FORSHAW OPTION

'77-#286-#6394

viz.

Geology, Geochemistry and Reasons for Terminating Option

NTS: 82 E 2

R.V. Longe February 1977

SUMMARY

Three claims (48 units) lying astride Wallace Creek north of Greenwood, B.C. were optioned in October 1975 to cover ground thought likely to contain conformable bodies of zinc or copper sulphides in limestone. At the end of the same year two holes were drilled without success. This report describes geologic mapping and geochemistry carried out in 1976. The work was directed at finding a place on the claims where Basal Brooklyn limestone might come close to surface. No such place appears on the claims. The option was terminated and the claims returned to the owners. Three claims have since been staked on the neighbouring Copper Queen camp where the stratigraphy is believed to be more favourable.

FORSHAW OPTION
Geology, Geochemistry and
Reasons for Terminating Option
NTS: 82 E 2

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FORSHAW OPTION
Geology, Geochemistry and
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1. INTRODUCTION

The presence of sphalerite in a shear zone in what appeared to be Brooklyn Limestone (the stratigraphic unit containing the Phoenix orebody) led in 1975 to geological mapping, an I.P. survey, and to subsequent optioning of a 48-unit property (the Forshaw claims) near Greenwood, B.C. Because a conformable sulphide body was considered a possible source for sphalerite in the shear zone, two holes were drilled in December 1975 to test a chargeability anomaly which appeared to be due to a conformable body. The drill holes[1] intersected limestones and dolostones and chert conglomerates known as "sharpstone". Pyrite and pyrrhotite were common, and particularly abundant in the dolostones. Development of skarn minerals was patchy but locally intense.

The drilling accounted for the I.P. anomalies and established the existence of an unexpected limestone beneath the sharpstone. The source of sphalerite in the shear zone remained unexplained.

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[1] See report: "Forshaw Option, 1975 Drill Program".

Field work in 1976 first established the importance of the lower of two limestone units. Geologic mapping then became a matter of identifying a place on the claims or in the surrounding area where this lower limestone (called "Basal Brooklyn Limestone" by Riocanex) might come closer to surface. No such place was found on the claims and rather than drill deep holes for targets which could not be pinned down with geophysics the property was abandoned. The geologic mapping has however pointed to another area (now the Queen claims) where the Basal Brooklyn Limestone is more accessible.

The work described in this report was carried out by R. Wilson, N. Wilson, and the writer. Details on regional stratigraphy, summarized but not described in this report, can be found in the report "Queen Claims, Proposal for 1977 Programme". Work on the Joe claim described in a report titled "Joe Claim", and submitted for assessment in October 1976, is incorporated in this report.

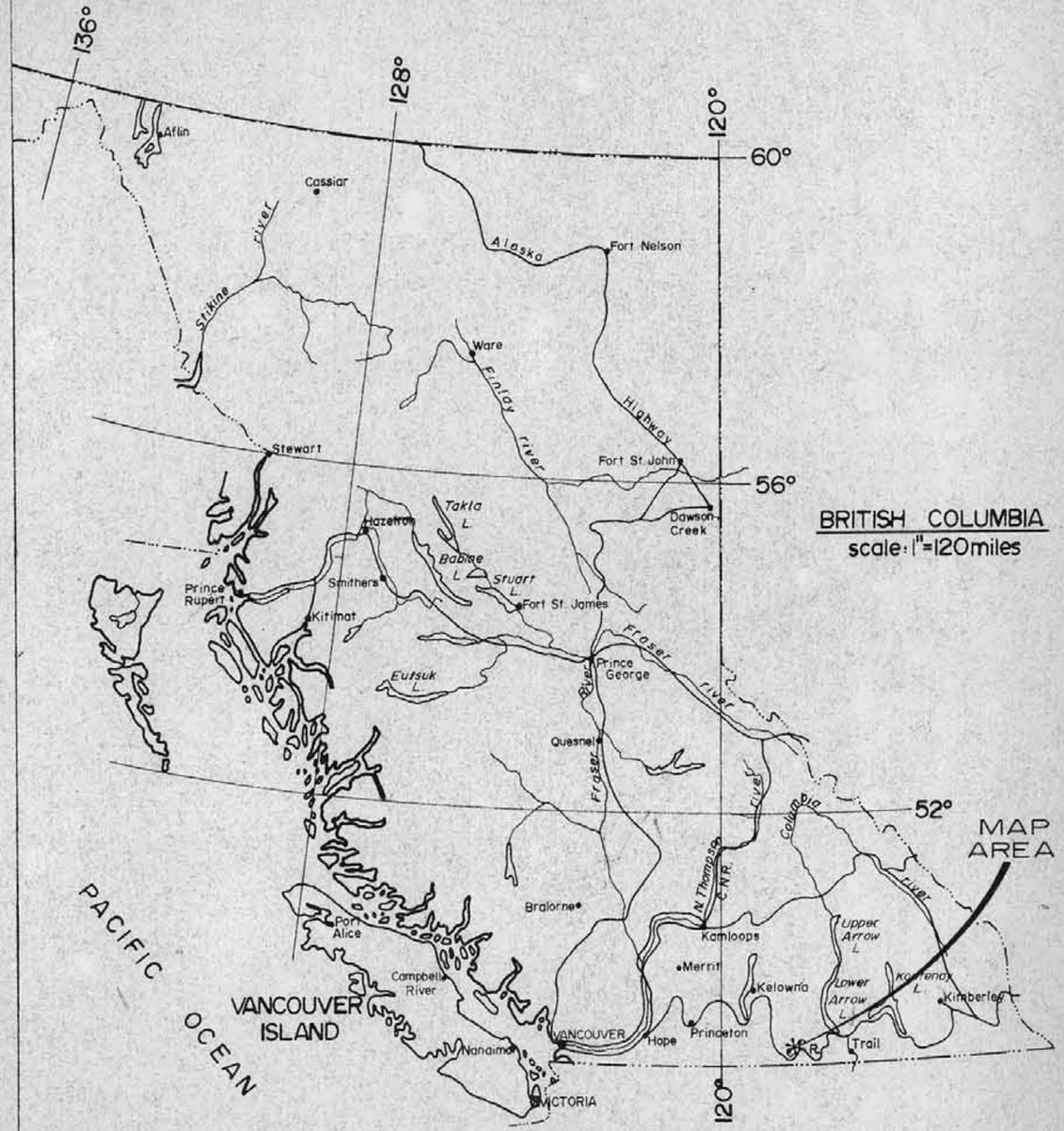
2. LOCATION DATA

The Forshaw claims (shown in Figure 1) lie astride Wallace Creek, five miles north west of Greenwood, B.C. and eleven miles north of the U.S. Border.

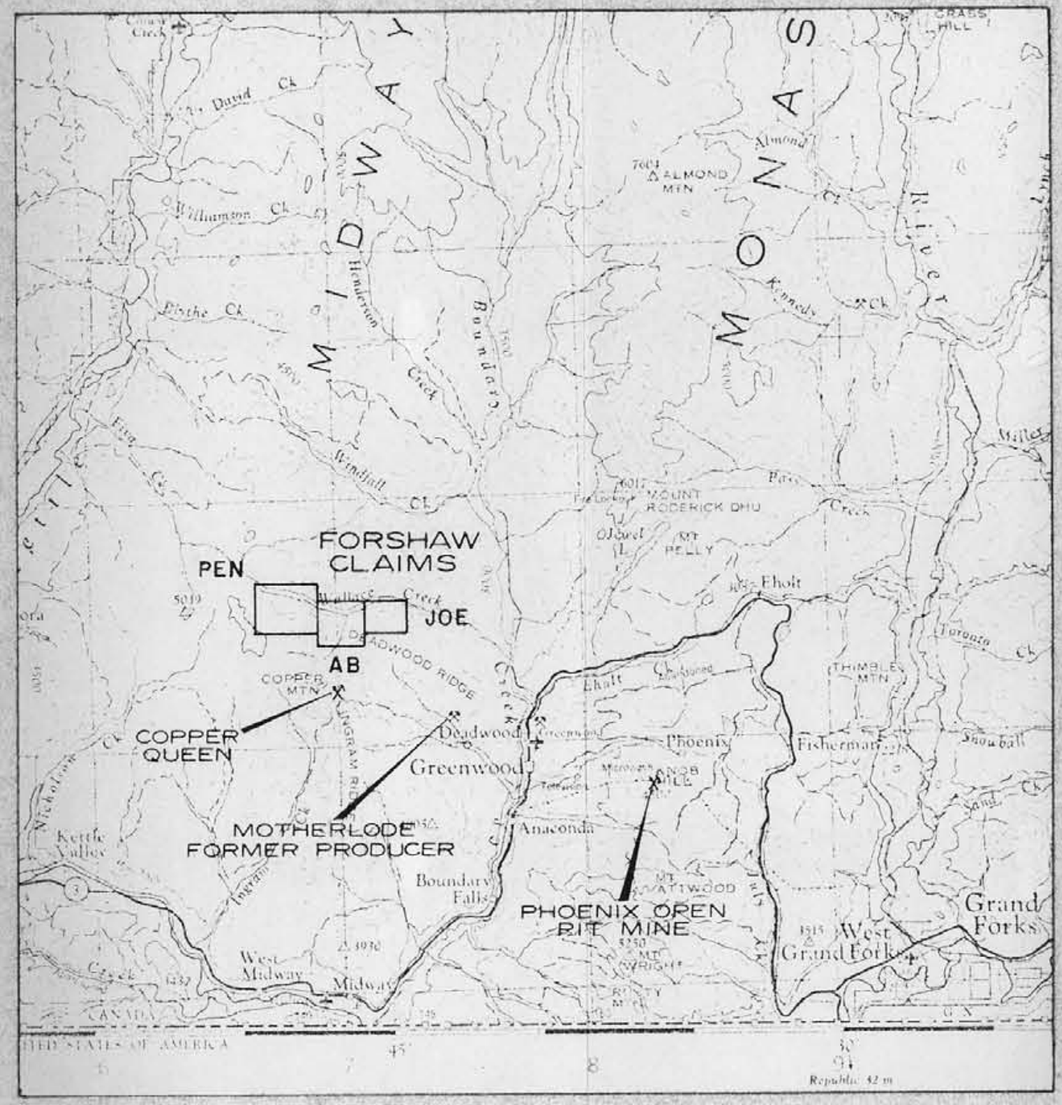
N.T.S. 82/E/2

Location of original showing:

Latitude; Longitude:	49°09' N; 118°49'30" W
U.T.M.:	368000 E; 5446550 N
Elevation:	4500 ft. above sea level



BRITISH COLUMBIA
scale: 1"=120miles



SCALE 1: 250,000

One Inch = 4 Miles (approx.)

RIO TINTO CANADIAN EXPLORATION LTD.

FORSHAW OPTION

LOCATION MAP

FIGURE 1.

R.L. / Altair | APRIL 1976 | DWG. L-6397

3. TOPOGRAPHY AND ACCESS

Relief in the Wallace Creek watershed is moderate, ranging from 3,000 to 5,000 feet above sea level. Much of the area has been logged and is covered by a network of roads, most of them usable. Elsewhere the forest varies from mature timber with open grass to scrub timber with dense undergrowth. Access is by road north from Greenwood along Boundary Creek and then west on either Wallace Creek (with the permission of a local farmer) or, more indirectly, via Windfall Creek.

4. OWNERSHIP, OPTION TERMS AND CLAIM STATUS

Three claims, the PEN, the AB, and the JOE comprise the Forshaw claim block shown in Figure 4. All 48 units in this claim block were optioned to Rio Tinto Canadian Exploration by the owners, Jim Forshaw and Val Luznar, in a Letter of Intent dated 1st October 1975. The AB claim (16 units) was located on 9th August 1975, the JOE claim (12 units) on 15th August 1975 and the PEN claim (20 units) on 17th September 1975. The agreement entitled Riocanex to acquire 100% interest in the property in return for a royalty of 3% Net Smelter Return up to a maximum of $1.5 million. The option was terminated on August 27th, 1976.

5. HISTORY OF PROPERTY AND PREVIOUS WORK

J. Forshaw located the main showing of sphalerite and pyrite in limestone in 1969 following a geochemical follow-up of a target he identified on an airborne magnetic map. The 36 "J" claims staked by Forshaw to cover this showing were optioned by the Orequest Syndicate (Pechiney, Home Oil, Granby) the same year. Orequest carried out geological mapping, geochemistry, a magnetometer survey and trenching during the summer of 1970 (B.C. Department of Mines Assessment Report 2925). In addition to the original 36 "J" claims located by Forshaw, Orequest staked a further 211 claims mostly on the south side of Wallace Creek. The option was later terminated and the claims returned to Forshaw. Riocanex examined the prospect in 1975 and carried out geological mapping, limited geochemical sampling, and a two-line I.P. survey. During this time Forshaw abandoned the "J" claims and staked the JOE, AB, and PEN claims, a group which covered most of the original "J" claims in addition to unstaked ground to the east. After geologic mapping and a two-line I.P. survey, the JOE, AB, and PEN claims were optioned by Riocanex in October 1975. Two holes were drilled at the end of 1975. Completion of geologic mapping of the claim block and geochemical sampling of the JOE claim were carried out in 1976 and are described in this report.

6. REGIONAL GEOLOGY

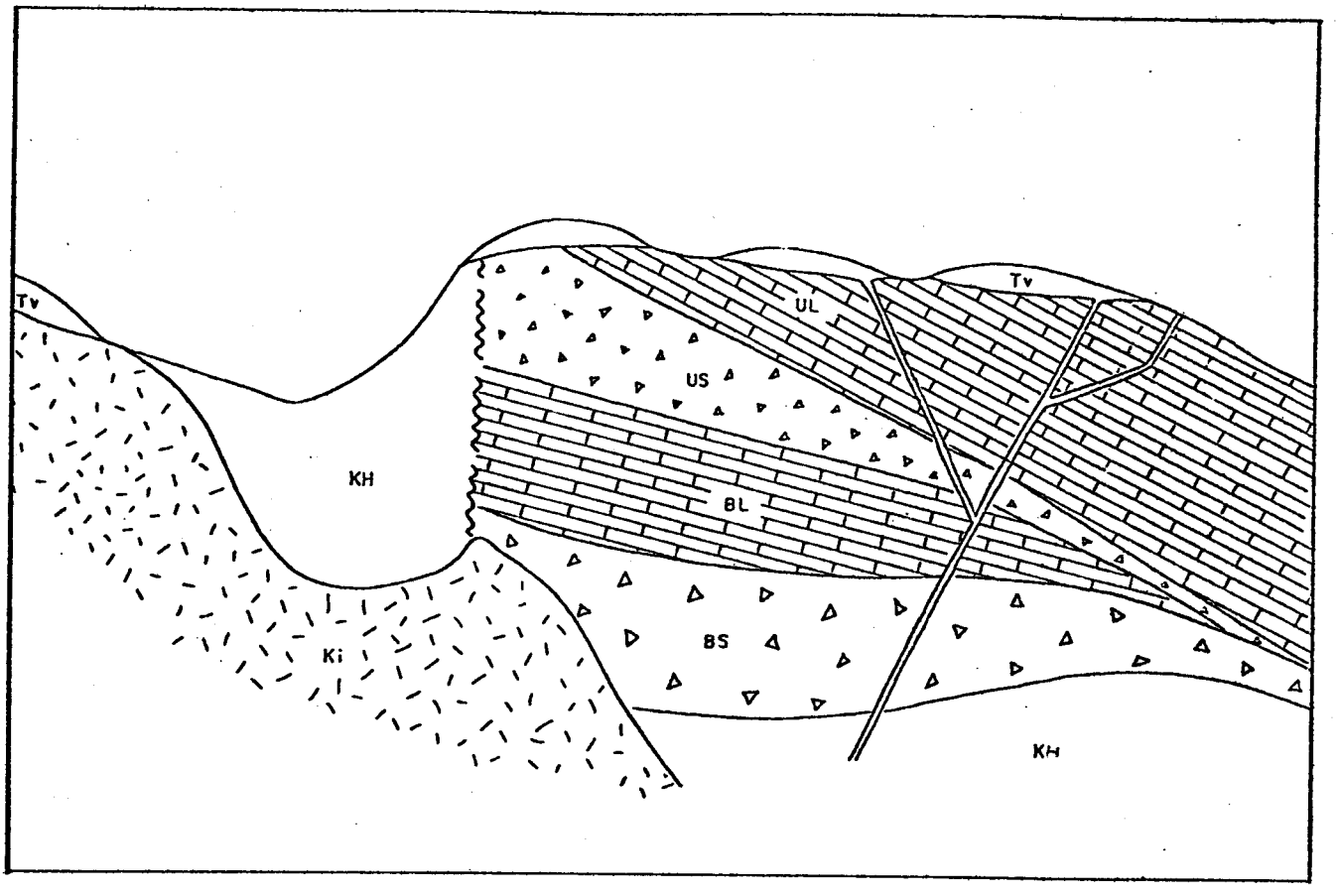
Much of the country between Grand Forks and Rock Creek is underlain by a sequence of volcanic and sedimentary rocks of Permian and Triassic age known as the Knob Hill and Anarchist Groups respectively. These are cut by Cretaceous granitic batholiths. Tertiary flows and pyroclastics laid down on a subdued version of the present land surface cover much of the area. Associated Tertiary dykes and sills are numerous. The sequence (represented in Figure 2) is as follows:

4.	Tertiary:	hypabyssal intrusives and volcanic-related sediments
3.	Cretaceous:	granitic intrusions
2.	Triassic:	Anarchist group
		2.5 Upper (Brooklyn) Limestone*
		2.4 Upper Sharpstone*
		2.3 Basal (Brooklyn) Limestone*
		2.2 Basal Sharpstone*
		2.1 Rawhide Shale
	Unconformity	
1.	Permian:	Knob Hill volcanic rocks and cherts

The Knob Hill volcanic rocks which were metamorphosed and uplifted in Permo-Triassic time are unconformably overlain by Basal Sharpstone and locally by Rawhide Shale, the oldest unit in the Anarchist group. This shale unit

*Riocanex terms

SCHEMATIC SECTION SHOWING STRATIGRAPHIC RELATIONSHIPS ON THE FORSHAW & QUEEN CLAIMS



DESCRIPTION	FORMATION NAME	AGE	SYMBOL
Volcanic rocks, tuffs and related sediments	Marron, Kettle River	Tertiary	Tv
Granitic Intrusives	Nelson ?	Cretaceous	Ki
Limestones, grey and white, grading into cherty dolostones and cherty siltstones	Brooklyn: Upper Limestone		UL
Sharpstone conglomerate, green or mauve, fine to medium grained, locally water sorted and/or calcareous	Brooklyn: Upper Sharpstone		US
Massive white limestone, often banded	Brooklyn: Basal Limestone	Tertiary	BL
Sharpstone conglomerate, brown-weathering, very coarse grained	Brooklyn: Basal Sharpstone		BS
Metamorphosed volcanic rocks	Knob Hill	Permian	KH

D.W.G. G.C. - 6462

FIGURE 2

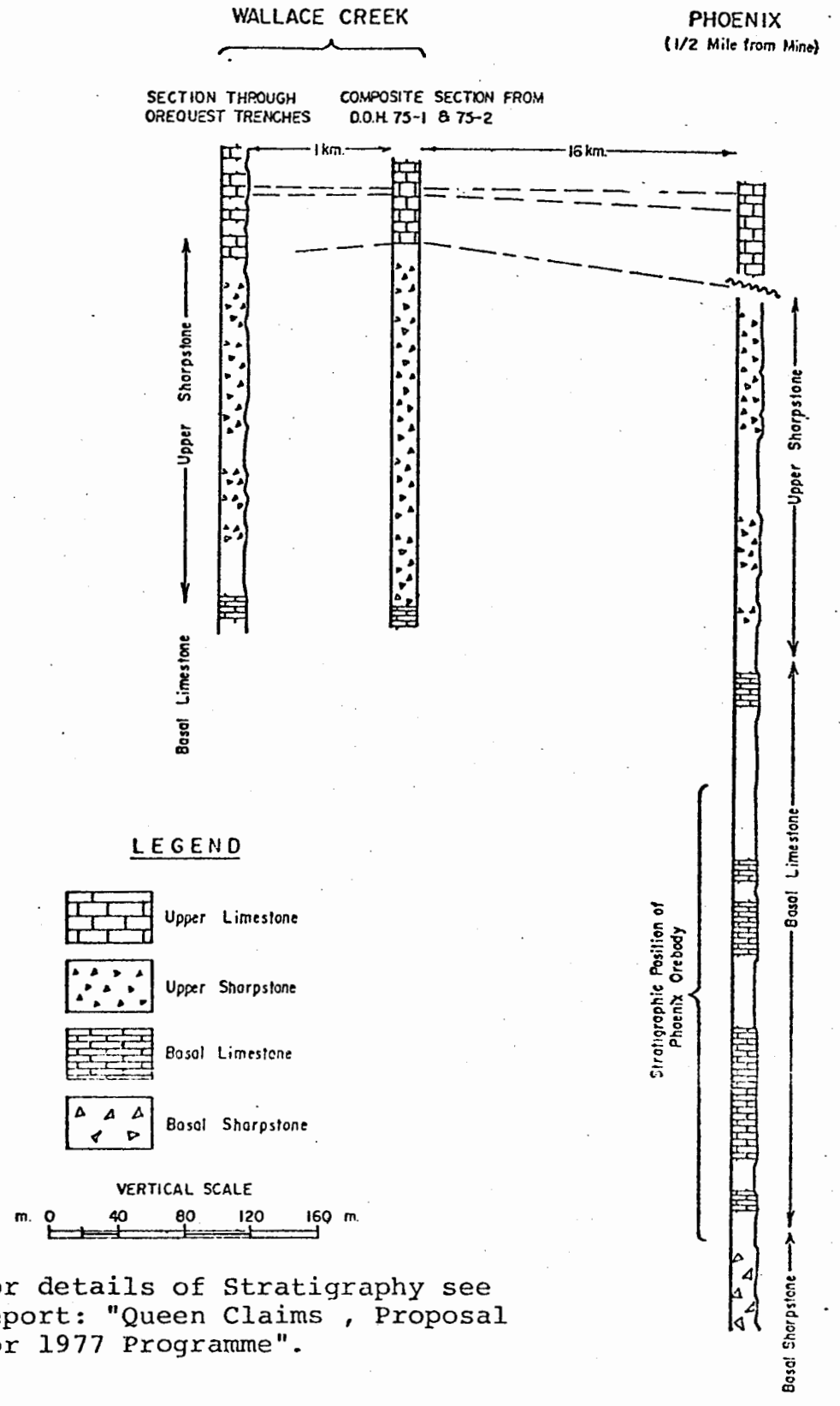
is restricted: it occurs as a lens 400 feet thick extending for 2000 feet along strike, southeast of the Phoenix pit. A shale occurring to the immediate south west of the Forshaw claim block may belong to the same unit. The Rawhide Shale is thought to represent depressions in a pre-Sharpstone landscape. The "Sharpstone" conglomerates are sedimentary, unsorted breccias consisting of angular clasts of chert ranging in size from 0.1 to 4.0 cm. Mapping in 1976 led to the recognition of two distinct units of sharpstone: The Basal Sharpstone lies on the Knob Hill Formation or on the Rawhide Shale, consists predominantly of larger very angular fragments, and is for the most part devoid of alluvial sorting. Aeolian quartzites are often associated. This unit is believed to have been deposited as outwash fans in a desert. The Upper Sharpstone is generally finer grained, of a greenish or mauvish hue, and has evidence of alluvial sorting of the fragments. Each sharpstone unit was followed by a period of limestone deposition. The two limestones are not easily distinguished from one another.

7. LOCAL GEOLOGY

7.1 Stratigraphy

In 1975 all major lithologic units of the Anarchist group, except for the Knob Hill Volcanics, were recognized on the Forshaw claims. The presence of Brooklyn Limestone, stratigraphically equivalent to the limestone containing the Phoenix orebody, seemed probable. Geologic mapping in 1976 (Figures 5 and 6) established that the stratigraphically favourable limestone beds were almost certainly present but it also indicated that these beds were too deeply buried to be explored by geophysics. The outcropping limestones were shown to be equivalent to an Upper Brooklyn Limestone present in the Phoenix area but not associated with the Phoenix orebody. The only place on the claim block where the Basal Brooklyn Limestone appeared in outcrop was just north of Wallace Creek where no more than 20 metres are exposed (Figure 7). Figure 3 suggests that, insofar as stratigraphic thicknesses near Phoenix can be applied to the rocks of Wallace Creek, the base of the Basal Brooklyn Limestone is some 300 metres below the exposures in Wallace Creek and below the deepest point reached in the 1975 drilling (Figure 8).

The lithologies at Wallace Creek differ from those near Phoenix in one noteable respect. The lower beds of the Upper Brooklyn Limestone, interesected in DDH 75-1, and shown (1975 mapping) over much of the map area as



For details of Stratigraphy see report: "Queen Claims , Proposal for 1977 Programme".

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SUMMARY OF MEASURED STRATIGRAPHIC SECTIONS

FIGURE 3

"cherty siltstone" are not, it appears, represented as such in the Upper Brooklyn Limestone exposed east of the Phoenix pit. The Cherty Siltstone, which is usually carbonate-rich, is now considered a silty equivalent of the relatively pure limestones of the Phoenix area.

Two extensive areas of the Knob Hill Formation, one west of the Discovery showing, one east of Susie Ridge, were recognized during 1976 (Figure 5). Where the Knob Hill rocks consist of metamorphosed chert they are easily recognized. Where they consist of argillites, limestones, or highly fractured quartzites they may be confused, respectively, with the Rawhide Shale, the Brooklyn Limestone or Sharpstone Conglomerates.

A bed of argillite appearing to lie between Knob Hill and Basal Sharpstones near the Top showing is thought to be Rawhide Shale.

On the Joe claim (Figure 9) the succession (Knob Hill/Upper Sharpstone/Upper Limestone) seen at the west end of the property is repeated yet again. Knob Hill metamorphic rocks on the west are succeeded to the east by sharpstone and limestone. Correlation of this limestone with the limestone in the Queen Claims to the south west indicated a local unconformity representing two missing units: Basal Limestone and Upper Sharpstone. The Upper Limestone lies directly on Basal Sharpstone. The Joe claim was investigated by soil geochemistry (see section 8 below) because of a copper and zinc anomaly reported there by the Orequest Syndicate (B.C. Assessment Report No. 2925).

7.2 Structure

The stratigraphic succession in Wallace Creek is cut and repeated by a series of major faults with a north-south trend. An east-west fault along Wallace Creek separates north-dipping beds on the north side of the fault from easterly dipping beds on the south side of the fault. No folding of significance has been recognized in the area.

8. GEOCHEMISTRY

8.1 Silt Samples

Silt samples were collected by Riocanex in 1976 along Trench Creek and Susie Creek because each of these creeks corresponded approximately with the base of a limestone unit. The samples were analyzed for copper and zinc. Values detected in these samples (shown in Figure 10) are not considered significant. Five additional silt samples were taken, three on the Joe claim and two to the south of the Joe claim. One of these is anomalous in both copper and zinc and corresponds with a minor anomaly in soil samples on the Joe claim grid (see below).

8.2 Soil Samples

In order to investigate a geochemical anomaly detected (but apparently not investigated) by the Orequest Syndicate, the Joe claim was covered in greater detail than the other claims. A grid was chained and flagged.

Samples (Figure 11) were collected at 25 metre intervals on lines 00, 400 and 800 m NE and at 50 metre intervals on lines 200, 600 and 1000 m NE. A total of 156 samples were taken, all from the 'B' horizon at depths ranging between 15 and 20 centimetres.

Copper (Figure 12)

Values in copper range from 3 ppm to a high of 168 ppm with a mean of 18.9 ppm and a standard deviation of 18.5 ppm. A minor anomaly was detected on line 1000 m NE.

Zinc (Figure 13)

Values in zinc range from 6 ppm to a high of 650 ppm with a mean of 91 ppm and a standard deviation of 85 ppm. A minor anomaly was detected on line 800 m NE.

Silver

Forty-four samples were analyzed for silver but the results were not considered useful and were not plotted.

9. DISCUSSION

Once the stratigraphic succession (Figure 3) had been determined it was then usefully applied to Wallace Creek where the aim of geologic mapping came to be a matter of distinguishing between two limestone units and two sharpstone units in order to recognize Basal Limestone in outcrop or to infer its existence beneath cover.

The two areas where Basal Limestone comes closest to surface are:

(1) west of the Discovery showing;

(2) south of the Orequest trenches.

In the first area, stratigraphic layers deeper than those reached in either drill hole would come closer to surface west of the drill holes were it not for probable truncation by at least one major north-south fault (Figure 16). An I.P. anomaly identified by P. Hallof of Phoenix Geophysics (see Appendix VII) lies west of the discovery-showing at a level which is slightly deeper than that reached by drilling. This anomaly, because it was downgraded by J. McCance (report pending) and because it appears to be at a depth not very much greater than that reached by DDH 75-2, was not rated highly. Moreover, as can be seen in plan (Figure 5) the area under which the deeper layers may occur is limited by the two major faults already mentioned. In other words, the area under which the lower levels of limestone might be reached by a short drill hole is very restricted. These considerations led to a decision not to test the target.

The second area in which an exploratory hole was considered is at the foot of the slope containing the Orequest trenches. Here (Figures 5, 7) what appears to be the Basal Limestone is exposed for about 30 feet at the foot of the hill just north of Wallace Creek. This area is unsuitable for I.P. because of proximity to a fault (the Wallace Creek Fault). The down-dip extension of this Basal Limestone, being restricted by the Wallace Creek fault to the south and west and by an intrusion to the east, can extend only to the north. In this direction the limestone dips into the mountain where in a short distance it reaches depths at which it cannot be tested by I.P.

The hypothesis that the base of the Brooklyn Limestone is a likely host for conformable bodies of copper or zinc sulphides remains untested. Sphalerite in the discovery trench remains unexplained. The possibility that sphalerite is derived from massive sulphides at the base of the limestone is still an acceptable possibility.

Although the base of the Brooklyn Limestone has not been found or inferred to lie sufficiently near the surface on the Forshaw claim block, its presence in the Copper Queen camp (now staked at the Queen claims) indicates that target areas can be identified by stratigraphic mapping. The Forshaw claims remain potentially interesting although they do not justify work at this time. Encouragement on the Queen claims could well lead back to the ground now covered by the Forshaw claims and possibly to drilling of some moderately deep holes.

10. ASSESSMENT REQUIREMENTS

Drilling in 1975 provided adequate work credits to keep the AB and PEN claims in good standing for over three years. One year's work was filed and the remainder offered to the owners to file at their own expense.

Soil geochemistry and geologic mapping in 1976 provided one year's assessment work on the Joe claim. This work was filed prior to return of the claim to the owner in October 1976.

11. CONCLUSIONS

The Basal Brooklyn Limestone underlies a significant proportion of the Forshaw claims but at a depth which makes exploration unattractive at present.

12. RECOMMENDATIONS

The option should be terminated.

This recommendation has been implemented at the time of writing.

COST STATEMENT

B.C. FORSHAW OPTION

3 SEPTEMBER 1976 - 3 FEBRUARY 1977

Travel		
Redhawk Truck	$ 29.00	
Budget Rent-A-Car	243.45	
Transglobe (Fixed Wing)	64.80	
Taxis	14.00	
Other	21.85	$373.10
Fuel		28.74
Supplies		118.25
Food & Accommodation		239.69
Report Preparation		1,951.95
TOTAL		$2,711.73

DWAY

MONASHEE

ANGE

PEN

AB

JOE

L 2585

L 2584

L 2329s

L 2332s

L 2321s

L 3681

L 3680

L 2322s

L 2327s

L 2323s

L 2325s

L 2326s

Creek

Matthews

Jarvis

5039

4500

5000

4200

LCP

LCP

LCP

3500

Line CO m

DDH 75-2

Line 200 m N

400 m W

DDH 75-1

Line 00 m N

400 m E

SHOWING OF PYRITE-SPHALERITE IN FAULT ZONE

Village

COPPER MOUNTAIN

L 2611

L 2610

L 2311

L 1851

L 655

456

L 660

L 617

Abandoned

L 1841

Abandoned

L 1572

L 1713

L 1708

L 381

L 2381

L 2380

Deadwood

L 2378

L 2315

L 2317

L 2437

L 2438

L 2439

L 696

L 2436

L 2319

L 2314

Motherlode

L 2229s

DEADWOOD

544200mN

364000mE

374000mE

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FIGURE 4

RIO TINTO CANADIAN EXPLORATION LIMITED

FORSHAW OPTION, 1975 DRILLING

FORSHAW CLAIMS, 1975 DRILL SITES, I.P. GRID, & SITE OF ORIGINAL SHOWING

SCALE 1:10,000

Metres 200 0 200 400 600 800 Metres

R.L. / Altair | APRIL 1976 | DWG. D-8425

OUTLINE OF FORSHAW OPTION

OUTLINE OF QUEEN CLAIMS

UL (cs)

Orequest Trenches

DDH 75-2

DDH 75-1

US

UL

BL

KH

BS

RS

UL (oq)

BL ?

4500

5000

4000

3500

3000

LEGEND

- V — Volcanics (Tertiary)
- Intrusives
- UL (cs) — Cherty Siltstone Facies of Upper Limestone
- UL (oq) — Aeolian Quartzite :- believed to be Shoreline Facies of Upper Limestone
- UL — Upper Limestone
- US — Upper Sharpstone
- BL — Basal Limestone
- BS — Basal Sharpstone
- RS — Rawhide Shale
- KH — Knob Hill metamorphic rocks
- Outcrop
- Lithologic contact ; approx , assumed
- Fault

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SCALE 1:10,000

Metres 0 100 200 400 600 800 1000 Metres

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ASSESSMENT REPORT
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FIGURE 5

RIO TINTO CANADIAN EXPLORATION LIMITED

FORSHAW OPTION & QUEEN CLAIMS

GEOLOGY - INTERPRETATION

R.L. /altair | JAN. - 1977 | DWG. G. - 8519

364000m E 65 66 67 68 69 70 71 72 373000m E

5445000mN 5442000mN

4500 3500 5000 4200 4500 4500

L 2585 L 2584 5039 L 2329s L 2332s L 2321s L 3681 L 3680 L 2322s L 2327s L 2323s L 2325s L 2326s

Creek Matthews Davis

Wallace R.

DREQUEST TRENCHES

TRENCH

SLOPE

JOE

DEADWOOD

COPPER MOUNTAIN

L 2611 L 2610 L 2311 L 1851 L 655 L 617 L 660 L 1841 L 1572 L 1713 L 1708 L 387 L 456 L 238 L 2380 L 2229s

Aband Aband

Deadwood Motherlode

L 2378 L 2315 L 2311 L 2437 L 2438 L 2439 L 2314 L 2319 L 2436 L 696

49°45 49°50

364000m E 65 66 67 68 69 70 71 72 373000m E

LEGEND

- Outcrop
- 269 Station number
- V Volcanics
- I Intrusives
- CS Cherty Siltstone
- L Limestone, grey and white, locally contains aeolian chert fragments
- S Sharpstone, angular chert fragments in an unsorted matrix
- RS Rowhide shale
- KH Knobhill metamorphic rocks
- WIN Claim outline

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NTS 82-E-2

SCALE 1:10,000

Metres 200 0 200 400 600 800 Metres

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FIGURE 6

RIO TINTO CANADIAN EXPLORATION LIMITED

FORSHAW OPTION & QUEEN CLAIMS

GEOLOGY OF WALLACE CREEK OUTCROPS & ROCK TYPES

R.L./altair | JAN - 1977 | DWG. G. - 8513

NORTH

SOUTH

Elevation in feet

4400

4300

4200

4100

4000

3900

3800

Grit, medium grained (.1 cm), slightly limey

? Stemwinder limestone, pale grey, greenish with limey appearance but not limey now. Skarn. White clasts elongated parallel to bedding. Overlies blotchy, impure limestone.

Dolomite, grey blotchy

Cherty siltstone, fine grained, grey weathering very brown 3m
Trace sphalerite, Cu stain
Limestone, fine grained, impure dark grey, weathering brown 2m+

Dolomitic chert, very fine grained, blotchy, grey-green, hard

Sharpstone, fine grained, very limey matrix

Sharpstone, fine grained, limey matrix

Sharpstone, medium grained, 0.5 clast size, green-grey matrix, clasts of quartz and chert.

Sharpstone, medium to coarse grained

Sharpstone, medium to coarse grained with thin (50 cm) shale beds

Sharpstone, fine grained

Sharpstone, fine grained, quartzitic, much sheared, 4cm clasts

Sharpstone, fine grained ? 2m
Limestone, argillaceous, grey, very fractured 75m
Limestone, banded, black and white, coarse grained, 7m plus

Road

Wallace Creek

STRATIGRAPHIC COLUMN

UPPER SHARPSTONE

BASAL LIMESTONE

NOTE: Sharpstone shown between 3820 and 3900 is by extrapolation from road at base of section.

FIGURE 7

LEGEND

- Cherty Siltstone
- Stemwinder Limestone
- Dolomite
- Limestone
- Carbonate with Sharpstone fragments
- Sharpstone

N.T.S 82E2

SCALE 1:1000

Metres 0 10 20 30 40 50 60 70 80 90 100 Metres

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FORSHAW OPTION & QUEEN CLAIMS

STRATIGRAPHIC SECTION
OREQUEST TRENCHES
NORTH OF WALLACE CREEK

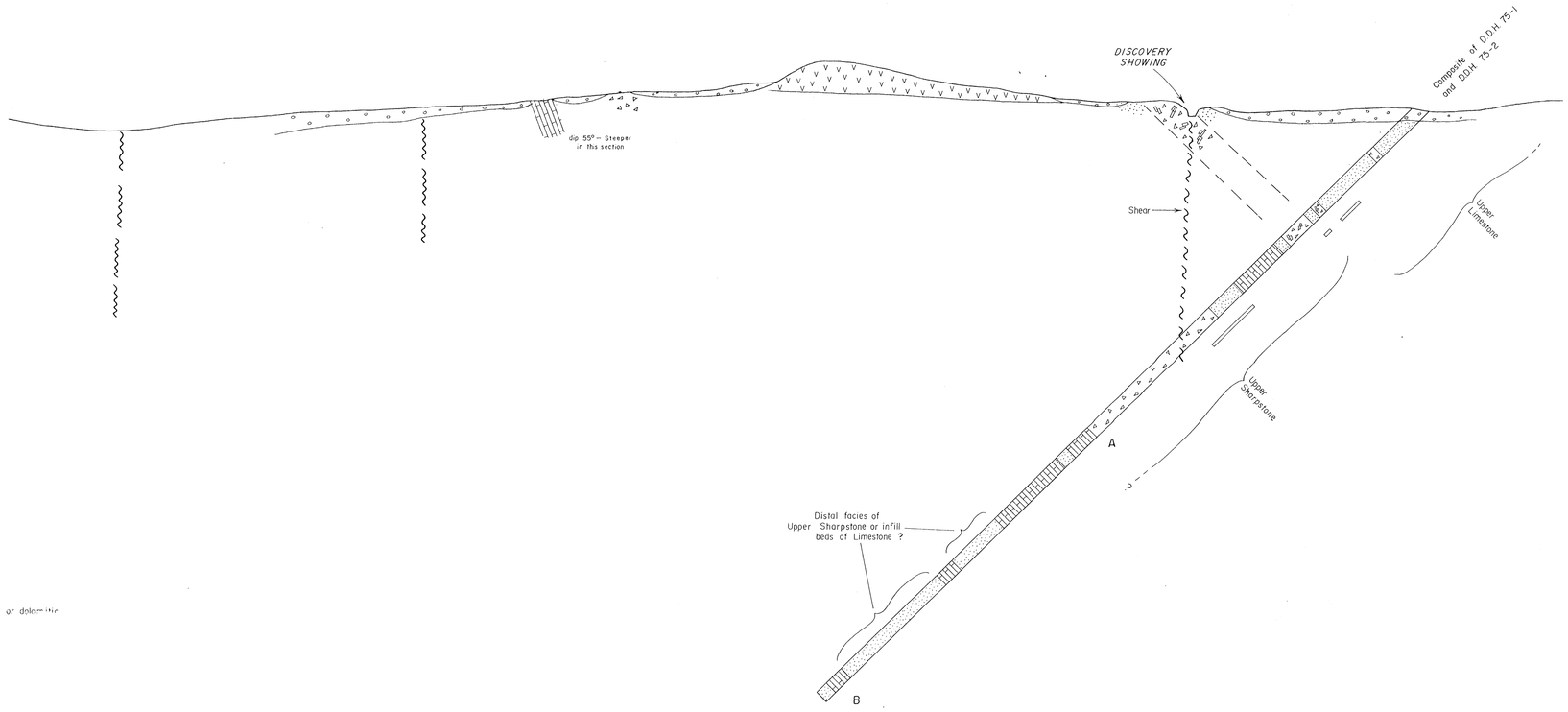
R.L. /altair | JAN.-1977 | DWG. G.-7439

W.

400 m W | 300 m W | 200 m W | 100 m W | 00 | 100 m E

E

Line 00 m N



LEGEND

- Overburden
- Tertiary volcanic rocks
- Siltstone – Mudstone, locally limey or dolomitic
- Limestone and Dolomite
- Sharpstone
- > 3% Sulphide (py + po) in drill core
- Shear
- Fault (inferred)

Inferred depths of base of Basal Limestone assuming Basal Limestone to be 300 m. thick (see Figure 18)

assuming point A on drill section is base of Upper Limestone (preferred interpretation)

assuming point B on drill section is base of Upper Sharpstone

Note: Topography is approximate

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FIGURE 8

N.T.S 82 E 2

SCALE 1 : 1000

m. 0 10 20 30 40 50 60 70 80 90 100 m.

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RELATIONSHIP OF DRILL SECTION TO OUTCROP NEAR DISCOVERY SHOWING (COMPOSITE SECTION ON LINE 00N)

R.L. / altair | JAN. - 1977 | DWG. G. - 7438

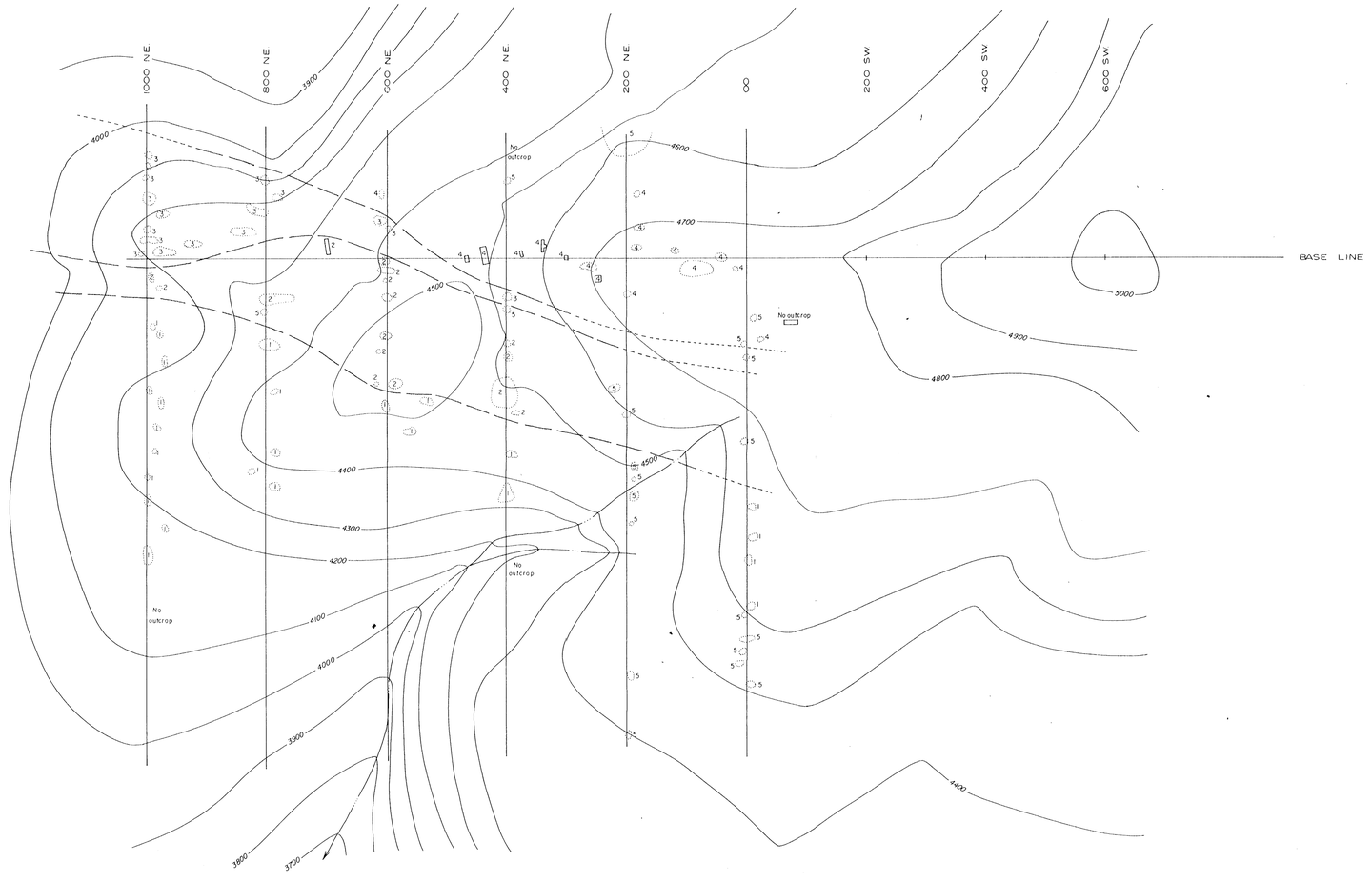

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FIGURE 9

LEGEND

Creeks
Outcrop
Trench
Shaft
Approximate contact
Assumed contact

LITHOLOGIES :

5. Recent volcanic rocks (may include intrusives)
4. Limestone ; grey. Locally contains aeolian quartz grains
3. Quartzite , pale green, with limey matrix
2. Sharpstone conglomerate ; chert fragments in unsorted matrix
1. Metasediments and metavolcanics ; probably Knob Hill Formation

CONTOUR INTERVAL 100 FEET
(Elevation by pocket altimeter)

N.T.S 82-E-2

SCALE 1: 5000

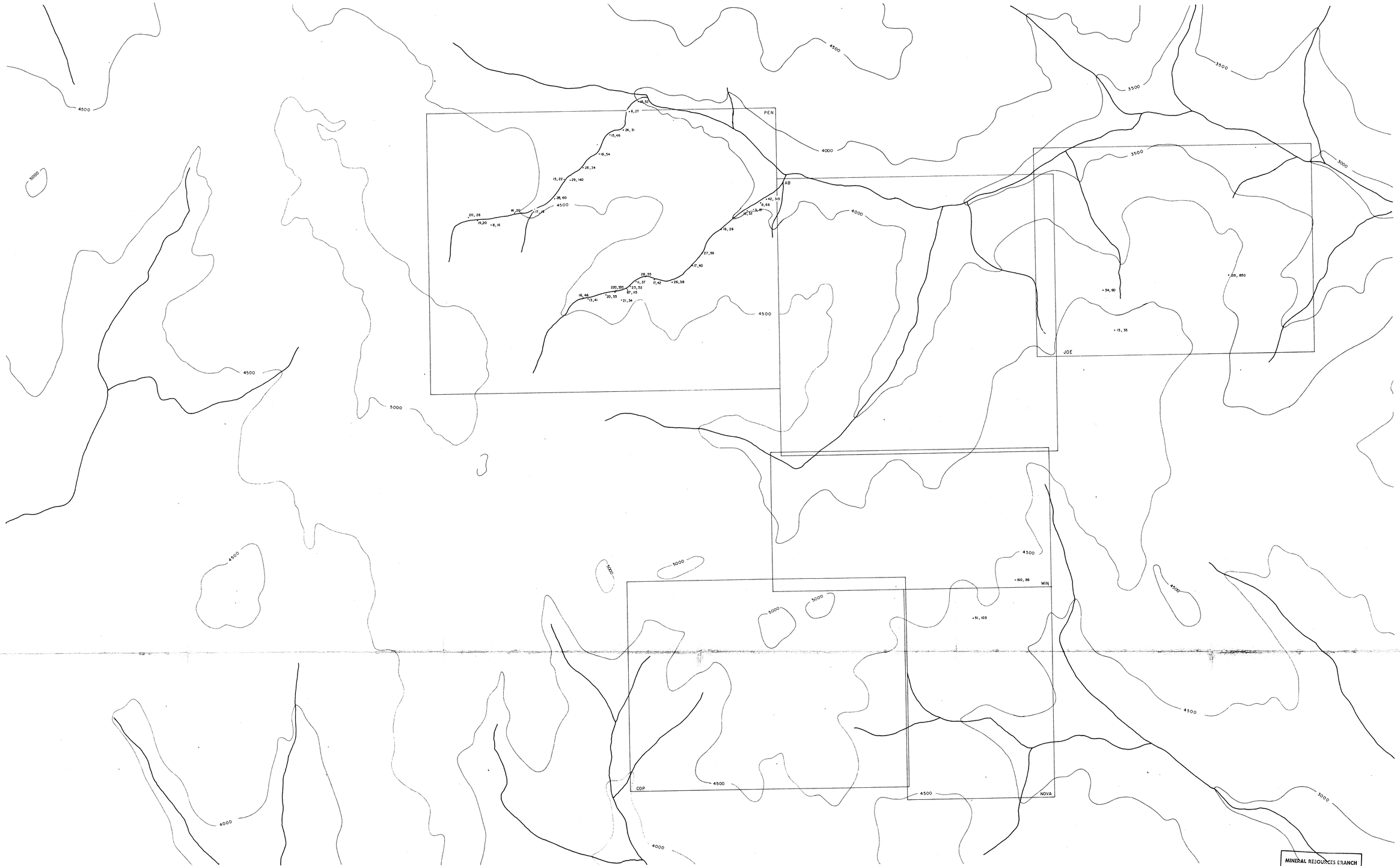
0 50 100 200 300 400 500 600

RIO TINTO CANADIAN EXPLORATION LIMITED

FORSHAW OPTION

JOE CLAIMS
GEOLOGY

SEPT 1976	N & RW/Altair	DWG. G. 7397



LEGEND

20, 26 Copper, Zinc values in stream silts, p.p.m.

NOTE. For results of detailed sampling on JOE claims see Figure

NOTE. This map is enlarged approximately 5% over the scale shown

N.T.S 82-E-2

SCALE 1:10,000

metres 0 100 200 400 600 800 1000 1200 metres

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FIGURE 10

RIO TINTO CANADIAN EXPLORATION LIMITED		
FORSHAW OPTION		
COPPER & ZINC VALUES IN STREAM SILTS		
R.L. / altair	JAN. - 1977	DWG. G. - 8514

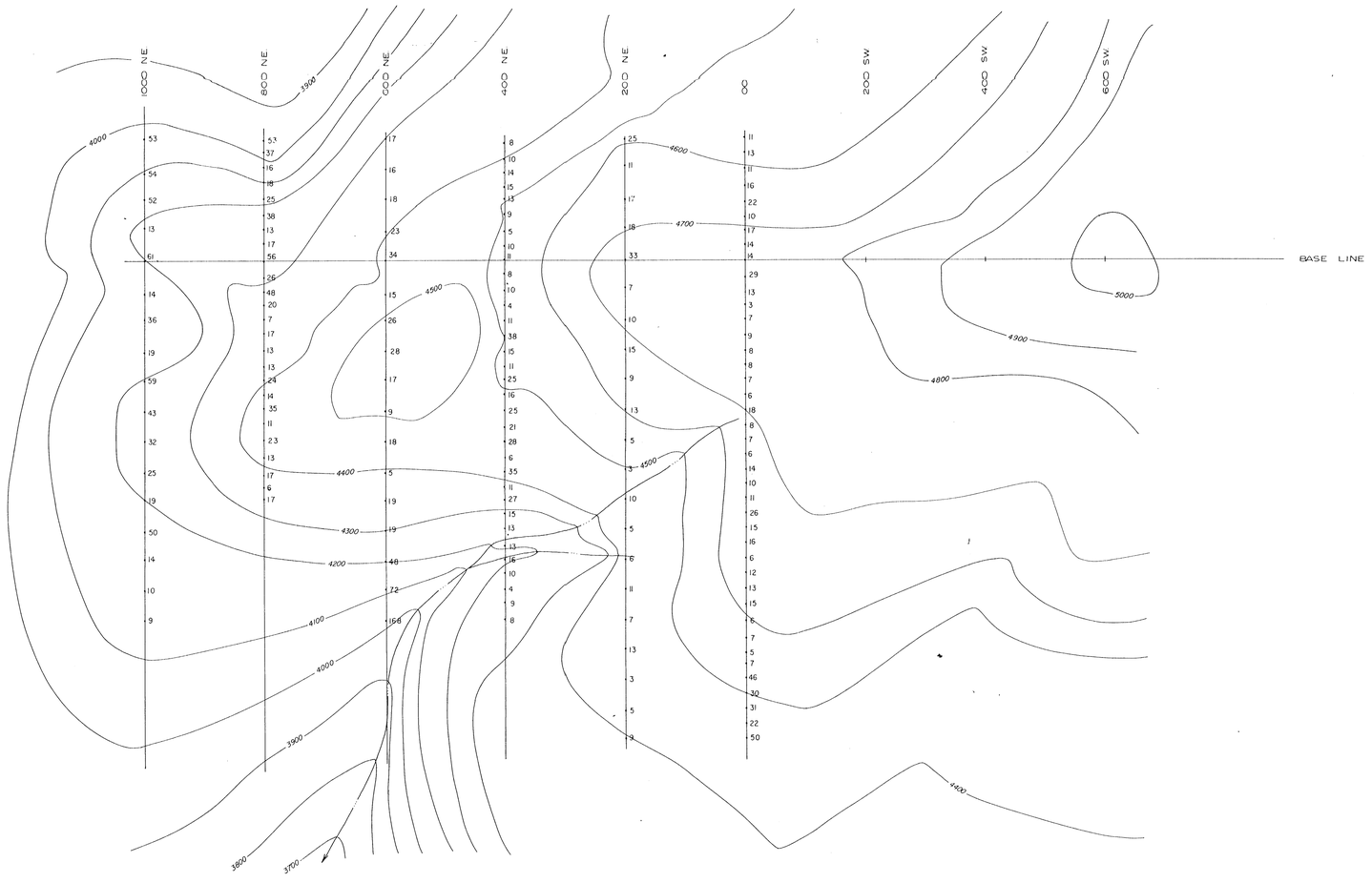

FIGURE 11

LEGEND

Creeks

19 p.p.m copper in soils

CONTOUR INTERVAL 100 FEET
(Elevation by pocket altimeter)

N.T.S 82-E-2

6394

SCALE 1:5000

0 50 100 200 300 400 500 600

RIO TINTO CANADIAN EXPLORATION LIMITED

FORSHAW OPTION

JOE CLAIMS
COPPER VALUES IN SOIL SAMPLES

SEPT. 1976 | R & NW / Altair | DWG. G.C. 7398

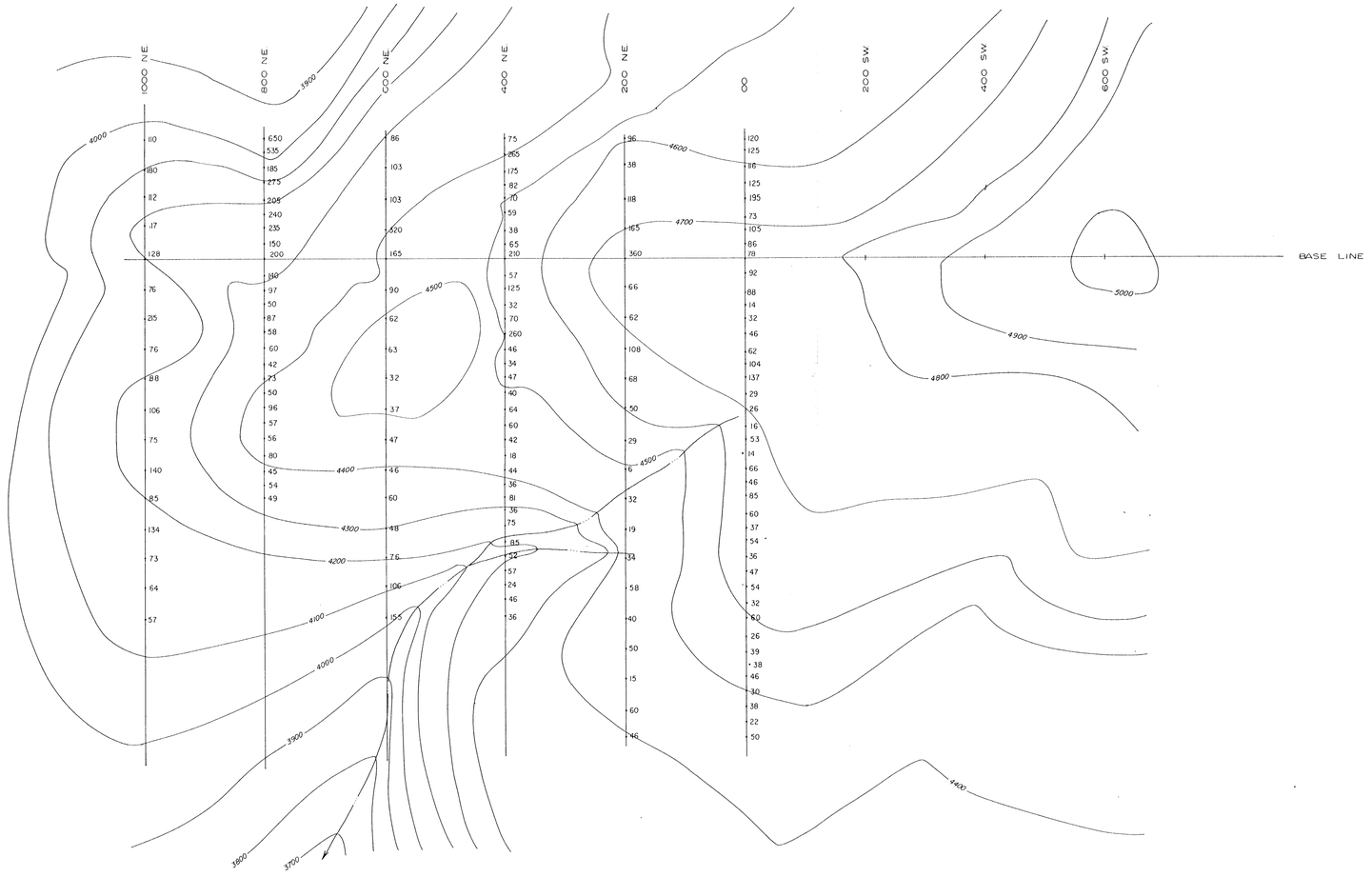

FIGURE 12

LEGEND

Creeks

46 ppm zinc in soils

CONTOUR INTERVAL 100 FEET
(Elevation by pocket altimeter)

N.T.S. 82-E-2

SCALE 1:5000
0 50 100 200 300 400 500 600

RIO TINTO CANADIAN EXPLORATION LIMITED

FORSHAW OPTION

JOE CLAIMS

ZINC VALUES IN SOIL SAMPLES

SEPT. 1976 | R.B. NW / Altair | DWG G.C. 7399

JOE CLAIM GRID

LEGEND

•271 Station or sample location

NOTE : For locations of samples on JOE Claims grid see Figure :-

NOTE : This map is enlarged approximately 5% over the scale shown.

N.T.S 82-E-2

6394

SCALE 1 : 10,000

Metres 0 100 200 400 600 800 1000 1200 Metres

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
NO. 6394

FIGURE 13

RIO TINTO CANADIAN EXPLORATION LIMITED

FORSHAW OPTION

SAMPLE & STATION LOCATIONS
1976

R.N.W./altair	JAN. - 1977	DWG. G. - 8512

APPENDIX I

Description of Claims

APPENDIX I

DESCRIPTION OF CLAIMS

FORSHAW OPTION

The PEN mineral claim (Tag. No. 26066; Record No. 127)
situated in the valley of Wallace Creek
approximately 7 miles NW of the city of Greenwood
in the Greenwood Mining Division
consisting of 20 units
(4 to the south and 5 to the west)
located by J. Forshaw (Free Miners Licence No. 99047)
on September 17, 1975.
Due Date: September 22, 1976.

The AB mineral claim (Tag. No. 26067; Record No. 113)
situated in the valley of Wallace Creek
approximately 6 miles NW of the city of Greenwood
in the Greenwood Mining Division
consisting of 16 units
(4 to the south and 4 to the east)
located by V. Luznar (Free Miners Licence No. 95048)
on August 9, 1975.
Due Date: September 03, 1976

The JOE mineral claim (Tag. No. 26072; Record No. 119)
situated south of Wallace Creek
approximately 5 miles NW of the city of Greenwood
in the Greenwood Mining Division
consisting of 12 units
(3 to the south and 4 to the east)
located by J. Forshaw (Free Miners Licence No. 95047)
on August 15, 1975.
Due Date: September 09, 1976

APPENDIX II

Laboratory Reports

OFFICE COPY

APPENDIX II

RIO TINTO CANADIAN EXPLORATION LIMITED

LABORATORY REPORT

EXTRN [A][B] ANDLZ [ ][ ][ ][ ][ ][ ]

SAMPLE TYPE:

- [x] SOIL & STREAM SEDIMENTS
- [ ] ROCK
- [ ] VEGETATION
- [ ] WATER
- [ ] _____

PROJECT 8620 Fort Liard

DATE REPORTED 14 July '76

SIZE FRACTION -80 mesh

EXTRACTION HNO_3-$HClO_4$

ANALYTICAL METHOD A.A.

ANALYST (s) E.F.P.

STATISTICAL SUMMARY

(Values for $\bar{x}$ and σ in p.p.m.)

DISTRIBUTION

- [ ] LOG NORMAL
- [x] NORMAL

ELEMENT		Cu	Zn					
Nº SAMPLES		30	56					
MEAN. $\bar{X}$								
STD. DEV. σ								
$\bar{X} + 2\sigma$								

COMMENTS: 0.6 g.

REPORT Nº 71-87

RIO TINTO CANADIAN EXPLORATION LIMITED

LABORATORY REPORT

PARTS PER MILLION

LAB Nº	SAMPLE Nº (NMBR)		Cu	Zn						COMMENTS
1	7614352		20	26						
2	53		15	32						
3	54		19	36						
4	55		29	140						
5	56		14	30						
6	57		26	34						
7	58		8	16						
8	59		18	54						
9	60		17	16						
10	61		15	46						
1	62		28	60						
2	63		24	31						
3	STD +		13	756						
4	65		6	27						
5	67		18	52						
6	69		8	55						
7	71		11	102						
8	7614372		22	162						
9	7614373A		13	100						
20	7614373B		160	86						
1	7614374		9	30						
2	75		15	215						
3	~~BLANK~~		~~10~~	~~4~~						
4	76		15	123						
5	78		16	109						
6	79		8	63						
7	7614380		12	108						
8	7614380B		51	123						
9	7614381		7	46						
30	82		16	66						
1	83		9	33						
2	7614384		4	85						
3	7614359		26	60						
4	7614367		17	49						
5	7614374		9	29						
6	7614380		13	108						
7	7614384		4	36						
8										
9										
10										

REPORT Nº 76-29

OFFICE COPY

RIO TINTO CANADIAN EXPLORATION LIMITED

LABORATORY REPORT

EXTRN [66] ANDLZ [ ][ ][ ][ ][ ][ ]

SAMPLE TYPE:

- [✓] SOIL & STREAM SEDIMENTS
- [ ] ROCK
- [✓] VEGETATION
- [ ] WATER
- [ ] _____

PROJECT 8620

DATE REPORTED 21 June '76

SIZE FRACTION -80 mesh

EXTRACTION HNO_3 - $HClO_4$

ANALYTICAL METHOD A.A.

ANALYST (s) E.F.D.

STATISTICAL SUMMARY

(Values for $\bar{x}$ and σ in p.p.m.)

DISTRIBUTION

- [ ] LOG NORMAL
- [ ] NORMAL

ELEMENT	Cu	Zn	Ag					
Nº SAMPLES	45	45	45					
MEAN. $\bar{X}$								
STD. DEV. σ								
$\bar{X} + 2\sigma$								

COMMENTS: 0.6g → 12 ml. +1 Tree sample analyzed for Cu, Pb, Zn

REPORT Nº. 76-11

PAGE 1 of 3

RIO TINTO CANADIAN EXPLORATION LIMITED

LABORATORY REPORT

PARTS PER MILLION

LAB Nº	SAMPLE Nº (NMBR)		Ag	Cu	Zn					COMMENTS
1	7614004.1		0.1	41	170					
2	11		0.1	14	10					
3	38	✓	0.1	14	78					
4	40	✓	0.1	29	92					
5	41		0.1	76	230					
6	42	✓	0.1	13	88					
7	44	✓	ND	3	14					
8	46	✓	0.1	9	46					
9	48	✓	ND	8	104					
10	50	✓	ND	6	29					
1	52A	✓	0.1	8	16					
2	~~STD 3~~		~~0.9~~	~~26~~	~~220~~					
3	52B		0.1	15	35					
4	54	✓	ND	6	14					
5	55	✓	ND	7	32					
6	56	✓	0.1	10	46					
7	57	✓	0.1	8	62					
8	58	✓	ND	26	60					
9	59	✓	ND	7	137					
20	60	✓	ND	16	54					
1	61		0.1	18	36					
2	~~BLANK~~		~~ND~~	~~ND~~	~~ND~~					
3	62		ND	12	47					
4	63	✓	0.1	7	52					
5	64	✓	ND	6	60					
6	65		ND	14	66					
7	66		ND	7	26					
8	67		ND	11	85					
9	68		ND	7	38					
30	69		ND	15	37					
1	70		ND	6	30					
2	71		ND	6	36					
3	72	✓	0.1	14	86					
4	73	✓	0.1	13	54					
5	74		ND	10	73					
6	75		ND	15	32					
7	76		ND	16	135					
8	77		ND	5	39					
9	78		ND	13	135					
40	7614079		ND	6	46					

REPORT Nº 76-11

RIO TINTO CANADIAN EXPLORATION LIMITED

LABORATORY REPORT

PARTS PER MILLION

LAB Nº.	SAMPLE Nº. (NMBR)		Ag	Cu	Zn	Pb				COMMENTS
41	7614081	✓	ND	12	38					
2	83	✓	ND	6	32					
3	85	✓	ND	10	50					
4	91	✓	0.1	17	105					
5	93	✓	ND	22	195					
6	95	✓	ND	11	116					
7	7614097	✓	0.1	11	120					
8	0.37		—	12	38	1				TREE SAMPLE
~~9~~	~~STD 3~~		~~0.1~~	~~33~~	~~52~~					
50	7614011		0.1	14	12					
1	48		ND	8	163					
2	56		0.1	10	44					
3	68		0.1	7	34					
4	72		ND	7	45					
5	7614065		ND	11	50					
6										
7										
8										
9										
0										
1										
2										
3										
4										
5										
6										
7										
8										
9										
0										
1										
2										
3										
4										
5										
6										
7										
8										
9										
0										

REPORT Nº. 76-11

OFFICE COPY

RIO TINTO CANADIAN EXPLORATION LIMITED

LABORATORY REPORT

EXTRN [B][B] ANDLZ [ ][ ][ ][ ][ ]

SAMPLE TYPE:

- [✓] SOIL & STREAM SEDIMENTS
- [ ] ROCK
- [ ] VEGETATION
- [ ] WATER
- [ ] _____

PROJECT 8620

DATE REPORTED 25 Jun '76

SIZE FRACTION -80 mesh

EXTRACTION HNO_3-$HClO_4$

ANALYTICAL METHOD A.A.

ANALYST (s) E.E.P.

STATISTICAL SUMMARY

(Values for $\bar{x}$ and σ in p.p.m.)

DISTRIBUTION

- [ ] LOG NORMAL
- [ ] NORMAL

ELEMENT	Pb	Zn						
Nº SAMPLES	60	60						
MEAN. $\bar{X}$								
STD. DEV. σ								
$\bar{X} + 2\sigma$								

COMMENTS: 0.6 g.

REPORT Nº 7-19

PAGE 1 of 3

RIO TINTO CANADIAN EXPLORATION LIMITED

LABORATORY REPORT

PARTS PER MILLION

LAB Nº.	SAMPLE Nº. (NMBR)		Cu	Zn						COMMENTS
1	7614039		8	75						
2	078		8	57						
3	080		4	32						
4	082		38	260						
5	084		11	34						
6	086		16	40						
7	088		21	60						
8	090		6	18						
9	092		11	36						
10	094		15	36						
1	7614096		13	85						
~~2~~	~~STD 2~~		~~24~~	~~195~~						
3	7614201		11	210						
4	202		10	65						
5	203		10	125						
6	204		9	59						
7	205		11	70						
8	206		15	82						
9	207		15	46						
20	208		17	150						
1	209		25	47						
~~2~~	~~BLANK~~		~~ND~~	~~ND~~						
3	210		39	241						
4	211		25	64						
5	212		18	275						
6	213		28	42						
7	214		215	850						
8	215		35	44						
9	217		37	87						
30	7614219A		13	75						
1	7614219B		103	78						
2	7614221		16	53						
3	222		56	200						
4	223		10	57						
5	224		26	148						
6	225		4	24						
7	226		30	56						
8	7614227A		9	46						
9	7614227B		16	245						
40	7614231		8	36						

REPORT Nº 76-18

RIO TINTO CANADIAN EXPLORATION LIMITED

LABORATORY REPORT

PARTS PER MILLION

LAB Nº.	SAMPLE Nº. (NMBR)		Cu	Zn						COMMENTS
41	7614230		17	58						
2	231		5	38						
3	232		13	70						
4	234		13	42						
5	235		14	175						
6	236		14	50						
7	240		11	57						
8	241		13	235						
9	243		25	205						
50	244		13	80						
1	245		16	185						
2	246		6	54						
~~3~~	~~STD 3~~		~~32~~	~~43~~						
4	247		37	535						
5	249		53	650						
6	251		48	97						
7	253		7	87						
8	255		13	60						
9	257		24	73						
60	259		35	96						
1	261		23	56						
2	263		17	45						
~~3~~	~~BLANK~~		~~NIL~~	~~NIL~~						
4	7614265		17	49						
~~5~~	~~7614288~~		~~20~~	~~52~~						
6	7614203		9	117						
7	7614210		37	235						
8	7614214A		13	72						
9	7614227A		9	45						
70	7614255		15	173						
1	7614246		6	52						
2	7614265		17	49						
3										
4										
5										
6										
7.										
8										
9										
80										

REPORT Nº 7[illegible]

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RIO TINTO CANADIAN EXPLORATION LIMITED

LABORATORY REPORT

EXTRN [BA] ANDLZ [ ]

SAMPLE TYPE:

- [✓] SOIL & STREAM SEDIMENTS
- [ ] ROCK
- [ ] VEGETATION
- [ ] WATER
- [ ] _____

PROJECT 8620

DATE REPORTED 30 June '76

SIZE FRACTION -80 mesh

EXTRACTION HNO_3 - $HClO_4$

ANALYTICAL METHOD A.A.

ANALYST (s) E.F.P.

STATISTICAL SUMMARY

(Values for $\bar{x}$ and σ in p.p.m.)

DISTRIBUTION

- [ ] LOG NORMAL
- [ ] NORMAL

ELEMENT	Cu	Zn						
Nº SAMPLES	75	75						
MEAN. $\bar{x}$								
STD. DEV. σ								
$\bar{x} + 2\sigma$								

COMMENTS: 0.69.

REPORT Nº. 76-19

PAGE 1 of 4

RIO TINTO CANADIAN EXPLORATION LIMITED

LABORATORY REPORT

PARTS PER MILLION

LAB Nº	SAMPLE Nº (NMBR)		Cu	Zn						COMMENTS
1	7614250		34	165						
2	252		15	90						
3	254		28	63						
4	256		9	37						
5	258		5	46						
6	260		19	48						
7	262		72	104						
8	272		23	320						
9	7614273.1		16	48						
10	7614274		16	103						
1	281		26	62						
2	282		16	46						
3	283		17	32						
~~4~~	~~STD 3~~		~~32~~	~~45~~						
5	284		13	41						
6	285		18	47						
7	286		20	55						
8	287		19	60						
9	288		220	358						
20	289		48	76						
1	290		21	34						
2	291		165	155						
3	292		87	115						
~~4~~	~~BLANK~~		~~ND~~	~~ND~~						
5	293		18	103						
6	294		25	52						
7	295		17	86						
8	297		13	117						
9	297		17	42						
30	7614301		26	38						
1	303		17	46						
2	305		27	59						
3	306		61	128						
4	307		16	26						
5	308		14	76						
6	309		12	32						
7	310		19	76						
8	311		9	19						
9	312		43	166						
40	7614313		8	66						

REPORT Nº 76-14

RIO TINTO CANADIAN EXPLORATION LIMITED

LABORATORY REPORT

PARTS PER MILLION

LAB Nº.	SAMPLE Nº. (NMBR)		Cu	Zn						COMMENTS
41	76.14313 B		42	315						
2	76.14314		25	140						
3	315		53	112						
4	316		50	134						
5	317		54	180						
6	318		10	64						
7	319		53	110						
8	321		36	215						
9	322		11	37						
50	323		59	88						
1	324		38	55						
2	325		32	75						
3	327		19	85						
4	328		18	165						
~~5~~	~~STD 1~~		~~12~~	~~796~~						
6	329		14	73						
7	330		11	38						
8	331		9	57						
9	333		17	118						
60	76.14335 A		25	96						
1	76.14335 B		7	66						
2	76.14336		33	360						
3	337		10	62						
4	338		15	108						
~~5~~	~~BLANK~~		~~Nil~~	~~Nil~~						
6	339		9	68						
7	340		13	50						
8	341		5	39						
9	342		3	6						
70	343		10	32						
1	344		5	19						
2	76.14345		6	34						
3	76.14345 B		54	66						
4	76.14346		11	58						
5	347		7	46						
6	349		13	50						
7	349		3	15						
8	350		5	60						
9	76.14351		9	48						
80	76.14352		16	166						

REPORT Nº. 7[illegible]-19

RIO TINTO CANADIAN EXPLORATION LIMITED

LABORATORY REPORT

PARTS PER MILLION

LAB Nº.	SAMPLE Nº. (NMBR)		Cu	Zn						COMMENTS
81	764290		20	35						
2	7614303		16	40						
3	7614313		8	64						
4	7614322	X	11	36						
5	7614333		17	120						
6	7614343		10	31						
7	764351		9	45						
8										
9										
90										
1										
2										
3										
4										
5										
6										
7										
8										
9										
100										
1										
2										
3										
4										
5										
6										
7										
8										
9										
110										
1										
2										
3										
4										
5										
6										
7										
8										
9										
120										

REPORT Nº. 76-17

APPENDIX III

Comments By P.G. Hallof on I.P. Data

APPENDIX III

MEMORANDUM TO: Mr. Robert V. Longe,
Rio Tinto Canadian Exploration Ltd.

FROM: Philip G. Hallof, - Phoenix Geophysics Limited

DATE: March 2, 1976

SUBJECT: IP Data from Line 0+00 Wallace Creek Property

By the time I got back to the office on Monday, Ash Mullan had already forwarded the extended IP data from Line 0+00 at Wallace Creek. As we had decided during our discussions last week in Vancouver, the IP anomaly on this line is complex. There appear to be at least three sources. I have shown them on the accompanying sketch of the data.

ANOMALY "A"

The source of this anomaly appears to be a narrow, shallow, dipping source with the up-dip end located in the interval 50E to 100E. Since the n = 1 measurement is very anomalous, the source of this anomaly could be better located and evaluated by repeating these measurements using shorter electrode intervals (X = 30 meters).

ANOMALY "B"

This anomalous pattern considerably overlaps the pattern from Anomaly "A" ; in fact, it is not completely clear that the two sources are separate. The anomalous pattern may just arise from one multiple source.

However, the sources appear to be separate, with the source of Anomaly "B" at a greater depth than the source of Anomaly "A". It is always difficult to interpret anomalies when the patterns overlap; however, the pattern for Anomaly "B" is not unlike that shown in scale modelling Case III-0.5-BU-50-a30°.

ANOMALY "C"

This anomaly occurs about 200 meters to the west. The source is indicated to have a considerable depth to the top and the anomalous magnitude is therefore lower in magnitude. The pattern indicates a greater depth than in Case III-1.0-BU-50-b30°. This would indicate that the depth to the top of the source of Anomaly "C" is 50 meters or more.

The above interpretation is compatible with the results of the drilling on Line 0+00. The drill logs suggest two, or more, zones of metallic mineralization, dipping to the east. However, it is possible that the hole drilled was collared too far to the west to intersect the source of Anomaly "A". If the source of Anomaly "B" is a separate source, the hole may not have extended far enough to interpret the source; this would be particularly true if the dip is greater than 45°. The hole certainly did not test the source of Anomaly "C".

The anomalies on Line 0+00 at Wallace Creek are complex. Different, but still complex patterns were detected on Line 200N. As shown by the modelling results from Case M3-0.5-S2.0-50-b, the anomalous patterns expected from multiple sources can be expected to overlap. When this occurs, the interpretation can be very difficult.

I feel that some detailed measurements would be warranted in an attempt to try to separate the various sources and to determine if further drilling is warranted to test all of the sources.

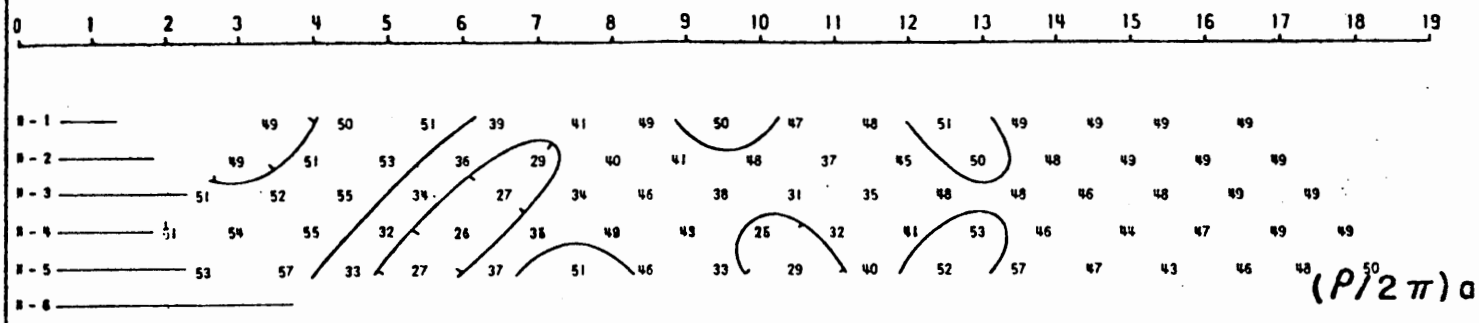
	200W to 200E	400W to 0+00
Line 50N	X = 40 m n = 1,2,3,4	X = 70 m n = 1,2,3,4)
Line 0+00		
Line 50S	X = 30 m n = 1,2,3,4	

With the above detail results available, all the data should be reviewed to determine the next step.

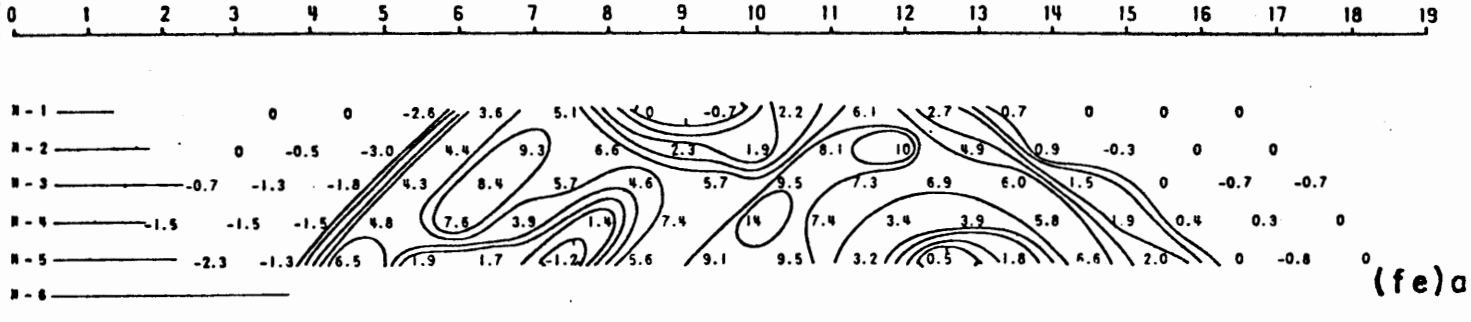
McPHAR GEOPHYSICS LIMITED

Theoretical Induced Polarization and Resistivity Studies

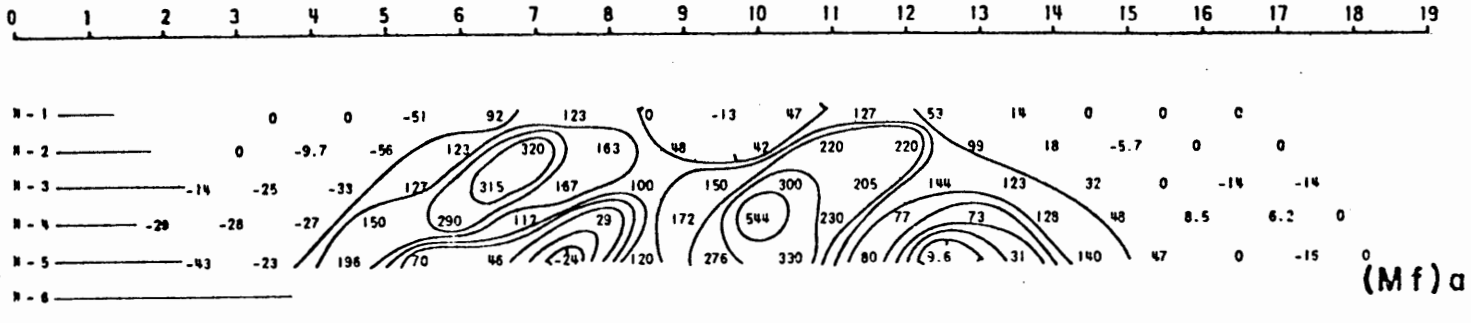
Scale Model Cases



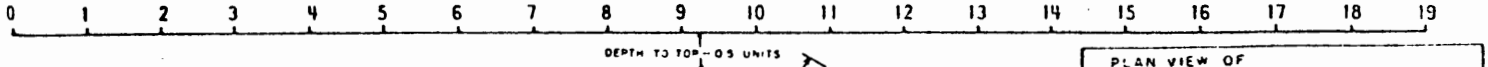
$(P/2\pi)a$



(fe)a



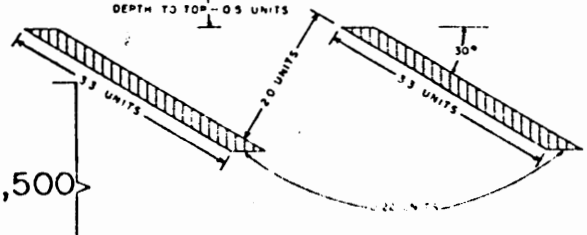
(Mf)a

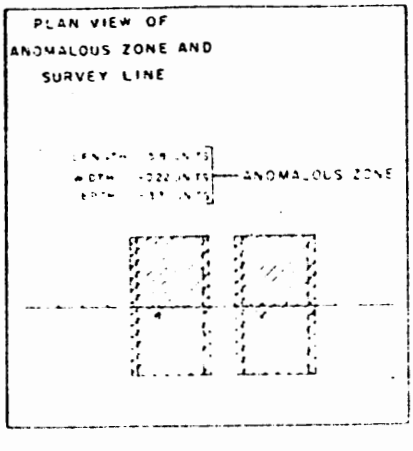


$(P/2\pi)_1 = 50$ $(P/2\pi)_2 = 2$

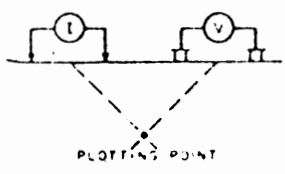
$(Mf)_1 = 0$ $(Mf)_2 = 12{,}500$

$(fe)_2 = 25\%$





ELECTRODE CONFIGURATION

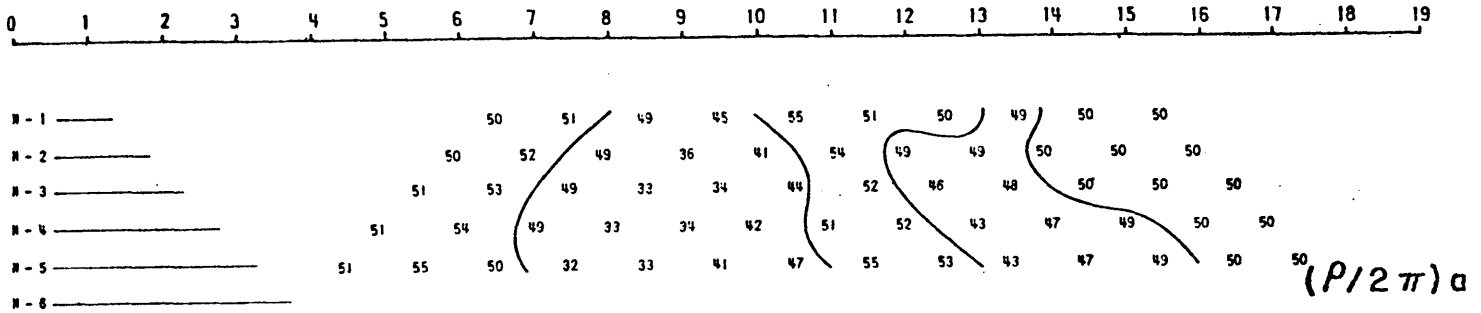


CASE M3-0.5-S2.0-50-b

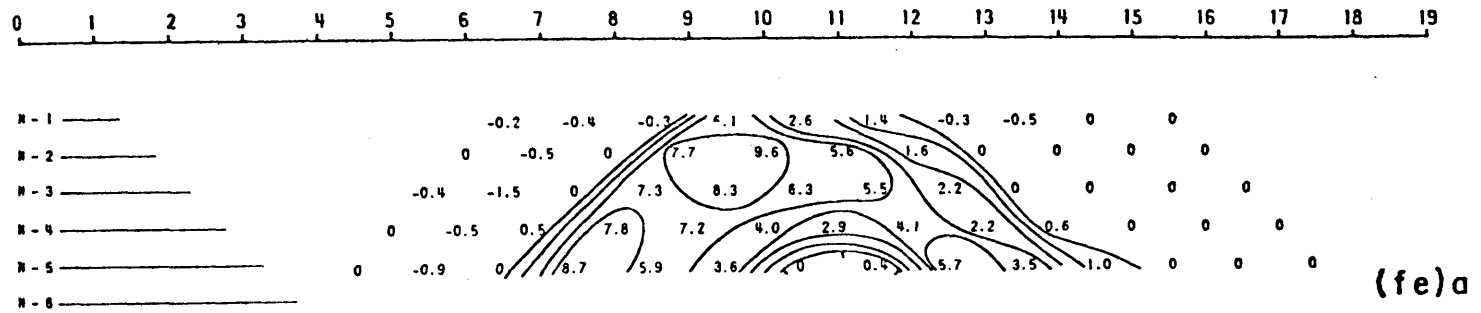
McPHAR GEOPHYSICS LIMITED

Theoretical Induced Polarization and Resistivity Studies

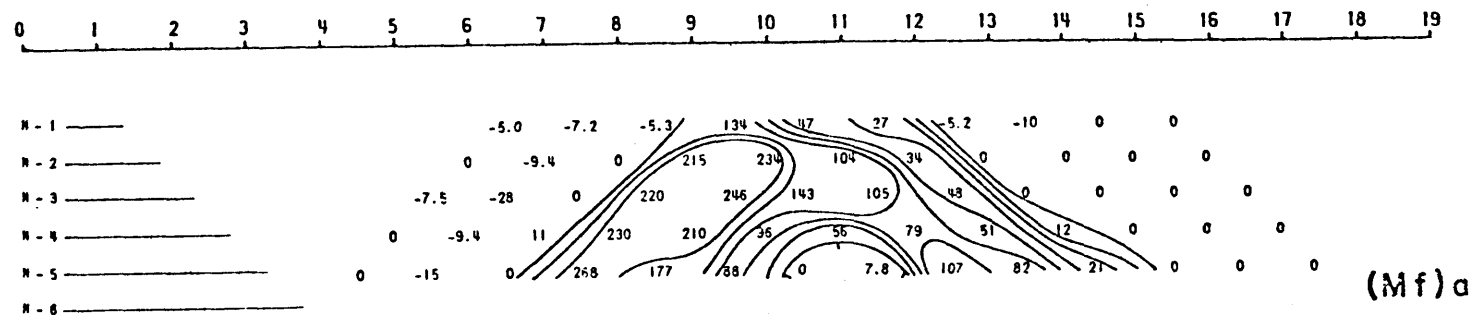
Scale Model Cases



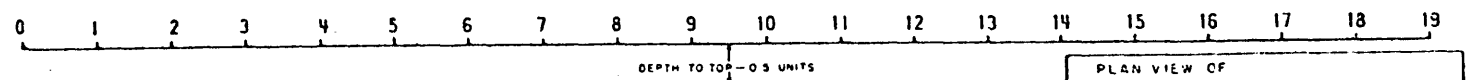
$(\rho/2\pi)a$

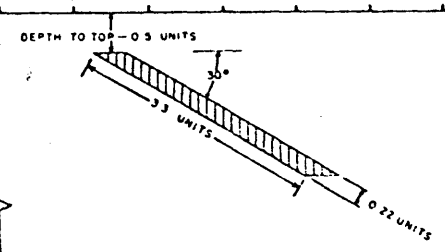


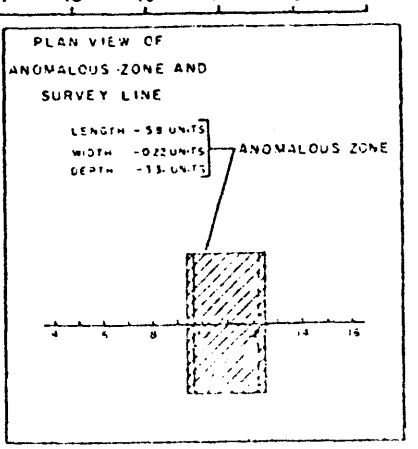
(fe)a



(Mf)a



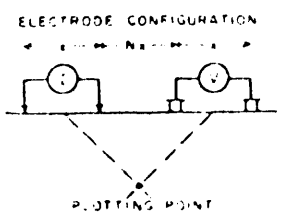




$(\rho/2\pi)_1 = 50$ $(\rho/2\pi)_2 = 2.0$

$(Mf)_1 = 0$ $(Mf)_2 = 12{,}500$

$(fe)_2 = 25\%$

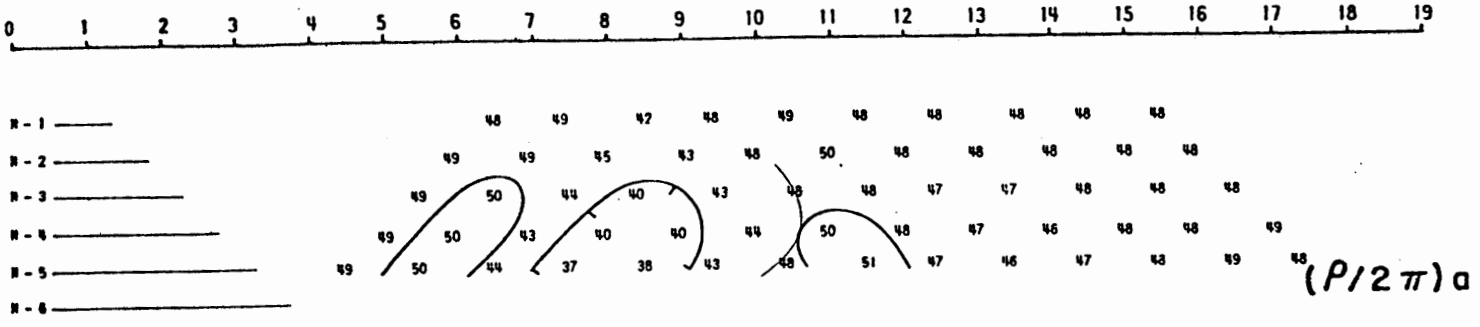


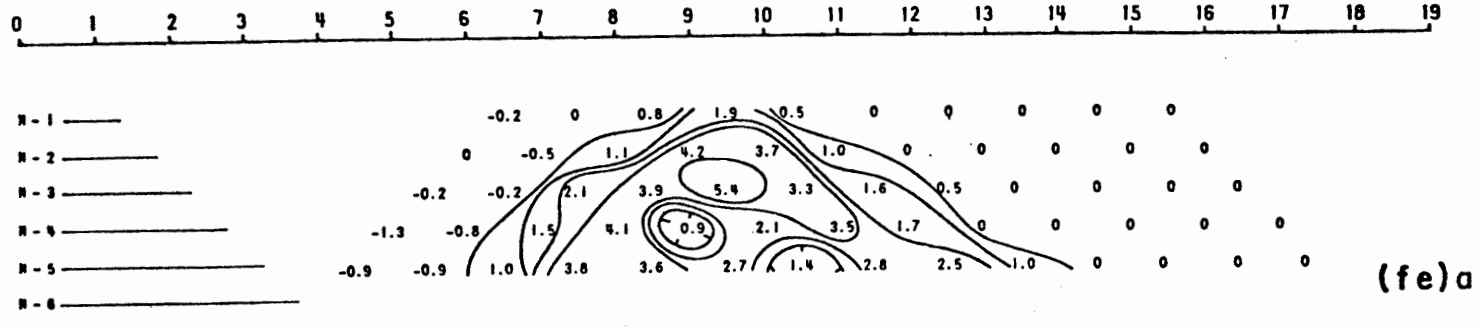
CASE III-0.5-BU-50-a30°

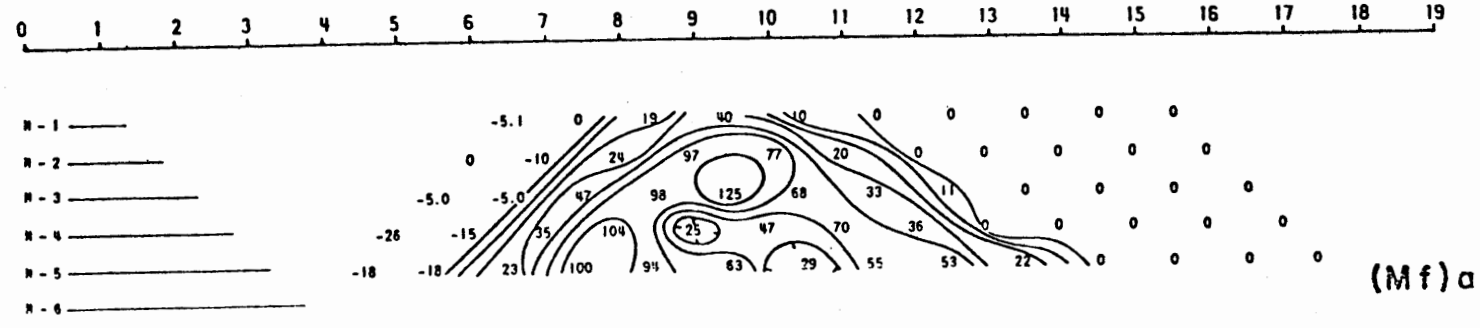
McPHAR GEOPHYSICS LIMITED

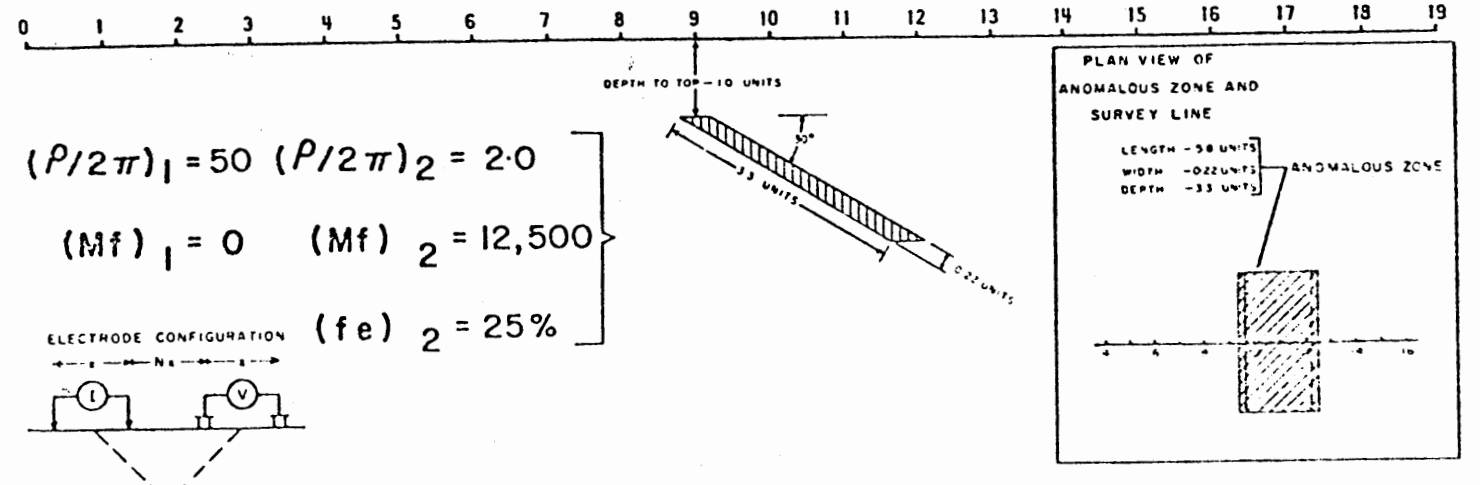
Theoretical Induced Polarization and Resistivity Studies

Scale Model Cases









$(\rho/2\pi)_1 = 50$ $(\rho/2\pi)_2 = 2{\cdot}0$

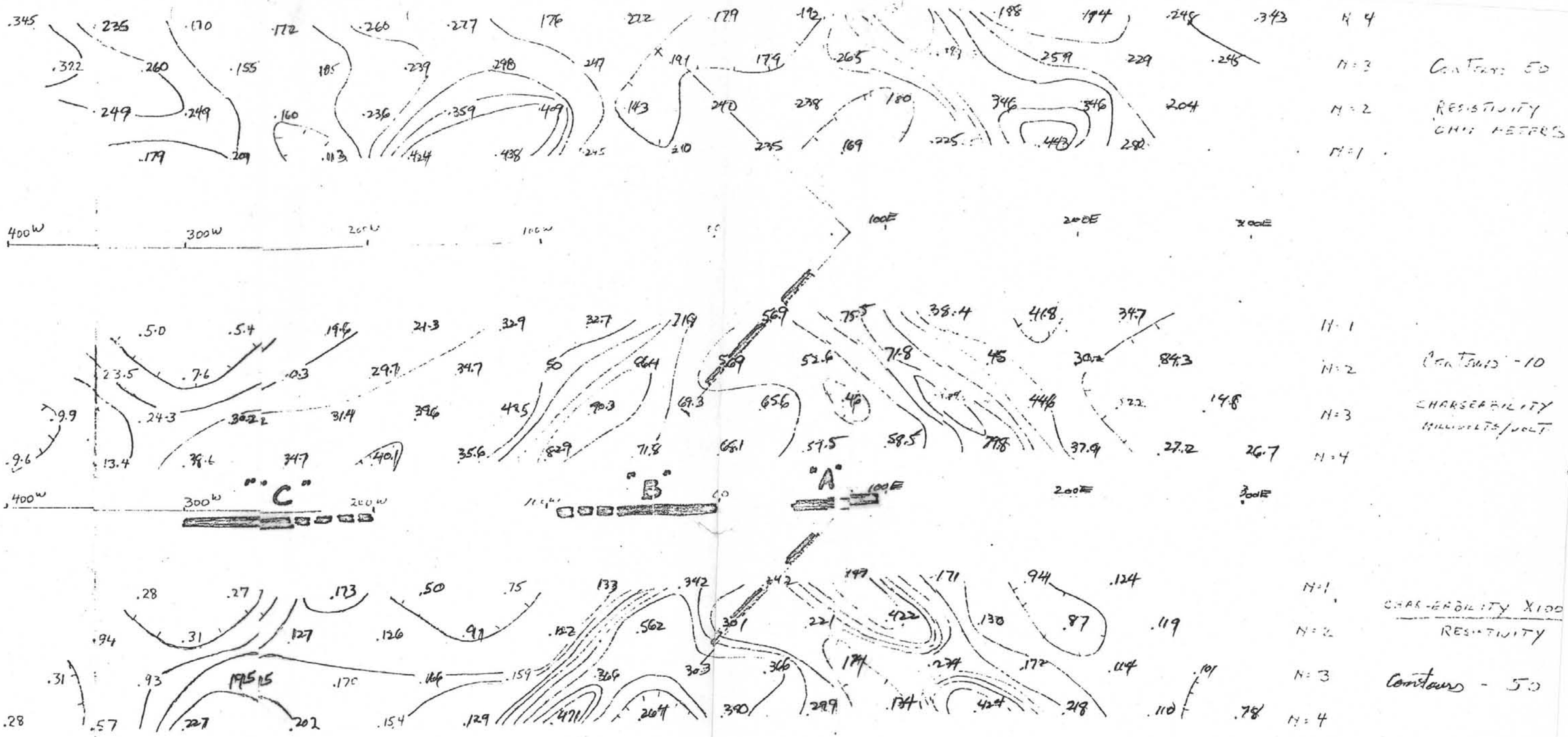
$(Mf)_1 = 0$ $(Mf)_2 = 12{,}500$

$(fe)_2 = 25\%$

ELECTRODE CONFIGURATION

PLOTTING POINT

CASE III-1-0-BU-50-b30°


400W
300W
200W
100W
0
100E
200E
300E
"C"
"B"
"A"
N=1
N=2
N=3
N=4
Contours - 50
Resistivity
Ohm metres
Contours - 10
Chargeability
Milliseconds/volt
Chargeability x100
Resistivity
Contours - 50
LINE NO 00
WALLACE CREEK
NTS 82E
SCALE 1" = 50M !!
DIPOLE DIPOLE
"A" = 50M

CONSECUTIVE LIST OF STATION NUMBERS

NUMBERS	INITIALS	DATE	TYPE OF OBSERVATION
7606103	RVL	76/05/26	Rock description
104	"	"	"
105	"	"	"
106	"	"	"
107	"	76/05/28	"
108	"	"	"
109	"	"	"
110	"	"	"
111	"	"	"
112	"	"	"
113	"	76/05/29	"
114	"	"	"
115	"	"	"
116	"	76/05/30	"
117	"	"	"
118	"	"	"
135	"	76/06/05	"
136	"	"	"
137	"	"	"

APPENDIX IV

Consecutive List of Sample and Station Numbers

CONSECUTIVE LIST OF STATION NUMBERS

NUMBERS	INITIALS	DATE	TYPE OF OBSERVATION
7614001	RGW	76/05/25	Rock description
002	NJW	76/05/25	Rock description
003	RGW	76/05/25	Rock description
004	NJW	76/05/26	Rock description, soil sample, rock for TS
005	RGW	76/05/25	Rock description
006	NJW	76/05/26	Rock description
007	RGW	76/05/25	Rock description
008	NJW	76/05/26	Rock description
009	NJW	76/05/26	Rock description
010	NJW	76/05/26	Rock description & claim post
011	RGW	76/05/26	Soil sample
012	NJW	76/05/27	Section measuring
013	RGW	76/05/26	Rock description
014	NJW	76/05/28	Rock description
015	RGW	76/05/28	Rock description
016	NJW	76/05/28	Rock description
017	RGW	76/05/28	Rock description
018	NJW	76/05/28	Rock description
019	RGW	76/05/28	Rock description
020	NJW	76/05/28	Rock description
021	RGW	76/05/28	Rock description
022	NJW	76/05/29	Rock description
023	RGW	76/02/29	Rock description
024	NJW	76/05/29	Rock description
025	RGW	76/05/29	Rock description
026	NJW	76/05/29	Rock description
027	RGW	76/05/29	Rock description
028	NJW	76/05/29	Rock description
029	RGW	76/05/29	Rock description
030	NJW	76/05/29	Rock description
031	RGW	76/05/29	Rock description
032	NJW	76/05/29	Rock description
033	RGW	76/05/29	Rock description
034	NJW	76/05/30	Rock description
035	RGW	76/05/30	Rock description
036	NJW	76/05/30	Rock description
037	RGW	76/05/31	Rock description
038	NJW	76/06/07	Soil sample
039	RGW	76/06/03	Rock description
040	NJW	76/06/07	Soil sample
041	RGW	76/06/03	Rock description
042	NJW	76/06/07	Soil sample
043	RGW	76/06/03	Rock description
044	NJW	76/06/07	Soil sample
045	RGW	76/06/03	Rock description
046	NJW	76/06/07	Soil sample
047	RGW	76/06/05	Rock description

NUMBERS	INITIALS	DATE	TYPE OF OBSERVATION
048	NJW	76/06/07	Soil sample
049	RGW	76/06/05	Rock description
050	NJW	76/06/07	Soil sample
051	RGW	76/06/05	Rock description
052	NJW	76/06/07	Soil sample
053	RGW	76/06/05	Rock description
054	NJW	76/06/07	Soil sample
055	RGW	76/06/07	Soil sample
056	NJW	76/06/07	Soil sample
057	RGW	76/06/07	Soil sample
058	NJW	76/06/07	Soil sample
059	RGW	76/06/07	Soil sample
060	NJW	76/06/07	Soil sample
061	RGW	76/06/07	Soil sample
062	NJW	76/06/07	Soil sample
063	RGW	76/06/07	Soil sample
064	NJW	76/06/07	Soil sample
065	RGW	76/06/07	Soil sample
066	NJW	76/06/07	Soil sample
067	RGW	76/06/07	Soil sample
068	NJW	76/06/07	Soil sample
069	RGW	76/06/07	Soil sample
070	NJW	76/06/07	Soil sample
071	RGW	76/06/07	Soil sample
072	NJW	76/06/07	Soil sample
073	RGW	76/06/07	Soil sample
074	NJW	76/06/07	Soil sample
075	RGW	76/06/07	Soil sample
076	NJW	76/06/07	Soil sample
077	RGW	76/06/07	Soil sample
078	NJW	76/06/10	Soil sample
079	RGW	76/06/07	Soil sample
080	NJW	76/06/10	Soil sample
081	RGW	76/06/07	Soil sample
082	NJW	76/06/10	Soil sample
083	RGW	76/06/07	Soil sample
084	NJW	76/06/10	Soil sample
085	RGW	76/06/07	Soil sample
086	NJW	76/06/10	Soil sample
087	RGW	76/06/07	Rock description
088	NJW	76/06/10	Soil sample
089	RGW	76/06/07	Rock description
090	NJW	76/06/10	Soil sample
091	RGW	76/06/07	Soil sample
092	NJW	76/06/10	Soil sample
093	RGW	76/06/07	Soil sample
094	NJW	76/06/10	Soil sample
095	RGW	76/06/07	Soil sample

NUMBERS	INITIALS	DATE	TYPE OF OBSERVATION
096	NJW	76/06/10	Soil sample
097	RGW	76/06/07	Soil sample
098	NJW	76/06/10	Rock description
099	RGW	76/06/07	Rock description
200	NJW	76/06/10	Rock description
201	RGW	76/06/10	Soil sample
202	NJW	76/06/11	Soil sample
203	RGW	76/06/10	Soil sample
204	NJW	76/06/11	Soil sample
205	RGW	76/06/10	Soil sample
206	NJW	76/06/11	Soil sample
207	RGW	76/06/10	Soil sample
208	NJW	76/06/11	Soil sample
209	RGW	76/06/10	Soil sample
210	NJW	76/06/11	Soil sample
211	RGW	76/06/10	Soil sample
212	NJW	76/06/11	Soil sample
213	RGW	76/06/10	Soil sample
214	NJW	76/06/11	Stream silt
215	RGW	76/06/10	Soil sample
216	NJW	76/06/11	Rock description
217	RGW	76/06/10	Soil sample
218	NJW	76/06/11	Rock description
219	RGW	76/06/10	A) Soil sample B) Stream silt
220	NJW	76/06/11	Rock description
221	RGW	76/06/10	Soil sample
222	NJW	76/06/11	Soil sample
223	RGW	76/06/10	Soil sample
224	NJW	76/06/11	Soil sample
225	RGW	76/06/10	Soil sample
226	NJW	76/06/11	Soil sample
227	RGW	76/06/10	Soil sample
228	NJW	76/06/11	Rock description
229	RGW	76/06/10	Soil sample
230	NJW	76/06/11	Soil sample
231	RGW	76/06/10	Soil sample
232	NJW	76/06/11	Rock description
233	RGW	76/06/10	Soil sample
234	NJW	76/06/11	Soil sample
235	RGW	76/06/10	Soil sample
236	NJW	76/06/11	Soil sample
237	RGW	76/06/10	Soil sample
238	NJW	76/06/11	Rock description
239	RGW	76/06/10	Soil sample
240	NJW	76/06/11	Soil sample
241	RGW	76/06/11	Soil sample
242	NJW	76/06/11	Rock description

NUMBERS	INITIALS	DATE	TYPE OF OBSERVATION
243	RGW	76/06/11	Soil sample
244	NJW	76/06/11	Soil sample
245	RGW	76/06/11	Soil sample
246	NJW	76/06/11	Soil sample
247	RGW	76/06/11	Soil sample
248	NJW	76/06/11	Rock description
249	RGW	76/06/11	Soil sample
250	NJW	76/06/18	Soil sample
251	RGW	76/06/11	Soil sample
252	NJW	76/06/18	Soil sample
253	RGW	76/06/11	Soil sample
254	NJW	76/06/18	Soil sample
255	RGW	76/06/11	Soil sample
256	NJW	76/06/18	Soil sample
257	RGW	76/06/11	Soil sample
258	NJW	76/06/18	Soil sample
259	RGW	76/06/11	Soil sample
260	NJW	76/06/18	Soil sample
261	RGW	76/06/11	Soil sample
262	NJW	76/06/18	Soil sample
263	RGW	76/06/11	Soil sample
264	NJW	76/06/18	Rock description
265	RGW	76/06/11	Soil sample
266	NJW	76/06/18	Rock description
267	RGW	76/06/16	Rock description
268	NJW	76/06/18	Rock description
269	RGW	76/06/16	Rock description
270	NJW	76/06/18	Rock description
271	RGW	76/06/16	Rock description
272	NJW	76/06/18	Soil sample
273	RGW	76/06/16	Rock description, soil sample
274	NJW	76/06/18	Soil sample
275	RGW	76/06/16	Rock description
276	NJW	76/06/18	Rock description
277	RGW	76/06/16	Rock description
278	NJW	76/06/18	Rock description
279	RGW	76/06/18	Rock description
280	NJW	76/06/18	Rock description
281	RGW	76/06/18	Soil sample
282	NJW	76/06/18	Stream silt
283	RGW	76/06/18	Soil sample
284	NJW	76/06/18	Stream silt
285	RGW	76/06/18	Soil sample
286	NJW	76/06/18	Stream silt
287	RGW	76/06/18	Soil sample
288	NJW	76/06/18	Stream silt
289	RGW	76/06/18	Soil sample
290	NJW	76/06/18	Stream silt
291	RGW	76/06/18	Soil sample

NUMBERS	INITIALS	DATE	TYPE OF OBSERVATION
292	NJW	76/06/18	Stream silt
293	RGW	76/06/18	Soil sample
294	NJW	76/06/18	Stream silt
295	RGW	76/06/18	Soil sample
296	NJW	76/06/19	Rock description
297	RGW	76/06/19	Rock description
298	NJW	76/06/19	Soil sample
299	RGW	76/06/18	Stream silt
300	NJW	76/06/18	Rock description
301	RGW	76/06/18	Stream silt
302	NJW	76/06/19	Rock description
303	RGW	76/06/18	Stream silt
304	NJW	76/06/19	Rock description
305	RGW	76/06/18	Stream silt
306	NJW	76/06/19	Soil sample, 306A rock desc.
307	RGW	76/06/18	Stream silt
308	NJW	76/06/19	Soil sample
309	RGW	76/06/18	Stream silt
310	NJW	76/06/19	Soil sample
311	RGW	76/06/18	Stream silt
312	NJW	76/06/19	Soil sample
313	RGW	76/06/18	A + B stream silts
314	NJW	76/06/19	Soil sample
315	RGW	76/06/19	Soil sample
316	NJW	76/06/19	Soil sample
317	RGW	76/06/19	Soil sample
318	NJW	76/06/19	Soil sample
319	RGW	76/06/19	Soil sample
320	NJW	76/06/19	Rock description
321	RGW	76/06/19	Soil sample
322	NJW	76/06/19	Stream silt
323	RGW	76/06/19	Soil sample
324	NJW	76/06/19	Stream silt
325	RGW	76/06/19	Soil sample
326	NJW	76/06/19	omitted
327	RGW	76/06/19	Soil sample
328	NJW	76/06/20	Soil sample
329	RGW	76/06/19	Soil sample
330	NJW	76/06/20	Soil sample
331	RGW	76/06/19	Soil sample
332	NJW	76/06/20	Rock description
333	RGW	76/06/20	Soil sample
334	NJW	76/06/20	Rock description
335	RGW	76/06/20	A + B soil sample
336	NJW	76/06/20	Soil sample
337	RGW	76/06/20	Soil sample
338	NJW	76/06/20	Soil sample
339	RGW	76/06/20	Soil sample

NUMBERS	INITIALS	DATE	TYPE OF OBSERVATION
340	NJW	76/06/20	Soil sample
341	RGW	76/06/20	Soil sample
342	NJW	76/06/20	Soil sample
343	RGW	76/06/20	Soil sample
344	NJW	76/06/20	Soil sample
345	RGW	76/06/20	Soil sample, B. stream silt
346	NJW	76/06/20	Soil sample
347	RGW	76/06/20	Soil sample
348	NJW	76/06/20	Soil sample
349	RGW	76/06/20	Soil sample
350	NJW	76/06/20	Soil sample
351	RGW	76/06/20	Soil sample
352	NJW	76/06/21	Stream silt
353	RGW	76/06/21	Stream silt
354	NJW	76/06/21	Stream silt
355	RGW	76/06/21	Stream silt
356	NJW	76/06/21	Stream silt
357	RGW	76/06/21	Stream silt
358	NJW	76/06/21	Stream silt
359	RGW	76/06/21	Stream silt
360	NJW	76/06/21	Stream silt
361	RGW	76/06/21	Stream silt
362	NJW	76/06/21	Stream silt
363	RGW	76/06/21	Stream silt
364	NJW	76/06/22	Rock description
365	RGW	76/06/21	Stream silt
366	NJW	76/06/22	Rock description
367	RGW	76/06/21	Stream silt
368	NJW	76/06/22	Rock description
369	RGW	76/06/22	Soil sample
370	NJW	76/06/22	Rock description
371	RGW	76/06/22	Soil sample
372	NJW	76/06/22	Soil sample
373	RGW	76/06/22	Soil sample,373.1 stream silt
374	NJW	76/06/22	Soil sample
375	RGW	76/06/22	Soil sample
376	NJW	76/06/22	Soil sample
377	RGW	76/06/22	Rock description
378	NJW	76/06/22	Soil sample
379	RGW	76/06/22	Rock description
380	NJW	76/06/22	Soil sample
381	NJW	76/06/22	Soil sample
382	NJW	76/06/22	Soil sample
384	NJW	76/06/22	Soil sample
386	NJW	76/06/22	Rock description
388	NJW	76/06/23	Rock description
390	NJW	76/06/23	Rock description

NUMBERS	INITIALS	DATE	TYPE OF OBSERVATION
392	NJW	76/06/23	Rock description
394	NJW	76/06/23	Rock description
396	NJW	76/06/23	Rock description
398	NJW	76/06/23	Rock description

APPENDIX V

Description of Silt Samples

APPENDIX V

DESCRIPTION OF SILT SAMPLES

NMBR	WIDTH	DEPTH	FLOW	DIRN	%C	%O	%F
7614052.2	30	5	TKL	320	50	20	30
7614214	20	5	TKL	120	5	55	40
7614282	30	10	MOD		15	5	80
7614284	100	20	MOD		25	5	70
7614286	20	5	TKL		5	5	90
7614288	10	5	TKL		10	5	85
7614290	20	5	TKL		5	5	90
7614292	80	15	MED		10	10	80
7614294	30	0	TKL		0	0	100
7614322	10	2	TKL		0	20	80
7614324	15	5	TKL		5	10	85
7614352	10	5	TKL		0	50	50
7614354	20	5	TKL		0	60	40
7614356	5	1	TKL		30	40	30
7614358	10	3	TKL		30	30	40
7614360	30	10	MOD		20	20	60
7614362	0	0	DRY		40	10	50
7614380	30	10	TKL		0	45	65
7614345.1	10	3	TKL	060	0	50	50
7614299	2	.2	TKL		35	5	60
7614301			DRY		0	15	85
7614303			DRY		0	15	85
7614305			DRY		0	15	85
7614307			DRY		0	15	85
7614309			DRY		0	15	85
7614311			DRY		35	5	65
7614313.1			DRY		20	5	75
7614313.2	1	.1	TKL		30	10	60
7614353			DRY			45	55
7614355	1	.1	TKL			35	65
7614357	1	.1	TKL		10	35	55
7614359	1	.1	TKL			35	65
7614361			DRY		25	30	45
7614363			DRY		35	20	45
7614365			DRY		65		35
7614367			DRY		50		50
7614373.2	20	5	MOD	140	10	70	20
7614219.1	50	15	MOD	10	0	50	50

Abbreviations:

NMBR : Sample Number
MOD : Moderate Flow
TKL : Trickle
DIRN : Direction of Flow
% C : % Coarse Material
% D : % Organics
% F : % Fine Material

APPENDIX VI

Description of Soil Samples

APPENDIX VII

Rock Descriptions

NMBR	UNIT	IDNT	ELEV	HORZ	DEPTH	COLOUR	% ORG	GRID E	GRID N	GRID TYPE
7614 211	760610	S620/R60	4470	B	25	BRN	20	+ 400	+ 250	
7614 213	"	"	4460	B	20	BRN	10	"	300	
" 215	"	"	4430	B	25	BRN	15	"	350	
" 217	"	"	4350	AB	30	BRN	30	"	400	
" 219.1	"	"	4220	BC	35	BRN	30	"	450	
" 221	"	"	4200	B	15	LBR	20	"	500	
" 223	"	"	4210	B	10	BRN	10	"	525	
" 225	"	"	4220	B	15	LBR	15	"	550	
" 227	"	"	4230	B	10	BRN	20	"	575	
" 229	"	"	4230	B	15	LBR	15	"	600	
" 231	"	"	4510	B	15	BRN	10	"	− 50	
" 233	"	"	4500	B	20	BRN	10	"	100	
" 235	"	"	4450	B	20	LBR	20	"	150	
" 237	"	"	4400	B	25	LBR	15	"	175	
" 239	"	"	4340	ABC	20	BRN	30	"	200	
" 241	760611	"	4250	ABC	10	BRN	30	+ 800	− 50	
" 243	"	"	4180	ABC	10	BRN	30	"	100	
" 245	"	"	4050	ABC	20	"	"	"	150	
" 247	"	"	3950	B	15	"	10	"	175	
" 249	"	"	3930	B	25	"	15	"	200	
" 251	"	"	4310	B	15	"	10	"	+ 50	
" 253	"	"	4350	B	15	"	15	"	100	
" 255	"	"	4380	AB	20	LBR	20	"	150	
" 257	"	"	4390	B	20	BRN	10	"	200	
" 261	"	"	4440	BC	15	"	10	"	250	
" 263	"	"		BC	20	"	10	"	300	
" 265	"	"		B	15	"	10	"	350	

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	NMBR	DATE	IDNT	ELEV	HORZ	DEPTH	COLOUR	% ORG	GRID E	GRID N	GRID
	7614265	76 06 11	3620/RGL	4360	B	15	BRN	15	+ 800	+ 400	T37E
	" 273	76 06 16	"	4750	BC	10	BRN	20			
	" 281	76 06 18	"	4520	B	15	RBR	10	+ 600	100	T35E
	" 283	"	"	4580	B	"	BRN	15	"	200	
	" 285	"	"	4470	B	"	"	10	"	300	
	" 287	"	"	4350	B	10	"	"	"	400	
	" 289	"	"	4200	B	20	"	"	"	500	
	" 291	"	"	4060	BC	10	"	20	"	600	
	" 293	"	"	4380	B	15	LBR	"	"	— 100	
	" 295	"	"	4320	B	10	BRN	15	"	200	
	" 315	76 06 19	"	4150	BC	10	LBR	20	+ 1000	100	
	" 317	"	"	4120	B	15	BRN	10	"	150	
	" 319	"	"	4020	BC	"	DBR	20	"	200	
	" 321	"	"	4120	"	20	BRN	25	"	+ 700	
	" 323	"	"	4200	"	15	BRN	15	"	200	
	" 325	"	"	4250	"	10	LBR	10	"	300	
	" 327	"	"	4200	"	15	LBR	20	"	400	
	" 329	"	"	4160	"	10	BRN	10	"	500	
	" 331	"	"	4140	B	15	LBR	10	"	+ 600	
	" 333	76 06 20	"	4650	BC	15	DBR	10	200	— 100	
	" 335	76 06 20	"	4600	B	5	BRN	15	"	— 200	
	" 335.1	"	"	4740	"	20	LBR	5	"	+ 50	
	" 337	"	"	4730	"	"	"	"	"	100	
	" 339	"	"	4680	"	10	BRN	20	"	200	
	" 341	"	"	4580	"	"	LBR	15	"	300	
	" 343	"	"	4480	AB	15	LBR	20	"	400	
	" 345	"	"	4450	B	"	"	10	"	500	

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NMBR	DATE	IDNT	ELEV	HORZ	DEPTH	COLOUR	%ORG	GRID E	GRID N	GRID
7614347	760620	8620/RGW	4440	B	10.	LBR	10	+200	+600	+5%
" 349	"	"	4440	AB	15	"	15	"	700	-
" 351	"	"	4400	B	10	BRN	10	"	800	-
" 369	760622	"	4300	BC	20	BRN	5			
" 371	"	"	4300	C	15	"	15			
" 373.1	"	"	4300	BC	10	"	10			
" 375	"	"	4320	ABC	15	"	20			
" 379	"	"	4300	B	15	"	10			
" 381	"	"	4300	B	10	"	10			
" 383	"	"	4300	B	15	"	5			
" 004	760526	8620/NJW	5000	AB	15	DBR	20			
" 035	760607	"	4750	B	15	BRN	5	00	0	+5%
" 040	"	"	4770	"	10	LBR	"	"	+ 25	-
" 042	"	"	4770	"	"	"	"	"	50	
" 044	"	"	4760	"	"	"	10	"	75	
" 046	"	"	4740	"	5	RBR	"	"	125	
" 048	"	"	4740	"	"	BRN	5	"	175	
" 050	"	"	4710	"	10	"	"	"	225	
" 052	"	"	4680	"	15	LBR	10	"	275	
" 054	"	"	4680	BC	20	"	5	"	325	
" 056	"	"	4660	B	10	RBR	5	"	375	
" 058	"	"	4660	"	"	DBR	80	"	425	
" 060	"	"	4670	"	"	BRN	5	"	475	
" 062	"	"	4660	"	20	"	"	"	525	
" 064	"	"	4605	ABC	5.	"	25	"	600	
" 066	"	"	4500	B	10	"	5	"	625	
" 068	"	"	4560	B	15	BRN	5	"	675	

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SOILS

8620

NMBR	DATE	IDNT	ELEV	HORZ	DEPTH	COLOUR	% ORG	GRID, E	GRID, N	GRID TYP
7614070	76 06 07	8620/NJW	4500	B	10	BRN	5	00	+ 725	TOR
" 072	"	"	4720	AB	5	"	10	"	- 25	"
" 074	"	"	4680	B	15	"	15	"	- 75	
" 076	"	"	4640	B	15	"	5	"	- 125	
" 078	7606 10	"	4530	B	20	LBR	5	+ 400	+ 25	
" 080	"	"	4530	B	15	RBR	10	"	75	
" 082	"	"	4500	B	10	"	5	"	125	
" 084	"	"	4530	B	"	BRN	"	"	175	
" 086	"	"	4490	B	5	DBR	"	"	225	
" 088	"	"	4460	B	15	BRN	3	"	275	
" 090	"	"	4460	B	30	LBR	5	"	325	
" 092	"	"	4380	B	10	RBR	20	"	375	
" 094	"	"	4360	B	15	LBR	5	"	425	
" 096	"	"	4200	B	10	"	20	"	475	
" 202	7606 11	"	4520	B	20	RBR	15	+ 400	- 25	
" 204	"	"	4500	B	15	"	10	"	75	
" 206	"	"	4480	B	10	"	20	"	125	
" 208	"	"	4250	B	5	LBR	"	+ 800	25	
" 210	"	"	4220	B	"	RBR	5	"	75	
" 212	"	"	4100	B	10	BRN	"	"	125	
" 222	7606 11	"	4260	B	10	BRN	5	+ 800	0	
" 224	"	"	4280	"	15	"	20	"	+ 25	
" 226	"	"	4320	"	"	"	10	"	75	
" 230	"	"	4380	"	10	RBR	5	"	125	
" 234	"	"	4380	"	15	"	"	"	175	
" 236	"	"	4400	"	10	BRN	5	"	225	
" 240	"	"	4420	"	15	"	10	"	275	

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NUMBER	DATE	IDNT	ELEV	HORZ	DEPTH	COLOUR	% ORG	GRID E	GRID N	CRD
7614244	760611	8620/NJW	4400	B	10	BRN	10	+800.	+325.	SE
" 246	760618	"	4380	B	10	"	10	"	375	"
" 250	"	"	4410	B	15	RBR	10	+ 600	0	
" 252	"	"	4420	B	10	"	"	"	50	
" 254	"	"	4560	B	7	"	5	"	150	
" 256	"	"	4540	B	5	LBR	"	"	250	
" 258	"	"	4400	B	10	"	15	"	350	
" 260	"	"	4300	B	20	RBR	5	"	450	
" 262	"	"	4100	B	15	"	15	"	550	
" 272	"	"	4460	B	10	"	10	"	− 50	
" 274	"	"	4340	B	10	"	15	"	− 150	
" 278	760619	"	4250	B	10	BRN	5	+ 1000	− 50.	
" 306	760619	"	4200	B	20	RBR	10	"	0	
" 308	"	"	4150	B	15	LBR	10	"	+ 50.	
" 310	"	"	4180	B	20	RBR	10	"	150	
" 312	"	"	4220	B	10	"	15	"	250	
" 314	"	"	4220	B	"	"	10	"	350	
" 316	"	"	4160	B	20	"	15	"	450	
" 319	"	"	4150	B	"	LBR	15	"	550	
" 328	760620	"	4800	B	30	RBR	10	+ 200	− 50 SE	
" 330		"	4620	B	15	LBR	5	"	− 150 SE	
" 336		"	4760	B	4	RBR	10	"	0	
" 338		"	4680	B	20	"	15	"	+ 150	
" 340		"	4620	B	15	"	10	"	250	
" 342		"	4500	B	30	LBR	10	"	350	
" 344		"	4460	B	25	"	15	"	450	
" 346		"	4450	B	10	RBR	5	"	550	

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NHGR	DATE	IDNT	ELEV	HORZ	DEPTH	COLOUR	% OCC	GRID E	GRID N	GRID
7663/8	760620	8620/NIL	4440	B.	20	RBR	10	4200	1650	TSE
" 350	"	"	4420	B.	20	"	10	"	750	
" 372	760622	"	4300	BC	5	RBR	5			
" 374	"	"	4300	BC	15	"	10			
" 376	"	"	4300	BC	"	"	"			
" 378	"	"	4300	BC	20	"	5			
" 380	"	"	4300	BC	10	"	"			
" 382	"	"	4300	BC	20	"	"			
" 384	"	"	4300	BC	15	LBR	"			
"	"	"								
"	"	"								
"	"	"								
"	"	"								
"	"	"								

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NUMBERS (All numbers preceded by 7614)	INITIALS	DATE (all dates preceded by 76)	ELEV (feet)	ROCK DESCRIPTIONS	STRIKE/DIP/ INTERVAL
279	RGW	0618	4680	At Bl 305 m NE a grey weath. greenish f.g. lst. No aeolians or lacework. Trench 4 x 4 m on the bl.	
297	RGW	0618	4840	Mostly f.g. green lst. with minor aeolians (approx. ½ cm).	
345.1	RGW	0620	4450	Intermittent + underground brooks in heavy forest no otc.	
373 B	RGW	0622	4300	Near 373 A, in qz, limy qz brxx + lst rocks on strike Joe claims and Cu Queen	
377	RGW	0622	4350	4 x 5 m x 10 m deep shaft in wtr to brn f.g. limestone qtz brxx. Clasts lst + qtz rotted in a limy matrix. No evid. of staining to indicate reason. For shaft, area slightly skarnified.	

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NUMBERS (All numbers preceded by 7614)	INITIALS	DATE (all dates preceded by 76)	ELEV (feet)	ROCK DESCRIPTIONS	STRIKE/DIP/ INTERVAL
379	RGW	0623	4380	A dk grey to blk to wte. f.g. qtzite. Weathered sfcs weather out frags!? less than 5% Assumed to be Knob Hill	

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NUMBERS	INITIALS	DATE	ELEVATION	ROCK DESCRIPTIONS	STRIKE/DIP/ INTERVAL
7606101	RVL	760525		Black, biotite-rich fine grained rock with white stringers, veins and blebs that could be due either to alteration or to fracture filling or to sedimentary features. Probably part of Knob Hill volcanics.	
7606102	RVL	760525	4700	Black, fine grained biotite-rich rock with blebs, stringers, and fracture filling of white material. Same rock as no. 7606001.	
7606103	RVL	760526	4900	Siltstone or argillite. Pale to dark grey, with bands and boudins of grey chert. Probably Knob Hill.	B/75/70/N/5
7606104	RVL	760526	5080	Black argillites. Rocks seen in 103 with bands and boudins are of chert and the wispy grey argillite all occur in this outcrop.	
7606105	RVL	760526	4600	Cherty siltstones, same as 7614006. Has fragmental appearance but this may be due to tendency of cherty parts to yield by fracturing while argillaceous parts deform plastically. Could overlie or underlie limestone. Streaky white veining in places. Must be Knob Hill.	
7606106	RVL	760526	4620	Grey, cherty argillite, streaky along foliations which are probably bedding. Probably Knob Hill.	F/120/75/N
7606107	RVL	760528	4360	Limestone breccia. Similar to carbonate pebble conglomerate and to limestone breccia on provincial highway east of Phoenix. Clasts or blobs of limestone in yellow-green matrix which in some places form a lace work as in section measured by R. Wilson.	
7606108	RVL	760528	4370	Outcrop by creek. Massive pinkish white, very coarsely crystalline limestone.	

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NUMBERS	INITIAL	DATE	ELEVATION	ROCK DESCRIPTIONS	STRIKE/DIP INTERVAL
7606109	RVL	760528	4440	Impure dolomite, grey to greenish grey, has nobbly appearance on fresh surface as if made of fragments. Dark colour possibly due to chlorite. ? Mn. Could be float. Same rock as 1975 station 527.	
7606110	RVL	760528	4460	Dacitic tuff, grey.	
7606111	RVL	760528	4500	Massive white crystalline limestone. Not so coarsely crystalline as 108.	
7606112	RVL	760528	4460	Cherty siltstone with fine grained angular chert fragments, - a water-sorted sharpstone, rusty along fractures.	
7606113	RVL	760529	4650	Well banded grey wacke? tuff? with some bands of cherty siltstone.	B/175/40/E/1
7606114	RVL	760529		Cherty siltstone. Grey-wacke texture but with some sharpstone clasts. Dip appears flat, but probably due to recent slumping. Limey in places. Could correspond to racks 50 m. east of DDH 75-1.	
7606115	RVL	760529	4900	North end of outcrop is rusty cherty siltstone. South end has chert pebble conglomerate.	
7606116	RVL	760530	3800	Sharpstone. Quartzite (sharpstone unit). Cherty siltstone. Fine grained grey dolomite and limestone, cherty in places. Outcrop is 30 m. long, E-W, and younger to the east.	

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NUMBERS	INITIAL	DATE	ELEVATION	ROCK DESCRIPTIONS	STRIKE/DIP INTERVAL
7606117	RVL	760530	3860	Sharpstone, interbedded, coarse and fine. Fine grained and well foliated parallel to ? bedding. All much sheared.	B/900/20/N
7606118	RVL	760530	4400	Very fine grained cherty siltstone. With limey or dolomitic parts. Typical of unit 4 above the limestone.	
7606135	RVL	760605	4440	Limestone, massive, white, with quartz grains, rounded and angular.	B/30/50/E
7606136	RVL	760605	4460	Sharpstone (upper) with puddingstone, water sorted, graded bedding, outcrop too broken up for strike and dip.	

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DESCRIPTION OF SOIL SAMPLES

Appendix VI

NMBR	UNIT	ZONT	ELEV	HORZ	DEPTH	COLOUR	% ORG	GRADE	CRDN	CRIP
7614011	760526	8620/RGW	4600	B	15	MBR	10			
7614055	760607	5620/RGW	4760	B	15	BRN	10	00	+ 100	JOE
7614057	"	"	4750	B	3	BRN	15	"	150	"
7614059	"	"	4730	B	15	BRN	10	"	200	
" 061	"	"	4700	B	10	DBR	20	"	250	
" 063	"	"	4680	B	15	BRN	20	"	300	
" 065	"	"	4650	B	15	BRN	20	"	350	
" 067	"	"	4650	B	10	BRN	10	"	400	
" 069	"	"	4660	B	15	BRN	15	"	450	
" 071	"	"	4660	B	10	BRN	10	"	500	
" 073	"	"	4615	B	10	BRN	10	"	550	
" 075	"	"	4615	B	10	BRN	15	"	600	
" 077	"	"	4550	B	10	LBR	20	"	650	
" 079	"	"	4530	B	15	BRN	15	"	700	
" 081	"	"	4480	B	30	BRN	20	"	750	
" 083	"	"	4470	B	15	BRN	15	"	775	
" 085	"	"	4420	B	20	BRN	20	"	800	
" 091	"	"	4700	B	15	DBR	20	"	-50	
" 093	"	"	4670	B	10	BRN	10	"	100	
" 095	"	"	4600	B	20	LBR	20	"	150	
" 097	"	"	4520	B	15	BRN	15	"	200	
" 201	760610	"	4550	BC	10	BRN	15	+ 400	+ 00	
" 203	"	"	4510	B	15	LBR	10	"	50	
" 205	"	"	4520	B	10	BRN	15	"	100	
" 207	"	"	4510	B	15	LBR	10	"	150	
" 209	"	"	4540	B	25	BRN	10	"	200	

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NUMBERS (All numbers preceded by 7614)	INITIALS	DATE (all dates preceded by 76)	ELEV (feet)	ROCK DESCRIPTIONS	STRIKE/DIP/ INTERVAL
013	RGW	0526	4830	Bulldozer trench (forestry) cherty argillite blk v.f.g. prob. equiv. to 004	
015	RGW	0528	4250	Sub crop in uprooted tree stump. Rusty brn weath. green fresh ?wacke. Sample #1. Unit 4	
017	RGW	0528	4360	As 015 only large otc. No lst.	
019	RGW	0528	4300	Contact betw (fren volc? wacke) as in 015 + 017 + pink weath. volc. Sample #3.	
021	RGW	0528	4160	Lst. otc! Contains minor siliceous bands but few granules. Equiv. to upper part of lst section. Interbedded is unit 4 rkxs hence assume near contact.	
023	RGW	0529	4070	Rusty brn weathering m.g. qtzite? Some clasts, possibly a sharpstone (or Knob Hill). Sample 023	

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NUMBERS (All numbers preceded by 7614)	INITIALS	DATE (all dates preceded by 76)	ELEV (feet)	ROCK DESCRIPTIONS	STRIKE/DIP/ INTERVAL
025	RGW	0529	4460	Grey weath. lt. brn. sed? or volc. Sample 025 Tv immediately above	
027	RGW	0529	4670	Lt. brn. mg qz granule silica cemented sst sample 027	
029	RGW	0529	4580	Atp a large otc of ?unit 4? or ? Knob Hill? sample 029. Unit 2? Some clasts of grnt. x marks a 6'x8'x6'. Hole - trench grey cherty siltstone slightly chloritic, veinlets of qz.	
031	RGW	0529	4600	Green rk similar to 029. Some rusty areas. ?clastic. Some clasts appear to be chert Unit 2 or 4?? Sample 031	
033	RGW	0529	4280	Otc? of grn. foliate unit 2 or 4. Sample 033 +50' W is uprooted tree Unit 2 Sharpstone?	
035	RGW	0530	4400	Siltstone, grey, speckled, f.g. locally sharpstone clasts (m.f.g.) prob. unit 4	

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NUMBERS (All numbers preceded by 7614)	INITIALS	DATE (all dates preceded by 76)	ELEV (feet)	ROCK DESCRIPTIONS	STRIKE/DIP/ INTERVAL
037	RGW	0531	4500	A cu-green colour stain in fallen (rotten) tree wood. Area is possible intermittent stream channel in heavy bush. Traced "upstream 15', down stream 6' ". Geochem sample to determine nature of colour.	
039	RGW	0603	4890	An overall large outcrop (series of closely spaced otc). Contains f.g. green siltstone? (highly weathered, difficult to get a fresh sfc.); white to brn f.g. qtzite and f.g. clastic? rk. Weathered sfc knobbly as sharpstone. Possible unit 1,2 or 4.	
041	RGW	0603	4380	Silt sample in small crk. Underground above + open at sample point. Near Cu stain color rotten tree as at 037	
043	RGW	0603	4760	A white m.g. crystalline (some radiating) lst containing a weathering pattern of brn + some powder blue colour. Check thm + zinc zap.	

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NUMBERS (All numbers preceded by 7614)	INITIALS	DATE (all dates preceded by 76)	ELEV (feet)	ROCK DESCRIPTIONS	STRIKE/DIP/ INTERVAL
045	RGW	0603	4770	A C-G white crystalline qtzite (sst ?) some lime interbedded rextal (f.g.) qtzite. Well rounded aeolian qtz grains found ATP Grains are .1 - .5 cm diameter.	
047	RGW	0605	4450	Lst., grey weath., pink wth m.g. massive no frags or aeolians. Silica veinlets qz "gobs". Some net work crosscut by qz dike 270° trend. In parts lst is brxx by intrusion + cemented by silica to produce lst brxx intrusion is 50% of otc.	B/010/50/W/1
049	RGW	0605	4580	As 047, increase in amt of silica. Crystals found	
051	RGW	0605	4440	Lst, buff weath. pale green f.g. x-taline. Net work (silica) cont malachite stain, lst not fragmental. Becomes coarser grained uphill dirn 230°, lack of network + stain. Some lacework higher 1500.	

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NUMBERS (All numbers preceded by 7614)	INITIALS	DATE (all dates preceded by 76)	ELEV (feet)	ROCK DESCRIPTIONS	STRIKE/DIP/ INTERVAL
053	RGW	0605	4500	Lst., grey-beige, wte x-talline brxx. Clasts angular 2 mm - 1 cm. Frags + matrix limy.	
087	RGW	0607	4450	A rusty brn weath. wte - tan fresh, veined qtzite Knob Hill?	
089	RGW	0607	4630	A tan weathering greenish wte m.c.-g Lst. Some dark bands no aeolians.	
099	RGW	0607	4700	Grey weath., grey wte mg lst containing aeolian silica granules subround and .3 mm dia. Limy + non limy matrix.	
219.1	RGW	0610	4300	Silt Sample. Continuous flow stream, but in part over grassy area. 10 m past geochem sample #7614219A	
267	RGW	0616	4660	Dk grey green matrix. Sub ang. grey red + wte chert frags. 1 mm - 2 cm. To su's py. Matrix has moderate fizz. Possible u. sharpstone near u. lst. Su's in matrix.	

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NUMBERS (All numbers preceded by 7614)	INITIALS	DATE (all dates preceded by 76)	ELEV (feet)	ROCK DESCRIPTIONS	STRIKE/DIP/ INTERVAL
269	RGW	0616	4700	A grey wte tan weath. grey f.g. lst. well developed lacework + some lacework contains sand sized chert frags.	
271	RGW	0616	4740	Probably a tertiary fragmental incorporating sharpstone fragments. Could be sharpstone.	
273	RGW	0616	4750	A volc flow + brxx containing some red jasper some calcite on fracs. + malachite staining. An adit 6 m in length was driven to explore same.	
275	RGW	0616	4780	A pale grey grn f.g. massive lst. No aeolians or lacework. Locally c.g. Cu stain in fracs. He? also mod. laceowrk further toward Cu Queen.	
277	RGW	0616	4700	Drilling site + wte. x-talline dry lst core trench of reddy brn weath. massive f.g. lst containing lots of malach stain. Frac stc contain He.	

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NUMBERS (All numbers preceded by 7614)	INITIALS	DATE (all dates preceded by 76)	ELEV (feet)	ROCK DESCRIPTIONS	STRIKE/DIP/ INTERVAL
270	NJW	0618	4500	Rusty weathering, f.g. grey qtzite. Looks like Knob Hill again .	
276	NJW	0618	4380	F.g. lt. grey - green quartzite. No fizzies, no fraggies.	
278	NJW	0618	4400	Pale green, blotchy limestone with intrusive in same hard specimen. Int. is hornblende porphyry & is slightly limey close to limestone.	
280	NJW	0618	4440	Fine grained green quartzite. No fizz. Frags. less than 2 mm. less than 5% of rock chert. Sharpstone?	
296	NJW	0619	4360	30 m long trench (2 m wide) almost 90° to BL; top just cuts; goes off S.E. Fine grained green qtzite with less than 5% frags (chert). Same all along trench.	

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NUMBERS (All numbers preceded by 7614)	INITIALS	DATE (all dates preceded by 76)	ELEV (feet)	ROCK DESCRIPTIONS	STRIKE/DIP/ INTERVAL
300	NJW	0619	4150	Aeolian quartz grain rock. Grains 2 mm - 1 cm Matrix non-calcareous. Some fizzy fractures.	
302	NJW	0619	4160	Large cliff outcrop. Fine grained pale green quartzite. Some rusty solution vugs. Calcareous fractures. ? Dipping into the hill? Slumped?	
304	NJW	0619	4180	Fine grained qtzite. Very pale green. Some pink? hematite	
306 A	NJW	0619	4050	Aeolian qtz grain rock. non calcareous. Grains 1 mm - 1 cm.	
320	NJW	0619	4150	No doubt - Knob Hill. f.g. brown-tan black veined quartzite.	
332	NJW	0620	4620	Huge otc of ? intrusive. Fine grained grey white white feldspar phenocrysts.	

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NUMBERS (All numbers preceded by 7614)	INITIALS	DATE (all dates preceded by 76)	ELEV (feet)	ROCK DESCRIPTIONS	STRIKE/DIP/ INTERVAL
334.	NJW	0620	4650	Small otc.. f.g. brown quartzite + white quartz (vein).	
364	NJW	0622	4740	Knobby, weathering, (?fragmental?) slightly calcareous grey rock. Hard to get good surface. Knob hill or lower most sharpstone.	
366	NJW	0622	4600	Very large Knob Hill outcrop. Dark grey to black argillite. Appears fragmented in places; some almost look like aeolians. Just off Harry's Hway to left going up. Fizzy fracs.	
368	NJW	0622	4600	Limestone. Some lacework + some aeolians. Poor outcrop - is just showing on roadcut under volcanics.	
370	NJW	0622	4600	Med. grey green f.g. sharpstone. Frags. less than 6% of rock. 1 mm - 5 mm. Slightly fizzy matrix. Rusty weathering.	

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NUMBERS (All numbers preceded by 7614)	INITIALS	DATE (all dates preceded by 76)	ELEV (feet)	ROCK DESCRIPTIONS	STRIKE/DIP/ INTERVAL
386	NJW	0623		Pale green quartzite and grey med. x-talline limestone - skarn probably - garnet, tremolite, wallastonite, diopside	
388	NJW	8620	4760	Quartz grains, rounded; about 85% of rock. Other 15% is limey cement. Grains 2 mm to 1 cm.	
390	NJW	0623	4780	Fine graned grey quartzite, fizzy fractures + slightly matrix.	
392	NJW	0623	4860	Very fine grained pale green brown quartzite fizz only on fractures.	
394	NJW	0623	4920	Med. grained white limestone. Non-calcareous veining. Not lacework.	
396	NJW	0623	4960	Fine grained. Green-black matrix. Frags. 40% of rock. 2mm - 2 cms. Mostly angular. White or clear qtz (? chert) No fizz.	

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NUMBERS (All numbers preceded by 7614)	INITIALS	DATE (all dates preceded by 76)	ELEV (feet)	ROCK DESCRIPTIONS	STRIKE/DIP/ INTERVAL
398	NJW	0623	4980	Fine grained green brown matrix. Large frags. 4 - 8 cms. Sub angular. Mostly green chert. This is a fault breccia.	

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ROCK DESCRIPTIONS

- odd numbers

NUMBERS (All numbers preceded by 7614)	INITIALS	DATE (all dates preceded by 76)	ELEV (feet)	ROCK DESCRIPTIONS	STRIKE/DIP/ INTERVAL
001	8620/RGW	0525	4510	F.G. Blk & wte veins?. Some mica (Bi) Sparkles in sunlight - grains? Mdst at one time?? wte veins altered blk mat. White pod was calcareous. Skarn?	
003	8620/RGW	0525	4520	White f.g. to v.f.g. cherty qtzite + some qz crystals. Recrystallized 'sucrosic' appearance. In part fragmental - rounded clasts? Polished frac. planes.	
005	8620/RGW	0525	4700	Blk to grey weathering f.g. volc.? (Knob Hill?) wte knobs (vesicles?) elongate (pipe vesicles) appears to conc. some veining/alt similar to 101. No fizz.	
007	8620/RGW	0525	4880	Vfg mauve grey green siltstone siliceous volc? similar to some of unit 4. Trace py.	
011	8620/RGW	0526	4600	Glacial outwash channel. Possible cat work - fault zone (as seen on airphoto's) soil sample.	

ROCK DESCRIPTIONS

- even numbers

NUMBERS (All numbers preceded by 7614)	INITIALS	DATE (all dates preceded by 76)	ELEV (feet)	ROCK DESCRIPTIONS	STRIKE/DIP/ INTERVAL
002	NJW	0525		Rock is mainly siltstone with some metamorphic biotite developed. Rock appears brecciated - may be due to intense veining by quartz - hairline to 5 cms. Some wider veins have crystals perpendicular to the walls - open space filling. Alteration - replacement - long. Minor sulphides - py, sp. ? skarn crystals?	
004	NJW	0526		Black, cherty, argillaceous siltstone. Probably a minor interband in sharpstone unit. Could be siltstone overlying sharpstone. About 5% disseminated sulphides. Distinctive pitted weathered surface. Sulphides small. Appears that area was trenched about 20 m long.	
006	NJW	0526	4600	Fragmental portion of siltstone rock - frags. rounded, cherty. Locally greater than 50% of rock.	

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NUMBERS (All numbers preceded by 7614)	INITIALS	DATE (all dates preceded by 76)	ELEV (feet)	ROCK DESCRIPTIONS	STRIKE/DIP/ INTERVAL
008	NJW	0526	5200	Sharpstone - angular chert clasts massive. Large, cliff forming otc.	
009	NJW	0526	5150	Cherty siltstone as at 004.	
010	NJW	0526	5050	Claim post: initial post 80319 M. Lt #1 J. Forshaw self oct 16, 1970. Volcanics to east. Siltstone to west.	
014	NJW	0528	4100	Skarnified limestone mins.: garnet, tremolite, diopside, quartz. Also odd, fragmental ? Is with brown-black alternation/stain? Some malachite seen on this.	
016	NJW	0528	4220	Similar to 014, more calcite here. Blue bloom. Same brown-black stuff.	
018	NJW	0528	4220	Very coarsely x-talline, pale green limestone.	

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NUMBERS (All numbers preceded by 7614)	INITIALS	DATE (all dates preceded by 76)	ELEV (feet)	ROCK DESCRIPTIONS	STRIKE/DIP/ INTERVAL
020	NJW	0528	4080	Chert pebble limestone.	
022	NJW	0529	4260	Micaceous siltstone.	
024	NJW	0529	4360	Water laid lithic wacke.	
026	NJW	0529	4500	Cherty siltstone with sharpstone frags.	
028	NJW	0529	4540	Fine grained green rock. Unit 4.	
030	NJW	0529	4400	Sharpstone.	
032	NJW	0529	4020	Contact of intrusive + sharpstone. Sharpstone is contact, metamorphosed & is foliated, but still recognizable. Is 022 an advanced case? I don't think so, but . . . - cooked zone about 40 cms wide.	

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NUMBERS (All numbers preceded by 7614)	INITIALS	DATE (all dates preceded by 76)	ELEV (feet)	ROCK DESCRIPTIONS	STRIKE/DIP/ INTERVAL
034	NJW	0530	3800	Coarse grained, blue-grey mottled limestone. Streaky white parts may be relief (recrystallized) bedding; perhaps now a foliation?	
036	NJW	0530	3950	Cherty, sharpstone. Looks like otc., but may have slid down the hill.	
098	NJW	0610	4300	Med. grey knobbly weathering, fine grained, med. to dk grey, quartzite ? knob hill?	
200	NJW	0610	4480	Rusty, grey weathering breccia? Frags angular, 1 mm - 5 mm (chert) 25% of rock. Matrix f.g. green. Fizzy fractures.	
012	NJW	0512	3960	Measured limestone section on Susie Ridge.	
214	NJW	0611	4050	Stream silt sample. Not much fine material in stream bed - mostly organics.	

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NUMBERS (All numbers preceded by 7614)	INITIALS	DATE (all dates preceded by 76)	ELEV (feet)	ROCK DESCRIPTIONS	STRIKE/DIP/ INTERVAL
216	NJW	0611	4050	Grey to rusty brn weathering white to pink fresh fragmental - chert frags 2 mm - 1.5 cms. Subrounded grains. Matrix - powder fizz.	
218	NJW	0611	4150	Rusty, grey, greenish-beige, fresh quartzite - fine grained tiny frags. Calcareous fractures.	
220	NJW	0611	4200	Fine grained green, massive, quartzite - locally fizzy.	
228	NJW	0611		Breccia - clasts angular chert, white 1 mm - 1.5 cm in f.g. green matri-, no fizz sharpstone?	
232	NJW	0611		Knob Hill? has definite old, cooked, crappy appearance. Fragments angular smeared. Veining across frags. has biotite, quartz + ? manganese oxides? (black mugs). Siliceous matrix. It appears that we have passed out of limestone and sharpstone into Knob Hill. That makes this limestone on Joe claims the lower limestone. ?Fault up S. Wallace Creek?	

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NUMBERS (All numbers preceded by 7614)	INITIALS	DATE (all dates preceded by 76)	ELEV (feet)	ROCK DESCRIPTIONS	STRIKE/DIP/ INTERVAL
238	NJW	0611	4440	Similar to 232 but more frags + more smeared No fizz.	
242	NJW	0611	4400	Large angular frags in black f.g. matrix. Veined + smeared. Knob Hill.	
248	NJW	0611	4390	Less smeared than 242 but same stuff. Knob Hill.	
264	NJW	0618	4060	Fine grained brown-rd quartzite. Massive. Knob Hill.	
266	NJW	0618	4560	Rusty grey weathering rock. Green grey fine grained matrix. Slightly calcareous rock. Rest matrix. 10% of rock is frags . Imported grey + white chert frags; angular; 1-5 mm size. ? upper Knob Hill or lower sharpstone.	
268	NJQ	0618	4550	Dark grey green f.g. matrix - non calcareous. Frags much smaller than at 266. Average 1 mm. Mostly white chert.	

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