricting.
46	EGR97							0	0		Medium	/	Abies las, drunken forst collapse areas + drainage channels e ident of standing water high gra el content as well	Hylospl, Pleusch, Nephroma, Cladstel, Cladarb, Vacc it, Ledudec, Sphag,		0	65	W	CRYO-TC-GL			sample of water taken pH 6.3 limited cryoturbation Ice within 2 metres will also be root restricting.
46	EGR97							0	0		Medium	/	Abies las, drunken forst collapse areas + drainage channels e ident of standing water high gra el content as well	Hylospl, Pleusch, Nephroma, Cladstel, Cladarb, Vacc it, Ledudec, Sphag,		0	65	W	CRYO-TC-GL			sample of water taken pH 6.3 limited cryoturbation Ice within 2 metres will also be root restricting.
47	EGR95							0	0	P	Medium	/	Gra els, cobbles, boulders at site	open lichen forest e idence of snow loading Abies las, cladina, Cladonia, Empe nig nTashe		1	60	L	REGO--O	O.R		Boulders at surface
47	EGR95							0	0	P	Medium	/	Gra els, cobbles, boulders at site	open lichen forest e idence of snow loading Abies las, cladina, Cladonia, Empe nig nTashe		1	60	L	REGO--O	O.R		Boulders at surface
48	EGR80							100	0	P	High	/	Shattered rock planar + rod shaped horizontal rock layers in profile No egetation on recent slide and slump ~ 10 m across	Abieslas, Cladinaste, Cladrang, Betupum, Ledugro open woodland lichen dominant		0			BRUN-DYB-O	O.DB		Ahe discontinuous + bedrock outcrop upslope ~ 20 m
48	EGR80							100	0	P	High	/	Shattered rock planar + rod shaped horizontal rock layers in profile No egetation on recent slide and slump ~ 10 m across	Abieslas, Cladinaste, Cladrang, Betupum, Ledugro open woodland lichen dominant		0			BRUN-DYB-O	O.DB		Ahe discontinuous + bedrock outcrop upslope ~ 20 m
48	EGR80							100	0	P	High	/	Shattered rock planar + rod shaped horizontal rock layers in profile No egetation on recent slide and slump ~ 10 m across	Abieslas, Cladinaste, Cladrang, Betupum, Ledugro open woodland lichen dominant		0			BRUN-DYB-O	O.DB		Ahe discontinuous + bedrock outcrop upslope ~ 20 m
49	EGL27							0	0		Medium	/	clast supported matrix Coarse sand photos taken active flowing channel disturbed by Placer mining	Salix, Alnus		0			REGO--O	O.R		variable clast size May be some Cu.R

SiteID	SiteNo	Organic Surface	Organic Drainage	Organic Soil Drainage	Nutrient Regime	Moisture Regime	Humus Form	Depth to Bedrock	Depth to Water	TSM	EP	Ecosite/Site Series	Site Note	Vegetation Note	QC By	QC Complete	Root Restricting Layer Depth	Root Restricting Layer Type	Soil Code	Series Code	Phase	Soil Notes
49	EGL27							0	0		Medium	/	clast supported matrix Coarse sand photos taken active flowing channel disturbed by Placer mining	Salix, Alnus		0			REGO--O	O.R		variable clast size May be some Cu.R
50	EGL12							0	0	S	Medium	/		Sb forest, Salix, Betugla, Cared pod		0	56	W	GLEY-HG-O			Cg is filled in with water from seepage Ahe 2 cm but too thin to sample. May be some Hu. Lu ic Gleysols on site. Humic Gleysol.
50	EGL12							0	0	S	Medium	/		Sb forest, Salix, Betugla, Cared pod		0	56	W	GLEY-HG-O			Cg is filled in with water from seepage Ahe 2 cm but too thin to sample. May be some Hu. Lu ic Gleysols on site. Humic Gleysol.
50	EGL12							0	0	S	Medium	/		Sb forest, Salix, Betugla, Cared pod		0	56	W	GLEY-HG-O			Cg is filled in with water from seepage Ahe 2 cm but too thin to sample. May be some Hu. Lu ic Gleysols on site. Humic Gleysol.
50	EGL12							0	0	S	Medium	/		Sb forest, Salix, Betugla, Cared pod		0	56	W	GLEY-HG-O			Cg is filled in with water from seepage Ahe 2 cm but too thin to sample. May be some Hu. Lu ic Gleysols on site. Humic Gleysol.
51	EGL215							0	0			/	broken horizons tipping/dying top spruce likely due to permafrost check drill logs in area	Sb forest open moss/lichen understory	nTashe	1	200	X	CRYO-TC-HD	O.DB		Sequence of silts o er gra els likely continues at depth Broken horizons likely influenced by ice in past
51	EGL215							0	0			/	broken horizons tipping/dying top spruce likely due to permafrost check drill logs in area	Sb forest open moss/lichen understory	nTashe	1	200	X	CRYO-TC-HD	O.DB		Sequence of silts o er gra els likely continues at depth Broken horizons likely influenced by ice in past
51	EGL215							0	0			/	broken horizons tipping/dying top spruce likely due to permafrost check drill logs in area	Sb forest open moss/lichen understory	nTashe	1	200	X	CRYO-TC-HD	O.DB		Sequence of silts o er gra els likely continues at depth Broken horizons likely influenced by ice in past
52	EGL22							0	0		Medium	/		Abies las, Pice mar, Ledu gro, Empe nig, Vacc oli, Salix pau, Salix gla, Rubus arc, Pleu sch, Peltigera		0			GLEY--R	R.G		flood sequence
52	EGL22							0	0		Medium	/		Abies las, Pice mar, Ledu gro, Empe nig, Vacc oli, Salix pau, Salix gla, Rubus arc, Pleu sch, Peltigera		0			GLEY--R	R.G		flood sequence
52	EGL22							0	0		Medium	/		Abies las, Pice mar, Ledu gro, Empe nig, Vacc oli, Salix pau, Salix gla, Rubus arc, Pleu sch, Peltigera		0			GLEY--R	R.G		flood sequence
52	EGL22							0	0		Medium	/		Abies las, Pice mar, Ledu gro, Empe nig, Vacc oli, Salix pau, Salix gla, Rubus arc, Pleu sch, Peltigera		0			GLEY--R	R.G		flood sequence
52	EGL22							0	0		Medium	/		Abies las, Pice mar, Ledu gro, Empe nig, Vacc oli, Salix pau, Salix gla, Rubus arc, Pleu sch, Peltigera		0			GLEY--R	R.G		flood sequence

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54	EGL26							0	0	P	Medium	/	Some tilted trees not many May be due to snow loading Some surface drainage channels sedimentation surface	Fir, spruce (Pice mar) forest, sphagnum, Hylo spl, Rubus cham, Empe nig, Equi syl		0		Z	CRYO--	Cryosol	p	Bedrock noted near side trail Phyllite highly weathered & fractured
54	EGL26							0	0	P	Medium	/	Some tilted trees not many May be due to snow loading Some surface drainage channels sedimentation surface	Fir, spruce (Pice mar) forest, sphagnum, Hylo spl, Rubus cham, Empe nig, Equi syl		0		Z	CRYO--	Cryosol	p	Bedrock noted near side trail Phyllite highly weathered & fractured
54	EGL26							0	0	P	Medium	/	Some tilted trees not many May be due to snow loading Some surface drainage channels sedimentation surface	Fir, spruce (Pice mar) forest, sphagnum, Hylo spl, Rubus cham, Empe nig, Equi syl		0		Z	CRYO--	Cryosol	p	Bedrock noted near side trail Phyllite highly weathered & fractured
56	EGL25							0	0		Medium	/	Broken metased material	Abies las, Pice mar, Pice gla, Hylo spl, Vacc oli, Ledu gro, Equi syl, Nephroma, Clad stel, Betu gla Main shrub is Salix pau		0			BRUN-DYB-O	O.DB		mid to upper slope difficult to texture as high broken rock fragments May be Lu osols in polygon
56	EGL25							0	0		Medium	/	Broken metased material	Abies las, Pice mar, Pice gla, Hylo spl, Vacc oli, Ledu gro, Equi syl, Nephroma, Clad stel, Betu gla Main shrub is Salix pau		0			BRUN-DYB-O	O.DB		mid to upper slope difficult to texture as high broken rock fragments May be Lu osols in polygon
56	EGL25							0	0		Medium	/	Broken metased material	Abies las, Pice mar, Pice gla, Hylo spl, Vacc oli, Ledu gro, Equi syl, Nephroma, Clad stel, Betu gla Main shrub is Salix pau		0			BRUN-DYB-O	O.DB		mid to upper slope difficult to texture as high broken rock fragments May be Lu osols in polygon
56	EGL25							0	0		Medium	/	Broken metased material	Abies las, Pice mar, Pice gla, Hylo spl, Vacc oli, Ledu gro, Equi syl, Nephroma, Clad stel, Betu gla Main shrub is Salix pau		0			BRUN-DYB-O	O.DB		mid to upper slope difficult to texture as high broken rock fragments May be Lu osols in polygon
57	EGL210							0	0			/		fir/spruce forest		0			LUV-GL-O	O.GL		likely O.DB in polygon as well Some met. sed in profile, mostly granodronite
57	EGL210							0	0			/		fir/spruce forest		0			LUV-GL-O	O.GL		likely O.DB in polygon as well Some met. sed in profile, mostly granodronite
57	EGL210							0	0			/		fir/spruce forest		0			LUV-GL-O	O.GL		likely O.DB in polygon as well Some met. sed in profile, mostly granodronite
57	EGL210							0	0			/		fir/spruce forest		0			LUV-GL-O	O.GL		likely O.DB in polygon as well Some met. sed in profile, mostly granodronite
57	EGL210							0	0			/		fir/spruce forest		0			LUV-GL-O	O.GL		likely O.DB in polygon as well Some met. sed in profile, mostly granodronite
58	EGL208							0	0		Low	/	broken horixon profile slow downward mo ement of material historically Cobbles to stones mostly with gra el			0			BRUN-DYB-E			skeletal soil
58	EGL208							0	0		Low	/	broken horixon profile slow downward mo ement of material historically Cobbles to stones mostly with gra el			0			BRUN-DYB-E			skeletal soil

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58	EGL208							0	0		Low	/	broken horizon profile slow downward movement of material historically Cobbles to stones mostly with gravel			0			BRUN-DYB-E			skeletal soil
58	EGL208							0	0		Low	/	broken horizon profile slow downward movement of material historically Cobbles to stones mostly with gravel			0			BRUN-DYB-E			skeletal soil
59	EGL209							0	0	U	High	/	Meta sed on 45 degree angle Two lithologies may be near bedrock contact	Abies, Betula		0			BRUN-DYB-E	E.DB/O.D B		meta sed SIL / igneous SL/LS
59	EGL209							0	0	U	High	/	Meta sed on 45 degree angle Two lithologies may be near bedrock contact	Abies, Betula		0			BRUN-DYB-E	E.DB/O.D B		meta sed SIL / igneous SL/LS
59	EGL209							0	0	U	High	/	Meta sed on 45 degree angle Two lithologies may be near bedrock contact	Abies, Betula		0			BRUN-DYB-E	E.DB/O.D B		meta sed SIL / igneous SL/LS
59	EGL209							0	0	U	High	/	Meta sed on 45 degree angle Two lithologies may be near bedrock contact	Abies, Betula		0			BRUN-DYB-E	E.DB/O.D B		meta sed SIL / igneous SL/LS
60	EGL50							0	0	U		/	bedrock cliffs above site pull out rock cliffs separate from boulder slides	Vaccinium, Hylocomium, Cladonia, Cladonia, Crustose lichen, Salix glauca, Betula, Ledum, Salix pauciflora, Empetrum		0			--			coarse sand w gravel
60	EGL50							0	0	U		/	bedrock cliffs above site pull out rock cliffs separate from boulder slides	Vaccinium, Hylocomium, Cladonia, Cladonia, Crustose lichen, Salix glauca, Betula, Ledum, Salix pauciflora, Empetrum		0			--			coarse sand w gravel
60	EGL50							0	0	U		/	bedrock cliffs above site pull out rock cliffs separate from boulder slides	Vaccinium, Hylocomium, Cladonia, Cladonia, Crustose lichen, Salix glauca, Betula, Ledum, Salix pauciflora, Empetrum		0			--			coarse sand w gravel
60	EGL50							0	0	U		/	bedrock cliffs above site pull out rock cliffs separate from boulder slides	Vaccinium, Hylocomium, Cladonia, Cladonia, Crustose lichen, Salix glauca, Betula, Ledum, Salix pauciflora, Empetrum		0			--			coarse sand w gravel
62	EGL212							0	0	S	Medium	/	mixed lithology of gravels flat, angular, subangular, various shapes due to lithology more than transport	old growth forest of Abies las, Ledum, Pleurozium, mostly Cladonia. some Vaccinium + Nephroma	nTashe	1			BRUN-DYB-O	O.DB		1 cobble near surface, all else is consistently gravel in the profile
62	EGL212							0	0	S	Medium	/	mixed lithology of gravels flat, angular, subangular, various shapes due to lithology more than transport	old growth forest of Abies las, Ledum, Pleurozium, mostly Cladonia. some Vaccinium + Nephroma	nTashe	1			BRUN-DYB-O	O.DB		1 cobble near surface, all else is consistently gravel in the profile
62	EGL212							0	0	S	Medium	/	mixed lithology of gravels flat, angular, subangular, various shapes due to lithology more than transport	old growth forest of Abies las, Ledum, Pleurozium, mostly Cladonia. some Vaccinium + Nephroma	nTashe	1			BRUN-DYB-O	O.DB		1 cobble near surface, all else is consistently gravel in the profile
62	EGL212							0	0	S	Medium	/	mixed lithology of gravels flat, angular, subangular, various shapes due to lithology more than transport	old growth forest of Abies las, Ledum, Pleurozium, mostly Cladonia. some Vaccinium + Nephroma	nTashe	1			BRUN-DYB-O	O.DB		1 cobble near surface, all else is consistently gravel in the profile

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64	EGL214							0	0	P	Medium	/	deep & wet soil consistency of pudding hole collapsing as digging tilled forest circular collapse scars (egetated) in site	open Sb forest Ledu gro, Cladina, Cladonia dominant		0	100	Z	CRYO--	Cryosol, R.HG		
64	EGL214							0	0	P	Medium	/	deep & wet soil consistency of pudding hole collapsing as digging tilled forest circular collapse scars (egetated) in site	open Sb forest Ledu gro, Cladina, Cladonia dominant		0	100	Z	CRYO--	Cryosol, R.HG		
64	EGL214							0	0	P	Medium	/	deep & wet soil consistency of pudding hole collapsing as digging tilled forest circular collapse scars (egetated) in site	open Sb forest Ledu gro, Cladina, Cladonia dominant		0	100	Z	CRYO--	Cryosol, R.HG		
67	EGL35							0	0			/	No rocks at surface some channel surface flow, but vegetation relatively intact	Open fir forest. Abies las, Betugra, Clad ste, Nephroma, Ledu gro, Cladonia, Poly tri	mTromm elen	1			BRUN-DYB-O	O.DB		high amount of gra el & mica in profile
67	EGL35							0	0			/	No rocks at surface some channel surface flow, but vegetation relatively intact	Open fir forest. Abies las, Betugra, Clad ste, Nephroma, Ledu gro, Cladonia, Poly tri	mTromm elen	1			BRUN-DYB-O	O.DB		high amount of gra el & mica in profile
68	EGL34							0	0		Low	/	M likely o er D or R	Abies las, Vacc oli, Vacc it, Ledu gro, Nephroma, Empi nig	nTashe	1			LUV-GL-O			likely O.GL/E.DB both in polygons
68	EGL34							0	0		Low	/	M likely o er D or R	Abies las, Vacc oli, Vacc it, Ledu gro, Nephroma, Empi nig	nTashe	1			LUV-GL-O			likely O.GL/E.DB both in polygons
68	EGL34							0	0		Low	/	M likely o er D or R	Abies las, Vacc oli, Vacc it, Ledu gro, Nephroma, Empi nig	nTashe	1			LUV-GL-O			likely O.GL/E.DB both in polygons
68	EGL34							0	0		Low	/	M likely o er D or R	Abies las, Vacc oli, Vacc it, Ledu gro, Nephroma, Empi nig	nTashe	1			LUV-GL-O			likely O.GL/E.DB both in polygons
69	EGL32							0	0	P	Medium	/		Open Betu gla shrubland		0			BRUN-DYB-E	E.DB		may be Lu isols in more stable areas
69	EGL32							0	0	P	Medium	/		Open Betu gla shrubland		0			BRUN-DYB-E	E.DB		may be Lu isols in more stable areas
69	EGL32							0	0	P	Medium	/		Open Betu gla shrubland		0			BRUN-DYB-E	E.DB		may be Lu isols in more stable areas
69	EGL32							0	0	P	Medium	/		Open Betu gla shrubland		0			BRUN-DYB-E	E.DB		may be Lu isols in more stable areas
69	EGL32							0	0	P	Medium	/		Open Betu gla shrubland		0			BRUN-DYB-E	E.DB		may be Lu isols in more stable areas
70	EGL31							200	0	U	High	/	Historic + shallow recent slides exposed mineral soil ~ 5 x 3 m	Aspen fir + Sw. In understory Juni com, Ledu gro, Vacc it, Arct u a, Vacc uli		0			REGO--O	O.R		cannot dig deeper than 40 cm due to high CF Some exposed stones/boulders on site Gra el in matrix
70	EGL31							200	0	U	High	/	Historic + shallow recent slides exposed mineral soil ~ 5 x 3 m	Aspen fir + Sw. In understory Juni com, Ledu gro, Vacc it, Arct u a, Vacc uli		0			REGO--O	O.R		cannot dig deeper than 40 cm due to high CF Some exposed stones/boulders on site Gra el in matrix
71	EGL30							200	0	P	Medium	/	Large boulders protruding at surface	Mature old fir/white spruce Geoc li , Hylo spl, Linn bor, Vacc it		0			BRUN-DYB-O	O.DB		bare soil under trees downslope only tonguing horizons
71	EGL30							200	0	P	Medium	/	Large boulders protruding at surface	Mature old fir/white spruce Geoc li , Hylo spl, Linn bor, Vacc it		0			BRUN-DYB-O	O.DB		bare soil under trees downslope only tonguing horizons
71	EGL30							200	0	P	Medium	/	Large boulders protruding at surface	Mature old fir/white spruce Geoc li , Hylo spl, Linn bor, Vacc it		0			BRUN-DYB-O	O.DB		bare soil under trees downslope only tonguing horizons
71	EGL30							200	0	P	Medium	/	Large boulders protruding at surface	Mature old fir/white spruce Geoc li , Hylo spl, Linn bor, Vacc it		0			BRUN-DYB-O	O.DB		bare soil under trees downslope only tonguing horizons

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72	EGR81							0	0	P	Medium	/	subsurface seepage above ice	open forest lichen dominant	nTashe	1	30	Z	CRYO-SC-HE		p	phase modifiers pt if Brunisols in area
72	EGR81							0	0	P	Medium	/	subsurface seepage above ice	open forest lichen dominant	nTashe	1	30	Z	CRYO-SC-HE		p	phase modifiers pt if Brunisols in area
72	EGR81							0	0	P	Medium	/	subsurface seepage above ice	open forest lichen dominant	nTashe	1	30	Z	CRYO-SC-HE		p	phase modifiers pt if Brunisols in area
72	EGR81							0	0	P	Medium	/	subsurface seepage above ice	open forest lichen dominant	nTashe	1	30	Z	CRYO-SC-HE		p	phase modifiers pt if Brunisols in area
75	EGL9							0	0	P	Low	/	matrix FSL, . poorly sorted, few poorly sorted areas (MS cs)			0		N	BRUN-DYB-O			no auger, can't check for ice O.EB or O.DYB
75	EGL9							0	0	P	Low	/	matrix FSL, . poorly sorted, few poorly sorted areas (MS cs)			0		N	BRUN-DYB-O			no auger, can't check for ice O.EB or O.DYB
75	EGL9							0	0	P	Low	/	matrix FSL, . poorly sorted, few poorly sorted areas (MS cs)			0		N	BRUN-DYB-O			no auger, can't check for ice O.EB or O.DYB
80	EGL10							0	0	S	Low	/	Poorly sorted, massive diamict; afs matrix, occasionally areas that are a bit more sorted (more mc sand). Clasta area A SA, minor SR. Mostly granule to pebble, only ~ 15 Y., ablation till or poss. debris flow (btw alley + glacier).			0	42	Z	CRYO--			
80	EGL10							0	0	S	Low	/	Poorly sorted, massive diamict; afs matrix, occasionally areas that are a bit more sorted (more mc sand). Clasta area A SA, minor SR. Mostly granule to pebble, only ~ 15 Y., ablation till or poss. debris flow (btw alley + glacier).			0	42	Z	CRYO--			
80	EGL10							0	0	S	Low	/	Poorly sorted, massive diamict; afs matrix, occasionally areas that are a bit more sorted (more mc sand). Clasta area A SA, minor SR. Mostly granule to pebble, only ~ 15 Y., ablation till or poss. debris flow (btw alley + glacier).			0	42	Z	CRYO--			
80	EGL10							0	0	S	Low	/	Poorly sorted, massive diamict; afs matrix, occasionally areas that are a bit more sorted (more mc sand). Clasta area A SA, minor SR. Mostly granule to pebble, only ~ 15 Y., ablation till or poss. debris flow (btw alley + glacier).			0	42	Z	CRYO--			
83	EGL11							0	0	S	Low	/	Is there a source for C above? Not a good till, but a small possibility			0		N	BRUN-DYB-O	O.EB or O.DYB		O.EB or O.DYB
83	EGL11							0	0	S	Low	/	Is there a source for C above? Not a good till, but a small possibility			0		N	BRUN-DYB-O	O.EB or O.DYB		O.EB or O.DYB
83	EGL11							0	0	S	Low	/	Is there a source for C above? Not a good till, but a small possibility			0		N	BRUN-DYB-O	O.EB or O.DYB		O.EB or O.DYB

SiteID	SiteNo	Organic Surface	Organic Drainage	Organic Soil Drainage	Nutrient Regime	Moisture Regime	Humus Form	Depth to Bedrock	Depth to Water	TSM	EP	Ecosite/Site Series	Site Note	Vegetation Note	QC By	QC Complete	Root Restricting Layer Depth	Root Restricting Layer Type	Soil Code	Series Code	Phase	Soil Notes	
89	EGR110							0	0	S	Low	/	abundant moss/peat/burnt duff eg + soil samples taken check photos to see if drape or if material makes slope TSM=II			0		N	BRUN-MB-O			or O.SB	
89	EGR110							0	0	S	Low	/	abundant moss/peat/burnt duff eg + soil samples taken check photos to see if drape or if material makes slope TSM=II			0		N	BRUN-MB-O			or O.SB	
89	EGR110							0	0	S	Low	/	abundant moss/peat/burnt duff eg + soil samples taken check photos to see if drape or if material makes slope TSM=II			0		N	BRUN-MB-O			or O.SB	
97	EGR415							0	0	S	Low	/	minor sed in patches on tops Horsetails + trees			0			--				some buried horizons
99	EGR416							0	0	S	Low	/	20 cm fs, no clasts o er ~ 1.5 m + z fs with ~ 40% R pebble to cobble			0		N	BRUN-DYB-O				O.DYB or O.EB
99	EGR416							0	0	S	Low	/	20 cm fs, no clasts o er ~ 1.5 m + z fs with ~ 40% R pebble to cobble			0		N	BRUN-DYB-O				O.DYB or O.EB
99	EGR416							0	0	S	Low	/	20 cm fs, no clasts o er ~ 1.5 m + z fs with ~ 40% R pebble to cobble			0		N	BRUN-DYB-O				O.DYB or O.EB
99	EGR416							0	0	S	Low	/	20 cm fs, no clasts o er ~ 1.5 m + z fs with ~ 40% R pebble to cobble			0		N	BRUN-DYB-O				O.DYB or O.EB
108	EGR411							0	0	U	Low	/	toe slope has a few piping holes whole hillside seems to be saturated + slowly slumping/creeping			0			--				
108	EGR411							0	0	U	Low	/	toe slope has a few piping holes whole hillside seems to be saturated + slowly slumping/creeping			0			--				
108	EGR411							0	0	U	Low	/	toe slope has a few piping holes whole hillside seems to be saturated + slowly slumping/creeping			0			--				
111	EGR409							0	0	S	Low	/	f= fsz, no clasts, interbeddedw buried humic to mesic beds 2 5 cm thick			0			--				
111	EGR409							0	0	S	Low	/	f= fsz, no clasts, interbeddedw buried humic to mesic beds 2 5 cm thick			0			--				
111	EGR409							0	0	S	Low	/	f= fsz, no clasts, interbeddedw buried humic to mesic beds 2 5 cm thick			0			--				
117	EGL66							0	0		Medium	/	Check drill logs for depth			0			BRUN-DYB-O				O.DYB to O.EB Ae thicker upslope than downslope
117	EGL66							0	0		Medium	/	Check drill logs for depth			0			BRUN-DYB-O				O.DYB to O.EB Ae thicker upslope than downslope
117	EGL66							0	0		Medium	/	Check drill logs for depth			0			BRUN-DYB-O				O.DYB to O.EB Ae thicker upslope than downslope

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118	EGR303							Moderate Well	0	0	S	Low	/	all clasts are very angular, all appear to be granitic, up with depth, granules to med pebbles (slate nearby on trail). dif D than yesterday, as dif R that it's eroded from. No idea how thick.		0			BRUN--			
118	EGR303							Moderate Well	0	0	S	Low	/	all clasts are very angular, all appear to be granitic, up with depth, granules to med pebbles (slate nearby on trail). dif D than yesterday, as dif R that it's eroded from. No idea how thick.		0			BRUN--			
118	EGR303							Moderate Well	0	0	S	Low	/	all clasts are very angular, all appear to be granitic, up with depth, granules to med pebbles (slate nearby on trail). dif D than yesterday, as dif R that it's eroded from. No idea how thick.		0			BRUN--			
118	EGR303							Moderate Well	0	0	S	Low	/	all clasts are very angular, all appear to be granitic, up with depth, granules to med pebbles (slate nearby on trail). dif D than yesterday, as dif R that it's eroded from. No idea how thick.		0			BRUN--			
119	EGL310							0	0	P	Medium	/	mixed mostly deciduous forest Is a small rock oc/frost head ~ 10 m to NW		0		N		BRUN-DYB-O			O.DYB or O.EB
119	EGL310							0	0	P	Medium	/	mixed mostly deciduous forest Is a small rock oc/frost head ~ 10 m to NW		0		N		BRUN-DYB-O			O.DYB or O.EB
119	EGL310							0	0	P	Medium	/	mixed mostly deciduous forest Is a small rock oc/frost head ~ 10 m to NW		0		N		BRUN-DYB-O			O.DYB or O.EB
120	EGL311									S	Medium	/	unsure of spatial extent		0		N		BRUN--			basially same as M, C, D parent materials
120	EGL311									S	Medium	/	unsure of spatial extent		0		N		BRUN--			basially same as M, C, D parent materials
120	EGL311									S	Medium	/	unsure of spatial extent		0		N		BRUN--			basially same as M, C, D parent materials
123	EGL47							0	0	S	Low	/	road cut,		0				--			
123	EGL47							0	0	S	Low	/	road cut,		0				--			
123	EGL47							0	0	S	Low	/	road cut,		0				--			
124	EGL1							Imperfect	0	0	S	Medium	/	Gully 20m downslope, only 1.2m wide.		0			--			IIC hard to texture due to clast content. Ah too thin to sample.
124	EGL1							Imperfect	0	0	S	Medium	/	Gully 20m downslope, only 1.2m wide.		0			--			IIC hard to texture due to clast content. Ah too thin to sample.
124	EGL1							Imperfect	0	0	S	Medium	/	Gully 20m downslope, only 1.2m wide.		0			--			IIC hard to texture due to clast content. Ah too thin to sample.
124	EGL1							Imperfect	0	0	S	Medium	/	Gully 20m downslope, only 1.2m wide.		0			--			IIC hard to texture due to clast content. Ah too thin to sample.

SiteID	SiteNo	Organic Surface	Organic Drainage	Organic Soil Drainage	Nutrient Regime	Moisture Regime	Humus Form	Drainage	Depth to Bedrock	Depth to Water	TSM	EP	Ecosite/Site Series	Site Note	Vegetation Note	QC By	QC Complete	Root Restricting Layer Depth	Root Restricting Layer Type	Soil Code	Series Code	Phase	Soil Notes
125	EGL313								0	0	S	Low	/	Seems to be an R Coned ridge. 2 holes dug encountered numerous phyllite pieces @ 20cm depth, with few intact pieces. SL matrix. Crest (old road) covered by numerous frost shattered pebbles (square, flat)			0	20	L	BRUN-DYB-O			Rock at 20cm. Soil code O.EB or O.DYB
125	EGL313								0	0	S	Low	/	Seems to be an R Coned ridge. 2 holes dug encountered numerous phyllite pieces @ 20cm depth, with few intact pieces. SL matrix. Crest (old road) covered by numerous frost shattered pebbles (square, flat)			0	20	L	BRUN-DYB-O			Rock at 20cm. Soil code O.EB or O.DYB
125	EGL313								0	0	S	Low	/	Seems to be an R Coned ridge. 2 holes dug encountered numerous phyllite pieces @ 20cm depth, with few intact pieces. SL matrix. Crest (old road) covered by numerous frost shattered pebbles (square, flat)			0	20	L	BRUN-DYB-O			Rock at 20cm. Soil code O.EB or O.DYB
126	EGR400							Imperfect	0	0	S	Low	/	+60cm of SL, mottled grey and brown, unsure if laminated. Are a few Fs beds therefore crude stratification. Spruce and cottonwood, equi sp, ibuedu, rosaaci, some moss.			0		N	REGO--GLCU			Soil Code GLCU.R (likely)
126	EGR400							Imperfect	0	0	S	Low	/	+60cm of SL, mottled grey and brown, unsure if laminated. Are a few Fs beds therefore crude stratification. Spruce and cottonwood, equi sp, ibuedu, rosaaci, some moss.			0		N	REGO--GLCU			Soil Code GLCU.R (likely)
126	EGR400							Imperfect	0	0	S	Low	/	+60cm of SL, mottled grey and brown, unsure if laminated. Are a few Fs beds therefore crude stratification. Spruce and cottonwood, equi sp, ibuedu, rosaaci, some moss.			0		N	REGO--GLCU			Soil Code GLCU.R (likely)
129	EGR401								0	0	S	Low	/	C1 20cm of z fs, appears massive, no clasts. C2 30cm+ of (sm lg) pebble gravel (35-45%) in a matrix granule poorly sorted matrix. Clasts are R, mix of litho			0			REGO--CU			Soil code CU.R
129	EGR401								0	0	S	Low	/	C1 20cm of z fs, appears massive, no clasts. C2 30cm+ of (sm lg) pebble gravel (35-45%) in a matrix granule poorly sorted matrix. Clasts are R, mix of litho			0			REGO--CU			Soil code CU.R

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129	EGR401							0	0	S	Low	/	C1 20cm of z fs, appears massive, no clasts. C2 30cm+ of (sm lg) pebble gravel (35-45%) in a matrix granule poorly sorted matrix. Clasts are R, mix of litho.			0		REGO--CU				Soil code CU.R	
129	EGR401							0	0	S	Low	/	C1 20cm of z fs, appears massive, no clasts. C2 30cm+ of (sm lg) pebble gravel (35-45%) in a matrix granule poorly sorted matrix. Clasts are R, mix of litho.			0		REGO--CU				Soil code CU.R	
133	EGR406							0	0	S	Medium	/	Old placer activity. One large roadcut exposes 5m of dk grey SL, interbedded with fms. Contains 2-3 peat beds with some large root pieces for Lisa (paleo). Lots of old wood in placer stuff.			0		REGO--GLCU				Soil Code GLCU.R	
133	EGR406							0	0	S	Medium	/	Old placer activity. One large roadcut exposes 5m of dk grey SL, interbedded with fms. Contains 2-3 peat beds with some large root pieces for Lisa (paleo). Lots of old wood in placer stuff.			0		REGO--GLCU				Soil Code GLCU.R	
133	EGR406							0	0	S	Medium	/	Old placer activity. One large roadcut exposes 5m of dk grey SL, interbedded with fms. Contains 2-3 peat beds with some large root pieces for Lisa (paleo). Lots of old wood in placer stuff.			0		REGO--GLCU				Soil Code GLCU.R	
134	EGR404									S	Low	/	Recent flooding/thin silt cover over	Alder, Equi sp.		0		N	REGO--CU				
135	EGR403									P	Low	/	rock exposed in road cut. Estimate D is 1-3 m thick Hole = 60% A phyllite pieces in a SL matrix. Mica in matrix too			0	10	L	REGO--O				
135	EGR403									P	Low	/	rock exposed in road cut. Estimate D is 1-3 m thick Hole = 60% A phyllite pieces in a SL matrix. Mica in matrix too			0	10	L	REGO--O				
135	EGR403									P	Low	/	rock exposed in road cut. Estimate D is 1-3 m thick Hole = 60% A phyllite pieces in a SL matrix. Mica in matrix too			0	10	L	REGO--O				
136	EGR407							0	0	P	Low	/	Slump block. Site is just down from R side of scarp, unsure how far it goes. Scarp is 2-3m high. Trees are 30-50 years old. Caution when digging toe as could reactivate. Trees are happy and upright looks stable now.			0		L	REGO--O				Soil code O.R. Root restricting layer: rock at some unknown depth.

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136	EGR407							0	0	P	Low	/	Slump block. Site is just down from R side of scarp, unsure how far it goes. Scarp is 2.3m high. Trees are 30-50 years old. Caution when digging toe as could reactivate. Trees are happy and upright looks stable now.			0	L	REGO--O				Soil code O.R Root restricting layer: rock at some unknown depth.	
139	EGR413									S	Low	/	2.5m up from river base.	TSM=1		0			--				
139	EGR413									S	Low	/	2.5m up from river base.	TSM=1		0			--				
139	EGR413									S	Low	/	2.5m up from river base.	TSM=1		0			--				
141	EGL21							Moderate Well	0	0	S	Low	/	1m high shrub birch, scattered spruce, moss. Gentle slope, some mud boils therefore permafrost. Not C, as no source area or dif material. Small depression below site has scattered A boulders.			0		BRUN-EB-O	O.EB			Soil code O.EB Structure and clour due (partially?) to weathering of R
141	EGL21							Moderate Well	0	0	S	Low	/	1m high shrub birch, scattered spruce, moss. Gentle slope, some mud boils therefore permafrost. Not C, as no source area or dif material. Small depression below site has scattered A boulders.			0		BRUN-EB-O	O.EB			Soil code O.EB Structure and clour due (partially?) to weathering of R
141	EGL21							Moderate Well	0	0	S	Low	/	1m high shrub birch, scattered spruce, moss. Gentle slope, some mud boils therefore permafrost. Not C, as no source area or dif material. Small depression below site has scattered A boulders.			0		BRUN-EB-O	O.EB			Soil code O.EB Structure and clour due (partially?) to weathering of R
141	EGL21							Moderate Well	0	0	S	Low	/	1m high shrub birch, scattered spruce, moss. Gentle slope, some mud boils therefore permafrost. Not C, as no source area or dif material. Small depression below site has scattered A boulders.			0		BRUN-EB-O	O.EB			Soil code O.EB Structure and clour due (partially?) to weathering of R
141	EGL21							Moderate Well	0	0	S	Low	/	1m high shrub birch, scattered spruce, moss. Gentle slope, some mud boils therefore permafrost. Not C, as no source area or dif material. Small depression below site has scattered A boulders.			0		BRUN-EB-O	O.EB			Soil code O.EB Structure and clour due (partially?) to weathering of R
144	TPA1											/	3rd sample is "OS" org. soft want part size + O.M. content			0	52	Z	--				wood in underlying till total hole depth ~ 6 ft all salagable mix of clay masses + collu ium

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144	TPA1											/	3rd sample is "OS" org. soft want part size + O.M. content			0	52	Z	--				wood in underlying till total hole depth ~ 6 ft all sal agable mix of clay masses + collu ium
144	TPA1											/	3rd sample is "OS" org. soft want part size + O.M. content			0	52	Z	--				wood in underlying till total hole depth ~ 6 ft all sal agable mix of clay masses + collu ium
145	TPA3							0	0			/				0	0.5	Z	--				silt till, low c.f. interbedded w 30 cm gra elly layers all sal eagable ice to 1.3 m may or may not be permafrost to 4 m SiS Mb then to SiS gray, unoxidized samples samples PM3+ PM4 both strangely effer esent, esp PM3 BM2 = PM1 gra elly bars PM2
145	TPA3							0	0			/				0	0.5	Z	--				silt till, low c.f. interbedded w 30 cm gra elly layers all sal eagable ice to 1.3 m may or may not be permafrost to 4 m SiS Mb then to SiS gray, unoxidized samples samples PM3+ PM4 both strangely effer esent, esp PM3 BM2 = PM1 gra elly bars PM2
145	TPA3							0	0			/				0	0.5	Z	--				silt till, low c.f. interbedded w 30 cm gra elly layers all sal eagable ice to 1.3 m may or may not be permafrost to 4 m SiS Mb then to SiS gray, unoxidized samples samples PM3+ PM4 both strangely effer esent, esp PM3 BM2 = PM1 gra elly bars PM2
146	TPA4							0	0			/				0	53	Z	--				All sal eageable underlying material is Cb w slope wash C o erlying pre ious surface soil No e idenc eof carbonates in this Cb sample PM1 frozen Cb total depth > 2.5 m
146	TPA4							0	0			/				0	53	Z	--				All sal eageable underlying material is Cb w slope wash C o erlying pre ious surface soil No e idenc eof carbonates in this Cb sample PM1 frozen Cb total depth > 2.5 m

SiteID	SiteNo	Organic Surface	Organic Drainage	Nutrient Regime	Moisture Regime	Humus Form	Drainage	Depth to Bedrock	Depth to Water	TSM	EP	Ecosite/ Site Series	Site Note	Vegetation Note	QC By	QC Complete	Root Restricting Layer Depth	Root Restricting Layer Type	Soil Code	Series Code	Phase	Soil Notes	
146	TPA4							0	0			/				0	53	Z	--				All sal eageable underlying material is Cb w slope wash C o erlying pre ious surface soil No e idenc eof carbonates in this Cb sample PM1 frozen Cb total depth > 2.5 m
146	TPA4							0	0			/				0	53	Z	--				All sal eageable underlying material is Cb w slope wash C o erlying pre ious surface soil No e idenc eof carbonates in this Cb sample PM1 frozen Cb total depth > 2.5 m
146	TPA4							0	0			/				0	53	Z	--				All sal eageable underlying material is Cb w slope wash C o erlying pre ious surface soil No e idenc eof carbonates in this Cb sample PM1 frozen Cb total depth > 2.5 m
146	TPA4							0	0			/				0	53	Z	--				All sal eageable underlying material is Cb w slope wash C o erlying pre ious surface soil No e idenc eof carbonates in this Cb sample PM1 frozen Cb total depth > 2.5 m
147	EGR451			Poor	SubMesic	mor	Well					/	by road			0			BRUN-DYB-O				
147	EGR451			Poor	SubMesic	mor	Well					/	by road			0			BRUN-DYB-O				
147	EGR451			Poor	SubMesic	mor	Well					/	by road			0			BRUN-DYB-O				
148	EGR450		peraquic	Poor	SubhyDric		Very Poor					/		fen sedge on periphery horsetail in centre surrounded by bog water at surface all egetated		0	20		GLE Y--R	Rego Gleysol		likely lenses of silt not isible due to high water table	
148	EGR450		peraquic	Poor	SubhyDric		Very Poor					/		fen sedge on periphery horsetail in centre surrounded by bog water at surface all egetated		0	20		GLE Y--R	Rego Gleysol		likely lenses of silt not isible due to high water table	
148	EGR450		peraquic	Poor	SubhyDric		Very Poor					/		fen sedge on periphery horsetail in centre surrounded by bog water at surface all egetated		0	20		GLE Y--R	Rego Gleysol		likely lenses of silt not isible due to high water table	

SiteID	SiteNo	ProfileID	Horizon	DpthStart	DpthEnd	COARSE FRAGS		TEXTURE	CF Type	Texture	C Frag	RATING	Salvage T	Seepage C	Permafros Depth to V	Root Restri	Root Restri	Soil Notes	
						Surf.Stone	CF%												CF Typ
1	4	EGL63	2 LFH	7	0	<0.01%	0		NA	NA	G	O	7		0	0		Fining upward sequence broken horizons from soil creep	
2	4	EGL63	3 Ahe	0	5	<0.01%	30	G	SiL		F	F	12		0	0		Fining upward sequence broken horizons from soil creep	
3	4	EGL63	7 Bm	5	9	<0.01%	50	G	SL		G	P			0	0		Fining upward sequence broken horizons from soil creep	
4	4	EGL63	9 BC	9	32	<0.01%	50	G	LS		F	P			0	0		Fining upward sequence broken horizons from soil creep	
5	4	EGL63	11 C	32	0	<0.01%	65	G	LS		F	U			0	0		Fining upward sequence broken horizons from soil creep	
6	5	EGL216	4 LFH	6	0		0		NA	NA	G	O	6		0	20		likely mix of rigosols and thin brunisols on site. Silty Sand	
7	5	EGL216	5 Bm	0	0		50	S		U	NA	NA	U		0	20		likely mix of rigosols and thin brunisols on site. Silty Sand	
8	5	EGL216	6 C	0	0		70	B		U	NA	NA	U		0	20		likely mix of rigosols and thin brunisols on site. Silty Sand	
9	6	EGR94	8 LFH	7	0	0.1 - 3%			NA	NA	NA	O	7	13	13			seepage flowing through pit Dissected landscape start of gentle drainage to creek	
10	6	EGR94	10 C	0	59	0.1 - 3%	45	G	SCL		G	F	66	13	13			seepage flowing through pit Dissected landscape start of gentle drainage to creek	
11	7	EGR93	12 LFH	4	0	15 - 50%	0		NA	NA	G	O	4		0	30	L	o er half the profile is rock no alignment	
12	7	EGR93	13 Ah	0	2	15 - 50%	55	S		U	NA	NA	U		0	30	L	o er half the profile is rock no alignment	
13	7	EGR93	14 Bm	2	25	15 - 50%	55	B		U	NA	NA	U		0	30	L	o er half the profile is rock no alignment	
14	8	EGR92	15 Of	1.7	0	<0.01%	0		NA	NA	G	O	1.7	22	60	0	60	Z	phase: pt Lenses of silt + sand Do not appear as layers Bands of silt + sand found in Of layer Some flat pans rocks in profile
16	8	EGR92	17 Cgz	60	61	<0.01%	0		SCL	NA	G	G		22	60	0	60	Z	phase: pt Lenses of silt + sand Do not appear as layers Bands of silt + sand found in Of layer Some flat pans rocks in profile
15	8	EGR92	16 Cg	0	60	<0.01%	15	G	CL		F	G	61.7	22	60	0	60	Z	phase: pt Lenses of silt + sand Do not appear as layers Bands of silt + sand found in Of layer Some flat pans rocks in profile
17	10	EGL8	18 LFH	10	0	0.01 - 0.1%	0		NA	NA	G	O	10		0			likely R.G + GL.R in polygon + GL.OB Ah too thin to sample	
18	10	EGL8	19 Ah	0	4	0.01 - 0.1%	0		SiCL	NA	G	G	14		0			likely R.G + GL.R in polygon + GL.OB Ah too thin to sample	
19	10	EGL8	20 Bg	4	14	0.01 - 0.1%	0		SCL	NA	G	G			0			likely R.G + GL.R in polygon + GL.OB Ah too thin to sample	
20	10	EGL8	21 BCg	14	41	0.01 - 0.1%	0		SCL	NA	G	G	51		0			likely R.G + GL.R in polygon + GL.OB Ah too thin to sample	
21	11	EGL6	22 C	0	0		75	S	S	U	F	U	U		0			Some depressions w water but o er all dry site	
22	12	EGL41	23 Of	25	0	<0.01%	0		NA	NA	G	O	25	19	100	0	100	Z	phase: pt likely roots restricted by ice some tilted trees, eryl stunted, cold soil likely Cryosol at site check drill logs for permafrost
23	12	EGL41	24 Cg	0	16	<0.01%	25	CG	SCL		G	G		19	100	0	100	Z	phase: pt likely roots restricted by ice some tilted trees, eryl stunted, cold soil likely Cryosol at site check drill logs for permafrost
24	12	EGL41	25 Cg	16	50	<0.01%	25	CG	SCL		G	G	75	19	100	0	100	Z	phase: pt likely roots restricted by ice some tilted trees, eryl stunted, cold soil likely Cryosol at site check drill logs for permafrost
25	13	EGL200	26 LFH	7	0	<0.01%	0		NA	NA	G	O	7		0			C too coarse to dig cannot cho el or auger Flat lying rocks Mine material	
26	13	EGL200	27 Ahe	0	5	<0.01%	20	G			NA	NA	12		0			C too coarse to dig cannot cho el or auger Flat lying rocks Mine material	
27	13	EGL200	28 Bm	5	29	<0.01%	0	C		G	NA	G			0			C too coarse to dig cannot cho el or auger Flat lying rocks Mine material	
28	13	EGL200	29 BC	29	51	<0.01%	0	C		G	NA	G	76		0			C too coarse to dig cannot cho el or auger Flat lying rocks Mine material	
29	13	EGL200	30 C	0	0	<0.01%	45	S		U	NA	NA	U		0			C too coarse to dig cannot cho el or auger Flat lying rocks Mine material	
30	14	EGR96	31 Of	20	0	<0.01%	0		NA	NA	G	O	20	10	30	0	30	Z	discontinuous Ah <2cm. Strongly cryoturbated layer of. Phase modifier = pt
31	14	EGR96	33 Cg	0	30	<0.01%	15	G	SiL		F	G	50	10	30	0	30	Z	discontinuous Ah <2cm. Strongly cryoturbated layer of. Phase modifier = pt
32	15	EGL16	35 LFH	7	0	15 - 50%	0		NA	NA	G	O	7		0			Augered holes BC structure indicati e of former ice contact causing dessication resulting in structure	
33	15	EGL16	40 Ah	0	7	15 - 50%	50	B	SiL	U	F	P	U		0			Augered holes BC structure indicati e of former ice contact causing dessication resulting in structure	
34	15	EGL16	41 Bm	10	30	15 - 50%	50	B	SiL	U	F	P	U		0			Augered holes BC structure indicati e of former ice contact causing dessication resulting in structure	
35	15	EGL16	42 BC	30	60	15 - 50%	50	B	L	U	G	P	U		0			Augered holes BC structure indicati e of former ice contact causing dessication resulting in structure	
36	16	EGR91	34 Of	12	0		0		NA	NA	G	O	12		0				
37	16	EGR91	36 C1	0	20		0		SiL	NA	F	G	F		0				
38	16	EGR91	37 Of2	20	40		0		NA	NA	G	O			0				
39	16	EGR91	38 C2	40	50		0		LS	NA	F	G	F		0				
40	16	EGR91	39 C3	50	60		0		SiL	NA	F	G	F	72		0			
41	19	EGL15	43 LFH	3	0	3 - 15%	20	G			NA	NA	O	3		0			Moist area, some parts of polygon e idence of surface drainage

SiteID	SiteNo	ProfileID	Horizon	DpthStart	DpthEnd	COARSE FRAGS		TEXTURE texture	CF Type RATING	Texture RATING	C Frag RATING	RATING	Salvage T	Seepage C	Permafros Depth to V	Root Resti	Root Resti	Soil Notes
						Surf.Stone CF%	CF Typ											
42	19	EGL15	44 Ah	0	7	3 - 15%	20 G	SL		G	F	F	7					Moist area, some parts of polygon e idence of surface drainage
43	19	EGL15	45 Bm	7	61	3 - 15%	20 C	SL	P	G	F	P						Moist area, some parts of polygon e idence of surface drainage
44	19	EGL15	46 Bgj	61	65	3 - 15%	45 S	SL	U	G	P	U						Moist area, some parts of polygon e idence of surface drainage
45	19	EGL15	47 Cg	0	0	3 - 15%	0		NA	NA	G							Moist area, some parts of polygon e idence of surface drainage
46	20	EGL17	48 LFH	5	0	3 - 15%	0		NA	NA	G	O	5					Verify texture's pH to determine if Brunisol s. Lu isol Heap leach option 3
47	20	EGL17	49 Ahe	0	6	3 - 15%	25 C	SiL	P	F	G	P						Verify texture's pH to determine if Brunisol s. Lu isol Heap leach option 3
48	20	EGL17	50 Bm	6	13	3 - 15%	30 C	SL	P	G	F	P						Verify texture's pH to determine if Brunisol s. Lu isol Heap leach option 3
49	21	EGL39	51 LFH	7	0	0.1 - 3%	0		NA	NA	G	O	7					Rocks and unstable slope angle limit soil depth. ariety of fragments gra el to cobbles
50	21	EGL39	52 Ae	0	7	0.1 - 3%	15 G	SiCL		G	G	G	14					Rocks and unstable slope angle limit soil depth. ariety of fragments gra el to cobbles
51	21	EGL39	53 Bm	7	33	0.1 - 3%	25 CG	SiCL		G	G	G	40					Rocks and unstable slope angle limit soil depth. ariety of fragments gra el to cobbles
52	21	EGL39	54 Bt	33	37	0.1 - 3%	40 C	SiC	U	F	F	U						Rocks and unstable slope angle limit soil depth. ariety of fragments gra el to cobbles
53	21	EGL39	55 BC	37	57	0.1 - 3%	40 C	SiCL	U	G	F	U						Rocks and unstable slope angle limit soil depth. ariety of fragments gra el to cobbles
54	22	EGL38	56 LFH	6	0	<0.01%	0		NA	NA	G	O	6					mica like shads of glass difficult to texture Almost a lu isoil
55	22	EGL38	57 Ahe	0	4	<0.01%	15 G	SiCL		G	G	G	10					mica like shads of glass difficult to texture Almost a lu isoil
56	22	EGL38	58 Bt	4	27	<0.01%	15 G	SiCL		G	G	G						mica like shads of glass difficult to texture Almost a lu isoil
57	22	EGL38	59 BC	27	42	<0.01%	15 G	SiL		F	G	F	52					mica like shads of glass difficult to texture Almost a lu isoil
58	22	EGL38	60 C	42	63	<0.01%	25 C	SiL	P	F	G	P						mica like shads of glass difficult to texture Almost a lu isoil
59	23	EGL37	61 LFH	8	0	0.01 - 0.1%	0		NA	NA	G	O	8					Soil shows pre ious ice contact by granulated structure at depth in C. Charcoal in profile
60	23	EGL37	62 Ahe	0	6	0.01 - 0.1%	30 G	SiL		F	G	F	14					Soil shows pre ious ice contact by granulated structure at depth in C. Charcoal in profile
61	23	EGL37	63 Bm	6	20	0.01 - 0.1%	30 C	SiL	P	F	G	P						Soil shows pre ious ice contact by granulated structure at depth in C. Charcoal in profile
62	23	EGL37	64 BC	20	50	0.01 - 0.1%	30 C	SiCL	P	G	G	P						Soil shows pre ious ice contact by granulated structure at depth in C. Charcoal in profile
63	23	EGL37	65 C	50	55	0.01 - 0.1%	45 C	SiCL	U	G	F	U						Soil shows pre ious ice contact by granulated structure at depth in C. Charcoal in profile
64	24	EGL36	66 LFH	4	0	<0.01%	0		NA	NA	G	O	4					some gra el is SA to SR
65	24	EGL36	67 Ah	0	5	<0.01%	25 G	SiL		F	G	G	9					some gra el is SA to SR
66	24	EGL36	68 Bm	5	35	<0.01%	30 G	SiL		F	G	F						some gra el is SA to SR
67	24	EGL36	69 C	35	70	<0.01%	25 G	SiCL		G	G	G	74					some gra el is SA to SR
68	25	EGL207	70 LFH	3	0	15 - 50%	0		NA	NA	G	O	3					weak Ae may some E.DB in more stable areas
69	25	EGL207	71 AeJ	0	2	15 - 50%	0	SiL	NA	F	G	U						weak Ae may some E.DB in more stable areas
70	25	EGL207	72 C	2	20	15 - 50%	0	SiL	NA	F	G	U						weak Ae may some E.DB in more stable areas
71	26	EGL18	73 LFH	6	0	0.1 - 3%	0		NA	NA	G	O	6					Not elu iated as not thick enough Broken horizon Platey structure from historic ice contact *weathered bedrock produces linear stration of mottle colours
72	26	EGL18	74 Ahe	0	4	0.1 - 3%	20 C	L	P	G	G	P						Not elu iated as not thick enough Broken horizon Platey structure from historic ice contact *weathered bedrock produces linear stration of mottle colours
73	26	EGL18	75 Bm	4	19	0.1 - 3%	30 C	L	P	G	G	P						Not elu iated as not thick enough Broken horizon Platey structure from historic ice contact *weathered bedrock produces linear stration of mottle colours
74	26	EGL18	76 Bm	19	59	0.1 - 3%	30 C	L	P	G	G	P						Not elu iated as not thick enough Broken horizon Platey structure from historic ice contact *weathered bedrock produces linear stration of mottle colours
75	26	EGL18	77 C	59		0.1 - 3%	50		NA	NA	NA							Not elu iated as not thick enough Broken horizon Platey structure from historic ice contact *weathered bedrock produces linear stration of mottle colours
76	27	EGL33	78 LFH	3	0		0		NA	NA	G	O	3					Thin dicontinuous Ahe (<2cm). 33 Auger/Sho el refusal large stone. Some SA gra el at depth
77	27	EGL33	79 Bm	0	8		15 G	SiL		F	G	F						Thin dicontinuous Ahe (<2cm). 33 Auger/Sho el refusal large stone. Some SA gra el at depth
78	27	EGL33	80 BC	8	30		15 G	SiL		F	G	F	33					Thin dicontinuous Ahe (<2cm). 33 Auger/Sho el refusal large stone. Some SA gra el at depth

SiteID	SiteNo	ProfileID	Horizon	DpthStart	DpthEnd	COARSE FRAGS		TEXTURE texture	CF Type	Texture RATING	C Frag RATING	RATING	Salvage T	Seepage	C	Permafros	Depth to V	Root Rest	Root Rest	Soil Notes		
						Surf.Stone	CF%														CF Typ	
79	27	EGL33	81 C	30	0		45 C	SiCL	U	G	F	U									Thin discontinuous Ahe (<2cm). 33 Auger/Shovel refusal large stone. Some SA gravel at depth	
80	28	EGL19	82 LFH	3	0	0.01 - 0.1%	0	SiL	NA	NA	G	O	3		37							
81	28	EGL19	83 AB	0	7	0.01 - 0.1%	15 G	SiL		F	G	G	10		37							
82	28	EGL19	84 Bm	7	29	0.01 - 0.1%	15 C	SiL	G	F	G	G	32		37							
83	28	EGL19	85 Bgj	29	37	0.01 - 0.1%	20 C	SiL	P	F	G	P			37							
84	28	EGL19	86 Cgj	37	42	0.01 - 0.1%	50 S		U	NA	NA	U			37							
85	29	EGL20	87 LFH	5	0	3 - 15%	0		NA	NA	G	O	5								C.F. content, but nice fine matrix for reclamation	
86	29	EGL20	88 Ah	0	9	3 - 15%	15 G	L		G	G	G	14								C.F. content, but nice fine matrix for reclamation	
87	29	EGL20	89 Bm	9	25	3 - 15%	15 S	L	F	G	G	F									C.F. content, but nice fine matrix for reclamation	
88	29	EGL20	90 Bm	25	55	3 - 15%	30 S	SiL	P	F	G	F	69								C.F. content, but nice fine matrix for reclamation	
89	29	EGL20	91 C	55	70	3 - 15%	40 B	L	U	G	F	U									C.F. content, but nice fine matrix for reclamation	
90	30	EGL201	92 LFH	2	0	15 - 50%	0		NA	NA	G	O	2					25	L		High coarse fragment makes unsuitable reclamation material. Well de eloped fines C? Cannot dig or auger Organic enrichment old soil.	
91	30	EGL201	93 Ah	0	5	15 - 50%	40 S	SiL	U	F	F	U							25	L		High coarse fragment makes unsuitable reclamation material. Well de eloped fines C? Cannot dig or auger Organic enrichment old soil.
92	30	EGL201	94 Bm	5	25	15 - 50%	60 S	SiL	U	F	P	U							25	L		High coarse fragment makes unsuitable reclamation material. Well de eloped fines C? Cannot dig or auger Organic enrichment old soil.
93	30	EGL201	95 Bm	25	40	15 - 50%	0		NA	NA	G	G							25	L		High coarse fragment makes unsuitable reclamation material. Well de eloped fines C? Cannot dig or auger Organic enrichment old soil.
94	31	EGL5	96 LFH	4	0	15 - 50%	0		NA	NA	G	O	4						100	X		So many boulder, stones near surface, went to cut created by road to describe soils. Topsoil from site.
95	31	EGL5	97 Ah	0	8	15 - 50%	40 S	SiL	U	F	F	U							100	X		So many boulder, stones near surface, went to cut created by road to describe soils. Topsoil from site.
96	31	EGL5	98 Bm	8	25	15 - 50%	45 C	SiL	U	F	F	U							100	X		So many boulder, stones near surface, went to cut created by road to describe soils. Topsoil from site.
97	31	EGL5	99 BC	25	60	15 - 50%	45 C	SiL	U	F	F	U							100	X		So many boulder, stones near surface, went to cut created by road to describe soils. Topsoil from site.
98	32	EGL202	100 LFH	4	0	3 - 15%	0		NA	NA	G	O	4								BC some colour imparted based on what is visible from disturbed areas	
99	32	EGL202	101 Ah	0	3	3 - 15%	20 G	SiL		F	G	G	7									BC some colour imparted based on what is visible from disturbed areas
100	32	EGL202	102 Bm	3	26	3 - 15%	30 C	SiL	P	F	G	P										BC some colour imparted based on what is visible from disturbed areas
101	32	EGL202	103 BC	26	45	3 - 15%	45 C	SiL	U	F	F	U										BC some colour imparted based on what is visible from disturbed areas
103	33	EGL203	105 C	0	0		0		NA	NA	G											Compacted all subsoil & topsoil pushed (unidirectional but mixed)
102	33	EGL203	104 C	0	100		50 C	SiL	U	F	P	U										Compacted all subsoil & topsoil pushed (unidirectional but mixed)
104	34	EGL58	106 LFH	0	0	3 - 15%	0		NA	NA	G	O	0		10							past evidence of permafrost no longer present boulders at surface
105	34	EGL58	107 Ahg	0	2	3 - 15%	20 G	SCL		G	G	G	2		10							past evidence of permafrost no longer present boulders at surface
106	34	EGL58	108 Bg	2	40	3 - 15%	30 G	SCL		G	G	G	40		10							past evidence of permafrost no longer present boulders at surface
107	34	EGL58	109 Cg	40	60	3 - 15%	40 C	LS	U	F	P	U			10							past evidence of permafrost no longer present boulders at surface
108	35	EGL52	110 LFH	4	0	3 - 15%	0		NA	NA	G	O	4									gentle then steepens to bulch/gully mottles from bedrock weathering not increased WiT frost boils exposed soil trends downward
109	35	EGL52	111 Ah	0	3	3 - 15%	20 G	L		G	G	G	7									gentle then steepens to bulch/gully mottles from bedrock weathering not increased WiT frost boils exposed soil trends downward
110	35	EGL52	112 Bm	3	49	3 - 15%	20 C	L	P	G	G	P										gentle then steepens to bulch/gully mottles from bedrock weathering not increased WiT frost boils exposed soil trends downward
111	35	EGL52	113 BC	49	82	3 - 15%	25 C	L	P	G	G	P										gentle then steepens to bulch/gully mottles from bedrock weathering not increased WiT frost boils exposed soil trends downward
112	35	EGL52	114 C	82	100	3 - 15%	30 S	L	P	G	G	F										gentle then steepens to bulch/gully mottles from bedrock weathering not increased WiT frost boils exposed soil trends downward

SiteID	SiteNo	ProfileID	Horizon	DpthStart	DpthEnd	Surf.Stone	COARSE FRAGS		TEXTURE	CF Type	Texture	C Frag	RATING	Salvage T	Seepage	C Permafros	Depth to V	Root Restri	Root Restri	Soil Notes
							CF%	CF Typ												
113	36	EGL53	115 LFH	30	0	3 - 15%	0		NA	NA	G	O	30							Ah thin & discontinuous ~ 3 cm
114	36	EGL53	116 Bm	0	15	3 - 15%	25	S	L	P	G	G	F							Ah thin & discontinuous ~ 3 cm
115	36	EGL53	117 BC	15	41	3 - 15%	30	B	L	P	G	G	F	71						Ah thin & discontinuous ~ 3 cm
116	36	EGL53	118 C	41	45	3 - 15%	45	B	L	U	G	F	U							Ah thin & discontinuous ~ 3 cm
117	37	EGL3	119 LFH	3	0	3 - 15%	0			NA	NA	G	O	3						Mottles from wathering rock only Mix of coarse fragments from pea gra el to boulders in silt loam matrix. Auger/sho el refusal at 50 3rd pit attempt due to rocks
118	37	EGL3	120 Ah	0	7	3 - 15%	30	G	L		G	G	F	7						Mottles from wathering rock only Mix of coarse fragments from pea gra el to boulders in silt loam matrix. Auger/sho el refusal at 50 3rd pit attempt due to rocks
119	37	EGL3	121 Bm	7	20	3 - 15%	30	C	L	P	G	G	P							Mottles from wathering rock only Mix of coarse fragments from pea gra el to boulders in silt loam matrix. Auger/sho el refusal at 50 3rd pit attempt due to rocks
120	37	EGL3	122 BC	20	40	3 - 15%	30	C	L	P	G	G	P							Mottles from wathering rock only Mix of coarse fragments from pea gra el to boulders in silt loam matrix. Auger/sho el refusal at 50 3rd pit attempt due to rocks
121	37	EGL3	123 C	40	50	3 - 15%	45	S	L	U	G	F	U							Mottles from wathering rock only Mix of coarse fragments from pea gra el to boulders in silt loam matrix. Auger/sho el refusal at 50 3rd pit attempt due to rocks
122	38	EGL204	124 LFH	3	0	3 - 15%	0			NA	NA	G	O	3						High degree of mixing in soil profile No 'C' horizon
123	38	EGL204	125 Ahe	0	10	3 - 15%	40	G	SiL		F	F	F	13						High degree of mixing in soil profile No 'C' horizon
124	38	EGL204	126 AB	10	20	3 - 15%	40	G	SiL		F	F	F	23						High degree of mixing in soil profile No 'C' horizon
125	38	EGL204	127 Bm	20	75	3 - 15%	40	C	L	U	G	F	U							High degree of mixing in soil profile No 'C' horizon
126	39	EGL4	128 LFH	7	0	3 - 15%	0			NA	NA	G	O	7						
127	39	EGL4	129 Ah	0	4	3 - 15%	30	C	L	P	G	G	P							
128	39	EGL4	130 Bm	4	51	3 - 15%	30	C	SL	P	G	F	P							
129	39	EGL4	131 BC	51	80	3 - 15%	60	S	SL	U	G	U	U							
130	40	EGL205	132 LFH	3	0	3 - 15%	0			NA	NA	G	O	3	60					
131	40	EGL205	133 Ah	0	5	3 - 15%	30	G	SiL		F	G	F	8	60					
132	40	EGL205	134 C1	5	30	3 - 15%	30	C	SL	P	G	F	P		60					
133	40	EGL205	135 C2	30	50	3 - 15%	60	C	LS	U	F	U	U		60					
134	41	EGL60	136 LFH	3	0	15 - 50%	0			NA	NA	G	O	3					L	x shallow cannot assess C horizon depth is estimate
136	41	EGL60	138 C	6	100	15 - 50%	70	B		U	NA	NA	U						L	x shallow cannot assess C horizon depth is estimate
135	41	EGL60	137 Bm	0	6	15 - 50%	65	C	L	U	G	P	U						L	x shallow cannot assess C horizon depth is estimate
137	42	EGL61	139 LFH	4	0	15 - 50%	0			NA	NA	G	O	4						x shallow Ahe 0.2 Too high C.F. to fully assess soil Some soil is just rock to surface flat lying rocks
138	42	EGL61	140 Ahe	0	2	15 - 50%	45	S	L	U	G	F	U							x shallow Ahe 0.2 Too high C.F. to fully assess soil Some soil is just rock to surface flat lying rocks
139	42	EGL61	141 Bm	2	40	15 - 50%	30	S	L	P	G	G	F	44						x shallow Ahe 0.2 Too high C.F. to fully assess soil Some soil is just rock to surface flat lying rocks
140	42	EGL61	142 C	40	0	15 - 50%	65	S	L	U	G	P	U							x shallow Ahe 0.2 Too high C.F. to fully assess soil Some soil is just rock to surface flat lying rocks
141	43	EGL68	143 LFH	6	0	3 - 15%	0			NA	NA	G	O	6						lots of deadfall on ground no charcoal in soil may be O.R weak structure mostly held together by roots
142	43	EGL68	144 Ah	0	2	3 - 15%	30	C	SiL	P	F	G	P							lots of deadfall on ground no charcoal in soil may be O.R weak structure mostly held together by roots
143	43	EGL68	145 Bm	2	19	3 - 15%	40	C	SiL	U	F	F	U							lots of deadfall on ground no charcoal in soil may be O.R weak structure mostly held together by roots
144	43	EGL68	146 C	19	55	3 - 15%	50	C	L	U	G	P	U							lots of deadfall on ground no charcoal in soil may be O.R weak structure mostly held together by roots
145	44	EGL206	147 LFH	7	0	15 - 50%	0			NA	NA	G	O	7						too many C.F. to sho el C horiz skeletal soil flat lying planar rock
146	44	EGL206	148 Bm	0	35	15 - 50%	45	S	L	U	G	F	U							too many C.F. to sho el C horiz skeletal soil flat lying planar rock
147	45	EGR206	149 LFH	4	0	15 - 50%	0			NA	NA	G	O	4						skeletal soil
148	45	EGR206	150 Bm	0	45	15 - 50%	0			NA	NA	G	G	49						skeletal soil
149	46	EGR97	151 LFH	4	0	0.1 - 3%	0			NA	NA	G	O	4	43	200				sample of water taken pH 6.3 limited cryoturbation
150	46	EGR97	152 Ah	0	6	0.1 - 3%	20	G	SiCL		G	G	G	10	43	200				sample of water taken pH 6.3 limited cryoturbation
151	46	EGR97	153 Bgj	6	27	0.1 - 3%	20	C	SCL	P	G	G	P		43	200				sample of water taken pH 6.3 limited cryoturbation
152	46	EGR97	154 Bg	27	58	0.1 - 3%	30	C	SCL	P	G	G	P		43	200				sample of water taken pH 6.3 limited cryoturbation
153	46	EGR97	155 Cg	58	68	0.1 - 3%	30	G	SCL		G	G	G		43	200				sample of water taken pH 6.3 limited cryoturbation
154	47	EGR95	156 LFH	6	0	3 - 15%	0			NA	NA	G	O	6						Boulders at surface
155	47	EGR95	157 C	0	50	3 - 15%	40	C	SCL	U	G	F	U							Boulders at surface
156	48	EGR80	159 LFH	3	0	0.1 - 3%	0			NA	NA	G	O	3						Ahe discontinuous + bedrock outcrop upslope ~ 20 m
157	48	EGR80	160 Ahe	0	3	0.1 - 3%	0			NA	NA	G	G	6						Ahe discontinuous + bedrock outcrop upslope ~ 20 m
158	48	EGR80	161 Bm	3	45	0.1 - 3%	40	C	SCL	U	G	F	U							Ahe discontinuous + bedrock outcrop upslope ~ 20 m
159	49	EGL27	162 LFH	2	0	>50%	0			NA	NA	G	O	2						variable clast size May be some Cu.R

SiteID	SiteNo	ProfileID	Horizon	DpthStart	DpthEnd	COARSE FRAGS		TEXTURE	CF Type	Texture	C Frag	RATING	Salvage T	Seepage C	Permafros Depth to V	Root Rest	Root Rest	Soil Notes
						Surf.Stone	CF%											
160	49 EGL27	163 C		0	0	>50%	65 B	S	U	F	U	U		0	0			variable clast size May be some Cu.R
161	50 EGL12	164 LFH		14	0	0.1 - 3%	0			NA	NA	G	O	14	45	0	56 W	Cg is filled in with water from seepage Ah 2 cm but too thin to sample
162	50 EGL12	165 Ahg		0	10	0.1 - 3%	25 CG	SCL		G	G	G		45	0	56 W		Cg is filled in with water from seepage Ah 2 cm but too thin to sample
163	50 EGL12	166 Bg		10	23	0.1 - 3%	25 CG	SCL		G	G	G	37	45	0	56 W		Cg is filled in with water from seepage Ah 2 cm but too thin to sample
164	50 EGL12	167 Cg		23	60	0.1 - 3%	25 C	SCL	P	G	G	P		45	0	56 W		Cg is filled in with water from seepage Ah 2 cm but too thin to sample
165	51 EGL215	168 LFH		14	0		0			NA	NA	G	O	14				Sequence of silts or gra els likely continues at depth Broken horizons likely influenced by ice in past
166	51 EGL215	169 Bm		0	9		25 FG	SiL	P	F	G	F		23				Sequence of silts or gra els likely continues at depth Broken horizons likely influenced by ice in past
167	51 EGL215	170 C		9	31		30 CG	LS		F	F	F		44				Sequence of silts or gra els likely continues at depth Broken horizons likely influenced by ice in past
168	52 EGL22	171 LFH		7	0	0.1 - 3%	0			NA	NA	G	O	7				flood sequence
169	52 EGL22	172 Cg		0	17	0.1 - 3%	40 G	S		F	P	P						flood sequence
170	52 EGL22	173 Ahbg		17	23	0.1 - 3%	30 G	SiL		F	G	F						flood sequence
171	52 EGL22	174 Bgb		23	26	0.1 - 3%	40 CG	LS	U	F	P	U						flood sequence
172	52 EGL22	175 Cg		26	43	0.1 - 3%	40 CG	S	U	F	P	U						flood sequence
173	54 EGL26	176 LFH		17	0	0.1 - 3%	0			NA	NA	G	O	17	31	0	Z	Bedrock noted near side trail Phyllite highly weathered & fractured
174	54 EGL26	177 Bm		0	11	0.1 - 3%	20 G	SiCL		G	G	G			31	0	Z	Bedrock noted near side trail Phyllite highly weathered & fractured
175	54 EGL26	178 Cz		11	31	0.1 - 3%	25 G	SCL		G	G	G	48		31	0	Z	Bedrock noted near side trail Phyllite highly weathered & fractured
176	56 EGL25	179 LFH		6	0	0.1 - 3%	0			NA	NA	G	O	6				mid to upper slope difficult to texture as high broken rock fragments May be Lu osols in polygon
177	56 EGL25	180 Ahe		0	2	0.1 - 3%	25 G	SiL		F	G	G	8					mid to upper slope difficult to texture as high broken rock fragments May be Lu osols in polygon
178	56 EGL25	181 Bm		2	33	0.1 - 3%	25 C	SCL	P	G	G	P						mid to upper slope difficult to texture as high broken rock fragments May be Lu osols in polygon
179	56 EGL25	182 BC		33	50	0.1 - 3%	40 C		U	NA	NA	U						mid to upper slope difficult to texture as high broken rock fragments May be Lu osols in polygon
180	57 EGL210	183 LFH		9	0		0			NA	NA	G	O	9				likely O.DB in polygon as well Some met. sed in profile, mostly granodronite
181	57 EGL210	184 Ahe		0	5		0	SiL		NA	F	G	G	14				likely O.DB in polygon as well Some met. sed in profile, mostly granodronite
182	57 EGL210	185 Bt		5	15		0	SiCL		NA	G	G	G					likely O.DB in polygon as well Some met. sed in profile, mostly granodronite
183	57 EGL210	186 BC		15	29		0	SCL		NA	G	G	G	38				likely O.DB in polygon as well Some met. sed in profile, mostly granodronite
184	57 EGL210	187 C		29	0		0	LS		NA	F	G	F					likely O.DB in polygon as well Some met. sed in profile, mostly granodronite
185	58 EGL208	188 LFH		6	0	0.01 - 0.1%	0			NA	NA	G	O	6				skeletal soil
186	58 EGL208	189 Ahe		0	4	0.01 - 0.1%	25 G	L		G	G	G	10					skeletal soil
187	58 EGL208	190 Bm		4	19	0.01 - 0.1%	35 S	SCL	U	G	F	U						skeletal soil
188	58 EGL208	191 C		19	50	0.01 - 0.1%	40 C	SCL	U	G	F	U						skeletal soil
189	59 EGL209	192 LFH		3	0	0.1 - 3%	0			NA	NA	G	O	3				meta sed SiL / igneous SL/LS
190	59 EGL209	193 Ahe		0	4	0.1 - 3%	0	SiL		NA	F	G	G	7				meta sed SiL / igneous SL/LS
191	59 EGL209	194 Bm		7	15	0.1 - 3%	0	SiL		NA	F	G	F	18				meta sed SiL / igneous SL/LS
192	59 EGL209	195 C		15	0	0.1 - 3%	0	SiCL		NA	G	G	G					meta sed SiL / igneous SL/LS
194	60 EGL50	197 Ahe		0	0		15 G	SL		G	F	F	0					coarse sand w gra el
193	60 EGL50	196 LFH		0	0		0			NA	NA	G	O	0				coarse sand w gra el
195	60 EGL50	198 Bm		0	0		50 C	LS	U	F	P	U						coarse sand w gra el
196	60 EGL50	199 C		0	0		75 B	LS	U	F	U	U						coarse sand w gra el
197	62 EGL212	200 LFH		5	0	<0.01%	0			NA	NA	G	O	5				1 cobble near surface, all else is consistently gra el in the profile
198	62 EGL212	201 Ahe		0	2	<0.01%	50 CG	SCL	U	G	P	U						1 cobble near surface, all else is consistently gra el in the profile
199	62 EGL212	202 Bm		2	18	<0.01%	50 CG	SL	U	G	P	U						1 cobble near surface, all else is consistently gra el in the profile
200	62 EGL212	203 C		18	50	<0.01%	50 CG	SCL	U	G	P	U						1 cobble near surface, all else is consistently gra el in the profile
201	64 EGL214	204 LFH		3	0	<0.01%	0			NA	NA	G	O	3	15	100	0	100 Z
202	64 EGL214	205 Ah		0	7	<0.01%	25 CG	SiCL		G	G	G			15	100	0	100 Z
203	64 EGL214	206 C		7	50	<0.01%	25 CG	SiCL		G	G	G	53		15	100	0	100 Z

SiteID	SiteNo	ProfileID	Horizon	DpthStart	DpthEnd	COARSE FRAGS		TEXTURE	CF Type	Texture	C Frag	RATING	Salvage T	Seepage	C Permafros	Depth to V	Root Rest	Root Rest	Soil Notes
						Surf.Stone	CF%												
204	67	EGL35	207 LFH	4	0		0		NA	NA	G	O	4			0			high amount of gra el & mica in profile
205	67	EGL35	208 Bm	0	30		45 C		U	NA	NA	U				0			high amount of gra el & mica in profile
207	68	EGL34	210 Ahe	0	6		25 G	SiL		F	G	G	6			0			likely O.GL/E.DB both in polygons
208	68	EGL34	211 Bt	6	18		25 CG	SiCL		G	G	G				0			likely O.GL/E.DB both in polygons
209	68	EGL34	212 BC	18	35		30 CG	SiCL		G	G	G	35			0			likely O.GL/E.DB both in polygons
206	68	EGL34	209 LFH	5	0		0		NA	NA	G	O	5			0			likely O.GL/E.DB both in polygons
211	69	EGL32	214 Ahe	0	5		30 CG			NA	NA					0			may be lu isols in more stable areas
212	69	EGL32	215 AB	5	30		30 CG			NA	NA					0			may be lu isols in more stable areas
210	69	EGL32	213 LFH	11	0		0		NA	NA	G	O	11			0			may be lu isols in more stable areas
213	69	EGL32	216 B	30	35		40 CG		U	NA	NA	U				0			may be lu isols in more stable areas
214	69	EGL32	217 C	35	59		45 C		U	NA	NA	U				0			may be lu isols in more stable areas
215	70	EGL31	218 LFH	0	2	3 - 15%	0		NA	NA	G	O	2			0			cannot dig deeper than 40 cm due to high CF Some exposed stones/boulders on site Gra el in matrix
216	70	EGL31	219 C	2	40	3 - 15%	40 C	SiL	U	F	F	U				0			cannot dig deeper than 40 cm due to high CF Some exposed stones/boulders on site Gra el in matrix
217	71	EGL30	220 LFH	5	0	3 - 15%	0		NA	NA	G	O	5			0			bare soil under trees downslope only tonguing horizons
218	71	EGL30	221 Ae	0	4	3 - 15%	0 C	SiL	G	F	G	F	9			0			bare soil under trees downslope only tonguing horizons
219	71	EGL30	222 Bm	4	30	3 - 15%	0 G	SCL		G	G	G				0			bare soil under trees downslope only tonguing horizons
220	71	EGL30	223 BC	30	45	3 - 15%	0 C	SiCL	G	G	G	G	50			0			bare soil under trees downslope only tonguing horizons
221	72	EGR81	224 Of	18	0		0		NA	NA	G	O	18			0			phase modifiers pt
222	72	EGR81	225 Bm1	0	0		15 G			NA	NA	G			12	30	0	30 Z	phase modifiers pt
223	72	EGR81	226 Bm2	0	0		20 G			NA	NA	NA			12	30	0	30 Z	phase modifiers pt
224	75	EGL9	227 LFH	9	0	<0.01%	0		NA	NA	G	O	9			0		N	no auger, can't check for ice O.EB or O.DYB
225	75	EGL9	228 A	0	3	<0.01%	30 G	SL		G	F	F	12			0		N	no auger, can't check for ice O.EB or O.DYB
226	75	EGL9	229 C	3	45	<0.01%	40 G	SL		G	P	P				0		N	no auger, can't check for ice O.EB or O.DYB
227	80	EGL10	230 LFH	15	0	<0.01%	0		NA	NA	G	O	15			57	0	42 Z	
228	80	EGL10	231 AB	0	3	<0.01%	10 G	SL		G	G	G	18			57	0	42 Z	
229	80	EGL10	232 C	3	42	<0.01%	15 G	SL		G	F	F	57			57	0	42 Z	
230	80	EGL10	233 Cz	42	0	<0.01%	0		NA	NA	G	G				57	0	42 Z	
231	83	EGL11	234 LFH	12	0	<0.01%	0		NA	NA	G	O	12			0		N	O.EB or O.DYB
232	83	EGL11	235 Ah	0	3	<0.01%	15 G	SL		G	F	F	15			0		N	O.EB or O.DYB
233	83	EGL11	236 BC	3	45	<0.01%	20 G	SiCL		G	G	G	57			0		N	O.EB or O.DYB
236	89	EGR110	239 Bm	15	48		30 CG	SiCL		G	G	G	60			0		N	or O.SB
234	89	EGR110	237 LFH	20	0		0		NA	NA	G	O	20			0		N	or O.SB
235	89	EGR110	238 Ah	0	15		0	SiL	NA	F	G	G	35			0		N	or O.SB
237	97	EGR415	240 C	0	50		0	SL	NA	G	G	G	50			0			some buried horizons
238	99	EGR416	241 LFH	8	0	<0.01%	0		NA	NA	G	O	8			0		N	O.DYB or O.EB
239	99	EGR416	242 Ae	0	3	<0.01%	0	S	NA	F	G	F	11			0		N	O.DYB or O.EB
240	99	EGR416	243 Bm	3	20	<0.01%	0	S	NA	F	G	F				0		N	O.DYB or O.EB
241	99	EGR416	244 C	20	30	<0.01%	30 G	SL		G	F	F	38			0		N	O.DYB or O.EB
242	108	EGR411	245 LFH	15	0		0		NA	NA	G	O	15			0			
243	108	EGR411	246 AB	0	2		15 G	CL		F	G	G	17			0			
244	108	EGR411	247 C	2	50		15 G	CL		F	G	F	65			0			
245	111	EGR409	248 LFH	60	0		0		NA	NA	G	O	60			0			
246	111	EGR409	249 Ah	0	12		0	SL	NA	G	G	G	72			0			
247	111	EGR409	250 C	12	40		0	SL	NA	G	G	G	100			0			
248	117	EGL66	251 LFH	4	0		0		NA	NA	G	O	4			0			O.DYB to O.EB Ae thicker upslope than downslope
249	117	EGL66	252 Ae	0	10		15 G	L		G	G	G	14			0			O.DYB to O.EB Ae thicker upslope than downslope
250	117	EGL66	253 Bm	10	50		30 G	SiCL		G	G	G	54			0			O.DYB to O.EB Ae thicker upslope than downslope
251	118	EGR303	255 LFH	5	0	<0.01%	0		NA	NA	G	O	5			0			
252	118	EGR303	257 Ah	0	2	<0.01%	5 G	L		G	G	G	7			0			
253	118	EGR303	258 Bm	2	14	<0.01%	5 G	L		G	G	G	19			0			
254	118	EGR303	260 C	14	50	<0.01%	15 G	SiL		F	G	F	55			0			
255	119	EGL310	254 LFH	4	0	<0.01%	0		NA	NA	G	O	4			0		N	O.DYB or O.EB
256	119	EGL310	256 Ae	0	3	<0.01%	5 G	S		F	G	F	7			0		N	O.DYB or O.EB
257	119	EGL310	259 Bmj	3	45	<0.01%	15 G	SL		G	F	F	49			0		N	O.DYB or O.EB
258	120	EGL311	261 LFH	4	0		0		NA	NA	G	O	4			0		N	basially same as M, C, D parent materials
259	120	EGL311	262 Ae	0	15		10 G	L		G	G	G	19			0		N	basially same as M, C, D parent materials
260	120	EGL311	263 BC	15	200		30 G	SiCL		G	G	G	204			0		N	basially same as M, C, D parent materials
261	123	EGL47	264 LFH	15	0	<0.01%	0		NA	NA	G	O	15			0			
262	123	EGL47	265 Ae	0	3	<0.01%	20 G	SL		G	F	F	18			0			
263	123	EGL47	266 Bm	3	0	<0.01%	30 G	SiCL		G	G	G				0			
264	124	EGL1	267 LFH	10	0	<0.01%	0		NA	NA	G	O	10			0			IIC hard to texture due to clast content. Ah too thin to sample.
265	124	EGL1	268 Ah	0	2	<0.01%	5 G	SL		G	G	G	12			0			IIC hard to texture due to clast content. Ah too thin to sample.
266	124	EGL1	269 IC	2	20	<0.01%	10 G	SL		G	G	G	30			0			IIC hard to texture due to clast content. Ah too thin to sample.
267	124	EGL1	270 IIC	20	50	<0.01%	40 G	SiCL		G	F	F	60			0			IIC hard to texture due to clast content. Ah too thin to sample.
268	125	EGL313	271 LFH	3	0	3 - 15%	0		NA	NA	G	O	3			0		20 L	Rock at 20cm. Soil code O.EB or O.DYB

SiteID	SiteNo	ProfileID	Horizon	DpthStart	DpthEnd	Surf.Stone	COARSE FRAGS CF%	CF Typ	TEXTURE texture	CF Type RATING	Texture RATING	C Frag RATING	RATING	Salvage T	Seepage C	Permafros Depth to V	Root Restri	Root Restri	Soil Notes
269	125	EGL313	272 Ae	0	1	3 - 15%	10 G	SL		G	G	G	G	4		0	20 L		Rock at 20cm. Soil code O.EB or O.DYB
270	125	EGL313	273 Bm	1	40	3 - 15%	10 G	SL		G	G	G	43		0	20 L		Rock at 20cm. Soil code O.EB or O.DYB	
271	126	EGR400	274 LFH	10	0	<0.01%	0		NA	NA	G	O	10		0	N		Soil Code GLCU.R (likely)	
272	126	EGR400	275 AB	0	2	<0.01%	0	SL	NA	G	G	G	12		0	N		Soil Code GLCU.R (likely)	
273	126	EGR400	276 C	2	60	<0.01%	0	SL	NA	G	G	G	70		0	N		Soil Code GLCU.R (likely)	
274	129	EGR401	277 LFH	4	0		0		NA	NA	G	O	4		0			Soil code CU.R	
275	129	EGR401	278 AB	0	2		0	SL	NA	G	G	G	6		0			Soil code CU.R	
276	129	EGR401	279 IC	2	22		0	SL	NA	G	G	G	26		0			Soil code CU.R	
277	129	EGR401	280 IIC	22	35		35 G	S		F	P	P			0			Soil code CU.R	
278	133	EGR406	281 LFH	15	0	<0.01%	0		NA	NA	G	O	15		0			Soil Code GLCU.R	
279	133	EGR406	282 Ah	0	6	<0.01%	0	SL	NA	G	G	G	21		0			Soil Code GLCU.R	
280	133	EGR406	283 C	6	60	<0.01%	0	SL	NA	G	G	G	75		0			Soil Code GLCU.R	
281	134	EGR404	284 C	0	40	<0.01%	40 G	S		F	P	P				N			
282	135	EGR403	285 LFH	12	0		0		NA	NA	G	O	12			10 L			
283	135	EGR403	286 Ae	0	10		30 G	SL		G	F	F	22			10 L			
284	135	EGR403	287 R	10	25		60 G	SL		G	U	U				10 L			
285	136	EGR407	288 LFH	4	0	<0.01%	0		NA	NA	G	O	4		0		L	Soil code O.R Root restricting layer: rock at some unknown depth.	
286	136	EGR407	289 C	0	50	<0.01%	35 G	SiL		F	F	F	54		0		L	Soil code O.R Root restricting layer: rock at some unknown depth.	
287	139	EGR413	290 LFH	4	0		0		NA	NA	G	O	4						
288	139	EGR413	291 Ae	0	1		0	SL	NA	G	G	G	5						
289	139	EGR413	292 C	1	60		2 G	SL		G	G	G	64						
290	141	EGL21	293 LFH	9	0	<0.01%	0		NA	NA	G	O	9		0			Soil code O.EB Structure and clour due (partially?) to weathering of R	
291	141	EGL21	294 Ah	0	4	<0.01%	10 G	L		G	G	G	13		0			Soil code O.EB Structure and clour due (partially?) to weathering of R	
292	141	EGL21	295 Bm	4	21	<0.01%	10 G	L		G	G	G			0			Soil code O.EB Structure and clour due (partially?) to weathering of R	
293	141	EGL21	296 Bm2	21	49	<0.01%	10 C	SiCL	G	G	G	G	58		0			Soil code O.EB Structure and clour due (partially?) to weathering of R	
294	141	EGL21	297 C	49	60	<0.01%	30 S	SL	P	G	F	P			0			Soil code O.EB Structure and clour due (partially?) to weathering of R	
295	144	TPA1	298 LFH	20	0		0		NA	NA	G	O	20		52		52 Z	wood in underlying till total hole depth ~ 6 ft all sal agable mix of clay masses + collu ium	
296	144	TPA1	299 Bm1	0	20		50 C	S	U	F	P	U			52		52 Z	wood in underlying till total hole depth ~ 6 ft all sal agable mix of clay masses + collu ium	
297	144	TPA1	300 Bm2	20	52		50 C	L	U	G	P	U			52		52 Z	wood in underlying till total hole depth ~ 6 ft all sal agable mix of clay masses + collu ium	
298	145	TPA3	301 LFH	19	0		0		NA	NA	G	O	19		50	0	0.5 Z	ice to 1.3 m may or may not be permafrost to 4 m SiS Mb then to	
299	145	TPA3	302 Bm1	0	22		5	SiL	NA	F	G	F	41		50	0	0.5 Z	silt till, low c.f. interbedded w 30 cm gra elly layers all sal eagable ice to 1.3 m may or may not be permafrost to 4 m SiS Mb then to SiS gray, unoxidized samples samples PM3+ PM4 both strangely effer esent, esp PM3 BM2 = PM1 gra elly bars PM2 underlying frozen silt PM3 is oxidized sandy till below ice (2 4 m) PM4 5 finer reduced till below (4 5 m)	
300	145	TPA3	303 Ahb	22	27		0		NA	NA	G	G	46		50	0	0.5 Z	silt till, low c.f. interbedded w 30 cm gra elly layers all sal eagable ice to 1.3 m may or may not be permafrost to 4 m SiS Mb then to SiS gray, unoxidized samples samples PM3+ PM4 both strangely effer esent, esp PM3 BM2 = PM1 gra elly bars PM2 underlying frozen silt PM3 is oxidized sandy till below ice (2 4 m) PM4 5 finer reduced till below (4 5 m)	
301	145	TPA3	304 Bm2	27	51		5	SiL	NA	F	G	F	70		50	0	0.5 Z	silt till, low c.f. interbedded w 30 cm gra elly layers all sal eagable ice to 1.3 m may or may not be permafrost to 4 m SiS Mb then to SiS gray, unoxidized samples samples PM3+ PM4 both strangely effer esent, esp PM3 BM2 = PM1 gra elly bars PM2 underlying frozen silt PM3 is oxidized sandy till below ice (2 4 m) PM4 5 finer reduced till below (4 5 m)	
302	146	TPA4	305 L	18	16		0		NA	NA	G	O	2		53	0	53 Z	All sal eageable underlying material is Cb w slope wash C o erlying pre ious surface soil No e idenc eof carbonates in this Cb sample PM1 frozen Cb total depth > 2.5 m	
303	146	TPA4	306 F	16	4		0		NA	NA	G	O	14		53	0	53 Z	All sal eageable underlying material is Cb w slope wash C o erlying pre ious surface soil No e idenc eof carbonates in this Cb sample PM1 frozen Cb total depth > 2.5 m	

SiteID	SiteNo	ProfileID	Horizon	DpthStart	DpthEnd	Surf.Stone	COARSE FRAGS CF%	CF Typ	TEXTURE texture	CF Type RATING	Texture RATING	C Frag RATING	RATING	Salvage T	Seepage C	Permafros	Depth to V	Root Rest	Root Rest	Soil Notes
304	146 TPA4	307 H		4	0		0			NA	NA	G	O	18			53	0	53 Z	All sal eageable underlying material is Cb w slope wash C o erlying pre ious surface soil No e idenc eof carbonates in this Cb sample PM1 frozen Cb total depth > 2.5 m
305	146 TPA4	308 Bm1		0	32		50	CL		NA	F	P	P				53	0	53 Z	All sal eageable underlying material is Cb w slope wash C o erlying pre ious surface soil No e idenc eof carbonates in this Cb sample PM1 frozen Cb total depth > 2.5 m
306	146 TPA4	309 Ahb		32	41		5	L		NA	G	G	G				53	0	53 Z	All sal eageable underlying material is Cb w slope wash C o erlying pre ious surface soil No e idenc eof carbonates in this Cb sample PM1 frozen Cb total depth > 2.5 m
307	146 TPA4	310 Bm2		41	53		50	CL		NA	F	P	P				53	0	53 Z	All sal eageable underlying material is Cb w slope wash C o erlying pre ious surface soil No e idenc eof carbonates in this Cb sample PM1 frozen Cb total depth > 2.5 m
308	147 EGR451	311 LFH		3	0		0			NA	NA	G	O	3						
309	147 EGR451	312 Bm					0	SiL		NA	F	G	F							
310	147 EGR451	313 C		8			35	LS		NA	F	P	P							
311	148 EGR450	314 Om								NA	NA	NA	O	0				20		likely lenses of silt not isible due to high water table
312	148 EGR450	315 Of								NA	NA	NA	O	0				20		likely lenses of silt not isible due to high water table
313	148 EGR450	316 C					45	CG		U	NA	NA	U					20		likely lenses of silt not isible due to high water table



APPENDIX F

Soil Metal Data

Table F.1 Soil Metal Exceedences (highlighted values only - based on CCME [1999], YK and BC)

Sample	Date Sampled	Depth (m)	General Parameters		Total Metals																				Copper / Molybdenum Ratio	Exchangeable Cations									
			pH	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Chromium	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Molybdenum	Nickel	Selenium	Silver	Strontium	Thallium	Tin		Titanium	Vanadium	Zinc	Zirconium	Calcium	Magnesium	Phosphorus	Potassium	Sodium	
				Al	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	Fe	Pb	Mn	Hg	Mo	Ni	Se	Ag	Sr	Tl	Sn		Ti	V	Zn	Zr	Ca	Mg	P	K	Na	
SOIL LAYER (DEPTH UP TO 1 METRE)																																			
DG3 S1	8//2009	1	5.9	7430	10.1	438	128	<1	1	0.4	20	15	39	31400	38.4	286	0.02	0.8	35	0.7	0.2	22	0.3	<5	342	26	108	13	n/a	2070	3530	494	1970	64	
HL6-8 S1	8//2009	0.3	8.2	5650	2.4	9.4	107	<1	3	0.3	9	6	21	15000	8.2	658	0.06	0.3	17	1.3	0.2	176	0.1	<5	35	10	44	4	n/a	34700	5090	411	1110	32	
HL6-10 S1	8//2009	0.2-0.4	4.8	7060	16.7	226	114	<1	<1	<0.2	15	9	25	25800	26.9	294	0.02	0.9	20	0.7	0.1	12	0.1	<5	175	25	53	<1	n/a	956	2340	340	748	33	
OVERBURDEN (DEPTH GREATER THAN 1 METRE)																																			
HL5-3 S3	8//2009	2	6.6	8410	5.9	486	163	<1	<1	0.9	28	9	12	22500	41.3	571	0.02	3.2	18	0.6	0.2	20	0.2	<5	996	33	125	2	n/a	3080	5250	674	1680	86	
HL5-4 S3	8//2009	4-4.5	7	14200	0.5	45.4	338	<1	<1	<0.2	30	9	3	23300	5.7	300	<0.01	1.1	25	0.5	<0.1	17	0.5	<5	1620	35	40	2	n/a	3410	8060	827	6980	93	
HL5-6 S3	8//2009	5-5.5	6.5	17500	0.9	49.3	272	<1	<1	<0.2	40	10	10	27900	9	419	<0.01	0.4	20	0.4	<0.1	20	0.6	<5	2090	40	63	3	n/a	2820	8460	791	7630	85	
HL5-7 S3	8//2009	2.2-2.5	6.8	2520	17.6	777	68	<1	1	1	8	10	18	25000	85.8	560	0.22	7.8	23	0.4	0.4	40	0.2	<5	49	7	144	7	2.3	1040	957	280	1180	17	
HL6-1 S3	8//2009	5-5.5	7.1	15900	2.4	42.3	120	1	<1	0.3	27	20	45	49600	9.6	658	0.01	0.9	57	0.6	<0.1	16	0.5	<5	443	29	97	9	n/a	1630	5940	303	5960	126	
HL6-3 S4	8//2009	5-5.5	7.1	11500	4.6	97.4	74	1	<1	<0.2	34	19	57	43200	11.9	390	0.02	0.9	48	0.7	0.1	19	0.5	<5	370	25	81	11	n/a	1730	5050	363	4550	86	
HL6-4 S3	8//2009	3	7.8	8070	5.5	1350	69	<1	<1	<0.2	22	14	51	32800	13.3	483	0.02	0.4	30	0.8	0.4	19	0.4	<5	221	28	54	10	n/a	2250	3720	332	2990	85	
HL6-4 S4	8//2009	4-4.4	7.8	14800	0.7	23.7	69	<1	<1	<0.2	26	15	50	48000	10.8	261	<0.01	1.3	30	0.5	<0.1	12	0.4	<5	302	27	90	24	n/a	1760	6540	296	5310	77	
P1-S2	8//2009	2.7-3.2	6.6	20400	5.4	148	155	<1	<1	<0.2	46	29	46	32900	11.5	947	0.01	0.9	42	0.4	<0.1	25	0.6	<5	639	49	92	2	n/a	3400	7560	314	8980	91	
P2-S2	8//2009	1-1.1	6.5	11000	10.5	78.3	374	<1	1	0.5	26	13	27	25300	14.5	461	0.02	1	29	0.6	0.1	23	0.2	<5	561	36	75	3	n/a	2600	4740	733	1940	85	
P4-S2	8//2009	1.8-2	7.2	13900	8.1	903	376	<1	1	0.3	26	14	81	23900	13.7	228	0.02	1.5	21	1	0.2	24	0.4	<5	869	29	46	5	n/a	4230	8160	577	4840	94	
WR1-S3	8//2009	6	7.8	4100	11.4	212	67	1	1	<0.2	8	30	84	62500	18.1	924	0.33	1.6	42	1.2	0.2	33	0.3	<5	16	87	93	9	n/a	3929	2250	630	1210	31	
WR2-S2	8//2009	4	7.1	13900	3.8	170	248	<1	1	0.4	23	12	30	29300	31.2	487	0.03	1	28	0.4	0.1	20	0.3	<5	563	27	102	9	n/a	2370	4710	560	3330	63	
WR3-S1	8//2009	2	7.3	3590	5.8	189	10	<1	1	<0.2	4	14	21	24300	12.1	94	0.06	5.7	43	0.5	<0.1	22	<0.1	<5	3	3	95	3	3.7	1740	1660	190	891	25	
WR8-S2	8//2009	2	7	7440	2.4	241	131	<1	1	0.7	19	8	17	21800	37.7	298	0.05	1.7	19	0.6	0.2	28	0.3	<5	726	24	113	2	n/a	2830	3900	599	1290	95	
BLINDS																																			
HL5-5 S3 BLND	8//2009		6.6	17100	1	45.9	264	<1	<1	<0.2	39	11	10	26900	8.5	411	<0.01	0.3	21	0.4	<0.1	20	0.6	<5	2040	38	63	2	n/a	2800	8400	732	7500	88	
HL6-1 S3 BLND	8//2009		7	18100	2.3	42.6	128	2	<1	0.3	29	19	49	51700	10.5	668	0.01	0.9	58	0.6	0.1	18	0.6	<5	492	30	98	9	n/a	1820	6730	306	6400	154	
REPORTING LIMITS																																			
CCME Ag.						20	12	750	4		1.4	64	40	63	70		6.6	5	50	1	20		1	5		130	200								
CCME Parkland						20	12	500	4		10	64	50	63	140		6.6	10	50	1	20		1	50		130	200								
BC (Ag.)						20	15	750	4		1.5	50	40	90	100		0.6	5	150	2	20		2	5		200	150								
BC (Parkland)						20	15	750	4		1.5	60	50	90	100		15	10	100	3	20		-	50		200	150								
Yukon (Ag)						20	15	750	4		1.5	50	40	90	100		0.6	5	150	2	20		2	5		200	150								
Yukon (Park)						20	15	500	4		1.5	60	50	90	100		15	10	100	3	20		-	50		200	150								

BC and Yukon guidelines are for most sensitive receptor (could be ingestion by livestock, groundwater, etc.)

over all guidelines

over CCME Ag. and parkland guidelines, but not B.C.

over CCME and B.C. Ag. Guidelines, but not CCME or B.C. Parkland