

Includes GKS Claim Sp.
Port Hardy Area.

SPARTAN EXPLORATIONS LTD. (N.P.L.),
303-1035 West Pender Street,
Vancouver 1, B.C.

92-L

810391

PROGRESS REPORT 1968
AND
PROPOSED PROGRAM 1969
PORT HARDY PROJECT
NORTHERN VANCOUVER ISLAND
BRITISH COLUMBIA

By

Clyde L. Smith,
Exploration Manager.

OCTOBER 29TH, 1968.

*There's Franklinite in the Magnetite
app 10% Zink in the future when looking
at Magnetite in Area Check for Zink.*

How easy is it to get to from above?

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REPORT ON CB, AAA, GREG AND GKS CLAIM GROUPS, by MacDonald Consultants Ltd., E.D. Dodson, P.Eng., September 9th, 1968.Attached
ACCOMPANYING MAP(pocket)
Claim Location Map.	

GENERAL STATEMENT

During the early part of 1968 it became known that Utah Construction & Mining Company was engaged in the development of an extremely large copper property having a potential of in excess of 100 million tons of 0.5% copper, 0.025% molybdenite with minor precious metals. The mineralized zone strikes northwesterly and lies north of Coal Harbour and southwest of Port Hardy in the northern end of Vancouver Island. Shortly after the discovery by Utah the entire northern end of Vancouver Island received a great deal of prospecting and staking.

In May, 1968, Spartan reviewed the exploration potential of the northern end of Vancouver Island and began a program of geochemical silt sampling and geologic mapping in an 80 square mile area south of Coal Harbour. The area is bounded on the east by Neroutsos Inlet, on the north by Quatsino Sound, and on the west by a system of roads leading southerly from the town of Mahatta River. The area was chosen for exploration because of the presence of known magnetite and copper showings, proximity to the Yreka Mine, and a favourable regional geologic setting similar to that in the area of the copper-magnetite deposit currently operated by Coast Copper Company Ltd. The regional geology is poorly known but, as mapped by the Geological Survey of Canada, consists of northwesterly-trending Bonanza volcanics and Quatsino limestone intruded in one area by a large monzonite stock apparently reflected by an intense aeromagnetic anomaly.

The Spartan program used as a base camp a 70-foot boat, located in Quatsino Sound, from which a seven-man crew was deployed by small boat and helicopter throughout the project area. The program consisted of geochemical silt sampling and geologic mapping. Three areas of relatively intense copper and molybdenum geochemical results were located in favourable geological terrain.

General Statement (continued)....

During a subsequent program in these areas during the summer of 1968, the three anomalous areas were staked and detailed follow-up work conducted.

During late August, 1968, Mr. Earl Dodson of MacDonald Consultants Ltd., an experienced geological consultant familiar with current exploration and mining developments on northern Vancouver Island, was retained to visit the Spartan properties in the Port Hardy area and supply a summary report of his findings. Mr. Dodson's report accurately represents Spartan's conclusions and it is, therefore, herein reproduced in place of a company report on the Port Hardy project.

Respectfully submitted,

Clyde L. Smith,
Exploration Manager.

MACDONALD CONSULTANTS LTD.
SUITE 12.425 HOWE STREET, VANCOUVER 1, B.C.

Report on the
CB, AAA, Greg and GKS
Groups of Mineral Claims

for

Spartan Explorations Ltd. (N.P.L.)

by

MacDonald Consultants Ltd.

12 - 425 Howe Street

Vancouver 1, B. C.

E. D. Dodson, P. Eng.

September 9, 1968

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INTRODUCTION

On the 21st of August, 1968 the writer travelled to Coal Harbour, B. C. At 7:30 a.m. on the 22nd of August accompanied by L. L. Storey, an employee of Spartan Explorations Ltd., the writer left by helicopter to examine four claim groups. In this report each claim group is treated individually following resumes of the regional and economic geology.

LOCATION & ACCESS

All claim groups are located in the Quatsino-Holberg area of northern Vancouver Island. This area lies to the south and west of the Port Hardy-Coal Harbour region, an area currently undergoing intensive exploration for copper and molybdenum deposits.

The general area is readily accessible by road, air and water. Local access is described under the individual claim groups.

GENERAL GEOLOGY

This region is underlain by rocks of the Vancouver group, divisible into the Karmutsen group, Quatsino formation and Bonanza group. The rocks range in age from Upper Triassic and (?) earlier to Upper Triassic and (?) Jurassic. Locally the above rocks are overlain by Upper Cretaceous sediments and perhaps some Tertiary flows. The Mesozoic rocks are intruded by both deep-seated and hypabyssal intrusives of uncertain age.

ECONOMIC GEOLOGY

Exploration for mineral deposits in the general area may, of course, be guided by such deposits as are already known. Two different types of deposit appear to be of economic significance. Three examples of these deposits are given below:

The Old Sport property operated by Coast Copper Company Limited.

The Yreka property formerly operated by Minoca Mines Ltd.

The Day Lake property currently under exploration by Utah Construction and Mining Co.'

The Old Sport and Yreka properties represent a type of deposit for which Vancouver Island is well known--the pyrometasomatic or skarn-type deposit.

The Old Sport is a pyrometasomatic deposit developed in and adjacent to a limestone band near the top of the Karmutsen group. The mineralization occurs in both limestone and volcanics at and near their mutual contact and adjacent to an intrusive of gabbroic to quartz-dioritic composition. Copper-bearing sulphides and magnetite are the main metallic minerals.

The Yreka deposit occurs in limestone and volcanics of the Vancouver Group (Karmutsen) (?) adjacent to quartz-feldspar porphyry dykes and an intrusive stock. Pods and lenses of copper-bearing sulphides and magnetite occur in and adjacent to skarn in the vicinity of the lime-volcanic contact.

The Day Lake property belongs to a different class of deposit than those above. To date there has been no production from this property but a feasibility study is currently under way.

Few disclosures have been made as to the geology of the Day Lake property.

The following significant features are known, however:

- 1.) The deposit occurs in rocks mapped by Mueller of the Geological Survey of Canada as Bonanza Group.¹
- 2.) It occurs near a deep-seated intrusive.
- 3.) The host rocks have undergone considerable silicification and

1. Mueller, J. E. - G.S.C. Paper 67-1, pp. 81 - 83, Port McNeill Area and Nanaimo Basin, Vancouver Island

argillic alteration.

- 4.) The sulphide minerals--pyrite, chalcopyrite, and molybdenite occur as disseminations and minute fracture-fillings over a broad area.
- 5.) Extensive pyritization occurs well beyond the boundaries of the ore-zone.

A recent disclosure by Utah Construction and Mining Co. indicates a potential ore-zone of ". . . a probable 120 million tons of .51 copper, .025 molybdenum sulphide and other metals."²

In a search for ore in this general area it would appear, then, that we have two types of deposit as prime targets: 1.) the small relatively high grade pyrometasomatic deposits exemplified by Coast Copper and Yreka and 2.) the large disseminated "porphyry-copper" type deposit exemplified by the Bay Lake property. Each has its own characteristics which may be used as prospecting guides.

COAST COPPER - YREKA TYPE

Environment

Volcanic-limestone contact area adjacent to an intrusive.

Recognition

Interrupted pencil-like ore-zones associated with skarn and with significant contained magnetite. Distribution controlled by intersection of favourable horizon and intrusive rocks.

UTAH TYPE

Environment

Bonanza (?) rocks near a deep-seated intrusive Hypabyssal siliceous intrusive adjacent to and in (?) ore-zone.

Recognition

Very extensive pyritization, silicification and argillic alteration. Within the above, a zone containing chalcopyrite and molybdenite.

PROPERTY DESCRIPTIONS

Four properties were visited. The first two described merit no further work at this time. The others are described and exploration proposals outlined.

CB Group

The CB Group of claims (CB 1 - 10) are located on a tributary of the Mahatta River approximately 10 miles upstream from the mouth of the river.

The rocks appear to be chiefly andesitic to Basaltic flows of the Vancouver group. No significant mineralization was seen nor was there any hydrothermal alteration apparent.

The claims were staked to protect a geochemical anomaly discovered during regional work. To the date of the writer's visit a single line of soil samples had been taken along the location line of the claims. Soil copper in this traverse ranges from 12 to 178 ppm. As the claims occupy a slope and the ridge beyond and as the readings were taken on the slope it is possible that the source of the copper is in a heavily timbered area above the sampled line.

At the time of the writer's visit a soil sampling team was on the property and was about to sample the area upslope from the previous work.

No recommendation for work on this property will be made at this time. Any future recommendation will be dependent upon the results of the soil sampling currently under way.

AAA Group

The AAA group of mineral claims located approximately four miles northwest of Holberg, although visited by the writer, is no longer of interest. The

only showings known are occasional small stringers of chalcocite and quartz in green vesicular basalt of the Karmutsen (?) group.

Greg Group

The Greg group is located on the north slope of Comstock Mountain above Kultus Cove. A total of 37 claims are located here including the Greg 1 - 24 and the Kultus 1 - 13. The writer reached the claims by helicopter but all the claims lie within two miles of Tidewater in Buchholz Channel of Quatsino Sound. The property extends from sea level to approximately 3,200 feet above sea level.

The rocks seen by the writer are red to green pyroclastics and flows of andesitic (?) composition. The only alteration seen is locally prominent epidote. Mineralization is confined to small fractures and minor disseminations within the volcanics. The sulphides are chalcopyrite and bornite.

Some preliminary geochemical sampling by Spartan crews shows values ranging from 5 to 208 ppm copper. Using a threshold value of 30 ppm highs appear sporadic and of little significance. The writer believes that they reflect minor concentrations of copper in shears crossing volcanic rocks of moderate copper content.

In order to establish the likelihood of significant copper deposits on the Greg group the writer recommends the following work:

- 1.) Prospecting and geological mapping by a prospector experienced in working this general area.
- 2.) Completion of soil sampling in areas of low relief (i.e. ridge top and foreshore areas) on lines spaced 400 feet apart with soil samples at 100 foot intervals.

3.) Reconnaissance magnetometer traverses on the above lines at 100 foot intervals with fill-in to 200 foot line spacing and 50 foot interval in areas showing pronounced magnetic relief.

If the above work outlines favourable geological or geochemical conditions a follow-up program will be required. As there is currently no indication as to what might be expected the second phase cannot be realistically outlined.

GKS Group

The GKS group is located approximately five miles upstream from the mouth of Klootchlimmis Creek (Ingersoll River). Current access is by helicopter or via an old trail which follows Klootchlimmis Creek from tidewater. The present claims (G.K.S. #1 - 19) were located as a result of a regional geochemical silt-sampling program. Anomalous values in copper were obtained in creeks draining the claim area.

Magnetite showings covered by the claims have been known for many years. The showings are described in Iron Ores of Canada, Volume I, G.S.C. - Economic Geology Series #3, 1926, p. 236.

The claims are in an area of heavy timber cover. Depth of overburden is unknown but cover is extensive and outcrops are rare.

The writer's visit to the property was, of necessity, brief. However, the known showings were readily accessible.

The showings occur in skarn within the volcanic rocks of the Vancouver group. The magnetite outcrops in two creek beds approximately 380 feet apart. Some angular intrusive float (monzonite) was seen by the writer in the creek beds.

The anomalous copper values in the silts, taken with the presence of

magnetite and skarn suggest the possibility of a Yreka type copper deposit. The writer recommends the following two-phase program to establish the locus of any such deposit.

Phase I

1. Soil sample the entire claim group for copper on lines spaced 400 feet apart and with sample interval of 100 feet.
- 2.) Using a Sharpe MF-1 magnetometer or equivalent instrument perform a magnetometer survey of the entire property on the 400 foot spaced lines with readings at 500 foot intervals. This survey should be useful in establishing the position of intrusive contacts, magnetite-bearing skarn zones and possibly other structures.

Phase II

If the geochemical and geophysical surveys give sufficient encouragement a second phase should be undertaken.

As the probable target will be relatively small and readily defined an initial allowance of 2,000 feet of diamond-drilling (AQ wireline) is suggested. The location and depth of the holes should be determined on the basis of the results of Phase I.

Greg Group - Budget

1. Prospector & assistant--1 month	\$2,000
2. Soil sample and magnetometer crew--1 month	1,800
3. Magnetometer rental	250
4. Soil sample analysis	1,000
5. Transportation & Radio Rental	850
6. Camp & Food	1,200
Mobilization & demobilization	400
Engineering, Etc.	800
	<hr/>
	\$8,300
Contingencies	800

GKS Budget

Phase I

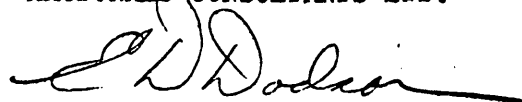
25 miles of line (chiefly ribboned)	\$
Soil sampling & magnetometer survey All contemporaneous 3 men - 25 days	2,800
Magnetometer Rental	250
Radio Rental	250
Soil Sample Analysis	1,200
Transportation	2,200
Camp & Food	800
Mobilization and Demobilization	400
Supervision (intermittent)	800
Engineering, Etc.	900
	<u>9,600</u>
Contingencies	960
Phase I - Total	\$10,560

Phase II

Diamond drilling 2,000 feet AQ at \$12/foot	24,000
Transportation and Radio	3,400
Geology & Supervision	2,500
Camp & Food	1,800
Mobilization and Demobilization	1,800
Engineering, Assaying, Etc.	3,200
	<u>36,700</u>
Contingencies	3,700
Phase II - Total	\$40,400
Total GKS Budget	\$50,960
Total GKS + Greg Budget	<u>\$60,060</u>

Respectfully submitted,

MACDONALD CONSULTANTS LTD.



E. D. Dodson, P. Eng.

EDD/st

MACDONALD CONSULTANTS LTD.
SUITE 12 - 425 HOWE STREET, VANCOUVER 1, B.C.

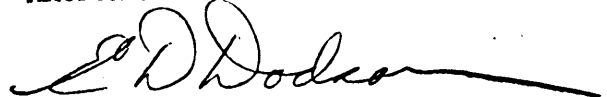
September 9, 1968

I, Earl D. Dodson do hereby declare that:

1. I reside at 2990 St. Kilda Avenue, North Vancouver, B. C. and have business address at 12 - 425 Howe Street, Vancouver 1, B. C.
2. I am a consulting geological engineer registered with the Association of Professional Engineers of the Province of British Columbia.
3. I examined the properties in this report dated September 9, 1968 on August 22, 1968.
4. I have no interest in either the properties or in Spartan Explorations Ltd. (N.P.L.) nor do I expect to receive any interest in the above company.

Respectfully submitted,

MACDONALD CONSULTANTS LTD.

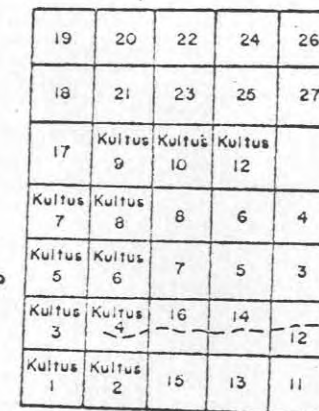


E. D. Dodson, P. Eng.

EDD/st

50° 25'

'GKS'
CLAIM GROUP



'GREG'
CLAIM GROUP

COMSTOCK
MOUNTAIN

MOUNT
WOLFENDEN

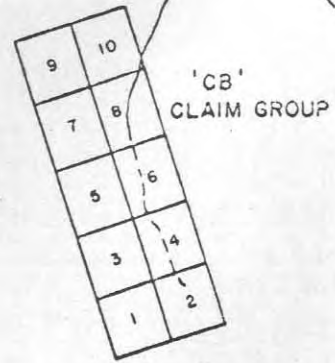
YREKA

INLET

NEROUTSOS

BUCHHOLZ CHANNEL

127° 35'

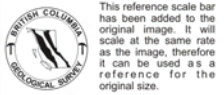
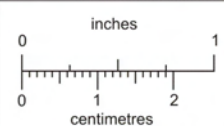


'CB'
CLAIM GROUP

CARTER
PEAK

MOUNT
PICKERING

MOUNT
CLARK

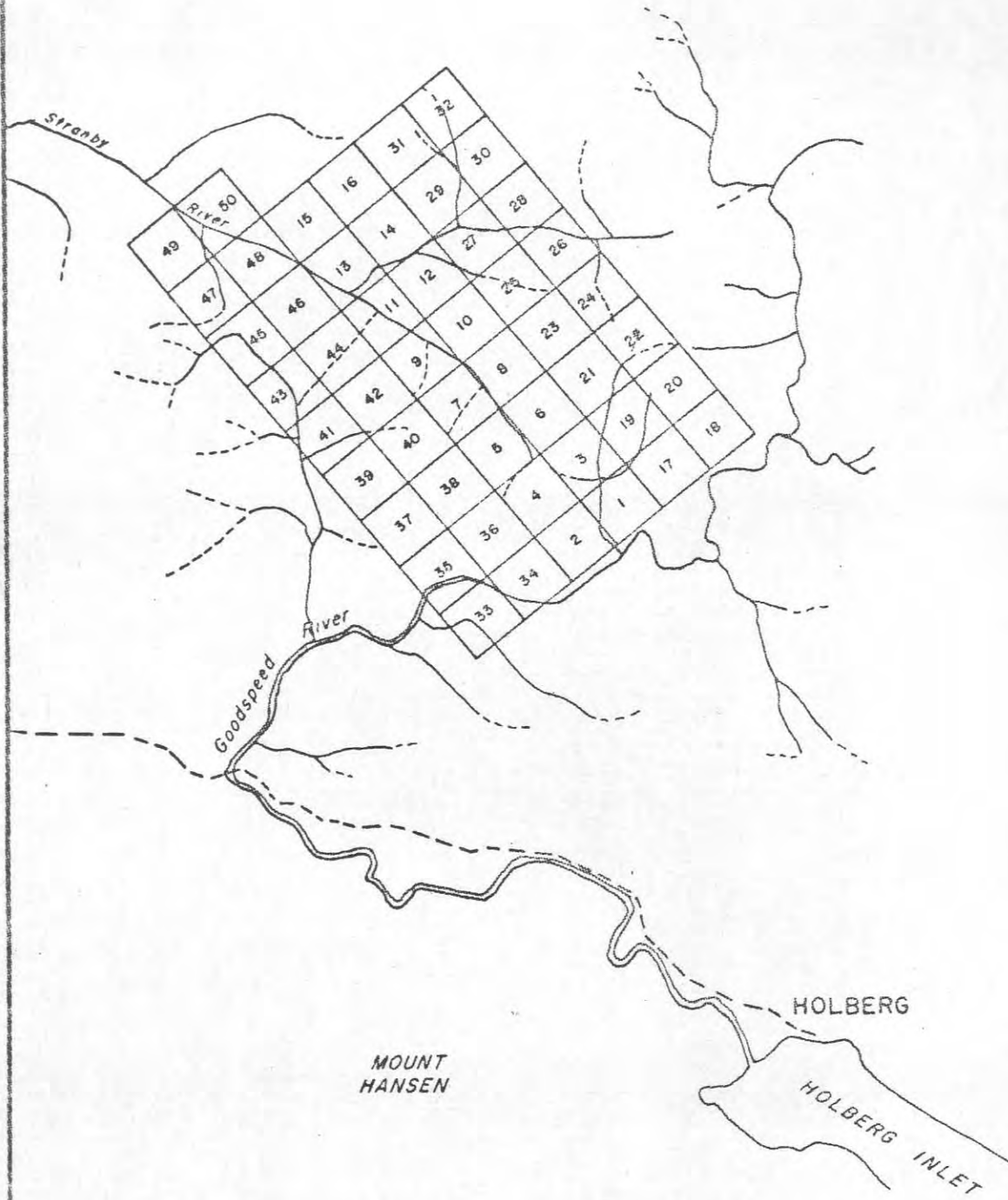


MacDonald Consultants Ltd.
SPARTAN EXPLORATIONS LTD.
(N.P.L.)

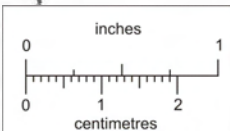
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DRAWN	ghe
DATE	SEPT '68
NO.	252-1

CLAIM
LOCATION
MAP

126°00'



50°40'



This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.



© C.I.L. 2017 A 1 - M C

MacDonald Consultants Ltd.

SPARTAN EXPLORATIONS LTD.
(N.P.L.)

SCALE	1:25" = 1 mi
DRAWN	ghs
DATE	SEPT '68
NO.	252-2

LOCATION MAP
'AAA' CLAIMS

T
S
L

Laboratories Limited

325 HOWE STREET - VANCOUVER 1, B.C.

TELEX: 04-50613
CODE NAME: TSL-LABS-VCR.

TELEPHONE 688-3504
AREA CODE 604

ASSAYERS
CHEMISTS,
GEOCHEMISTS

CERTIFICATE OF ANALYSIS

SAMPLE(S) FROM

Gardner Exploration Ltd

REPORT NO.

V5709-01

2 SAMPLE(S) OF
SOILS
REJECT

SOIL & SILT

GEOCHEM. RESULTS.
RESULTS IN PARTS PER MILLION P.O. # *2490*

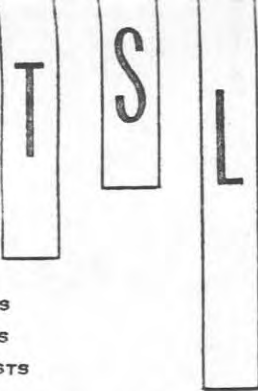
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"											
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"	5	<i>15</i>	<i>SOIL</i>	<i>" 22E</i>	<i>16</i>						
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"	0	<i>2020</i>	<i>SILT</i>	<i>" 31E+10'</i>	<i>42</i>						

DATE MAY 26, 1969

SIGNED RB Fletcher



2
mmmm



Laboratories Limited

325 HOWE STREET - VANCOUVER 1, B.C.

TELEX: 04-50613
CODE NAME: TSL-LABS-VCR.

TELEPHONE 688-3504
AREA CODE 604

ASSAYERS
CHEMISTS
GEOCHEMISTS

CERTIFICATE OF ANALYSIS

SAMPLE(S) FROM *Spartan Explorations*

REPORT NO.
V5709-2

SAMPLE(S) OF *soils*
Protect

RESULTS IN PARTS PER MILLION *P.O. # 2490*

		SAMPLE No		LOCATION	Cu	Pb	Zn	Ag	Ni	Mo	Co
<i>EKS</i>	1	<i>2021</i>	<i>SOIL</i>	<i>ON 32E</i>	<i>21</i>						
<i>EKS</i>	2	<i>22</i>	<i>SOIL</i>	<i>" 34E</i>	<i>13</i>						
"	3	<i>23</i>	<i>SOIL</i>	<i>" 36E</i>	<i>15</i>						
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"				<i>37E 45E</i>							
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"	2	<i>32</i>	<i>SILT</i>	<i>3N 45E</i>	<i>20</i>						
"	3	<i>33</i>	<i>SOIL</i>	<i>1S 44E</i>	<i>9</i>						
"	4	<i>34</i>	<i>SOIL</i>	<i>1S 42E</i>	<i>9</i>						
"	5	<i>35</i>	<i>SOIL</i>	<i>1S 40E</i>	<i>9</i>						
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"	7	<i>37</i>	<i>SOIL</i>	<i>1S 36E</i>	<i>27</i>						
"	8	<i>38</i>	<i>SOIL</i>	<i>1S 34E</i>	<i>22</i>						
"	9	<i>39</i>	<i>SOIL</i>	<i>1S 33E</i>	<i>3</i>						
"	0	<i>2040</i>	<i>SOIL</i>	<i>1S 32E</i>	<i>7</i>						

DATE *MAY 26, 1969*

SIGNED *R.B. Fletcher*





Laboratories Limited

325 HOWE STREET - VANCOUVER 1, B.C.

TELEX: 04-50613
CODE NAME: TSL-LABS-VCR.

TELEPHONE 688-3504
AREA CODE 604

ASSAYERS
CHEMISTS
GEOCHEMISTS

CERTIFICATE OF ANALYSIS

SAMPLE(S) FROM *Spenton Explorations*

REPORT NO.
V5709-3

SAMPLE(S) OF *Soils*

RESULTS IN PARTS PER MILLION *P.O. # 2490*

PROJECT

		SAMPLE No	LOCATION	Cu	Pb	Zn	Ag	Ni	Mo	Co
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"	2	<i>42</i>	<i>SOIL 1S 28E</i>	<i>5</i>						
"	3	<i>43</i>	<i>SOIL 1S 26E</i>	<i>7</i>						
"	4	<i>44</i>	<i>SOIL 1S 24E</i>	<i>4</i>						
"	5	<i>45</i>	<i>SOIL 1S 22E</i>	<i>3</i>						
"	6	<i>46</i>	<i>SOIL 1S 20E</i>	<i>6</i>						
"	7	<i>47</i>	<i>SILT 4N 0E</i>	<i>11</i>						
"	8	<i>48</i>	<i>SOIL 4N 0E</i>	<i>9</i>						
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"	0	<i>2050</i>	<i>SILT 4N 3E</i>	<i>37</i>						
"			SOIL 4N 4E							
"	1	<i>2051</i>	<i>SOIL 4N 4E</i>	<i>10</i>						
"	2	<i>52</i>	<i>SOIL 4N 6E</i>	<i>15</i>						
"	3	<i>53</i>	<i>SOIL 4N 8E</i>	<i>5</i>						
"	4	<i>54</i>	<i>SOIL 4N 9E+30'</i>	<i>2</i>						
"	5	<i>55</i>	<i>SOIL 4N 12E</i>	<i>3</i>						
"	6	<i>56</i>	<i>SOIL 4N 14E</i>	<i>4</i>						
"	7	<i>57</i>	<i>SOIL 4N 16E</i>	<i>15</i>						
"	8	<i>58</i>	<i>SOIL 4N 18E</i>	<i>7</i>						
"	9	<i>59</i>	<i>SOIL 4N 20E+50'</i>	<i>4</i>						
"	0	<i>2060</i>	<i>SOIL 4N 22E</i>	<i>6</i>						

DATE *MAY 26, 1969*

SIGNED *RB Fletcher*



T S L

Laboratories Limited

325 HOWE STREET - VANCOUVER 1, B.C.

TELEX: 04-50613
CODE NAME: TSL-LABS-VCR.

TELEPHONE 688-3504
AREA CODE 604

ASSAYERS
CHEMISTS
GEOCHEMISTS

CERTIFICATE OF ANALYSIS

SAMPLE(S) FROM *Spartan Explorations Ltd*

REPORT NO.
V5709-4

SAMPLE(S) OF *Soil*

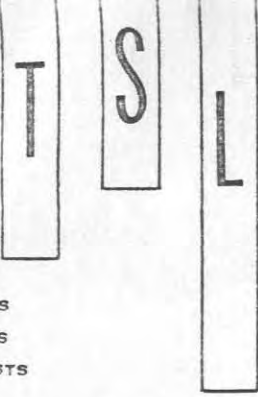
RESULTS IN PARTS PER MILLION *P.O. #2490*

		SAMPLE No	LOCATION	Cu	Pb	Zn	Ag	Ni	Mo	Co
<i>EXES</i>	1	<i>2061</i>	<i>SOIL 4N 24E</i>	<i>9</i>						
"	2	<i>62</i>	<i>SOIL 4N 26E</i>	<i>5</i>						
"	3	<i>63</i>	<i>SOIL 4N 28E</i>	<i>6</i>						
"	4	<i>64</i>	<i>SOIL 4N 30E</i>	<i>7</i>						
"	5	<i>65</i>	<i>SOIL 4N 32E</i>	<i>6</i>						
"	6	<i>66</i>	<i>SOIL 4N 34E</i>	<i>15</i>						
"	7	<i>67</i>	<i>SOIL 4N 38E</i>	<i>10</i>						
"	8	<i>68</i>	<i>SOIL 4N 40E</i>	<i>6</i>						
"	9	<i>69</i>	<i>SOIL 4N 41E + 25'</i>	<i>55</i>						
"	0	<i>2070</i>	<i>SOIL 8N 42E</i>	<i>4</i>						
"			<i>SOIL 8N 42E</i>							
"	1	<i>2071</i>	<i>SOIL 8N 40E</i>	<i>20</i>						
"	2	<i>72</i>	<i>SOIL 8N 38E</i>	<i>3</i>						
"	3	<i>73</i>	<i>SOIL 8N 35E + 25'</i>	<i>15</i>						
"	4	<i>74</i>	<i>SOIL 8N 34E</i>	<i>6</i>						
"	5	<i>75</i>	<i>SOIL 8N 32E</i>	<i>6</i>						
"	6	<i>76</i>	<i>SOIL 8N 30E</i>	<i>3</i>						
"	7	<i>77</i>	<i>SOIL 8N 28E</i>	<i>5</i>						
"	8	<i>78</i>	<i>SOIL 8N 26E</i>	<i>7</i>						
"	9	<i>79</i>	<i>SOIL 8N 24E</i>	<i>6</i>						
"	0	<i>2080</i>	<i>SOIL 8N 22E</i>	<i>15</i>						

DATE MAY 26 1969

SIGNED RTB Fletcher





Laboratories Limited

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ASSAYERS
CHEMISTS
GEOCHEMISTS

CERTIFICATE OF ANALYSIS

SAMPLE(S) FROM *Spartan Explorations*

REPORT NO.
15709-5

SAMPLE(S) OF *Soil*
PROJECT

RESULTS IN PARTS PER MILLION *P.O. #2490*

		SAMPLE No	LOCATION	Cu	Pb	Zn	Ag	Ni	Mo	Co
<i>GKS</i>	1	<i>2081</i>	<i>SOIL 8N 20E</i>	<i>20</i>						
"	2	<i>82</i>	<i>SOIL 8N 19E</i>	<i>18</i>						
"	3	<i>83</i>	<i>SOIL 8N 16E</i>	<i>17</i>						
"	4	<i>84</i>	<i>SOIL 8N 14E</i>	<i>16</i>						
"	5	<i>85</i>	<i>SOIL 8N 12E</i>	<i>12</i>						
"	6	<i>86</i>	<i>SOIL 8N 10E</i>	<i>12</i>						
"	7	<i>87</i>	<i>SOIL 8N 8E</i>	<i>21</i>						
"	8	<i>88</i>	<i>SOIL 8N 6E</i>	<i>8</i>						
"	9	<i>2089</i>	<i>SOIL 8N 4E</i>	<i>7</i>						
"	0	<i>2090</i>	<i>SOIL 8N 2E</i>	<i>12</i>						
"										
"	1	<i>2091</i>	<i>SOIL 8N 0E</i>	<i>5</i>						
"	2									
"	3	<i>BY HOT HCl—ACID EXTRACTION</i>								
"	4									
"	5	<i>DETERMINED BY A.A.</i>								
"	6									
"	7									
"	8									
"	9									
"	0									

DATE *MAY 26, 1969*

SIGNED *RBFletcher*

