



AGAT Laboratories

TAIGA Consultants Ltd.

**COMBINED BULK AND CLAY XRD ANALYSIS
OF ONE MUD SAMPLE FROM
A WELL LOCATION**

Work Order A 15196

**BC Geological Survey
Assessment Report
32731c**

August, 2011

AGAT Laboratories Ltd.

3801 - 21 Street N.E.

Calgary, Alberta

T2E 6T5

COMBINED X-RAY DIFFRACTION ANALYSIS

One mud sample from a well location was analyzed by AGAT Laboratories Ltd. for bulk and clay XRD mineralogy. The sample was cleaned of hydrocarbons prior analysis and the “cleaned” solids were analyzed. The sample was examined using XRD technique to determine their crystalline mineralogical composition. In order to separate the particles less than 3µm (clay fraction) from the bulk fraction, the samples were treated in an ultrasonic bath using sodium metaphosphate as a deflocculating agent. The materials were then centrifuged at different speed, which separates the clay fraction from the bulk materials. Weight fraction was measured for both bulk and clay portions of the samples.

The combined bulk and clay XRD results (Table 1) indicate that the sample consists mainly of quartz (66%) [silicon dioxide, SiO₂], with lesser amounts of plagioclase feldspar (16%) [sodium to calcium aluminum silicate, Na(AlSi₃O₈)-Ca(Al₂Si₂O₈)]. Minor amounts of potassium feldspar (7%) [potassium aluminum silicate, K(SiAl₃O₈)], illite (6%) [potassium aluminum silicate hydroxide, KAl₂(OH)₂AlSi₃(O,OH)₁₀], kaolinite (5%) [aluminum silicate hydroxide, Al₄Si₄O₁₀(OH)₈], plus trace chlorite [(Mg,Fe)₅Al(AlSi₃) O₁₀(OH)₉] are also present.

The clay fraction (<3µm) weight is 3.95% of the total rock volume. The clay fraction XRD (Table 1) results indicate that the sample consists mainly of illite (51%), with lesser amounts of kaolinite (15%), quartz (13%) and plagioclase feldspar (10%). Minor amounts of potassium feldspar (7%) and chlorite (4%) are also identified.

The analyses indicate that the samples are composed of sand/silt/clays (quartz, plagioclase feldspar, potassium feldspar, illite, kaolinite and chlorite – formation materials). Water sensitive clays are not identified in the sample.

Table 1- Summary of XRD Analysis

Company: TAIGA Consultants Ltd.

Work Order No. A-15196

Location:

August, 2011

SAMPLE ID.	TYPE OF ANALYSIS	WEIGHT %	← CLAYS →															Total Clay
			Qtz	Plag	K-Feld	Cal	Dol	Anhy	Pyr	Musc	Bar	Sider	Kaol	Chl	Ill	ML	Smec	
1	BULK FRACTION:	96.05	67	17	7	0	0	0	0	0	0	0	5	0	4	0	0	9
	CLAY FRACTION:	3.95	13	10	7	0	0	0	0	0	0	0	15	4	51	0	0	70
	BULK & CLAY	100	66	16	7	0	0	0	0	0	0	0	5	TR	6	0	0	11

XRD LEGEND

- XRD Analysis is semi-quantitative (approx. 10% at best) and identifies only crystalline substances; amorphous (non-crystalline) substances will not be detected.
- Bulk Fraction – greater than 3 microns size fraction.
- Clay Fraction – less than 3 micron size fraction.
- Bulk and Clay – mathematical recalculation including the bulk and clay fraction representing the whole sample.
- Total Clay – sum of the clay minerals (may include authigenic and matrix clays plus clays in rock fragments).

ABBREVIATIONS

Amp - Amphiboles	Dol - Dolomite	Musc - Muscovite	Pr - Pure (95 – 100%)
Ana - Analcime	Gyp - Gypsum	Plag - Plagioclase Feldspar	NPr - Near Pure (90 – 95%)
Anh - Anhydrite	Hema - Hematite	Port - Portlandite	Abnt - Abundant (60 – 90%)
Ank - Ankerite	Magn - Magnetite	Pyrrh - Pyrrhotite	
		Pyr - Pyrite	Com - Common (30 – 60%)
Anata- Anatase	Ill - Illite	Qtz - Quartz	Mnr - Minor (10 – 30%)
Cal - Calcite	Kaol - Kaolinite	Sid - Siderite	Rre - Rare (1 – 10%)
Chl - Chlorite	K-feld- Potassic Feldspar	Smec - Smectite (montmorillonite)	Tr - Trace; detectable,
Cupr - Cuprite	Graph - Graphite	Goe - Goethite	but not measurable (0 – 1%)
ML - Mixed-layer clays (illite-smectite or smectite-chlorite)		Unk - Unknown mineral	

NOTE: Not all these minerals are present in this sample suite

APPENDIX

BULK & CLAY PROCEDURES

1. Crush dry rock sample until grains disintegrate completely.
2. Weigh empty beaker and put sample in it. Weigh again "total weight". (≈ 3 g of sample).
3. Add 50 mL of distilled water, plus a few drops of Sodium Metaphosphate.
4. Put in ultrasonic bath for 2 (two) hours.
5. Stir sample and pour out top portion into test tube.
6. Centrifuge for 5 minutes at 600 rpm.
7. Pour out top portion into another test tube for the clay fraction ($< 3\mu\text{m}$) sample.
8. Recombine the coarser residue in the first test tube with the residue in the beaker and weight this "bulk sample" (after drying completely). Subtract this weight from the "total weight" to get the clay fraction weight.
9. Centrifuge the "clay fines" in the second test tube for 20 minutes at maximum rpms.
10. Pour out most of the water then shake test tube using Vortex Mixer.
11. Pipette onto a glass slide.
12. Put the slide on the hot plate (low) until dry then run sample in XRD.
13. Then put slide in a glycol vapour bath overnight (glycolated clay); Smectite will swell and be recognized.
14. If chlorite suspected, then treat the remaining sample in the test tube with diluted HCl and leave overnight (acidized clay). If chlorite was present in the sample this test causes it to disappear.
15. Run the "clay fraction" slide from 2-38 degrees.
16. Grind the "bulk sample" and spread the powder on an aluminum holder then run from 4-58 degrees.

Appendix 2
Summary of Personnel
Summary of Expenditures

Personnel

Field Personnel

	Dates	Man days		
James W. Davis	5/06-5/10	5.00		
	5/18-5/28	11.00		
	6/08-6/17	10.00		
	6/26-7/07	12.00		
	8/16-8/25	<u>10.00</u>	48.00	
T. B. Millinoff	5/01-6/12	43.00		
	6/16-7/07	<u>22.00</u>	65.00	
S. Fitchett	5/04-5/29	26.00		
	6/01-7/09	<u>39.00</u>	65.00	
J. Fitchett	5/04-5/29	26.00		
	6/01-7/09	<u>39.00</u>	65.00	
B. Secord-Smith	6/01-6/18	17.50		
	6/26-7/08	<u>12.50</u>	<u>30.00</u>	273.00

Office Personnel (report wrtiing)

James W. Davis	May 2011	2.25		
	July 2011	1.75		
	Aug.2011	<u>2.25</u>	6.25	
T.B. Millinoff	May 2011	1.75		
	July 2011	0.75		
	Aug.2011	<u>0.75</u>	3.25	
R. Maynard	May 2011	2.00		
	July 2011	0.75		
	Aug.2011	<u>16.00</u>	18.75	
M.D. Jamieson	June 2011	<u>1.25</u>	<u>1.25</u>	<u>29.50</u>
				<u><u>302.50</u></u>

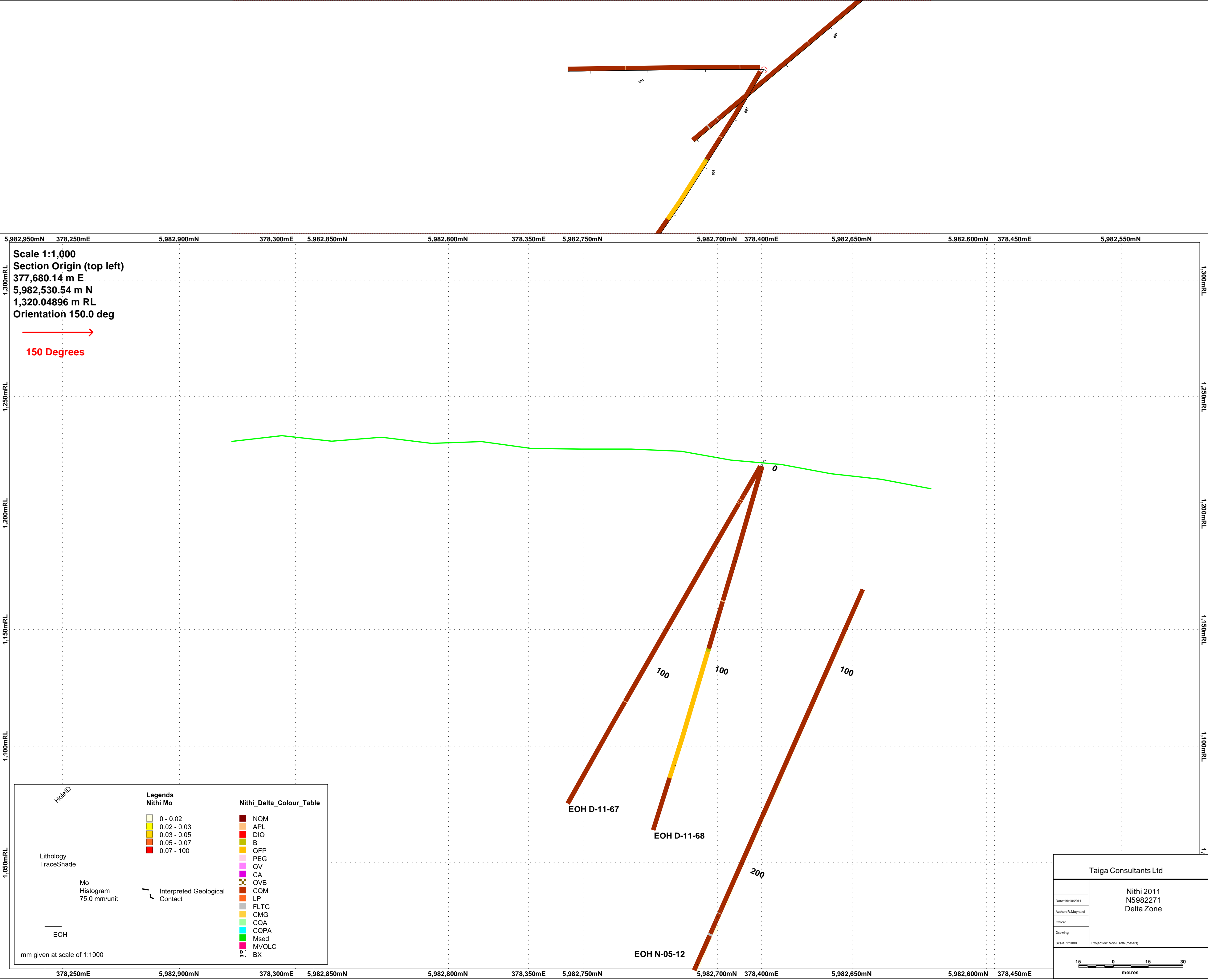
Summary of Expenditures**2011 Nithi Mtn. Drill Program****Leeward Capital Corp.**

AGAT	441.00
Archer CRM Partnerships	6324.39
Avison Management	21943.88
Doug Wylie Trucking	64435.90
Loring Labs Ltd.	54137.52
Manitoulin Transport	1212.79
MBI Pacific Drilling Products	6855.28
Normans Electric	8342.09
Vancouver Petrographics	2636.79
WestCan Projects Ltd.	21317.24
Corewest Drilling	381936.16
LDS Drilling	257268.26
Taiga Consultants Ltd.	266344.25
Tetra Tech Wardrop	58036.65
TOTAL	1151232.20

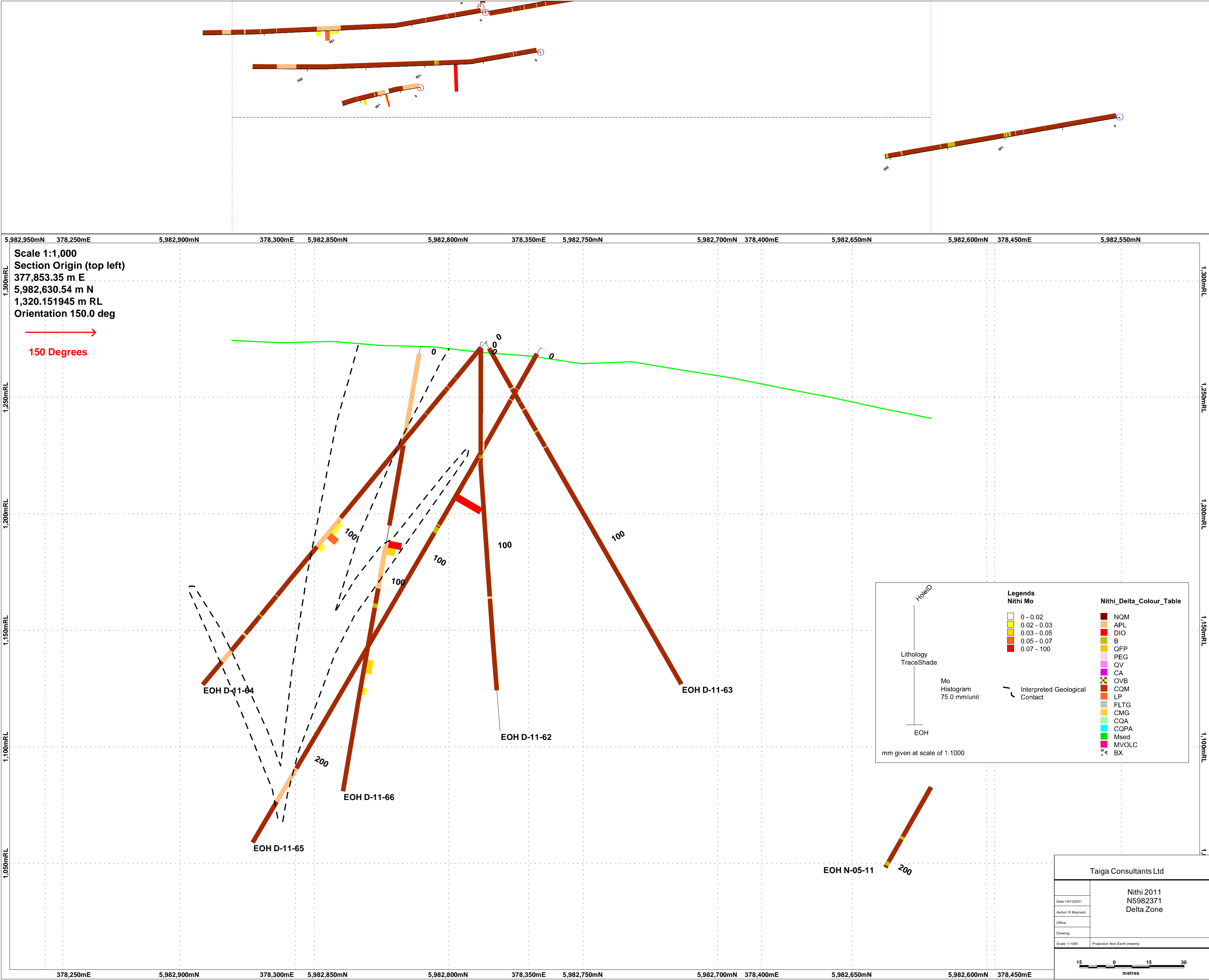
clay analysis from drill cuttings
Archaeological Study
Huckelberry Management and Mitigation Study
Road building, excavator onsite to move drill and ongoing reclamation
Assays
Shipping (samples to lab)
Drill Logging equipment
Core Shed lighting/rewiring
Petrographic Study
Environmental Study, water sampling, reclamation

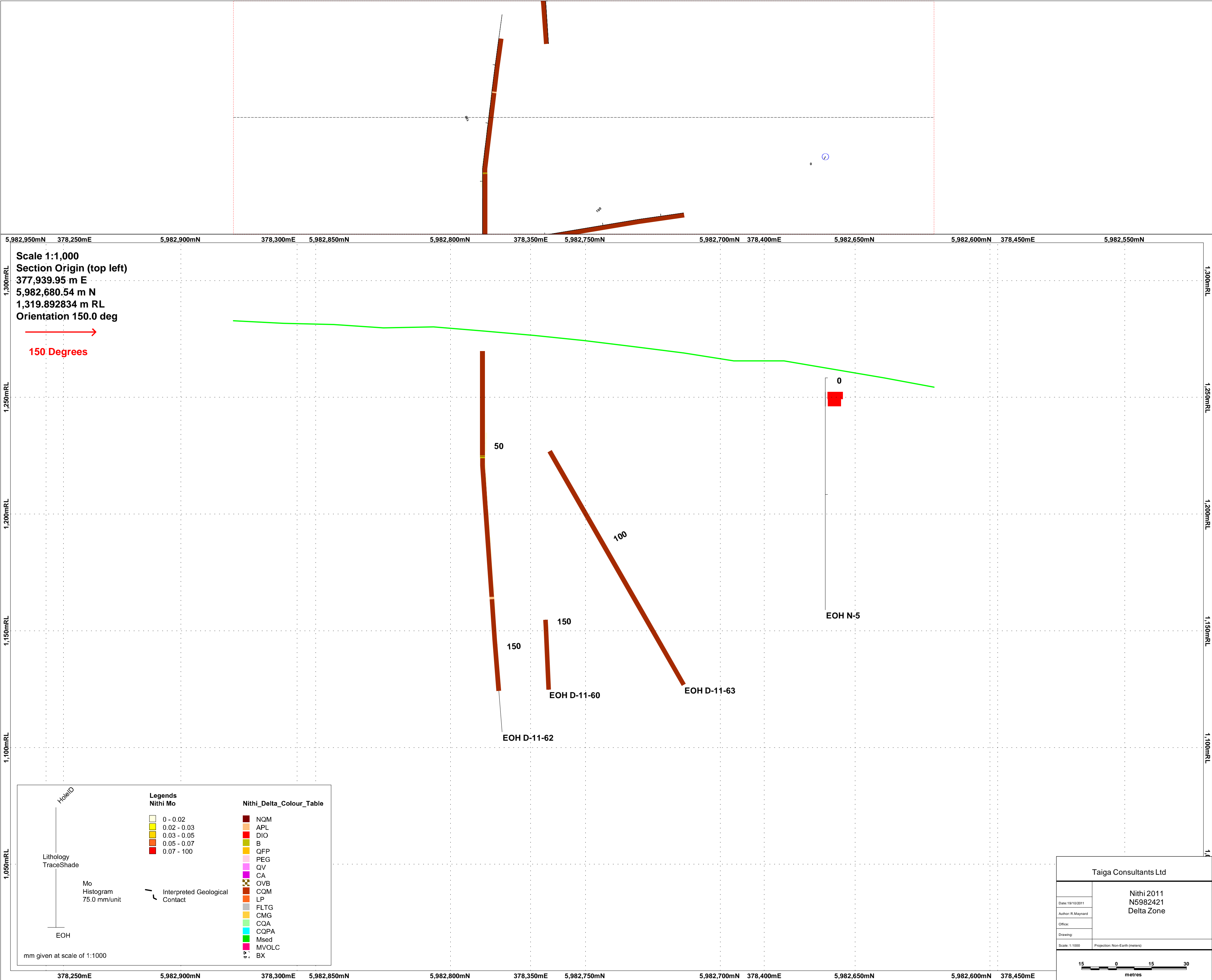
drilling 6,266 m 32 drillholes NQ core
drill program supervision, logging, sampling, report writing
resource calculation

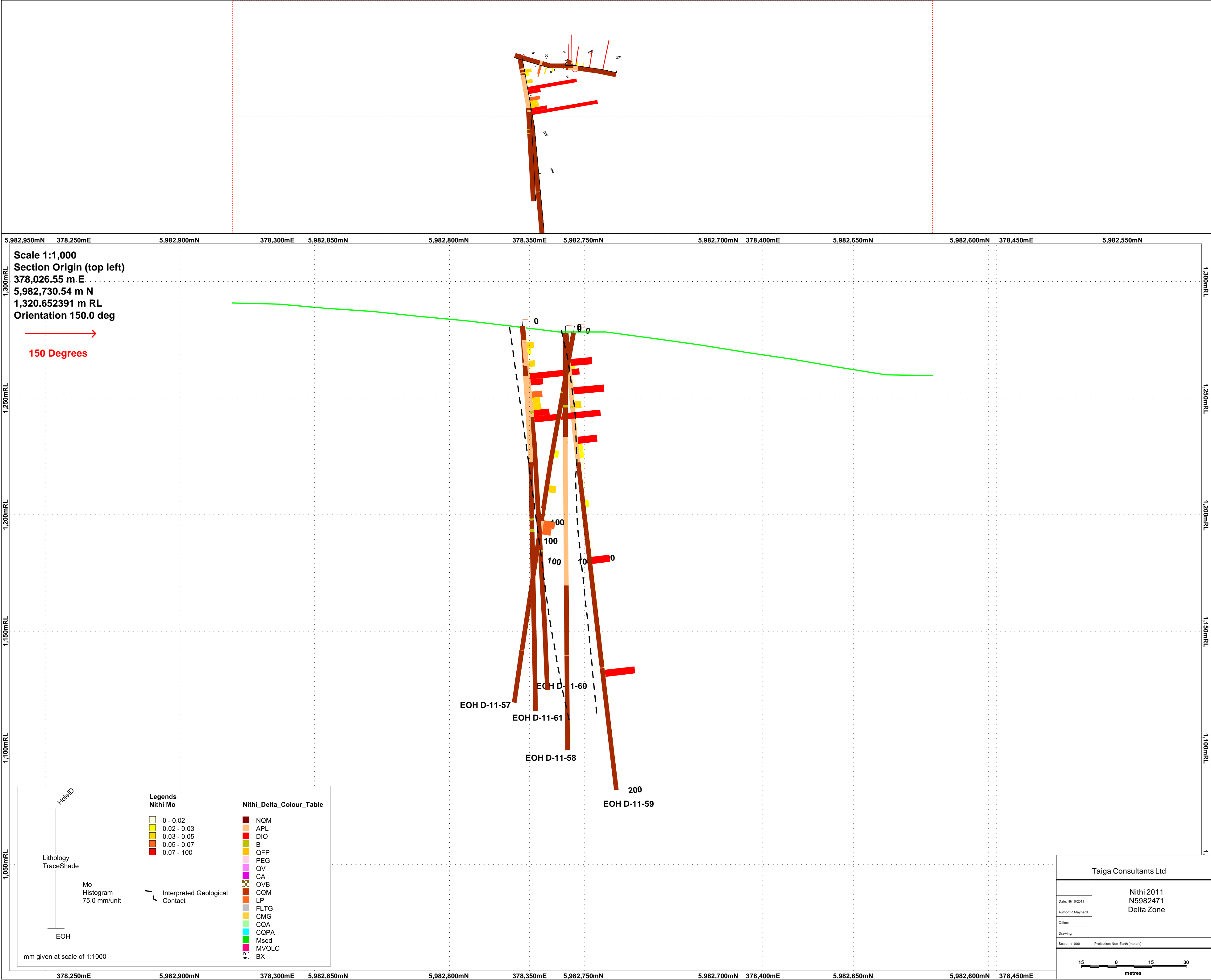
Appendix 3
Geological Sections
Vancouver Petrographics Report
Map 1 Drill Hole Locations and Zones











Scale 1:1,000
Section Origin (top left)
378,026.55 m E
5,982,730.54 m N
1,320.652391 m RL
Orientation 150.0 deg

→
150 Degrees

HoleID

Lithology

TraceShade

Mo

Histogram

75.0 mm/unit

EOH

mm given at scale of 1:1000

Legends

Nithi Mo

0 - 0.02

0.02 - 0.03

0.03 - 0.05

0.05 - 0.07

0.07 - 100

Interpreted Geological Contact

Nithi_Delta_Colour_Table

NQM

APL

DIO

B

QFP

PEG

QV

CA

OVB

CQM

LP

FLTG

CMG

CQA

CQPA

Msed

MVOLC

BX

Taiga Consultants Ltd

Date: 19/10/2011

Author: R. Maynard

Office:

Drawing:

Scale: 1:1000

Projection: Non-Earth (meters)

Nithi 2011

N5982471

Delta Zone

15

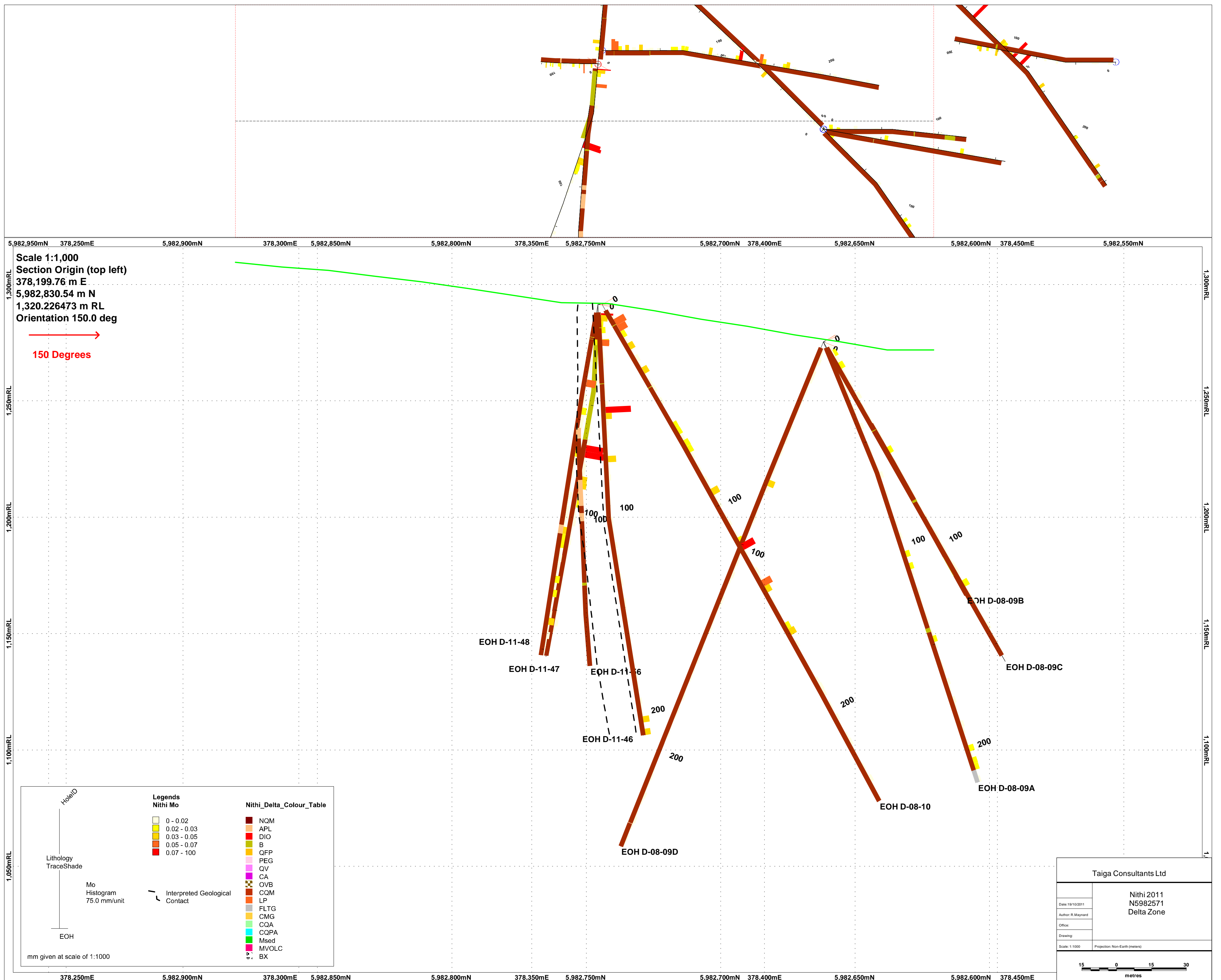
0

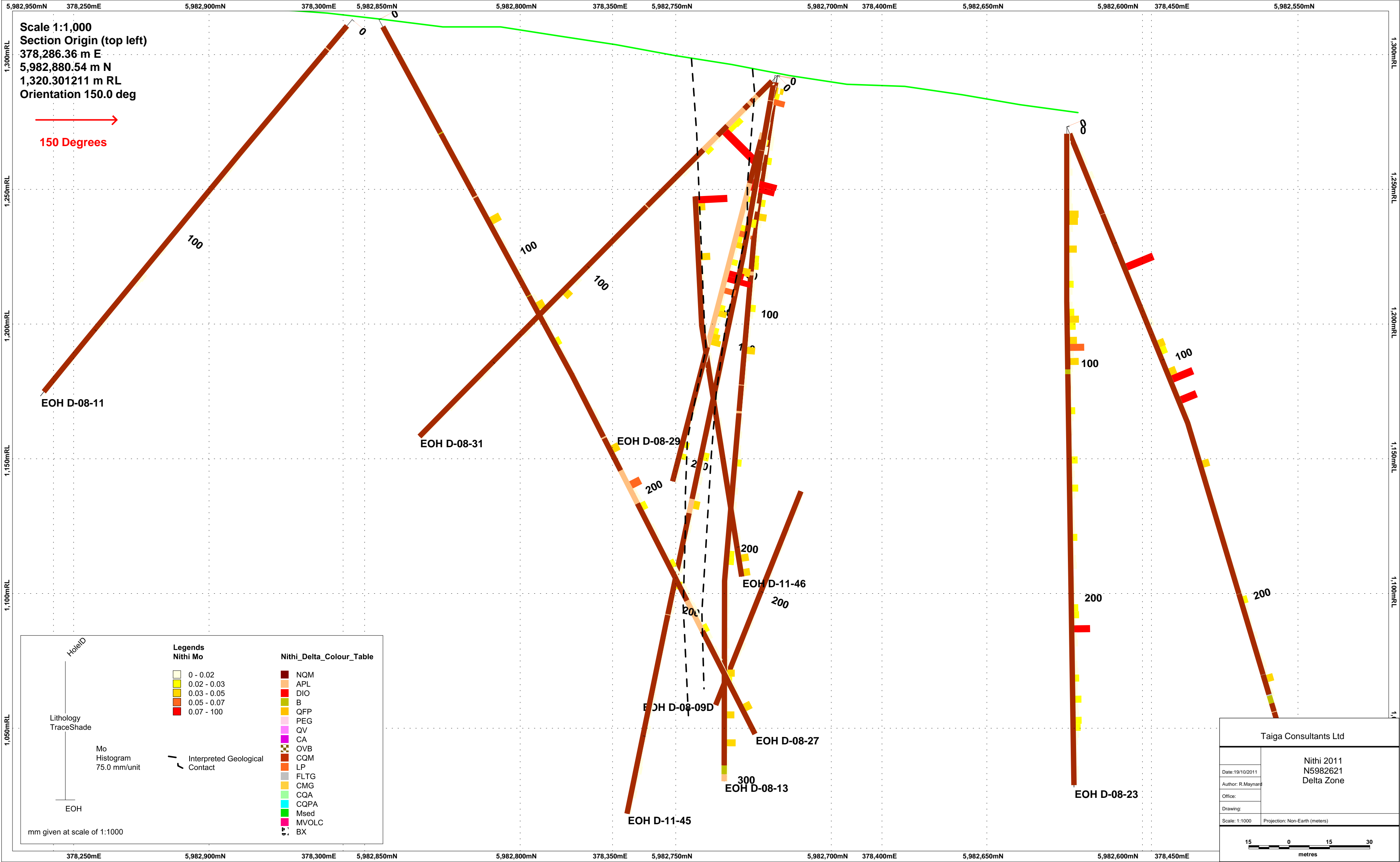
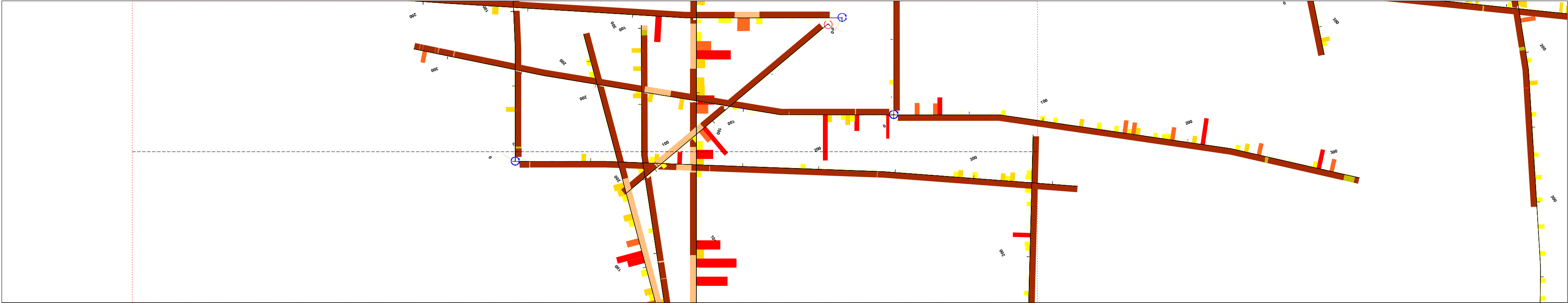
15

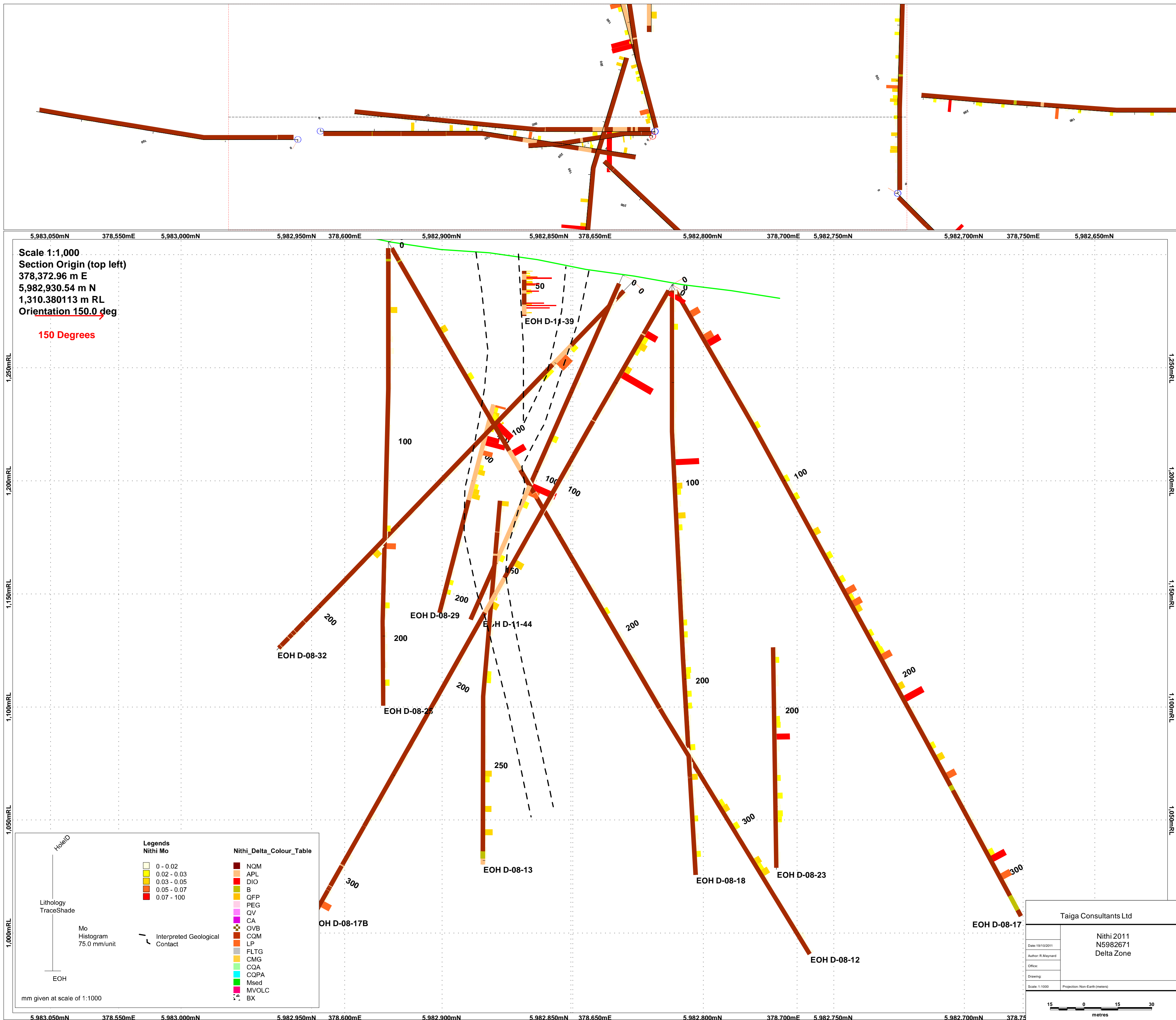
30

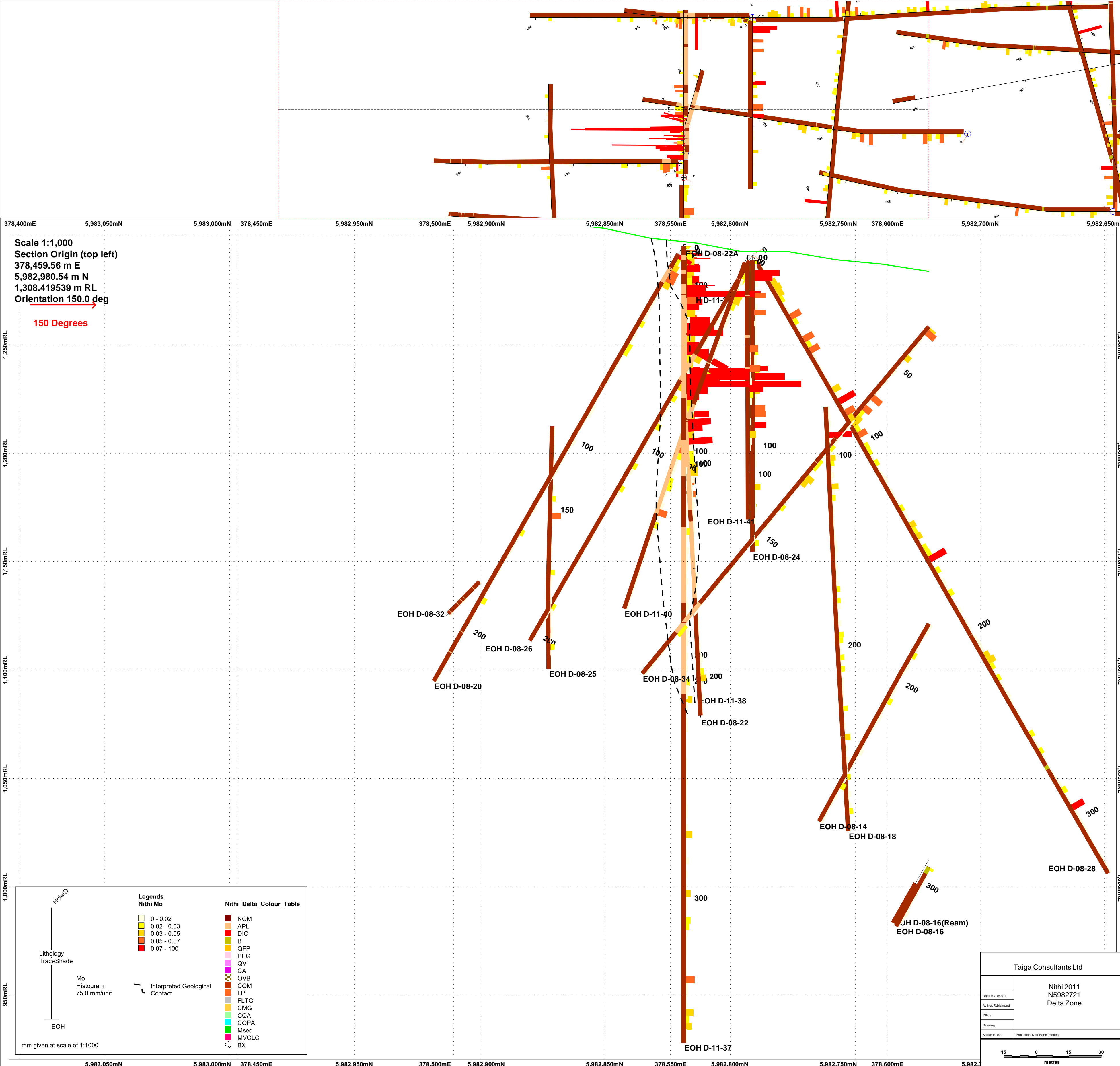
metres











Scale 1:1,000
Section Origin (top left)
378,459.56 m E
5,982,980.54 m N
1,308.419539 m RL
Orientation 150.0 deg

150 Degrees

Legends

Nithi Mo

0 - 0.02
0.02 - 0.03
0.03 - 0.05
0.05 - 0.07
0.07 - 100

Nithi_Delta_Colour_Table

NQM
APL
DIO
B
QFP
PEG
QV
CA
OVB
CQM
LP
FLTG
CMG
CQA
CQPA
Msed
MVOLC
BX

Lithology

TraceShade

Mo

Histogram

75.0 mm/unit

EOH

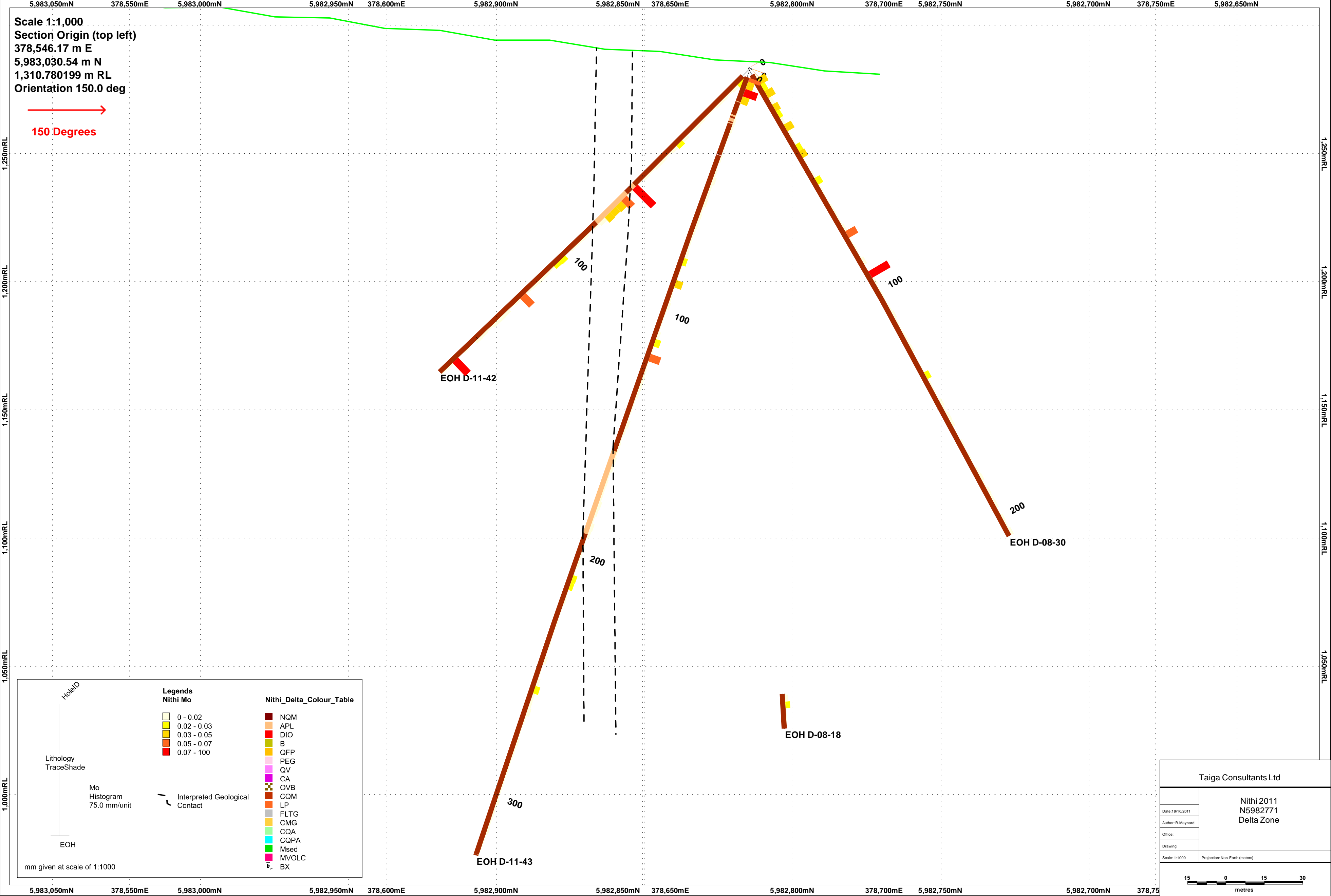
mm given at scale of 1:1000

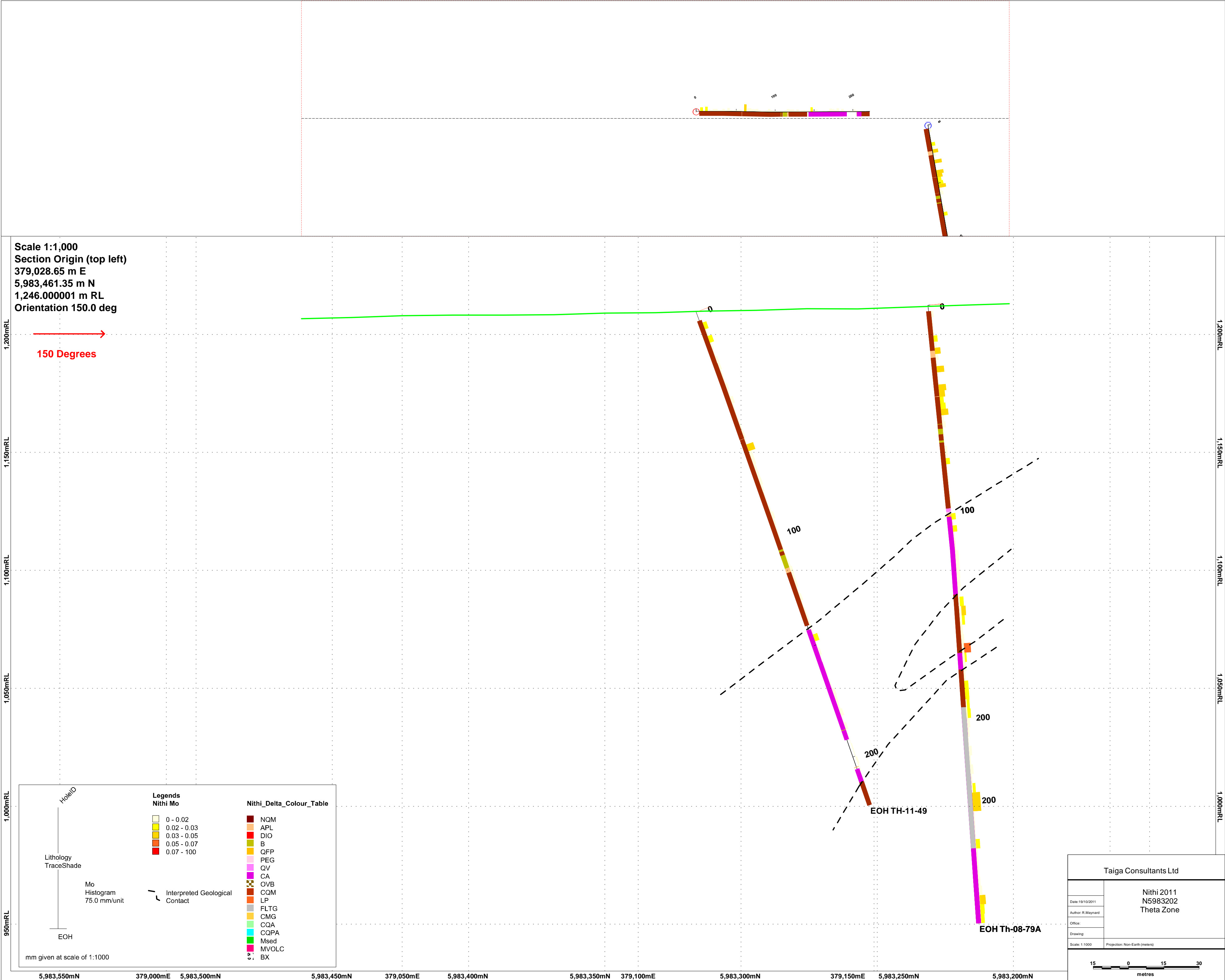
Interpreted Geological Contact

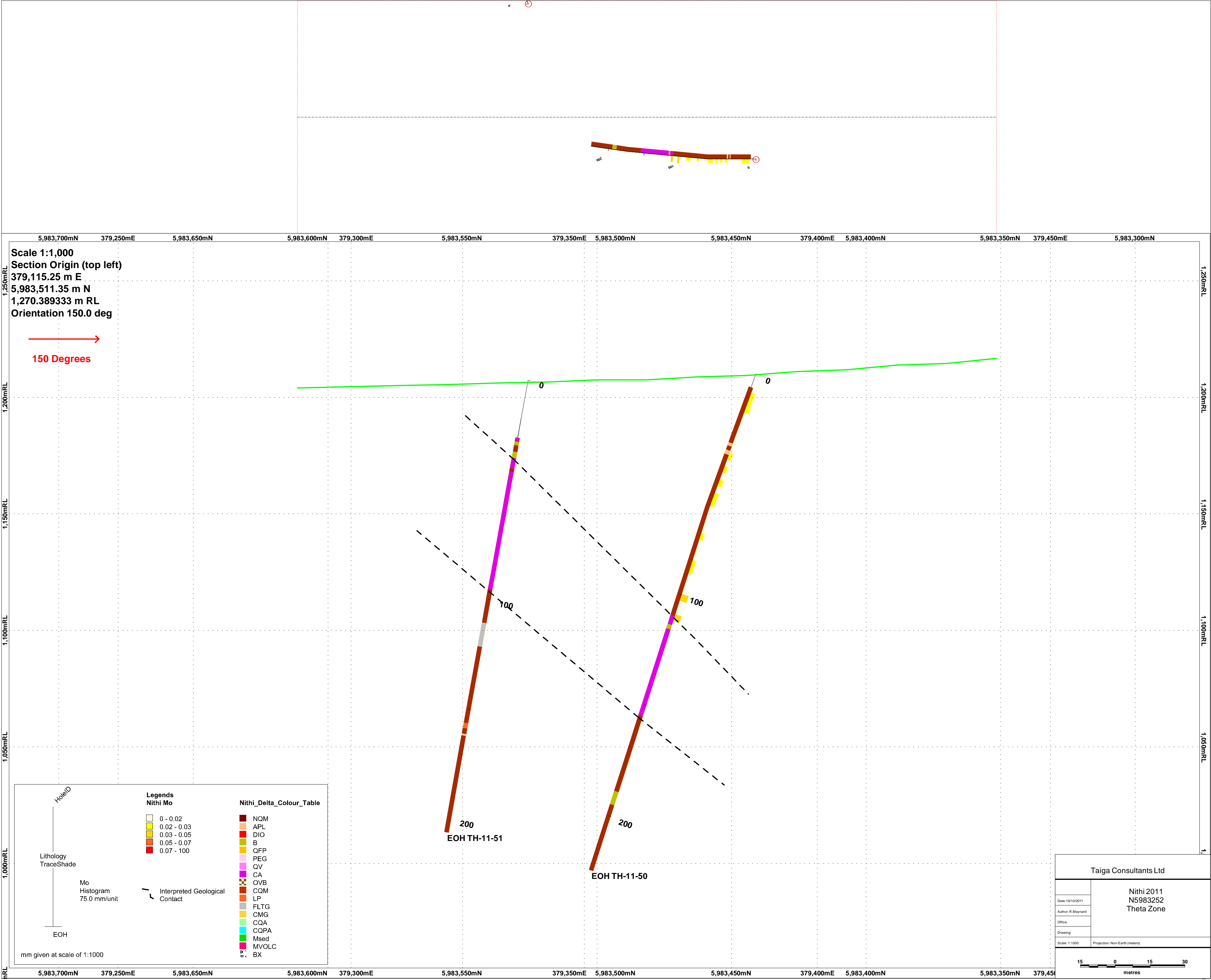
Taiga Consultants Ltd

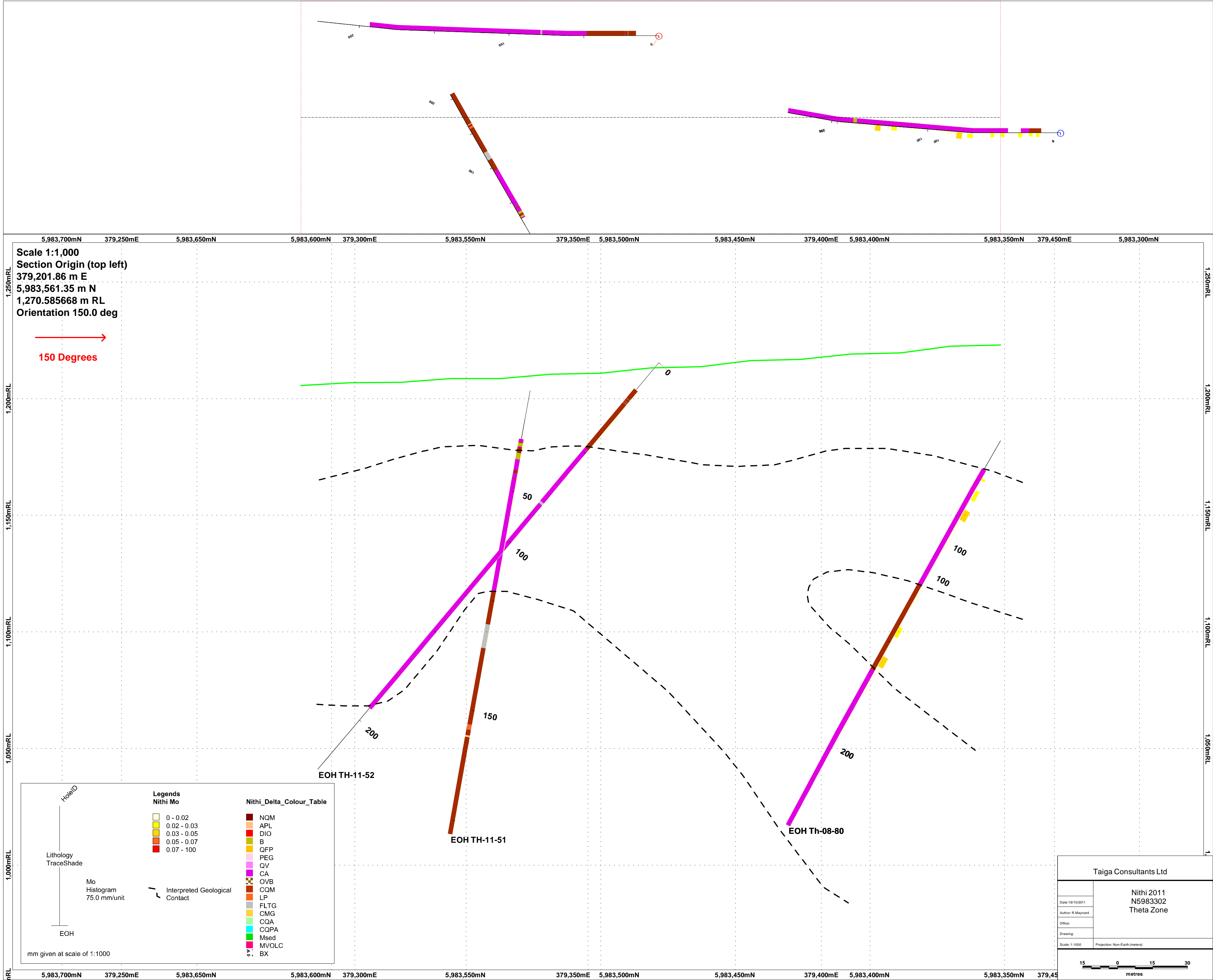
Date: 19/10/2011	Nithi 2011 N5982721 Delta Zone
Author: R.Maynard	
Office:	
Drawing:	
Scale: 1:1000	Projection: Non-Earth (metres)

15 0 15 30 metres

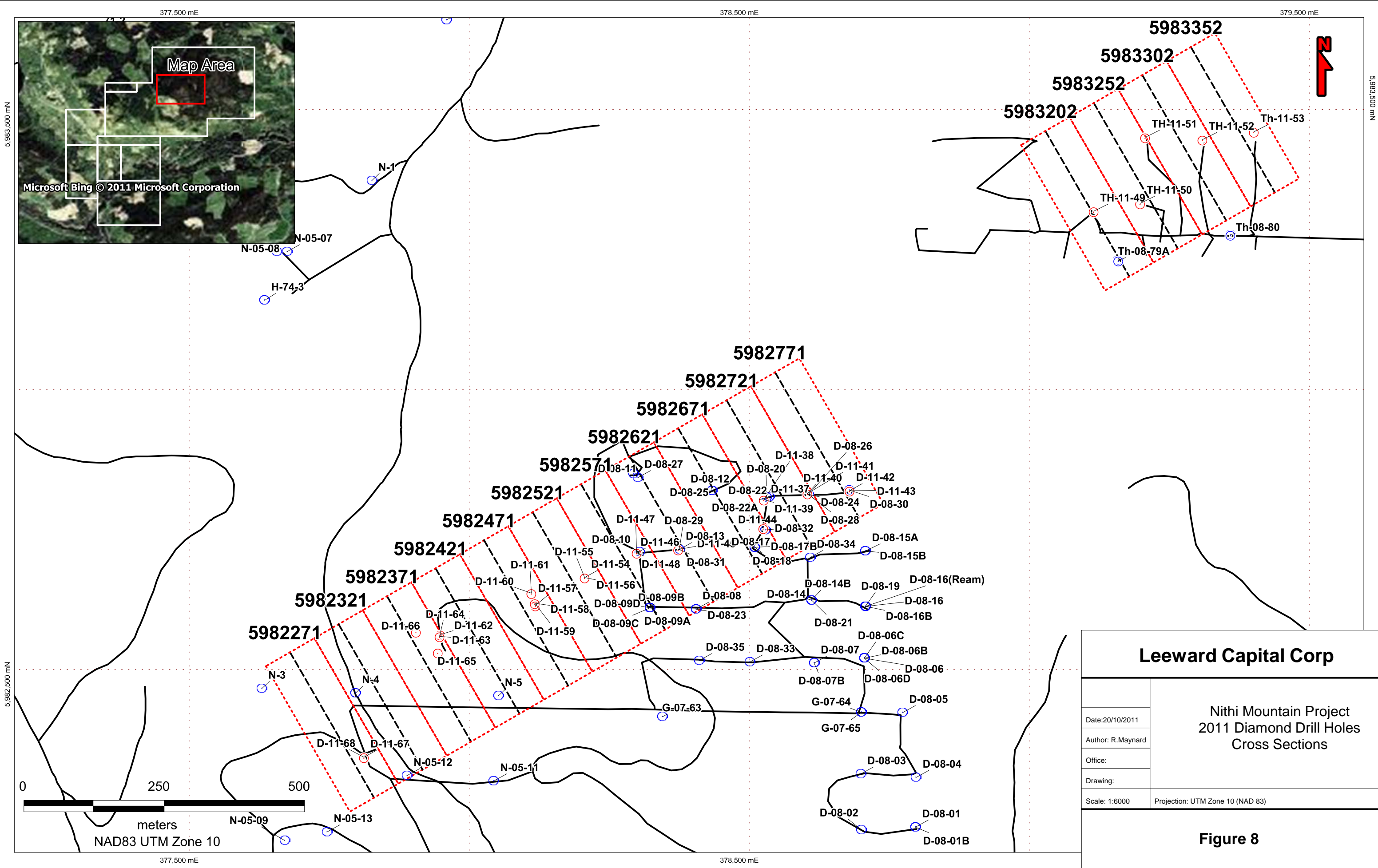




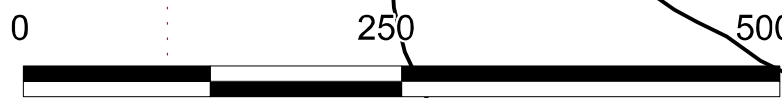
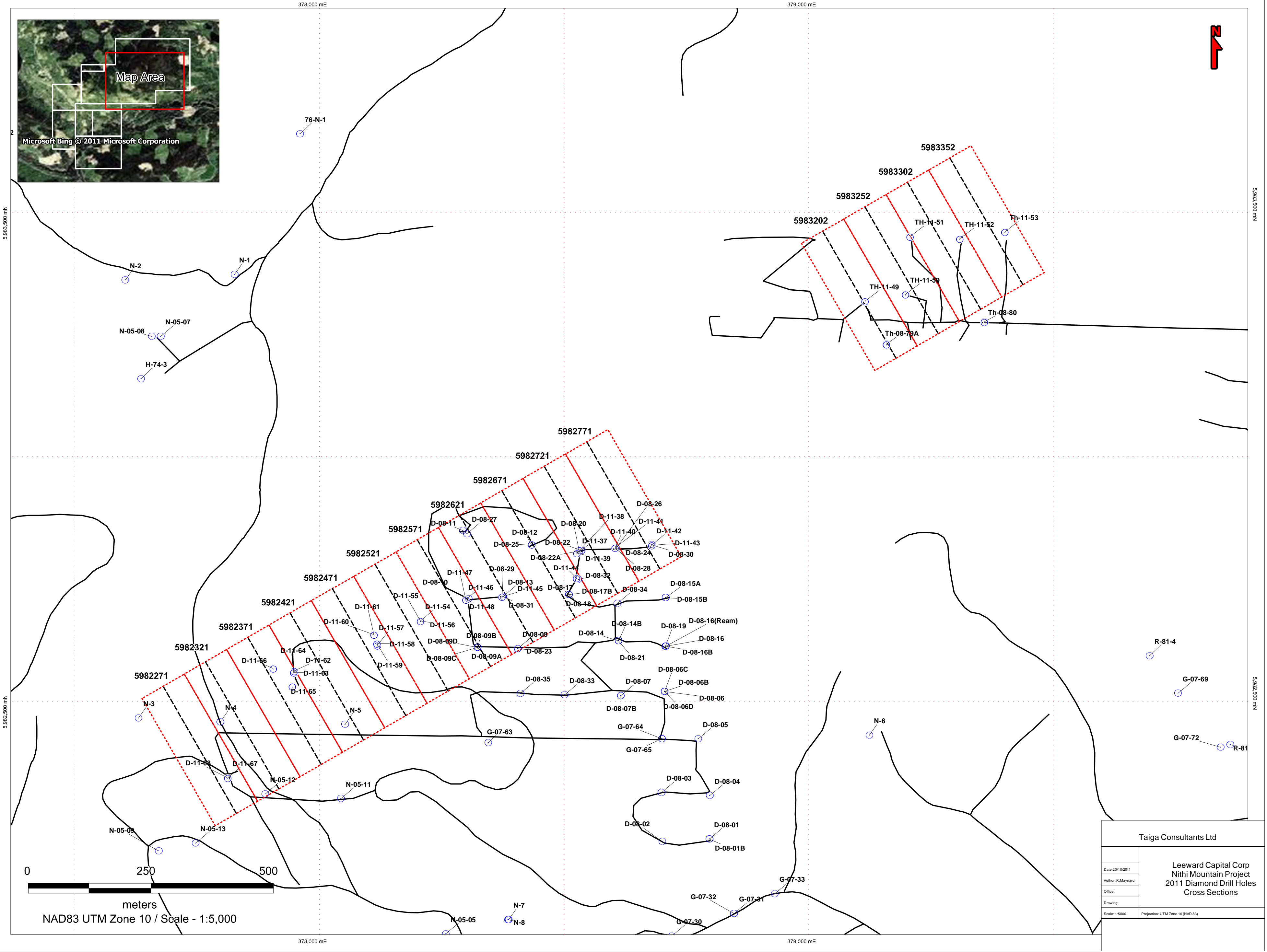
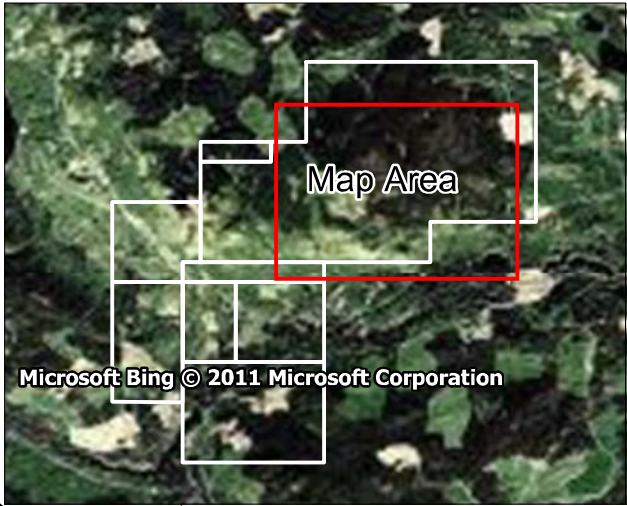








Leeward Capital Corp	
Date: 20/10/2011	Nithi Mountain Project 2011 Diamond Drill Holes Cross Sections
Author: R. Maynard	
Office:	
Drawing:	
Scale: 1:6000	Projection: UTM Zone 10 (NAD 83)
Figure 8	



NAD83 UTM Zone 10 / Scale - 1:5,000

Taiga Consultants Ltd	
Date: 20/10/2011	Leeward Capital Corp Nithi Mountain Project 2011 Diamond Drill Holes Cross Sections
Author: R. Maynard	
Office:	
Drawing:	
Scale: 1:5000	Projection: UTM Zone 10 (NAD 83)



Vancouver Petrographics Ltd.

8080 GLOVER ROAD, LANGLEY, B.C. V1M 3S3

PHONE: 604-888-1323 • FAX: 604-888-3642

email: vanpetro@vanpetro.com

Website: www.vanpetro.com

Report for: Leeward Capital Corp.
101 – 2719 7th Avenue N.E.
Calgary, AB T2A 2L9
Canada

Sent to: Terri Millinoff, P.Geo.
tmillinoff@taiga-ltd.com

Report 110678

August 25, 2011

Table of Contents

Summary.....	3
Table 1: List of samples and petrographic classification of the samples.....	3
Glossary of microstructural and petrologic terms used in the text.....	5
The polished thin sections and the offcuts.....	7
Petrographic descriptions.....	8
Sample D-11-38 97.6.....	8
Sample D-11-38 616.....	10
Sample D-11-39 353.....	13
Sample D-11-53 615.5.....	16
Sample D-11-88 320.2.....	18
Sample D-11-59 139.5.....	20
Sample D-11-68 484.....	22
Sample D-11-55 28.8.....	24
Sample D-11-56 22.65.....	26
Sample D-11-66 220.1.....	29

D-11-53



NITHI MAY_JUNE - JULY 2011

Samples for Thin Section/Polished Section							
DDH	Box #	from (ft)	To (ft)	From (m)	TO (m)	interval (m)	
D-11-38	Box 6	97.6	98.2	29.75	29.93	0.18	Aplite
D-11-38	Box 45	616	616.45	187.76	187.89	0.14	
D-11-39	Box 25	353	353.6	107.59	107.78	0.18	1/2sample
Th-11-53		615.5	616.1	187.60	187.79	0.18	
D-11-68	Bx 22	320.2	320.8	97.60	97.78	0.18	
D-11-59	bx10	139.5	139.95	42.52	42.66	0.14	Aplite
D-11-68	bx 34	484	484.6	147.52	147.71	0.18	QFP w felsic scoria fragment?
D-11-55	bx2	28.8	29	8.78	8.84	0.06	NQM w mo frac fill , py on x frac
D-11-56	bx 1	22.65	22.9	6.90	6.98	0.08	qv in alt NQM w mo selvages
D-11-66		220.1	220.5	67.09	67.21	0.12	copper mineralization
D-11-68	bx22	320.2	320.8	97.60	97.78	0.18	QFP just past basalt in ddh
Large Kaolin sample rom D-11-65				bucket			

Summary:

Ten (10) samples were submitted for petrographic analysis (see details in Table 1).

Table 1: List of samples and petrographic classification of the samples.

Sample N°	SAMPLE ID		Lithology
1	D-11-38	97.6	Altered (chlorite-white mica-clay?) fine-grained porphyritic dacite
2	D-11-38	616	Fine-grained porphyritic dacite Quartz-pyrite-calcite-chalcopyrite-white mica veins White mica-calcite veinlets
3	D-11-39	353	Altered (quartz-K-feldspar [Domain A] and clay [Domain B]) breccia Quartz veins
4	Th-11-53	615.5	Clay altered fine-grained porphyritic rhyodacite Quartz-white mica-pyrite veinlets
5	D-11-68	320.2	Altered (clay-epidote-chlorite) fine-grained porphyritic rhyolite
6	D-11-59	139.5	Altered (white mica-quartz-kaolinite?) fine-grained porphyritic andesite(?) Quartz-white mica veinlet
7	D-11-68	484	Altered (clay-epidote-chlorite-rutile?) fine-grained porphyritic rhyolite
8	D-11-55	28.8	Altered (white mica-chlorite-pyrite-rutile) granite Quartz-molybdenite veinlets
9	D-11-56	22.65	Altered (white mica-pyrite) granite Quartz-pyrite-molybdenite vein
10	D-11-66	220.1	Altered (white mica) granite Quartz-white mica-pyrite veinlet

The samples can be subdivided into six different suites. The first four suites are **hypabyssal** lithologies. The fifth was set apart due to its **brecciated** microstructure. The last suite includes **granitic** rocks which host the **molybdenite mineralization**.

The first suite (Samples N° 1 and 2) is a fine-grained porphyritic dacite. The two samples show different amounts of alteration; chlorite-white mica and possible clay have almost completely bleached Sample N° 1. Sample N° 2 is less altered with plagioclase with and some of the biotite still preserved. The veinlet within the second sample possibly indicates the assemblage (i.e., quartz-pyrite-calcite-chalcopyrite-white mica±chlorite) of the waning stages of the alteration, which almost left this sample unaffected, while intensely altering Sample N°

Glossary of microstructural and petrologic terms used in the text

a, b, c: symbols used to describe the crystallographic axes of the crystals.

Alteromorph: Mineral or group of minerals developed by partial to complete alteration or weathering of a primary mineral. The alteromorph does not always preserve the shape, size and volume of the mineral that it has replaced.

Aspect ratio: Ratio of length to width of crystals and grains.

Decussate: An arrangement of randomly-oriented elongate grains (such as mica).

Epitaxis (epitaxy): Nucleation and growth of a mineral in another with a systematic relationship between the two crystal structures.

Embayed phenocryst: Phenocryst (typically in a volcanic or shallow intrusive igneous rock) with smoothly curved embayments formed either by magmatic corrosion (re-solution in the magma, owing to changes in external conditions) or, in some instances, dendritic growth.

Groundmass: Aggregate that is distinctly finer-grained than the phenocrysts (q.v.) in an igneous rock.

Intergrowth: Aggregate of two or more minerals, generally arranged in a regular manner, formed by simultaneous growth or exsolution.

Interlobate: With irregular, lobate grain boundaries.

Interstitial: Mineral occupying angular cavities or interspace fillings between other minerals.

Matrix: Aggregate that is distinctly finer-grained than the porphyroblasts in a metamorphic rock. The usage is similar to that of groundmass (q.v.) in an igneous rock.

Pleochroism: A property of certain crystals of absorbing light to an extent that depends on the orientation of the vector of the light with respect to the optic axes of the crystal.

Poikilitic: Term referring to grains with many inclusions in igneous rocks.

Polygonal: Crystal with straight grain boundaries and consisting of anhedral or subhedral grains.

Relict (residual structure): Structure remaining after a deformation or metamorphic event, such as a porphyroblast in a mylonite, a phenocryst in a metamorphosed volcanic rock, or a partly replaced porphyroblast in a retrograde metamorphic rock. 'Relict' is sometimes used as an adjective for 'residual'.

Undulose (undulatory) extinction: Wavy, non-uniform extinction in a single grain, owing to slight bending of the crystal. Patchy, irregular undulose extinction can be due to submicroscopic fractures, kinks and dislocation tangles.

X, Y, Z: symbols used to describe the optical indicatrix of the crystals.

Xenoblastic: Describes a structure of irregular grains showing no crystal-face boundaries in a metamorphic rock.

References:

Amstutz, G.C., 1954, 1960, *A geometric classification of basic intergrowth patterns of minerals*. *Am. Geol. Inst. Data Sheet* 21.

Delvigne, J.E., 1998, *Atlas of Micromorphology of Mineral Alteration and Weathering*, The

The polished thin sections and the offcuts

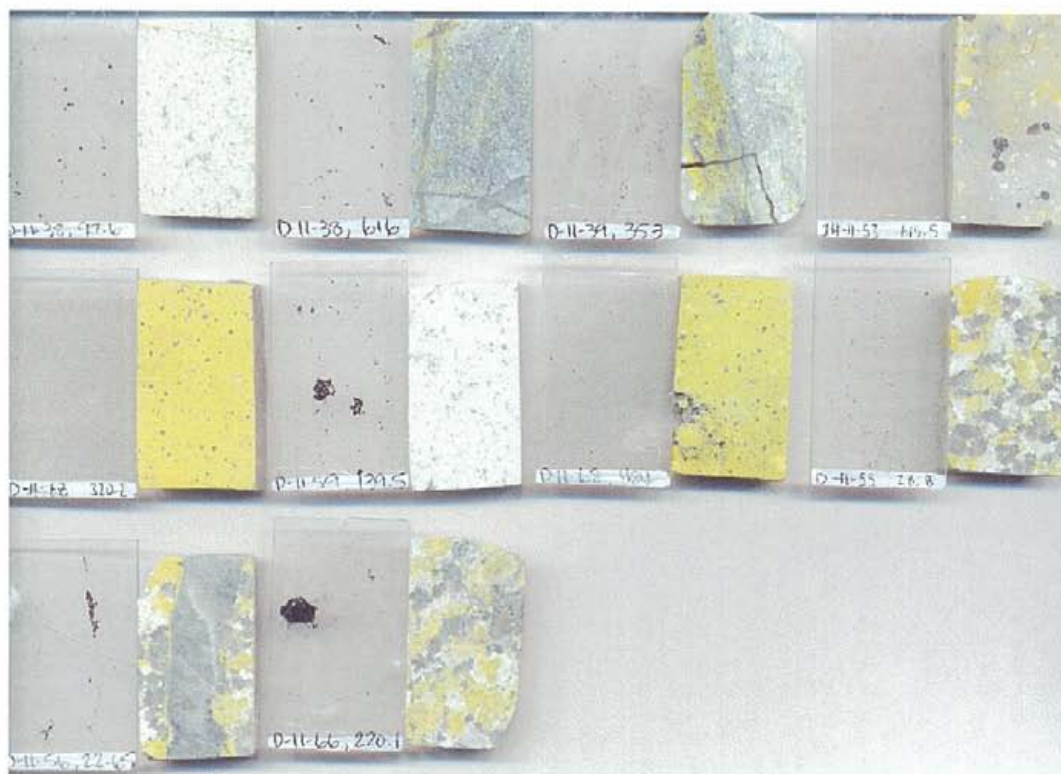


Figure 1: The polished thin sections and the offcuts.

Petrographic descriptions

Sample D-11-38 97.6

Altered (chlorite-white mica clay?) fine-grained porphyritic dacite

This polished thin section is characterized by a fine-grained porphyritic microstructure defined by the presence of completely altered subhedral feldspar, alteromorphosis of chlorite+white mica, and embayed quartz phenocrysts immersed within an inequigranular interlobate groundmass made up of quartz and albite. Pyrite forms subhedral crystals dispersed within the groundmass.

<i>Mineral</i>	<i>Modal %</i>	<i>Main size range (mm)</i>
Quartz	65 - 70	0.5-1 as phenocryst, up to 0.2 in the groundmass
(Feldspar) altered by white mica+clay	20 - 24	Up to 1.5
White mica-chlorite-clay (after biotite?)	6 - 8	Up to 1
White mica	4 - 5	0.02
Pyrite	1 - 1.5	Up to 1
Rutile	tr - 1	Up to 0.4
Pyrrhotite	tr	Up to 0.2
Titanite	tr	Up to 0.1
Chalcopyrite	tr	Up to 0.05

Quartz occurs as anhedral and embayed phenocrysts of up to 1 mm in size. Some phenocrysts are rimmed and in some instances the embayments, indicating a resorption process which occurred within the magma, are occupied by intensely altered feldspar. The phenocrysts are immersed within a fine-grained (0.1-0.2 mm) interlobate aggregate of quartz, albite and irregularly distributed very fine-grained white mica and possibly clay.

Subhedral structural relicts of possible **feldspar** are intensely to completely altered by a very fine-grained aggregate of white mica and possible clay. The nature of the cryptocrystalline aggregate should be further investigated with infrared-spectrometry analysis. The absence of the yellow colour on the stained offcut (see Fig. 0) suggests that no feldspar was present within this lithology, however, the feldspar could have been completely altered and replaced by white mica+clay.

Chlorite and lesser **white mica** form an epitaxial replacement of a tabular to columnar ferromagnesian mineral, which had a relatively high aspect ratio in some of its occurrences (up to 10:1). The presence of anhedral titanite within the alteromorphoses indicates that the

ferromagnesian mineral could have been biotite.

Pyrite is dispersed within the groundmass as subhedral crystals and hosts blebs and sub-rounded inclusions of **pyrrhotite**, **chalcopyrite**, quartz and other fine-grained unresolved minerals. In some instances pyrite is fractured and rare chalcopyrite is observed between the cracks.

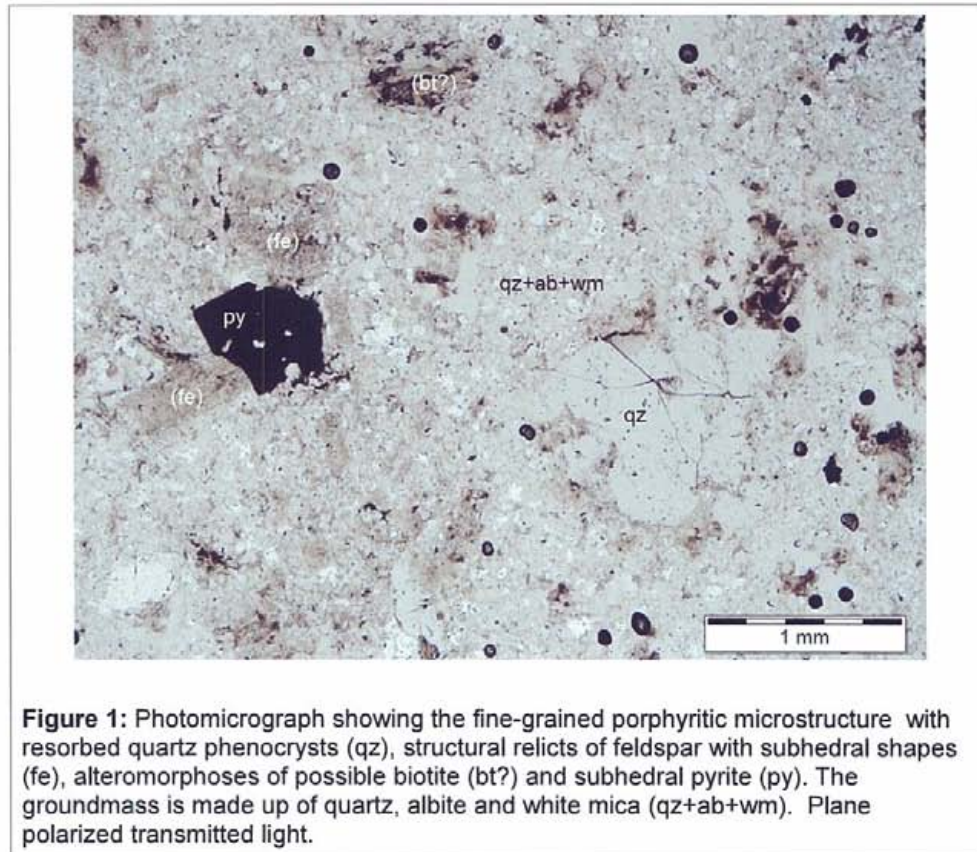


Figure 1: Photomicrograph showing the fine-grained porphyritic microstructure with resorbed quartz phenocrysts (qz), structural relicts of feldspar with subhedral shapes (fe), alteromorphoses of possible biotite (bt?) and subhedral pyrite (py). The groundmass is made up of quartz, albite and white mica (qz+ab+wm). Plane polarized transmitted light.

Sample D-11-38 616

Fine-grained porphyritic dacite

Quartz-pyrite-calcite-chalcopyrite-white mica veins

White mica-calcite veinlets

This polished thin section shows a fine-grained porphyritic microstructure with subhedral crystals of plagioclase and lesser tabular crystals of altered biotite and quartz immersed within a fine-grained interlobate aggregate of quartz+albite±biotite. Quartz-rich veins host minor amounts of pyrite; chalcopyrite and rutile and are crosscut by veinlets made up of calcite, which in turn are crosscut by white mica±chlorite±calcite veinlets.

<i>Mineral</i>	<i>Modal %</i>	<i>Main size range (mm)</i>
Plagioclase	46 - 50	Up to 1
Quartz	35 - 40	Up to 1
Biotite	8 - 10	Up to 1
White mica	5 - 6	Up to 0.2
Chlorite	2 - 3	Up to 0.5
Pyrite	1 - 2	Up to 1
Calcite	1	Up to 0.1
Rutile	0.5 - 1	Up to 0.4
Sphalerite	tr	Up to 0.7
Chalcopyrite	tr	Up to 0.5
Apatite	tr	Up to 0.05

Plagioclase forms subhedral phenocrysts of up to 1 mm in size. The phenocrysts show distinct normal (albite-richer rims) zonation and refractive indexes greater than quartz. The measured extinction angle [X': trace (010) in the zone perpendicular to (010), Troger (1979)] of 15° and the refractive indexes greater than quartz indicate a 30% anorthite content (i.e. **oligoclase-andesine**) for the plagioclase. The plagioclase is weakly fractured and is weakly altered by a very fine-grained dispersion of white mica and lesser calcite. Albite and Carlsbad twinning are observed but are not widespread, and in some instances the plagioclase rims are finely interlobated with the fine-grained groundmass. Plagioclase and quartz form an interlobate aggregate with maximum grain-size of 0.1 mm. In this case the plagioclase shows refractive indexes comparable with the quartz and is therefore interpreted as being albite. Albite is also distinguished from the quartz by its typical albite twins.

Quartz forms fine-grained interlobate crystals which constitute the groundmass in association with albite and lesser biotite flakes of up to 0.1 mm. It is rarely observed as anhedral

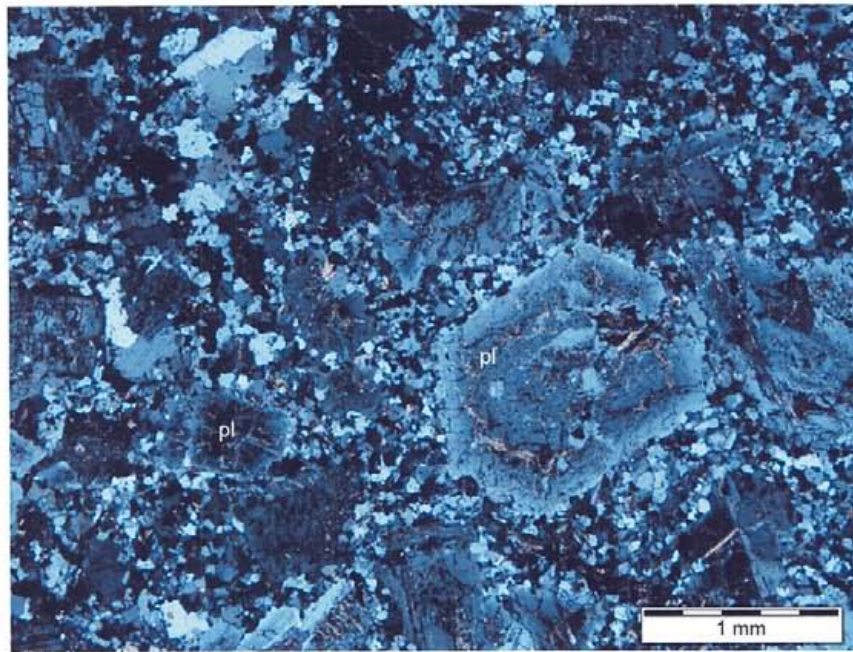


Figure 2a: Photomicrograph with subhedral phenocrysts of plagioclase (pl) immersed within a fine-grained groundmass of quartz and albite. Crossed nicols transmitted light.

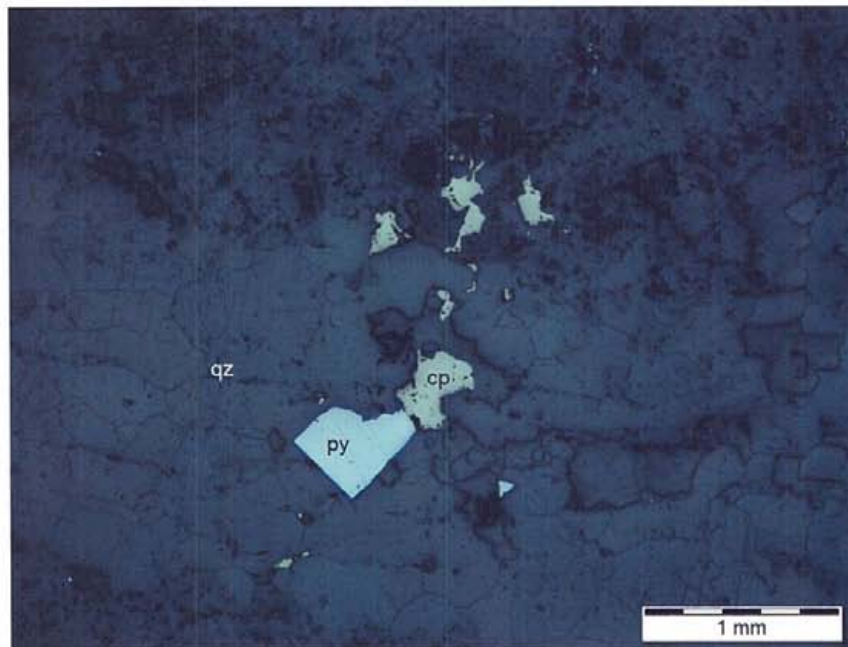


Figure 2b: Subhedral pyrite (py) and anhedral chalcopyrite (cp) within a quartz-rich vein (qz). Plane polarized reflected light.

Sample D-11-39 353

**Altered (quartz-K-feldspar [Domain A] and clay [Domain B]) breccia
Quartz veins**

This sample is made up of two domains. The first domain (**A**) is characterized by a fragmental microstructure with sub-angular fragments made up of a fine-grained aggregate of quartz, albite and white mica. The fragments are immersed within a matrix composed of a fine-grained aggregate of quartz, albite, clay and white mica. **Domain B** consists mostly of an inequigranular aggregate of quartz overgrown by bladed quartz of up to 0.5 mm. The coarser quartz crystals are interpreted as being temporally associated with the quartz veinlets and veins which crosscut the two domains. Pyrite is dispersed within the two domains and is absent from the quartz-veins and veinlets, and chalcopyrite occurs only within Domain B.

<i>Mineral</i>	<i>Modal %</i>	<i>Main size range (mm)</i>
Domain A (57 % of PTS)		
Quartz	17 - 20	0.01-0.1
Albite?	8 - 10	0.01-0.1
Clay	5 - 6	cryptocrystalline
White mica	1.5 - 2	Up to 0.2
Pyrite	0.4 - 0.5	0.2
Rutile	tr	Up to 0.1
Domain B (33 % of PTS)		
Quartz	40 - 44	0.01-0.5 and rare fragments of up to 0.4
K-feldspar	15 - 17	0.01-0.5
Pyrite	0.5 - 0.8	Up to 0.3
Chalcopyrite	0.5 - 0.8	Up to 0.4
White mica	tr	Up to 0.1
Veinlets and Vein (10% of PTS)		
Quartz	10	Up to 1

Quartz forms a fine- to very fine-grained aggregate with interlobate grain shapes associated with possible albite, white mica and clay within the lithic fragments of Domain A. Rare quartz fragments of up to 0.4 mm in size and with a strong undulose extinction are also found

immersed within a very fine-grained matrix which is possibly composed of quartz, and possibly of albite and clay. The lithic fragments are, in some instances, showing subhedral structural relicts of **feldspar** which are strongly replaced by clay and are immersed within a very fine-grained groundmass of quartz and possibly albite.

Within Domain B the quartz shows different grain shapes: from the very fine-grained and interlobate aggregate with grain size of up to 0.05 mm, which is locally overgrown by granoblastic patches with crystals of up to 0.2 mm, then which is finally overgrown by bladed to blocky quartz of up to 0.5 mm. The coarser quartz is possibly coeval with the quartz veins and veinlets, in which it occurs as clear crystals from blocky to columnar shapes, and in some instances, blades and columns which are oriented perpendicular to the vein/veinlet walls.

K-feldspar is associated with quartz within Domain B as fine to very fine-grained interlobated to polygonal crystals with refractive indexes smaller than quartz and low birefringence. The presence of K-feldspar within Domain B, itself representing a vein-like domain with intense recrystallization and replacement, is interpreted here as an evidence of a potassic (K-feldspar) alteration.

Pyrite is distributed heterogeneously in the two domains as rounded to euhedral crystals. The presence of rounded crystals within the matrix of Domain A suggests that the deposition of pyrite could have started during the brittle brecciation and continued during the quartz-feldspar alteration observed within Domain B. **Chalcopyrite** occurs as amoeboid crystals within Domain B where in some instances it is spatially associated and rims anhedral pyrite and euhedral crystals of quartz.

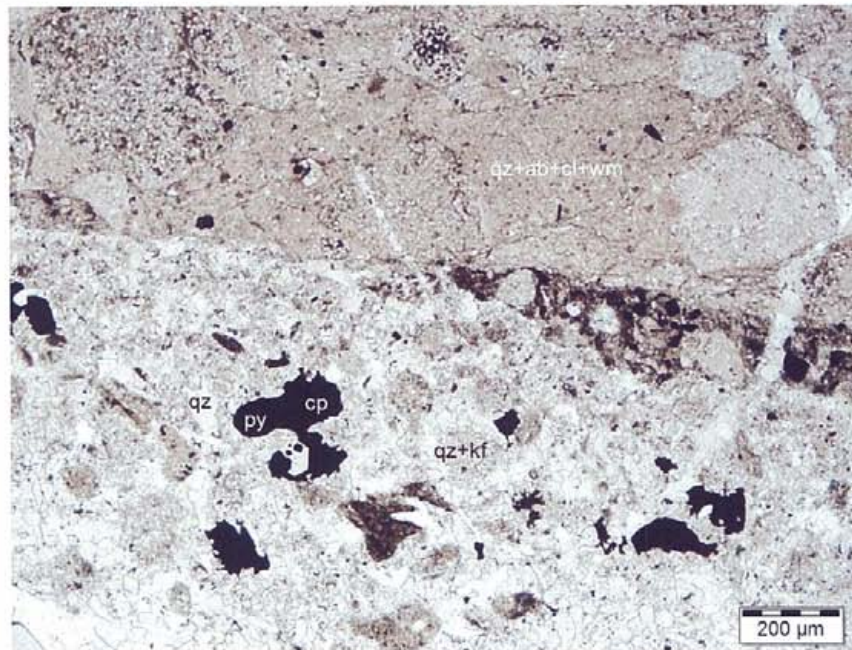


Figure 3a: Photomicrograph showing the contact between Domain A (upper part of the Figure) with lithic fragments immersed within a matrix of quartz, albite, clay and white mica (qz+ab+cl+wm), and Domain B, in which pyrite and chalcopyrite (py and cp, see details in Figure 3b) are hosted within a quartz (qz) and quartz+K-feldspar aggregate (qz+kf). Plane polarized transmitted light.

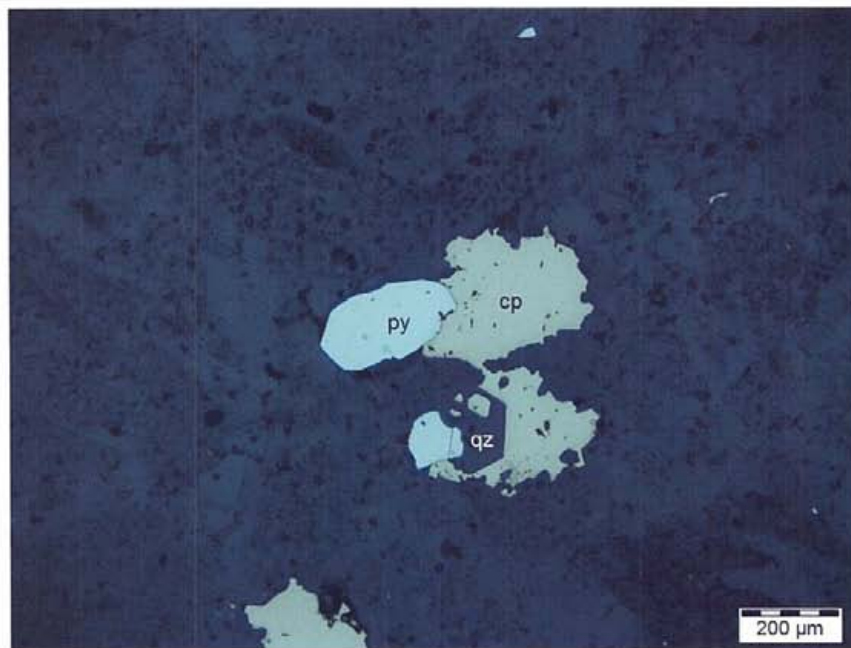


Figure 3b: Detail of the previous Figure 3a. Chalcopyrite rims anhedral crystal of pyrite (py) and euhedral quartz (qz) within Domain B. Plane polarized reflected light.

Sample ~~D~~¹¹-11-53 615.5

Clay altered fine-grained porphyritic rhyodacite

Quartz-white mica-pyrite veinlets

The microstructure of this polished thin section is characterized by subhedral and embayed phenocrysts of quartz and euhedral feldspar crystals intensely altered by very fine-grained white mica and lesser clay. The phenocrysts are immersed in a fine-grained groundmass made up of a xenomorphic aggregate consisting of albite±quartz, and possibly white mica—and which is strongly altered by clay.

Mineral	Modal %	Main size range (mm)
Albite	55 - 60	Up to 0.12
Quartz	(9) 25 - 30	Up to 4
Clay	12 - 15	cryptocrystalline
K-feldspar, partially replaced by clay	(15) 15 - 17	Up to 2.5
(Plagioclase) replaced by white mica	(12) 12 - 15	Up to 2.5
Pyrite	tr	Up to 0.05
Rutile	tr	Up to 0.05

*figures in parentheses indicate the % of the phenocrystalline portion of the mineral

Quartz forms subhedral phenocrysts of up to 4 mm in size with abundant embayments generated by its resorption and partial replacement of possibly feldspar (albite?) which is in turn completely replaced by a cryptocrystalline aggregate of clay. Albite is partially to completely replaced by clay and in some instances rims the euhedral faces of quartz. Quartz possibly occurs also within the xenomorphic groundmass, however the nature of this strongly altered aggregate is not resolved by the microscope due to the fine grain size and the strong clay alteration. The phenocrysts are subordinate as compared to the groundmass. Quartz finally forms thin veinlets (up to 0.2 mm wide) with lesser amounts of white mica and rare pyrite.

Albite possibly constitutes most of the xenomorphic groundmass where it forms irregular to interlobate crystals of up to 0.12 mm in size. Albite is the major constituent of the rims and resorption microstructures around the quartz phenocrysts. Structural euhedral-shaped relicts which are made up of very fine-grained white mica are interpreted as alteromorphosis after **plagioclase**.

Euhedral **K-feldspar** phenocrysts are partially replaced by cryptocrystalline clay and in some occurrences enclose euhedral plagioclase.

Pyrite is anhedral and is found in some of the quartz veinlets that crosscut the sample and within the intensely to completely altered feldspars.

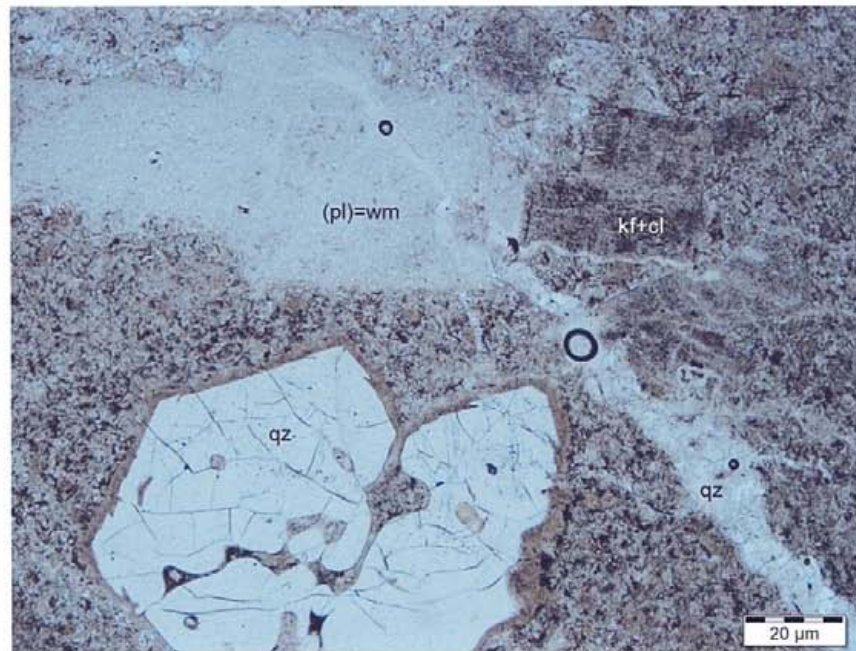


Figure 4: Subhedral and embayed quartz phenocrysts (qz), euheral alteromorphosis of white mica after plagioclase [(pl)=wm] and clay-altered K-feldspar (kf+cl) are immersed within a clay altered groundmass. Plane polarized transmitted light.

18 D-11-68
Sample D-11-88 320.2

Altered (clay-epidote-chlorite) fine grained porphyritic rhyolite

This sample has a fine-grained porphyritic microstructure with subhedral to euhedral quartz and K-feldspar phenocrysts immersed within a very fine-grained groundmass constituting K-feldspar prevailing on quartz, possible albite and white mica. The groundmass is moderately to strongly altered by a cryptocrystalline dispersion of possible clay.

Mineral	Modal %	Main size range (mm)
K-feldspar	(20) 50 - 55	Up to 5
Quartz	(15) 25 - 30	Up to 1.2
Clay	10 - 12	cryptocrystalline
Albite?	5 - 7	Up to 0.1
White mica	4 - 5	Up to 0.04
Iron-oxides and limonite	1	Up to 0.3
Titanite?	tr	Up to 0.01
Epidote	tr	Up to 0.01
Chlorite	tr	Up to 0.25

*Figures in parentheses indicate the % of the phenocrystalline portion of the mineral

K-feldspar forms euhedral to subhedral prisms of up to 5 mm in size which are subtly altered by clay dispersion and possibly very fine-grained epitaxial epidote prisms (saussurite). The optical sign is small and negative, and indicates that the feldspar belongs to the high albite series (i.e., low sanidine or anorthoclase); no perthites are observed and in some instances the crystals show Carlsbad contact twinning.

Quartz is euhedral to subhedral and shows subtle embayments indicating a certain degree of resorption and disequilibrium with the groundmass, however, the resorption is less evolved if compared with the previous sample (D-11-53 615.5). Quartz forms interlobate fine-grained crystals (up to 0.04 mm) within the groundmass.

The groundmass is possibly formed by abundant K-feldspar, quartz, possible albite, and is later altered by a very fine-grained dispersion of white mica flakes and cryptocrystalline clay. The amount of K-feldspar as a constituent of the groundmass can be ascertained by the yellow stain; however it must also be considered that white mica and clay may sometimes absorb the stain.

The walls of some irregular cavities of up to 0.5 mm in size are encrusted by iron oxides, limonite, epidote crystals and polygonal quartz crystals. Rare pseudomorphoses with subhedral shapes (up to 0.5 mm) consist of white mica and chlorite, are partially destroyed during the sample preparation and are possibly the result of the alteration of some ferromagnesian mineral. Rare crystals of up to 0.3 mm in size are completely oxidized.

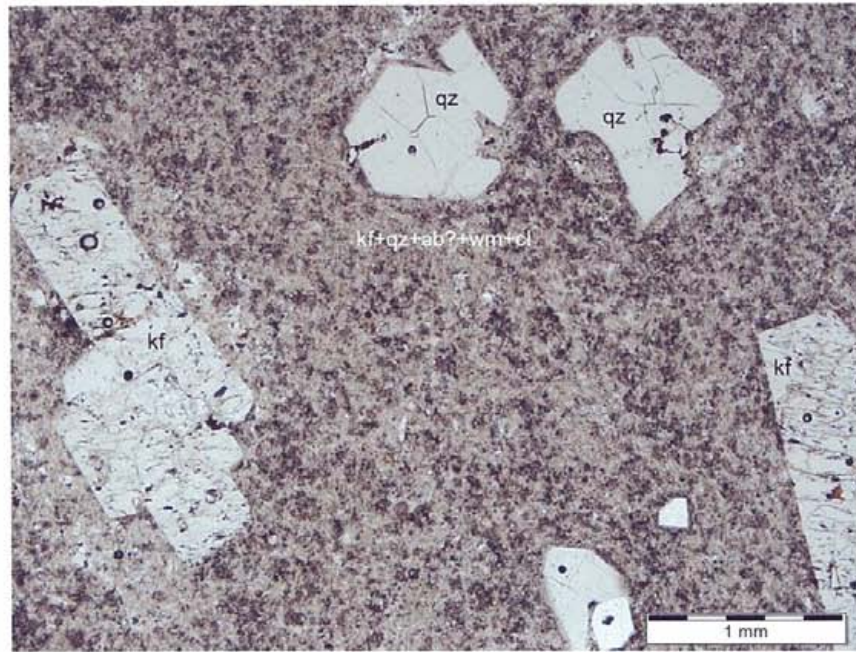


Figure 5: K-feldspar (kf) and quartz (qz) phenocrysts immersed in a groundmass made up of K-feldspar, quartz, possible albite, white mica and clay (kf+qz+ab?+wm+cl). Plane polarized transmitted light.

Sample D-11-59 139.5

***Altered (white mica-quartz-kaolinite?) fine-grained porphyritic andesite(?)
Quartz-white mica veinlet***

The microstructure of this polished thin section is characterized by subhedral to euhedral phenocrysts, likely of feldspar, which are completely replaced by very fine-grained white mica and immersed within a fine-grained groundmass with interlobate quartz, albite and white mica. Quartz phenocrysts are rare and anhedral. Pyrite forms poikilitic crystals and hosts inclusions of quartz, white mica-rich alteromorphoses, pyrrhotite and chalcopyrite.

<i>Mineral</i>	<i>Modal %</i>	<i>Main size range (mm)</i>
Quartz	(1) 40 - 44	0.1-0.3 within the groundmass, up to 0.8 as phenocryst, up to 0.4 within the veinlet
White mica+Kaolinite? (alteromorphosis after feldspar)	(35) 35 - 40	0.004-0.03 (alteromorphosis size up to 1 mm)
Albite	12 - 15	Up to 0.1
White mica	8 - 10	Up to 0.25
Pyrite	2	Up to 5
Rutile	tr	Up to 0.25
Chalcopyrite	tr	Up to 0.4
Galena	tr	Up to 0.5
Pyrrhotite	tr	Up to 0.05
Titanite	tr	Up to 0.05

* figures in parentheses indicate the % of the phenocrystalline portion of the mineral

Quartz forms fine-grained crystals of up to 0.1 mm in size with interlobate to polygonal shapes. It is generally associated with albite and white mica flakes and constitutes the groundmass of the porphyritic rock. In some cases the quartz forms monomineralic aggregates with patchy and irregular shapes in which the crystals reach 0.3 mm. Quartz also forms very rare (2) phenocrysts of up to 0.8 mm in size which have an anhedral shape. A thin veinlet (0.5 mm wide) crosscuts the polished thin section and is infilled by blocky to polygonal quartz of up to 0.4 mm with a weak to moderate undulose extinction and rare white mica flakes.

White mica forms very fine-grained aggregates within alteromorphoses with euhedral to subhedral shapes. The presence of kaolinite within the alteromorphoses is suspected and

should be confirmed by X-ray diffractometric analysis or infrared spectrometry. The shape of the alteromorphoses and the mineral products indicate that the primary phase could have been **feldspar**. White mica forms crystal aggregates with crystals of up to 0.25 mm in size which are randomly oriented and interpreted as being crystallized during a post-magmatic alteration event. Only in some cases is white mica associated with very fine-grained **titanite** and therefore is interpreted as having originated from the alteration of a Ti-bearing phase such as biotite.

Pyrite forms anhedral poikilitic and fractured crystals of up to 5 mm in size and includes quartz crystals, white mica alteromorphoses after feldspar and blebs of **chalcopryite** and **pyrrhotite**.

Galena mantles the pyrite in some rare occurrences, while in some cases the chalcopryite infills the fractures of pyrite.

In only one instance, a plagioclase crystal is found hosted as armoured inclusion within the pyrite. It is identified as plagioclase by its growth zoning and the Carlsbad contact twin. By assuming that this crystal was analogous to the other crystals, which are now completely replaced by white mica, and finally by the very small amount of quartz as phenocryst, this porphyritic rock is tentatively classified as andesite.

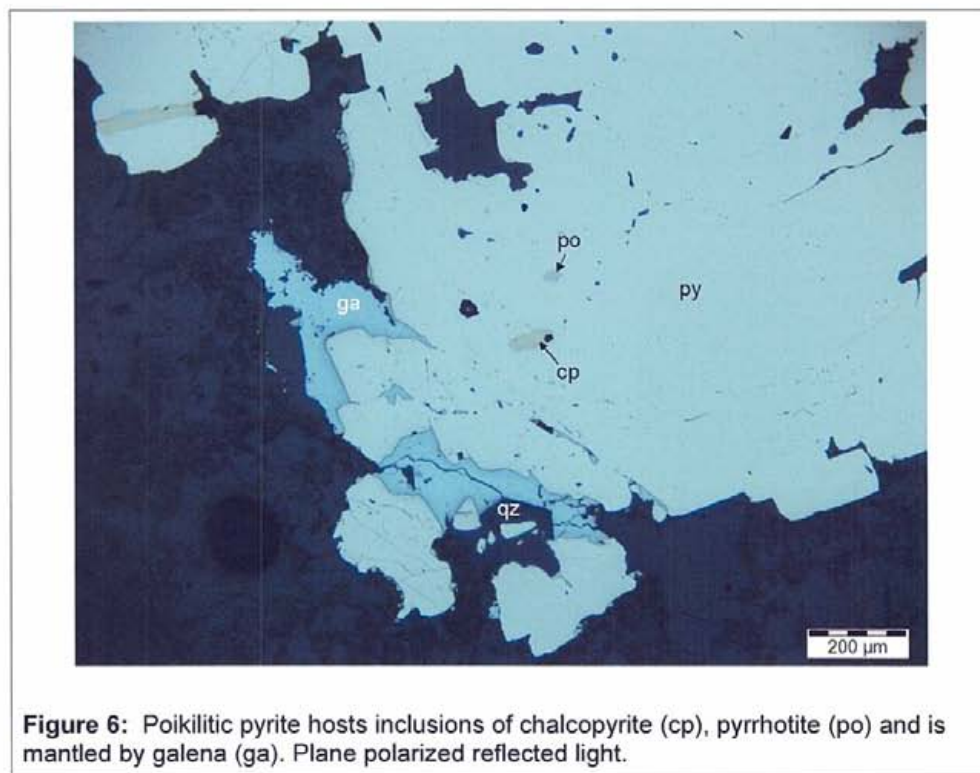


Figure 6: Poikilitic pyrite hosts inclusions of chalcopyrite (cp), pyrrhotite (po) and is mantled by galena (ga). Plane polarized reflected light.

Sample D-11-68 484

Altered (clay-epidote-chlorite-rutile?) fine-grained porphyritic rhyolite

This sample shares some compositional and microstructural similarities with Sample D-11-88 320.2. Euhedral to subhedral phenocrysts of K-feldspar and quartz are immersed within a fine-grained groundmass made up of K-feldspar, clay, quartz and possibly albite.

<i>Mineral</i>	<i>Modal %</i>	<i>Main size range (mm)</i>
K-feldspar (and perthitic albite)	(15) 50 - 55	Up to 3
Quartz	(10) 25 - 30	Up to 1
Clay	15 - 17	cryptocrystalline
White mica	3 - 5	Up to 0.04
Epidote	1 - 2	Up to 0.4
Magnetite	0.5 - 1	Up to 0.2
Pyrite	tr	Up to 0.1
Fe-chlorite	tr	Up to 0.3
Titanite?	tr	Up to 0.5
Iron-oxides and limonite	tr	Up to 0.05
Rutile	tr	Up to 0.02

* figures in parentheses indicate the % of the phenocrystalline portion of the mineral

K-feldspar forms euhedral to subhedral phenocrysts with a small 2V and negative optical sign. Replacement perthites are common and in some instances fine albite twinning is observed within the perthites, which also show a refractive index greater than the host K-feldspar. The perthitic feldspar is relatively fresh with only minor saussuritic overgrowths of very fine-grained epidote. K-feldspar is possibly the dominant constituent of the fine-grained groundmass. Fine grained laths of albite and quartz form an interlobate aggregate, which is moderately to strongly altered by a cryptocrystalline dispersion of clay and white mica flakes. The presence of very fine-grained epidote crystals is also suspected.

Quartz forms euhedral to subhedral phenocrysts of up to 1 mm in size and is associated, as very fine-grained interstitial grains, with the feldspar-rich groundmass. Some phenocrysts show embayment and evidence of disequilibrium with the groundmass which has partially corroded and replaced the quartz. Quartz also occurs as polygonal crystals within irregular and partially filled cavities and has recrystallized within the groundmass. Columnar epidote with high (10:1 and higher) aspect ratio is associated with secondary quartz.

Clay is more abundant if compared with Sample D-11-88 320.2, and in this sample it locally obscures the groundmass with a cryptocrystalline and earthy dispersion.

Magnetite forms subhedral and rare cubic crystals which are irregularly dispersed within the groundmass and are fractured in most of their occurrences.

Rare alteromorphoses with subhedral shapes are made up of **chlorite** and white mica and are possibly replacing a ferromagnesian mineral. The sign of elongation of the chlorite is positive and is therefore identified as Fe-chlorite.

Titanite forms a tabular prism of 0.5 mm with a thin corona of **rutile**.

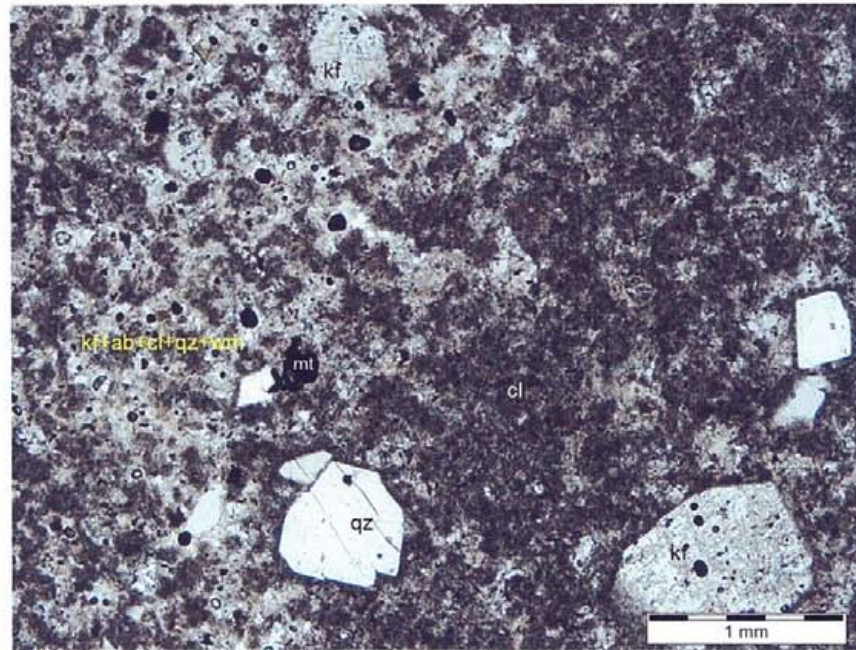


Figure 7: Phenocrysts of K-feldspar (kf) and quartz (qz), and fine-grained magnetite (mt) are immersed within an heterogeneous groundmass; clay alteration differentially affected the groundmass: on the right side of the Figure the groundmass is intensely altered by clay (cl), on the left, moderate to strong alteration partially replaces fine-grained aggregate consisting of K-feldspar, albite, quartz and white mica (kf+ab+cl+qz+wm). Plane polarized reflected light.

Sample D-11-55 28.8

Altered (white mica-chlorite-pyrite-rutile) granite

Quartz-molybdenite veinlets

This sample is characterized by a coarse-grained granitic microstructure with subhedral plagioclase and interstitial quartz and K-feldspar. Pyrite and rutile are preferentially associated with the alteromorphosis of white mica and chlorite after possible biotite. Quartz and quartz-molybdenite form subparallel veinlets.

<i>Mineral</i>	<i>Modal %</i>	<i>Main size range (mm)</i>
Plagioclase	37 - 40	Up to 5
Quartz	30 - 32	Up to 8
K-feldspar	24 - 26	Up to 8
White mica	3 - 4	Up to 0.5
Chlorite	1	Up to 0.5
Pyrite	1	Up to 0.7
Titanite	tr	Up to 0.05
Rutile	tr	~0.1
Molybdenite	tr	Up to 1
Biotite	tr	Up to 0.2

Plagioclase forms subhedral crystals of up to 5 mm in size. It is weakly to moderately altered by a fine- to very fine-grained dispersion of white mica flakes. It appears to be the first phase to have crystallized as it is in many occurrences mantled by K-feldspar and later by quartz. Plagioclase is distinguished by its typical albite twin and its refractive indexes are greater than the K-feldspar and are comparable to or slightly higher than the quartz.

Quartz forms interlobate and interstitial crystals, which in most of the cases infills the spaces left after the growth of plagioclase and K-feldspar. In some cases quartz and K-feldspar are interlobated, indicating a contemporaneous crystallization. It is fractured and shows moderate to strong undulose extinction, possibly due to the strain accumulated during the same deformation event which accompanied the quartz+molybdenite infill.

K-feldspar is anhedral, mantles plagioclase and is in some cases interlobated with quartz. It is distinguished from plagioclase in transmitted light by the different alteration pattern: if plagioclase is preferentially altered by very fine-grained white mica, K-feldspar hosts dusty cryptocrystalline dispersions unresolved by the microscope. In some instances K-feldspar hosts perthitic rods and strings.

Sample D-11-56 22.65

Altered (white mica-pyrite) granite

Quartz-pyrite-molybdenite vein

This polished thin section consists of a quartz-rich vein crosscutting a coarse-grained granite, which is very similar to the previous sample (D-11-55 28.8), with plagioclase, quartz and K-feldspar. Pyrite and molybdenite occurs in the proximity of the quartz-rich vein walls.

<i>Mineral</i>	<i>Modal %</i>	<i>Main size range (mm)</i>
Quartz-molybdenite-pyrite vein (48% of PTS)		
Quartz	44 - 46	Up to 1
Molybdenite	2 - 3	Up to 1.2
Pyrite	1 - 2	Up to 0.5, up to 7x1.5 within the vein
Chalcopyrite	tr	Up to 0.12
Oxides	tr	cryptocrystalline
Granite (52% of PTS)		
Plagioclase	18 - 22	Up to 5
Quartz	15 - 18	Up to 5
K-feldspar	14 - 16	Up to 6
White mica	3 - 4	Up to 1
Titanite	tr	up to 0.1
Pyrite	tr	Up to 0.5

Quartz is the main constituent of the vein that crosscuts the granite. Within the vein, quartz occurs as inequigranular interlobate to polygonal crystals with weak to moderate undulose extinction. It hosts sparse flakes of molybdenite within its fractures and along its grain boundaries. Within the granite quartz forms interlobate crystals of up to 6 mm in size which mantle plagioclase and K-feldspar.

Plagioclase forms subhedral to anhedral crystals mantled by K-feldspar and quartz and is distinguished by its typical albite twins. Plagioclase shows refractive indexes greater than the quartz and this, together with the small angle of extinction of albite twin lamellae, calculated with the "symmetrical zone" method [X' :trace (010) in the zone perpendicular (010)], which is

generally smaller than 15° , indicates that the plagioclase can be determined as being an oligoclase. Plagioclase is moderately altered by a very fine-grained dispersion of white mica.

K-feldspar forms anhedral crystals that are characterized by the presence of perthites as replacement patches of albite, beads and rods.

White mica forms irregular flakes and bent crystals of up to 1 mm in size hosting fine-grained dispersions of titanite and is possibly derived by the alteromorphosis of biotite as already described in the previous sample. Most of the white mica appears to be a product of the alteration of pre-existing biotite as suggested by the titanite dispersions, however, particularly at the contact between the quartz-rich vein and some feldspars, white mica may have crystallized as alteration product nucleated on pre-existing white mica (i.e., very fine-grained white mica after plagioclase) and/or as partially replacing the perthitic K-feldspar.

Pyrite forms fine-grained anhedral crystals generally associated with the white mica-rich alteromorphosis after biotite and, within the quartz vein, occurs as poikilitic crystals of up to 7 by 1.5 mm in size aligned along the vein wall. In this case it hosts inclusions of quartz and fine-grained amoeboid chalcopyrite, which shows various degrees of oxidation.

Molybdenite forms bent flakes with a high aspect ratio (10:1); it is preferentially precipitated along the vein walls and in particular, the coarser lamellae are associated with white mica flakes occurring at the boundary between quartz (on the vein side) and K-feldspar (on the rock side).

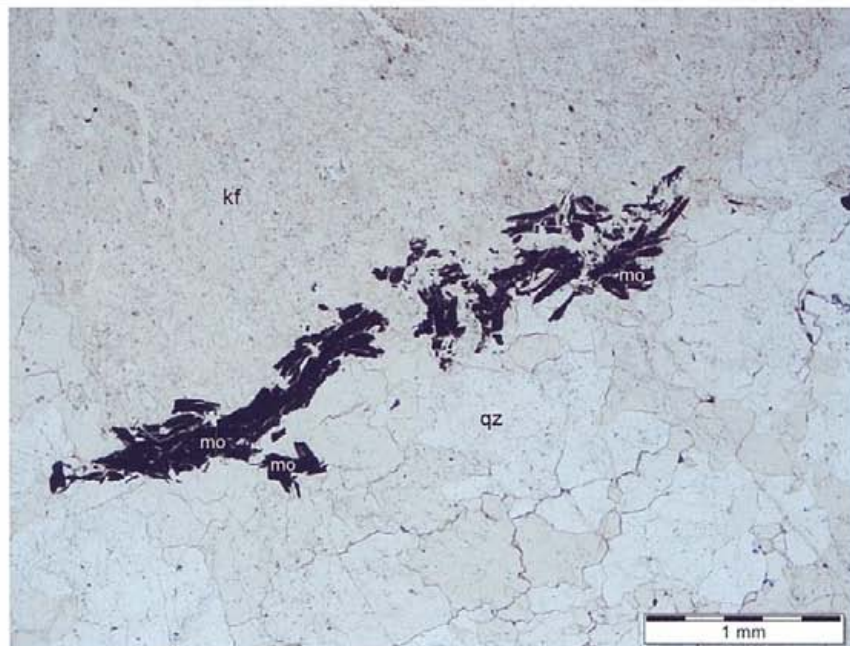


Figure 9a: Contact between the host rock (upper left of the photomicrograph) with a K-feldspar crystal (kf) and the quartz-pyrite-molybdenite vein (qz) and (mo) on the lower right. Molybdenite lamellae (mo) occur preferentially at the contact between the K-feldspar (kf) and the vein (qz). Plane polarized transmitted light.

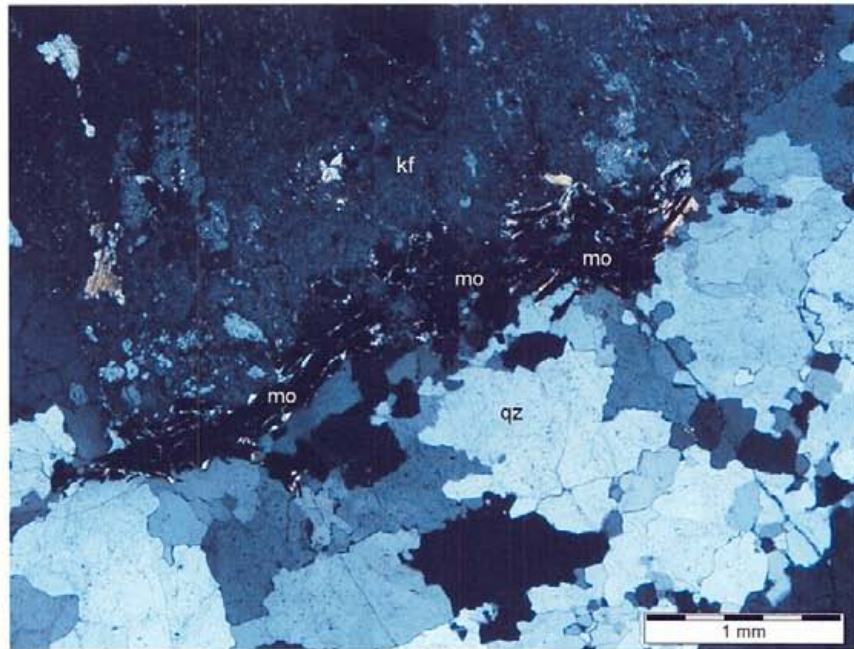


Figure 9b: Same detail shown in the previous Figure 9a. In this photomicrograph the association of molybdenite (mo) with white mica (highly birefringent flakes) at the contact between the perthitic K-feldspar (kf) and the vein (qz) is shown. Crossed polars transmitted light.

Sample D-11-66 220.1

Altered (white mica) granite

Quartz-white mica-pyrite veinlet

This polished thin section is characterized by a granitic microstructure with abundant anhedral K-feldspar, subhedral to euhedral plagioclase and anhedral quartz. White mica completely replaces biotite and partially replaces some of the plagioclase crystals.

<i>Mineral</i>	<i>Modal %</i>	<i>Main size range (mm)</i>
K-feldspar	35 - 39	Up to 4
Quartz	27 - 30	Up to 5
Plagioclase	22 - 25	Up to 2.5
White mica	7 - 9	Up to 1
Pyrite	6 - 7	~7
Rutile	tr	Up to 0.4
Chalcopyrite	tr	Up to 0.35
Pyrrhotite	tr	Up to 0.05

K-feldspar occurs as anhedral crystals interlobated with quartz and mantles the plagioclase. K-feldspar is weakly altered by very fine-grained dispersions of a high relief mineral irresolvable by the microscope—possibly epidote—and hosts inclusions of plagioclase and perthites as replacement beads and rods. Some of the perthites are probably altered by white mica. K-feldspar is locally interlobated with plagioclase with some evidence of disequilibrium between the two phases such as embayment of plagioclase occupied K-feldspar.

Plagioclase forms subhedral to anhedral crystals and is, in most of its occurrences, mantled and enclosed within the K-feldspar. In some instances plagioclase shows embayments at the contact with K-feldspar and quartz. The plagioclase shows a refractive index lower than quartz, thus indicating an **albitic** composition and is distinguished from the K-feldspar by its albite twin lamellae.

Anhedral quartz is interlobated with the feldspars and it shows moderate to strong undulose extinction. Quartz is generally clear and devoid of solid inclusions.

White mica occurs as alteration product after biotite, and in this case forms alteromorphoses that may reach 1 mm in size in association with fine-grained titanite. In other occurrences white mica is inclusion-free, preferentially replaces the plagioclase and reaches dimensions of up to 0.5 mm with decussate flakes and flake aggregates. White mica is also abundant at the outer rim of the coarse-grained pyrite (see Fig. 10b).

Pyrite forms anhedral crystals of up to 7 mm in size with interlobate margins and hosts inclusions of quartz, white mica, **chalcopyrite** and **pyrrhotite**. Pyrite occurs, in association with white mica and quartz, as anhedral crystals of up to 0.7 mm within a quartz-rich veinlet, which is (0.5 mm wide).

Rutile in one case occurs as anhedral crystal aggregate of about 0.4 mm, which is possibly overgrown on a white mica alteromorphosis.

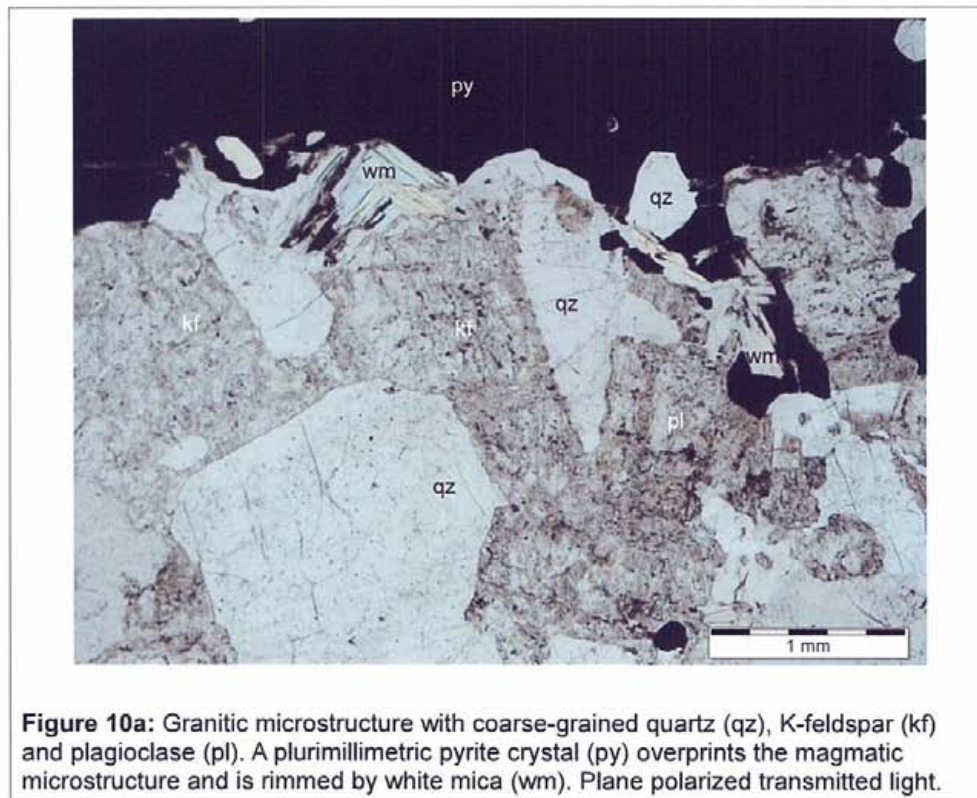


Figure 10a: Granitic microstructure with coarse-grained quartz (qz), K-feldspar (kf) and plagioclase (pl). A plurimillimetric pyrite crystal (py) overprints the magmatic microstructure and is rimmed by white mica (wm). Plane polarized transmitted light.

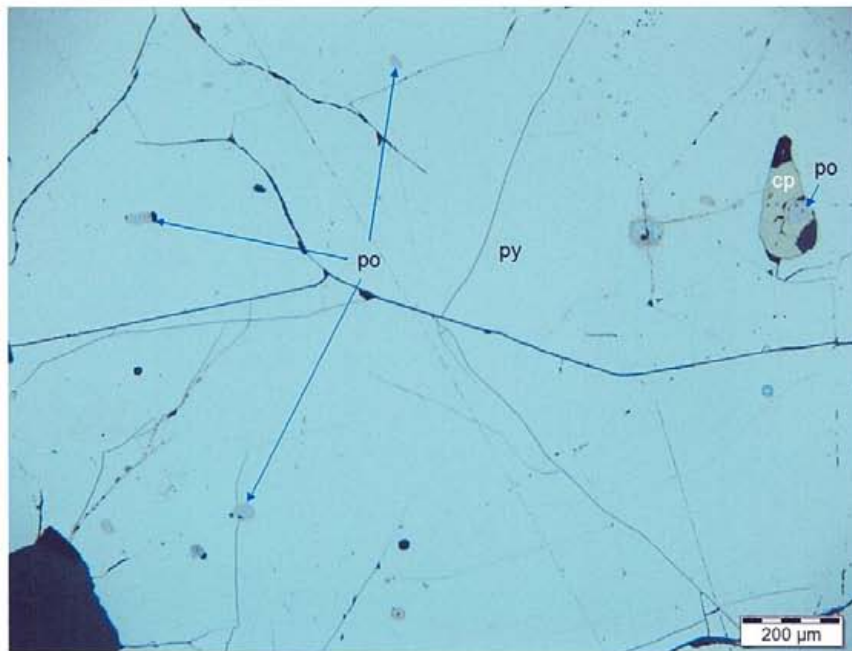
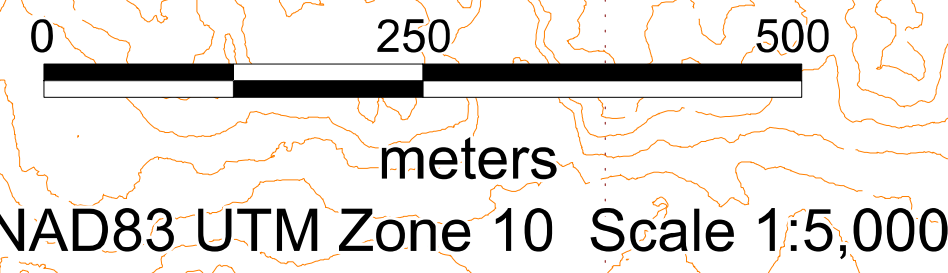
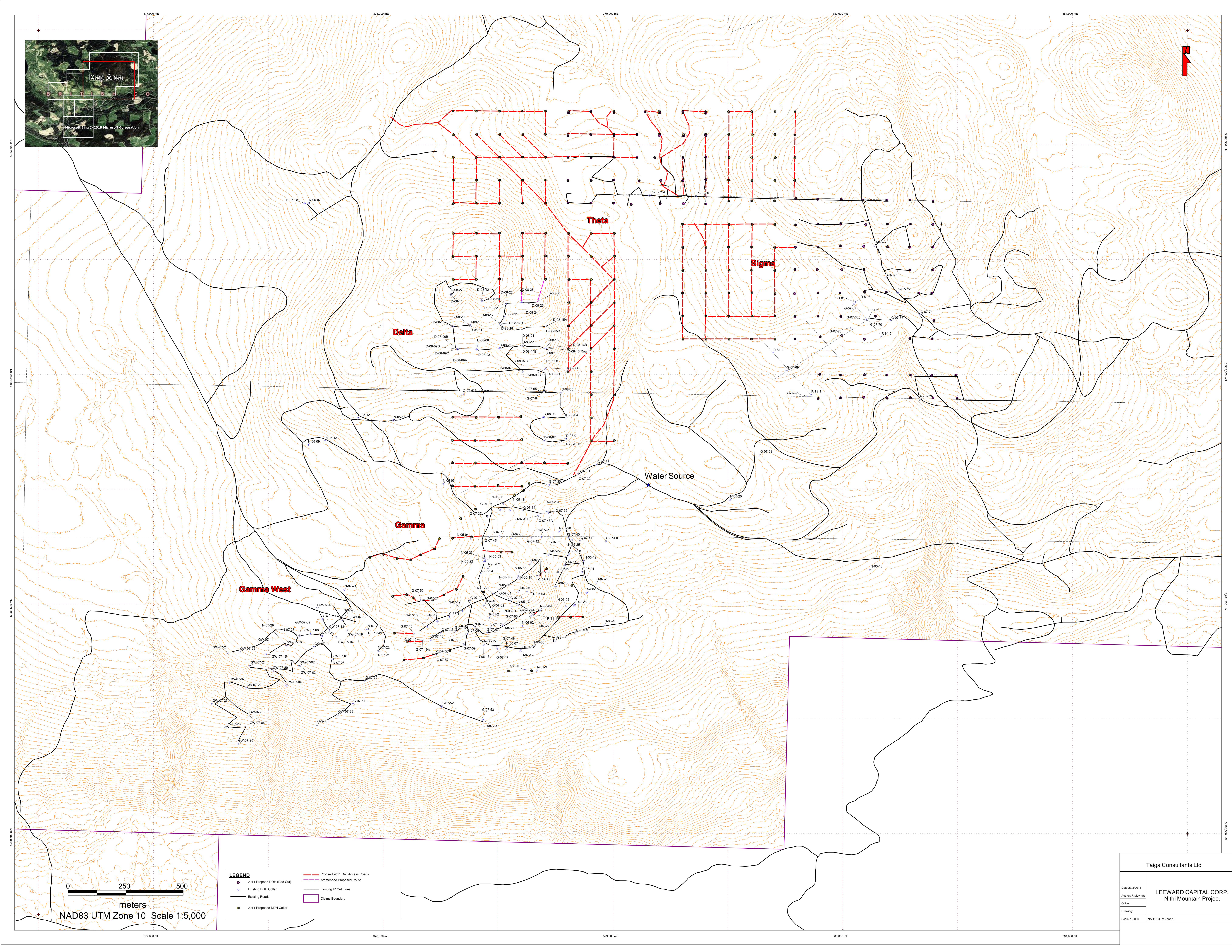
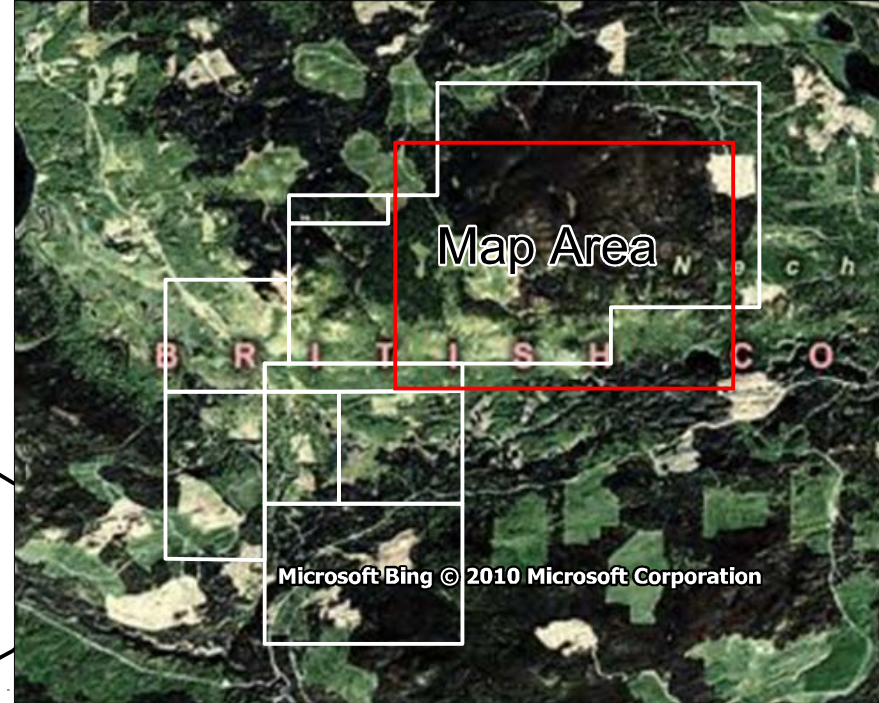


Figure 10b: Detail of the plurimillimetric pyrite (py) shown in Fig. 10a with inclusions of chalcopyrite (cp) and pyrrhotite (po). Plane polarized reflected light.



LEGEND	
2011 Proposed DDH (Pad Cut)	Proposed 2011 Drill Access Roads
Existing DDH Collar	Amended Proposed Route
Existing Roads	Existing IP Cut Lines
2011 Proposed DDH Collar	Claims Boundary

Taiga Consultants Ltd	
Date: 23/3/2011 Author: R. Maynard Office: Drawing: Scale: 1:5000	LEEWARD CAPITAL CORP. Nithi Mountain Project NAD83 UTM Zone 10

Appendix 4

WestCan Projects Ltd. Reclamation Report including Archaeological Report
Huckelberry Study and Water Survey Report
Tetra Tech-Wardrop Reserve Calculation



ENGINEERING
DESIGN
ENVIRONMENTAL
CONSTRUCTION

WestCan Projects
From Concept to Completion
PRINCE GEORGE • GRANDE PRAIRIE

MINERAL EXPLORATION RECLAMATION PLAN

NITHI MOUNTAIN PROJECT MINERAL LEASE NO. MX-11-192



Prepared for: **Leeward Capital Corp.**
101, 2719 – 7th Avenue NE
Calgary, AB T2A 2L9

Attn: Jim Davis

Prepared by: **WestCan Projects Ltd.**
1579 – 9th Avenue
Prince George, BC V2L 3R8
1-877-612-0355

Written by: Jody Watson, EIT
Reviewed by: Robert S.J. Bourcier, PAg

Date: September 15, 2011
WestCan File: 11173-150

WWW.WESTCANPROJECTS.COM





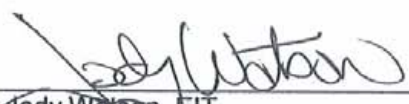
SIGNATURE PAGE

WestCan Projects Ltd. is pleased to submit this report for your review. This report has been prepared using sound technical and professional judgement, based on our knowledge and experience, applicable regulatory framework, industry best management practices, and current understanding of project conditions, design, and environmental setting.

Report Title: Exploration Activity Reclamation Plan – Nithi Mountain

Prepared for: Leeward Capital Corp.

Written by:


Jody Watson, EIT

Reviewed by:


Rob Bourcier, PAg

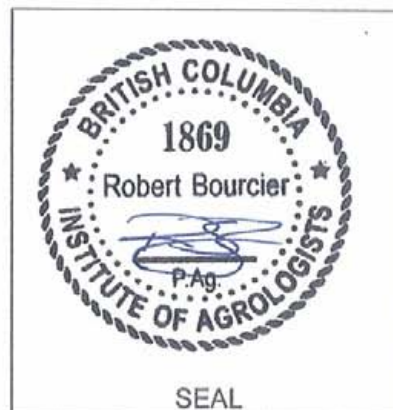




TABLE OF CONTENTS

1.0	INTRODUCTION	1
1.1	SITE LOCATION	1
1.2	SITE VISIT	1
1.3	REGULATORY FRAMEWORK	2
1.4	REPORT OBJECTIVES	2
2.0	OVERVIEW ASSESSMENT	3
2.1	GAMMA ZONE	4
2.2	SIGMA ZONE	5
2.3	DELTA ZONE	6
2.4	THETA ZONE	7
2.5	NOLAN LAKE WATER SOURCE INTAKE AREA	8
3.0	RECLAMATION PLAN	9
3.1	CONSTRUCTION BEST MANAGEMENT PRACTICES	9
3.2	BUILDINGS, MACHINERY AND DEBRIS	9
3.3	EXPLORATION TRAILS	9
3.4	DRAINAGE MANAGEMENT	10
3.5	REVEGETATION	11
3.6	SEASONAL (TEMPORARY/PARTIAL) DEACTIVATION	12
3.7	ARCHAEOLOGICAL AREAS	12
4.0	SITE-SPECIFIC RECOMMENDATIONS	13
4.1	GAMMA ZONE	13
4.2	SIGMA ZONE	13
4.3	DELTA ZONE	13
4.4	THETA ZONE	13
4.5	NOLAN LAKE ACCESS	14
5.0	REFERENCES	15

APPENDICES

APPENDIX A – SITE MAPS

APPENDIX B – AS-BUILT SURVEY (GPS)

APPENDIX C - INSTALLATION GUIDELINES

APPENDIX D – ARCHAEOLOGICAL ASSESSMENT

APPENDIX E – EDIBLE PLANT SURVEY



1.0 INTRODUCTION

WestCan Projects Ltd (WestCan) has been retained by Leeward Capital Corp (Leeward) to prepare a reclamation plan for their exploration activities on the Nithi Mountain Project, located near Fraser Lake, BC. The permit area is approximately 620 ha in size, containing four existing exploration target sites (Gamma, Delta, Sigma, Theta) that have been drilled over the past six years (2005 – present). Exploration activity is ongoing.

1.1 SITE LOCATION

The Nithi Mountain Property is located approximately 8 km south of Fraser Lake, BC (160 km east of Prince George), and can be accessed via Chowsunket Road, turning onto Nithi Forest Service Road (FSR). The Nithi FSR forms a circle route via the Foster FSR and 213 FSR, which allows road access to the majority of the site. The Nolan Lake FSR takes off from Nithi FSR at approximately KM12. A location map is included in Appendix A.

1.2 SITE VISIT

Jody Watson, EIT and Rob Bourcier, P.Ag of WestCan visited the site on July 22, 2011 to perform an overview assessment, and returned on August 29, 2011 to conduct the as-built survey of recent (2011) activities.

Representative sections of the four existing exploration areas within the Nithi Mountain Property (Gamma, Delta, Sigma and Theta) were assessed, as well as the Nolan Lake water source access road. As-built surveys were conducted for the 2011 activity that occurred at Delta and Theta group.

Access to the sites was gained on existing FSRs via 4x4 truck, as well as on ATV and foot where conditions required. As-built survey was performed using GPS equipment. A detailed inspection of each drill hole was not within the scope of this assessment.



1.3 REGULATORY FRAMEWORK

Reclamation is required to be performed in all areas impacted by mineral exploration activities, as defined Part 9 of the Health, Safety and Reclamation Code for Mines in British Columbia: Mineral Exploration (MX Code, Part 9.13.1 and 10.7.1-10.7.31). Additional relevant regulations to exploration activities in this area includes the federal *Fisheries Act*, which prohibits disturbance to fish-bearing streams, the provincial *Water Act*, which governs work in and around watercourses, and the *Forest and Ranges Practices Act*, which governs exploration activities such as road building, logging and reforestation.

Key agency reference documents used in the preparation of this report include:

- Health, Safety and Reclamation Code for Mines in British Columbia, Ministry of Energy, Mines and Petroleum Resources (2008)
- Handbook for Mineral and Coal Exploration in British Columbia, Ministry of Energy, Mines and Petroleum Resources and Ministry of Environment (2008/09)
- Best Management Practices Handbook: Hillslope Restoration in British Columbia, Ministry of Forests (2001)

1.4 REPORT OBJECTIVES

This Reclamation Plan has been developed to meet the objectives of the MX Code, including the following (from Section 9.13.1 of the Code):

- Reclamation of mechanically disturbed sites, campsites and exploration access shall occur within one year of cessation of exploration,
- Appropriate measures shall be taken to minimize the establishment of noxious weeds and the erosion of exposed or disturbed soil, and
- Exploration sites shall be revegetated to a self-sustaining state with species appropriate for the site.

This plan is intended to provide Leeward with the appropriate Best Management Practices (BMPs), procedures and site-specific prescriptions (where appropriate) for achieving these goals.



2.0 OVERVIEW ASSESSMENT

Terrain along the Nithi Mountain property is characterized by two large hillslopes (including Nithi Mountain), with a total elevation difference of approximately 320 m from the base (Gamma) to peak (Sigma/Delta) areas. Several non-classified drainages and streams are present in the lease, although none have been designated as fish-bearing (EDI, 2008). No steep slopes or areas of geotechnical instability were noted during the site assessment, and trails through the area are general flat (no significant cut/fills required). Vegetation in the area is typical of the moist, cold Sub-Boreal-Spruce biogeoclimatic zone (SBSmc2), with areas near the peak entering the Englemann Spruce Subalpine Fir (ESSFmv1) zone. An archaeological assessment (Appendix D) and edible-plant survey (Appendix E) have recently been conducted in the area.

Recent forestry activity in the area by West Fraser Mills Ltd. (West Fraser) in the winter of 2010/2011 has resulted in many of the exploration areas being cleared. Logged areas and associated service roads will not require reclamation by Leeward under the MX Code, as these would fall under the jurisdiction of the *Forest and Range Practices Act*. West Fraser has provided maps of their recent activity on Nithi Mountain, which are included as Appendix A. The following impacts were observed:

- Gamma Zone – Partially logged
- Sigma Zone – Partially logged
- Delta Zone – Partially logged

As the Nithi Mountain property is in close proximity to Fraser Lake, BC., no associated camps or buildings have been constructed in association with exploration activities. Aside from ground disturbances, no residual evidence of activity by Leeward (ie. machinery, equipment, petroleum products or other debris) was noted in any of the areas.



2.1 GAMMA ZONE

The Gamma zone was explored from 2005 – 2008. The area has been deactivated, with debris piling, cross drains and waterbars installed in 2008 (Allnorth, 2009). During the site assessment, a representative area of the Gamma was inspected to confirm deactivation.

The nutrient-poor soil conditions along much of the access trails are such that limited vegetation growth has occurred, however this is typical of natural regeneration rates that would be expected in this area. Where soil conditions were improved, vegetation establishment was proportionally increased. A seeding program was undertaken in 2008 with a native seed mix of Needle grass applied in the western Gamma zone (Leeward, pers comm).

No significant erosion concerns were observed, as the soils are generally well drained.



PHOTO 1: GAMMA – DEBRIS PILING ALONG ROADWAY



PHOTO 2: GAMMA – TYPICAL VEGETATION ESTABLISHMENT IN POOR SOILS



PHOTO 3: GAMMA – SMALL TREE GROWTH IN POOR SOILS (APPROX. 5 YEAR)



PHOTO 4: GAMMA – VEGETATION ESTABLISHMENT WHERE SOIL CONDITIONS/NUTRIENTS ARE MORE PLENTIFUL



2.2 SIGMA ZONE

The Sigma zone was explored in 2008. The area has been harvested and constructed, with drill pads and sumps reclaimed (Allnorth, 2009). During the site assessment, a representative area of the Delta was inspected to determine appropriate reclamation prescriptions.

A significant portion of the southern extent of the Sigma zone, as well as through the center of the exploration target, has been logged during recent activity in the area (see Maps, Appendix A). The remaining trails and pads were assessed. Extensive debris scattering along the trails has facilitated significant vegetation establishment through natural regeneration.

Ground cover was stable and no erosion concerns were noted.



PHOTO 5: SIGMA – TYPICAL TRAIL



PHOTO 6: SIGMA – TYPICAL DRILL PAD



PHOTO 7: SIGMA – LOGGED AREA



PHOTO 8: SIGMA – TYPICAL TREE GROWTH



2.3 DELTA ZONE

The Delta zone was explored in 2007/08 and 2011. During the site assessment, a representative area of the recent Delta activity was inspected to determine appropriate reclamation measures.

A significant portion of the western extents of the Delta zone have been cleared during recent winter logging activity in the area (see Maps, Appendix A). In the remaining (unlogged) areas, waterbars had been installed, debris piles were present, and soils had generally been left in a roughened state. Several isolated wetland areas were present near the trails, but no water crossing structures or erosion concerns were noted. Vegetation establishment on the trails and pad areas was minimal as the trails are still relatively fresh, but good soil conditions should facilitate rapid natural regeneration.

The total area of disturbance in the Delta Zone was calculated to be approximately 1.1 ha (see Appendix B for map).



PHOTO 9: DELTA – HOLE IN CUTBLOCK



PHOTO 10: DELTA – TYPICAL TRAIL



PHOTO 11: DELTA – DEBRIS PILING ON TRAIL



PHOTO 12: DELTA – TYPICAL DRILL PAD AREA



2.4 THETA ZONE

The Theta Zone had been harvested in the winter of 2008 with two holes drilled, and an additional five holes drilled in 2011.

The access trail to the 2011 holes followed the IP line, with a wide clearing width and debris piling along the edges. Some waterbars had been installed, but drainage issues were evident along the long hillslope access trail (approx. 10-20% grade). A wetland area is present beyond the end of the access trail (see Photo 16), but no erosion concerns (sediment deposition) was noted at the time of the site visit, likely attributable to the loose state of the soils. Vegetation establishment on the trails and pad areas was minimal as the trails are still relatively fresh, but good soil conditions should facilitate rapid natural regeneration.

The total area of disturbance in the Theta Zone was calculated to be approximately 1.6 ha (see Appendix B for map).



PHOTO 13: THETA – ACCESS TRAIL



PHOTO 14: THETA – TYPICAL TRAIL TO PAD



PHOTO 15: THETA – TYPICAL DRILL PAD



PHOTO 16: THETA –END OF 2011 TRAIL (ALONG IP LINE),
ADJACENT TO WETLAND



2.5 NOLAN LAKE WATER SOURCE INTAKE AREA

The Nolan Lake water intake access was utilized in 2007/08. There is currently road access to a small landing area outside the riparian zone of the lake (prepared for water truck access), with a small trail through approximately 35 m of forested riparian area to the waters edge.

The landing area is relatively flat and has been seeded, with an established stable ground cover of grasses (no significant erosion concerns noted). This open area would have high success for planted trees, and should be reforested (when area is no longer required) to a density and species diversity similar to surrounding cutblock conditions. The small trail to the lake was prepared with no significant disturbance to the riparian area, and appears to have heavy use by wildlife. Corduroy has been installed on a small drainage along the access roadway (see Photo 19), which should be removed if access to this area is no longer required (rock and wood can be salvaged for re-placement if necessary). If continued (long-term) access is necessary, a culvert or other stable structure which allows free flow of water should be installed.



PHOTO 17: NOLAN LAKE – LANDING AREA



PHOTO 18: NOLAN LAKE – TRAIL TO LAKE



PHOTO 19: NOLAN LAKE – CORDEROY



3.0 RECLAMATION PLAN

The following reclamation plan covers permanent deactivation for exploration trails within the Nithi Mountain property. The priority will be on the management of drainage and erosion controls for high-runoff (freshet) conditions, with vegetation establishment forming a key component of sustained erosion control. No stream crossings or riparian management issues were noted during the site assessment, aside from the Nolan Lake access (see Section 2.5).

3.1 CONSTRUCTION BEST MANAGEMENT PRACTICES

Reclamation planning will begin prior to/during construction of all exploration trails, following these key best management practices:

- Trail alignments will be planned to avoid, minimize or mitigate impacts to riparian and other sensitive areas.
- All drainages along proposed trail routes will be identified and clearly marked prior to construction. Appropriate drainage structures (ex. temporary bridge, culvert), where required, will be installed.
- Construction methods will limit vegetation removal, soil disturbance and surface drainage disruption.
- Any soil stockpiles created as a result of trail or drill pad construction should be placed on upslope area for later use in reclamation. Woody debris from clearing activities should also be stockpiled for scattering during reclamation.
- Yearly inspections and maintenance will be undertaken on all trails (until permanent deactivation and reclamation), to ensure safety and stability
- Progressive reclamation will be implemented as practical, as per Sections 3.2 to 3.5.

3.2 BUILDINGS, MACHINERY AND DEBRIS

- Prior to permanent deactivation/restoration, all buildings, machinery, equipment, cables, culverts and other debris from exploration activities will be removed.
- All hydrocarbon products and drilling additives will be removed and appropriately disposed of.

3.3 EXPLORATION TRAILS

- Road surfaces will be re-graded to generally match natural topography, where practical and deemed safe
- Where excessive compaction of soils has occurred, tracked machinery will be used to rip/loosen soils to allow natural groundwater flow and enhance vegetation establishment



- Any sidecast or temporarily stockpiled topsoil/cut material will be spread over road surface to enhance ground cover and limit barriers to runoff flow (ie. berms). Spread material should be left in a rough, loose condition
- Any ditchlines will be re-graded to prevent channelized flow of runoff
- Stockpiled woody debris will be scattered over road surface to provide wildlife habitat complexity and microsites for natural regeneration of vegetation.

3.4 DRAINAGE MANAGEMENT

As the Nithi Mountain property is not located in an area with significant stream crossings or slope stability issues, waterbars will be the primary means of runoff management for all reclaimed trails within the lease area. Best management practices will be as follows:

- All natural drainages noted along trails will be maintained throughout exploration activities
- Prior to construction, all drainages along the trails will be identified and clearly marked
- Any culverts or temporary drainage structures across the trails will be removed at the end of each field season (see Section 3.6), and/or at completion of activity in an area (permanent deactivation), prior to site demobilization
- Waterbars will be installed at the end of each field season (see Section 3.6), and/or at completion of activity in an area (permanent deactivation), prior to site demobilization
- Waterbars will be orientated such that water will drain downhill across the trail (see Appendix C)
- Waterbar spacing will be determined by slope and soil conditions as per Table 1:

TABLE 1: WATERBAR SPACING (MEMPR, 1992)

Slope Gradient	Erodible Soils (silt/clay)	Normal Soils (loam)	Rocky soils (sand/gravel)
Under 5%	45 m	60 m	n/a
5-10%	35 m	45 m	60 m
>10%	15 m	30 m	45 m

3.4.1 STREAM CROSSINGS

There were no noted stream crossings associated with existing exploration activities in the Nithi Mountain property, or anticipated in the future exploration areas. All stream crossings within the permit area are associated with existing FSR roadways. Any future stream crossings required as part of exploration activities would be constructed as per best management practices outlined in Section 10.4.5 of the MX Handbook (MEMPR, 2008)



3.5 REVEGETATION

Natural regeneration of vegetation has been successful in good soil conditions throughout the existing reclaimed areas of the Nithi Exploration project. Creating conditions that encourage colonization of native species will be the primary revegetation strategy, with supplemental seeding with an appropriate seed mix to expedite establishment. *NOTE: Natural regeneration was the primary recommendation of the edible plant survey (see Appendix D), to encourage growth and establishment of huckleberry and other potential food sources (Avison, 2011).*

- Roughening of soils will occur to help in promoting emergence of the natural seed bed.
- Woody debris (stockpiled during construction) will be spread across the trail surface to help stabilize soils and create micro-sites for vegetation
- Supplemental seeding with an appropriate seed mix (standard Canada No. 1 Forage Mix, Interior BC Reclamation) will be performed by hand using broadcast seeding techniques, applied progressively as soil roughening is completed
 - The mix will be certified to be free of invasive plant species, and no fertilizer admixes will be used (as these typically encourage weed growth over sustainable native cover).
 - It is recommended that a 30 kg/ha application rate be used at this location, or as recommended by manufacturer.
- Live staking/tree planting and/or fertilizer application may be recommended for areas of poor soils, large drill target pads or other areas where natural regeneration may be hindered. These areas will be assessed on a site-specific basis, with planting/seeding prescriptions developed to reflect soil and site conditions.
- Reforestation of previously planted cutblocks stocked by licensees should be reforested if mineral exploration activities have occurred within (ie. creation of exploration trails and drill pad establishment). Leeward to discuss reforestation stocking densities and standard with West Fraser Mills or corresponding licensees.

3.5.1 SEEPAGE AREAS

Where practical and as a best management practice, areas where seepage is encountered can be live planted. Planting density of 1 stem / m² using local deciduous species (cottonwood, willow or red osier dogwood) should be harvested and collected in situ (see Appendix C for installation guidelines). The establishment of these species will aid in water absorption and also provide further site stability through root mass over time.

3.5.2 RIPARIAN AREAS

The only noted riparian management areas associated with the Nithi Mountain project are the wetland area adjacent to the Theta trail (see Section 2.4) and the Nolan Lake access (see Section 2.5). Where practical and as a best management practice, riparian areas should be live planted. Planting density of 1 stem / m² using local deciduous species (cottonwood,



willow or red osier dogwood) should be harvested and collected in situ (see Appendix C for installation guidelines). The establishment of these species will create a vegetated buffer for erosion and sedimentation protection, and provide further site stability through root mass over time.

3.6 SEASONAL (TEMPORARY/PARTIAL) DEACTIVATION

Where activity in an area has been suspended, and/or at the end of the field season (prior to spring freshet), all trails will have temporary waterbars established (see Section 3.4) to assist in management of runoff during freshet, and all crossing structures will be removed. Where practical, stockpiled woody debris will also be spread to provide interim erosion control.

3.7 ARCHAEOLOGICAL AREAS

In areas that have high potential for archaeological artifacts to be discovered (see Figure 1 of Archaeological Assessment, Appendix D), all on-site personnel will be made aware of means of identifying potential archeologically significant features. Any potential features will be clearly marked, and appropriate regulatory agencies and/or specialists will be contacted to determine a management plan.



4.0 SITE-SPECIFIC RECOMMENDATIONS

4.1 GAMMA ZONE

No additional reclamation activity is recommended for the existing Gamma zone. It was noted that additional effort should have been made in the past to reclaim the trails at the time of deactivation (ie. roughening, scattering of woody debris, additional waterbars, etc), however any disturbance at this time would likely only adversely impact the successful establishment of the limited vegetation species present. Any future activity in this area should follow the reclamation guidelines included in Section 3.0.

4.2 SIGMA ZONE

No additional reclamation activity is recommended for the Sigma zone. Any future activity in this area should follow the reclamation guidelines included in Section 3.0.

4.3 DELTA ZONE

Additional reclamation in the Delta zone is recommended.

The total area of disturbance in the Delta zone is approximately **1.08 ha** (not including the areas that were disturbed by recent logging activity), with the following breakdown: 1.60 km of trail (average width 5 m), and 11 landing areas/drill pads (average area 250 m²). See Appendix B for as-built survey map.

The disturbed area is comprised of access trails and drill pads. Implementation of Best Management Practices as outlined in the following sections is recommended:

- Section 3.3 – Exploration Trails
- Section 3.4 – Drainage Management
- Section 3.5 – Revegetation

Any future activity in this area should follow the reclamation guidelines included in Section 3.0.

4.4 THETA ZONE

Additional reclamation in the Theta zone is recommended.

The total area of disturbance in the Theta zone is approximately **1.62 ha**, with the following breakdown: 800 m of 'typical' trail (average width 6 m), 800 m of 'widened trail' (average width 10.5 m), and 10 landing areas/drill pads (average area 300 m²). See Appendix B for as-built survey map.

The disturbed area is comprised of access trails and drill pads. Implementation of Best Management Practices as outlined in the following sections is recommended:



- Section 3.3 – Exploration Trails
- Section 3.4 – Drainage Management
- Section 3.5 – Revegetation

Any future activity in this area should follow the reclamation guidelines included in Section 3.0.

4.5 NOLAN LAKE ACCESS

The landing area near the Nolan Lake Access was constructed outside of the riparian zone of the lake (>35m from wetted perimeter), and no reclamation of the existing path through the riparian is required. Reforestation of the landing area is recommended when access to the water source is no longer needed, to a density and species diversity similar to surrounding cutblock conditions.



5.0 REFERENCES

Allnorth Consultants Limited, Nithi Mountain Exploration As-Built (Drawing), February 2009

Archer, Preliminary Field Reconnaissance of Nithi Mountain Mineral Exploration Tenure Parcel 51542, western half, July 2011

Avison Management Services Ltd., Huckleberry Mitigation and Monitoring Plan – Nithi Mountain Moly Property, Study Area, July 2011

EDI Environmental Dynamics Inc., Nithi Mountain Property – Environmental Baseline Analysis: State of the Baseline, April 2008

Environment Canada, Environmental Code of Practice for Metal Mines, 2009

Ministry of Energy, Mines and Petroleum Resources, Health, Safety and Reclamation Code for Mines in British Columbia, 2008

Ministry of Energy, Mines and Petroleum Resources and Ministry of Environment, Handbook for Mineral and Coal Exploration in British Columbia, 2008/09

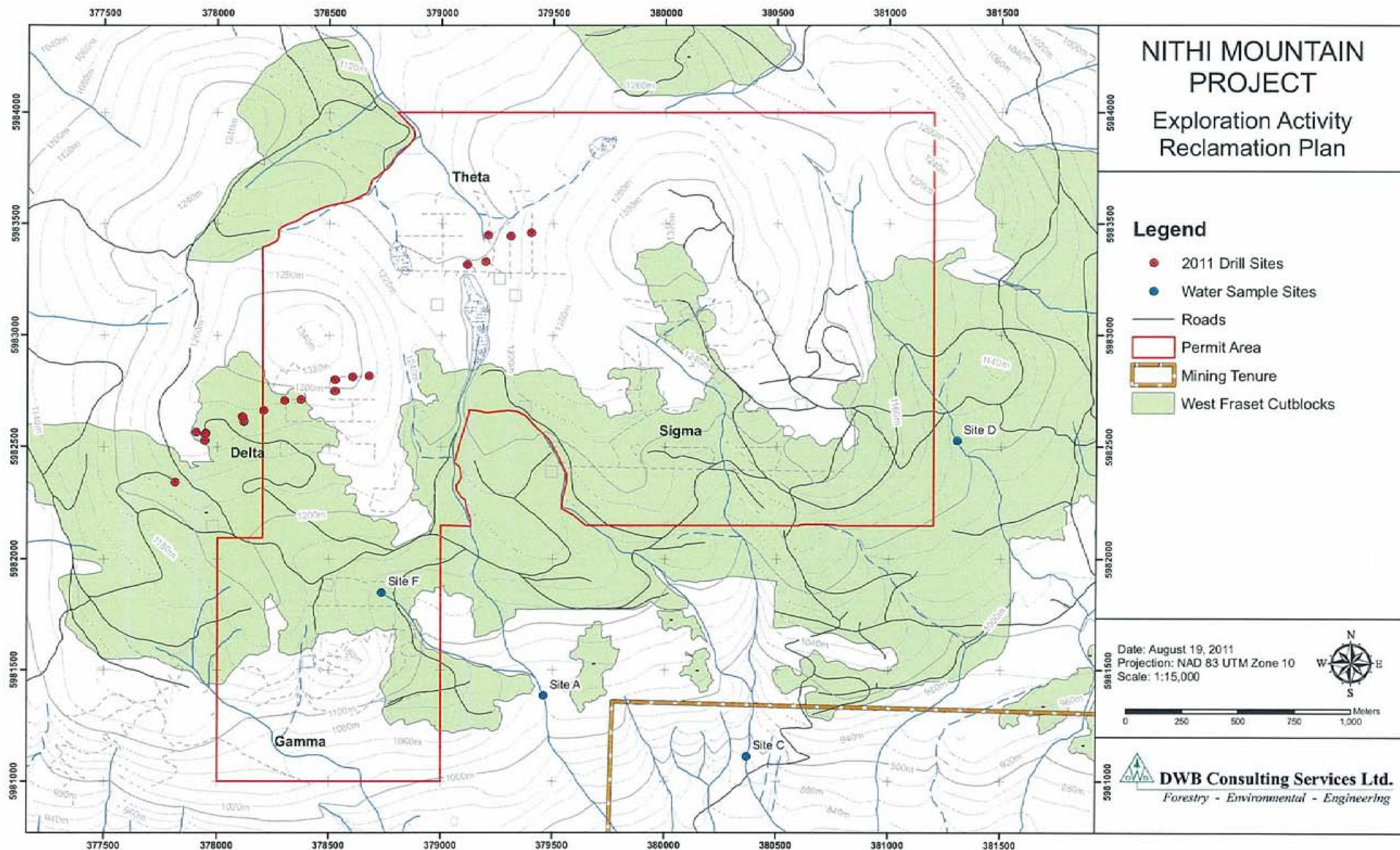
Ministry of Forests, Best Management Practices Handbook: Hillslope Restoration in British Columbia, 2001

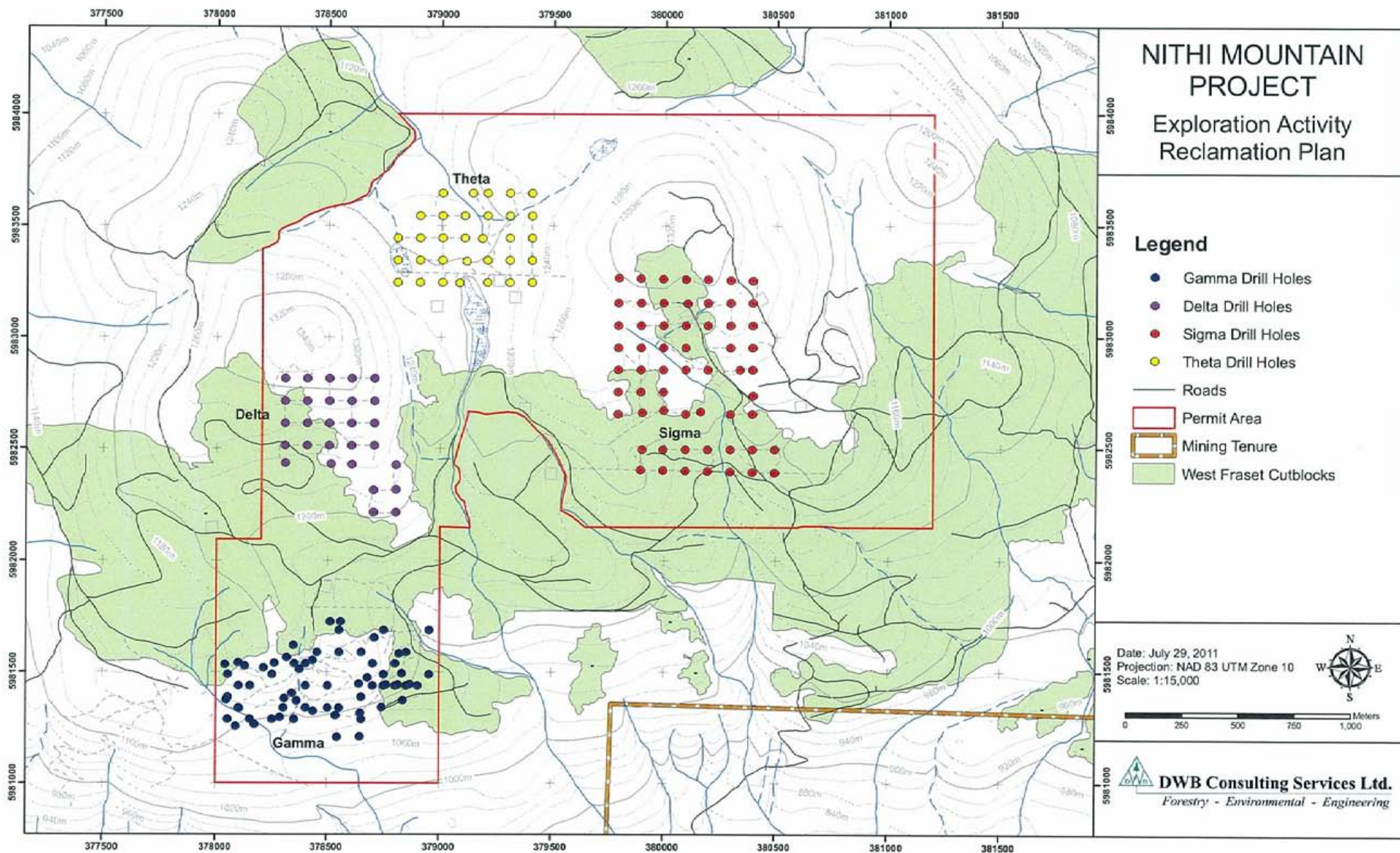
Ministry of Forests, Forest Practices Code (FPC) - Soil Rehabilitation Guidebook, 1997

Prospectors and Developers Association of Canada, Excellence in Environmental Stewardship (EES), 2009



APPENDIX A – SITE MAPS







APPENDIX B - AS-BUILT SURVEY (GPS)

378500

378500

NITHI MOUNTAIN PROJECT

Exploration Activity Reclamation Plan

Legend

- GPS Waypoints
- Opening Centres
- 2011 Drill Sites
- Water Sample Sites
- Roads
- Permit Area
- Mining Tenure
- Openings - 0.79 Ha
- West Fraset Cutblocks

DELTA ZONE - EASTERN EXTENT

5982500

Date: September 6, 2011
Projection: NAD 83 UTM Zone 10
Scale: 1:2,000



0 50 100 150 Metres



DWB Consulting Services Ltd.
Forestry - Environmental - Engineering

5982500

NITHI MOUNTAIN PROJECT

Exploration Activity Reclamation Plan

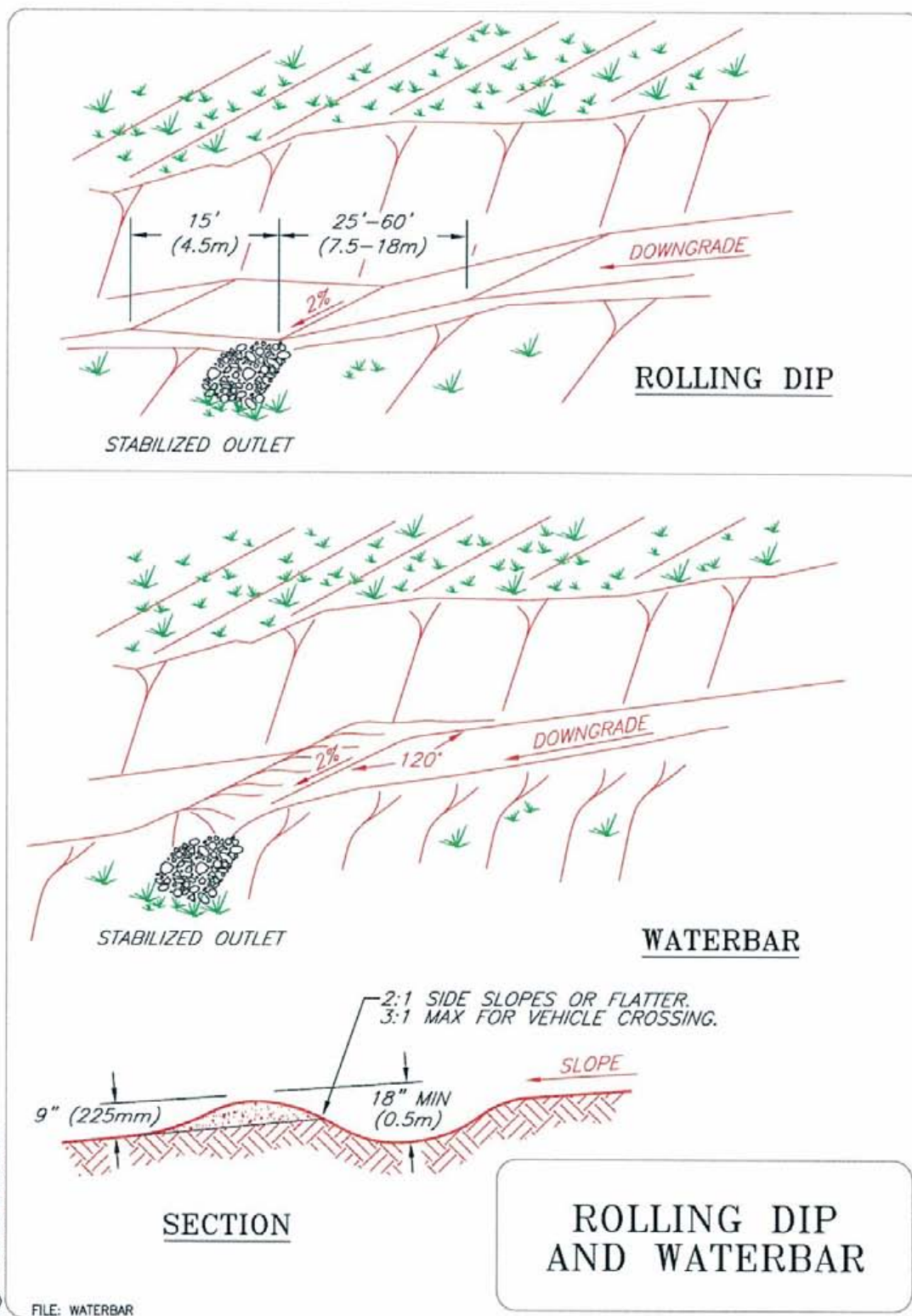
Legend

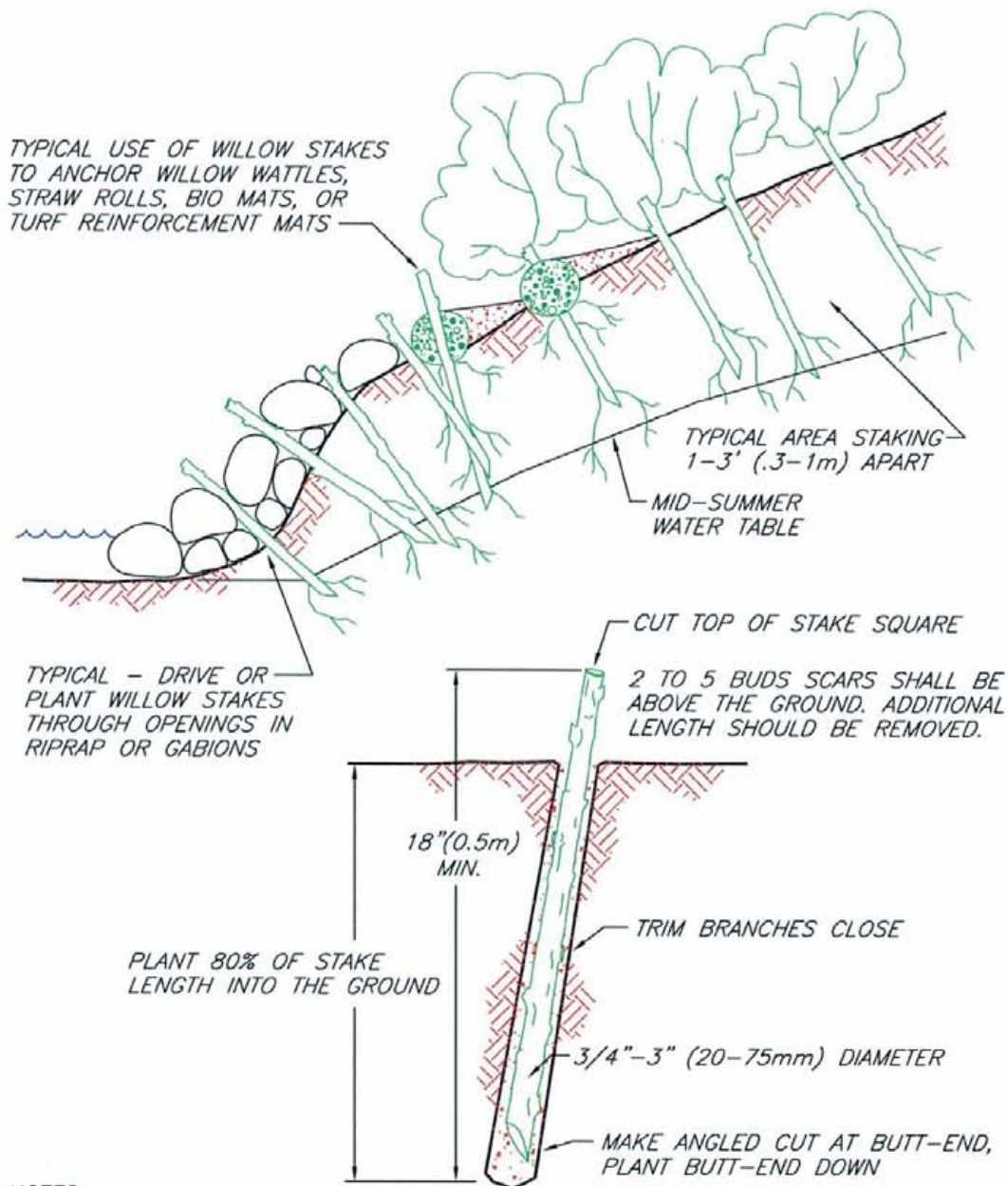
- GPS Waypoints
- Opening Centres
- 2011 Drill Sites
- Water Sample Sites
- Roads
- Permit Area
- Mining Tenure
- Openings - 1.62 Ha
- West Fraset Cutblocks





APPENDIX C - INSTALLATION GUIDELINES





NOTES:

1. HARVEST AND PLANT STAKES DURING THE DORMANT SEASON.
2. USE HEALTHY, STRAIGHT AND LIVE WOOD AT LEAST 1 YEAR OLD.
3. MAKE CLEAN CUTS AND DO NOT DAMAGE STAKES OR SPLIT ENDS DURING INSTALLATION, USE A PILOT BAR IN FIRM SOILS.
4. SOAK CUTTINGS FOR 24 HOURS (MIN.) PRIOR TO INSTALLATION.
5. TAMP THE SOIL AROUND THE STAKE.

NOT TO SCALE

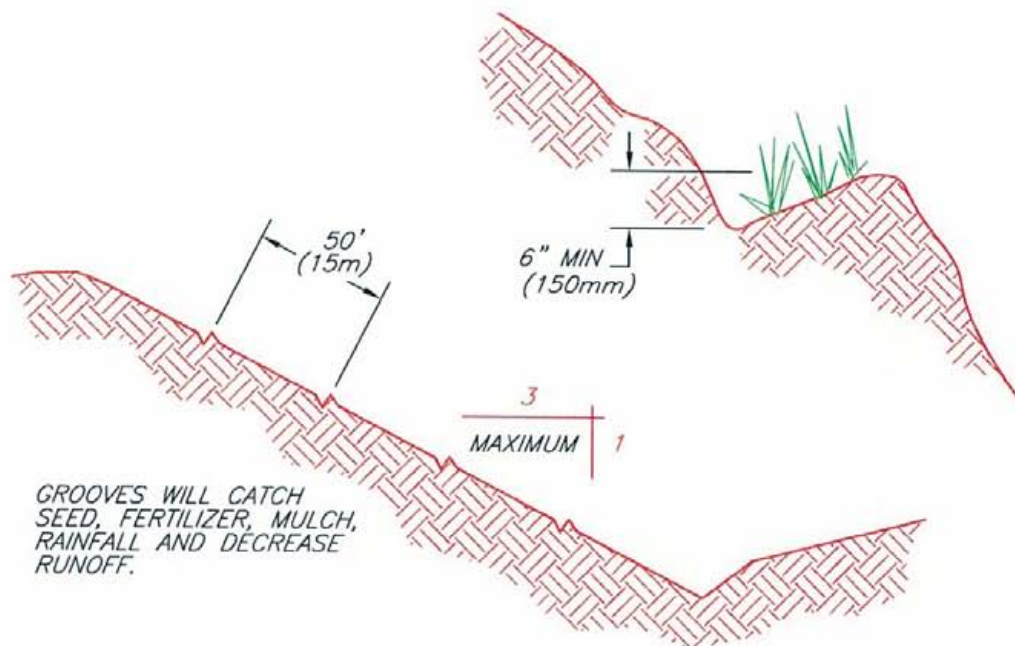
LIVE STAKING

1996 JOHN McCULLAN
©

FILE: LIVESTK



TRACKING



CONTOUR FURROWS

SURFACE ROUGHENING

1994 JOHN McCULLAH



FILE: SRFROUGH



APPENDIX D – ARCHAEOLOGICAL ASSESSMENT



APPENDIX E – EDIBLE PLANT SURVEY

WestCan Projects Ltd.

ENGINEERING ▴ DESIGN ▴ ENVIRONMENTAL ▴ CONSTRUCTION



September 15, 2011

Jim Davies
Vice President
Taiga Consultants Ltd./ Leeward Capital Corp.
101, 2719-7th Ave N.E.
Calgary, Alberta T2A 2L9

Dear Mr. Davis:

RE: Cost Engineered Estimate for Completion of Existing Reclamation Work

Nithi Mountain Project - Mineral Lease No. MX-11-192

Enclosed below is a "Cost Engineered Estimate" for reclamation works based on the collected information from the most recent site visit. This estimate was compiled to ensure that Leeward Capital Corp. is meeting all of its requirements as stipulated within the current NOW permit as issued by Forest, Lands and Natural Resources Operations (FLNRO) formerly known as Mines and Energy (MEM).

Total area to be reclaimed within the mineral lease was approximately **2.7 hectares** (ha) of disturbance. Areas were initially determined within each of the drill target zones – Gamma, Sigma, Delta and Theta. The site inspection revealed that no additional reclamation activity was recommended within the Gamma and Sigma zones respectively.

Associated reclamation activities were only noted within the Delta and Theta zones. A total area of **1.08 ha** was disturbed within the Delta zone. This area was broken down into "exploration trails" and "drill pads" respectively. A total of 1.6 km of trail was observed and noted in the field. A total of 11 drill pads (average size of 250 m²) was also noted in the field.

A total area of **1.62 ha** was disturbed within the Theta zone. This area was also broken down into "exploration trail" and "drill pads" area respectively. A total of 800m of trail was observed and noted in the field. A total of 10 drill pads (average size of 300 m²) was also noted in the field.

The Cost Engineered Estimate was based on the information provided above and the implementation of the Best Management Practices (BMPs) as described in the *Mineral Exploration Reclamation Plan – Nithi Mountain Project Mineral Lease No. MX -11- 192* prepared by WestCan Projects Ltd. Anticipated timelines for the completion and implementation of the reclamation plan are 3-4 days.

The following table details the associated costs to complete the reclamation works based on the total area observed in the field and implementation of BMPs as the reclamation plan.

Table 1: Cost Engineered Estimate

Description of Supply or Service Required for Reclamation	Estimated Costs
<p>Excavator site preparation – spreading of woody debris waste over existing drill pads and exploration trails.</p> <p>Re-establishment of natural watercourses – i.e. waterbars, swales, ditching etc. as directed by Senior Env. Technician.</p>	<ul style="list-style-type: none"> • Mobilization/demobilization to site ~ \$925 if local machine used on site. (\$1485 if low bedded from Prince George). • All Found Rate for 100 series excavator ~ \$130/hr (30hrs) - \$3900 • LOA non applicable as it is assumed local operator would be utilized.
<p>Environmental Services – initial prework, seeding, mulching, tree planting.</p> <p>Final site inspection and post reclamation report.</p>	<ul style="list-style-type: none"> • Professional Rate - \$80/hr (18 hrs) ~ \$1440 • Senior Env. Technician - \$70/hr (40 hrs) ~ \$2800 • Junior Env. Technician - \$60/hr (40 hrs) ~ \$2400 • Living Out Allowance - \$140/day/individual ~ \$980 • Approved forest reclamation seed – 300kg ~ \$400 • Hay mulch – 30 bales @ \$6 - \$180.00 • Transportation – 0.80/km (850) ~ \$656
ESTIMATED TOTAL COSTS	Approximately \$16,000 including HST

Respectfully submitted,

Robert S.J. Bourcier, P.Ag.
Project Manager
WestCan Projects Ltd.

WestCan Ref.: 11173-150



ENGINEERING
DESIGN
ENVIRONMENTAL
CONSTRUCTION

WestCan Projects
From Concept to Completion
PRINCE GEORGE • GRANDE PRAIRIE

MINERAL EXPLORATION RECLAMATION PLAN

NITHI MOUNTAIN PROJECT MINERAL LEASE NO. MX-11-192



Prepared for: **Leeward Capital Corp.**
101, 2719 – 7th Avenue NE
Calgary, AB T2A 2L9

Attn: Jim Davis

Prepared by: **WestCan Projects Ltd.**
1579 – 9th Avenue
Prince George, BC V2L 3R8
1-877-612-0355

Written by: Jody Watson, EIT
Reviewed by: Robert S.J. Bourcier, PAg

Date: July 29, 2011
WestCan File: 11173-150

WWW.WESTCANPROJECTS.COM





SIGNATURE PAGE

WestCan Projects Ltd. is pleased to submit this report for your review. This report has been prepared using sound technical and professional judgement, based on our knowledge and experience, applicable regulatory framework, industry best management practices, and current understanding of project conditions, design, and environmental setting.

Report Title: **Exploration Activity Reclamation Plan – Nithi Mountain**

Prepared for: **Leeward Capital Corp.**

Written by:

Jody Watson, EIT

Reviewed by:

Rob Bourcier, PAg





TABLE OF CONTENTS

1.0	INTRODUCTION	1
1.1	SITE LOCATION	1
1.2	SITE VISIT.....	1
1.3	REGULATORY FRAMEWORK	1
1.4	REPORT OBJECTIVES	2
2.0	CURRENT CONDITIONS.....	2
2.1	GAMMA ZONE	3
2.2	SIGMA ZONE	4
2.3	DELTA ZONE	5
2.4	THETA ZONE	6
2.5	NOLAN LAKE WATER SOURCE INTAKE AREA.....	7
3.0	RECLAMATION PLAN	8
3.1	CONSTRUCTION BEST MANAGEMENT PRACTICES	8
3.2	BUILDINGS, MACHINERY AND DEBRIS	8
3.3	EXPLORATION TRAILS.....	8
3.4	DRAINAGE MANAGEMENT	9
3.5	REVEGETATION	10
3.6	SEASONAL (TEMPORARY/PARTIAL) DEACTIVATION.....	11
3.7	ARCHAEOLOGICAL AREAS.....	11
4.0	REFERENCES	11

APPENDICES

APPENDIX A – SITE MAPS

APPENDIX B - INSTALLATION GUIDELINES

APPENDIX C – ARCHAEOLOGICAL ASSESSMENT

APPENDIX D – EDIBLE PLANT SURVEY



1.0 INTRODUCTION

WestCan Projects Ltd (WestCan) has been retained by Leeward Capital Corp (Leeward) to prepare a reclamation plan for their exploration activities on the Nithi Mountain Project, located near Fraser Lake, BC. The permit area is approximately 620 ha in size, containing three existing exploration target sites (Gamma, Delta, Sigma) that have been drilled over the past six years (2005 – present), and one site (Theta) that has been cleared in preparation for future drilling. Exploration activity is ongoing.

1.1 SITE LOCATION

The Nithi Mountain Property is located approximately 8 km south of Fraser Lake, BC (160 km east of Prince George), and can be accessed via Chowsunket Road, turning onto Nithi Forest Service Road (FSR). The Nithi FSR forms a circle route via the Foster FSR and 213 FSR, which allows road access to the majority of the site. The Nolan Lake FSR takes off from Nithi FSR at approximately KM12. A location map is included in Appendix A.

1.2 SITE VISIT

Jody Watson, EIT and Rob Bourcier, P.Ag of WestCan visited the site on July 22, 2011. Representative sections of the three existing exploration areas within the Nithi Mountain Property (Gamma, Delta, and Sigma) were assessed, as well as the Nolan Lake water source access road. Access to the sites was gained on existing FSRs via 4x4 truck, as well as on ATV and foot where conditions required. A detailed inspection of each drill hole was not within the scope of this assessment.

1.3 REGULATORY FRAMEWORK

Reclamation is required to be performed in all areas impacted by mineral exploration activities, as defined Part 9 of the Health, Safety and Reclamation Code for Mines in British Columbia: Mineral Exploration (MX Code). Additional relevant regulations to exploration activities in this area includes the federal *Fisheries Act*, which prohibits disturbance to fish-bearing streams, and the provincial *Water Act*, which governs work in and around watercourses.

Key agency reference documents used in the preparation of this report include:

- Health, Safety and Reclamation Code for Mines in British Columbia, Ministry of Energy, Mines and Petroleum Resources (2008)
- Handbook for Mineral and Coal Exploration in British Columbia; Ministry of Energy, Mines and Petroleum Resources and Ministry of Environment (2008/09)
- Best Management Practices Handbook: Hillslope Restoration in British Columbia; Ministry of Forests (2001)



1.4 REPORT OBJECTIVES

This Deactivation Plan has been developed to meet the objectives of the MX Code, including the following (from Section 9.13.1 of the Code):

- Reclamation of mechanically disturbed sites, campsites and exploration access shall occur within one year of cessation of exploration,
- Appropriate measures shall be taken to minimize the establishment of noxious weeds and the erosion of exposed or disturbed soil, and
- Exploration sites shall be revegetated to a self-sustaining state with species appropriate for the site.

This plan is intended to provide Leeward with the appropriate Best Management Practices (BMPs), procedures and site-specific prescriptions (where appropriate) for achieving these goals.

2.0 CURRENT CONDITIONS

Terrain along the Nithi Mountain property is characterized by two large hillslopes (including Nithi Mountain), with a total elevation difference of approximately 320 m from the base (Gamma) to peak (Sigma/Delta) areas. Several non-classified drainages and streams are present in the lease, although none have been designated as fish-bearing (EDI, 2008). No steep slopes or areas of geotechnical instability were noted during the site assessment, and trails through the area are general flat (no significant cut/fills required). Vegetation in the area is typical of the moist, cold Sub-Boreal-Spruce biogeoclimatic zone (SBSmc2), with areas near the peak entering the Englemann Spruce Subalpine Fir (ESSFmv1) zone. An archaeological assessment (Appendix C) and edible-plant survey (Appendix D) have recently been conducted in the area.

Recent forestry activity in the area by West Fraser Mills Ltd. (West Fraser) in the winter of 2010/2011 has resulted in many of the exploration areas being cleared. Logged areas and associated service roads will not require reclamation by Leeward under the MX Code, as these would fall under the jurisdiction of the *Forest and Range Practices Act*. West Fraser has provided maps of their recent activity on Nithi Mountain, which are included as Appendix A. The following impacts were observed:

- Gamma Zone – Partially logged
- Sigma Zone – Partially logged
- Delta Zone – Partially logged

As the Nithi Mountain property is in close proximity to Fraser Lake, BC., no associated camps or buildings have been constructed in association with exploration activities. Aside from ground disturbances, no residual evidence of activity by Leeward (ie. machinery, equipment, petroleum products or other debris) was noted in any of the areas.



2.1 GAMMA ZONE

The Gamma zone was explored from 2005 – 2008. The area has been deactivated, with debris piling, cross drains and waterbars installed in 2008 (Allnorth, 2009). During the site assessment, a representative area of the Gamma was inspected to confirm deactivation.

The nutrient-poor soil conditions along much of the access trails are such that limited vegetation growth has occurred, however this is typical of natural regeneration rates that would be expected in this area. Where soil conditions were improved, vegetation establishment was proportionally increased. A seeding program was undertaken in 2008 with a native seed mix of Needle grass applied in the western Gamma zone (Leeward, pers comm). No significant erosion concerns were observed, as the soils are generally well drained. It was noted that additional effort should have been made in the past to reclaim the trails at the time of deactivation (ie. roughening, scattering of woody debris, additional waterbars, etc), however any disturbance at this time would likely only adversely impact the successful establishment of the limited vegetation species present. No additional reclamation activity is recommended for the existing Gamma zone. Any future activity in this area should follow the reclamation guidelines included in Section 3.0.



PHOTO 1: GAMMA – DEBRIS PILING ALONG ROADWAY



PHOTO 2: GAMMA – TYPICAL VEGETATION ESTABLISHMENT IN POOR SOILS



PHOTO 3: GAMMA – SMALL TREE GROWTH IN POOR SOILS (APPROX. 5 YEAR)



PHOTO 4: GAMMA – VEGETATION ESTABLISHMENT WHERE SOIL CONDITIONS/NUTRIENTS ARE MORE PLENTIFUL



2.2 SIGMA ZONE

The Sigma zone was explored in 2008. The area has been harvested and constructed, with drill pads and sumps reclaimed (Allnorth, 2009). During the site assessment, a representative area of the Delta was inspected to determine appropriate reclamation prescriptions.

A significant portion of the southern extent of the Sigma zone, as well as through the center of the exploration target, has been logged during recent activity in the area (see Maps, Appendix A). The remaining trails and pads were assessed. Extensive debris scattering along the trails has facilitated significant vegetation establishment through natural regeneration. Ground cover was stable and no erosion concerns were noted. No additional reclamation activity is recommended for the Sigma zone. Any future activity in this area should follow the reclamation guidelines included in Section 3.0.



PHOTO 5: SIGMA – TYPICAL TRAIL



PHOTO 6: SIGMA – TYPICAL DRILL PAD



PHOTO 7: SIGMA – LOGGED AREA



PHOTO 8: SIGMA – TYPICAL TREE GROWTH



2.3 DELTA ZONE

The Delta zone was explored in 2007/08 and 2011. During the site assessment, a representative area of the recent Delta activity was inspected to determine appropriate reclamation measures.

A significant portion of the western extents of the Delta zone have been cleared during recent winter logging activity in the area (see Maps, Appendix A). In the remaining (unlogged) areas, waterbars had been installed, debris piles were present, and soils had generally been left in a rough state. Several isolated wetland areas were present near the trails, but no water crossing structures or erosion concerns were noted. Vegetation establishment on the trails and pad areas was minimal as the trails are still relatively fresh, but good soil conditions should facilitate rapid natural regeneration. Scattering of woody debris across the roadways would provide erosion control and microsite complexity for vegetation. Additional reclamation in the Delta zone, as per guidelines included in Section 3.0, is recommended.



PHOTO 9: DELTA – HOLE IN CUTBLOCK



PHOTO 10: DELTA – TYPICAL TRAIL



PHOTO 11: DELTA – DEBRIS PILING ON TRAIL



PHOTO 12: DELTA – TYPICAL DRILL PAD AREA



2.4 THETA ZONE

The Theta Zone had been harvested in the winter of 2008 with two holes drilled, and an additional five holes drilled in 2011.

Vegetation establishment on the trails and pad areas was minimal as the trails are still relatively fresh, but good soil conditions should facilitate rapid natural regeneration. Scattering of woody debris across the roadways would provide erosion control and microsite complexity for vegetation. Additional reclamation in the Theta zone, as per guidelines included in Section 3.0, is recommended.



PHOTO 13: THETA – TYPICAL DRILL PAD



PHOTO 14: THETA – TYPICAL TRAIL



2.5 NOLAN LAKE WATER SOURCE INTAKE AREA

The Nolan Lake water intake access was utilized in 2007/08. There is currently road access to a small landing area outside the riparian zone of the lake (prepared for water truck access), with a small trail through approximately 35 m of forested riparian area to the waters edge.

The landing area is relatively flat and has been seeded, with an established stable ground cover of grasses (no significant erosion concerns noted). This open area would have high success for planted trees, and should be reforested (when area is no longer required) to a density and species diversity similar to surrounding cutblock conditions. The small trail to the lake was prepared with no significant disturbance to the riparian area, and appears to have heavy use by wildlife. Corduroy has been installed on a small drainage along the access roadway (see Photo 15), which should be removed if access to this area is no longer required (rock and wood can be salvaged for re-placement if necessary). If continued (long-term) access is necessary, a culvert or other stable structure which allows free flow of water should be installed.



PHOTO 15: NOLAN LAKE – LANDING AREA



PHOTO 16: NOLAN LAKE – TRAIL TO LAKE



PHOTO 17: NOLAN LAKE – CORDOROI



3.0 RECLAMATION PLAN

The following reclamation plan covers permanent deactivation for exploration trails within the Nithi Mountain property. The priority will be on the management of drainage and erosion controls for high-runoff (freshet) conditions, with vegetation establishment forming a key component of sustained erosion control. No stream crossings or riparian management issues were noted during the site assessment, aside from the Nolan Lake access (see Section 2.5).

3.1 CONSTRUCTION BEST MANAGEMENT PRACTICES

Reclamation planning will begin prior to/during construction of all exploration trails, following these key best management practices:

- Trail alignments will be planned to avoid, minimize or mitigate impacts to riparian and other sensitive areas.
- All drainages along proposed trail routes will be identified and clearly marked prior to construction. Appropriate drainage structures (ex. Temporary bridge, culvert), where required, will be installed.
- Construction methods will limit vegetation removal, soil disturbance and surface drainage disruption.
- Any soil stockpiles created as a result of trail or drill pad construction should be placed on upslope area for later use in reclamation. Woody debris from clearing activities should also be stockpiled for scattering during reclamation.
- Yearly inspections and maintenance will be undertaken on all trails (until permanent deactivation and reclamation), to ensure safety and stability
- Progressive reclamation will be implemented as practical, as per Sections 3.2 to 3.5.

3.2 BUILDINGS, MACHINERY AND DEBRIS

- Prior to permanent deactivation/restoration, all buildings, machinery, equipment, cables, culverts and other debris from exploration activities will be removed.
- All hydrocarbon products and drilling additives will be removed and appropriately disposed of.

3.3 EXPLORATION TRAILS

- Road surfaces will be re-graded to generally match natural topography, where practical and deemed safe
- Where excessive compaction of soils has occurred, tracked machinery will be used to rip/loosen soils to allow natural groundwater flow and enhance vegetation establishment



- Any sidecast or temporarily stockpiled topsoil/cut material will be spread over road surface to enhance ground cover and limit barriers to runoff flow (ie. berms). Spread material should be left in a rough, loose condition
- Any ditchlines will be re-graded to prevent channelized flow of runoff
- Stockpiled woody debris will be scattered over road surface to provide wildlife habitat complexity and microsites for natural regeneration of vegetation.

3.4 DRAINAGE MANAGEMENT

As the Nithi Mountain property is not located in an area with significant stream crossings or slope stability issues, waterbars will be the primary means of runoff management for all reclaimed trails within the lease area. Best management practices will be as follows:

- All natural drainages noted along trails will be maintained throughout exploration activities
- Prior to construction, all drainages along the trails will be identified and clearly marked
- Any culverts or temporary drainage structures across the trails will be removed at the end of each field season (see Section 3.6), and/or at completion of activity in an area (permanent deactivation), prior to site demobilization
- Waterbars will be installed at the end of each field season (see Section 3.6), and/or at completion of activity in an area (permanent deactivation), prior to site demobilization
- Waterbars will be orientated such that water will drain downhill across the trail (see Appendix B)
- Waterbar spacing will be determined by slope and soil conditions as per Table 1:

TABLE 1: WATERBAR SPACING (MEMPR, 1992)

Slope Gradient	Erodible Soils (silt/clay)	Normal Soils (loam)	Rocky soils (sand/gravel)
Under 5%	45 m	60 m	n/a
5-10%	35 m	45 m	60 m
>10%	15 m	30 m	45 m

3.4.1 STREAM CROSSINGS

There were no noted stream crossings associated with existing exploration activities in the Nithi Mountain property, or anticipated in the future exploration areas. All stream crossings within the permit area are associated with existing FSR roadways. Any future stream crossings required as part of exploration activities would be constructed as per best management practices outlined in Section 10.4.5 of the MX Handbook (MEMPR, 2008)



3.5 REVEGETATION

Natural regeneration of vegetation has been successful in good soil conditions throughout the existing reclaimed areas of the Nithi Exploration project. Creating conditions that encourage colonization of native species will be the primary revegetation strategy, with supplemental seeding with an appropriate seed mix to expedite establishment. *NOTE: Natural regeneration was the primary recommendation of the edible plant survey (see Appendix D), to encourage growth and establishment of huckleberry and other potential food sources (Avison, 2011).*

- Roughening of soils will occur to help in promoting emergence of the natural seed bed.
- Woody debris (stockpiled during construction) will be spread across the trail surface to help stabilize soils and create micro-sites for vegetation
- Supplemental seeding with an appropriate seed mix (standard Canada No. 1 Forage Mix, Interior BC Reclamation) will be performed by hand using broadcast seeding techniques, applied progressively as soil roughening is completed
 - The mix will be certified to be free of invasive plant species, and no fertilizer admixes will be used (as these typically encourage weed growth over sustainable native cover).
 - It is recommended that a 30 kg/ha application rate be used at this location, or as recommended by manufacturer.
- Live staking/tree planting and/or fertilizer application may be recommended for areas of poor soils, large drill target pads or other areas where natural regeneration may be hindered. These areas will be assessed on a site-specific basis, with planting/seeding prescriptions developed to reflect soil and site conditions.

3.5.1 SEEPAGE AREAS

Where practical and as a best management practice, areas where seepage is encountered can be live planted. Planting density of 1 stem / m² using local deciduous species (cottonwood, willow or red osier dogwood) should be harvested and collected in situ (see Appendix B for installation guidelines). The establishment of these species will aid in water absorption and also provide further site stability through root mass over time.

3.5.2 RIPARIAN AREAS

The only noted riparian management area associated with the Nithi Mountain project is the Nolan Lake access (see Section 2.5 for detail). The landing area was constructed outside of the riparian zone of the lake (>35m from wetted perimeter), and no reclamation of the existing path through the riparian is required. Reforestation of the landing area is recommended when access to the water source is no longer needed, to a density and species diversity similar to surrounding cutblock conditions.



3.6 SEASONAL (TEMPORARY/PARTIAL) DEACTIVATION

Where activity in an area has been suspended, and/or at the end of the field season (prior to spring freshet), all trails will have temporary waterbars established (see Section 3.4) to assist in management of runoff during freshet, and all crossing structures will be removed. Where practical, stockpiled woody debris will also be spread to provide interim erosion control.

3.7 ARCHAEOLOGICAL AREAS

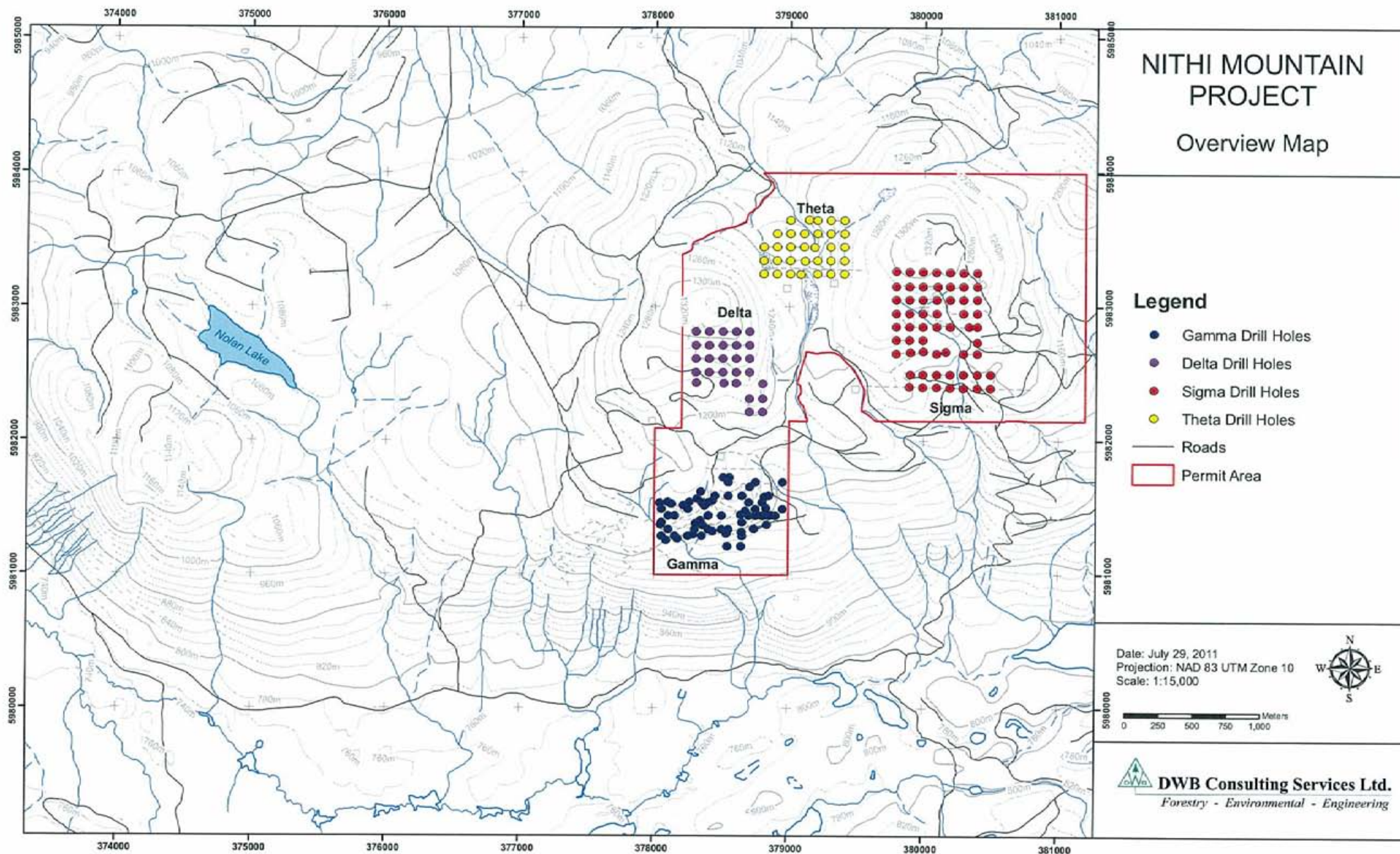
In areas that have high potential for archaeological artifacts to be discovered (see Figure 1 of Archaeological Assessment, Appendix C), all on-site personnel will be made aware of means of identifying potential archeologically significant features. Any potential features will be clearly marked, and appropriate regulatory agencies and/or specialists will be contacted to determine a management plan.

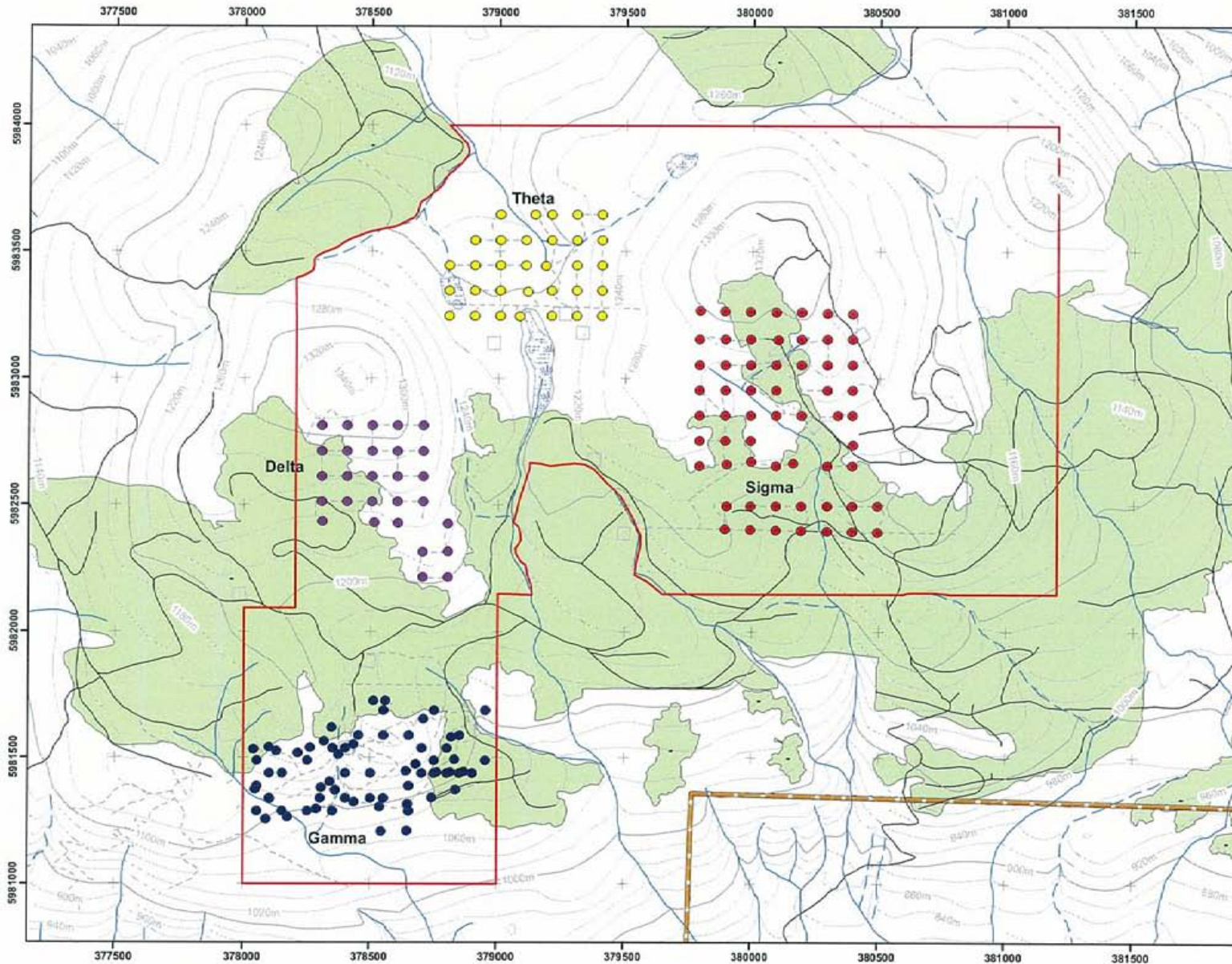
4.0 REFERENCES

- Allnorth Consultants Limited, Nithi Mountain Exploration As-Built (Drawing), February 2009
- Archer, Preliminary Field Reconnaissance of Nithi Mountain Mineral Exploration Tenure Parcel 51542, western half, July 2011
- Avison Management Services Ltd., Huckleberry Mitigation and Monitoring Plan – Nithi Mountain Moly Property, Study Area, July 2011
- EDI Environmental Dynamics Inc., Nithi Mountain Property – Environmental Baseline Analysis: State of the Baseline; April 2008
- Environment Canada, Environmental Code of Practice for Metal Mines, 2009
- Ministry of Energy, Mines and Petroleum Resources, Health, Safety and Reclamation Code for Mines in British Columbia; 2008
- Ministry of Energy, Mines and Petroleum Resources and Ministry of Environment. Handbook for Mineral and Coal Exploration in British Columbia; 2008/09
- Ministry of Forests, Best Management Practices Handbook: Hillslope Restoration in British Columbia; 2001
- Ministry of Forests, Forest Practices Code (FPC) - Soil Rehabilitation Guidebook, 1997
- Prospectors and Developers Association of Canada, Excellence in Environmental Stewardship (EES), 2009



APPENDIX A – SITE MAPS





NITHI MOUNTAIN PROJECT

Exploration Activity Reclamation Plan

Legend

- Gamma Drill Holes
- Delta Drill Holes
- Sigma Drill Holes
- Theta Drill Holes
- Roads
- ▭ Permit Area
- ▭ Mining Tenure
- ▭ West Fraset Cutblocks

Date: July 29, 2011
 Projection: NAD 83 UTM Zone 10
 Scale: 1:15,000



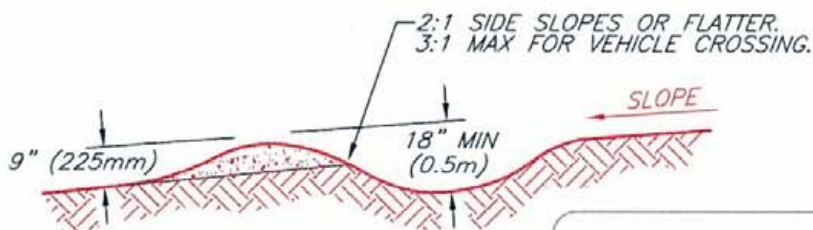
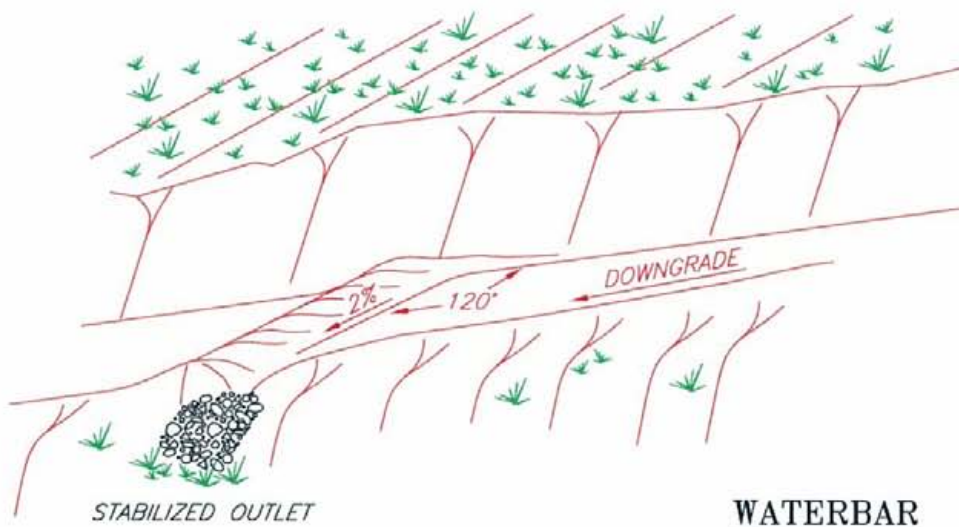
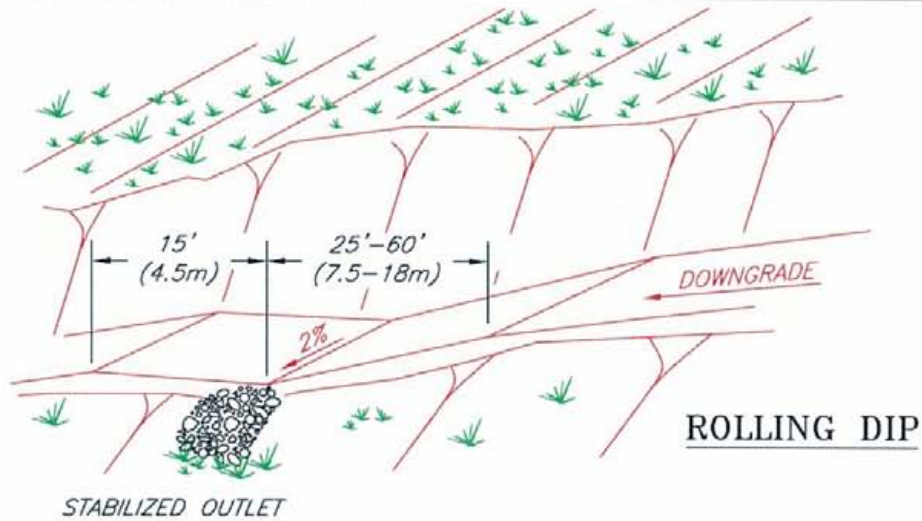
0 250 500 750 1,000 Meters



DWB Consulting Services Ltd.
 Forestry - Environmental - Engineering



APPENDIX B - INSTALLATION GUIDELINES

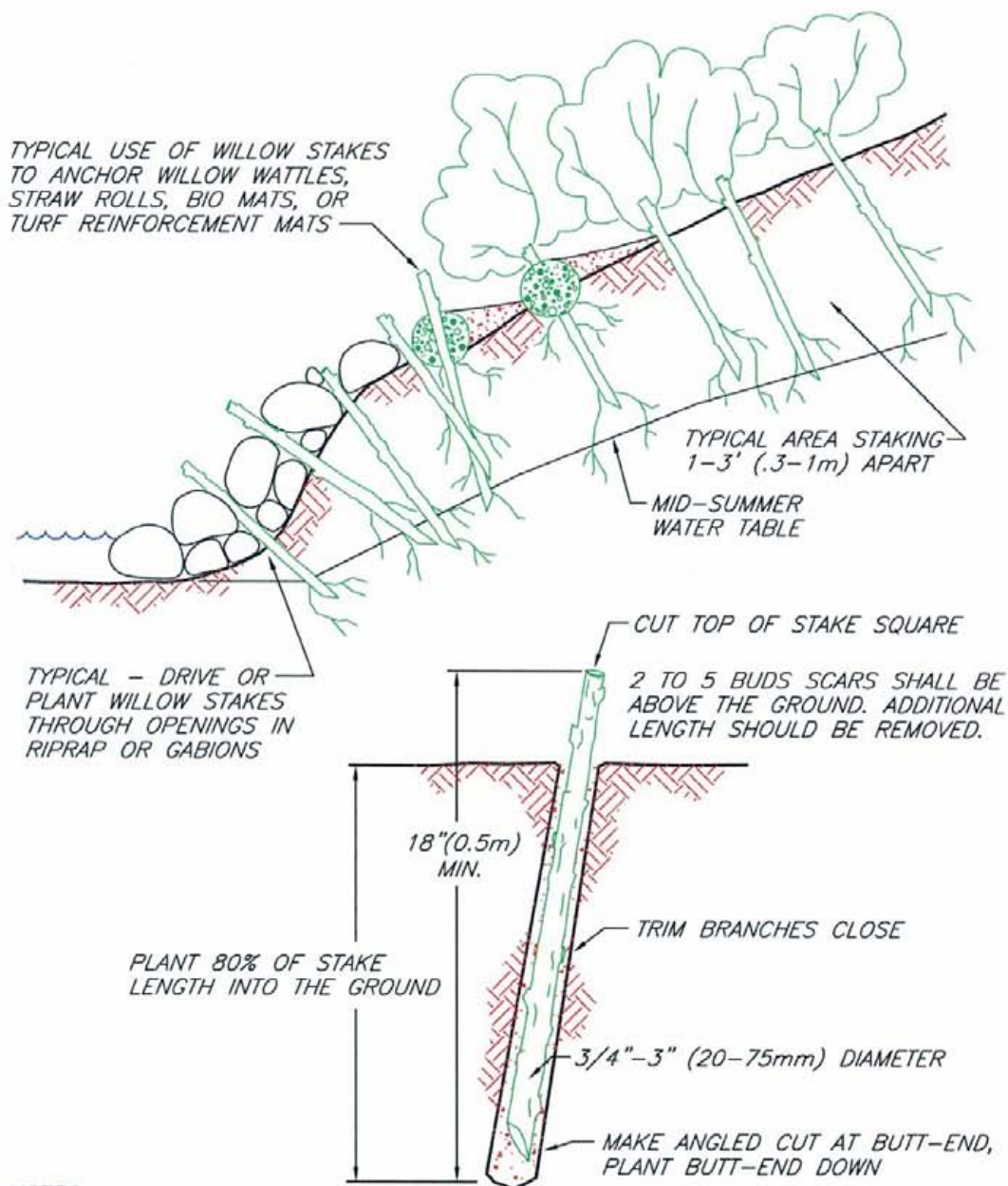


SECTION

ROLLING DIP
AND WATERBAR

© 1994 JOHN McCULLAH

FILE: WATERBAR



NOTES:

1. HARVEST AND PLANT STAKES DURING THE DORMANT SEASON.
2. USE HEALTHY, STRAIGHT AND LIVE WOOD AT LEAST 1 YEAR OLD.
3. MAKE CLEAN CUTS AND DO NOT DAMAGE STAKES OR SPLIT ENDS DURING INSTALLATION, USE A PILOT BAR IN FIRM SOILS.
4. SOAK CUTTINGS FOR 24 HOURS (MIN.) PRIOR TO INSTALLATION.
5. TAMP THE SOIL AROUND THE STAKE.

NOT TO SCALE

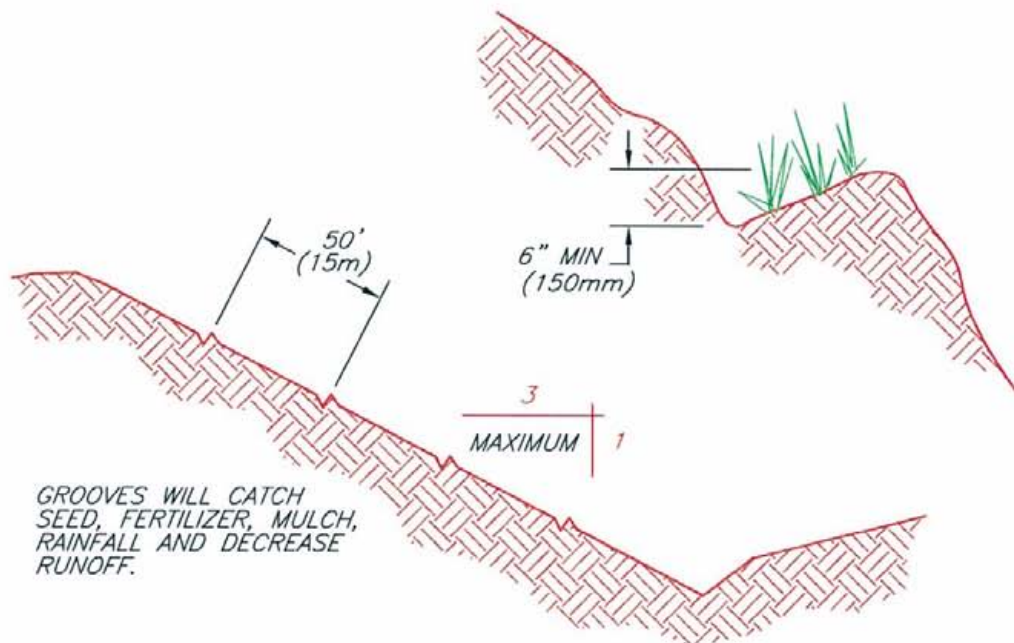
LIVE STAKING

© 1996 JOHN McCULLAH
HTTJN30 9661

FILE: LIVESTK



TRACKING



CONTOUR FURROWS

SURFACE ROUGHENING



APPENDIX C – ARCHAEOLOGICAL ASSESSMENT



Preliminary Field Reconnaissance (PFR) Assessment No. 9245

For use by Archaeological Permitting Section only

OGC / ILMB #

1 Administrative Information

1.1 Date	July 18, 2011	1.2 Author	Frank Craig
1.3 Report Title	Preliminary Field Reconnaissance of Nithi Mountain Mineral Exploration Tenure Parcel 51542, western half. (No survey in 550990)		
1.4 Permit #	Non-Permitted	1.5 Permit holder	--
1.6 Proponent	Leeward Capital Corp.	1.7 Contact	James W. Davis

2 Project Information

2.1	Land Use Activity	<input type="checkbox"/> Forestry <input type="checkbox"/> Oil & Gas <input type="checkbox"/> Residential <input type="checkbox"/> Infrastructure <input checked="" type="checkbox"/> Mineral exploration						
2.2	Components & size (Figure 1)	<ul style="list-style-type: none">• Tenure Parcel 515427 is 2852 ha.• Tenure Parcel 550990 is 77 ha.• HP 1 - 5 x 10 m (Figure 1, Inset 2)• HP 2 - 10 x 10 m (Figure 1, Inset 2)• HP 3 - 5 x 28 m (Figure 1, Inset 2)• HP 4 - 20 x 50 m (Figure 1, Inset 1)• HP 5 - 30 x 30 m (Figure 1, Inset 3)						
2.3	Method of PFR	<input checked="" type="checkbox"/> Foot <input checked="" type="checkbox"/> ATV <input checked="" type="checkbox"/> Truck <input type="checkbox"/> Overflight						
2.4	Borden Block	FISe, FISf	2.5	NTS Mapsheet	93-F-15	2.6	Sites	N/A
2.7	Geographic Location	The study area is located 55 km west of the community of Vanderhoof and 5.5 km south of the community of Fraser Lake. Mineral tenure 515427 has a centre point located at NAD83, UTM 10 coordinate 378661, 5982699 while 550990 has a centre point located at NAD83, UTM 10 coordinate 375302, 5983100.						
2.8	Access	From the community of Fraser Lake head south on Chowsunkit Road past the waste transfer station to approximately 4.9 km mark. Turn Right at the transmission lines onto the Nithi Mtn FSR and follow for an additional 5.6 km. Turn left and go up hill into some cutblocks at top of the hill for approximately 5.5 km and you will be in the south middle section of the tenure.						
2.9	Methodology	Areas identified as having high archaeological potential were surveyed by a crew of two spaced 20-30 m. High archaeological potential areas (HPs) were marked with purple flagging.						
2.10	Field Crew	Frank Craig (Director), Robin Heathcliffe (FN Assistant)			2.11	Date of PFR	June 18, 21 & 22, 2011	



177 East Columbia St, Box 523
Vanderhoof B.C. V0J 3A0
T: 1.250.567.9496 F: 1.250.567.9492

www.archercrm.ca
1.877.261.5591

2.12 Comments

Based on an Archaeological Overview Assessment (AOA report 9245, May 20/11) of the Nithi Mountain Mineral Exploration area, it was established that pre-AD 1846 CMTs or other archaeological remains may be present inside the Study Area.

The present PFR only addresses those areas field visited during the survey and confirms five areas of high potential for archaeological resources (HPs) as illustrated in Figure 1. Additional areas of high archaeological potential are present within the project area but were not visited during the present PFR, as they will not be impacted by development as planned at this stage

Previously recorded archaeological site information obtained from RAAD on May 25, 2011

3 All Known Archaeological Sites Within 250 m

Site no.	Direction & distance from development	Type	Possibility of impact
None	--	--	--

4 Five Closest Known Archaeological Sites Between 250 & 5000 m

Site no.	Direction & distance from development	Type	Possibility of impact
FISf-003	CMT	1500 m south	None
FISf-004	CMT	1500 m south	None
FISf-006	Lithic, CD, CMT	700 m west	None
FISf-007	Lithic, CD, Hearth	850 m west	None
FISf-008	CD	850 m west	None

5 Physiography of Study Area

HPs 1, 2 & 3: Isolated knolls and terraces with minimal slope (2%) around a small wetland.
 HPs 4 & 5: Un-named mountain apex (HP 4) and the apex of Nithi Mountain (HP 5), Steep hilly terrain with a maximum slope of 45% in all directions.

6 Vegetation in Study Area

HPs 1, 2 & 3: Forest cover consists of subalpine fir, lodgepole pine, and spruce. Understory and ground cover consist of huckleberry, juniper, alder & moss.
 HPs 4 & 5: Forest cover consists of subalpine fir, lodgepole pine, and spruce. Understory and ground cover consist of huckleberry, juniper, alder & moss.

7 Ground Visibility

HPs 1, 2 & 3: Moderate due to open terrain and ground cover vegetation.
 HPs 4 & 5: Good due to minimal ground cover vegetation. Excellent in areas of bedrock outcrops.

8 Previous Impacts / Disturbances

HPs 1, 2 & 3: Large portions of the general project area have been previously logged. Numerous roads are present. The HPs themselves are intact with no disturbance.
 HPs 4 & 5: Large portions of the general project area have been previously logged. Numerous roads are present. The HPs themselves are relatively intact with no significant disturbance. The summit of Nithi Mountain, HP5, has some historic disturbance from previous exploration and survey activities. There is an old transit station present.

9 Archaeological Potential

- HPs 1, 2 & 3:** Moderate-high for subsurface cultural material remains and features. Low for CMTs in the area.
- HPs 4 & 5:** Moderate - high for subsurface cultural material remains and features. Low for CMTs in the area.
- Note:** Additional areas of high archaeological potential are present within the project area but were not visited during the present PFR, as they are not in an area of mineral exploration interest at this time and will not be impacted by development (see figure 1)

10 Recommendations

Our *Preliminary Field Reconnaissance of Nithi Mountain Mineral Exploration Tenure Parcels 515427 & 550990* suggests pre-AD 1846 CMTs or buried archaeological remains may be present inside the assessed Study Area. It is recommended that an archaeological impact assessment (AIA) be undertaken if ground and/or timber altering activities are to commence within areas identified as high potential on Figure 1 in order to ascertain potential cultural resource management needs.

The development areas illustrated on the attached maps indicate areas subject to archaeological assessment, unless otherwise noted. If Final Plans differ, the results of this assessment may not be applicable in part or in whole.

To address the prospect of unanticipated archaeological remains being discovered, it is recommended that the proponent inform its employees and contractors of this possibility. If archaeological materials or other heritage remains are uncovered during construction, work in the area of the find must immediately cease and the Archaeology Branch and/or ARCHER informed. It is recommended that the proponent also promptly inform the relevant First Nations concerning any unanticipated archaeological findings.

It was not the intent of this study to identify, evaluate, or comment on the presence or absence of Aboriginal Rights in the study area. Completion of this study does not "abrogate or derogate from aboriginal treaty rights" (Heritage Conservation Act Sec. 8). The study was conducted without prejudice to First Nations Treaty Negotiations, aboriginal rights or aboriginal title.

I concur that the above information is true as of July 18, 2011, given available information.

Sincerely,



Frank Craig, BA, RPCA
(Directing archaeologist)

11 References Cited

Subject Report Citation:

ARCHER CRM Partnership

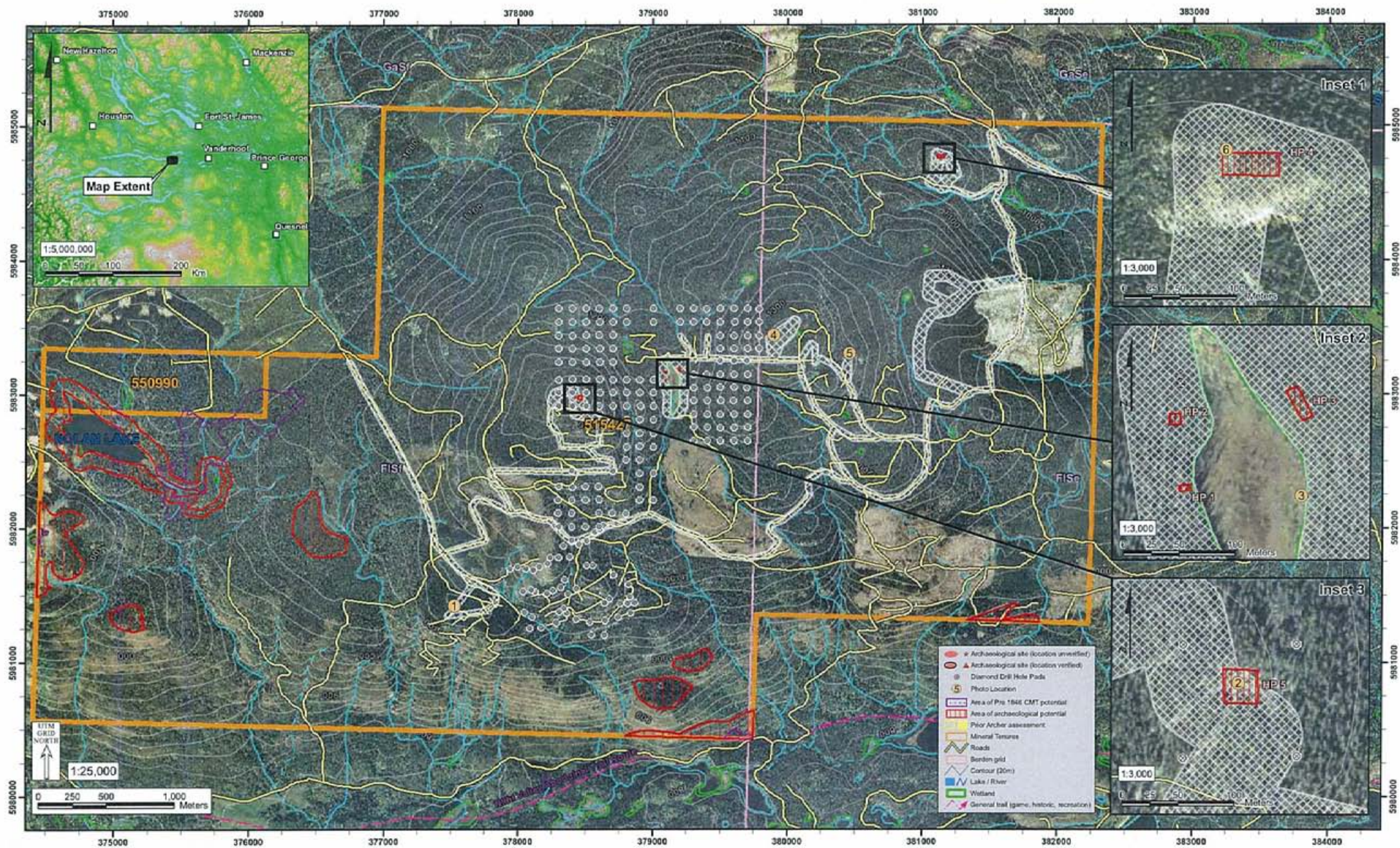
2011 *Archaeological Overview Assessment of Nithi Mountain Mineral Exploration site*. Consultant file 9245.
Prepared for Leeward Capital Corp., Fort Fraser, BC..

12 Distribution List

<i>Individual</i>	<i>Association</i>	<i>Phone</i>	<i>Fax</i>	<i>E-mail</i>
Chief and Council	Stellat'en First Nation	250.699.8747	250.699.6430	--
Chief and Council	Nadleh Whut'en First Nation	250.690.7211	250.690.7316	--
James W. Davis	Leeward Capital Corp.	403.265.2777	403.235.5362	jimd@taiga-ltd.com

13 Archaeology Branch Information


MAIL: Archaeology Branch Ministry of Natural Resource Operations PO Box 9816 Stn Prov Govt Victoria BC, V8W 9W3	LOCATION: #3 - 1250 Quadra Street, Victoria, BC V8W 2K7	CONTACT: Reception (250) 953-3334 Fax (250) 953-3340
---	--	---



ARCHER	Figure #:	Title:	Project #	BCGS	NTS	Projection	5
	1	Proposed Leeward Capital Nithi Mountain Mineral Exploration Tenure Parcels 515427 & 550990	9245	93F.096, 097	93F/15	NAD83, UTM 10	



See Figure 1 for photo locations.

	Figure #: 2	Proposed Leeward Capital Nithi Mountain Mineral Exploration Tenure Parcels 515427 & 550990	6
---	-----------------------	--	---



APPENDIX D – EDIBLE PLANT SURVEY



Huckleberry Mitigation and Monitoring Plan
Nithi Mountain Moly Property, Study Area
July 21, 2011

Prepared for: Leeward Capital Corporation
101, 2719 7 Avenue NE,
Calgary, Alberta, T2A 2L9



Prepared by: Avison Management Services Ltd
Box 774
Vanderhoof, BC, V0J 3A0

Table of Contents

Table of Contents	2
Executive Summary	3
1.0 Background	4
2.0 Introduction	4
2.1 Study Area	4
3.0 Methods	6
3.1 Vegetation Mapping and Site Selection	6
3.2 Field Surveys	6
4.0 Results	7
4.1 Vegetation Mapping	7
4.2 Study Area and Vegetation Descriptions	9
4.2.1 Study Area Overview	8
4.2.2 Description of Vegetation Types	8
5.1 Mitigation and Monitoring Strategies	17
5.2 Recommended Mitigation and Monitoring Plan	19
Literature Cited	20

Tables and Figures

Map 1:Nithi Mountain Moly Property Study Area Overview	5
Table 1: Number of field Inspection Plots by Vegetation Type	7
Table 2: Occurrence of Upland and Wetland Vegetation Types within the Study area	7
Map 2: Study Area Vegetation Types	8
Map3: Mitigation and Monitoring Strategy 3	18
Table3: Strategy 3 Mitigation Strategy by Vegetation Type	19



Executive Summary

The Nithi Mountain Moly property is undergoing mineral exploration by Leeward Capital Corporation. One of the *conditions of authorization* given within the approval of the amended Mines Act permit for the Nithi Mountain Moly property was that a mitigation and monitoring plan be developed to address plant species of concern to the Stelat'en First Nation. It was determined through discussions held by Leeward Capital Corporation representatives that huckleberries (*Vaccinium sp.*) were the plant species of concern. In June 2011 Avison Management Services Ltd. assessed the study area through aerial photo interpretation and ground surveys to estimate the distribution and percent cover of huckleberry plants. The resulting report proposes three mitigation and monitoring strategies to address the impact exploration activities will have on huckleberry species, within the study area.



1.0 Background

Leeward Capital Corporation has been conducting mineral exploration in the Nithi Mountain area since 2005, in order to better define the molybdenum resource within the Nithi Mountain Moly Property (EDI, 2008). This property is located 5 km south of community of Fraser Lake, BC and within the Stellat'en First Nation territory.

Due to severe market conditions in 2008 Leeward Capital Corporation was unable to complete the 2007 amended Mines Act Permit: MX-11-192. A request for an extension of the permit was made in 2011 to complete the remaining drilling. The remaining drilling includes an estimated 30 –35 drill hole sites, utilizing existing trails with the new disturbance area totaling approximately 1.4 ha.

The Ministry of Energy and Mines granted the Mines Act Permit extension on April 30, 2011. One of the conditions of this authorization was the development and implementation of "a detailed mitigation and monitoring plan establishing how impact to plants species of significant interest to the Stellat'en First Nation would be minimized" for the new disturbance areas.

In June 2011 Avison Management Services Ltd (AMS) conducted a vegetation survey within Nithi Mountain Moly Property on the 199.35 ha study area (Map 1).

2.0 Introduction

This report provides information used to determine and ultimately the approval of a mitigation and monitoring plan for the plant species of significant interest to the Stellat'en First Nation within the Nithi Mountain Moly Property.

Prior to the development of the field surveys Taiga Consultants Ltd. engaged in discussions with the Stellat'en First Nation on behalf of Leeward Capital Corporation. Taiga Consultants Ltd. staff concluded that huckleberries (*Vaccinium* sp) were the plant species of significant interest to the First Nation within this area. Within the Vanderhoof Forest District there are several species of *Vaccinium* for the purposes of this report, huckleberries refer to the following species *Vaccinium membranaceum*, *Vaccinium ovalifolium*, *Vaccinium myrtilloides*, *Vaccinium caespitosum*, although *Vaccinium membranaceum* and *Vaccinium caespitosum* were the only huckleberry species observed.

A vegetation survey was done to investigate and document the occurrence and approximate the distribution of huckleberry plants within the study area. The data collected from this survey was utilized to design the proposed mitigation and monitoring plan for huckleberry species cover within the study area.

2.1 Study Area

The Nithi Mountain Moly Property is located 5 km south of Fraser Lake, in central British Columbia and is located within the Prince George Forest Region (BC Forest, 1993). The study area is within the Fraser river Plateau ecoregion, the Bulkley Basin ecosection (EDI, 2008) and 2 biogeoclimatic (BEC) subzones.

ESSFmv1 dominates the study area with only small portions of lower elevations identified through PEM as SBSmc2. ESSFmv1 captures the highest, coldest type of forest in the Vanderhoof Forest District (ILMB, 1997). Precipitation levels are moderate and primarily in the form of snow. Soils are Humo-Ferric Podzols with parent materials predominantly morainal (BC Forest, 1993).



Lodgepole pine, initiated by forest fire, is the predominant species within the ESSFmv1 ecozone, but subalpine fir and hybrid white spruce are common in late succession forests. Map 1 outlines the Nithi Mountain Moly Property and the Study Area with the BEC ecozone classification.

Access to the study area is on gravel roads, unsuitable for 2WD vehicles during inclement weather. Access within the study area is limited to 4WD quad and walking due to road deactivations, blowdown and steep slopes. The soils are shallow and site productivity is very poor with Forest Resource inventory data classifying the site index range between 11-13 (BC Forest. 1997).

3.0 Methods

3.1 Vegetation Mapping and Site Selection

Vegetation Mapping utilized the Ministry of Environment Predictive Ecosystem Mapping (PEM) and Vegetation Resources Inventory (VRI) data, 1:20,000 Colour Aerial Photographs (1997), Seamless Image Database (SID) colour Orthoimagery (2006) and contour lines to assist in the delineation of the study area into a preliminary BEC map to the site series level. The compilation of a final baseline BEC map was not within the scope of this plan.

The site series distribution and access within the study area was used to select field site locations and other areas of interest to help determine the distribution of huckleberry species across the study area.

3.2 Field Surveys

Two types of field inspections were completed to improve the vegetation mapping and to record the distribution and percent cover of huckleberry species within the study area. For both plot-based surveys and visual checks, boundaries of all survey areas encompassed a homogeneous ecosystem as defined by the site series and could vary in shape to ensure homogeneity. The focuses of the surveys were on preliminary BEC mapping and huckleberry species distribution however; an inventory of the dominant terrestrial vegetation was also noted.

Plot-Based Surveys (Ground Inspections)

A 20 m by 20 m plot was selected in an area of homogeneous vegetation, at least 20 m away from any disturbance or community boundary (to avoid edge effects). This plot was used to define the tree layer if present. All identifications and measurements of tree species, including: percent covers, average diameter at breast height (dbh), within the canopy and sub-canopy layers of the 20 m by 20 m plot, were identified. A 10 m by 10 m subplot (or some equal area) was identified to define the shrub and ground layers. Percent cover was estimated to the nearest whole number for species occupying less than 5 percent of the plot. Percent cover was estimated to the nearest 5 percent for species occupying 5 percent or more of the plot.

In addition to vegetation characteristics, general site information on slope, aspect, structural stage, forest pests and disease and inferred moisture regime and nutrient status were recorded. Universal transverse mercator (UTM) co-ordinates and photographs were recorded for each plot-based survey.

Visual Checks (Visual Inspections)

Visual checks included an assessment of correct assignment of the BEC site series, based on the percent cover of dominant tree, shrub and other plants species. Dominant vegetation characteristics, general site information on slope, aspect, structural stage, forest pests and disease, inferred moisture regime and nutrient status were recorded. Universal transverse mercator (UTM) co-ordinates and photographs were recorded for each visual check.



4.0 Results

4.1 Vegetation Mapping

Field inspections were conducted on June 20-23, 2011, collecting data at 36 plots distributed across the study area (see Table 1). The study area is primarily within the ESSFmv 1 BEC subzone with a small polygon in the southwest corner that is classified within the SBSmc2 subzone. The field inspections identified six productive forest site series based on the BEC field guide (BC Forest, 1993) and one wetland (non productive swamp) within the study area. The productive forestland dominated the landscape covering 196.41 ha. The non-productive land covered 2.92 ha of the study area (see Table 2 and Figure 2)

Table 1: Number of Field Inspection Plots by Vegetation Type

Vegetation Type (BEC Site Series)	Number of Plots
Nechako Moist Very Cold Engelmann Spruce- Sub alpine Fir (ESSF mv1)	
01: Bl- Rhododendron- Feathermoss	15
02: Pl- Huckleberry-Caldonia	4
03: Bl- Huckleberry- Feathermoss	9
04: Bl- Huckleberry- Gooseberry	2
05: Bl- Horsetail-Glowmoss	4
Babine Moist Cold Sub-Boreal Spruce (SBS mc2)	
01: Sxw- Huckleberry	1
Non Productive (NP) Natural (Swamp)	1
Total	36

Table 2: Occurrence of the Upland and Wetland Vegetation Types within the Study Area

Upland Vegetation Type	
Nechako Moist Very Cold Engelmann Spruce- Subalpine Fir (ESSF mv1)	Area (ha)
01: Bl (Sub alpine fir)- Rhododendron- Feathermoss	125.29
02: Pl (Lodgepole Pine)- Huckleberry-Caldonia	7.44
03: Bl (Sub alpine fir)- Huckleberry- Feathermoss	39.50
04: Bl (Sub alpine fir)- Huckleberry- Gooseberry	4.53
05: Bl (Sub alpine fir) - Horsetail-Glowmoss	15.53
Babine Moist Cold Sub-Boreal Spruce (SBS mc2)	
01: Sxw (Hybrid White Spruce)- Huckleberry	4.22
Wetland Vegetation Type	
Non Productive (NP) Natural (Swamp)	2.94
Anthropogenic Disturbance (not removed from vegetation type total areas)	(0.30)
Study Area Total	199.35



4.2 Study Area and Vegetation Descriptions

4.2.1 Study Area Overview

The study area is primarily within the ESSFmv1 BEC ecozone with a small polygon in the southwest corner that can be classified within the SBSmc2 zone. The elevation range for the study area is 1200-1350m with variable slope aspects ranging from 0 – 35%. Although not verified with soil profiles, soil moisture levels ranges from subxeric to subhydric conditions and the soil nutrient regime ranges from poor to rich. South facing slopes are dominated by Lodgepole pine (*Pinus contorta*), which has a mortality rate in excess of 80%, due to mountain pine beetle (*Dendroctonus ponderosae* Hopk.) (EDI.2008). The north facing slopes are dominated by mature to late seral stage sub alpine fir (*Abies lasiocarpa*) and hybrid white spruce (*Picea glauca* X *engelmannii*). Ingress sub alpine fir, white spruce and Lodgepole pine in the understory generally show moderate to poor form and vigor.

The field data identifies six site series based on the BEC field guide (BC Forest, 1993) and one wetland, classified as NPS (non-productive shrub). Many of the vegetation survey plots are classified as transitional as they contained plants bridging between several site series. A possible explanation for this is the successional changes many of the sites are undergoing due to overstory mortality and increased light levels to the forest floor. Overstory mortality is primarily due to the mountain pine beetle epidemic and to a lesser extent the late seral stage sub alpine fir.

The overall seasonal huckleberry yield was observed throughout the field surveys. Generally, the huckleberry yield on all of the sites is found to be minimal; with only two to three flowers/berries per bush observed. Possible reasons for low berry productivity are poor site conditions or the cool wet weather of 2011.

4.2.2 Description of Vegetation Types

Overall, sub alpine fir is the dominant tree species with a carpet of red-stemmed feather moss (*Pleurozium schreberi*) found on most sites. The forest cover is mature to overmature with low shrub layers in variable slopes. The following provides a general description of each BEC subzone, by site series surveyed within the study area. This includes vegetation cover, forest type, percent cover of huckleberry species and ranking relative to the other vegetation types. Photo documentation is included with each description



ESSFmv1 01: BI- Rhododendron-Feathermoss

This ecozone site series is sub alpine fir leading forest cover with variable slopes and aspects. The majority of the study area is classified as this site type. White-flowered rhododendron (*Rhododendron albiflorum*) is present in isolated patches throughout this site series. There is minimal advance sub alpine fir growth in the shrub layer and huckleberry species cover is the second highest of the sites surveyed, ranging between 0 and 35%.



Vegetation plot #V003 Photo Orientation: Forest Floor
BEC site series: ESSFmv1 01 Photo date: June 20, 2011



Vegetation plot # V017 Photo Orientation: West
BEC site series: ESSFmv1 01 Photo date: June 21, 2011



ESSFmv1 02: PI-Huckleberry-Cladonia

ESSFmv1 02 is a dry Lodgepole pine leading stand, with minimal shrub cover and located on exposed rocky slopes. Terrestrial vegetation is primarily lichen (*Cladonia* & *Cladonia sp.*). With a range of huckleberry species cover from 0 to 10% this site ranks fourth in coverage amongst the sites.



Vegetation Plot #V006 **Photo Orientation: Forest Floor**
BEC site series: ESSFmv1 02 **Photo date: June 22, 2011**



Vegetation Plot #V026 **Photo Orientation: East**
BEC site series: ESSFmv1 02 **Photo date: June 23, 2011**



ESSFmv1 03: BI-Huckleberry-Feathermoss

ESSFmv1 03 site type contains the most variable aspects and slopes with a mixture of Lodgepole pine and sub alpine fir leading forest cover. Vegetation is more diverse than ESSFmv1 02 sites primarily due to higher nutrient and soil moisture regimes. The shrub layer is comprised of sub alpine seedlings and poles and to a lesser extent alder (*Alnus sp.*) Huckleberry species is present in all plots with variable coverage ranging from trace to 65%. ESSFmv1 03 has the highest percent huckleberry species cover of all sites, within the study area.



Vegetation Plot #V027 **Photo Orientation: Forest Floor**
BEC site series: ESSFmv1 03 **Photo date: June 23, 2011**



Vegetation Plot #V009 **Photo Orientation: East**
BEC site series: ESSFmv1 03 **Photo date: June 22, 2011**



ESSFmv1 04: Bl-Huckleberry- Gooseberry

ESSFmv1 04 is associated with subsurface drainage systems and subhydric soil moisture regime. Sub alpine fir is the leading forest cover species with advanced regeneration layer of sub alpine fir. Huckleberry species cover ranges between 0 and 20% and is ranked third in coverage by site type. The dominant plant species on these sites is red-stemmed feather moss (*Pleurozium schreberi*).



Vegetation Plot # V020A Photo Orientation: Forest Floor
BEC site series: ESSFmv1 04 Photo date: June 21, 2011



Vegetation Plot # V037 Photo Orientation: West
BEC site series: ESSFmv1 04 Photo date: June 21, 2011



ESSFmv1 05: BI-Horsetail-Glow moss

This site type is dominated by sub alpine fir with large scattered hybrid white spruce (*Picea glauca x engelmannii*) in the overstory. The shrub layer is comprised of sub alpine fir advanced regeneration and minimal huckleberry species coverage (0-2%), the least of the ESSFmv1 ecozone types. The forest floor is predominantly covered with horsetail (*Equisetum sp.*), Sphagnum moss (*Sphagnum sp.*) and red-stemmed feather moss (*Pleurozium schreberi*). Seasonally saturated soils make this site series unsuitable for huckleberry species.



Vegetation Plot # V021 **Photo Orientation: Forest Floor**
BEC site series: ESSFmv1 05 **Photo date: June 22, 2011**



Vegetation Plot # V022 **Photo Orientation: West**
BEC site series: ESSFmv1 05 **Photo date: June 22, 2011**



SBSmc2 01: Sxw- Huckleberry

A small portion to the southwest of the study area is best classified as SBSmc2 01. Dominated by sub alpine fir, SBSmc2 01 has the highest forest cover crown closure. The rich site has a wide diversity of vegetation but low coverage due to low light levels. There is no evidence of huckleberry species on this site type.



Vegetation Plot # V035
BEC site series: SBSmc2 01

Photo Orientation: Forest Floor
Photo date: June 23, 2011



Vegetation Plot #V035
BEC site series: SBSmc2 01

Photo Orientation: North
Photo date: June 23, 2011



Non Productive Wetland

Two sites have been identified as non-productive wetlands within the study area. The largest is an open low-lying site dominated by grass and grass like species (*Eriophorum* sp. & *Carex* sp.). Soils are saturated with standing water in this fen-like wetland. The scattered Lodgepole pine and hybrid white spruce are stunted with willow (*salix* sp) occupying raised microsites. These wetlands are unsuitable growing sites for huckleberry species.



Vegetation Plot #V015
Non Productive Wetland

Photo Orientation: Forest Floor
Photo date: June 22, 2011



Vegetation Plot #V015
Non Productive Wetland

Photo Orientation: South
Photo date: June 22, 2011



5.1 Mitigation and Monitoring Strategies

Strategy 1. Natural Regeneration

Strategy 1 involves the least intervention as it relies on the forest to restore itself. It is anticipated that the loss of huckleberry plants in the disturbed sites will be compensated by their increased presence in the forested area adjacent to the disturbance, due to increased light levels (Cocksedge, W., 2006). Huckleberry plants are known to propagate through rhizomes and that these rhizomes will spread from undisturbed areas over time. Huckleberry species are known to regenerate naturally from rhizomes over 3-5 years from the adjacent undisturbed sites (Haeussler, S., D. Coates and J. Mather, 1990.). This strategy will require a minimum of two monitoring surveys. A walkthrough survey, 2 and 5 years after disturbance, is recommended to evaluate the levels of vegetative competition and huckleberry regeneration (percent cover) on disturbed sites as five years is required for huckleberry plant reestablishment after disturbance (Haeussler, S., D. Coates and J. Mather, 1990.) This strategy is the most viable considering the disturbance area size, ease of the application of the treatment and cost.

Strategy 2: Artificially Stocking

Strategy 2 involves transplanting huckleberry nursery stock on all disturbed sites. Maximum planting densities are recommended at 1 metre spacing for 10,000 stems per hectare to ensure survival due to browsing by wildlife (Barney, 1999). This strategy will require a minimum of 2 monitoring surveys, at 2 and 5 years after disturbance. A walkthrough survey is recommended to evaluate the levels of vegetative competition and huckleberry regeneration (percent cover) on the disturbed sites.

Strategy 2 has some significant limitations such as the nursery stock availability, compatible seed sources and additional planting costs. Verbal conversations with BC nurseries indicated that there are currently limited quantities of huckleberry seedlings available for purchase and it is doubtful that local seed source transplants are available (Degenais, J., personal communication). Local seed stock would require seed collection in the fall, which would then be ready for transplanting 2 years later. Vegetative competition is a significant factor in huckleberry transplant survival (Barney, 1999). Should local seed stock be utilized, close monitoring will be required, as competing vegetation will have 2 years of advanced growth on transplanted huckleberry plants. This strategy is considered the least viable for both the ease of the treatment application and cost.

Strategy 3: Mitigation Strategy by Vegetation Type

Strategy 3 is a combination of Strategies 1 and 2. It focuses only on those areas with the greatest current huckleberry species presence, which has the best potential for successful huckleberry reestablishment. Table 3 presents the proposed mitigation strategy for each vegetation type. South-facing slopes would be expected to have improved huckleberry presence since light intensity is the most significant factor in berry yield (Cocksedge, W. 2006). Strategy 3 proposes that huckleberries only be transplanted on disturbed sites identified as ESSFmv1 01 and ESSFmv1 03, on south facing slopes. The remainder of the disturbed sites would have no treatment and be left to reestablish naturally. Map 3 identifies the areas to be considered for transplanting huckleberry plants in new disturbances as a result of exploration activity. The outlined area identifies ESSFmv1 01 and ESSFmv1 03 sites with southerly aspects. This strategy will require a minimum of 2 monitoring surveys at 2 and 5 years after disturbance. A walkthrough survey is recommended to evaluate the levels of vegetative competition and huckleberry regeneration (percent cover) on the disturbed sites.



Table 3: Strategy 3. Mitigation Strategy by Vegetation Type

Vegetation Type (BEC site series)	Huckleberry presence based on % cover*	Proposed Mitigation Strategy
ESSFmv1 01	Mod	Southerly Aspects: Plant to 10,000 stems per ha Northerly Aspects: Leave to Natural Regeneration
ESSFmv1 02	Low	Leave to Natural Regeneration
ESSFmv1 03	High	Southerly Aspects: Plant to 10,000 stems per ha Northerly Aspects: Leave to Natural Regeneration
ESSFmv1 04	Low	Leave to Natural Regeneration
ESSFmv1 05	Very Low	N/A
SBSmc2 01	Low	Leave to Natural Regeneration
NP Nat	Very Low	N/A

**Determinations of the huckleberry presence are site specific and apply to seasonal levels for 2011. Presence does not imply yield*

5.2 Recommended Mitigation and Monitoring Plan

After completion of the vegetation survey, Avison Management Services Ltd. developed 3 mitigation and monitoring strategies to address the impact exploration activities will have on huckleberry species cover, within the study area. Strategy 1 proposes that the disturbed sites be left to reestablish on their own from the adjacent undisturbed sites. Monitoring is required to ensure the huckleberry species have reestablished to pre disturbance percent cover levels. Strategy 2 proposes transplanting nursery stock huckleberries in new disturbances. Strategy 2 has some significant limitations such as the nursery stock availability, compatible seed sources and additional planting costs. Strategy 3 focuses only on those areas with the greatest current huckleberry species presence and has the best potential for successful huckleberry reestablishment. This strategy has similar limitations to strategy 2 due to nursery stock availability and vegetative competition. All 3 strategies recommend walkthrough surveys be completed at 2 and 5 years after disturbance to monitor huckleberry reestablishment (percent cover) and vegetative competition.

This report recommends the proposed Strategy 1: Natural Regeneration as a mitigation and monitoring plan to address the impact of exploration disturbances. The estimated 1.4 ha of new disturbance is expected to have minimal negative impact on the percent cover of huckleberry species, over time. This strategy allows the forest to restore itself and is the most viable considering estimated new disturbance size, ease of application and nursery stock limitations.



Literature Cited

Barney, 1999. Growing Western Huckleberries. University of Idaho.
<http://www.cals.uidaho.edu/edComm/pdf/BUL/BUL0821.pdf>

BC Forest. 1993. " A field Guide for Site Identification and Interpretation for the Southwest Portion of the Prince George Forest Region (p 10)

BC Forest. 1997. Site Index Estimates by Site Series for Coniferous Tree Species in British Columbia. BC Forest Renewal BC and Ministry of Forests.p15

Cocksedge, W. 2006. Incorporating non-timber forest products into sustainable forest management. An overview for forest managers. Royal Roads University.
<http://www.royalroads.ca>

EDI, 2008, Nithi Mountain Property, Environmental Baseline Analysis: State of Baseline., Environmental Dynamics Inc., EDI Project No. 08-BC-0003.

Haeussler,S., D. Coates and J. Mather. 1990. Autecology of Common Plants In British Columbia: A Literature Review. FRDA Report 158, Forestry Canada and BC Ministry of Forests, Victoria, BC.

ILMB.1997. Vanderhoof Land and Resource Management Plan. Integrated Land Management Bureau.



WestCan Projects Ltd.

ENGINEERING ▲ DESIGN ▲ ENVIRONMENTAL ▲ CONSTRUCTION



September 15, 2011

Jim Davies
Vice President
Taiga Consultants Ltd./ Leeward Capital Corp.
101, 2719-7th Ave N.E.
Calgary, Alberta T2A 2L9

Dear Mr. Davis:

RE: August 2011 Water Sampling Results

As per your request, water sampling was performed on the Nithi Mountain property on August 29, 2011. The sample locations were located on watercourses consistent with the sampling program undertaken in 2008. With the exception of two sites (A and C), which had been located on roadways that were no longer accessible due to recent logging activities and deactivations, samples were collected from consistent locations, as outlined in Table 1.

Table 1 – Aug 2011 Nithi Mountain Water Sample Locations

Site	2008 UTM (approx.)	2011 UTM	Description
Site A	379460 E 5981385 N	378633 E 5980635 N	Approximately 700m upstream of 2008 sample location (deactivated road)
Site C	380367 E 5981114 N	380292 E 5982389 N	Approximately 1.1 km upstream of 2008 sample location (deactivated road)
Site D	381302 E 5982528 N	same	Deactivated spur road approx.. 400 m from Foster Rd Extension, downstream of large beaver pond
Site F (Dup)	378736 E 5981850 N	same	Deactivated spur road approx. 300 m from Foster Rd Extension. Duplicate sample taken for QC
Burns Creek	374442 E 5980058 N	same	At bridge crossing of Nithi Pit Rd

The laboratory used (Caro Analytical) is consistent with the 2008 program. The attached laboratory results have not been processed for comparison to relevant water quality guidelines etc., however they will provide a historical record of water quality in the proximity of the Nithi Mountain development that will be invaluable in future Environmental Assessment applications. It is anticipated that there may be significant water quality changes when compared to 2008 results, reflecting the impacts of expansive logging activity in the area.

Recommendations

A sampling program at regular intervals (monthly, bi-monthly, or quarterly) is recommended for this property to establish a historical baseline that can be used in future studies and regulatory applications. Additional sampling locations at the north end of the site, near the Theta Zone, may be appropriate if development in this area continues.

DWB will be pleased to provide additional sampling services, and/or processing of data results, at your request.

Respectfully submitted,

Jody Watson, EIT
Environmental Engineer
WestCan Projects Ltd.

ATTCH: Caro - K1H1290
WestCan Ref.: 11173-150

CERTIFICATE OF ANALYSIS



CLIENT	DWB Consulting 1579-9th Ave. Prince George BC V2L 3R8	TEL	1(250)562-5541
		FAX	1(250)562-5561
ATTENTION	Jody Watson		
RECEIVED / TEMP	Aug-31-11 08:05 / 5.0 °C	WORK ORDER	K1H1290
REPORTED	Sep-09-11	PROJECT	Nithi Mtn
COC #(s)	32826	PROJECT INFO	11173-150

General Comments:

CARO Analytical Services employs methods which are based on those found in "Standard Methods for the Examination of Water and Wastewater", 21st Edition, 2005, published by the American Public Health Association (APHA); US EPA protocols found in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846", 3rd Edition; protocols published by the British Columbia Ministry of Environment (BCMOE); and/or CCME Canada-wide Standard Reference methods.

Methods not described in these publications are conducted according to procedures accepted by appropriate regulatory agencies, and/or are done in accordance with recognized professional standards using accepted testing methodologies and quality control efforts except where otherwise agreed to by the client.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. CARO is not responsible for any loss or damage resulting directly or indirectly from error or omission in the conduct of testing. Liability is limited to the cost of analysis. Samples will be disposed of 30 days after the test report has been issued unless otherwise agreed to in writing.

- All solids results are reported on a dry weight basis unless otherwise noted
- Units:
 - mg/kg = milligrams per kilogram, equivalent to parts per million (ppm)
 - mg/L = milligrams per litre, equivalent to parts per million (ppm)
 - ug/L = micrograms per litre, equivalent to parts per billion (ppb)
 - ug/g = micrograms per gram, equivalent to parts per million (ppm)
 - ug/m3 = micrograms per cubic meter of air
- "RDL" Reported detection limit
- "<" Less than reported detection limit
- "AO" Aesthetic objective
- "MAC" Maximum acceptable concentration (health-related guideline)
- "LAB" RMD = Richmond location, KEL = Kelowna location, EDM = Edmonton location, SUB = Subcontracted

Please contact CARO if more information is needed or to provide feedback on our services.

CARO Analytical Services

A handwritten signature in blue ink, appearing to read "JShanko", is written over a horizontal line.

Final Review Per: **Jennifer Shanko, ASCT**
Administration Coordinator

CARO Analytical Services

#120 12791 Clarke Place
Richmond, BC V6V 2H9
Tel: 604-279-1499 Fax: 604-279-1599

#102 3677 Highway 97N
Kelowna, BC V1X 5C3
Tel: 250-765-9646 Fax: 250-765-3893

9523 42 Avenue
Edmonton, AB T6E 5R2
Tel: 780-628-3737

www.caro.ca

SAMPLE DATA



CLIENT DWB Consulting
PROJECT Nithi Mtn

WORK ORDER # K1H1290
REPORTED Sep-09-11

Analyte	Result	RDL	Units	Prepared	Analyzed	Notes
---------	--------	-----	-------	----------	----------	-------

General Parameters

Site A (K1H1290-01) Matrix: Water Sampled: Aug-29-11

Alkalinity, Total as CaCO3	30.0	1.0	mg/L	Sep-01-11	Sep-01-11	
Bromide	< 0.05	0.05	mg/L	Aug-31-11	Sep-01-11	
Carbon, Total Organic	18.0	0.5	mg/L	Aug-31-11	Sep-01-11	
Chloride	0.46	0.10	mg/L	Aug-31-11	Sep-01-11	
Conductivity (EC)	70	2	uS/cm	Sep-01-11	Sep-01-11	
Fluoride	0.25	0.01	mg/L	Aug-31-11	Sep-01-11	
Hardness, Total (Total as CaCO3)	28.7	0.1	mg/L	Sep-01-11	Sep-06-11	
Hardness, Total (Diss. as CaCO3)	27	0.1	mg/L	Sep-01-11	Sep-03-11	
Nitrogen, Ammonia as N	0.01	0.01	mg/L	Aug-31-11	Sep-01-11	
Nitrogen, Nitrate+Nitrite as N	0.007	0.005	mg/L	Aug-31-11	Sep-01-11	
Nitrogen, Nitrate as N	0.007	0.005	mg/L	Aug-31-11	Sep-01-11	
Nitrogen, Nitrite as N	< 0.003	0.003	mg/L	Aug-31-11	Sep-01-11	
Nitrogen, Total Kjeldahl	0.48	0.05	mg/L	Aug-31-11	Sep-08-11	
Nitrogen, Total	0.483	0.050	mg/L	Aug-31-11	Sep-08-11	
pH	7.12	0.01	pH Units	Sep-01-11	Sep-01-11	
Phosphorus, Total	0.17	0.01	mg/L	Aug-31-11	Sep-06-11	
Phosphate, Ortho as P	0.081	0.005	mg/L	Aug-31-11	Sep-01-11	
Solids, Total Dissolved	48	5	mg/L	Sep-02-11	Sep-02-11	
Solids, Total Suspended	< 1	1	mg/L	Aug-31-11	Aug-31-11	
Sulfate	6.2	0.5	mg/L	Aug-31-11	Sep-01-11	
Turbidity	2.5	0.1	NTU	Aug-31-11	Aug-31-11	

Site D (K1H1290-02) Matrix: Water Sampled: Aug-29-11

Alkalinity, Total as CaCO3	13.6	1.0	mg/L	Sep-01-11	Sep-01-11	
Bromide	< 0.05	0.05	mg/L	Aug-31-11	Sep-01-11	
Carbon, Total Organic	19.7	0.5	mg/L	Aug-31-11	Sep-01-11	
Chloride	0.42	0.10	mg/L	Aug-31-11	Sep-01-11	
Conductivity (EC)	39	2	uS/cm	Sep-01-11	Sep-01-11	
Fluoride	0.16	0.01	mg/L	Aug-31-11	Sep-01-11	
Hardness, Total (Total as CaCO3)	15.7	0.1	mg/L	Sep-01-11	Sep-06-11	
Hardness, Total (Diss. as CaCO3)	13	0.1	mg/L	Sep-01-11	Sep-03-11	
Nitrogen, Ammonia as N	0.04	0.01	mg/L	Aug-31-11	Sep-01-11	
Nitrogen, Nitrate+Nitrite as N	0.031	0.005	mg/L	Aug-31-11	Sep-01-11	
Nitrogen, Nitrate as N	0.031	0.005	mg/L	Aug-31-11	Sep-01-11	
Nitrogen, Nitrite as N	< 0.003	0.003	mg/L	Aug-31-11	Sep-01-11	
Nitrogen, Total Kjeldahl	0.55	0.05	mg/L	Aug-31-11	Sep-08-11	
Nitrogen, Total	0.577	0.050	mg/L	Aug-31-11	Sep-08-11	
pH	6.43	0.01	pH Units	Sep-01-11	Sep-01-11	
Phosphorus, Total	0.12	0.01	mg/L	Aug-31-11	Sep-06-11	
Phosphate, Ortho as P	0.131	0.005	mg/L	Aug-31-11	Sep-01-11	
Solids, Total Dissolved	23	5	mg/L	Sep-02-11	Sep-02-11	
Solids, Total Suspended	80	1	mg/L	Aug-31-11	Aug-31-11	
Sulfate	1.7	0.5	mg/L	Aug-31-11	Sep-01-11	
Turbidity	88	0.1	NTU	Aug-31-11	Aug-31-11	

SAMPLE DATA



CLIENT
PROJECT

DWB Consulting
Nithi Mtn

WORK ORDER #
REPORTED

K1H1290
Sep-09-11

Analyte	Result	RDL	Units	Prepared	Analyzed	Notes
---------	--------	-----	-------	----------	----------	-------

General Parameters, Continued

Site C (K1H1290-03) Matrix: Water Sampled: Aug-29-11

Alkalinity, Total as CaCO ₃	4.6	1.0	mg/L	Sep-01-11	Sep-01-11	
Bromide	< 0.05	0.05	mg/L	Aug-31-11	Sep-01-11	
Carbon, Total Organic	15.7	0.5	mg/L	Aug-31-11	Sep-01-11	
Chloride	0.59	0.10	mg/L	Aug-31-11	Sep-01-11	
Conductivity (EC)	22	2	uS/cm	Sep-01-11	Sep-01-11	
Fluoride	0.03	0.01	mg/L	Aug-31-11	Sep-01-11	
Hardness, Total (Total as CaCO ₃)	7.0	0.1	mg/L	Sep-01-11	Sep-06-11	
Hardness, Total (Diss. as CaCO ₃)	7	0.1	mg/L	Sep-01-11	Sep-03-11	
Nitrogen, Ammonia as N	< 0.01	0.01	mg/L	Aug-31-11	Sep-01-11	
Nitrogen, Nitrate+Nitrite as N	0.050	0.005	mg/L	Aug-31-11	Sep-01-11	
Nitrogen, Nitrate as N	0.050	0.005	mg/L	Aug-31-11	Sep-01-11	
Nitrogen, Nitrite as N	< 0.003	0.003	mg/L	Aug-31-11	Sep-01-11	
Nitrogen, Total Kjeldahl	0.37	0.05	mg/L	Aug-31-11	Sep-08-11	
Nitrogen, Total	0.419	0.050	mg/L	Aug-31-11	Sep-08-11	
pH	6.53	0.01	pH Units	Sep-01-11	Sep-01-11	
Phosphorus, Total	< 0.01	0.01	mg/L	Aug-31-11	Sep-06-11	
Phosphate, Ortho as P	< 0.005	0.005	mg/L	Aug-31-11	Sep-01-11	
Solids, Total Dissolved	38	5	mg/L	Sep-02-11	Sep-02-11	
Solids, Total Suspended	2	1	mg/L	Aug-31-11	Aug-31-11	
Sulfate	1.5	0.5	mg/L	Aug-31-11	Sep-01-11	
Turbidity	3.2	0.1	NTU	Aug-31-11	Aug-31-11	

Site F (K1H1290-04) Matrix: Water Sampled: Aug-29-11

Alkalinity, Total as CaCO ₃	8.5	1.0	mg/L	Sep-01-11	Sep-01-11	
Bromide	< 0.05	0.05	mg/L	Aug-31-11	Sep-01-11	
Carbon, Total Organic	10.2	0.5	mg/L	Aug-31-11	Sep-01-11	
Chloride	0.37	0.10	mg/L	Aug-31-11	Sep-01-11	
Conductivity (EC)	37	2	uS/cm	Sep-01-11	Sep-01-11	
Fluoride	0.30	0.01	mg/L	Aug-31-11	Sep-01-11	
Hardness, Total (Total as CaCO ₃)	11.8	0.1	mg/L	Sep-01-11	Sep-06-11	
Hardness, Total (Diss. as CaCO ₃)	11	0.1	mg/L	Sep-01-11	Sep-03-11	
Nitrogen, Ammonia as N	0.01	0.01	mg/L	Aug-31-11	Sep-01-11	
Nitrogen, Nitrate+Nitrite as N	0.025	0.005	mg/L	Aug-31-11	Sep-01-11	
Nitrogen, Nitrate as N	0.025	0.005	mg/L	Aug-31-11	Sep-01-11	
Nitrogen, Nitrite as N	< 0.003	0.003	mg/L	Aug-31-11	Sep-01-11	
Nitrogen, Total Kjeldahl	0.25	0.05	mg/L	Aug-31-11	Sep-08-11	
Nitrogen, Total	0.272	0.050	mg/L	Aug-31-11	Sep-08-11	
pH	6.87	0.01	pH Units	Sep-01-11	Sep-01-11	
Phosphorus, Total	< 0.01	0.01	mg/L	Aug-31-11	Sep-06-11	
Phosphate, Ortho as P	< 0.005	0.005	mg/L	Aug-31-11	Sep-01-11	
Solids, Total Dissolved	43	5	mg/L	Sep-02-11	Sep-02-11	
Solids, Total Suspended	6	1	mg/L	Aug-31-11	Aug-31-11	
Sulfate	6.1	0.5	mg/L	Aug-31-11	Sep-01-11	
Turbidity	3.3	0.1	NTU	Aug-31-11	Aug-31-11	

SAMPLE DATA



CLIENT
PROJECT

DWB Consulting
Nithi Mtn

WORK ORDER #
REPORTED

K1H1290
Sep-09-11

Analyte	Result	RDL	Units	Prepared	Analyzed	Notes
---------	--------	-----	-------	----------	----------	-------

General Parameters, Continued

Burns Creek (K1H1290-05) Matrix: Water Sampled: Aug-29-11

Alkalinity, Total as CaCO3	69.6	1.0	mg/L	Sep-01-11	Sep-01-11	
Bromide	< 0.05	0.05	mg/L	Aug-31-11	Sep-01-11	
Carbon, Total Organic	7.9	0.5	mg/L	Aug-31-11	Sep-01-11	
Chloride	0.25	0.10	mg/L	Aug-31-11	Sep-01-11	
Conductivity (EC)	130	2	uS/cm	Sep-01-11	Sep-01-11	
Fluoride	0.32	0.01	mg/L	Aug-31-11	Sep-01-11	
Hardness, Total (Total as CaCO3)	51.2	0.1	mg/L	Sep-01-11	Sep-06-11	
Hardness, Total (Diss. as CaCO3)	49	0.1	mg/L	Sep-01-11	Sep-03-11	
Nitrogen, Ammonia as N	< 0.01	0.01	mg/L	Aug-31-11	Sep-01-11	
Nitrogen, Nitrate+Nitrite as N	0.029	0.005	mg/L	Aug-31-11	Sep-01-11	
Nitrogen, Nitrate as N	0.029	0.005	mg/L	Aug-31-11	Sep-01-11	
Nitrogen, Nitrite as N	< 0.003	0.003	mg/L	Aug-31-11	Sep-01-11	
Nitrogen, Total Kjeldahl	0.34	0.05	mg/L	Aug-31-11	Sep-08-11	
Nitrogen, Total	0.368	0.050	mg/L	Aug-31-11	Sep-08-11	
pH	7.32	0.01	pH Units	Sep-01-11	Sep-01-11	
Phosphorus, Total	0.02	0.01	mg/L	Aug-31-11	Sep-06-11	
Phosphate, Ortho as P	< 0.005	0.005	mg/L	Aug-31-11	Sep-01-11	
Solids, Total Dissolved	85	5	mg/L	Sep-02-11	Sep-02-11	
Solids, Total Suspended	9	1	mg/L	Aug-31-11	Aug-31-11	
Sulfate	2.3	0.5	mg/L	Aug-31-11	Sep-01-11	
Turbidity	1.6	0.1	NTU	Aug-31-11	Aug-31-11	

Dup (K1H1290-06) Matrix: Water Sampled: Aug-29-11

Alkalinity, Total as CaCO3	9.2	1.0	mg/L	Sep-01-11	Sep-01-11	
Bromide	< 0.05	0.05	mg/L	Aug-31-11	Sep-01-11	
Carbon, Total Organic	9.2	0.5	mg/L	Aug-31-11	Sep-01-11	
Chloride	0.36	0.10	mg/L	Aug-31-11	Sep-01-11	
Conductivity (EC)	37	2	uS/cm	Sep-01-11	Sep-01-11	
Fluoride	0.13	0.01	mg/L	Aug-31-11	Sep-01-11	
Hardness, Total (Total as CaCO3)	12.5	0.1	mg/L	Sep-01-11	Sep-06-11	
Hardness, Total (Diss. as CaCO3)	11	0.1	mg/L	Sep-01-11	Sep-03-11	
Nitrogen, Ammonia as N	0.02	0.01	mg/L	Aug-31-11	Sep-01-11	
Nitrogen, Nitrate+Nitrite as N	0.014	0.005	mg/L	Aug-31-11	Sep-01-11	
Nitrogen, Nitrate as N	0.014	0.005	mg/L	Aug-31-11	Sep-01-11	
Nitrogen, Nitrite as N	< 0.003	0.003	mg/L	Aug-31-11	Sep-01-11	
Nitrogen, Total Kjeldahl	0.28	0.05	mg/L	Aug-31-11	Sep-08-11	
Nitrogen, Total	0.290	0.050	mg/L	Aug-31-11	Sep-08-11	
pH	6.97	0.01	pH Units	Sep-01-11	Sep-01-11	
Phosphorus, Total	< 0.01	0.01	mg/L	Aug-31-11	Sep-06-11	
Phosphate, Ortho as P	< 0.005	0.005	mg/L	Aug-31-11	Sep-01-11	
Solids, Total Dissolved	44	5	mg/L	Sep-02-11	Sep-02-11	
Solids, Total Suspended	3	1	mg/L	Aug-31-11	Aug-31-11	
Sulfate	6.1	0.5	mg/L	Aug-31-11	Sep-01-11	
Turbidity	3.8	0.1	NTU	Aug-31-11	Aug-31-11	

Dissolved Metals by ICPMS

SAMPLE DATA



**CLIENT
PROJECT**

DWB Consulting
Nithi Mtn

**WORK ORDER #
REPORTED**

K1H1290
Sep-09-11

Analyte	Result	RDL	Units	Prepared	Analyzed	Notes
---------	--------	-----	-------	----------	----------	-------

Dissolved Metals by ICPMS, Continued

Site A (K1H1290-01) Matrix: Water Sampled: Aug-29-11

Aluminum, dissolved	266	2	ug/L	Sep-01-11	Sep-03-11	
Antimony, dissolved	0.05	0.05	ug/L	Sep-01-11	Sep-03-11	
Arsenic, dissolved	0.24	0.05	ug/L	Sep-01-11	Sep-03-11	
Barium, dissolved	7.9	0.2	ug/L	Sep-01-11	Sep-03-11	
Beryllium, dissolved	0.06	0.01	ug/L	Sep-01-11	Sep-03-11	
Bismuth, dissolved	0.009	0.002	ug/L	Sep-01-11	Sep-03-11	
Boron, dissolved	1	1	ug/L	Sep-01-11	Sep-03-11	
Cadmium, dissolved	0.050	0.002	ug/L	Sep-01-11	Sep-03-11	
Calcium, dissolved	6500	50	ug/L	Sep-01-11	Sep-03-11	
Chromium, dissolved	0.3	0.1	ug/L	Sep-01-11	Sep-03-11	
Cobalt, dissolved	0.085	0.005	ug/L	Sep-01-11	Sep-03-11	
Copper, dissolved	4.0	0.1	ug/L	Sep-01-11	Sep-03-11	
Iron, dissolved	224	2	ug/L	Sep-01-11	Sep-03-11	
Lead, dissolved	0.06	0.05	ug/L	Sep-01-11	Sep-03-11	
Lithium, dissolved	1.97	0.05	ug/L	Sep-01-11	Sep-03-11	
Magnesium, dissolved	2730	5	ug/L	Sep-01-11	Sep-03-11	
Manganese, dissolved	57.3	0.05	ug/L	Sep-01-11	Sep-03-11	
Mercury, dissolved	< 0.01	0.01	ug/L	Sep-01-11	Sep-03-11	
Molybdenum, dissolved	112	0.01	ug/L	Sep-01-11	Sep-03-11	
Nickel, dissolved	0.72	0.02	ug/L	Sep-01-11	Sep-03-11	
Phosphorus, dissolved	9	5	ug/L	Sep-01-11	Sep-03-11	
Potassium, dissolved	1280	5	ug/L	Sep-01-11	Sep-03-11	
Selenium, dissolved	0.2	0.1	ug/L	Sep-01-11	Sep-03-11	
Silicon, dissolved	7990	100	ug/L	Sep-01-11	Sep-03-11	
Silver, dissolved	0.02	0.01	ug/L	Sep-01-11	Sep-03-11	
Sodium, dissolved	3780	5	ug/L	Sep-01-11	Sep-03-11	
Strontium, dissolved	72.1	0.1	ug/L	Sep-01-11	Sep-03-11	
Tellurium, dissolved	< 0.05	0.05	ug/L	Sep-01-11	Sep-03-11	
Thallium, dissolved	0.005	0.004	ug/L	Sep-01-11	Sep-03-11	
Thorium, dissolved	0.09	0.01	ug/L	Sep-01-11	Sep-03-11	
Tin, dissolved	< 0.05	0.05	ug/L	Sep-01-11	Sep-03-11	
Titanium, dissolved	5.2	0.2	ug/L	Sep-01-11	Sep-03-11	
Uranium, dissolved	0.466	0.001	ug/L	Sep-01-11	Sep-03-11	
Vanadium, dissolved	0.5	0.2	ug/L	Sep-01-11	Sep-03-11	
Zinc, dissolved	4	1	ug/L	Sep-01-11	Sep-03-11	
Zirconium, dissolved	0.81	0.01	ug/L	Sep-01-11	Sep-03-11	

Site D (K1H1290-02) Matrix: Water Sampled: Aug-29-11

Aluminum, dissolved	418	2	ug/L	Sep-01-11	Sep-03-11	
Antimony, dissolved	0.14	0.05	ug/L	Sep-01-11	Sep-03-11	
Arsenic, dissolved	0.64	0.05	ug/L	Sep-01-11	Sep-03-11	
Barium, dissolved	14.4	0.2	ug/L	Sep-01-11	Sep-03-11	
Beryllium, dissolved	0.15	0.01	ug/L	Sep-01-11	Sep-03-11	
Bismuth, dissolved	0.028	0.002	ug/L	Sep-01-11	Sep-03-11	
Boron, dissolved	2	1	ug/L	Sep-01-11	Sep-03-11	
Cadmium, dissolved	0.059	0.002	ug/L	Sep-01-11	Sep-03-11	

SAMPLE DATA



**CLIENT
PROJECT**

DWB Consulting
Nithi Mtn

**WORK ORDER #
REPORTED**

K1H1290
Sep-09-11

Analyte	Result	RDL	Units	Prepared	Analyzed	Notes
---------	--------	-----	-------	----------	----------	-------

Dissolved Metals by ICPMS, Continued

Site D (K1H1290-02) Matrix: Water Sampled: Aug-29-11, Continued

Calcium, dissolved	3580	50	ug/L	Sep-01-11	Sep-03-11	
Chromium, dissolved	0.5	0.1	ug/L	Sep-01-11	Sep-03-11	
Cobalt, dissolved	0.690	0.005	ug/L	Sep-01-11	Sep-03-11	
Copper, dissolved	4.7	0.1	ug/L	Sep-01-11	Sep-03-11	
Iron, dissolved	501	2	ug/L	Sep-01-11	Sep-03-11	
Lead, dissolved	0.37	0.05	ug/L	Sep-01-11	Sep-03-11	
Lithium, dissolved	0.44	0.05	ug/L	Sep-01-11	Sep-03-11	
Magnesium, dissolved	1060	5	ug/L	Sep-01-11	Sep-03-11	
Manganese, dissolved	465	0.05	ug/L	Sep-01-11	Sep-03-11	
Mercury, dissolved	< 0.01	0.01	ug/L	Sep-01-11	Sep-03-11	
Molybdenum, dissolved	32.2	0.01	ug/L	Sep-01-11	Sep-03-11	
Nickel, dissolved	0.86	0.02	ug/L	Sep-01-11	Sep-03-11	
Phosphorus, dissolved	16	5	ug/L	Sep-01-11	Sep-03-11	
Potassium, dissolved	822	5	ug/L	Sep-01-11	Sep-03-11	
Selenium, dissolved	0.3	0.1	ug/L	Sep-01-11	Sep-03-11	
Silicon, dissolved	6280	100	ug/L	Sep-01-11	Sep-03-11	
Silver, dissolved	< 0.01	0.01	ug/L	Sep-01-11	Sep-03-11	
Sodium, dissolved	2320	5	ug/L	Sep-01-11	Sep-03-11	
Strontium, dissolved	44.1	0.1	ug/L	Sep-01-11	Sep-03-11	
Tellurium, dissolved	< 0.05	0.05	ug/L	Sep-01-11	Sep-03-11	
Thallium, dissolved	0.013	0.004	ug/L	Sep-01-11	Sep-03-11	
Thorium, dissolved	0.43	0.01	ug/L	Sep-01-11	Sep-03-11	
Tin, dissolved	< 0.05	0.05	ug/L	Sep-01-11	Sep-03-11	
Titanium, dissolved	9.3	0.2	ug/L	Sep-01-11	Sep-03-11	
Uranium, dissolved	1.59	0.001	ug/L	Sep-01-11	Sep-03-11	
Vanadium, dissolved	1.5	0.2	ug/L	Sep-01-11	Sep-03-11	
Zinc, dissolved	6	1	ug/L	Sep-01-11	Sep-03-11	
Zirconium, dissolved	1.81	0.01	ug/L	Sep-01-11	Sep-03-11	

Site C (K1H1290-03) Matrix: Water Sampled: Aug-29-11

Aluminum, dissolved	350	2	ug/L	Sep-01-11	Sep-03-11	
Antimony, dissolved	0.05	0.05	ug/L	Sep-01-11	Sep-03-11	
Arsenic, dissolved	0.17	0.05	ug/L	Sep-01-11	Sep-03-11	
Barium, dissolved	5.7	0.2	ug/L	Sep-01-11	Sep-03-11	
Beryllium, dissolved	0.16	0.01	ug/L	Sep-01-11	Sep-03-11	
Bismuth, dissolved	0.011	0.002	ug/L	Sep-01-11	Sep-03-11	
Boron, dissolved	3	1	ug/L	Sep-01-11	Sep-03-11	
Cadmium, dissolved	0.026	0.002	ug/L	Sep-01-11	Sep-03-11	
Calcium, dissolved	1690	50	ug/L	Sep-01-11	Sep-03-11	
Chromium, dissolved	0.3	0.1	ug/L	Sep-01-11	Sep-03-11	
Cobalt, dissolved	0.080	0.005	ug/L	Sep-01-11	Sep-03-11	
Copper, dissolved	4.3	0.1	ug/L	Sep-01-11	Sep-03-11	
Iron, dissolved	200	2	ug/L	Sep-01-11	Sep-03-11	
Lead, dissolved	0.12	0.05	ug/L	Sep-01-11	Sep-03-11	
Lithium, dissolved	0.76	0.05	ug/L	Sep-01-11	Sep-03-11	
Magnesium, dissolved	649	5	ug/L	Sep-01-11	Sep-03-11	

SAMPLE DATA



CLIENT
PROJECT

DWB Consulting
Nithi Mtn

WORK ORDER #
REPORTED

K1H1290
Sep-09-11

Analyte	Result	RDL	Units	Prepared	Analyzed	Notes
---------	--------	-----	-------	----------	----------	-------

Dissolved Metals by ICPMS, Continued

Site C (K1H1290-03) Matrix: Water Sampled: Aug-29-11, Continued

Manganese, dissolved	14.9	0.05	ug/L	Sep-01-11	Sep-03-11	
Mercury, dissolved	< 0.01	0.01	ug/L	Sep-01-11	Sep-03-11	
Molybdenum, dissolved	20.6	0.01	ug/L	Sep-01-11	Sep-03-11	
Nickel, dissolved	0.55	0.02	ug/L	Sep-01-11	Sep-03-11	
Phosphorus, dissolved	8	5	ug/L	Sep-01-11	Sep-03-11	
Potassium, dissolved	532	5	ug/L	Sep-01-11	Sep-03-11	
Selenium, dissolved	0.4	0.1	ug/L	Sep-01-11	Sep-03-11	
Silicon, dissolved	5960	100	ug/L	Sep-01-11	Sep-03-11	
Silver, dissolved	< 0.01	0.01	ug/L	Sep-01-11	Sep-03-11	
Sodium, dissolved	2130	5	ug/L	Sep-01-11	Sep-03-11	
Strontium, dissolved	26.6	0.1	ug/L	Sep-01-11	Sep-03-11	
Tellurium, dissolved	< 0.05	0.05	ug/L	Sep-01-11	Sep-03-11	
Thallium, dissolved	0.007	0.004	ug/L	Sep-01-11	Sep-03-11	
Thorium, dissolved	0.39	0.01	ug/L	Sep-01-11	Sep-03-11	
Tin, dissolved	0.05	0.05	ug/L	Sep-01-11	Sep-03-11	
Titanium, dissolved	3.8	0.2	ug/L	Sep-01-11	Sep-03-11	
Uranium, dissolved	0.985	0.001	ug/L	Sep-01-11	Sep-03-11	
Vanadium, dissolved	0.4	0.2	ug/L	Sep-01-11	Sep-03-11	
Zinc, dissolved	38	1	ug/L	Sep-01-11	Sep-03-11	
Zirconium, dissolved	0.85	0.01	ug/L	Sep-01-11	Sep-03-11	

Site F (K1H1290-04) Matrix: Water Sampled: Aug-29-11

Aluminum, dissolved	262	2	ug/L	Sep-01-11	Sep-03-11	
Antimony, dissolved	0.06	0.05	ug/L	Sep-01-11	Sep-03-11	
Arsenic, dissolved	0.13	0.05	ug/L	Sep-01-11	Sep-03-11	
Barium, dissolved	5.7	0.2	ug/L	Sep-01-11	Sep-03-11	
Beryllium, dissolved	0.06	0.01	ug/L	Sep-01-11	Sep-03-11	
Bismuth, dissolved	0.007	0.002	ug/L	Sep-01-11	Sep-03-11	
Boron, dissolved	3	1	ug/L	Sep-01-11	Sep-03-11	
Cadmium, dissolved	0.035	0.002	ug/L	Sep-01-11	Sep-03-11	
Calcium, dissolved	2350	50	ug/L	Sep-01-11	Sep-03-11	
Chromium, dissolved	0.2	0.1	ug/L	Sep-01-11	Sep-03-11	
Cobalt, dissolved	0.056	0.005	ug/L	Sep-01-11	Sep-03-11	
Copper, dissolved	5.3	0.1	ug/L	Sep-01-11	Sep-03-11	
Iron, dissolved	124	2	ug/L	Sep-01-11	Sep-03-11	
Lead, dissolved	0.07	0.05	ug/L	Sep-01-11	Sep-03-11	
Lithium, dissolved	1.95	0.05	ug/L	Sep-01-11	Sep-03-11	
Magnesium, dissolved	1260	5	ug/L	Sep-01-11	Sep-03-11	
Manganese, dissolved	5.06	0.05	ug/L	Sep-01-11	Sep-03-11	
Mercury, dissolved	< 0.01	0.01	ug/L	Sep-01-11	Sep-03-11	
Molybdenum, dissolved	20.1	0.01	ug/L	Sep-01-11	Sep-03-11	
Nickel, dissolved	0.71	0.02	ug/L	Sep-01-11	Sep-03-11	
Phosphorus, dissolved	7	5	ug/L	Sep-01-11	Sep-03-11	
Potassium, dissolved	663	5	ug/L	Sep-01-11	Sep-03-11	
Selenium, dissolved	0.2	0.1	ug/L	Sep-01-11	Sep-03-11	
Silicon, dissolved	7920	100	ug/L	Sep-01-11	Sep-03-11	

SAMPLE DATA



CLIENT
PROJECT

DWB Consulting
Nithi Mtn

WORK ORDER #
REPORTED

K1H1290
Sep-09-11

Analyte	Result	RDL	Units	Prepared	Analyzed	Notes
---------	--------	-----	-------	----------	----------	-------

Dissolved Metals by ICPMS, Continued

Site F (K1H1290-04) Matrix: Water Sampled: Aug-29-11, Continued

Silver, dissolved	0.01	0.01	ug/L	Sep-01-11	Sep-03-11	
Sodium, dissolved	2770	5	ug/L	Sep-01-11	Sep-03-11	
Strontium, dissolved	28.9	0.1	ug/L	Sep-01-11	Sep-03-11	
Tellurium, dissolved	< 0.05	0.05	ug/L	Sep-01-11	Sep-03-11	
Thallium, dissolved	< 0.004	0.004	ug/L	Sep-01-11	Sep-03-11	
Thorium, dissolved	0.07	0.01	ug/L	Sep-01-11	Sep-03-11	
Tin, dissolved	< 0.05	0.05	ug/L	Sep-01-11	Sep-03-11	
Titanium, dissolved	4.3	0.2	ug/L	Sep-01-11	Sep-03-11	
Uranium, dissolved	0.385	0.001	ug/L	Sep-01-11	Sep-03-11	
Vanadium, dissolved	0.3	0.2	ug/L	Sep-01-11	Sep-03-11	
Zinc, dissolved	8	1	ug/L	Sep-01-11	Sep-03-11	
Zirconium, dissolved	0.51	0.01	ug/L	Sep-01-11	Sep-03-11	

Burns Creek (K1H1290-05) Matrix: Water Sampled: Aug-29-11

Aluminum, dissolved	9	2	ug/L	Sep-01-11	Sep-03-11	
Antimony, dissolved	0.07	0.05	ug/L	Sep-01-11	Sep-03-11	
Arsenic, dissolved	0.62	0.05	ug/L	Sep-01-11	Sep-03-11	
Barium, dissolved	15.1	0.2	ug/L	Sep-01-11	Sep-03-11	
Beryllium, dissolved	< 0.01	0.01	ug/L	Sep-01-11	Sep-03-11	
Bismuth, dissolved	< 0.002	0.002	ug/L	Sep-01-11	Sep-03-11	
Boron, dissolved	2	1	ug/L	Sep-01-11	Sep-03-11	
Cadmium, dissolved	0.004	0.002	ug/L	Sep-01-11	Sep-03-11	
Calcium, dissolved	14000	50	ug/L	Sep-01-11	Sep-03-11	
Chromium, dissolved	< 0.1	0.1	ug/L	Sep-01-11	Sep-03-11	
Cobalt, dissolved	0.032	0.005	ug/L	Sep-01-11	Sep-03-11	
Copper, dissolved	1.0	0.1	ug/L	Sep-01-11	Sep-03-11	
Iron, dissolved	137	2	ug/L	Sep-01-11	Sep-03-11	
Lead, dissolved	< 0.05	0.05	ug/L	Sep-01-11	Sep-03-11	
Lithium, dissolved	1.23	0.05	ug/L	Sep-01-11	Sep-03-11	
Magnesium, dissolved	3470	5	ug/L	Sep-01-11	Sep-03-11	
Manganese, dissolved	29.4	0.05	ug/L	Sep-01-11	Sep-03-11	
Mercury, dissolved	< 0.01	0.01	ug/L	Sep-01-11	Sep-03-11	
Molybdenum, dissolved	2.32	0.01	ug/L	Sep-01-11	Sep-03-11	
Nickel, dissolved	0.24	0.02	ug/L	Sep-01-11	Sep-03-11	
Phosphorus, dissolved	11	5	ug/L	Sep-01-11	Sep-03-11	
Potassium, dissolved	675	5	ug/L	Sep-01-11	Sep-03-11	
Selenium, dissolved	< 0.1	0.1	ug/L	Sep-01-11	Sep-03-11	
Silicon, dissolved	5930	100	ug/L	Sep-01-11	Sep-03-11	
Silver, dissolved	< 0.01	0.01	ug/L	Sep-01-11	Sep-03-11	
Sodium, dissolved	4480	5	ug/L	Sep-01-11	Sep-03-11	
Strontium, dissolved	136	0.1	ug/L	Sep-01-11	Sep-03-11	
Tellurium, dissolved	< 0.05	0.05	ug/L	Sep-01-11	Sep-03-11	
Thallium, dissolved	< 0.004	0.004	ug/L	Sep-01-11	Sep-03-11	
Thorium, dissolved	< 0.01	0.01	ug/L	Sep-01-11	Sep-03-11	
Tin, dissolved	< 0.05	0.05	ug/L	Sep-01-11	Sep-03-11	
Titanium, dissolved	< 0.2	0.2	ug/L	Sep-01-11	Sep-03-11	

SAMPLE DATA



CLIENT
PROJECT

DWB Consulting
Nithi Mtn

WORK ORDER #
REPORTED

K1H1290
Sep-09-11

Analyte	Result	RDL	Units	Prepared	Analyzed	Notes
---------	--------	-----	-------	----------	----------	-------

Dissolved Metals by ICPMS, Continued

Burns Creek (K1H1290-05) Matrix: Water Sampled: Aug-29-11, Continued

Uranium, dissolved	0.101	0.001	ug/L	Sep-01-11	Sep-03-11	
Vanadium, dissolved	0.3	0.2	ug/L	Sep-01-11	Sep-03-11	
Zinc, dissolved	5	1	ug/L	Sep-01-11	Sep-03-11	
Zirconium, dissolved	0.13	0.01	ug/L	Sep-01-11	Sep-03-11	

Dup (K1H1290-06) Matrix: Water Sampled: Aug-29-11

Aluminum, dissolved	276	2	ug/L	Sep-01-11	Sep-03-11	
Antimony, dissolved	< 0.05	0.05	ug/L	Sep-01-11	Sep-03-11	
Arsenic, dissolved	0.12	0.05	ug/L	Sep-01-11	Sep-03-11	
Barium, dissolved	5.8	0.2	ug/L	Sep-01-11	Sep-03-11	
Beryllium, dissolved	0.06	0.01	ug/L	Sep-01-11	Sep-03-11	
Bismuth, dissolved	0.008	0.002	ug/L	Sep-01-11	Sep-03-11	
Boron, dissolved	3	1	ug/L	Sep-01-11	Sep-03-11	
Cadmium, dissolved	0.038	0.002	ug/L	Sep-01-11	Sep-03-11	
Calcium, dissolved	2350	50	ug/L	Sep-01-11	Sep-03-11	
Chromium, dissolved	0.2	0.1	ug/L	Sep-01-11	Sep-03-11	
Cobalt, dissolved	0.060	0.005	ug/L	Sep-01-11	Sep-03-11	
Copper, dissolved	5.8	0.1	ug/L	Sep-01-11	Sep-03-11	
Iron, dissolved	134	2	ug/L	Sep-01-11	Sep-03-11	
Lead, dissolved	0.07	0.05	ug/L	Sep-01-11	Sep-03-11	
Lithium, dissolved	1.94	0.05	ug/L	Sep-01-11	Sep-03-11	
Magnesium, dissolved	1230	5	ug/L	Sep-01-11	Sep-03-11	
Manganese, dissolved	5.47	0.05	ug/L	Sep-01-11	Sep-03-11	
Mercury, dissolved	< 0.01	0.01	ug/L	Sep-01-11	Sep-03-11	
Molybdenum, dissolved	19.9	0.01	ug/L	Sep-01-11	Sep-03-11	
Nickel, dissolved	0.78	0.02	ug/L	Sep-01-11	Sep-03-11	
Phosphorus, dissolved	7	5	ug/L	Sep-01-11	Sep-03-11	
Potassium, dissolved	661	5	ug/L	Sep-01-11	Sep-03-11	
Selenium, dissolved	0.2	0.1	ug/L	Sep-01-11	Sep-03-11	
Silicon, dissolved	7760	100	ug/L	Sep-01-11	Sep-03-11	
Silver, dissolved	0.02	0.01	ug/L	Sep-01-11	Sep-03-11	
Sodium, dissolved	2750	5	ug/L	Sep-01-11	Sep-03-11	
Strontium, dissolved	28.3	0.1	ug/L	Sep-01-11	Sep-03-11	
Tellurium, dissolved	< 0.05	0.05	ug/L	Sep-01-11	Sep-03-11	
Thallium, dissolved	0.005	0.004	ug/L	Sep-01-11	Sep-03-11	
Thorium, dissolved	0.07	0.01	ug/L	Sep-01-11	Sep-03-11	
Tin, dissolved	< 0.05	0.05	ug/L	Sep-01-11	Sep-03-11	
Titanium, dissolved	4.7	0.2	ug/L	Sep-01-11	Sep-03-11	
Uranium, dissolved	0.389	0.001	ug/L	Sep-01-11	Sep-03-11	
Vanadium, dissolved	0.3	0.2	ug/L	Sep-01-11	Sep-03-11	
Zinc, dissolved	12	1	ug/L	Sep-01-11	Sep-03-11	
Zirconium, dissolved	0.59	0.01	ug/L	Sep-01-11	Sep-03-11	

Total Recoverable Metals by ICPMS

SAMPLE DATA



**CLIENT
PROJECT**

DWB Consulting
Nithi Mtn

**WORK ORDER #
REPORTED**

K1H1290
Sep-09-11

Analyte	Result	RDL	Units	Prepared	Analyzed	Notes
---------	--------	-----	-------	----------	----------	-------

Total Recoverable Metals by ICPMS, Continued

Site A (K1H1290-01) Matrix: Water Sampled: Aug-29-11

Aluminum	309	2	ug/L	Sep-01-11	Sep-06-11	
Antimony	0.07	0.05	ug/L	Sep-01-11	Sep-06-11	
Arsenic	0.29	0.05	ug/L	Sep-01-11	Sep-06-11	
Barium	8.2	0.2	ug/L	Sep-01-11	Sep-06-11	
Beryllium	0.07	0.01	ug/L	Sep-01-11	Sep-06-11	
Bismuth	0.014	0.002	ug/L	Sep-01-11	Sep-06-11	
Boron	2	1	ug/L	Sep-01-11	Sep-06-11	
Cadmium	0.051	0.002	ug/L	Sep-01-11	Sep-06-11	
Calcium	6820	50	ug/L	Sep-01-11	Sep-06-11	
Chromium	0.5	0.1	ug/L	Sep-01-11	Sep-06-11	
Cobalt	0.108	0.005	ug/L	Sep-01-11	Sep-06-11	
Copper	4.4	0.1	ug/L	Sep-01-11	Sep-06-11	
Iron	308	2	ug/L	Sep-01-11	Sep-06-11	
Lead	0.08	0.05	ug/L	Sep-01-11	Sep-06-11	
Lithium	2.11	0.05	ug/L	Sep-01-11	Sep-06-11	
Magnesium	2820	5.0	ug/L	Sep-01-11	Sep-06-11	
Manganese	77.3	0.05	ug/L	Sep-01-11	Sep-06-11	
Mercury	0.01	0.01	ug/L	Sep-01-11	Sep-06-11	
Molybdenum	109	0.01	ug/L	Sep-01-11	Sep-06-11	
Nickel	0.80	0.02	ug/L	Sep-01-11	Sep-06-11	
Phosphorus	18	5	ug/L	Sep-01-11	Sep-06-11	
Potassium	1250	5	ug/L	Sep-01-11	Sep-06-11	
Selenium	0.3	0.1	ug/L	Sep-01-11	Sep-06-11	
Silicon	7300	100	ug/L	Sep-01-11	Sep-06-11	
Silver	0.04	0.01	ug/L	Sep-01-11	Sep-06-11	
Sodium	3950	5	ug/L	Sep-01-11	Sep-06-11	
Strontium	70.1	0.1	ug/L	Sep-01-11	Sep-06-11	
Tellurium	< 0.05	0.05	ug/L	Sep-01-11	Sep-06-11	
Thallium	0.005	0.004	ug/L	Sep-01-11	Sep-06-11	
Thorium	0.06	0.01	ug/L	Sep-01-11	Sep-06-11	
Tin	< 0.05	0.05	ug/L	Sep-01-11	Sep-06-11	
Titanium	4.2	0.2	ug/L	Sep-01-11	Sep-06-11	
Uranium	0.525	0.001	ug/L	Sep-01-11	Sep-06-11	
Vanadium	0.8	0.2	ug/L	Sep-01-11	Sep-06-11	
Zinc	3	1	ug/L	Sep-01-11	Sep-06-11	
Zirconium	0.48	0.01	ug/L	Sep-01-11	Sep-06-11	

Site D (K1H1290-02) Matrix: Water Sampled: Aug-29-11

Aluminum	3110	2	ug/L	Sep-01-11	Sep-06-11	
Antimony	0.13	0.05	ug/L	Sep-01-11	Sep-06-11	
Arsenic	1.22	0.05	ug/L	Sep-01-11	Sep-06-11	
Barium	47.9	0.2	ug/L	Sep-01-11	Sep-06-11	
Beryllium	0.27	0.01	ug/L	Sep-01-11	Sep-06-11	
Bismuth	0.155	0.002	ug/L	Sep-01-11	Sep-06-11	
Boron	2	1	ug/L	Sep-01-11	Sep-06-11	
Cadmium	0.083	0.002	ug/L	Sep-01-11	Sep-06-11	

SAMPLE DATA



**CLIENT
PROJECT**

DWB Consulting
Nithi Mtn

**WORK ORDER #
REPORTED**

K1H1290
Sep-09-11

Analyte	Result	RDL	Units	Prepared	Analyzed	Notes
---------	--------	-----	-------	----------	----------	-------

Total Recoverable Metals by ICPMS, Continued

Site D (K1H1290-02) Matrix: Water Sampled: Aug-29-11, Continued

Calcium	3580	50	ug/L	Sep-01-11	Sep-06-11	
Chromium	2.4	0.1	ug/L	Sep-01-11	Sep-06-11	
Cobalt	1.87	0.005	ug/L	Sep-01-11	Sep-06-11	
Copper	9.3	0.1	ug/L	Sep-01-11	Sep-06-11	
Iron	3450	2	ug/L	Sep-01-11	Sep-06-11	
Lead	2.69	0.05	ug/L	Sep-01-11	Sep-06-11	
Lithium	1.53	0.05	ug/L	Sep-01-11	Sep-06-11	
Magnesium	1640	5.0	ug/L	Sep-01-11	Sep-06-11	
Manganese	570	0.05	ug/L	Sep-01-11	Sep-06-11	
Mercury	0.02	0.01	ug/L	Sep-01-11	Sep-06-11	
Molybdenum	35.3	0.01	ug/L	Sep-01-11	Sep-06-11	
Nickel	2.34	0.02	ug/L	Sep-01-11	Sep-06-11	
Phosphorus	110	5	ug/L	Sep-01-11	Sep-06-11	
Potassium	1220	5	ug/L	Sep-01-11	Sep-06-11	
Selenium	0.5	0.1	ug/L	Sep-01-11	Sep-06-11	
Silicon	10000	100	ug/L	Sep-01-11	Sep-06-11	
Silver	0.06	0.01	ug/L	Sep-01-11	Sep-06-11	
Sodium	2430	5	ug/L	Sep-01-11	Sep-06-11	
Strontium	50.9	0.1	ug/L	Sep-01-11	Sep-06-11	
Tellurium	< 0.05	0.05	ug/L	Sep-01-11	Sep-06-11	
Thallium	0.055	0.004	ug/L	Sep-01-11	Sep-06-11	
Thorium	0.61	0.01	ug/L	Sep-01-11	Sep-06-11	
Tin	0.06	0.05	ug/L	Sep-01-11	Sep-06-11	
Titanium	53.5	0.2	ug/L	Sep-01-11	Sep-06-11	
Uranium	2.35	0.001	ug/L	Sep-01-11	Sep-06-11	
Vanadium	6.0	0.2	ug/L	Sep-01-11	Sep-06-11	
Zinc	11	1	ug/L	Sep-01-11	Sep-06-11	
Zirconium	1.4	0.01	ug/L	Sep-01-11	Sep-06-11	

Site C (K1H1290-03) Matrix: Water Sampled: Aug-29-11

Aluminum	462	2	ug/L	Sep-01-11	Sep-06-11	
Antimony	0.06	0.05	ug/L	Sep-01-11	Sep-06-11	
Arsenic	0.23	0.05	ug/L	Sep-01-11	Sep-06-11	
Barium	6.7	0.2	ug/L	Sep-01-11	Sep-06-11	
Beryllium	0.17	0.01	ug/L	Sep-01-11	Sep-06-11	
Bismuth	0.025	0.002	ug/L	Sep-01-11	Sep-06-11	
Boron	2	1	ug/L	Sep-01-11	Sep-06-11	
Cadmium	0.028	0.002	ug/L	Sep-01-11	Sep-06-11	
Calcium	1690	50	ug/L	Sep-01-11	Sep-06-11	
Chromium	0.5	0.1	ug/L	Sep-01-11	Sep-06-11	
Cobalt	0.112	0.005	ug/L	Sep-01-11	Sep-06-11	
Copper	4.5	0.1	ug/L	Sep-01-11	Sep-06-11	
Iron	361	2	ug/L	Sep-01-11	Sep-06-11	
Lead	0.20	0.05	ug/L	Sep-01-11	Sep-06-11	
Lithium	0.84	0.05	ug/L	Sep-01-11	Sep-06-11	
Magnesium	676	5.0	ug/L	Sep-01-11	Sep-06-11	

SAMPLE DATA



**CLIENT
PROJECT**

DWB Consulting
Nithi Mtn

**WORK ORDER #
REPORTED**

K1H1290
Sep-09-11

Analyte	Result	RDL	Units	Prepared	Analyzed	Notes
---------	--------	-----	-------	----------	----------	-------

Total Recoverable Metals by ICPMS, Continued

Site C (K1H1290-03) Matrix: Water Sampled: Aug-29-11, Continued

Manganese	20.2	0.05	ug/L	Sep-01-11	Sep-06-11	
Mercury	0.01	0.01	ug/L	Sep-01-11	Sep-06-11	
Molybdenum	20.3	0.01	ug/L	Sep-01-11	Sep-06-11	
Nickel	0.60	0.02	ug/L	Sep-01-11	Sep-06-11	
Phosphorus	13	5	ug/L	Sep-01-11	Sep-06-11	
Potassium	518	5	ug/L	Sep-01-11	Sep-06-11	
Selenium	0.2	0.1	ug/L	Sep-01-11	Sep-06-11	
Silicon	5300	100	ug/L	Sep-01-11	Sep-06-11	
Silver	0.03	0.01	ug/L	Sep-01-11	Sep-06-11	
Sodium	2110	5	ug/L	Sep-01-11	Sep-06-11	
Strontium	25.1	0.1	ug/L	Sep-01-11	Sep-06-11	
Tellurium	< 0.05	0.05	ug/L	Sep-01-11	Sep-06-11	
Thallium	0.009	0.004	ug/L	Sep-01-11	Sep-06-11	
Thorium	0.31	0.01	ug/L	Sep-01-11	Sep-06-11	
Tin	< 0.05	0.05	ug/L	Sep-01-11	Sep-06-11	
Titanium	5.3	0.2	ug/L	Sep-01-11	Sep-06-11	
Uranium	1.09	0.001	ug/L	Sep-01-11	Sep-06-11	
Vanadium	0.7	0.2	ug/L	Sep-01-11	Sep-06-11	
Zinc	33	1	ug/L	Sep-01-11	Sep-06-11	
Zirconium	0.51	0.01	ug/L	Sep-01-11	Sep-06-11	

Site F (K1H1290-04) Matrix: Water Sampled: Aug-29-11

Aluminum	374	2	ug/L	Sep-01-11	Sep-06-11	
Antimony	0.06	0.05	ug/L	Sep-01-11	Sep-06-11	
Arsenic	0.18	0.05	ug/L	Sep-01-11	Sep-06-11	
Barium	6.7	0.2	ug/L	Sep-01-11	Sep-06-11	
Beryllium	0.07	0.01	ug/L	Sep-01-11	Sep-06-11	
Bismuth	0.017	0.002	ug/L	Sep-01-11	Sep-06-11	
Boron	1	1	ug/L	Sep-01-11	Sep-06-11	
Cadmium	0.045	0.002	ug/L	Sep-01-11	Sep-06-11	
Calcium	2510	50	ug/L	Sep-01-11	Sep-06-11	
Chromium	0.4	0.1	ug/L	Sep-01-11	Sep-06-11	
Cobalt	0.090	0.005	ug/L	Sep-01-11	Sep-06-11	
Copper	6.4	0.1	ug/L	Sep-01-11	Sep-06-11	
Iron	260	2	ug/L	Sep-01-11	Sep-06-11	
Lead	0.15	0.05	ug/L	Sep-01-11	Sep-06-11	
Lithium	2.09	0.05	ug/L	Sep-01-11	Sep-06-11	
Magnesium	1350	5.0	ug/L	Sep-01-11	Sep-06-11	
Manganese	9.54	0.05	ug/L	Sep-01-11	Sep-06-11	
Mercury	< 0.01	0.01	ug/L	Sep-01-11	Sep-06-11	
Molybdenum	19.9	0.01	ug/L	Sep-01-11	Sep-06-11	
Nickel	0.85	0.02	ug/L	Sep-01-11	Sep-06-11	
Phosphorus	16	5	ug/L	Sep-01-11	Sep-06-11	
Potassium	683	5	ug/L	Sep-01-11	Sep-06-11	
Selenium	0.2	0.1	ug/L	Sep-01-11	Sep-06-11	
Silicon	7000	100	ug/L	Sep-01-11	Sep-06-11	

SAMPLE DATA



**CLIENT
PROJECT**

DWB Consulting
Nithi Mtn

**WORK ORDER #
REPORTED**

K1H1290
Sep-09-11

Analyte	Result	RDL	Units	Prepared	Analyzed	Notes
---------	--------	-----	-------	----------	----------	-------

Total Recoverable Metals by ICPMS, Continued

Site F (K1H1290-04) Matrix: Water Sampled: Aug-29-11, Continued

Silver	0.06	0.01	ug/L	Sep-01-11	Sep-06-11	
Sodium	2950	5	ug/L	Sep-01-11	Sep-06-11	
Strontium	27.9	0.1	ug/L	Sep-01-11	Sep-06-11	
Tellurium	< 0.05	0.05	ug/L	Sep-01-11	Sep-06-11	
Thallium	< 0.004	0.004	ug/L	Sep-01-11	Sep-06-11	
Thorium	0.05	0.01	ug/L	Sep-01-11	Sep-06-11	
Tin	< 0.05	0.05	ug/L	Sep-01-11	Sep-06-11	
Titanium	4.9	0.2	ug/L	Sep-01-11	Sep-06-11	
Uranium	0.476	0.001	ug/L	Sep-01-11	Sep-06-11	
Vanadium	0.6	0.2	ug/L	Sep-01-11	Sep-06-11	
Zinc	9	1	ug/L	Sep-01-11	Sep-06-11	
Zirconium	0.24	0.01	ug/L	Sep-01-11	Sep-06-11	

Burns Creek (K1H1290-05) Matrix: Water Sampled: Aug-29-11

Aluminum	256	2	ug/L	Sep-01-11	Sep-06-11	
Antimony	0.08	0.05	ug/L	Sep-01-11	Sep-06-11	
Arsenic	1.12	0.05	ug/L	Sep-01-11	Sep-06-11	
Barium	19.9	0.2	ug/L	Sep-01-11	Sep-06-11	
Beryllium	0.02	0.01	ug/L	Sep-01-11	Sep-06-11	
Bismuth	0.004	0.002	ug/L	Sep-01-11	Sep-06-11	
Boron	2	1	ug/L	Sep-01-11	Sep-06-11	
Cadmium	0.011	0.002	ug/L	Sep-01-11	Sep-06-11	
Calcium	14600	50	ug/L	Sep-01-11	Sep-06-11	
Chromium	0.4	0.1	ug/L	Sep-01-11	Sep-06-11	
Cobalt	0.187	0.005	ug/L	Sep-01-11	Sep-06-11	
Copper	1.6	0.1	ug/L	Sep-01-11	Sep-06-11	
Iron	749	2	ug/L	Sep-01-11	Sep-06-11	
Lead	0.23	0.05	ug/L	Sep-01-11	Sep-06-11	
Lithium	1.37	0.05	ug/L	Sep-01-11	Sep-06-11	
Magnesium	3560	5.0	ug/L	Sep-01-11	Sep-06-11	
Manganese	89.1	0.05	ug/L	Sep-01-11	Sep-06-11	
Mercury	< 0.01	0.01	ug/L	Sep-01-11	Sep-06-11	
Molybdenum	2.14	0.01	ug/L	Sep-01-11	Sep-06-11	
Nickel	0.45	0.02	ug/L	Sep-01-11	Sep-06-11	
Phosphorus	55	5	ug/L	Sep-01-11	Sep-06-11	
Potassium	732	5	ug/L	Sep-01-11	Sep-06-11	
Selenium	< 0.1	0.1	ug/L	Sep-01-11	Sep-06-11	
Silicon	5600	100	ug/L	Sep-01-11	Sep-06-11	
Silver	0.01	0.01	ug/L	Sep-01-11	Sep-06-11	
Sodium	4720	5	ug/L	Sep-01-11	Sep-06-11	
Strontium	126	0.1	ug/L	Sep-01-11	Sep-06-11	
Tellurium	< 0.05	0.05	ug/L	Sep-01-11	Sep-06-11	
Thallium	0.004	0.004	ug/L	Sep-01-11	Sep-06-11	
Thorium	0.02	0.01	ug/L	Sep-01-11	Sep-06-11	
Tin	< 0.05	0.05	ug/L	Sep-01-11	Sep-06-11	
Titanium	8.3	0.2	ug/L	Sep-01-11	Sep-06-11	

SAMPLE DATA



**CLIENT
PROJECT**

DWB Consulting
Nithi Mtn

**WORK ORDER #
REPORTED**

K1H1290
Sep-09-11

Analyte	Result	RDL	Units	Prepared	Analyzed	Notes
---------	--------	-----	-------	----------	----------	-------

Total Recoverable Metals by ICPMS, Continued

Burns Creek (K1H1290-05) Matrix: Water Sampled: Aug-29-11, Continued

Uranium	0.228	0.001	ug/L	Sep-01-11	Sep-06-11	
Vanadium	1.3	0.2	ug/L	Sep-01-11	Sep-06-11	
Zinc	8	1	ug/L	Sep-01-11	Sep-06-11	
Zirconium	0.17	0.01	ug/L	Sep-01-11	Sep-06-11	

Dup (K1H1290-06) Matrix: Water Sampled: Aug-29-11

Aluminum	390	2	ug/L	Sep-01-11	Sep-06-11	
Antimony	0.06	0.05	ug/L	Sep-01-11	Sep-06-11	
Arsenic	0.19	0.05	ug/L	Sep-01-11	Sep-06-11	
Barium	6.9	0.2	ug/L	Sep-01-11	Sep-06-11	
Beryllium	0.07	0.01	ug/L	Sep-01-11	Sep-06-11	
Bismuth	0.014	0.002	ug/L	Sep-01-11	Sep-06-11	
Boron	1	1	ug/L	Sep-01-11	Sep-06-11	
Cadmium	0.038	0.002	ug/L	Sep-01-11	Sep-06-11	
Calcium	2780	50	ug/L	Sep-01-11	Sep-06-11	
Chromium	0.4	0.1	ug/L	Sep-01-11	Sep-06-11	
Cobalt	0.092	0.005	ug/L	Sep-01-11	Sep-06-11	
Copper	6.4	0.1	ug/L	Sep-01-11	Sep-06-11	
Iron	280	2	ug/L	Sep-01-11	Sep-06-11	
Lead	0.17	0.05	ug/L	Sep-01-11	Sep-06-11	
Lithium	2.10	0.05	ug/L	Sep-01-11	Sep-06-11	
Magnesium	1360	5.0	ug/L	Sep-01-11	Sep-06-11	
Manganese	9.38	0.05	ug/L	Sep-01-11	Sep-06-11	
Mercury	< 0.01	0.01	ug/L	Sep-01-11	Sep-06-11	
Molybdenum	20.1	0.01	ug/L	Sep-01-11	Sep-06-11	
Nickel	0.83	0.02	ug/L	Sep-01-11	Sep-06-11	
Phosphorus	13	5	ug/L	Sep-01-11	Sep-06-11	
Potassium	675	5	ug/L	Sep-01-11	Sep-06-11	
Selenium	0.2	0.1	ug/L	Sep-01-11	Sep-06-11	
Silicon	7100	100	ug/L	Sep-01-11	Sep-06-11	
Silver	0.06	0.01	ug/L	Sep-01-11	Sep-06-11	
Sodium	2970	5	ug/L	Sep-01-11	Sep-06-11	
Strontium	28.0	0.1	ug/L	Sep-01-11	Sep-06-11	
Tellurium	< 0.05	0.05	ug/L	Sep-01-11	Sep-06-11	
Thallium	< 0.004	0.004	ug/L	Sep-01-11	Sep-06-11	
Thorium	0.04	0.01	ug/L	Sep-01-11	Sep-06-11	
Tin	< 0.05	0.05	ug/L	Sep-01-11	Sep-06-11	
Titanium	4.9	0.2	ug/L	Sep-01-11	Sep-06-11	
Uranium	0.481	0.001	ug/L	Sep-01-11	Sep-06-11	
Vanadium	0.7	0.2	ug/L	Sep-01-11	Sep-06-11	
Zinc	9	1	ug/L	Sep-01-11	Sep-06-11	
Zirconium	0.28	0.01	ug/L	Sep-01-11	Sep-06-11	

ANALYSIS / REPORT INFORMATION



CLIENT DWB Consulting
PROJECT Nithi Mtn

WORK ORDER # K1H1290
REPORTED Sep-09-11

Analysis Description	Method Reference(s) (* = modified from)		LAB
	Preparation	Analysis	
Dissolved Metals by ICPMS	N/A	EPA 6020A	RMD
Alkalinity, total	NO PREP	APHA 2320 B	KEL
Bromide by IC	IC	APHA 4110 B	KEL
Total Organic Carbon	N/A	APHA 5310 B	KEL
Chloride by IC	IC	APHA 4110 B	KEL
Conductivity-Water	NO PREP	APHA 2510 B	KEL
Fluoride by IC	IC	APHA 4110 B	KEL
Ammonia-N	N/A	APHA 4500-NH3 G	KEL
Nitrate by IC	IC	APHA 4110 B	KEL
Nitrite by IC	IC	APHA 4110 B	KEL
Total Nitrogen (TKN + NO3-N+NO2-N)		Calc	KEL
Total Kjeldahl Nitrogen	N/A	EPA 351.2	KEL
pH	NO PREP	APHA 4500-H+ B	KEL
Orthophosphate-P by IC	IC	APHA 4110 B	KEL
Phosphorus, Total (colour)	Acid Digestion	EPA 351.2	KEL
Total Dissolved Solids (180C)	N/A	APHA 2540 C	KEL
Total Suspended Solids (105C)	N/A	APHA 2540 D	KEL
Sulfate by IC	IC	APHA 4110 B	KEL
Turbidity	NO PREP	APHA 2130 B	KEL
Total Recoverable Metals by ICPMS	EPA 200.2 *	EPA 6020A	RMD

QUALITY CONTROL DATA



**CLIENT
PROJECT**

DWB Consulting
Nithi Mtn

**WORK ORDER #
REPORTED**

K1H1290
Sep-09-11

The following section reports quality control (QC) data that is associated with your sample data. Groups of samples are prepared in "batches" and analyzed in conjunction with quality control samples that ensure your data is of the highest quality. Common QC types include:

- **Method Blank (Blk):** Laboratory reagent water is carried through sample preparation and analysis steps. Method Blanks indicate that results are free from contamination, i.e. not biased high from sources such as the sample container or the laboratory environment
- **Duplicate (Dup):** Preparation and analysis of a replicate aliquot of a sample. Duplicates provide a measure of the analytical method's precision, i.e. how reproducible a result is. Duplicates are only reported if they are associated with your sample data.
- **Blank Spike (BS):** A known amount of standard is carried through sample preparation and analysis steps. Blank Spikes, also known as laboratory control samples (LCS), are prepared from a different source of standard than used for the calibration. They ensure that the calibration is acceptable (i.e. not biased high or low) and also provide a measure of the analytical method's accuracy (i.e. closeness of the result to a target value).
- **Standard Reference Material (SRM):** A material of similar matrix to the samples, externally certified for the parameter(s) listed. Standard Reference Materials ensure that the preparation steps in the method are adequate to achieve acceptable recoveries of the parameter(s) tested for.

Each QC type is analyzed at a 5-10% frequency, i.e. one blank/duplicate/spike for every 10 samples. For all types of QC, the specified recovery (% Rec) and relative percent difference (RPD) limits are derived from long-term method performance averages and/or prescribed by the reference method.

Analyte	Result	Reporting Limit Units	Spike Level	Source Result	% REC Limits	% RPD Limit	Notes
---------	--------	--------------------------	----------------	------------------	-----------------	----------------	-------

Dissolved Metals by ICPMS, Batch R102735

Blank (R102735-BLK1)

Prepared: Sep-01-11, Analyzed: Sep-03-11

Aluminum, dissolved	< 2	2 ug/L
Antimony, dissolved	< 0.05	0.05 ug/L
Arsenic, dissolved	< 0.05	0.05 ug/L
Barium, dissolved	< 0.2	0.2 ug/L
Beryllium, dissolved	< 0.01	0.01 ug/L
Bismuth, dissolved	< 0.002	0.002 ug/L
Boron, dissolved	< 1	1 ug/L
Cadmium, dissolved	< 0.002	0.002 ug/L
Calcium, dissolved	< 50	50 ug/L
Chromium, dissolved	< 0.1	0.1 ug/L
Cobalt, dissolved	< 0.005	0.005 ug/L
Copper, dissolved	< 0.1	0.1 ug/L
Iron, dissolved	< 2	2 ug/L
Lead, dissolved	< 0.05	0.05 ug/L
Lithium, dissolved	< 0.05	0.05 ug/L
Magnesium, dissolved	< 5	5 ug/L
Manganese, dissolved	< 0.05	0.05 ug/L
Mercury, dissolved	< 0.01	0.01 ug/L
Molybdenum, dissolved	< 0.01	0.01 ug/L
Nickel, dissolved	< 0.02	0.02 ug/L
Phosphorus, dissolved	< 5	5 ug/L
Potassium, dissolved	< 5	5 ug/L
Selenium, dissolved	< 0.1	0.1 ug/L
Silicon, dissolved	< 100	100 ug/L
Silver, dissolved	< 0.01	0.01 ug/L
Sodium, dissolved	< 5	5 ug/L
Strontium, dissolved	< 0.1	0.1 ug/L
Tellurium, dissolved	< 0.05	0.05 ug/L
Thallium, dissolved	< 0.004	0.004 ug/L
Thorium, dissolved	< 0.01	0.01 ug/L
Tin, dissolved	< 0.05	0.05 ug/L
Titanium, dissolved	< 0.2	0.2 ug/L
Uranium, dissolved	< 0.001	0.001 ug/L
Vanadium, dissolved	< 0.2	0.2 ug/L
Zinc, dissolved	< 1	1 ug/L
Zirconium, dissolved	< 0.01	0.01 ug/L

Duplicate (R102735-DUP1)

Source: K1H1290-03

Prepared: Sep-01-11, Analyzed: Sep-03-11

Aluminum, dissolved	367	2 ug/L	350	5	20
Antimony, dissolved	< 0.05	0.05 ug/L	0.05		20
Arsenic, dissolved	0.18	0.05 ug/L	0.17		20
Barium, dissolved	6.1	0.2 ug/L	5.7	6	20

QUALITY CONTROL DATA



CLIENT
PROJECT

DWB Consulting
Nithi Mtn

WORK ORDER #
REPORTED

K1H1290
Sep-09-11

Analyte	Result	Reporting Limit Units	Spike Level	Source Result	% REC Limits	% REC Limits	% RPD Limit	% RPD Limit	Notes
---------	--------	--------------------------	----------------	------------------	-----------------	-----------------	----------------	----------------	-------

Dissolved Metals by ICPMS, Batch R102735, Continued

Duplicate (R102735-DUP1), Continued		Source: K1H1290-03		Prepared: Sep-01-11, Analyzed: Sep-03-11					
Beryllium, dissolved	0.16	0.01 ug/L		0.16			2	20	
Bismuth, dissolved	0.009	0.002 ug/L		0.011				20	
Boron, dissolved	3	1 ug/L		3				20	
Cadmium, dissolved	0.024	0.002 ug/L		0.026			9	20	
Calcium, dissolved	1740	50 ug/L		1690			3	20	
Chromium, dissolved	0.3	0.1 ug/L		0.3				20	
Cobalt, dissolved	0.084	0.005 ug/L		0.080			5	20	
Copper, dissolved	4.5	0.1 ug/L		4.3			6	20	
Iron, dissolved	212	2 ug/L		200			6	20	
Lead, dissolved	0.13	0.05 ug/L		0.12				20	
Lithium, dissolved	0.80	0.05 ug/L		0.76			4	20	
Magnesium, dissolved	686	5 ug/L		649			6	20	
Manganese, dissolved	15.6	0.05 ug/L		14.9			5	20	
Mercury, dissolved	< 0.01	0.01 ug/L		< 0.01				20	
Molybdenum, dissolved	21.7	0.01 ug/L		20.6			5	20	
Nickel, dissolved	0.58	0.02 ug/L		0.55			5	20	
Phosphorus, dissolved	10	5 ug/L		8				20	
Potassium, dissolved	549	5 ug/L		532			3	20	
Selenium, dissolved	0.3	0.1 ug/L		0.4				20	
Silicon, dissolved	6170	100 ug/L		5960			3	20	
Silver, dissolved	< 0.01	0.01 ug/L		< 0.01				20	
Sodium, dissolved	2240	5 ug/L		2130			5	20	
Strontium, dissolved	27.7	0.1 ug/L		26.6			4	20	
Tellurium, dissolved	< 0.05	0.05 ug/L		< 0.05				20	
Thallium, dissolved	0.007	0.004 ug/L		0.007				20	
Thorium, dissolved	0.40	0.01 ug/L		0.39			< 1	20	
Tin, dissolved	0.09	0.05 ug/L		0.05				20	
Titanium, dissolved	3.8	0.2 ug/L		3.8			1	20	
Uranium, dissolved	1.04	0.001 ug/L		0.985			5	20	
Vanadium, dissolved	0.4	0.2 ug/L		0.4				20	
Zinc, dissolved	40	1 ug/L		38			5	20	
Zirconium, dissolved	0.87	0.01 ug/L		0.85			3	20	

Matrix Spike (R102735-MS1)		Source: K1H1290-04		Prepared: Sep-01-11, Analyzed: Sep-03-11					
Antimony, dissolved	4.98	0.05 ug/L	4.00	0.06	123	81-114			
Arsenic, dissolved	40.5	0.05 ug/L	40.4	0.13	100	89-115			
Barium, dissolved	348	0.2 ug/L	312	5.7	110	86-115			
Beryllium, dissolved	15.3	0.01 ug/L	19.7	0.06	78	77-124			
Cadmium, dissolved	19.5	0.002 ug/L	20.0	0.035	97	82-126			
Chromium, dissolved	39.3	0.1 ug/L	40.1	0.2	98	85-117			
Cobalt, dissolved	11.6	0.005 ug/L	11.9	0.056	97	76-131			
Copper, dissolved	88.8	0.1 ug/L	78.1	5.3	107	88-113			
Iron, dissolved	247	2 ug/L	117	124	105	80-115			
Lead, dissolved	9.76	0.05 ug/L	10.2	0.07	95	84-121			
Manganese, dissolved	35.5	0.05 ug/L	31.8	5.06	96	75-135			
Nickel, dissolved	77.2	0.02 ug/L	78.9	0.71	97	83-121			
Selenium, dissolved	3.1	0.1 ug/L	3.00	0.2	96	91-122			
Silver, dissolved	0.01	0.01 ug/L		0.01		74-120			
Thallium, dissolved	3.62	0.004 ug/L	3.50	0.004	103	79-119			
Vanadium, dissolved	75.1	0.2 ug/L	79.8	0.3	94	80-115			
Zinc, dissolved	85	1 ug/L	80.0	8	97	89-123			

Reference (R102735-SRM1)		Prepared: Sep-01-11, Analyzed: Sep-03-11							
Aluminum, dissolved	20	2 ug/L	20.9		95	74-127			
Antimony, dissolved	3.92	0.05 ug/L	4.00		98	86-116			
Arsenic, dissolved	38.2	0.05 ug/L	40.4		94	84-111			
Barium, dissolved	320	0.2 ug/L	312		103	87-114			
Beryllium, dissolved	19.2	0.01 ug/L	19.7		98	78-127			
Boron, dissolved	156	1 ug/L	161		97	74-117			
Cadmium, dissolved	18.2	0.002 ug/L	20.0		91	89-110			
Calcium, dissolved	682	50 ug/L	650		105	83-128			
Chromium, dissolved	39.1	0.1 ug/L	40.1		98	87-112			
Cobalt, dissolved	11.5	0.005 ug/L	11.9		97	88-113			

QUALITY CONTROL DATA



CLIENT
PROJECT

DWB Consulting
Nithi Mtn

WORK ORDER #
REPORTED

K1H1290
Sep-09-11

Analyte	Result	Reporting Limit Units	Spike Level	Source Result	% REC Limits	% REC Limits	% RPD Limit	Notes
---------	--------	--------------------------	----------------	------------------	-----------------	-----------------	----------------	-------

Dissolved Metals by ICPMS, Batch R102735, Continued

Reference (R102735-SRM1), Continued

Prepared: Sep-01-11, Analyzed: Sep-03-11

Copper, dissolved	81.8	0.1 ug/L	78.1	105	91-115			
Iron, dissolved	122	2 ug/L	117	104	81-117			
Lead, dissolved	9.26	0.05 ug/L	10.2	91	90-114			
Lithium, dissolved	10.0	0.05 ug/L	9.60	105	77-134			
Magnesium, dissolved	604	5 ug/L	611	99	79-122			
Manganese, dissolved	30.0	0.05 ug/L	31.8	94	86-114			
Molybdenum, dissolved	40.1	0.01 ug/L	38.7	104	92-113			
Nickel, dissolved	76.7	0.02 ug/L	78.9	97	89-114			
Phosphorus, dissolved	40	5 ug/L	44.8	89	60-117			
Potassium, dissolved	270	5 ug/L	284	95	80-113			
Selenium, dissolved	2.8	0.1 ug/L	3.00	92	84-120			
Sodium, dissolved	1720	5 ug/L	1740	99	78-118			
Strontium, dissolved	88.8	0.1 ug/L	97.9	91	88-113			
Thallium, dissolved	3.45	0.004 ug/L	3.50	99	96-129			
Uranium, dissolved	19.1	0.001 ug/L	24.4	78	68-95			
Vanadium, dissolved	74.3	0.2 ug/L	79.8	93	83-110			
Zinc, dissolved	77	1 ug/L	80.0	96	90-115			

General Parameters, Batch K103658

Blank (K103658-BLK1)

Prepared: Aug-31-11, Analyzed: Aug-31-11

Turbidity	< 0.1	0.1 NTU						
-----------	-------	---------	--	--	--	--	--	--

Blank (K103658-BLK2)

Prepared: Aug-31-11, Analyzed: Aug-31-11

Turbidity	< 0.1	0.1 NTU						
-----------	-------	---------	--	--	--	--	--	--

Blank (K103658-BLK3)

Prepared: Aug-31-11, Analyzed: Aug-31-11

Turbidity	< 0.1	0.1 NTU						
-----------	-------	---------	--	--	--	--	--	--

LCS (K103658-BS1)

Prepared: Aug-31-11, Analyzed: Aug-31-11

Turbidity	40	0.1 NTU	40.0	99	85-115			
-----------	----	---------	------	----	--------	--	--	--

LCS (K103658-BS2)

Prepared: Aug-31-11, Analyzed: Aug-31-11

Turbidity	40	0.1 NTU	40.0	99	85-115			
-----------	----	---------	------	----	--------	--	--	--

LCS (K103658-BS3)

Prepared: Aug-31-11, Analyzed: Aug-31-11

Turbidity	39	0.1 NTU	40.0	98	85-115			
-----------	----	---------	------	----	--------	--	--	--

Duplicate (K103658-DUP1)

Source: K1H1290-02

Prepared: Aug-31-11, Analyzed: Aug-31-11

Turbidity	88	0.1 NTU	88	< 1	20			
-----------	----	---------	----	-----	----	--	--	--

General Parameters, Batch K103662

Blank (K103662-BLK1)

Prepared: Aug-31-11, Analyzed: Aug-31-11

Bromide	< 0.05	0.05 mg/L						
Chloride	< 0.10	0.10 mg/L						
Fluoride	< 0.01	0.01 mg/L						
Nitrogen, Nitrate as N	< 0.005	0.005 mg/L						
Nitrogen, Nitrite as N	< 0.003	0.003 mg/L						
Phosphate, Ortho as P	< 0.005	0.005 mg/L						
Sulfate	< 0.5	0.5 mg/L						

Blank (K103662-BLK2)

Prepared: Aug-31-11, Analyzed: Aug-31-11

Bromide	< 0.05	0.05 mg/L						
Chloride	< 0.10	0.10 mg/L						
Fluoride	< 0.01	0.01 mg/L						
Nitrogen, Nitrate as N	< 0.005	0.005 mg/L						
Nitrogen, Nitrite as N	< 0.003	0.003 mg/L						
Phosphate, Ortho as P	< 0.005	0.005 mg/L						
Sulfate	< 0.5	0.5 mg/L						

QUALITY CONTROL DATA



CLIENT
PROJECT

DWB Consulting
Nithi Mtn

WORK ORDER #
REPORTED

K1H1290
Sep-09-11

Analyte	Result	Reporting Limit Units	Spike Level	Source Result	% REC Limits	% RPD Limit	Notes
---------	--------	--------------------------	----------------	------------------	-----------------	----------------	-------

General Parameters, Batch K103662, Continued

Blank (K103662-BLK3)

Prepared: Aug-31-11, Analyzed: Aug-31-11

Bromide	< 0.05	0.05 mg/L
Chloride	< 0.10	0.10 mg/L
Fluoride	< 0.01	0.01 mg/L
Nitrogen, Nitrate as N	< 0.005	0.005 mg/L
Nitrogen, Nitrite as N	< 0.003	0.003 mg/L
Phosphate, Ortho as P	< 0.005	0.005 mg/L
Sulfate	< 0.5	0.5 mg/L

Blank (K103662-BLK4)

Prepared: Aug-31-11, Analyzed: Sep-01-11

Bromide	< 0.05	0.05 mg/L
Chloride	< 0.10	0.10 mg/L
Fluoride	< 0.01	0.01 mg/L
Nitrogen, Nitrate as N	< 0.005	0.005 mg/L
Nitrogen, Nitrite as N	< 0.003	0.003 mg/L
Phosphate, Ortho as P	< 0.005	0.005 mg/L
Sulfate	< 0.5	0.5 mg/L

Blank (K103662-BLK5)

Prepared: Aug-31-11, Analyzed: Sep-01-11

Bromide	< 0.05	0.05 mg/L
Chloride	< 0.10	0.10 mg/L
Fluoride	< 0.01	0.01 mg/L
Nitrogen, Nitrate as N	< 0.005	0.005 mg/L
Nitrogen, Nitrite as N	< 0.003	0.003 mg/L
Phosphate, Ortho as P	< 0.005	0.005 mg/L
Sulfate	< 0.5	0.5 mg/L

LCS (K103662-BS1)

Prepared: Aug-31-11, Analyzed: Aug-31-11

Bromide	4.16	0.05 mg/L	4.00	104	85-115
Chloride	3.92	0.10 mg/L	4.00	98	85-115
Fluoride	4.06	0.01 mg/L	4.00	102	85-115
Nitrogen, Nitrate as N	4.29	0.005 mg/L	4.00	107	85-115
Nitrogen, Nitrite as N	4.26	0.003 mg/L	4.00	106	85-115
Phosphate, Ortho as P	4.17	0.005 mg/L	4.00	104	85-115
Sulfate	4.1	0.5 mg/L	4.00	102	85-115

LCS (K103662-BS2)

Prepared: Aug-31-11, Analyzed: Aug-31-11

Bromide	4.23	0.05 mg/L	4.00	106	85-115
Chloride	3.94	0.10 mg/L	4.00	98	85-115
Fluoride	4.07	0.01 mg/L	4.00	102	85-115
Nitrogen, Nitrate as N	4.30	0.005 mg/L	4.00	108	85-115
Nitrogen, Nitrite as N	4.29	0.003 mg/L	4.00	107	85-115
Phosphate, Ortho as P	4.24	0.005 mg/L	4.00	106	85-115
Sulfate	4.2	0.5 mg/L	4.00	105	85-115

LCS (K103662-BS3)

Prepared: Aug-31-11, Analyzed: Sep-01-11

Bromide	4.24	0.05 mg/L	4.00	106	85-115
Chloride	3.96	0.10 mg/L	4.00	99	85-115
Fluoride	4.12	0.01 mg/L	4.00	103	85-115
Nitrogen, Nitrate as N	4.31	0.005 mg/L	4.00	108	85-115
Nitrogen, Nitrite as N	4.25	0.003 mg/L	4.00	106	85-115
Phosphate, Ortho as P	4.23	0.005 mg/L	4.00	106	85-115
Sulfate	4.2	0.5 mg/L	4.00	106	85-115

LCS (K103662-BS4)

Prepared: Aug-31-11, Analyzed: Sep-01-11

Bromide	4.12	0.05 mg/L	4.00	103	85-115
Chloride	3.91	0.10 mg/L	4.00	98	85-115
Fluoride	4.06	0.01 mg/L	4.00	101	85-115
Nitrogen, Nitrate as N	4.28	0.005 mg/L	4.00	107	85-115
Nitrogen, Nitrite as N	4.26	0.003 mg/L	4.00	106	85-115
Phosphate, Ortho as P	4.22	0.005 mg/L	4.00	106	85-115
Sulfate	4.2	0.5 mg/L	4.00	105	85-115

QUALITY CONTROL DATA



CLIENT
PROJECT

DWB Consulting
Nithi Mtn

WORK ORDER #
REPORTED

K1H1290
Sep-09-11

Analyte	Result	Reporting Limit Units	Spike Level	Source Result	% REC Limits	% RPD Limit	Notes
---------	--------	--------------------------	----------------	------------------	-----------------	----------------	-------

General Parameters, Batch K103662, Continued

LCS (K103662-B55)

Prepared: Aug-31-11, Analyzed: Sep-01-11

Bromide	4.19	0.05 mg/L	4.00	105	85-115	
Chloride	3.94	0.10 mg/L	4.00	99	85-115	
Fluoride	4.08	0.01 mg/L	4.00	102	85-115	
Nitrogen, Nitrate as N	4.31	0.005 mg/L	4.00	108	85-115	
Nitrogen, Nitrite as N	4.29	0.003 mg/L	4.00	107	85-115	
Phosphate, Ortho as P	4.29	0.005 mg/L	4.00	107	85-115	
Sulfate	4.3	0.5 mg/L	4.00	107	85-115	

Duplicate (K103662-DUP5)

Source: K1H1290-06

Prepared: Aug-31-11, Analyzed: Sep-01-11

Bromide	< 0.05	0.05 mg/L	< 0.05			15
Chloride	0.37	0.10 mg/L	0.36			15
Fluoride	0.12	0.01 mg/L	0.13		4	15
Nitrogen, Nitrate as N	0.014	0.005 mg/L	0.014			15
Nitrogen, Nitrite as N	< 0.003	0.003 mg/L	< 0.003			15
Phosphate, Ortho as P	< 0.005	0.005 mg/L	< 0.005			20
Sulfate	6.2	0.5 mg/L	6.1		1	15

General Parameters, Batch K103664

Blank (K103664-BLK1)

Prepared: Aug-31-11, Analyzed: Sep-01-11

Carbon, Total Organic	< 0.5	0.5 mg/L				
-----------------------	-------	----------	--	--	--	--

Blank (K103664-BLK2)

Prepared: Aug-31-11, Analyzed: Sep-01-11

Carbon, Total Organic	< 0.5	0.5 mg/L				
-----------------------	-------	----------	--	--	--	--

Blank (K103664-BLK3)

Prepared: Aug-31-11, Analyzed: Sep-01-11

Carbon, Total Organic	< 0.5	0.5 mg/L				
-----------------------	-------	----------	--	--	--	--

Blank (K103664-BLK4)

Prepared: Aug-31-11, Analyzed: Sep-01-11

Carbon, Total Organic	< 0.5	0.5 mg/L				
-----------------------	-------	----------	--	--	--	--

LCS (K103664-B51)

Prepared: Aug-31-11, Analyzed: Sep-01-11

Carbon, Total Organic	9.0	0.5 mg/L	10.0	90	80-121	
-----------------------	-----	----------	------	----	--------	--

LCS (K103664-B52)

Prepared: Aug-31-11, Analyzed: Sep-01-11

Carbon, Total Organic	9.5	0.5 mg/L	10.0	95	80-121	
-----------------------	-----	----------	------	----	--------	--

LCS (K103664-B53)

Prepared: Aug-31-11, Analyzed: Sep-01-11

Carbon, Total Organic	9.5	0.5 mg/L	10.0	95	80-121	
-----------------------	-----	----------	------	----	--------	--

LCS (K103664-B54)

Prepared: Aug-31-11, Analyzed: Sep-01-11

Carbon, Total Organic	9.2	0.5 mg/L	10.0	92	80-121	
-----------------------	-----	----------	------	----	--------	--

Duplicate (K103664-DUP2)

Source: K1H1290-06

Prepared: Aug-31-11, Analyzed: Sep-01-11

Carbon, Total Organic	9.2	0.5 mg/L	9.2		< 1	17
-----------------------	-----	----------	-----	--	-----	----

General Parameters, Batch K103667

Blank (K103667-BLK1)

Prepared: Aug-31-11, Analyzed: Sep-06-11

Solids, Total Suspended	< 1	1 mg/L				
-------------------------	-----	--------	--	--	--	--

Blank (K103667-BLK2)

Prepared: Aug-31-11, Analyzed: Sep-06-11

Solids, Total Suspended	< 1	1 mg/L				
-------------------------	-----	--------	--	--	--	--

Blank (K103667-BLK3)

Prepared: Aug-31-11, Analyzed: Sep-06-11

Solids, Total Suspended	< 1	1 mg/L				
-------------------------	-----	--------	--	--	--	--

LCS (K103667-B51)

Prepared: Aug-31-11, Analyzed: Sep-06-11

Solids, Total Suspended	392	1 mg/L	434	90	84-108	
-------------------------	-----	--------	-----	----	--------	--

QUALITY CONTROL DATA



**CLIENT
PROJECT**

DWB Consulting
Nithi Mtn

**WORK ORDER #
REPORTED**

K1H1290
Sep-09-11

Analyte	Result	Reporting Limit Units	Spike Level	Source Result	% REC	% REC Limits	% RPD	% RPD Limit	Notes
---------	--------	--------------------------	----------------	------------------	-------	-----------------	-------	----------------	-------

General Parameters, Batch K103667, Continued

LCS (K103667-BS2)

Prepared: Aug-31-11, Analyzed: Sep-06-11

Solids, Total Suspended	49	1 mg/L	50.0	97	84-108
-------------------------	----	--------	------	----	--------

LCS (K103667-BS3)

Prepared: Aug-31-11, Analyzed: Sep-06-11

Solids, Total Suspended	50	1 mg/L	50.0	100	84-108
-------------------------	----	--------	------	-----	--------

General Parameters, Batch K103672

Blank (K103672-BLK1)

Prepared: Sep-01-11, Analyzed: Sep-01-11

Nitrogen, Ammonia as N	< 0.01	0.01 mg/L
------------------------	--------	-----------

Blank (K103672-BLK2)

Prepared: Sep-01-11, Analyzed: Sep-01-11

Nitrogen, Ammonia as N	< 0.01	0.01 mg/L
------------------------	--------	-----------

Blank (K103672-BLK3)

Prepared: Sep-01-11, Analyzed: Sep-01-11

Nitrogen, Ammonia as N	< 0.01	0.01 mg/L
------------------------	--------	-----------

LCS (K103672-BS1)

Prepared: Sep-01-11, Analyzed: Sep-01-11

Nitrogen, Ammonia as N	9.33	0.10 mg/L	10.0	93	85-115
------------------------	------	-----------	------	----	--------

LCS (K103672-BS2)

Prepared: Sep-01-11, Analyzed: Sep-01-11

Nitrogen, Ammonia as N	9.63	0.10 mg/L	10.0	96	85-115
------------------------	------	-----------	------	----	--------

LCS (K103672-BS3)

Prepared: Sep-01-11, Analyzed: Sep-01-11

Nitrogen, Ammonia as N	9.45	0.10 mg/L	10.0	94	85-115
------------------------	------	-----------	------	----	--------

Duplicate (K103672-DUP1)

Source: K1H1290-03

Prepared: Sep-01-11, Analyzed: Sep-01-11

Nitrogen, Ammonia as N	< 0.01	0.01 mg/L	< 0.01	20
------------------------	--------	-----------	--------	----

General Parameters, Batch K103679

Blank (K103679-BLK1)

Prepared: Sep-01-11, Analyzed: Sep-01-11

Alkalinity, Total as CaCO3	< 1.0	1.0 mg/L
Conductivity (EC)	< 2	2 uS/cm

Blank (K103679-BLK2)

Prepared: Sep-01-11, Analyzed: Sep-01-11

Alkalinity, Total as CaCO3	< 1.0	1.0 mg/L
Conductivity (EC)	< 2	2 uS/cm

Blank (K103679-BLK3)

Prepared: Sep-01-11, Analyzed: Sep-01-11

Alkalinity, Total as CaCO3	< 1.0	1.0 mg/L
Conductivity (EC)	< 2	2 uS/cm

Blank (K103679-BLK4)

Prepared: Sep-01-11, Analyzed: Sep-01-11

Alkalinity, Total as CaCO3	< 1.0	1.0 mg/L
Conductivity (EC)	< 2	2 uS/cm

LCS (K103679-BS1)

Prepared: Sep-01-11, Analyzed: Sep-01-11

Alkalinity, Total as CaCO3	106	1.0 mg/L	100	106	95-109
----------------------------	-----	----------	-----	-----	--------

LCS (K103679-BS2)

Prepared: Sep-01-11, Analyzed: Sep-01-11

Alkalinity, Total as CaCO3	102	1.0 mg/L	100	102	95-109
----------------------------	-----	----------	-----	-----	--------

LCS (K103679-BS3)

Prepared: Sep-01-11, Analyzed: Sep-01-11

Alkalinity, Total as CaCO3	102	1.0 mg/L	100	102	95-109
----------------------------	-----	----------	-----	-----	--------

LCS (K103679-BS4)

Prepared: Sep-01-11, Analyzed: Sep-01-11

Alkalinity, Total as CaCO3	101	1.0 mg/L	100	101	95-109
----------------------------	-----	----------	-----	-----	--------

QUALITY CONTROL DATA



CLIENT
PROJECT

DWB Consulting
Nithi Mtn

WORK ORDER #
REPORTED

K1H1290
Sep-09-11

Analyte	Result	Reporting Limit Units	Spike Level	Source Result	% REC Limits	% REC Limits	% RPD Limit	Notes
---------	--------	--------------------------	----------------	------------------	-----------------	-----------------	----------------	-------

General Parameters, Batch K103679, Continued

LCS (K103679-BS5)		Prepared: Sep-01-11, Analyzed: Sep-01-11						
Conductivity (EC)	1380	2 uS/cm	1410		98	95-105		
LCS (K103679-BS6)		Prepared: Sep-01-11, Analyzed: Sep-01-11						
Conductivity (EC)	1370	2 uS/cm	1410		97	95-105		
LCS (K103679-BS7)		Prepared: Sep-01-11, Analyzed: Sep-01-11						
Conductivity (EC)	1390	2 uS/cm	1410		99	95-105		
LCS (K103679-BS8)		Prepared: Sep-01-11, Analyzed: Sep-01-11						
Conductivity (EC)	1390	2 uS/cm	1410		99	95-105		
Duplicate (K103679-DUP1)		Source: K1H1290-01		Prepared: Sep-01-11, Analyzed: Sep-01-11				
Alkalinity, Total as CaCO3	29.6	1.0 mg/L		30.0			2	10
Conductivity (EC)	72	2 uS/cm		70			2	5
pH	7.20	0.01 pH Units		7.12			1	5
Reference (K103679-SRM1)		Prepared: Sep-01-11, Analyzed: Sep-01-11						
pH	7.01	0.01 pH Units	7.00		100	98-102		
Reference (K103679-SRM2)		Prepared: Sep-01-11, Analyzed: Sep-01-11						
pH	7.02	0.01 pH Units	7.00		100	98-102		
Reference (K103679-SRM3)		Prepared: Sep-01-11, Analyzed: Sep-01-11						
pH	7.01	0.01 pH Units	7.00		100	98-102		
Reference (K103679-SRM4)		Prepared: Sep-01-11, Analyzed: Sep-01-11						
pH	7.01	0.01 pH Units	7.00		100	98-102		

General Parameters, Batch K103690

Blank (K103690-BLK1)		Prepared: Sep-01-11, Analyzed: Sep-08-11						
Nitrogen, Total Kjeldahl	< 0.05	0.05 mg/L						
LCS (K103690-BS1)		Prepared: Sep-01-11, Analyzed: Sep-08-11						
Nitrogen, Total Kjeldahl	9.87	0.50 mg/L	10.0		99	89-118		
Duplicate (K103690-DUP1)		Source: K1H1290-03		Prepared: Sep-01-11, Analyzed: Sep-08-11				
Nitrogen, Total Kjeldahl	0.34	0.05 mg/L		0.37			9	19

General Parameters, Batch K103691

Blank (K103691-BLK1)		Prepared: Sep-01-11, Analyzed: Sep-06-11						
Phosphorus, Total	< 0.01	0.01 mg/L						
Blank (K103691-BLK2)		Prepared: Sep-01-11, Analyzed: Sep-06-11						
Phosphorus, Total	< 0.01	0.01 mg/L						
LCS (K103691-BS1)		Prepared: Sep-01-11, Analyzed: Sep-06-11						
Phosphorus, Total	0.41	0.02 mg/L	0.500		83	75-116		
LCS (K103691-BS2)		Prepared: Sep-01-11, Analyzed: Sep-06-11						
Phosphorus, Total	0.49	0.02 mg/L	0.500		97	75-116		
Duplicate (K103691-DUP1)		Source: K1H1290-04		Prepared: Sep-01-11, Analyzed: Sep-06-11				
Phosphorus, Total	< 0.01	0.01 mg/L		< 0.01				20

General Parameters, Batch K103724

QUALITY CONTROL DATA



**CLIENT
PROJECT**

DWB Consulting
Nithi Mtn

**WORK ORDER #
REPORTED**

K1H1290
Sep-09-11

Analyte	Result	Reporting Limit Units	Spike Level	Source Result	% REC Limits	% RPD Limit	Notes
---------	--------	--------------------------	----------------	------------------	-----------------	----------------	-------

General Parameters, Batch K103724, Continued

Blank (K103724-BLK1)

Prepared: Sep-02-11, Analyzed: Sep-02-11

Solids, Total Dissolved	< 5	5 mg/L					
Duplicate (K103724-DUP1) Source: K1H1290-06 Prepared: Sep-02-11, Analyzed: Sep-02-11							
Solids, Total Dissolved	38	5 mg/L		44		15	15
Reference (K103724-SRM1) Prepared: Sep-02-11, Analyzed: Sep-02-11							
Solids, Total Dissolved	236	5 mg/L	240		98	85-115	

Total Recoverable Metals by ICPMS, Batch R102730

Blank (R102730-BLK1)

Prepared: Sep-01-11, Analyzed: Sep-06-11

Aluminum	< 2	2 ug/L					
Antimony	< 0.05	0.05 ug/L					
Arsenic	< 0.05	0.05 ug/L					
Barium	< 0.2	0.2 ug/L					
Beryllium	< 0.01	0.01 ug/L					
Bismuth	< 0.002	0.002 ug/L					
Boron	< 1	1 ug/L					
Cadmium	< 0.002	0.002 ug/L					
Calcium	< 50	50 ug/L					
Chromium	< 0.1	0.1 ug/L					
Cobalt	< 0.005	0.005 ug/L					
Copper	< 0.1	0.1 ug/L					
Iron	< 2	2 ug/L					
Lead	< 0.05	0.05 ug/L					
Lithium	< 0.05	0.05 ug/L					
Magnesium	< 5.0	5.0 ug/L					
Manganese	< 0.05	0.05 ug/L					
Mercury	< 0.01	0.01 ug/L					
Molybdenum	< 0.01	0.01 ug/L					
Nickel	< 0.02	0.02 ug/L					
Phosphorus	< 5	5 ug/L					
Potassium	< 5	5 ug/L					
Selenium	< 0.1	0.1 ug/L					
Silicon	< 100	100 ug/L					
Silver	< 0.01	0.01 ug/L					
Sodium	< 5	5 ug/L					
Strontium	< 0.1	0.1 ug/L					
Tellurium	< 0.05	0.05 ug/L					
Thallium	< 0.004	0.004 ug/L					
Thorium	< 0.01	0.01 ug/L					
Tin	< 0.05	0.05 ug/L					
Titanium	< 0.2	0.2 ug/L					
Uranium	< 0.001	0.001 ug/L					
Vanadium	< 0.2	0.2 ug/L					
Zinc	< 1	1 ug/L					
Zirconium	< 0.01	0.01 ug/L					
Duplicate (R102730-DUP1) Source: K1H1290-03 Prepared: Sep-01-11, Analyzed: Sep-06-11							
Aluminum	478	2 ug/L		462		3	20
Antimony	0.06	0.05 ug/L		0.06			20
Arsenic	0.24	0.05 ug/L		0.23			20
Barium	6.8	0.2 ug/L		6.7		3	20
Beryllium	0.17	0.01 ug/L		0.17		3	20
Bismuth	0.028	0.002 ug/L		0.025		13	20
Boron	1	1 ug/L		2			20
Cadmium	0.027	0.002 ug/L		0.028		5	20
Calcium	1700	50 ug/L		1690		< 1	20
Chromium	0.5	0.1 ug/L		0.5		5	20
Cobalt	0.116	0.005 ug/L		0.112		4	20
Copper	4.4	0.1 ug/L		4.5		2	20
Iron	365	2 ug/L		361		1	20
Lead	0.20	0.05 ug/L		0.20			20

QUALITY CONTROL DATA



**CLIENT
PROJECT**

DWB Consulting
Nithi Mtn

**WORK ORDER #
REPORTED**

K1H1290
Sep-09-11

Analyte	Result	Reporting Limit Units	Spike Level	Source Result	% REC Limits	% RPD Limit	Notes
---------	--------	--------------------------	----------------	------------------	-----------------	----------------	-------

Total Recoverable Metals by ICPMS, Batch R102730, Continued

Duplicate (R102730-DUP1), Continued		Source: K1H1290-03		Prepared: Sep-01-11, Analyzed: Sep-06-11			
Lithium	0.86	0.05 ug/L		0.84		3	20
Magnesium	688	5.0 ug/L		676		2	20
Manganese	20.4	0.05 ug/L		20.2		< 1	20
Mercury	0.02	0.01 ug/L		0.01			20
Molybdenum	20.5	0.01 ug/L		20.3		1	20
Nickel	0.66	0.02 ug/L		0.60		9	20
Phosphorus	16	5 ug/L		13			20
Potassium	534	5 ug/L		518		3	20
Selenium	0.3	0.1 ug/L		0.2			20
Silicon	5500	100 ug/L		5330		3	20
Silver	0.04	0.01 ug/L		0.03			20
Sodium	2150	5 ug/L		2110		2	20
Strontium	25.8	0.1 ug/L		25.1		3	20
Tellurium	< 0.05	0.05 ug/L		< 0.05			20
Thallium	0.008	0.004 ug/L		0.009			20
Thorium	0.31	0.01 ug/L		0.31		< 1	20
Tin	< 0.05	0.05 ug/L		< 0.05			20
Titanium	5.3	0.2 ug/L		5.3		< 1	20
Uranium	1.11	0.001 ug/L		1.09		3	20
Vanadium	0.8	0.2 ug/L		0.7			20
Zinc	37	1 ug/L		33		11	20
Zirconium	0.52	0.01 ug/L		0.51		1	20

Matrix Spike (R102730-MS1)		Source: K1H1290-04		Prepared: Sep-01-11, Analyzed: Sep-06-11			
Antimony	9.48	0.05 ug/L	10.1	0.06	93	80-120	
Arsenic	23.0	0.05 ug/L	24.4	0.18	94	80-120	
Barium	150	0.2 ug/L	155	6.7	93	80-120	
Beryllium	7.87	0.01 ug/L	9.76	0.07	80	80-120	
Cadmium	9.16	0.002 ug/L	9.80	0.045	93	80-120	
Chromium	49.6	0.1 ug/L	48.4	0.4	102	80-120	
Cobalt	7.79	0.005 ug/L	7.32	0.090	105	80-120	
Copper	116	0.1 ug/L	97.4	6.4	112	80-120	
Iron	354	2 ug/L	93.8	260	100	80-120	
Lead	39.3	0.05 ug/L	38.6	0.15	102	80-120	
Manganese	30.8	0.05 ug/L	21.8	9.54	97	80-120	
Nickel	50.1	0.02 ug/L	48.4	0.85	102	80-120	
Selenium	21.1	0.1 ug/L	23.0	0.2	91	80-120	
Thallium	15.7	0.004 ug/L	15.9	0.004	99	80-120	
Vanadium	73.1	0.2 ug/L	75.2	0.6	96	80-120	
Zinc	515	1 ug/L	484	9	104	80-120	

Reference (R102730-SRM1)		Prepared: Sep-01-11, Analyzed: Sep-06-11					
Aluminum	59	2 ug/L	59.2	100	81-129		
Antimony	9.60	0.05 ug/L	10.1	95	88-114		
Arsenic	23.2	0.05 ug/L	24.4	95	88-114		
Barium	143	0.2 ug/L	155	92	72-104		
Beryllium	10.1	0.01 ug/L	9.76	104	76-131		
Boron	713	1 ug/L	680	105	75-121		
Cadmium	9.12	0.002 ug/L	9.80	93	89-111		
Calcium	2130	50 ug/L	2040	104	86-121		
Chromium	51.7	0.1 ug/L	48.4	107	89-114		
Cobalt	8.06	0.005 ug/L	7.32	110	91-113		
Copper	111	0.1 ug/L	97.4	114	91-115		
Iron	105	2 ug/L	93.8	112	77-124		
Lead	40.1	0.05 ug/L	38.6	104	92-113		
Lithium	80.5	0.05 ug/L	78.0	103	85-115		
Magnesium	726	5.0 ug/L	662	110	78-120		
Manganese	22.3	0.05 ug/L	21.8	102	90-114		
Mercury	0.98	0.01 ug/L	0.912	108	50-150		
Molybdenum	39.0	0.01 ug/L	39.4	99	90-111		
Nickel	52.0	0.02 ug/L	48.4	107	90-111		
Phosphorus	40	5 ug/L	46.6	87	85-115		
Potassium	1270	5 ug/L	1190	107	84-113		

QUALITY CONTROL DATA



CLIENT
PROJECT

DWB Consulting
Nithi Mtn

WORK ORDER #
REPORTED

K1H1290
Sep-09-11

Analyte	Result	Reporting Limit Units	Spike Level	Source Result	% REC Limits	% RPD Limit	Notes
---------	--------	--------------------------	----------------	------------------	-----------------	----------------	-------

Total Recoverable Metals by ICPMS, Batch R102730, Continued

Reference (R102730-SRM1), Continued

Prepared: Sep-01-11, Analyzed: Sep-06-11

Selenium	21.3	0.1 ug/L	23.0	93	85-115	
Sodium	1690	5 ug/L	1530	111	82-123	
Strontium	65.8	0.1 ug/L	72.6	91	88-112	
Thallium	16.1	0.004 ug/L	15.9	102	91-114	
Uranium	3.70	0.001 ug/L	3.84	96	85-120	
Vanadium	76.9	0.2 ug/L	75.2	102	86-111	
Zinc	527	1 ug/L	484	109	85-111	

Report to:

LEEWARD CAPITAL CORP.



**Technical Report on the
Nithi Mountain Molybdenum Property,
British Columbia, Canada**

Document No. 1192110100-L0001-00



Report to:

LEEWARD CAPITAL CORP.



TECHNICAL REPORT ON THE NITHI MOUNTAIN MOLYBDENUM PROPERTY, BRITISH COLUMBIA, CANADA

EFFECTIVE DATE: AUGUST 31, 2011

Prepared by Gregory Zale Mosher, P.Geo.

JW/vc



Suite 800, 555 West Hastings Street, Vancouver, British Columbia V6B 1M1
Phone: 604-408-3788 Fax: 604-408-3722

Report to:

LEEWARD CAPITAL CORP.



TECHNICAL REPORT ON THE NITHI MOUNTAIN MOLYBDENUM PROPERTY, BRITISH COLUMBIA, CANADA

EFFECTIVE DATE: AUGUST 31, 2011

Prepared by	<u>"Original document signed by Gregory Zale Mosher, P.Geo."</u> Gregory Zale Mosher, P.Geo.	Date	<u>August 31, 2011</u>
Reviewed by	<u>"Original document signed by Jeff Wilson, Ph.D., P.Geo."</u> Jeff Wilson, Ph.D., P.Geo.	Date	<u>August 31, 2011</u>
Authorized by	<u>"Original document signed by Jeff Wilson, Ph.D., P.Geo."</u> Jeff Wilson, Ph.D., P.Geo.	Date	<u>August 31, 2011</u>

JW/vc



Suite 800, 555 West Hastings Street, Vancouver, British Columbia V6B 1M1
Phone: 604-408-3788 Fax: 604-408-3722

REVISION HISTORY

REV. NO	ISSUE DATE	PREPARED BY AND DATE	REVIEWED BY AND DATE	APPROVED BY AND DATE	DESCRIPTION OF REVISION
00	2011/08/31	Gregory Z. Mosher	Jeff Wilson	Jeff Wilson	Final Report

TABLE OF CONTENTS

1.0	SUMMARY	1
2.0	INTRODUCTION	3
2.1	INTRODUCTION	3
2.2	TERMS OF REFERENCE	3
3.0	RELIANCE ON OTHER EXPERTS.....	4
4.0	PROPERTY DESCRIPTION AND LOCATION	5
5.0	ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY	9
6.0	HISTORY.....	10
7.0	GEOLOGICAL SETTING AND MINERALIZATION	11
7.1	GEOLOGICAL SETTING	11
7.2	MINERALIZATION	12
8.0	DEPOSIT TYPE.....	14
9.0	EXPLORATION.....	16
10.0	DRILLING.....	17
10.1	SAMPLING METHOD AND APPROACH.....	20
11.0	SAMPLE PREPARATION, ANALYSES, AND SECURITY.....	21
12.0	DATA VERIFICATION	22
13.0	MINERAL PROCESSING AND METALLURGICAL TESTING.....	23
14.0	MINERAL RESOURCE ESTIMATES.....	24
14.1	EXPLORATORY DATA ANALYSIS	24
14.1.1	ASSAYS.....	24
14.1.2	CAPPING	24
14.1.3	COMPOSITES	24
14.2	BULK DENSITY	25
14.3	GEOLOGICAL INTERPRETATION	25
14.4	SPATIAL ANALYSIS	26
14.5	RESOURCE BLOCK MODEL	26
14.6	INTERPOLATION PLAN	27
14.7	MINERAL RESOURCE CLASSIFICATION	27
14.8	MINERAL RESOURCE TABULATION	27
14.9	BLOCK MODEL VALIDATION	31

15.0	ADJACENT PROPERTIES	32
16.0	OTHER RELEVANT DATA AND INFORMATION	33
17.0	INTERPRETATION AND CONCLUSIONS	34
18.0	RECOMMENDATIONS	39
19.0	REFERENCES	40
20.0	CERTIFICATES OF QUALIFIED PERSON	41

LIST OF TABLES

Table 1.1	Summary of Delta, Gamma and Gamma West Resources.....	2
Table 1.2	Recommended Nithi Exploration Budget 2011	2
Table 4.1	Nithi Molybdenum Property Mineral Tenures	7
Table 10.1	Leeward Drill Programs at Nithi Mountain 2005-2008 (by Zone)	17
Table 14.1	Descriptive Statistics Nithi MoS ₂ Assays and Composites.....	25
Table 14.2	Nithi Variography.....	26
Table 14.3	Nithi Search Ellipse Parameters	26
Table 14.4	Nithi Block Model Parameters.....	26
Table 14.5	Nithi Resource Estimate Kriged	28
Table 14.6	Nithi Resource Estimate ID ²	29
Table 14.7	Nithi Resource Estimate ID ⁵	30
Table 14.8	Summary of Nithi Kriged Resource Estimate @ 0.02 MoS ₂ Lower Threshold...	31
Table 17.1	Summary of Delta, Gamma and Gamma West Resources.....	34
Table 18.1	Recommended Nithi Exploration Budget 2011 (Costs in CAD\$)	39

LIST OF FIGURES

Figure 4.1	Nithi Property Location.....	6
Figure 4.2	Nithi Property Location of Mineral Tenure 515427	8
Figure 7.1	Nithi Property Molybdenum Zones.....	12
Figure 10.1	Location of Nithi Molybdenum Zones and Leeward Drill Holes 2005-2011	18
Figure 10.2	Plan View Nithi Delta, Gamma and Gamma West Zones	19
Figure 17.1	Plan View Nithi Northeast and Northwest Trends in Block Model Grades.....	36
Figure 17.2	Plan View High Grade Distribution on Margins of Delta and Gamma Zones.....	37
Figure 17.3	Cross Sectional View Delta and Gamma Zones Near-Surface High Grade Blocks	38

GLOSSARY

UNITS OF MEASURE

Above mean sea level.....	amsl
Acre	ac
Ampere	A
Annum (year)	a
Billion	B
Billion tonnes.....	Bt
Billion years ago.....	Ga
British thermal unit	BTU
Centimetre	cm
Cubic centimetre	cm ³
Cubic feet per minute	cfm
Cubic feet per second	ft ³ /s
Cubic foot.....	ft ³
Cubic inch	in ³
Cubic metre.....	m ³
Cubic yard.....	yd ³
Coefficients of Variation	CVs
Day	d
Days per week	d/wk
Days per year (annum)	d/a
Dead weight tonnes	DWT
Decibel adjusted	dBa
Decibel.....	dB
Degree	°
Degrees Celsius.....	°C
Diameter	ø
Dollar (American)	US\$
Dollar (Canadian).....	Cdn\$
Dry metric ton.....	dmt
Foot.....	ft
Gallon	gal
Gallons per minute (US)	gpm
Gigajoule.....	GJ
Gigapascal	GPa
Gigawatt.....	GW
Gram	g
Grams per litre	g/L
Grams per tonne	g/t
Greater than.....	>
Hectare (10,000 m ²).....	ha
Hertz	Hz

Horsepower.....	hp
Hour	h
Hours per day	h/d
Hours per week.....	h/wk
Hours per year	h/a
Inch	"
Kilo (thousand).....	k
Kilogram.....	kg
Kilograms per cubic metre	kg/m ³
Kilograms per hour.....	kg/h
Kilograms per square metre.....	kg/m ²
Kilometre.....	km
Kilometres per hour.....	km/h
Kilopascal.....	kPa
Kilotonne	kt
Kilovolt	kV
Kilovolt-ampere	kVA
Kilovolts.....	kV
Kilowatt	kW
Kilowatt hour	kWh
Kilowatt hours per tonne (metric ton)	kWh/t
Kilowatt hours per year	kWh/a
Less than	<
Litre.....	L
Litres per minute	L/m
Megabytes per second.....	Mb/s
Megapascal.....	MPa
Megavolt-ampere	MVA
Megawatt	MW
Metre.....	m
Metres above sea level	masl
Metres Baltic sea level	mbsl
Metres per minute	m/min
Metres per second	m/s
Metric ton (tonne).....	t
Microns	µm
Milligram.....	mg
Milligrams per litre.....	mg/L
Millilitre.....	mL
Millimetre.....	mm
Million.....	M
Million bank cubic metres.....	Mbm ³
Million bank cubic metres per annum.....	Mbm ³ /a
Million tonnes	Mt
Minute (plane angle)	'
Minute (time).....	min

Month	mo
Ounce	oz
Pascal	Pa
Centipoise	mPa·s
Parts per million	ppm
Parts per billion	ppb
Percent.....	%
Pound(s)	lb
Pounds per square inch	psi
Revolutions per minute	rpm
Second (plane angle).....	"
Second (time).....	s
Specific gravity	SG
Square centimetre.....	cm ²
Square foot	ft ²
Square inch.....	in ²
Square kilometre.....	km ²
Square metre	m ²
Thousand tonnes	kt
Three Dimensional.....	3D
Three Dimensional Model	3DM
Tonne (1,000 kg).....	t
Tonnes per day	t/d
Tonnes per hour.....	t/h
Tonnes per year.....	t/a
Tonnes seconds per hour metre cubed	ts/hm ³
Volt.....	V
Week.....	wk
Weight/weight	w/w
Wet metric ton.....	wmt
Year (annum).....	a

1.0 SUMMARY

Leeward Capital Corp. (Leeward) owns the Nithi Mountain Molybdenum Property (the Property) in central British Columbia (BC) at about 54° North Latitude and 125° West Longitude. The Property is located 10 km south of Fraser Lake and about 20 km southeast of the Endako Molybdenum Mine, which has been in production since 1965. Leeward acquired the Property in 2003 and between then and 2008 carried out geological mapping, geochemical sampling, geophysical surveying, and approximately 47,000 m of drilling in 210 holes. These exploration programs identified five zones of molybdenum (Mo) mineralization, three of which were sufficiently well-defined to support a resource estimate that was completed in July 2011. During the period May to July 2011 Leeward completed an additional 32 drill holes (6,460 aggregate meters), mostly within the Delta Zone.

Tetra Tech Wardrop (Tetra Tech), has been retained by Leeward to prepare a Technical Report on the Nithi Property, prepared in accordance with National Instrument 43-101 (NI 43-101) and containing an updated resource estimate that incorporates data from the 2011 drill program.

The Property is comprised of seven mineral tenures. Mineral Tenure 515427, which contains the known mineralization of interest, was staked in 2003 as eight claims under the Modified Grid System. In 2005, those claims were converted to Mineral Tenure 515427 which is 2852.729 ha in area.

The Property is situated within the Intermontane Morphogeological/Tectonic Belt of BC that is comprised of the of the Cache Creek, Nisling, and Stikine allochthonous terranes. The Property area is underlain by the multi-phase granodioritic Francois Lake Plutonic Suite of Late Jurassic to Early Cretaceous age that, as part of the Endako Batholith, was emplaced along the boundary between the Stikine and Cache Creek Terranes.

In the Nithi Mountain area, the Nithi Quartz Monzonite has been extensively faulted and brecciated, and mineralization observed on the Property to date occurs in numerous crosscutting veinlets, fractures, and breccias within a northeast-trending zone approximately 2 km wide, called the Alpha Trend. Within this trend, five mineralized zones, Gamma, Gamma West, Delta, Sigma and Theta have been identified to date.

Of these, Gamma and Delta have been explored most extensively; Gamma West has also been explored in reasonable detail. Sigma and Theta are poorly-defined.

The drill data accumulated to date has been used to carry out resource estimates for the three zones Delta, Gamma and Gamma West.

Resources were estimated using ordinary kriging (OK), inverse distance squared (ID^2) and inverse distance to the fifth power (ID^5). The kriged estimate is summarized below in Table 1.1. Resources are stated at a lower grade threshold of 0.02% molybdenum sulphide (MoS_2). Tonnes have been rounded to the nearest thousand.

Table 1.1 Summary of Delta, Gamma and Gamma West Resources

Zone	Tonnes	$MoS_2\%$	Mo%
Delta Indicated	43,064,000	0.037	0.022
Delta Inferred	71,023,000	0.034	0.021
Gamma Indicated	93,310,000	0.039	0.023
Gamma Inferred	114,383,000	0.035	0.021
Gamma West Indicated	11,230,000	0.030	0.018
Gamma West Inferred	54,182,000	0.029	0.017
Total Indicated	147,604,000	0.038	0.023
Total Inferred	239,588,000	0.033	0.020

Tetra Tech recommends a program of drilling to better define the distribution of mineralization, particularly in the Delta and Gamma Zones where higher-grade mineralization appears to be concentrated on the outer margins of those zones as currently defined. In addition, Leeward has indicated the intention to carry out some reclamation work as well as an archaeological and conceptual mine design studies. Drilling is assumed to cost approximately Cdn\$185/m. In addition, Tetra Tech recommends that samples are collected on the basis of lithology rather than on the length of drill runs, which will better serve to identify and define controls on the distribution of mineralization.

Table 1.2 Recommended Nithi Exploration Budget 2011

Item	Holes	Metres	Cost
Drilling	65	16,000	2,960,000
Reclamation			25,000
Archaeological Study			15,000
Conceptual Mining Study			60,000
Total			3,060,000

Successful completion of this work will determine the most appropriate course of action to advance the Property.

2.0 INTRODUCTION

2.1 INTRODUCTION

Leeward owns the Nithi Mountain Molybdenum Property in central BC at approximately 54° North Latitude and 125° West Longitude. The Property is located 10 km south of Fraser Lake and approximately 20 km southeast of the Endako Molybdenum Mine which has been in production since 1965. Leeward acquired the Property in 2003 and between then and 2008 carried out geological mapping, geochemical sampling, geophysical surveying and about 47,000 m of drilling in 210 holes.

No work was carried out on the Property between 2008 and 2011. Between May and July 2011, Leeward drilled 32 holes (aggregate length 6,460 meters) to better define controls on mineralization, in particular, to assess the potential of northeast-trending structural zones to contain higher-grade mineralization. Of the 32 holes, 27 were drilled in the Delta Zone and five in the Theta Zone.

2.2 TERMS OF REFERENCE

Tetra Tech was retained by Leeward to prepare a Technical Report on the Nithi Property that has been prepared in accordance with NI 43-101 and contains an update of the resource estimate that was completed prior to the latest drill campaign. The updated estimate is the subject of this report and incorporates data from the 27 holes drilled in the Delta Zone; a resource estimate was not carried out for the Theta Zone.

Sources of information used in this report are listed in Section 21.0 References, or elsewhere in the text of the report.

The author conducted a site visit to the Property on July 26, 2011.

3.0 RELIANCE ON OTHER EXPERTS

Tetra Tech has relied upon Leeward for information pertaining to ownership of the Property, permitting requirements and status, and legal and financial liabilities pertaining to the Property. Tetra Tech has not independently verified the accuracy of this information.

4.0 PROPERTY DESCRIPTION AND LOCATION

The Property is located in central BC at approximately 54° North Latitude and 125° West Longitude, approximately 160 km west of the city of Prince George, 10 km south of Fraser Lake, and approximately 20 km southeast of the Endako Molybdenum Mine (Figure 4.1). The Property is comprised of seven mineral tenures as listed in Table 4.1 and shown in Figure 4.2. Mineral Tenure 515427, which contains the known areas of significant molybdenum mineralization, is 2852.729 ha in area and is highlighted in Figure 4.2. This mineral tenure was staked in 2004 under the Modified Grid System as the Terri 1 to Terri 8 Claims; in 2005 these were consolidated into Mineral Tenure 515427.

The boundaries of the Property have not been surveyed; the boundaries of the Property are map coordinates.

Table 4.1 was obtained from the British Columbia Government Mineral Titles Online website: <https://www.mtonline.gov.bc.ca>.

The Property is located in central BC, 158 km west of Prince George and 10 km south of the Village of Fraser Lake. Geographic co-ordinates of the approximate center of the Property are 53°58' north latitude and 124°50' west longitude, within NTS Map Sheet 93F/15.

Leeward holds a 100% interest in the Property free and clear of any royalties, back-in rights, payments or other agreements and encumbrances. Leeward does not hold any surface rights and no other surface rights are recorded within the Property.

Other than the mineral zones that are the subject of this report, there are 11 other, apparently minor, known molybdenum occurrences within the Property. All are located within an east-northeast trend known as the Alpha Trend that also includes the main molybdenum zones of interest. There are no mine workings or any related tailings ponds, waste deposits or other improvements other than a series of forestry roads that have been constructed by logging companies and drill-access roads that have been constructed by the Leeward.

There are no known environmental liabilities.

Leeward holds the necessary permits to conduct exploration: an Occupation Licence to cut, under the forest Practices Access Code of British Columbia for road building, drill site construction and trenching, and drilling and water-use permits that are issued by the British Columbia Ministry of the Environment.

The mineral tenures are in good standing until at least 2014 and no expenditures are needed at present to maintain the Property in good standing.

Figure 4.1 Nithi Property Location

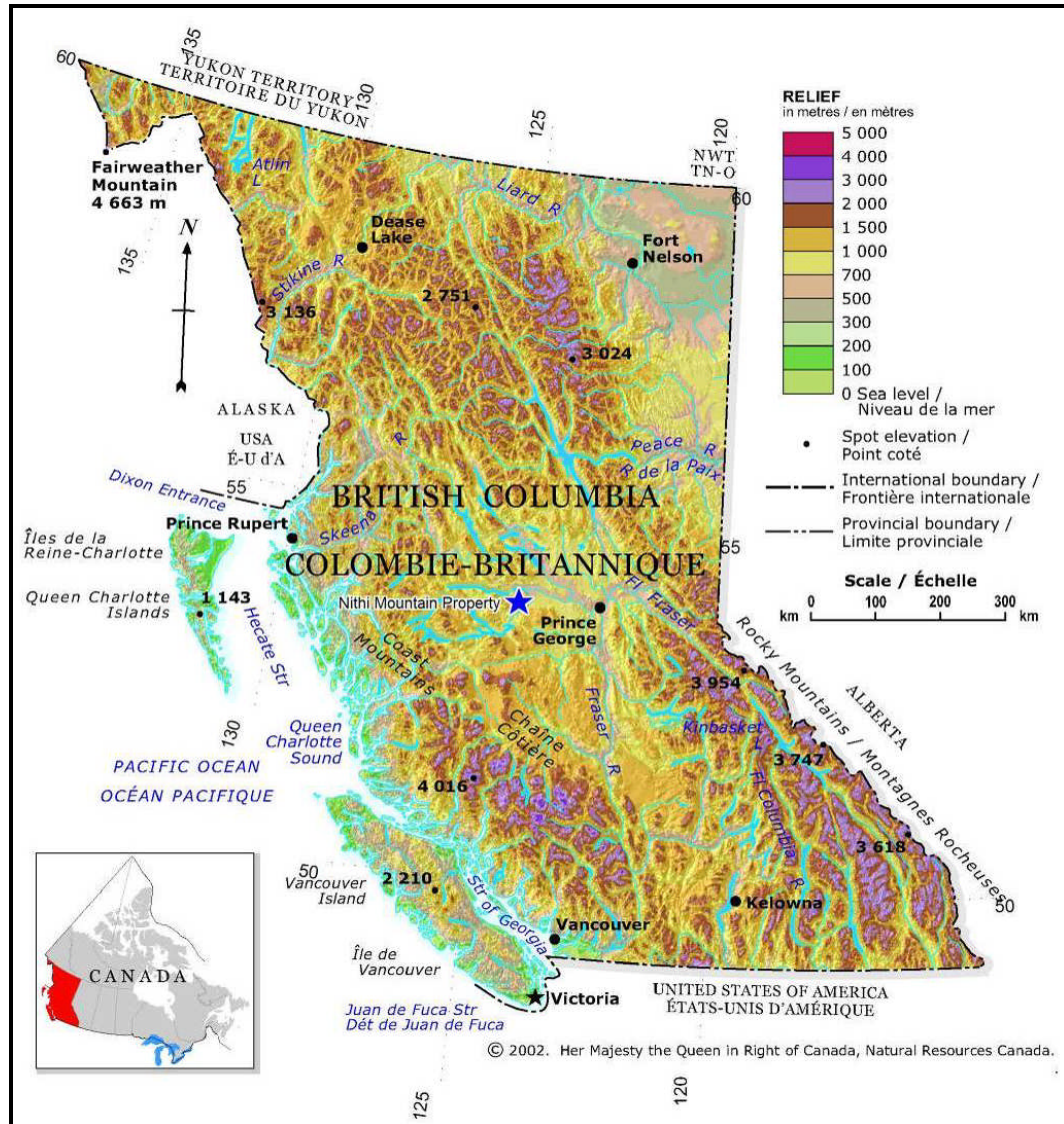
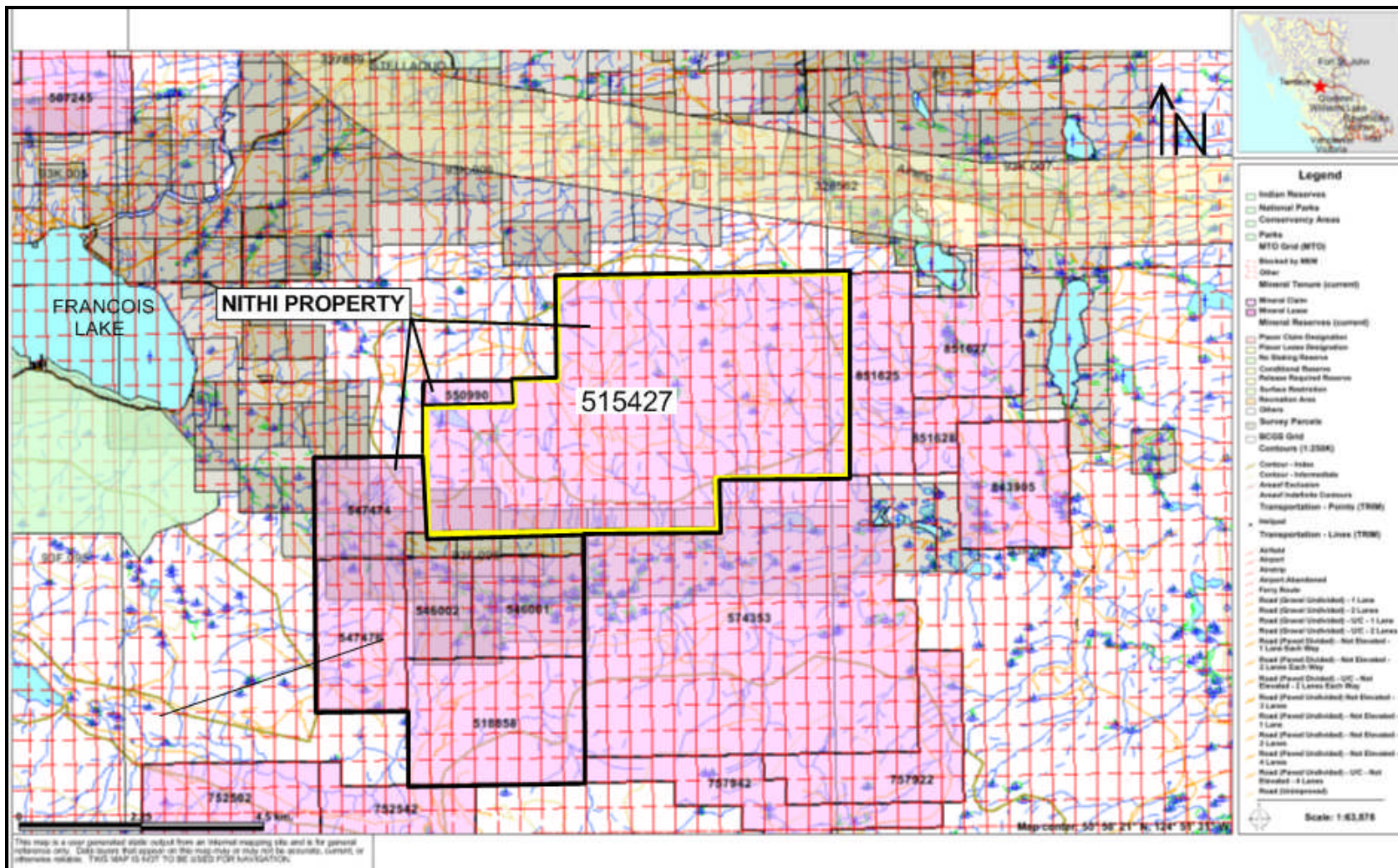


Table 4.1 Nithi Molybdenum Property Mineral Tenures

Tenure Number	Owner	Tenure Type	Tenure Subtype	Map Number	Issue Date	Good To Date	Status	Area (ha)
515427	Leeward Capital (100%)	Mineral	Claim	093F	2005/Jun/28	2018/Oct/25	GOOD	2,852.73
518858	Leeward Capital (100%)	Mineral	Claim	093F	2005/Aug/09	2018/Jan/12	GOOD	761.66
546001	Leeward Capital (100%)	Mineral	Claim	093F	2006/Nov/28	2014/Nov/28	GOOD	380.66
546002	Leeward Capital (100%)	Mineral	Claim	093F	2006/Nov/28	2014/Nov/28	GOOD	228.40
547474	Leeward Capital (100%)	Mineral	Claim	093F	2006/Dec/14	2014/Dec/14	GOOD	361.48
547476	Leeward Capital (100%)	Mineral	Claim	093F	2006/Dec/14	2014/Dec/14	GOOD	456.83
550990	Leeward Capital (100%)	Mineral	Claim	093F	2007/Feb/02	2019/Feb/02	GOOD	76.07

Figure 4.2 Nithi Property Location of Mineral Tenure 515427



5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

The Property is located between the major population centers of Prince George, 160 km to the east, and Smithers, 210 km to the west. Both communities are joined by Highway 16 that passes 10 km to the north of the Property, near the south shore of Fraser Lake. Access to the property is provided by the paved two-lane Chowsunket Road, 5 km south from the Village of Fraser Lake, then another 5 km by gravel logging roads most suitable for four-wheel-drive vehicles. A network of logging and drill roads provides access to the western and southern parts of the Property.

Population centres near the Property include Fraser Lake, 10 km north on Highway 16, Vanderhoof, 60 km east of Fraser Lake, and Burns Lake, 62 km west of Fraser Lake.

Two airfields, suitable for small aircraft, are located in the vicinity of Fraser Lake and a float-plane base is located on the northwest side of Fraser Lake. Scheduled flights are available from Prince George and Smithers. The Canadian National Railway passes south of Fraser Lake.

The property is centred on Nithi Mountain, with a maximum elevation of 1,352 masl, and a minimum elevation of about 900 masl in the valley of the Nithi River. Topography ranges from moderate to steep, with maximum local relief of about 450 m. The uplands around the crest of Nithi Mountain are of relatively subdued relief but the southern flanks of the mountain are relatively steep. The area is heavily forested with both deciduous and coniferous species. Warm summers, long cold winters and light precipitation typify the climate in the Nithi Mountain area.

Although Leeward holds no surface rights within the Property or elsewhere within the immediate area, suitable areas for mine infrastructure exist within and around the Property.

Electric power for an anticipated mining operation may be obtained from the main high voltage line to the Endako Mine that passes 2 km to the north of the Property.

The Nithi River, located 2 km south of the Gamma Zone, could reasonably provide an adequate water supply for a mining operation.

Skilled mining personnel are available both locally and from elsewhere within the province.

6.0 HISTORY

The following section is modified from Kelly (September 2008).

1952-1956: Uranium was discovered on the southwestern flanks of Nithi Mountain. Limited exploration by American Standard Mines demonstrated that the mineralization lacked depth and the Property was dropped.

1963-1964: R and P Metals Corp. Ltd. (Fraser Lake Mines) carried out trenching, soil sampling and limited diamond drilling on the MOLLY claim. The best intersection, in hole N-14, was 117 m averaging 0.10% MoS₂. Several other companies, New Indian Mines Ltd., Jodee Mines Ltd., Dundee Mines Ltd., and Fort Reliance Minerals, staked and explored claims in the Nithi Mountain area at this time. Property ownership was fragmented and the properties were dropped by the late 1960's.

1970-1973: Nithex Exploration and Development staked a large land package and carried out soil geochemical sampling and drilled four small-diameter core holes.

1975-1976: Amax Potash Ltd. optioned the Nithex claims, staked additional ground, and carried out geological mapping, geochemical soil sampling, geophysical surveys, and a percussion drilling program of 12 holes. Amax subsequently dropped their option and no significant additional work was done through the remainder of the 1970's.

1980-1981: Rockwell Mining Corp. optioned the claims from Nithex and Fraser Lake Mines, and contracted Taiga Consultants Ltd. to carry out a program of geochemical sampling, mapping, prospecting, and a drilling program of 10 holes (1,818 aggregate meters) of NQ core. The option was dropped and no additional work was done until 1997.

1997: Six new molybdenite occurrences were located along new logging roads west and south of Nithi Mountain during a regional mapping program by the Geological Survey of Canada.

2003: In December 2003, the Property was staked by Leeward Capital Corp., the present owners of the Property, as eight four-post claims, Terri 1 to Terri 8, under the Modified Grid System.

2004-2005: The Terri 1 to 8 Claims were re-staked (consolidated) by Leeward as Mineral Tenure 515427 (TERRI claim), and a program of data compilation, prospecting, geophysics and drilling was undertaken.

7.0 GEOLOGICAL SETTING AND MINERALIZATION

7.1 GEOLOGICAL SETTING

The Property is situated within the Intermontane Morphogeological/Tectonic Belt of BC that is comprised of the Cache Creek, Nisling, and Stikine allochthonous terranes. The Cache Creek and Nisling terranes were formed in the western Pacific during Permian to Middle Triassic time (280-230 Ma). The Stikine Terrane is a Carboniferous to Early Jurassic (320-190 Ma), island arc that was formed in the east Pacific. During the Early to Middle Jurassic (190-178 Ma), the two terranes joined to form the Intermontane Belt. Arc-related magmatic activity continued into the Tertiary.

The Property area is underlain by the multi-phase granodioritic François Lake Plutonic Suite of Late Jurassic to Early Cretaceous age that, as part of the Endako Batholith, was emplaced along the boundary between the Stikine and Cache Creek Terranes.

Biotite monzogranite to granodiorite phases of the François Lake Plutonic Suite comprise the northeastern part of the Endako batholith and are the host-rock of molybdenum mineralization in the Endako and Property areas. The François Lake Plutonic Suite has been subdivided into two sub-suites on the basis of composition and age:

1. The Glenannan sub-suite, consisting of the Glenannan and Nithi phases, with their various sub-phases, displays a range of compositions from biotite and hornblende–biotite monzogranite to granodiorite, is generally medium to coarse grained, and is located in the north-central to northwestern parts of the batholith.
2. The Endako sub-suite includes the Endako phase, its François sub-phase, the Casey phase, and a set of pre-ore felsic dykes. This suite generally consists of medium- to fine-grained monzogranite to granodiorite units. The Endako sub-suite is inferred to be younger than the Glenannan sub-suite.

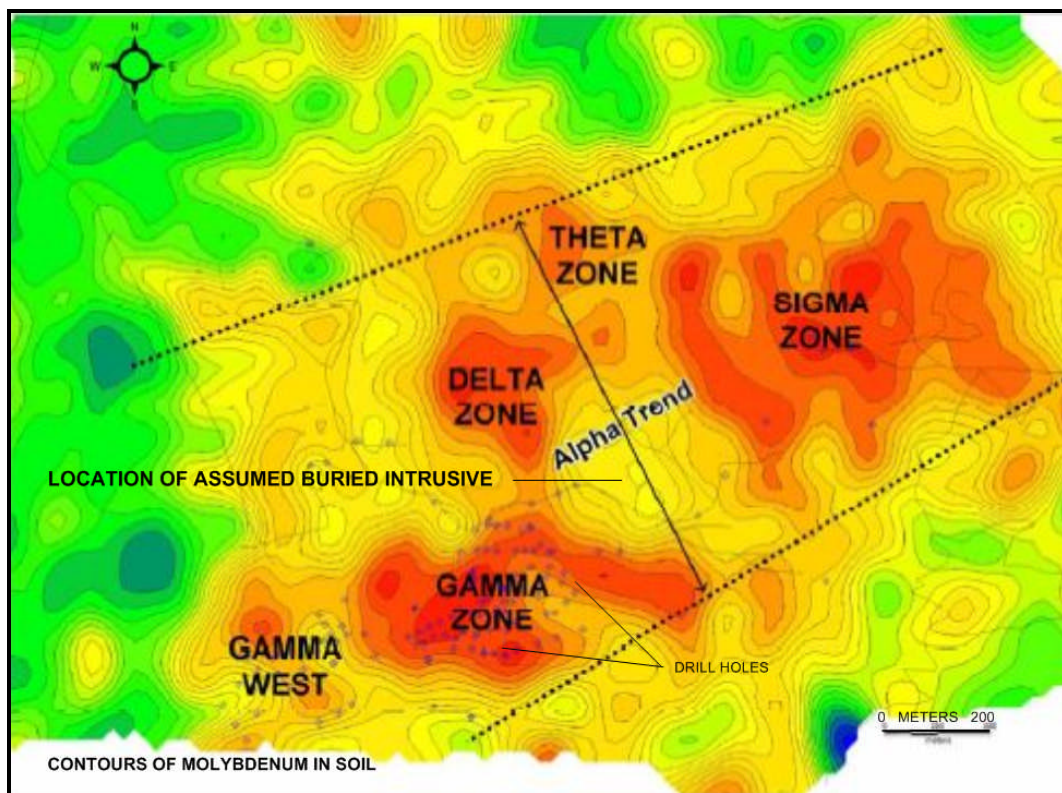
The François Lake plutonic suite records a complex, protracted history that includes emplacement, solidification, locally intense veining, felsic dyke injection, Molybdenum and pyrite mineralization, alteration, and late dyke intrusion, fracturing, and jointing.

7.2 MINERALIZATION

This section is modified from Kelly (September 2008).

In the Nithi Mountain area, the Nithi Quartz Monzonite has been extensively faulted and brecciated, and mineralization observed on the Property to date occurs in numerous crosscutting veinlets, fractures and breccias within a northeast-trending zone approximately two km wide, called the Alpha Trend. Within this trend, five mineralized zones, Gamma, Gamma West, Delta, Sigma and Theta have been identified to date (Figure 7.1).

Figure 7.1 Nithi Property Molybdenum Zones



Mineralization is associated with intense clay alteration. Mineralized quartz veins are narrow (1 to 3 mm wide) and non-laminated, with varying proportions of solid molybdenite, quartz, hematite and a fine-grained black mixture of sulphides and lithified gouge. Quartz veins have a predominant east-northeast trend; these veins are cut by north-northwest trending, and less commonly by southeast trending veins. Laminated quartz-molybdenite veins, indicative of multiple stages of vein opening and sulphide deposition, are less abundant here than at the Endako mine. North-northwest trending fractures and faults locally cut and offset the east-northeast trending vein set.

Minor pyrite commonly occurs with molybdenite; hematite and magnetite are less common. Chalcopyrite, bornite and lesser chalcocite as well as fluorine have been noted in drill core.

Early mineralized veins have alteration envelopes of K-feldspar and variably contain quartz, quartz-molybdenite, or rarely, quartz- hematite. Veins with envelopes of sericite-quartz-pyrite cut those with K-feldspar envelopes veins and coalesce into broad, diffuse zones of pervasive sericitic alteration.

Argillic alteration consisting of kaolinite \pm sericite varies from weak to intense, rated on the successive breakdown of mafic minerals, plagioclase, and finally K-feldspar, and their replacement by clay. Argillic alteration is most intense in the Gamma Zone.

Intense argillic alteration does not always coincide with elevated molybdenum mineralization, indicating that some alteration may be associated with post-mineral faulting and brecciation.

Geophysical data, primarily vertical gradiometrics, suggest the presence of several small intrusive centres or plugs, and the most prospective mineralization to date has been found on the outer edges of two of these. In addition to the geophysical indicators, soil geochemical results correspond to the outlines of these circular features. The Gamma and Delta Zones as delineated thus far are situated on the western outer edge of one of the coincident geochemical-geophysical circular features (Figure 7.1).

8.0 DEPOSIT TYPE

The following section is modified from Kelly (September 2008).

Porphyry molybdenum deposits are classified as alkalic-calcic granite type (e.g. Climax deposit) and low-fluorite (low-F) calc-alkaline quartz monzonite type (Endako deposit). Molybdenum mineralization at Nithi Mountain is classified as the low-F type.

Sinclair (1995) characterized low-F-type porphyry Mo deposits as calc-alkaline molybdenum stockworks, or stockworks of molybdenite-bearing quartz veinlets and fractures in intermediate to felsic intrusive rocks and associated country rocks. The following description of low-F-type Mo deposits is from Sinclair (1995):

- Deposits are low grade but large and amenable to bulk mining methods.
- These deposits are found in subduction zones related to arc/continent or continent/continent collision.
- The geological setting is that of high-level to subvolcanic felsic intrusive centres and multiple stages of intrusion are common.
- Geological age of the deposits range from Achaean to Tertiary with Mesozoic and Tertiary examples being most common.
- Host rocks are variable. Tuffs or other extrusive volcanic rocks may be associated with subvolcanic intrusives. Genetically related intrusive rocks are porphyritic and granodioritic with quartz monzonite being the most common. Intrusive rocks are characterized by low-F content (generally <0.1% F) compared to intrusive rocks associated with the Climax type porphyry Mo deposits;
- The deposits occur in various shapes from inverted cup-like to roughly cylindrical to highly irregular forms. They are typically hundreds of meters across and range from tens to hundreds of meters in vertical extent.
- The ore tends to be structurally controlled in stockworks of crosscutting fractures and quartz veinlets, veins, vein sets and breccias.
- The mineralogy consists principally of molybdenite with trace or minor chalcopyrite, scheelite, and galena.
- Gangue mineralogy consists of quartz, pyrite, potassium feldspar, biotite, sericite, clays, calcite and anhydrite.
- Alteration mineralogy consists of a core of potassic and silica alteration characterized by hydrothermal K-feldspar, biotite, quartz and possibly anhydrite.

- Phyllic alteration surrounds the inner potassic/silicic alteration core and may extend for hundreds of meters beyond the potassic/silicic and phyllic alteration zones. Where present, argillic alteration is characterized by kaolinite and typically overprinted onto the other zones.

The Endako Mine is an example of a porphyry molybdenum deposit. The following information has been modified from Kelly (September 2008); **the present author has been unable to verify the following information and the information is not necessarily indicative of the mineralization that has been or may be found on the Property.**

The Endako open-pit molybdenum mine, located about 20 km northwest of Nithi Mountain, has been in continuous production since 1965.

The current milling rate is about 30,000 st/d. A new 50,000 st/d mill is currently under construction and is scheduled to be finished in the spring of 2011. The average head grade is about 0.06% Mo and the recovery rate is about 78%.

The Endako deposit is a low F-type porphyry Mo deposit analogous to Nithi Mountain and like Nithi is related to an evolved aplitic phase of the host quartz monzonite. The host rock at Endako is the quartz monzonite phase of the Francois Lake Intrusive Suite. Two stages of molybdenite mineralization at 148-145 Ma are six to nine million years younger than the Nithi mineralization that has been dated at 154 Ma.

The Endako orebody is a 3.5 km-long stockwork zone that trends west- northwest and dips about 50° to the south. Mineralization has been traced to a depth of 330 m.

The stockwork is located at the structural intersection of the EW-trending South Boundary Fault, the NW-trending Casey Lake Fault, and NE-trending structures.

9.0 EXPLORATION

The following section is modified from Kelly (September 2008), and describes work carried out by Leeward since the acquisition of the Property in 2003.

2003: The Property was acquired in December 2003 by the staking of the Terri 1 to Terri 8 Claims.

2004: All data pertaining to previous exploration on the Property was compiled and a brief program consisting of prospecting, geological mapping, and geochemical sampling was completed. In addition, a NI 43-101 report was completed.

2005: Exploration included an airborne magnetic and electromagnetic survey and two drill programs (25 holes, 6,170 aggregate meters), to test the Gamma, Delta and Theta Zones.

2006: Sixteen drill holes (2923 m) were completed on the Gamma Zone.

2007: Exploration work consisted of airborne gradiometer and radiometric surveys and digital terrain mapping, as well as soil geochemical surveys and the drilling of 120 holes (aggregate length 25,500 m).

2008: Drilling, primarily on the Delta Zone, comprised 50 holes (12,600 m).

Vertical gradiometer geophysical data suggest the presence of several small intrusive centres or plugs and the most prospective mineralization detected to date, appears to be spatially related to the outer rims of two of these inferred intrusive bodies. In addition to the geophysical indicators, molybdenum-in-soil geochemical results correspond closely to the outlines of these circular features. The Gamma and Delta Zones, as delineated to date, are situated on the southwestern and western edges respectively, of one of the coincident geochemical-geophysical circular features (Figure 7.1).

The airborne geophysical surveys were done under contract by Fugro and Aeroquest. The geochemical sampling, geological mapping and geological and supervisory aspects of the drill programs were done under contract by Taiga Consultants Ltd. of Calgary.

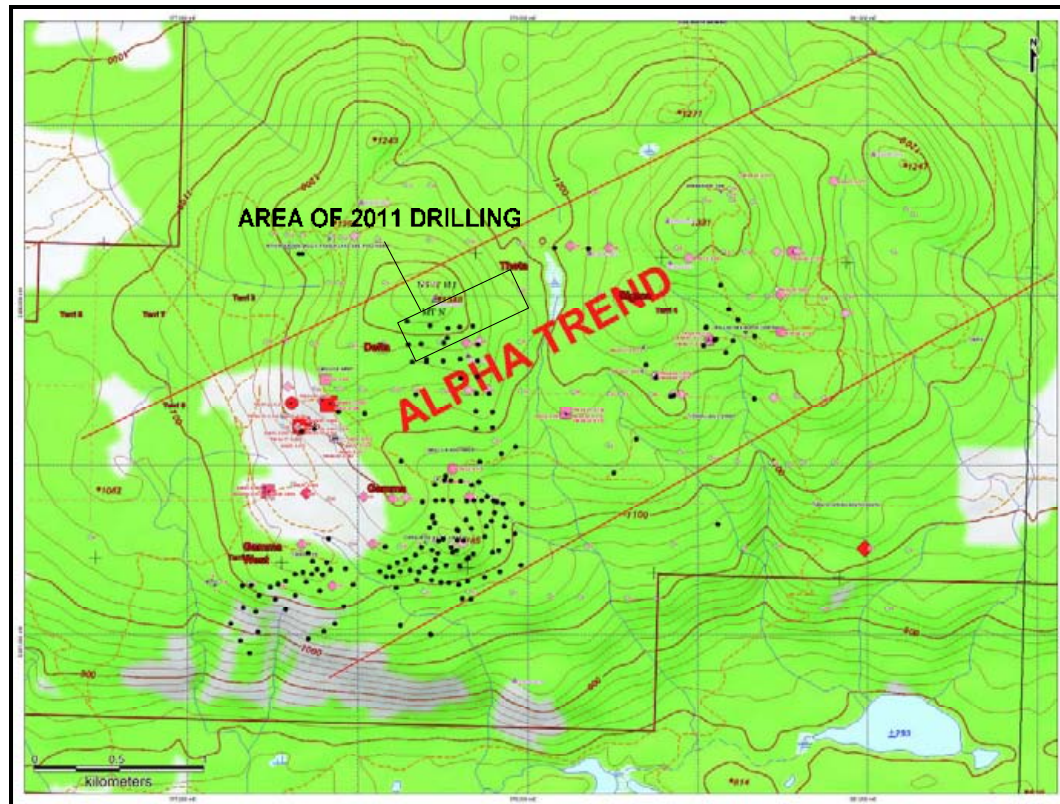
10.0 DRILLING

The location and amount of drilling that was carried out annually by Leeward between 2004 and 2011 is summarized below both by meters per zone and by meters per year (Table 10.1). The location of the zones and the distribution of the drill holes are shown in Figure 10.1. All holes were of NQ size.

Table 10.1 Leeward Drill Programs at Nithi Mountain 2005-2008 (by Zone)

Nithi Drilling Summary by Zone				Nithi Drilling Summary by Year			
Zone	Year	No. of Holes	Length (m)	Year	Zone	No. of Holes	Length (m)
Delta	2007	3	817	2005	Gamma	17	3,941
Delta	2008	48	12,051	2005	Other	7	1,791
Delta	2011	27	5,351	2005	Subtotal	24	5,732
Delta	Subtotal	78	18,219				
Gamma	2005	17	3,941	2006	Gamma	16	3,145
Gamma	2006	16	3,145				
Gamma	2007	59	12,581	2007	Delta	3	817
Gamma	Subtotal	92	19,667	2007	Gamma	59	12,581
Gamma West	2007	40	8,432	2007	Gamma West	40	8,432
Other	2005	7	1,791	2007	Other	6	1,098
Other	2007	6	1,098	2007	Sigma	12	2,588
Other	Subtotal	13	2,889	2007	Subtotal	120	25,516
Sigma	2007	12	2,588				
Theta	2008	2	540	2008	Delta	48	12,051
Theta	2011	5	1,110	2008	Theta	2	540
Theta	Subtotal	7	1,650	2008	Subtotal	50	12,591
Total		237	53,444				
				2011	Delta	27	5,351
				2011	Theta	5	1,110
				2011	Subtotal	32	6,461
				Total		210	53,444

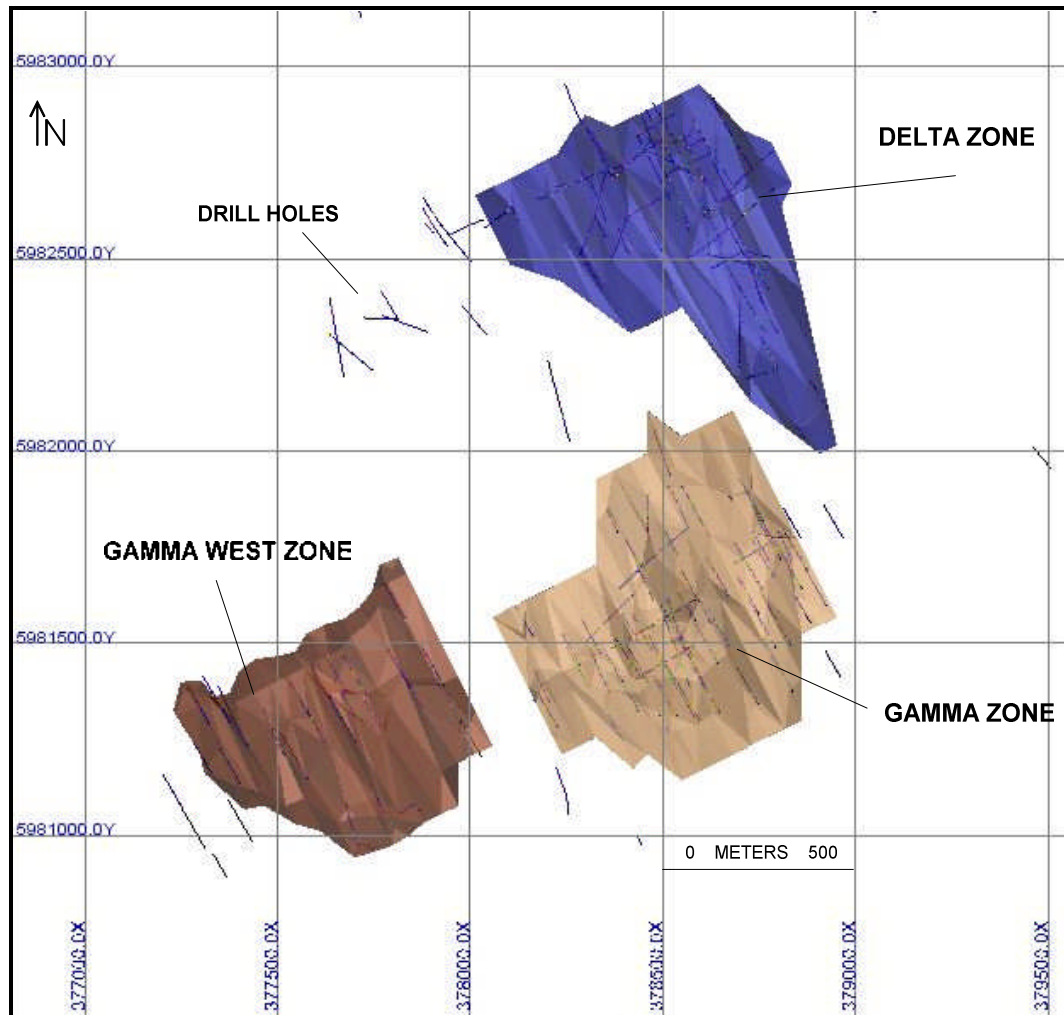
Figure 10.1 Location of Nithi Molybdenum Zones and Leeward Drill Holes 2005-2011



As can be seen from Table 10.1, the majority of holes have been drilled to test the Gamma (38%), Gamma West (16%) and Delta (34%) Zones. The geological interpretation for the Property has been developed from observations made within these areas.

Mineralization in the Gamma and Gamma West Zones is stockwork-style that is hosted by argillically-altered Nithi quartz-monzonite and Casey aplite. The predominant trend of mineralized fractures is about 060° and dips are vertical to steep, to the southeast. Drilling to date in the Gamma Zone has indicated the presence of mineralization over an area of about 1000 m NW-SE by 500 m NE-SW and to a maximum depth of 250 m below surface. The Delta Zone may be an offset portion of the Gamma Zone. (Figure 10.2)

Figure 10.2 Plan View Nithi Delta, Gamma and Gamma West Zones



As in the Gamma Zone, Delta Zone mineralization is stockwork-style within argillically-altered Nithi quartz monzonite and Casey aplite. In addition to numerous quartz-molybdenite veins, disseminated molybdenite and rare, thicker seams of molybdenite occur as fracture fillings. Drilling in the Delta Zone has indicated the presence of mineralization over an area of about 800 m NW-SE by 450 m NE-SW and to a maximum depth of 260 m below surface.

The Delta and Gamma Zones are interpreted to contain multiple, stacked molybdenite zones that strike E-NE and dip gently to the SE. The shallow-dipping zones are intersected by a series of quartz-feldspar porphyry and basalt dykes and mineralized structures that strike NNW roughly perpendicular to the 060° trend. Some of the northwest-trending structures may also be mineralized.

Insufficient drilling has been done in the other zones (Sigma and Theta) to permit a meaningful interpretation of the mineralization that has been intersected in these areas.

Drill holes have intersected mineralization at a range of angles relative to true thickness; therefore it is not possible to make any generalization with respect to the relationship between sample length and the true thickness of mineralization.

10.1 SAMPLING METHOD AND APPROACH

Drill core from all programs was sampled in a similar manner: All core was logged, split with a mechanical splitter (early holes were cut rather than split or not processed at all if no mineralization was visually detected), and sampled. The length of individual samples was typically established by sampling between the wooden blocks that marked the drill runs. The most common sample length was 3.05 m (10 ft, the conventional maximum drill run).

Logging, splitting and sampling the core was done by geologists and a technician under the supervision of T. Millinoff, all of whom were employees of Taiga Consultants Ltd.

Because each hole was sampled in its entirety, sample bias was not a meaningful concern. Core recovery, in general, was reported by Leeward as being excellent.

Core from the 2011 program was logged, split, and sampled at a rented garage located on Telegraph Road, Fraser Lake. All core, including that from previous drill campaigns, is stored out of doors within a fenced and protected area on the outskirts of Fraser Lake. Samples were placed in plastic sample bags, sealed, and shipped to Loring Laboratories in Calgary.

11.0 SAMPLE PREPARATION, ANALYSES, AND SECURITY

Drill core was logged, split with a mechanical splitter, and one-half was placed in a plastic sample bag with one of a triple set of assay tags. The second half of the core was returned to its proper place in the core box. The second copy of the sample tag was placed in the core box at the start of the sample interval and the third portion of the sample tag was retained in the assay book. It was noted during the site visit that no sample tags were seen in any of the core boxes examined. Sample preparation for all drill programs was carried out by employees of Taiga Consultants Ltd. of Calgary.

Sample bags were sealed and packed into shipping sacks that in turn were labelled and sealed and securely stored until shipment. Samples were shipped by truck from Fraser Lake to Loring Laboratories (Loring) in Calgary. Loring is an Alberta Certified Assayer and is also ISO certified.

Loring used a 2 g sample charge and analyzed for Mo using an Atomic Absorption with a Spectrophotometric finish.

Standards and blanks were used for all drill programs; duplicates were used for the 2011 program.

Blanks and standards were inserted into the sample stream after every ten regular samples. Three standards were obtained from WCM Minerals of Burnaby, BC. Blank material for earlier programs was obtained from barren granite; for the 2011 program, local river sand was used for blanks.

Tetra Tech considers the sampling, sample preparation, security and analytical procedures to be within industry norms and that the data that has been obtained from these samples is adequate for the purpose of the resource estimate that follows.

12.0 DATA VERIFICATION

Leeward employed standards, blanks and duplicate samples as quality assurance/quality control (QA/QC) measures in their 2011 drill program and this data was provided to Tetra Tech. Two of 98 analyses of blanks exceeded an accepted mean value of 0.001 % MoS₂; both were from hole D-11-42. Sample batches associated with failed blanks were re-run.

Tetra Tech received analytical data for one standard (Cu-119 from WCM Minerals of Burnaby, British Columbia) used during the 2011 drill program. Only one of 90 analyses (from hole D-11-42) differed from the expected mean by more than 10 percent. The sample batch associated with the failed standard was re-run.

Data was received for 99 duplicate pairs. About 35% of the pairs differed by more than 10 percent compared to the original assay, the analyses of 18 duplicates were less than 90% of the original and the assays of 17 duplicates were more than 110% of the original. The magnitude of the differences did not, as is commonly the case, increase with an increase of the assay values. Leeward did not have a set threshold for rejection of duplicate assays but a decision to re-run the relevant batch was made on a case-by-case basis.

Tetra Tech did not collect any samples of core to independently verify the existence of molybdenite mineralization as it is macroscopically visible in the core and in outcrop and its existence is therefore not in question.

13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

In 2008, G&T Metallurgical Services Ltd. (G&T), located in Kamloops, BC, carried out a preliminary metallurgical assessment of Nithi molybdenum mineralization.

Leeward sent about 367 kg of coarse reject drill core sample material to G&T as three composites of low-grade (0.043 %MoS₂), medium-grade (0.058 %MoS₂) and high-grade (0.032 %MoS₂) mineralization. G&T carried out open-circuit and locked-cycle tests. Overall recoveries for the open-circuit tests ranged between 83 and 90%; for the locked-cycle tests recoveries were about 94%. Rate of recovery did not appear to have a quantitative relationship with grade.

14.0 MINERAL RESOURCE ESTIMATES

14.1 EXPLORATORY DATA ANALYSIS

14.1.1 ASSAYS

Leeward provided Tetra Tech with an assay database in Microsoft Excel™ format that included collar locations, down-hole surveys, assays (1,693 samples) with values expressed as MoS₂ and Mo, lithology, and alteration for the holes drilled during the 2011 program. The drill hole data were imported into the resource estimation software program GEMS™, added to the existing database, and checked for integrity. Minor discrepancies were found between maximum stated hole lengths and maximum sample lengths, as well as a minor number of from-and-to transposition errors in the assay table. These were corrected to produce an error-free data set.

14.1.2 CAPPING

Capping is normally applied to a data set to compensate for the disproportionate influence of high values if those values are atypical of the sample population. The complete Nithi molybdenum assay population ranges in value from zero to a maximum of 1.62% MoS₂. Although most values (16,688 of 17,151) are equal to or less than 0.1% MoS₂, those in excess of 0.1% have an even progression to the maximum value of 1.62% which suggests a homogenous population, and the top decile contains less than 40% of the value of the total assay population, the threshold for capping when using the Parrish method. Therefore none of the high values is considered to be an outlier and no capping was applied.

14.1.3 COMPOSITES

Samples are composited to even lengths to overcome the distorting effect of variable sample lengths on the weighting of sample grades. In the case of the Nithi assay data set, all but 42 of the 1,693 assays from the 2011 drill program were 3.05 meters in length and overall, only 0.2% of the samples exceeded 3.05 m in length. Samples were therefore composited to 3.05 m. The compositing process was restricted to those assays that were located within the modeled geological solids (Gamma, Gamma West and Delta Zones) to minimize dilution on the margins of the mineralized zones. The comparative descriptive statistics for all raw assays and those composites within the principal three known zones are shown below in Table 14.1.

Table 14.1 Descriptive Statistics Nithi MoS₂ Assays and Composites

Nithi All Samples MoS ₂	Assays	Composites
Mean	0.026	0.030
Standard Error	0.000	0.000
Median	0.016	0.022
Mode	0.001	0.016
Standard Deviation	0.041	0.036
Sample Variance	0.002	0.001
Kurtosis	344.467	154.723
Skewness	13.220	9.155
Range	1.619	1.001
Minimum	0.000	0.000
Maximum	1.619	1.001
Sum	441.788	364.498
Count	17,151	12,265

14.2 BULK DENSITY

In 2007, Leeward collected 84 bulk density measurements from Gamma Zone core samples. Measurements ranged from 2.40 to 2.76 g/cm³. The average is 2.55 g/cm³. In 2011, 29 measurements of bulk density were made from fine-grained reject material. These values ranged between 2.59 to 2.79 g/cm³ with an average value of 2.71 g/cm³. For the purpose of the resource estimate, a weighted average of all 113 measurements, 2.59 g/cm³ was used.

14.3 GEOLOGICAL INTERPRETATION

Five zones of molybdenum concentration, Gamma, Gamma West, Delta, Sigma and Theta, have been identified by Leeward from surface geochemical and geophysical surveys and drilling. However, these zones appear to be identifiable only on the basis of concentration of mineralization, not by any unique geological features. Therefore, for this resource estimation exercise, the zones were modeled as grade shells. A grade of 0.02% MoS₂ was chosen as the appropriate lower boundary limit for the grade shell. This grade appears to be a natural limit at which the distribution of molybdenum mineralization becomes erratic or ceases to form a relatively coherent volume. Only three of the five currently-identified zones were modeled: Gamma, Gamma West and Delta. Too little data is currently available for the Sigma and Theta Zones to support a meaningful estimation of the resources present there. The three zones, as modeled, are shown in Figure 10.2.

14.4 SPATIAL ANALYSIS

Variographic analysis of the Nithi data set was made using composite values and Sage 2001 software. The resultant ellipse was flat-lying and elongate in a nearly north-south direction. Geological evidence (outcrop) indicates that the distribution of mineralization has been influenced by fractures trending both northeast and northwest. The north-trending ellipse was retained as a compromise for both trends, but rather than having the north-south axis longer than the east-west axis, both were made equal so that the search ellipse is a flat disk to give equal weight to both fracture directions. Variogram parameters are given in Table 14.2; search ellipse parameters are given in Table 14.3.

Table 14.2 Nithi Variography

Structure	Weight	XYZ Rotation Axis	C1		C2	
			Axis Orientation	Range	Axis	Range
C0	0.371	Z	0	60	X	90
C1	0.518	Y	87	120	Y	180
C2	0.111	Z	0	100	Z	200

Model – Two Structure Exponential

C0 – Nugget

C1 – First Structure

C2 – Second Structure

Lag – 65 m

Pairs Minimum – 350

Range in metres

Table 14.3 Nithi Search Ellipse Parameters

Search Ellipse	Axis	Axis Orientation	Indicated Range	Inferred Range
	Principal Axis	0	40	60
	Principal Dip	87	80	120
	Intermediate Axis	0	80	120

14.5 RESOURCE BLOCK MODEL

Block model parameters are given below in Table 14.4.

Table 14.4 Nithi Block Model Parameters

Origin	Coordinates	Dimensions	Number	Size (m)	Rotation
X	377200	Columns	90	20	0
Y	5980900	Rows	105	20	
Z	1400	Levels	70	10	

14.6 INTERPOLATION PLAN

Resources were interpolated in two passes. In each pass, interpolation of grades was restricted to the solid from which the composited assay values were obtained; that is to say, interpolated values pertain only to an individual solid and grades within a given solid are not affected by grades in adjacent solids.

In the first pass, for a grade to be interpolated into a block it was necessary that a minimum of four (4) samples, with a minimum of one sample per drill hole (i.e. a minimum of four drill holes), be located within the volume of the search ellipse. The Indicated search ellipse was used for the first pass.

For the second pass, it was necessary that a minimum of two (2) samples, with a minimum of one sample per drill hole (two drill holes), be present within the volume of the search ellipse. The Inferred search ellipse was used for this pass. In both cases the maximum number of samples permitted for the estimation of a block grade was 16 samples.

Resources were estimated by ordinary kriging, inverse distance squared (ID^2) and inverse distance to the fifth power (ID^5). Kriging is taken as the “best” estimate; the others were run as checks on the kriged estimate.

14.7 MINERAL RESOURCE CLASSIFICATION

As implied by the names of the search ellipses, blocks that received a grade during the first pass were classified as Indicated; those that received a grade during the second pass were classified as Inferred. No blocks were classified as Measured.

14.8 MINERAL RESOURCE TABULATION

The kriged, ID^2 and ID^5 resource estimates for the Delta, Gamma and Gamma West Zones are presented below in Table 14.5, Table 14.6, and Table 14.7 respectively. The base case of 0.02% MoS_2 is highlighted in yellow in each.

Table 14.5 Nithi Resource Estimate Kriged

Delta Threshold MoS ₂	Indicated Tonnes	Grade MoS ₂ %	Grade Mo%
0.50	0	0.000	0.000
0.25	20,400	0.278	0.167
0.10	1,213,800	0.145	0.087
0.09	1,611,600	0.132	0.079
0.08	2,091,000	0.121	0.073
0.07	2,937,600	0.108	0.065
0.06	4,396,200	0.093	0.056
0.05	6,456,600	0.081	0.049
0.04	10,822,200	0.066	0.040
0.03	20,665,199	0.051	0.031
0.02	43,064,399	0.037	0.022
0.01	77,591,398	0.027	0.016
Delta Threshold MoS ₂	Inferred Tonnes	Grade MoS ₂ %	Grade Mo%
0.50	10,200	0.510	0.306
0.25	40,800	0.338	0.203
0.10	887,400	0.144	0.087
0.09	1,122,000	0.134	0.080
0.08	1,540,200	0.120	0.072
0.07	2,488,800	0.103	0.062
0.06	4,182,000	0.087	0.052
0.05	7,925,400	0.072	0.043
0.04	15,534,599	0.058	0.035
0.03	32,180,999	0.046	0.028
0.02	71,022,598	0.034	0.021
0.01	117,779,396	0.027	0.016

Gamma Threshold MoS ₂	Indicated Tonnes	Grade MoS ₂ %	Grade Mo%
0.50	0	0.000	0.000
0.25	0	0.000	0.000
0.10	1,111,800	0.132	0.079
0.09	1,499,400	0.122	0.073
0.08	2,223,600	0.110	0.066
0.07	3,988,200	0.094	0.056
0.06	8,098,800	0.079	0.047
0.05	16,952,400	0.066	0.040
0.04	34,027,199	0.055	0.033
0.03	62,546,398	0.046	0.028
0.02	93,309,598	0.039	0.023
0.01	103,325,997	0.037	0.022
Gamma Threshold MoS ₂	Inferred Tonnes	Grade MoS ₂ %	Grade Mo%
0.50	0	0.000	0.000
0.25	0	0.000	0.000
0.10	571,200	0.118	0.071
0.09	1,020,000	0.108	0.065
0.08	1,591,200	0.099	0.060
0.07	2,754,000	0.089	0.053
0.06	5,630,400	0.076	0.046
0.05	12,556,200	0.064	0.039
0.04	29,294,399	0.053	0.032
0.03	65,606,398	0.043	0.026
0.02	114,382,796	0.035	0.021
0.01	133,171,196	0.033	0.020

Gamma West Threshold MoS ₂	Indicated Tonnes	Grade MoS ₂ %	Grade Mo%
0.50	0	0.000	0.000
0.25	0	0.000	0.000
0.10	0	0.000	0.000
0.09	30,600	0.094	0.057
0.08	51,000	0.089	0.054
0.07	81,600	0.084	0.050
0.06	163,200	0.073	0.044
0.05	316,200	0.064	0.039
0.04	1,213,800	0.050	0.030
0.03	4,253,400	0.039	0.023
0.02	11,230,200	0.030	0.018
0.01	18,584,400	0.024	0.015
Gamma West Threshold MoS ₂	Inferred Tonnes	Grade MoS ₂ %	Grade Mo%
0.50	0	0.000	0.000
0.25	0	0.000	0.000
0.10	71,400	0.140	0.084
0.09	142,800	0.118	0.071
0.08	142,800	0.118	0.071
0.07	255,000	0.098	0.059
0.06	591,600	0.079	0.047
0.05	1,560,600	0.064	0.038
0.04	4,896,000	0.050	0.030
0.03	17,380,799	0.038	0.023
0.02	54,182,398	0.029	0.017
0.01	91,912,197	0.023	0.014

Table 14.6 Nithi Resource Estimate ID²

Delta Threshold MoS ₂	Indicated Tonnes	Grade MoS ₂ %	Grade Mo%
0.50	0	0.000	0.000
0.25	51,000	0.286	0.172
0.10	1,305,600	0.148	0.089
0.09	1,632,000	0.137	0.082
0.08	2,121,600	0.125	0.075
0.07	3,049,800	0.109	0.066
0.06	4,559,400	0.094	0.057
0.05	6,558,600	0.082	0.049
0.04	11,291,400	0.066	0.040
0.03	20,389,799	0.052	0.031
0.02	41,666,999	0.038	0.023
0.01	75,337,198	0.028	0.017
Delta Threshold MoS ₂	Inferred Tonnes	Grade MoS ₂ %	Grade Mo%
0.50	10,200	0.555	0.333
0.25	81,600	0.376	0.226
0.10	1,193,400	0.147	0.088
0.09	1,632,000	0.133	0.080
0.08	2,386,800	0.118	0.071
0.07	3,672,000	0.103	0.062
0.06	5,722,200	0.089	0.053
0.05	9,486,000	0.075	0.045
0.04	17,044,199	0.062	0.037
0.03	32,262,599	0.049	0.029
0.02	67,156,798	0.036	0.022
0.01	113,842,197	0.028	0.017

Gamma Threshold MoS ₂	Indicated Tonnes	Grade MoS ₂ %	Grade Mo%
0.50	0	0.000	0.000
0.25	61,200	0.303	0.182
0.10	1,560,600	0.139	0.083
0.09	2,111,400	0.127	0.076
0.08	3,213,000	0.113	0.068
0.07	5,487,600	0.097	0.058
0.06	9,883,800	0.082	0.049
0.05	18,309,000	0.070	0.042
0.04	33,527,399	0.058	0.035
0.03	58,660,199	0.048	0.029
0.02	89,229,598	0.040	0.024
0.01	102,785,397	0.037	0.022
Gamma Threshold MoS ₂	Inferred Tonnes	Grade MoS ₂ %	Grade Mo%
0.50	0	0.000	0.000
0.25	20,400	0.333	0.200
0.10	887,400	0.129	0.077
0.09	1,326,000	0.118	0.071
0.08	2,295,000	0.104	0.062
0.07	3,845,400	0.092	0.055
0.06	7,384,800	0.079	0.047
0.05	14,198,400	0.067	0.040
0.04	29,671,799	0.055	0.033
0.03	63,025,798	0.044	0.027
0.02	109,466,397	0.036	0.022
0.01	131,998,196	0.033	0.020

Gamma West Threshold MoS ₂	Indicated Tonnes	Grade MoS ₂ %	Grade Mo%
0.50	0	0.000	0.000
0.25	0	0.000	0.000
0.10	40,800	0.117	0.070
0.09	40,800	0.117	0.070
0.08	71,400	0.105	0.063
0.07	173,400	0.087	0.052
0.06	316,200	0.077	0.046
0.05	663,000	0.065	0.039
0.04	1,652,400	0.052	0.031
0.03	4,386,000	0.041	0.025
0.02	10,240,800	0.032	0.019
0.01	18,105,000	0.025	0.015
Gamma West Threshold MoS ₂	Inferred Tonnes	Grade MoS ₂ %	Grade Mo%
0.50	0	0.000	0.000
0.25	0	0.000	0.000
0.10	122,400	0.147	0.088
0.09	214,200	0.125	0.075
0.08	285,600	0.115	0.069
0.07	530,400	0.096	0.058
0.06	1,091,400	0.080	0.048
0.05	2,233,800	0.067	0.040
0.04	6,038,400	0.052	0.031
0.03	17,462,399	0.040	0.024
0.02	51,203,998	0.030	0.018
0.01	89,056,197	0.024	0.014

Table 14.7 Nithi Resource Estimate ID⁵

Delta Threshold MoS ₂	Indicated Tonnes	Grade MoS ₂ %	Grade Mo%
0.50	0	0.000	0.000
0.25	193,800	0.307	0.184
0.10	1,876,800	0.161	0.096
0.09	2,325,600	0.148	0.089
0.08	2,927,400	0.135	0.081
0.07	3,794,400	0.121	0.073
0.06	5,161,200	0.106	0.064
0.05	7,782,600	0.089	0.053
0.04	12,229,800	0.073	0.044
0.03	20,032,799	0.058	0.035
0.02	37,709,399	0.042	0.025
0.01	68,737,798	0.030	0.018
Delta Threshold MoS ₂	Inferred Tonnes	Grade MoS ₂ %	Grade Mo%
0.50	20,400	0.532	0.319
0.25	153,000	0.357	0.214
0.10	2,101,200	0.143	0.086
0.09	2,774,400	0.131	0.079
0.08	3,784,200	0.119	0.071
0.07	5,691,600	0.104	0.062
0.06	8,007,000	0.093	0.056
0.05	12,056,400	0.080	0.048
0.04	18,237,599	0.068	0.041
0.03	33,149,999	0.053	0.032
0.02	62,485,198	0.039	0.024
0.01	105,223,197	0.029	0.018

Gamma Threshold MoS ₂	Indicated Tonnes	Grade MoS ₂ %	Grade Mo%
0.50	20,400	0.529	0.317
0.25	91,800	0.388	0.233
0.10	2,335,800	0.145	0.087
0.09	3,386,400	0.130	0.078
0.08	4,824,600	0.116	0.070
0.07	7,456,200	0.101	0.061
0.06	12,495,000	0.087	0.052
0.05	19,584,000	0.075	0.045
0.04	33,098,999	0.062	0.037
0.03	54,641,399	0.051	0.031
0.02	82,334,398	0.043	0.026
0.01	101,092,197	0.038	0.023
Gamma Threshold MoS ₂	Inferred Tonnes	Grade MoS ₂ %	Grade Mo%
0.50	0	0.000	0.000
0.25	30,600	0.344	0.207
0.10	1,621,800	0.131	0.078
0.09	2,386,800	0.119	0.071
0.08	3,417,000	0.109	0.065
0.07	5,559,000	0.095	0.057
0.06	10,434,600	0.081	0.048
0.05	16,574,999	0.071	0.043
0.04	30,202,199	0.059	0.035
0.03	58,782,598	0.047	0.028
0.02	100,388,397	0.038	0.023
0.01	129,009,596	0.033	0.020

Gamma West Threshold MoS ₂	Indicated Tonnes	Grade MoS ₂ %	Grade Mo%
0.50	0	0.000	0.000
0.25	0	0.000	0.000
0.10	91,800	0.130	0.078
0.09	153,000	0.116	0.070
0.08	183,600	0.111	0.067
0.07	306,000	0.097	0.058
0.06	489,600	0.085	0.051
0.05	1,009,800	0.069	0.042
0.04	2,203,200	0.056	0.033
0.03	4,569,600	0.045	0.027
0.02	9,781,800	0.034	0.020
0.01	16,942,200	0.026	0.016
Gamma West Threshold MoS ₂	Inferred Tonnes	Grade MoS ₂ %	Grade Mo%
0.50	0	0.000	0.000
0.25	0	0.000	0.000
0.10	224,400	0.141	0.085
0.09	397,800	0.121	0.073
0.08	530,400	0.112	0.067
0.07	969,000	0.095	0.057
0.06	1,581,000	0.083	0.050
0.05	3,070,200	0.069	0.042
0.04	7,680,600	0.054	0.033
0.03	20,277,599	0.042	0.025
0.02	48,745,798	0.031	0.019
0.01	84,068,397	0.025	0.015

Table 14.8 Summary of Nithi Kriged Resource Estimate @ 0.02 MoS₂ Lower Threshold

Zone	Tonnes	MoS ₂ %	Mo%
Delta Indicated	43,064,000	0.037	0.022
Delta Inferred	71,023,000	0.034	0.021
Gamma Indicated	93,310,000	0.039	0.023
Gamma Inferred	114,383,000	0.035	0.021
Gamma West Indicated	11,230,000	0.030	0.018
Gamma West Inferred	54,182,000	0.029	0.017
Total Indicated	147,604,000	0.038	0.023
Total Inferred	239,588,000	0.033	0.020

Note: Tonnes have been rounded to the nearest thousand in Table 14.8.

14.9 BLOCK MODEL VALIDATION

The block model was validated in the following two ways:

1. By comparison of results of the three interpolation methods (Table 14.5, Table 14.5, and Table 14.6)
2. Visual inspection of the goodness of fit of the block model relative to the enclosing geological solid.

These tests show good agreement both between the estimation methods and between the block model and the geological solids. The interpolation results are consistent with the expected behaviour of the methodologies used: kriging estimates a larger tonnage with a lower grade than either ID² or ID⁵; ID² estimates more tonnes at a lower grade than ID⁵.

15.0 ADJACENT PROPERTIES

There are no adjacent properties.

16.0 OTHER RELEVANT DATA AND INFORMATION

There is no additional information or explanations that would make this technical report not misleading.

17.0 INTERPRETATION AND CONCLUSIONS

Leeward carried out a drill program on the Property during the first half of 2011 that comprised 32 holes with an aggregate length of 6,461 meters to bring the total amount of drilling to date to 242 holes with an aggregate length of 53,444 m.

The drill data accumulated prior to 2011 was used to in July 2011 carry out a resource estimates for the three zones Delta, Gamma and Gamma West.

The July 2011 resource estimate has been updated in this report with the addition of the data obtained during the 2011 drill program.

Resources were estimated using OK, ID² and ID⁵. The kriged estimate is summarized below in Table 17.1. Resources are stated at a lower grade threshold of 0.02% MoS₂. Tonnes have been rounded to the nearest thousand.

Table 17.1 Summary of Delta, Gamma and Gamma West Resources

Zone	Tonnes	MoS ₂ %	Mo%
Delta Indicated	43,064,000	0.037	0.022
Delta Inferred	71,023,000	0.034	0.021
Gamma Indicated	93,310,000	0.039	0.023
Gamma Inferred	114,383,000	0.035	0.021
Gamma West Indicated	11,230,000	0.030	0.018
Gamma West Inferred	54,182,000	0.029	0.017
Total Indicated	147,604,000	0.038	0.023
Total Inferred	239,588,000	0.033	0.020

The pattern of grade distributions in the block model suggests three generalizations with respect to the nature of the mineralization discovered to date:

1. Consistent with observations of fracturing and mineralization in outcrop, grades exhibit both northeast and northwest trends. (Figure 17.1)
2. The highest grades in the Delta and Gamma Zones as defined to date appear to be distributed along the outer boundary of both zones with respect to the presumed barren intrusive around which the Delta, Gamma and Gamma West Zones are distributed. (Figure 17.2)
3. The highest grades of mineralization appear to be relatively shallow. (Figure 17.3)

Tetra Tech considers that the currently estimated resources are consistent with the amount of exploration that has been carried out to date but that additional drilling is

warranted to further investigate whether structurally-controlled, higher-grade volumes of mineralization can be defined in sufficient detail to permit which if present would enhance the potential economics of the Property.

Figure 17.1 Plan View Nithi Northeast and Northwest Trends in Block Model Grades

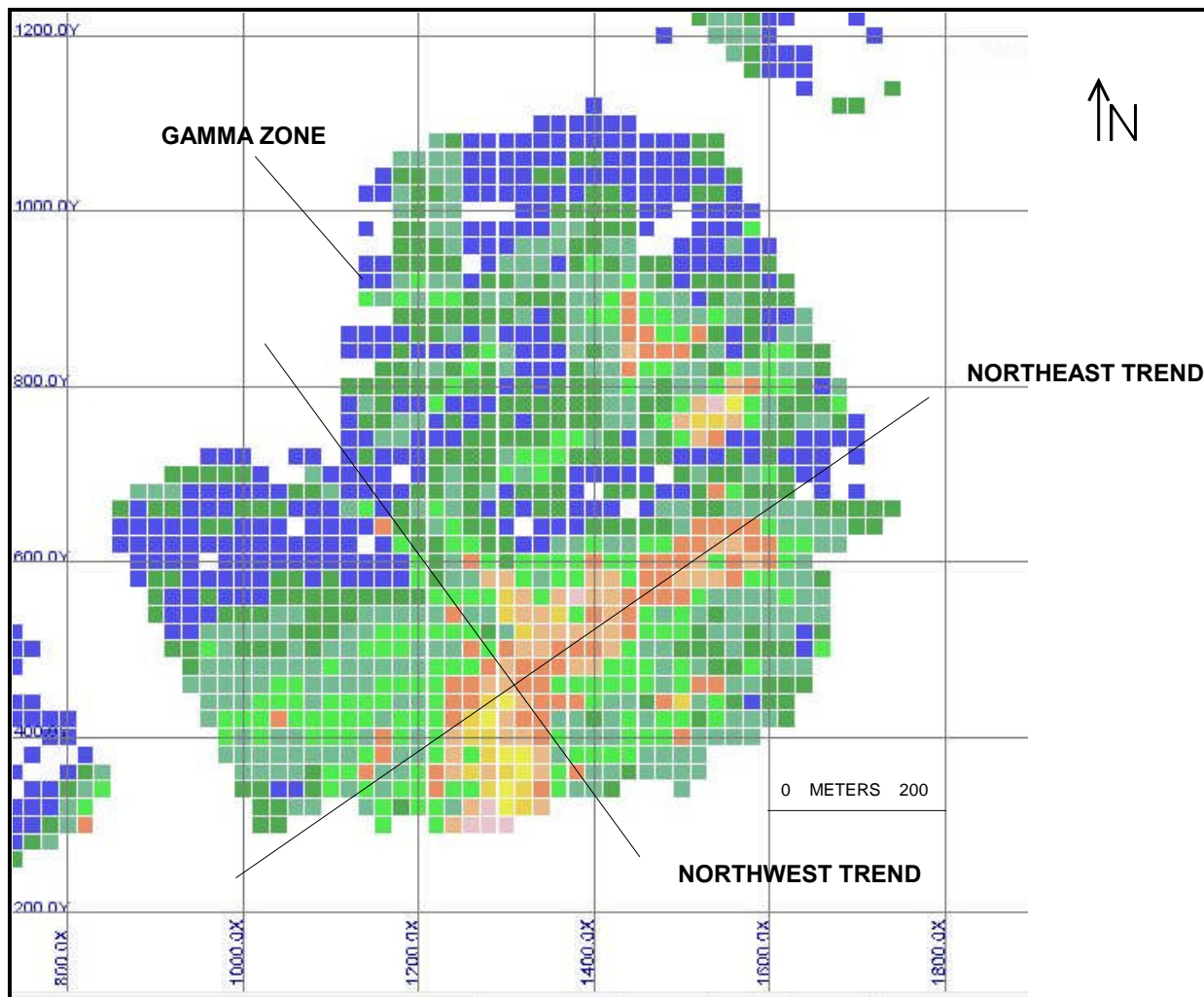


Figure 17.2 Plan View High Grade Distribution on Margins of Delta and Gamma Zones

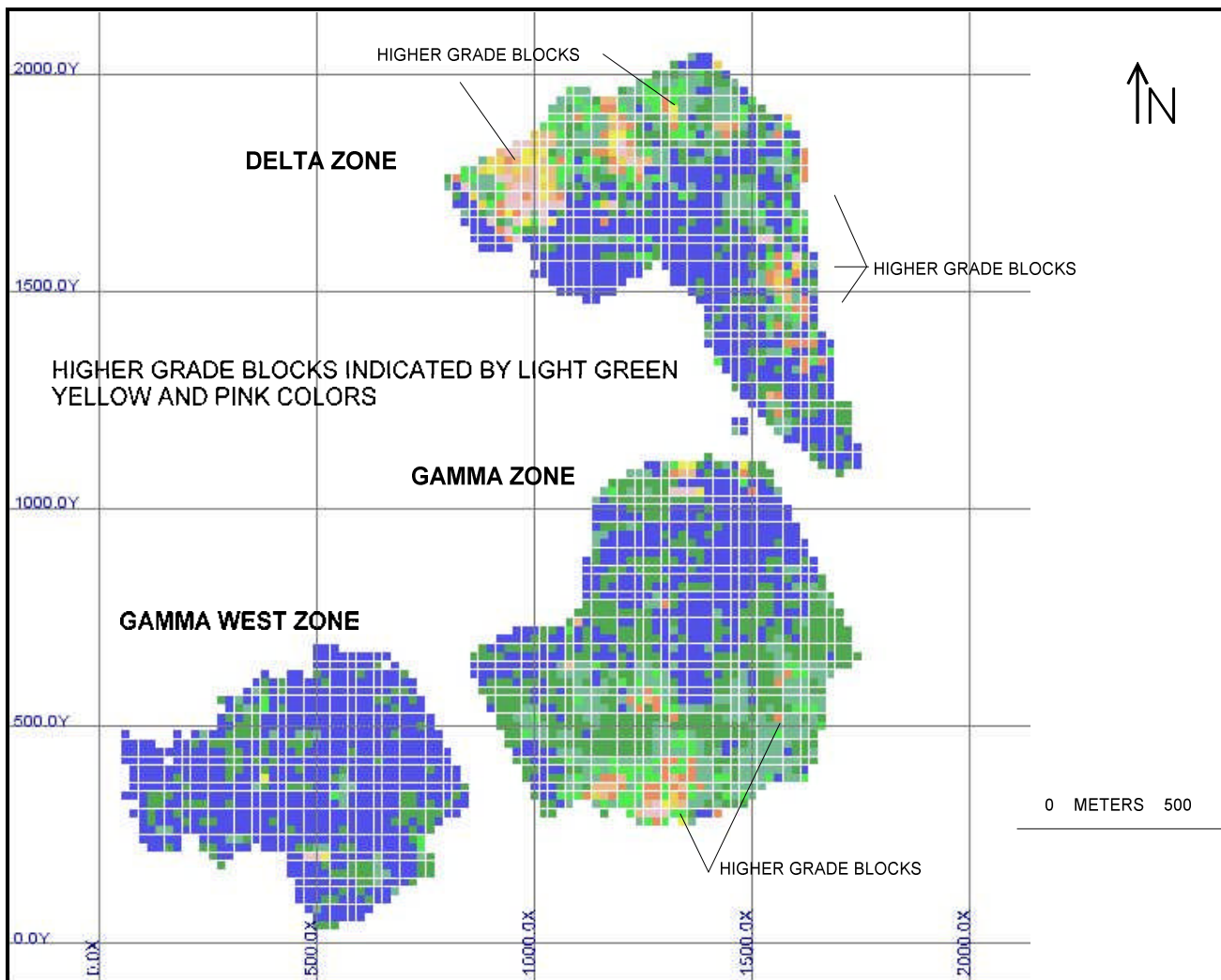
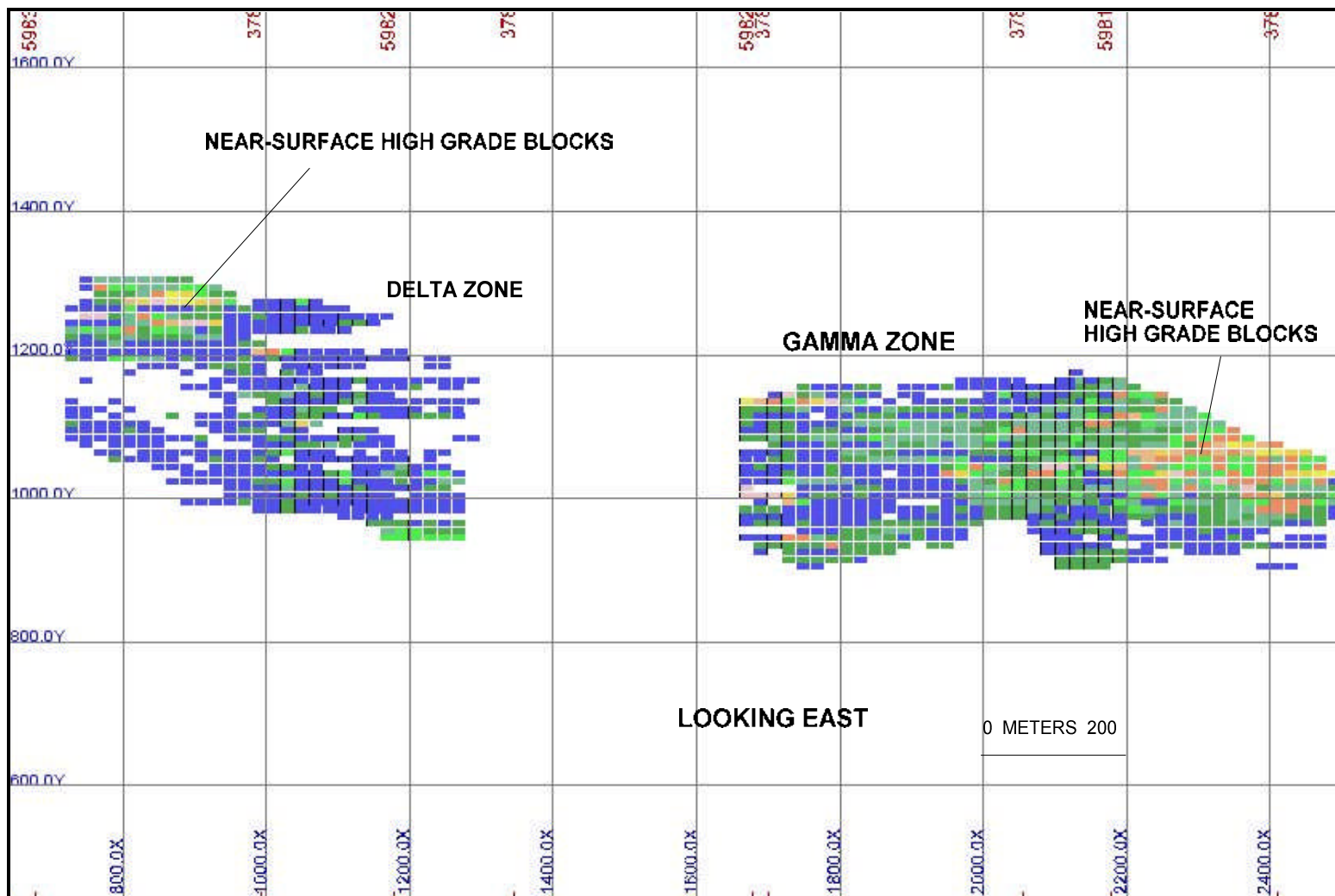


Figure 17.3 Cross Sectional View Delta and Gamma Zones Near-Surface High Grade Blocks



18.0 RECOMMENDATIONS

Tetra Tech recommends the following program that consists primarily of drilling to better define the distribution of higher-grade mineralization, particularly in the Delta and Gamma Zones where higher-grade mineralization appears to be concentrated on the outer margins of those zones as currently defined. Leeward has indicated the intention to carry out some reclamation work as well as an archaeological and conceptual mine design studies. Drilling is assumed to cost about Cdn\$185/m.

Table 18.1 Recommended Nithi Exploration Budget 2011 (Costs in CAD\$)

Item	Holes	Metres	Cost
Drilling	65	16,000	2,960,000
Reclamation			25,000
Archaeological Study			15,000
Conceptual Mining Study			60,000
Total			3,060,000

On the basis of observations of core sampling and storage procedures employed in previous sampling programs, Tetra Tech recommends the following modifications:

- Depth measurements recorded on the wooden blocks in the core boxes should be shown to two decimal places and in both metric and imperial units.
- Consideration should be given to basing sample boundaries on lithology rather than on drill runs so as to better define distribution and controls of mineralization.

It is further recommended that:

- Previous sampling should be reviewed to determine whether those samples that were recorded as being of 3.0 m in length are in fact of 3.05 m length. If this is the case, sample lengths should be corrected.
- If core from previous drill campaigns is to be retained for archival purposes, it should be stored with greater consideration of its long-term preservation than is currently the case.

Successful completion of this work will determine the most appropriate course of action to advance the Property.

19.0 REFERENCES

Dawson, Kenneth, April 21, 2007. Review of the Drilling on the Nithi Mountain Property of Leeward Capital Corp., Fraser Lake, British Columbia

G&T Metallurgical Services Ltd., February 29, 2008. Preliminary Metallurgical Assessment – Nithi Mountain Property, British Columbia, Canada, For Leeward Capital Corp.

Kelly, James, February 15, 2008. Technical Report Resource Assessment on the Gamma Zone, Nithi Mountain Molybdenum Property, Fraser Lake, British Columbia. For Leeward Capital Corp.

Kelly, James, September 22, 2008. Technical Report on the Resource Assessment of the Gamma and Delta Zones, Mineral Tenure 515427, Nithi Mountain Molybdenum Property, Fraser Lake, British Columbia. For Leeward Capital Corp.

Sinclair, W.D., 1995. Porphyry Mo (Low-F type) in: Selected British Columbia Mineral Deposit Profiles, Volume 1, Metallica and Coal; D. Lefebure and G. Ray, editors; British Columbia Ministry of Energy Mines and Petroleum Resources Open File 1995-20, pp93-96.

20.0 CERTIFICATES OF QUALIFIED PERSON

GREGORY ZALE MOSHER, P.GEO.

I, Gregory Zale Mosher of North Vancouver British Columbia, do hereby certify:

- I am a Senior Geologist with Wardrop Engineering Inc. with a business address at 800-555 West Hastings Street, Vancouver, British Columbia, Canada.
- This certificate applies to the technical report entitled "Technical Report on the Nithi Mountain Molybdenum Property, British Columbia, Canada", dated August 31, 2011 (the "Technical Report").
- I am a graduate of Dalhousie University, (B.Sc. Hons., 1970) and McGill University (M.Sc.Applied, 1973). I am a member in good standing of the Association of Professional Engineers and Geoscientists of Association of Professional Engineers and Geoscientists of British Columbia (License # 121151). My relevant experience with respect to molybdenum deposits includes over 20 years of intermittent exploration for and evaluation of molybdenum deposits. In addition, I have carried out resource estimates of molybdenum deposits over the past six years. I am a "Qualified Person" for purposes of National Instrument 43-101 (the "Instrument").
- I completed a personal inspection of the Property on July 26, 2011, for one day.
- I am responsible for Sections 1-20 of the Technical Report.
- I am independent of Leeward Capital Corp. as defined by Section 1.5 of the Instrument.
- I have no prior involvement with the Property that is the subject of the Technical Report.
- I have read the Instrument and the technical report has been prepared in compliance with the Instrument.
- As of the date of this certificate, to the best of my knowledge, information and belief, the technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.

Signed and dated this 31st day of August, 2011, at Vancouver, Canada.

*"Original document signed and stamped
by Gregory Zale Mosher, P.Geo."*

Gregory Zale Mosher, P.Geo.
Senior Geologist