520422

SURFACE GEOLOGY AND SOIL GEOCHEMISTRY
ENTERPRISE MINE
SLOCAN MINING DIVISION, B.C.

NTS 82F/14W

LATITUDE 49°49' LONGITUDE 116°19'

ARCTEX ENGINEERING SERVICES

where are ours

NTS

L.B. GOLDSMITH, P.ENG
CONSULTING GEOLOGIST
OWNER, OPERATOR, CONSULTANT, AUTHOR

NOVEMBER 1979

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SURFACE GEOLOGY AND SOIL GEOCHEMISTRY
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SUMMARY

A programme of prospecting, soil sampling and geological mapping on claims of the Enterprise Mine has outlined three target areas for additional exploration on surface. Underground workings are accessible and should be thoroughly sampled and mapped to detail ore which is readily available. Object of the exploration is to locate high-grade, direct-shipping silver-lead-zinc ore with a high silica content.

A cost estimate of $126,000.00 to continue evaluation through the next stage is presented.

INTRODUCTION

The Enterprise property is located 14.5 km (9 miles) at azimuth 172° from Silverton, B.C. on the steep southern slope of Enterprise Creek. Access is by a recently improved logging road for 8 km (5 miles) up Enterprise Creek from a point on Highway 6 which is 11 km (6.8 miles) south of Silverton.

The claims were acquired by the author of this report and his associates November 3, 1978 in a drawing for lapsed crown grants. Because the claims were drawn singly instead of as a unit the ownership was fragmented but the key claims were obtained. From northeast to southwest the claims now held are:

United Empire	L2103
London Fraction	L5664
Sunset Fraction	L14541
Slocan Queen	L1015
Enterprise Fraction	L4522
Enterprise	L1014 (acquired Nov. 9, 1979)
Empress Fraction	L8400

All of the claims which were held for the past year were prospected and of these only the Enterprise Fraction (1.6 acres) did not have soil samples taken for geochemical analyses. A total of 170 soil samples and 3 samples of vein material were analysed. Prospecting and soil sampling were supervised and performed by the author; geological mapping was done by the author. Approximately 8 km of grid was established.

Early history of the mine is summarized by Cairnes (2, p. 172-174) and is reproduced below.

ENTERPRISE MINE

References: Ann. Repts., Minister of Mines, B.C., 1896-1928; 1896, pp. 69, 70; 1904, p. 171; 1924, pp. 200-201; and other years.
Rept. of Zinc Commission, 1906, p. 225.

The Enterprise property comprises the Enterprise, Enterprise fraction, Slocan Queen, and Iron Horse No. 2 Crown-granted claims. It is situated on the lower southern slope of Enterprise (Tenmile) creek about 2,200 feet above and 8 miles by road from Enterprise landing on Slocan lake. The property was acquired in 1928 by Yankee Girl Consolidated Mines, Limited, Vancouver, B.C.

The ore produced by the Enterprise mine exceeds in quantity and total value that of any other property in Slocan City mining division. The main Enterprise lode was located in 1894. The property was sold in 1895 or 1896 and then acquired by the Enterprise (B.C.) Mines Company, Limited, which held the property until 1928 when it was secured by the present owners. Enterprise Mines operated the property until about 1901 since when it has been operated at intervals by lessees.

The first production recorded was 160 tons of silver-lead ore shipped in 1896. This ore carried, on the average, 163 ounces in silver to the ton and 23 per cent lead. Up to the end of 1905 the property is credited with 6,212 tons of silver-lead ore carrying an average of 122 ounces in silver to the ton and about 19 per cent lead. The shipments of this period doubtless included considerable zinc, of which no complete record is available. According to the Zinc Commission the production up to 1906 included 8,215 tons of shipping ore, of which 2,466 tons were concentrates from the mill and 5,749 tons hand-sorted ore. Included in this tonnage was a middling product sold as silver ore, though containing 27·98 per cent zinc, 71·6 ounces in silver to the ton, and 2 to 4 per cent lead. Up to the end of 1919 shipments included 6,810 tons, averaging 121 ounces in silver to the ton and about 19 per cent lead. No shipments are recorded in the years 1920-1924 inclusive, but in 1925, 1926, and 1927 a total of 1,746 tons of silver-lead-zinc milling ore was shipped. Values of the 1927 shipments are unknown, but in the previous two years 929 tons of ore averaged about 20 ounces in silver to the ton, about 12 per cent lead, and 29 per cent zinc.

The underlying rock on this property is chiefly coarse-grained porphyritic granite of the Nelson batholith. In places both in the underground workings and at the surface more basic phases form irregular bodies of varying size, most of which appear to be either digested inclusions or differentiates of the granitic magma. The granitic rocks are intersected by a few, small, basic dykes, varying from hornblende porphyrite to olivine and olivine-diallage lamprophyres. One at least, and probably two, narrow dykes of the lamprophyre types were observed to cut across the Enterprise lode on No. 5 level. Others are pre-mineral and are involved in the faulting that disrupts this lode.

The main or Enterprise lode has been developed by nine adits, several intermediate levels, and two shafts on a slope facing northeasterly. One shaft was sunk on the lode about 50 feet above and 300 feet southwest of the portal of the uppermost level and the other on the lode from a point 35 feet below and a short distance northeast of the lowest adit. The lower shaft is on the Iron Horse No. 2 claim and is reported to have followed the lode to a depth of 214 feet. The difference in elevation between the collar of the upper shaft and the bottom of the lower shaft is in the neighbourhood of 1,100 feet and the two shafts are about 2,200 feet apart horizontally.

The lode is continuous between the two shafts and throughout this distance the mineralization has an encouraging character. It is narrow,

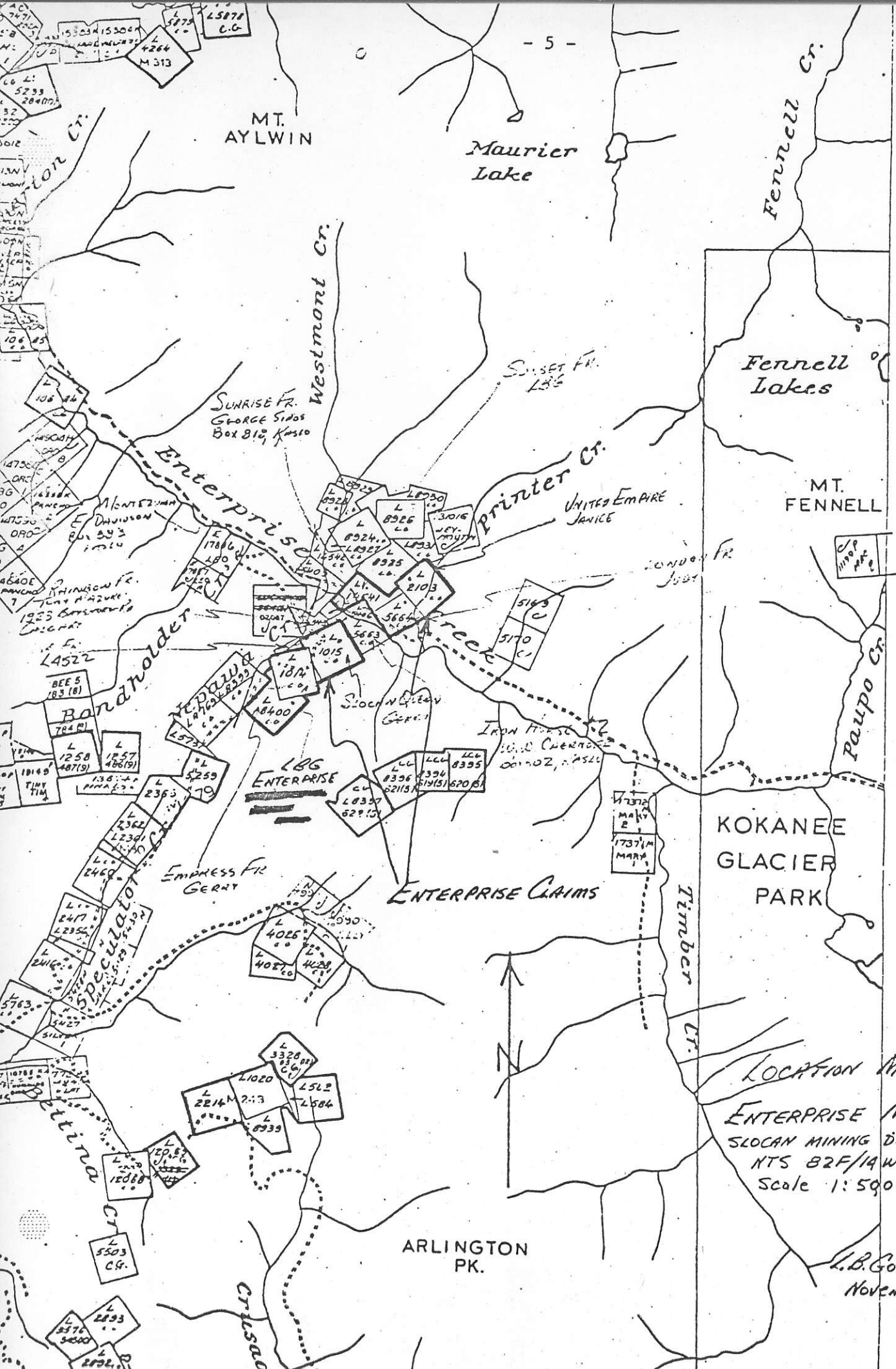
in but few places exceeding 1½ feet in width and averaging less than 1 foot. The lode is a mineralized fissure striking north 50 degrees east and dipping from 60 to 80 degrees southeast. In the upper levels it was filled chiefly by varying proportions of quartz and ore minerals. Most of the ore has been stoped out above the sixth level and the workings above are largely inaccessible, though some work has been done in recent years on the fourth level. Above the sixth level the ore minerals were largely galena carrying grey copper or other silver-bearing minerals. In the lower workings zinc blende became increasingly abundant. The zinc blende is claimed to carry better silver values than the galena and these are said to persist to the lowest workings, zinc ore carrying as much as 90 ounces in silver a ton having been obtained from the lower shaft on the Iron Horse claim. Other ore minerals are pyrite and chalcopyrite.

The Enterprise lode is interrupted by one major fault or fault zone and by minor faults. The major fault intercepts the lode nearly at right angles about midway between the two shafts and dips steeply northeast. It offsets the lode about 60 feet to the left. The other faults cause only slight displacements. On either side of the main fault vein matter formed an almost continuous ore shoot which pitched towards the northeast. Along the sixth level, stoping was continuous for 650 feet and, 100 feet above this level, for 325 feet. Coincident with the increase of zinc blende with depth siderite became conspicuous and is notably abundant on the lowest level. Towards the face of this level, however, quartz is again the predominant gangue, the vein matter including, in places, from 6 to 12 inches of chiefly banded, massive zinc blende and quartz.

Some stoping has been done above the lowest level over a length of 400 feet, but above this there remains a large block of ground yet to be explored. It would appear that work might be extended to investigate the lode below the sixth adit level west of the big fault, though the character of the lode on the lowest (No. 7), and the third lowest (No. 5), adit level indicates that mineralization below these older, more westerly workings is likely to be zincy in character.

Aside from the extensive developments on the main Enterprise lode, a little work has been done on a second lode outcropping 380 feet to the west and on a level with the portal of the seventh adit. In 1927 it had been drifted on for about 150 feet. It is a wide shear zone in the granitic rocks and is composed mostly of crushed rock, partly cemented by quartz gangue with a little calcite. It strikes about north 40 degrees east and dips 70 degrees east. The hanging-wall is particularly well defined. In character and width this lode bears some resemblance to that developed so extensively in the Arlington mine and with which it is presumed to be continuous, though the two have not been traced to a junction. It seems likely that both lodes at the Enterprise mine and those on adjoining properties are within a single, wide zone of fissuring, shearing, and brecciation, and that to the southwest this zone passes through the Arlington, Speculator, and intervening properties. It is more doubtful whether any single fissure persists for this distance. Exploratory work conducted within such a zone involves much crosscutting to assure that no important mineralized fissure is being overlooked.

In 1945 the Western Exploration Company reopened the mine and operated it for millfeed until 1953. During 1947 most of the total production of the company came from the Enterprise, being 6,125 tons containing 11 ounces Au (0.0018 oz/ton Au), 66,008 ounces Ag (10.78 oz/ton Ag), 432,683 pounds Pb (3.53% Pb) and 1,475,083 pounds Zn (12.04% Zn).



LEGEND

ROWN-GRANTED MINERAL CLAIM
EVERTED C.G. MINERAL CLAIM
ORFEITED MINERAL CLAIM
ERIFIED LEGAL CORNER POST
EGAL SURVEY
EGAL CORNER POST & TAG NUMBER

Miles 1 .5 0 1 2 Miles
Metres 1000 500 0 1000 2000 3000 Metres
Kilometres 1 .5 0 1 2 3 Kilometres

UNLESS ...FIED OR SURVEYED, THE MAP POSITION OF A LEGAL CORNER POST IS BASED ON THE LOCATOR'S SKETCH. FOR FURTHER INFORMATION, APPLY TO THE OFFICE OF THE MINING DIVISION CONCERNED.

DATE OF MICROFILM: 78·10·26

LOCATION MAP
ENTERPRISE MINE
SLOCAN MINING DIVISION
NTS 82F/14W
Scale 1:50000

L.B. Goldsmith, P.Eng.
November, 1979

MAP 1

(Reference 1). Lessees have extracted small quantities of ore since 1953 in at least two periods (1966-68 and 1974-76), the most recent operator being Len Freise, now retired in Nakusp, B.C. (Personal communication with L. Freise).

MINDEP computer files (3) list the total production and grade through 1978 as:

Tons	oz/ton Au	oz/ton Ag	% Pb	% Zn
12,274	0.0005	95.2	16.5	21.9

The recorded tonnage is believed to be low; the author has seen a figure of 29,000 tons of a similar grade.

GEOLOGY

The claims are underlain by porphyritic granodiorite and dioritic phases of the Nelson batholith. Soil and talus cover is heavy and outcrops are scarce except in the extreme northern and southern portions of the claims. Location of assumed contacts has been based in part upon the preponderance of types of rock fragments in soil cover and the prevailing slope direction. The valley floor of Enterprise Creek is filled with transported alluvium.

In hand specimen the free quartz content generally appears to be too low for a porphyritic granite; thus the rock has been classified as a porphyritic granodiorite. Individual crystals of orthoclase feldspar may be as long as 50 centimetres, averaging perhaps 20 centimetres, in a more nearly equigranular (0.5 - 1.0 cm) groundmass of orthoclase, plagioclase and quartz with minor biotite and hornblende. Orthoclase content exceeds that of plagiclase.

The diorite or dioritic phase is generally less porphyritic and the percentages of orthoclase and plagioclase are more nearly equal. Ferromagnesian minerals may approach quantities of 25% - 30% although 20% is more common.

Zones of shearing trend 040° - 050° and dip steeply southeasterly. The Enterprise vein occupies one such zone. At least three other shears are present, one near the northwest side of the Slocan Queen claim, one west of the 5 level portal (previously called No. 2 vein) and one (or two) on the Empress Fraction claim.

Cairnes records cross-faults which trend northwesterly and offset the northeast-trending shears. Narrow fractures near the 3½ level portal which strike approximately 135° may belong to this system.

SOIL GEOCHEMISTRY

Base line for the grid was established at azimuth 050°, parallel to the strike of the Enterprise vein, with cross-lines oriented at 140°. Line spacing is 122 metres (400 feet) with sample intervals of 30.5 metres (100 feet). Samples were taken with a narrow elongate spade at depths of 20 cm (8 inches) below the organic debris. Soils are nearly uniformly light-coloured and sandy with varying proportions of light-coloured (usually light-brown-orange) clay minerals.

Analyses for silver, lead and zinc were performed by Loring Laboratories Ltd., 629 Beaverdam Road N.E., Calgary, Alberta. Samples are screened to -80 mesh and 500 mg of the fine fraction is weighed into test tubes. Aquaregia is added and the sample is digested in a water bath at 100°C for three hours. Test tubes are then bulked to the 10 ml level, mixed and allowed to settle overnight. The samples are then put through the atomic absorption, with appropriate standards, and the results reported in parts per million.

Background metal values for lead and silver are averaged for 70 samples from lines 12 + 00N to 32 + 00N above the alluvium level where the soils are not deemed to be anomalous, and found to be 20 ppm Pb and 0.6 ppm Ag. Zinc analyses had not been requested but the laboratory inadvertently analyzed one batch of samples; coverage is not adequate to calculate background values but a subjective scan sets a background level at approximately 90 ppm although there are broad fluctuations from this figure. There may be a vague direct relationship between soils which have an interpreted diorite association and higher zinc values but zinc from rock minerals is probably overprinted by zinc from sulphide zones.

Lead values clearly increase near the Enterprise lode as it is approached from either the northwest or southeast. Silver also peaks near the lode although in a less pronounced fashion than lead.

The most unambiguous single anomalous analysis of 280 ppm Pb and 8.5 ppm Ag is from 12 + 00S, 4 + 00E where there is no evidence of contamination from mining operations, and the sample is located on the trace of the Enterprise lode. This sample is high on the valley slope of a stream which cuts the lode at approximately 14 + 00S, 4 + 00E, or 60 metres (200 feet) grid south.

Other anomalous values listed below could possibly be attributed to stream transport or to man-made disturbances. However, in every instance the soil texture and colour (recorded at the time of sampling) is appreciably different from the balance of the samples. At these locations the soil contains more clay, is damper and is dark brown in colour. It is possible that a very old slide which crossed the Enterprise lode may have mixed and transported soils, organics and metals downslope. None of the sites are particularly flat, nor is there evidence of ore stockpiles.

Location	Pb ppm	Ag ppm	Soil Description
4+00S, 1+00W	240	2.8	Dark brown, coarse sand, lesser clay. Skid trail (?) on slope direction passes at 0+80 W. Porph. grano. fragments.
8+00S, 1+00W	760	5.6	Dark brown to tan, sand and clay and fine rock fragments. Deeper soil without coarse rock. In clearing (15m x 15m) with Devil's Club, 10 metres downslope from road.
8+00S, 1+00E	159	3.5	Brown sand with clay. Porph. grano. and dioritic fragments. Descending into road cut. Stream at 1+20E.
12+00S, 1+00E	240	5.5	Dark brown sand and clay. Porph. grano. gragments. Clearing, with Devil's Club. Possibly very old slide area 4 metres downslope from road.
12+00S, 2+00E	187	3.2	Dark brown clay and sand. Porph. grano. gragments. 2 metres downslope from road.

Values from lines 4 + 00S and 8 + 00S if correlated to line 12 + 00S appear to be offset southeasterly; this offset would be in the same left-hand relationship as the cross-fault noted by Cairnes which should cross the grid in the vicinity of line 12 + 00S.

On the Empress Fraction claim the geochemical values in the vicinity of trenches and adits are approximately three times background in lead and two times background in silver. Two parallel zones are indicated.

In the northeastern portion of the property two samples at 32 + 00N, 4 + 00E and 5 + 00E are two to three times background in lead and two times background in silver. These lie within a stream valley and could have been transported. However, samples taken further downstream do not show anomalous values.

PROSPECTING

Surface

Prospecting was conducted on approximately 30 metre (100 foot) traverses between the established grid lines, in addition to coincident prospecting with soil sampling. Because drainages have undoubtedly been examined extensively in the past, more attention was devoted to areas with soil cover.

Three character samples of vein material were collected and assayed. Of primary interest is sample EMP-1 taken from a trench near 36 + 00S, 2 + 00E on the Empress Fraction claim which returned 9.56 oz/ton Ag. The composition is mostly vein quartz with bands of sphalerite. There has been no extensive mining nearby; if an ore shoot is present it has been undisturbed by previous mining operations.

Sample SQ-1 taken from a stope above the 2 level portal assayed 28.82 oz/ton Ag. Quartz with some calcite and ankerite has streaks and blebs of galena and sphalerite. This is of importance as an indication of the grade of mineralization which might have been deemed sub-economic when the level was last worked.

SQ-2 was broken from a chunk (150 cm^3) of quartz and iron carbonate with disseminated galena and sphalerite, from dump material at the mouth of an adit. In-place location of the specimen is unknown but the adit is accessible and should be examined.

A rusty shear zone with a narrow quartz vein in a creek valley on the United Empire claim does not appear to be mineralized. The shear is probably part of the broad Enterprise zone.

An explanation for the anomalous geochemical values on the Slocan Queen claim was not found.

Underground

8 Level. The 8 level drift on the Enterprise vein was prospected along its length of 290 metres (950 feet) from a point 75 metres (250 feet) from the portal where the crosscut intersects the lode. Five samples of vein material were collected but have not yet been assayed.

Much of the vein has been stoped above the drift, particularly from 60 metres (200 feet) to 180 metres (600 feet) measured from the point where the crosscut intersects the lode. Beyond 180 metres to the end of the drift several exploration raises and small stopes have been mined. At the end of the drift the vein digitates into at least three strands of 3 cm width each over 2 metres of exposure.

A little underhand stoping has been done to 1.25 metres (4 feet) below the track intermittently along 45 metres (150 feet) of drift beneath the mined area. The excavations are water-filled but could easily be pumped, washed and sampled.

Exposures of the vein 3 on the hangingwall (southeasterly) side of the drift floor were examined at numerous locations. Where stoping begins nearest to the portal the mineralization is heaviest across 200 cm (8") and consists of sphalerite in bands with irregular blebs and streaks of galena in a quartz-carbonate gangue. Sulphides may comprise 10% of the vein. At a point 150 metres (500 feet) along the lode the width of the mineralization is still approximately 200 cm. Quantity of sulphides is about 10% but galena content increases to perhaps 25% of the total sulphide. Carbonate content has also increased to perhaps 70% of the gangue.

In the last 60 metres (200 feet) of drift the vein narrows to 100 cm (4") with pinches and swells, and breaks into strands. Sulphides are erratically distributed and appear to comprise less than 5% of the vein. Galena content, however, increases to 50% of the sulphides. Tetrahedrite (?)

or finely divided galena is hosted in quartz veinlets. Carbonate and quartz contents are approximately equal.

When assays are available, the results with a map and sample descriptions will form an addendum to this report.

Only portals of other workings were examined. Their condition is noted below:

7 level	Partly caved but accessible. Ladders from 8 level are usable.
6 level	Caved. Could be reopened inexpensively.
5 level	Accessible.
4 level	Caved. Crawl space may be open into a stope.
3½ level	Caved but accessible with a ladder into a stope.
3 level	Badly caved and partly covered with 2 level dump.
2 level	Caved but several hours shovel work would enlarge an opening to provide access.

RECOMMENDATIONS

Surface

1. Additional soil geochemistry should be completed on intermediate lines in the vicinity of 4 + 00S, 8 + 00S and 12 + 00 S near the base line to further define the anomalous zone. If results are encouraging, trenching with a bulldozer-backhoe should be done to expose bedrock. Soil cover appears to be thick and diamond drilling might be required to penetrate overburden.

2. Soil geochemistry should be undertaken, with prospecting and geological mapping, on the newly acquired Enterprise claim.

3. Cleaning of old trenches and new stripping should be attempted on the Empress Fraction to define, sample and map the mineralized zone.

4. The road to the Empress Fraction from 16 + 00S, 4 + 00E should be reopened by bulldozing the scrub alders and minor slides off the right-of-way. This may be completed within a few days of the time of writing this report.

5. Prospecting and limited soil geochemistry to the north of line 32 + 00N should be completed to search for the source of the two weakly anomalous values near the creek.

6. Four short discovery diamond drill holes will be considered to explore the anomaly on the Slocan Queen and the mineralization on the Empress Fraction. Total length of drilling would be in the order of 300 metres (1,000 feet).

Underground

1. Sampling and measuring of all accessible vein material will be undertaken to outline potential mining or salvage blocks. Statistical treatment of the quantative data may assist in guiding exploration. Number of samples is estimated at 100 for a preliminary phase and 200 more for detail, totalling 300. Minor rehabilitation of access routes is anticipated.

2. Geological mapping with particular emphasis on structure should begin with the sampling programme. Controls for lode dilation and zoning patterns will be noted.

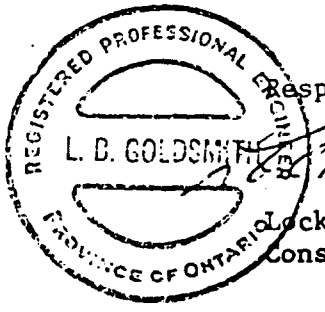
CONCLUSIONS

The Enterprise Mine has provided a moderate tonnage of high-grade silver-lead-zinc ore. In addition, the high percentage of silica is currently purchased as flux when shipped to the Cominco smelter at Trail, some 125 km (78 miles) distance from the mine site.

Exploration should be directed towards discovering new high-grade ore shoots in fissures parallel to the main Enterprise lode, as well as in ummined sections of the Enterprise lode which may now be economic. It is anticipated that ores can be mined and shipped directly to a smelter without milling.

COST ESTIMATE

Surface (Items 1 - 6 refer to Recommendations 1 - 6)			
1.	Soil geochemistry, 100 samples @ $3.00 each	$ 300.00	
	Grid, sample collection	500.00	
	Assays, 10 @ $20.00 each	200.00	
	Equipment rental, 50 hrs. @ $40.00/hr.	2,000.00	$ 3,000.00
2.	Soil geochemistry, 100 samples @ $3.00 ea.	300.00	
	Assays, 10 @ $20.00 each	200.00	
	Grid, sample collection	500.00	
	Prospecting	1,000.00	
	Geological mapping	1,600.00	3,600.00
3.	Assays, 25 @ $20.00 each	500.00	
	Equipment rental, 50 hrs. @ $40.00/hr.	2,000.00	2,500.00
4.	Equipment rental, 20 hrs. @ $65.00/hr.	1,300.00	1,300.00
5.	Prospecting	500.00	
	Grid, sample collection	400.00	
	Soil geochemistry, 33 samples @ $3.00 ea.	100.00	1,000.00
6.	Drilling, 300 metres @ $100.00/metre	30,000.00	30,000.00
7.	Supervision	14,000.00	
	Reporting	4,000.00	18,000.00
Surface phase subtotal:			$71,110.00
Underground (Items 1 - 2 refer to Recommendations 1 - 2)			
1.	Sampling	6,000.00	
	Assays, 300 samples @ $20.00 each	6,000.00	
	Equipment time, rehabilitation, 10 hours @ $40.00/hr.	400.00	12,400.00
2.	Geological mapping	10,000.00	10,000.00
3.	Supervision	6,500.00	
	Reporting	5,000.00	11,500.00
Underground phase subtotal			$33,900.00
Total - both phases:			$105,000.00
Contingency @ 20%			21,000.00
TOTAL			$126,000.00



Respectfully submitted,

Locke B. Goldsmith, P.Eng.
Consulting Geologist

Silverton, B.C.
November 30, 1979

ENGINEER'S CERTIFICATE

1. I, Locke B. Goldsmith, am a Registered Professional Engineer in the Province of Ontario and a Registered Professional Geologist in the State of Oregon. My address is Box 29, Silverton, B.C., V0G 2B0.

2. I have a B.Sc. (Honours) degree in Geology from Michigan Technological University and have done postgraduate study in Geology at Michigan Tech, University of Nevada and the University of British Columbia. I am a graduate of the Haileybury School of Mines and am a Certified Mining Technician. I am a member of the Society of Economic Geologists, the AIME, and the Australasian Institute of Mining and Metallurgy.

3. I have been engaged in mining exploration for the past 21 years.

4. I have written the report entitled "Surface Geology and Soil Geochemistry, Enterprise Mine, Slocan Mining Division, B.C.". The report is based upon field work conducted by the author.

5. I control, with associates, 100% interest in the property.

6. I consent to the use of this report in a prospectus or in a statement of material facts related to the raising of funds.

Respectfully submitted,

REGISTERED PROFESSIONAL ENGINEER L. B. GOLDSMITH PROVINCE OF ONTARIO

Locke B. Goldsmith, P.Eng.
Consulting Geologist

Silverton, B.C.
November 30, 1979

REFERENCES

1. B.C.D.M. Annual Report, 1947

2. Cairnes, C.E., Descriptions of Properties Slocan Mining Camp, B.C.: G.S.C. Memoir 184, 1935, p. 172 - 174.

3. University of British Columbia, MINDEP computer files.

ITEMIZED COST STATEMENT, 1979 PROGRAMME

1. Wage Scales:

L. B. Goldsmith, Consulting Geologist

Sept. 16, ½21, ½22, ½29, 30, Oct. ½1, 2, 4, ½5, ½6, ½7, ½8, ½9, ½10, ½11, ½12, 13, 14, ½15, 16, ½18, ½19, ½22, 24, ½25, 26, 27, 28, ½29, ½30, ½31, Nov. ½1, 2, 3, 4, ½5, 6, 7, 8, ½9, ½10, 11, 12, 13, ½14, ½17, 22, 23, 24, 25, 26, 27, 28, 29, 30.

Total 42 days @ $200/day $ 8,382.93

G. B. Bennett, Prospector

Aug. 16, 17, 18, Sept. 16, ½21, ½22, ½29, 30, Oct. ½1, 2, 4, ½5, ½6, ½7, ½8, ½9, ½10, ½11, ½12, 13, 14, ½15, 16, ½18, ½19, ½22, 24, ½25, 26, 27, 28, ½29, ½30, ½31, Nov. ½1, 2, 3.

Total 26½ days @ $80/day 2,120.00

P. Harker, Prospector

Sept. ½21, ½22, ½29, 30, Oct. ½1, 2, 4, ½5, ½6, ½7, ½8, ½9, ½10, ½11, ½12, 13, 14, ½15, 16, ½18, ½19, ½22, 24, ½25, 26, 27, 28, ½29, ½30, ½31, Nov. ½1, 2, 3, 4, ½5, 6, 7, 8, ½9, ½10, 11, ½14.

Total 29½ days @ $80/day 2,360.00

N. Stacey, Geologist

August 16, 17, 18. Total 3 days @ $110/day 330.00

$13,192.93

2. Food:

Total expenditure of $186.36 divided by 101 man days = rate of $1.85/day, to be prorated to the days worked in item 1.
Accommodation charges @ $4.80/man day, total $484.80

3. Transportation:

Approximately 30 mile round trip to the property from Silverton; 37 trips = 1,100 miles @ $.20/mile = $220.00, prorated as to the dates worked in item 1.
Gasoline expenditure = $52.66.

4. Surveys

Grid:	L.B. Goldsmith; Sept. 16, ½21, ½22. Total 2 days @ $200/day	$ 400.00
	G. Bennett; Aug. 16, 17, 18, Sept. 16, ½21, ½22, ½29, 30, Oct. ½1. Total 7 days @ $80/day	560.00
	P. Harker; Sept. ½21, ½22, ½29, 30, Oct. ½1, 2, 4, ½5, ½6, ½7. Total 6½ days @ $80/day	520.00
	Expenses (prorated)	100.00
	Mileage (prorated)	40.00
		$1,620.00

$1,620 divided by 8 km of grid = $202.50/km.

Geology:	L.B. Goldsmith, field geology Oct. 14, 16, ½18, ½19, ½22, 24, ½25, 26, 27, 28, ½29, ½30, ½31, Nov. ½1, 2, 3, 4, ½5, 6, 7, 8, ½9, ½10, 11, 12, ½13. Total 19-3/4 days @ $200/day (approximated to balance figures)	$3,932.93
	N. Stacey, field geology Aug. 16, 17, 18 Total 3 days @ $110/day	330.00
	Expenses (prorated)	287.02
	Mileage (prorated)	85.00
		$4,634.95

Geochemical Survey:

L.B. Goldsmith Sept. ½29, 30, Oct. ½1, 2, 4, ½5. Total 4½ days @ $200/day	900.00
G. Bennett Oct. 2, 4, ½5, ½6, ½7, ½8, ½9, ½10, ½11, ½12, 13, 14, ½15, 16, ½18 Total 10 days @ $80/day	800.00
P. Harker Oct. ½8, ½9, ½10, ½11, ½12, 13, 14, ½15, 16, ½18, ½19, ½22, 24, ½25, 26. Total 10 days @ $80/day	800.00
Expenses (prorated)	150.00
Mileage (prorated)	50.00
	$2,700.00

5. Analyses:

170 soil samples, cost $399.05 = $2.35/sample.

4 rock samples, cost $86.00 = $21.50/sample.

6. Report:

L.B. Goldsmith: Nov. ¼13, ½14, ½17, 22, 23, 24, 25, 26, 27, 38, 29, 30.
Total 10¾ days @ $200/day = $2,050.00

APPENDIX

COST STATEMENT FOR MEIP

Summary of Contracts #5, 6, 7

1.	Grid:		
	L.B. Goldsmith, 2 days @ $200/day	$ 400.00	
	G. Bennett, 7 days @ $80/day	560.00	
	P. Harker, 6½ days @ $80/day	520.00	
	Expenses (prorated)	100.00	
	Mileage (prorated)	40.00	1,620.00
2.	Prospecting:		
	L.B. Goldsmith, 5 days @ $200/day	1,000.00	
	G. Bennett, 8½ days @ $80/day	680.00	
	P. Harker, 12 days @ $80/day	960.00	
	Expenses (prorated)	200.00	
	Mileage (prorated)	60.00	2,900.00
3.	Geological Surveying:		
	N. Stacey, 3 days @ $110/day	330.00	
	L.B. Goldsmith, 14 days @ $200.day	2,800.00	
	L.B. Goldsmith, reporting, 10¼ days @ $200/day	2,050.00	
	Expenses (prorated)	230.00	
	Mileage (prorated)	70.00	5,480.00
4.	Geochemical Surveying:		
	L.B. Goldsmith, 4½ days @ $200/day	900.00	
	G. Bennett, 10 days @ $80/day	800.00	
	P. Harker, 10 days @ $80/day	800.00	
	Expenses (prorated)	150.00	
	Mileage (prorated)	50.00	2,700.00
5.	Assaying:		485.05
6.	Consulting:		
	L.B. Goldsmith, 5-3/4 dyas @ $200/day (approximated to balance figures)	1,132.93	
	Expenses (prorated)	57.02	
	Mileage (prorated)	15.00	1,204.95
7.	Miscellaneous:		
	Road repairs:		
	L.B. Goldsmith, ½ day @ $200/day	100.00	
	G. Bennett, 1 day @ $80/day	80.00	
	P. Harker, 1 day @ $80/day	80.00	260.00
			$14,650.00

Maximum M.E.I.P. Commitment: $4,883.33

The author certifies that the Cost Statement is true in every respect.

REGISTERED PROFESSIONAL ENGINEER L. B. GOLDSMITH PROVINCE OF ONTARIO

L. B. Goldsmith, P.Eng.
Consulting Geologist

To: LOCKE B. GOLDSMITH
Box 95
Silverton, B.C.
V0G 2B0
cc: G. Bennett-New Denver

File No. 17925
Date October 5, 1979
Samples Soil

Certificate of ASSAY

LORING LABORATORIES LTD.

SAMPLE No.	PPM Pb	PPM Ag
"SOIL SAMPLES"		
8+00S-0+00	34	0.7
8+00S-1+00W	760	5.6
2+00W	54	0.9
3+00W	21	0.5
4+00W	24	0.7
5+00W	15	0.5
6+00W	23	0.6
7+00W	23	0.8
8+00W	20	0.8
9+00W	16	0.7
10+00W	21	0.9
11+00W	26	0.8
12+00S-0+00	27	1.5
12+00S-1+00W	30	0.9
2+00W	30	1.1
3+00W	32	0.8
4+00W	35	0.7
5+00W	40	0.6
6+00W	24	0.6
12+00S-1+00E	240	5.5
2+00E	187	3.2
3+00E	96	1.9
4+00E	280	8.5
5+00E	37	1.1
6+00E	28	0.8
7+00E	26	0.8
8+00E	51	1.0
24N-01+00E	24	0.6

I Hereby Certify THAT THE ABOVE RESULTS ARE THOSE ASSAYS MADE BY ME UPON THE HEREIN DESCRIBED SAMPLES . . . .

Rejects Retained one month.

Pulps Retained one month unless specific arrangements made in advance.

A. J. Isaac

Licensed Assayer of British Columbia

To: LOCKE B. GOLDSMITH
Box 95
Silverton, B.C.
V0G 2B0

cc: G. Bennet-New Denver

File No. 17925
Date October 5, 1979
Samples Soil

Certificate of ASSAY

LORING LABORATORIES LTD.

SAMPLE No.	PPM Pb	PPM Ag
24N-02+00E	25	0.7
03+00E	23	0.9
04+00E	24	1.0
05+00E	21	0.7
06+00E	26	0.5
07+00E	27	0.5
08+00E	17	0.4
09+00E	10	0.4
10+00E	26	0.5
11+00E	24	0.6
12+00E	23	0.6
BL-00+04S	42	0.9
00+08S	68	1.0
00+12S	24	2.0
00+36S	23	0.8
00+40S	25	0.7
BL-00+16N	24	0.8
00+20N	23	0.8
00+24N	25	0.8
00+28N	14	0.5
00+32N	14	0.4
32N+01E	20	0.6
+02E	19	0.5
+03E	22	0.8
+04E	60	1.3
+05E	37	0.8
+06E	23	0.5
+07E	13	0.5
+08E	19	0.8
+09E	25	0.7

I Hereby Certify THAT THE ABOVE RESULTS ARE THOSE ASSAYS MADE BY ME UPON THE HEREIN DESCRIBED SAMPLES . . . .

Rejects Retained one month.

Pulps Retained one month unless specific arrangements made in advance.

C. Loring Jones

Licensed Assayer of British Columbia

To: LOCKE B. GOLDSMITH
Box 95
Silverton, B.C.
V0G 2B0

File No. 18043
Date October 22, 1979
Samples Rock Chip

Certificate of ASSAY

LORING LABORATORIES LTD.

SAMPLE No.	OZ./TON GOLD	OZ./TON SILVER	% Pb	% Zn
"ROCK CHIP SAMPLES"				
EMP-# 1	Trace	9.56	.80	2.49 Enterprise
VH-# 1	Trace	.06	.06	35.11
SQ-# 1	Trace	28.82	1.69	9.15 Enterprise
SQ-# 2	Trace	.54	1.54	7.96 Enterprise

I Hereby Certify THAT THE ABOVE RESULTS ARE THOSE ASSAYS MADE BY ME UPON THE HEREIN DESCRIBED SAMPLES . . . .

Rejects Retained one month.
Pulps Retained one month unless specific arrangements made in advance.

A. E. McGrade
Licensed Assayer of British Columbia

ENTERPRISE

To: LOCKE B. GOLDSMITH
Box 95
Silverton, B.C.
V0G 2B0

File No. 18046
Date October 22, 1979
Samples Soil

Certificate of ASSAY

LORING LABORATORIES LTD.

Page # 1

SAMPLE No.	PPM Pb	PPM Zn	PPM Ag
"SOIL SAMPLES"			
45-1+00W	130	240	2.8
2+00W	42	190	1.3
3+00W	41	117	1.2
4+00W	31	380	1.1
5+00W	41	150	1.5
6+00W	41	151	1.7
7+00W	25	146	1.0
8+00S-1+00E	159	340	3.5
2+00E	30	154	1.2
5+00E	17	108	1.4
6+00E	29	165	1.6
7+00E	21	145	1.1
8+00E	21	109	1.7
9+00E	24	136	1.4
10+00E	30	126	1.3
32S-1+00E	24	250	1.6
2+00E	21	155	1.4
3+00E	18	80	1.0
4+00E	20	105	1.5
5+00E	19	150	1.5
6+00E	21	89	1.0
7+00E	19	134	1.1
8+00E	12	42	0.6
9+00E	13	56	0.9
10+00E	17	67	1.1
36S-1+00E	59	199	1.3
2+00E	66	142	1.1

I Hereby Certify THAT THE ABOVE RESULTS ARE THOSE ASSAYS MADE BY ME UPON THE HEREIN DESCRIBED SAMPLES . . . .

Rejects Retained one month.

Pulps Retained one month unless specific arrangements made in advance.

A. Loring Laird

Licensed Assayer of British Columbia

To: LOCKE B. GOLDSMITH
Box 95
Silverton, B.C.
V0G 2B0

File No. 18046
Date October 22, 1979
Samples Soil

Certificate of ASSAY

LORING LABORATORIES LTD.

Page # 2

SAMPLE No.	PPM Pb	PPM Zn	PPM Ag
36S-3+00E	23	81	1.3
4+00E	20	78	0.9
5+00E	17	46	1.2
6+00E	13	14	1.6
7+00E	13	32	0.7
8+00E	18	21	1.6
9+00E	14	57	1.0
10+00E	14	22	1.6
40S-1+00E	36	69	1.4
2+00E	22	77	1.3
3+00E	18	104	1.5
4+00E	21	111	1.5
5+00E	75	134	1.4
6+00E	15	19	0.2
7+00E	24	42	1.4
8+00E	26	128	1.2
9+00E	19	51	0.7
10+00E	15	63	0.6

I Hereby Certify THAT THE ABOVE RESULTS ARE THOSE ASSAYS MADE BY ME UPON THE HEREIN DESCRIBED SAMPLES . . . .

Rejects Retained one month.

Pulps Retained one month unless specific arrangements made in advance.

Licensed Assayer of British Columbia

To: LOCKE B. GOLDSMITH
Box 81
Silverton, B.C.
V0G 2B0

cc: G. Bennet-New Denver

File No. 17925
Date October 5, 1979
Samples Soil

Certificate of ASSAY

LORING LABORATORIES LTD.

SAMPLE No.	PPM Pb	PPM Ag
32N-[illegible]	17	0.5
+12E	20	0.5
+13E	30	0.8
+14E	18	0.5
+15E	21	0.7
16N-1+00E	26	0.7
2+00E	17	0.6
3+00E	19	0.6
4+00E	19	0.7
5+00E	18	0.7
6+00E	24	0.6
7+00E	26	0.5
8+00E	23	0.6
9+00E	24	0.6
10+00E	27	0.7
11+00E	24	0.7
12+00E	24	0.6
20N-0+00	23	0.8
20N-1+00E	19	0.8
2+00E	19	0.6
3+00E	18	0.7
4+00E	18	0.6
5+00E	21	0.6
6+00E	22	0.6
7+00E	16	0.7
8+00E	18	0.6
9+00E	14	0.5
10+00E	19	0.5
11+00E	13	0.5
12+00E	20	0.7

I Hereby Certify THAT THE ABOVE RESULTS ARE THOSE ASSAYS MADE BY ME UPON THE HEREIN DESCRIBED SAMPLES . . . .

Rejects Retained one month.

Pulps Retained one month unless specific arrangements made in advance.

A. J. Iwaasa

Licensed Assayer of British Columbia

To: LOCKE B. GOLDSMITH
Box 95
Silverton, B.C.
V0G 2B0
c.c.: G. Bennet-New Denver

File No. 17925
Date October 5, 1979
Samples Soil

Certificate of ASSAY

LORING LABORATORIES LTD.

Page # 4

SAMPLE No.	PPM Pb	PPM Ag
20N-13+00E	19	0.6
14+00E	17	0.6
15+00E	20	0.6
28N-01+00E	20	0.6
02+00E	19	0.7
03+00#	16	0.5
04+00E	16	1.0
05+00E	21	0.6
06+00E	19	0.6
07+00E	10	0.4
08+00E	19	0.5
09+00E	21	0.5
10+00E	18	0.5
11+00E	21	0.5
12+00E	19	0.5
13+00E	15	0.5
14+00E	21	0.8
15+00E	23	0.5
18+50E	23	0.5
12N-0+00	26	0.8
12N-1+00E	14	0.5
2+00E	25	0.4
3+00E	22	0.5
4+00E	23	0.6
5+00E	24	0.6
6+00E	22	0.5
7+00E	22	0.5
8+00E	25	0.6
9+00E	19	0.5
10+00E	21	0.6

I Hereby Certify THAT THE ABOVE RESULTS ARE THOSE ASSAYS MADE BY ME UPON THE HEREIN DESCRIBED SAMPLES . . . .

Rejects Retained one month.

Pulps Retained one month unless specific arrangements made in advance.

A. J. McLeod

Licensed Assayer of British Columbia

To: LOCKE B. GOLDSMITH
Box 95
Silverton, B.C.
V0G 2B0

cc: G. Bennet-New Denver

File No. 17925
Date October 5, 1979
Samples Soil

Certificate of ASSAY

LORING LABORATORIES LTD.

SAMPLE No.	PPM Pb	PPM Ag
12N-11+00E	13	0.5
12+00E	25	0.6
BL-00+32S	30	1.0
32N+10E	19	0.6
24N-15+00E	18	0.5
13+00E	21	0.7
14+00E	18	0.5

I Hereby Certify THAT THE ABOVE RESULTS ARE THOSE ASSAYS MADE BY ME UPON THE HEREIN DESCRIBED SAMPLES . . . .

Rejects Retained one month.

Pulps Retained one month unless specific arrangements made in advance.

Licensed Assayer of British Columbia

8W

4W

Base Line Az. 50°

19 0.4 20 0.6

14 0.5 20 0.6

25 0.6 24 0.6

23 0.8 19 0.8

24 0.8 26 0.7

26 0.8 19 0.5

to Hwy 6

5 mi

SUNSET FRACTION

L 14541

Enterprise

Alluvium

8W

4W

Base Line

146 / 25 / 1.0 — 151 / 41 / 1.7 — 150 / 41 / 1.5 — 390 / 31 / 1.1 — 117 / 41 / 1.2 — 190 / 42 / 1.3 — 240 / 130 / 2.6 — 42 / 0.9

SQ-2

180°

Porphyritic granodiorite

Diorite

26 / 0.8 — 21 / 0.9 — 16 / 0.7 — 20 / 0.8 — 23 / 0.8 — 23 / 0.6 — 15 / 0.5 — 24 / 0.7 — 21 / 0.5 — 54 / 0.9 — 780 / 5.6 — 36 / 0.7 — 340 / 159 / 3.5

CHIP SAMPLES OF VEIN MATERIAL

Sample	oz/ton Au	oz/ton Ag	% Pb	% Zn
EMP-1	Tr	9.56	0.80	2.49
SQ-1	Tr	28.82	1.69	9.15
SQ-2	Tr	0.54	1.54	7.96

24 / 0.6 — 40 / 0.6 — 35 / 0.7 — 32 / 0.8 — 30 / 1.1 — 30 / 0.9 — 27 / 1.5 — 240 / 5.5

Diorite

LEGEND

155 / 36 / 0.6 : Zn, Pb, Ag, ppm in soils

EMP-1 : Vein material sample number

△ △ △ : Slide area

○ ○ ○ ○ : Boulder field

: Adit portal; with stope

□ □ : Buildings (collapsed)

△△△ : Slide area

○○○○ : Boulder field

Adit portal; with slope

Buildings (collapsed)

Road

Trail

Stream

Outcrop

Assumed contact

Slope direction; head of arrow points downslope

Waste dump

Strike & dip of shear zone

Claim boundaries scaled from 1:50,000 topographic map. No corner posts were located.

ENTERPRISE PROPERTY

SLOCAN MINING DIVISION, B.C.

NTS 82 F/14W

SURFACE GEOLOGY & SOIL GEOCHEMISTRY

Scale : 1" = 200'

1cm = 24.016 metres

0 50 100 200 300 400 600 800 feet

0 24.02 48.03 72.05 96.06 120.08 144.10 168.11 192.13 216.14 240.16 metres

ARCTEX ENGINEERING SERVICES

LOCKE B. GOLDSMITH, P.ENG.

CONSULTING GEOLOGIST

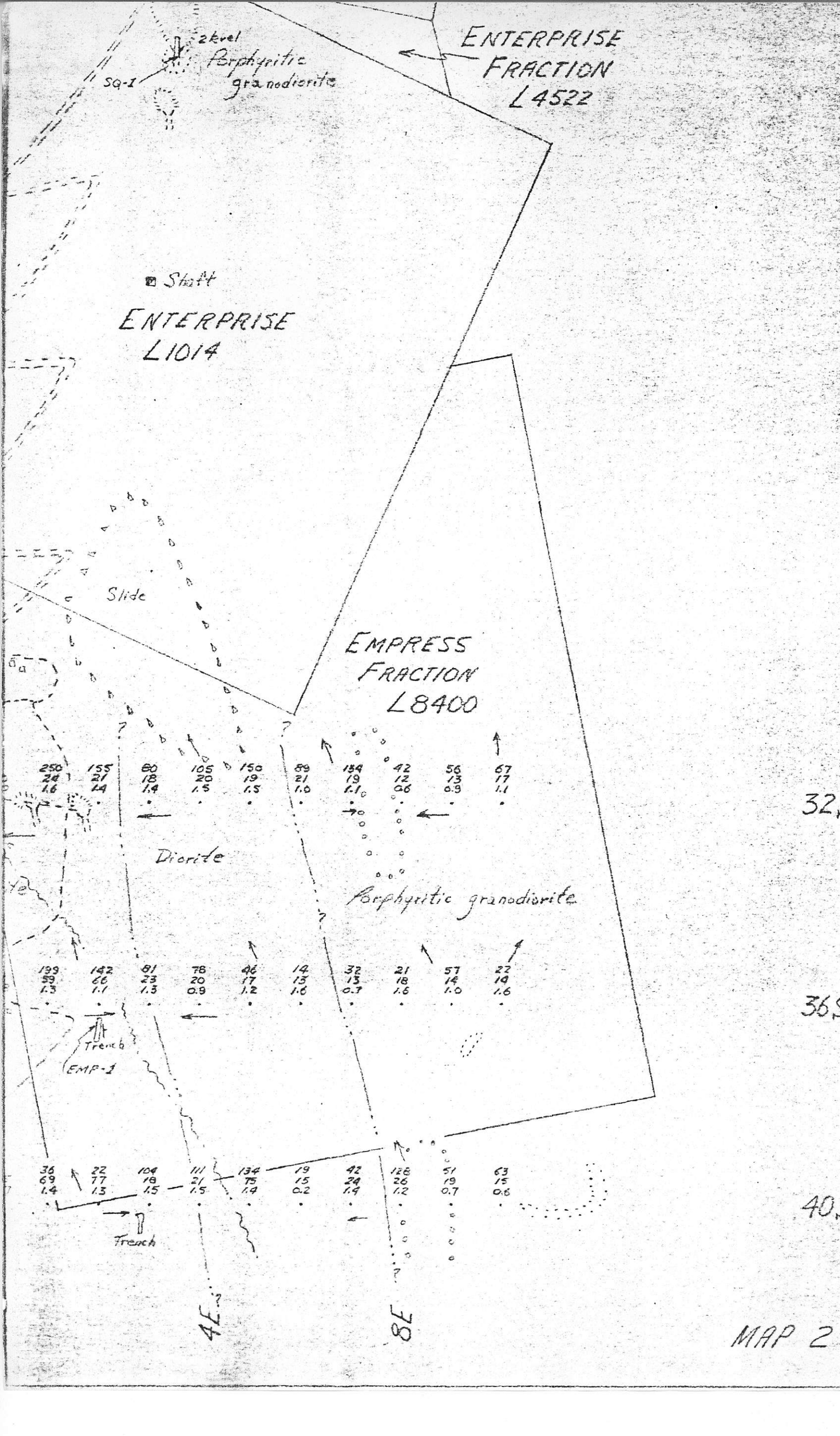
NOVEMBER, 1979

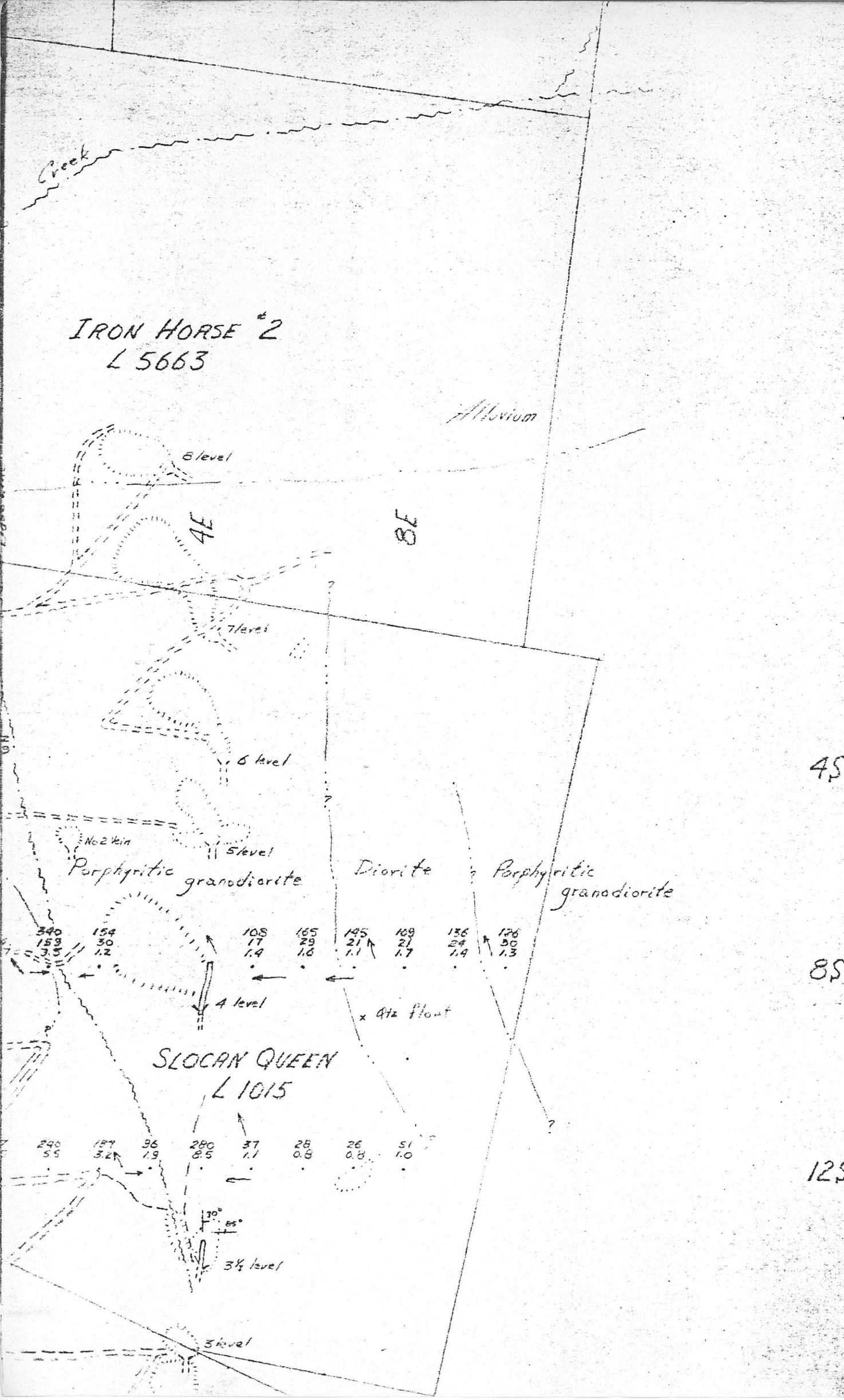
REGISTERED PROFESSIONAL ENGINEER L.B. GOLDSMITH PROVINCE OF ONTARIO

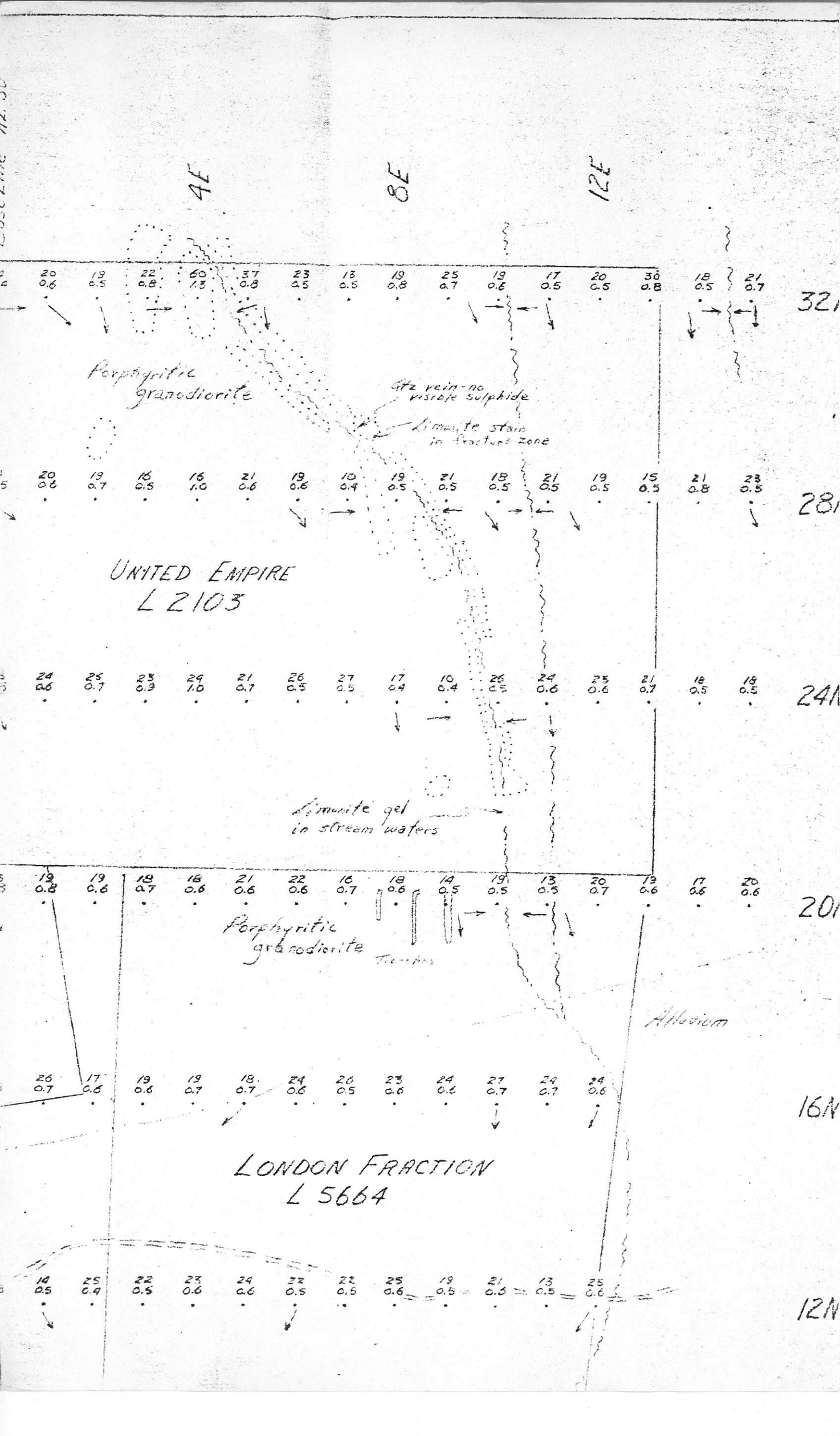
Slide

Porphyritic granodiorite

Base Line Az. 50°


ENTERPRISE FRACTION L4522
2 level Porphyritic granodiorite
SQ-1
Shaft
ENTERPRISE L1014
Slide
EMPRESS FRACTION L8400
250 155 80 105 150 89 134 42 56 67
24 21 18 20 19 21 19 12 13 17
1.6 1.4 1.4 1.5 1.5 1.0 1.1 0.6 0.9 1.1
Diorite
Porphyritic granodiorite
139 142 81 78 46 14 32 21 57 27
59 66 23 20 17 13 13 18 14 19
1.3 1.1 1.3 0.9 1.2 1.6 0.7 1.6 1.0 1.6
Trench
EMP-1
36 22 104 111 134 19 42 128 51 63
69 77 18 21 75 15 24 26 19 15
1.4 1.3 1.5 1.5 1.4 0.2 1.4 1.2 0.7 0.6
Trench
4E
8E
32
36
40
MAP 2


Creek
IRON HORSE #2
L 5663
Alluvium
8 level
4E
8E
7 level
6 level
5 level
No 2 Vein
Porphyritic granodiorite
Diorite
Porphyritic granodiorite
340 154
153 30
3.5 1.2
108 17 1.4
165 29 1.6
195 21 1.1
109 21 1.7
136 24 1.4
126 30 1.3
4 level
x Qtz Vein
SLOCAN QUEEN
L 1015
240 5.5
187 3.2
96 1.9
280 8.5
37 1.1
28 0.8
26 0.8
51 1.0
30°
65°
3½ level
3 level
45
85
125


4E
8E
12E
32N
28N
24N
20N
16N
12N
Porphyritic granodiorite
Qtz vein - no visible sulphide
Limonite stain in fracture zone
UNITED EMPIRE
L 2103
Limonite gel in stream waters
Porphyritic granodiorite
Alluvium
LONDON FRACTION
L 5664