OFFICE OF THE CHIEF ANALYST AND ASSAY

92 P/9E
92 P-49

013563

THE GOVERNMENT OF
THE PROVINCE OF BRITISH COLUMBIA

DEPARTMENT OF MINES AND PETROLEUM RESOURCES
VICTORIA

SAMPLE RECEIVED FROM Mr. R.J. Franks,

ADDRESS Box 70, Vavenby, B.C.

LABORATORY No.	SUBMITTER'S MARK	LABORATORY REPORT
30210	22543 B #1 Sonja #2 Claim	Spectrochemical Analysis: A small fraction of 1 per cent of lead, very small fractions of 1 per cent of copper and zinc, and a trace of molybdenum were found; the other base metals found, and their percentages, were those occurring normally in rocks. Assays: Gold trace; Silver trace; Copper 0.09%; Lead 0.21%; Zinc 0.05% Radioactivity: No greater than that occurring normally in rocks.
30211	22544 B #2 Sonja #2 Claim	Spectrochemical Analysis: Lead and zinc, very small fractions of 1 per cent of copper, antimony, arsenic, bismuth and cadmium, and a trace of molybdenum were found; the other base metals found, and their percentages, were those occurring normally in rocks. Assays: Gold trace; Silver 5.0 oz. per ton; Copper 0.03%; Lead 4.00%; Zinc 4.58% Radioactivity: No greater than that occurring normally in rocks. Both samples referred to the Mineralogical Branch for examination; you will hear from them also.

DATE May 28th 1969

S. Metcalfe
CHIEF ANALYST AND ASSAYER.

LABORATORY REPORT

Mariposa Spectrographic Laboratory

Star Route, Mariposa, California 95338
Telephone WOodland 6-2591

CHARGES: $5.00
LAB NO. 13258
SUBMITTED BY:

Date 6/3/69 PM

Qualitative Spectrographic Analysis

Vavenby Mineral Exploration Co.
C/O R.J. Franks
P. O. Box 70
Vavenby, B.C., Canada

ELEMENTS FOUND AND ESTIMATED PERCENTAGE RANGE OF CONCENTRATION

SAMPLE MARK

No mark
Kim #1&2 Claims

ELEMENT	Not Less Than %	Not More Than %	ELEMENT	Not Less Than %	Not More Than %	ELEMENT	Not Less Than %	Not More Than %
Aluminum	0.10	0.30	Lithium			Thallium		
Antimony			Magnesium MgO	0.30	0.70	Thorium		
Arsenic	0.05	0.15	Manganese	0.02	0.08	Tin		
Barium	.0007	.003	Mercury			Titanium	.001	.006
Beryllium			Molybdenum	.0004	.0008	Tungsten		
Bismuth	.008	0.04	Nickel	.001	.006	Uranium		
Boron			Osmium			Vanadium	.0006	.002
Calcium as CaO	1.0	3.0	Palladium			Zinc	0.30	0.80
Cadmium	0.01	0.06	Phosphorus	0.5	1.5	Zirconium		
Cesium			Platinum Not detected in sample			RARE EARTHS:		
Chromium	.001	.006	Potassium			Cerium		
Cobalt	.0007	.003	Rhenium			Dysprosium		
Columbium			Rhodium			Erbium		
Copper	0.02	0.07	Rubidium			Europium		
Gallium			Ruthenium			Gadolinium		
Germanium			Scandium			Holmium		
Gold Below detection limit			Silicon (as Si02)	60.0	80.0	Lanthanum		
Hafnium			Silver	.003	.009	Neodymium		
Indium			Sodium			Praseodymium		
Iridium			Strontium	.0007	.003	Samarium		
Iron	3.0	10.0	Tantalum			Ytterbium		
Lead	1.0	2.5	Tellurium			Yttrium		

Remarks: See letter.

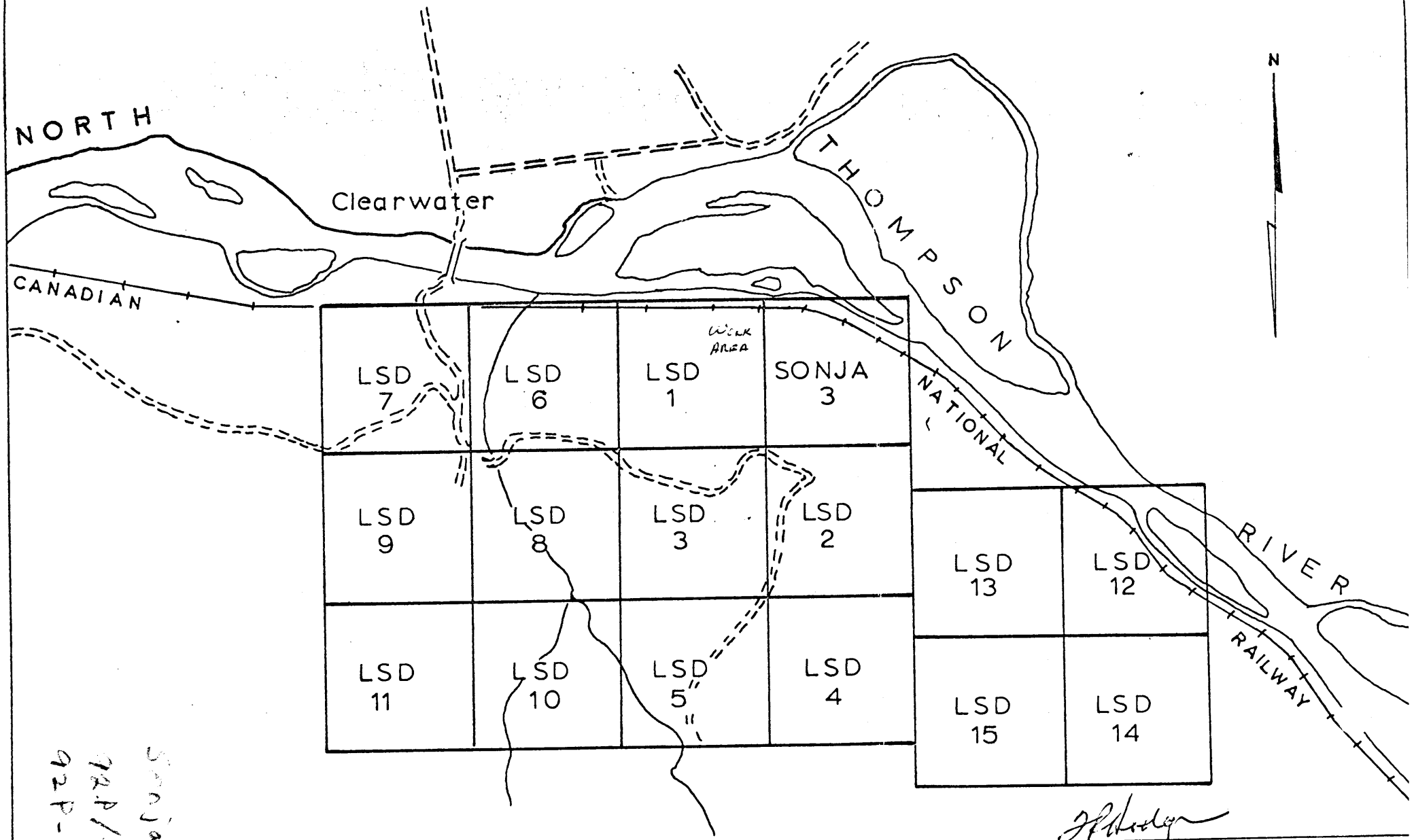
KIM 1 & 2 Claims

Respectfully Submitted

George D. Franks (Spectrographer)

MARIPOSA SPECTROGRAPHIC LABORATORY

percent to ton (2,000 lbs.)
1.0% = 20.0 Lbs. AVOIR.
0.10% = 2.0 Lbs. AVOIR.
0.01% = 3.2 oz. AVOIR.
0.001% = 0.32 oz. AVOIR.
0.0001% = 0.032 oz. AVOIR.

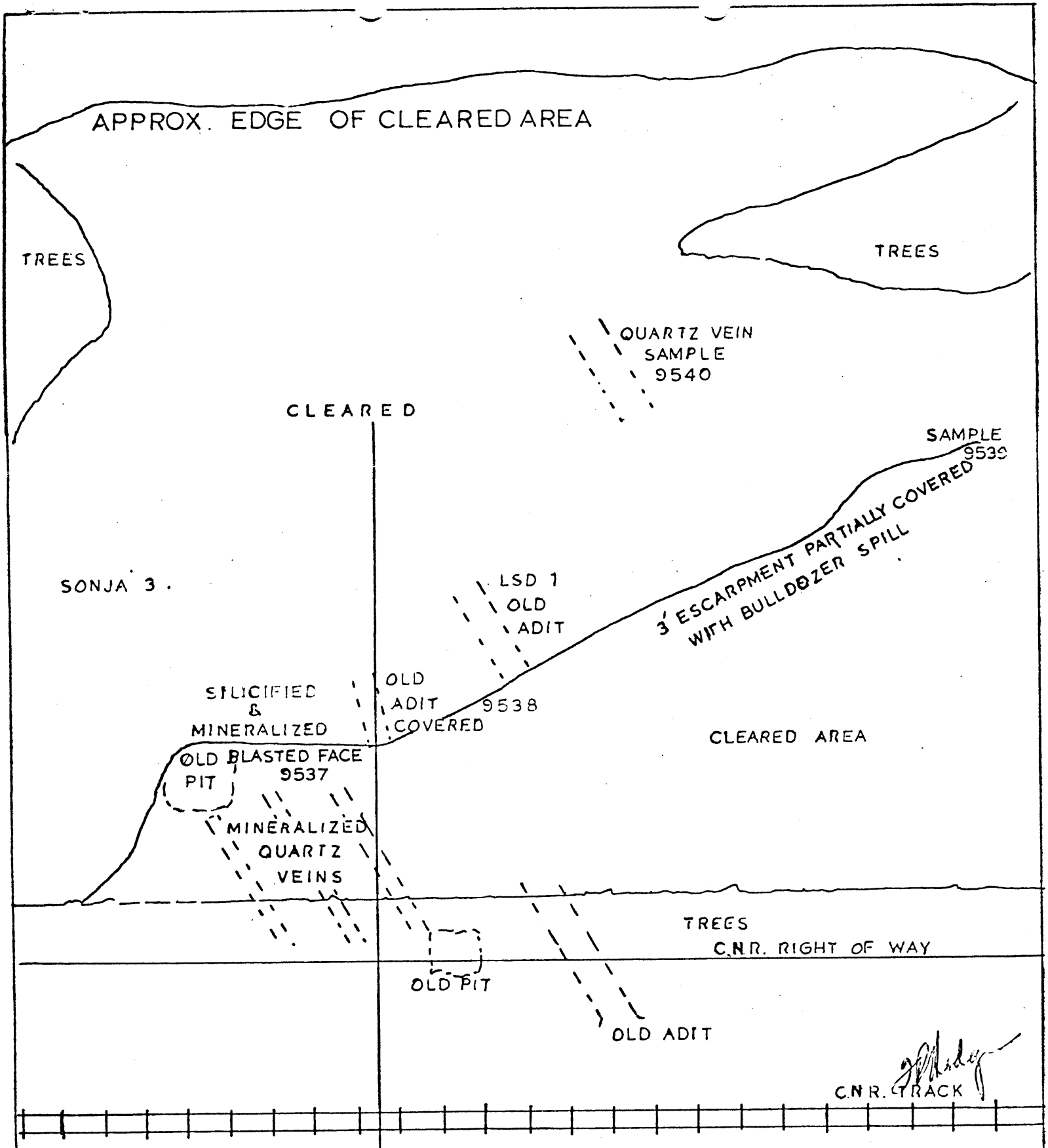


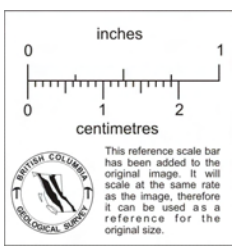
F. P. HODGSON P. ENG.

TEXAL DEVELOPMENTS Ltd.(N.P.L.)
CLAIMS MAP

JMH	28 JAN 1970	FIGURE 5

Revision Mar 10/70 LSD 12.13.14.15 replotted P.H.





SCALE 1" = 20'

F. P. HODGSON P. ENG.

TEXAL DEVELOPMENT LTD. (N.P.L.)

PACE & COMPASS SKETCH MAP

OF SHOWINGS

VALENTINE CLAIMS

N

J.M.H. | JAN. 29. 1970 | FIG. 2

92P/9E

92P-49

(SONJA; LSD)

REPORT ON THE VALENTINE GROUP OF MINERAL CLAIMS LOCATED AT CLEARWATER, BRITISH COLUMBIA

PREPARED FOR

TEXAL DEVELOPMENT LTD. (N.P.L.)
575 HOWE STREET
VANCOUVER 1, BRITISH COLUMBIA

by

Frederick P. Hodgson, Consulting Mining Engineer
Kamloops, British Columbia

July 27th, 1970

1. INTRODUCTION

This report purports to cover the conditions observed and recommendations for further work on the Valentine group of mineral claims held by Texal Development Ltd. (N.P.L.), located near Clearwater, British Columbia.

Authority to write this report was given by Mr. J.E. LaFleur, President and Director of Texal Development Ltd. (N.P.L.), 575 Howe Street, Vancouver, B.C.

The writer has visited the property on several occasions to examine the mineralized zones (silver – lead associated mainly with quartz veins) and to take samples. Rocks along the railroad cut and in some of the old pits in the general area were also examined.

2. SUMMARY

Texal Development Ltd. (N.P.L.) hold a group of 16 mineral claims, known as the Valentine Group, located near Clearwater, B.C., approximately 80 miles north of Kamloops, B.C. The claims are in the Kamloops Mining District, and are registered in the Mining Recorders Office at Kamloops, B.C.

An area of approximately one acre has been stripped to bedrock, exposing quartz veins and dykes carrying silver - lead mineralization. Silicification has penetrated into the adjacent metasediments. Disseminated sulphides have followed into the silicified zones. Individual veins of varying widths up to three feet have been exposed for approximately 150 feet along strike. Mineralized zones adjacent to the veins increase the width to up to 10 feet. The elevation difference across the stripped area is approximately 75 feet.

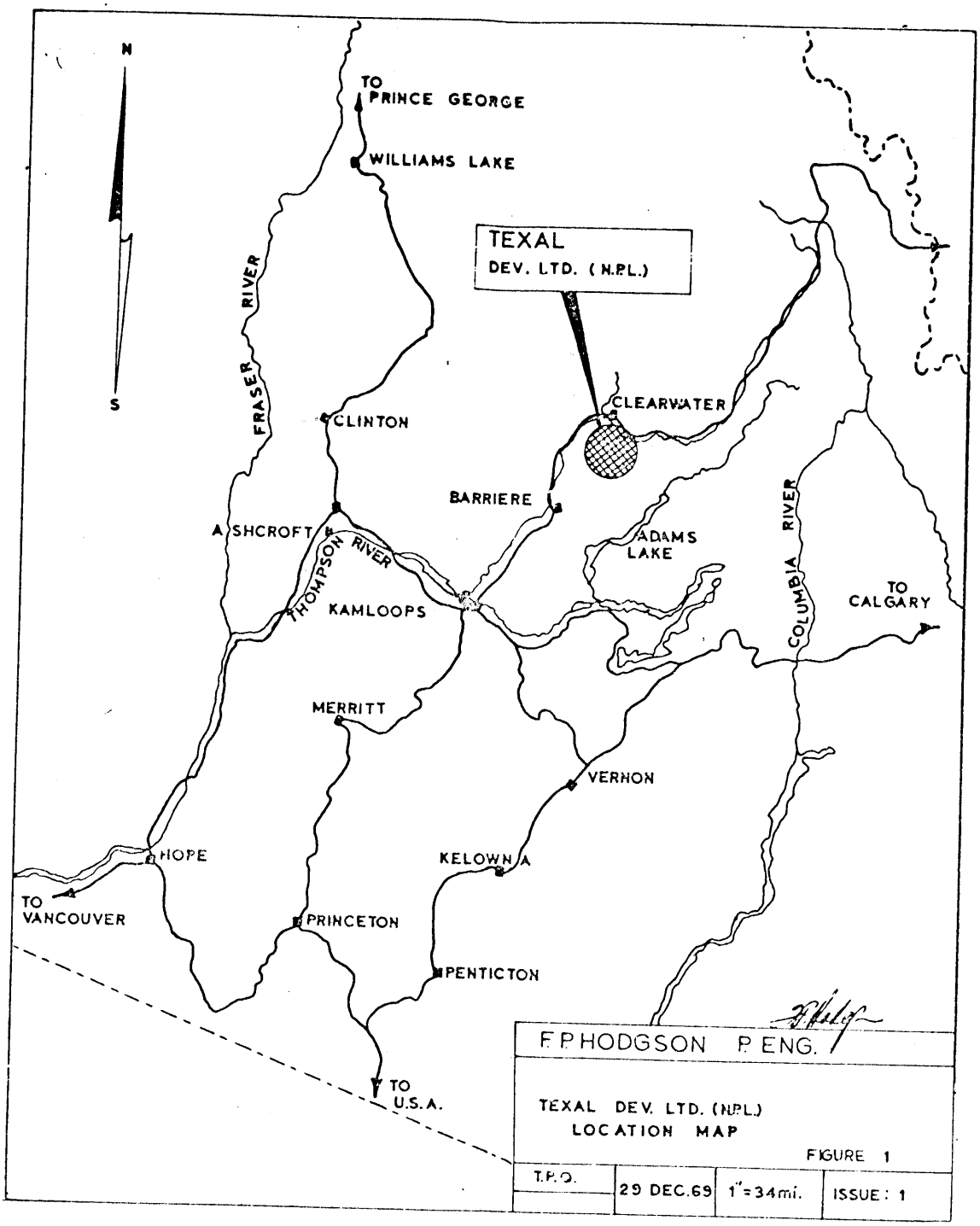
Assays on seventeen samples taken from the stripped area vary in mineral content from trace up to 3.1 oz. silver per ton, 6.73% lead, 0.05% zinc. A ten inch channel sample taken from a massive sulphide occurrence that completely filled the vein yielded 26.5 oz. of silver per ton, 52.30% lead, and 1.24% zinc.

A reconnaissance Geochemical Soils Survey by Crest Laboratories (B.C.) Ltd., yielded eighteen lead anomalies on the remainder of the claims. Silver, copper and zinc anomalies are coincident with most of them. Of the eighteen, at least nine are considered to be of moderate order.

Mineralized zones containing copper and pyrite were noted in the railway cuts along the northern boundary. Several old pits and trenches were found, of which, only two or three were coincident with the targets indicated by the Geochemical Survey.

Several well known prospect shafts, adits and mines are located within five to eight miles of the property. During 1969 and 1970, Denison Mines Ltd. carried out an extensive exploration program on the Rexpar property five miles to the south east.

It is recommended that an exploration program consisting of detail geochemical survey,



electromagnetic and scintillometer surveys, bulldozing, stripping, bulk sampling, and diamond drilling be initiated to evaluate the economic potential of the property. Such a program is estimated to cost $80,000.00.

3. PROPERTY

The property consists of 16 unpatented located contiguous mineral claims, known as the Valentine Group.

LSD 1 - 15	Record Numbers 80883 - 80897	June 9th, 1970
Sonja 3	Record Number 69224	June 9th, 1970

The claims are located at Clearwater, British Columbia, in the Kamloops Mining District, and are recorded in the Mining Recorders Office at Kamloops, British Columbia.

The claims form a block, six claims wide (E.W.) on the south side by three claims deep (N.S.) on the west side and two claims deep (N.S.) on the east side. See figure 2.

4. TOPOGRAPHY

The property is located on the south side of the North Thompson River. The land rises to the south from the river valley to an estimated 1,000 feet above the river level on the southern boundary. Beyond the southern boundary, the land rises sharply to over 6,000 feet above sea level.

Hacheck and Russel Creeks cross the property on the south west.

Talus and glacial till cover the area to varying depths from zero to probably over 100 feet.

For exploration or mining purposes, water would be available from the North Thompson River or from a swampy catch basin area lying to the south east of the property.

The claims group is covered by forest in varying degrees of growth from recently logged areas to commercial grade spruce and pine.

5. LOCATION AND ACCESS

The claim group is located immediately south east of Clearwater, British Columbia, which is approximately 80 miles north of Kamloops, B.C. Highway No. 5, and the main line of the Canadian National Railway serve the Community. See figure 1.

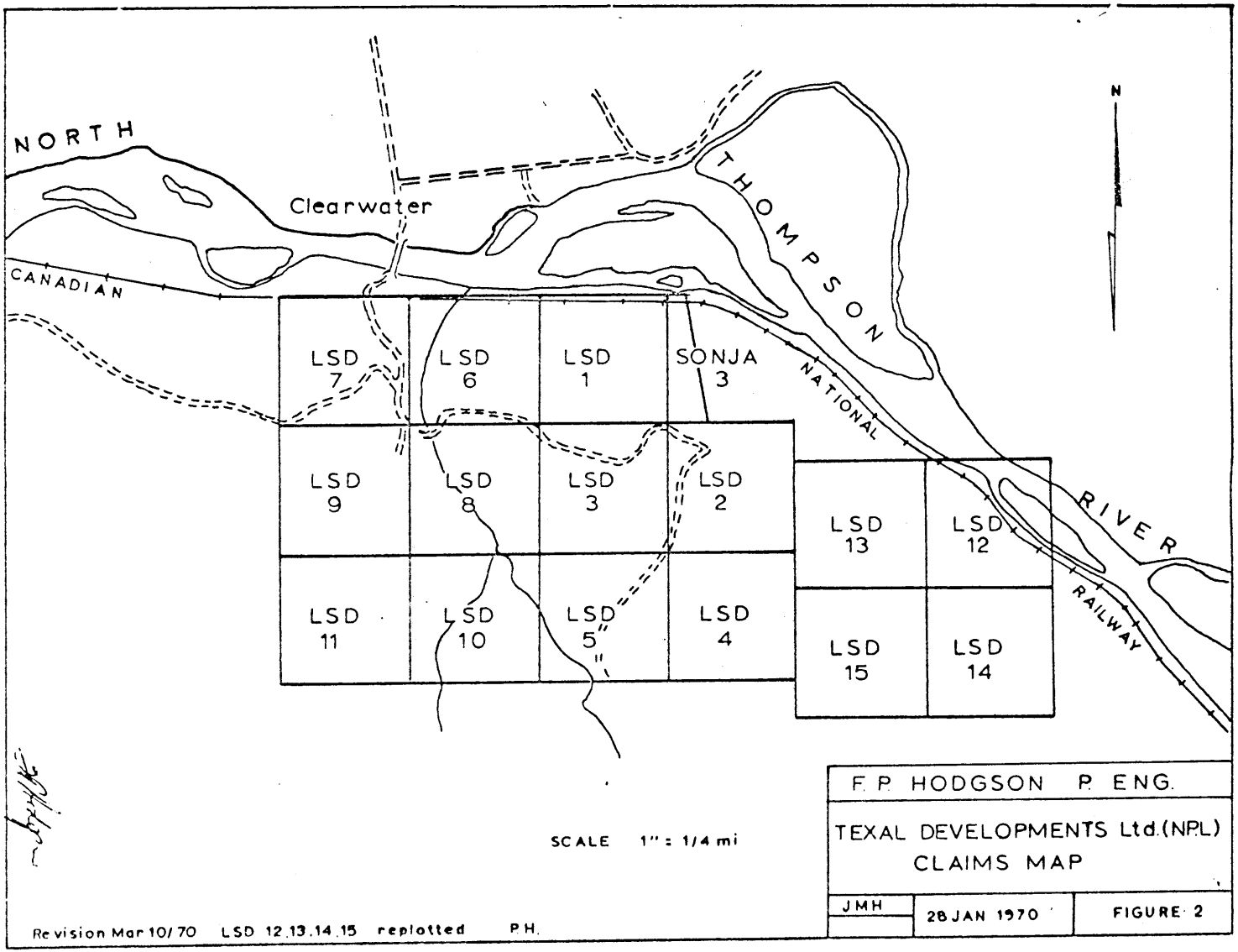
From Clearwater, the property is reached by a gravel road for a distance of one mile. Short access roads suitable for automobiles have been built by the company across the property to the showings. Old logging roads (also improved) provide access to the central sections of the property.

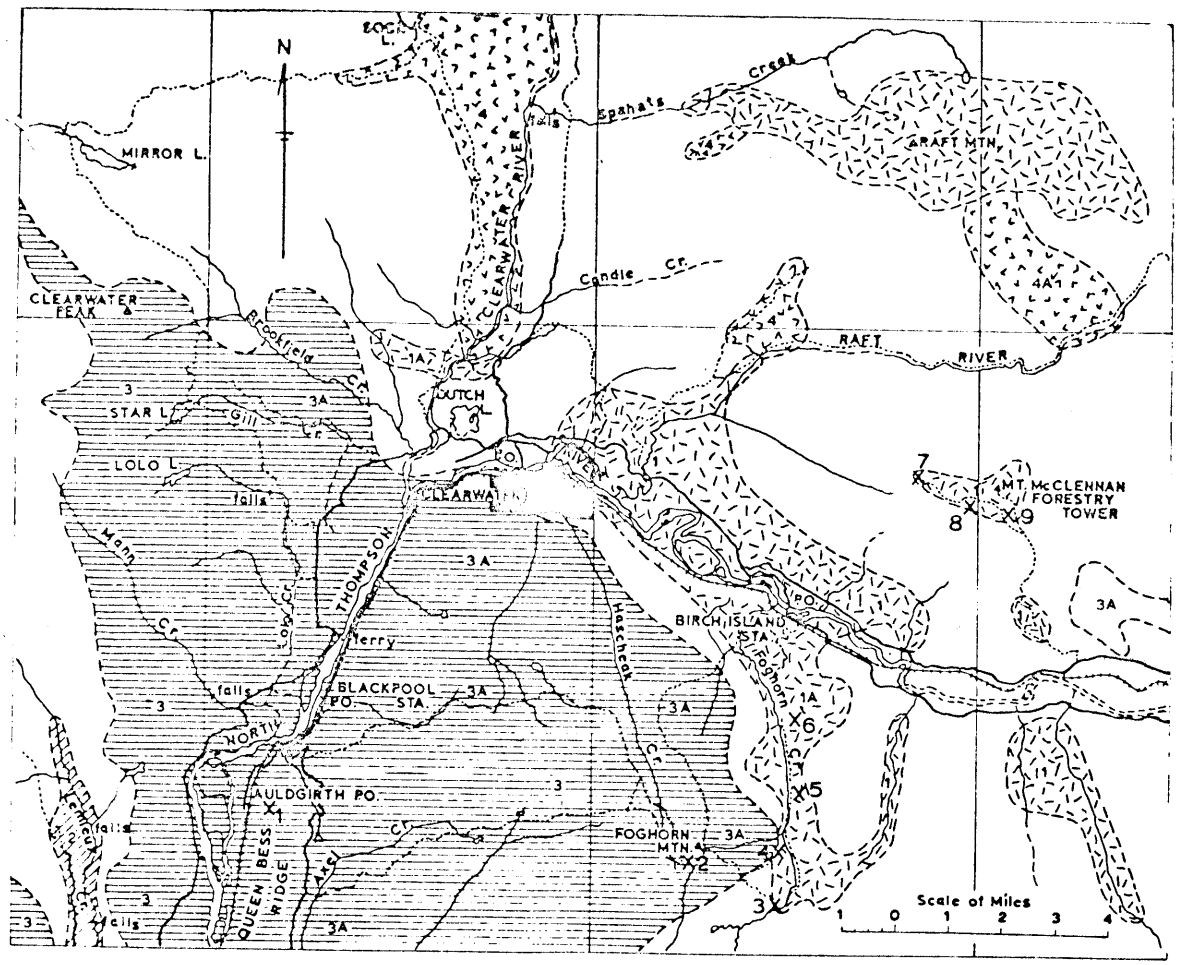
The south west corner of the property occurs near a point 120° 2' West and 51° 38' 15" North.

6. HISTORY AND ACTIVITY IN THE GENERAL AREA

Mention is made of activity in the general area in the reports of the Minister of Mines of British Columbia, back to the early 1900's. In addition to the work reported in publications, numerous pits, adits, and trenches can be seen in the field. A major company is reported to have driven one of the adits. Local inhabitants report that a small tonnage of cobbed ore was shipped from one of the workings. Properties within a radius of five to eight miles that have either gone into production, or have undergone significant work include the Queen Bess Mine to the south west, Foghorn, Minnesota Girl, and Lydia to the south east, as well as the properties on Mt. McLennan approximately 10 miles to the east. See figure 3.

More recently, Rexpar Uranium and Metals have proven up 1.5 million tons of uranium ore in their property some five miles east. Denison Mines Ltd., carried out an extensive drilling and geophysical program on the property during 1969 and 1970.





F.P.HODGSON P.ENG.	TEXAL DEVELOPMENTS Ltd		
GENERAL GEOLOGY MAP of AREA	T.P.Q.	30 DEC. 69	ISSUE 1

Several mining companies have been active during 1969 and 1970 in the area on ground adjacent to that held by the Company.

During 1969, the current holders of the claims did some bulldozer stripping and trenching on LSD 1. A reconnaissance geochemical soil sampling survey was carried out over the area of the property during February of 1970 by Crest Laboratories (B.C.) Limited.

7. GENERAL GEOLOGY

The area was described by W.L. Uglow in the Geological Survey of Canada, Summary Report 1921, Pages 74 - 103, and by J.F. Walker, Department of Mines Geological Survey Summary Report, 1930 Part A, pages 125A - 153A. See figure 3. In general, the contact between the Triassic Fennel Greenstone and the metamorphosed precambrian sediments traverses the claim area from north west to south east.

Underlying the claims areas are a series of metasediments thought to be part of the Fennel formation, derived from a complex series of sediments of volcanic and terrestial origin. The series is represented by a series of silicious and talcereous phyllites with interlaced green schists and greenstones. Secondary minerals such as chalcorite, muscovite, sericite, and talc have been produced by metamorphism of moderate to extreme proportions. Stresses accompanying metamorphism has created a highly foliate nature in the rock. Felspathic and silicious materials separating from the mafic fractions have caused color banding which obliterates the original bedding.

On the southern boundary of the property, a small stock or boss of a horneblende diorite penetrates the metasediments.

Along the northern border, dykes and sills of fine grained diorite (similar in appearance to the diorite stock) and biotite lamprophyre occur in widths of a few inches to five feet. There is evidence that entry has been made forcibly as well as filling openings present at the time of deposition.

Quartz veins of several generations are common throughout the area. These veins and lenses, regardless of orientation interrupt or are interrupted by the above mentioned dykes when the two occur together.

In general, the dip of the metasediments is from 15^{o} to 50^{o} to the north east, while the strike is north west. The nearly vertical quartz veins and dykes strike in a northerly to north westerly direction.

8. LOCAL AND ECONOMIC GEOLOGY

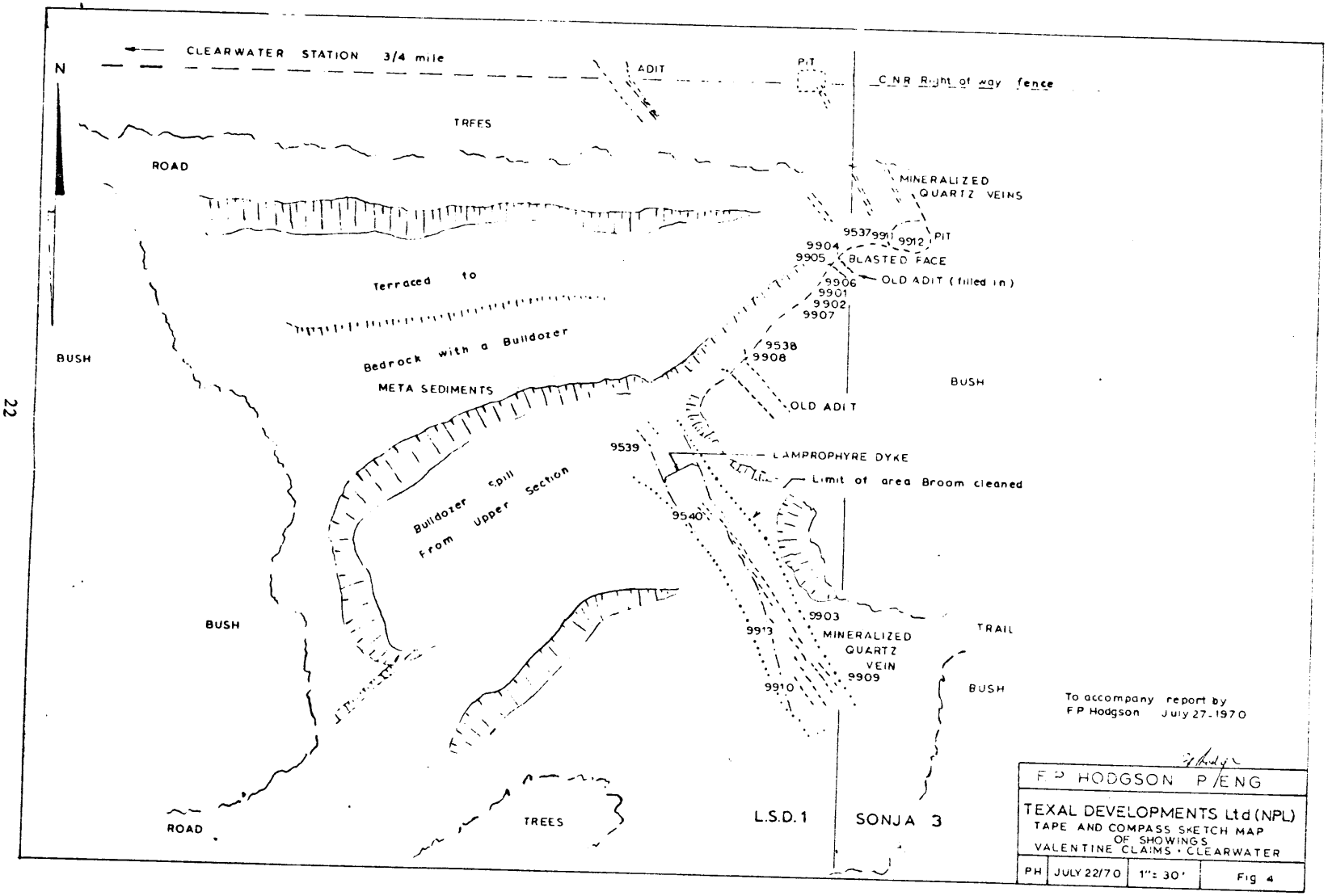
On the LSD 1 claim, where most of the work has been concentrated, a bulldozer was used to strip away the bush and overburden to bedrock. See figure 4. Metasediments displaying schistose characteristics and varying from quartz sericite to gray phyllite were exposed.

Faulting has taken place along numerous vertical planes. Slippage along the beds is also present.

Quartz veins striking at N 40^{o} W fill some of these faults to thicknesses of up to three to five feet. Silicification has penetrated into the bedding for varying distances, but is generally confined to a few feet.

The minerals of interest are silver, lead, and zinc. Copper, gold molybdenum and uranium have been found in minor amounts and may, or may not eventually contribute to the value of the ore.

The sulphide mineralization, in the form of galena, sphalerite, and chalcopyrite, is usually associated with lenses, dykes, and sills of massive silica, the sulphides occurring as blebs, stringers and veinlets within the quartz. Fine grained disseminated sulphides follow the silicification into the metasediments for distances up to a few feet. Sulphides are occasionally present in the beds seemingly unassociated with tabular quartz masses.



Near the boundary between LSD 1 and Sonja 3 is a network of three or four mineralized quartz veins interconnected by sills which are also mineralized. The combined width is approximately 100 feet, while the length and elevation difference are approximately 200 feet and 75 feet, respectively.

Some seventeen samples have been taken by F.P. Hodgson in the above mentioned area. These were sent to Crest Laboratories (B.C.) Limited, where they were subject to chemical analysis. See figure 4.

Sample Number	Description	Assay Results		
		Ag. oz.	Pb %	Zn %
9912	6' Channel Sample Across two qtz. sills and a silicified bed	.5	.78	.02
9911	5' Channel Sample Across Qtz sill and silicified bed	2.3	1.98	.02
9537	18" Channel Sample Across Qtz Vein	2.6	2.5	.02
9904	18" Channel Sample Across Qtz Sill	Tr.	Tr.	.01
9905	3' Channel Sample Across Qtz Sill	Tr.	.02	.01
9906	3' Channel Sample Across Qtz Sill	4.1	3.65	.28
9901	2' Channel Sample Across Qtz Sill	2.0	1.88	.08
9902	3' Channel Sample at 45° Across Qtz vein	0.9	1.20	.06
9907	6' Chip sample down an irregular vertical face	2.5	2.82	.03
9538	4' Chip sample across silicified and mineralized zone	Tr.	.05	–
9908	5' Channel Sample along wall of adit	.1	.09	.01
9539	3' Chip sample across mineralized and silicified zone	.4	.40	.02
9540	4' Channel Sample diagonally across quartz vein 3' wide	1.4	3.07	.05
9903	12" Channel Sample across Qtz vein of variable width up to 3' wide	3.1	6.73	.05
9913	12' Channel sample diagonally across vein sampled in 9903	1.7	4.54	.10
9909	10" Channel sample across massive sulphides filling qtz vein from wall to wall	26.5	52.30	1.24
9910	2' chip sample from mineralized beds 4' W. of sample 9909	1.6	4.44	0.01

Along the railway tracks to the east, mineralization is present in many of the beds and quartz veins exposed by the railway cuts. Samples taken by a consulting geologist two years ago, assayed values in copper from .21% in a quartz sericite schist to 5.6% in a quartz vein. In each case, small silver values were present. Pyrite is found widely disseminated throughout the schists.

A one ton shipment of ore from one of the old adits is reported to have assayed 3.1 oz. gold, 6.5 oz. silver, and 11.5% lead.

During February 1970, a reconnaissance geochemical soil survey was completed by Crest Laboratories (B.C.) Ltd., of Vancouver. Samples were taken at 200' intervals along cross lines 400 feet apart. The samples were tested for silver, lead, zinc, and copper. As a result of the survey, eighteen lead anomalies were located, nine of which are considered significant (exclusive of the known occurrences

on which stripping and sampling has been done.) Of the nine, silver anomalies are coincident with five of them, zinc and/or copper anomalies are coincident with eight.

9. RECOMMENDED WORK PROGRAM

The writer feels that there is sufficient justification to initiate an aggressive exploration program. Two phases are recommended, the first designed to uncover and further evaluate significant targets; during the second, only the most promising targets would receive detailed study. However, because of the numerous occurrences of indicated mineralization which must be investigated, the program must be broad enough to ensure proper coverage.

Phase I:

(A) The occurrences already uncovered in the north east corner of LSD 1 require further work. The cleared area must be extended to the south to follow the vein along its strike. Bulk sampling must be done over mining widths. This will require crushing and sampling of crushed material.

The old adits should be dewatered, mapped and sampled as required.

An allowance should be made for a limited diamond drilling program. The first hole would intersect the known occurrences at approximately 100 feet below the surface. Other holes would be contingent on the results of the first.

(B) A detail geochemical survey is required to pin anomalies located by the reconnaissance survey. Spacing should be reduced to a 200 foot by 100 foot grid. This will require additional line cutting. Selected targets should be exposed by bulldozer for visual evaluation. Subject to conditions of overburden, topography and the nature of the body causing the anomaly, an Electromagnetic Instrument using a vertical loop, dual frequency may be required to extend its limits.

At this stage, a reconnaissance scintillometer survey should be run on the lines already cut to check for radioactive occurrences.

Phase II:

During Phase I, those targets showing the most promise should have been located. Phase II is designed to extend and test them.

Anomalous trends should be cross sectioned by bulldozer to expose the underlying mineralization.

An Electromagnetic Instrument should be used to extend the target once it has been located and identified.

A program of channel and bulk sampling should be carried out. Mineralized zones observed by physical exposure or indicated by geophysical methods should then be sampled at depth by means of diamond drilling.

Because of the type of occurrences, the services of a full time geologist to supervise the field work on a continuous basis are considered necessary.

10. WORK PROGRAM COSTS

Phase I:

A. Extension and evaluation of known showings

B. Detail geochemical and reconnaissance scintillometer grid survey of 16 claims

A.	Extension and Evaluation of Known Showings			
	1.	Bulldozing and clearing	$ 2,000.00	
	2.	Trenching and Bulk Sampling	1,500.00	
	3.	Dewatering adits and prepare for mapping	1,000.00	
	4.	Diamond Drilling (1,000 ft.)	9,000.00	
	5.	Assays	1,000.00	
B.	Geochemical and Scintillometer Grid Survey			
	1.	Additional line cutting	1,500.00	
	2.	Fill in geochemical survey	2,000.00	
	3.	Scintillometer Survey	2,000.00	
C.	Other Costs			
	1.	Supervision and labour	3,000.00	
	2.	Field office, telephone, etc.	1,500.00	
	3.	Travel, board and room, vehicle	2,500.00	
	4.	Engineering	3,000.00	
	5.	Miscellaneous	3,000.00	
		Total Phase I:		$33,000.00
Phase II:				
	Evaluation of Significant Anomalies Found in Phase I			
A.	1.	Bulldozer stripping and roads	$ 3,000.00	
	2.	Extension of Vein Structure by EM Survey. (Including additional line cutting)	3,000.00	
	3.	Trenching and bulk sampling	4,500.00	
	4.	Diamond Drilling (2,000 ft.)	20,000.00	
	5.	Assays	2,000.00	
B.	Other Costs			
	1.	Supervision and Labour	3,000.00	
	2.	Field office, telephone, etc.	1,500.00	
	3.	Travel, board and room, vehicle	2,500.00	
	4.	Engineering	3,000.00	
	5.	Miscellaneous	4,500.00	
		Total Phase II:		$47,000.00
		Total Phases I and II:		$80,000.00

11. CONCLUSIONS

The sixteen claims held by Texal Developments Ltd. (N.P.L.), are ideally located with respect to services, labour, transport.

Initial stripping, sampling and geochemical soil survey has uncovered significant occurrences of silver - lead mineralization.

In view of the observed presence of sulphide mineralization in a favourable geological environment, and the existence of significant geochemical anomalies nearby, it is recommended that an aggressive exploration program be initiated, of proportions and tenor sufficient to indicate whether or not economic extraction can be expected. The program is expected to cost $80,000.00.

Additional funds would be required to physically penetrate and test any potential ore bodies.

Respectfully Submitted By,
"F.P. HODGSON"
F.P. Hodgson, P.Eng.