

د ت اسما

0.1

1

Mining District: Omineca

NTS Map Sheet: 094E/7W & 6E

Latitude: 57<sup>0</sup> 19' N Longitude: 126<sup>0</sup> 55' E

Owner of Claims: Electrum Resources Corporation

Project Operator: Finlay Minerals Ltd.

Report by: Robert F. Brown, P. Eng.

Date of Report: December 10, 2002



# GEOLOGICAL SURVEY BRANCH ASSESSMENT REPORT



# Table of Contents

	Page #	
Summary		3
Introduction		3
Location		4
History		4
Work Done		5
Cost		6
Geology		6
Structures		10
Alteration and Mineralization		11
Rock Geochemistry		14
Soil Geochemistry		16
Discussion of Results		20
Recommendations		22
References		23

# <u>Tables</u>

List of PIL Mineral Claims

Table #1

# **Appendices**

Cost Statement		Appendix #1
Author's Qualifications		Appendix #2
Rock Sample Descriptions		Appendix #3
Analytical Results		Appendix #4
Petrography Report		Appendix #5
	Figures	
Location Map		Figure #1
Claim Map		Figure #2
Sample Site Map, Pil North	1:10,000 scale	Figure #3
Geology Map, Property	1:20,000 scale	Figure #4
Geology Map, Pil North sheet	1:5,000 scale	Figure #5
Trench A Geology and Rock Ge	ochemistry 1:50 scale	Figure #6
Trench B Geology and Rock Ge		Figure #7
Trench C Geology and Rock Geo		Figure #8
Trench D Geology and Rock Ge		Figure #9
Trench E Geology and Rock Geo		Figure #10

Trench F Geology and Rock Geochemistry 1:50 scale Figure #11 Trench G Geology and Rock Geochemistry 1:50 scale Figure #12 Trench WG040 Geology and Rock Geochemistry 1:50 scale Figure #13 Trench WG041 Geology and Rock Geochemistry 1:50 scale Figure #14 Figure #15 Rock Geochemistry Map, Pil North; Copper (ppm) 1:10,000 scale 1:10,000 scale Figure #16 Rock Geochemistry Map, Pil North; Gold (ppb) Figure #17 1:10,000 scale Rock Geochemistry Map, Pil North; Zinc (ppm) 1:10,000 scale Figure #18 Rock Geochemistry Map, Pil North; Silver (ppm) Figure #19 Soil Geochemistry Map, Pil North; Copper (ppm) 1:10,000 scale Figure #20 Soil Geochemistry Map, Pil North; Gold (ppb) 1:10,000 scale Figure #21 Soil Geochemistry Map, Pil North; Zinc (ppm) 1:10,000 scale

1:10,000 scale

Figure #22

1:1,000 scale Figure #23 Sample Site and Geology Map Pil South Figure #24 Trench H Geology and Rock Geochemistry 1:50 scale Figure #25 1:1,000 scale Rock Geochemistry Map, Pil South; Copper (ppm) 1:1,000 scale Figure #26 Rock Geochemistry Map, Pil South; Gold (ppb) 1:1,000 scale Figure #27 Rock Geochemistry Map, Pil South; Zinc (ppm) Figure #28 1:1,000 scale Rock Geochemistry Map, Pil South; Silver (ppm)

#### Summary:

Costs involved in the Pil claims exploration amounted to \$202,535.36 and will be used for assessment.

The Pil claims were the site of line cutting, rock/soil sampling, induced polarization and magnetometer surveys, and geological mapping traverses. This work was conducted over areas of known copper-gold geochemistry and coincident iron gossan on the Pil #7, Pil #9, Pil #10, Pil #11, Pil #12, Pil #22-26, Pil #28, Pil #30 and Pil #32-38 mineral claims.

In the Pil North target area detailed geological and geochemical work indicates that seven zones of significant gold-copper-zinc-silver-molybdenum anomalous values within a three (3) kilometer east west by six (6) kilometer north south gossan are associated with strongly fractured and hematitic, silicified and phyllic (sericite) altered multi-phase intrusive rocks (quartz monzonite, quartz diorite with minor granodiorite and diorite) with disseminated pyrite, and lesser barite, quartz veining and stockwork, galena, sphalerite, chalcopyrite, and chalcocite. Induced polarization and magnetometer surveys conducted by Lloyd Geophysics Ltd. (2001, 2002) are reported on under separate cover, but show chargeability zones coincident with the altered intrusive rocks and soil / rock geochemistry anomalies.

At the Pil South target (Pil #12 mineral claim) cross line L22+00S was chain sawn and flagged eastward from the baseline (0+00) to 15+00E. Lloyd Geophysics Ltd. conducted an induced polarization survey on L22S, with a strong chargeability anomaly evident from approximately station 2+00E to station 9+00E, a width of 700 meters.

Further rock sampling was done 50 meters southeast of the "Lorne's showing" area of the Pil South target. "Lorne's showing" is a hand trench oriented east-northeast from L18+00S, 3+25E. New geological mapping, hand trenching, and rock sampling extend the copper showing area to at least 50 meters to the southeast of "Lorne's showing". The 2002 trench "H" visually shows that copper has been leached from the surface outcrop, and the better mineralization in the trench is coincidental with a surface expression of a 800m wide induced polarization chargeability feature generally located 50-100m below surface. Alteration and mineralization are propylitic "pyrite halo" in nature with associated copper, gold, silver, lead, and zinc. Geological, geochemical, and geophysical studies indicate a porphyry copper-gold target at the Pil South (Pil #12 mineral claim), to be 2,200m long north south and up to 1,000m wide east west.

#### Introduction:

The Pil claims (Table #1) were the site of linecutting, soil and rock sampling, geological mapping traverses, and induced polarization and magnetometer surveys. This work focused on what is referred to by Finlay Minerals personnel as the Pil North target area. As well there was three days work on the Pil South target consisting of chain saw cutting and flagging line, induced polarization geophysical survey, hand trenching, and rock sampling. Work on the Pil claims by the author was on July 19 to August 8, 2001. This work was conducted over areas of known copper-gold geochemistry and coincident iron gossan on the Pil #7, Pil #9, Pil #10, Pil #11, Pil #12, Pil #22-26, Pil #28, Pil #30, Pil #32, Pil #33, Pil #34 Pil #35, Pil #36 Pil #37, and Pil #38 mineral claims.

The author and crew were in a camp established by GLJ Enterprises of Smithers B.C., in a clearing between two ponds at the headwaters of an unnamed creek draining into the Toodoggone River on NTS 94/E7W. Access to the Pil claims camp, this year, was by helicopter supplied by Canadian Helicopters Western based in Smithers B.C.

Tenure Number	Claim Name	Issue Date	Good Standing To	Units
308127	PIL 1	14MAR92	31-Jan-07	8
308128	PIL 2	14MAR92	31-Jan-07	20
316950	PIL 4	29MAR93	31-Jan-07	20
316951	PIL 5	29MAR93	31-Jan-08	15
316952	PIL 6	29MAR93	31-Jan-08	12
316953	PIL 7	29MAR93	31-Jan-08	20

TABLE #1					
List of Mineral	Claims	from	the	PIL.	Project

316955	PIL 9	29MAR93	31-Jan-08	16
316956	PIL 10	29MAR93	31-Jan-08	18
316957	PIL 11	29MAR93	31-Jan-08	20
319649	PIL 12	21JUL93	31-Jan-08	20
319650	PIL 13	21JUL93	31-Jan-08	20
340215	PIL 20	16SEP95	31-Jan-08	9
340216	PIL 21	16SEP95	31-Jan-08	16
340217	PIL 22	16SEP95	31-Jan-08	16
340218	PIL 23	17SEP95	31-Jan-08	18
340219	PIL 24	16SEP95	31-Jan-08	1
340220	PIL 25	16SEP95	31-Jan-08	1
340221	PIL 26	16SEP95	31-Jan-08	1
340222	PIL 27	16SEP95	31-Jan-08	1
340223	PIL 28	16SEP95	31-Jan-08	1
340224	PIL 29	16SEP95	31-Jan-08	1
340225	PIL 30	16SEP95	31-Jan-08	1
340226	PIL 31	16SEP95	31-Jan-08	1
340227	PIL 32	16SEP95	31-Jan-08	1
340228	PIL 33	16SEP95	31-Jan-08	1
370563	LIP 1	28JUL99	31-Jan-08	1
370564	LIP 2	28JUL99	31-Jan-08	1
370565	LIP 3	28JUL99	31-Jan-08	1
370566	LIP 4	28JUL99	31-Jan-08	1
395328	Pil 34	19JUL02	19JUL06	1
395329	Pil 35	19JUL02	19JUL06	1
395330	Pil 36	19JUL02	19JUL06	1
395331	Pil 37	19JUL02	19JUL06	1
395332	Pil 38	19JUL02	19JUL06	1
396939	PN 1	27SEP02	27SEP03	12
A-4.94	35 CLAIMS		TOTAL UNITS	279

Note: the "good standing to" date includes acceptance of the work described in this report.

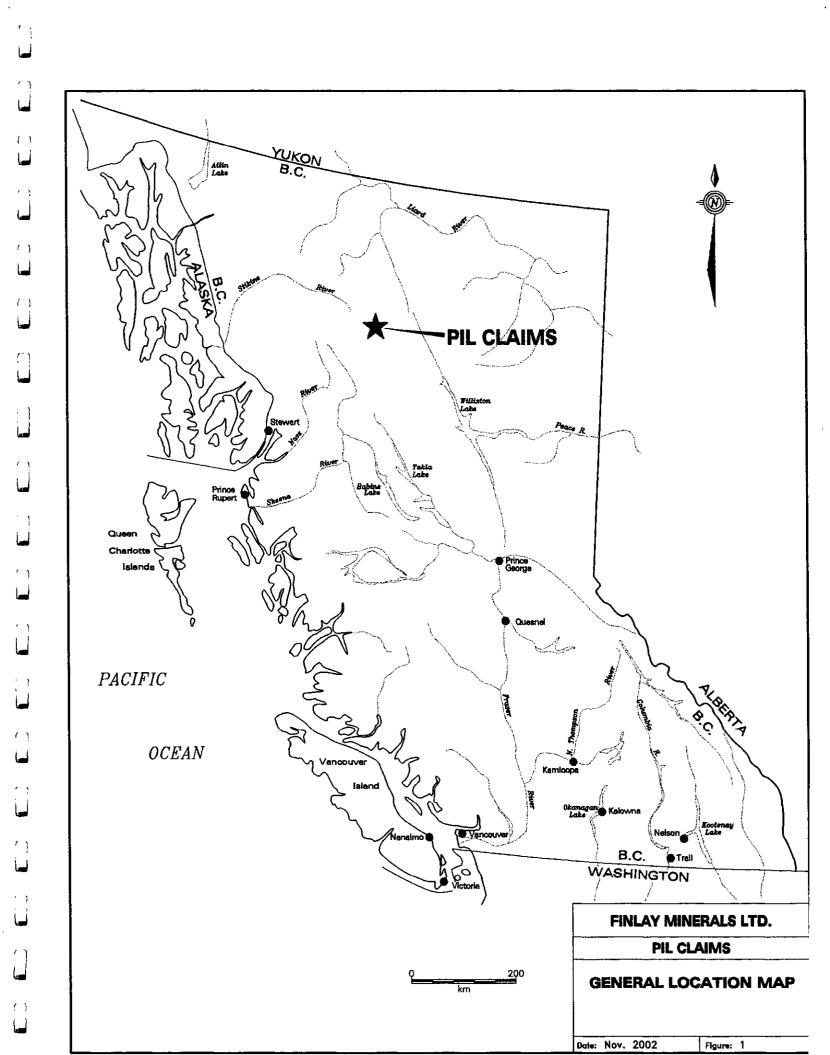
# Location:

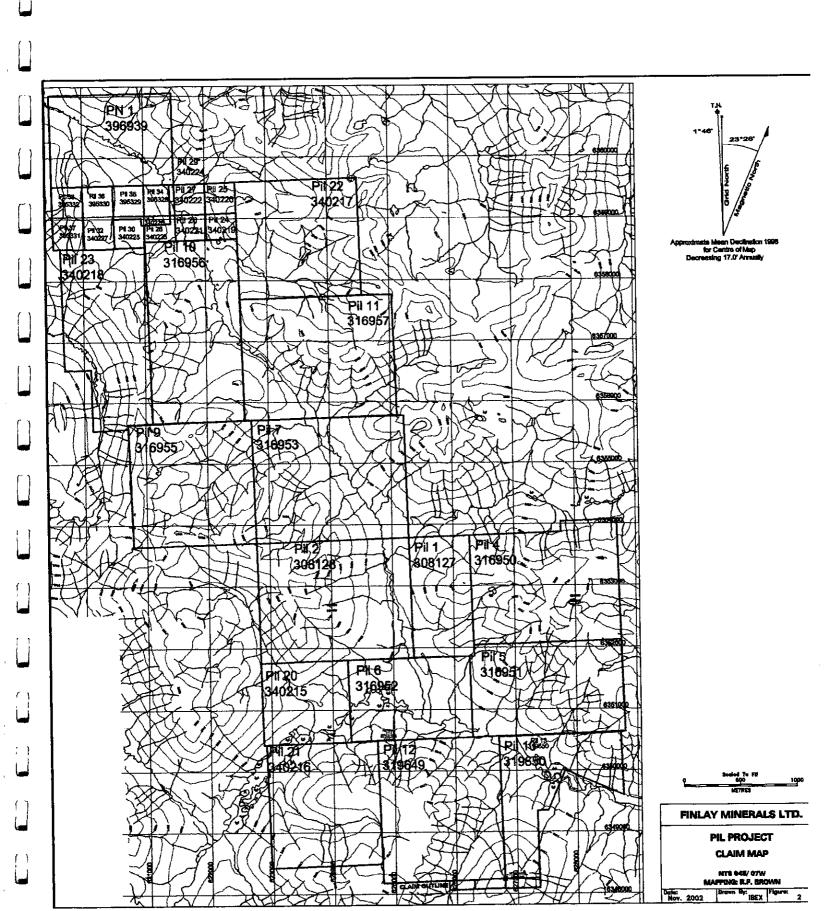
The Pil claims (Figures #1 & #2) straddle the west flowing Jock Creek, north of the Finlay River, in central northern British Columbia. The claims are in the Omineca Mining District, NTS map sheet 094E/7W, located at latitude  $57^{0}$  19'N and longitude  $126^{0}$  55'N. Access for the exploration this year on the northern portion of the claims was by helicopter, which at the time was based at the Kemess Mine. Access for the southern portion of the claims is by road via a network of logging roads from Windy Point, on the John Hart Highway 164km north of Prince George. From Windy Point a 433km drive northwesterly leads to the Sturdee River airstrip, and from here the Pil project is 21km to the northeast along the south side of Jock Creek.

# History:

The Pil claims are within a broad region of prospects and mines known as the Toodoggone mining camp. Exploration in this area commenced in earnest in the late 1960's, by Cominco and Kennco Exploration (Western) on numerous large gossanous zones within the camp representing both epithermal and porphyry copper-gold type targets. Exploration activity peaked through the late 1970's and the1980's. Little exploration took place in the 1990's excepting at several of the mines and more advanced prospects.

During 2000 to 2002 Northgate Exploration Ltd., owners of the Kemess Mine conducted drilling on the Kemess North porphyry copper-gold deposit. Results of the 2001 and 2002-drill exploration are very encouraging with a deep, higher-grade zone being developed (Northgate Exploration Limited, newsrelease October 9, 2001). Porphyry copper-gold deposits include those of Northgate Exploration being the Kemess Mine (Kemess South deposit), Kemess Central, Kemess North, and those of Stealth Mining Corporation on





the Pine project. Porphyry prospects of note include the Atty, Pil South, and Pil North of Finlay Minerals, as well as a number of others.

Epithermal precious metal deposits in the camp include the Baker Mine, former mines at the Lawyers, Cliff Creek, and Shasta properties, and numerous prospects (see Figure #1).

On the Pil claims exploration started with exploration by Cominco (Cooke, 1969) in the Pil North target area, and Cordilleran Engineering in 1967 in the Pil South target area. Cordilleran Engineering drilled two holes on the Pil 12 claim in 1969 (Reeve, 1969), in an area just east of Finlay Minerals Pil South coppergold porphyry target. Cominco was focused on a copper porphyry target named the Theban on the south flank of the Pil North gossan target (now referred to as the South zone).

In 1980-81 Serem Ltd. did detailed stream sediment sampling and contour soil sampling in the Pil North target area. After acquiring the Pil claims in 1992-93 Electrum Resources Corp. began a long methodical period of stream sediment, soil sampling, prospecting, rock sampling, Landsat imaging, and limited geophysical (VLF and magnetics) work (Staargaard, 1992 & 1994; Zastavnikovich, 1996 & 1997; Sterenberg, 1997; and Ronning, 1998). In 1999 Finlay Minerals Ltd. purchased the project and conducted a major exploration effort which included IP and magnetic geophysical surveys, soil and rock sampling and detailed geological mapping (Ronning, 1999) over the Pil South target. In 2000 limited exploration work occurred on the Pil claims, but included rock sampling and hand trenching on the Pil South target, and a geological and rock sampling traverse south of the Pil North target (Brown, 2000). In 2001 Finlay conducted a focused exploration effort on the Pil North target (Brown, 2001), with the completion of 8.3 kilometers of chain-sawn line, induced polarization and magnetic geophysical surveys, soil and rock sampling.

The results of exploration to date indicate that the Pil property has the potential to contain several coppergold porphyry deposits.

#### Work Done:

The Pil North gossan target (Figure #3) was the site of linecutting (13,100 meters), soil (319 samples) and rock (190 samples) sampling, geological mapping traverses, and induced polarization (10,800 meters) and magnetometer surveys (10,600 meters). The results of the induced polarization and magnetometer surveys are reported on under separate cover by John Lloyd, principal of Lloyd Geophysics Ltd. This work was conducted over areas of known copper-gold geochemistry and coincident iron gossan on the Pil #7, Pil #9, Pil #10, Pil #11, Pil #22-26, Pil #28, Pil #30 and Pil #32 mineral claims.

Robert Brown spent sixteen (16) days on the Pil North target, both rock sampling and geological mapping. Robert Montgomery spent twenty-one (21) days on the Pil North target, rock sampling and geological mapping outcrops as well as seven hand mucked and blasted trenches. Warner Greunwald spent eighteen (18) days on the Pil North target, both rock sampling and geological mapping. J. Barakso spent four (4) days rock sampling and mapping on the Pil North target. Rock sampling and geological mapping on the Pil North claims by the above personnel was from July 18 to August 8, 2002.

The camp management, expediting, line cutting, and soil sampling was carried out on behalf of Finlay Minerals Ltd. by CJL Enterprises of Smithers, B.C. Lines 8N (11+00E to 38+00E), 17N (14+00E to 43+00E), 27N (15+00E to 47+00E), and 32N (15+00E to 48+00E) were chain sawn and flagged. Soil samples were taken on 50-meter centers along the new lines. As well line 36N was extended south westerly (20+00E to 30+00E) by flagging, and subsequent was soil sampled. CJL Enterprise personnel with explosive blasting permits supervised the hand mucking and blasting of eight trenches.

There were three days work on the Pil South target (Pil #12 mineral claim) consisting of chain sawn and flagged line (1,700 meters on line 22+00S, 2+00W to 15+00E), induced polarization geophysical survey (line 22+00S) and rock (16 samples) sampling. Lloyd Geophysics Ltd. conducted the one line of induced polarization geophysical surveying on August  $9^{th}$  2002. R. Brown, and John Barakso spent one day, August  $3^{rd}$  2002, on the Pil South target, while R. Montgomery spent two days, August  $4^{th}$  and  $5^{th}$  2002, in

5

the detailed chip sampling and geological mapping of Trench "H". CJL Enterprise personnel with explosive blasting permits supervised the hand mucking and blasting of one trench.

The geological observation points and soil sample sites have been digitized which allowed the easy plotting of geological data, as well as the rock geochemical results.

The work was conducted under Annual Work Approval #2002-1300295-0001 as required by the B.C. Ministry of Energy and Mines.

# Costs:

Costs for the program are estimated \$202,535.36. A detailed break down is given in Appendix #1. Invoices for all the listed costs are available at the offices of Finlay Minerals Ltd.

#### Geology:

#### Regional:

The author's geological mapping is incorporated with the Toodoggone River regional geology as presented by Diakow et al. (1993). Regionally the Toodoggone area lies within the Intermontane Belt, between the east end of the Stikine Arch in the north and the Skeena Arch in the south. Geology along the eastnortheast margin of the Stikine Terrane is dominated by successive volcano-plutonic arcs, which were constructed from Permian time but most importantly during the late Triassic and early Jurassic. The Toodoggone area lies within a north-northwest trending corridor of Mesozoic island-arc magmatism.

Layered rocks ranging in age from Permian to Cretaceous underlie the map area. The general stratigraphic succession, listed in order of decreasing age, includes: the Asitka Group – Lower Permian, the Takla Group – Upper Triassic, the Toodoggone Formation of the Hazelton Group – Lower Jurassic, and the Sustut Group – Upper and Lower Cretaceous. The Asitka Group is composed of limestone, chert and argillite sediments. The Takla Group is composed of submarine basalt to andesite flows and tuffs, with minor interbedded limestone and argillite. The Hazelton Group, Toodoggone Formation is composed of submarine andesite to dacite flows and tuffs, rare basalt and rhyolite flows; subordinate volcanic siltstone to conglomerate; and rare limestone lenses. The Sustut Group is composed of nonmarine conglomerate, siltstone, shale, sandstone, and minor ash-tuff. All the rock groups have unconformable contacts.

The Toodoggone Formation is estimated to be more than 2200 meters thick. It is broadly divided into lower and upper volcanic cycles that are further subdivided into six members. These members are established on the basis of rock type, mineral assemblage, texture, and field relationships. The Saunders, Metsantan and Adoogacho members are named for readily recognizable, areally extensive successions of ash-flow tuffs and lava flows. In contrast the Attycelley, McClair and Moyez members are mainly intercalated pyroclastic and epiclastic rocks that are mappable on a local scale but vary markedly in thickness.

Volcanic strata of the Toodoggone Formation are spatially associated with stocks and subvolcanic porphyritic plutons, and cut by a variety of dykes. These Early Jurassic granitoids, designated the Black Lake Plutonic Suite, form part of an arcuate belt of Late Triassic and Early to Middle Jurassic stocks and composite batholiths. The spatial and temporal relationship of these intrusions with predominately calcalkaline Upper Triassic and Lower Jurassic volcanic successions suggest that they probably mark the locus of an extensive magmatic arc. The Black Lake stock and similar plutons in the Toodoggone Lake map area are pink granodiorite and quartz monzonite of coarse to medium grained, hypidiomorphic granular plagioclase, orthoclase, quartz, hornblende, and biotite. Accessory minerals include apatite, zircon, and magnetite (Diakow, 1993). The various Kemess Mine copper-gold porphyry type deposits are hosted by these granitoids.

Regional structures include numerous steeply dipping normal faults, and a few strike-slip and thrust faults that juxtapose successions of differing stratigraphic level. Composite layering sections of the Toodoggone Formation are undeformed, shallow dipping beds, which locally define gentle flexures. In contrast, younger and older volcanic and sedimentary rocks are locally folded. The dominant structures are steeply dipping faults that define a prominent northwest trending regional structural fabric. In turn, high-angle northeast trending faults appear to truncate and displace northwest trending faults. Collectively, these faults form a boundary for variably tilted and rotated blocks that are underlain by monoclinal strata (Diakow, 1993).

Two supracrustal units are important hosts of mineralization in the Toodoggone mining camp. Volcanics of the Takla Group host the intrusions at the Kemess Mine (Kemess South deposit), and numerous porphyry prospects. The Toodoggone Formation of the Hazelton Group is the most important stratigraphic unit in terms of epithermal precious metal deposits.

# Property Geology:

# Pil North Grid Area:

Sixteen days were spent by the author traversing a bulge in Black Lake Intrusive Suite rocks hosting the Pil North gossan target in the Pil #7, Pil #9, Pil #10, Pil #11, Pil #22-26, Pil #28, Pil #30 and Pil #32 mineral claims (Figure #4 & #5). In the area of the traverses the Black Lake Intrusive Suite is composed predominately of syenite, and lesser monzonite. These are both field terms used by the author, although the Black Lake Intrusive Suite is mapped predominately as quartz monzonite to granodiorite (Diakow, 1993). Thin section and polished thin section work by Finlay on the Pil North suite of intrusives confirms that the "syenite" is likely a hypabyssal porphyritic quartz monzonite. The syenite is massive, porphyritic, weakly sausseritized with generally minor chlorite, epidote and pyrite (<1%) on fractures. It is ubiquitously magnetic. Within the syenite in the Pil North gossan "bulge", are phyllic (sericite) altered "dykes" and masses of diorite to quartz diorite.

The diorite to quartz diorite is porphyritic, non-magnetic; moderately to highly fractured, with 1-5% disseminated pyrite, sericitized, containing strong hematite and limonite on fractures, which also contain rare quartz veinlets. The thin section work confirms the phyllic alteration of the diorite / quartz diorite. Contacts are sharp both with the syenite and the enclosing Toodoggone Formation volcanic andesites, and neither enclosing unit is contact altered.

Of particular note during 2002 is the confirmation by geological mapping and thin section analysis that the gossanous areas of the Pil North are extensively leached, shattered to brecciated sericite-quartz-iron oxide (intense phyllic alteration) rocks. Much of this leached phyllic rock is attributed to the alteration of pyritic dioritic rock, but there is ample evidence that some of the leached rock is shattered and sheared zones within the quartz monzonite. The best area as an example is within the streambed of Milky Creek in the area of Trench E.

The nature of the contacts between the gossanous rocks and the quartz monzonite is contentious. In places the dioritic rocks are noted to be in sharp contacts with the enclosing units. Leached dioritic rock is in sharp (faulted?) contact with generally purple-green Toodoggone Frm. volcanics. Good examples of this are the eastern contact of the East and North-East Zones with the Toodoggone Frm., and the not so well defined contact on the west side of the South-West Zone. Within the outlines of the Black Lake Intrusive Suite the authors' observations, immediately east of camp, lead him to believe that the dioritic rocks are a separate leached and phyllic altered and fractured intrusive unit, although in this area there are no contacts. Internally there is only one good location displaying the contact between the dioritic rocks and the quartz monzonite. This location is on the west flank of the North-East Zone, in a dry creek bed that parallels the south side of line 36N. From southwest to northeast the quartz monzonite becomes progressively more fractured, then over a several meter gap becomes a gossanous leached phyllic altered diorite. For the most part contacts are marked by abrupt changes in talus and rubble. These contacts are, such as on the ridges west and northwest of camp, sharp northwest oriented contacts between the quartz diorite and the syenite. It is not fully understood if these contacts are structural, being faults, intrusive contacts, or rapid changes in fracture and alteration intensity all within quartz monzonite.

Basalt dykes to 5 meters width intrude both the syenite and dioritic rocks and make up <<1% of the area. One basalt dyke was noted at the Black Lake Intrusive Complex – Toodoggone volcanics contact, at the east side of the East Zone. Based on the geological mapping, previous soil geochemistry results, anomalous induced polarization chargeability values (>20msec.) (Lloyd, 2001, 2002) and gossanous rock exposure the Pil North gossan area has been loosely divided into seven descriptive zones (Figure #5).

The North West Zone is the furthest northwest extent of gossanous rocks, notably intensely phyllic altered and sheared dioritic and quartz monzonitic intrusions (mineral claims Pil 30, Pil 32, Pil 36, Pil 37, and Pil 38). It encompasses an area 700 meters east west by 1000 meters north south. It is terminated on the west by a regional north south fault (Diakow, 1993), west of which outcrops barren coarse-grained feldspar porphyritic diorite with xenoliths of dark grey hornblende diorite. No geophysical surveys have been conducted in the North West Zone.

The Milky Creek Zone is named after a milky colour tinted north flowing creek (aluminum sulfates?), which contains blotchy gossanous zones in the quartz monzonite and notably intensely phyllic altered and leached quartz diorite. This zone straddles the boundary between mineral claims Pil 10 and Pil 23, and is crossed by line 36N at 26+00E, and by line 32N at 19+00E. The Milky Creek zone is separated from the North West Zone due to a lack of detailed geology and poor outcrop exposure. Further detailed mapping will be necessary to see if the phyllic altered dioritic rocks in both zones coalesce.

The Central zone is mainly defined on the basis of anomalous induced polarization chargeability values (>20msec.) (Lloyd, 2001 and 2002). Geophysically the Central and Milky Creek zone form an open ended (both north and south) north south trending anomalous chargeability feature from line 8N through to line 36N (~3000 meters) varying in width from 500-1000 meters. Geologically skree slopes and minor outcroppings of quartz monzonite dominate the Central zone. There are numerous, narrow northwest trending fractured to sheared gossanous zones noted on the ridge between lines 8N and 12N.

The South West Zone (400 by 600 meters and open to the south) is located in the central north portion of the Pil 9 mineral claim. Gossanous rubble of phyllic altered quartz diorite is noted underlying a knoll at line 12N 17+00E. Only a few outcrops have been found to the north of quartz diorite, poorly outlining an altered quartz diorite in a sea of quartz monzonite skree. Immediately to the west of the quartz diorite knoll is the buried contact between extensive barren Toodoggone Formation mafic volcanics to the west. The South West Zone forms a distinct IP chargeability anomaly on line 8N, but due to extensive rock skree the IP survey was not completed to the west end of line 12N.

The South Zone (1500 by 400 meter area) is an area dominated by quartz monzonite outcroppings, and forms a notable gossan closed to the south and mountain ridge by barren quartz monzonite, and buried to the north side by extensive skree slopes and glacial valley debris, with densely wooded lower slope and valley bottom. No geophysical surveys have been conducted in the South Zone. Geological mapping to date has been cursory.

The North East Zone (500 by 1500 meters in area) is within the Pil 24, Pil 25 and Pil 22 mineral claims. Two knolls of leached, phyllic altered, quartz diorite and the interpreted extension defined by an anomalous IP chargeability anomaly characterize the North East Zone. The quartz diorite is flanked to the east by barren Toodoggone Formation green-purple mafic volcanics. In one location quartz monzonite is observed flanking the west side of the North East Zone in a dry creek bed that parallels the south side of line 36N (station 43+50E). From southwest to northeast the quartz monzonite becomes progressively more fractured, then over a several meter gap becomes a gossanous leached phyllic altered quartz diorite.

The East Zone (600 by 1300 meter area) is located with in the Pil 11 and Pil 22 mineral claims. It is defined by an anomalous IP chargeability anomaly, an expansive skree and rubble slope with minor outcroppings of leached, phyllic altered, quartz diorite. It is flanked on the east by barren Toodoggone Formation green-purple mafic volcanics, and to the west by quartz monzonite. The southern half of the East Zone is defined by IP in an area that is wooded with no outcroppings. J. Lloyd's (2002) interpretation from the geophysics is that the North East and East Zones are contiguous.

#### Property Geology:

#### Pil South Grid Area:

Geologically three main units were mapped in the Pil South prospect grid area (Ronning, 1999 and Diakow, 1993), being the Triassic age Takla Group, Jurassic age Hazelton Group Toodoggone Formation Saunders Member, and various composition intrusions of the Jurassic age Black Lake Intrusive Complex. The Takla Group rocks underlie a zone of alteration and mineralization with associated anomalous copper, gold, silver, zinc geochemistry, high magnetic values and induced polarization high chargeability geophysical values. The Takla Group volcanics are dominantly augite phyric basalt flows. The detailed geological mapping by Ronning (1999) modifies the earlier regional geological mapping by Diakow (1993) which showed Takla Group volcanics only to the south of the Pil S grid area.

The author and John Barakso spent two days geological mapping in an area between line 18S and line 22S from the baseline (0+00) to 5+00E. Slight modifications were made to previous mapping (Ronning, 1999) in the extent of one diorite dyke, and the outline of a second more southerly quartz diorite dyke was better defined (Figure #23). The second quartz diorite dyke is northwest oriented, and highly magnetic. It is characterized by its plagioclase feldspar porphyritic nature, minor hematite, and strong magnetics.

The contact between the Triassic Takla Group augite phyric basalt and the more westerly Jurassic Saunders Member Toodoggone Formation felsic pyroclastics was better defined, although not to a degree to define the nature of the contact. The Saunders Member felsic rocks have no remaining textures to define orientation due to pervasive silica flooding, argillic alteration, iron oxides after pyrite, and fracturing. The diorite and quartz diorite dykes are hosted in Takla Group augite phyric basalt. The Takla Group basalt is variably fractured to shattered with the more shattered areas having a higher concentration of silica flooding, sericitization, iron oxides, pyrite and rare copper oxides and sulfides (chalcopyrite and malachite). Surface outcrops show considerable leaching of sulfides, especially in the more fractured Takla Grp. basalts.

#### Property Geology:

#### Pil South Hand Trench H:

Two days were spent mapping and rock sampling by Robert Montgomery along with crew from GLJ Enterprises on a new hand mucked and blasted trench ("H") cut in an area southeast from L18S, 3+25E (Figure #4, #23, and #24). Host rock in the trench area is augite phyric basalt of the Takla Group. The basalt is massive, and variously fractured, altered and mineralized. From the south end 12 meters north to a point 2 meters from the north end of the 14-meter trench, the basalt is described as silicified, bleached, with quartz-sulfide veins and fractures. The northern 2 meters is darker green, "fresher' looking basalt, it as well contains sulfide rich quartz veins.

#### Property Geology:

#### Pil South Canyon:

Á small canyon in the central north portion of mineral claim Pil 6 was visited, geologically mapped, and rock sampled over a one-day period by the author, R. Montgomery and W. Grunwald. The traverse started in the canyon and continued ~6 kilometers north along the central drainage running south along the east side of mineral claims Pil 2 and Pil 7. In the canyon outcrops on the east bank are, from south to north 10 meters of highly altered, fractured, and weathered intrusive rock with hematite and limonite, followed by 40 meters of quite massive greenish pinky "syenite" with patchy epidote and trace pyrite, then again into 10 meters of highly fractured, limonitic and hematitic, weathered intrusive. This general sequence is repeated to the north, but for the fact that the highly fractured weathered intrusive forms much narrower bands within "syenite" outcrops. One such location is at RB02PS03 where a 2-meter silicified, sheared zone with 1-2 centimeter wide quartz veins was sampled. At the north end of the canyon, near the north boundary of mineral claim Pil 6 the outcrop is coarse grained green and pink mottled "syenite". Scant outcrop is observed from here north to the south end of the Pil North gossanous area. The "syenite" is part of the Black Lake Intrusive Suite of rocks generally mapped as quartz monzonite and granodiorite (Diakow, 1993).

#### Structures:

# Pil North Grid Area:

A number of structural measurements were taken from the syenitic rocks, and contacts with the altered quartz diorite. The dominant fracture orientation is  $300-320^{\circ}$  with steep or shallow dips. A number of contacts were noted with similar orientation but with steep dips. A secondary fracture direction is  $210-250^{\circ}$  with moderate to steep south dips. Again there are several contacts between syenite and monzonite, and monzonite and quartz diorite, which display the SW orientation.

In the North East Zone there are several prominent shear zones, most notable is a plus 250 meter long shear oriented at 318<sup>0</sup> with a vertical dip (i.e. rock sites WP111 and WP112). Silicification, bleaching, strong iron oxides, quartz-barite, malachite and sphalerite mark this shear. This shear is mapped as cutting both phyllic altered quartz diorite and notably bleached, silicified and iron oxide enriched syenite.

Four hand-mucked and blasted trenches were attempted in the Milky Creek Zone, to the north of line 32N, 22+50E, namely trenches A, B, C, and D (Figures #6-#9). Variously exposed, especially in Trenches A, B, and D is potash feldspar flooded "syenite", often with wispy quartz-magnetite veinlets, bleached to silicified syenite, and highly altered to gouge zones in syenite (?). Notable fracture to fault orientations are from Trench B are  $330^{\circ} / 80^{\circ}$  S;  $334^{\circ} / 75^{\circ}$  SW; and  $340^{\circ} / 22^{\circ}$  S. Fracture sets noted in Trench C are  $220^{\circ} / 38^{\circ}$  NW and  $275^{\circ} / 45^{\circ}$  S. As well in Milky Creek, Trench E (Figure #10) was placed over a previous sample RB02PN16 taken by the author. At Trench E the syenite displays more or less one meter of leached cap, underlain by sericitized and silicified syenite. Particular to Trench E is shears with sphalerite, galena, and traces of chalcopyrite and malachite. The sulfides are noted in  $305-325^{\circ}$  oriented, vertical dipping shears, below the leached cap.

Two small hand-mucked, blasted trenches were placed into the East Zone, Trench G (Figure #12) along an outcrop lip. Outcrop is phyllic altered quartz diorite, with four narrow (<5 meter wide) mafic dykes. In the area of trench G trace chalcopyrite and sphalerite were noted along with 1-2% disseminated pyrite. A shear zone at the west end of the trench is oriented more or less north south, roughly the orientation of the mafic dykes.

Trench F (Figure #11) is also located in the East Zone, and was excavated in an area of notable quartz and barite vein float. The trench did not establish the source of the float; non-the-less the bedrock in trench F was noted as variously silicified and bleached syenite, with the southern half of the trench containing 2-3% disseminated pyrite and trace chalcopyrite and sphalerite. The north half of the trench is noted as being more altered and limonitic. A shear zone divides the north and south halves of the trench and is oriented at  $340^{\circ} / 72^{\circ}$  NE. The dominant fracturing is oriented at  $110^{\circ} / 20^{\circ}$  N.

In the course of geological mapping Warner Greunwald located float and sub-outcrop of silica stockwork and near by barite with galena, sphalerite and minor chalcopyrite south of line 27N, station 35+00E. Two trenches (WG040 and WG041(Figures #13 and #14)) were hand mucked, blasted, chip sampled and geologically mapped. The geological mapping indicates that the trenches are within an ~30 meter wide cataclastic breccia zone (WG Zone) of silicified and sericitized intrusive rock. Both trenches are within the silicified, sericitized breccia, and both display varying amounts of disseminated galena, sphalerite and chalcopyrite, with or without barite wisps and veins. Rocks immediate to this zone are massive propylitically altered syenite, granite, and diorite. The WG zone is not considered part of the East Zone, but as a separate structurally controlled entity. The rough orientation if the WG zone is north northwest.

#### Structures:

#### Pil South Hand Trench "H":

From mapping in the hand trench "H" (Figure #24) it is apparent that there is strong fracturing, shearing and associated quartz veining; areas of quartz stockwork and silicification; and areas of blocky fracturing. Structural measurements from the 2002 geological mapping are in agreement with the mapping of Ronning (1999). The primary shear/open fracture/quartz vein orientation is NW to NNW with vertical dips. Secondary orientation of open fractures and shears is E-W with steep north dips. Notable quartz-sulfide veins in trench "H" are  $288^{\circ} / 88^{\circ}$  SW dip, and  $320^{\circ} / 84^{\circ}$  SW dip.

10

# Structures: Pil South Canyon:

Note worthy fracture patterns were derived from the second from southerly shear/fracture zone which was dominated by a flattish fracture set oriented at  $330^{\circ} / 10^{\circ}$ E. Further north, at 625282E, 6351800N, bands of fractured and altered intrusive are oriented at  $33^{\circ} / 60^{\circ}$ S. To the immediate north other fracturing (sampled as RB02PS02) is oriented at  $285^{\circ} / 90^{\circ}$ . These fracture / shear zones may be splays from a major through going fault marking the east boundary of the Black Lake intrusive suite rocks, and Toodoggone Formation volcanics located to the east of the canyon (Diakow, 1993).

# Alteration & Mineralization:

# Pil North Area:

Typically the alteration and mineralization in the Black Lake Intrusive Suite syenite is fracture controlled. Throughout the area traversed the syenite has minor (<1%) pyrite, epidote, chlorite, limonite, hematite and rare magnetite on fractures. In places there is weak pervasive chloritization and saussuritization of the mafic minerals within the syenite. This alteration is considered as propylitic.

The syenite is also noted to be highly fractured to sheared, silicified, pyritized and sericitized in numerous areas, as such the syenite becomes gossanous and altered. Typically the syenite will host hematite and limonite (goethite) on fractures, with minor (1-2%) pyrite, and be sericitized to a pale off white colour. In the Milky Creek and Northwest Zones, leaching effects the fractured syenite, leaving a quartz-sericite-iron oxide breccia leached "cap". These fracture zones may host fracture controlled sphalerite-galena-chalcopyrite-malachite mineralization. Examples of the latter are found in Trench E from the Milky Creek Zone, and from Trench F and G from the East Zone. Quartz or barite with sphalerite, galena and chalcopyrite was noted in trenches WG040 and WG041, as well as in float from the North West, South West, and East Zones.

The "quartz diorite", is a field name used to reflect the highly fractured (open and closed fractures) to shattered, sericite-silica-pyrite and iron oxide altered rock commonly found in the Pil North target. The dioritic rocks being for the most part phyllic altered are also intensely leached, giving rise to a cap of sericite-silica-iron oxide +/- pyrite. Thin section work (Payne, 2001) has confirmed that these rocks are in fact quartz diorite in part, although feldspar phyric porphyritic diorite has been located in 2002.

The North West Zone was partially defined by geological mapping in 2002. It consists of a mix of propylitically altered to gossanous phyllic altered "syenite", as well as outcrops of variably gossanous phyllic altered quartz diorite. Numerous strong northwest to north-northwest trending structures dominate the area juxtaposing rock types and alteration intensities. Associated with the structures are barite/carbonate veinlets, quartz stockwork, silicification and gouge zones, along with chalcocite, malachite and azurite along fractures. Minor amounts of disseminated pyrite and chalcopyrite were also noted. One area of potash feldspathization of the "syenite" was noted by R. Montgomery south of the main quartz diorite mass. Goethite and hematite dominate the iron oxides. Considerable ferrocrete exists in or along the creeks, notably a 400 meter stretch along the east bank the north flowing, westside bounding creek of the North West Zone.

The Milky Creek Zone was well defined by geological mapping in 2002. It consists of a mix of propylitically altered to gossanous phyllic altered porphyritic quartz monzonite, as well as outcrops of variably gossanous phyllic altered porphyritic quartz diorite. Within the Milky Creek Zone (line 32N, 22+50E area and north) there are areas of potash feldspathization (matrix), silicification, and wispy magnetite veining. This occurs along the northern edge of a large mapped gossanous phyllic altered quartz diorite mass in the area of line 32N, 22+50E. The rock has been mapped as syenite, but may well be intensely altered diorite, part of a remnant "potassic" alteration zone unaffected by later superimposed phyllic alteration. Four trenches (A, B, C, D) (Figure #6-9) were excavated near the top of a knoll in the area of potash feldspar flooding with quartz-magnetite veinlets. The trenches show abundant fracture and fault zones, and variably altered (silicified, sericitized and potash feldspar flooded) "syenite" with variable amounts of fine quartz microveinlets with iron oxides, magnetite, and pyrite. Some areas have the rock matrix flooded with up to semi-massive levels of magnetite (trench A).

Outcrops, especially in Milky Creek itself are marked by >1 meter of leached "cap", developed predominately on variably fractured, silicified and sericitized (phyllic altered) "syenite". Trench E was blasted along the Milky Creek bank at the base of the leached cap. The southern six meters is described as "syenite" and has small scale shearing with gouge and stringers of galena, chalcopyrite and pyrite. The northern eight meters is described as bleached and silicified syenite with minor pyrite and iron oxides. One thin/polished section specimen from trench E (1.0 meter from south end) describes the rock as a porphyritic "rhyolite" (Northcote, 2002) but from the field perspective the outcrop is intrusive and therefore a porphyritic quartz monzonite. The specimen was "crazed" with fine quartz, sericite and carbonate veinlets, with trace amounts of sphalerite, pyrite, chalcopyrite, galena and covellite mineralization.

Minor shattered outcrops and extensive areas of rubble and talus slopes dominate the area mapped as quartz diorite in the Milky Creek Zone. The quartz diorite along the eastern fringe of the Milky Creek zone is weakly altered with 1-2% disseminated pyrite. In this area (line 27N, 25+50E) the quartz diorite has variable amounts and sizes of plagioclase phenocrysts. Further east outcrops denoted as quartz diorite are gossanous (hematite and goethite), silicified, containing up to 5% disseminated pyrite, sericitization and minor epidote. The outcrops are shattered to brecciated. The most gossanous, leached quartz diorite on line 27N is between 25+00E and 17+75E. Further west is propylitically altered "syenite" to the mountain peak and westward.

The Central Zone is largely defined by induced polarization geophysics survey. Large portions of the Central Zone are skree and talus covered. Where there is exposure, such as on the rolling ridge top paralleling and south of line 17N, 21+00 to 27+00E is dominated by propylitically altered "syenite". Within the syenite are structurally controlled northwest trending intensely fractured zones noted as gossanous, with 2-5% disseminated pyrite, silicification and sericitization. Iron oxides are dominated by goethite and hematite. Likely these structural zones, varying from several meters to 40-50 meters across is phyllic altered and leached syenite.

The South West Zone is a strong induced polarization chargeability anomaly noted on lines 8N (centered at 15+00E) and line 12N (centered at 18+00E). Closely associated with the chargeability anomaly is a mass of gossanous phyllic (1-3% remnant disseminated pyrite) altered quartz diorite, enclosed in propylitically altered "syenite". Iron oxides are dominated by goethite and hematite. Along the western flank of the quartz diorite is considerable float of barite.

In the South Zone the "syenite" is fractured and gossanous, with shears and quartz veining (minor) containing manganese, chalcocite, malachite, azurite, magnetite, pyrite and rarely potash feldspar. Jarosite was noted on several large outcrop faces along with the more ubiquitous goethite and hematite. The South Zone is unique in that the intensity of fracturing and gossan development diminishes vertically and to the south toward the east west ridge. From the minor amount of geological work on the South Zone no quartz diorite was noted.

Two rounded knolls of leached, gossanous phyllic (1-5% remnant disseminated pyrite) altered quartz diorite characterize the North East Zone. Iron oxides are dominated by goethite and hematite. Barren Toodoggone Formation purple-green volcanic flows and tuffs mark the eastern side of the North East Zone. Parallel and to the south of line 36N, around 43+50E, there is an outcrop of propylitically altered "syenite" in which fracturing increases toward the contact area with the quartz diorite.

From the induced polarization survey the North East Zone is connected south to the East Zone, but geologically there is a gap in outcrop (skree and glacial outwash cover) of ~800 meters, and as such the zones are left unconnected.

The East Zone is characterized by a large, poorly exposed gossanous, leached, phyllic (1-5% remnant disseminated pyrite) altered quartz diorite. Besides talus rubble, the best exposure is a low ridge of outcrop south of line 22N, 42+00E. In this outcrop area the quartz diorite is strongly fractured, cut by four, 4-5 meter wide north south trending magnetic mafic dykes. South of this outcrop area, the rolling skree covered slopes are marked by numerous area of quartz, quartz-barite, and barite vein float. The East zone

is bound on the east by Toodoggone Formation purple-green volcanic flows and tuffs. To the southwest the East Zone is confined by propylitically altered "syenite", mainly as skree, but as well as outcrop. Several new trenches ("F" and "G")(Figures #11 and #12) were hand mucked and blasted into the East Zone. Trench F was excavated in an area of abundant quartz and barite vein float. The source of the quartz barite veining was not exposed but bedrock exposed is described as silicified syenite to sericitized and silicified syenite. The outcrop exposed was well fractured, contains 2-3% pyrite and the southern most 2 meters contains trace chalcopyrite and sphalerite. Trench G was excavated in the outcrop lip of quartz diorite in an area of previous observed chalcopyrite and sphalerite (rock sample RB02PN10). The trench outcrop is strongly silicified with 0.5% pyrite, basically phyllic altered; the western half of the trench contains minor chalcopyrite, sphalerite and malachite. The western edge of the trench exposes a rusty shear zone with broken, sub-angular silicified quartz diorite in a grey clay/sand gouge.

The WG zone, is an altered and gossanous zone located southeast of line 27N, 36+00E. The WG040 and WG041 trenches (Figures #13 and #14) with the WG zone display brecciated porphyritic intrusive rocks, which have been intensely silicified and sericitized. This ~30 meter wide zone trends northwest and is has been traced ~200 meters southeast of line 27N, station 35+00E. Associated with the alteration are barite veins, disseminations and bands of galena, sphalerite and minor chalcopyrite; and areas of quartz stockwork.

Thin/polished section examination of rock specimens from trenches WG040 and WG041 indicate that the rocks are gossanous highly altered (quartz-sericite) intrusives or breccias of highly altered (quartz-sericite) intrusive fragments in a breccia matrix of quartz, zeolite and minor carbonate. Several polished sections from the trenches revealed native gold (trace), along with pyrite, galena, chalcopyrite, sphalerite, pyrrhotite (trace), covellite (trace), and possibly argentite (trace) and telluride (trace).

#### Alteration & Mineralization:

#### Pil South Hand Trench "H" Area:

The intensity of alteration and mineralization is directly related to the intensity of fracturing and shearing. The 14 meter long trench H (Figure #24) was located within fractured and gossanous Takla Group augite phyric basalt. The southern 12 meters of basalt is described as grey to medium grey, bleached and locally silicified. Bleaching is related to the sericitization of the rock mass. The basalt hosts' fracture and dissemination pyrite (2-3%), along with traces of chalcocite, malachite and chalcopyrite. After one round of blasting and the removal of the upper 0.5 meters of rubbly outcrop the exposure was still gossanous, especially along fractures. Several notable quartz veins were exposed the southern most containing 2-3% pyrite and trace chalcocite, while the lore northerly is vuggy and limonitic.

Else where in the immediate area around trench H the Takla Group basalt is fractured to shattered with fracture fillings of epidote and magnetite, and in several locations quartz veins mineralized with sphalerite, chalcopyrite and pyrite.

#### Alteration & Mineralization:

# Pil South Canyon:

The "syenite" is typically propylitically altered, with epidote on fractures, minor chloritization of mafic minerals, trace fracture controlled pyrite, and a ubiquitous magnetic aspect. Strongly fractured to sheared zones are highly weathered and sericitized with hematite and limonite. Sheared zones, such as at RB02PS02 have minor amounts of quartz-magnetite veinlets in epidote rich fractured syenite. At RB02PS03 the syenite has been fractured, silicified, and contains 1-5% pyrite, along with narrow (1-2cm) quartz veins over 2 meters.

#### Rock Geochemistry:

The rock samples were collected during the course of geological mapping and were designated by the sampler's initials, the year, the project and the sample number. For example a rock sample taken by the author on the Pil North project would be designated RB02PNXX. The samples are either composite grabs ("grab") consisting of numerous pieces collected from an outcrop or area, or oriented chips ("chip") consisting of chips collected perpendicular to the strike of specific structural features such as veins or shears or in the hand trenching. Oriented chip samples were taken as a reasonably accurate representation

of the specific feature sampled. Descriptions of all outcrops examined and rock samples taken for analysis are compiled in Appendix #3. Rock samples taken for analysis are located on Figure #3; while analytical results are plotted on Figures#6 to #18 and #24.

The rock samples collected by R. Brown (38 samples), J. Barakso (4 samples), R. Montgomery (36 samples and 45 trench chip samples), W. Greunwald (33 samples), Tom Bell (6 samples), and Sam Watling (11 samples) were shipped to Assayers Canada of Vancouver, B.C for analysis. Samples were crushed and a representative portion of each sample was then pulverized to 200 mesh to be used for analysis. Gold was analyzed by fire assay of a one assay ton sample then finished using atomic absorption, and reported in parts per billion (ppb). Samples with over 500ppb gold were re-analyzed by the same method but reported in grams per tonne (g/t). All samples underwent a 30-element aqua regia digestion ICP analysis using a 0.5-gram sample (Appendix #4).

# Rock Geochemistry:

#### Pil North Area:

Rock samples from the North West Zone are from old trenches exposing sheared and barite veined gossanous intrusive with malachite, chalcocite and trace chalcopyrite, such as RM02PN30 and 31, which returned 714 and 2439ppm copper respectively. Gold, silver, lead, zinc, molybdenum, arsenic and antimony values were all low. Further north syenite with fracture controlled copper mineralization, such as RM02PN01-04 returned 1013, 222, 365, and 549ppm copper. Other anomalous elements include 3400ppm barium, and 202ppm lead in RM02PN01, and 0.8ppm silver and 72ppm molybdenum in RM02PN04.

Samples of the silicified quartz diorite include RB02PN03 and RM02PN33 returning 6ppb and 42ppb gold respectively, with 29ppm and 59ppm copper, and 20ppm and 2ppm molybdenum respectively.

Milky Creek Zone trenches A and D, within quartz-magnetite veinleted monzonite returned anomalous gold and silver. Gold values in Trench A averaged 523ppb over 10 meter trench exposure, while Trench D averaged 269ppb. Curiously, sample TRA02PN-04 returned >15% iron and >10,000ppm zirconium. Trench E in the bank of Milky Creek had anomalous copper, lead, zinc over the southern six meters of the trench. Typical is sample TRE02PN-06 which returned 1.2ppm silver, 220ppm copper, 2606ppm lead, and 4160ppm zinc over 2 meters.

Central Zone rock samples from sheared gossanous monzonite include WG02PN16-18. The rocks contained weakly anomalous silver (0.2, 0.4, 0.4ppm), and copper (109, 120, 80ppm), and molybdenum (32, 10, 8ppm) respectively. Gold values were 5, 4, 14ppb respectively.

South East Zone outcrops are poor except on the ridge top parallel to line 12N. Three samples by the author of sheared, gossanous monzonite to quartz diorite taken along the south side of the ridge, and straddling line 8N in the 16+00E area are RB02PN30-32. Anomalous assays for these three samples include gold (6, 9, 43ppb), and silver (0.4, 0.8, 0.6ppm). In the line 12N 16+00E area float of barite with pyrite, chalcopyrite and sphalerite assayed 2.4ppm silver, 2450ppm barium, and 279ppm copper from rock sample TB02PN12.

South Zone rock sampling was limited to five rock samples in 2002, all of which are geochemically anomalous. In an outcrop area of gossanous, sheared and quartz veined porphyritic monzonite samples RB02PN33 and 34 returned 48 and 67ppb gold, 1.0 and 0.8ppm silver, 46 and 110ppm copper, 2 and 16ppm molybdenum, and 273 and 108ppm zinc respectively. Likewise in a ravine 400 meters to the northeast rock samples RM02PN23-25 returned 11, 15, and 10ppb gold, 1286, 81, and 2767ppm copper, >10000, 2170, and3360ppm manganese, 24, 12, and<2ppm molybdenum, and 1100, 185, and 962ppm zinc. As well rock sample RM02pn23 had anomalous cadmium (17ppm) and cobalt (287ppm).

North East Zone rock sampling was sparse in 2002 with three rock samples collected (RB02PN25-27). These three samples were of leached, silicified and phyllic altered quartz diorite porphyry. For the most part analyses were inconsequential, but with anomalous gold (35, 17, 8ppb) and arsenic (50, <5, and 30ppm).

East Zone rock sampling included detailed rock sampling of a leached phyllic altered quartz diorite outcrop lip, several excavated trenches (F and G, Figures #11, 12), and considerable rock sampling and two trenches (WG040 and WG041, Figures # 13, 14) in a structurally controlled breccia zone to the immediate east.

Rock sample RB02PN10 was a grab sample of phyllic altered quartz diorite with fracture controlled minor amounts of galena, sphalerite and chalcopyrite. Analysis returned 44ppb gold, 1.4ppm silver, 26ppm copper, 14ppm molybdenum, 1128ppm lead, and 2017ppm zinc. Trench G was excavated by hand mucking and blasting in this area, and exposed three meters of mineralized silicified quartz diorite with anomalous gold and silver. Sample TRG02PN03 and 04 returned 45 and 26ppb gold and 2 and 1.4ppm silver respectively. Base metal values were at low level, even though chalcopyrite, malachite and sphalerite were noted in the trench sampling notes.

In the southern portion of the East Zone there is considerable float of barite and quartz vein material. The float material was sampled as RB02PN13, which assayed 33ppb gold, 0.4ppm silver, 11ppm copper, 146ppm molybdenum, 8ppm lead, and 19ppm zinc. Trench F was excavated in what was thought to be the source area for one such float train. Trench F revealed silicified "syenite", with the southern 2.0 meters (TRF02PN04) containing trace chalcopyrite and sphalerite with 20ppb gold, 0.6ppm silver, 9ppm copper, and 134ppm zinc.

Warner Grunwald did one day of sampling in a breccia zone he discovered immediately west of the East Zone, basically due grid south of line 27N, 35+50E. Several days were subsequently spent in September, as part of a follow-up trenching program, excavating WG040 and WG041. The trenches revealed galena, sphalerite, carbonate, and barite mineralization in silicified, sericitized porphyritic intrusive rocks and brecciated equivalents. Mineralization is exposed over the 8.3-meter width of WG041 and 6.2-meter width of trench WG040. The best results are from sample WG02PN041F with 0.61g/t gold, 21.2ppm silver, 2.75% lead and 2.14% zinc. As well a separate style of mineralization was revealed in this area, one that consists of phyllic altered intrusive with quartz stockwork. Examples of float of this material include WG02PN038, 038A, 042, and 042A, which contain 4.93g/t, 1.24g/t, 0.73g/t, and 9ppb gold respectively.

# Rock Geochemistry:

# Pil South Hand Trench H:

Trench H (Figure #24) was hand mucked and blasted into a topographic "nose" between two small creeks ~100m south of line 18S, 4+00E. Geological mapping through the area revealed quartz veins with pyrite, chalcocite, and chalcopyrite in fractured to sheared, and brecciated gossanous Takla augite phyric mafic volcanics. Trench H was excavated over 14 meters with the best 2.0 meter chip sample (TRH02PS03) containing 27ppb gold, 1.8ppm silver, 333ppm copper, 473ppm zinc, and 390ppm lead. The excavation did not completely remove the gossanous leached material, but does serve to further expand the area of copper mineralized quartz veins and brecciated Takla volcanics.

#### Rock Geochemistry:

#### Pil South Area:

Robert Montgomery took one rock sample and the author took three rock samples in the Pil South area. The R. Montgomery sample (RM02PS27) was of a pyrite, chalcocite, and chalcopyrite mineralized 30cm thick quartz vein located ~100 meters at 3450 for Lorne's trench (line 18S, 3+25E). This mineralization is on structural trend with the mineralization in Lorne's trench. The vein assayed 18ppb gold, 8.6ppm silver, 6641ppm (re-assay 0.584%) copper, 106ppm molybdenum, and 3428ppm zinc. The author took several samples in the Pil South area, namely RB02PS09 from silicified Toodoggone volcanics (?) south of line 13+50S, station 3+50E, which returned 107ppb gold, 11.0ppm silver, 214ppm copper, 6ppm molybdenum, 840ppm lead, and 89ppm zinc. Sample RB02PS10 was also from silicified (sinter) Toodoggone volcanics, immediately west of the Takla Group volcanics contact ~150 meters north of line 22S, station 2+00E, returned 13ppb gold, <0.2ppm silver, 10ppm copper, 6ppm molybdenum, and 56ppm zinc.

# Rock Geochemistry:

# Pil South Canyon:

A number of samples by the author (3 samples) and W. Grunwald (2 samples) were taken in the canyon on the north side of Jock Creek, and further north, basically between the two main mineralized areas of Pil South and Pil North. Sampling was of fractured zones. The samples all returned anomalous amounts of gold, silver, molybdenum, lead, and zinc. The best results were from the narrow more northern shears within the canyon. Sample RB02PS02 (0.75m wide) and RB02PS03 (2.0m wide) returned 236 and 341ppb gold, 1.6 and 4.2ppm silver, 12 and 30ppm molybdenum, 382 and 88ppm lead, and304 and 274ppm zinc respectively.

#### Soil Geochemistry:

The soils were shipped to Assayers Canada of Vancouver, B.C for analysis. Samples were screened to -80 mesh, with the fine fraction retained for analysis. Gold was analyzed by fire assay method using a  $\frac{1}{2}$  assay ton sample then finished using atomic absorption, and reported in parts per billion (ppb). Samples with over 500ppb gold were re-analyzed by the same method but reported in grams per tonne (g/t). All samples underwent a 30-element aqua regia digestion ICP analysis using a 0.5-gram sample (Appendix #4).

Results of the 2001-work program are displayed on Figures #10-13 while the results of Assayers Canada soil geochemical analyses are in Appendix #4.

#### Soil Geochemistry:

#### Pil North Area:

Four lines (L8N, L17N, L27N, and L32N) totaling 13,100 meters were compassed, chained and power-saw cut, while L36N was chain and compass extended from 15+00E to 25+00E, and LPNA and LPNB were chain and compassed from 0+00E to 20+00E. These lines served as soil sampling lines as well as lines for induced polarization and magnetometer geophysical surveys. The results of copper, gold, zinc, and silver are plotted on Figures #19-22. A total of 319 soil samples were collected in the Pil North gossan target area. A number of moderate to highly anomalous gold, silver, copper and zinc areas were outlined with associated molybdenum and lead values.

The sample value populations were divided into percentile categories. All the Pil North soil geochemistry data was used in the data analysis. The higher the percentile category, the larger the circle given to the sample site on the soil geochemistry maps.

	FINLAY MINE GEOSTATIST	RALS LTD. ICS ON ALL P	IL NORTH S	DIL SAMPL	ES	
	AU ppb	AG ppm	<u>CU ppm</u>	MO ppm	PB ppm	ZN ppm
50 percentile	13	0.2	41	6	39	104
60 percentile	17	0.3	50	7	48	120
70 percentile	24.2	0.4	62	8	60	142
80 percentile	36	0.6	80	11	72	174
90 percentile	72	1	115.6	16	104	248.5
95 percentile	119	1.6	170	22	181.8	340
98 percentile	189.52	2.2	275.84	39.72	328.08	513.6

The soil sample maps also include previous soil sampling completed by both Finlay Minerals Ltd., and Electrum Resources, the property vendors company. The Pil North area has been divided into seven zones, shown on the soil sample maps, and the 2002 soil sample results will be discussed in reference to the seven zones. *The print in italics below is drawn from the author's 2001 report on the Pil property*. This information is included as it forms an integral part of the Pil North soil anomalies, and descriptions thereof.

# Soil Geochemistry:

### Pil North Area, North West Zone:

Along with the strong alteration and copper mineralization in rocks the North West Zone is defined by LPNA and LPNB, two soil line run east-west cross country. Both lines define a 500-meter wide zone from 0+00E to 5+00E, although the soil sample collection on LPNB is spotty due to rock talus at many sites. Particularly note worthy on both lines is silver, molybdenum, copper and barium, along with very modest gold, zinc. Lead values are strong on LPNB at the west end, coincident with barium, but offset from the copper found to the east. On LPNB typical higher values (west side) are from 2+00E with 64ppb gold, 1.6ppm silver, 880ppm barium, 94ppm copper, 8ppm molybdenum, 312ppm lead, and 214ppm zinc. The east side of the North West Zone is typified by 8+50E with 14ppb gold, 0.6ppm silver, 190ppm barium, 126ppm copper, 28ppm molybdenum, 14ppm lead, and 44ppm zinc. On LPNA a typical anomalous sample, say 2+50E is typified by 49ppb gold, 1.8ppm silver, 440ppm barium, 401ppm copper, 64ppm molybdenum, 42ppm lead, and 62ppm zinc.

A number of pre-Finlay soil lines exist between anomalous samples on the west ends of LPNB (North West Zone) and line 36N (Milky Creek Zone), a distance of ~1400 meters. They indicate continuity between the zones. The Milky Creek Zone was separated on the basis that it is better defined by geology, geochemistry, and geophysics (induced polarization chargeability anomaly).

#### Soil Geochemistry:

#### Pil North Area, Milky Creek Zone:

The Milky Creek Zone is defined, on lines 36N, 32N, and 27N, by erratic soil geochemistry anomalous values in gold, lead, and zinc, with modest values in copper, molybdenum and silver.

On line 36N the soil anomaly is located between 21+00E and 32+00E, a width of 1100 meters. The best gold value (302ppb) occurs at 24+00E, along with 0.2ppm silver, 570ppm barium, 52ppm copper, 8ppm molybdenum, 104ppm lead, and 97ppm zinc.

On L36N, there are strongly anomalous values in copper (297ppm) and zinc (1095ppm) at 35+50E with associated molybdenum (14ppm) and manganese (5090ppm) (Author's note: This may be down slope dispersion from the Milky Creek Zone). The neighbouring sample at 35+00E returned 34ppb gold, 16ppm molybdenum and 86ppm copper. This area coincides with a swamp bounding the major NNW drainage.

On line 32N the soil anomaly is located from 17+00E to 26+00E, a width of 900 meters. Again the soil geochemistry anomaly area has erratic distribution of anomalous values. Typical would be 23+00E with 152ppb gold, 1.8ppm silver, 1330ppm barium, 116ppm copper, 14ppm molybdenum, 64ppm lead, and 64ppm zinc.

On line 27N the soil anomaly is located from 19+00E to 26+00E, a width of 700 meters. Again the soil geochemistry anomaly area has erratic distribution of anomalous values. Typical would be 23+00E with 152ppb gold, 1.8ppm silver, 1330ppm barium, 116ppm copper, 14ppm molybdenum, 64ppm lead, and 64ppm zinc. The zinc anomaly extends 400m further east over an extensive outcrop area of quartz monzonite, with little obvious mineralization and typical propylitic alteration. Possibly this zinc anomaly is vertical leakage. Station 16+00E soil had a value of 533ppm zinc, along with 141ppm copper, 2145 manganese, and 70ppm lead.

# Soil Geochemistry:

### Pil North Area, Central Zone:

South of line 27N outcrop diminishes, the tenor of the soil anomaly drops off markedly, and the southern continuity of the induced polarization anomaly (Lloyd, 2002) is for the most part covered by talus, in a broad valley. As such this area was designated separately as the Central Zone. The Central Zone for the most part is an induced polarization chargeability anomaly, with extremely weak soil geochemistry in the central western halves of lines 22N, 17N, 12N, and 8N.

(Author's note: This section of the 2001 (Brown) report deals with L22N, the Central and likely southern dispersion from the Milky Creek Zones) Again the main NNW drainage and associated swamp is site for a strong coincident copper, zinc, and manganese anomaly from 32+00 to 33+00E. Typical is 32+00E with 224ppm copper, 4885ppm manganese, and 806ppm zinc (Author's note: Probably down slope dispersion from southern Milky Creek or northern Central Zone). From 21+00 to 31+00E there is a spotty gold, zinc, molybdenum, and silver anomaly (Author's Note: This covers the Central Zone). This zone flanks the south side of a mountain with prominent outcroppings of both syenite and quartz diorite. Best values include, from site 21+00E, 727ppb gold, 122ppm copper, 1046ppm zinc, 0.8ppm silver, with 20ppm molybdenum and 332ppm lead. More typical would be 25+50E with 72ppb gold, 0.8ppm silver, and 18ppm molybdenum. Possibly some of the zinc and lead is related to fractures in syenite with galena, but generally the breadth of the anomaly is far to large for rarely observed galena veinlets. Near the west end of L22N is a three station, 16+50E to 17+50E, copper zinc, and lead anomaly, all within a bowl of syenite outcroppings. Best values are from 16+50E with 107ppm copper and 232ppm lead.

Line 17N, west of the main NNW drainage is notable by a consistent molybdenum soil anomaly from 17+50E to 31+00E, a width of 1350 meters. This molybdenum anomaly is considerably wider than the induced polarization chargeability anomaly noted from 21+50E to 28+00E, and denoted the Central Zone. Associated with the molybdenum anomaly are sporadic anomalous spikes in silver, gold, copper, zinc and lead. Best values include, from site 19+00E and 23+50E, 28 and 40ppb gold, 76 and 93ppm copper, 201 and 70ppm zinc, <0.2 and 0.4ppm silver, with 24 and 40ppm molybdenum and 64 and 62ppm lead. Line 17N for the most part in the Central Zone area is till and skree covered.

(Author's Note: This 2001 description covers the Central Zone on line 12N form 22+00E to 28+00E and the north end of the South West Zone from 14+00E to 20+00E). West of the main drainage L12N follows the flank of a major ENE trending ridge. A "spotty" or discontinuous soil anomaly is noted from 17+00E to 26+00E, or a distance of 900 meters. There are anomalous values in copper, zinc, molybdenum, with minor silver and barium nearer the west extreme. In particular the sample at station 26+00E returned 170ppm copper and 200ppm zinc, while station 21+00E returned 182ppm copper, 208ppm lead and 316ppm zinc. Further west station 17+00E returned 0.8ppm silver, 1560ppm barium, 10ppm molybdenum, 82ppm lead and 288ppm zinc.

The southern end of the Central Zone, as presently known, is on line 8N. Line 8N parallels the south facing slope and is completely till covered. As such the Central zone is defined by an induced polarization chargeability anomaly from 22+00 to 24+00E. There is no soil anomaly in this area but a weak erratic copper, molybdenum, zinc and gold anomaly is located further east from 27+50E to 32+00E. Typical would be 30+50E with 7ppb gold, <0.2ppm silver, 560ppm barium, 230ppm copper, 10ppm molybdenum, 24ppm lead, and 165ppm zinc.

### Soil Geochemistry:

# Pil North Area, South West Zone:

The South West Zone is defined by an induced polarization chargeability anomaly at the west ends of both line 12N (16+00E to 20+00E) and 8N (14+00E to 18+50E). A notable area of gossanous quartz diorite outcroppings within propylitically altered quartz monzonite is also defined in this region. Soil geochemistry on line 12N was discussed above (Brown, 2001) where it was noted that a discontinuous soil anomaly exists fro 17+00E to 26+00E. The best values is at station 17+00E which returned 0.8ppm silver, 1560ppm barium, 10ppm molybdenum, 82ppm lead and 288ppm zinc.

On line 8N a distinct soil anomaly is noted from 15+00E to 18+00E. The best geochemical values are from station 15+00E, which returned 11ppb gold, 1.2ppm silver, 174ppm copper, 10ppm molybdenum, 310ppm lead, and 362ppm zinc.

#### Soil Geochemistry:

### Pil North Area, South Zone:

A minor amount of pre-Finlay contour soil sampling, several geological traverses and rock geochemistry define the South Zone. No 2002 soil sampling was completed over this zone.

#### Soil Geochemistry:

Pil North Area, North East Zone:

The North East Zone is defined by a combination of geology, rock and soil geochemistry, and an induced polarization chargeability anomaly, which straddles the east ends of lines 36N, 32N, and 27N. Geophysically it is contiguous with the more southerly East Zone, but these two zones have been left separate due to an 800-meter gap (glacial outwash valley and skree) in geological control.

The eastern end of L36N contains a zinc, gold, silver plus lead multi-element anomaly from 42+00E to the end of the line at 47+00E. Best values include 43+00E with 178ppb Au, 918ppm lead, 694ppm zinc, 0.6ppm silver, and 10ppm molybdenum; and at station 44+00E with 458ppb gold, 99ppm copper, 4.2ppm silver, and 662ppm lead. This 500m long soil anomaly coincides with the west flank of a 500 by 200-meter area of intensely altered and shattered quartz diorite (Author's note: This zone is now designated as the North East Zone).

The eastern end of L32N contains a gold, silver plus lead, zinc, arsenic, copper, and molybdenum multielement anomaly from 42+50E to 46+50E. Several typical soil sample results would be from 46+00E and 44+00E which returned 56 and 86ppb gold, <0.2 and 0.8ppm silver, 25 and 170ppm arsenic, 231 and 65ppm copper, 30 and 2ppm molybdenum, 86 and106ppm lead, and 260 and 144ppm zinc. The northeastern end of line 32N is at 48+00E which the author considers outside of the northeastern edge of the North East Zone, and as well northeast of the phyllic altered and leached quartz diorite, and into the Toodoggone Formation volcanics.

The eastern end of L27N contains a modest gold, arsenic, silver, lead, zinc, copper, and molybdenum multi-element anomaly from 38+00E to 44+50E. Several typical soil sample results would be from 40+00E and 44+50E which returned 18 and 13ppb gold, 0.4 and 0.2ppm silver, 10 and 25ppm arsenic, 37 and 48ppm copper, 4 and 4ppm molybdenum, 34 and30ppm lead, and 83 and 128ppm zinc. The northeastern end of line 27N is at 47+00E which the author considers outside of the northeastern edge of the North East Zone, and as well northeast of the phyllic altered and leached quartz diorite, and into the Toodoggone Formation volcanics. Considerable skree and avalanche debris from the Toodoggone Formation volcanics masks the phyllic altered quartz diorite at the northeast end of line 27N.

The East Zone is defined by a combination of geology, rock and soil geochemistry, and an induced polarization chargeability anomaly, which straddles the east ends of lines 22N, 17N, and 12N. The east end of line 8N is believed to be southeast of the phyllic-altered zone and solely within the Toodoggone Formation volcanics, although there is little outcrop to be definitive.

South, near the east end of L22E, associated with a 600-meter east-west zone of intensely altered and shattered quartz diorite, is another multi-element soil anomaly. The gold, copper, silver, molybdenum anomaly is present from 42+00E to 45+00E. Best values are from sample site 43+50E with 147ppb gold, 1.2ppm silver, 82ppm copper, and 14ppm molybdenum (Author's note: This zone is now designated as the East Zone).

The eastern end of L17N contains a strong gold, silver, lead, zinc, copper, and modest arsenic, molybdenum, bismuth multi-element anomaly from 35+00E to the end of the line at 43+00E. Several typical soil sample results would be from 39+50E and 37+00E which returned 140 and 80ppb gold, 1.4 and 0.4ppm silver, 15 and <5ppm arsenic, 10 and <5ppm bismuth, 40 and 164ppm copper, 4 and 4ppm molybdenum, 36 and 20ppm lead, and 195 and 415ppm zinc. This 800m long soil anomaly coincides with the area of intensely altered and shattered quartz diorite of the East Zone. The highest 2002 soil sample value in gold (989ppb) was taken at station 39+00E on lime 17N, with strong coincident silver (2.6ppm).

On L12N there are a number of areas with anomalous soil analysis. From east to west a gold, silver, zinc and lead anomaly is found between 43+50E and 45+00E. The best sample at 43+50E contains 146ppb gold, 1.4ppm silver, and 278ppm lead. This portion of the line is at the contact between the Black Lake Intrusive Suite symite outcrop and outcrop of the Toodoggone Formation volcanics. (Author's note: This zone is now designated as the East Zone). At 39+50E to 41+00E on line 12N in an area of no known outcrop is a copper, zinc, and molybdehum anomaly. The best value is at station 40+00E containing 212ppm copper, 271ppm zinc, and 0.4ppm silver. At the headwater swamp of both NNW and SSE drainages central in the claims is a copper anomaly. Best values include 231ppm copper, 10ppm molybdenum and 144ppm zinc from 34+50E. The copper anomaly may be related to down slope migration of leached copper from zones to the east and vertically above these values.

# Soil Geochemistry:

Pil South Grid Area: No soil sampling was done in the Pil South area in 2002.

### Discussion of Results:

#### Pil North Area:

The 2002 Pil North exploration program was focused on a more detailed examination, geologically and geophysically of the gossanous area. As well the gossanous, altered and mineralized zone was expanded by reconnaissance geology along with rock and soil geochemistry. The area of gossanous, altered and mineralized rock has been expanded to a six (6) kilometer north south by up to three (3) kilometer east west area. Thin section examination of basic rock types exposed within the Black Lake Intrusive Suite (Payne, 2002), as well as thin/polished slides of mineralized and altered rock Black Lake Intrusive Suite rocks (Northcote, 2002) has been completed.

Geophysical (magnetics and induced polarization) surveys were completed over four new chain saw cut lines (lines 8N, 17N, 27N, and 32N) and soil geochemical surveys were completed over the chain saw lines as well as two flagged lines (LPNA and LPNB) (Lloyd, 2001and 2002). Considerably more rock sampling was completed as chip and grab samples from outcrops and float of interest, and from nine (9) hand mucked and blasted trenches.

The field names used in the geological mapping of Black Lake Intrusive Suite rocks include syenite and monzonite. In the field they form extensive areas of pinkish-green outcrop or coarse rock talus areas. Typically the alteration is propylitic consisting of chloritized mafic minerals, fracture controlled epidote, trace pyrite and associated iron oxide, and are ubiquitously magnetic (magnetite). In two years of traversing the propylitically altered "syenite" on one-millimeter galena veinlet was noted as mineralization. Petrographically (Payne, 2001, Northcote, 2002) the "syenite" is a quartz monzonite with pinkish plagioclase phenocrysts in a groundmass of potash feldspar and lesser quartz and remnant mafic minerals (hornblende and mica). Likely the monzonite is more of a granodiorite. The other main field rock type is quartz diorite, which is petrographically described as quartz diorite. During 2002 areas of diorite were also mapped. For the most part the dioritic rocks are intensely phyllic altered by pyrite, sericite and quartz. In many areas this phyllic alteration has been leached leaving a quartz sericite iron oxide fractured to shattered rock of questionable origin. Other notable aspects from the 2002 geological mapping are the strong structural print left on the gossanous area, and associated alteration and mineralization. Structures, generally as fractures and shears are most often oriented in a north northwest to northwest direction. A lesser but well displayed orientation is east west with variable flattish to vertical dips. Structural zones are noted in the quartz monzonite as iron oxide gossanous, fractured to sheared zones with sericite to quartzsericite alteration. Mineralization consists mainly of 1-5% fracture controlled and disseminated pyrite, but in places the sheared quartz monzonite hosts barite-quartz-carbonate veins with pyrite, galena, sphalerite, chalcopyrite, malachite, azurite, chalcocite, and rarely native gold or telluride (?).

Several of these mineralized zones were trenched during the 2002 exploration program. The most prominent would be the WG040 and WG041 trenches to the southeast of line 27N, station 36+50E. Here the intrusive rocks are intensely sericitized and silicified and in places brecciated with a silica flooded groundmass. Rock samples from this area include grabs of silica stockwork intrusive float. Examples of the float include WG02PN038, 038A, 042, and 042A, which contain 4.93g/t, 1.24g/t, 0.73g/t, and 9ppb gold respectively. Brecciated intrusive with silica and barite veining, containing the above mentioned base metals include sample WG02PN041F (1.1 meter chip sample) from trench WG041 with 0.61g/t gold, 21.2ppm silver, 2.75% lead and 2.14% zinc. Several other trenches, such as trench E from the Milky Creek

Zone and trenches F and G from the East Zone, display minor amounts of galena, sphalerite and chalcopyrite in quartz monzonite with localized fracturing to shearing, sericitization and silicification. Only trench E had analytical values of interest with the best value being from sample TRE02PN04 with 23ppb gold, 4.2ppm silver, 82ppm copper, 3227ppm zinc, and 3432ppm lead over a 2.0-meter width.

One other area of interesting alteration and mineralization was in the Milky Creek Zone where intrusive outcrops (quartz syenite?) have been intensely potash feldspar flooded, then fractured with quartz-magnetite-pyrite veinlets. Four trenches (A, B, C, and D) were excavated in this area. For the most part trenches B and C display fractures quartz monzonite with sericitization and silicification and at best 1-2% pyrite. Rock samples contained low geochemical values from trenches B and C. Trenches A and D contained the most intense potash feldspar flooding and quartz-pyrite-magnetite veinlets. Trench A averaged 523ppb gold over its 10 meter length. Other elements in trench A were at background levels.

A minimal amount of time was spent reviewing the geology of the South Zone, initial observations are that the host rock of the gossan is quartz monzonite. Iron oxides, derived from pyrite and likely copper sulfides, include hematite, goethite and jarosite. Alteration is propylitic in nature with a weak potassic overprint. The potassic alteration includes minor quartz veins with magnetite, potash feldspar, chalcocite, malachite, chalcopyrite, and pyrite. A composite grab sample (RM02PN25) across 15 meters of talus with fracture coatings to semi-massive black "chalcocite" returned 10ppb gold, <0.2ppm silver, 2767ppm copper, 3360ppm manganese, <2ppm molybdenum, and 962ppm zinc. Likely this copper, zinc, manganese mineralization is largely transported and re-deposited by leaching.

Leaching has made a marked impression on the phyllic altered dioritic and monzonitic rocks. As the phyllic alteration by nature had 1-5% fracture controlled and disseminated pyrite, some of which remains, a large acid system was created by the circulation of ground water through the rocks. To a large extent the host rock for the leached "Cap" of one or more meters thickness cold either be the monzonitic or dioritic rocks, either being unrecognizable as the leached cap consists of a highly fractured to shattered quartz-sericite-iron oxide rock. At trench G, in Milky Creek, the leached cap is ~1 meter thick, veinlets of galena and sphalerite are intact below the leached cap, but are completely destroyed above the transition. Many areas denoted as quartz diorite have intense leaching, in particular the southern portions of the North West Zone, southern portion of the Milky Creek zone, the North East Zone, and East Zone.

Mobile metals derived from the leached areas are transported laterally and downwards, creating supergene zones, lateral soil anomalies, and highly anomalous stream sediments. Copper and zinc, two mobile elements are found forming highly anomalous lateral and down hill dispersion anomalies on the east flank of the Milky Creek Zone, and on the west flank of the North East Zone. Malachite, azurite, and chalcocite have formed lateral "exotic" deposits on fractures within propylitically altered quartz monzonite rubble in the line 12N area, just north of station 35+00E. Possibly similar "exotic" deposition occurs in structural zones along the topographically lower western flank of the North West Zone. Also within the North West Zone the rock samples from the leached quartz diorite have background levels of copper, but a streambed-draining north is coated in iron oxides and contains highly anomalous copper (stream sediment RB02PN02 assayed 446ppm copper, >15.0% iron). Milky Creek itself is a "milky" colour due to dissolved sulfates.

In 2002 a more detailed inspection of the gossanous area lead to the dividing of it into seven zones, namely the North West, Milky Creek, Central, South West, South, North East, and East. The 2001/2002-grid area covers all but the most northerly North West Zone and the most southerly South Zone. This six (6) kilometer north south by up to three (3) kilometer wide multi-phase suite of altered and mineralized Black Lake Intrusive rocks contains a number of key elements which indicate to the author that the Pil North gossan is the upper portion of a significant porphyry copper prospect. Namely, the extensive porphyritic nature of the intrusive rock, and petrographic descriptions indicates the intrusives are high level or hypabyssal in nature. The alteration, being for the most part propylitic is indicative of the outer shell of a porphyry system, and the strong phyllic alteration may be retrograde alteration of the top of a potassic system by downward movement of ground waters. The intense leaching has removed mobile metals from the intensely altered area, moving them downward and laterally, with re-deposited of the metals in the streams, soils, and to some degree as "exotic" copper-zinc-manganese deposits. Geologically, the outline of the "bulge" in the Black Lake Intrusive Suite rocks was adjusted to a minor degree between the west ends of lines 12N and 17N. In this area the intrusive rocks, weakly propylitically altered quartz monzonite is in contact with andesitic tuffs and flows of the Metsantan Member of the Jurassic age Toodoggone Formation.

Discussion of Results: Pil South Grid Area:

The geological mapping of 2002 modified the mapping of Ronning (1999) only slightly. The presence of geologists on the ground at Pil South continues to uncover and discover copper showings in the altered Takla Group augite phyric basalts. The hand mucking and blasting of trench H continued to expand the area of copper mineralization first noted in "Lorne's trench" and now covers an area at least 100 meters north west by 50 meters south east. This area is coincidental with a strong induced polarization anomaly located between L18N, 2+50E to 9+00E surveyed in 1999; and on L22S, 2+00E to 9+00E, surveyed in 2002 (Lloyd, 2002).

# Recommendations:

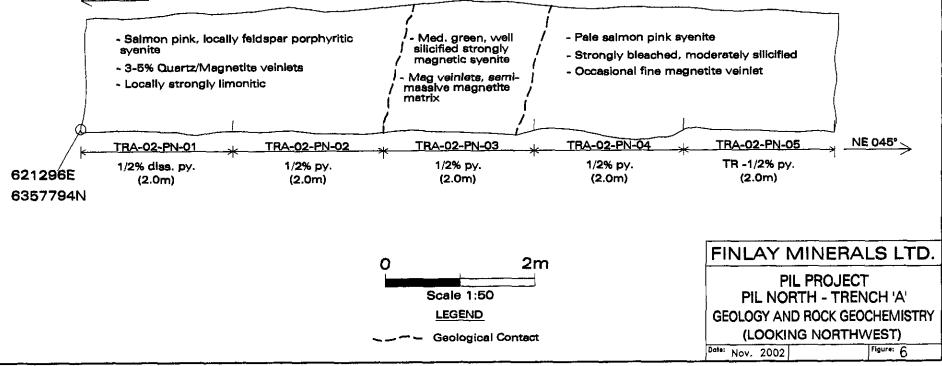
From wide spaced reconnaissance traversing (Zastavnikovich, 1996; Cooke, 1969; Staargaard, 1992, 1994), satellite iron oxide colour features (Sterenberg, 1997), and the more detailed geological, geochemical, and geophysical work this year and last (Brown, 2002) a significant, gold-copper-silver-zinc-molybdenum anomaly related to a leached porphyry copper type system in the Black Lake Intrusive Suite with dimensions of up to three (3) kilometer east-west by six (6) kilometers north-south is developing in the Pil North target area. This anomaly, divided into seven zones, has coincident induced polarization chargeability anomalies associated with five of the zones (two zones unsurveyed by geophysics). Further recommended work, would be to drill test several of the zones, in particular the Milky Creek and East Zones where intense alteration is associated with soil and rock geochemistry, and induced polarization chargeability anomalies. As well detailed appraisal of the North West and South Zones by further detailed geological mapping, soil and rock sampling, and geophysical surveys (induced polarization and magnetics) are warranted.

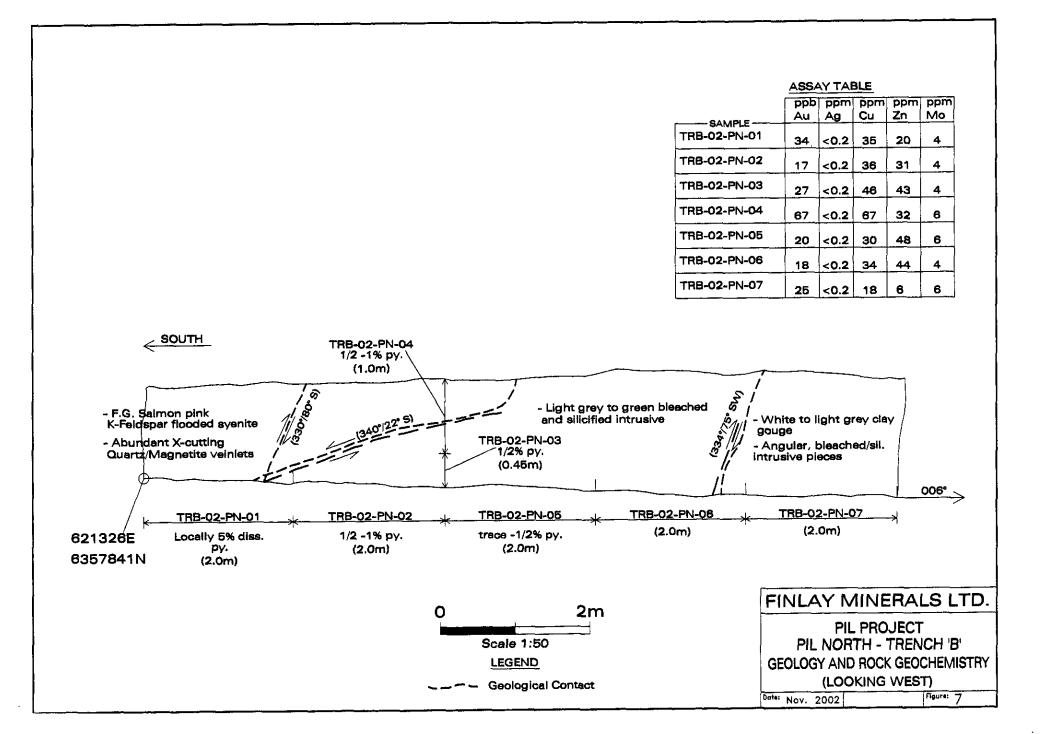
Careful consideration needs to be given to the data on hand to vector into the potassic core of the Pil South porphyry copper-gold system. As the project is road accessible this could be accomplished with a program of detailed mapping and sampling along access road cuts to a half dozen drill sites oriented to drill several sections across coincident geophysical, geochemical, and geological features (say L18S and L13+50S).

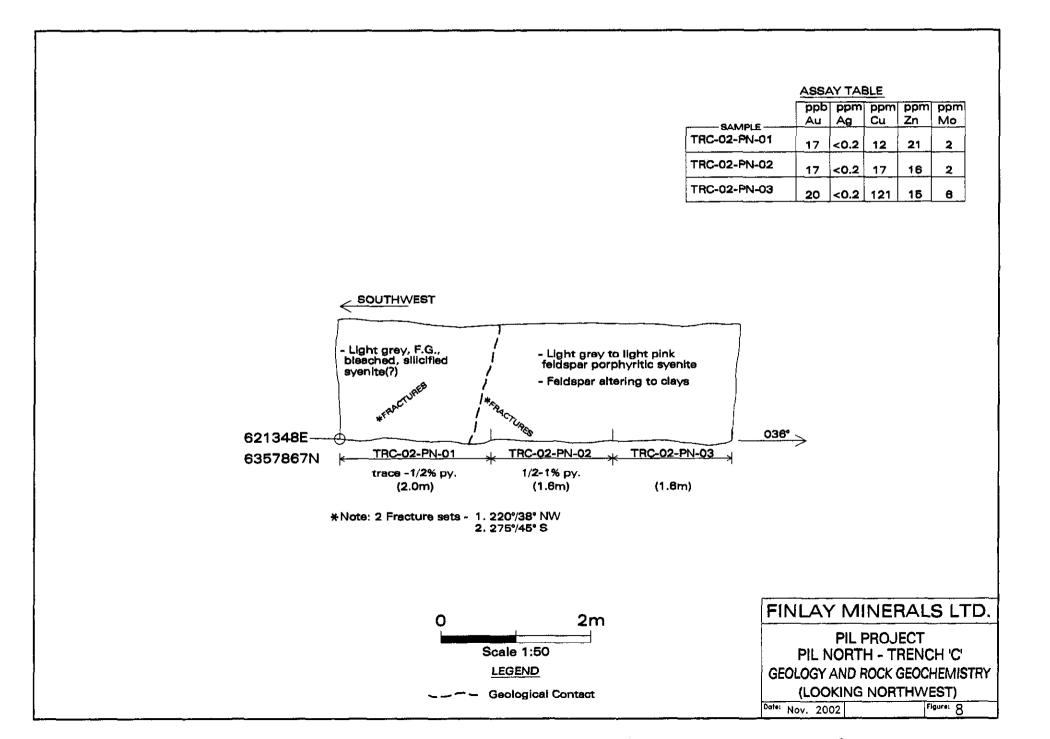
Robert F. Brown, P. Eng. December 10, 2002

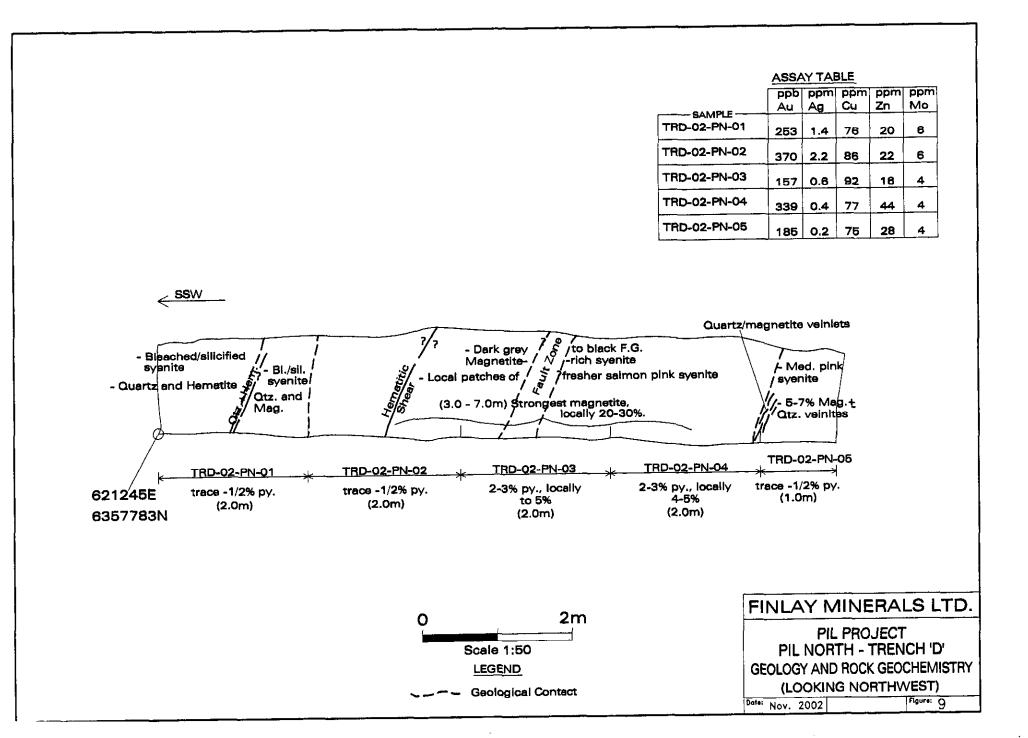
at ESSIO, R. F. BROWN GINE

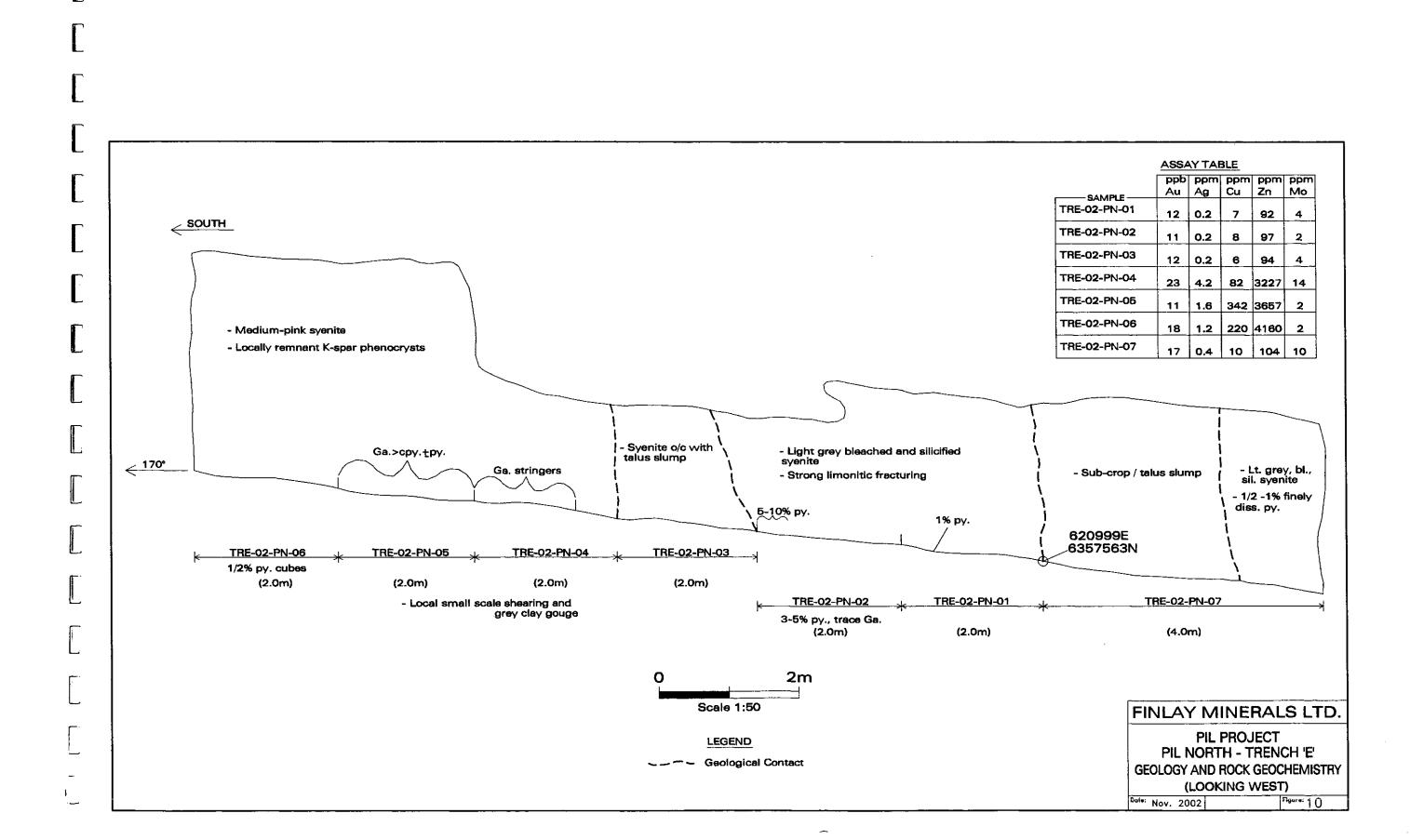
	ASSA	ASSAY TABLE					
	ppb Au	ppm Ag	ppm Cu	ppm Zn	ppm Mo		
SAMPLE	398	0.4	86	23	4		
TRA-02-PN-02	229	0.4	66	13	6		
TRA-02-PN-03	1196	0.4	106	33	_4		
TRA-02-PN-04	398	2.4	31	7	6		
TRA-02-PN-05	392	1. <del>6</del>	24	з	6		

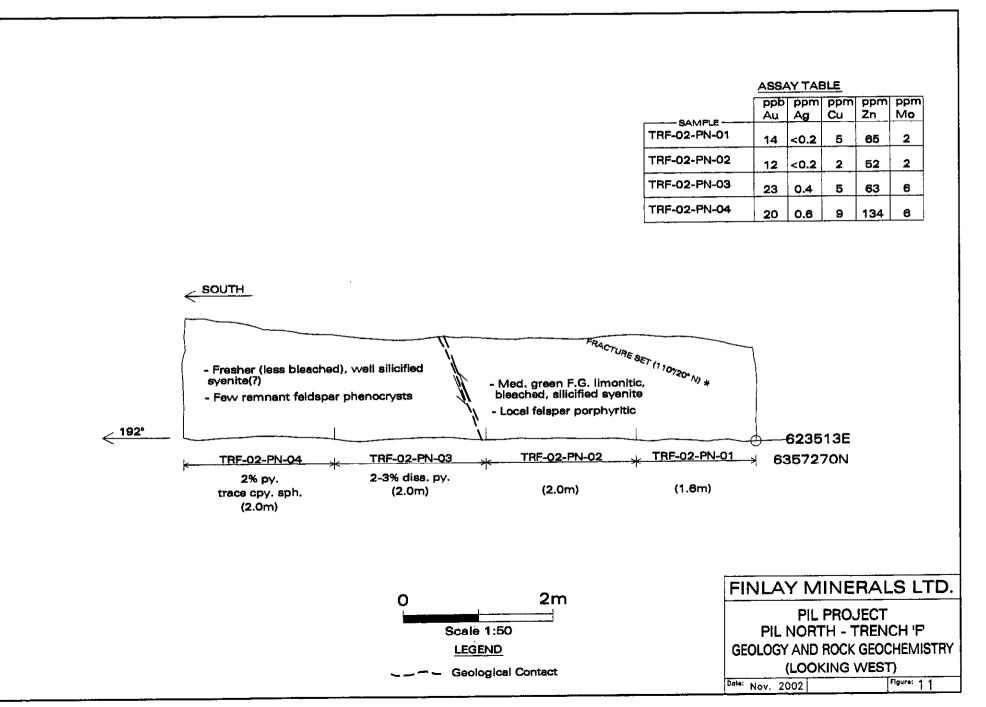




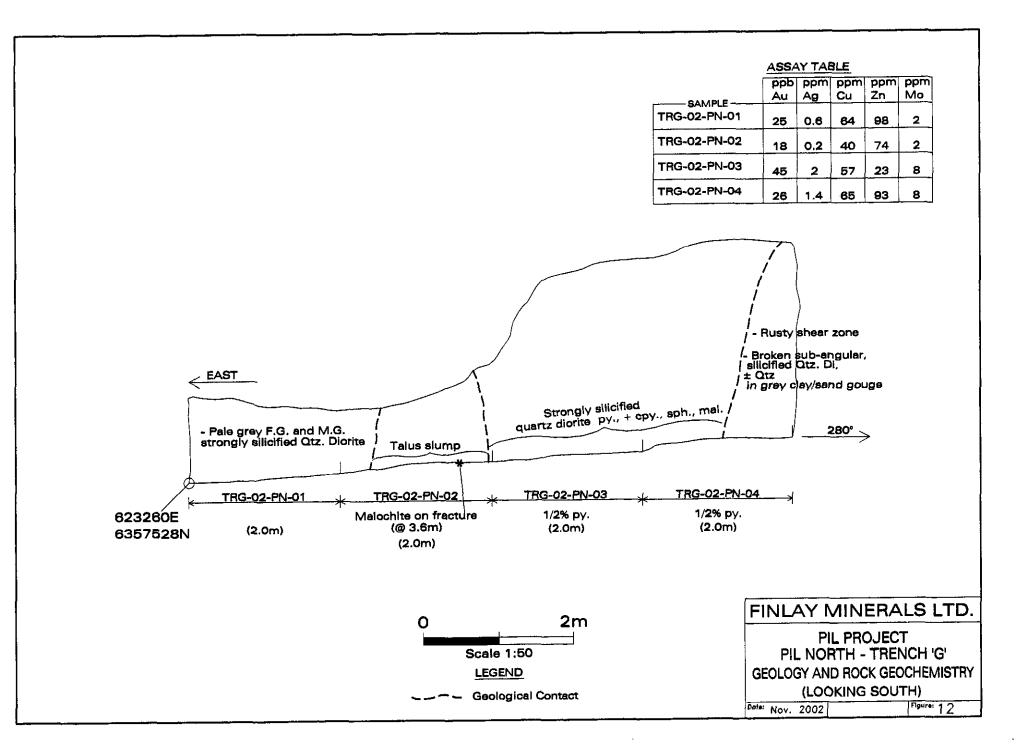


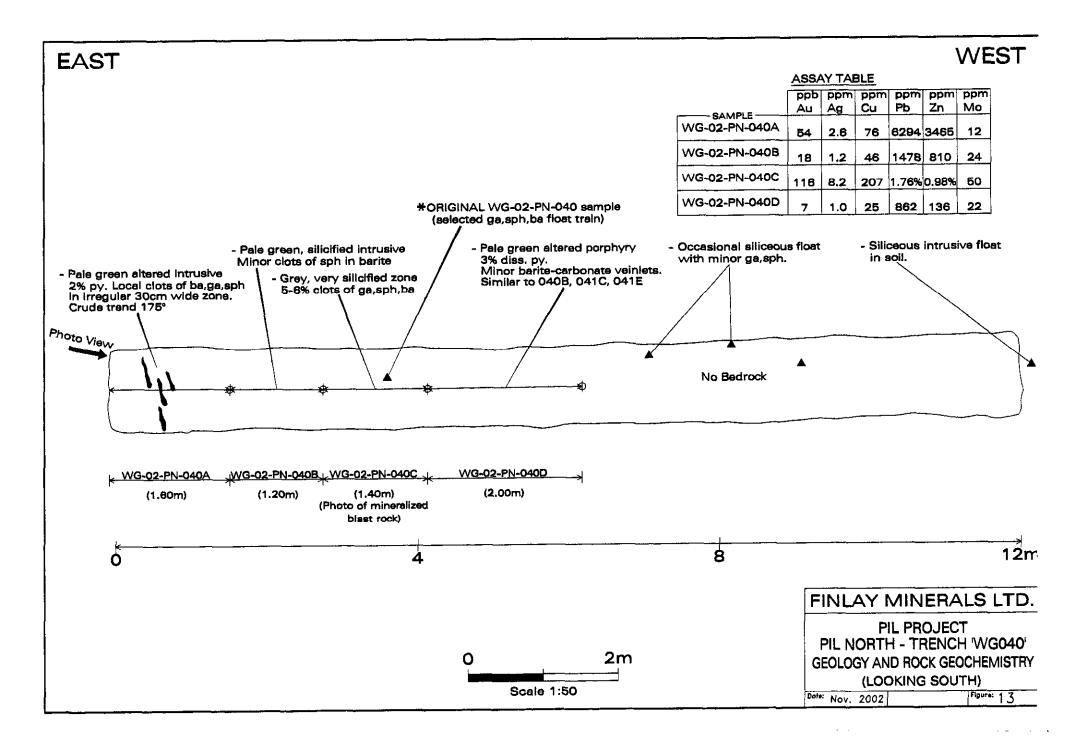


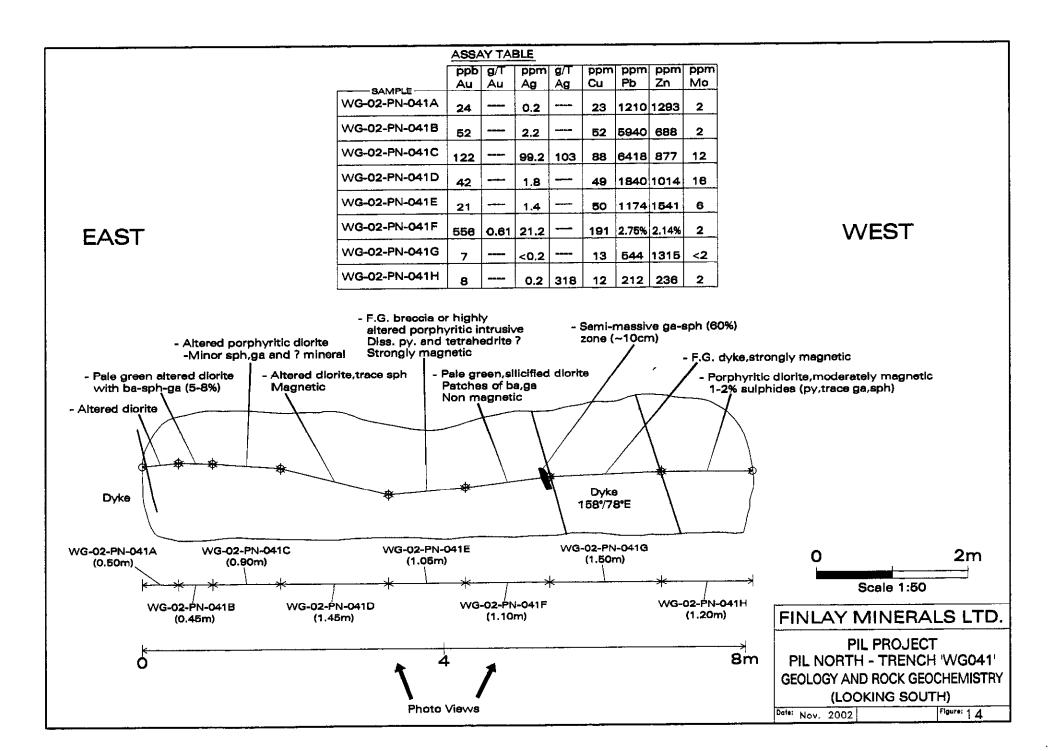


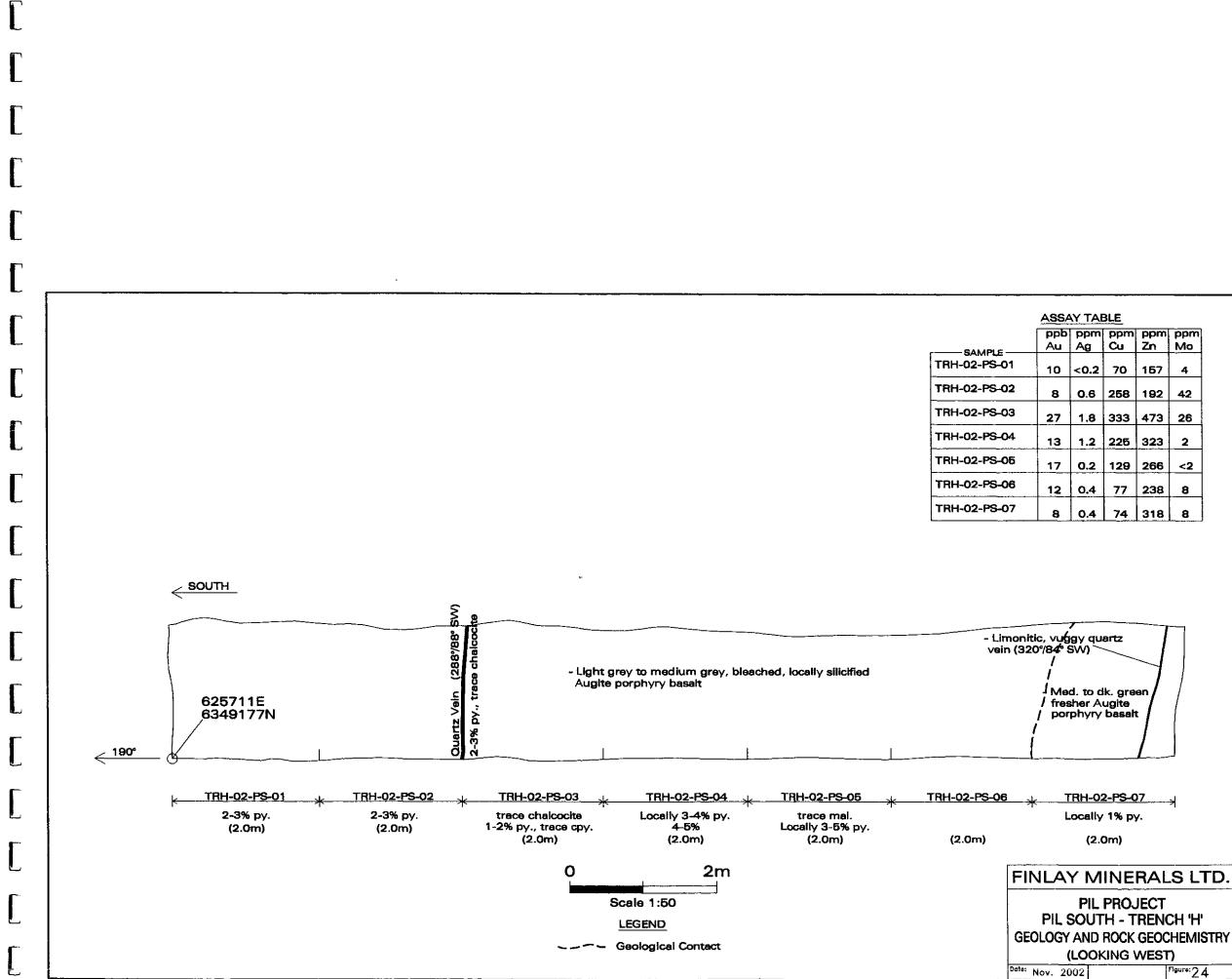


. .









	ASSA	Y TA	<u>BLE</u>		
	ppb	ppm	ppm	ppm	ppm
SAMPLE	Au	Ag	Cu	Zn	Mo
-02-PS-01	10	<0.2	70	157	4
-02- <del>PS-02</del>	8	0.6	258	192	42
-02-PS-03	27	1.8	333	473	26
-02-PS-04	13	1.2	225	323	2
-02-PS-05	17	0.2	129	266	<2
-02-PS-06	12	0.4	77	238	8
-02-PS-07	8	0.4	74	318	8

# References

## Brown, R.F.

2001 Assessment Report on the PIL Property Geological Mapping and Rock Sampling Program, internal report of Finlay Minerals Ltd., report filed for assessment credit.

# Brown, R.F.

2000 Assessment Report on the PIL Property Geological Mapping and Rock Sampling Program, internal report of Finlay Minerals Ltd., report filed for assessment credit.

# Chavez, W.A.,

2000 Supergene Oxidation of Copper Deposits: Zoning and Distribution of Copper Oxide Minerals, SEG Newsletter, Number 41, pages 1& 10-21.

#### Cooke, D.L.

1969 Geological and Geochemical Report on the Theban #1-40 Claims Situated Approximately Six Miles South of Toodogoone Lake in the Omineca Mining Division. Cominco Ltd., assessment report # 2082.

#### Diakow, L.J., Panteleyev, A., and Schroeder, T.G.

1993 Geology of the Early Jurassic Toodoggone Formation and Gold-Silver Deposits in the Toodoggone River Map Area, Northern British Columbia. Mineral Resource Division, Geological Survey Branch, Bulletin 86.

Northcote, K.E.

2002 Petrographic Report prepared for Finlay Minerals Ltd., by K.E. Northcote & Associates Ltd. / Vancouver Petrographics Ltd., internal Finlay Minerals Ltd. report.

# Rebagliati, C.M., Bowen, B.K., Copeland, D.J., and Niosi D.W.A.

1997 Kemess South and Kemess North porphyry gold-copper deposits, northern British Columbia, in Porphyry Copper Deposits of the North West Cordillera of North America, edited by T.G. Schroeder, Spec. Vol. 46, CIMM, paper 23, p377-396.

Ronning, P.A.

- 1998 Exploration Program on the Pil Property. Internal report for Electrum Resources Corp., filed for assessment credit.
- 1999 Exploration Program on the Pil Property. Internal report for Finlay Minerals Corp., filed for assessment credit.

#### Staargaard, C.F.

- 1992 Reconnaissance Heavy Mineral Sampling in the Vicinity of the Pil 1-13 claims. Internal report for Electrum Resources Corp., filed for assessment credit.
- 1994 Geochemical Sampling and Reconnaissance Geology of the Pil 1-13 claims; Toodogoone Area British Columbia. Internal report for Electrum Resources Corp., filed for assessment credit.

#### Sterenberg, V.Z

1997 Assessment Report – 1996 Exploration, Pil Claims, Toodogoone Area, British Columbia. Internal report for Electrum Resources Corp., filed for assessment credit.

#### Zastavnikovich, S. and Rockel, E.R.

1997 Geochemical and Geophysical Assessment Report on the Pil Mineral Claims, Internal report for Electrum Resources Corp., filed for assessment credit. 1996 Geochemical and Geophysical Assessment Report on the Pil Mineral Claims, Internal report for Electrum Resources Corp., filed for assessment credit.

•

24

- -

:

\_\_\_\_\_

Ł

11

-----

# Appendix #1

# COST STATEMENT PIL MINERAL CLAIMS

Field Work (L.L. 19 Associat ())	Cost \$
<u>Field Work (July 18 – August 9)</u> R. F. Brown field work; 16 day @ \$400/day + GST	6,848.00
J. Barakso field work; 4 day @ \$600/day + GST	2,568.00
R. Montgomery field work; 21 days @ \$325/day + GST	7,302.75
W. Greunwald field work; 16 days @ \$400/day + GST	6,848.00
E. Greunwald cook; 26 days @ \$250/day + GST	6,955.00
Field Work (Sept 23 - 28, November 3 & 4)	
W. Greunwald field work; 5.5 days @ \$400/day + GST	2,376.61
Camp Costs	
CJL Enterprises, July 13 – August 12, 2002	51,942.50
Mob-Demob. + GST (includes 82.2% proportion of travel and expenses)	36,073.15
CJL Enterprises, Sept 21-Sept 29, 2002	11,603.24
Helicopter	
Canadian Helicopters Western (July 18 through August 9)	14,852.49
Canadian Helicopters Western (Sept 22-Sept 28)	6,300.97
Geophysical Surveys	
Lloyd Geophysics Ltd., Induced Polarization and magnetometer surveys + GST	27,668.72
Report	5,000.00
Analysis Assure Consider the second state of 210 and a second sec	
Assayers Canada phase 1: 212 rocks & 319 soil samples, 1 stream silt & 1 stream pan con. + GST	8,433.20
Assayers Canada phase 2: 23 rocks	428.43
Assayers Canada phase 2, 23 rocks	420.45
Petrography Report	
Vancouver Petrographics	2,194.30
Drafting IBEX Drafting Services (estimate)	3,000.00
IDEA Drading Bervices (estimate)	5,000.00
Report Writing	A 140.00
R. F. Brown 5 days @ \$400/day + GST	2,140.00
TOTAL EXPENDITURES	\$202,535.36

# Appendix #2

#### Author's Qualifications

I, Robert F. Brown, P. Eng., of 3977 Westridge Avenue, West Vancouver, B.C. hereby certify that:

- 1. I am a consulting geological engineer, doing business under the registered name of R.F.B. Geological. My business address is 3977 Westridge Avenue, West Vancouver, B.C., V7V 3H6.
- 2. I am a member in good standing of the Association of Professional Engineers and Geoscientists of British Columbia.
- 3. I am a graduate of Queen's University in Kingston, Ontario, with a B.Sc. geological engineering granted in 1975.
- 4. I have worked as a geological engineer in the field of mineral exploration continuously for the last 25 years in Canada, Mexico, Indonesia, Peru, Ecuador, Argentina, and Ukraine.
- 5. I am the author of the report entitled "2002 Assessment Report on the PIL Property Geological Mapping and Rock Sampling Program" and dated December 10, 2002.
- 6. The conclusions expressed in this report are professional opinions, based upon my own work in the subject area in 2000 / 01/ 02 and on sources acknowledged in the text. Having undertaken reasonable due diligence and believing the information I have used to be correct, I nevertheless accept no responsibility for the accuracy of information that I did not personally originate.
- 7. I neither own nor control a beneficial interest in the mineral property that is the subject of this report. I am though, President of Finlay Minerals Ltd.
- 8. Finlay Minerals Ltd. may use this report for any lawful purpose for which it is suitable. Should it be necessary to use abridgements of or excerpts from the report, these must be made in such a way as to retain their original meaning and context. All reasonable efforts must be made to obtain my approval prior to any use of such abridgements or excerpts.

MAN OF - 1 ESSION La R. F. BROWN GINE

Dated December 10, 2002 Robert F. Brown, P. Eng.

# Appendix #3

Rock Sample Descriptions

.

#### FINLAY MINERALS LTD. SAMPLE DETAILS Description Type Length/ **Property Location (Nad 83)** Sample Easting Northing (Chip, Grab, Etc.) Area Name No. Shattered, argillic altered pyroclastics, HE, LI 2 m RB02AT-001 Atty 635514 6335332 Grabs, rocks Altered rocks from creek float, HE Grabs, float RB02AT-002 Attv 636028 6334706 30 m downhill, banded barite, pink, white 636028 6334706 Grabs, float RB02AT-003 Atty Float train of very limonitic magnetite bearing float. Grab 10 m 6327397 WG02AT-001 Atty 636051 SF volcanics, HE, LI, pv $5 \times 5 m$ Grabs, Scree 618345 6353741 RB02AU-001 Gold Tuff, HE, LI. 1% diss. py 6353962 Grabs rock 3 x 3 m RB02AU-002 Gold 618424 2 m Silicified zone, shear, HE, LI 618386 6354011 Grabs rock RB02AU-003 Gold 20 m SF, HE, /F $\rightarrow$ SH, 5-10% diss py 6354271 Grabs rock 618484 RB02AU-004 Gold Otz vein, CB, tr mal, HE Grabs rock 3 m RB02AU-005 Gold 618248 6354718 Argillic altered, HE, LI, 5-10% diss py, bornite? Grabs rock 40 m RB02AU-006 617790 6355868 Gold Otz diorite?, manganese on /F Grabs rock 2 m RB02AU-008 617145 6355548 Gold Feldspar x'al tuff, fractured, SF, diss py, HE, LI Grabs rock 4 m RB02AU-009 Gold Gossanous pyrite zone, fractured ? Grabs rock RB02AU-010 Gold Fractured, HE, LI $2 \times 2 m$ Grabs rock RB02AU-011 Gold Tuff, shattered, minor SF, HE, LI Grabs rock 10 m 617694 6355508 RB02AU-012 Gold Qtz diorite porphyry, ?F, 2% diss. Py 10 m 617778 6355286 Grabs rock RB02AU-013 Gold Chl altered tuff. SF zone with cpv, sph, chalcocite Float Rock RB02AU-014 Gold 617836 6354811 Feldspar x'al tuff, shattered, HE, LI, diss py 617758 6355402 Grabs rock TB02AU-001 Gold Silicified, 2-3% diss. py Grabs rock 10 m 6355365 TB02AU-002 Gold 617766 As above 617808 6354933 Float Rock TB02AU-003 Gold Svenite with gtz veins grab rock $2 \times 2 m$ 620974 6359109 RB02PN-001 Pil North Ferricrete in creek, some fines Pil North 620491 6359053 stream silt RB02PN-002 Siliceous atz diorite 6359079 grabs rock 3x3m 620251 RB02PN-003 Pil North Semi massive py in porphyritic qtz diorite chips rock 6357540 RB02PN-004 Pil North 623045 Silicified atz diorite grabs rock 3 m 623130 6357560 RB02PN-005 Pil North Fractured, HE, LI, qtz diorite with veinlets 11 m grabs rock RB02PN-006 Pil North 623170 6357538 Fractured, HE, LI, gtz diorite, 5-10% diss py 6357528 grabs rock 4 m RB02PN-007 623186 Pil North Otz sericite zone, fractured, HE, LI 10 m 623222 6357534 grabs rock RB02PN-008 Pil North Otz sericite zone, fractured, HE, LI grabs rock 1 m 6357530 RB02PN-009 623260 Pil North Otz sericite zone, specks cpy, sph, gal 2 m grabs rock RB02PN-010 Pil North 623260 6357528 Otz sericite zone, splotches malachite 623295 6357503 grabs rock 4 m RB02PN-011 Pil North Siliceous atz diorite, <5% diss py grabs rock 4 m 623350 6357505 RB02PN-012 Pil North Silica flooding, barite(?), tr py, sph(?) $5 \times 10 m$ 623516 6357249 grabs rock RB02PN-013 Pil North

40 m

8 m

5 m

 $5 \times 5 m$ 

 $5 \times 5 m$ 

30 m

grabs float rock

grabs rock

grabs rock

chips rock

grabs rock

grabs rock

grabs rock

grabs rock

6357370

6357315

6357531

6357535

6357566

6357480

6357350

6357446

620886

620926

621003

620995

621301

621477

621508

621662

RB02PN-014 Pil North

RB02PN-015 Pil North

RB02PN-016 Pil North

RB02PN-017 Pil North

RB02PN-018 Pil North

RB02PN-019 Pil North

RB02PN-020 Pil North

RB02PN-021 Pil North

Silicified qtz diorite, 5% diss py

Pinkish green, cherty atz zone

Flat breccia in svenite, HE, LI

Qtz-eye porphyry, minor LI

Svenite, fractured, silica-Kspar, tr sph, cpy

Qtz diorite, shattered to brecciated, HE sealed

Otz diorite, siliceous, 2-3% py, HE,LI

Qtz diorite, siliceous, 2-3% py, HE,LI

Sample	Property	Location	n (Nad 83)	Туре	Length/	Description
No.	Name			(Chip, Grab, Etc.)	Area	
	Pil North	621510	6357661	grabs rock	20 x 20 m	Siliceous qtz diorite, fractured, HE,LI
and the second se	Pil North	621398	6357783	grabs rock	5 x 5 m	Siliceous qtz diorite, fractured, 1-2% py
the second s	Pil North	622465	6358919	grabs rock	2 x 3 m	IF syenite, HE
and the second	Pil North	622773	6358957	grabs rock	5 x 10 m	Qtz sericite, 2-3% diss. Py/F→SH
	Pil North	622880	6359056	grabs rock	10 m	Siliceous rock, HE,IF,2-3%py,/F 85°/80°N
	Pil North	623039	6358731	grabs rock	5 m	gtz diorite, IF, SF, HE, LI; /F80°/±10°
	Pil North	622967	6357145	grabs rock	2 m	gtz monzonite, shattered HE,LI
B02PN-029	Pil North	622930	6355898	grabs rock	10 m	3m vertical shattered zone in syenite, epidote, flats
B02PN-030	Pil North	622025	6355409	grabs rock	10 m	syenite, IF, HE
B02PN-031	Pil North	621988	6355381	grabs rock	8 m	diorite, SF, IF, HE, LI, 1% remnant py
	Pil North	621908	6354345	grabs rock	10 m	SF, diss py, /F, HE syenite
	Pil North	622417	6354751	grabs rock		Selected sample of qtz /Kspar/py/epidote veins
B02PN-034	Pil North	622435	6354733	grabs rock		Select /F +veins of qtz, py, one speck cpy in syenite. Conspicuous Fe oxides, He + jarosite.
	Pil North	623229	635338	grabs rock		Select syenite w/F malalchite, chalcocite.
B02PN-036	Pil North	623386	6356801	grabs rock	20 m	Syenite and /F, HE, syenite.
B02PN-037	Pil North	623622	6356862	grabs rock	10 x 10 m	FeOx, brxy, 2% py qtz diorite.
B02PN-038	Pil North	623542	6357176	grabs rock		Scree of barite-qtz, tr py in epidote rich grey-green syenite?
B02PN-039	Pil North	623390	6357429	grabs rock	old trench	/F, HE, LI, 2% py, qtz diorite.
M02PN-001	Pil North	619886	6359389	Chip	0.10 m	Silicified, microveined, altered syenite. Azurite, mal, py, cpy
M02PN-002	Pil North	619885	6359412	Chip	1 m	Weak-mod silicified ep/carb altered syenite. Azurite, mal
M02PN-003		619900	6359446	Chip	<u>2 m</u>	Old blast trench. Azurite/ma. In syenite.
M02PN-004		619888	6359479	Chip	<u>3 m</u>	Limonitic, silicified sygnite(?). 1-2% py, locally 7-10%
M02PN-005		619856	6359300	Grab	0.2 m	Qtz/carb veined silicified syenite.
M02PN-006		619875	6359256	Chip	0.6 m	Limonitic, bleached, weakly silicified intrusive (qtz dio) tr cpy
M02PN-007		619870	6359270	Chip	<u>8 m</u>	Limonitic, silicified syenite fault zone. Tr py
M02PN-008	the second s	619872	6359223	Chip	<u>1 m</u>	Bleached, silicified syenite. Tr py.
M02PN-009		619873	6359189	Chip	5 m .	Altered syenite Tr cpy(?) tr malachite
M02PN-010		620066	6358134	Grab	<u>3 m</u>	Subcrop/talus - bleached, silic diorite(?) 2-3% py
M02PN-011		620155	6357983	Chip	<u>8 m</u>	Limonitic, bleached, weakly silicified syenite(?) tr-1/2% py
M02PN-012		620278	6358417	Chip	12 m	Lim. bleached, weakly silicified sy above bright orange gossan
M02PN-013		620388	6358415	Chip	<u>3 m</u>	Bleached, silic. intrusive (sy?) above bright orange/red gossan Strongly sil, qtz microveined, Altered qtz dio(?) Hem alteration
M02PN-014		623549	6357246	Grab (float)	~5.0 m	
M02PN-015		623643	6357104	Chip (old trench)	<u>6.0 m</u>	Bleached, silic, qtz microveined alt sy. Yellow clay weathering Lim. fault zone of silic qtz microveined syenite within Toodoggone volc.
M02PN-016		624301	6356727	Chip	4.0 m	Lim, tault zone of silic diz microvened syenite within Toodoggone voic.
M02PN-017		624487	6356831	Chip	<u>3.0 m</u>	Mal, Az, ½% bornite. Tr py in altered feldspar porphyry volc. 2m wide lim. shear zone with
M02PN-018		624443	6356561	Chip	<u>0.2 m</u>	Bleached wkly sil, bx, lim, feldspar porphyry volc,
M02PN-019		624224	6356467	Chip	2.0 m 1.0 m	Dk green, f.g. amygdaloidal. mafic dyke, tr mal, minor chalcocite
M02PN-020 M02PN-021		623041	6356325	Chip Grab	3.0 m	Subcrop, bleached, sil. Syenite. 5-6% diss py
		622002	6355865 6355048	Chip	2.0 m	Altered syenite. Chalcocite(?) on fractures; Minor mal.
M02PN-023 M02PN-024		<u>622713</u> 622734	6355031	Chip	2.0 m	M.g. epidote altered syenite. Chalcocite on fractures. Tr mal.
			6354848	Selected grab	15.0 m	Epidote altered syenite with chalcocite(?) and mal on frac.
M02PN-025	Pil North	622822 621181	6357794	chip	0.60 m	Limonitic, bleached, weakly silicified syenite. Tr py.

<u>()</u>	Dues	T and	Ned 92	Turne	Longth/	Description
Sample	-		n (Nad 83) Northing		Length/ Area	Description
<u>No.</u>	Name			(Chip, Grab, Etc.)		
RM02PN-028		619912	6359443	grab	<u>1.5 m</u>	Silicified, feldspar porphyritic syenite. 1/2% py, Tr Ga, Tr cpy Limonitic, well silicified syenite. Locally 10-15% mag. 5-6% py, Tr Cpy
RM02PN-029		619999	6359369	grab (float/subcrop)	1.0 m	
RM02PN-030		620035	6359170	chip	<u>3.0 m</u>	Old trench. Well fractured syenite. Mal., Az. on fractures
RM02PN-031		620035	6359170	chip	<u>1.5 m</u>	S.T.A.(RM-30). Shear zone attitude=305° /42° NE
RM02PN-032		620118	6358947	grab	1.0 m	Qtz/barite. Well silicified, qtz microveinlets. Locally 1-2% Disseminated py
RM02PN-033		620310	6358873	grab		Strongly silicified altered qtz dio. Locally 3-5%
RM02PN-034	and the second se	623713	6357270	grab (float)		Silicified, bleached, altered intrusive. 10-15% py.
RM02PN-035	Pil North	622055	6355395	grab	3.0 m	Bx, silicified, bleached qtz dio. Yellow clay mineral. 1-2% disseminated py in less bleached rock.
RM02PN-036		621667	6355549	grab (float)		Strongly bleached, weakly to moderately silicified altered qtz dio. Yellow clay alteration.
RM02PN-037	Pil North	621715	6355994	chip	3.0 m	Outcrop limonitic, locally bleached, silicified syenite. Mal. On fractures. 1% disseminated py. Tr-
						1/2% cpy. Trace sph?
RM02PN-038	Pil North	621786	6355978	grab	0.60 m	Barite+ (minor) qtz with salmon pink m.g. feldspar Porphyritic syenite. Locally blebs (up to 1.0
						cm) Ga+ sph. Also noted a grass green mineral. (Cu-secondary?). Attitude of barite
						stockwork/veining=335°/80-90°
WG02PN-001		62 <u>08</u> 44	635766	Chip	2.5 m	Limonitic, fractured green diorite, 3-5% diss py
WG02PN-002		620993	635774	<u>G</u> таb	2 m	V. limonitic, fractured syenite, 1-2% diss py
WG02PN-003		621097	6357127	Chip-random	3.5 m	Silicified intrusive (?), 2% f.g. diss py
WG02PN-004		621220	6357239	Chip	<u>3.5 m</u>	aplite dyke-yellow weathering, cuts syenite
WG02PN-005		621107	6357292	Chip	<u>1.5 m</u>	Silicified zone, yellow, v. fractured, 2% f.g. py
WG02PN-006		621173	6357546	Chip	1.25 m	"Microdiorite", v. lim, frac 1-3%v.f.g. pyrite
WG02PN-007		621189	6357774	Float Grab		Syenite, abundant stringers of qtz-magnetite.
WG02PN-008		621287	6357798	Grab-subcrop	3 x 3 m	Syenite with qtz-magnetite veinlets
WG02PN-009		621289	6357800	Grab-subcrop	2 x 2 m	Silica-argillitic zone adjacent to W5-002
WG02PN-010		621337	6357844	Chip-bedrock	1.5m	Diorite, green, m.g. 2-3%diss py
WG02PN-011		621335	6357881	Grab-subcrop	3 x 3 m	"Alt Diorite"-pale grey, v. silicified fractured.
WG02PN-012		621508	6357945	Chip-bedrock	<u>3 m</u>	Syenite? Lim, fractured, bleached 1% diss py.
WG02PN-013		621458	6357963	Grab-talus float		Dioritic intrusive, clots of py-magnetite.
WG02PN-014	a second s	621293	<u>635753</u>	Grab-subcrop	<u>3 x 3 m</u>	Quartz Diorite-breccia, v. silicified, granular qtz.
WG02PN-015		622515	6357552	Grab-subcrop	15 m	Quartz Diorite-v. limonitic, grey 2% diss py, tr cpy
WG02PN-016		622498	6357362	Grab	<u>5x5m</u>	quartz diorite-silicified, veined.
WG02PN-017		622095	6357221	Grab-subcrop	<u>3 x 3 m</u>	syenite, rusty, dissem and stringers of magnetite
WG02PN-018		621879	635774	Chip	<u>3 m</u>	Syenite, rusty, frac zone 2% diss py.
WG02PN-019		621746	6357667	Chip	<u>3 m</u>	Quartz Diorite - v. lim, f.g. diss py 1%
WG02PN-020		621671	6355664	Grab-random	<u>5x5m</u>	Silicified intrusive? Local bx texture, tr py
WG02PN-021	الالاست وبريي بيهيا نفت مستعاد	621544	6356020	Chip	3.0 m	Syenite, highly frac, lim stained, tr - 0.5% py
WG02PN-022		620992	6356141	Chip	2.5 m	Syenite porphyry, yellow weathering, 1% diss py
WG02PN-023		621283	6356832	Chip	5.0 m	Silicified/argillic zone in qtz diorite? 1%+ diss py
WG02PN-024		621338	6356944	Grab	<u>lx1m</u>	Silicified syenite porphyry 1-1.5% py
WG02PN-025		621021	6357888	Random Grab	10.0 m	Yellow weathering, pale grey, v. silicified zone 3-5% py.
WG02PN-026		621340	6357528	Grab	lxlm	Limonitic, v. fractured intrusive. Brecciated, minor pyrite
WG02PN-027		621343	6357519	Chip/Grab	<u>1 x5m</u>	Fs porphyritic intrusive (not reg. syenite) 2% diss py.
WG02PN-028	Pil North	621332	6357442	Random Chip	10 m	Yellowish weathering intensely altered zone of siliceous intrusive. Diss and frac py 2-3%.

.

								`										<b>L</b>	
--	--	--	--	--	--	--	--	---	--	--	--	--	--	--	--	--	--	----------	--

Sample	Property	Location	n (Nad 83)	Туре	Length/	Description
No.	Name			(Chip, Grab, Etc.)		
WG02PN-029		621328	6357318	Grab	5.5 m	Silicified, bx'd qtz diorite.
WG02PN-030		621326	6357100	Grab	3 x 3 m	Green, f.g. epidotized qtz diorite with 2% diss py.
WG02PN-031	the second s	621041	6357439	Grab		Limonitic talus float. Minor cpy, mal, ga.
WG02PN-032		622441	6357634	Grab		Soil pit rock chips of v. angular green m.g. qtz diorite with 3% diss py and suspect cpy.
WG02PN-033		622742	6357723	Grab	4 x 4 m	Float of qtz-barite in area of diorite
WG02PN-034		622742	6357723	Grab		Host diorite to above vein float that has been silicified and bleached
WG02PN-035		623395	6357549	Grab	3 x 3 m	L-22N;44+85E. Dk green dioritic rock with locally abundant diss py. Occasional qtz veinlet with
W G021 11-055		020570	0007010	Grue	0 11 0 114	py and suspect sph.
WG02PN-036	Pil North	622754	6357647	Grab	5 m	Subcrop/talus of pale green, weakly cemented silicified intrusive (dio?) with weakly diss py
WG02PN-037		622727	6357684	Chip	2.5 m	Most uphill (S) exposure and float of silicified stockwork veined zone with ga, sph, cpy. Sample
				1		mostly greenish diorite with 0.7 m qtz-barite vein.
WG02PN-038	Pil North	622786	6357611	Grab	5 x 5 m	Float of qtz stockwork in feldspar-porphyry talus
WG02PN-039		622739	6357637	Grab	6 x 6 m	Float boulders of well veined and silicified intrusive.
WG02PN-040		622723	6357714	Grab	3 m	Galena rich qtz barite float train (selected sample).
WG02PN-041	and the second se	622655	6357767	Grab	4 m	Numerous pieces of angular float (suspect bedrock). Some qtz-barite-galena rich, others of a
		024000				green, brecciated, very altered rock with blebs of galena.
RB02PS-001	Pil South	625404	6351429	Grabs rock	5 x 1 0m	Highly frac. HE, LI qtz diorite
	Pil South	625282	6351840	Chips rock	0.75 m	0.75m structure 105°, SF, 2% py, some qtz-magnetite veins
	Pil South	624987	6353153	grabs rock	2 m	Siliceous zones 1-5% py, 1-2cm qtz veins in syenite.
	Pil South	625681	6349544	Outcrop rock		Otz vein in sinterly SF Toodoggone volcanics
	Pil South	625535	6348941	Outcrop rock	5 x 5 m	Qtz-eye silica unit in Toodoggone volcanics
RM02PN-027				grab	0.30 m	Qtz vein (attitude=350/66 w). Locally 1-2% cpy, 1-2% py,1/2-1% chalcocite
	Pil South	625467	6351415	Random Chip	3.0 m	V. fractured, limonitic intrusive, ep-chl altn minor sulphides
	Pil South	625392	6351580	Grab	3.0 m	Limonitic, fractured intrusive, silicification and clay alteration
RB02SP-001	Spruce	628718	6362195	Outcrop rock	1 m	Shear in andesitic volcanics
RB02SP-002	Spruce	628488	6362129	Outerop rock		K-spar in pyroclastics, tr py, HE
RB02SP-003	Spruce	627726	6361740	Outcrop rock	20 m	Qtz veinlets in pinkish tuff
RB02SP-004	Spruce	627528	6361727	Grabs, rocks		Gossan, argillic altered andesite tuff
	Spruce	627528	6361727	Grabs, rocks	50 m	Andesite, /F, HE
the second s	Spruce	627500	6361393	Grabs, rocks		Silicified, HE, andesite
	Spruce	626814	6361294	Grabs, rocks	4 m	Argillic altered andesite, tr. py, HE, LI
	Spruce	626300	6361715	Grabs, rocks	20 m	Andesite, narrow zones of HE
	Spruce	626070	6361849	Grabs, rocks	10 m	Andesite, argillic altered, some SF
	Spruce	627088	6361183	Grabs, float	20 x 20 m	SF, breccia and brxy andesite with epidote/magnetite
WG02SP-001		627561	6359918	Grab	3 x 5 m	Milky qtz float in talus. Locally up to 1m. Local vugs and bx'n
WG02SP-002		627681	6359935	Soil	lm	To test for qtz vein, stockwork float in talus.
WG02SP-003		627786	6360002	Soil	7 m	Composite soil on rusty talus slope of mixed volc and fairly abundant qtz/silicified float
WG02SP-004		627950	6360013	Soil	5 m	Rusty soil below limonitic, very frac volcanic with 1-2 diss py.
WG02SP-005	فاستجرب والانتخاب والمراجع	627921	6359955	Chip	5 m	V. rusty, frac siliceous zone of x'al tuff? 1-2% py, tr cpy.
WG02SP-006		628181	6360066	Grab		Rusty, subangular float cobble of pale green siliceous tuff. 3% sulphides. Py, minor sph, possible chalcocite.
WG02SP-007	Spruce	628277	6359884	Grab	3 x 5 m	Rusty patch comprised of numerous limonitic silicified volc rocks with 2-3% It coloured py.

# Appendix #4

3

: 1

أسيا

. .

r ) [...]

, |\_\_\_\_

 Analytical Results

·

# **Finlay Minerals Ltd**

Attention: Warner Gruenwald

Project:

1

Sample: Soil

# Assayers Canada

8282 Sherbrooke St., Vancouver, B.C., V5X 4R6	Report No	:	2V0313 SJ
Tel: (604) 327-3436 Fax: (604) 327-3423	Date	:	Sep-09-02

### **MULTI-ELEMENT ICP ANALYSIS**

Aqua Regia Digestion

i	Sample Number		Ag ppm	AI %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sn ppm	Sr ppm	Ti %	V ppm	W ppm	Y ppm	Zn ppm	Zr ppm
1	R802SP-004		<0.2	5.06	< 5	360	1.0	<5	0.03	<1	29	244	97	7.12	0.09	3,43	1795	2	0.01	111	1430	36	<5	22	<10	59	0.01	151	10	12	368	8
	WG025P-002		0.4			270	1.0	<5	0.20	<1	10	9	70	6.84	0.20	0.60	1090	16	0.02	10		54	<5	3	<10	50	0.14	113	<10	5	142	6
	WG025P-003		0.2			300	1.0	<5	15.71	<1	15	3	92	9.66	0.20	0.62	860	20	0.01	8		48	<5	5	<10	49	0.14	122	<10	10	133	9
	WG025P-004	_	0.8				0.5	5	0.38	<1		<1	178	>15.00	0.08	0.52	635		0.01	7		220	<5	5	<10	15	0,15	137	<10	8	133	12
I		BN	1.4			100	1.0	<5	0.15	<1	- 5	12	19	4.21	0.07	0.50	595	2	0.02	9		24	<5	1	<10	18	0.06	62	<10	6	115	9
							11 P. 1				-				÷			_		-		-		-					-,-	-		
I	RM02PN-002	11£ [	0.8	2.67	10	70	0.5	<5	0.08	<1	4	9	18	4.64	0.05	0.32	570	2	0.01	6	2820	24	<5	<1	<10	8	0.03	70	<10	3	73	3
1	RM02PN-003	E	0.4	2.05	<5	200	0:5	<5	0.08	<1	5	12	21	3.88	0.10	0.28	1220	2	0.01	6	1990	40	<5	<1	<10	18	0.02	75	<10	3	111	3
	RM02PN-004		0.2	1.90	<5	150	0.5	<5	0.08	<1	5	9	30	4.49	0.08	0.39	1415	2	0.01	5	1690	34	<5	<1	<10	13	0.01	85	<10	2	108	3
	RM02PN-005		0.2	1.87	<5	180	0.5	5	0.06	<1	4	7	28	4.38	0.10	0.24	515	4	0.02	5	Z120	50	<5	<1	<10	28	0.01	83	<10	z	95	3
	RM02PN-006		0.2	1.55	5	160	<0,5	5	0.06	<1	3	5	60	3.42	80.0	0.23	640	2	0.01	4	1610	30	. <5	<1	<10	19	0.01	70	<10	2	79	2
											: . `		e de la companya de Esta de la companya de																			
	RM02PN-007		0.2	1.00	<5	270	<0.5	5	0.03	<1	1	З.	57	2.89	0.12	0.07	120	4	0.03	2	1470	60	<5	<1	<10	100	<0.01	45	<10	1	38	2
	RM02PN-008		0.4	1.75	<5	250	0.5	5	0.06	<1	3	8	45	4.78	0.11	0.26	410	6	0.02	6	2050	88	<5	<1	<10	38	0.01	63	<10	2	125	3
	RM02PN-009		1.2	2.93	<5	250	-1.0	5	0.14	<1	10	11	174	6.16	0.15	0.58	1045	10	0.02	11	2140	310	<5	2	<10	60	0.03	63	10	6	362	8
	RM02PN-010		1.2	1,37	5	520	0.5	10	0.06	<1	1	1	84	6.64	0.40	0.28	370	16	0.07	- 4	2910	128	<5	2	<10	247	0.03	43	<10	6	68	5
	RM02PN-011		0.6	1.05	<5	420	<0.5	5	0.05	<1	2	4	50	3.56	0.20	0.07	200	10	0.03	3	1980	120	<5	<1	<10	66	<0.01	48	<10	3	148	2
															· .																	
	RM02PN-012		0.4		5		<0.5		0.06	<1	1	3	58	3.51	0.16	0.08	125	8			1780	70	<5	<1	<10	141	0.01	51	<10	2	62	2
	RM02PN-013		0.8	2.55	5	340	0.5	5	0.07	<1	3	7	43	5.30	0.16	0.49	500	6	0.03	7	2160	72	<5	1	<10	248	0.01	64	<10	4	102	5
	RM02PN-014		0.6	1.42	5	310	0.5	- 5	0.07	<1	ं ्	6	75	3.93	0.12	0.32	305	8	0.02	· 5	1430	40	<5	<1	<10	105	0.02	55	<10	2	83	2
	RM02PN-015		0.6		5	440	0.5	5	0.13	<1	6	6	102		0.16	0.41	515	8			1960	54	<5	1	<10	124	0.01	45	<10	16	140	4
	RM02PN-016		<0.2	1.52	<5	210	0.5	<5	0.14	<1	4	6	15	3.48	0.06	0.28	615	<2	0.01	5	1580	18	<5	<1	<10	13	0.01	73	<10	2	104	3
					-			_	- 18 J														-									
	RM02PN-017		0.4	1.23	5	200	<0.5	5	0.12	<1	3	4	62	3.78	0.11	0.21	645		0.02	4	1650	34	<5	<1	<10	33	0.01	72	<10	2	98	2
	RM02PN-018		<0.2	1.15	<5	130	<0,5	<5	0.07	<1	3	5 -	34	3.70	0.08	0.20	355		0.01	4	1250	30	<5	<1	<10	18	0.01	80	<10	2	93	2
	RM02PN-019		0.2	1.63	<5	280	0.5	_<5	0.06	<1	4	5	133		0.10	0.13	1105	4	0.02	5		32	<5	<1	10	33	0.01	51	<10	2	81	2
	RM02PN-020		0.4	1.64	<5	380	0,5	<5.	0.07	<1	9	6	66	3.24	0.07	0.21	1580	4	0.01	4	1010	28	<\$	<1	<10	10	0.01	78	<10	2	147	2
	RM02PN-021		<0.2	2.13	5	180	0.5	5	0.04	<1	5	10	31	5.45	0.08	0.44	780	2	0,02	7	1350	28	<b>≲</b> \$	<1	<10	17	0.03	94	<10	2	122	4
	RM02PN-022		0.4	1.79	5	190	0.5	<5	0.08	<1	· · 3	5	85	3.89	0.08	0.25	340	8	0.02	4	1540	48	<5	<1	<10	25	0.01	. 63	<10	18	86	2
	RM02PN-023		0.2	2.57	5	370	1,0	<5	0.08	<1	. 10	10	71	4.91	0.11	0.50	1650	6	0.02	10	2380	30	<5	1	<10	32	0.02	58	<10	4	165	6
	RM02PN-024		0.2	1.65	5	220	0.5	5	0.07	<1	4	10	39	4.61	0.08	0.40	365	2	0.02	8	1320	28	<5	<1	<10	26	0.01	69	<10	2	122	3
	RM02PN-025		<0.2	1.09	5	200	0.5	<5	0.07	<1	2	7	84	3.18	0.08	0.15	205	2	0.02	5	1310	28	<5	<1	<10	20	0.02	60	<10	2	71	2
	RM02PN-026		0.2	0.95	<5	120	<0.5	<5	0.06	<1	2	5	26	2.20	0.05	0.08	150	2	0.01	2	750	18	<5	<1	<10	15	0.01	54	<10	1	50	2
											· ′		28.9						•													

A .5 gm sample is digested with 5 ml 3:1 HCl/HNO3 at 95c for 2 hours and diluted to 25ml with D.I.H20.

Signed:

# **Finlay Minerals Ltd**

Attention: Warner Gruenwald

Project:

1

Sample: Soil

# Assayers Canada

8282 Sherbrooke St., Vancouver, B.C., V5X 4R6	Report No	:	2V0313 SJ
Tel: (604) 327-3436 Fax: (604) 327-3423	Date	:	Sep-09-02

Signed:

# **MULTI-ELEMENT ICP ANALYSIS**

Aqua Regia Digestion

	Sampie Number	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sn ppm	Sr ppm	Ti %	V ppm	W ppm	Y ppm	Zn ppm	Zr ppm	
1	RM02PN-027	0.6	0.91	<5	60	<0.5	<5	0.09	<1	1	4	34	1.56	0.04	0.08	100	<2	0.01	2	990	12	<5	<1	<10	12	0,01	35	<10	4	32	1	
1	RM02PN-028	<0.2	1.19	<5	100	<0.5	<5	0.08	<1	3	5	24	3.85	0.06	0.28	400	2	0.01	4	1290	26	<5	<1	<10	18	0.03	87	<10	2	74	2	
	RM02PN-029	<0.2	1.04	<5	130	<0.5	<5	0.09	<1	2	5	38	2.90	0.05	0.22	240	2	0.01	3	990	20	<5	<1	<10	19	0.01	65	<10	2	63	2	
	RM02PN-030	<0.2	1.41	<5	130	<0.5	5	0.09	<1	3	5	41	3.51	0.06	0.36	460	4	0.01	4	1480	22	<5	<1	<b>&lt;10</b>	18	0.01	67	<10	2	108	2	
I	RM02PN-031	<0.2	1.30	<5	100	<0.5	<5	0.08	<1	3	7	45	3.77	0.06	0.22	465	4	0.01	5	1090	20	<5	<1	<10	8	0.02	72	<10	2	90	2	
	RM02PN-032	<0.2	1.73	5	460	1.0	<5	0.30	<1	13	9	194	4.32	0.14	0.72	1245	4	0.02	11	1040	36	<5	4	<10	53	0.05	65	<10	17	187	5	
	RM02PN-033	<0.2	1.59	5	240	0.5	<5	0.37	<1	7	7	63	3.88	0.10	0.74	1025	2	0.01	8	1140	- 30	<5	3	<10	40	0.05	72	<10	9	116	3	
	RM02PN-034	1.0	1.59	<5	220	<0.5	5	0.02	<1	1	12	274	4.40	0.14	0.21	95	60	0.02	2	1070	20	<5	1	<10	23	<0.01	36	<10	13	26	3	
	RM02PN-035	4.6	1.32	<5	540	<0.5	5	0.02	<1	2	4	239	5.69	0.53	0.12	285	226	0.04	3	1800	92	<5	<1	<10	246	0.01	30	<10	3	48	3	
	RMOZPN-036LPN A	<b>0.4</b>	1.62	5	580	0.5	5	0.03	<1	3	11	178	5.09	0.23	0.22	170	32	0.02	4	1390	60	<5	1	<10	116	0.01	62	<10	3	67	3	
	RM02PN-037	2.2	2.83	<5	670	0.5	5	0.05	<1	7	2	683	9.82	0.29	0.63	600	200	0.02	6	2240	54	<5	3	<10	52	0.06	72	<10	6	69	14	
	RM02PN-038	1.6	2.84	<5	680	0.5	5	0.04	<1	5	2	570	8.31	0.31	0.45	460	72	0.02	5	1830	80	<5	2	<10	24	0.03	69	<10	6	79	7	
	RM02PN-039 •	1.8	2.89	<5	440	0.5	5	0.03	<1	3	4	401	9.23	0.19	0.42	255	64	0.02	6	2120	42	<5	3	<10	57	0.04	92	<10	2	62	7	
	RM02PN-040	4.4	2.93	<5	190	0.5	<5	0.03	<1	3	10	201	5.28	0.10	0.52	260	24.	0.02	9	1040	32	<5	2	<10	2 <del>6</del>	0.04	63	<10	-2	75	7	
	RM02PN-041	0.2	1.76	<5	160	0.5	<5	0.03	<1	3	11	69	3.64	0.07	0.33	195	14	0.01	9	730	22	<5	1	<10	14	0.04	50	<10	2	52	5	
	RM02PN-042	1.0	3.45	<5	140	0.5	<5	0.03	<1	4	10	50	3.44	0.06	0.17	495	8	0.01	5	1430	20	<5	<1	<10	13	0.02	33	<10	з	49	5	
	RM02PN-043	<0.2	2.22	<5	150	0.5	<5	0.03	<1	2	8	53	3.84	0.07	0.26	235	8	0.01	6	1290	26	<5	<1	<10	12	0.02	48	<10	2	61	6	
	RM02PN-044	0.8	3.34	<5	140	1.0	<5	0.05	<1	3	10	36	3.91	0.05	0.19	295	6	0.01	7	1480	14	<5	<1	<10	11	0.02	47	<10	7	55	3	
	RM02PN-045	<0.2	2.32	<5	100	0.5	<5	0,04	<1	4	10	23	3.21	0.04	0.48	345	2	0.01	9	1050	12	<5	1	<10	6	0.02	65	<10	3	76	4	
	RM02PN-046	<0.2	2.53	<5	110	0.5	<5	0.15	<1	5	12	28	3.28	0.05	0.61	480	2	0.01	12	1030	14	<5	1	<10	16	0.03	65	<10	5	139	4	
	RM02PN-047	<0.2	2.75	-	80	0.5	<5	0.05	<1	4	9	29	3.94	0.04	0.41	380		0.01	7		16	<5	1	<10	8	0.03	75	<10	3	88	5	
	RM02PN-048	0.2	1.45	<5	90	<0.5	<5	0.05	<1	2	12	18	2.23	0.04	0.22	165	2		7	630	16	<5	<1	<10	14	0.02	52	<10	2	41	1	
	RM02PN-049	<0.2	2.59	<5	100	0.5	<5	0.07	<1	5	8	. 25	4.02	0.07	0.46	535	2	0.01	8	1060	18	<\$	1	. <10	12	0.01	76	<10	3	79	3	
	RM02PN-050	0.4	2.30	<5	80	0.5	<5	0.04	<1	з	5	23	3.58	0.05	0.15	285	2	0.01	4	1400	16	<5	<1	<10	9	0.02	64	<10	3	50	.3	
	RM02PN-051	<0,2	2.50	<5	80	0.5	<5	0.06	<1	5	12	44	4.96	0.04	0.56	545	4	0.01	11	1160	18	<5	1	<10	8	0.05	82	<10	3	84	6	
	RM02PN-052	<0.2	2.55	<5	100	0.5	<5	0.05	<1	4	13	36	4.64	0.05	0.44	365	8	0.01	10	1650	24	<5	1	<10	12	0.02	72	<10	2		6	
	RM02PN-053	<0.2	2.80	5	120	0.5	<5	0.07	<1	6	16	<b>51</b>	4.50	0.06	0.57	530	6	0.01	14	1260	24	<5	2	<10	16	0.03	63	<10	3	102	5	
	RMO2PN-054	0.2	2.48	<5	160	0.5	<5	0.09	<1	5	. 13	24	3.36	<b>0.04</b>	0.37	660	4	0.01	9	1500	12	<5	<1	<10	17	0.02	53	<10	2	75	3	
	RM02PN-055	0.4	2.20	5	170	0.5	<5	0.08	<1	5	21	25	3.65	0.05	0.53	395	<2	0.01	19	600	14	<5	1	<10	15	0.03	64	<10	3	78	4	
	RM02PN-056	0.4	2.61	<5	120	0.5	<5	0.08	<1	5	11	38	4.65	0.05	0.47	460	2	0,01	9	1030	14	<5	. 1	<10	16	0.04	77	<10	3	80	3	

A .5 gm sample is digested with 5 ml 3:1 HCI/HNO3 at 95c for 2 hours and diluted to 25ml with D.I.H20.

Page 2 of 12

# **Finlay Minerals Ltd**

Attention: Warner Gruenwald

Project:

Sample: Soil

# Assayers Canada

8282 Sherbrooke St., Vancouver, B.C., V5X 4R6	Report No	:	2V0313 SJ
Tel: (604) 327-3436 Fax: (604) 327-3423	Date	:	Sep-09-02

### **MULTI-ELEMENT ICP ANALYSIS**

Aqua Regia Digestion

1	Sample Number	Ag ppm	AI %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sn ppm	Sr ppm	Ti %	V ppm	W ppm	Y ppm	Zn ppm	Zr ppm
T	RM02PN-057	<0.2	2.33	<5	90	0.5	<5	0.06	<1	6	19	25	4.40	0.05	0.64	525	<2	0.01	17	1220	12	<5		<10	11	0.04	70	<10	,	96	4
	RM02PN-058	0.2	2.66	<5	230	0.5	<5		<1	7	10	54	4.38	0.04	0.74	605	2		11		24	<5	1	<10	8	0.04	72	<10	3	129	4
1	RM02PN-059	0.4	2.39	<5	130	0.5	<5	1	<1	3	4	22	3.00	0.08	0.32	890		0.01	3		22	<5	1	<10	1	0.01	48	<10	4	94	3
1	RM02PN-060	<0.2	1.87	<5	290	0.5	5		<1	3	3	21	3.53	0.09	0.18	880	4	0.01	3		14	<5	1	<10	5	0.01	71	<10	1	108	3
	RM02PN-061	<0.2		<5	90	0.5	<5		<1	6	6	17	4.61	0.04	0.69	550	<2		6		36	<5	3	<10	107	0.11	112	<10	4	89	4
		-0.2	2.14			•				-	•			0.01	0.05	550		0.01	Ŭ	500	50		5	-10		0.11			•		•
1	RM02PN-062	<0.2	2.12	<5	100	0.5	<5	0.11	<1	5	6	18	4.87	0.05	0.49	555	2	0.01	6	560	26	<5	1	<10	23	0.05	103	<10	2	93	3
1	RMOZPN-063	<0.2	2.15	<5	560	0.5	<5	0.59	<1	5.	5	28	3.03	0.06	0.55	435	4	0.01	4	800	60	<5	2	<10	76	0.04	73	<10	7	142	2
1	RM02PN-064	<0.2	1.90	<5	650	1.0	<5	0.70	<1	7	8	43	3.25	0.05	0.50	930	4	0.01	8	1230	28	<5	1	<10	42	0.02	66	<10	14	111	3
1	RM02PN-065	<0.2	1.91	<5	300	0.5	<5	0.39	<1	8	7	38	4.01	0.09	0.78	935	- 4	0.01	7	730	30	<5	3	<10	35	0.03	78	<10	7	150	4
1	RM02PN-066	<0.2	1.53	<5	140	0.5	<5	0.08	<1	3	5	40	2.73	0.05	0.21	415	2	0.01	· 4	930	24	<5	<1	<10	18	0.01	62	<10	2	69	2
	011/02 bit 000			-						. 9							-		-		405	- 5							~ ~	404	
	SW02PN-002		1.62	5	770	1.0	5	1111	1	3	5	167	5.60	0.37	0.43	1675		0.10	-	1530	102	<5	2	<10	79	0.01	40	10	21	491	-
	SWO2PN-003	0.2	1.04	<5	450	0.5	5	0.15	<1		2	23		0.39	0.24	430		0.13	-	1530	66	<5	1	<10	108	0.01	37	<10	6	152 143	
I r	SW02PN-004	0.4	2.18	30 5	170 630	0.5	15 15		<1	3	<1	68	6.67	0.86	0.54	470 285	4	0.08 0.06		3020	358	<5	. 2	<10	75 45	<0.01 0.01	38 45	<10 <10	13	145	9
	SW02PN-005	0.4	1.79	-		0.5	20	0.03 0.02	<1 <1	د د		60 39	5.90	0.44	0.32					1460	318	<5	· 2	<10	45 25		45 52	<10	3	91	-
1	SW02PN-006	0.6	1.79	10	580	0.5	20	<u>0.02</u>	<1	3	1	24	7.93	0.48	0.23	360	10	0.04	4	1840	840	<5	1	<10	25	0.01	52	<10	د	91	2
I.	SW02PN-008	1.6	2.11	5	660	0.5	5	0.07	1	2	2	79	6.60	0.50	0.48	610	10	0.08	5	2100	260	<5	1	<10	75	0.04	56	<10	6	133	4
1	SW02PN-009	1.2	2.28	<5	650	0.5	5	0.05	1	5	2	108	6.90	0.40	0.47	720	10	0.07	5	2370	660	<5	3	<10	59	0.04	63	<10	10	387	5
1	SW02PN-010	0.6	2.37	5	560	0.5	5	0.04	<1	4	7	54	5.87	0.25	0.53	490	6	0.06	7	1520	190	<5	2	<10	53	0.02	58	<10	4	160	5
1	SW02PN-011	0.2	2.84	5	310	0.5	5	0.05	<1	2	8	335	6.87	0.22	0.45	200	4	0.04	6	1710	34	<5	2	20	27	0.01	61	<10	2	79	7
1	SW02PN-012	0.4	1.89	<5	430	0.5	<5	0.05	<1	1	2	410	6.68	0.40	0.76	295	6	0.09	3	2270	30	<5	4	20	81	0.06	63	<10	9	62	11
			<b>-</b>	_			_			_									_			_	_						_		~
1	SW02PN-013		2.42	<5	500	0.5	5	2012	<1	2	4	92		0.35	0.63	365		0.11		2340	46	<5	2	<10	76	0.03	104	<10	2	82	6
	SW02PN-015	0.2	3.08	10	220	1.5	<5	0.14	<1	31	8	219	7.27	0.13	0.90	2155	-	0.02	10	1660	62	<5	4	<10	52	0.04	86	<10	19	311	11
	SW02PN-016	1.2	3.20	<5	430	1.0	5	0.07	1	27	9	203		0.10	0.75	5560	. 6	0.01	7		72	<5	4	<10	4	< 0.01	91	<10	7	344	20
1	SW02PN-018	< 0.2	3.23	<5	180	0.5	<5	0.47	<1	10	9	64	5.57	0.08	0.67	1000		0.02	8	1170	26	<5	2	<10	57	0.06	123	<10	4	158	-
I	SW02PN-019	0.8	2.73	<5	450	0.5	<5	0.06	<1	5	6	75	5.99	0.23	0.48	380	4	0.02	. 5	1430	32	<5	1	<10	53	0.02	73	<10	5	161	. 5
I.	SW02PN-020	0.8	2.01	<5	240	0.5	5	0.03	<1	2	4	45	4.04	0.08	0.15	225	4	0.02	2	980	30	<5	<1	<10	27	0.01	68	<10	2	66	3
I.	SW02PN-021	0.6	3.38	<5	230	0.5	<5	0.07	<1	5	10	71	5.07	0.10	0.50	390	6	0.02	7	1190	42	<5	2	<10	31	0.05	65	<10	4	114	9
	SW02PN-022	0.2	2.29	5	230	0.5	<5	0.05	<1	6	12	74	5.77	0.11	0.59	545	10	0.02	10	1240	46	<5	2	<10	25	0.03	78	<10	3	123	5
	SW02PN-023	0.2	2.50	<5	320	0.5	<5	0.06	<1	2	4	68	4.78	0.11	0.17	155	8	0.02	4		26	<5	1	<10	24	0.02	51	<10	2	55	6
	SW02PN-024	0.6	4.49	<5	210	0.5	<5	0.05	<1	5	10	87	4.99	0.10	0.42	555	12	0.02	8	1720	24	<5	1	<10	20	0.03	47	<10	4	122	20
				_															-												

A .5 gm sample is digested with 5 ml 3:1 HCl/HNO3 at 95c for 2 hours and diluted to 25ml with D.I.H20.

Signed:\_

Fl-

# **Finlay Minerals**

Attention: Warner Grue

Project:

1

Sample: Soil

# Assayers Canada

s Ltd	8282 Sherbrooke St., Vancouver, B.C., V5X 4R6	Report No	:	2V0313 SJ
ruenwald	Tel: (604) 327-3436 Fax: (604) 327-3423	Date	:	Sep-09-02

### **MULTI-ELEMENT ICP ANALYSIS**

Aqua Regia Digestion

1	Sample Number		Ag ppm	AI %	As ppm	Ba ppm	Be	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sn ppm	Sr ppm	Ti %	V ppm	W	Y ppm	Zn ppm	Zr ppm
			PPIN	~	PPIII	PP	P.P.11	PPIN		PPIN	PPIII	PPin	PPIN	/0	74	<i>,</i> ,,	Phil	PPIII	74	ppin	66uu	Phili	PPIII	Phili	PPIII	PPIII	/0	hhitt	PP'0	<b>PP</b> <sup>III</sup>	PP	PP
	SW02PN-025		<0.2	3.15	<5	150	0.5	<5	0.05	<1	5	13	65	5.51	0.07	0.37	440	10	0.02	8	1750	28	<5	1	<10	12	0.04	56	<10	3	112	11
	SW02PN-026		<0.2	1.79	5	330	0.5	<5	0.03	<1	5	6	72	5.11	0.15	0.45	355	14	0.02	6	1180	32	<5	2	<10	30	0.04	60	<10	3	85	6
	SW02PN-027		<0.2	1.94	<5	460	0.5	<5	0.05	<1	4	4	80	5.58	0.19	0.47	375	16	0.02	5	1630	26	<5	2	<10	34	0.04	62	<10	4	75	6
	SW02PN-029		1.0	3.22	5	230	0.5	<5	0.06	<1	7	11	84	4.95	0.11	0.60	620	10	0.02	9	1560	46	<5	1	<10	22	0.03	60	<10	4	127	8
	SW02PN-030		<0.2	1.90	<5	100	0.5	<5	0.15	<1	.7	7	34	3.88	0.04	0.58	665	2	0.01	6	850	22	<5	2	<10	14	0.06	71	<10	4	92	4
	SW02PN-031		0.4	3.40	<5	150	0.5	<5	0.06	<1	7	14	48	6.39	0.06	0.46	740	10	0.02	10	1340	38	<5	2	<10	10	0.07	85	<10	3	125	11
	SW02PN-032		0. <b>6</b>	3.02	<5	180	0.5	5	0.09	<1	3	5	79	7.50	0.07	0.28	405	12	0.01	5	1540	50	<5	1	<10	17	0.06	82	<10	3	58	6
	SW02PN-033		<0.2	2.97	<5	170	0.5	<5	0.06	<1	7	11	37	7.36	0.06	0.57	540	10	0.01	10	650	60	<5	3	<10	9	0.07	97	<10	4	117	9
	SW02PN-034		<0.2	2.52	<5	190	0.5	5	0.06	<1	7	11	54	6.57	D.08	0.56	455	20	0.01	10	690	50	<5	2	<10	12	0.07	97	<10	3	120	6
	SW02PN-036		<0.2	2.70	<5	240	0.5	<5	0.10	<1	7	13	24	6.78	0.05	0.35	425	24	0.01	9	910	72	<5	1	<10	11	<b>0.10</b>	101	<10	5	86	8
	SW02PN-037		0.4	2.09	<5	230	<0.5	<5	0.05	<1	6	4	126	5.95	0.07	0.30	425	4	0.01	4	730	256	<5	1	10	2	0.04	60	<10	2	122	4
	SW02PN-038		1.2	2.41	5	220	0.5	<5	0.11	<1	5	11	40	4.99	0.06	0.45	320	18	0.02	6	760	104	<5	2	<10	29	0.10	89	<10	5	110	6
	SW02PN-039 -3	5{+4 3 E	<0.2	3.55	<5	320	1.5	<5	0,40	<1	. 22	21	197	4.19	0.07	0.68	680	30	0.02	21	980	68	<5	3	<10	36	80.0	60	<10	54	292	8
	SW02PN-040		<0.2	3.10	. S	150	0.5	<5	0.08	<1	7	15	33	5.90	0.06	0.73	700	2	0.02	11	970	52	<5	3	<10	12	0.07	105	<10	3	147	5
	SW02PN-041		<0.2	2.53	5	110	0.5	<5	0.05	<1	5	13	32	5.06	0.06	0.46	510	4	0.02	8	800	64	<5	1	<10	13	0.07	99	<10	3	107	4
	SW02PN-042		0.2	3.55	15	410	1.0	<5	0.10	<1	9	32	66	6.64	0.13	0.80	585	8	0.03	17	1600	72	<5	3	<10	47	0.10	73	<10	6	197	18
	SW02PN-046 +	`€	0.4	4.57	10	180	1.0	<5	0.04	<1	4	18	37.	5.35	0.07	0.34	315	- 4	0.02	9	1540	34	<5	1	<10	11	0.07	54	<10	4	83	13
·	SW02PN-047		0.2	2.22	20	440	0.5	5	0.03	<1	2	8	23	6.24	0.14	0.34	290	4	0.04	6	1660	36	ં <5	1	<10	31	0.03	66	<10	2	75	5
	SW02PN-048		0.4	3.18	45	600	0.5	5	0.03	<1	5	5	69	8.05	0.33	0.52	465	4	0.07	7	2040	46	<5	2	<10	77	0.07	74	<10	3	100	11
	SW02PN-049		0.2	2.58	30	480	0.5	5	0.04	<1	3	6	35	7.46	0.16	0.40	430	4	0.04	6	1910	46	<5	1	<10	49	0.03	66	<10	1	84	6
	SW02PN-050		<0.2	2.49	25	260	0.5	5	0.02	<1	.2	7	39	6.10	0.09	0.39	265	6	0.02	6	1270	38	<5	1	<10	21	0.03	53	<10	1	75	5
	SW02PN-051		<0.2	1.93	15	290	0.5	<5	0.07	<1	2	6	63	4.31	0.10	0.29	210	2	0.04	4	1620	30	<5	1	<10	57	0.03	66	<10	2	71	3
	SW02PN-053		<0.2	2.16	30	310	1.0	<5	0.40	<1	. 7	10	61	5.06	0.11	0.89	660	2	0.03	8	1060	32	. <b>&lt;</b> 5	3	<10	37	Ó.06	95	<10	6	254	4
	SW02PN-054		0.2	2.52	15	210	0.5	<5	0.05	<1	4	9	68	5.51	0.09	0.58	47.5	2	0.03	8	1350	28	<5	1	<10	19	0.04	82	<10	3	153	4
	SW02PN-055	: · .	0.2	2.29	25	240	0.5	<5	0.03	<1	4	9	48	5.51	0.11	0.46	505	4	0.03	6	1600	30	<5	1	<10	22	0.04	63	<10	2	128	4
	SW02PN-056		0.4	3.08	5	100	0.5	<5	0.09	<1	6	9	44	4.66	0.06	0.89	665	2	0.02	8	1850	16	<5	1	<10	7	0.05	83	<10	3	153	4
	SW02PN-057		<0.2	2.45	<5	160	0.5	<5	0.09	<1	6	7	24	5.47	0.07	0.69	720	<2	0.02	7	1090	22	<5	1	<10	9	0.06	97	<10	3	123	4
	SW02PN-059	1	<0.2	2.57	5	200	1.0	<5	0.15	. <1	9	8	29	5.76	0.09	0.76	1175	<2	0.02	7	1950	28	<5	3	<10	12	0.14	111	<10	4	123	6
	SW02PN-062		2.0	1.59	5	600	0.5	5	0.04	<1	4	1	89	6.81	0.45	0.37	535	10	0.05	4	1490	36	<5	1	<10	27	0.04	38	<10	3	115	4
	SW02PN-063		2.4	1.76	5	440	0.5	10	0.03	<1	6	1	112	7.37	0.62	0.37	635	8	0.07	4	1650	40	<5	1	<10	33	0.04	40	<10	4	121	5
						-						-			-					-			-		_		-	-	•			

# A .5 gm sample is digested with 5 ml 3.1 HCl/HNO3 at 95c for 2 hours and diluted to 25ml with D.I.H20.

Signed:\_

# Finlay Minerals Ltd

Attention: Warner Gruenwald

Project:

1

Sample: Soil

# **Assayers Canada**

8282 Sherbrooke St., Vancouver, B.C., V5X 4R6	Report No	;	2V0313 SJ
Tel: (604) 327-3436 Fax: (604) 327-3423	Date	:	Sep-09-02

# **MULTI-ELEMENT ICP ANALYSIS**

Aqua Regia Digestion

1	Sample Number	ر . روال	Ag ppm	AI %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sn ppm	Sr ppm	Ti %	V ppm	W	Y ppm	Zn ppm	Zr ppm	
	SW02PN-064	117N	1.8	1.51	5	540	0.5	10	0.02	<1	7	1	96	6.77	0.50	0.37	715	10	0.05	4	1670	38	<5	1	<10	29	0.04	37	<10	5	115	5	
ſ	SW02PN-065	٧W	2.6	1.63	10	520	0.5	5		<1	,	<1	62	6.29	0.63	0.29	405		0.04	3		108	<5	1	<10	34	0.02	31	<10	5			
ì	SW02PN-066		1.4		15	510	0.5	5		<1	9	2	85	6.17	0.36		935		0.03		1680	42	<5	2	<10	24	0.02	46	<10	4	233		
i.	SW02PN-067		1.8		10	510	1.0	5	0.09	<1	20	1	62	6.92	0.49	0.51	1550		0.04	7		30	<5	4	<10	37	0.05	62	10	16			
(	SW02PN-069	1	1.4		15	510	0.5	10	0.02	<1	4	2	40	6.31	0.59		455		0.09		2080	36	<5	1	<10	51	0.01	32	<10	7			
	51102111 005			2.00	••						•	-	••	0.0,0	0.00	0.00	455	-	9.05		- TÓOO	50		•	-10		0.01					•	
I.	SW02PN-070		2.6	2.12	5	300	0.5	10	0.02	<1	4	2	66	8.15	0.98	0.51	545	6	0.05	5	2360	92	<5	2	<10	42	0.02	50	<10	6	174	6	
I.	SW02PN-072		0.2	2.89	5	280	0.5	5	0.04	<1	5	5	48	7.26	0.23	0.28	660	4	0.03	6	2690	26	<5	<1	<10	23	0.01	65	<10	4	104	6	
I.	SW02PN-073		0.6	2.59	<5	320	1.0	<5	0.43	1	12	<1	113	12.80	0.64	0.67	805	14	0.12	7	2290	68	<5	3	<10	128	0.17	63	<10	33	198	14	
I	SW02PN-074	X ·	0.4	2.37	<5	210	1.0	_<5	0.09	<1	8	10	164	4.41	0,17	0.59	765	4	0.03	8	1150	20	<5	3	<10	20	0.04	43	10	8	415	11	
1	SW02PN-075		0.2	3.26	5	360	1.0	<5	0,21	<1	16	7	111	6.88	0.22	0.51	1225	10	0.03	9	1740	42	<5	2	<10	51	0.05	71	<10	12	231	7	
								_																								_	
I.	SW02PN-078	35+008		2.51	5	340	1.0		0.14	<1	14	10	82		0.20	0.66	1260		0.03	12		36	<5	2	<10	37	0.03	76	<10	7	209		
I	SW02PN-079		<0.2	2.87	5	200	0.5	5	0.08	<1	9	11	59	5.50	0.11	0.51	1165			9	1480	26	<5	1	<10	23	0.03	67	<10	4	168		
J	SW02PN-080		<0.2	4.59	<5	180	1.0	<5	0.09	<1	4	9	6B	4.79	0.06	0.37	575		0.02	8	1760	16	<5	<1	<10	.32	0.03	50	<10	4	80		
1	SW02PN-081		<0.2	2.43	15	160	0.5	<5	0.09	.<1	6	8	17	4.65	0.06	0.47	595	2	0.01	8	780	. 16	<5	1	<10	12	0.03	92	<10	3	135		
I	SW02PN-083		<0.2	2.32	<5	90	0.5	5	0.05	<1	4	6	66	6.56	0.06	0.44	450	6	0.02	6	750	30	<5	1	<10	8	0.06	108	<10	1	108	5	
	SW02PN-085	کول ا	<0.2	1.86	5	210	0,5	<5	0.36	<1	5	4	11	4.11	0.06	0.70	925	,	0.01	4	790	28	<5	1	<10	26	0.03	83	<10	3	89	3	
1	SW02PN-085	J (	1,0	3.03	5	90	0.5	<5	0.22	<1	6	7	28	3.92	0.06	0.75	885			6		62	<5	1	<10	17	0.04	68	<10	5	126		
I		LIANY	0.6	2.38	5	70	0.5	5	1.1	<1	. J	, 4	19	3.96	0.05	Ó.69	570			4		50	<5	1	<10	11	0.03	65	<10	3	88		
1	SW02PN-088		<0.2	2.14	5	150	0.5	5	1.10	<1	8	3	22	4.64	0.08	0.65	1755			4		56	<5	2	<10	<1	0.01	70	<10	6	163		
	SW02PN-089		0.2	2.21	<5	130	0.5	-	0.04	<1	5	9	32	4.41	0.04	0.14	920		0.01	6	890	60	<5	<1	<10	3	0.01	86	<10	2			
	SW02PN-090		0.2	2.05	<5	200	0.5	5	0.03	<1	4	4	57	6.19	0.08	0.22	385	14	0.01	4	1800	92	<5	<1	<10	6	0.01	63	<10	5	179	4	
	SW02PN-092		0.6	2.35	<5	120	0,5	<5	0.08	<1	6	8	26	5.28	0.06	0.49	1415	4	0.01	6	2150	68	<5	1	<10	9	0.02	77	<10	2	118	4	
	SW02PN-093		0.6	4.99	<5	140	2.0	<5	0.21	1	36	10	379	3.73	0.07	0.45	2425	_ 10	0.02	10	1980	36	<5	2	<10	22	0.04	. 45	<10	52	280	6	
	SW02PN-094		<0.2	2.27	<5	340	0.5	<5	0.15	<1	10	5	55	4.22	0.08	0.68	1260	12	0.02	5	1400	44	<5	1	<10	16	0.02	67	<10	5	186	4	
	SW02PN-095		<0.2	2.40	5	120	0.5	<5 -	0,15	<1	6	7	33	4.28	0.06	0.75	1150	10	0.01	6	1000	70	<5	1	<10	13	0.02	70	<10	્ 3	174	3	
			•				1	_		•	_	_											_										
	SW02PN-096	4	<0.2	2.10	<5	540	0.5	<5	0.49	<1	7	7	76		0.07	0.71	1225	1	0.02	-	1210	64	<5	1	<10	42	0.01	66	<10	4	201	4	
	SW02PN-097		<0.2	2.30	<5	250	0.5	<5	0.27	<1	4	6	49		0.06	0.60	625	18	0.02	5	670	60	<5	1	<10	36	0.01	60	<10	3	225		
	SW02PN-098			2.32	<5	240	0.5	<5	0.08	<1	4	7	112		0.09	0.65	640		0.02		1780	98	<5	1	<10	31	0.03	64	<10	3	129		
	SW02PN-099		0.8	2.72	<5	530	0.5	<5	0.07	<1	5	1	76	6.57	0.15	0.58	720	1	0.02		1750	68	<5	1	<10	46	0.05	66	<10	4	113		
	SW02PN-100		0.6	2.43	5	400	0.5	<5	0.08	<1	6	9	79	8.23	0.16	0.59	1280	12	0.02	8	2840	62	<5	1	<10	42	0.06	75	<10	3	104	7	

A .5 gm sample is digested with 5 ml 3:1 HCl/HNO3 at 95c for 2 hours and diluted to 25ml with D.1.H20.

Page 5 of 12

Fb/ Signed:

# **Finlay Minerals Ltd**

Attention: Warner Gruenwald

Project:

Sample: Soil

# Assayers Canada

8282 Sherbrooke St., Vancouver, B.C., V5X 4R6	Report No	:	2V0313 SJ
Tel: (604) 327-3436 Fax: (604) 327-3423	Date	:	Sep-09-02

# **MULTI-ELEMENT ICP ANALYSIS**

Aqua Regia Digestion

:: 	Sample Number	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sn ppm	Sr ppm	Ti %	V ppm	W ppm	Y ppm	Zn ppm	Zr ppm	
ſ	SW02PN-102	<0.2	1.96	<5	340	0.5	<5	0.13	<1	6	7	263	5.60	0.13	0.53	980	( 40	0.02	7	1180	46	<5	1	<10	52	0.03	69	<10	R	116	4	
Т	SW02PN-103	<0.2			400	0.5	<5		<1	4	8	65	5.35	0.13		420	1	0.02		1170	44	<5	1	<10	61	0.07	84	<10	3	94	4	
Т	SW02PN-104	0.3		<5	360	0.5	<5	£	<1	3	9	149	5.45		0.50	450		0.02	-	1540	28	<5	1	<10	45	0.05	62	<10	5	101	5	
1	SW02PN-105 *	0.4	2.28	<5	760	0.5	5	0.03	<1	3	5	93	6.45	0.27	0.29	355	40			1820	62	<5	1	<10	35	0.02	70	<10	2	70	5	
1	SW02PN-107	0.4	3.51	<5	180	0.5	<5	0.06	<1	4	9	69	5.76	0.05	0.32	555	10	0.02	6	1770	26	<5	1	<10	28	0.06	90	<10	3	70	5	
												- 11 -		,			i															1
1	SW02PN-110	<0.3	4.11	<5	310	0.5	<5	0.20	<1	5	14	98	4.63	0.09	0.59	405	12	0.02	13	1920	14	<5	2	<10	69	0.05	48	<10	4	92	10	
- I	SW02PN-111	<0.2	3.43	<5	340	0.5	<5	0.07	<1	4	11	62	5.37	0.10	0.50	360	12	0.03	9	1600	24	<5	1	<10	45	0.05	61	<10	3	83	6	
I.	SW02PN-113	0.2			250	0.5	<5		<1	3	7	51	4.15	0.07	0.35	230	14			1070	34	<5	1	<10	37	0.05	65	<10	2	62	3	
I.	SW02PN-117	<0.2			160	0.5	<5		<1	5	12	88	5.61	0.08	0.52	515	10			1240		<5	2	<10	19	0.04	63	<10	4	125	12	
T	SW02PN-118	0.2	3.03	<5	210	0.5	<5	0.09	<1	· 4	10	152	5.21	0.09	0.49	375	12	0.02	8	1560	94	< 5	1	<10	21	0.02	69	<10	10	105	5	
	SW02PN-120	0.4	2.54	5	430	1.5	- 6	0.38	1	76	6	98	7 77	0.20		1005	1						-								,	
	SW02PN-120	0.4		-	170	0.5	<5		ر 1>	26	7	43	7.23 4.74	0.28	0.58 0.44	1805 405	-14		9	1670 1320	44 26	<5	2	<10 <10	59	0.04 0.03	54 96	<10 <10	25 3	329 111	6	
	CD02PN-001	i <0.2		10	680	1.0		0.42	<1	13	23	135	8.59	0.28			12		13			<5	1	<10	17 135	0.03	76	<10	13	192	<u>4</u> 15	
i	CD02PN-002 132			10	470	0.5	5	1 A A	<1	6	46	129	7.72			765	22		11		32	<5	3	<10	47	0.04	68	<10	7	169	14	
1	* CDO2PN-003 prid	0.8	1.95	- +	300	0.5	5		<1	13	2	65	9.40	0.13	0.55	2695	~~~	0.02		3330	106	5	1	<10	9	0.01	36	<10	6	144	8	
				1										•.					-			-	-						-			
Ι	CD02PN-004	0.6	1.09	45	330	<0.5	5	0.03	<1	3	4	57	8.11	0.26	0.33	495	6	0.06	4	2700	66	5	<1	<10	44	<0.01	35	<10	12	127	7	
J	CD02PN-005	0.2	1.34	40	390	<0.5	<5	0.03	<1	2	5	32	5.13	0.18	0.19	455	2	0.03	6	2260	66	<5	<1	<10	18	0.01	54	<10	2	131	3	
	CD02PN-006	1.2		35	460	0.5	5		<1	4	9	88	5.81	0.23	0.41	460		0.05	10	2080	54	<5	1	<10	63	0.02	60	<10	4	205	5	
ſ	CD02PN-008	0.4		10	170	<0.5	5	0.04	_ <1	1	2	20	3.39	0.08	0.15	135		0.02	3	960	54	<5	<1	<10	48	0.01	31	<10	2	57	2	
	CD02PN-009	<0.2	0.99	10	400	<0.5	<5	0.03	<1	1	<1	25	3.10	0.26	0.29	170	2	0.09	2	690	14	<5	1	<10	80	0.01	18	<10	2	59	3	
	CD02PN-010	0.2	2.77	20	590	0.5	5	0.07	<1	4	10	55	4.71	0.15	0.33	300	2	0.07	8	2200	86	<5	1	<10	62	0.01	44	<10	12	112	4	
	CD02PN-011	<0.2		40	160	0.5	<5	0.07	<1	6	15	25	4.48	0.07	0.58	880		0.02	11	1140	30	<5	1	<10	8	0.03	89	<10	3	127	4	
:	CD02PN-012	<0.2		30	270	1.0	<5	0.50	<1	9	16	25	5.74	0.08	0.55	1370	<2		12	1110	42	<5	1	<10	19	0.10	99	<10	6	121	. 8	
1	CD02PN-013	<0.2		15	330	0.5	<5	0.06	<1	• 4	13	49	7.88		0.55	415	20		11	2040	46	<5	2	<10	58	0.07	66	<10	6	115	11	
1	CD02PN-014 🛪	<0.2	2.07	25	320	0.5	5	0.20	<1	3	13	231	11.18	0.32	0.43	455	30	0.18		3240	86	<\$	3	10	129	0.09	77	<10	4	260	11	
																	'n															
1	CD02PN-015	<0.2	1.82	10	410	0.5	<5	0.19	<1	5	6	163	5.88	0.31	0.57	625	8	0.09	7	2140	24	<\$	3	<10	78	0.05	58	<10	9	158	5	
;	CD02PN-016	<0.2		10	350	0.5	5	<b>0.02</b>	<1	2	5	37	5.99	0.13	0.37	255		0.04	5	1380	38	<5	1	<10	30	0.02	64	<10	1	89	5	
i.	CD02PN-017	0.2		10	320	0.5	<5	0.04	<1	1	5	35			0.36	245	6	0.03	6	1240	58	<5	1	<10	38	0.02	71	<10	1	98	4	
	CD02PN-018	<0.2	1.19	15	260	<0.5	5	0.11	<1	<1	6	30	4.45		0.17	100	6		6	1480	64	<5	<1	<10	40	0.01	37	<10	1	82	3	
1	CD02PN-019	<0.2	1.94	5	230	0.5	<5.	0.18	1	6	17	29	5.36	0.09	0.46	725	4	0.01	10	1070	72	<5	1	<10	22	0,03	113	10	3	434	. 4	

A .5 gm sample is digested with 5 ml 3:1 HCl/HNO3 at 95c for 2 hours and diluted to 25ml with D.1.H20.

Signed:\_\_

# **Finlay Minerals Ltd**

Attention: Warner Gruenwald

Project:

Sample: Soil

# Assayers Canada

8282 Sherbrooke St., Vancouver, B.C., V5X 4R6	<b>Report No</b>	:	2V0313 SJ
Tel: (604) 327-3436 Fax: (604) 327-3423	Date	:	Sep-09-02

### **MULTI-ELEMENT ICP ANALYSIS**

Aqua Regia Digestion

	Sample Number	Ag ppm	AI %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	К %	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sn ppm	Sr ppm	Ti %	V ppm	W ppm	Y ppm	Zn ppm	Zr ppm
1	CD02PN-020	0.2	1.45	5	590	0.5	5	0.13	7	2	5	27	4.65	0.11	0.20	900	16	0.03	5	1530	86	<5	<1	10	39	<0.01	35	10	6	520	3
I	CD02PN-021	0.6		15	440	<0.5	5	0.03	<1	1	4	27	6.18	0.17	0.21	145	10	0.04	5	1480	102	<5	<1	<10	43	0.01	42	<10	2	74	4
1	CD02PN-022	<0.2		<5	150	0.5	<5	0.09	<1	4	11	17	4.03	0.07	0.28	765	2	0.01	7	1110	48	< 5	<1	<10	16	0.04	79	<10	2	176	3
1	CD02PN-023	<0.2	2.09	5	120	1.0	<5	0.46	<1	11	15	53	4.29	0.09	0.97	1035	<2	0.02	13	1030	52	<5	5	<10	39	0.13	95	<10	10	186	.8
1	CD02PN-024	<0.2	2.95	10	110	0.5	<5	0.20	<1	7	14	45	4.98	0.06	0.61	845	<2	0.02	11	3010	34	<5	2	<10	19	0.07	107	<10	4	148	5
1	CD02PN-025	0.4		5	130	0.5	<5	0.20	<1	8	16	38	4.83	0.06	0.84	735	-	0.02	-	1110	42	<5	4	<10	22	0.07	95	<10	5		9
1	CD02PN-026	0.2	2.82	5	130	0.5	<5	0.13	<1	7	17	46	4.42	0.07	0.78	735	_	0.02	14		44	<5	2	<10	21	0.05	78	<10	4	225	6
1	CD02PN-027	<0.2	3.07	5	170	1.0	<5	0.14	<1	14	18	64	4.36	0.08	0.88	1255	_	0.02	17		50	_	4	<10	28	0.08	84	<10	8	267	5
	CD02PN-028		2.13	5	100	0.5	<5	0.06	<1	6	9	30	6.04	0.05	0.65	575		0.02	9		32	<5	2	<10	5	0.10	124	<10	2	131	5
:	CD02PN-029	1.0	2.76	<5	120	0.5	<5	0.07	<1	8	15	48	4.48	0.07	0.64	780	4	0.02	13	830	40	<5	2	<10	17	0.07	83	<10	4	163	5
1	CD02PN-030	0.6	3.25	5	190	0.5	<5	0.10	<1	7	15	59	5.25	0.08	0.73	670	4	0.02	13	1050	48	<5	2	<10	20	0.04	82	<10	3	165	8
	CD02PN-031	<0.2		5	200	1.5	<5		<1	21	25	138	4.79	0.12	0.96	2095		0.02	22		44	<5	6	<10	30	0.11	78	10	12	312	12
	CD02PN-033	<0.2		5	120	0.5	<5	0.18	<1	8	8	69	4.14	0.07	0.62	790	6		7		32	<5	1	<10	17	0.05	63	<10	5	184	4
	CD02PN-034	0.2	3.47	<5	170	0.5	<5	0.08	<1	5	10	53	4.37	0.06	0.49	610	6	0.02	7	1320	30	<5	1	<10	16	0.03	55	<10	5	204	4
	CD02PN-035		2.70	5	500	1.0	<5	0.65	<1	15	20	91	4.68	0.14	0.96	1505	8	0.02	18	860	54	<5	5	<10	61	0.07	66	<10	21	273	8
1	CD02PN-036	<0.2	1.87	10	760	1.0	<5	0.34	<1	11	18	60	4.26	0.13	0.69	2705	6	0.02	20	1750	68	<5	3	<10	29	0.02	53	<10	18	209	8
1	CD02PN-037	0.4	1.81	5	640	1.0	5	0.19	1	12	10	141	4.63	0.19	0.47	2145	4	0.03	11	1900	70	<5	2	<10	31	0.01	44	10	14	533	6
1	CD02PN-038	0.4	1.36	<5	250	0.5	5	0.08	1	3	6	34	2.58	0.11	0.14	435	2	0.01	_	3070	60	<5	<1	<10	15	<0.01	26	<10	5	293	2
1	CD02PN-039	0.4	1.66	<5	560	<b>1.</b> Q	5	0.34	2	14	11	58	4.28	0.16	0.44	3895		0.02		2030	192	<5	1	<10	22	0.01	50	10	8	434	5
	CD02PN-040	0.4	1.30	5	730	0.5	5	0.25	1	12	2	123	4.47	0.19	0.66	1980	4	0.02	4	1250	84	<5	2	<10	78	<0.01	39	<10	12	302	4
1	CD02PN-041	Ô.2	2.15	5	290	0.5	5	0.06	<1	5	2	128	3.94	0.17	0.57	930	4	0.02	2	1380	96	<5	2	<10	71	<0.01	38	<10	6	289	8
ì	CD02PN-042		1.58	10	390	0.5		0.10	<1	7	2	79	4.79		0.56	1225				1850	66	<5	1	<10	52	< 0.01	47	<10	4	256	4
1	CD02PN-043	0.4	2.17	<5	170	0.5	5	D.06	<1	Э	4	20	3.07	0.07	0.24	585	4	0.01	4	1850	74	<5	<1	<10	. 12	0.01	49	<10	3	100	5
1	CD02PN-044	2.4	0.88	10	290	0.5	35	0.02	<1	7	<1	52	8.11	0.30	0.13	465	20	0.02	4	1450	400	<5	1	<10	57	0.01	· 32	<10	5	223	7
J	CD02PN-045	1.0	2.00	<5	450	0.5	5	0.04	<1	8	1	42	6.42	0.26	0.38	1565	10	0.02	4	2090	620	<5	1	<10	56	0.01	. 47	<10	7	250	6
						۰.																			_				-	. – •	
1	CD02PN-046		1.56	5	1120	0.5	5	0.64	1	4	3	59	5.09	0.19	0.38	770	10	0.02		1280	160	<5	1	<10	56	0.01	49	10	33	475	4
1	CD02PN-047	3.6	0.97	30	200	0.5		0.18	<1	2	<1	15		1.12	0.10	65	54	0.03	3		644	<5	1	<10	2067	0.06	16	<10	33	122	11
	CD02PN-048	1.4	2.37	15	590	0.5	10	0.05	<1	6	3	59	8.02	0.44	0.62	1020		0.04	6		224	<5	1	.<10	295	0.01	49	<10	8	283	8
1	CD02PN-049	0.8	1.22	50	550	0.5		0.05	<1	4	2	38	5.16	0.34	0.33	640	8	0.04	5		148	<5	2	<10	80	< 0.01	34	<10	12	197	4
1	CD02PN-050	0.8	2.96	<5	560	0.5	5	0.08	<1	5	1	105.	8.99	0.41	0.40	810	14	0.06	6	4410	182	<5	2	<10	95	0.06	75	<10	9	207	7

A .5 gm sample is digested with 5 ml 3:1 HCI/HNO3 at 95c for 2 hours and diluted to 25ml with D.I.H20.

Signed:

Et -

# **Finlay Minerals Ltd**

Attention: Warner Gruenwald

Project:

Sample: Soil

# Assayers Canada

8282 Sherbrooke St., Vancouver, B.C., V5X 4R6	Report No	:	2V0313 SJ
Tel: (604) 327-3436 Fax: (604) 327-3423	Date	:	Sep-09-02

# **MULTI-ELEMENT ICP ANALYSIS**

Aqua Regia Digestion

	Sample Number	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	Р ppm	Pb ppm	Sb ppm	Sc ppm	Sn ppm	Sr ppm	Ti %	V mqq	W ppm	Y ppm	Zn ppm	Zr
		FE		FF		<b>FF</b> 3			•• F; · · ·	FF			• -			F.F	FF···		F F		FF		•					••	••	• •	• :
1	CD02PN-051	0.2	1.52	10	340	0.5	<5	0.07	<1	3	<1	41	8.40	0.52	0.44	455	6	0.06	3	2210	76	5	5	<10	67	0.14	76	<10	5	88	17
J	CD02PN-052	<0.2	1:55	<5	370	0.5	<5	0.11	<1	2	<1	47	7.76	0.65	0.59	305	8	0.05	3	2370	36	5	4	<10	117	0.06	61	<10	4	69	11
1	CD02PN-053	<0.2	1.49	<5	540	0.5	<5	0.07	<1	7	<1	96	5.11	0.40	0.28	585	-	0.03	2	1890	56	<5	2	<10	95	0.08	34	<10	12		8
1	CD02PN-054	0.4	1.44	<5	370	<0.5	<5	0.05	<1	1	4	71	4.04	0.20	0.32	325	6	0.02	5	1160	38	<5	2	<10	60	0.03	44	<10	4	99	
1	CD02PN-055	0.4	1.68	<5	400	0.5	5	0.10	<1	1	1	103	5.28	0.26	0.27	260	14	0.02	3	1450	28	<5	1	<10	53	0.02	56	<10	2	50	4
				-			_				-							<b>.</b> .	_			_	-						-	~ •	•
1	CD02PN-056		2.57			0.5	<5		<1	2	3	116	6.03		0.29	330	14			2050	64	<5	3	<10	107	0.04	73	<10	5		
1	CD02PN-057	<0.2	-	<5		0.5	<5		<1	2	2	175	6.00	0.43	0.39	380	20			1600	30	<5	3	<10	100	0.06	54	<10	-	85	
	CD02PN-058	0.4			380	<0.5	5		<1		7	96	5.34		0.23	245		0.02		1850	30	<5	<1	10	26	0.01	58	<10	2	95 400	
÷	CD02PN-059	0.2		<5	-	1.0	<5		1	16	19	251	4.65	0.20	0.79	2675	8			1770	66	<5	2	<10	42	0.03	46	10	13 10		11
	CD02PN-060	0.8	2.80	<5	440	0.5	5	0.25	<1	4	3	113	7.27	0.28	0.45	700	18	0.04	5	3020	34	<5	3	<10	80	0.06	80	<10	10	131	11
	CD02PN-061	<0.2	2.35	<5	550	0.5	<5	0.17	1>	7	12	125	7 86	0.32	0 44	455	48	0.07	11	2650	32	<5	3	10	115	0.09	60	<10	11	140	13
	CD02PN-063	0.4	2.55	<5	240	0.5	5		<1	2	6	45	2.97	0.07	0.16	135	8		4		28	<5	1	<10	17	0.02	59	<10	28	70	3
	CD02PN-064	<0.2		<5	240	0.5	<5		<1	4	9	53	7.97	0.11	0.32	265	10		-	1230	38	<5	2	<10	11	0.06	82	<10	3	69	9
	CD02PN-065	0.2		<5	240	0.5	5		<1	3	9	59		0.10	0.23	255	-	0.03		1340	42	<5	1	- 20	15	0.07	97	<10	3	100	7
	CD02PN-066	0.6		<5	370	0.5	<5	-	<1	2	6	42	5.16	0.15	0.29	245		0.03	5	1500	40	<5	1	<10	25	0.03	72	<10	2	79	4
				•								•																			
1	CD02PN-067	0.6	2.27	<5	160	<0.5	5	0.02	<1	1	3	41	4.79	0.08	0.15	120	42	0.02	3	830	44	<5	1	<10	6	0.02	61	<10	1	49	3
1	CD02PN-068	<0.2	2.36	<5	140	0.5	<5	0.06	<1	4	9	49	3.82	0.07	0.40	260	12	0.02	7	790	30	<5	2	<10	17	0.03	68	<10	3	78	5
1	CD02PN-069	0.2	2.19	<5	140	0.5	<5	0.07	<1	4	11	58	4.91	0.08	0.37	285	12	0.02	7	930	40	<5	2	<10	18	0.07	120	<10	2	101	4
1	CD02PN-070	0.2	3.80	< 5	160	0.5	<5	0.10	<1	7	19	112	4.90	0.09	0.73	570	8	0.02	15	1060	44	<5	2	<10	23	0.03	64	<10	4	173	12
1.1	CD02PN-071	<0.2	3.36	5	290	1.0	<5	0.17	<1	9	18	120	4.64	0.09	0.82	690	10	0.02	17	650	38	<5	3	<10	28	0.03	63	<10	6	188	9
				_			_		_								_				~~							- 10	7		
i.	CD02PN-072	0.2		5	730	0.5	5		1	11	6	53	5.39	0.25	0.37	1915		0.03		2380	88	<5	<1	<10	38	0.01	58 56	<10 <10	5	- • +	
;	CD02PN-074	0.4	2.32	<5	310	0.5	<5		<1	4	6	48	4.15	0.18	0.23	620		0.03		2170	96 82	<5	<1	<10	26	0.01	56	<10	5	. 121	5
i	CD02PN-075	0.4	2.66	<5	240	0.5	5		<1	4	6 10	49 86	5.03 5.10	0.13	0.23 0.31	480 935	-	0.03 0.03		2050 2460	132	<5 <5	<1 <1	<10 10	20 34	0.01 0.02	61	<10	6	211	ر م
	CD02PN-076	1.0	2.41	5	270	0.5	5		1	5	3	108	-	0.16	0.50	620		0.03		2160	234	<5	2	<10	67	0.02	63	<10	6	264	5
1	CD02PN-077	0.4	2.17	10	570	0.5	10	0.04	<1	2	د	100	1.22	0.40	0.50	020	10	0.07		2100	234	~ >	2	-10	07	0.00	05	-10		201	•
	CD02PN-078	. 0.8	1.62	5	580	0.5	30	0.03	<1	2	<1	35	6.50	0.42	0.17	245	14	0.05	3	2110	340	<5	1	<10	48	0.02	38	<10	4	108	5
ľ	CD02PN-079	0.2	1.21	<5	330	<0.5	5	0.05	<1	2	13	66	4.20	0.18	0.14	265		0.02		1210	96	<5	<1	<10	20	0.01	80	<10	2	123	3
	CD02PN-080	0.2	1.77	<5	570	0.5	5		<1	2	6	52	6.09	0.25	0.22	280		0.04	5	1960	104	<5	1	<10	37	0.03	63	<10	2	97	4
j	CD02PN-081	0.8	1.62	<5	560	0.5	<5	0.05	<1	2	3	50	5.81	0.28	0.30	310		0.03	5	2090	56	<5	<1	<10	41	0.05	67	<10	2	77	5
1	CD02PN-085	0.4	2.53	5	340	1.0	5	0.17	<1	7	2	71	5.78	0.14	0.39	1105	14	0.02	4	2290	134	<5	1	<10	81	0.01	47	10	.25	460	7
	,4E 171	×		_	-							·																			

A .5 gm sample is digested with 5 ml 3:1 HCl/HNO3 at 95c for 2 hours and diluted to 25ml with D.1.H20.

Signed:

Fb/~

# **Finlay Minerals Ltd**

Attention: Warner Gruenwald

Project:

Sample: Soil

# Assayers Canada

8282 Sherbrooke St., Vancouver, B.C., V5X 4R6	<b>Report</b> No	:	2V0313 SJ
Tel: (604) 327-3436 Fax: (604) 327-3423	Date	:	Sep-09-02

### **MULTI-ELEMENT ICP ANALYSIS**

Aqua Regia Digestion

l I	Sample Number	Ag ppm	Ai %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sn ppm	Sr ppm	Ti %	V ppm	W ppm	Y ppm	Zn ppm	Zr ppm
1	CD02PN-086	0.2	4.49	<5	250	0.5	<5	0.04	<1	2	4	76	4.43	0.11	0.36	260	8	0.02	4	1380	10	<5	2	<10	37	0.02	39	<10	3	62	15
1	CD02PN-087	<0.2	2.30	<5	260	0.5	5	0.02	<1	2	5	69	4.20	0.11	0.36	300	10	0.02	4	1060	14	<5	1	<10	28	0.01	55	<10	2	48	4
:	CD02PN-088	0.2	2.04	<5	150	0.5	<5	0.04	<1	4	6	62	5.31	0.07	0.36	395	8	0.02	5	1370	24	<5	1	<10	17	0.04	85	<10	2	62	5
1	CD02PN-089	0.2	2.60	<5	140	0.5	<5	0.02	<1	2	6	52	3.88	0.07	0.23	225	6	0.02	4	970	16	< 5	1	<10	12	0.02	68	<10	2	43	4
1	CD02PN-090	<0.2	2.56	<5	300	1.0	<5	0.11	<1	7	14	136	5.35	0.10	0.63	360	20	0.02	16	1330	14	<5	3	<10	33	0.04	63	<10	5	78	7
:	CD02PN-092	0.6	4.65	<5	190	0.5	<5	0.05	<1	3	7	85	4.48	0.08	0.37	255	8	0.02	6	1470	12	<5	2	<10	16	0.02	46	<10	4	73	16
1	CD02PN-093	1.0	2.74	<5	120	0.5	<5	0.02	<1	2	10	63	5.50	0.07	0.40	335	6	0.02	6	1750	24	<5	1	<10	6	0.02	68	<10	2	67	6
1.1	CD02PN-094	1.0	3.80	<5	170	0.5	<5	0.08	<1	3	6	64	4.53	0.07	0.39	300	8	0.02	6	1330	58	<5	2	<10	15	0.03	45	<10	3	70	12
1	CD02PN-095	0.4	2.19	<5	140	0.5	<5	0.04	<1	3	6	47	5.69	0.08	0.31	285	4	0.02	5	1210	62	<5	1	<10	10	0.05	84	<10	2	73	4
1	CD02PN-096	<0.2	2.42	<5	170	Ó.5	<5	0.06	<1	6	18	57	5.39	0.07	0.43	310	14	0.02	12	1390	34	<5	1	<10	14	0.08	107	<10	3	62	5
1	CD02PN-097	0.8	3.65	<5	130	1.0	<5	0.07	<1	8	29	58	7.10	0.06	0.61	465	8	0.02	14	1230	26	<5	3	<10	6	0.13	162	<10	4	84	14
1	CD02PN-099	0.4	3.21	5	200	0.5	<5	0.11	<1	5	14	109	4.07	0.05	0.56	365	12	0.02	9	630	48	<5	2	<10	38	0.06	79	<10	12	119	5
1	CD02PN-100	0.4	3.01	<5	130	0.5	<5	0.11	<1	6	11	74	6.51	0.07	0.55	490	14	0.02	9	1220	392	<5	2	<10	12	0.06	83	<10	3	130	10
1	CD02PN-103	<0.2	2.58	<5	120	0.5	<5	0.05	<1	6	6	21	7.57	0.05	0.39	405	12	0.01	5	710	56	<5	1	<10	6	0.06	93	<10	· 2	72	10
1	CD02PN-104	<0.2	2.27	<5	100	0.5	<5	0.03	<1	5	5	34	5.99	0.05	0.31	430	12	0.02	5	760	36	<5	1	<10	3	0.04	104	<10	3	64	6
1	CD02PN-108	<0.2	3.57	<5	110	0.5	<5	0.21	<1	6	5	19	4.54	0.04	0.34	690	6	0.02	4	1350	86	<5	2	<10	21	0.06	58	<10	5	62	15
1	CD02PN-109	<0.2	2.07	<5	120	ö.5	<5	0.04	<1	4	7	17	5.13	0.03	0.23	275	10	0.02	5	760	26	<5	1	<10	6	0.08	104	<10	2	44	6
1	CD02PN-111	<0.2	2.14	· <5	120	<0.5	<5	0.02	<1	5	2	16	6.50	0.08	0.31	470	28	0.01	3	1250	72	<5	1	<10	<1	0.01	62	<10	2	61	6
1	CD02PN-112	0.6	1.97	<5	270	<0.5	<5	0.02	<1	4	4	35	3.55	0.06	0.13	300	12	0.01	5	1010	26	<5	<1	<10	3	0.01	65	<10	2	52	3
1	CD02PN-113	1.0	2.49	<5	310	0.5	<5	0.12	<1	17	4	45	6.75	0.08	0.41	1515	50	0.02	4	1720	114	<5	1	<10	7	0.02	49	<10	5	101	16
:	CD02PN-114	0.8	2.92	<5	180	0.5	<5	0.09	<1	10	4	89	5.26	0.09	0.51	630	26	0.01	5	1180	76	<5	2	<10	12	0.01	53	<10	6	240	8
1	CD02PN-121	0.2	2.73	10	260	0.5	<5	0.16	<1	5	9	43	6.15	0.08	0.48	545	4	0.02	8	1100	62	<5	1	<10	31	0.04	95	<10	2	188	5
1	CD02PN-123	0.4	2.48	10	160	0.5	<5	0.07	<1	6	22	41	5.38	0.09	0.69	550	4	0.02	14	1250	66	<5	. 2	<10	20	0.05	88	<10	2	171	6
:	CD02PN-126	0.8	3.60	10	160	0.5	<5	0.08	<1	6	18	59	5.77	0.07	0.63	530	10	0.02	12	910	72	<5	3	<10	16	0.05	86	<10	3	190	11
1	CD02PN-127	<0.2	3.21	5	140	0.5	<5	0.07	<1	8	23	42	6.89	0.07	0.62	705	6	0.02	16	810	46	<5	3	<10	10	0.09	100	<10	3	214	10
:	CD02PN-129	0.2	2.53	5	210	0.5	<5	0.13	<1	6	12	49	5.41	0.07	0.66		36	0.02	9	670	48	<5	2	<10	19	0.03	83	10	10	500	5
I.	SW02PN-128	0.4	0.84	<5	260	<0.5	5	0.01	<1	1	1	117	7.42	0.30	0.10	100	138	0.03	4	1280	40	<5	<1	<10	5	<0.01	20	<10	3	25	5
I.	SW02PN-129	0.4	0.88	<5	280	<0.5	5	0.01	<1	1	15	152	8.25	0.41	0.10	105	124	0.03	12	1380	54	<5	<1	<10	2	<0.01	20	<10	3	30	7
I.	SW02PN-130	0.4	0.89	<5	300	<0.5	5	0.01	<1	1	3	140	5.86		0.07	110	114	0.03	5	1390	36	<5	<1	<10	8	<0.01	18	<10	3	26	5
1	SW02PN-131	0.6	0.99	<5	290	<0.5	5	0.01	<1	1	. 1	139	5.84	0.42	0.05	90	100	0.03	3	1260	42	<5	<1	<10	6	<0.01	18	<10	3	22	5

A .5 gm sample is digested with 5 ml 3:1 HCl/HNO3 at 95c for 2 hours and diluted to 25ml with D.1.H20.

Page 9 of 12

Signed:\_

# **Finlay Minerals Ltd**

Attention: Warner Gruenwald

Project:

Sample: Soil

# **Assayers Canada**

8282 Sherbrooke St., Vancouver, B.C., V5X 4R6 : 2V0313 SJ Report No Tel: (604) 327-3436 Fax: (604) 327-3423 Date Sep-09-02 :

**MULTI-ELEMENT ICP ANALYSIS** 

Aqua Regia Digestion

l T	Sample Number	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sn ppm	Sr ppm	Ti %	V ppm	W ppm	Y ppm	Zn ppm	Zr ppm
I.	SW02PN-132	1.0	0.91	<5	350	<0.5	5	0.01	<1	1	<1	163	6.97	0.60	0.07	135	88	0.04	2	1340	48	5	<1	<10	11	<0.01	16	<10	Э	24	5
I.	SW02PN-133	1.0	1.02	<5	380	<0.5	5	0.01	<1	1	6	170	6.83	0.71	0.08	195	80	0.05	7	1510	54	<5	<1	<10	15	<0.01	19	<10	3	30	5
1	SW02PN-134	1.0	1.12	<5	430	<0.5	10	0.01	<1	1	1	177	7.18	0.71	0.08	175	78	0.05	4	1590	60	<5	<1	<10	16	<0.01	20	<10	3	32	5
1	SW02PN-136	0.2	4.95	5	340	1.5	<5	2.66	1	7	6	25	2.83	0.13	0.92	1095	<2	0.03	5	1150	58	<5	3	<10	292	0.04	46	<10	22	214	12
I	SWOZPN-137 U	0.8	2.34	5	760	0.5	5	0.03	<1	2	4	42	6.65	0.28	0.28	245	8	0.04	5	2100	136	<5	1	<10	140	<0.01	48	<10	3	86	5
1	SW02PN-138	<0.2	2.39	5	700	0.5	5	0.02	<1	1	3	42	5.67	0.24	0.31	155	8	0.04	4	1400	128	<5	1	<10	152	<0.01	35	<10	2	77	5
I.	SW02PN-140	1.6	2.89	20	880	0.5	<5	0.03	<1	4	11	94	5.77	0.28	0.36	255	8	0.05	8	1590	312	<5	2	<10	124	0.01	49	<10	4	214	6
J	SW02PN-141	1.4	2.19	10	580	0.5	5	0.03	<1	3	9	92	5.39	0.25	0.31	255	8	0.08	8	1090	188	<5	1	<10	45	0.01	44	<10	3	110	5
1	SW02PN-142	0.8	1.60	5	500	0.5	5	0.03	<1	. 3	6	115	6.74	0.43	0.34	210	4	0.09	6	2020	186	<5	1	<10	78	0.01	57	<10	4	118	5
I	SW02PN-143	2.6	1.60	5	530	0.5	<5	0.03	<1	3	9	37	4.48	0.16	0.29	210	14	0.05	7	920	126	<5	1	<10	32	0.01	43	<10	2	94	6
I.	SW02PN-144	0.2	1.15	5	260	0.5	<5	0.02	<1	2	11	38	3.82	0.12	0.17	145	44	0.03	7	550	52	<5	1	<10	18	0.01	26	<10	2	41	3
1	SW02PN-147	0.2	1.62	5	240	<0.5	<5	0.02	<1	1	10	42	3.10	0.07	0.09	65	18	0.03	2	1260	60	<5	<1	<10	23	0.01	45	<10	1	34	3
I.	SW02PN-151s	0.6	5.38	<5	190	1.0	<5	0.08	<1	4	16	126	4.50	0.07	0.30	225	28	0.02	9	1800	14	<5	1	<10	16	0.08	49	<10	4	44	21
I.	SW02PN-154s	<0.2	2.28	<5	230	0.5	<5	0.03	<1	6	14	231	5.37	0.11	0.59	465	36	0.02	10	1120	32	<5	2	<10	23	0.03	63	<10	4	80	7
T	SW02PN-155s	0.8	2.80	<5	180	0.5	<5	0.02	<1	2	13	273	4.64	0.07	0.26	225	18	0.02	5	1270	28	<5	1	10	12	0.02	48	<10	2	55	9
1	SW02PN-156s	<0.2	1.74	<5	210	0.5	<5	0.02	<1	2	11	97	4.79	0.08	0.22	195	20	0.02	5	910	40	<5	1	<10	14	0.03	61	<10	2	48	4
1	SW02PN-157s	<0.2	1.39	<5	170	<0.5	5	0.04	<1	2	10	64	3.19	0.08	0.21	150	16	0.02	4	1070	30	<5	<1	<10	25	0.01	55	<10	2	49	3
1	SW02PN-158s	<0.2	2.55	<5	120	0.5	<5	0.05	<1	4	13	32	3.93	0.05	0.41	335	6	0.02	10	830	18	<5	1	<10	18	0.04	68	<10	2	69	6
1	SW02PN-1595	<0.2	2.52	<5	120	0.5	<5	0.06	<1	5	18	30	5.16	0.05	0.48	435	4	0.02	15	1000	22	<5	1	<10	11	0.04	83	<10	2	69	6
1	SW02PN-160s	0.2	2.05	5	130	0.5	<5	0.07	<1	5	21	40	3.73	0.05	0.50	380	4	0.02	19	1350	16	<5	1	<10	14	0.02	57	<10	3	71	8
	SW02PN-161s	0.4	2.47	<5	250	0.5	5	0.08	<1	6	13	124	4.51	0.07	0.47	630	6	0.02	9	1510	20	<5	1	<10	15	0.01	62	<10	3	92	7
	SW02PN-162s	0.6	3.83	5	170	1.0	5	0.08	<1	4	14	37	3.61	0.05	0.41	285	2	0.02	13	1250	10	<5	2	<10	9	0.02	50	<10	5	123	13
	SW02PN-163s	<0.2	2.09	<5	. 90	0.5	<5	0.12	<1	4	7	49	4.80	0.04	0.35	440	4	0.02	6	920	18	<5	1	<10	29	0.05	100	<10	2	92	4
:	SW02PN-164s	<0.2	2.41	<5	150	0.5	<5	0.11	<1	6	16	46	4.32	0.04	0.69	465	2	0.01	15	880	14	<5	2	<10	14	0.04	83	<10	3	104	6
i -	SW02PN-1655	0.2	1.95	<5	90	0.5	· <5	0.08	<1	4	8	21	4.50	0.04	0.34	415	2	0.01	7	770	18	<5	1	<10	11	0.03	87	<10	2	75	4
1	SW02PN-166s	0.2	2.84	<5	90	0.5	<5	0.08	<1	6	8	40	5.52	0.05	0.61	470	4	0.02	6	950	18	<5	2	<10	20	0.05	109	<10	3	99	7
1	SW02PN-167s	<0.2	2.60	<5	100	0.5	<5	0.07	<1	5	6	24	5.27	0.05	0.64	575	2	0.01	6	680	22	<5	2	<10	9	0.02	97	<10	2	117	5
i -	SW02PN-168s	<0.2	2.17	<5	590	0.5	<5	0.33	<1	6	6	54	4.64	0.07	0.68	690	6	0.01	6	680	22	<5	1	<10	21	0.02	87	<10	3	175	5
1	SW02PN-170s	<0.2	1.76	<5	160	0.5	<5	0.19	<1	6	11	44	4.63	0.06	0.62	545	6	0.01	10	570	32	<5	1	<10	30	0.04	101	<10	2	132	4
	SW02PN-171s	<0.2	2.29	. 5	350	0.5	<5	0.31	<1	ė	. 9	36	4.04	0.06	0.76	1340	8	0.01	11	1080	30	<5	2	<10	29	0.02	76	<10	8	199	5

A .5 gm sample is digested with 5 ml 3:1 HCI/HNO3 at 95c for 2 hours and diluted to 25ml with D.I.H20.

Signed:\_

# Finlay Minerals Ltd

Attention: Warner Gruenwald

Project:

Sample: Soil

# Assayers Canada

8282 Sherbrooke St., Vancouver, B.C., V5X 4R6	Report No	:	2V0313 SJ
Tel: (604) 327-3436 Fax: (604) 327-3423	Date	:	Sep-09-02

# **MULTI-ELEMENT ICP ANALYSIS**

Aqua Regia Digestion

1	Sample Number	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sn ppm	Sr ppm	Ti %	V ppm	W ppm	Y ppm	Zn ppm	Zr ppm
				-							•											· · _									_
	SW02PN-172s		2.31	5	520	1.0	<5	••••	<1	9	14	48	4.48	0.07	0.77	1380		0.02	13		30	<5	3	<10	36	0.03	93	<10	16	170	7
	BM02PN-001	<0.2		+	220	2.0	5		2	16	7	4024	7.73	0.09	0.50	1365	58			1780	70	<5	7	<10	190	0.03	56	10	122	614	25
	BM02PN-002	0.4	1.25	5 15	860	0,5	5		<1	14 7	· 7	78	2.94	0.09	0.22		<2	2 A 1	4		20	<5	1	<10	18	0.01	48	<10	4	95	3
	BM02PN-003	<0.2			640	0.5	<5	0.16	<1		•	25	3.70	0.13	0.60	1955	<2		6		38	<5	1	<10	11	0.01	60	<10	3	80	3
,	BM02PN-004	<0.2	1,18	<5	360	0.5	5	0.06	<1	4	3	18	3.44	0.14	0.23	875	<2	0.01	4	1730	16	<5	1	<10	5	<0.01	51	<10	2	72	3
	BM02PN-005	<0.2	2.81	5	210	1.0	<5	1.30	<1	11	5	34	4.34	0.10	1.28	1435	<2	0.02	6	1200	10	<5	3	<10	82	0.12	107	<10	9	137	4
	BM02PN-006	<0.2	3.32	5	140	1.0	<5	1.57	<1	11	5	29	4.19	0.10	1.37	1125	<2	0.02	. 7	1490	8	<5	4	<10	105	0.15	102	<10	10	124	5
1	BM02PN-007	<0.2	1.05	5	120	0.5	<5	0.05	<1	5	8	39	4.14	0.06	0.25	480	2	0.02	6	900	20	<5	1	<10	3	0.05	94	<10	2	92	3
1	BM02PN-008	<0.2	1.57	10	260	0.5	<5	0.33	<1	6	9	84	3.48	0.09	0.63	925	2	0.02	7	1120	24	<5	1	<10	19	0.03	74	<10	8	264	3
1	BM02PN-009	<0.2	1.39	5	310	0.5	<5	0.27	<1	6	11	71	3.88	0.08	0.51	480	<2	0.02	7	900	20	<5	2	<10	20	0.06	86	<10	3	130	3
				_					- •	-				• • -					-			_							_		_
	BM02PN-010		1.54	5	150	0.5	<5	0.10	<1	7	8	32	4.86	0.07	0.53	2255		0.02		1510	16	<5	1	<10	1	0.03	107	<10	3	148	4
	BM02PN-011	<0.2	1.38	5	120	< 0.5	<5	0.07	<1	3	5	19	3.25	0.05	0.11	485			3	760	12	<5	<1	<10	5	0.02	75	<10	1	61	3
	BM02PN-012	<0.2	1.65	<5	80	0.5	<5	0.07	<1	6	8	43	4.37	0.04	0.35	330	8	0.02	6	480	24	<5	1	<10	25	0.05	107	<10	1	113	3
	BM02PN-013	<0.2	2.04	10	240	0.5	<5	0.06	<1	4	6	89	5.87	0.09	0.47	400	18	0.02	6		56	<5	<1	<10	18	0.02	71	<10	2	89	5
	BM02PN-014	0.2	2.49	<5	100	0.5	<5	0.11	<1	5		125	5.20	0.05	0.41	735	12	0.02		1300	288	<5	1	<10	15	0.04	90	<10	3	132	4
1	BM02PN-016	<0.2	4.09	<5	560	1.0	<5	0.96	<1	6	20	230	3.22	0.09	0.76	920	10	0.02	17	2210	24	<5	1	<10	95	0.01	72	<10	63	165	3
1	BM02PN-017	0.4	2.34	<5	60	0.5	<5	0.14	<1	7	8	49	5.70	0.04	0.48	915	6	0.01	7	850	48	<5	1	<10	29	0.12	92	<10	2	212	6
1	BM02PN-018	0.2	3.48	<5	100	0.5	<5	0.10	<1	4	11	42	4.21	0.04	0.42	865	8	0.01	7	1150	28	· <5	1	<10	22	0.04	68	<10	2	139	4
1	BM02PN-019	0.2	1.60	<5	90	<0.5	<5	0.09	<1	3	5	35	3.62	0.04	0.33	600	4	0.01	4	1100	30	<5	<1	<10	20	0.02	58	<10	1	84	3
I.	BM02PN-020	0.2	1.70	<5	90	0.5	<5	0.08	<1	5	7	94	4.25	0.04	0.42	460	20	0.02	7	740	50	<5	1	<10	23	0.05	74	<10	2	145	3
	BM02PN-021	0.2	1.92	<5	90	0.5	<5	0.08	<1	4	7	60	5.03	0.05	0.34	615	10	0.02	. 7	930	40	<5	<1	<10	19	0.05	74	<10	,	109	A
ì	BM02PN-022	0.2	1.43	<5	130	< 0.5	<5	0.09	<1	3	10	96		0.06	0.39	320	16	0.02	7	830	32	<5	<1	<10	30	0.03	51	<10	2	101	2
1	LBW01PL02	<0.2	4.45	5	180	1.0	<5	0.95	<1	6	17	39		0.07	0.58	395	<2	0.01	18	1220	4	<5	2	<10	136	0.06	49	<10	5	71	9
	LBWPN02-002	<0.2	2.30	20	120	1.0	<5	0.34	<1	10	ģ	20		0.03	1.13	1255	-	0.01	10	1620	8	<5	2	<10	22	0.01	66	<10	9	97	5
ł	LBWPN02-003		1.90	5	160	0.5	<5	0.62	1	10	6	69		0.08	1.06	1780		0.01		1490	32	<5		<10	51	0.02	65	<10	8	289	4
				-				•••••	-		-								•				-		•-		•••		Ū	207	•
ſ	LBWPN02-004	<0.2		<5	120	1.0	<5	0.47	<1	10	12	60	4.81	0.06	0.68	1135		0.01	14	1230	48	<5	3	<10	58	0.01	77	<10	12	240	6
1	LBWPN02-005		2.52	5	120	1.0	<5	1.34	<1	10	3	89	2.98	0.12	0.54	935	2	0.01	4	1600	26	<5	3	<10	160	0.01	38	<10	9	73	3
	LBWPN02-006		1.08	5	320	0.5	< 5 .	0.21	. 2	13	9	22	2.95	0.06	0.18	4650	2	0.01	_ 6	2020	52	5	<1	<10	29	0.01	58	<10	3	147	2
	LBWPN02-007	<0.2	1.85	5	80	0.5	<5	0.43	<1	8	10	38	3.05	0.05	0.86	1225	<2	0.01	10	1340	30	<5	3	<10	49	0.01	55	<10	12	150	4
I		0.2	1.68	5	110	0.5	<5	0.08	<1	3	8	34	3.48	0.07	0.35	455	2	0.02	6	1330	. 28	<5	<1	<10	22	0.02	62	<10	3	69	3

A .5 gm sample is digested with 5 ml 3:1 HCI/HNO3 at 95c for 2 hours and diluted to 25ml with D.I.H20.

Signed:

# **Finlay Minerals Ltd**

Attention: Warner Gruenwald

Project:

Sample: Soil

# **Assayers Canada**

td	8282 Sherbrooke St., Vancouver, B.C., V5X 4R6	Report No	:	2V0313 SJ
wald	Tel: (604) 327-3436 Fax: (604) 327-3423	Date	:	Sep-09-02

### **MULTI-ELEMENT ICP ANALYSIS**

Aqua Regia Digestion

1	Sample Number	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sn ppm	Sr ppm	Ti %	V ppm	W ppm	Y ppm	Zn ppm	Zr ppm
i.	LBWPN02-009	0.2	1.52	<5	130	0.5	<5	0.11	<1	3	7	22	2.57	0.07	0.25	575	2	0.01	5	2160	18	<5	<1	<10	28	0.01	43	<10	2	65	2
i -	LBWPN02-010	<0.2	1.01	5	210	<0.5	5	0.09	<1	1	3	21	2.86	0.17	0.30	225	4	0.02	3	1550	24	<5	<1	<10	76	<0.01	33	<10	2	- 46	3
1	LBWPN02-011	0.6	2.10	5	510	<0.5	5	0.03	<1	1	2	122	5.07	0.21	0.52	470	24	0.02	3	1300	102	<5	1	<10	98	0.01	75	<10	3	133	3
1	LBWPN02-012	0.2	1.80	5	120	<0.5	<5	0.02	<1	2	2	109	4.93	0.06	0.66	725	18	0.01	4	1460	92	<5	1	<10	7	0.01	71	<10	2	250	4
1	LBWPN02-013	0.6	1.68	5	320	<0.5	5	0.04	<1	2	3	194	6.71	0.16	0.49	430	34	0.02	6	1640	102	<5	1	<10	40	0.01	66	10	2	285	4
I	LBWPN02-014	0.2	1.10	5	90	<0.5	<5	0.03	<1	1	3	39	3.35	0.04	0.11	100	12	0.01	3	680	40	<5	<1	<10	11	0.04	87	<10	1	43	2
1	LBWPN02-015	<0.2	1.15	5	250	0.5	5	0.21	1	2	3	190	4.42	0.07	0.41	310	22	0.01	5	1020	54	<5	1	<10	36	0.02	69	<10	12	251	3
1	LBWPN02-016	<0.2	2.13	20	120	0.5	<5	0.26	<1	Ś	18	38	5.23	0.08	0.72	650	2	0.01	11	.1220	54	<5	3	<10	39	0.07	80	<10	4	100	6
1	LBWPN02-017	<0.2	1.44	10	70	0.5	<5	0.07	<1	3	9	15	4.87	0.05	0.26	335	<2	0.01	6	700	30	<5	1	<10	11	0.07	122	<10	2	48	4
I	LBWPN02-018	<0.2	1.44	5	50	0.5	<5	0.07	<1	5	6	12	3.92	0.04	0.32	410	<2	0.01	4	440	20	<5	1	<10	12	0.11	107	<10	2	52	3
1	LBWPN02-019	<0.2	2.13	5	70	0.5	<5	0.11	<1	3	5	, é	4.64	0.03	0.31	400	<2	0.01	4	960	40	<5	1	<10	25	0.11	93	<10	2	49	5
1	LBWPN02-020	<0.2	2.37	10	80	1.0	<5	1.10	<1	9	3	16	3.85	0.09	0.60	960	<2	0.01	5	1340	26	<5	3	<10	107	0.07	88	<10	7	119	3
1	SW02PN-179s	0.6	0.95	<5	360	<0.5	5	0.01	<1	1	<1	150	6.44	0.49	0.08	130	94	0.03	3	1310	44	<5	<1	<10	8	< 0.01	19	<10	3	31	5
1	TP02SP Soll#1	<0.2	0.59	5	330	<0.5	<5	0.08	<1	2	<1	31	2.27	0.16	0.25	105	2	0.02	2	390	16	<5	2	<10	29	0.01	30	<10	2	18	6
1	TP02SP Soll#2	<0.2	0.37	10	190	<0.5	5	0.02	<1	<1	<1	50	0.84	0.09	0.11	20	4	0.01	1	160	42	<5	1	<10	12	<0.01	10	<10	1	11	7

A .5 gm sample is digested with 5 ml 3:1 HCl/HNO3 at 95c for 2 hours and diluted to 25ml with D.I.H20.

Signed:

A N A D		<b>Assayers Canada</b> 8282 Sherbrooke St. Vancouver, B.C. V5X 4R6 Tel: (604) 327-3436 Fax: (604) 327-3423	
	Quality Assaying for over 25 Years		
<u>Geochemical And</u>	<u>ılysis Certificate</u>	2V-0313-SG1	
Company: <b>Finlay Minera</b> Project:	ls Ltd	Sep-09-02	
Attn: Warner Gruenv	vald		
We <i>hereby certify</i> the follow submitted Aug-16-02 by W	ving geochemical analysis of 24 soil samples arner Gruenwald.		
Sample Name	Au ppb		
RB02SP-004	3		
WG02SP-002 WG02SP-003	708 281		
WG02SP-004	81		
RM02PN-001 ON	5	· · · · · · · · · · · · · · · · · · ·	
RM02PN-002 11	1		
RM02PN-003 RM02PN-004	2 3		
RM02PN-005	1		
RM02PN-006	ī	·	
RM02PN-007	3		
RM02PN-008	6		
	11		
RM02PN-009	A 1		
RM02PN-010	<b>41</b> 11		
RM02PN-010 RM02PN-011	11	·	
RM02PN-010 RM02PN-011 RM02PN-012			
RM02PN-010 RM02PN-011 RM02PN-012 RM02PN-013 RM02PN-014	118 17 16		
RM02PN-010 RM02PN-011 RM02PN-012 RM02PN-013 RM02PN-014 RM02PN-015	11 8 17 16 32		•
RM02PN-010 RM02PN-011 RM02PN-012 RM02PN-013 RM02PN-014 RM02PN-015 RM02PN-016	11 8 17 16 32 1		· · · · ·
RM02PN-010 RM02PN-011 RM02PN-012 RM02PN-013 RM02PN-014 RM02PN-015 RM02PN-016 RM02PN-017	11 8 17 16 32 1 2		
RM02PN-010 RM02PN-011 RM02PN-012 RM02PN-013 RM02PN-014 RM02PN-015 RM02PN-016	11 8 17 16 32 1		

(

1

the

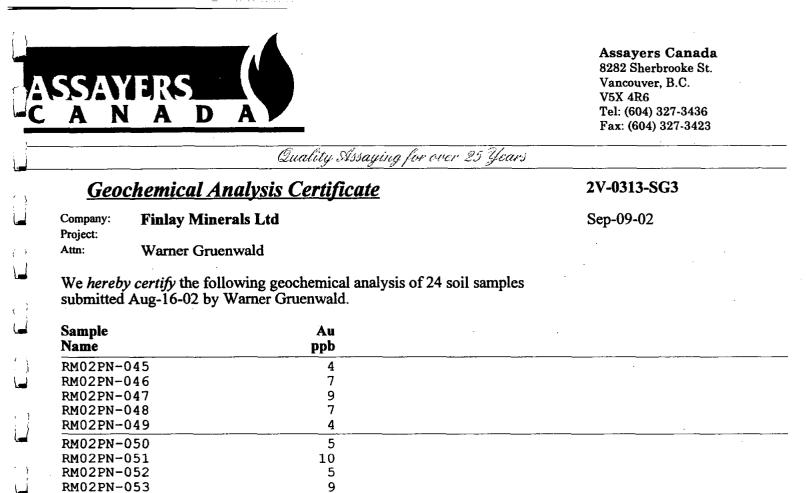


Quality Assaying for over 25 Years

#### **Geochemical Analysis Certificate** 2V-0313-SG2 Sep-09-02 Company: **Finlay Minerals Ltd** Project: Attn: Warner Gruenwald We hereby certify the following geochemical analysis of 24 soil samples submitted Aug-16-02 by Warner Gruenwald. Sample Au ppb Name 2 RM02PN-021 RM02PN-022 18 6 RM02PN-023 20 RM02PN-024 5 RM02PN-025 9 RM02PN-026 7 RM02PN-027 5 RM02PN-028 4 RM02PN-029 RM02PN-030 6 3 RM02PN-031 24 RM02PN-032 19 RM02PN-033 RM02PN-034 LPNA 29 52 RM02PN-035 RM02PN-036 12 RM02PN-037 80 RM02PN-038 48 49 RM02PN-039 27 RM02PN-040 7 RM02PN-041 RM02PN-042 9 9 RM02PN-043 7 RM02PN-044

Certified by

the



4

5

4 5

3

1

1

5

3

6 4

4

27

15

RM02PN-054

RM02PN-055

RM02PN-056 RM02PN-057

RM02PN-058

RM02PN-059

RM02PN-060

RM02PN-061

RM02PN-062

RM02PN-063 RM02PN-064

RM02PN-065 RM02PN-066

SW02PN-002

SW02PN-003

Certified by
--------------

the



# Quality Assaying for over 25 Years

#### Geochemical Analysis Certificate 2V-0313-SG4 Sep-09-02 **Finlay Minerals Ltd** Company: Project: Attn: Warner Gruenwald We hereby certify the following geochemical analysis of 24 soil samples submitted Aug-16-02 by Warner Gruenwald. Au Sample ppb Name 33 SW02PN-004 34 SW02PN-005 SW02PN-006 61 79 SW02PN-008 74 SW02PN-009 51 SW02PN-010 34 SW02PN-011 75 SW02PN-012 34 SW02PN-013 190 SW02PN-015 9 SW02PN-016 16 SW02PN-018 13 SW02PN-019 14 SW02PN-020 22 SW02PN-021 23 SW02PN-022 21 SW02PN-023 22 SW02PN-024 15 SW02PN-025 34 SW02PN-026 92 SW02PN-027 42 SW02PN-029 11 SW02PN-030 20 SW02PN-031

Certified by

H1/



# Quality Assaying for over 25 Years

# Geochemical Analysis Certificate

#### 2V-0313-SG5

Sep-09-02

Company: Project: Attn:

Warner Gruenwald

**Finlay Minerals Ltd** 

# We hereby certify the following geochemical analysis of 24 soil samples submitted Aug-16-02 by Warner Gruenwald.

Sample Name	Au ppb	
SW02PN-032	5	
SW02PN-033	10	
SW02PN-034	10	
SW02PN-036	11	
SW02PN-037	21	
SW02PN-038	10	
SW02PN-039	14	•
SW02PN-040	14	
SW02PN-041	15	
SW02PN-042	25	
SW02PN-046	18	
SW02PN-047	9	
SW02PN-048	76	
SW02PN-049	21	
SW02PN-050	22	
SW02PN-051	10	
SW02PN-053	18	
SW02PN-054	9	
SW02PN-055	13	
SW02PN-056	9	
SW02PN-057	8	
SW02PN-059	4	
SW02PN-062	71	

Certified by

the



ł

# Quality Assaying for over 25 Years

#### **Geochemical Analysis Certificate** 2V-0313-SG6 Sep-09-02 **Finlay Minerals Ltd** Company: Project: Warner Gruenwald Attn: We hereby certify the following geochemical analysis of 24 soil samples submitted Aug-16-02 by Warner Gruenwald. Sample Au ppb Name 69 SW02PN-063 98 SW02PN-064 106 SW02PN-065 129 SW02PN-066 105 SW02PN-067 140 SW02PN-069 989 SW02PN-070 48 SW02PN-072 80 SW02PN-073 80 SW02PN-074 59 SW02PN-075 41 SW02PN-078 SW02PN-079 16 10 SW02PN-080 7 SW02PN-081 11 SW02PN-083 5 SW02PN-085 13 SW02PN-086 7 SW02PN-087 7 SW02PN-088 16 SW02PN-089 18 SW02PN-090 8 SW02PN-092 12 SW02PN-093



# Cheeling Hallough a second Scherich

# Geochemical Analysis Certificate

#### 2V-0313-SG7

Sep-09-02

Finlay Minerals Ltd

Project: Attn: Warne

Company:

Warner Gruenwald

We hereby certify the following geochemical analysis of 24 soil samples submitted Aug-16-02 by Warner Gruenwald.

ple	Au			
e	ppb	 	<u></u>	
2PN-094	9			
2PN-095	13			
2PN-096	28			· · .
2PN-097	12			
2PN-098	84			
2PN-099	30			
2PN-100	20			
2PN-102	24			
2PN-103	20			
2PN-104	31			
2PN-105	40			
2PN-107	12			
2PN-110	44			
2PN-111	26			
2PN-113	19			
2PN-117	11			
2PN-118	23			
2PN-120	125			
2PN-121	17			
2PN-001	25			
2PN-002	22			
2PN-003	86			
2PN-004	42			
2PN-005	11			

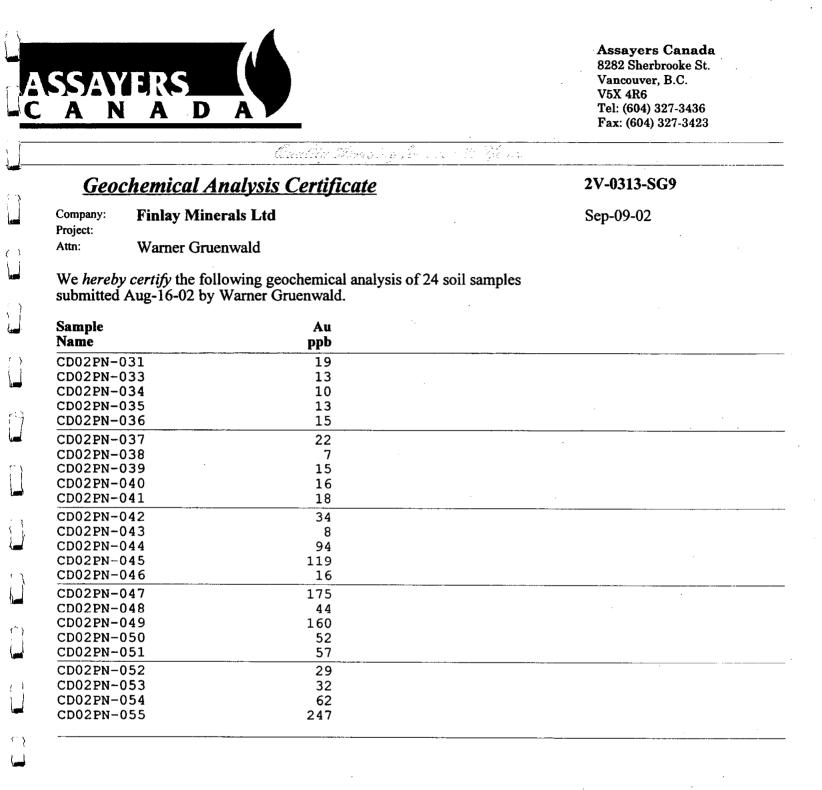
Ħ1~



### Cuclity Assaying for over 25 years

#### **Geochemical Analysis Certificate** 2V-0313-SG8 **Finlay Minerals Ltd** Sep-09-02 Company: Project: Attn: Warner Gruenwald We hereby certify the following geochemical analysis of 24 soil samples submitted Aug-16-02 by Warner Gruenwald. Sample Au Name ppb CD02PN-006 80 23 CD02PN-008 CD02PN-009 59 30 CD02PN-010 7 CD02PN-011 7 CD02PN-012 52 CD02PN-013 56 CD02PN-014 21 CD02PN-015 26 CD02PN-016 20 CD02PN-017 19 CD02PN-018 35 CD02PN-019 17 CD02PN-020 26 CD02PN-021 10 CD02PN-022 CD02PN-023 19 CD02PN-024 16 CD02PN-025 11 14 CD02PN-026 15 CD02PN-027 23 CD02PN-028 12 CD02PN-029 13 CD02PN-030

t t



Certified by

the



Warner Gruenwald

Company: Project: Attn: Assayers Canada 8282 Sherbrooke St. Vancouver, B.C. V5X 4R6 Tel: (604) 327-3436 Fax: (604) 327-3423

Al-

# Quality Assaying for over 25 Years

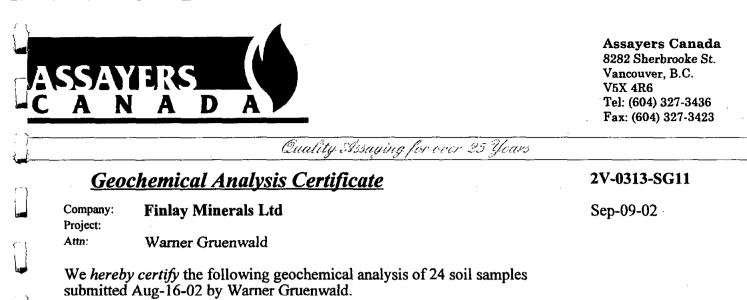
#### 2V-0313-SG10

Geochemical Analysis Certificatepany:Finlay Minerals Ltd

Sep-09-02

We hereby certify the following geochemical analysis of 24 soil samples submitted Aug-16-02 by Warner Gruenwald.

Sample Name	Au ppb	
CD02PN-056	152	
CD02PN-057	75	
CD02PN-058	47	
CD02PN-059	43	
CD02PN-060	66	
CD02PN-061	36	
CD02PN-063	26	
CD02PN-064	22	
CD02PN-065	13	
CD02PN-066	36	· · · · · · · · · · · · · · · · · · ·
CD02PN-067	156	
CD02PN-068	14	
CD02PN-069	17	
CD02PN-070	19	
CD02PN-071	29	
CD02PN-072 JL36N, 70E	17	
CD02PN-074	24	
CD02PN-075	19	
CD02PN-076 <sup>2</sup>	33	
CD02PN-077	262	
CD02PN-078	50	
CD02PN-079	18	
CD02PN-080	302	
CD02PN-081	25	



Sample Name	Au ppb			
CD02PN-085	34	·······		
CD02PN-086	31			
CD02PN-087	35			
CD02PN-088	20			
CD02PN-089	21			
CD02PN-090	39	<u></u>		 
CD02PN-092	42			
CD02PN-093	17		•	
CD02PN-094	28			•
CD02PN-095	16			• •
CD02PN-096 L36 CD02PN-097 1 32	13		<u> </u>	 
CD02PN-097 32	20			
CD02PN-099	6			
CD02PN-100	19			
CD02PN-103	28			
CD02PN-104	5			
CD02PN-108	19			
CD02PN-109	3			
CD02PN-111	14			
CD02PN-112	31			
CD02PN-113	35	<u></u>		
CD02PN-114	33			
CD02PN-117*				
CD02PN-121	6			

\* Sample missing

the



#### Quality Assaying for over 25 years

#### Geochemical Analysis Certificate 2V-0313-SG12 Sep-09-02 **Finlay Minerals Ltd** Company: Project: Attn: Warner Gruenwald We hereby certify the following geochemical analysis of 24 soil samples submitted Aug-16-02 by Warner Gruenwald. Sample Au Name ppb CD02PN-123 11 CD02PN-126 14 CD02PN-127 8 267 CD02PN-129 SW02PN-128 182 194 SW02PN-129 SW02PN-130 176 SW02PN-131 180 209 SW02PN-132 SW02PN-133 158 SW02PN-134 185 9 SW02PN-136 SW02PN-137 15 SW02PN-138 31 SW02PN-140 64 SW02PN-141 70 SW02PN-142 16 29 SW02PN-143 SW02PN-144 32 SW02PN-147 22 SW02PN-151s 14 SW02PN-154s 24 SW02PN-155s 6 SW02PN-156s 13

Certified by

the

A N A D		<b>Assayers Canada</b> 8282 Sherbrooke St. Vancouver, B.C. V5X 4R6 Tel: (604) 327-3436 Fax: (604) 327-3423
	Quality Assaying for over 25 Years	
<u>Geochemical A</u>	Analysis Certificate	2V-0313-SG13
Company: Finlay Min Project:	erals Ltd	Sep-09-02
Attn: Warner Gru	ienwald	
submitted Aug-16-02 by Sample Name	Ilowing geochemical analysis of 24 soil samples Warner Gruenwald. Au ppb	
SW02PN-157s	15	· · · · · · · · · · · · · · · · · · ·
SW02PN-158s	6	
SW02PN-159s SW02PN-160s	6	
SW02PN-161s	7	
SW02PN-162s	3	
	8	
SWUZPN-103S	6	
SW02PN-163s SW02PN-164s	U U	
SW02PN-164s SW02PN-165s	5	
SW02PN-164s		
SW02PN-164s SW02PN-165s SW02PN-166s SW02PN-167s	5	
SW02PN-164s SW02PN-165s SW02PN-166s SW02PN-167s SW02PN-168s	5 6 10 6	
SW02PN-164s SW02PN-165s SW02PN-166s SW02PN-167s SW02PN-168s SW02PN-168s SW02PN-170s	5 6 10 6 11	
SW02PN-164s SW02PN-165s SW02PN-166s SW02PN-167s SW02PN-168s SW02PN-168s SW02PN-170s SW02PN-171s	5 6 10 6 11 25	
SW02PN-164s SW02PN-165s SW02PN-166s SW02PN-167s SW02PN-168s SW02PN-170s SW02PN-171s SW02PN-172s	5 6 10 6 11 25 14	
SW02PN-164s SW02PN-165s SW02PN-166s SW02PN-167s SW02PN-168s SW02PN-170s SW02PN-171s SW02PN-172s BM02PN-001	5 6 10 6 11 25 14 99	
SW02PN-164s SW02PN-165s SW02PN-166s SW02PN-167s SW02PN-168s SW02PN-170s SW02PN-171s SW02PN-171s SW02PN-172s BM02PN-001 BM02PN-002	5 6 10 6 11 25 14 99 2	
SW02PN-164s SW02PN-165s SW02PN-166s SW02PN-167s SW02PN-168s SW02PN-170s SW02PN-171s SW02PN-171s SW02PN-172s BM02PN-001 BM02PN-002 BM02PN-003	5 6 10 6 11 25 14 99 2 11	
SW02PN-164s SW02PN-165s SW02PN-166s SW02PN-167s SW02PN-168s SW02PN-170s SW02PN-171s SW02PN-171s SW02PN-001 BM02PN-001 BM02PN-002 BM02PN-003 BM02PN-004	5 6 10 6 11 25 14 99 2 11 6	
SW02PN-164s SW02PN-165s SW02PN-166s SW02PN-167s SW02PN-168s SW02PN-170s SW02PN-171s SW02PN-172s BM02PN-001 BM02PN-002 BM02PN-003 BM02PN-004 BM02PN-005	5 6 10 6 11 25 14 99 2 11 6 4	
SW02PN-164s SW02PN-165s SW02PN-166s SW02PN-167s SW02PN-168s SW02PN-170s SW02PN-171s SW02PN-172s BM02PN-001 BM02PN-002 BM02PN-003 BM02PN-004 BM02PN-005 BM02PN-006	5 6 10 6 11 25 14 99 2 11 6 4 4	
SW02PN-164s SW02PN-165s SW02PN-166s SW02PN-167s SW02PN-168s SW02PN-170s SW02PN-171s SW02PN-172s BM02PN-001 BM02PN-002 BM02PN-003 BM02PN-004 BM02PN-005	5 6 10 6 11 25 14 99 2 11 6 4	

Certified by

the



Quality Assaying for over 25 Years

#### **Geochemical Analysis Certificate** 2V-0313-SG14 **Finlay Minerals Ltd** Company: Sep-09-02 Project: Attn: Warner Gruenwald We hereby certify the following geochemical analysis of 24 soil samples submitted Aug-16-02 by Warner Gruenwald. Sample Au Name ppb BM02PN-010 4 BM02PN-011 4 BM02PN-012 3 BM02PN-013 13 19 BM02PN-014 7 BM02PN-016 BM02PN-017 10 BM02PN-018 10 BM02PN-019 6 BM02PN-020 9 12 BM02PN-021 BM02PN-022 17 8 LBW01PL02 GOLD LBWPN02-002 15 LBWPN02-003 9 LBWPN02-004 16 LBWPN02-005 14 LBWPN02-006 11 LBWPN02-007 9 LBWPN02-008 45 17 LBWPN02-009 LBWPN02-010 102 LBWPN02-011 62 LBWPN02-012 423

tt/



# Geochemical Analysis Certificate

**Finlay Minerals Ltd** 

Warner Gruenwald

Company:

Project:

Attn:

t

.

1

2V-0313-SG15

Sep-09-02

We hereby certify the following geochemical analysis of 11 soil samples submitted Aug-16-02 by Warner Gruenwald.

.

Sample Name	Au ppb	·
LBWPN02-013	90	
LBWPN02-014	101	
LBWPN02-015	101	
LBWPN02-016	54	· · ·
LBWPN02-017	28	· · ·
LBWPN02-018	13	
LBWPN02-018 GOLP	5	
LBWPN02-020	7	
SW02PN-179s	173	
TP02SP Soil#1	22	
TP02SP Soil#2	21	

the

Assayers Canada												
Finlay Minerals Ltd	8282 Sherbrooke St., Vancouver, B.C., V5X 4R6	Report No	: 2V0313 CJ									
Attention: Warner Gruenwald	Tel: (604) 327-3436 Fax: (604) 327-3423	Date	: Sep-09-02									
Project:												
Sample: Panned Conc	MULTI-ELEMENT ICP ANALYSIS											

Aqua Regia Digestion

Sample	Ag	AI	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sn	Sr	Ti	V	W	Y	Zn	Zr	
Number	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	%	%	ppm	ppm	%	ppm	%	ppm	ppm	ppm	ppm	ppm							
SW02PN-124	<0.2	1.96	<5	290	1.5	<5	0.34	<1	45	144	1347	5.76	0.20	0.52	1265	20	0.04	15	870	24	<5	3	<10	51	0.07	118	<10	26	115	6	

A .5 gm sample is digested with 5 ml 3:1 HCI/HNO3 at 95c for 2 hours and diluted to 25ml with D.I.H20.

-

ί.

T

Page 1 of 1

~

Signed:

, -1-

.

-

2

Ĩ

SAVIRS A N A I			Assayers 8282 Sherb Vancouver, V5X 4R6 Tel: (604) 3 Fax: (604) 3	rooke St. B.C. 27-3436
	Quality Assays	ng for over 25 Yea	+3	
<b>Geochemical</b>	Analysis Certificate		2V-0313-C	G1
Project: Attn: Warner G			Sep-09-02	
We hereby certify the submitted Aug-16-02	following geochemical analy by Warner Gruenwald.	sis of 1 panned cond	c sample	
Sample Name	Au ppb			
SW02PN-124	17			

أسرا

....

.

the

<b>inlay Mi</b> ttention: Wa									·			<b>Ass</b> orbrooke 504) 327	e St., V	Vanco		B.C.,									<b>Rep</b> e Date	ort Ne	io :		/ <b>0313</b> ep-09-(	
oject: ample: Silt												'I-ELF	EME	ent i		ANA														
nple nber	Ag ppm	AI %	As ppm	Ba ppm	Be ppm	Bi 1 ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sn ppm	Sr ppm	Ti %	V ppm	W ppm	Y ppm	Zn ppm	Zr
PN-02	<0.2 <u> </u>	0.82	2 <5	5 100	0 <0.5	5 20	0 0.02	2 <1	1	1 <1	446	š <sup>∵</sup> >15.00	0.05	0.08	8 25	2	0.01	10	1590	48	5	5 <1	1 <10	0 <1	1 0.01	39	) <10	4	4 27	
																							÷							
																													·	
					·																									
								- 4. Tepper	é an fis										·											
														,		-														
A .5 gm at 95c f	n sample is o for 2 hours a	digest and di	ted wit	ih 5 ml to 25m	3:1 HC I with E	CI/HNC D.I.H20	)3 ).	•																				1_	·	
														ge 1 of	1				t.	Sigr	ned:						_#	Z		_

SAY A N	ERS A D A	<b>Assayers Canada</b> 8282 Sherbrooke St. Vancouver, B.C. V5X 4R6 Tel: (604) 327-3436 Fax: (604) 327-3423
	Quality Assaying for over 25	Years
Geod	<u>chemical Analysis Certificate</u>	2V-0313-LG1
Company: roject:	Finlay Minerals Ltd	Sep-09-02
Attn:	Warner Gruenwald	
We <i>hereb</i> y submitted	<i>certify</i> the following geochemical analysis of 1 silt san Aug-16-02 by Warner Gruenwald.	nple
Sample	Au	
Name	ррь	

1

. Lund

: .

the

	Assayers Canada		
Finlay Minerals Ltd	8282 Sherbrooke St., Vancouver, B.C., V5X 4R6	<b>Report No</b>	: 2V0313 RJ
Attention: Warner Gruenwald	Tel: (604) 327-3436 Fax: (604) 327-3423	Date	: Sep-09-02
Project:			
Sample: Rock	MULTI-ELEMENT ICP ANALYSIS		

### **MULTI-ELEMENT ICP ANALYSIS**

Aqua Regia Digestion

i	Sample Number	Ag ppm	A) %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Рb ppm	Sb ppm	Sc ppm	Sn ppm	Sr ppm	Ti %	V ppm	W ppm	Y ppm	Zn ppm	Zr ppm
	RB02PN-01	0.6	0.43	5	2310	<0.5	<5	0.09	<1	3	106	18	0.65	0.27	0.16	275	2	0.01	. 4	310	10	<5	1	<10	64	<0.01	7	<10	٦	29	6
i i	RB02PN-03	<0.2		5	170	<0.5	<5	0.01	<1	1	87	29		0.22	0.02	15		0.02	4	80	2	·	<1	<10	1	<0.01	6	<10	1	7	8
1	RB02PN-04	<0.2		<5	90	0.5	<5	0.34	<1	11	81	13	6.45	0.11	1.43	690		0.06	6		10	5	5	<10	37	0.13	85	<10	5	62	15
1	RB02PN-05	<0.2	1.56	<5	430	0.5	<5	0.32	<1	6	72	26	4.02	0.15	1.02	595		0.07	5		4	<5	5	<10	55	0.16	76	<10	6	55	14
I.	RB02PN-06	<0.2	1.16	<\$	140	0.5	<5	0.15	<1	5	59	31	3.43	0.17	0.67	380	32	0.04	4	730	10	<5	3	<10	19	0.15	45	<10	5	82	12
1	RB02PN-07	2.0	1.14	<5	160	<0.5	5	0.04	<1	1	57	49	4.13	0.22	0.79	720	2	ò.03	4	850	26	<5	2	<10	<1	0.02	39	<10	3	109	10
1	RB02PN-08	0.6	0.92	- 5	160	<0.5	5	0.38	<1	2	39	23	3.38	0.44	0.21	165	4	0.02	4	<b>940</b>	8	<5	1	<10	2	0.02	21	<10	4	30	20
1	RB02PN-09	0.6	0.19	10	540	<0.5	<5	0.01	<1	1	124	15	1.53	0.22	0.02	35	8	0.01	5	250	18	<5	<1	<10	16	0.01	3	<10	1	11	5
1	RB02PN-10	1.4	0.21	5	130	<0.5	5	0.01	14	4	148	26	2.65	0.24	0.02	20	14	0.01	6	340	1128	<5	<1	<10	15	<0.01	4	40	1	2017	6
1	RB02PN-11	0.4	0.24	10	100	<0.5	5	0.01	<1	j <b>1</b>	128	10	2.12	0.20	0.02	20	24	0.01	5	200	8	<b>~</b> 5	<1	<10	<1	< 0.01	4	<10	1	9	6
										*!r																					
1	RB02PN-12	<0.2		<\$	300	<0.5	<5	0.08	<1	`» <b>1</b>	61	36	3.57	0.16	0.73	605		0.04	4	720	4	<Ś	2	<10	9	0.02	33	<10	4	64	4
1	RB02PN-13		0.15	5	980	<0.5	5	0.02	<1	ີ 2	168	11		0.11	0.02	30	146	0.02	6	80	8	<5	<1	<10	80	<0.01	1	<10	1	19	5
1	RB02PN-14		0.80	<5	180	0.5	<5	0.16	<1	2	41	9	4.02		1.01	540	2	0.04		1290	76	<5	2	<10	5	0.09	57	<10	4	120	18
I	RB02PN-15	<0.2		5	150	<0.5	5	0.31	<1	2	161	10	1.09		0.19	410		0.04		220	20	. 5	1	<10	14	0.01	8	<10	5	119	23
1	RB02PN-16	<0.2	1.15	15	350	0,5	5	0.15	<1	4	35	15	7.14	0.26	0.53	895	18	0.03	5	2480	26	<5	2	<10	100	0.03	68	<10	6	228	15
:	R802PN-17	1.2	1.15	<5	620	0.5	<5	1.67	14	3	56	227	2.40	0.22	0.71	2640	2	0.01	4	540	1994	<5	1	<10	57	<0.01	17	80	11	4264	15
:	RB02PN-18	0.6	1.99	10	110	0.5	<5	0.51	1	7	20	30	6.00	Ó.10	1.52	1535	<2	Ó.07	4	1260	42	5	7	<10	223	0.23	124	<10	5	235	12
	RB02PN-19	<0.2	2.80	<5	90	1.0	<5	0.62	<1	10	17	46	6.54	0.14	1.91	1230	· <2	0.08	8	1520	50	<5	9	<10	63	0,28	176	<10	.9	159	13
	RB02PN-20	<0.2	0.30	<5	210	<0.5	<5	0.02	<1	1	85	8	1.64	0.25	0.05	25	4	0.06	3	380	12	<5	1	<10	16	0.03	10	<10	1	7	18
	RB02PN-21	<0.2	0.3 <del>6</del>	<5	400	<0.5	10	0.04	<1	1	40	56	8.59	0.24	0.02	<5	6	<b>0.02</b>	5	1470	42	5	<1	<10	85	<0.01	29	<10	1	11	14
	RB02PN-22	0.4	1.39	<5	320	0.5	<5	0.13	<1	3	37	42	3. <del>6</del> 1	0.19	0.90	610	2	0.06	3	720	4	<b>~</b> 5	3	<10	35	0.12	46	<10	3	81	12
	RB02PN-23	<0.2	1.27	<5	220	<0.5	<5	0.09	<1	3	58	177	3.96	0.20	0.92	555	2	0.05	4	710	4	<5	3	<10	24	0.08	68	<10	4	76	11
	RB02PN-24	<0.2	0.88	<5	60	0.5	<5	0.22	<1	7	111	23	3.10	0.20	0.40	615	8	0.03	5	710	30	<5	2	<10	3	0.08	52	<10	8	93	8
	RB02PN-25	0.4	0.76	50	130	<0.5	<5	0.09	<1	4	47	40	3.69	0.20	0.58	305	`<2	0.06	. 3	920	12	5	1	<10	13	0.07	39	<10	4	64	9
	RB02PN-26	0.2	1.29	<5	100	0.5	<5	0.25	1	2	75	24	3.38	0.16	0.78	640	4	0.07	<b>4</b>	780	10	<5	2	<10	35	0.06	48	10	4	191	12
	RB02PN-273	<0.2	1.23	30	130	<0.5	<5	0.21	<1	3	53	4	3.23	0.23	0.96	520	<2	0.04	5	1090	22	<5	1	<10	13	0.04	35	<10	5	74	10
	RB02PN-28	0.4	1.28	<5	400	0.5	<5	0.29	<1	3	78	15	4.15	0.15	0.79	675	12	0.05	4	910	34	<b>&lt;</b> 5	2	<10	40	0.11	47	<10	4	66	24
	RB02PN-29	0.2	1.36	<5	240	0.5	<5	0.54	<1	5	82	107	2.33	0.13	1.15	1265	2	0.02	5	1030	4	<5	1	<10	50	0.07	29	<10	5	114	10
	RB02PN-30	0.4	1.21	<5	380	0.5	<5	0.20	<1	4	59	45	3.15	0.27	0.62	935	4	0.04	3	670	16	<5	2	<10	25	0.05	26	10	4	217	13
	RB02PN-31	0.8	1.31	<5	180	0.5	<5	0.22	<1	3	71	29	3.00	0.16	0.86	1145	6	0.05	3	610	36	<5	2	<10	61	0.17	41	<10	4	117 <	10

A .5 gm sample is digested with 5 ml 3:1 HCI/HNO3 at 95c for 2 hours and diluted to 25ml with D.1.H20.

1

Page 1 of 9

Signed:\_

			~		- 					,	L				ers C	i. Canad		<b>.</b>							Ĺ	;			Ĺ			
	Finlay Mine	rals I	Ltd								82	282 Shei		-			•	75X	4R6							R	eport	No	:	2V0313	3 RJ	
!	Attention: Warne			d								Tel: (6	04) 32	27-34	36 Fa	IX: (604	) 327-	-342	.3							D	ate		:	Sep-09	9-02	
1	Project:								H				ŗ			•	•															
1	Sample: Rock										N	MULT				-		LYS	SIS													
													Ac	qua R	egia D	igestio	n															
	Sample Number	Ag ppm	AI %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Mg %	Mn ppm	Mo I ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sn ppm	Sr ppm	Ti %	V ppm	W ppm	Y ppm	Zn ppm	Zr ppm	
;	RB02PN-32	0.6	0.83	<5	220	<0.5	<5	0.04	<1	3	56	24	3.36	0.20	0.55	665	6 (	0.02	4	1000	136	<5	1	<10	27	<0.01	27	<10	3	88	14	
;	RB02PN-33	1.0	0.98	<5	110	<0.5	<5	0.32	1	3	68	46	3.61	0.19	0.85	980	2 (	0.03	5	960	28	<5	1	<10	15	0.04	30	10	4	273	10	
l -	RB02PN-34	0.8	0.79	<5	160	<0.5	<5	0.13	<1	3	79	110	4.31	0.21	0.51	665	16 (	0.02	4	700	80	<5	2	<10	8	0.03	35	<10	2	108	7	
1	R802PN-35	0.2	0.89	ʻ <5	140	0.5	<5	0.52	<1	6	86	853	2.22	0.10	0.63	590	2 (	0.03	5	690	6	<b>&lt;</b> 5	1	<10	53	0.08	32	<10	9	128	12	
1	RB02PN-36	0.2	1.00	<5	130	0.5	<5	0.19	<1	4	61	155	2.57	0.15	0.67	670	94_0	0.03	4	510	10	<5	3	<10	13	0.09	41	<10	6	96	17	
1	RB02PN-37	<0.2	1.52	<5	280	<0.5	<5	0.08	<1	1	25	8	5.18	Ô.19	1.52	1005	2 (	0.03	з	1180	26	<5	3	<10	21	0.03	60	<10	3	84	- 17	
1	RB02PN-38		0.19	5	1820		<5	0.02	<1	1	148	15		0.23	0.02	55	14 (		5	260	352		<1	<10	103	<0.01	3	<10	2	24	3	
	RB02PN-39		1.89	5	100	0.5	<5	0.16	1	11	63	118		0.24	1.61	1325	2 (		15		12	<5	5		4	0.10		<10	6	215	13	
1	RB02PS-01		0.72	10	290	0.5	<5	0.15	<1	2	39	3			0.43	420	14 (			1680	128	<5	3		22	0.14		<10	3	63	10	
:	R802PS-02	1.6	0.88	10	250	<0.5	<b>&lt;</b> 5	0.07	<1	2	39	127	5.54	0.36	0.57	1480	12 0	0.03	4	1510	382	<5	1	<10	15	<0.01	40	10	5	304	11	
1	BB0205-02	4.2	0.26	ć	220	20 E	5	1 02	+	2	49	72	2 52	0.26	0.07	665	20 8	ñ 01	2	700	00			~10	70	-0.01	10	10		774		

R802PS-02	1.6 0.88	10	250	<0.5	<b>&lt;</b> 5	0.07	<1	2	39	127	5.54 0.36	0.57	1480	12 0.03	4	1510	382	<5	1	<10	15	<0.01	40	10	5	304	11
RB02PS-03	4.2 0.36	5	330	<0.5	5	1.02	1	2	48	23	2.53 0.26	0.07	665	30 0.01	3	780	88	<5	1	<10	29	<0.01	10	10	6	274	6
RM02PN-01	0.2 0.92	<ŝ	3400	0.5	<5	0.54	<1	9	96	1013	1.95 0,17	0.53	715	2 0.03	5	680	202	<5	1	<10	270	0.02	27	<10	15	66	14
RM02PN-02	0.2 1.52	<5	180	0.5	<5	0.66	<1	11	71	222	2.80 0.15	1.20	990	2 0.03	5	940	4	<5	2	<10	69	0.10	46	<10	8	126	20
RM02PN-03	<0.2 1.37	.<5	240	0.5	<5	1.07	<1	9	70	365	3.23 0.16	1.10	820	<2 0.03	4	920	4	<5	3	<10	56	0.09	65	<10	11	90	20
RM02PN-04	0.8 1.34	<5	120	0.5	5	0.19	<1	12	24	549	10.90 0.16	0.65	325	72 0.03	8	1610	20	<5	2	<10	<1	0.07	104	<10	7	38	18
RM02PN-05	0.4 0.37	<\$	2000	<0.5	<5	0.01	<1	1	91	45	1.04 0.16	0.13	75	4 0.03	4	280	78	<5	1	<10	479	0.01	11	<10	1	19	10
RM02PN-06	0.4 0.95	<5	940	<0.5	5	0.02	<1	1	34	82	4.11 0.21	0.50	290	2 0.03	3	1260	32	<5	1	<10	44	<0.01	43	<10	3	61	10
RM02PN-07	0.6 0.28	<5	850	<0.5	<5	0.01	<1	<1	116	21	1.56 0.28	0.03	25	6 0.05	4	430	36	<5	<1	<10	31	<0.01	7	<10	1	10	11
RM02PN-08	0.6 0.29	<5	370	<0.5	5	0.01	<1	<1	87	22	2.03 0.17	0.10	90	4 0.03	3	710	40	<5	1	<10	17	<0.01	9	<10	2	16	7
RM02PN-09	0.2 0.39	45	200	<0.5	5	0.01	<1	<1	90	21	6.30 0.46	0.02	15	6 0.04	5	890	496	<5	<1	<10	29	<0.01	27	<10	<1	28	14
RM02PN-10	0.2 1.05	5	190	0.5	<5	0.01	<1	5	37	9	4.31 0.18	û.77	520	<2 0.06	3	760	22	<5	7	<10	18	0.28	97	<10	2	76	18
RM02PN-11	0.2 1.88	<5	160	1.0	<5	0.18	<1	8	26	14	5.19 0.16	1.34	1085	<2 0.05	3	1230	16	<5	6	<10	10	0.35	112	<10	6	134	18
RM02PN-12	0.2 1.46	<5	110	0.5	<5	0.04	<1	5,	48	100	2.76 0.14	0.75	1290	2 0.03	4	370	192	<5	3	<10	3	0.04	41	10	6	260	26
RM02PN-13	<0.2 0.35	<5	370	<0.5	5	0.01	<1	1	73	·14	2.44 0.36	0.07	25	<2 0.08	3	570	14	<5	1	<10	11	0.02	11	<10	1	10	25
RM02PN-14	0.8 0.18	<5	1160	<0.5	<5	0.01	<1	1	167	5	0.76 0.19	0.01	20	50 0.01	6	70	10	<5	<1	<10	17	<0.01	2	<10	1	7	4
RM02PN-15	0.2 0.21	5	1960	<0.5	<5	0.01	<1	1	118	3	0.32 0.19	0.01	15	2 0.01	4	170	2	<5	<1	<10	82	<0.01	2	<10	1	8	3
RM02PN-16	0.2 0.65	30	1040	0.5	5	0.09	<1	4	50	10	2.46 0.24	0.14	105	4 0.04	3	410	44	<5	1	<10	69	<0.01	9	<10	7	63	15
RM02PN-17	<0.2 0.30	<5	190	0.5	<5	0.93	1	4	70	7	2.27 0.11	0.24	495	<2 0.04	5	570	14	<5	2	<10	9	0.02	47	<10	6	50	19
RM02PN-18	>200.0 1.72	15	150	1.0	<5	2.56	9	11	24	>10000	3.34 0.08	1.77	1080	<2 0.05	5	2740	78	<5	13	<10	45	0.27	95	<10	18	85	28
RM02PN-19	1.0 0.83	10	420	1.0	<5	0.14	<1 .	7	18	129	3.62 0.34	0.18	155	<2 0.05	2	1090	. 26	<5	4	<10	26	0.31	38	<10	6	35	21

A .5 gm sample is digested with 5 ml 3:1 HCI/HNO3 at 95c for 2 hours and diluted to 25ml with D.I.H20.

Page 2 of 9

Signed:

.

.

<b>Finlay Mine</b>	rals I	Ltd								82	282 She	rbrook	e St.,	Vanc	ouver, i	B.C., '	V5X	4R6							Re	eport	No	: :	2V0313	3 R.
Attention: Warne			d								Tel: (6															ate		:	Sep-09	
Project:											`	,			,	,	-													
5											<b></b>	тта	17 B. 41		ton		<b>T X</b> 74	oto												
Sample: Rock										N	<b>IULT</b>	I-EL	EMI	ENT	ICP A	INA	LYS	515												
											·	Ac	jua R	egia D	igestio	n <sub>.</sub>														
Sample Number	Ag ppm	AI %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Mg %	. Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sn ppm	Sr ppm	Ti %	V ppm	W ppm	Y ppm	Zn ppm	Z pp
WG02PN-01	0:6	1.08	<5	190	0.5	<5	0.20	<1	5	30	21	3.75	0.24	0.68	665	6	0.06	4	980	18	<5	2	<10	44	0.12	44	<10	5	93	
WG02PN-02	0.6	1.52	5	360	0.5	<5	0.30	<1	4	37	26	4.79	0.16	1.11	1925	2	0.03	4	1250	18	<5	3	<10	25	0.15	56	<10	5	242	
WG02PN-03	0.2	1.07	<5	180	0.5	<5	0.20	<1	4	45	7	3.96	0.13	1.12	780	<2	0.06	2	1050	156	<5	2	<10	26	0.21	49	<10	4	143	
WG02PN-04	0.2	0.31	5	190	<0.5	<5	0.01	<1	<1	142	3	0.95	0.28	0.03	35	4	0.04	4	340	358	<5	1	<10	18	<0.01	4	<10	2	10	
WG02PN-05	1.6	1.53	50	180	<0.5	<5	0.02	<1	<1	40	21	4.80	0.31	1.74	2055	2	0.05	2	1020	236	<5	2	<10	18	<0.01	53	<10	3	170	
WG02PN-06	0.2	1.88	<5	240	0.5	<5	0.06	<1	2	44	35	4.92	0.42	1.45	770	2	0.04	3	1660	46	<5	3	<10	16	0.03	66	<10	8	121	
WG02PN-07	0.2	0.70	<5	80	<0.5	5	0.01	<1	1	128	51	5.39	0.23	0.25	205	4	0.03	5	200	10	<5	1	<10	<1	0.01	87	<10	<1	26	
WG02PN-08		0.57	<5	80			1	<1	1	120	73		0.23	0.15	145		0.03	5		8	<5	1	<10	<1	0.02	62	<10	1	20	
WG02PN-09		0.30	-	550		-	0.01	<1	<1	160	21	1.05	0.26	0.01	20	-	0.02	5		6	<5	<1	<10	13	0.01	7	<10		3	
WG02PN-10	<0.2	1.38	<5	220	0.5	<5	0.09	<1	5	43	45	4.49	0.25	0.98	545	10	0.05	3	800	12	<5	5	<10	11	0.15	82	<10	4	86	
WG02PN-11	0.2	0.27	<5	660	<0.5	<5	0.01	<1	<1	70	18	1.95	0.21	0.02	10	8	0.01	3	170	4	<5	<1	<10	1	0.02	4	<10	<1	4	
WG02PN-12	<0.2	0.71	<5	630	<0.5	5	0.01	<1	1	77	64	3.78	0.23	0.26	115	6	0.08	4	640	12	<5	1	<10	29	0.04	28	<10	1	18	
WG02PN-13	<0.2	1.31	<5	40	<0.5	10	0.01	<1	23	59	222	12.07	0.46	0.32	250	2	0.02	7	350	16	<5	<1	<10	<1	0.05	39	<10	<1	21	
WG02PN-14	<0.2	0.45	<5	780	<0.5	5	0.01	<1	1	88	25	1.16	0.21	0.14	40	16	0.03	3	190	- 4	<5	<1	<10	13	<0.01	7	<10	3	S	
WG02PN-15	0.2	1.12	<5	150	<0.5	<5	0.03	<1	13	99	225	4.38	0.70	0.35	270	18	0.03	7	410	12	<5	1	<10	<1	0.04	23	<10	3	36	
WG02PN-16	-	0.68	5	290		5	0.02	<1	1	67	109	3.73		0.15	80		0.03	4		10	<5	1	<10	14	0.04	20	<10	1	14	
WG02PN-17		1.35	<5	100		<5	0.34	<1	5	51	120		0.23	0.67	915		0.04	5		14	<5	3		58	0.17	40	<10	7	83	
WG02PN-18		1.68	<5	300		<5	0.23	<1	4	37	80		0.29	1.05	1560		0.02		1170	10	<5	3	<10	17	0.03	56	<10	6	134	
WG02PN-19		0.37	30	330		10	0.01	<1	1	35	17		0.17	0.02	20		0.01		400	16	<5	1	<10	6	< 0.01	10	<10	2	21	
WG02PN-20	<0.2	0.26	<5	370	<0.5	5	<0.01	<1	<1	83	5	1.00	0.01	<0.01	10	4	0.01	4	110	2	<5	<1	<10	23	<0.01	4	<10	<1	4	
WG02PN-21		1.47	<5	290		<5	0.37	<1	4	54	147		0.13	0.90	810		0.04	5	860	12	5	3	<10	29	0.07	56	<10	6	137	
WG02PN-22		0.87	<5	60		<5	0.21	<1	4	32	6		0.31	0.54	350		0.03	3	860	22	<5	3	<10	3	0.23	30	<10	7	29	
WG02PN-23		0.25	<5	650		5		<1	<1	49	<1		0.23	0.01	10		0.02	2	190	16	<5	1			< 0.01	. 4	<10	1	5	
WG02PN-24		2.02	<5	120		<5	0.21	<1	4	37	28		0.15	1.54	1620		0.05	3	530	24	<5	3	<10	46	0.25	59	<10	4	119	
WG02PN-25	0.6	0.59	<5	90	_ <0.5	5	0.05	<1	6	58	37	3.64	0.36	0.21	135	.52 (	0.02	5	430	12	<5	<1	<10	44	0.02	11	<10	5	33	
WG02PN-26	<0.2	1.98	<5	130	0.5	<5	0.69	<1	1	38	14	2.75	0.15	0.70	270	6 (	0.03	2	800	6	<5	5	<10	96	0.12	67	<10	4	31	
WG02PN-27	<0.2	1.43	<5	320	0.5	< S	0.19	<1	3	46	10	3.60	0.26	0.73	610	4 (	0.05	3	800	20	<5	4	<10	30	0.13	57	<10	4	53	
WG02PN-28	<0.2	1.29	<5	100	<0.5	<5	0.13	<1	4	53	8	3.71	0.49	0.83	305	2 (	0.03	4	1130	12	<5	2	<10	<1	0.01	30	<10	6	47	
WG02PN-29	<0.2	0.40	30	190	<0.5	5	0.02	<1	<1	116	12	3.95	0.19	0.01	10	10 (	0.02	5	1370	42	<5	<1	<10	26	<0.01	14	<10	1	9	
WG02PN-30	0.2	1.64	<5	80	0.5	<5	0.63	1	6	102	47	2 1 2	0.12	1 37	1595	4 (	0.00	*	830	26	<5	3	<10	59	0.25	62	<10	7	177	

A .5 gm sample is digested with 5 ml 3:1 HCl/HNO3 at 95c for 2 hours and diluted to 25ml with D.I.H20.

Page 3 of 9

Signed:\_

E

E

	Finlay N	Minera	ale T	.td								82	282 She		•		Canad ouver, H		V5X	4R6							Re	port	No	: :	2V0313	R.J
	Attention:				4										-		ax: (604										Da	•	- 10		Sep-09	
		wanter	Gruci	1 ** a.iv	4								101. ((	/04) 51		50 11	un. (00-	, 52	-542								Da	ic.		•	3cp-03	-02
	roject:																															
1	Sample: Re	ock										N	<b>IULT</b>	<b>I-EL</b>	EM	ENT	ICP A	ANA	LY	SIS												
														Ac	jua R	egia E	Digestio	n														
																							·									
	Sample Number		Ag ppm	AI %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sn ppm	Sr ppm	Ti %	V ppm	W ppm	Y ppm	Zn ppm	Zr ppm
	WG02PN-31	1	1.8	0.36	<5	230	<0.5	5	0.06	3	2	160	172	1.91	0.22	0.07	225	10	0.01	6	150	2852	5	<1	<10	39	0.02	4	20	3	871	:
	NG02PS-01		<0.2	1.33	10	660	<0.5	<5	0.20	<1	<1	56	3		0.23	0.75	1085	2	0.04	3	1370	24	<5	4	<10	32	0.06	54	<10	9	91	1
	VG02PS-02			0.81	5	600	<0.5	<5	0.04	<1	1	36	2		0.27	0.41	575		0.05		1280	146	<5	2	<10	29	0.02	40	<10	4	135	1
	M02PN-20		<0.2		<5	50	1.0	<5	1.78	1	31	94	1195	5.55		3.06	1470		0.04		1210	4	<5	13	<10	74	0.25	.174	<10	23	175	1
	LM02PN-21		0.2	1.25	<5	110	<0.5	<5	0.05	<1	1	53	8	3.43	0.32	1.21	1175	2	0.03	3	750	52	<5	1	<10	10	<0.01	18	<10	4	65	
	M02PN-23		1.4	1.95	<5	1370	0.5	<5	0.60	17	287	78	1286	5.35	0.19	1.00	>10000	24	0.03	11	820	40	5	4	<10	98	0.07	49	20	15	1100	
	MOZPN-24		<0.2		<5	80	< 0,5	<5	0.35	1	26	78	81		0.14	0.84	2170		0.04	5		16	<5	2	<10	35	0.06	50	<10	5	185	
	M02PN-25 /		<0.2		<5	330	0.5	<5	0.77	4	36	49	2767	3.32		1.11	3360		0.03		1000	12	<5	3	<10	24	0.04	64	10	23	962	
	M02PN-26	_	0.2	1.34	<5	60	0.5	<5	0.12	`_<1`	8	31	129	4.28	0.21	0.86	970	6	0.02	7	890	8	<5	4	<10	<1	0.04	66	<10	10	176	
	B02AU-01	7	<0.2	1.82	10	180	<0.5	<5	0.12	<1	2	32	<b>´12</b>	3.89	0.14	1.71	2240	<2	0.01	4	1030	20	<5	3	<10	2	0.03	44	<10	7	183	
	B02AU-02	Cars	<0.2	1.52	5	220	0.5	<5	0.21	<1	2	29	11	3.72	0.10	1.30	1085	<2	0.02	4	1050	28	<5	4	<10	6	0.10	72	<10	8	85	:
		6020	<0.2		<5	60	0.5	<5	0.34	<1	2	42	5	3.60	0.19	0.96	505		0.02	4	790	24	<5	2	<10	34	0.08	54	<10	5	65	:
		<lam3< td=""><td></td><td>0.90</td><td>&lt;5</td><td>270</td><td>&lt;0.5</td><td>&lt;5</td><td>0.07</td><td>&lt;1</td><td>3</td><td>35</td><td>29</td><td>2.58</td><td></td><td>0.72</td><td>265</td><td></td><td>0.01</td><td>4</td><td>660</td><td>32</td><td>&lt;5</td><td>1</td><td>&lt;10</td><td></td><td>&lt; 0.01</td><td>16</td><td>&lt;10</td><td>4</td><td>103</td><td>1</td></lam3<>		0.90	<5	270	<0.5	<5	0.07	<1	3	35	29	2.58		0.72	265		0.01	4	660	32	<5	1	<10		< 0.01	16	<10	4	103	1
	BOZAU-05	,	.⊴0.8 <0.2	0.08	<5 <5	500 100	<0.5 <0.5	5 <5	0.37 0.28	<1 <1	1 4	220 47	274 14	1.14 3.68	0.05 0.19	0.01 1.09	60 380		0.01	9 5	300 710	16 10	<5	<1 1	<10		< 0.01	2	<10	2	41	
	B02AU-06	-ll-	-0.2	1.20	~ 3	100	<b>NO.3</b>	~ 5	0.20	~1	-	-//	14	3.00	0.19	1.05	380	20	0.01	2	710	10	<5	1	<10	2	<0.01	30	<10	-	119	
	RA02PN-01		0.4	0.43	<5	320	<0.5	<5	0.01	<1	1	70	86	3.26	0.32	0.06	70		0.02	4	500	10	<5	<1	<10	17	0.03	22	<10	2	23	2
	RA02PN-02			0.42	<5	180	< 0.5	5	0.01	<1	1	103	66	3.37		0.06	55		0.04	5	390	10	<5	1	<10	16	0.02	24	<10	1	13	1
	RAO2PN-03			0.70	<5	140	< 0.5	<5	0.01	<1	1	96	106	4,64	0.29	0.23	165		0.03	6	500	8	<5	1	<10	19	0.02	56	<10	2	33	1
	RA02PN-04 RA02PN-05			0.26 0.23	10 5	380 360	<0.5 <0.5	5 5	0.01 0.01	<1 <1	1 1	88 92	31 24	>15.00 2.69	0.31 0.35	0.01 0.01	- 15 15		0.02 0.02	4 5	320 220	24 10	<5 <5	<1 <1	<10 <10	19 15	0.02 0.01	11 14	<10 <10	1 <1	7 3	>1000 1
	RB02PN-01		<0.2	0.32	<5	200	<0.5	<5	0.01	<1	1	59	35	2.48	0.27	0.04	40	4	0.03	4	210	8	<5	<1	<10	3	0.01	13	<10	1	20	1
•	RB02PN-02		<0.2	0.36	<5	80	<0.5	5	0.01	<1	1	100	36	1.52	0.20	0.03	25	4	0.03	5	140	4	<5	<1	<10	2	<0.01	5	<10	1	31	:
	RB02PN-03		<0.2		<5	70	<0.5	<5	0.01	<1	1	52	46	1.88	-	0.03	25		0.02	3	210	12	<5	<1	<10		<0.01	6	<10	1	43	:
	RB02PN-04			0.40	<5	160	<0.5	5	0.01	<1	1	101	67	3.30	0.23	0.04	35		0.03	5	280	18	<5	<1	<10	3	0.01	20	<10	1	32	-
]	RB02PN-05		<0.2	0.27	<5	2 <del>9</del> 0	<0.5	<5	0.01	<1	1	59	30	1.59	0.18	0.02	20	6	0.01	3	170	6	_<5	<1	<10	3	<0.01	4	<10	2	48	2
	RB02PN-06		<0.2			300			0.01	<1	1	98	34		0.23		40		0.02	5	210	6	<5		<10		0.01		<10	1	44	2
	RB02PN-07		<0.2		<5				0.02	<1	<1	64	18		0.23		15		0.01	3	290	8	<5		<10		< 0.01		<10	2	6	2
	RC02PN-01		<0.2			150			0.01	<1	1	80 70	12	1.86		0.23	140		0.03		420	8	<5		<10		0.06		<10	2	21	1
	RC02PN-02		<0.2 <0.2					<5 <5		<1 <1	1 <1	79 65	17 121		0.18 0.19	0.18	95 90		0.03	4		8	<5 <5		<10	4			<10	1	16	1
	RC02PN-03		<0.2	0.41	50	500	NU.3	<b>N</b> 0	0.01		<1	05	121	2.24	0.19	0.14	80	ø	0.03	. 5	630	14	<5	1	<10	10	0.02	17	<10	2	15	1

A .5 gm sample is digested with 5 ml 3:1 HCI/HNO3 at 95c for 2 hours and diluted to 25ml with D.I.H20.

Page 4 of 9

Signéd:\_

## **Finlay Minerals Ltd**

Attention: Warner Gruenwald

Project:

i -

Sample: Rock

## Assayers Canada

8282 Sherbrooke St., Vancouver, B.C., V5X 4R6	Report No	:	2V0313 RJ
Tel: (604) 327-3436 Fax: (604) 327-3423	Date	:	Sep-09-02

### **MULTI-ELEMENT ICP ANALYSIS**

Aqua Regia Digestion

Sample Number	Ag ppm	AI %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Şn ppm	Sr ppm	Ti %	V ppm	W ppm	Y ppm	Zn ppm	Zr ppm
TRD02PN-01	1.4	0.48	3 <5	320	<0.5	10	0.01	<1	1	120	76	5.55	0.27	0.04	45	6	0.02	4	220	12	5	<1	<10	<1	0.01	58	<10	<1	20	14
TRD02PN-02	2.2	0.49	) <5	140	<0.5	10	0.01	<1	<1	138	86	5.24	0.26	0.05	55	6	0.02	4	210	12	5	<1	<10	<1	0.01	66	<10	<1	22	13
TRD02PN-03	0.6	0.55	i <5	130	<0.5	5	0.01	<1	1	165	92	6.46	0.27	0.08	70	4	0.03	6	190	14	5	<1	<10	<1	0.02	79	<10	<1	16	18
TRD02PN-04	0.4	0.42	2 - <5	110	<0.5	10	<0.01	<1	1	130	77	7.36	0.22	0.05	60	4	0.02	5	160	12	5	<1	<10	<1	0.01	101	<10	<1	44	16
TRD02PN-05	0.2	0.41	<5	80	<0.5	10	0.01	<1	1	123	75	6.59	0.20	0.05	60	4	0.03	5	230	12	5	<1	<10	<1	0.02	75	<10	<1	28	18
TRE02PN-01	0.2	0.76	i <5	200	<0.5	S	0.07	<1	1	48	7	3.09	0.28	0.29	175	4	0.03	2	1310	236	<5	1	<10	13	<0.01	15	<10	5	92	14
TRE02PN-02	0.2	1.05	i <5	130	<0.5	5	0.11	<1	3	47	8	4.02	0.32	0.60	300	2	0.04	3	1410	108	<5	Ź	<10	4	0.01	28	<10	6	97	19
TRE02PN-03	0.Z	0.76	i <5	290		5	0.11	<1	1	41	6	2.66	0.27	0,35	405	4	0.03	1	1190	182	<5	1	<10	8	0.01	15	<10	5	94	14
TRE02PN-04		1.15			0.5	5	0.47	11	3	52	82		0.35	0.65	1535		0.01	3	1030	3432		1	<10	17	<0.01	20	70	8	3227	18
TRE02PN-05	1.6	1.40	<5	420	0.5	5	0.61	13	6	46	342	2.89	0.26	0.77	2615	2	0.01	3	710	1808	<5	1	<10	27	<0.01	22	70	10	3657	18
TRE02PN-06	1.2	1.43	<5		0.5	<5	0.93	15	7	62	220	2.93		0.75	2770		0.02	3		2606	<5	2	<10	43	<0.01	27	80	12	4160	16
TRE02PN-07		0.96	-		<0.5	5	0.08	<1	2	71	10		0.53	0.32	350		0.04		1660	412	<5	1	<10	33	0.01	22	<10	5	104	16
RB02AU-08		2.21		60	1.0	<5	1.36	<1	19	43	13	3.46		0.97	1375		0.05		1060	48	<5	3	<10	127	0.17	82	<10	9	153	17
RBOZAU-09 GOLL		1.43			0.5	<5	0.58	<1	4	45	6	3.74		0.79	930		0.03		1020	50	<5	4	<10	48	0.17	74	<10	6	75	13
RB02AU-10 C&AIM.	۶ 1.4	0.28	5	30	<0.5	<5	0.03	<1	8	42	<1	4.16	0.23	0.02	10	<2	0.02	4	430	10	<5	1	<10	<1	0.10	10	<10	2	8	15
RB02AU-11	0.2	1.52	<5	50	0.5	<5	0.70	<1	2	39	3	3.50	0.14	0.61	655	<2	0.03	3	960	50	<5	3	<10	73	0.16	73	<10	4	63	12
R802AU-12	<0.2	2.30	<5	90	0.5	<5	0.56	<1	4	44	31	4.70	0.14	1.51	1490	2	0.04	4	1950	28	<5	5	<10	103	0.18	97	<10	8	152	10
R802AU-13	<0.2	1.92	<5	280	0.5	<5	Ó.30	1	4	38	27	3.45	0.17	1.24	910	4	0.04	3	1530	46	<5	3	<10	155	0.09	73	<10	5	193	12
RB02AU-14	<0.2	1.62	<5	90	<0.5	<5	1.36	<1	9	37	8	5.19	0.36	1.18	595	2	0.02	5	1150	30	<5	2	<10	8	0.02	44	<10	10	135	12
TB02AU-01	0.2	0.74	<5	220	<0.5	5	0.02	<1	1	44	32	3.39	0.21	0.66	345	26	0.01	2	400	30	<5	1	<10	15	0.01	21	<10	2	48	11
TB02AU-02	<0.2	0.56	<5		<0.5	5	0.04	<1	3	63	23	2.19	0.28	0.28	115	10	0.01	3	500	12	<5	1	<10	10	<0.01	12	<10	4	26	6
TB02AU-03	26.4			20	<0.5	25	0.04	20	12	130	3186		0.16	0.03	35		0.01	9	360	1092	10	<1	<10	<1	<0.01	12	80	6	4126	9
TB02AU-04	12.8			80	<0.5	35	1.06	>100	4	45	379		0.24	1.05	545		0.01	2	230	148	<5	1	<10	11	<0.01	19	550	8	>10000	11
TB02PN-01		0.28	-			<5	0.01	<1	1	89	10		0.20	0.04	90		0.01	3	80	44	<5	<1	<10	8	0.02	• 5	<10	2	118	18
TB02PN-02	1.4	1.52	<5	490	0.5	<5	0.23	5	12	68	160	3.38	0.26	0.70	3235	6	0.02	5	770	484	<5	3	<10	4	0.09	35	30	11	1208	21
TB02PN-03		0.26	-		<0.5	5	0.01	<1	1	88	24		0.27	0.03	40			3	150	420	<5	<1	<10	25	0.01	4	<10	1	59	12
TB02PN-04		1.19			0.5	<5	0.50	15	5	56	453	-	0.29	0.61	1645		0.02	4	690	268	<5	1	<10	69	0.01	23	110	11	5261	15
TB02PN-05	1,4				0.5	<\$	0.21	2	7	71	311		0.28	0.27	365		0.01	5	560	90	<5	1	<10	<1	0.17	23	10	10	665	27
TB02PN-06	<0.2				< 0.5	<5	0.09	<1	1	51	20		0.37	0.79	270		0.03	3	800	8	<5	1	<10	6	0.02	14	<10	6	53	15
RB02PS-09	11.0	0.62	<5	20	<0.5	<5	0.03	<1	1	211	214	2.70	0.02	0.04	90	6	0.01	9	300	840	<5	2	<10	5	0.02	32	<10	<1	89	3

A .5 gm sample is digested with 5 ml 3:1 HCI/HNO3 at 95c for 2 hours and diluted to 25ml with D.I.H20.

Signed:

Page 5 of 9

# 

## Assayers Canada

8282 Sherbrooke St., Vancouver, B.C., V5X 4R6	Report No	:	2V0313 RJ
Tel: (604) 327-3436 Fax: (604) 327-3423	Date	:	Sep-09-02

**Finlay Minerals Ltd** 

Attention: Warner Gruenwald

Project:

Sample: Rock

#### **MULTI-ELEMENT ICP ANALYSIS**

Aqua Regia Digestion

1	Sample Number	Ag ppm	AI %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	к %	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sn ppm	Sr ppm	Ti %	V ppm	W ppm	Y ppm	Zn ppm	Zr ppm
1	SW02PN-61	0,4	0.84	<5	120	0.5	<5	0.30	<1	13	106	32	3.84	0.15	0.51	725	2	0.05	8	550	20	<5	3	<10	18	0.17	44	<10	8	82	7
1	SW02PS#-122RF	<0.2		5	50	1.0	<5	1.21	<1	14	75	4	3.69	0.38	1.07	580	2	0.19	6	1100	12	<5	4	<10	105	0.29	88	<10	7	95	17
r	BM02PS-23	<0.2		5	240	1.0	<5	1.79	<1	14	51	48	6.04	0.28	1.96	1590	4	0.23	9	1310	10	<5	6	<10	243	0.31	194	<10	8	220	16
1	BM02PS-24		0.25	<5	140	<0.5	<5	0.02	<1	1	105	9	0.87	0.18	0.03	35	4	0.04	4	60	20	<5	<1	<10	6	<0.01	2	<10	2	13	14
I	BM02PS-25	<0.2	1.56	<5	60	0.5	<5	0.66	<1	5	45	8	3.11	0.09	1.13	920	<2	0.05	4	1170	10	<5	2	<10	62	0.12	52	<10	5	140	10
I.	BM02PS-26	0.2	1.53	25	80	<0.5	5	0.40	<1	6	68	36	4.35		0.82	305		0.13		1040	36	<5	1		324	<0.01	24	<10	3	125	12
1	BM02PS-27	0.6	3.02	- <5	260	1.0	<5	1.29	<1	6	52	18		0.07	1.62	3150		0.12		1360	54	<5	4	<10	427	0.19	80	<10	9	233	14
1	BM02PS-27RF	<0.2	0.96	<5	40	0.5	<5	0.40	<1	4	124	5		0.08	0.99	815		0.07	5		12	<5	2	<10	25	0.11	28	<10	6	77	11
1	BM02PS-28		1.24	<5	100	0.5	<5	1.06	<1	8	123	21		0.15	0.57	515		0.12	5		20	<5	3	<10	111	0.19	95	<10	7	63	22
1	BM02PS-29	0.2	3.26	5	520	1.0	<5	1.75	1	2	48	12	2.50	0.23	0.87	785	<2	0.04	4	1210	10	<5	2	<10	218	0.13	38	<10	5	146	9
1	BM02PS-30	0.4	3.34	45	70	0.5	<5	1.10	<1	13	72	5	6.30	0.05	2.70	1300	<2	0.13	9	1310	22	<5	10	<10	135	0.10	195	<10	8	135	15
1	TRG02PN-01	0.6	1.17	5	440	<0.5	5	0.05	<1	6	140	64	4.02	0.40	0.53	995	2	0.03	5	900	12	<5	1	<10	6	0.02	24	<10	4	98	6
Γ.	TRG02PN-02	0.2	1.02	<5	250	<0.5	<5	0.07	<1	3	106	40	3.41	0.35	0.49	600	2	0.03	4	810	6	<5	1	<10	3	<0.01	20	<10	3	74	6
I	TRG02PN-0	2.0	0.34	5	430	<0.5	5	0.02	<1	2	154	57	3.18	0.32	0.03	55	8	0.01	6	620	42	<5	<1	<10	11	0.01	7	<10	່ 2	23	8
I	TRG02PN-04	1.4	0.56	10	330	<0.5	5	0.03	<1	5	130	65	3.52	0.38	0.09	220	8	0.01	5	680	46	<5	<1	<10	5	0.02	9	<10	3	93	10
(	TRH02PS-0	<0.2	3.29	<5	210	0.5	<5	1.24	1	6	46	70	5.43	0.17	1.43	965		0.06		1340	28	<5	6	<10	187	0.22	100	<10	2	157	7
l I	RB02SP-01	5.4	3.45	60	640	<0.5	10	0.07	<1	20	47	466	10.15	0.49	1.97	3340		0.01	16	1260	172	<5	5	<10	<1	<0.01	115	10	4	702	12
1	RB02SP-02	0.4	1.01	10	110	0.5	<5	0.18	<1	3	101	10	2.25	0.21	0.49	400		0.07	4	460	32	<5	3	<10	36	0.19	49	<10	5	62	27
	RB02SP-03	1.0	0.67	<5	3310	<0.5	<5	0.69	8	3	200	231		0.23	0.34	605		0.03	8	450	1388	5	1	<10	130	<0.01	12	10	7	297	11
	RB025P-05	<0.2	2.54	20	110	1.0	<5	1.12	<1	13	52	35	5.57	0.08	2.04	1020	<2	0.05	11	1350	20	<5	12	<10	65	0.40	196	<10	10	114	26
	RB02SP-06	0.4	0.69	5	80	<0.5	<5	0.04	<1	1	63	9	2.40	0.15	0.53	805		0.06	4	620	22	<5	2	<10	5	0.04	37	<10	3	72	21
	RB02SP-07	<0.2	1.07	<5	90	0.5	<5	0.08	1	4	55	21	2.43		0.41	540		0.03	4	460	50	<5	2	<10	13	0.04	29	<10	14	69	15
	RB02SP-08	<0.2	2.97	10	60	1.0	<5	0.52	<1	9	30	48	5.52		2.24	1490	4	0.09		1300	10	5	14	<10	39	0.31	197	<10	16	149	18
	RB02SP-09	<0.2	2.67	5	220	1.0	<5	0.34	<1	10	25	41	6.73 (		1.32	700	-	0.06		1190	16	5	12	<10	48	0.31	170	<10	13	115	23
	RB025P-10	<0.2	0.34	65	1160	0.5	10	0.01	, <b>&lt;1</b>	1	66	17	7.49 (	0.02	0.01	15	26	0.01	5	1280	14	5	2	<10	11	<0.01	48	<10	1	29	13
	RB02PS-10	<0.2		5	50	<0.5	<5	0.01	<1	<1	76	10	1.76		0.04	30		0.01	3	210	8	<5	<1	<10		<0.01	4	<10	2	56	8
I	WG02SP-01		0.06	<5	10	<0.5	<5	0.02	<1	<1	147	8	0.26		< 0.01	15		0.01	5	160	4	5	<1	<10	3	<0.01	1	<10	1	5	6
	WG02SP-05		0.59	5	230	<0.5	<5	0.04	ব	2	126	4		0.31	0.38	210		0.03	5	420	20	<5	1	<10	2	0.06	19	<10	. 3	43	37
	WG02SP-06		1.74	10	80	1.0	<5	0.49	Ż	18	42	738		),44	0.83	1675	198		9	920	40	<5	5	<10	22	0.25	73	10	19	355	26
	WG025P-07	0.2	0.86	<5	50	0.5	<5	0.25	<1	6	50	15	3.68 (	0.24	0.77	475	. 4	0.04	4	680	16	5	4	<10	2	0.23	51	<10	8.	50	41

A .5 gm sample is digested with 5 ml 3:1 HCI/HNO3 at 95c for 2 hours and diluted to 25ml with D.I.H20.

Signed:

															•	ers (											_					_
Fin]	lay Mine	erals I	Ltd									82	82 She	rbrook	e St.,	Vanc	ouver, l	3.C.,	V5X	4R6							Re	eport	No	: :	2V0313	
Atter	tion: Warn	er Grue	nwal	ld									Tel: (6	04) 32	7-34	36 Fa	ax: (604	) 327	7-342	23							Da	ite		:	Sep-09	-02
Proje	et.																															
•												-								~~~												
Samp	ole: Rock											N	<b>IULT</b>	I-EL	EM	ENT	ICP A	NA	LY	SIS												
														Ac	jua R	egia D	igestio	n														
Samp Numi		Ag ppm	AI %	As ppr		Ba pm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sn ppm	Sr ppm	Ti %	V ppm	W ppm	Y ppm	Zn ppm	Zı ppr
TOUOT	PS-02		3.07	, ,	<5	230	0.5	<5	1.09	3	6	43	258	6.10	0.19	1.23	990	42	0.03	6	1120	32	<5	4	<10	240	0.17	80	<10	1	192	
	PS-02		3.80		-	150	0.5	15	0.47	2	-	182	333		0.16	3.00	4045		0.03		1280	390	5	12	<10	132	0.28			1	473	
	PS-04		3.25			160	0.5	<5	1.03	3	10	60	225	6.07	0.08	1.97	1940		0.06		1580	650	<5	6	<10	229	0.19		<10	4	323	
	PS-05		3.85			170	0.5	<5	1.73	2		103	129	5.06		1.73	1415		0.15		1440	36	<5	5	<10	261	0.18		<10	4	266	
	PS-06		3.33			120	0.5	<5	1.17	1		59	77	4.16	0.11	1.39	1600		0.03		1330	32	<5	5	<10	111	0.08		<10	2	238	
TRH02	PS-07	0.4	3.42	2 <	<5	100	0.5	<5	0.83	1	8	40	74	4.62	0.14	1.78	2115	8	0.04	6	1340	40	<5	5	<10	78	0.16	101	<10	4	318	
RMOZF	S-27	8.6	0.22	2 <	<5	<10	<0.5	25	0.01	16	5	216	6641	2.32	0.01	0.15	185	106	0.01	12	260	102	5	1	<10	<1	0.01	10		<1	3428	
RBO2A			0.47	1, 2	20 2	2060	<0.5	5	<0.01	<1	1	70	54	1.92	0.03	0.01	10	2	0.01	4		92	25	2		17	<0.01			3	21	
R802A	IT-02 ATT	Y 5.2	1.57	/ 2	20	290	0.5	<5	0.98	<1	10	92	58	4.15	0.07	0.95	355		0.04	18		28	5	5	<10	116	0.10			5	69	
RB02A	т-03	<0.2	0.81	4	45	300	<0.5	5	0.01	<1	1	5	5	0.85	0.08	<0.01	50	<2	0.07	1	70	4	15	1	<10	95	<0.01	57	10	<1	13	
WG02	PN-32	<0.2	1.33	<u>ہ</u>	<5	100	0.5	<5	0.40	<1	5	56	7	3.48	0.09	0.87	470	6	0.07	4	830	4	<5	6	<10	28	0.16	66	<10	10	47	
WG02		37.6	0.20	) <	ŝ	100	<0.5	<5	0.07	29	1	126	559	1.11	0.13	0.01	40	48	0.01	4	190	>10000	<5	<1	<10	393	0.01	3	140	2	6532	
WG02	PN-34	2.4	0.37	' <	<5	120	<0.5	<5	0.10	2	5	132	53	2.76	0.30	0.06	80	60	0.01	7	610	766	<5	1	<10	36	0.01	8	10	4	345	
WG02	PN-35	0.2	0.75	; <	<5	40	<0.5	10	0.09	<1	3	79	71	7.49	0.33	0.16	340	· <2	0.02	6	640	26	<5	<1	<10	<1	<0.01	14	<10	-3	83	
WG02	PN-36	0.2	1.04	+ <	<b>(5</b> ) 1	<b>1440</b> .	<0.5	<5	0.10	<1	2	49	11	2.81	0.26	0.62	325	. 8	0.02	3	820	24	<5	1	<10	14	<0.01	35	<10	4	42	
WG02	PN-37	0.8	0.40				<0.5	<5	0.09	<1	2	113	15		0.28	0.10	150			4	510	498	<5	<1	<10	160	<0.01	7		2	30	
WG02			0.43		-		<0.5	<5	0.04	<1	2		19		0.21	0.10	135		0.01	8	360	150	5	<1	<10	20	< 0.01	8		2	. 31	
WG02			0.33				<0.5	<5	0.04	<1	3	304	19		0.21	0.07	150		0.01	9	260	38	5	<1	<10	64 259	0.01	6		1	29 >10000	
WG02  WG02			0.17		<5 <5		<0.5 <0.5	10 <5	0.09 0.82	>100 40	3 6	160 170	1024 98	0.66 1.87	0.15 0.26	0.01 0.16	65 1240		0.01 0.01	4 6	200 490	>10000 >10000	<5 <5	<1 1	<10 <10	259 229	0.01 0.02	2 11		1 6	9603	
			1.63	1	5	170	0.5	<5	0.36	<1	11	78	32	4.74	0.12	1.61	690	,	0.04	5	850	86	<5	7	<10	11	0.22	112	<10	10	158	
)BS-01 1BS-02			1.03		-	120	0.5	<5	0.62	<1	4	91	39	4.01	0.12	0.74	830		0.09	-	1380	26	<5	3	<10	30	0.14	59		7	92	
185-02 18P-03			0.39		-		<0.5	5	0.30	<1	2	94	. 11	2.01	0.26	0.16	150		0.02	3	260	682	<5	1	<10	17	<0.01	15		3	30	
)BP-04			0.28				<0.5	<5	0.01	<1	<1	79	20	1.15	0.20	0.01	10		0.01	2	70	8	<5	<1	<10	- 9	<0.01	2		1	4	
IBP-04			0.97			110	0.5	<5	0.72	<1	9	111	753		0.16	0.57	410		0.03	7		14	<5	2	<10	39	0.07	64		5	50	
BP-06	5	<0.2	1.37	, <	:5	900	0.5	<5	1.12	<1	8	73	1131	3.68	0.15	1.09	1055	<2	0.04	5	960	8	<5	4	<10	69	0.11	71	<10	15	98	
	N-135R	0.2	0.92	. <	:5	730	<0.5	<5	0.07	<1	<1	76	43	3.48	0.24	0.55	325	26	0.05	4	2380	10	<5	3	<10	16	<0.01	38	<10	4	58	
	N-173F	<0.2	1.50	) <	:5	150	0.5	<5	0.66	<1	11	71	41	3.91	0.25	1.26	605	4	0.06	5	1060	6	. <5	7	<10	52	0.24	96	<10	11	210	
	N-174F	<0.2	0.93	4	ю	30	<0.5	10	0.09	<1	8	108	58	9.27	0.30	0.13	220	2	0.01	8	660	16	<5	<1	<10	<1	<0.01	18	<10	2	26	
	N-176F	~0.2	1.58		30	100	0.5	<5	1.12	<1	2	59	12	2.67	0.11	0.99	2265	<2	0.13	7	1140	16	<5	2	<10	44	0.08	43	<10	10	249	

- **1** 

5

 $\hat{}$  5

A .5 gm sample is digested with 5 ml 3:1 HCI/HNO3 at 95c for 2 hours and diluted to 25ml with D.I.H20.

~

F

4

5

F

` 5

·

`

n

ŧ ٦.

-

Page 7 of 9

Signed:\_

•

1 ł

•

İ			
		Assayers Canada	
ł	Finlay Minerals Ltd	8282 Sherbrooke St., Vancouver, B.C., V5X 4R6	Report No : 2V0313 RJ
	Attention: Warner Gruenwald	Tel: (604) 327-3436 Fax: (604) 327-3423	Date : Sep-09-02
:	Project:		
	Sample: Rock	MULTI-ELEMENT ICP ANALYSIS	
		Aqua Regia Digestion	

	Sample Number	Ag ppm	AI %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sn ppm	Sr ppm	Ti %	V ppm	W ppm	Y ppm	Zn ppm	Zr ppm	
	SW02PN-177F	0.8	0.65	10	1250	0.5	<5	0.59	<1	3	61	4519	1.84	0.24	0.23	645	2	0.01	4	620	12	<5	1	<10	125	<0.01	11	<10	5	100	10	
	SW02PN-178F		0.95		340	0.5	<5	1.80	<1	4	94	23	1.89	0.20	0.61	855	<2	0.03	7	600	2	<5	1	<10	65	0.07	22	<10	5	82	4	
	SW02PN-123R	<0.2	0.62	<5	90	0.5	<5	0.69	<1	5	54	8	2.75	0.09	0.23	205	<2	0.05	3	910	12	<5	1	<10	24	0.10	80	<10	5	33	6	
	SW02PN-125RF	<0.2	0.72	5	70	0.5	<5	0.32	<1	11	61	57	1.53	0.05	0.47	390	<2	0.04	4	370	4	<5	2	<10	67	0.09	37	<10	7	45	15	
	SW02PN-126F	<0.2			100	1.0	<5	0.54	<1	10	56	106	3.15	0.13	0.90	1015	<2	0.04	5	730	6	<5	4	<10	38	0.22	60	<10	14	84	29	
	SW02PN-127F	<0.2	1.51	<5	540	1.0	<5	0.55	<1	11	48	62	4.09	0.11	1.44	1215	<2	0.05	7	1030	8	<5	7	<10	30	0.24	101	<10	14	87	26	
	SW02PN-175F	<0.2	1.42	<5	240	0.5	<5	0.61	<1	15	83	77	6.15	0.06	0.87	770	6	0.03	7	510	16	<5	1	<10	148	0.06	40	<10	5	67	7	
	TRF02PN-01	<0.2	0.84	<5	370	<0.5	5	0.06	<1	8 1	62	5	5.83	0.41	0.40	235	2	0.04	4	2560	36	<5	1	<10	229	<0.01	25	<10	3	65	20	
	TRF02PN-02	<0.2	0.78	<5	290	<0.5	5	0.05	<1	1	44	2	4.75	0.40	0.34	165	2	0.03	3	2280	42	<5	1	<10	315	<0.01	19	<10	4	52	17	
	TRF02PN-03	0.4	0.74	<5	180	<0.5	5	0.06	<1	3	46	5	4.33	0.41	0.25	160	6	0.03	3	1810	118	<5	1	<10	311	<0.01	17	<10	5	63	19	
	TRF02PN-04	0.6	0.89	<5	160	<0.5	<5	0.11	<1	. 5	40	9	4.79	0.38	0.49	390		0.02		1720	228	<5	1	<10	72	0.01	23	<10	4	134	19	
	TRF02	0.8	1.07	<5	70	<0.5	<5	0.19	2	11	37	26		0.31	0.72	535	4	0.02	4	1750	652	<5	2	<10	10	0.01	37	10	6	581	19	
	RB02AT-04	<0.2	0.22	<5	40	<0.5	<5	0.69	<1	2	144	7		0.15	0.05	530	<2	0.01	6		6	5	1	<10	5	0.01	27	<10	3	22	3	
.*	RB02AT-05	0.2	0.23	<5	70	<0.5	<5	0.77	<1	2	142	15	1.77	0.19	0.04	575	<2		6	490	6	5	1	<10	5	0.02	34	<10	4	25	4	
	RB02AT-06 ATTY	<0.2	0.31	<5	80	<0.5	<5	5.40	<1	3	72	5	1.80	0.17	0.13	1855	<2	0.01	4	500	6	5	1	<10	45	0.01	32	<10	8	39	4	
	RB02AT-07	<0.2	0.55	<5	110	0.5	<5	2.48	<1	4	101	6	2.56	0.26	0.28	1300	<2	0.01	5	700	8	5	2	<10	21	0.02	48	<10	7	56	5	
	RB02AT-08	<0.2	0.49	<5	100	0.5	<5	0.22	<1	4	62	8	2.40	0.23	0.20	675	<2	0.01	4	730	8	5	2	<10	2	0.02	49	<10	5	51	3	
	RB02AT-09	<0.2	0.45	<Ś	160	0.5	<5	0.51	<1	4	122	6	2.10	0.24	0.10	1130	<2	0.01	5	610	8	5	2	<10	4	0.01	39	<10	9	47	2	
	RB02AT-10	<0.2	0.76	<5	180	0.5	<5	0.21	<1	6	59	9	3.15	0.27	0.26	1080	<2	0.01	5	830	8	5	2	<10	2	0.02	55	<10	8	74	3	
	TB02SP-01	<0.2	2.24	<5	40	1.0	<5	0.68	<1	16	45	15	6.25	0.07	2.09	335	<2	0.04	9	1010	8	<5	5	<10	40	0.45	134	<10	4	42	16	
	TB02SP-02	<0.2	1.02	10	1180	0.5	<5	0.06	<1	3	5	68	12.01	0.15	0.08	10	<2	0.04	4	1180	22	5	5	<10	190	0.14	115	<10	<1	19	12	
	TB02SP-03	1.8	0.27	<5	680	<0.5	<5	0.01	1	1	115	6	1.45	0.25	0.02	25	10	0.02	4		170	<5	<1	<10	19	<0.01	6	<10	1	167	10	
	TB02SP-04	6.2	0.10	<5	250	<0.5	5	0.03	4	1	86	42	0.17	0.12	0.01	. 15	<2	0.01	4	150	>10000	<5	<1	<10	600	<0.01	1	<10	<1	59	3	
	TB02SP-05	0.6	0.16	<5	2470	<0.5	<5	0.69	11	2	124	2	0.37	0.15	0.02	260	2	0.01	5	180	4156	<5	<1	<10	154	<0.01	1	<10	3	178	8	
	TB02Pil-010	1.0	0.32	<5	950	<0.5	. 5	0.01	<1	1	28	45	5.20	0.15	0.02	10	6	0.01	2	560	100	<5	2	<10	50	<0.01	14	<10	1	13	11	
	TB02Pil-011	0.2	0.68	5	1440	<0.5	<5	0.01	<1	1	25	10		0.14	0.3 <del>9</del>	190	_	0.02	2	340	6	<5	2	<10	363	0.01	31	<10	1	50	7	
	TB02Pil-012	2.4	0.84	<5	2450	0.5	<5	1.68	<1	6	64	279	2.63	0.18	0.59	825		0.02	4	720	40	<5	1	<10	143	0.01	44	<10	8	171	8	
	TB02PII-013		1.06		3580	0.5	<5	2.28	<1	6	86	10	3.02		0.52	895		0.03	5	940	38	<5	1	<10	117	0.01	. 40	<10	9	197	10	
	TB02PII-014	<0.2		<5	110	0.5	<5	0.37	<1	6	27	6	4.68	0.14	1.44	940		0.05	3	1090	22	<5	3	<10	21	0.23	69	<10	4	129	12	
	TB02Pil-015	1.6	1.57	<5	1260	0.5	<5	0.86	5	9	86	1469	2.82	0.14	1.06	1300	2	0.03	6	840	6	<5	2	<10	126	0.11	37	20	6	971	12	

A .5 gm sample is digested with 5 ml 3:1 HCI/HNO3 at 95c for 2 hours and diluted to 25ml with D.I:H20.

1

ł 

Signed:

the

# 

## Finlay Minerals Ltd

Attention: Warner Gruenwald

Project:

1

Sample: Rock

## Assayers Canada

8282 Sherbrooke St., Vancouver, B.C., V5X 4R6	Report No	:	2V0313 RJ
Tel: (604) 327-3436 Fax: (604) 327-3423	Date	:	Sep-09-02

### **MULTI-ELEMENT ICP ANALYSIS**

Aqua Regia Digestion

}		Ag opm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sn ppm	Sr ppm	Ti %	V ppm	W ppm	Y ppm	Zn ppm	Zr ppm
L	RM02PN-28	0.8	1.22	<5	100	0.5	<5	0.18	<1	5	47	271	4.38	0.16	0.76	280	28	0.04	5	850	10	<5	4	<10	11	0.13	64	<10	5	32	11
1	RM02PN-29	<0.2	0.91	<5	140	<0.5	<5	0.03	<1	9	56	300	7.91	0.11	0.40	170	12	0.02	6	320	10	<5	3	<10	<1	0.08	91	<10	<1	17	10
1	RM02PN-30	<0.2	1.38	<5	880	0.5	<5	0.47	<1	8	79	714	3.52	0.14	0.99	955	2	0.04	6	900	4	5	4	<10	65	0.10	63	<10	13	93	15
1	RM02PN-31	<0.2	1.56	<5	340	0.5	<5	0.30	<1	6	45	2439	4.28	0.19	0.86	925	4	0.03	5	1040	10	<5	3	<10	16	0.02	48	<10	18	115	13
I	RM02PN-32	0.8	0.25	10	920	<0.5	5	0.01	<1	<1	43	12	1.97	0.18	0.02	10	8	0.04	2	110	60	<5	<1	<10	13	<0.01	4	<10	1	<1	11
I	RM02PN-33	<0.2	1.19	5	140	0.5	<5	0.13	<1	3	57	59	2.93	0.12	1.15	470	2	0.08	4	740	14	<5	3	<10	32	0.09	51	<10	6	77	20
1	RM02PN-34	0.4	0.26	<5	40	<0.5	5	<0.01	<1	6	67	22	5.76	0.23	0.03	80	24	0.01	5	120	18	5	<1	<10	2	<0.01	8	<10	1	18	9
· ·	RM02PN-35	0.4	0.50	5	410	<0.5	5	0.02	<1	1	48	12	4.23	0.51	0.07	85	26	0.04	2	1170	14	5	2	<10	250	0.05	23	<10	1	6	12
l .	RM02PN-36	<0.2	0.47	<5	230	0.5	<5	0.01	<1	2	42	1	1.76	0.25	0.06	40	4	0.08	1	610	12	<5	1	<10	43	0.11	12	<10	2	5	8
ł	RM02PN-37	0.4	1.44	<5	160	0.5	<5	0.40	<1	4	57	626	3.65	0.09	1.25	1145	2	0.03	5	<del>9</del> 00	4	<5	· 2	<10	31	0.09	62	<10	4	103	13
ł	RM02PN-38 Barrow	0.2	0.19	<5	1720	<0.5	5	0.27	19	1	55	7	0.35	0.08	0.05	100	<2	0.01	2	80	192	<5	<1	<10	547	<0.01	2	30	2	1464	3
I.	WG02AT-01		1.17	120	660	1.0	130	0.10	<1	49	15	1991	>15.00	0.03	0.10	285	38	0.01	15	1440	104	15	2	<10	<1	0.04	190	<10	<1	198	30

A .5 gm sample is digested with 5 ml 3:1 HCl/HNO3 at 95c for 2 hours and diluted to 25ml with D.I.H20.

Signed:

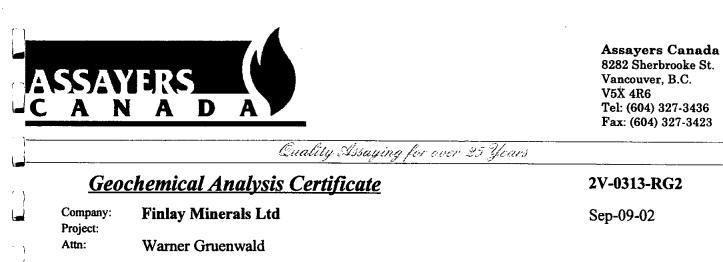
SSAVIERS A N A I		<b>Assayers Canada</b> 8282 Sherbrooke St. Vancouver, B.C. V5X 4R6 Tel: (604) 327-3436 Fax: (604) 327-3423
	Quality Assaying for over 25 Ye	rars
<u>Geochemical</u>	Analysis Certificate	2V-0313-RG1
Company: <b>Finlay M</b> i Project:	inerals Ltd	Sep-09-02
Attn: Warner Gr	ruenwald	
We <i>hereby certify</i> the f submitted Aug-16-02 b Sample	following geochemical analysis of 24 rock sam by Warner Gruenwald. Au	ples
Name	ppb	
RB02PN-01	97	
RB02PN-03	6	
RB02PN-04	8	
RB02PN-05 RB02PN-06	1 4	
RB02PN-07		
RB02PN-07 RB02PN-08	28 53	
RB02PN-09	15	
RB02PN-10	44	
RB02PN-11	37	
RB02PN-12	11	
RB02PN-13	33	
RB02PN-14	11	
RB02PN-15	1	
RB02PN-16	3	
RB02PN-17	5	
RB02PN-18	29	
RB02PN-19	64	
RB02PN-20	16	
RB02PN-21	7	· · · ·
RB02PN-22	47	
	66	
RB02PN-23 RB02PN-24	5	

to

Certified by

ر ز استا

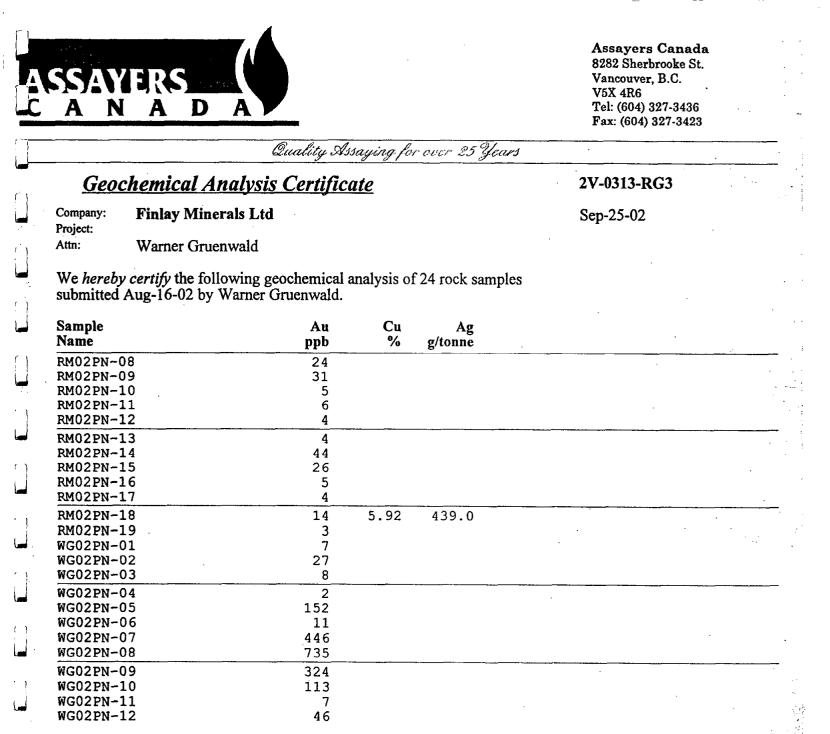
( ) اسا



# We hereby certify the following geochemical analysis of 24 rock samples submitted Aug-16-02 by Warner Gruenwald.

Sample Name	Au ppb	
RB02PN-26	17	
RB02PN-27	8	· ·
RB02PN-28	5	
RB02PN-29	4	
RB02PN-30	6	
RB02PN-31	9	
RB02PN-32	43	
RB02PN-33	48	
RB02PN-34	67	
RB02PN-35	3	
RB02PN-36	7	
RB02PN-37	8	
RB02PN-38	96	
RB02PN-39	158	
RB02PS-01	93	
RB02PS-02	236	
RB02PS-03	341	
RM02PN-01	2	
RM02PN-02	1	
RM02PN-03	3	
RM02PN-04	26	
RM02PN-05	12	
RM02PN-06	15	and the second
RM02PN-07	19	

tor



£Ш



`}

Assayers Canada 8282 Sherbrooke St. Vancouver, B.C. V5X 4R6 Tel: (604) 327-3436 Fax: (604) 327-3423

th

Quality Assaying for over 25 Years

#### Geochemical Analysis Certificate 2V-0313-RG3 **Finlay Minerals Ltd** Sep-09-02 Company: Project: Attn: Warner Gruenwald We hereby certify the following geochemical analysis of 24 rock samples submitted Aug-16-02 by Warner Gruenwald. Sample Au Cu Name % ppb RM02PN-08 24 RM02PN-09 31 RM02PN-10 5 RM02PN-11 6 RM02PN-12 4 4 RM02PN-13 44 RM02PN-14 RM02PN-15 26 5 RM02PN-16 4 RM02PN-17 RM02PN-18 14 5.92 3 RM02PN-19 7 WG02PN-01 27 WG02PN-02 WG02PN-03 8 WG02PN-04 2 WG02PN-05 152 WG02PN-06 11 446 WG02PN-07 735 WG02PN-08 324 WG02PN-09 WG02PN-10 113 7 WG02PN-11 46 WG02PN-12

Certified by



Quality Assaying for over 25 Years

#### Geochemical Analysis Certificate 2V-0313-RG4 Sep-09-02 **Finlay Minerals Ltd** Company: Project: Attn: Warner Gruenwald We hereby certify the following geochemical analysis of 24 rock samples submitted Aug-16-02 by Warner Gruenwald. Sample Au Name ppb WG02PN-13 273 WG02PN-14 13 WG02PN-15 85 WG02PN-16 75 WG02PN-17 21 16 WG02PN-18 WG02PN-19 29 8 WG02PN-20 9 WG02PN-21 35 WG02PN-22 5 WG02PN-23 8 WG02PN-24 WG02PN-25 169 WG02PN-26 60 36 WG02PN-27 54 WG02PN-28 15 WG02PN-29 17 WG02PN-30 23 WG02PN-31 13 WG02PS-01 39 WG02PS-02 RM02PN-20 4 RM02PN-21 4 11 RM02PN-23

Certified by

AL



## Quality Assaying for over 25 Years

## **Geochemical Analysis Certificate**

**Finlay Minerals Ltd** 

### 2V-0313-RG5

Sep-09-02

Project: Attn: Warner Gruenwald

Company:

السيا

We *hereby certify* the following geochemical analysis of 24 rock samples submitted Aug-16-02 by Warner Gruenwald.

Sample Name	Au ppb	Au g/tonne		· .
RM02PN-24	15		· · · · · · · · · · · · · · · · · · ·	
RM02PN-25	10			
RM02PN-26	36			
RB02AU-01	9			
RB02AU-02	12			
RB02AU-03 GAD BB02AU-04 GAD	11			
RB02AU-04 G	42			
RB02AU-05	13			
RB02AU-06	67		,	
TRA02PN-01	398			
TRA02PN-02	229			
TRA02PN-03	1196	1.21		
TRA02PN-04	398			
TRA02PN-05	392			
TRB02PN-01	34	· .		
TRB02PN-02	17			
TRB02PN-03	27			
TRB02PN-04	67			
TRB02PN-05	20			
TRB02PN-06	18			
TRB02PN-07	25			
TRC02PN-01	17			
TRC02PN-02	17			
TRC02PN-03	20			

the



## Quality Assaying for over 25 Years

## **Geochemical Analysis Certificate**

## 2V-0313-RG6

**Finlay Minerals Ltd** Company: Project:

Sep-09-02

Attn: Warner Gruenwald

# We *hereby certify* the following geochemical analysis of 24 rock samples submitted Aug-16-02 by Warner Gruenwald.

Sample Name	Au ppb	Zn %			
TRD02PN-01	253			••••••••••••••••••••••••••••••••••••••	 · · · · · · · · · · · · · · · · · · ·
TRD02PN-02	370				
TRD02PN-03	157				
TRD02PN-04	339				
TRD02PN-05	185				
TRE02PN-01	12			······································	 
TRE02PN-02	11				
TRE02PN-03	12				
TRE02PN-04	23				
TREO2PN-05	11				
TRE02PN-06	18		<u></u>		 · · · ·
TRE02PN-07	17			•	
RB02AU-08	2				
RB02AU-09 🕈	6				
RB02AU-10	11				
RB02AU-11	6		· · ·		 
RB02AU-12	27				
RB02AU-13	24				
RB02AU-13 RB02AU-14 Gold	314				
RB02AU-14 Governs TB02AU-01 CLAMMS	24				
TB02AU-02	31				 
TB02AU-03	100				
TB02AU-04	26	2.51			
TB02PN-01	9				

tar



ĦJ.

Quality Assaying for over 25 Years

#### **Geochemical Analysis Certificate** 2V-0313-RG7 **Finlay Minerals Ltd** Company: Sep-09-02 Project: Warner Gruenwald Attn: We hereby certify the following geochemical analysis of 24 rock samples submitted Aug-16-02 by Warner Gruenwald. Sample Au Name ppb TB02PN-02 9 31 TB02PN-03 TB02PN-04 173 TB02PN-05 54 26 TB02PN-06 RB02PS-09 107 13 SW02PN-61 SW02PS#-122RF 8 8 BM02PS-23 9 BM02PS-24 4 BM02PS-25 BM02PS-26 81 BM02PS-27 19 8 BM02PS-27RF 5 BM02PS-28 BM02PS-29 4 BM02PS-30 132 TRG02PN-01 25 TRG02PN-02 18 TRG02PN-03 45 26 TRG02PN-04 TRH02PS-01 10 RB02SP-01 106 RB02SP-02 6

Certified by



the

## Quality Assaying for over 25 Years

## **Geochemical Analysis Certificate**

#### 2V-0313-RG8

Sep-09-02

Project: Attn:

Company:

Warner Gruenwald

**Finlay Minerals Ltd** 

We hereby certify the following geochemical analysis of 24 rock samples submitted Aug-16-02 by Warner Gruenwald.

Sample Name	Au ppb	Au g/tonne	Cu %		
RB02SP-03	6	<del></del>	· · · · · · · · · · · · · · · · · · ·		
RB02SP-05	6 7 9				
RB02SP-06	9				
RB02SP-07	45				
RB02SP-08	16				
RB02SP-09	10				
RB02SP-10	44				
RB02PS-10	13				
WG02SP-01	1657	1.88			
WG02SP-05	11				
WG02SP-06	45			•	
WG02SP-07	7				
TRH02PS-02	8				
TRH02PS-03	27				
TRH02PS-04	13				
TRH02PS-05	17				
TRH02PS-06	12				
TRH02PS-07	8				
RM02PS-27	18		0.584		
RB02AT-01	6				
RB02AT-02 ATTY	238			 	
RB02AT-03	4				
WG02PN-32	6				
WG02PN-33	1242	1.22			
		1.22		`	



SW02PN-127F

Assayers Canada 8282 Sherbrooke St. Vancouver, B.C. V5X 4R6 Tel: (604) 327-3436 Fax: (604) 327-3423

## Quality Assaying for over 25 Years

#### **Geochemical Analysis Certificate** 2V-0313-RG9 Company: **Finlay Minerals Ltd** Sep-09-02 Project: Attn: Warner Gruenwald We hereby certify the following geochemical analysis of 24 rock samples submitted Aug-16-02 by Warner Gruenwald. Sample Au Au Zn Name % ppb g/tonne WG02PN-34 205 WG02PN-35 66 WG02PN-36 13 WG02PN-37 71 WG02PN-38 4754 4.93 WG02PN-39 290 WG02PN-40 447 3.42 WG02PN-41 612 12 JBS-01 JBS-02 14 JBP-03 17 JBP-04 6 JBP-05 72 JBP-06 3 77 SW02PN-135R $\sqrt{}$ 9 SW02PN-173F 105 SW02PN-174F SW02PN-176F 8 7 SW02PN-177F SW02PN-178F 4 ✓ SW02PN-123R 4 SW02PN-125RF 4 SW02PN-126F 3

Certified by

4

th



£.

## Quality Assaying for over 25 Years

#### Geochemical Analysis Certificate 2V-0313-RG10 **Finlay Minerals Ltd** Sep-09-02 Company: Project: Attn: Warner Gruenwald We hereby certify the following geochemical analysis of 24 rock samples submitted Aug-16-02 by Warner Gruenwald. Sample Au ppb Name SW02PN-175F 10 TRF02PN-01 14 12 TRF02PN-02 TRF02PN-03 23 20 TRF02PN-04 21 TRF02 RB02AT-04 3 RB02AT-05 4 RB02AT-06 5 7 RB02AT-07 RB02AT-08 3 RB02AT-09 4 5 RB02AT-10 TB02SP-01 6 TB02SP-02 2 **TB02SP-03** 83 33 TB02SP-04 28 TB02SP-05 10 TB02Pi1-010 TB02Pi1-011 7 7 TB02Pi1-012 TB02Pi1-013 25 TB02Pi1-014 4 7 TB02Pi1-015

Certified by

SAY A N	A D A	<b>Assayers Canada</b> 8282 Sherbrooke St. Vancouver, B.C. V5X 4R6 Tel: (604) 327-3436 Fax: (604) 327-3423
	Quality Assaying for over 25	5 Years
<u>Geoch</u>	<u>emical Analysis Certificate</u>	2V-0313-RG11
Company:	Finlay Minerals Ltd	Sep-09-02
CIUICUL.		•
Attn: We <i>hereby c</i> submitted A	Warner Gruenwald <i>certify</i> the following geochemical analysis of 12 rock sug-16-02 by Warner Gruenwald.	samples
Attn: We <i>hereby c</i> submitted A Sample Name	<i>eertify</i> the following geochemical analysis of 12 rock sug-16-02 by Warner Gruenwald. Au ppb	samples
Attn: We <i>hereby a</i> submitted A Sample Name RM02PN-28	<i>certify</i> the following geochemical analysis of 12 rock sug-16-02 by Warner Gruenwald. Au ppb 32	samples
submitted A Sample Name RM02PN-28 RM02PN-29	<i>certify</i> the following geochemical analysis of 12 rock sug-16-02 by Warner Gruenwald. Au ppb 32 26	samples
Attn: We hereby of submitted A Sample Name RM02PN-28 RM02PN-29 RM02PN-30	<i>certify</i> the following geochemical analysis of 12 rock sug-16-02 by Warner Gruenwald. Au ppb 32 26 4	samples
Attn: We hereby of submitted A Sample Name RM02PN-28 RM02PN-29 RM02PN-30 RM02PN-31	<i>certify</i> the following geochemical analysis of 12 rock sug-16-02 by Warner Gruenwald. Au ppb 32 26 4 4	samples
Attn: We hereby of submitted A Sample Name RM02PN-28 RM02PN-28 RM02PN-30 RM02PN-31 RM02PN-32	<i>certify</i> the following geochemical analysis of 12 rock s ug-16-02 by Warner Gruenwald. Au ppb 32 26 4 4 4 42	samples
Attn: We hereby of submitted A Sample Name RM02PN-28 RM02PN-29 RM02PN-30 RM02PN-32 RM02PN-33 RM02PN-33 RM02PN-34	<i>certify</i> the following geochemical analysis of 12 rock s ug-16-02 by Warner Gruenwald. Au ppb 32 26 4 4 4 22 12 75	samples
Attn: We hereby of submitted A Sample Name RM02PN-28 RM02PN-30 RM02PN-31 RM02PN-32 RM02PN-33 RM02PN-34 RM02PN-35	<i>certify</i> the following geochemical analysis of 12 rock s ug-16-02 by Warner Gruenwald. Au ppb 32 26 4 4 42 12 75 14	samples
Attn: We hereby of submitted A Sample Name RM02PN-28 RM02PN-30 RM02PN-32 RM02PN-32 RM02PN-33 RM02PN-33 RM02PN-35 RM02PN-36	<i>certify</i> the following geochemical analysis of 12 rock s ug-16-02 by Warner Gruenwald. Au ppb 32 26 4 4 42 12 75 14 5	samples
Attn: We hereby of submitted A Sample Name RM02PN-28 RM02PN-30 RM02PN-31 RM02PN-33 RM02PN-33 RM02PN-34 RM02PN-34 RM02PN-35 RM02PN-36 RM02PN-37	eertify the following geochemical analysis of 12 rock s ug-16-02 by Warner Gruenwald. Au ppb 32 26 4 4 4 42 12 75 14 5 7	samples
Attn: We hereby of submitted A Sample Name RM02PN-28 RM02PN-29 RM02PN-30 RM02PN-31 RM02PN-32 RM02PN-33	eertify the following geochemical analysis of 12 rock s ug-16-02 by Warner Gruenwald. Au ppb 32 26 4 4 4 42 12 75 14 5 7 11	samples

....

( ) |\_\_\_\_\_

1\_\_\_\_

1

{\_\_\_

K^

A C	SSAYERS A N A I					Assayers Canac 8282 Sherbrooke S Vancouver, B.C. V5X 4R6 Tel: (604) 327-3430 Fax: (604) 327-342	
[]		Sector States and the sector of the sector o	ssaying for	over 25 3	lan.	2V-0393-RG1	
[]		<u>Analysis Certific</u> linerals Ltd	<u>cate</u>			Oct-29-02	
الح ا	Project: Attn: John Bara				e 1994 (* 1995) 1955 1966		
	We hereby certify the	following geochemical	analysis of	20 rock chi	p samples		
[ }	submitted Oct-18-02					Zn	
	Sample Name	Au ppb	Au g/tonne	Ag g/tonne	Pb %	<u>%</u>	
	WG 02 PN-036A WG 02 PN-038A WG 02 PN-039A	18 1071 15	1.24				
Γì	WG 02 PN-039A WG 02 PN-040A WG 02 PN-040B	54 18					
	WG 02 PN-040C WG 02 PN-040D	116 7			1.76	0.98	
	WG 02 PN-041A WG 02 PN-041B	24 52 122		103.0			
	WG 02 PN-041C WG 02 PN-041D WG 02 PN-041E	42 42 21		103.0			
	WG 02 PN-041E WG 02 PN-041F WG 02 PN-041G	556 7	0.61		2.75	2.14	
[ }	WG 02 PN-041H WG 02 PN-042	8 760	0.73	n an airte Ratairean		And Andrews	<u></u>
	WG 02 PN-042A WG 02 PN-042B	9 26 12					
	WG 02 PN-043 WG 02 PN-044 *97-2	12 19 1.42					
	*97-2 *MP-1a (1/5) *BLANK	<0.01		13.9 <0.1	0.86 <0.01	3.83 <0.01	
at					ke kan Letter		
$\square$							
							N N
			Cert	fied by		U	Rec.
		fan de service de servi La construcción de service de servi	5.5 <b>4</b> 5 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5				

i

ī

!

## Finlay Minerals Ltd

Attention: John Barakso

Project:

1

Sample: rock chip

## Assayers Canada

8282 Sherbrooke St., Vancouver, B.C., V5X 4R6	<b>Report No</b>	:	2V0393 RJ
Tel: (604) 327-3436 Fax: (604) 327-3423	Date	:	Oct-29-02

### **MULTI-ELEMENT ICP ANALYSIS**

Aqua Regia Digestion

	Sample Number	Ag ppm	AI %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	К %	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sn ppm	Sr ppm	Ti %	V ppm	W ppm	Y ppm	Zn ppm	Zr ppm
1	WG 02 PN-036A	0.2	1.36	<5	1230	0.5	<5	0.13	<1	4	68	20	3.16	0.34	0.78	510	10	0.04	3	880	24	<5	2	<10	13	< 0.01	46	<10	6	55	10
2	WG 02 PN-038A	1,2	0.50	5	1550	<0.5	<5	0.03	<1	1	124	14	1.78	0.15	0,16	240	106	0.03	4	260	88	5	<1	<10	55	<0.01	10	<10	3	51	5
1	WG 02 PN-039A	0.2	1.09	<5	730	<0.5	<5	0.13	<1	6	73	8	2.40	0.28	0.50	515	14	0.04	3	720	22	<5	1	<10	9	< 0.01	25	<10	5	46	6
1	WG 02 PN-040A	Z.6	0.46	<5	160	<0.5	<5	0.13	16	4	78	76	2.04	0.34	0.04	110	12	0.03	2	620	6294	<5	1	<10	100	0.02	7	60	5	3465	12
1	WG 02 PN-040B	1.2	0.58	<5	740	<0.5	<5	0.13	4	4	95	46	1.65	0.34	0.10	260	24	0.03	3	610	1478	<5	1	<10	47	0.02	9	10	5	810	11
	· _																														
1	WG 02 PN-040C	8,2	0.32	<5	130	<0.5	5	0.07	59	2	114	207	1.19	0.25	0.02	40	50	0.03	3	380	>10000	<5	<1	~10	196	0.01	4	200	2	>10000	8
1	WG 02 PN-040D	1.0	0.56	<5	160	<0.5	<5	0.13	1	3	101	25	2.38	0.40	0.06	90	22	0.03	3	720	862	<5	1	<10	60	0.02	9	<10	5	136	13
1	WG 02 PN-041A	0.2	2.02	<5	980	0.5	<5	0.67	4	14	91	23	4.07	0.36	1.34	2155	2	0.05	18	1070	1210	5	6	<10	35	0.16	83	20	11	1293	15
1	WG 02 PN-041B	2.2	0.84	<5	1710	0.5	<5	0.28	1	8	94	52	1.85	0.37	0.22	1575	2	0.03	3	680	5940	<5	2	<10	78	0.09	17	10	8	688	13
1	WG 02 PN-041C	99.2	0.83	<5	610	0.5	<5	0.97	4	5	65	88	2.42	0.40	0.33	1180	12	0.03	2	720	6418	<5	2	<10	56	0.08	21	10	11	877	14
																•															
1	WG 02 PN-041D	1.8	1.05	_<5	1460	0.5	<5	0.22	5	10	59	49	4.03	0.41		1540	-	0.03	3	870	1840	<5	2	<10	30	0.03	35	20	13	1014	16
1	WG 02 PN-041E		1.38	. <5	1690	0.5	<5	0.28	7	9	68	50	3.51			2200		0.03	4	890	1174	<5	2	<10	41	0.01	47	30	11	1541	13
1	WG 02 PN-041F	21.2	0.89	<5	70	0.5	<5	0.48	>100	7	64	191	~	0.33	0.33	1320		0.03	2	650	>10000	<5	2	<10	128	0.04	22	410	8	>10000	11
1	WG 02 PN-041G	<0.2	4.80	<5	870	1.0	<5	3.43	4	17	12	13	5.65	0.06	1.52	1455	<2	0.05	1	1470	544	<5	5	<10	170	0.24	155	10	14	1315	24
•	WG 02 PN-041H	Q.2	1.74	<5	650	0.5	<5	0.31	1	8	79	12	3.65	0.32	0.97	1240	2	0.05	3	770	212	<5	3	<10	21	0.03	61	<10	10	236	9
	WG 02 PN-042	2.2	0.46	<5	200	<0.5	·<5	0.07	26	4	180	26	1.63	0.21	0.18	210	28	0.03	5	260	2728	<5	1	<10	328	0.02	12	90	2	4955	8
	WG 02 PN-042A		1.65	<5	1460	0.5		0.36	<1	q	94	31	3.28		0.82	795	10	0.06	4	830	42	<5	3	<10	48	0.06	51	<10	9	118	9
	WG 02 PN-0428		0.31	<5	620	<0.5	-	0.05	5	1	113		0.77		0.04	40	10	0.03	2	350	6308	<5	<1	<10	186	< 0.01	5	20	1	975	6
	WG 02 PN-0425		0.34	<5	560	<0.5	-	0.14	1	5	177		0.92		0.07	735		0.04	5	240	42	<5	<1	<10	13	0.01	4	<10	4	133	1
	WG 02 PN-044	-	0.80	<5	340	0.5		1.31	14	6	80	640	2.08		0.32	1030		0.04	4	520	24	<5	1	<10	20	0.06	30	50	10	3048	25

A .5 gm sample is digested with 5 ml 3:1 HCl/HNO3 at 95c for 2 hours and diluted to 25ml with D.I.H20.

## Appendix #4

Petrographic Report

.

.

Petrographic Report

 $\Gamma$ 

) (\_\_) (\_\_)

× •

بة. السا

,2 ,

. <sup>ي</sup>ر

-

prepared for

Finlay Minerals Ltd.

by

K.E. Northcote & Associates Ltd. /Vancouver Petrographics Ltd.

November 22, 2002



# Vancouver Petrographics Ltd.

8080 GLOVER ROAD, LANGLEY, B.C. V1M 3S3 PHONE (604) 888-1323 • FAX (604) 888-3642 email: vanpetro@vancouver.net

Robert Brown Finlay Minerals, Ltd. 912-510 West Hastings Street Vancouver, B.C. V6B 1L8

November 22, 2002

Re: Toodoggone Sample Suite Petrography

Dear Mr. Brown,

Enclosed is a petrographic report describing 13 samples submitted to Vancouver Petrographics. Your samples and sections are enclosed as well.

As you noted these are mostly intrusives and breccias. None has the texture of a plutonic rock, but I suspect they are all either dykes, sills or possibly volcanic domes. While none is plutonic, none is pyroclastic, and only one (31) has what looks like a flow-related texture.

They have varying degrees of sericite alteration and silicification. Generally, the more potassic porphyries are less-altered.

2

Should you have any further questions, please contact me at 604-796-2034 or <u>bknorthcota@yahoo.ca</u>.

Sincerely

Bruce Northcote

Encls.

#### [1] 6 Quartz Monzonite/Quartz Latite Summary Description

Porphyritic rock, probably hypabyssal intrusive, with abundant plagioclase phenocrysts, altered mafic, quartz and K-feldspar phenocrysts in a K-feldspar-rich matrix. Amount of quartz places it close to granite/rhyolite classification. Plagioclase has some sericite alteration, but mafics are completely altered. Magnetite is the iron ore. There are a number of small discontinuous carbonate-filled tension gashes. Pyrite is very sparse.

#### Microscopic Description Transmitted Light

#### **Phenocrysts**

Plagioclase (altered); 30-35%, euhedral (0.2 to ~3 mm). Moderate sericite alteration. A few glomerocrysts. Probably oligoclase-andesine, based on the few unaltered patches observable.

Altered mafic; 7-10%, euhedral/subhedral (0.2 to ~2 mm). Original mafic phenocrysts are completely altered to chlorite, carbonate and minor epidote.

Quartz; 3-5%, anhedral (0.3 to ~2 mm). Most shows some evidence of resorption.

K-feldspar; 1-3%, euhedral to subhedral (0.2 to ~3 mm). Less altered than the plagioclase – finely dusted with clay alteration.

Apatite; <0.5%, euhedral (0.2 to ~1.5 mm). Sparsely scattered prismatic apatite crystals.

#### Groundmass

K-feldspar; 35-40%, anhedral (<0.01 to 0.1 mm). Interlocking K-feldspar dominates groundmass.

Quartz; 7-10%, anhedral (<0.01 to 0.1 mm). Lesser component of the groundmass.

Plagioclase; 2-3%, anhedral (0.01 to 0.1 mm). Minor in groundmass.

#### Alteration/Veining

There has been moderate sericite alteration of the plagioclase phenocrysts. Mafics have been completely replaced by carbonate and chlorite, with some minor, localized epidote, both in mafic pseudomorphs and in other microveins and patches. Carbonate fills very fine en-echelon tension gashes, as well as forming small replacement patches elsewhere.

#### **Reflected Light**

Magnetite; 1-2%, euhedral to subhedral (0.01 to 0.8 mm). Fairly evenly scattered. Some minor alteration to hematite.

Hematite/Fe oxides; <1%, anhedral (<0.01 to 0.1 mm). Most of the magnetite has some alteration to hematite. There is fine hematite in pseudomorphs after mafics.

Pyrite; traces, subhedral (0.1 to 0.2 mm). Minor, altering to Fe oxide.

Chalcopyrite; trace, anhedral (0.02 mm). In pyrite.

Leucoxene/ilmenite; traces, anhedral (<0.01 to 0.1 mm). A few skeletal grains of sphene, ilmenite and rutile.

#### [2] 31 Rhyolite(/Quartz Trachyte) Summary Description

Banded porphyritic rock, with sparse phenocrysts of plagioclase and quartz in a groundmass of mainly K-feldspar. Alteration is generally weak, but the sample contains a stockwork of quartz microveins. These have resulted in only localized silicification along parallel bands. Pyrite is very sparse.

#### Microscopic Description Transmitted Light

#### **Phenocrysts**

Plagioclase; 3-5%, euhedral to subhedral (0.3 to ~3 mm). Dusted with microcrystalline clays (?), locally with some sericite alteration. There are a few glomerocrysts.

Quartz; 2-3%, anhedral (0.3 to ~1 mm). All have rounded forms and apparent resorption.

#### Groundmass

K-feldspar; 70-75%, anhedral (0.01 to 0.3 mm). Interlocking, dusted with very fine, weak alteration – mainly clays, minor sericite.

Quartz; 10-15%, anhedral (0.01 to 0.3 mm). Fairly sparsely scattered in the groundmass as what appear to be original quartz grains. Introduced quartz is more common.

#### Veins/Alteration

Introduced quartz; 7-12%, anhedral (<0.01 to 0.1 mm).

The rock is crazed with quartz veins and microveins, however silicification has not been pervasive but patchy. The introduced quartz has silicified small irregular patches and parallel bands of a few mm wide.

Fine sericite/clays dust the feldspars.

#### **Reflected Light**

Leucoxene; traces+, anhedral (<0.01 to 0.1 mm). Scattered as small aggregates, common with introduced carbonate, quartz.

Fe-oxides; traces, anhedral/amorphous (<0.01 to 0.2 mm). Found locally in cavities and fractures. Dull, earthy material.

Pyrite; traces, anhedral (<0.01 to 0.05 mm). Sparse.

Magnetite; traces, anhedral (0.01 to 0.1 mm). Very sparse blebs of magnetite.

#### [3] TRB Rhyolite Summary Description

\_\_\_\_\_

Porphyritic rock with sparse plagioclase, quartz and altered mafic phenocrysts in a fine grained Kfeldspar-quartz groundmass. There is some fine quartz veining, patchy silicification and weak sericite alteration. Pyrite is finely and unevenly disseminated. Fe oxide fills some fractures.

#### Microscopic Description Transmitted Light

#### **Phenocrysts**

Plagioclase; 7-12%, euhedral (0.3 to ~4 mm). Variable sericite alteration – locally strong. Most of the plagioclase is only weakly altered, but turbid, dusted with fine clays.

Quartz; 2-3%, anhedral to subhedral (0.5 to ~2 mm). Some of the larger phenocrysts are rounded, apparently partly resorbed.

Altered Mafics; 1-3%, euhedral pseudomorphs (0.5 to ~2 mm). Replaced by mixtures of sericite, Fe oxide and leucoxene.

#### Groundmass

K-feldspar; 45-50%, anhedral (0.01 to 0.4 mm). Interlocking, intermixed with quartz in the groundmass. K-feldspar is dusted with very fine alteration.

Quartz; 25-30%, anhedral (0.01 to 0.4 mm). Fairly abundant in the groundmass. Some (estimate less than half) represents patchy silicification.

Plagioclase; 3-5%, anhedral (0.01 to 0.3 mm). Scattered plagioclase is found in the groundmass. Less sericite altered than the phenocrysts.

#### Veins/alteration

The sample contains fine quartz veins (generally <0.5 mm) and a network of microveins, producing some roughly parallel bands of silicification and scattered smaller patches of silicification. The largest veins have similar orientations. Most of this silicification is accompanied by lesser sericite. Neither the quartz nor the sericite is pervasive.

#### **Reflected Light**

Fe oxide; ≤1%, anhedral/amorphous (<0.01 to 0.1 mm). Found in and around fractures, lining small cavities and in scattered pseudomorphs after pyrite.

Pyrite; <0.5%, subhedral to anhedral (<0.01 to 0.3 mm). In veins as well as finely and unevenly disseminated, partly replacing mafics, found only in a portion of the sample.

Leucoxene; traces+, anhedral (<0.01 to 0.1 mm). Small aggregates, mostly after mafics, but also found in quartz veins.

#### [4] WG02PN038 Breccia Summary Description

Multistage breccia with quartz matrix and strongly silicified, sericite-altered clasts. Fe staining is patchy, with oxides commonly following fractures in clasts, which in some cases do not continue into quartz matrix (i.e. they were earlier stage veins), although staining pervades quartz in intergranular spaces. Pyrite is unevenly disseminated, mainly in clasts.

#### Microscopic Description Transmitted Light

Clasts (approximately 50% of the section)

Quartz;  $\geq$ 80% of typical clast, anhedral (<0.01 to 0.3 mm). Interlocking quartz is the main constituent of breccia clasts. There are also some scattered patches and pseudomorphs of sericite. Quartz is largely the product of silicification.

Sericitic Pseudomorphs; <25%, euhedral to subhedral (0.3 to ~1 mm). At least some clasts were originally porphyritic and have sericitic pseudomorphs, similar to those seen in other altered samples of this suite.

Chlorite; <5%, anhedral (0.01 to 0.1 mm). A few chloritic clasts noted near a disrupted vein – possibly part of an earlier phase of alteration (?)

#### <u>Matrix</u>

Quartz; >90% of matrix, subhedral (0.1 to several mm). Commonly encrusting terminated crystals/ comb texture. There are some open spaces and small patches of zeolite.

Zeolite; <1%, subhedral (0.5 to ~3 mm). Sparse, filling spaces in quartz breccia matrix.

#### **Reflected Light**

Pyrite; ≤1%, euhedral (<0.01 to 0.4 mm). Found mainly in silicified breccia clasts and in areas apparently subjected to later-stage fracturing and rehealing, subsequent to the coarsest and most-abundant earlier-stage quartz matrix.

Fe oxide; <0.5%, anhedral/amorphous (<0.01 to 0.2 mm). Alteration of pyrite and filling fractures and cavities.

Chalcopyrite; trace, anhedral (<0.01 to 0.1 mm). Minor, associated with pyrite.

#### [5] WG041 Altered Porphyry Summary Description

Veined, silicified, sericite-altered, crowded porphyry. Phenocrysts consisted of quartz, unidentified mafics and presumably plagioclase, now completely replaced by sericite. The groundmass is a fine grained mixture of quartz, sericite patches and minor chlorite. Magnetite is scattered throughout. Pyrite is sparsely and unevenly disseminated. Traces of galena are noted.

#### Microscopic Description Transmitted Light

#### **Phenocrysts**

Sericitic Pseudomorphs; 25-30%, euhedral (0.2 to ~4 mm). Phenocrysts are almost completely replaced by sericite. Presumably mainly after plagioclase, although no original feldspar remains.

Quartz; 7-10%, subhedral to anhedral (0.2 to ~2 mm). Phenocrysts are overgrown by rims of later-stage quartz. Original edges are outlined by fine sericite.

Chloritic Pseudomorphs; 3-5%, anhedral to subhedral (0.3 to ~2 mm). Pseudomorphs consisting of fine bladed chlorite, quartz and sericite are apparently after original matrics. Some of the shapes suggest amphibole.

Apatite; traces, euhedral (0.2 to 0.4 mm). Sparsely scattered accessory apatite crystals.

#### Groundmass

Quartz; 25-30%, anhedral (0.05 to 0.2 mm). Interlocking in groundmass.

Sericite; 20-25%, microcrystalline. Small patches interspersed among the quartz in the groundmass. Apparently after groundmass feldspar.

Chlorite; 2-4%, anhedral (<0.01 to 0.3 mm). Chlorite is scattered in the groundmass, as well as in pseudomorphs after phenocrysts.

#### Alteration and Veining

A quartz-carbonate-zeolite vein approximately 1.5 mm wide cuts across the section. It has a few open spaces along the centerline. As noted above, sericite has completely or nearly completely replaced feldspars, both phenocrysts and groundmass. Sparser mafics are chloritized. Iron staining follows an open fracture.

#### **Reflected Light**

Magnetite; ≤1%, subhedral (0.01 to 0.5 mm). Scattered throughout the section as individual grains and small clusters.

Pyrite; <1%, anhedral (0.01 to 0.4 mm). Unevenly disseminated and in and around microveins.

Fe oxide; traces+, anhedral (<0.01 to 0.2 mm). Patchy alteration of pyrite to dull earthy Fe oxide.

Galena; traces, anhedral (0.01 to 0.1 mm). Very sparse, in intergranular spaces in quartz.

Leucoxene; traces, microcrystalline. Scattered small aggregates. Common in pseudomorphs after mafics.

#### [6] GOLD 2 Altered Porphyry Summary Description

Strongly and pervasively sericite-altered porphyritic rock. Original phenocrysts included quartz, feldspar and mafics. Feldspar is replaced by sericite and mafics by chloritic mixtures. Some plagioclase survives in areas of the groundmass, although sericite alteration is strong there as well. Pyrite is fairly abundant in veins and is also found disseminated in the wallrock. Minor galena, sphalerite, chalcopyrite and pyrrhotite are associated with the pyrite.

#### Microscopic Description Transmitted Light

#### Phenocrysts

Sericitic Pseudomorphs; 25-30%, anhedral to subhedral (0.3 to ~3 mm). Presumably mostly after original feldspar.

Quartz; 5-7%, anhedral to subhedral (0.3 to ~2 mm). Quartz phenocrysts are commonly fractured.

Pseudomorphs after mafics (?); 1-3%, subhedral to anhedral (0.4 to ~1.5 mm). Pseudomorphs consisting of sericite, leucoxene, Fe oxide, carbonate, minor chlorite are apparently after original mafic phenocrysts.

Pyroxene; trace, subhedral (0.3 mm). One unaltered pyroxene noted.

Zircon; trace, subhedral (0.1 mm). A single broken crystal.

#### Groundmass

Altered feldspar; 17-22%, anhedral (0.01 to 0.3 mm). Interlocking in patches of less-altered material. Variable sericite alteration.

Sericite; 15-20%, microcrystalline. Much of the groundmass has been altered to sericite, like the phenocrysts.

Quartz; 7-12%, anhedral (0.01 to 0.3 mm). Interspersed among the sericite-altered groundmass feldspar.

#### **Alteration**

As noted, sericite replaces most of the feldspar. Some minor silicification is found at the edge of the section, near a part of a carbonate-pyrite vein. A pyrite-carbonate vein within the section swells to approximately 5 mm. Another quartz-carbonate-pyrite vein is more regular and less than 0.5 mm in width.

#### Reflected Light – GOLD 2

Pyrite; 10-15%, anhedral (0.01 to ~4 mm). In veins with quartz and carbonate and disseminated in wallrock.

Leucoxene, traces+, microcrystalline. Scattered patches of fine Ti±Fe oxides, apparently after some unidentified mafic mineral(s).

Galena; traces, anhedral (~0.01 mm). Minute blebs in pyrite.

Sphalerite; traces, anhedral (~0.01 mm). Minute blebs in pyrite.

Pyrrhotite; traces, anhedral (~0.01 mm). Minute blebs in pyrite.

Chalcopyrite; trace, anhedral (<0.01 mm). Very minor, associated with pyrite.

# [7] 041E Brecciated Porphyry **Summary Description**

Brecciated, silicified, sericite-altered porphyritic rock. Originally contained feldspar, guartz and mafic phenocrysts. The feldspar and mafics are completely sericite-altered. Groundmass is silicified, with small patches of sericite after the groundmass feldspar. There has been more than one stage of brecciation and healing with guartz and the latest-stage matrix consists of sparry coarser quartz, zeolite, some open spaces and galena. Unevenly disseminated pyrite is found mainly in clasts. A few small grains of native gold are present, apparently associated with the later-stage quartz matrix, although this is not entirely clear, as they are at the edges of strongly silicified clasts.

### **Microscopic Description Transmitted Light**

Sericitic Pseudomorphs; 30-35%, subhedral to euhedral (0.4 to ~3 mm). Feldspar phenocrysts have completely altered to fine sericite.

Pseudomorphs after Mafics; 3-5%, subhedral (0.5 to ~4 mm). Elongate, with rectangular outlines. Consist of quartz, sericite and Fe/Ti oxides.

Quartz; 2-3%, anhedral (0.3 to ~1 mm). A few quartz phenocrysts with thin overgrowths of laterstage quartz.

Apatite; traces, euhedral to subhedral (0.1 to 0.4 mm). A few accessory apatite crystals.

#### Groundmass

Quartz; 45-50%, anhedral (0.01 to 0.3 mm). Interlocking in groundmass. Probably representing

Sericite; 10-15%, microcrystalline. Small patches of sericite scattered throughout groundmass.

Breccia Matrix Note: clasts described above account for 60-70% of the section, matrix 30-40%.

Quartz; 70-75%, subhedral (<0.01 to ~1 mm). Sparry quartz with small open spaces.

Zeolite; 25-30%, subhedral (0.1 to several mm). Forms sheaflike aggregates of elongated tabular grains, intermixed with the quartz.

Carbonate; traces, subhedral (0.01 to 0.5 mm). Minor carbonate in the breccia matrix.

As noted above, silicification and sericite alteration of the porphyritic breccia clasts is strong. There is also some minor carbonate and quartz-carbonate veining and very minor patchy carbonate replacement patches in altered feldspar. The carbonate veinlets are generally not continuous and are not seen cutting across the quartz matrix.

# 

# Reflected Light - 041E

Pyrite; 2-3%, anhedral (0.01 to ~1 mm). Unevenly disseminated, commonly in small aggregates. Locally the pyrite is partly granulated, crushed by a later stage of brecciation.

Fe oxide; ≤1%, anhedral (<0.01 to 0.3 mm). Alteration of pyrite to dull grey iron oxide.

Galena; <0.5%, anhedral (0.01 to several mm). Most common occurrence is filling small cavities in quartz, as in the centres of veins or breccia matrix (see photomicrograph). Fine galena is also found in a few intergranular crevices in quartz.

Chalcopyrite; traces, anhedral (<0.01 to 0.1 mm). Minor, found in a few intergranular spaces in quartz, associated with galena.

Leucoxene; traces, microcrystalline. Scattered small aggregates. Common in pseudomorphs after mafics.

Argentite(?); traces, anhedral (<0.01 to 0.1 mm). Darker grey soft isotropic mineral found with some galena, and having a similar occurrence in intergranular spaces. Suspect argentite, but small grain size makes indentification difficult. SEM analysis is suggested if confirmation is required.

Unknown; trace, anhedral (<0.01 to 0.1 mm). A creamy-coloured mineral is developing a redorange tarnish. One example of this mineral has a small grain of native gold within it. Possible telluride, but SEM analysis recommended if confirmation is required.

Native Gold; traces, anhedral (visible from ~1 micron to ~20 microns). Minute grains found in intergranular crevices in quartz. Some has a reddish tarnish, but it is not clear whether this is from some adjacent material

÷

# [8] 040A Altered porphyry Summary Description

Strongly sericite altered and silicified porphyritic rock, originally with feldspar and mafic phenocrysts. Unlike other porphyries of this suite, quartz phenocrysts are not conspicuous. The sample is cut by quartz microveins and irregular sparry quartz veins with small open spaces and sulfides in the centres. One of these sphalerite clots has a small grain of native gold associated. Pyrite is finely disseminated.

# Microscopic Description Transmitted Light

# **Phenocrysts**

Sericitic Pseudomorphs; 25-30%, euhedral (0.4 to ~4 mm). Pseudomorphs consisting almost entirely of fine sericite are presumably after original feldspar phenocrysts.

Pseudomorphs after Mafics; 5-7%, euhedral to subhedral (0.3 to ~1.5 mm). Pseudomorphs consisting of coarser sericite, Fe oxide, leucoxene and quartz are presumed after original mafics. Some forms suggest amphibole.

Zircon; trace, euhedral (0.05 mm). Single zircon crystal.

# Groundmass

Quartz; 40-45%, anhedral (0.05 to 0.3 mm). Interlocking groundmass quartz, dusted with sericite. Mostly introduced.

Plagioclase; 10%?, anhedral (0.01 to 0.3 mm). Some plagioclase may reman in the groundmass – some of its sericite alteration has survived as a fine dusting in the quartz.

Sericite; 10-15%, microcrystalline. Dusting throughout groundmass, as noted.

### Alteration/Veining

Sericite alteration of feldspar phenocrysts is strong, as is silicification of groundmass, associated with quartz veining. The quartz veins are irregular, commonly discontinuous, swelling to approximately 2 mm and pinching out. There is some weak localized brecciation. As in other samples of this suite, there is textural evidence of multistage quartz, with reactivation and rehealing. The late stage is clearer, coarser, and has a few small open spaces. Sphalerite and native gold appear to accompany the later quartz.

# Reflected Light-040A

1

Pyrite; 2-3%, anhedral to subhedral (<0.01 to ~1 mm). Mostly disseminated, with some occurring in veins. Locally fractured.

--- -

ŗ.

i í

Sphalerite; traces+, anhedral (0.01 to 0.5 mm). Found mainly in the centres of quartz veinlets. Most of the sphalerite has chalcopyrite disease.

Galena; traces, anhedral (<0.01 to 0.05 mm). Small blebs in pyrite.

Pyrrhotite; traces, anhedral (<0.01 to 0.05 mm). Small blebs in pyrite.

Covellite; trace, microcrystalline. Found with sphalerite and a trace of native gold in a quartz vein.

Native Gold; trace, anhedral (5 microns). A single grain found, with sphalerite, in an apparently reactivated vein.

1.11

# [9] 041H Fine Granite / Rhyolite Dyke or Sill Summary Description

Crowded porphyry with fine-grained siliceous and potassic groundmass. Similar to sample labeled "6," and possibly also related to the rhyolites of this suite, with phenocrysts of plagioclase, quartz, altered mafics and K-feldspar. The groundmass consists mainly of K-feldspar and quartz. Some of the groundmass quartz may be attributable to silicification, although veining is not obvious. Magnetite is sparsely scattered and pyrite is somewhat unevenly and sparsely disseminated.

### Microscopic Description Transmitted Light

## **Phenocrysts**

Plagioclase; 32-37%, euhedral (0.4 to ~4 mm). Dusted with very fine sericite/illite. Glomerocrysts are common. Oscillatory and normal zoning are visible in some crystals. Oligoclase compositions estimated optically.

Altered Mafics; 7-10%, anhedral pseudomorphs (0.5 to ~2 mm). Completely replaced by chlorite, epidote, Fe oxide, pyrite, quartz. Roughly rectangular, elongate outlines common.

Quartz; 5-7%, anhedral to subhedral (0.3 to ~2 mm). Slight rounding of edges attributable to resorption.

K-feldspar; 5-7%, euhedral to subhedral (0.3 to ~2 mm). With a slight dusting of clays.

Apatite; trace, subhedral (0.8 mm). Single prismatic crystal noted.

## Groundmass

K-feldspar; 20-25%, anhedral (0.05 to 0.3 mm). Abundant in groundmass. Turbid, dusted with fine alteration.

Quartz; 12-17%, anhedral (0.05 to 0.3 mm). Intermixed with K-feldspar in the groundmass.

Plagioclase; 2-3%, anhedral to subhedral (0.05 to 0.4 mm). Minor fine plagioclase in the groundmass in addition to phenocrysts.

## Alteration

The groundmass is very siliceous, suggesting there may have been some silicification, although there is no clear textural evidence for this within the sample. Mafics are completely altered to chlorite, commonly with some epidote, quartz and Fe oxide. There has been weak sericite alteration affecting the plagioclase phenocrysts.

. . . .

# Reflected Light -- 041H

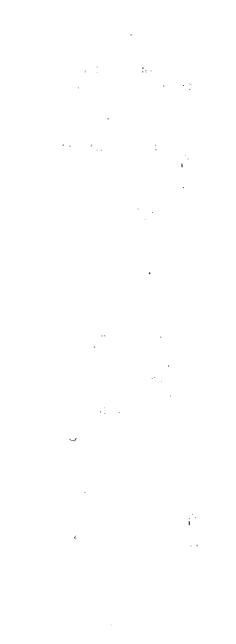
Magnetite;  $\leq$ 1%, anhedral to subhedral (0.01 to ~1 mm). Scattered, with some small clusters. Some minor alteration to hematite.

Pyrite; ≤1%, anhedral (<0.01 to 0.4 mm). Sparsely and somewhat unevenly scattered, with a few small clusters. Some alteration to Fe oxide.

i i

Fe oxide; <0.5%, anhedral/amorphous (<0.01 to 0.1 mm). Most of the pyrite has rims of dull grey Fe oxide.

Chalcopyrite; traces, anhedral (<0.01 to 0.1 mm). With pyrite.



والمراجع والمراجع

# [10] E1,0 Rhyolite Summary Description

Porphyritic rock with phenocrysts of plagioclase, quartz and K-feldspar in a fine-grained potassic groundmass. The rock has a shattered appearance and is veined, with a very fine network of quartz-sericite, quartz-carbonate and carbonate veins. There has been some crushing, healed by sericite and quartz. Sphalerite is the most abundant sulfide, with traces, of pyrite, chalcopyrite and galena.

## Microscopic Description Transmitted Light

### **Phenocrysts**

Plagioclase; 12-17%, euhedral (0.3 to ~3 mm). Variable sericite alteration and patchy carbonate replacement. Some of the phenocrysts have been completely replaced.

Quartz; 3-5%, anhedral to euhedral (0.2 to ~1.5 mm). Euhedral crystals are fairly common in this sample, but the phenocrysts are rimmed by feldspar and show some minor or incipient resorption.

K-feldspar; 1-2%?, euhedral (0.5 to ~2 mm). Sparse, turbid, dusted with fine alteration.

Apatite; trace, subhedral (0.4 mm). Single apatite crystal noted.

#### Groundmass

K-feldspar; 60-65%, anhedral (0.01 to 0.1 mm). The groundmass consists mainly of fine interlocking K-feldspar.

Quartz; 10-15%, anhedral (0.01 to 0.1 mm). Relatively minor quartz is scattered throughout the groundmass.

#### Veins/Alteration

The section is crazed with fine quartz, sericite and carbonate veins. There is some minor healed crushing with heavier sericite and quartz. Sericite and lesser carbonate also affects plagioclase phenocrysts. There are some patches of silicification. While Quartz, sericite and carbonate may be found together in the same veins, late discontinuous microveins (tension gashes) are filled with carbonate and cut across the quartz veins. A larger (to 0.5 mm), irregular, mainly-carbonate vein has minor quartz along the walls and some open spaces in the centre, as well as sphalerite, chalcopyrite and galena.

# **Reflected Light – E1,0**

Sphalerite;  $\leq 0.5\%$ , anhedral (<0.01 to ~1 mm). Found mainly in small quartz-carbonate veinlets which form a fine stockwork in this section. The sphalerite generally has chalcopyrite disease.

Pyrite; traces+, anhedral to euhedral (<0.01 to 0.5 mm). Sparsely disseminated.

Leucoxene; traces+, microcrystalline.

Chalcopyrite; traces+, anhedral (<0.01 to 0.1 mm). Scattered loose clusters. Commonly associated with sphalerite. Also found within sphalerite.

Galena; traces, anhedral (<0.01 to 0.1 mm). Unevenly scattered, generally found near the sphalerite, in intergranular spaces in wallrock. Some of the galena develops a tarnish, along with associated unidentified mineral.

ŧ.

Unknown; traces, anhedral (<0.01 to 0.1 mm). Suspect an unidentified mineral may be responsible for the tarnish that spreads to the galena. There may also be an impurity in the galena itself. Some "galena" takes a slightly rougher polish than the majority.

Covellite; trace, anhedral, microcrystalline. Some minor alteration of the chalcopyrite.

# [11] RM 33 Silicified Porphyry (dacite/granodiorite) Summary Description

Porphyritic rock with a fine grained intensely silicified groundmass. Phenocrysts consist of plagioclase and minor quartz as well as chloritic-sericitic patches after mafics. Suspect originally a dacite or subvolcanic equivalent. Pyrite is fairly abundant as irregular, unevenly scattered clots.

۰, <sup>۱</sup>

1

. .

#### Microscopic Description Transmitted Light

#### **Phenocrysts**

Plagioclase; 20-25%, euhedral (0.2 to ~5 mm). Some weak clay alteration, minor sericite. A few glomerocrysts. Where twinning is still visible, oligoclase compositions estimated.

Quartz; 1-2%, anhedral to euhedral (0.2 to ~1.5 mm). A few euhedral crystals, but most have rounded rims attributed to resorption.

Unknown Pseudomorphs; 3-5%, anhedral (0.5 to ~2 mm). Weakly chloritic-sericitic patches, presumably after mafic phenocrysts.

Zircon; trace, euhedral (0.1 mm). Accessory zircon.

#### **Groundmass**

Quartz; 65-70% (of entire rock), anhedral (<0.01 to 0.05 mm). The groundmass is pervasively silicified, consisting of fine equigranular quartz.

Sericite/clays; 3-5%, microcrystalline. Groundmass is speckled with sericite/clay.

#### **Alteration**

Silicification of the groundmass is almost complete. A dusting of sericite±clays is found in feldspars in groundmass. Sericite-chlorite patches are presumed to represent original mafics.

#### **Reflected Light**

Pyrite; 7-10%, anhedral (<0.01 to ~2 mm). Irregular clots to several mm in diameter.

Leucoxene; traces+. microcrystalline. Found in pseudomorphs after unidentified mafics. One pseudomorph after sphene.

Fe oxide; traces+, microcrystalline. With the leucoxene.

# [12] WP 118 Rhyolite Summary Description

Porphyritic rhyolite, probably a hypabyssal intrusive. It has fairly sparse phenocrysts of plagioclase and resorbed quartz and a few K-feldspar phenocrysts. The groundmass consists of K-spar with lesser quartz, and the two minerals form very fine graphic intergrowths. The sample is quartz veined with the main veins running in two nearly perpendicular directions. Only traces of pyrite and chalcopyrite were noted.

#### Microscopic Description Transmitted Light

#### **Phenocrysts**

Plagioclase; 7-10%, euhedral (0.3 to ~2 mm). Relatively sparse, dusted with clay, minor sericite alteration

Quartz; 2-5%, anhedral (0.3 to ~1.5 mm). Sparse, rounded, partly resorbed and surrounded by feldspathic rims.

K-feldspar; traces, euhedral (0.5 to ~1 mm). Only a few noted within the section (larger ones visible in the hand specimen).

#### Groundmass

K-feldspar; 70-75%, anhedral (0.1 to 0.5 mm). Interlocking, weakly dusted with very fine clays. Fine quartz intergrowths found throughout.

Quartz; 15-20%, anhedral (<0.01 to 0.3 mm). Fine intergrowths with K-feldspar, and scattered individual quartz grains.

#### Veins and Alteration

Quartz veins and microveins are fairly regular, ranging from 0.01 to ~ 5 mm in width. Most in two directions, minor third orientation noted. The veins are a significant portion of the section, together making up just less than 20%.

Feldspars are not strongly altered, but they are cloudy, dusted with clays.

## **Reflected Light**

Leucoxene; traces, microcrystalline. Minor, in fractures and unidentified pseudomorphs.

Fe oxide; traces, euhedral (<0.01 to 0.05 mm). Sparse, most apparently after pyrite.

Chalcopyrite; trace, anhedral (≤0.01 mm). Very sparse.

Pyrite; trace, euhedral (≤0.01 mm). Very sparse.

# [13] 040E Breccia Summary Description

Brecciated porphyritic rock, consisting of strongly sericite-altered and silicified clasts with a quartz matrix. While most clasts are strongly silicified, a few nearby sericitic clasts retain some original porphyritic textures, suggesting the silicification of the clasts may be largely attributable to an earlier phase. The most abundant sulfide is sphalerite, generally found in the later, coarser quartz. Finer pyrite is disseminated mainly in the clasts. Galena and chalcopyrite are also present, found with both pyrite and sphalerite.

#### Microscopic Description Transmitted Light

Clasts approximately 50-60% of the section

Clasts are angular and consist of strongly silicified, strongly altered material. While original textures are not visible in most cases (almost completely silicified), a few less-silicified clasts retain their porphyritic textures, typically with silicified groundmass and completely sericite-altered euhedral phenocrysts, apparently after feldspar.

Matrix approximately 40-50% of the section

Quartz; >95% of matrix, subhedral (to ~5 mm).

The breccia matrix is largely quartz, with some sulfide, more sphalerite and galena than pyrite. The quartz commonly encrusts fragments with comb texture, and there are some small open spaces. Distinguishable from the silicified clasts by coarser, sparry and commonly terminated crystals and lack of clay dusting or sericite. There are a few small open spaces.

# **Reflected Light**

Sphalerite; 1-3%, anhedral (0.01 to ~3 mm). Irregular grains, found in the coarse quartz matrix material. Some speckled with minute grains of chalcopyrite. Some interstitial galena.

Pyrite; ≤1%, subhedral to euhedral (0.01 to 0.5 mm). Disseminated, mainly in the silicified clasts.

Galena; traces+, anhedral (<0.01 to 0.3 mm). Found in intergranular spaces in quartz, pyrite, sphalerite, and in some cases intergrown with pyrite. As in other samples of this suite, some of the galena develops a tarnish.

Chalcopyrite; traces+, anhedral (<0.01 to 0.3 mm). Similar to galena, found in intergranular spaces, interstices in quartz. Some associated with sphalerite or pyrite. Minute grains of chalcopyrite are common in the sphalerite.

# **Photomicrographs**

# [1]

R02VIII-0 and 1. Plane polarized light and crossed nicols. Sericite altered feldspar, altered mafic and quartz phenocrysts. Long axis field of view is 2 mm.

# [2]

R02VIII-2 and 3. Plane polarized light and crossed nicols. Quartz veining, phenocrysts. Long axis field of view is 2 mm.

# [3]

R02VIII-5. Crossed nicols. Veining, sericite altered plagioclase phenocryst. Long axis field of view is 2 mm.

# [4]

R02IX-13. Crossed nicols. Multistage quartz. Long axis field of view is 2 mm.

# [5]

R02VIII-10 and 11. Plane polarized light and crossed nicols. Sericite alteration of groundmass, altered mafic phenocryst at bottom. Long axis field of view is 2 mm.

# [6]

R02VIII-12 and 13. Plane polarized light and crossed nicols. Sericite alteration. Long axis field of view is 2 mm.

# [7]

R02VIII-18 and 19. Plane polarized light and crossed nicols. Sericitic phenocrysts, silicified groundmass, carbonate vein. Long axis field of view is 2 mm.

R02VIII-14. Reflected light. Galena in quartz. Long axis field of view is 2 mm.

R02VIII-16. Reflected light. Native gold in quartz. Long axis field of view is 0.25 mm.

R02X-1. Reflected light. Left – unidentified mineral with orange tarnish contains speck of native gold, right – pale electrum (?) with tarnish. Long axis field of view is 0.25 mm.

R02X-6. Reflected light. Unidentified soft yellow mineral developing orange tarnish - not native gold, but possibly a gold mineral. Long axis field of view is 0.25 mm.

R02X-9. Reflected light. Galena with pitted, roughly polished rim – this develops an iridescent tarnish. Long axis field of view is 0.25 mm.

### [8]

R02X-2. Reflected light. Pyrite (large bright yellow), sphalerite (grey, lighter than gangue), covellite (blue) and a small grain of native gold. All in a quartz vein. Long axis field of view is 0.25 mm.

. .. .

R02VIII-20. Transmitted light, crossed nicols. Long axis field of view is 2 mm.

# [9]

R02VIII-22. Transmitted light, crossed nicols. Long axis field of view is 2 mm.

# [10]

R02VIII-23. Transmitted light, crossed nicols. Long axis field of view is 2 mm.

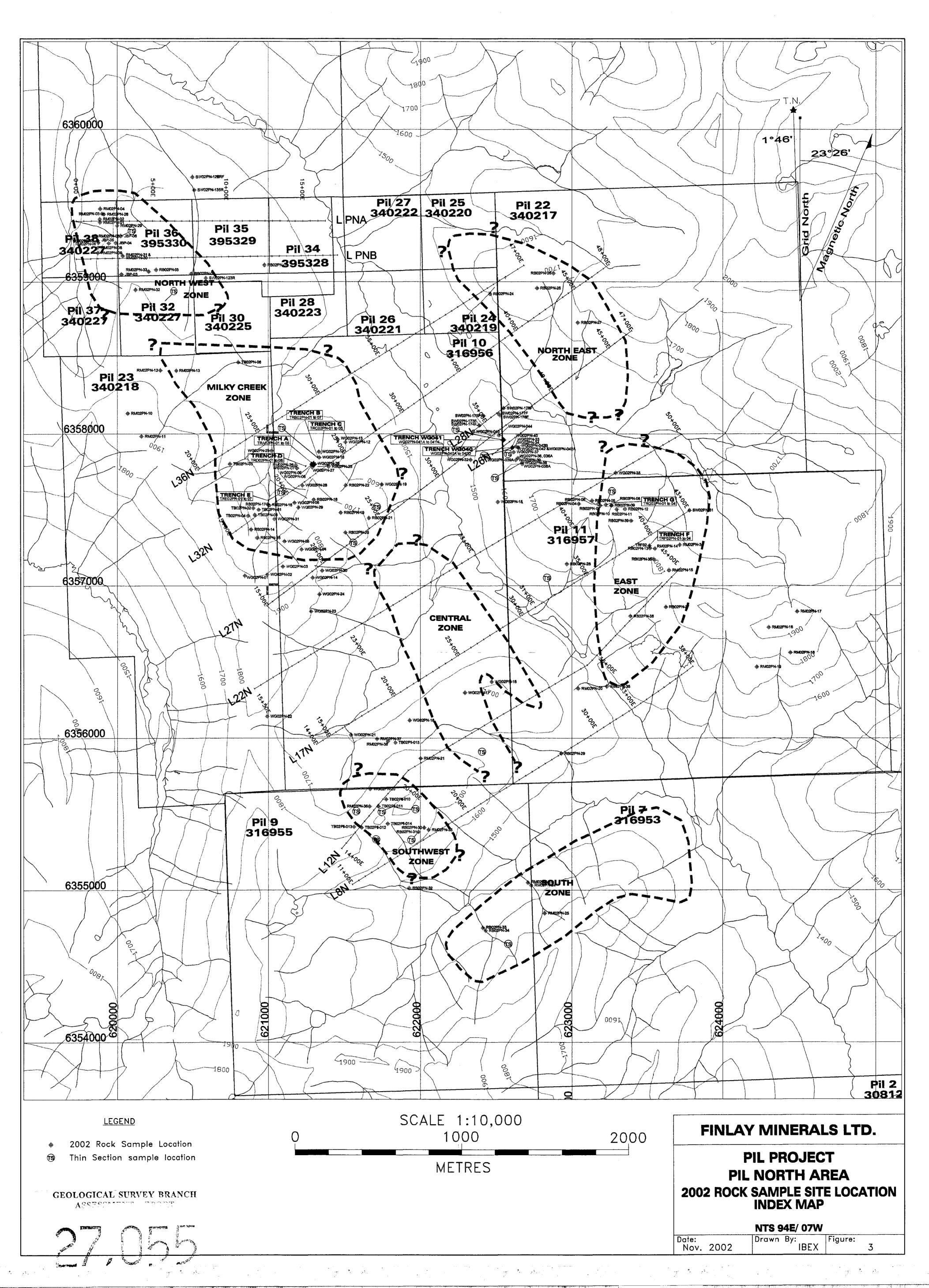
[11] R02VIII-24. Transmitted light, crossed nicols. Long axis field of view is 2 mm.

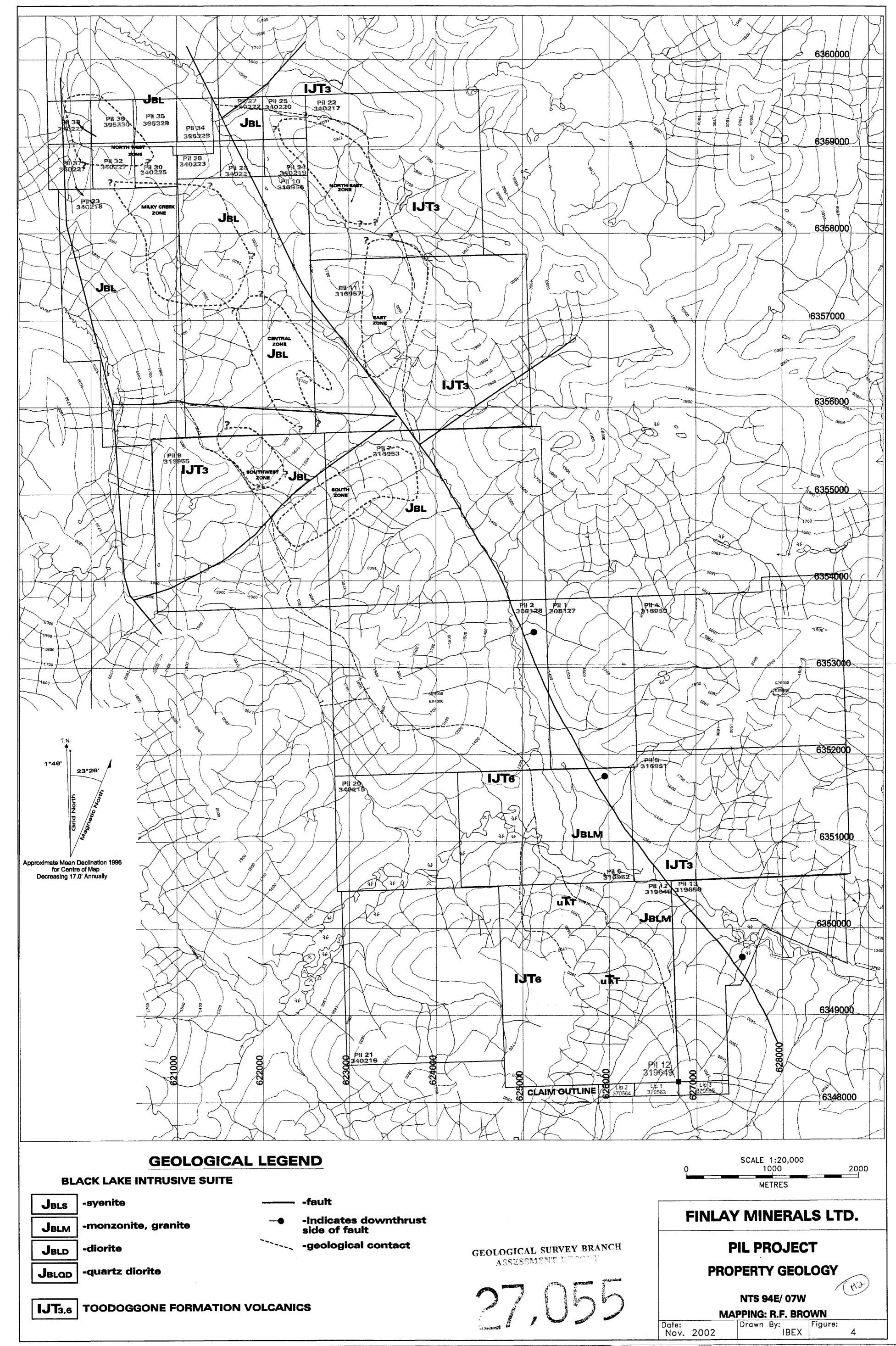
[12] R02IX-4. Transmitted light, crossed nicols. Long axis field of view is 2 mm.

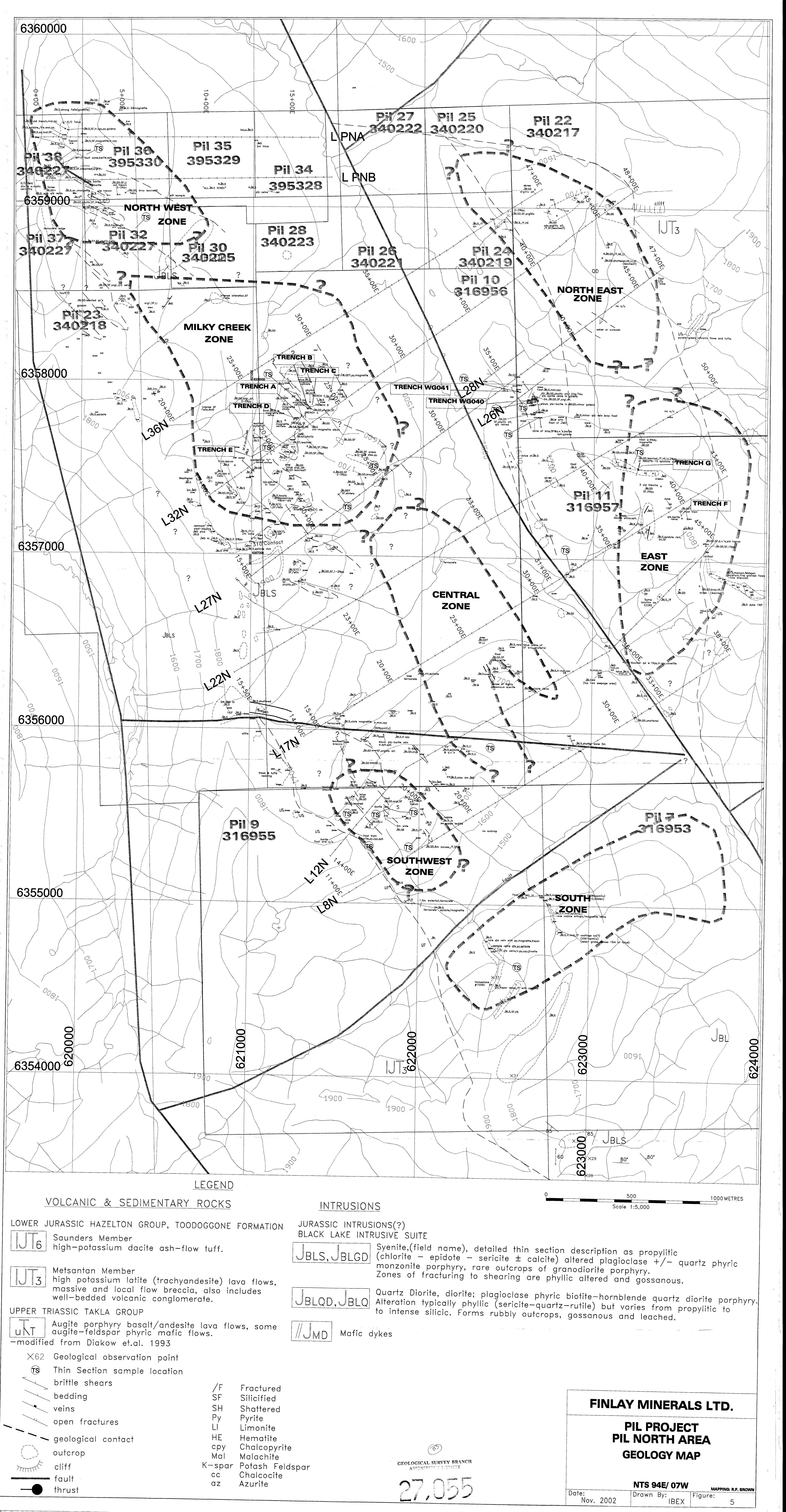
[13] R02IX-1. Transmitted light, crossed nicols. Long axis field of view is 2 mm.

 $\chi^{2} \left( \frac{1}{2} \right)^{n} = 0$ 

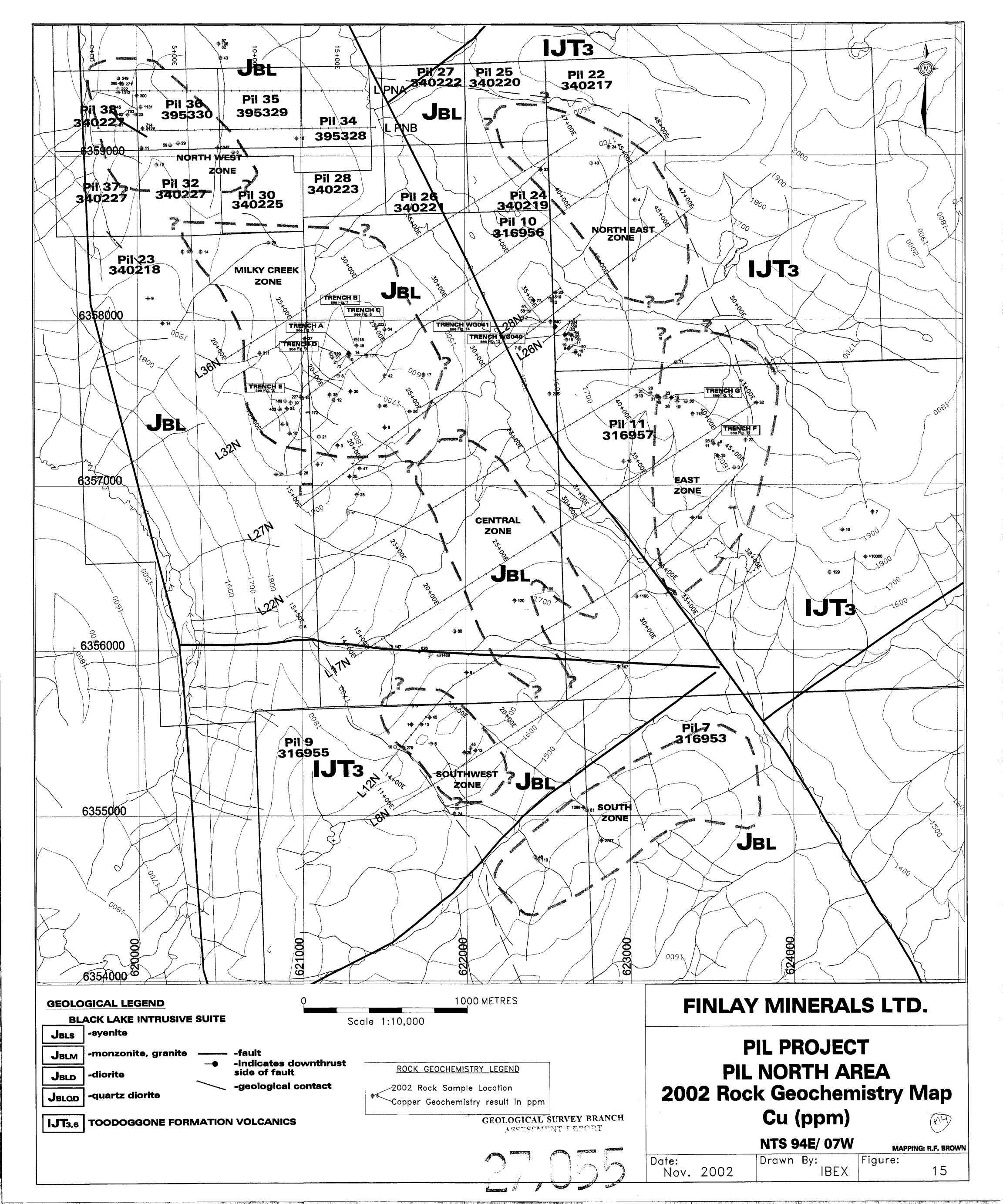
÷

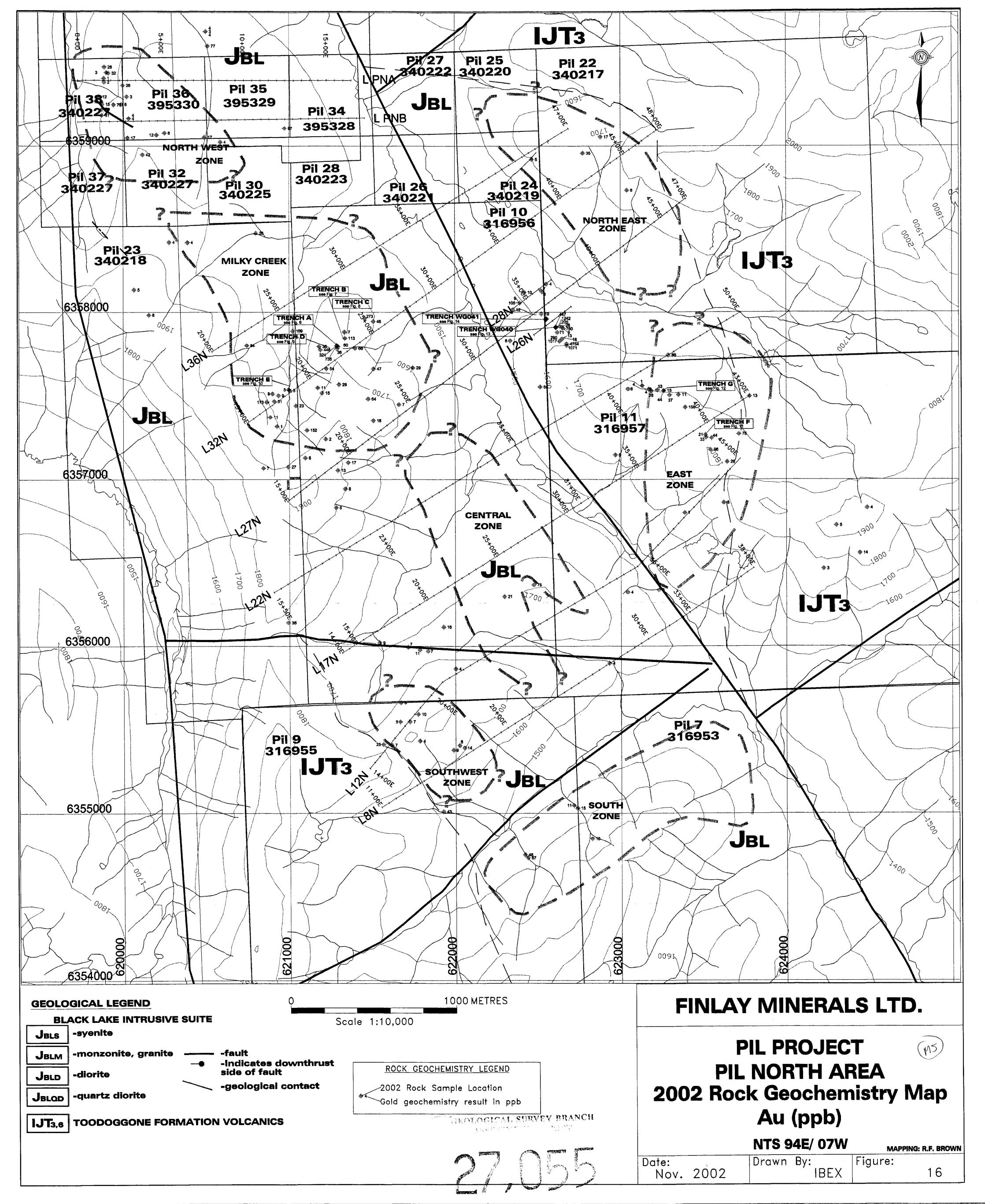




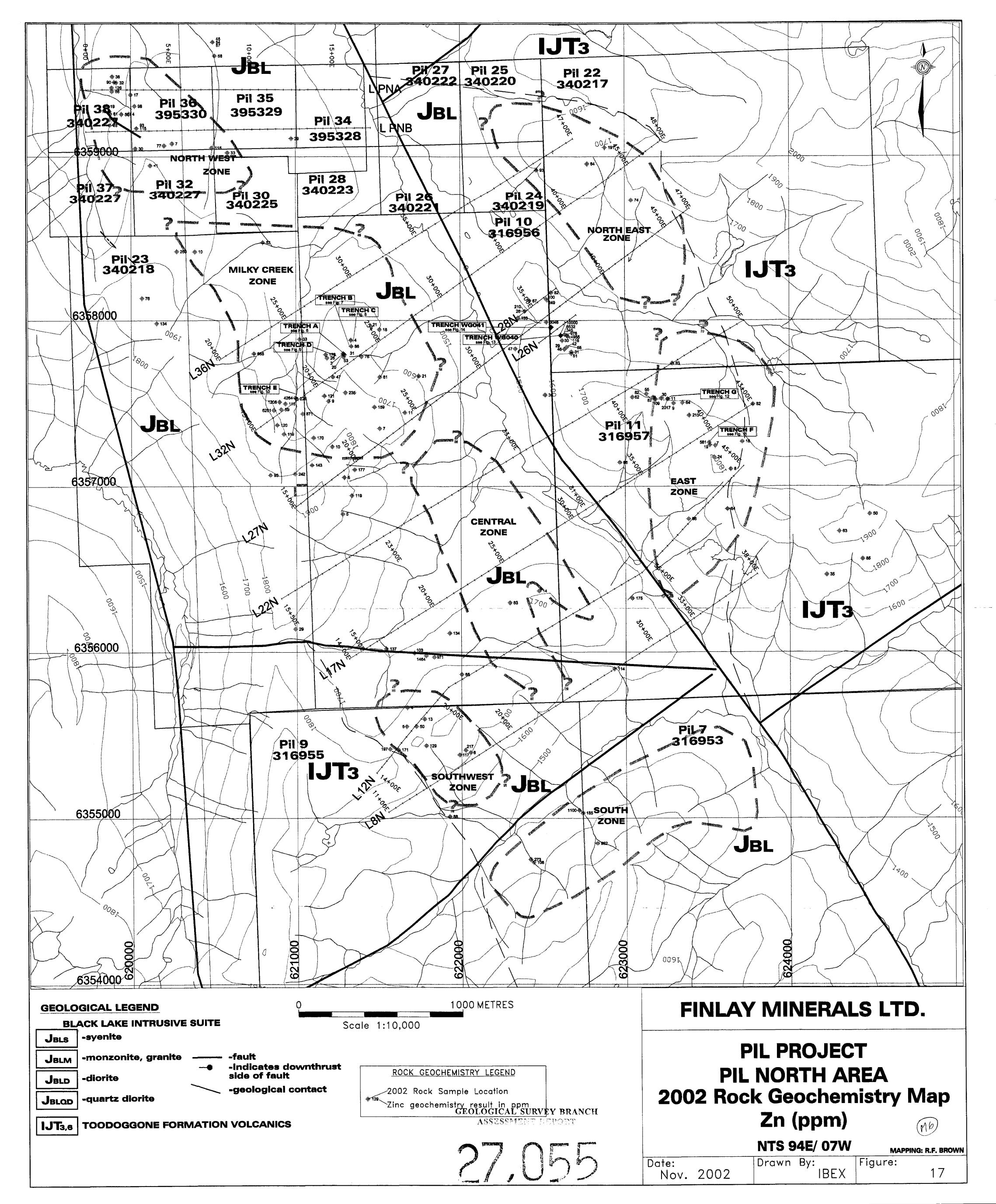


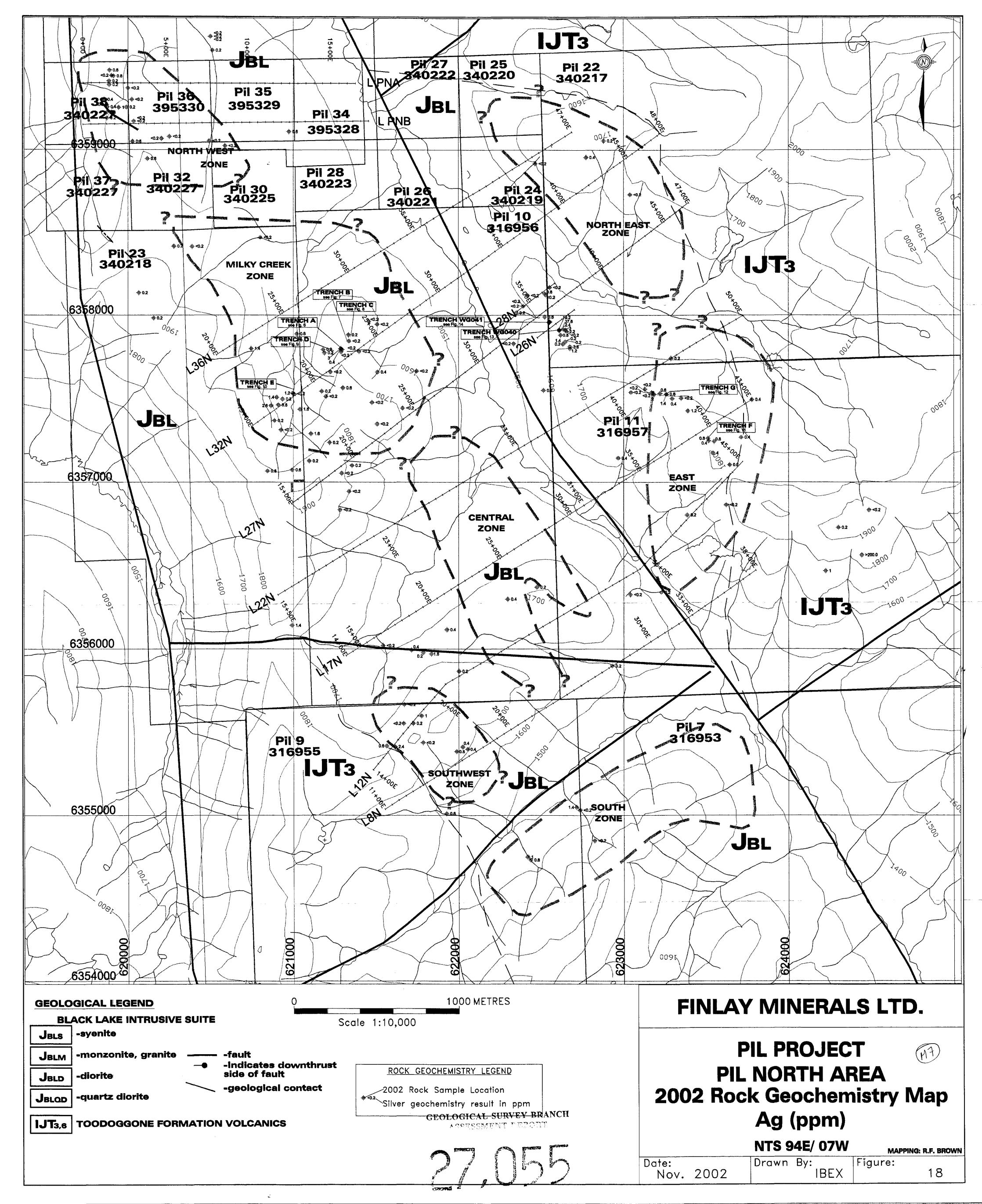
	° cc	
		ter an ter ter an te



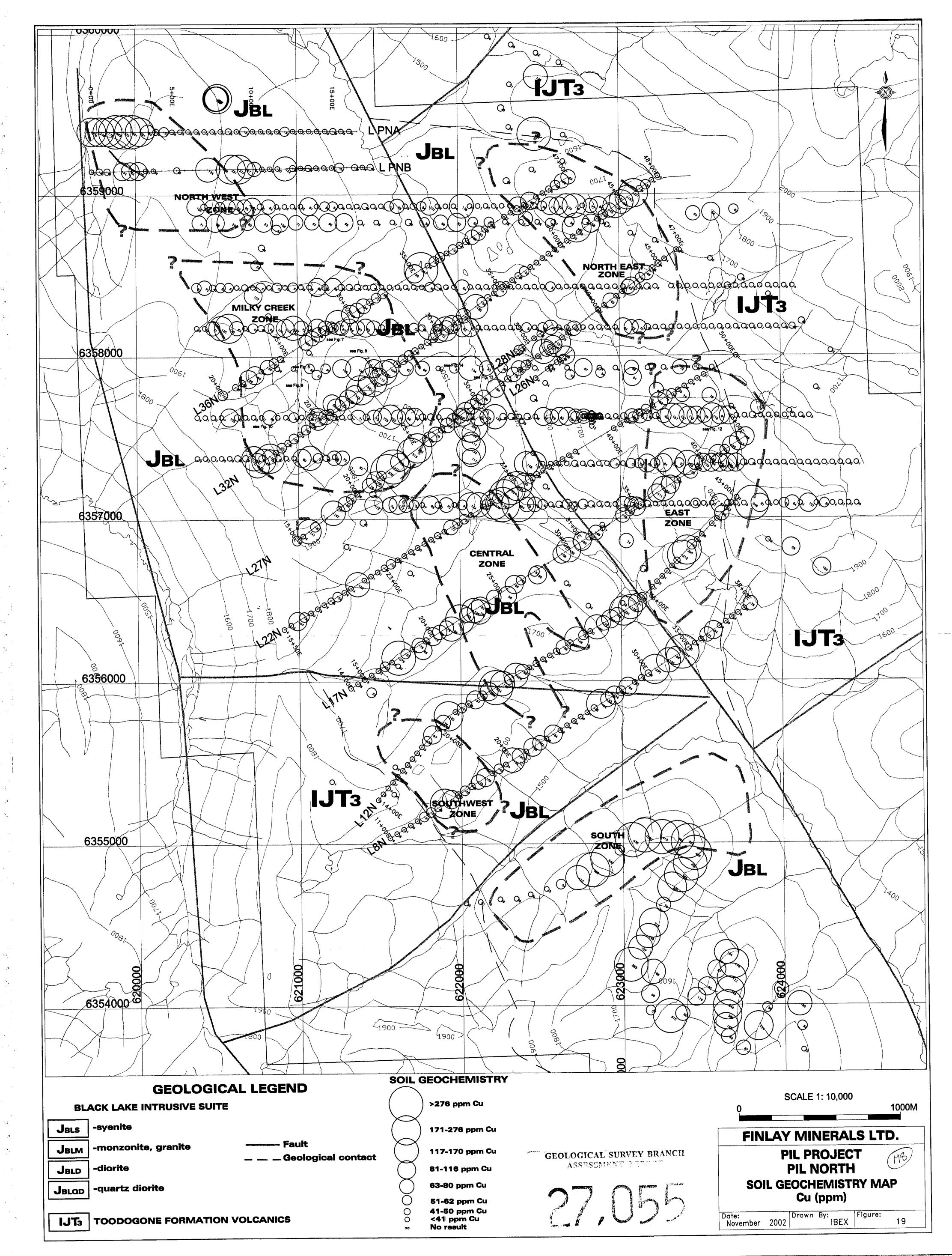


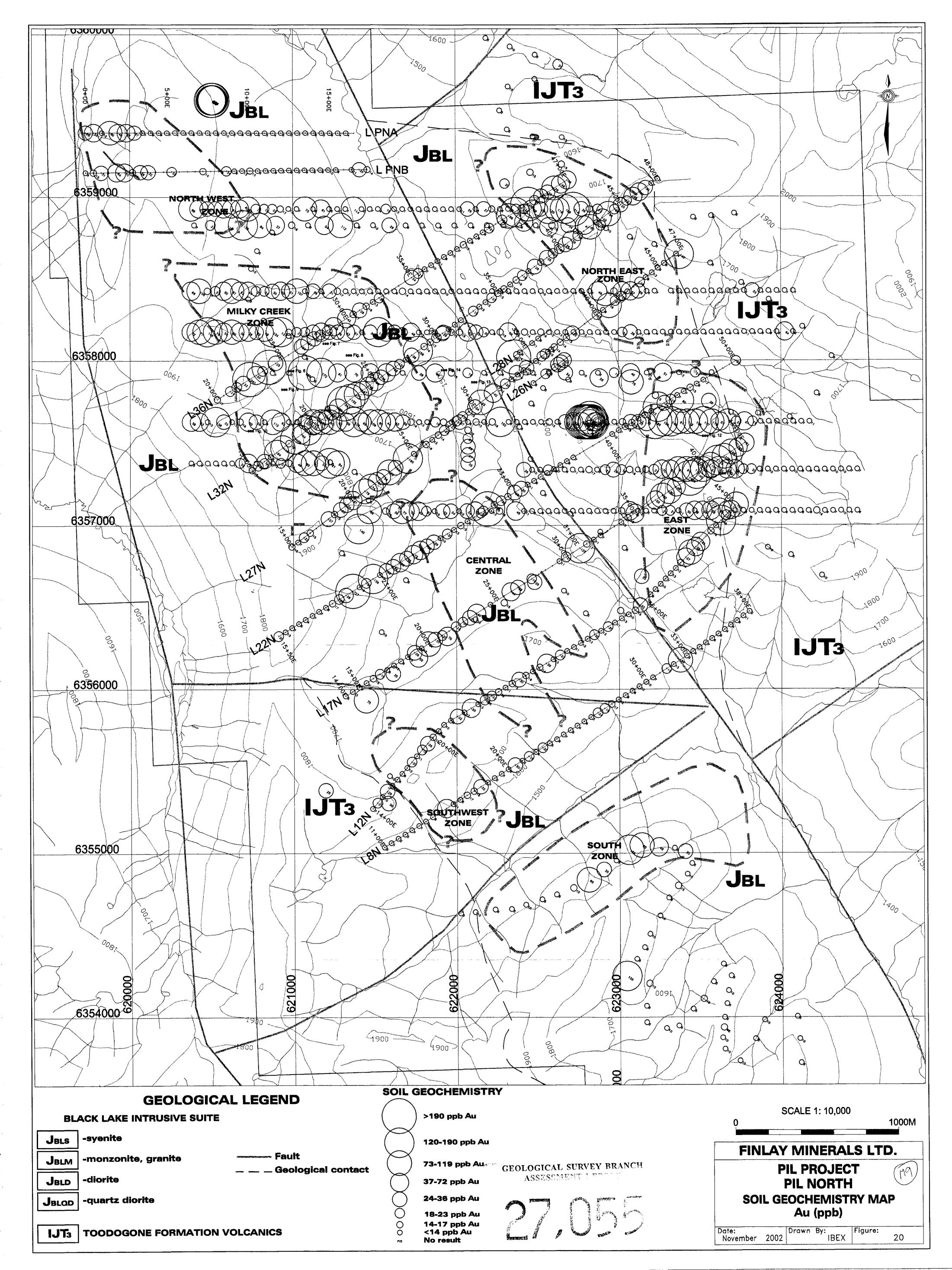
가는 것을 하는 것이다. 이번 바람이 있는 사람이 되었는 사람이 있는 것을 알았는 것을 알았는 것을 하는 것을 알았는 것을 해야 했다. 이번 방법 이번에 대한 방법 방법 이번 가슴이 있는 것이 있는 그 그 가 가 있는 것이다. 이번 것이 있는 것이 같은 것이 있는 것이 없다. 것이 있는 것이 있는 것이 없는 것이 없다. 것이 있는 것이 있는 것이 없는 것이 없는 것이 없는 것이 없다. 것이 있는 것이 없는 것이 없는 것이 없는 것이 없는 것이 없는 것이 없다. 것이 있는 것이 없는 것이 없는 것이 없는 것이 없는 것이 없다. 것이 있는 것이 있는 것이 없는 것이 없는 것이 없는 것이 없다. 것이 없는 것이 없는 것이 없는 것이 없는 것이 없는 것이 없는 것이 없다. 것이 없는 것이 없다. 것이 없는 것이 없다. 것이 없는 것이 없이 없는 것이 없는 것이 없는 것이 없다. 것이 없는 것이 없다. 것이 없는 것이 없는 것이 없 것이 것이 없는 것이 없이 없이 없다. 것이 없는 것이 없는 것이 없는 것이 없는 것이 없는 것이 없다. 것이 없는 것이 없는 것이 없는 것이 없는 것이 없는 것이 없다. 것이 없는 것이 없는 것이 없는 것이 없는 것이 없는 것이 없는 것이 없다. 않아, 것이 없는 것이 없는 것이 없다. 것이 없는 것이 없다. 것이 없는 것이 없다. 것이 없는 것이 없다. 것이 않아, 않아, 않아, 것이 없다. 것이 없다. 것이 없다. 것이 않아, 않아, 않아, 것이 것이 없는 것이 없는 것이 없는 것이 없는 것이 없다. 것이 없는 것이 없는 것이 없다. 것이 없이 없다. 것이 없다. 것이 없다. 것이 없다. 것이 없다. 것

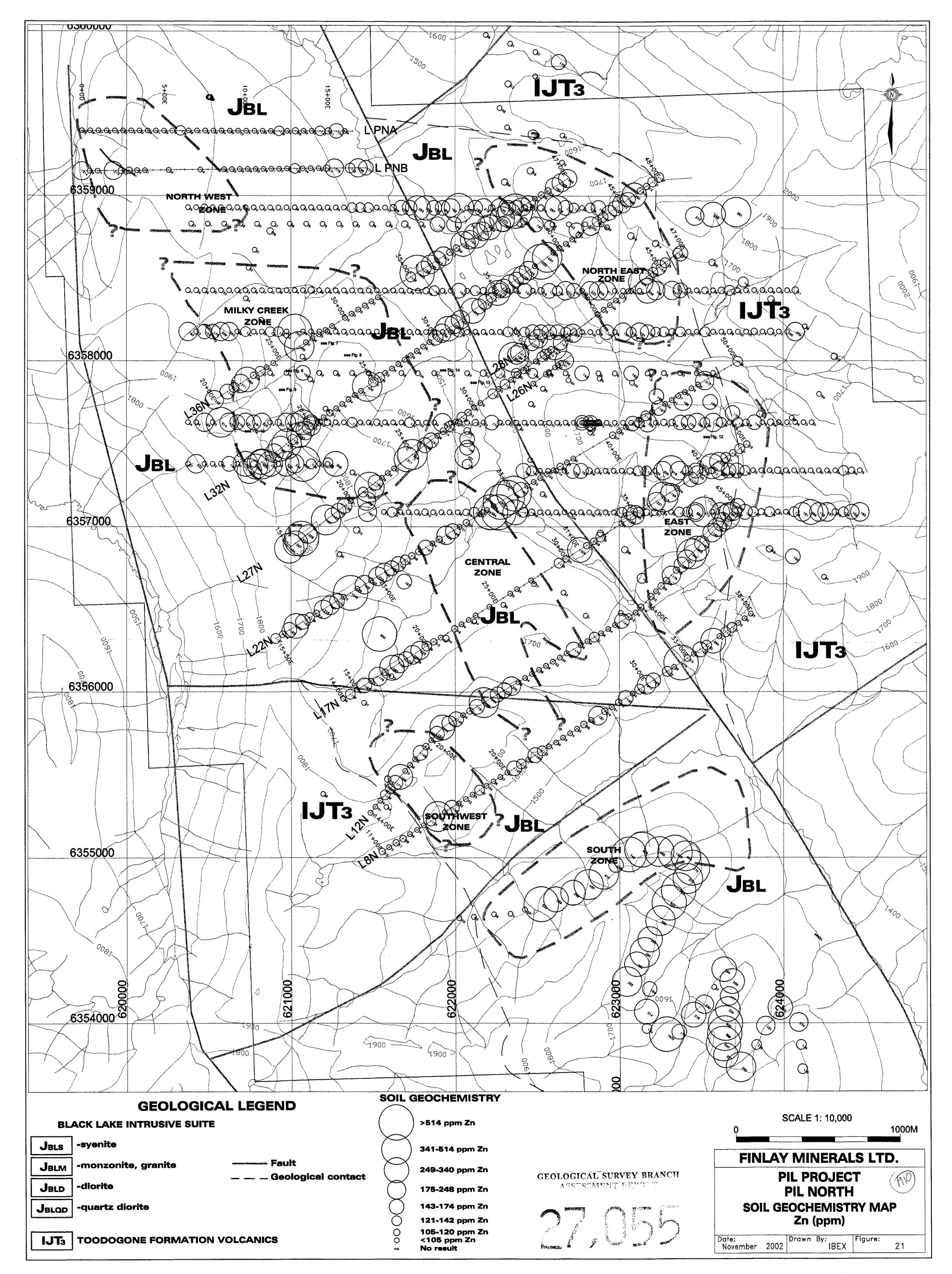




가지 때마다 그 방법에 방상했다면서 이야기 때마다 승규는 것이다. 귀엽에 이는 것 같은 것 생각 것이다. 그 것이지 않는 것에서 같은 것이다. 그는 것이다. 그는 것이다. 그는 것이 나는 것이 나는 것이다. 가장 것이다. 그는 것이다.







, N

