DIAMOND DRILLING

MT. SICKER PROPERTY

VICTORIA MINING DIVISION

BRITISH COLUMBIA

Location:	NTS 92 B 13, E & W Latitude 48° 52' N Longitude 123° 46' W
Claim Names:	CF Group #8 Richard III Belle Seattle Little Nugget
Owner/Operator:	S.E.R.E.M. Ltd.
Report by:	P. Ronning
Drill Logs by:	C. G. van Houten
Date:	July, 1980

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INTRODUCTION

The Mount Sicker property straddles Big Sicker Mountain and part of Little Sicker Mountain in the Chemainus, Seymour and Somenos Land Districts, Vancouver Island, British Columbia. Big Sicker Mountain is 10 kilometers northwest of the town of Duncan. Access to the property is by road, from Highway 18 north on Somenos Road, northwest onto the Mt. Prevost Road and thence onto a network of old mining and logging raods. It can also be reached from Highway 1, via a turnoff to the west onto a country road, just south of the Chemainus River bridge.

Big Sicker Mountain is a little over 700 meters high. For the most part its flanks slope between 10 and 30 degrees and it is densely treed, except for some steep bare cliffs on the east side facing Highway 1. The mountain has been glaciated and much of it has been covered with drift. The flatter parts of the top and flanks are swampy. It is bounded on the south by Mt. Prevost, on the west by the U-shaped valley of the Chemainus River with Copper Canyon in its bottom, on the north by the broad valley of the Chemainus River and on the east by the valley of Bonsall Creek and Highway 1.

S.E.R.E.M. Ltd. staked the six Rocky claims, the Acme Fraction and the Margret Fraction. The fourteen CF claims and 26 crown grants are owned by S.E.R.E.M. under the terms of an option agreement with Mount Sicker Mines Ltd., now Peppa Resources. The Nugget Creek Group of 13 claims is optioned from Dr. Postuk and Mr. Fulton of Duncan, B.C.

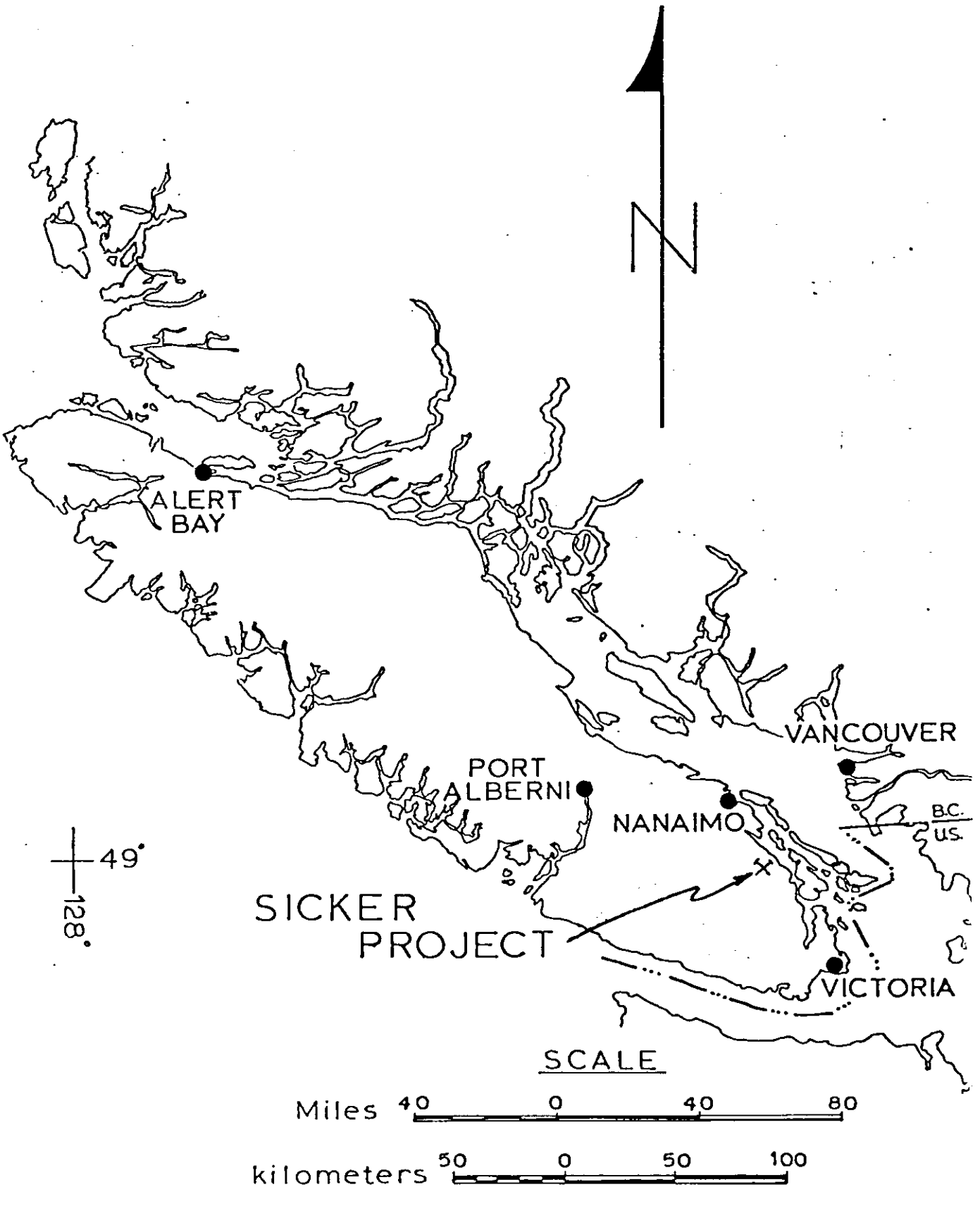
The property centres on an old underground mine which has been worked sporadically by various companies since the turn of the century. The initial discovery was made in 1897, with development and mining beginning on the Tyee Claim in that year. Work on the Lenora claim began in 1898, and mining continued until 1907. A few tons were shipped from the Richard III claim in the same period.

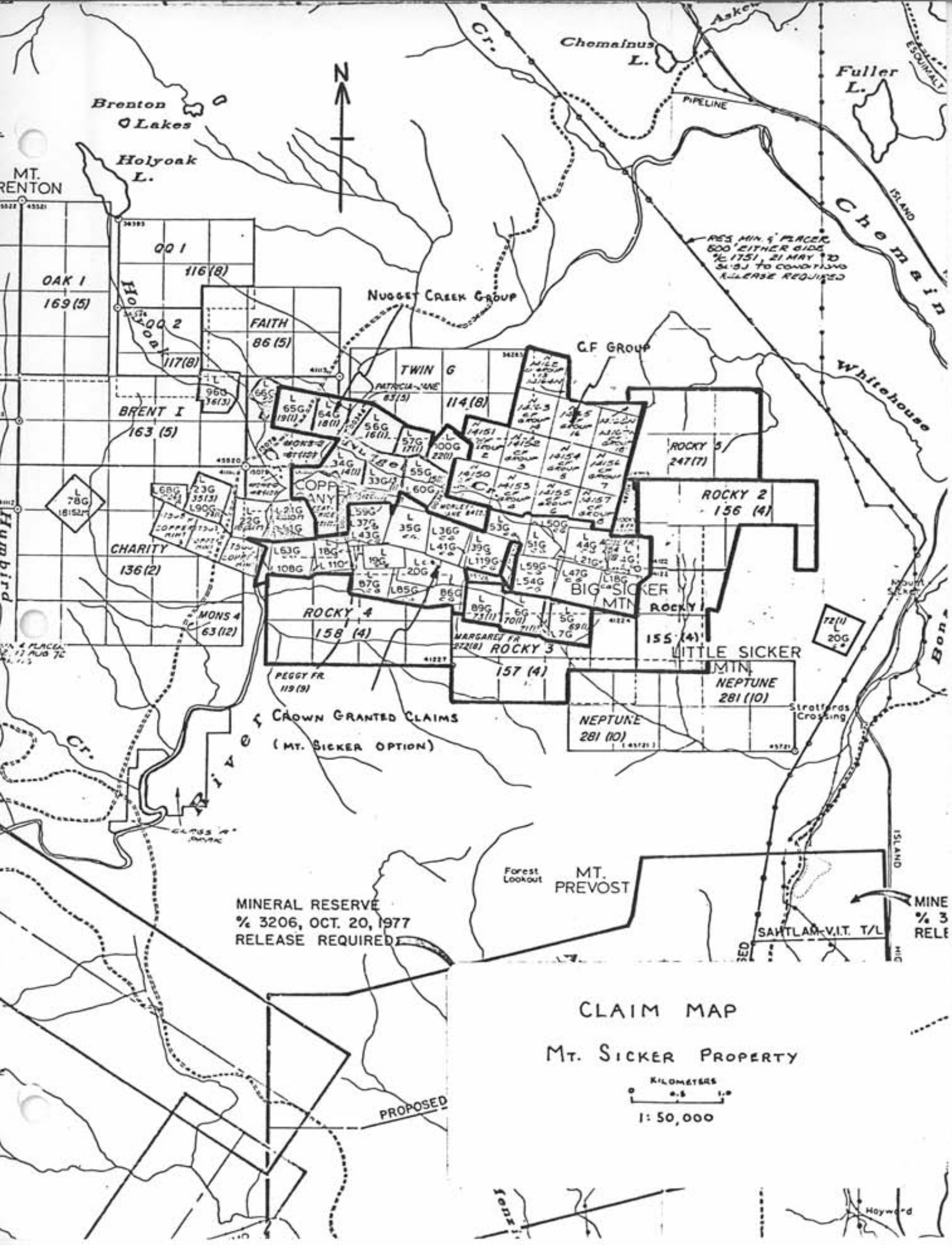
Development and exploration work were done by Ladysmith-Tidewater Smelters Ltd. in 1926-1929 and by Sheep Creek Mines Ltd. in 1939-1940.

From 1943-1947 Twin J. Mines produced copper and zinc concentrates from the consolidated group. In 1949-1952 Vancouver Island Base Metals rehabilitated the mine, with some production.

Location Map

Fig. 1





CLAIM MAP

Mt. Sicker Property

KILOMETERS
0 .5 1.0

1: 50,000

Some surface mining was done by the original principals of Mt. Sicker Mines Ltd. in 1964, and the company was formed shortly thereafter. From that time until 1974 various operators explored the property, doing surface work and diamond drilling. In 1967 an attempt was made to extract copper from dump material by heap leaching, but it did not prove feasible.

In the old mine were two nearly parallel east-west trending ore bodies. They consisted of massive sulphides, containing principally copper and zinc, with minor lead and significant gold and silver. Barite is a major constituent of some ore and may be of economic interest. To date production has been 305,787 tons of ore yielding 20,265,763 lbs. of copper, 45,960,252 lbs. of zinc, 40,052 ounces of gold and 841,276 ounces of silver.

The ore bodies occur within the mid to upper paleozoic Sicker Group, associated with schists believed to have originated as felsic volcanics.

From March 20, 1980 to April 2, 1980 and from April 16, 1980 to May 19, 1980, S.E.R.E.M. Ltd. did 1,236 meters of diamond drilling on the Mt. Sicker property. A summary of the drilling done follows:

DDH #	Length	Claim	Lot or Record No.
SRM 12	306.3 m	Richard III	L 26 or L 39-G
SRM 13	196.6 m	CF Group #8	14157
SRM 14	141.7 m	CF Group #8	14157
SRM 15	197.5 m	Belle	L 55G; 15
SRM 16	132.9 m	Little Nugget	L 33G; ~~14~~ 13
SRM 17	107.0 m	Seattle	L 57G; 17
SRM 18	153.9 m	Little Nugget	L 33G; ~~14~~ 13

This report describes the results of that drilling.

Richard III Area

(DDH SRM 12)

Setting and Purpose

DDH SRM 12 was collared on the Richard III Claim, about 125 meters north and slightly east of the Richard III shaft. It was intended to test an hypothesis that the ore horizon of the old Richard III, Tyee and Lenora Mines might have been displaced to the north, east of the Richard III shaft. It was also intended to look at the area immediately east of the Richard III shaft itself, at a depth of about 180 meters.

Results

The first 157 meters of the hole passed through a series of felsic volcanics with a few intermediate tuffs. Most of the volcanics have the aspect of a dacite or rhyo-dacite porphyry, with feldspar phenocrysts and some quartz eyes. They are variably schistose, but the schistosity hasn't completely destroyed the original textures. Pyrite is present as disseminations and in seams and quartz veinlets, averaging around 1%. Trace amounts of chalcopyrite sometimes accompany the pyrite.

There are fractured, gougy zones throughout this section but major faulting only begins to appear in about the last 5 meters.

From 157 to 184.5 meters, diabase and chlorite sericite quartz schist alternate every three to five meters, with the schist usually fractured and gougy. At the end of this interval is a small amount of graphitic gouge. This probably marks the mine fault.

Below 184.5 meters, with the exception of a 10 meter section of diabase and gabbro, are 122 meters of hornblende andesite porphyry, some of which appears tuffaceous. The andesite is massive and unfoliated, with some epidotization and chloritization. It carries trace amounts of pyrite but only rare traces of chalcopyrite.

C Zone

(DDH SRM 13, 14)

Setting and Purpose

In the east central part of the Mt. Sicker property is an area known as the C Zone. It extends from about 44 E to 80 E, beginning within 150 meters of the O N base line and extending 300 to 400 meters north. Within it, no bedrock is exposed.

Most of the C Zone was covered by both Pulse EM and IP surveys in 1979. A persistent 1 to 2 channel EM anomaly runs east-west through the C Zone. A 200 m to 250 m wide zone of low resistivity, with some moderately high frequency effects also trends approximately east-west across the C Zone.

The strongest geophysical responses are on line 60 E at about 3+90 N, and these were tested by drilling. Since the geophysical information was ambiguous as to the dip of the conductive zone, it was decided to try a south dipping hole first, looking for a north dipping zone, and if the results of that were inconclusive to try a north dipping hole. In the event, both holes were drilled. DDH SRM 13 was collared at about 60 E, 4+80 N plunging 55° to the south while DDH SRM 14 was collared near 60 E, 3+10 N plunging 55° to the north.

Results

The results of holes SRM 13 and 14 are shown graphically on Figs. 5, 6, and 7. SRM 13 was in gabbro for most of its length, although it passed through 20.7 meters of schistose volcanics at 94.2 m and a couple of shorter intervals of the same before the end of the gabbro at 172.7 meters. The final 24 meters of the hole, to 196.6 m, were in dacite. Most of the gabbro contains quartz-calcite veinlets and may be partly epidotized. One 1.7 m wide quartz vein in gabbro contains about 5% chalcopyrite.

Much of the rock in SRM 13 is partly fractured and a couple of intensely fractured and mylonitized zones were crossed, from 156 m to 159 m and at 194 m.

SRM 14 passed through 41.5 m of overburden before hitting bedrock. The first 11 m of bedrock consisted of intensely fractured and mylonitized dacite, where less than 10% core

recovery was attained. Similar fractured rock was found from 64.6 to 66.1 meters and from 87.5 to 90.5 meters, where the dacite ends. Next is one meter of semi-massive pyrite in quartz, followed by 1½ meters of gabbro and 12.3 meters of very siliceous chlorite sericite quartz schist. The last 36½ meters of the hole are in gabbro.

With the exception of the chalcopyrite-bearing quartz vein already mentioned, only traces of mineralization were found by either hole, scattered through the quartz-calcite-epidote bearing gabbro.

The only explanation available to account for the geophysical anomalies seems to be the fault zones encountered in both holes. All the sections of fractured, mylonitized rock are probably part of a major fault zone, perhaps being the eastward extension of the Nugget Creek Fault.

No further drilling or exploration work is needed in the C Zone.

Nugget Creek Group

(DDH SRM 15, 16, 17, 18)

Setting and Purpose

The four holes on the Nugget Creek Group were drilled in an area of favourable geological, geochemical and geophysical indications. They are on a northwest facing hillside underlain by felsic, variably siliceous schists that originated as tuffs and flows. Fifty to a hundred meters north of the drill holes there is a transition to andesitic rocks. The nature of this contact (stratigraphic or facies change) is unclear.

A structural interpretation (Fig. 9) suggests that the holes are drilled into a south-dipping "panel" of schist with hanging and foot walls of gabbro.

Near the collar of SRM 15, in a road cut at the southwest end of a bulldozer trench, is a small zinc showing in sericite schist, from which selected samples assay around 7% zinc. There is some suspicion that the showing is in a large boulder which has sloughed down the hillside from above, but the presence of the zinc is, nevertheless, intriguing.

Soil sampling revealed a zinc anomaly in soils that covers the areas of SRM 15, 16 and 17, extending from there about four hundred meters to the northeast. There is a copper anomaly downslope from these holes to the west.

A pulse EM survey showed a conductor running from 130 meters west of SRM 16 southeast for about 800 meters.

Drill holes SRM 15 and SRM 16 were intended to test the geophysical anomaly near lines 8 W and 12 W. During the drilling of SRM 16 there were some indications that the hole might have been going down the dip of the lithologic horizons so it was decided to try drilling SRM 17 in the opposite direction. SRM 18 was designed to complement SRM 16, so that the two holes together would cover the complete width of the schist panel between the upper and lower gabbros.

Results

Lithologies

Figures 10, 12 and 13 show holes SRM 15, 16, 17 and 18 in profile with, respectively, the lithologies, visual estimates of the sulphide contents and averaged assay results.

Excluding gabbro, rock in all four holes falls into two main types. The first is a rock never seen elsewhere on Mt. Sicker; a very soft, crumbly, friable dark green sericite chlorite schist (Unit 3b on Fig. 10). Sericite and chlorite are by far the major constituents of it, with chlorite dominating. It is usually slightly talcose. Quartz is a minor constituent, occurring as scattered crystals less than 2 mm long, sometimes idiomorphic and sometimes oval. Lenses, streaks and pods a few millimeters thick of very fine silty material sometimes occur, parallelling the schistosity. Occurring with the silty material, or in its absence, are thin, faint anastomosing colour bands, also parallel to the schistosity. Lighter coloured, fine grained spots up to 5 mm wide, sometimes elongated parallel to the schistosity, could be remnants of fragments.

This chlorite-rich rock is probably an alteration product formed by iron and/or magnesium rich hydrothermal fluids. In the siliceous schists occurring deeper in the drill holes are occasional veins and seams of chlorite that could be feeders for a hydrothermal system.

The remaining original textures suggest that the chloritized rocks began as tuffs and lapilli tuffs. They occur from 23.8 m to 38.9 m in SRM 15, above 70.7 m in SRM 16 and above 30.9 m in SRM 17. In SRM 15 the section above 23.8 m is also chloritized and in many ways resembles the other chloritized rock but contains enough quartz to be called a quartz schist.

Located below the chloritized rock in SRM 15 and 16, below it but separated by 14 m in SRM 17 and throughout SRM 18 are quartz schists. Most of them are chlorite sericite augen quartz schists (Unit 1d), with the exception of SRM 16 where they lack augen. These rocks are light grey to white, sometimes speckled with green. Though all are siliceous, their hardness, fissility and competence are highly variable, depending on the amount of quartz present. They usually have a very fine grained groundmass which probably consists of a mixture of quartz, sodic plagioclase, orthoclase, sericite and chlorite. Quartz "augen" vary from 1 to a few millimeters in size and are not always true augen, sometimes being only rounded quartz crystals. A few percent of feldspar phenocrysts or light coloured "spots" suggesting relict feldspars are usually present.

The quartz schists probably originated as rhyolites and/or dacites. The remaining original textures are not often diagnostic of flows or tuffs but with some exceptions most of the quartz schists are more suggestive of flows or of a rhyolite "plug" than of tuff.

The quartz schists are criss-crossed by white quartz and quartz-calcite veins a few millimeters to a few centimeters wide. Sometimes they form breccias with angular fragments of the schist in white quartz and calcite. There is usually pyrite and lesser chalcopyrite associated with the quartz and calcite.

Separating the quartz schist from the chlorite schist in SRM 17 are 14 meters of chlorite-bearing sericite schist (Unit 2c), with a couple of bands of chlorite schist and 3 bands of cherty quartz. This cherty quartz is very pyritiferous (greater than 10% pyrite) and appears to replace chlorite schist. It is strongly reminiscent of Unit 10, "cryptocrystalline quartz" in the Northeast Copper Zone.

Mineralization

Sulphide mineralization found in drill holes SRM 15, 16, 17 and 18 consists entirely of pyrite and chalcopyrite. The quartz schist and the chloritized schist each have their characteristic forms of sulphide occurrence.

In the quartz schist, pyrite and chalcopyrite occur as disseminations or associated with quartz-calcite veins and breccias. Disseminated mineralization may be coarse to fine; that associated with veins may occur as envelopes, cores or spots several millimeters to a centimeter in diameter.

In the chlorite schist, disseminated mineralization also occurs but quartz veins are less frequent and less likely to contain sulphides. It is common, however, to see sulphides concentrated along the schistosity as fine to coarse grains, often oval and elongated with the schistosity.

The sulphide content of the core often changes when the rock type does (Figs. 12 and 13) but there isn't a systematic relationship between rock types and sulphide content. Generally speaking, the chloritized schist is sulphide rich (5% to 10%) but the quartz schist can be equally rich, though the mode of sulphide occurrence is different. Only the cherty quartz bands in SRM 17 always have a high sulphide content.

Most of the drill core was assayed for copper and zinc and check assays were also run for lead, silver, gold and barium at frequent intervals. The results are tabulated in Appendix 1 .

Copper is the only assayed element which is frequently present in anomalously high amounts. This was expected, since chalcopyrite was the only sulphide other than pyrite seen in the

core. The highest copper assay obtained was 3.16% in SRM 15, but only over 28 cm. Most assays were under 0.5% Cu.

To make the assay results more comprehensible, averages were calculated for copper over sections of core with similar levels. These averages are tabulated in Appendix 1 and shown graphically on Fig. 13 .

Comparing Figures 10 and 13 demonstrates a few things. In holes SRM 15, 16 and 17, which had considerable variations of rock type, copper levels are quite variable. In these three holes the highest, but also the most erratic, copper values occur in or near the chloritized schists. For example, in SRM 18 an average of 0.37% Cu lasts for 4.6 meters, followed three meters later by 0.008% Cu over 9 meters, all in chloritized schist.

SRM 15 also intersected three sections of better than 0.1% Cu in the lower part of the hole near quartz breccias, though the breccias themselves are not particularly well mineralized.

In SRM 18, which cut a comparatively monotonous section of rhyolite porphyry, copper levels remain fairly constant over long intervals and are lower than in SRM 15 and 16.

Looking at Figures 12 and 13 , there is no particular relationship between copper assays and visual estimates of total sulphides (pyrite plus chalcopyrite) so the variable copper levels must reflect a variable copper-iron ratio in the sulphides. Note that visual estimates of the amount of chalcopyrite don't compare well with the assays; much of the chalcopyrite is very fine and intimately mixed with pyrite, making such visual estimates unreliable.

The average assays for the four holes in the Nugget Creek area are 0.083% Cu, 0.081% Cu, 0.044% Cu, and 0.058% Cu for SRM 15, 16, 17 and 18 respectively.

To put the above copper assays in some perspective, they can be compared with results from other holes drilled on Mt. Sicker. For example, SRM 1 was drilled through the ore horizon (though not through an orebody) in the old Tyee section of the mine. The best section obtained was 4 meters of 0.33% Cu in the ore horizon. In the underlying stringer zone the best copper average was 0.04% over 8 meters, and the average assay for the hole was only 0.036%, exceeded by all four holes in the Nugget Creek Area.

On the other hand, SRM 6, drilled on the Richard III claim, intersected no ore horizon but did intersect a couple of hundred feet of stringer type mineralization, and maintained an assay average of 0.104% Cu, higher than any of the Nugget Creek holes. SRM 10 and SRM 11, also in stringer type mineralization, had assay averages of 0.079% Cu and 0.115% Cu, respectively, though they were assayed much more selectively than the Nugget Creek holes.

Assay results for lead are uninteresting, fluctuating in the range 0.01% Pb to 0.03% Pb.

Zinc assays fluctuate in the range of 0.01% to 0.1%, with rare ones exceeding 0.1% but never 0.2%. There is a zonation to the zinc assays, with the bottom 40 meters of SRM 15 and all of SRM 16 having the highest averages, 0.07% Zn and 0.08% Zn, respectively. Everywhere else the average is in the range 0.02% Zn to 0.04% Zn.

Sometimes above average zinc assays accompany higher copper assays but this relationship isn't consistent.

Silver is usually less than 0.10 oz/ton, with an occasional slightly higher value accompanying a higher than average copper value.

Gold rarely exceeds 0.002 oz/ton except in SRM 15, where a couple of short intervals (27 cm. and 28 cm. long) reach 0.005% Au.

Barium assays hover around background level for felsic rocks on Mt. Sicker.

APPENDIX 1

Drill Logs

DIAMOND DRILL LOG

Logged by:	C. G. Van Houten	
DDH #:	SRM 12	
Property:	Mt. Sicker	
Claim:	Richard III (Lot 39G or Lot 26)	
Location:	92B 13W, Grid Ref. 19E, 0 + 60N	
Collar Elevation:	590m	
Collar:	Bearing 183°	dip - 61° (topari)
106m (348 ft.)	" 189.5	dip - 50° (topari)
158m (518 ft.)	" 192°	dip - 48° (topari)
306m (1005 ft.)	" ---	dip - 48° (acid)
Core Diameter:	36.37 mm (1.432"), B.Q.	
Length of Hole:	306m (1005 ft).	

LOG

0 - 6.1m Overburden

6.1 - 12.59m Dacitic porphyry (unit 8)
(20 - 41.3 ft) Porphyritic with vague millimetric plagioclase crystals holding chlorite and saussurite. Rather even blueish green colour with vague green splotches, mostly moderately siliceous. Some vaguely outlined lighter coloured (grading into grey) mottlings appear relatively richer in silica. Many up to 1 mm fine sphene specks. Scattered core portions with white to yellowish white specks and patches (part saussurite). Schistose with poor to moderate fissility. Occasionally slight tendencies towards gougyness and softening by finescale fracturing.

Pyrite: Less than 1% scattered sub - to euhedral crystals. Schistosity; 6.1m - 57°, 9.1m - 37°?, 12.2m - 52°.

12.59 - 14.63m Rhyodacite (Unit 8)
(71.3 - 48 ft) (more than 1/3 of all feldspar likely albite). Light grey to grey porphyry with 2-5 cm apart centimetric green to light green spots (chloritic). Small quartz phenocrysts present (± 5%). At 12.59m; gradual contact within 18 cm. Moderate to strongly siliceous rock, poor fissility by vague schistosity.

Traces of very fine pyrite.

14.63 - 22.25m (48 - 73 ft.)	Dacitic Porphyry (Unit 8) Similar to the 6.1 - 12.59 m interval. At 14.63 gradual upper contact within 30 cm. Pyrite gradually increasing to 1-2%. Schistosity; 15.2 m - 49°, 18.3 m ?, 21.3 m - 51°.
22.25 - 31.58m (73 - 103.6 ft.)	Dacitic Porphyry (Unit 8) Millimetric largely white plagioclase phenocrysts in a grey to greenish grey, in places dark grey matrix. Occasionally grey to white patches of quartz enrichment. Slight green mottling by small variations in the chlorite content. Schistosity frequently absent. Rock hard. Pyrite in places concentrated in less than 1 cm thick narrow bands with in excess of 50% pyrite. Generally pyrite at approx. 1%.
31.58 - 60.69 m (103.6 - 199.1)ft.	Dacitic Porphyry (Unit 8) Grey and greenish grey schistose rock. More sericite than chlorite. Siliceous with a few quartz phenocrysts. Plagioclase glassy with white spotty alteration and occasionally chlorite in individual phenocrysts. Light green spots and streaks, holding chlorite. Moderately variable fissility, hardness and amount of silica. Occasionally gougy fine scale fracturing over less than 60 cm lengths of core. Pyrite generally disseminated as fine sub-to euhedral crystals. Schistosity; 33.5m - 48°, 36.6m - 58°, 39.6m - 44°, 42.7m - 35° 51.8m - 34°, 54.9m - 43°, 57.9m - 34°.
37.06 - 37.67m (121.6 - 123.6 ft	A few up to 1cm pyrite concentrations (stringers) fine hematitic streaks with a few traces of chalcopyrite. Negative Zn and Pb tests. Average py. content approx. 5%.
38.56m (126.5 ft.)	3mm with (specular?) hematite, pyrite, a trace of Cp.
44.81m (147. ft)	1cm of disseminated pyrite (± 5%), a trace of chalcopyrite, hematite, possibly traces of galena and sphalerite. Tests for Zn and Pb negative.
60.69 - 72.48m (199.1 - 237.8 ft)	Tuff? or schistose intermediate porphyry (sub-unit 5b) Grey to dark greenish grey, mostly fine grained rock with small portions suggesting a porphyritic texture. Up to 3mm epidotic specks a number of which appear pseudomorphous after feldspar. Relatively soft rock with fine schistosity and good fissility. Slight talcose feel. Pyrite as disseminated fine crystalline specks reaching 5 mm diameters. Pyrite approx. 2%. Traces of chalcopyrite. Schistosity; 61m - 40°, 64m - 37°,, 67m - 45°, 70.1m - 79°.

72.48 - 75.29m (237.8 - 247.)	Rhyodacite porphyry (or tuff?) (Unit 8) Grey to light grey rock, moderately to strongly siliceous. Schistose, moderately fissile. Approx. 1 mm - size white cloudy feldspar crystals and finer quartz in extremely fine matrix. The texture suggests a fine porphyry, but a tuff is possible. At 72.48m and 75.29m, contacts within 30cm by gradual change in colour. The rock has a slightly talcose feel. No Cp noted. Pyrite disseminated approx. 1% schistosity; 73.2m-36°.
75.29 - 85.65m (247 - 2 ft)	Tuff or Schistose Intermediate Porphyry (sub-unit 5b) Similar to the 60.69 - 72.48 interval. In places softened and gougy by faulting. Disseminated pyrite approximately 1%, no Cp. Schistosity, 76.2m - 36°, 79.2m - 48°, 82.3m - 49°, 85.3m - 60°.
78.29 - 78.94m (256 - 259. ft.)	Soft, gougy.
82.45m (270.5 ft.)	2cm wide oval patch of cloudy epidote with quartz and pyrite in the centre.
83.2 - 85.65m (273 - 281 ft.)	Colour turning grey to greenish grey with light grey siliceous patches of several cm^2 or smaller and a few siliceous bands (1-2 cm thick) at 70° to c.a. In places increased sizes of the quartz grains to 2 mm (less than 10%). The rock looks transitional to the adjacent rock (85.65 - 99.12) interval.
85.65m - 99.12m (281 - 325.2 ft)	Quartz Eye Porphyry (Unit 9 or 8) Light grey to grey to greenish grey rock, showing mainly quartz crystals in a very fine matrix. The quartz eyes are clear, often rounded and show sporadically embayments. They show local differences in size (smaller than 1mm - 2mm) and vary slightly in quantity (approx. 5 - 10%). Occasionally a cloudy altered fspr. xstal. appears. Strongly siliceous rock, schistosity tends to be rough, fissility absent to weak. Some mottling and streaking by a low chlorite content. Marginally rhyoditic or phyodacitic. Pyrite; mainly disseminated, and concentrated on schistosity planes. Content less than 1% to 1%. Sporadic approx. 30 cm long portions holding 5% of disseminated pyrite specks and a trace of chalcopyrite. Schistosity; 88.4m - 62°; 91.4m - 65°, 94.5m - 55°, 97.5m - 38°.
99.12 - 99.40m (325.2 - 326.1 ft)	Diabase (sub-unit 14b) Fine grained, equigranular, greyish green colour by alteration, saussuritic feldspar. Disseminated euhedral pyrite crystals.

99.40 - 116.74m (326.1 - 383 ft)	Tuff? or Schistose Intermediate porphyry (sub-unit 5b) Relatively dark coloured rock, greenish grey to dark greyish green. Resemblance with the 60.69 - 72.48 interval but no yellow epidote specks were observed. Portions of the rock are fine grained with very fine glassy quartz "grains". Other portions appear porphyritic with vague possibly crushed feldspar crystals. Occasionally quartz grains occur with oval outlines, some of which appear embayed. Relatively soft rock, pronounced schistosity and strongly fissile. Pyrite disseminated in specks and single crystals, in places concentrating parallel to the schistosity or in fractures. Traces of chalcopyrite among the pyrite. Pyrite approx. 2-3%. Schistosity; 103.6m - 40°, 106.7m - 50°, 109.7m - 40°, 112.7m - 65°, 115.8m - 58°.
113.54 - 115.18m (372.5 - 377.9 ft.)	Light grey bands and streaks parallel to the schistosity. Cp more conspicuous (less than 1%). 114.8m - 115.18m; 5% pyrite.
116.74 - 145.82 383 - 478.7	Dacitic Porphyry (unit 8) Light grey rock with many streaks, flames and then discontinuous bands of light green to green chlorite. Plagioclase appears to occur in a porphyritic texture (almost no contrast with the matrix). An occasional quartz crystal can be found. Strong to moderate siliceous aspect. Parallelism in the chloritic streaks and bands, reflecting the schistosity. Fissility fair to absent. Pyrite (approx. 1%) disseminated in single sub - to euhedral crystals and specks, in places concentrating in patches (fracture related) or schistosity planes. Traces of chalcopyrite. Schistosity; 118.9m - 52°, 121.9m - 38°, 124m - 52°, 128m - 57°, 134.1m - 58°, 137.2m - 53°, 143.3m - 45°.
125.88 - 145.82m (413 - 478.4 ft)	Relatively clear plagioclase phenocrysts 1-2mm).
125.88 - 132.59m (413 - 435)	Increased amount of pyrite (2-3%), forming veinlets up to 1cm thick with in excess of 50% py. millimetric spots of Cp. exist in the larger Py. concentrations.
130.88 - 130.97m (429.7 - 729.7 ft)	Hard cohesive tectonic breccia cemented by silica.
145.82 - 146.12m (478.4 - 479.4 ft.)	Diabase? (Sub-unit 14b) Epidote holding chlorite schist, possibly derived from diabase 10% of disseminated pyrite crystals.
146.12 - 157.00 m (479.4 - 515.1 ft.)	Dacitic Porphyry (unit 8) c.f. 116.74 - 145.82 No chalcopyrite. Schistosity; 137.2m - 53°, 143.3m - 45°, 146.3m - 38°, 149m - 42°

146.12 - 146.30 m (479.4 - 480 ft.) White quartz veins, gouge and sheared rock at 53° to C.A.

147.67 - 147.83m (487.5 - 485 ft) Gouge and broken rock

152.4 - 157.60m (500 - 515.1 ft). More than 50% of the rock soft, gougy, at the point of falling apart.

150.58 - 157.00m (474 - 515.1 ft.) Approx. 1-2% pyrite, traces of chalcopyrite

157.00 - 159.7m (575.1 - 523.8 ft.) Diabase (sub-unit 14b)
Fine grained, altered into epidote and chlorite.
Scattered (less than 1%) euhedral py. crystals present.

159.65 - 164.29m (523.8 - 539 ft.) Chlorite Sericite Quartz Schist (sub-unit 1c)
Fine grained rock, no phenocrysts showing, even medium grey sometimes slightly greenish grey. Gloss in places soaplike. Fine sand size quartz grains (less than 10%). Less chlorite than colourless phyllosilicates. Very slight talcose feel. More than 50% of the rock is heavily fractured, coming in chips and less than 5cm long pieces. Tuffaceous? Pyrite; fine disseminated euhedral crystals (less than 1%).

164.29 - 167.63m (539 - 548 ft.) Diabase (sub-unit 14b)
See 157.00 - 159.7. Rock in part schistose at 29° to c.a.

167.03 - 170.66m (548 - 559.9 ft.) Chlorite Sericite Quartz Schist (sub-unit 1c)
Slightly lighter coloured and more siliceous than 159.65 - 164.29 More than 50% gouge and fine scale fracturing.

170.66 - 175.71m (559.9 - 576.5 ft.) Diabase or Andesite (Unit 14b or 15)
Mainly altered into a greyish green colour, appears porphyritic with a coarser matrix than the felsic rocks (andesite-like). Besides chloritic the alteration might be partly
Quartz and calcite veinlets tend to occur in fractures or are streaky in foliated portions. A few hematitic fracture surfaces were observed. The rock is fairly cohesive, many fractures are present, a few showing 1cm displacements.
Pyrite disseminated as fine crystals (less than 1%).

173.74 - 174.65m) (570 - 573 ft). Fine grained, epidotized, foliated at 32° to c.a.

175.71 - 177.49m (576.5 - 582.3 ft.) Chlorite sericite quartz schist (sub-unit 1c)
Similar to 167.03 - 170.66. Many fractures, chips and small pieces. A few gougy portions.

177.4 - 181.48m (582.3 - 595.4 ft) — Diabase (sub-unit 14b)
Porphyritic, slightly altered. Yellowish (saussuritic) plagioclase crystals. Rock is fractured into mostly less than 10 cm pieces, a few chips, some foliation. Sporadic hematitic fracture planes. Traces of pyrite.

181.48 - 184.53m (595.4 - 605.4 ft) — Chlorite Scricite Quartz Schist (sub-unit 1c)
See 175.71 - 177.49. More than 70% of the interval consists of millimetric grains held together by gouge.

184.19 - 184.53m (604.3 - 605.4 ft.) — A few dark grey streaks and a 1-cm band at 184.53m in a mixture of gouge and rock crumbs. Remnants of graphitic schist?

184.53 - 192.66m (605.4 - 632.1) — Andesite (unit 15)
Green rock, non-siliceous aspect, resemblance to the gabbro (sub-unit 14a) but colour slightly brighter green. Schistosity slightly imperfect and undulose. Variations in the schistosity create a slightly banded aspect. Scattered hematitic fracture coatings, and quartz-calcite veinlets. Fine crystalline pyrite often in minifractures, in places traces of Cp as separate specks or among sporadic streaky pyrite concentrations.

192.66 - 193.79m (632.1 - 635.8 ft.) — Diabase and Quartz (sub-unit 14b)
Diabase is for 80% replaced by white quartz, containing minor amounts of calcite. Several specks of chalcopyrite were noted within the quartz and on its fringes.

193.79 - 208.64m (635.8 - 684.5 ft.) — Gabbro (sub-unit 14a)
At 193.79m gradational transition within less than 1m. Yellowish epiditic feldspar crystals in clusters among a dark green "matrix" rich in mafics. The rock shows patches of diffuse epidote. Fracture surfaces tend to be hematite coated. Scattered thin epidote veinlets are present. Mainly medium grained rock. Small amounts of quartz and calcite veinlets. Here and there foliated portions, a few of them wavy. Foliation at 198m - 39° c.a.

202.78 - 202.84m (665.3 - 665.5 ft.) — Quartz vein with irregular contacts, holding calcite.

206.3 - 207.26m (677 - 680 ft.) — Gouge, chips, small pieces of core.

208.64 - 211.96m (684.5 - 695.4 ft.) — Diabase (sub-unit 14b)
More than 50% foliated (at 210.3m - 32°). Near the contact at 211.9m a few epidote specks and thin veinlets, also a few strongly epidotized feldspar phenocrysts.

211.96 - 306.32m (695.4 - 1005 ft.)	Hornblende Andesite (unit 15) Porphyritic with plagioclase and amphibole phenocrysts. The amphibole partly in clusters altering into chloritic patches. The zonary plagioclase shows replacement by bright yellow epidote. The yellow pseudomorphs in places expand into cm size oval nodules, blobs and a few subangular spots. In places the rock turns yellow by large amounts of "cloudy" epidote. Remains of the hornblende can be found among the epidote. The matrix is very fine grained, green to greyish green in colour; in places grey and appearing siliceous. The rock is in many places unfoliated, fresh aspect. Some fractures coated with hematite, in places accompanied by quartz and carbonate or pyrite. Pyrite; mainly as fine disseminated euhedral crystals, but also in small veinlets and streaks. Pyrite less than 1% or traces.
229.82 - 232.26m (754 - 762 ft.)	Scattered small scale fracturing and gougy rock.
248.26 - 249.02m (814.5 - 817)	50 - 90% of the rock epidotized by fine crystalline epidote. Colour; a mottled grey to yellow with the amphibole crystals still preserved and part of the feldspar still unaltered. A few quartz and calcite veinlets are present. Schistosity; 259m - 48°, 253m - 35°
261.32 - 262.13m (857 - 860 ft.)	See 248.26 - 249.02. A few up to 1 cm^2 chlorite patches exist.
262.86 - 263.10m (862.4 - 863.2 ft.)	See 248.26 - 249.02 Schistosity; 259m - 50°, 265m - 22°?, 268.2m - 32°
269.75 - 272.74m (885 - 894.8 ft.)	Over all rock colour light grey with green amphibole specks and ± 20% small specks and clouds of epidote, in places resulting in a yellow colour. Traces of Cp. millimetric pyrite specks in places. Schistosity; 274.3m - 32°, 277.4m - 27°, 280.4m - 32°
284.07 - 290.77m (932 - 953 ft.)	Almost no epidote
290.47 - 292.61m (953 - 960 ft.)	Traces of chalcopyrite.
293.7m (963.5 ft.)	1 x 2 cm oval spot with a 1/2 cm calcite core, surrounded by chlorite and with a 2mm epidote rim. Schistosity: 283.5m - 36°, 286.5m - 35°, 289.6m - 28°, 295.7m - 21°, 301.8m - 37°, 304.8m - 29°

DIAMOND DRILL LOG

Logged by:	C.G. Van Houten	
DDH #:	SRM 13	
Property:	Mount Sicker	
Claim:	Anaconda	
Location:	92B 13E, Grid Ref. 60E, 4 + 80N	
Collar Elevation:	695m	
Collar:	Bearing 177°	dip - 55°
91.4m (300 ft.)		dip - 51° (acid test)
189.9m (623 ft.)		dip - 46° (acid test)
Core Diameter:	36.37mm (1.432"), B.Q.	
Length of Hole:	196.60m (645 ft.)	

LOG

0 - 10.06m (0 - 33 ft.)	Overburden
10.06 - 24.99m (33 - 82 ft.)	Diabase Plagioclase phenocrysts are less than 3mm in diameter and in many places occur in clusters. Feldspar mainly white. Small portions of the interval (Less than 15cm) show epidotization of the plagioclase. Small portions are medium grained - equigranular (Gabbro). In places weak foliation.
17.07 - 24.99m (56 - 82 ft.)	Millimetric - centimetric cavities, many of them elongate and parallel to the schistosity. Possibly derived from concentrations of carbonate crystals. Schistosity: 21.3m - 35°, 24.4m - 43° to core axis.
24.99 - 39.32m (82 - 129 ft.)	Gabbro (Unit 14a) Medium grained, slightly porphyritic with (less than 5mm) plagioclase phenocrysts and crystal clusters which are slightly saussuritic. Here and there cavities (see 10.06 - 24.99) a few patches of yellowish green cloudy epidote. Small portions show a weak foliation. Small variations in crystal size. Scatteredareas of magnetism (in places strong), showing disseminated magnetite crystals. Some patches holding interstitial quartz (light colour). A few quartz veinlets and quartz-calcite veinlets. One quartz veinlet holding small amounts of chlorite.

	Schistosity: 30.5m - 32°, 36.6m - 52° to core axis.
35.05m 115 ft.	1 cm^2 of pyrite with chlorite and some hematite at the border of a cavity.
39.32m - 40.60m (129 - 133.2 ft.)	Gabbro (Unit 14a) Even dark green, ± 50% is chloritized. A few fracture surfaces coated with a dark yellow oxydized material. Many cavities with a dark brown iron rich stain.
	Schistosity: 39.6m - 47° to core axis.
40.60m - 42.34m (133.2 - 138.9 ft.)	Quartz With short stretches (max. 18cm) of schistose diabase. Also present; cm - size partly dissolved concentrations of siderite and/or limonite (light brown). Some patchy chlorite. Varying amounts of chalcopyrite (less than 30%), which is often observed in fractures. Small amounts of malachite occur. Zinc and lead tests negative.
42.34 - 44.20 (138.9 - 145 ft.)	Gabbro (Unit 14a) Chloritized and foliated (see 39.32 - 40.60)
	Schistosity: 42.7m - 55°.
44.20 - 64.43m (145 - 211.4 ft.)	Diabase (Unit 14b) Porphyritic with up to 3mm plagioclase phenocrysts and clusters of crystals which commonly show slight epidotization. Generally fresh looking rock with concentrations of cloudy epidote near fractures. Short pieces of core with weak schistosity and an even green colour (chlorite) relatively coarse.
	Schistosity: 54.9m - 41°.
59.44 - 64.43m (195 - 211.4 ft.)	Portion of the diabase with large amounts of centimeter - size cavities, in part occurring in foliated rock, the cavities show an iron rich dark brown coating and some quartz with millimetric cavities. Foliation: 61m - 29°.

61.11 - 62.48m (200.5 - 205 ft.)	50 - 60% of the interval consists of crumbs and chips, which in many places are mixed with a soft yellowish brown material. Schistosity: 64m - 39°.
64.43 - 69.34m (211.4 - 227.5 ft.)	Diabase (Unit 14b) Weakly schistose. Slightly chloritic with approximately 10% streaks patches and veinlets of quartz and calcite. Some of the veinlets are controlled by fracturing. Schistosity: 67m - 39°.
69. 34 - 85.71m (227.5 - 281.2 ft.)	Gabbro (Unit 14a) Relatively fine grained, slightly saussuritic feldspar. Approximately 10% of the core length is slightly chloritic with calcite-quartz streaks. Non schistose portions; mainly scattered quartz-calcite veinlets. Schistosity: 82.3m - 32°.
73.61 - 73.76m (241.5 - 242 ft.)	Quartz vein with relict gabbro texture defined by chloritic specks. Planar contacts at 53° to core axis.
80.77 - 81.38m (265 - 267 ft.)	Core pieces smaller than 5cm. At 81.38m 1cm of grey claylike material (gouge?).
85.04m (279 ft.)	A few chalcopyrite crystals in a quartz-calcite veinlet.
85.71 - 94.21m (281.2 - 305.9 ft.)	Diabase (Unit 14b) Porphyritic with (less than 2mm) plagioclase phenocrysts, quartz veins and veinlets with varying amounts of calcite, some chlorite and in places dusty epidote. Quartz-calcite veinlets hold sporadic Cp. crystals.

94.21m - 94.21m (305.9 - 309.1 ft.)	Diabase (Unit 14b) Chloritic and weakly schistose. Approximately 20% replaced by quartz-calcite veining (see 85.71 - 94.21). Chalcopyrite crystals have a slight preference for vein edges or the vicinity of chlorite. 93.97 - 94.12m; 10% chalcopyrite.
94.21 - 98.76m (309.1 - 324 ft.)	Chlorite Sericite Augen Quartz Schist (Unit 1d) Highly siliceous rock, schistose, but not fissile, hard rock. 10 - 20% quartzeyes occur, they can approach 1cm in their longest cross-section. They are mainly clear with predominant oval shapes, also occasionally showing 1 or more crystal faces. Scattered feldspar phenocrysts appear to be present, often white, some individuals holding chlorite. The rock colour varies from light grey to greenish grey and light blueish green, depending on the amounts of bright green streaky chlorite. Based on the amount of silica, the rock appears to be rhyolitic. Pyrite; traces of scattered euhedral crystals. Contact at 94.21m is obscured by quartz veining (without Cp.) Zn test negative. Schistosity: 94.5m - 57°, 97.5m - 44°.
98.76 - 102.84m (324 - 337.4 ft.)	Tuff? (Unit 5b?) Medium blueish green, in many places even coloured but also with green mottling. Vague banding occurs parallel to the foliation marked by slight color changes, approaching yellowish green. Yellowish white feldspar crystals (less than 2mm) occur in millimetric - centimetric bands or streaks parallel to the schistosity. Less than 5mm size quartzeyes are present (Less than 10%). The rock is strongly siliceous, cohesive, in places poorly fissile. Pyrite, disseminated fine crystals, less than 1%. Schistosity: 100.6m - 50°, zinc test negative.
99.43 - 99.52m (326.2 - 326.6 ft.)	Concentration of epidote with quartz and minor calcite.
102.84 - 114.88m (337.4 - 376.9 ft.)	Chlorite Sericite Augen Quartz Schist (Unit 1d) Strongly mottled from grey to green, strongly siliceous. Small portions look like the 98.76 - 102.84 interval. In places white to yellowish white saussuritic plagioclase is visible in apparent porphyritic texture, which is at least partly alterated by the schistosity.

The rock is hard, in places poorly fissile. Some quartz-calcite veins are present, but also separate calcite veinlets. Contact of a 102.84m transitional within 60cm. Pyrite; disseminated crystals, fine grained (less than 1%).

Schistosity: 103.6m - 46°, 109.7 - 48°, 112.8 - 30°.

114.88 - 130.39m (376.9 - 427.8 ft.) — Diabase (Unit 14b)

Porphyritic with chilled contacts which are equigranular. The 114.88m contact is sharp at 25° with a few patches of fine epidotic alteration. The 130.39m contact is at 23° to core axis. In places quartz-calcite veinlets occur, especially in chloritic portions that form less than 10% of rock and which are for a large part foliated.

130.39 - 131.95m (427.8 - 432.9 ft.) — Chlorite Sericite Quartz Schist(?) (Unit 1c)

Extremely siliceous. Mainly grey, pinkish grey, in places cloudy white to yellowish white by epidotic material mixed in. Green mottling by patchy chlorite. Scattered clear rounded quartz crystals might indicate a silicified rock holding quartzeyes. No measurable schistosity.

131.95 - 136.18m (432.9 - 446.8 ft.) — Diabase (Unit 14b)

Chilled 131.95m contact. Mainly equigranular rock. Approximately 30% of the core is schistose (38°) with calcitic streaks and veinlets as well as quartz-calcite veinlets.

136.18 - 136.79m (446.8 - 448.8 ft.) — Chlorite Sericite Quartz Schist (?) (Unit 1c)

See 130.39 - 131.95.

136.79 - 154.44 448.8 - 506.7 — Diabase (Unit 14b)

Contact at 136.79m replaced by 4.5cm of calcite and quartz at 37° to core axis. Rock mainly porphyritic, some equigranular portions, short stretches schistose (51°) and/or chloritic. In places patches of cloudy epidote. Patches, streaks and veinlets with varying amounts of quartz and/or calcite. Sporadic traces of Cp associated with the veinlets.

156.62 - 154.44m (504 - 506.7 ft.)	Small scale cohesive fracturing, increasing toward 154.44. Frequent quartz-calcite veinlets controlled by the fracturing.
154.44 - 156.06m 506.7 - 512	Chlorite Sericite Quartz Schist (?) (Unit 1c) Extremely siliceous rock, grey with some light green patchy chlorite, possibly some sericite mixed in. Yellow to white pinpoint sphene specks might indicate a volcanic origin. Strong fine scale fracturing to the point of falling apart. Small amounts of quartz-calcite veining.
156.06 - 156.79m (512 514.4 ft.)	Soft Gouge With chlorite holding light blueish green siliceous millimetric grains. At both ends approximately 2cm of dark grey clay (graphitic?) Pyrite; traces to 1%.
156.79 - 157.89m (514.4 - 512 ft.)	Chlorite Sericite Quartz Schist (Unit 1c) Crushed, sheared, ± 50% gouge. Colour; light blueish green, strongly siliceous. Pyrite: 1%.
157.89 - 159.29m (518 - 522.6 ft.)	Gouge Gouge, holding smaller than 1cm pieces of most likely highly siliceous low sericite quartz schist with sporadic dull white spots (feldspar?). Most pieces white or very light even green. Here and there a chloritic streak. Pyrite disseminated fine crystals, trace - 1%. Zinc test negative.
159.29 - 161.24m (522.6 - 529 ft.)	Chlorite Sericite Augen Quartz Schist (Unit 1d) Colour light grey to grey with greenish grey chloritic mottlings, moderate siliceous aspect. Fine grained feldspar crysals might be present (almost no contrast with the matrix). One quartzeye shows an embayment. Interval related to 156.79 - 157.89. Felsic flow on tuff?. Interval mostly sheared and with small scale fracturing portions fairly fissile and schistose. Pyrite; approximately 1%, as specks in places concentrating in thin bands parallel to the schistosity.

161.24 - 161.88m (529 - 531.1 ft.)	Diabase (Unit 14b) Equigranular, slightly chloritic. Small scale fracturing. Many calcite rich veinlets, controlled by the fracturing. Traces of disseminated fine pyrite crystals.
161.88 - 163.68m (531.1 - 537 ft.)	Chlorite Sericite Augen Quartz Schist (Unit 1d) Similar to 159.29 - 161.24.
162.98 - 163.68m (534.7 - 537 ft.)	Slightly more chlorite, slightly less siliceous.
163.68 - 172.67m (537 - 566.5 ft.)	Diabase (Unit 14b) Mainly equigranular, yellowish green by cloudy epidote. 15cm long portions or less replaced by white quartz with minor calcite and associated with traces of chalcopyrite. Some cloudy epidote fringes a number of the quartz veinlets. Feldspar slightly saussuritic. Calcitic patches, turning streaky in the schistose portions.
172.36 - 172.67m 565.5 - 566.5 ft.	*Apparent slightly finer grain size (chilled).*
172.67 - 196.60m (566.5 - 645 ft.)	Rhyodacite (Unit 8) Chlorite sericite quartz schist. Moderately siliceous. Light grey to greenish grey, vague mottling by mainly streaky greyish green chlorite. Well developed fissility. Smaller than 1mm quartzeyes (less than 5%). Scattered white to yellowish white spots show feldspar morphology. Minor folding of the schistosity. Slight Talcose feel on foliation planes. Volcanic flow or tuffaceous? Pyrite in specks and individual crystals which in places concentrate in cm thick bands parallel to the schistosity. The amount of pyrite increases with increasing amounts of chlorite. Traces of chalcopyrite sporadically found among the pyrite. Schistosity: 176.8m - 47°, 179.8m - 48°, 182.9m - 44°, 185.9m - 47°, 189m - 38°.
189.31 - 189.89m (621.1 - 623 ft.)	Earthy hematite specks, derived from pyrite alteration.
190.53 - 190.83m (625.1 - 626.1 ft.)	See 189.31 - 189.89m.

193.24 - 196.29m (634 - 644 ft.)	Small pieces, broken pieces, core loss.

DIAMOND DRILL LOG

Logged by:	C. G. VanHouten	
DDH #:	SRM 14	
Property:	Mount Sicker	
Claim:	Anaconda	
Location:	92 B 13E, grid ref. 61 E, 3 + 10 N	
Collar Elevation:	680 m	
Collar:	Bearing 001° - 30'	dip - 55°
71.6m (235 ft)		dip - 46° (acid test)
141.1m (463 ft)		dip - 41° (acid test)
Core diameter:	36.37 mm (1.432") B.Q.	
Length of hole:	141.73m (465 ft.)	

LOG

0 - 41.45 m 0 - 136 ft.	Over burden
41.45 - 87.48 m (136 - 287 ft)	Rhyodacite? (Unit 8) Chlorite sericite quartz schist. Moderately siliceous. Light grey to greenish grey, vague mottling by mainly greyish green chloritic material. Schistose with well developed fissility. Quartz eyes, less than 5%, 1 mm or smaller. Scattered white to yellowish white spots (2 mm or smaller) showing feldspar morphology. A few yellow epidote streaks observed. Volc. flow with few phenocrysts or tuffaceous? Pyrite in specks and as individual crystals. In places cm thick bands with concentrations of pyrite specks and streaks parallel to the schistosity, which in many places are green by increased amounts of chlorite. Some grey material occurring in sporadic streaks might be graphitic. Schistosity (slightly folded) 45.92 m - 54°, 54.86 m - 59°, 57.91 m - 50°, 60.96 m - 40°, 64 m - 47°, 67.1 m - 52°, 70.1 m - 50°, 73.15 m - 45°, 76.2 m - 58°, 82.70 - 72°, 85.34 - 53°.
41.45 - 52.43 m (136 - 172 ft)	Extreme core losses, less than 10% left, core mainly in chips.

53.94 - 64.62 m (177 - 212 ft)	Core recovery; 14.5 - 65.5%
64.62 - 66.14 m (212 - 217 ft.)	0 - 4.2% core recovery
78.64 - 87.48 m (258 - 287 ft.)	Scattered streaks and patches with sharp outlines of a dark greenish grey soft material, in a few places discoloured into dark grey or dark greyish brown. The margins of these spots in places cross-cut the schistosity at near 90° angles, but in most cases are subparallel to the schistosity.
84.95 - 85.07 m (278.7 - 279.1 ft)	Quartz vein (white), containing remnants of the country rock. 1 speck of chalcopyrite.
86.56 - 87.48 m (284 - 287 ft.)	A small number of (1 cm or less) oval white siliceous (partly glassy) fragments.
87.48 - 90.53 m (287 - 297 ft.)	Chlorite Sericite Quartz Schist (Unit 1c) Light grey with a few light to blueish green chloritic streaks and hazy patches. A few (less than 5 mm) quartz eyes are preserved in the almost disintegrating, sheared and fractured rock. Approx. 30% of the interval consists of gougy chips. At 87.48 m, 3 cm of gouge with millimetric grains of unit 1c. Schistosity; 88.4 m - 53°.
88.39 m (290 ft.)	A few dark green chips with approx. 20% pyrite.
90.52 - 91.44 m (297 - 300 ft.)	Pyrite Near massive pyrite. Relatively minor small scale fracturing. Approx. 6 cm foliated. Among the pyrite varying amounts of quartz with minor calcite and traces of chlorite, showing as white to pinkish patches. A calcite-quartz veinlet crosses both pyrite and quartz. At 90.52 and 91.44 m, gouge (drillers information).
91.44 - 92.93 m (300 - 304.9 ft.)	Diabase (Unit 14b) Equigranular, relatively coarse grained, moderately fractured with quartz-calcite veining controlled by the fracturing. Reduced grain size near 92.93 m. At 92.93 m; 3 cm of dark grey clay-like gouge (chloritic?).
92.93 - 105.16 m (304.9 - 345 ft.)	Chlorite sericite Quartz Schlist(?) (Unit 1c?) Highly to extremely siliceous rock, grey to pinkish grey with patchy and streaky dark green chloritic portions. The streaks are mainly sub-parallel. Sporadic (3 mm and smaller) mainly rounded quartz eyes. Here and there white and yellowish white spots, which might be feldspar. In a few places chloritic specks suggest mafic crystals. Many pinpoint to almost 1 mm dull white to yellow amorphous sphene specks. Siliceous character not related to predominantly white quartz-calcite veining. Possibly a felsic volcanic rock. Mainly massive character with

varying small scale fracturing, in places crushed to a mush.

Pyrite; disseminated, traces - 1%.

100.04 - 100.31 m (328.2 - 329.1 ft) Irregularly shaped white quartz-calcite vein, replacing approx. 50% of the rock. Some chlorite included. Strong carbonate reaction. Control by fracturing. Angular "islands" of hostrock in the vein. Schistosity 103.6 m - 45°.

105.10 - 105.16 m (344.8 - 345) Light yellowish green by dusty epidote.

105.16 - 109.24 m (345 - 358.4 ft.) Diabase (unit 14b)
Variations in the amounts and sizes of phenocrysts. Minor quartz-calcite veining. Slight epidotization of the feldspar. Relatively fine grained near 105.16 m.

109.24 - 112.04 m (358.4 - 367.6 ft) Diabase (unit 14b)
Mainly foliated and slightly chloritic. Many "flames" and streaks of calcite + quartz. 5 cm and thinner quartz-calcite veins and veinlets. In places yellow pathces of dusty epidote. Foliation, 109.7 - 53°.

112.04 - 141.73 m (367.6 - 465 ft.) Gabbro (Unit 14a)
Medium grained equigranular, small magnetic portions. Plagioclase slightly saussuritic, mostlikely mixed with sub - to anhedral amphibole. Approx. 50% of the core mainly weakly foliated with flames and streaks of quartz + calcite parallel to the foliation. Quartz-calcite veining in many places increases with increased fracturing. Some quartz rich veins occupy 15 cm long core sections. Minor chlorite accompanies the veining. Once white feldspar crystals observed at the fringes of a quartz vein. Commonly millimetric greyish brown streaks and splotches present, apparently alteration products of ti-rich minerals (skeletal magnetite?). In places 50 - 100 cm long coarse grained portions.

Scattered light yellowish green portions and patches (10 cm and shorter) caused by dusty epidote. Foliation, 115.82 m - 48°, 118.87 - 44°, 128 m - 52°, 131 m - 45°, 134.1 m - 53°.

129.02 - 129.51 m (423.3 - 424.9 ft) 80% of the gabbro replaced by white quartz, minor calcite, varying amounts of chalcopyrite, max. 25%.

P.J. Van Hees

DIAMOND DRILL LOG

Logged by:	C. G. VanHouten
DDH #:	SRM 15
Property:	Mount Sicker
Claim:	Belle
Location:	92B 13W, grid reference 8W, 9 + 30N
Collar Elevation:	390m
Collar:	Bearing 183° dip - 80°
70.1m (230')	dip - 75° 30' (acid based)
144.8m (475')	dip - 70° 30' (acid based)
197.5m (648')	- 70° 00' (acid based)
Core diameter:	36.37 mm (1.432"), B.Q.
Length of hole:	197.5 m (648')

LOG

0 - 7.01 m (6 - 23 ft) — Overburden

7.01 - 23.77 m (23 - 78 ft.) — Chlorite Sericite Quartz Schist (unit 1c)

Grey and light grey, moderately siliceous, mainly fissile to moderately fissile. The rock shows light grey spots and streaks (± 5%) which might be in part altered felsic fine grained crystalline fragments (size not exceeding 1 cm). In places rounded quartz eyes (max. size ± 3mm), with occasionally visible embayments. Very fine sericitic matrix. Vague white spots (1-2 mm), with scattered individuals showing rectangular outlines (feldspar?). Possibly a felsic tuffaceous rock.

Pyrite as fine individual sub-euhedral crystals and millimetric specks, mainly disseminated. A few concentrations of specks, band-wise parallel to the schistosity.

More than 50% of the core in chips and small pieces.

Schistosity; 12.2m - 22°, 15.2m - 44°, 18.3m - 42°, 21.3m - 48°.

12.80 - 14.33m (42 - 47 ft.) — Less than 10% core recovery.

23.77 - 38.86m (78 - 127.5 ft.) — Sericite Chlorite Schist (Unit 3b)

Dark greenish grey, soft, low in quartz. Chlorite and sericite approx. in equal amounts. Colour rather even. Small (less than 5mm) fragments(?) (see 7.01 - 23.77) often oval in shape. This interval is a finer, darker (tuffaceous(?) rock than in 7.01 - 23.77.

Abundance of disseminated pyrite (5 - 10%) in specks and crystals up to 5mm. A tendency of the pyrite to concentrate on schistosity planes. Traces of chalcopyrite.

Schistosity; 27.43m - 32°, 30.48m - 41°, 33.53m - 38°, 36.58m - 44°.

38.28 - 38.86m (125.6 - 127.5 ft.) — Increase in Cp content. One 2 cm^2 Cp spot.

38.86 - 97.20 (127.5 - 318.9 ft.) — Chlorite Sericite Augen Quartz Schist (Unit 1d)

Strongly siliceous. Small amounts of chlorite causing greenish grey streaky to patchy mottlings in a light grey to grey rock. Scattered 1-2 mm white spots appear to be feldspar-shaped in places. 15-20% clear quartz eyes occur (max. size approx. 5mm). The quartz eyes show rounded to oval outlines, but also more irregular shapes are present. One or more crystal faces and small embayments are in places visible on the "eyes". More than 90% of the oval quartz eyes are parallel to the schistosity. A few pyrite crystals penetrate quartz eyes.

Possibly a sodic rhyolitic pyrit; with small feldspar phenocrysts.

Pyrite - disseminated fine grained crystals and millimetric specks with accumulations parallel to the schistosity. A few grey spots caused by concentrations of very fine disseminated pyrite crystals. Pyrite; 1 - 5%. Chalcopyrite; traces to 1%, for short stretches (less than 30 cm) approaching 5%. Schistosity; 39.6m - 61°, 42.7m - 42°, 45.7m - 56°, 51.8m - 38°, 54.8m - 46°, 57.9m - 24°, 60m - 52°, 64m - 37°, 67m - 23°, 70.1m - 37°, 73.2m - 40°, 76.2m - 48°, 79.3m - 46°, 82.30m - 48°, 85.3m - 43°, 88.4m - 33°, 91.4m - 58°, 94.5m - 46°.

38.86 - 39.08m (127.5 - 128.2 ft) — Gouge with (less than 1 cm) fragments of the rock. A few soft 1 - 2 cm thick dark grey clay-like bands, holding pyrite crystals, no graphitic staining. Clay-like bands at 40° to c.a.

64.71 - 64.77 m (212.3 - 212.5 ft.) — Approx. 25% pyrite, approximately 5% cp.

71.7 - 72.54m (233.5 - 238 ft.) — Core mainly in pieces shorter than 10 cm and gougy chips (fault?).

97.20 - 97.41m (318.9 - 319.6 ft.) — Chlorite Schist (Unit 3a)

Green colour; streaks and veinlets of calcite with quartz. Scattered fine pyrite crystals. Diabase?

97.41 - 99.4m (319.6 - 326.2 ft.) — Chlorite Sericite Augen Quartz Schist (Unit 1d)

Basically similar to 38.86 - 39.08. The chlorite has gradually slightly increased, resulting in stronger (blueish - greyish green) mottling. Schistosity; 97.5m - 45°. Pyrite; 2 - 5%. CP; 1% or slightly less.

99.4m - 99.49m (326.2 - 326.4 ft.)	Chlorite Schist (unit 3a) See 97.20 - 97.41.
99.49 - 129.54 (326.4 - 425 ft.)	Chlorite Sericite Augen Quartz Schist (Unit 1d) Continued from 319.6 - 326.2. Pyrite; 2 - 5%. Cp; 1% or slightly less. Schistosity; 100.6m - 38°, 103.6m - 38°, 106.7m - 52°, 109.7m - 42°, 112.8m - 35°, 115.8m - 33°, 121.9m - 54°, 125m - 55°, 128m - 42°.
129.54 - 179.22m (425 - 588 ft.)	Chlorite Sericite Augen Quartz Schist (Unit 1d) Slightly more siliceous than 99.49 - 129.54. 10 - 15% Quartz eyes, greyish green to blueish green mottling. Scattered (less than 2mm white spots suggesting feldspar. In places white to light grey quartz eyes (recrystallized?). Pyrite and chalcopyrite, see 38.86 - 97.20. A portion of the sulfides accompanied by quartz and calcite. Schistosity; 131.1m - 50°, 134.1m - 40°, 137.2 - 51°, 143.3 - 39°.
131.03 - 131.98m (429.9 - 433 ft.)	Approx. 30% pyrite and approximately 20% chalcopyrite associated with quartz, minor carbonate and remnants of the country rock.
134.69 - 134.75m (441.9 - 442.1 ft.)	Slightly fractured white quartz vein, holding minor chlorite white feldspar and calcite. Approx. 25% pyrite, approx. 5 - 10% Cp.
135.30 - 135.58m (443.9 - 444.8 ft.)	Similar to the 134.69 - 134.75 portion. Partly sulfide-rich country rock. A fair amount of calcite, high Cp content.
150.02 - 150.63m (492.2 - 494.2 ft.)	Mainly gouge, holding rock fragments.
152 - 152.3m (498.7 - 499.7 ft.)	White quartz with some calcite, chlorite and host rock mixed 1m. Quartz both patchy and vein-like with mainly sharp contacts. Abundant sulfides especially in the host-rock adjacent to the quartz. Some irregular fracturing partly controlling the position of the medium to coarse sulfide patches. Pyrite and chalcopyrite in equal amounts.
157.09 - 157.37m (515.4 - 516.3 ft.)	Pyrite and chalcopyrite, mainly within a dark grey relatively chlorite-rich spot. Also sulfides in fractures in the vicinity. Only a few separate spots of white quartz occur (centimetric), not associated with the sulfides.
163.07m (535.0 ft.)	Dark grey 2 cm^2 almost rectangular chlorite-rich dark grey spot with relatively large amounts of sulfides.

168.55 - 168.92m (553 - 554.2 ft.)	Almost massive portion, showing porphyritic texture with small (approx. 1mm) white to yellowish white feldspar crystals. Approx. 10% of the common quartz eyes. Possibly chloritic pseudomorphs of less than 2mm mafic phenocrysts. Disseminated crystals and specks of py. and cp. Gradational transitions into the schistose rock.
174.1m (571.2 ft.)	1 cm of white quartz with approx. 30% of coarse pyrite crystals at 37° to c.a.
177.06 - 177.33m (580.9 - 581.8 ft.)	Approx. 30% pyrite and 10% chalcopyrite, partly along fractures. A quartz-calcite veinlet fills a fracture.
178.6m (586 ft.)	Centre of 5 cm of white quartz and calcite, sharp contact, no sulfides.
	Schistosities; 152.4m - 38°, 155.5m - 51°, 158.5m - 30°, 161.5m - 54°, 167.6m - 48°, 170.7 - 62°, 173.7 - 34°, 176.8 - 38°.
179.22 - 197.51m (588 - 648 ft.)	Rhyolite? (Unit 9) Generally a weakly schistose chlorite sericite augen quartz schist. 10 - 20% clear quartz eyes. Strongly siliceous with fine light grey matrix. In places porphyritic texture recognizable with (less than 2 mm) yellowish white altered feldspar phenocrysts. The quartz eyes show (less than 0.5 cm) oval to circular shapes, occasionally with, 1 or more crystal faces. Greyish green streaky chloritic mottling and spots. In places millimetric chloritic specks suggesting mafic phenocrysts. Porphyritic texture in many places obliterated by the schistosity.
	Pyrite and chalcopyrite mainly as disseminated crystals and specks. Pyrite 2 - 1% chalco., traces - 1%. Schistosities; see below.
189.07 - 189.34m (620.3 - 621.2 ft.)	Silicified fractured portion with pyrite and chalcopyrite enrichment in many places along fractures. A few small spots of white quartz.
189.62 - 189.83m (622.1 - 622.8 ft.)	White - grey quartz with pyrite and chalcopyrite both in quartz and nearby country rock. Fine epidote bordering a fracture.
195.89 - 196.02m (642.7 - 643.1 ft.)	Portion with white to grey quartz. Quartzose portion and host rock strongly pyritic (approx. 20%). Strong fine scale fracturing.
196.44 - 196.50m (644.5 - 644.7 ft.)	White quartz with a few coarse pyrite crystals.
197.05 - 643.1m (646.5 - 646.7 ft.)	White quartz with probably some white to yellowish feldspar.
	Schistosity; 182.9m - 51°, 185.9m - 56°, 189m - 37°, 192.02 - 38°.
197.51m (648 ft.)	End of hole.

C. J. Van Hees

DIAMOND DRILL LOG

Logged by:	C. G. Van Houten
DDH #;	SRM 16
Property;	Mount Sicker
Claim;	Little Nugget
Location:	92 B 13 W, Grid ref. 12 W, 9 + 60 N
Collar Elevation;	360 m.
Collar;	Bearing 000° dip - 65°
61m (200 ft.)	dip - 65° (acid based)
131m (430 ft.)	dip - 61° . 40' (acid based)
Core Diameter:	36.37 mm (1.432") B.Q.
Length of Hole:	132.89 (436')

LOG

0 - 8.84m (0 - 29 ft.) Overburden

8.84 - 13.11 m (29 - 43 ft.) Sericite Chlorite Schist (unit 3b)

With sericite and quartz in close to equal amounts. Colour dark greyish green. Soft rock, strongly schistose, but moderately fissile. Lenses streaks and pods of very fine material (silt-range) which do not exceed 3 cm in longest dimension. Their colour is often brownish green. They are often laminated especially with increased lenticular shapes of their own. These structures occur in a slightly lighter coloured mass of chlorite and sericite, which in many places show light grey millimetric to 1 or 2 cm large mottlings, spotty to streaky looking with a slight "snowflake"-like aspect. In portions of the interval only this lighter coloured material is present. In places (less than 1 cm) oval, green, quartzose grains are common with varying amounts of chlorite, a number of them holding varying amounts of sulfides.

Small amounts of quartz are present throughout the rock as clear to grey thin lobate streaks and elongate lobate spots parallel to the schistosity. A few rounded quartz crystals were also encountered. Throughout the rock very dark green (alsmost black) less than 1 mm scattered chloritic specks are present. At least part of the structures and textures may be related to the schistosity - formation.

Pyrite; approx. 10%, disseminated in crystals and specks sub-parallel to the schistosity, fine chalcopyrite (less than 1%?). Schistosity; 5.1 m - 17°, 12.2 m - 30°.

13.11 - 22.16m (43 - 72.7 ft.)	Sericite Chlorite Schist (unit 3b) Related to 8.84 - 13.11. Fine grained ("silt" range) stretched out lenticular streaking in brownish green and greyish green parallel to the schistosity. A few scattered white spots (less than 2 mm) suggestive of feldspar. Pyrite; see 8.84 - 13.11, more than 10%. Chalcopyrite 2 - 3 %? Schistosity; 15.2 m - 0°, 18.3 m - 0°, 21.3 m - 0°.
22.16 - 23.74 m (72.7 - 77.9 ft.)	Sericite quartz schist (unit 1a) Light grey and grey mottlings parallel to the schistosity oval to lenticular (less than 1 cm) light grey aphanitic sports might be the remains of fragments in the strongly schistose rock. Moderately siliceous aspect. Small quartz crystals and "eyes" are present in places. At 77.9 m; contact abrupt, disconnected but fits at 43° to c.a., local schistosity 02°. Pyrite and chalcopyrite disseminated in crystals and specks. Pyrite 2 - 3%, Cp less than 1%.
23.74 - 49.56 (77.9 - 162.6 ft.)	Sericite Chlorite Schist (unit 3b) Fine "siltsize"grains, almost like slate, even dark greyish green. In places fine grained chlorite-feldspar fragments not exceeding 1 cm, showing a boudinaged aspect. In places millimetric to centimetric light grey anastomosing banding parallel to the schistosity (no evidence of current lamination). A few quartz grains, some rounded. Also elongate lobate quartz spots and thin lobate streaks (approx. 1 mm thick) parallel to the schistosity. Scattered quartz calcite veinlets. Pyrite and chalcopyrite; see 43 - 72.9. Schistosity; 24.4 m - 27°, 27.4m - 02°, 33.5m - 26°, 36.6m - 13°, 39.6m - 14°, 42.7m - 0°, 45.7m - 30°, 48.8 - 8°.
31.09 - 32.61m (102 - 107 ft.)	Quartz veining and replacement by quartz, no relation to sulfides.
43.59 - 49.57m (143 - 162.6 ft.)	Deminished amounts of fragments, 30 - 60 cm sections showing almost none.
49.57 - 49.96 m 162.6 - 163.9 ft.	Diabase? (unit 14b) Light greenish grey - light yellowish green equigranular finegrained rock. Feldspar appears saussuritic, mafics at least partly chloritic. 49.80m - 49.96 rough wavy foliation at 24° to c.a. continuing beyond 49.96m. Contact at 49.96 with 0.5 cm of chilled border 90° to c.a. Pyrite and chalcopyrite: disseminated in crystals and specks, py; 1-2%, Cp; - traces.

49.96 - 70.71m (163.9 - 232 ft.) Sericite Chlorite Schist (unit 3b)
Continuation of 23.74 - 49.56. Light grey banding largely absent. A few fragments (see 23.79 - 49.56). Schistosity: 51.8 m - 29°, 58.9m - 09°, 61m - 13°, 67m - 22°, 70.1m - 23°.

68.88 - 70.71m (226 - 232 ft.) Rock slightly less schistose and harder, cohesive.

69.49 - 70.41 m (228 - 231 ft.) Small pieces, chips and gougy chips.

70.71 - 72.30 m (232 - 237.2 ft.) Sericite quartz schist (unit 1a)
Even light grey, very fine grained. Appears to show a few fine white feldspar crystals near 72.30m. Contact at 70.71m at 9° to c.a., sharp parallel to schistosity. Might be a finer grained version of 72.30 - 73.40.

Pyrite and chalcopyrite; in specks and crystals concentrating in fractures and a few foliation planes. Pyrite more than 10%, chalco; 1-2%.

72.30 - 73.40m 237.2 - 240.8 ft. Chlorite sericite quartz schist (unit 1c)
Light grey, slight streaky chloritic mottling. Apparent small zonary (less than 2mm) feldspar. Crystals, scattered rather evenly. Rhyodacitic? porphyry? tuff? At 237.2', contact by slight increase in crystal sizes within 2mm, disturbed by cohesive fracturing.

Sulfides see 70.71 - 72.30
Schistosity; 73.2m - 21°.

73.40 - 75.96m (240.8 - 249.2 ft) Chlorite Sericite Quartz Schist (unit 1c)
Light greenish grey rock with vague green to bluish green chloritic mottling. Moderately to strongly siliceous, strongly schistose but good cohesive core. Fragmentary aspect by very fine grained light grey siliceous fragments and chloritic fragments, not exceeding 2 cm. Shape of the fragments, oval, lenticular, rhomb, pod, subrounded. Deformation at least in part cause of the fragment shapes. Between the fragments sandsize and siltsize material (vague light coloured "grains"), with varying amounts of chlorite in lenses and streaks. A few rounded quartz grains. Felsic volcanic breccia or tuffaceous? Pyrite; disseminated in crystals and specks tending to concentrate on schistosity planes, (2 - 3%). Chalcopyrite relatively coarse grained, disseminated specks (approx. 1%). Contact at 73.40m by a gradually increasing quantity of fragments (within 5cm).

75.96 - 80.01m Chlorite Sericite Quartz Schist (unit 1c)
(249.2 - 262.5 ft.) Basically similar to 72.30 - 73.40. 75.96 - 76.4 transitional zone with only a few fragments, sharp decrease at 75.96. Pyrite; 2 - 3%, Cp approx. 1%, Schistosity; 72.2m - 13° 79.3m - 22°.

80.01 - 88.57m (262.5 - 290.6 ft.) Sericite Chlorite Schist (unit 3b)

Low sericite. Dark greyish green. Schistosity moderate to weak. Cohesive core, the rock looks like a schistose dyke or fine sand. Even grained with cloudy white grains or crystals. Scattered fine - pinpoint very dark green chloritic specks throughout the interval. Small streaky variations in chlorite content.

Pyrite and chalcopyrite mainly concentrated along schistosity planes. Pyrite; 1-3%, exceeding 10% from 82.91 - 83.52. Cp; 1% or less, 5% from 82.91 - 83.52. 82.91 - 83.52 light grey by silicification. Schistosity; 85.34m - 14°, 88.39m - 43°.

88.57 - 96.16m (290.6 - 315.5 ft.) Chlorite Schist (unit 3a)

Only small difference with 80.01 - 88.57 appears to hold cloudy epidote in places causing yellowish green colours. 50% of the inurval is clearly schistose with streaks of solid dark green chlorite. 88.57 - 88.87, yellowish green relatively epidote-rich portion, at 88.57 sudden change in colour parallel to the schistosity. In places quartz-calcite veinlets and streaks. Schistosity slightly wavy in places. Resembling schistose diabase. Pyrite and chalcopyrite; scattered medium grained crystals with some concentration in fractures and on schistosity planes. Schistosity; 91.4m - 35°, 94.5m - 5°.

94.18 - 94.49m (309 - 310 ft.) Chips and some gouge.

96.16 - 99.27m (315.5 - 325.7 ft.) Silicified sericite(?) Chlorite schist (unit 3b)

Dark grey to dark greenish grey cherty looking rock. Texture apparently similar to 80.01 - 88.57. Showing mainly pinpoint chloritic specks in a grey (sericite holding?) siliceous mass. Mainly cohesive rock with in many places fracturing, holding relatively large amounts of sulfides. Scattered white quartz and calcite veinlets are present. 99.27 end of interval within 2 mm by colour change and absence or silica, parallel to schistosity, some offset by fracturing.

Pyrite; 7 - 10%, chalcopyrite; approx. 5%.
Schistosity; 97.54m - 16°.

99.27 - 102.53 m 325.7 - 336.4 ft. Diabase (unit 14b)

Schistose. Green to yellowish green. Mainly equigranular. Many white calcite rich (some quartz) streaks and flames parallel to the schistosity. Also quartz and calcite veins and veinlets present. One quartz vein holds a few coarse Cp crystals.

Pyrite: less than 1%, disseminated. Cp; traces.
Schistosity; 100.58m - 18°.

101.80 - 102.53m (334 - 336.4 ft.)	Increasing amount of phenocrysts, deminishing schistosity.
102.53 - 132.89m (336.4 - 436 ft.)	Gabbro (unit 14a) Medium grained to coarse grained. In places less than 30 cm sections of the core are greenish yellow by "cloudy" epidote together with some quartz. A few patches of solid chlorite occur near fractures. Throughout the interval little change.

P J Van Hale

DIAMOND DRILL LOG

Logged by:	C. G. Van Houten	
DDH #:	SRM 17	
Property:	Mount Sicker	
Claim:	Seattle	
Location:	92 B 13 W, Grid. ref. 8 W, 9 + 90 N	
Collar Evevation:	350m	
Collar:	Bearing 198	dip - 50°
53.34m (175 ft.)		dip - 48° 30'
106.68m (350 ft.)		dip - 46° 30'
Core Diameter:	36.37mm (1.432") B.Q.	
Length of Hole:	106.99m (351 ft.)	

LOG

0 - 9.14m (0 - 30 ft.)	Overburden
9.14m - 9.97m (30 - 32.7 ft.)	Sericite Chlorite Schist (Unit 3b) Relatively sericite rich. Slight variations in colour from dark greyish green to dark greenish grey. Colours tending to be even with scattered chlorite rich streaks. The rock appears fine grained with vague light coloured grains in the sand range. Scattered very dark green choritic speaks (almost black), pinpoint to 0.5mm, occur throughout the interval. Quartz in small amounts, as fine streaks and oval spots. Strongly fissile rock, falling apart along schistosity planes. Pyrite; as fine disseminated crystals and specks, (approx. 1%). Some chalcopyrite mixed in, (less than 1%).
9.97m - 10.73m (32.7 - 35.2ft.)	Sericite Chlorite Schist (Unit 3b) Sericite and chlorite possibly in near equal amounts. Colour greyish green, lighter than the 9.14 - 9.97 interval. Almost no fissility. Fine grained rock (see 9.14 - 9.97). Scattered very dark green (pinpoint 0.5mm) chloritic specks. Scattered small (max. 1mm) quartz crystals, some rounded. In places a (max. 1mm) white spot (feldspar?). Gradual transition into the more chlorite rich schists at 9.97m and 10.73m. Possibly a less chloritized version of 3b type rocks. Pyrite; as fine disseminated crystals and specks. Chalcopyrite; partly mixed in. One coarse py + Cp concentration. Py; 1 - 3%. Cp; (less than 1%).

10.73m - 14.11m (35.2 - 46.3 ft.) Sericite Chlorite Schist (Unit 3b)
Similar to 9.14 - 9.97m.
Schistosity; 12.2m - 56°.

14.11 - 15,54m (76.3 - 51 ft. Chlorite Sericite Schist (Unit 2c)
Grey to light grey. Light grey mainly in a few bands (millimetric - 3cm thick), which are parallel to the schistosity. Fine grained rock, very vague, mainly white (less than 1mm) "grains" are surrounded by a grey matrix (porphyry?). Scattered (max. 1/2mm) dark green chloritic specks are present. The interval appears related to 9.97 - 10.73.

At 14.11 and 15.54, mainly chips of 3b type rock.

Pyrite and chalcopyrite; mainly disseminated crystals and specks. Py; less than 1%, Cp, traces.

Schistosity; 15.2m - 78°.

15.54 - 19.90m (51 - 65.3 ft.) Chlorite Sericite Quartz Schist (Unit 1c)
Dark grey to greenish grey. The rock looks fragmental. Fragments; light coloured, quartz rich, oval to elongate, in many cases with slightly irregular borders. Chlorite rich fragments, often smaller, are also present. All fragments maximally 2cm. Surrounding the fragments; a mass of fine (silt-size) material, light coloured. Mixed in are scattered quartz crystals, some rounded. Also present are scattered vaguely outlined white feldspar crystals. Chlorite is largely dispersed, but there exist, also scattered dark green lenses and streaks. Strong schistosity. Rather soft rock. Varying amounts of very dark green (max. 0.5mm) chloritic specks (2 - 5%). Kinking and gentle folding of the schistosity. Pyrite mainly as disseminated crystals and specks (2 - 3%). Less than 1% of cp among the py. Schistosity; 18.3m - 71°.

19.90 - 30.9m (65.3 - 101.5ft.) Sericite Chlorite Schist (Unit 3b)
Rich in sericite, mainly greyish green. Fine grained (siltlike). Sporadic quartz crystals. Sericite rich and chlorite rich, streaky. Probably a few quartzo-feldspathic and chlorite rich fragments present. In places equally spaced (max. 1mm) vague feldspar crystals.

Sulfides; see 15.84 - 19.90.

Schistosity; 22.3m - 73°, 24.4m - 53°, 27.4m - 37°.

27.12 - 30.94m (89 - 101.5 ft.) Crushed rock, many small folds in the schistosity. A few white quartz calcite veins. 28.96 - 30.94m; pyrite approx. 3 - 5%.

30.94 - 32.55m (101.5 - 106.8) Sericite Chlorite Schist (Unit 3b)
Relatively rich in sericite? Greenish grey. Fine porphyritic aspect, with apparent white to yellowish white (1mm) feldspar phenocrysts and approx. 1mm chloritic pseudomrphs of mafics. Light colour partly caused by fine epidote. Andesite? pyrite (approx. 1%) mainly disseminated in crystals and specks. Traces of chalcopyrite might be mixed in.

32.55 - 34.32m (106.8 - 110.8 ft.) Sericite Chlorite Schist (Unit 3b)
Finer grained equigranular version of 30.94 - 32.55. A few white quartz calcite veinlets; controlled by fractures.

Schistosity; 33.5m - 53°.

33.77 - 34.32m (110.8 - 112.6 ft.) Slight shearing by faulting. Increased amount of pyrite, 5 - 30%. Cp - amount appears small (less than 1%).

34.32 - 35.66m (112.6 - 117 ft.) Cherty Quartz
Grey cherty quartz, crossed by a few (white) quartz-calcite veinlets. Apparently replacing sericite chlorite schist (3b, approx. 30% of the interval), which seems in part feldspar holding. Large amounts of pyrite (10 - 30%) occur in both rock types. The amounts of chalcopyrite appear small (max. 1%).

35.66 - 36.73m (117 - 120.5 ft.) Sericite Chlorite Schist (Unit 3b)
Similar looking as 30.94 - 32.55. Fine schistosity (52%) chloritic pseudomorphs streaked out.

Disseminated pyrite less than 1%. Traces of chalcopyrite.

36.73 - 37.43m (120.5 - 122.8 ft.) Diabase? (Unit 14b)
Yellowish green. Fine grained equigranular. Fine, cloudy epidotic alteration. At 36.73m and 37.43m contacts parallel to the schistosity.

Pyrite in scattered crystals and specks. No cp.

37.43 - 38.95m (122.8 - 127.8 ft.) Sericite Chlorite Schist (Unit 3b)
Mainly dark greyish green, soft, strongly fissile, fine grained. "Sand" size whte grains (fledspar?) appear to float in a green mass "silt" size grains, which do not touch eachother. A few very dark green chloritic specks are present. Slight streakyness by slight variations in the amounts of chlorite.

Pyrite; disseminated, fine crystals or specks (approx. 1%). Traces of chalcopyrite might be blended in.

38.95 - 39.32m (127.8 - 129 ft.) — Grey Cherty Quartz

See 34.32 - 35.66. More than 95% of the host rock (2c) replaced. Rich in pyrite (10 - 30% traces (?) of chalcopyrite blended in.

39.32 - 40.39m (129 - 132.5 ft.) — Chlorite Sericite Schist (Unit 2c)

Greenish grey, vaguely visible white grains (less than 1mm) surrounded by a finer matrix. Scattered quartz crystals, some rounded. Dark green to light bluish green chloritic streaking on a small scale. Felsic porphyry or tuffaceous?

Pyrite; mainly in medium to coarse disseminated specks, approx. 5%, traces of visible chalcopyrite.

40.39 - 40.84m (132.5 - 134 ft.) — Cherty Quartz

See 38.95 - 39.32.

40.84 - 74.87 (134 - 147.2 ft.) — Chlorite Sericite Schist (Unit 2c)

See 39.32 - 40.39. Schistosity; 42.8m - 50°.

44.87 - 53.34 (147.2 - 175 ft.) — Chlorite Sericite Augen Quartz Schist (Unit 1d)

White to grey rock with bluish green to green frequent mainly streaky mottling parallel to the shistosity. Moderately to strongly siliceous. Fissility moderate to well developed, anhedral quartz (max. 5mm) crystals. Quartz mainly oval to circular with, in cases, surface irregularities such as small embayments, crystal faces or less defined. Most of the oval quartz eyes line up with the schistosity. Texture appears porphyritic with white (less than 2mm) vague feldspar crystals surrounded by a mixture of sericite quartz and chlorite. Schist likely derived from felsic prophyry (rhyloitic - rhyodacitic). Some kinking and folding of the schistoisty.

Pyrite; predominantly in fine crystals and fine specks, tending to be concentrated in places on foliation planes. Pyrite; approx. 5% chalcopyrite in traces.

Schistosity; 45.7m - 61°, 48.8m - 61°, 51.8m - 69°.

53.34 - 53.52m (175 - 175.6 ft.) — Diabase (Unit 14b)

Equigranular, slightly epidotized. Scattered pyrite crystals.

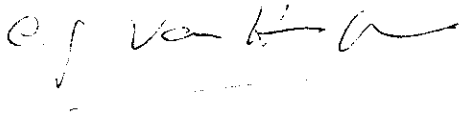
53.52 - 59.74m (175.6 - 196 ft.) — Clorite Sericite Augen Quartz Schist (Unit 1d)

See 44.87 - 53.34.

Pyrite; approx. 3%. Chalcopyrite; traces.

Schistosity; 54.9m - 72°, 57.9m - 61°.

59.74 - 60.17m (196 - 197.4 ft.)	Diabase (Unit 14b) See 53.34 - 53.52. Some white to grey quartz veining with minor carbonate. At 60.17. Contact parallel to schistosity.
60.17 - 60.62 (197.4 - 198.9 ft.)	Chlorite Sericite Augen Quartz Schist (Unit 1d) See 53.52 - 59.74.
60.62 - 61.20m 198.9 - 200.8 ft.	Diabase (Unit 14b)
61.20 - 106.99m (200.8 - 351 ft.)	Chlorite Sericite Augen Quartz Schist (Unit 1d) See 53.52 - 59.74 Schistosity; 64.0m - 72°, 67.1m - 73°, 70.1m - 49°, 73.2m - 75°, 79.3m - 53°, 82.30 - 17°, 85.3m - 71°, 88.4m - 53°, 91.4m - 69°, 94.5m - 67°, 97.5m - 95°, 106.7 - 65°.
79.24 - 106.99m (260 - 351 ft.)	Sizes of the quartz eyes appear slightly diminished, possibly some recrystallization.
87.32 - 87.78m 286.5 - 288 ft.	Crushed rock and gouge.
100.16 - 104.85m (328.6 - 344 ft.)	Core in pieces of less than 2cm, strong small scale fracturing. In places crumbs, also minor gouge.
104.85 - 106.99m (344 - 351 ft.)	A few less than 10cm thick quartz calcite veins.



DIAMOND DRILL LOG

Logged by:	C.G. Van Houten
DDH #:	SRM 18
Property:	Mount Sicker
Claim:	Little Nugget
Location:	92 B 13 W, Grid ref. 12 W, 8 + 70 N
Collar Elevation:	395m
Collar:	Bearing 04° Dip - 60°
45.7m (150')	Dip - 63°
91.4m (300')	Dip - 63°
Core Diameter:	36.37mm (1.432") B.Q.
Length of Hole:	153.92m (505 ft.)

LOG

0 - 16.15m (0 - 53 ft.)	Overburden
16.15 - 33.53m (53 - 110 ft.)	Chlorite Sericite Augen Quartz Schist (Unit 1d) Light grey rock with grey mottlings caused by largely clear, less than 1cm, quartz eyes (10-20%). Some quartz eyes show small embayments and/or one or more crystal surfaces More than 50% of the quartz shows rounded to oval outlines. Most oval crystals show parallelism by their longest axis to the rough schistosity. Strongly siliceous rock. Matrix predominantly a mixture of sericite and quartz. Sporadic less than 2mm white spots (feldspar?). In a few places spotty dark grey chloritic alterations especially near pyrite accumulations. Schist possibly derived from a rhyolitic porphyry. Pyrite, (approx. 5%), disseminated in fine crystals and fine crystalline patches, specks and veinlets. In places concentrations of medium to coarse specks. Traces? of chalcopyrite appear mixed with the pyrite. Schistosity; 16.2m - 10°, 18.3m - 20°, 21.3m - 26°, 24.4m - 20°, 30.5m - 35°, 33.5 - 22°.
25.60 - 28.96m (84 - 95 ft.)	Small scale fracturing, gougyness and chips, core loss.

29.81 - 29.99m (97.8 - 98.4 ft.)	Increased pyrite, approx. 25%.
33.53 - 47.55m (110 - 156 ft.)	Chlorite Sericite Augen Quartz Schist (Unit 1d) Increased amount of chlorite results in vague patchy colour changes from greenish grey to greyish green to dark green. Portions of the interval show chloritic streaking parallel to the schistosity. The strong to moderately siliceous rock turns soft where heavy concentrations of chlorite exist often near small fractures. Quartz eyes are present (less than 15%), a few of them appear partly recrystallized (less transparent light grey). Schistosity varies from poor to well developed. Pyrite and chalcopyrite; see 16.15 - 33.53. Schistosity; 36.6m - 10°, 39.6m - 20°, 42.7m - 23°, 45.7m - 23°.
47.55 - 68.61m (156 - 225.1 ft.)	Chlorite Sericite Augen Quartz Schist (Unit 1d) Moderate to strongly siliceous. Chlorite rather evenly distributed. Colour, bluish green to greenish grey with vague streaky mottlings and in places even coloured. A few chlorite rich spots occur with shapes in between pod and lens (no fragments). Quartz eyes (See 33.52 - 47.55) are present. Smaller quartz grains (2mm and less) appear more often irregular in shape than the larger ones. A portion of the quartz contrasts weakly with the matrix, possibly because of fine fracturing and recrystallization. Basically the same felsic volcanic rock as in 16.15 - 33.53 and 33.53 - 47.55. Generally solid core, hardly fissile. Pyrite; disseminated in specks and crystals (3-5%). Traces of Cp, possibly mixed in. Schistosity; 48.8m - 28°, 51.8m - 8°, 54.9m - 21°, 57.9m - 23°, 64.00m - 21°, 67.1m - 11°.
59.13 - 59.74m (194 - 196 Ft.)	A few conspicuous chalcopyrite specks.
63.09 - 68.61m (207 - 225.1 ft.)	Scattered spotty dark greyish green to dark green chlorite rich relatively soft spots and streaks, a number of which appear to be almost pure chlorite (in part introduced?). Slight increase in the amount of Cp (less than 1% present).

68.31 - 68.61m (224.1 - 225.1 ft.) Increased amount of chlorite rich centimetric spots and streaks, (See 63.09 - 68.6) oriented parallel to the schistosity. Slightly increasing in size and quantity towards 68.58m.

68.61 - 68.85 (225.1 - 225.9 ft.) Sericite Chlorite Schist (Unit 3b)
Dark greyish green rock. Small pocket of irregular shape are present within the section. Quartz occurs as small crystals (1mm or less) in the chloritic portions. Scattered, in part rounded fine grained chlorite aggregates of millimetric size contrast slightly by their dark green colour. At 68.61 contact parallel to schistosity after a short portion of increased amounts of chloritic spots in 68.31 - 68.6. At 68.85 possibly irregular contact (broken rock).

Pyrite in medium to coarse disseminated specks or irregular concentrations of specks (approx. 10%). Cp blended in (approx. 1%).

68.85 - 88.30m (225.9 - 289.7 ft.) Chlorite Sericite Augen Quartz Schist (Unit 1d)
Similar to the 63.09 - 68.61 portion of the 47.55 - 68.61 interval.

Schistosity; 70.1m - 41°, 13.2m - 17°, 76.2m - 23°, 79.3m - 27°, 82.3m - 27°, 85.3m - 13°.

88.30 - 105.03m (289.7 - 344.6 ft.) Chlorite Sericite Augen Quartz Schist (Unit 1d)
Strongly siliceous. Light grey with chloritic mottlings, including a few vaguely outlined patches holding varying amounts of chlorite in light bluish green to dark greenish grey colours. A few of these patches appear controlled by fracturing. Evenly scattered millimetric chloritic streaks might be relics of mafics. The matix appears to hold scattered (max. 1mm) feldspar phenocrysts. Schistosity rather erratic and rough, poor fissility.

Pyrite; (approx. 5%) as disseminated crystals and specks but also stringers (max. 2cm thick) holding max. 50% py. They tend to be parallel to schistosity and to concentrate in or near factures. Pyrite stringers contain relatively large amounts of chlorite in many places. Visible chalcopyrite not exceeding 1%. Schistosity 88.4m - 19°, 91.4m - 12°, 94.5m - 31°, 97.5m - 19°, 100.6m - 17°, 103.6 - 54°.

99.06 - 105.04m (325 - 344.6 ft.) Frequent (max. 50%), grey to greenish grey streaks, discontinuous bands and a few splotches, parallel to the schistosity and contrasting sharply with the light grey sericitic portions. Moderately siliceous portion.

105.03 - 105.64m (344.6 - 346.6 ft.) Diabase (Unit 14b)
Dark blueish green, fresh aspect, traces of disseminated pyrite crystals. Calcite-quartz and quartz-calcite veinlets present. 105.03m; contact at 58° (approx.) parallel to local schistosity. 105.64m irregular contact.

105.64 - 126.49m (346.6 - 415 ft.)	Chlorite Sericite Augen Quartz Schist (Unit 1d) Mainly continuation of the 99.06 - 105.03 portion of the 88.30 - 105.03 interval.
105.64 - 108.20m (346.6 - 355 ft.)	Most of the rock fractured and sheared on a fine scale.
115.82 - 126.49m (380 - 415 ft.)	Well developed schistosity. Increasing amount of medium to coarse chalcopyrite. Specks and patches disseminated and blended in with the pyrite. Estimated Cp. approx. 1%.
120.79 - 121.07m (396.3 - 397.2 ft.)	Pyrite stringers with chalcopyrite. Pyrite approx. 30%. Chalcopyrite approx. 7%.
126. 49 - 153.92m (415 - 505 ft.)	Chlorite Sericite Augen Quartz Schist (Unit 1d) Light grey colour has almost disappeared. Grey schistose rock with rather uniform green to dark green streaking which in places consists of almost pure soft chlorite. The almost pure chlorite includes sporadically quartz eyes. 5 - 15% quartz eyes are present. Some quartz eyes appear to show jagged edges. A portion of the quartz "grains" show irregular anhedral shapes. Scattered (max. 1mm) feldspar crystals are vaguely visible in the grey parts of the rock. Pyrite; in disseminated crystals and specks, which in places concentrate in stringers and patches holding relatively large amounts of chlorite. Sulphide content; 126.49 - 130.5m approx. 5% Py, 1% Cp. 130.5 - 131.0m approx. 7-10% Py, 5% Cp. General approx. 1% Py, under 1% Cp. Schistosity; 128m - 22°, 131.1m - 37°, 134.1m - 18°, 137.2m - 27°, 140.2m - 15°, 143.3m - 21°, 149.4m - 18°, 152.4m 0 21°.
145.08 - 148.44m (476 - 487 ft.)	Mainly gougy crumbs and chips.
148.13 - 153.92m (486 - 505 ft.)	Scattered white and minor grey quartz veins and veinlets, holding some calcite, barren.
150.21 - 151.33m (492.8 - 496.5 ft.)	A few sulphide rich stringers with pyrite approx. 5% and Cp close to 1%.

C. J. Van [illegible]

APPENDIX 2

ASSAYS

ASSAYS

DDH SRM 15

Feet	Meters	% Cu	% Pb	% Zn	Oz/ton Ag	Oz/ton Au	% Ba
23.3	7.10						
		0.050	0.01	0.04	0.08	0.002	
26.3	8.02						
		0.062		0.03			
37.0	11.28						
		0.038		0.03			
47.0	14.33						
		0.200		0.17			
57.0	17.37						
		0.310		0.02			
68.0	20.73						
		0.018		0.03			
78.0	23.77						
		0.189		0.04			
81.0	24.69						
		0.591		0.05			
85.0	25.91						
		0.014		0.03			
88.0	26.82						
		0.033	0.01	0.07	0.10	0.002	
98.0	29.87						
		0.081		0.03			
103.0	31.39						
		0.073		0.05			
108.0	32.92						
		0.051		0.02			0.18
113.0	34.44						
		0.030		0.03			0.16
119.0	36.27						
		0.039		0.01			0.23

DDH SRM 15 (Cont'd)

Feet	Meters	% Cu	% Pb	% Zn	Oz/ton Ag	Oz/ton Au	% Ba
123.5	37.64						
		0.397	0.01	0.02	0.09	0.003	0.20
125.6	38.28						
		0.169		0.02			0.31
128.8	39.26						
		0.011		0.01			0.28
138.0	42.06						
		0.030		0.02			0.24
148.0	45.11						
		0.021		0.01			
158.0	48.16						
		0.049		0.01			
168.0	51.21						
		0.046		0.01			
178.0	54.25						
		0.036		0.02			
188.0	57.30						
		0.037		0.02			
200.5	61.11						
		0.086		0.02			
210.0	64.01						
		0.072		0.01			
220.0	67.06						
		0.042		0.01			
230.0	70.10						
		0.079		0.01			
241.0	73.46						
		0.014	0.01	0.02	0.04	0.002	0.25
243.5	74.22						
		0.010		0.02			
248.0	75.59						
		0.029		0.02			

DDH SRM 15 (Cont'd)

Feet	Meters	% Cu	% Pb	% Zn	Oz/ton Ag	Oz/ton Au	% Ba
258.0	78.64						
		0.021		0.02			
268.0	81.69						
		0.086		0.01			
278.0	84.73						
		0.122		0.01			
288.0	87.78						
		0.141		0.02			
298.0	90.83						
		0.062	0.01	0.01	0.03	0.003	0.31
308.0	93.88						
		0.081		0.01			
318.0	96.93						
		0.049		0.02			
328.0	99.97						
		0.088		0.02			
341.3	104.03						
		0.068		0.02			
343.0	104.55						
		0.076		0.02			
353.0	107.59						
		0.072		0.01			
363.0	110.64						
		0.038		0.01			
373.0	113.69						
		0.039		0.01			
383.0	116.74						
		0.057	0.01	0.02	0.03	0.003	0.27
393.0	119.79						
		0.031		0.01			
403.0	122.83						
		0.059		0.01			
413.0	125.88						
		0.055		0.01			

DDH SRM 15 (Cont'd)

Feet	Meters	% Cu	% Pb	% Zn	Oz/ton Ag	Oz/ton Au	% Ba
423.0	128.93						
		0.057		0.02			
433.0	131.98						
		0.127		0.02			
443.9	135.30						
		3.160	0.01	0.09	0.34	0.005	0.10
444.8	135.58						
		0.263		0.02			
448.6	136.73						
		0.123		0.03			
452.0	137.77						
		0.178		0.03			
462.0	140.82						
		0.071		0.02			
472.0	143.87						
		0.080		0.02			
482.1	146.94						
		0.030		0.04			
492.0	149.96						
		0.116		0.02			
494.0	150.57						
		0.282	0.01	0.02	0.10	0.004	0.20
499.7	152.31						
498.7	152.00						
		1.125	0.01	0.06	0.18	0.004	0.10
499.7	152.31						
		0.027		0.01			
504.0	153.62						
		0.071		0.02			
515.4	157.09						
		0.430	0.03	0.08	0.17	0.003	0.24

DDH SRM 15 (Cont'd)

Feet	Meters	% Cu	% Pb	% Zn	Oz/ton Ag	Oz/ton Au	% Ba
516.3	157.37						
		0.113		0.03			
526.0	160.32						
		0.113		0.08			
536.0	163.37						
		0.122		0.06			
546.0	166.42						
		0.070		0.08			
556.0	169.47						
		0.043		0.07			
566.0	172.52						
		0.049		0.06			
576.0	175.56						
		0.042		0.06			
580.9	177.06						
		0.429	0.03	0.09	0.15	0.002	0.22
581.8	177.33						
		0.038		0.08			
592.0	180.44						
		0.045		0.06			
602.0	183.49						
		0.046		0.05			
612.0	186.54						
		0.042		0.07			
620.3	189.07						
		0.908	0.02	0.20	0.28	0.005	0.19
621.2	189.34						
		0.042		0.10			
631.0	192.33						
		0.031		0.09			
642.0	195.68						
		0.031		0.08			
648.0	197.51						

AVERAGED COPPER ASSAYS

DDH SRM 15

Feet	Meters	% Cu
23.3	7.10	
		0.050
47.0	14.33	
		0.258
68.0	20.73	
		0.018
78.0	23.77	
		0.419
85.0	25.91	
		0.046
123.5	37.64	
		0.259
128.8	39.26	
		0.033
200.5	61.11	
		0.070
241.0	73.46	
		0.021
268.0	81.69	
		0.086
363.0	110.64	
		0.048
433.0	131.98	
		0.182
482.1	146.94	
		0.030
492.0	149.96	
		0.239
499.7	152.31	
		0.027
504.0	153.62	
		0.103
556.0	169.47	
		0.053
648	197.51	

Average value for all assays in hole = 0.083% Cu.

AVERAGED ZINC ASSAYS

DDH SRM 15

Feet	Meters	% Zn
23.3	7.10	
		0.03
47.0	14.33	
		0.17
57.0		
	17.37	
		0.02
515.4	157.09	
		0.07
648.0	197.51	

Average value for all assays in hole = 0.03%.

ASSAYS

DDH SRM 16

Feet	Meters	% Cu	% Pb	% Zn	Oz/ton Ag	Oz/ton Au	% Ba
29.0	8.84						
		0.039		0.06			
34.0	10.36						
		0.005	0.02	0.08	0.06	0.001	0.06
39.0	11.89						
		0.011		0.08			
44.0	13.41						
		0.068		0.09			
49.0	14.94						
		0.053		0.08			
54.0	16.46						
		0.120	0.02	0.10	0.09	0.001	0.02
59.0	17.98						
		0.027		0.06			
64.0	19.51						
		0.032		0.08			
69.0	21.03						
74.0	22.56						
		0.356		0.06			
84.0	25.60						
		0.403		0.10			
89.0	27.13						
		0.038		0.11			
94.0	28.65						
		0.055		0.09			
99.0	30.18						
		0.009		0.10			

DDH SRM 16 (Cont'd)

Feet	Meters	% Cu	% Pb	% Zn	Oz/ton Ag	Oz/ton Au	% Ba
104.0	31.70						
		0.006		0.06			
111.0	33.83						
		0.010	0.02	0.09	0.09	0.001	0.11
114.0	34.75						
		0.009		0.08			
119.0	36.27						
		0.008		0.07			
124.0	37.80						
		0.010		0.09			
129.0	39.32						
		0.052		0.08			
134.0	40.84						
		0.023	0.03	0.05	0.06	0.002	0.21
139.0	42.37						
		0.009		0.07			
143.0	43.59						
		0.023		0.09			
148.0	45.11						
		0.017		0.08			
153.0	46.63						
		0.105		0.09			
158.0	48.16						
		0.036		0.05			
163.9	49.96						
		0.011	0.02	0.09	0.03	0.001	0.24
169.0	51.51						
		0.049		0.07			
174.0	53.04						
		0.024		0.06			
179.0	54.56						
		0.043		0.08			

AVERAGED COPPER ASSAYS

DDH SRM 16

Feet	Meters	% Cu
29.0	8.84	
		0.018
44.0	13.41	
		0.080
59.0	17.98	
		0.030
69.0	21.03	
74.0	22.56	
		0.372
89.0	27.13	
		0.047
99.0	30.18	
		0.008
129.0	39.32	
		0.040
240.8	73.40	
		0.158
284.9	86.84	
318.5	97.08	
		0.202
323.8	98.69	

Average value for all assays in hole = 0.081% Cu.

AVERAGED ZINC ASSAYS

Average value for all assays in hole = 0.08% Zn.

DDH SRM 16 (Cont'd)

Feet	Meters	% Cu	% Pb	% Zn	Oz/ton Ag	Oz/ton Au	% Ba
184.0	56.08						
		0.090		0.09			
189.0	57.61						
		0.047		0.08			
194.0	59.13						
		0.053		0.04			
199.0	60.66						
		0.095	0.03	0.05	0.10	0.001	0.13
204.0	62.18						
		0.013		0.08			
209.0	63.70						
		0.014		0.09			
214.0	65.23						
		0.043		0.06			
219.0	66.75						
		0.013		0.07			
224.0	68.28						
		0.037		0.08			
229.0	69.80						
233.4	71.14						
		0.052	0.03	0.07	0.06	0.001	0.22
236.5	72.09						
238.4	72.66						
		0.013	0.02	0.07	0.05	0.002	0.17
240.8	73.40						
		0.142		0.08			
243.0	74.07						
		0.091	0.02	0.08	0.07	0.001	0.22
248.9	75.86						
250.6	76.38						
		0.325		0.08			
256.0	78.03						
		0.079		0.09			

DDH SRM 16 (Cont'd)

Feet	Meters	% Cu	% Pb	% Zn	Oz/ton Ag	Oz/ton Au	% Ba
262.5	80.01						
		0.183	0.03	0.08	0.08	0.002	0.24
268.0	81.69						
		0.075	0.02	0.09	0.05	0.002	0.23
272.0	82.91						
		0.471		0.11			
274.2	83.58						
		0.140	0.02	0.10	0.06	0.001	0.26
279.0	85.04						
		0.093		0.07			
284.9	86.84						
318.5	97.08						
		0.202	0.03	0.05	0.09	0.001	0.13
323.8	98.69						

ASSAYS

DDH SRM 17

Feet	Meters	% Cu	% Pb	% Zn	Oz/ton Ag	Oz/ton Au	% Ba
30.0	9.14						
		0.038		0.04			
32.7	9.97						
		0.200	0.01	0.04	0.10	0.001	0.09
35.2	10.73						
		0.010	0.02	0.02	0.09	0.001	0.11
40.0	12.19						
		0.008	0.01	0.04	0.09	0.001	0.10
46.3	14.11						
		0.108	0.01	0.04	0.09	0.003	0.13
51.0	15.54						
		0.026		0.04			
57.0	17.37						
		0.005	0.02	0.04	0.09	0.002	0.16
63.5	19.35						
		0.004		0.04			
67.5	20.57						
		0.003		0.06			
71.0	21.64						
		0.003		0.04			
75.0	22.86						
		0.005		0.06			
79.0	24.08						
		0.005	0.03	0.05	0.10	0.002	0.13
87.0	26.52						
		0.006		0.07			
91.0	27.74						
		0.043		0.05			

DDH SRM 17 (Cont'd)

Feet	Meters	% Cu	% Pb	% Zn	Oz/ton Ag	Oz/ton Au	% Ba
96.0	29.26						
		0.020		0.06			
101.0	30.78						
		0.015	0.02	0.04	0.09	0.003	0.14
107.0	32.61						
		0.011	0.01	0.04	0.09	0.002	0.06
112.6	34.32						
		0.016	0.01	0.03	0.10	0.003	0.10
117.0	35.66						
		0.022	0.02	0.04	0.09	0.001	0.09
120.1	36.61						
124.0	37.80						
		0.025	0.02	0.04	0.10	0.001	0.10
127.8	38.95						
		0.008	0.01	0.02	0.07	0.002	0.02
129.0	39.32						
		0.006		0.02			
132.5	40.39						
		0.011		0.01			
134.0	40.84						
		0.022		0.02			
139.5	42.52						
		0.040		0.03			
144.5	44.04						
		0.050	0.02	0.02	0.09	0.001	0.18
147.2	44.87						
		0.112		0.01			
157.0	47.85						
		0.054		0.01			
167.0	50.90						
		0.010		0.01			
177.0	53.95						
187.0	57.00						
		0.036		0.01			

DDH SRM 17 (Cont'd)

Feet	Meters	% Cu	% Pb	% Zn	Oz/ton Ag	Oz/ton Au	% Ba
196.0	59.74						
201.0	61.26						
		0.026		0.01			
211.0	64.31						
		0.008		0.01			
221.0	67.36						
		0.029		0.01			
231.0	70.41						
		0.036	0.02	0.01	0.06	0.001	0.23
241.0	73.46						
		0.037		0.02			
251.0	76.50						
		0.057		0.02			
261.0	79.55						
		0.045		0.01			
271.0	82.60						
		0.096		0.01			
281.0	85.65						
		0.122		0.07			
291.0	88.70						
		0.082		0.02			
301.0	91.74						
		0.094	0.02	0.01	0.04	0.002	0.18
311.0	94.79						
		0.079		0.01			
321.0	97.84						
		0.064		0.02			
328.6	100.16						
		0.045		0.02			
332.0	101.19						
		0.048	0.02	0.01	0.03	0.002	0.15
344.0	104.85						
		0.010	0.03	0.01	0.04	0.002	0.20
351.0	106.98						

AVERAGED COPPER ASSAYS

DDH SRM 17

Feet	Meters	% Cu
30.0	9.14	
		0.038
32.7	9.97	
		0.200
35.2	10.73	
		0.009
46.3	14.11	
		0.108
51.0	15.54	
		0.026
57.0	17.37	
		0.005
91.0	27.74	
		0.020
144.5	44.04	
		0.079
167.0	50.90	
		0.026
251.0	76.50	
		0.075
344.0	104.85	

Average value for all assays in hole = 0.044% Cu.

AVERAGED ZINC ASSAYS

DDH SRM 17

Feet	Meters	% Zn
30.0	9.14	
		0.04
127.8	38.95	
		0.02
351.0	106.98	

Average value for all assays in hole = 0.02% Zn.

ASSAYS

DDH SRM 18

Feet	Meters	% Cu	% Pb	% Zn	Oz/ton Ag	Oz/ton Au	% Ba
53.0	16.15						
		0.004		0.02			
63.0	19.20						
		0.005		0.01			
73.0	22.25						
		0.006		0.01			
83.0	25.30						
		0.039		0.02			
93.0	28.35						
		0.115	0.01	0.01	0.07	0.002	0.23
103.0	31.39						
		0.013		0.01			
113.0	34.44						
		0.024		0.02			
123.0	37.49						
		0.023		0.02			
133.0	40.54						
		0.034		0.02			
143.0	43.59						
		0.046	0.01	0.02	0.06	0.001	0.20
153.0	46.63						
		0.038		0.01			
163.0	49.68						
		0.028		0.01			
173.0	52.73						
		0.044		0.01			
183.0	55.78						
		0.031		0.01			

DDH SRM 18 (Cont'd)

Feet	Meters	% Cu	% Pb	% Zn	Oz/ton Ag	Oz/ton Au	% Ba
193.0	58.83						
		0.039		0.02			
203.0	61.87						
		0.062	0.01	0.02	0.03	0.001	0.14
213.0	64.92						
		0.061		0.01			
223.0	67.97						
225.1	68.61						
		0.220	0.02	0.02	0.09	0.001	0.16
225.9	68.85						
		0.038		0.01			
236.0	71.93						
		0.028		0.02			
246.0	74.98						
		0.070		0.01			
256.0	78.03						
		0.089		0.01			
266.0	81.08						
		0.026	0.02	0.01	0.07	0.001	0.17
276.0	84.12						
		0.027		0.02			
286.0	87.17						
		0.070		0.01			
289.5	88.24						
		0.035		0.01			
299.0	91.14						
		0.049		0.01			
309.0	94.18						
		0.031		0.02			
319.0	97.23						
		0.074		0.02			

DDH SRM 18 (Cont'd)

Feet	Meters	% Cu	% Pb	% Zn	Oz/ton Ag	Oz/ton Au	% Ba
329.0	100.28						
		0.116	0.02	0.02	0.06	0.001	0.18
333.0	101.50						
		0.056		0.02			
349.0	106.38						
		0.106		0.01			
359.0	109.42						
		0.090		0.01			
369.0	112.47						
		0.128		0.02			
379.0	115.52						
		0.116		0.02			
389.0	118.57						
		0.216		0.01			
393.7	120.00						
		0.323	0.02	0.02	0.10	0.002	0.19
394.2	120.15						
		0.061		0.02			
396.3	120.79						
		0.574	0.01	0.02	0.11	0.001	0.12
397.2	121.07						
		0.031		0.02			
407.0	124.05						
		0.106		0.02			
417.0	127.10						
		0.064		0.02			
423.0	128.93						
		0.102		0.02			
426.2	129.91						
		0.441	0.02	0.04	0.19	0.001	0.02
427.9	130.42						
		0.058		0.01			

DDH SRM 18 (Cont'd)

Feet	Meters	% Cu	% Pb	% Zn	Oz/ton Ag	Oz/ton Au	% Ba
430.4	131.19						
		0.090		0.02			
440.0	134.11						
		0.108		0.02			
450.0	137.16						
		0.054		0.01			
460.0	140.21						
		0.015		0.02			
470.0	143.26						
		0.036		0.02			
478.0	145.69						
		0.049	0.01	0.02	0.04	0.001	0.13
486.0	148.13						
		0.022		0.01			
492.8	150.21						
		0.011	0.01	0.02	0.07	0.001	0.16
496.5	151.33						
		0.082		0.02			
505.0	153.92						

AVERAGED COPPER ASSAYS

DDH SRM 18

Feet	Meters	% Cu
53.0	16.15	
		0.005
83.0	25.30	
		0.039
93.0	28.35	
		0.115
103.0	31.39	
		0.041
319.0	97.23	
		0.100
460.0	140.21	
		0.038
505.0	153.92	

Average value for all assays in hole = 0.058% Cu.

AVERAGED ZINC ASSAYS

Average value for all assays in hole = 0.02% Zn.

APPENDIX 3

LIST OF CLAIMS

RECORDED MINERAL CLAIMS	Record No.
CF Group #1	14150
2	14151
3	14152
4	14153
5	14154
6	14155
7	14156
8	14157
CF Group 13	14162
14	14163
15	14164
16	14165
17	14166
18	14167
Rocky #1	155
Rocky #2	156
Rocky #3	157
Rocky #4	158
Rocky #5	247
Rocky #6 Fr.	248
Acme Fr	254
Margret Fr.	272

Crown Granted Claims	Lot No.
Estelle	53-G
Westholme	54-G
Blue Bell	51-G
Moline Fraction	50-G
Acme	4-G
Tony	18-G
Hellena	47-G
Westholme Fraction	59-G
Dixie Fraction	21-G
Golden Rod	44-G
Donagan	18-G
XL	19-G
Donald	63-G
Muriel Fraction	108-G
Doubtful Fraction	87-G

Thelma Fraction	85-G
Imperial Fraction	86-G
Herbert Fraction	20-G
Phil Fraction	110-G
NT Fraction	43-G
Magic Fraction	41-G
Richard III	39-G
Key City	37-G
Lenora	35-G
Tyee	36-G
International Fraction	60-G

Nugget Creek Group	Lot	Record No
Little Nugget	33G	13(1)
Chemainus	34G	14(1)
Belle	55G	15(1)
Dunsmuir	56G	16(1)
Seattle	57G	17(1)
Copper King	64G	18(1)
Copper Queen	65G	19(1)
Queen Bee	100G	22(1)
Alliance Fr.	59G	120(9)
Patricia - Jane		83(5)
Morley - Jane		84(5)
Peggy Fr.		119(9)
Beatrice		121(9)

APPENDIX 4

Cost Statements

DDH SRM 12

COST STATEMENT

March 20, 1980 - April 2, 1980

Direct Drilling Costs:					
Casing	20'	@ $15.00/ft	=	$ 300.00	
Drilling	480'	@ $14.00/ft	=	$6,720.00	
	500'	@ $15.40/ft	=	$7,700.00	
	5'	@ $16.90/ft	=	$ 84.50	
Labour (site preparation, set-up, tear down, daily travel time) 127 man hours @ $16.75			=	$2,127.25	
					$ 16,931.75
Other Costs					
Travel time (Vancouver - Duncan and back) 30 man hrs. @ $16.75			=	$ 502.50	
Ferry travel			=	$ 36.00	
Bulldozer - 1 month @ $2,600.00			=	$2,600.00	
Truck - 14 days @ $24.00			=	$ 336.00	
Freight			=	$ 320.40	
Core boxes			=	$ 195.10	
Restaurent meals (total from receipts)			=	$ 861.60	
Groceries (total from receipts)			=	$ 165.47	
Motel 4 men x 14 days x $12.50			=	$ 700.00	
1 man x 5 days x $12.25			=	$ 61.25	
*House rental (used for office, core logging, core storage $250. x 306.3m/1235.9m			=	$ 61.96	
Telephone			=	$ 16.86	
Core logging - 1 man x 11 days x $100/day			=	$1,100.00	
*Report writing, drafting - 1 man x 10 days @$100 x 306.3m/ 1235.9m			=	$ 247.84	
					$ 7,204.98
		TOTAL			$ 24,136.73

*Costs prorated on a per-meter basis, i.e.:
Total cost x 306.3m/1235.9m

306.3m = length of SRM 12
1235.9m = total drilling

DDH SRM 13

COST STATEMENT

April 22, 1980 - April 27, 1980

Direct Drilling Costs:					
Casing	33'	@ $15.00/ft	=	$ 495.00	
Drilling	468'	@ 14.00/ft	=	$ 6,552.00	
	145'	@ 15.40/ft.	=	$ 2,233.00	
Acid tests	2	@ 25.00	=	$ 50.00	
Labour (site preparation, set-up tear down): 131 man hrs. @ $16.75			=	$ 2,194.25	
					$ 11,524.25
Other Costs					
†Road Construction: 55 man hours @ $16.75 x 50%			=	$ 460.63	
*Camp Construction, tear down: 220 man hours @ $16.75 x 196.6/929.6			=	779.34	
*Travel Time: 32 man hrs. @ $16.75 x 196.6/929.6			=	113.36	
*De-mobilization: 42 man hrs. @ $16.75 x 196.6/929.6			=	148.78	
*Cook: 1.2 months @ $1,150.00 x 196.6/929.6			=	291.85	
*Tents and Flys: $1,072.78 x 196.6/929.6			=	224.77	
*Lumber: $1,000.00 x 196.6/929.6			=	211.49	
*Misc. Camp Gear: $423.75 x 196.6/929.6			=	89.62	
*Camp Fuel: $124.15 x 196.6/929.6			=	26.26	
*Ferry travel: $28.00 x 196.6/929.6			=	5.92	
*Bulldozer: 2 months @ $2,600.00 x 196.6/929.6			=	1,099.74	
*Truck: 35 days @ $24.00 x 196.6/929.6			=	177.65	
*Freight:			=	204.65	
Core Boxes			=	121.73	
*Restaurent Meals (total from receipts): $193.72 x 196.6/929.6			=	40.97	
*Groceries (total from receipts): $1,683.95 x 196.6/929.6)			=	356.14	

*Motel (total from receipts): $157.50 x 196.6/920.6	=	$ 33.31	
**House Rental (used for office, core logging, core storage): $250.00 x 196.6/1,235.9	=	39.77	
*Telephone: $57.84 x 196.6/929.6	=	12.23	
*Core Logging: 1 man x 31 days @ $100.00 x 196.6/929.6	=	655.62	
**Report writing: 1 man x 10 days @100.00 x 196.6/1,235.9	=	159.07	
Drill site and access road clean-up, (loggers on contract) 2 men x 6 days @ $125.00	=	1,500.00	
			$ 6,752.90
TOTAL			$18,277.15

† Cost split 50% between SRM 13 and 14

Cost pro-rated on a per-meter basis, ie:

* Total cost x 196.6m/929.6m

** Total cost x 196.6m/1235.9m

196.6m	=	length of SRM 13
929.6m	=	total drilling excluding SRM 12
1235.9m	=	total drilling including SRM 12

DDH SRM 14

COST STATEMENT

April 27, 1980 - May 2, 1980

Direct Drilling Costs:			
Casing:	50' @ $15.00	=	$ 750.00
	20 hrs. @ $45.00	=	900.00
Drilling:	340' @ $14.00	=	4,760.00
Casing Shoes:			320.32
Acid Tests:	2 @ $25.00	=	50.00
Labour (site preparation, set-up, tear down):	72 man hrs. @ $16.75	=	1,206.00
			$ 7,986.32
Other Costs:			
†Road Construction:	55 man hrs. @ $16.75 x 50%	=	460.62
*Camp Construction, tear down:	220 man hrs. @ $16.75 x 141.7/929.6	=	561.71
*Travel Time:	32 man hrs. @ $16.75 x 141.7/929.6	=	81.70
*De-Mobilization:	42 man hrs. @ $16.75 x 141.7/929.6	=	107.24
*Cook:	1.2 months @ $1,150.00 x 141.7/929.6	=	210.35
*Tents and Flys:	$1,062.78 x 141.7/929.6	=	162.00
*Lumber:	$1,000.00 x 141.7/929.6	=	152.43
*Misc. Camp Gear:	$423.75 x 141.7/929.6	=	64.59
*Camp Fuel (propane):	$124.15 x 141.7/929.6	=	18.92
*Ferry Travel:	$28.00 x 141.7/929.6	=	4.27
*Bulldozer:	2 months @ $2,600.00 x 141.7/929.6	=	792.64
*Truck:	35 days @ $24.00 x 141.7/929.6	=	128.04
*Freight:		=	153.41
Core Boxes:			52.68
*Restaurant Meals (total from receipts)	$193.72 x 141.7/929.6	=	29.53

*Groceries (total from receipts) $ 1,683.95 x 141.7/929.6	=	$ 256.69	
*Motel (total from receipts) $157.50 x 141.7/929.6	=	24.01	
**House Rental (used for office, core logging and core storage) $250.00 x 141.7/1,235.9	=	28.66	
*Telephone: $57.84 x 141.7/929.6	=	8.82	
*Core Logging: 1 man x 31 days @ $100.00 x 141.7/929.6	=	472.54	
**Report writing: 1 man x 10 days @ $100.00 x 141.7/1,235.9	=	114.65	
Drill site and access road clean up (2 loggers on contract) 2 men x 6 days @ $125.00.	=	1,500.00	
			$5,385.50
TOTAL			$13,371.82

† Cost split 50% between SRM 13 and 14

Cost pro-rated on a per-meter basis, ie:
* total cost x 147.1m/929.6m.
** total cost x 147.1m/1,235.9m.

141.7m = length of SRM 14
929.6m = total drilling excluding SRM 12
1,235.9m = total drilling including SRM 12

DDH SRM 15

COST STATEMENT

May 2, 1980 - May 7, 1980

Direct Drilling Costs:			
Casing: 23' @ $15.00	=	$ 345.00	
Drilling: 477' @ 14.00	=	6,678.00	
148' @ 15.40	=	2,279.20	
Reaming: 11 hrs. @ $45.00	=	495.00	
Acid Tests: 2 @ $25.00	=	50.00	
Labour (site preparation, set-up, tear down): 80 man hrs. @ $16.75	=	1,340.00	
			$ 11,187.20
Other Costs:			
*Camp Construction, tear down: 220 man hrs. @ $16.75 x 197.5/929.6	=	782.90	
*Travel Time: 32 man hrs. @ $16.75 x 197.5/929.6	=	113.88	
*De-mobilization: 42 man hrs. @ $16.75 x 197.5/929.6	=	149.46	
*Cook: 1.2 months @ $1,150.00 x 197.5/929.6	=	293.19	
*Tents and Flys: $1,062.78 x 197.5/929.6	=	225.80	
*Lumber: $1,000.00 x 197.5/929.6	=	212.46	
*Misc. Camp Gear: $423.75 x 197.5/929.6	=	90.03	
*Camp Fuel (propane): $124.15 x 197.5/929.6	=	26.38	
*Ferry Travel: $28.00 x 197.5/929.6	=	5.95	
*Bulldozer: 2 months @ $2,600.00 x 197.5/929.6	=	1,104.78	
*Truck: 35 days @ $24.00 x 197.5/929.6	=	178.46	
*Freight:		214.40	
Core boxes:	=	113.10	
*Restuarant meals (total from receipts): $193.72 x 197.5/929.6	=	41.16	
*Groceries (total from receipts): $1683.95 x 197.5/929.6	=	357.77	

*Motel (total from receipts): $157.50 x 197.5/929.6	=	$ 33.46	
**House Rental (used for office, core logging, core storage): $250.00 x 197.5/1235.9	=	39.95	
*Telephone: $57.84 x 197.5/929.6	=	12.29	
*Core Logging: 1 man x 31 days @ 100.00 x 197.5/929.6	=	658.62	
***Core Splitting: 1 man x 11 days @ $60.00 x 197.5/591.3	=	220.45	
Assays (79 samples)	=	1,477.00	
**Report writing: 1 man x 10 days @ $100.00 x 197.5/1,235.9	=	159.80	
			$ 6,511.29
TOTAL			$ 17,698.29

Costs pro-rated on a per-meter basis, ie:

* total cost x 197.5m/929.6m
** total cost x 197.5m/1,235.9m
*** total cost x 197.5m/591.3m

197.5m	=	length of SRM 15
929.6m	=	total drilling excluding SRM 12
1,235.9m	=	total drilling including SRM 12
591.3m	=	total of SRM 15,16,17 and 18

DDH SRM 16

COST STATEMENT

May 7, 1980 - May 10, 1980

Direct Drilling Costs:			
Casing: 29' @ $15.00	=	$ 435.00	
Drilling: 407' @ 14.00	=	5,698.00	
Reaming: 2 hrs. @ $45.00	=	90.00	
Acid Tests: 2 @ $25.00	=	50.00	
Labour (site preparation, set-up, tear down): 52 man hrs. @ $16.75	=	871.00	
Casing and shoe left in hole:	=	619.35	
			$ 7,763.35
Other Costs:			
*Camp Construction, tear down: 220 man hrs. @ $16.75 x 132.9/929.6	=	526.82	
*Travel Time: 32 man hrs. @ $16.75 x 132.9/929.6	=	76.63	
*De-mobilization: 42 man hrs. @ $16.75 x 132.9/929.6	=	100.58	
*Cook: 1.2 months @ $1,150.00 x 132.9/929.6	=	197.29	
*Tents and Flys: $1,062.78 x 132.9/929.6	=	151,94	
*Lumber: $1,000.00 x 132.9/ 929.6	=	142.96	
*Misc. Camp Gear: $423.75 x 132.9/929.6	=	60.58	
*Camp fuel (propane): $124.15 x 132.9/929.6	=	17.75	
*Ferry Travel: $28.00 x 132.9/ 929.6	=	4.00	
*Bulldozer: 2 months @ $2,600. x 132.9/929.6	=	743.42	
*Truck:35 days x $24.00 x 132.9/929.6	=	120.09	
*Freight:		138.40	
Core Boses:	=	87.20	
*Restaurant Meals (total from receipts) $193.72 x 132.9/ 929.6	=	27.70	
*Groceries (total from receipts) $1,683.95 x 132.9/929.6)	=	240.75	

*Motel (total from receipts) $157.50 x 132.9/929.6	=	$ 22.52	
**House Rental (use for office, core logging, core storage) $250.00 x 132.9/1,235.6	=	26.88	
*Telephone: $57.84 x 132.9/929.6	=	8.27	
*Core Logging: 1 man x 31 days @ $100.00 x 1329/929.6	=	443.19	
***Core Splitting: 1 man x 11 days @ $60.00 x 132.9/591.3	=	148.34	
Assays (50 samples)		1,077.00	
**Report Writing: 1 man x 10 days @ $100.00 x 132.9/ 1,235.9	=	107.53	
			$ 4,469.84
TOTAL			$ 12,233.19

Costs pro-rated on a per-meter basis, ie:

* total cost x 132.9m/929.6m
** total cost x 132.9m/1,235.9m
*** total cost x 132.9m/591.3m

132.9m = length of SRM 16
929.6m = total drilling excluding SRM 12
1235.9m = total drilling including SRM 12
591.3m = total of SRM 15,16,17 and 18

DDH SRM 17

COST STATEMENT

May 10, 1980 - May 13, 1980

Direct Drilling Costs:			
Casing: 30' @ $15.00	=	$ 450.00	
Drilling: 321' @ $14.00	=	4,494.00	
Acid tests: 2 @ $25.00	=	50.00	
Labour: (site preparation, set-up, tear down) 40 man hrs. @ $16.75	=	670.00	
			$ 5,664.00
Other Costs:			
*Camp Construction, tear down: 220 man hrs. @ $16.75 x 107.0/929.6	=	424.16	
*Travel Time: 32 man hrs. @ $16.75 x 107.0/929.6	=	61.70	
*Demobilization: 42 man hrs. @ 107.0/929.6	=	80.98	
*Cook: 12. months @ $1,150.00 x 107.0/929.6	=	158.84	
*Tents and Flys: $1,062.78 x 107.0/929.6	=	122.33	
*Lumber: $1,000.00 x 107.0/929.6	=	115.10	
*Misc. Camp Gear: $423.75 x 107.0/929.6	=	48.78	
*Camp Fuel (propane) $124.15 x 107.0/929.6	=	14.29	
*Ferry Travel: $28.00 x 107.0/929.6	=	3.22	
*Bulldozer: 2 months @ $2,600.00 x 107.0/929.6	=	598.54	
*Truck: 35 days @ $24.00 x 107.0/929.6	=	96.69	
*Freight:	=	116.19	
Core Boxes:	=	65.62	
*Restaurant meals (total from receipts): $193.72 x 107.0/929.6	=	22.30	
*Groceries (total from receipts): $1,683.95 x 107.0/929.6	=	193.83	
*Motel (total from receipts): $157.50 x 107.0/929.6	=	18.13	

**House Rental (used for office, core logging, core stroage): $250.00 x 107.0/1235.9.	=	$ 21.65	
*Telephone: $57.84 x 107.0/929.6	=	6.66	
*Core Logging: 1 man x 31 days @ $100.00 x 107.0/929.6	=	356.82	
***Core Splitting: 1 man x 11 days @ $60.00 x 107.0/591.3	=	119.43	
Assays (46 samples)	=	1,086.00	
**Report Writing: 1 man x 10 days @ $100.00 x 107.0/1,235.9	=	86.58	
			$ 3,817.84
TOTAL			$ 9,481.84

Costs pro-rated on a per-meter basis, ie:

* total cost x 107.0m/929.6m
** total cost x 107.0m/1,235.9m
***total cost x 107.0m/591.3m

107.0m	=	length of SRM 17
929.6m	=	total drilling excluding SRM 12
1,235.9m	=	total drilling including SRM 12
591.3m	=	total of SRM 15, 16, 17 and 18

DDH SRM 18

COST STATEMENT

May 13, 1980 - May 16, 1980

Direct Drilling Costs:			
Casing:	50' @ $15.00	=	$ 750.00
	2 hrs @ $45.00	=	90.00
Drilling:	448' @ $14.00	=	6,272.00
	5' @ $15.00	=	77.00
Reaming:	5 hrs. @ $45.00	=	225.00
Casing and Shoe:		=	505.18
Bits: 2 x $306.55 + 10%		=	674.41
Acid Tests: 2 @ $25.00		=	50.00
Labour: (site preparation, set-up, tear down) 53 man hrs. @ $16.75		=	887.75
			$ 9,531.34
Other Costs:			
*Camp Construction, tear down: 220 man hrs. @ $16.75 x 153.9/929.6		=	610.07
*Travel Time: 32 man hrs. @ $16.75 x 153.9/929.6		=	88.74
*De-mobilization: 42 man hrs. @ $16.75 x 153.9/929.6		=	116.47
*Cook: 1.2 months @ $1,150.00 x 153.9/929.6		=	228.47
*Tents and Flys: $1,062.78 x 153.9/929.6		=	175.95
*Lumber: $1,000.00 x 153.9/929.6		=	165.56
*Misc. Camp Gear: $423.75 x 153.9/929.6		=	70.15
*Camp Fuel (propane) $124.15 x 153.9/929.6		=	20.55
*Ferry Travel: $28.00 x 153.9/929.6		=	4.64
*Bulldozer: 2 months @ $2,600.00 x 153.9/929.6		=	860.89
*Truck: 35 days @ $24.00 x 153.9/929.6		=	139.07
*Freight:		=	163.89
Core Boxes:		=	91.52
*Restaurant meals (total from receipts): $193.72 x 153.9/929.6		=	32.07

*Groceries (total from receipts): $1,683.95 x 153.09/929.6	=	$ 278.79	
*Motel (total from receipts): $157.50 x 153.9/929.6	=	26.07	
**House Rental (used for office, core logging, core storage): $250.00 x 153.9/1,235.9	=	31.13	
*Telephone: $57.84 x 153.9/929.6	=	9.58	
*Core Logging: 1 man x 31 days x 153.9/929.6	=	513.22	
***Core Splitting: 1 man x 11 days x 153.9/591.3	=	171.78	
Assays (54 samples)		1,042.00	
**Report writing: 1 man x 10 days @ $100.00 x 153.9/1,235.9	=	124.52	
			$ 4,848.66
	TOTAL		$14,496.47

Costs pro-rated on a per-meter basis, ie:

* total cost x 153.9m/929.6m
** total cost x 153.9m/1235.9m
*** total cost x 153.9m/591.3m

153.9m = length of SRM 18
929.6m = total drilling excluding SRM 12
1235.9m = total drilling including SRM 12
591.3m = total of SRM 15, 16, 17, and 18

STATEMENT OF QUALIFICATIONS

I, Christiaan G. Van Houten of North Cowichan, British Columbia, hereby certify that:

1. I am a graduate of the University of Amsterdam, the Netherlands, holding the degree of Doctorandus (approximately equivalent to MSc) in geology (1969).

2. I am a geologist employed by S.E.R.E.M. Ltd. of 505 - 850 West Hastings Street, Vancouver, B.C.

3. I have worked in the field of exploration for four years.

4. I have no financial interest in the claims covered by this report or in S.E.R.E.M. Ltd.

DATED at Duncan, B.C. this 18th day of December, 1979.

C. J. Van Houten

Christiaan G. Van Houten
Geologist

STATEMENT OF QUALIFICATIONS

I, Peter A. Ronning of P. O. Box 718, Duncan, B.C. hereby certify that:

1. I am a geologist employed by S.E.R.E.M. Ltd. of 300 - 535 Thurlow Street, Vancouver, B.C.
2. I hold the degree of Bachelor of Applied Science in Geological Engineering from the University of British Columbia, granted in 1973.
3. I have worked as a geologist in mineral exploration since 1973.
4. I supervised and participated in the work covered by this report.
5. I have no financial interest in any of the claims covered by this report.

P. Ronning
Duncan, B.C.
June 27, 1980

441,000E. 442,000E. 443,000E. 444,000E. 445,000E.

5,414,000N. 5,413,000N. 5,412,000N. 5,411,000N.

N

D D'

E E'

SEATTLE L570

LITTLE NUGGET L336

BELLE L329

RICHARD III L334

SRM 12 SRM 13 SRM 14 SRM 15 SRM 16 SRM 17 SRM 18

CF GROUP #8

NUGGET CREEK

NUGGET CREEK FAULT

INDEPENDENCE FAULT

HERMES FAULT

MINE FAULT

DUNCAN

BL 0 N

BL 54 N

BL 29 N

BL

R.C. TO RELAY STATION

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
8264

LEGEND: MAP SYMBOLS

- Geological boundary
- Facies change
- Fault
- Schistosity
- Bedding
- Diamond drill hole
- SEREM drill hole
- Shaft
- Adit
- Trench
- CP Chalcopyrite
- Zn Positive Zinc test
- Contour line (50 meter intervals)
- Creek
- Road

SEREM LTD.

PROJECT: MOUNT SICKER

TITLE: GEOLOGY

NTS: 92B 13

SCALE: 1 : 5000

DATA: FIELD

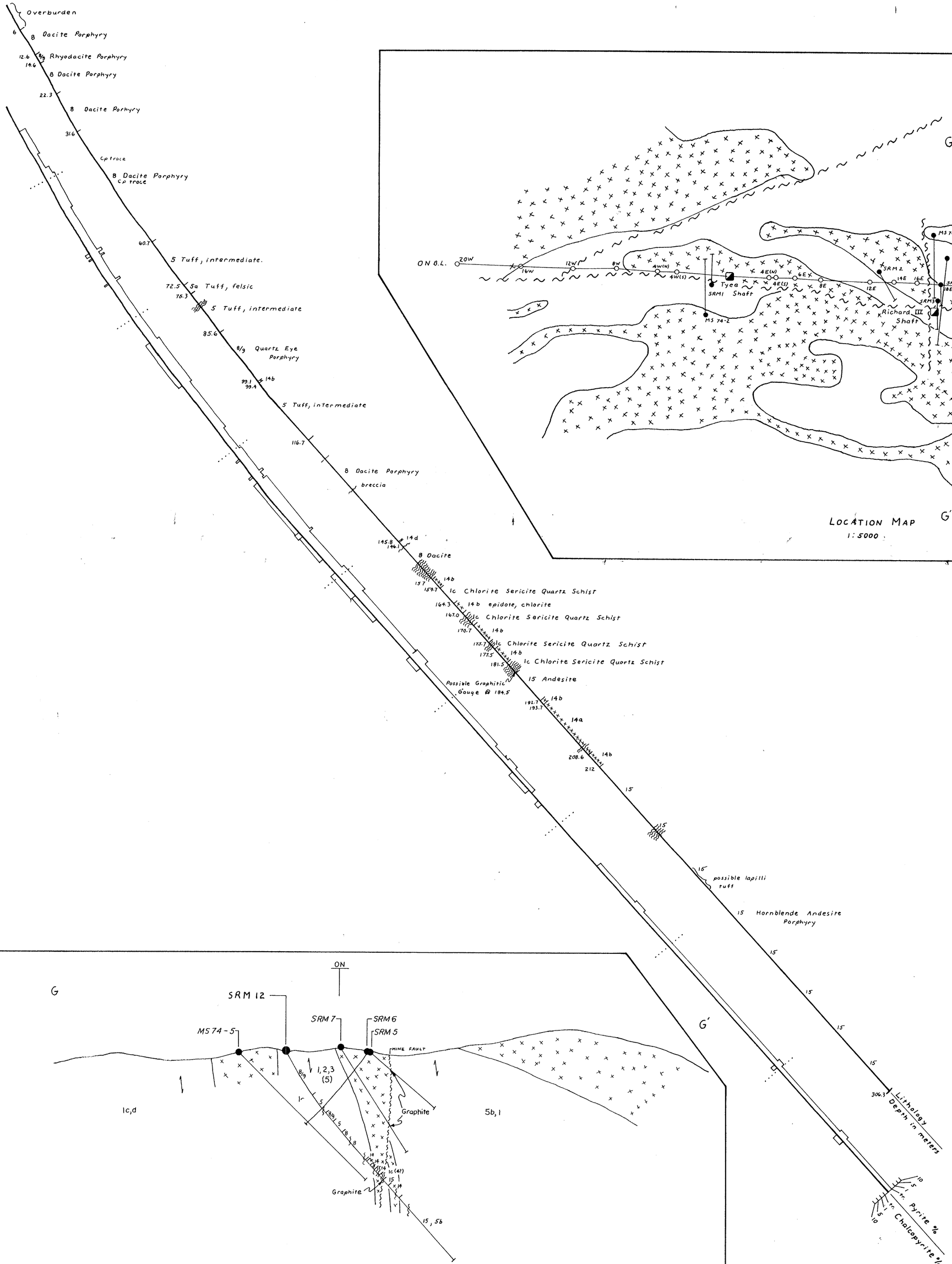
DRAWN: G.A., D.G.D.

DATE: DEC. 79

MAP 3

LITHOLOGY

1a	QUARTZ SCHIST	a—Sericite
1b		b—Sericite Augen
1c		c—Chlorite Sericite
1d		d—Chlorite Sericite Augen
2a	SCHIST	a—Sericite
2b		b—Sericite Augen
2c		c—Chlorite Sericite
2d		d—Chlorite Sericite Augen
3a	CHLORITE SCHIST	a—Chlorite
3b		b—Sericite Chlorite
4a	GRAPHITIC SCHIST	a—Black Graphitic schist
4b		b—Graphitic Sericite Schist
5a	FELDSPAR CRYSTAL TUFFS (includes some flows)	a—Rhyolitic to Dacitic
5b		b—Andesitic
6	META-QUARTZITE	
7	SLATE/PHYLLITE	
8	DACITE (includes some tuffs)	
9	RHYOLITE	
10	CRYPTOCRYSTALLINE QUARTZ	
11	HORNFELLS	
12	QUARTZ FELDSPAR PORPHYRY	
13	GRANITOID INTRUSION	
14a	GABBROIC INTRUSION	a—Gabbro
14b		b—Diabase
14c		c—Diorite
14d		d—Schistose derivations of a,b or c
15a	ANDESITE,	a)—Schistose Andesite
16	LATE RHYOLITE/LATITE	
17a	SOOKE GROUP SEDIMENTS	a—Fine grained siliceous, tuffaceous sediments
17b		b—Andesitic tuffaceous sediments
17c		c—Siliceous argillite
17d		d—Banded chert
17e		e—Pebble to cobble conglomerate
18a	NANAIMO GROUP SEDIMENTS	a—Breccia, conglomerate
18b		b—Litsic wacke
18c		c—Mudstone, shale
19	INTERMEDIATE TO FELSIC PORPHYRITIC INTRUSIVE	



8264

SEREM LTD. APRIL 1980

MT. SICKER
DDH SRM 12
GRAPHIC LOG AND SULPHIDE LOG

North-South Section, Looking East

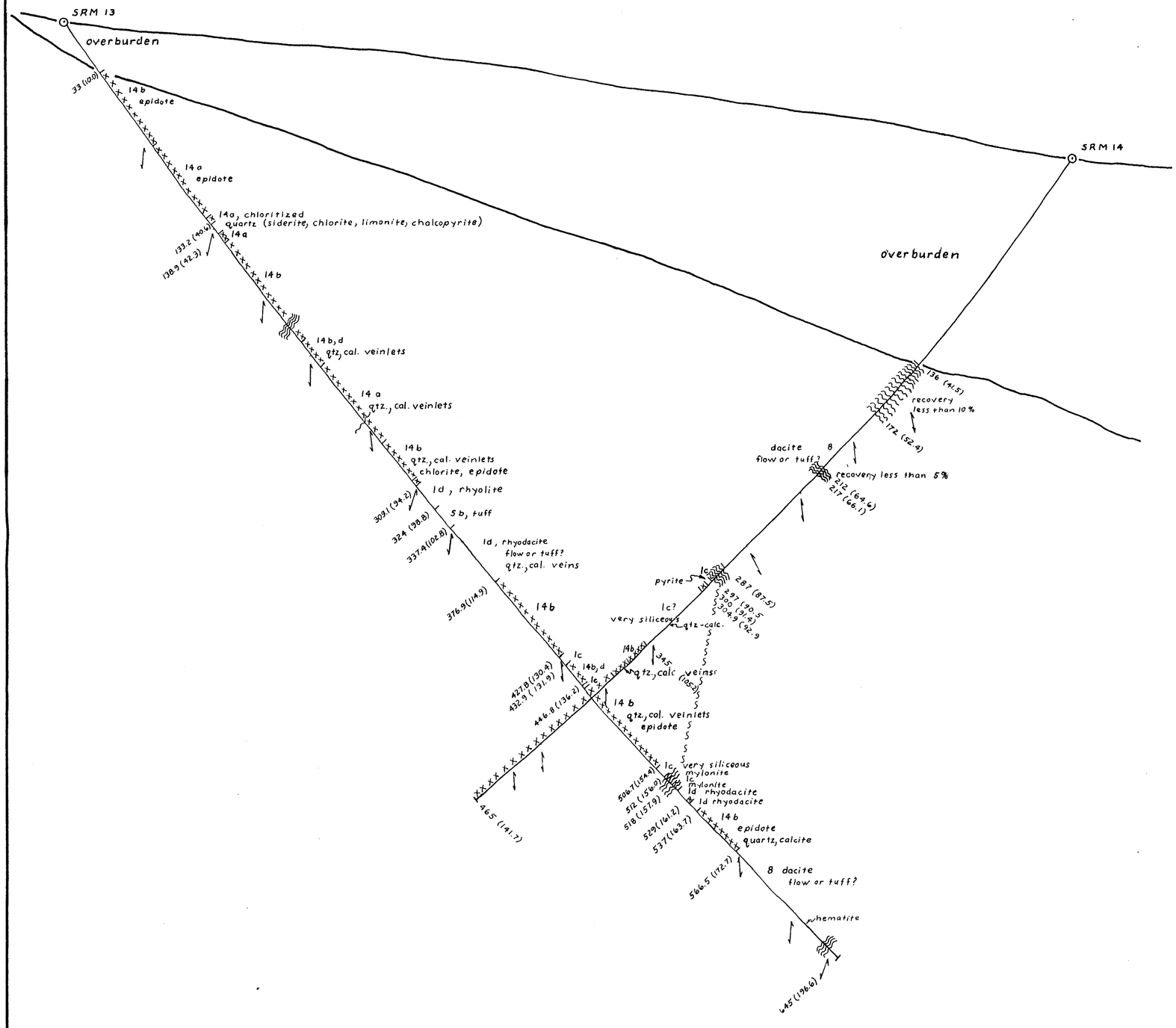
Rock Unit Numbers Refer to 1979 Map Legend

xxx Gabbro, Diabase or Derivative

Fault

Scale 1"=40' or 1:480

Fig. 4



LEGEND:

1. Quartz Schist
   - c. chlorite sericite
   - d. chlorite sericite augen

8 Dacite

14. Gabbroic Rocks
   - a. gabbro
   - b. diabase
   - d. schistose derivative of a. or b.

Gabbro

Fault

Schistosity

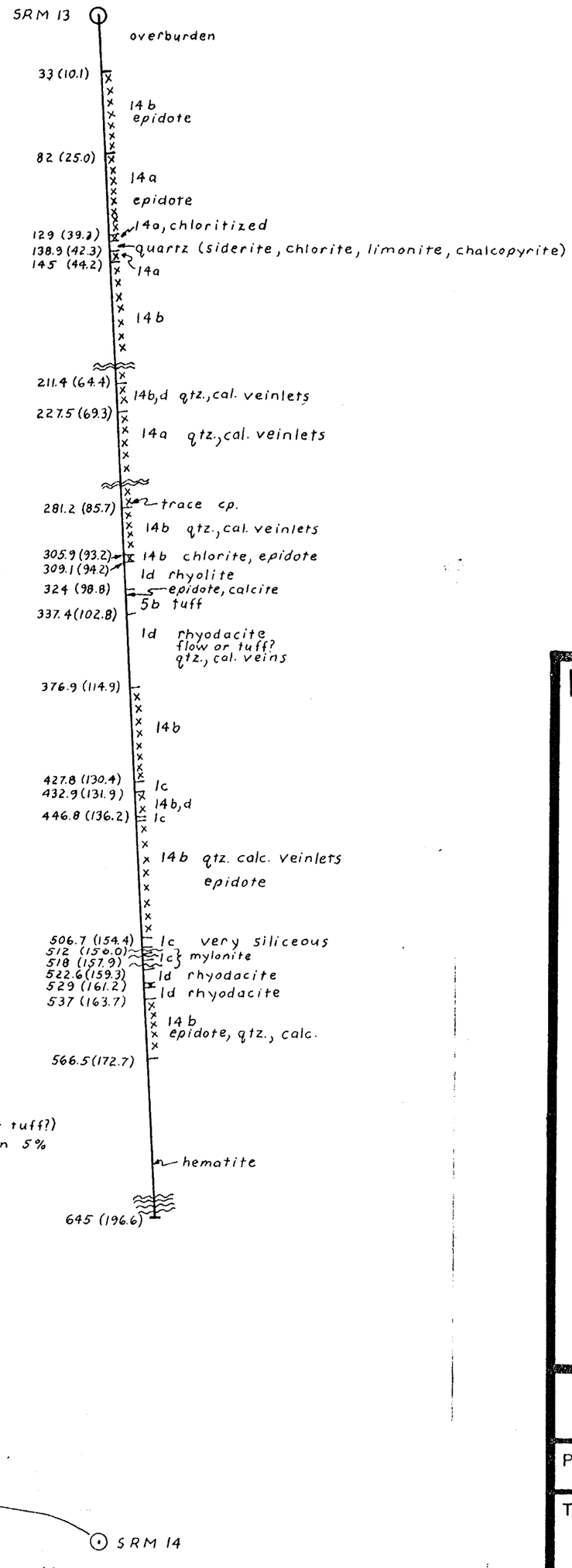
SEREM LTD.

PROJECT: Mt. SICKER

TITLE:
C ZONE
DDH SRM 13,14
GRAPHIC LOG

NTS:	SCALE:	DATA:
92 B 13 W	1:480 projection on to vertical north-south plane	DRAWN: PAR
		DATE: JUNE, 1980

FIGURE 5



For clarity, schematic moved 30 m. west of actual location.

LEGEND:

1. Quartz Schist
   - c. chlorite sericite
   - d. chlorite sericite augen

8 Dacite

14. Gabbroic Rocks
   - a. gabbro
   - b. diabase
   - d. schistose derivative of a. or b.

⁂ Gabbro

ʃ Fault

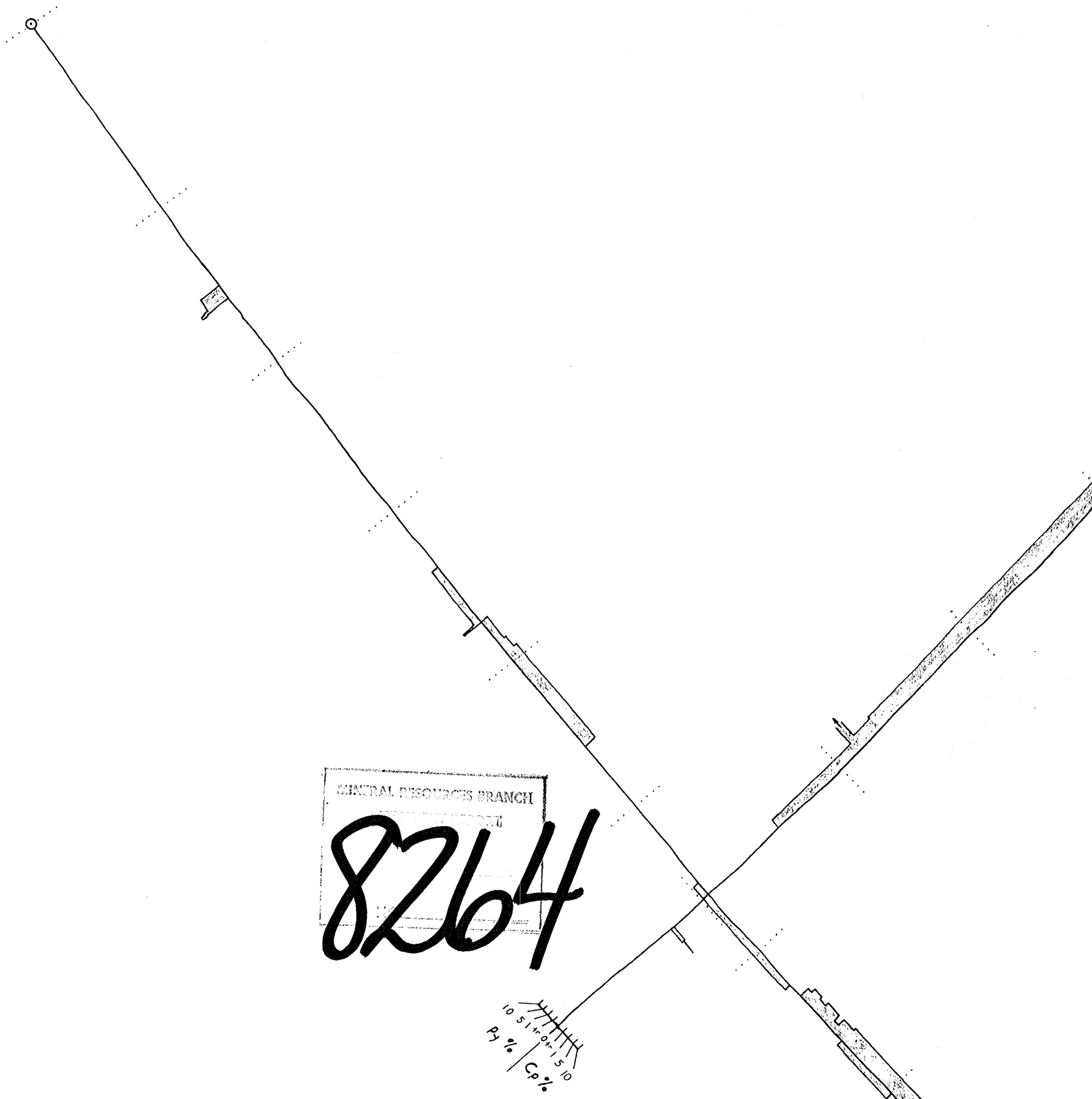
✓ Schistosity

SEREM LTD.

PROJECT: Mt. SICKER

TITLE:
C ZONE
DDH SRM 13,14
GRAPHIC LOG

NTS:	SCALE:	DATA:	FIGURE
92 B 13W	1:480 Plan View	CVH	6
		DRAWN: PAR	
		DATE: JUNE, 1980	



SEREM LTD.

PROJECT: Mt. SICKER

TITLE:

C ZONE
DDH SRM 13,14
GRAPHIC SULPHIDE LOG

NTS:	SCALE:	DATA:	FIGURE
92 B 13 W	1:480 projection on to vertical north-south plane	DRAWN: PAR	7
		DATE: JUNE, 1980	

Mt. Sicker
Nugget Creek Area
Geology, Geophysics and Drill Holes

Fig. 8

Drill Hole, SEREM, other

Geologic Boundary

Pulse E.M. Conductor

Schistosity

Topographic Contour

Road

Grid:
Station
Base Line
Line Number

SCALE 1: 2,500

1 Quartz Schist
- a sericite
- b sericite augen
- c chlorite sericite
- d chlorite sericite augen

2 Schist
a, b, c, d as above

3 Chlorite Schist
- a chlorite
- b sericite chlorite

5b Andesitic Tuff

8 Dacite

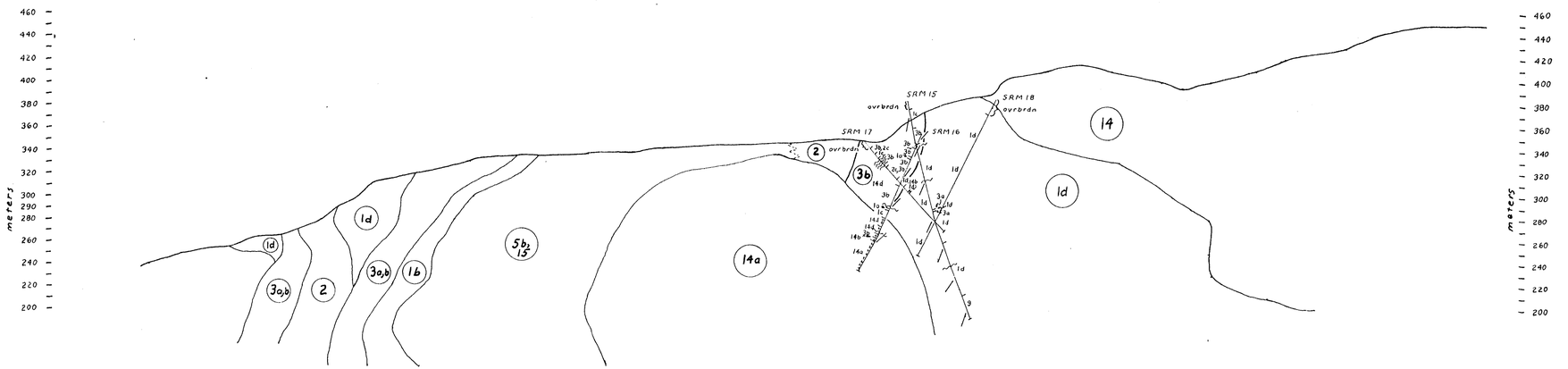
9 Rhyolite

12 Quartz Feldspar Porphyry

14 Gabbroic Rocks
- a Gabbro
- b Diabase

15 Andesite

928



LEGEND:

1. Quartz Schist
   - a. sericite
   - b. sericite augen
   - c. chlorite sericite
   - d. chlorite sericite augen

2. Schist
   - a. sericite
   - b. sericite augen
   - c. chlorite sericite
   - d. chlorite sericite augen

3. Chlorite Schist
   - a. chlorite
   - b. sericite chlorite

5. b. Andesitic Tuff

9. Rhyolite

14. Gabbroic Rocks
   - a. gabbro
   - b. diabase

15 Andesite

- Drill Hole
- Geologic Boundary
- Fault, Fault Zone
- Topographic Surface

8264

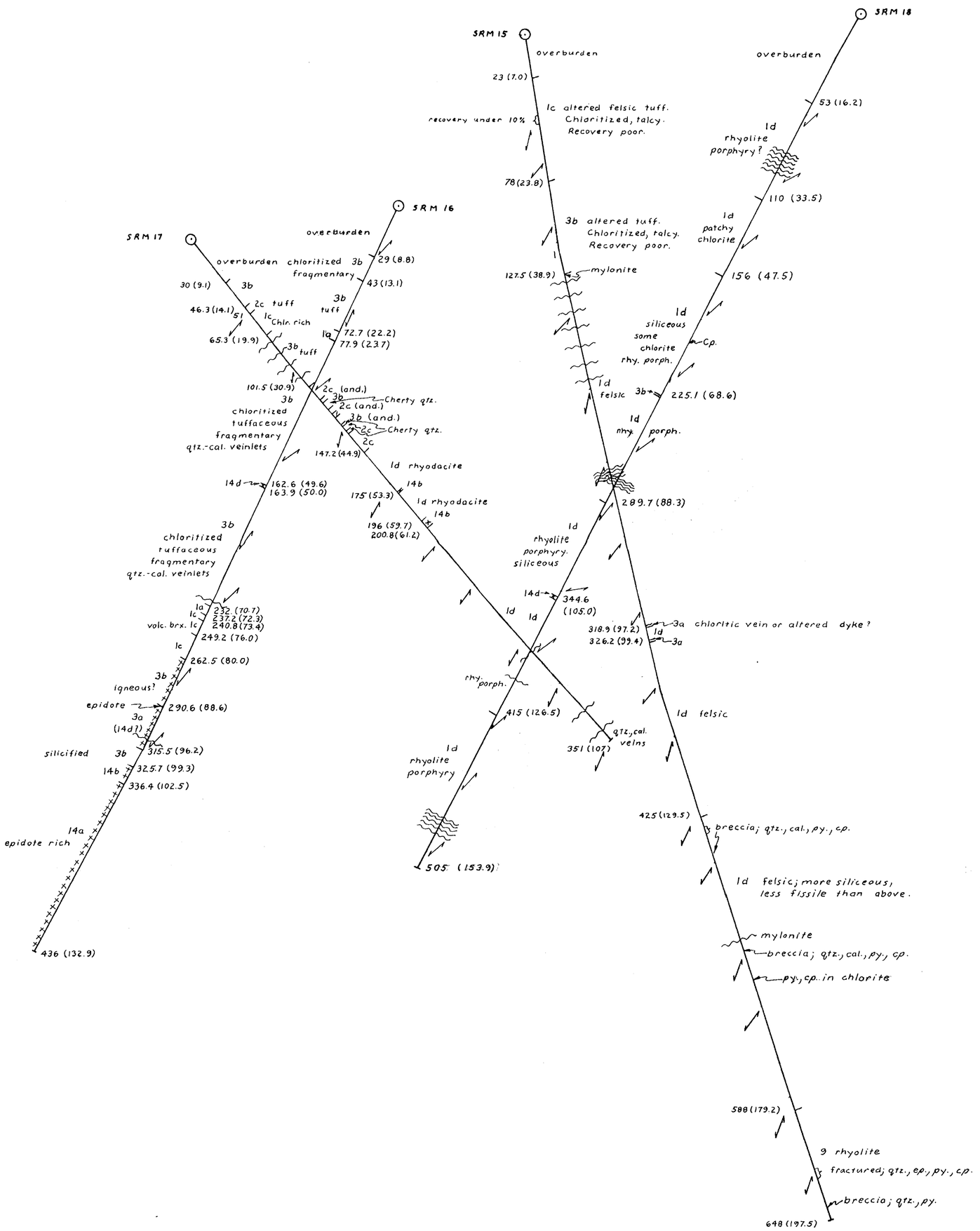
SEREM LTD.

PROJECT: Mt. SICKER

TITLE:

NUGGET CREEK AREA
GEOLOGICAL CROSS SECTION

NTS:	SCALE:	DATA: GA, PAR, CVH	FIGURE
92 B 13 W	1: 2,500	DRAWN: PAR	9
		DATE: JUNE, 1980	



LEGEND:

1. Quartz Schist
   - a. sericite
   - b. sericite augen
   - c. chlorite sericite
   - d. chlorite sericite augen
2. Schist
   - a. sericite
   - b. sericite augen
   - c. chlorite sericite
   - d. chlorite sericite augen
3. Chlorite Schist
   - a. chlorite
   - b. sericite chlorite
9. Rhyolite
14. Gabbroic Rocks
   - a. gabbro
   - b. diabase
   - c. diorite
   - d. schistose derivative of a, b or c

Gabbro

Fault

Schistosity

*projection on to vertical north-south plane

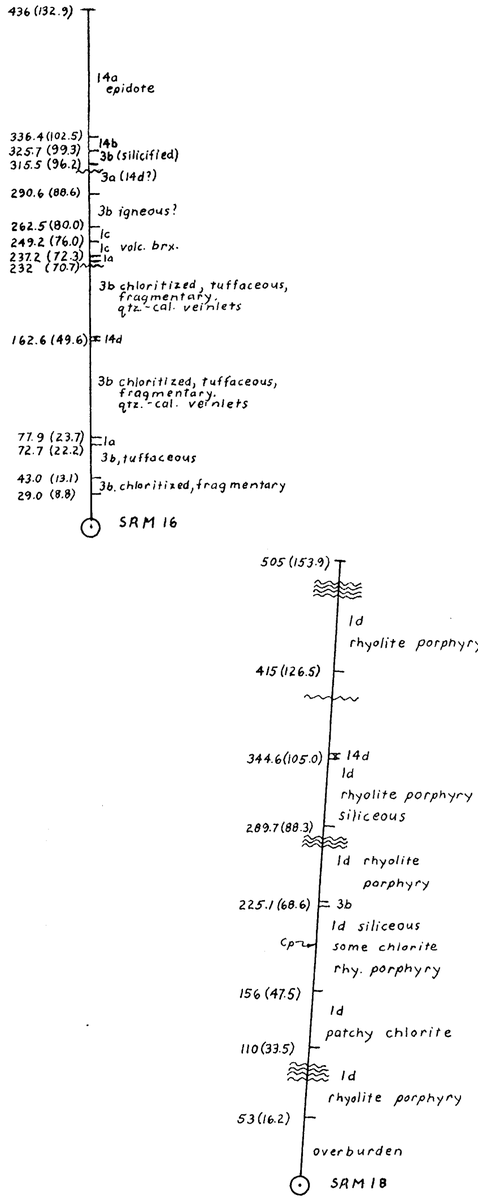
8264

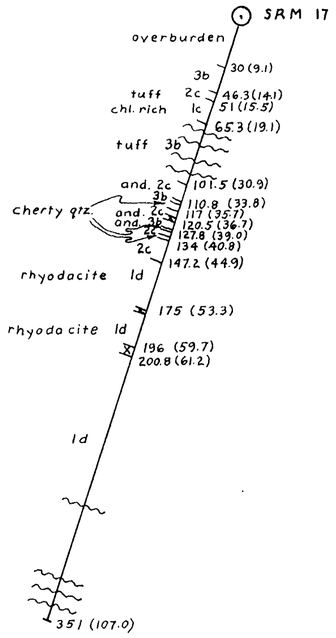
SEREM LTD.

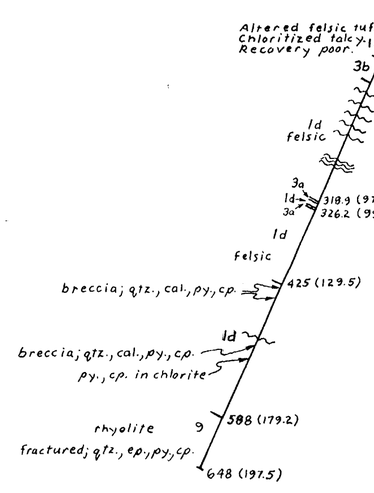
PROJECT: Mt. SICKER

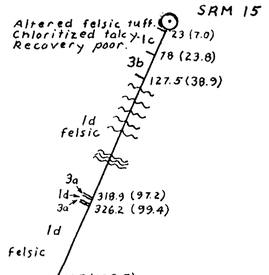
TITLE: NUGGET CREEK AREA
DDH SRM 15,16,17,18
*GRAPHIC LOG

NTS:	SCALE:	DATA: CVH	FIGURE
92 B 13 W	1 : 480	DRAWN: PAR	10
		DATE: JUNE 1980	









LEGEND:

1. Quartz Schist
   - a. sericite
   - b. sericite augen
   - c. chlorite sericite
   - d. chlorite sericite augen
2. Schist
   - a. sericite
   - b. sericite augen
   - c. chlorite sericite
   - d. chlorite sericite augen
3. Chlorite Schist
   - a. chlorite
   - b. sericite chlorite
9. Rhyolite
14. Gabbroic Rocks
   - a. gabbro
   - b. diabase
   - c. diorite
   - d. schistose derivative of a, b or c

* plan view

× Gabbro

Fault

Schistosity

SEREM LTD.

PROJECT: Mt. SICKER

TITLE: NUGGET CREEK AREA
DDH SRM 15,16,17,18
*GRAPHIC LOG

NTS:	SCALE:	DATA: CVH	FIGURE
92 B 13 W	1 : 480	DRAWN: PAR	11
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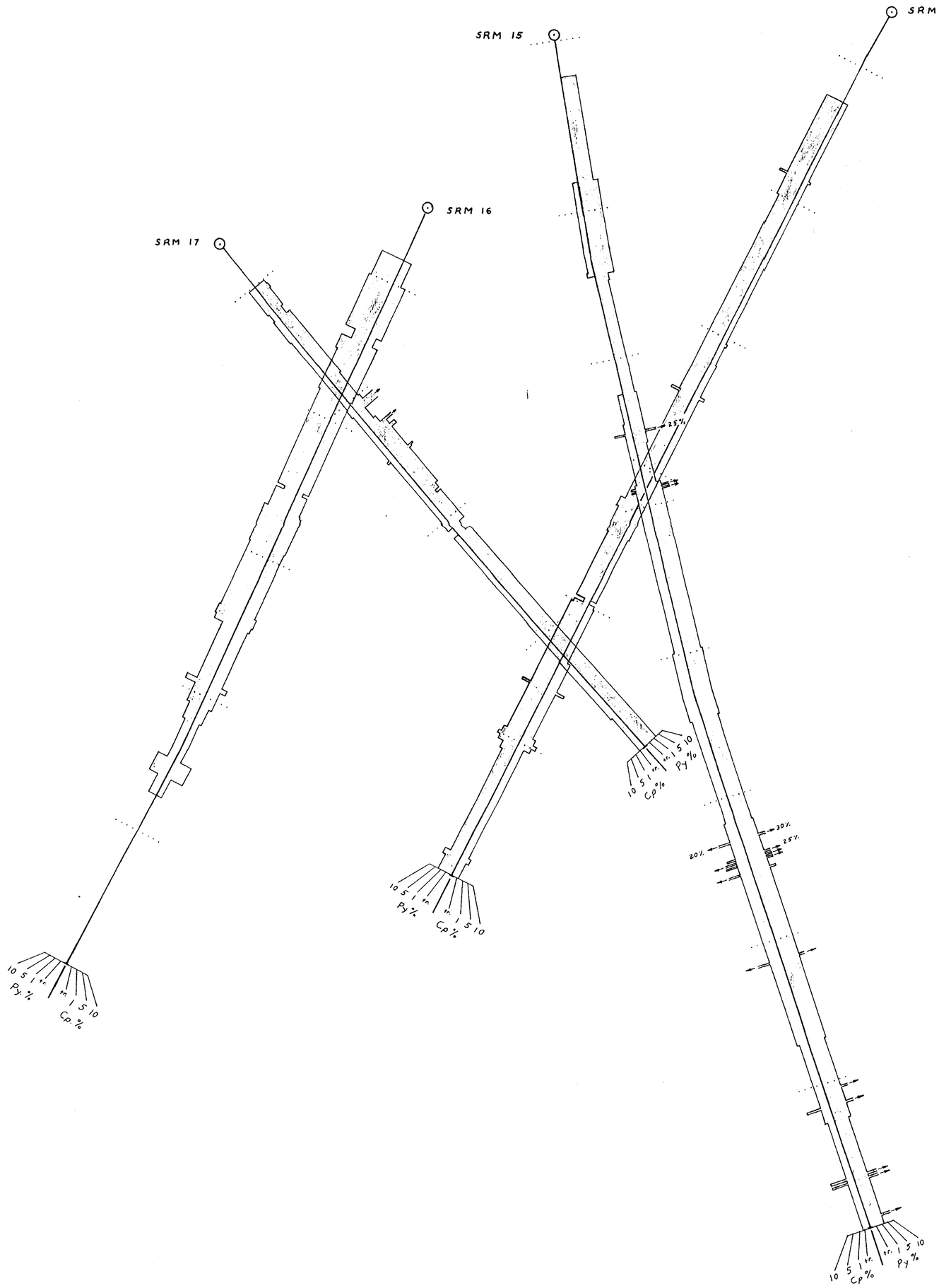
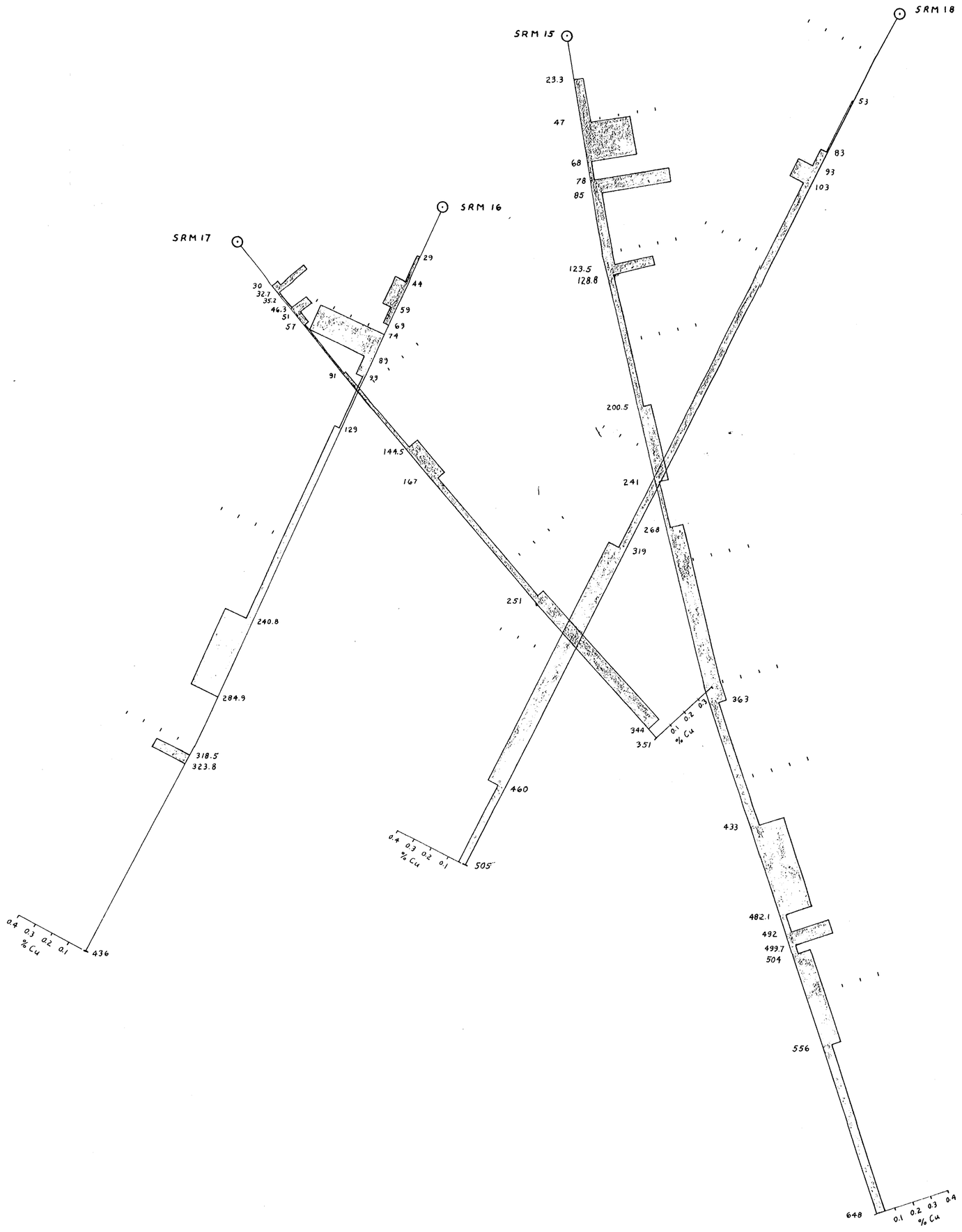


SEREM LTD.

PROJECT: Mt. SICKER

TITLE: NUGGET CREEK AREA
DDH SRM 15, 16, 17, 18
GRAPHIC SULPHIDE LOG
PYRITE, CHALCOPYRITE

NTS:	SCALE:	DATA:	FIGURE
92 B 13 W	1:480 projection on to vertical north-south plane	CVH	12
		DRAWN: PAR	
		DATE: JUNE 1980	



SEREM LTD.

PROJECT: Mt. SICKER

TITLE: NUGGET CREEK AREA
DDH SRM 15,16,17,18
GRAPHIC ASSAY LOG
COPPER

NTS:	SCALE:	DATA: CVH	FIGURE
92 B 13 W	1 : 480 projection on to vertical north-south plane	DRAWN: PAR	13
		DATE: JUNE 1980	