ARIS SUMMARY SHEET

District Geologist, Kamloops Off Confidential: 89.05.25

ASSESSMENT REPORT 17576 MINING DIVISION: Vernon

PROPERTY: Spod
LOCATION: LAT 49 57 25 LONG 119 31 00
UTM 11 5536660 319480
NTS 082E13E
CLAIM(S): Spod
OPERATOR(S): Stushnoff, J.
AUTHOR(S): Stushnoff, J.
REPORT YEAR: 1988, 21 Pages
COMMODITIES
SEARCHED FOR: Gold,Silver,Copper
GEOLOGICAL
SUMMARY: A Jurassic Cache Creek sedimentary unit is intruded by a quartz rhyolite dyke. Pyrite and gold occur in a rhyolite dyke 1200 metres long and 3-5 metres wide.
WORK
DONE: Prospecting
PROS 375.0 ha
Map(s) - 2; Scale(s) - 1:5000

PROSPECTING ASSESMENT REPORT

on the

Spod Mineral Claims (Spod property)

Blue Grouse Mountain Kelowna, British Columbia

Vernon Mining Division
NTS 82E - 13E

by

John Stushnoff, Free Miner Prospector

Claims

Spod twelve units
Spod A one unit
Spod B one unit
Spod C one unit

Location

The Spod property situated on Blue Grouse Mountain, 15 km northwest of Kelowna, BC. Latitude 49° 57' longitude 119° 31'. - See figure 1

Owner	J. Stushnoff
Operator	J. Stushnoff
Date Started	September 14, 1987
Date Completed	December 14, 1987

Kelowna, BC November 25, 1988

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MAPS

APPENDIX

SUMMARY

Spod mineral claims are situated on the east slope of Blue Grouse Mt., on the west side of Okanagan Lake, 15 km north west of Kelowna, British Columbia.

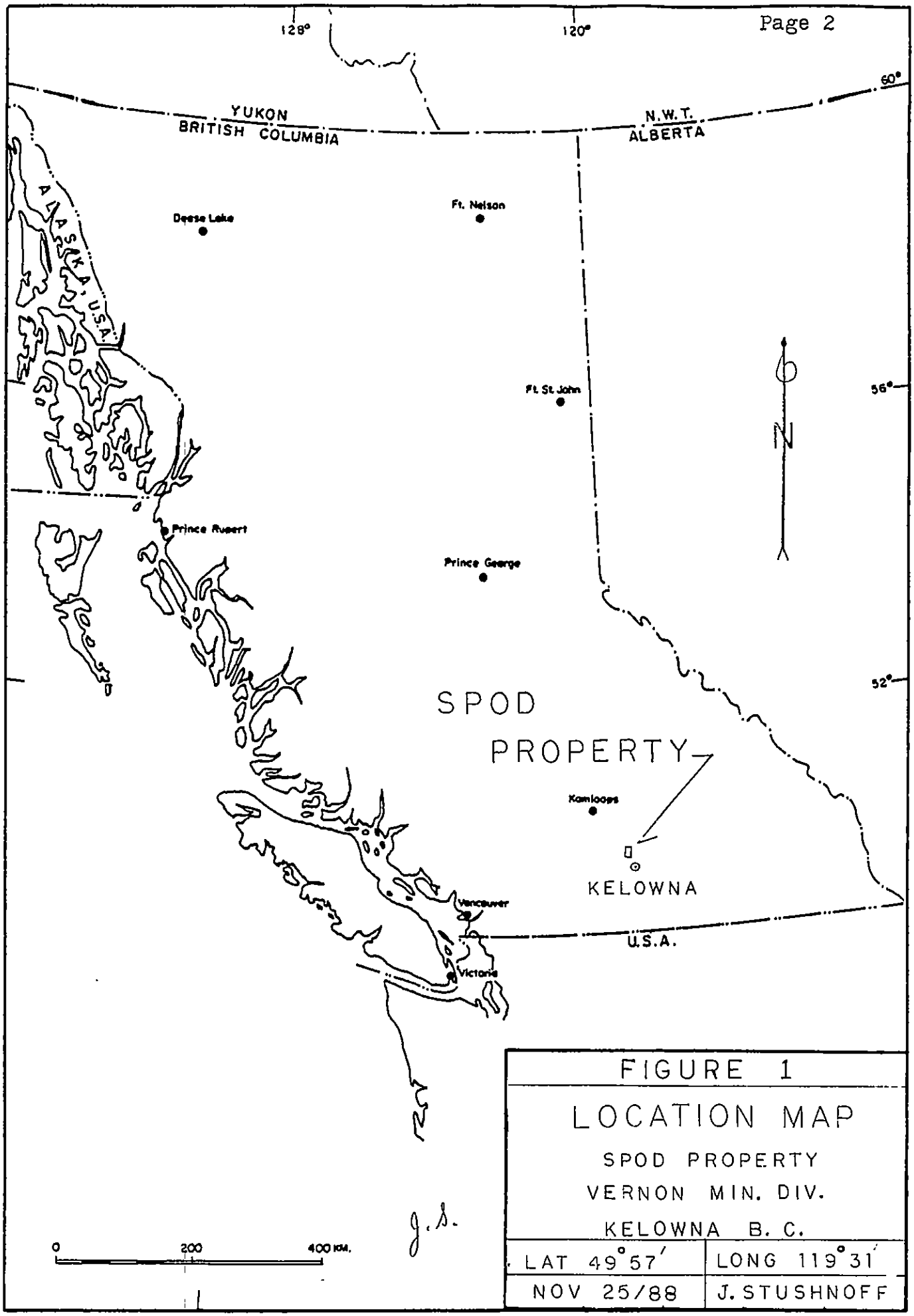
The claims were located on Crown land in the Vernon Mining Division by the author of this report, John Stushnoff, owner and operator of the Spod property.

Prospecting on this property was carried out before, by other persons. Unknown to the extent and magnitude of the work carried out.

The prospecting is carried out at present by the author. The minerals sought after are gold, silver, copper, lead and zinc.

Establishing a grid on the property for a technical excersize of prospecting for geo-chem sampling, geophysical, and geological surveys.

Should interest prevail, to be followed up by trenching, more sampling, and drilling.



g.s.

FIGURE 1

LOCATION MAP

SPOD PROPERTY

VERNON MIN. DIV.

KELOWNA B. C.

LAT 49°57′	LONG 119°31′
NOV 25/88	J. STUSHNOFF

INTRODUCTION, SPOD PROPERTY

Location, Access, Topography, and Vegetation

Spod property owned 100% by the author, John Stushnoff, prospector, free miner, and operator, located and staked the property in 1987 to prospect for gold, silver, lead, zinc, and copper.

The property is located on Crown land on Blue Grouse Mt., on the west side of Okanagan Lake, 15 km north west of Kelowna, BC.

The property is situated on Latitude 49° 57' longitude 119° 31', in the Vernon Mining Division. NTS 82E - 13E, figure 1A 1:50,000 Location Map.

Access to the property, from Kelowna, 2.5 km west by Hwy 97 to Westside paved all-weather road, for 8 km going north to Bear Creek forestry access gravel road, for 2 km to Blue Grouse No. 1 good-weather dirt road up Blue Grouse Mt. to Spod property and Television tower at the top.
Figure 1 A

Spod claims lie on the east slope of Blue Grouse Mt. The west limit of the property lies on semi-flat benches, the eastern limit of the property descends steeply to the south east, interrupted by an occassional cliff or ridge and ravine.

The elevation at the west boundary of the property is 3,500 ft. mean sea level, the eastern boundary is 2,000 ft.

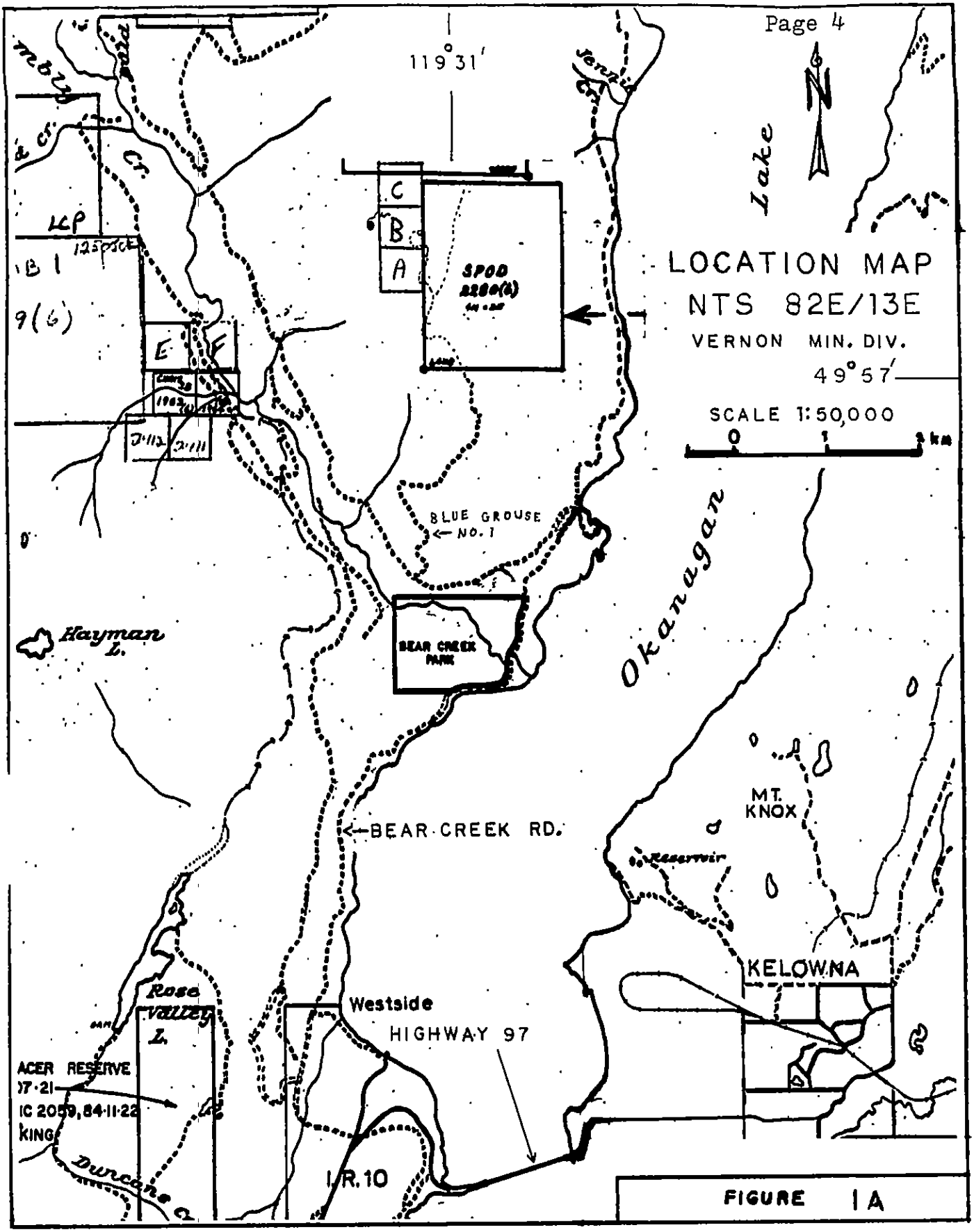


FIGURE 1A

NOV 25/88

SPOD PROPERTY

J.S.

Status

The spod property consists of 4 mineral claims. The Spod claim comprised of 12 units, 3 units east, 4 units north, tag number 64118 staked on May 22, 1987, record No. 2280, recorded in the Vernon Mining Divison, Vernon, BC on June 2/87.

The Spod A, B, and C are 2 post mineral claims, record numbers 2357, 2358, 2359 respectively were staked on September 2, 1987 and recorded on September 25, 1987 in the Vernon Mining Division. NTS 82E - 13E.

Spod A tag No. 345654, Spod B tag No. 472010, Spod C tag No. 472011, adjacent to the Spod claim. The A, B, and C claims are 457.20 m^2.

History

Evidence of previous prospecting occur in numerous areas, from hand dug pits, to dozer scraping soils of rock outcrop.

Most evident is a vertical shaft 1.5 m^2 hammered out of a rhyolite dyke, broken rock littering the margin of the shaft, Extent of previous prospecting and magnitude is unknown.

REGIONAL GEOLOGY

Blue Grouse Mountain made up of a complexed series of rock put together in a basement of pre-Cenozoic sediments, which were intruded by granite and members of lower Cretaceous-upper Jurassic era, by B. H. Church map #39 1980.

The intrusives are wide spread in the region making up the Okanagan batholith. From this batholith, are smaller bodies of rock protruding the sedimentary rocks are; seyenite, quartz seyenite, diorite and granodiorite.

Glaciation left its mark in the region, deepening valley floor, gouging and grinding valley walls, terracing mountain slopes.

LOCAL GEOLOGY

The pre-Cenozoic sedimentary rock unit of argillaceous, metavolcanics and shistosic rocks are interrupted by a sequence of volcanic rift eruptions making up part of a Kittley Lake member of the Marron formation (52.9 ma.)

A trend of eruptive thin lava of low magnitude flows in a south easterly direction.

Metamorphic rocks are numerous, medium grained plagioclase feldspar porphry rock units intermix with the sedimentary rocks.

North western corner of the property, a limestone baron of fossils nearly pure white partly marbelized, narrow quartz veining and minor silicification.

TRAVERS IDENTIFICATION

Travers program execised over most of the property by plotting from notes taken when staking, and a topographic 1:50,000 82E/13 map.

Taking into consideration of topography, locations of interest resulted into plotting 6 routes numbered 1 - 6, lettered destination points on sketches were prepared.

refer to map 2, figure 2.

Identification

Each travers route identified by a large number, letters identify destination points, small numbers to identify station.

Direction of route by compass, distance of travers from start to finish by hip chain measurement in meters.

Travers Route 1 Stations 1 - 16, Map 2, figure 2.

(1) Travers 1 began on Westside road, 2 km north of Bear Creek forestry access road.

Proceeded west on foot to destination A, station 1, 70 m treck.

Host rock shale cut by andasitic dykes, a quartz intrusion surfaced, carrying small amounts of sulfieds and oxides, galena, cube pyrite and arseno-pyrite, limonite coating on fractures, chlorite, calsite and clay gangue minerals. Alterations--metamorphisis.

Destination B, (2) (3) (White spots) calsite percipitating onto surface by way of moisture coming from rock.

Rock type, a cherty banded siltstone, light green in colour, minor diseminated cube pyrite 1 - 2 mm in diameter.

Travers Route 1 continued . . .

Travers Route 1 continued

(4) Severely fractured shale, flooded by a pinkish white rock, thin baron quartz veins.

(5) 520 m on chain, a fractured shale intruded by quartz, .5 m wide and 1.5 m long, diagonal habit of vertical intrusion, secondary mineralization, malacite, trace calco-pyrite, limonite, manganese, alteration, metamorphisis.

(6) Porphyritic Trachyte - andesite flows, bedding not defined.

Destination C, (7) A medium grained porphyritic andesite and associated thin baron calsite, quartz veins.

(8) Inclusions of shale in greenish, dark granular feldspar porphyry, sporadic inclusions measuring 10 - 20 m in diameter, contacts not well defined.. Some inclusions grade from a shale to banded siltstone towards center.

(9) Same as 8.

(10) 1,700 m on chain, a sharp vertical contact in a fault, shale on north of contact and a light green feldspar porphyry on south. A horizontal fault on contact 40 m west, strike 110° dipping 5° north, shale overlying feldspar porphyry.

Destination D, (11) 2,000 m on chain, shale grading into siltstone, porphyry rock fazed out entirely.

(12) Inclusions of shaley siltstone in a granular porphyritic greenish rock, contacts difficult to establish.

(13) A cherty greenish banded siltstone intruded by white to pink rock, 1 - 2 m wide, 20 m long trending 334°, no distinct mineralization.

(14) (15) White spots appearing on surface, cherty green rock float, overburden presumabley 1 m deep.

(16) 3,850 on chain, calsite vein 30 cm wide, 3 m long surfacing in shale quartz inclusions in calsite, associated epidote, chlorite clay, trace pyrite, calco-pyrite.

Travers Route 2 Stations 1 - 16, Map 2, figure 2.

(1) (2) (3) shale rock intruded by seyenitic rocks, pockets of limonitic manganese stained rocks, thin quartz veins, argillic, trace pyrite mineralization.

(4) A rhyolite outcrop in shale 2 m wide, 4 m long, protruding above ground, pyrite, arseno-pyrite mineralization.

Destination A, (5) 590 m on chain. A weaving contact on shale and feldspar porphyry.

(6) (7) Inclusions of shale in porhyritic rocks vertical block faulting.

(8) Shale grading into banded siltstone.

Destination B, (9) 1310 m on chain. White and pink rock intruding shales and argillic siltstone, patches trending 335°, trace diseminated pyrite visible.

(10) (11) Patchy argillic shales and banded siltstone, small quartz veinlets, trace pyrite.

Destination C, (12) (13) Rhyolite outcrop, host rock shale, measuring 3 - 4 m accross, flat lying in surrounding rock, mineralization fine diseminated pyrite, arseno-pyrite.

(14) (15) A continuation of rhyolite partially above ground, 3 m wide, 6 - 8 m long, pink to dark red in colour on surface. Thin quartz veinlets, fine diseminated pyrite, arseno-pyrite, minor clay vesicles, cross vertical bedding flows variations from 20 - 40 cm wide, light coating of limonite in patches.

(16) 2015 m on chain. Rhyolite intruded shale, breccia and fractured host rock.

Unit 4 - 6 m wide, 30 m long, trending 330°. Cross vertical bedding 30 - 60 cm wide, evidence of a shaft started. Mineralization--pyrite, arseno-pyrite more abundant.

Travers Route 3 Stations 1 - 11, Map 2, figure 2.

(1) Proceeding northwast, road cut an edge of a rhyolite outcrop 3 m wide, 10 m long, linear trend 330°. Appearing same type and habit as last rhyolite examined, same composition of minerals. Minor change in host rock, basaltic units appearing in shale.

Destination A (2) Shale host rock brecciated, rhyolite intruding shale, flow bedding strike 5° dipping 80° west. Rock type, a fine grain porphyritic biotite seyenite. Mineralization in a narrow quartz vein along bedding plain, pyrite, arseno-pyrite, galena, gangue minerals, clay, calsite, quartz, chlorite, cerrusite.

(4) Same composition as 3, except for a bright red weathering on fractured surfaces.

(5) Same as 4.

(6) Porphyritic greenstone float.

Destination B, (7) 960 m on chain. Porphyritic greenstone in situ, trace diseminated pyrite.

(8) Greenstone porphyry grading into shale and banded siltstone.

(9) (10) Argillic siltstone and shales.

(11) Dark brown feldspar porphyry, limonite patches, back at station 1, 2,560 m on chain.

Travers Route 4 Stations 1 - 11, Map 2, figure 2.

(1) Area hosts a fine grain green sandstone in contact with extruded igneous rocks, trachyte-andesite, and agglomerate.

(2) (3) A talus float, trachyte-andesite.

(4) Shale and siltstone appearing at surface, showing stress from volcanics.

Destination A, (5) 675 m on chain. Argillite on shale hosted linears trending north, minor quartz veinlets.

(6) Talus and trachyte-andesite flows.

Destination B, (7) 1,025 m on chain. Amygdule basalt, lightcoloured porphyritic, agate quartz filling vesicles, 2 mm to 1 cm, trace pyrite.

(8) (9) Trachyte-andesite light coloured medium grained basalt.

(10) Trachyte basalt fractured, calsite crystalization on fractures.

(11) Tufaceous agglomerate, local vertical faulting, trace pyrite, minor limonite, weathered red crumbly rock, contains small amounts of mercury.

Travers Route 5 Stations 1 - 12, Map 2, figure 2.

(1) Argillic shale, calsite quartz veinlets, severe fracturing in host rock.

(2) Limestone float.

(3) Limestone in situ, very white, barron of fossils high concentration of calsite.

(4) Limestone in situ, silisification and quartz vein alteration, trace pyrite in quartz.

Travers Route 5 continued . . .

Travers Route 5 continued

Destination A, (5) 850 m on chain. Limestone nearly white, narrow quartz veins 1 - 2 cm wide, minor quartz flooding.

(6) Dense vegetation. (coniferus forest)

(7) Limestone float.

(8) (9) (10) Dark grey coloured siltstone, minor local block faulting, no mineralization.

Destination B (11) 2,580 m on chain. Fault strike 245° dip presumably vertical. Shear zone strike 335°, dipping 30° northeast, argillic shale hosting shear zone, calsite quartz gangue, trace pyrite mineralization.

(12) Local block faulting, home base, 3,310 m on chain.

Travers Route 6 Stations 1 - 13, Map 2, figure 2.

(1) Brecciated shales, cemented tight by silicification.

(2) Shales, banded siltstone.

(3) Clusters of rhyolite intruding shale linear, trend 330°, weathering red on fractures, limonitic, pyrite mineralization.

Destination A, (4) 550 m on chain. Porphyritic andesite.

(5) (6) Shale linear argillic, vesicular, trace pyrite mineralization.

(7) (8) Argillic, limonitic shale, pyrite mineralization.

Destination B, (9) 1,170 m on chain. Clustered rhyolite intruding shale, haematite weathering on surface.

(10) Argillic limonite shale, arseno-pyrite mineralization.

Destination C, (11) 1,490 m on chain. Porphyritic seyenite intruding shale, quartz veins, trace pyrite.

(12) Continuation of seyenite, quartz veins fazed out.

Travers Route 6 continued . . .

Travers Route 6 continued

(13) Agglomerate in road bed, fine grain greenish sand cementation holding bouldery aggregate together. Boulder size ranging 2 cm pebbles to 30 cm boulders, exposed 1 m wide, 6 m long, home base 2,040 m on chain.

GRID LOCATION MAP 3 FIGURE 3 g.s.

Grid location began on Oct. 26 1987, starting at 2N,0E intermediate post on claim line and proceded east to 850m last station.

Starting with 0 on the base line at 2N,0E and cut off at 850m, a decline of 500 feet in elevation had to be worked out on a scaled graph on a sketch to allow for decend and distance, using compass for degree of slope angle. A hip chain used for spacing stations. Stations marked with metal tags cut from thin gauge aluminum, numbers pressed into tags and nailed to trees or posts.

Base line continued west for 450m from 0 station, for overall total of 1300m. Stations spaced at 50m, true lines spaced at 100m, 5050m of true line established using metal numbered tags every 50m station spacing.

True lines established to a reasonable distance for good access before a steep talus slope ahead. Upon backtracking to base line, investigating and examining rock outcrop noting rock types, alteration and mineralization if any and specimen samples collected.

DISCUSSION

Interest showing up in Travers, centers on a diagonal trend through property in the vicinity of the rhyolite intruding local rock unit.

Linears and breccia associated mostly around rhyolite.

Concentration of mineralization focuses in rhyolite, alteration habit in shale and siltstone propylitic?

CONCLUSION

The structure of rock could easily support ore deposits, batholitic rocks carrying up to 10% pyrite and possible volatile solutions for mineralization of precious metals.

A fault through the property would supply a route for these solutions.

Volcanic activity would supply heat and stimulate mineralization.

Permeable rock required for a deposit, having limestone and brecciated shales may provide the necessary environment for a mineral deposit.

RECOMMENDATION

Dense sampling be carried out over the rhyolite trend and nearby rocks. Follow up with geophysics on a broader scale on a grid using a magnetometer and a VLF M16 survey.

J. S.

APPENDIX I

GEOCHEMICAL SOIL SAMPLING

Soils were taken with a shovel, by cutting a pie shape 30-35cm. in diameter, 20-25cm. deep, lifting the soil out of the hole cutting across the middle depth-wise, exposing layered soil horizons. Filling a soil envelope from the B horizon, hand screening out pebbly material.

TABLE A: SOIL HABIT

SOIL HORIZON	ALPINE IN CM.	SAM NO.	RAINFOREST IN CM.	SAM NO.	GULLY & RAVINE IN.CM.	SAM NO.
Leaf HUMUS (H)	1-2		5-6		3-4	
OR TOP SOIL(TS)	3-4		4-6		8-10	
LEACHED (A)	0-1		3-4		6-8	
BROWN (B)	3-4		3-4		3-5	

Five soil samples collected on Alpine terrain numbers; 3, 7,8,24,31; four samples collected in forested area numbers; 5,9,17,23; two samples collected in gullys numbers; 12,29. Total of 11 samples collected and asseyed.

TABLE B: RESULTS AND VALUES

SOILS	3	5		7	8	9	12	17			31	
ROCKS			6						18	19		
AU		*		*	*	*			*			10 PPB PLUSS
Ag									*			6.0
Hg			*						*	*	*	25 PPB PLUS
CU										*	*	50 PPM PLUS
ZN									*			200 PPM PLUS

J. S.

GEOCHEMICAL ANALYSIS DATA

Seven soil samples assayed by method of 12 elements, ICP for AG, As, CO, CU, FE, MN, MO, NI, PB, ZN, W, plus HG, AU; (HG - Acid Digestion) (AU - Fire A.A.).

Four soil samples assayed by method of 31 elements, ICP for AG, AL, AS, B, BA, BE, BI, CA, CD, CO, CU, FE, K, LI, MG, MN, MO, NA, NI, P, PB, SB SR, TH, U, V, ZN, GA, SN, W, CR, plus AU; (AU wet ÷ geochemical).

For results see Table B.

GEOCHEMICAL ROCK SAMPLES

Twenty rock samples analyzed for 31 elements. ICP plus AU, same elements as for soils; 3 anomalous rock samples, number 6, 18, 19.

For results see Table B.

All Assays performed by:

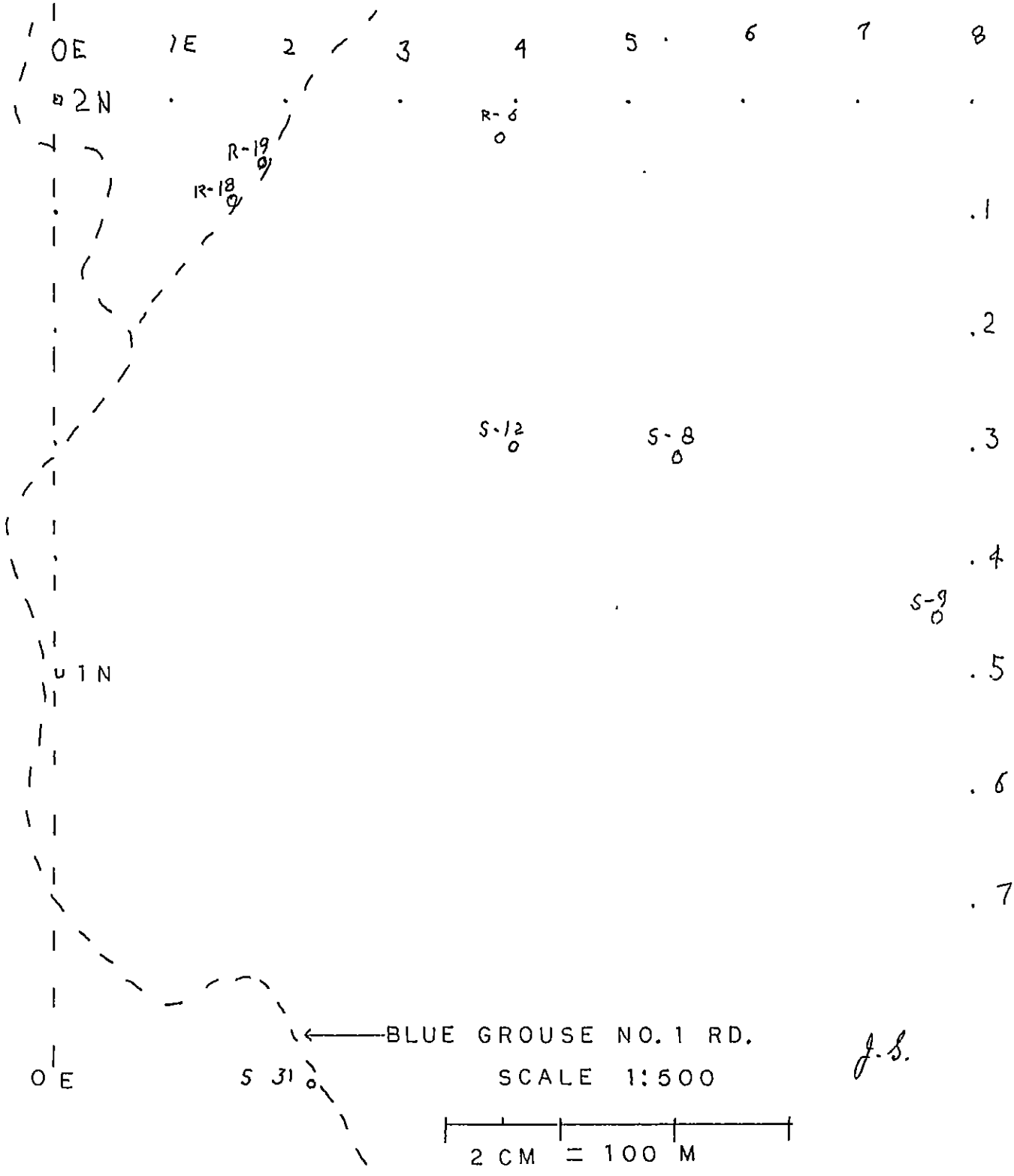
MIN-EN LABORATORIES LTD.
North Vancouver, B. C.
December 19, 1987.

J. S.

APPENDIX II

TREND OF ANOMALY

TABLE C



J.S.

COST AND EXPENDITURES ON SPOD PROPERTY

PROSPECTING; by maner of:

TRAVERSE:	1 man,6 days @ $130.00/day . . .	$780.00
LAYING GRID	1 man,6 days @ $130.00/day . . .	$780.00
COLLECTING AND CHIPPING SAMPLES . . .	1 man,3 days @ $130.00/day . . .	$390.00
GEOLOGICAL SURVEY . . .	1 man,2 days @ $130.00/day . . .	$260.00
ACCESSORIES	Thread, flagging	$20.00

GEOCHEMICAL EXPENSES:

ASSAY COST	$350.00
SHIPPING	$16.00
SAMPLE BAGS	$7.80

ROOM AND BOARD:

17 days @ $12.00/day	$204.00

TRANSPORTATION:

4x4 truck, including fuel . .	17 days @ $40.00/day . .	$680.00

REPORT PREPERATION:

DATA PREPERATION	$130.00
TYPING AND ZEROX	$30.00
GRAND TOTAL	$3647.80

I certify this statement to be true in expenditures for work excersized on this property from September 14 1987 to December 14 1987

DATE: NOVEMBER 25 1988 SIGNED: JOHN STUSHNOFF

John Stushnoff

QUALIFICATIONS

Owner and operator of the Spod property I, John Stushnoff, am the author of this Report on the Spod Claims situated in the Vernon Mining division. My knowledge in prospecting, with the help of maps and assistance, by way of grants to prospectors, from the Ministry of Mines and Petroleum Resources has made this project possible.

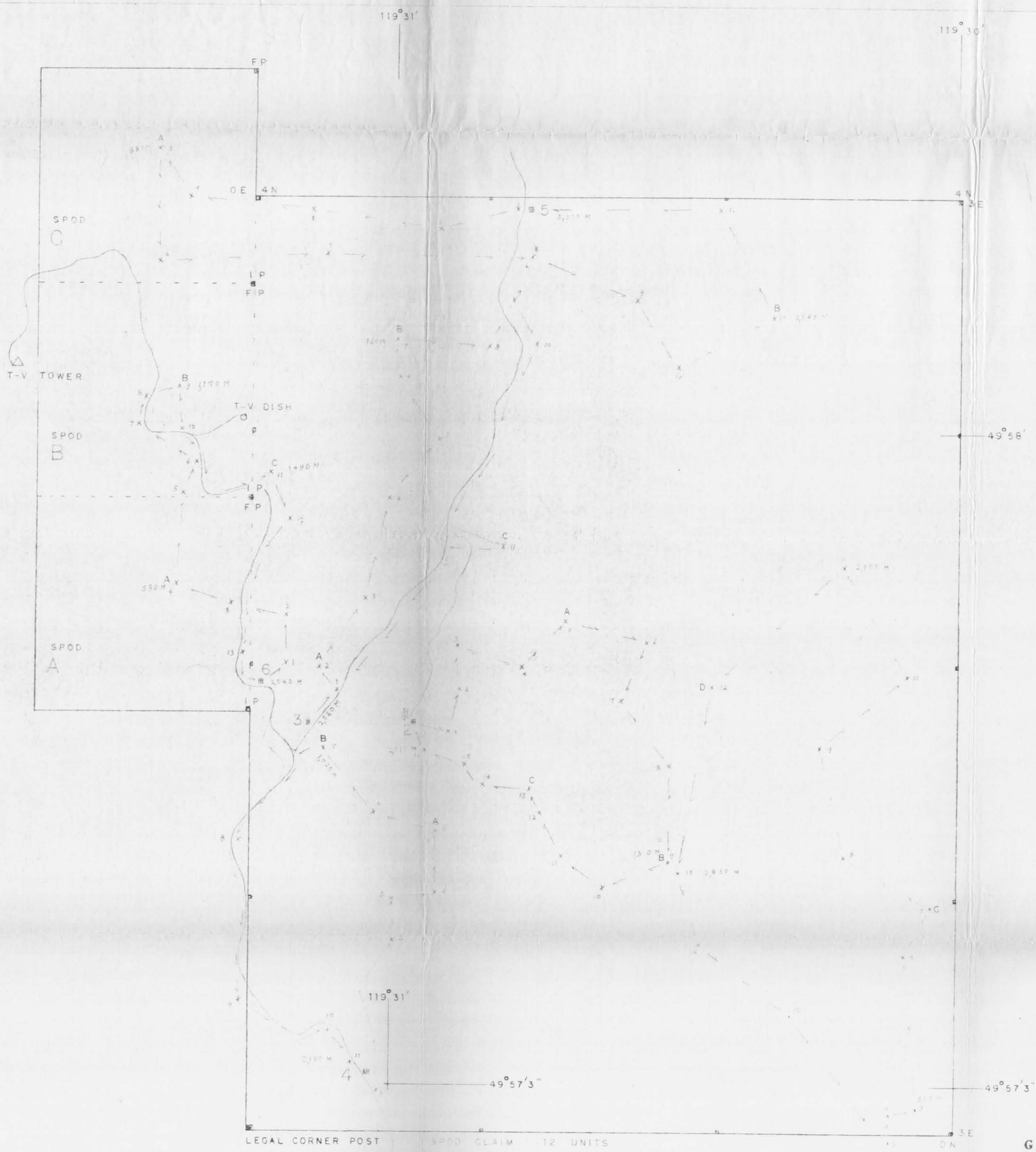
Prospecting as a hobby takes me back to early 1950. My first real experience was in 1978 and 1979 with Charles Fipke, on stream sampling and Collin Godwin on Ultramafic rocks and Kimberlite pipes in the east Kootenay region. The next course I took, in 1982, was an introduction to rocks and minerals, with Arnie Palmer, who was chief geologist for Brenda Mines at the time. The same summer, I worked in the field with Mr. Palmer and crew exploring the Molybdinum and Copper deposits.

I took my third course, in 1985, with Gordon White as instructor on rocks and minerals, handling claims, plus a field trip. The most recent course I attended for Prospectors, at Malaspina College, was put together by government staff and other colleagues.

My sincere thank you, to the people with whom I have worked and attended classes, with regard to this very important industry.

John Stushnoff

J. S.



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SPOD PROPERTY

VERNON MIN. DIV.

TRAVERS MAP 2

LATITUDE 49°57'3"

LONGITUDE 119°30'

LEGEND

SPOD-CLAIM ..... 12 UNITS
SPOD-A ..... 1 UNIT
SPOD-B ..... 1 UNIT
SPOD-C ..... 1 UNIT
LP ..... INITIAL POST
FP ..... FINAL POST
TRAVERS 1
" 2
" 3
" 4
" 5
" 6

SYMBOLS

DESTINATION ..... A-B-C-D
START TRAVERS .....
TRAVERS .....
REFERENCE STATION .....
ROAD .....
T-V-DISH .....
T-V-TOWER .....

SCALE 1:500

200 M

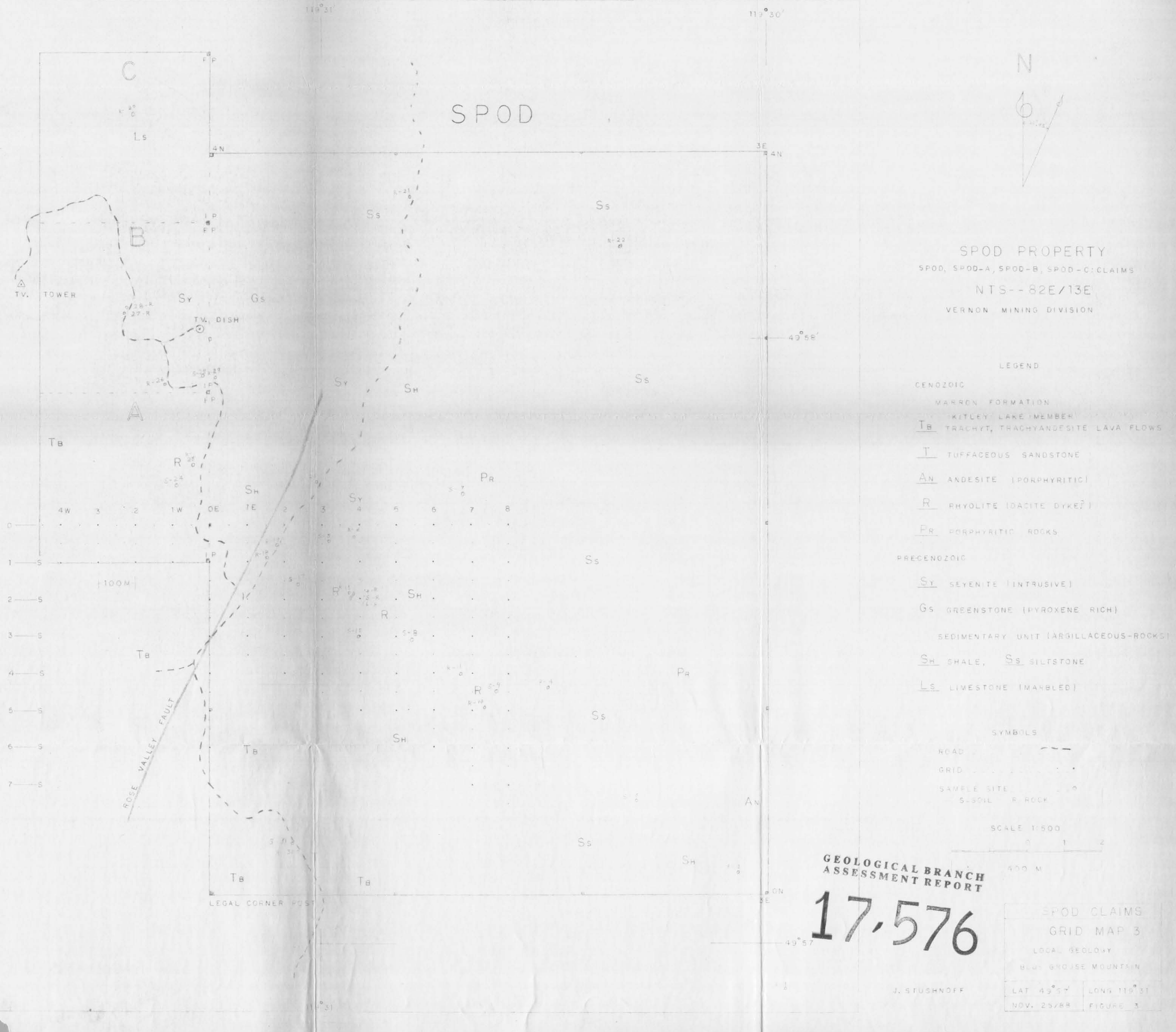
TRAVERS

GEOLOGICAL BRANCH
ASSESSMENT REPORT

17,576

FIGURE 2

NOV 25/88 J. TUSHNOFF J.S.



N

SPOD PROPERTY

SPOD, SPOD-A, SPOD-B, SPOD-C CLAIMS

NTS--82E/13E

VERNON MINING DIVISION

LEGEND

CENOZOIC

MARRON FORMATION

(KITLEY LAKE MEMBER)

Tb TRACHYT, TRACHYANDESITE LAVA FLOWS

I TUFFACEOUS SANDSTONE

An ANDESITE (PORPHYRITIC)

R RHYOLITE (DACITE DYKE?)

Pr PORPHYRITIC ROCKS

PRECENOZOIC

Sy SEYENITE (INTRUSIVE)

Gs GREENSTONE (PYROXENE RICH)

SEDIMENTARY UNIT (ARGILLACEOUS-ROCKS)

Sh SHALE, Ss SILTSTONE

Ls LIMESTONE (MARBLED)

SYMBOLS

ROAD

GRID

SAMPLE SITE
S-SOIL R-ROCK

SCALE 1:500

0 1 2

400 M

GEOLOGICAL BRANCH
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J. STUSHNOFF

SPOD CLAIMS
GRID MAP 3
LOCAL GEOLOGY
BLUE GROUSE MOUNTAIN

LAT 49°57'	LONG 119°31'
NOV. 25/88	FIGURE 3