82-#737-10705

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ASSESSMENT REPORT

GEOLOGICAL AND GEOCHEMICAL REPORT ON THE WRICH 1, 2 AND 3 CLAIMS (32 UNITS)

OMINECA MINING DIVISION

by

MOHAN R. VULIMIRI and SHEILA A. CRAWFORD

LOCATION: 57°07' N to 57°09' N Latitude
126°43' W to 126°47' W Longitude
N.T.S. 94E/2E and 2W

OWNER/OPERATOR: SEREM LTD.

DATES WORK PERFORMED: August 27, 30, 1981
August 20, 21, 28, September 2, 1982

DATE OF REPORT: October 1982

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INTRODUCTION

The Wrich 1, 2 and 3 claims are located between 57°07' N and 57°09' N latitude and 126°43' W and 126°47' W longitude in the Toodoggone River map sheet area, N.T.S. 94E/2E and 2W, Omineca Mining Division (see Figures 1 and 2). Elevation ranges approximately from 1220 to 2020 metres above sea level and topography is moderate to rugged. Less than one-third of the property lies above treeline. Outcrop is exposed on about one-third of the area.

Access to the property is by plane from Smithers to Sturdee Airstrip, a distance of 280 kilometres and from the airstrip to the property by helicopter, a distance of about 20 kilometres.

The number of units, record number, and recording date of each claim are as follows:

Claim Name	No. of Units	Record No.	Recording Date
Wrich 1	12	4249	Sept. 9, 1981
Wrich 2	12	4250	"
Wrich 3	8	4327	Oct. 15, 1981

The claims are owned and operated by Serem Ltd.

No previous work has been done in this area. The ground was staked on the basis of anomalous gold in stream silts (sampled in 1980 by Serem) and favourable geology. Initial mapping, prospecting, and minor soil and silt sampling were carried out after staking the claims. Wrich 3 was added to better cover the anomalous area, and close off the ground between Wrich 2 and the Rich claim staked by Taiga Resources. In 1982, Serem personnel carried out a soil geochemical survey, detailed geological mapping and rock sampling over a zone of intense hydrothermal alteration (Figure 3).

The numbers of samples taken on each claim are as follows:

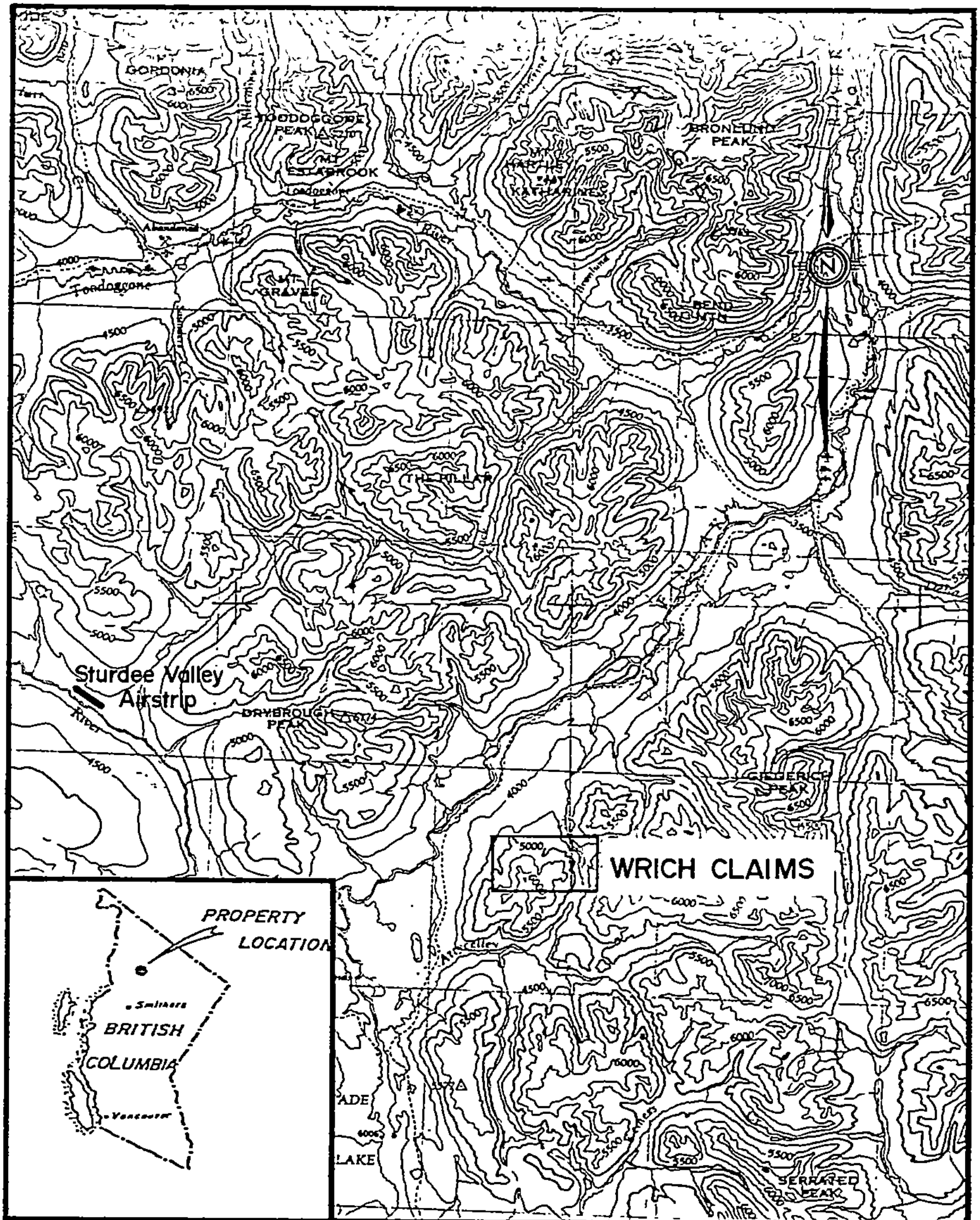
1981 Sampling:

Sample Type	Wrich 1	Wrich 2	Total
Stream silt	9	1	10
Soil	39	17	56
Rock	21		21

1982 Sampling:

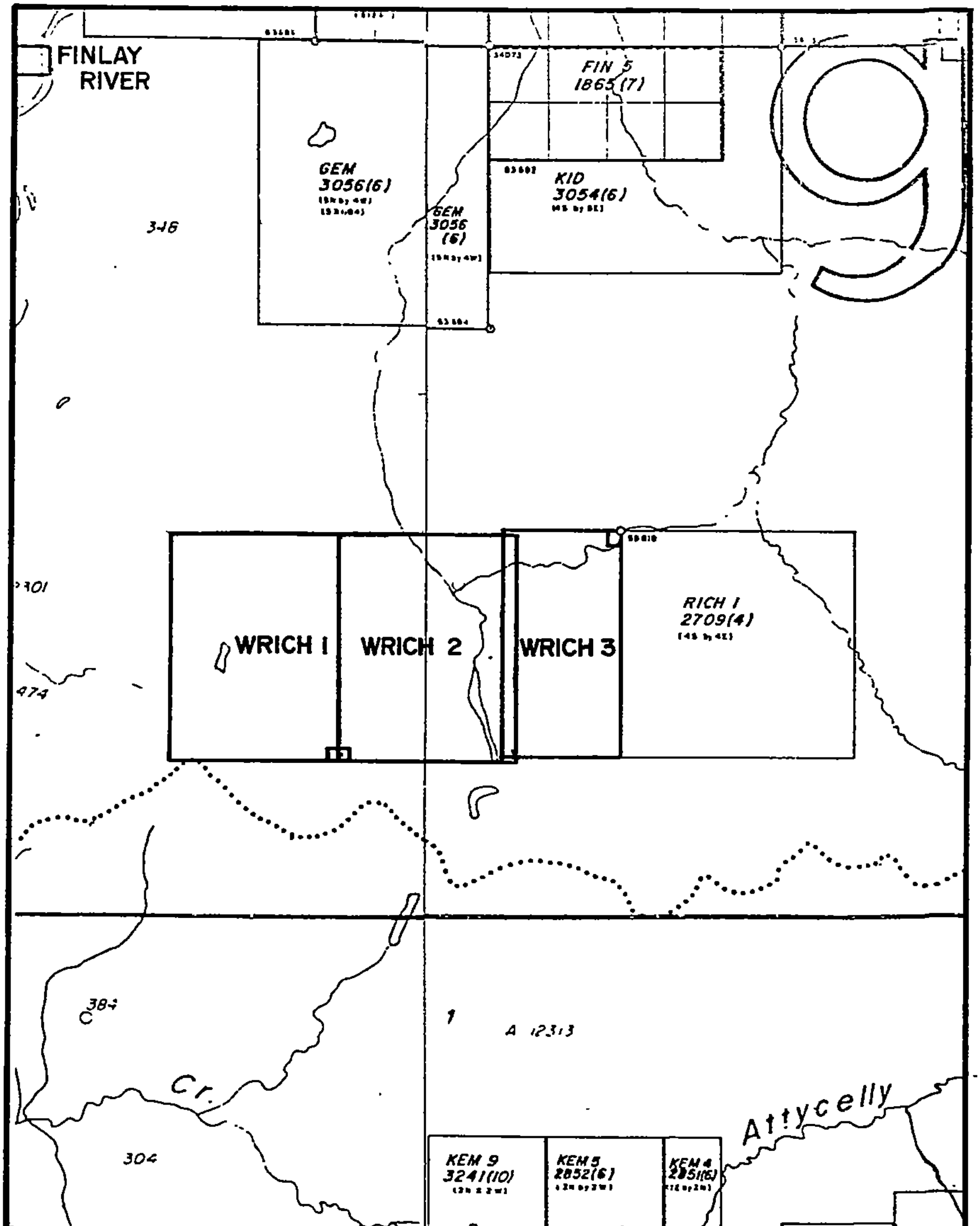
Sample Type	Wrich 1	Wrich 2	Wrich 3	Total
Soil	88	103		191
Rock	40	13	2	55

All samples were analysed or assayed for gold and silver. A few were also tested for copper, lead, zinc or molybdenum.



WRICH CLAIMS: LOCATION MAP

FIGURE: 1



WRICH CLAIMS: CLAIMS MAP

FIGURE: 2

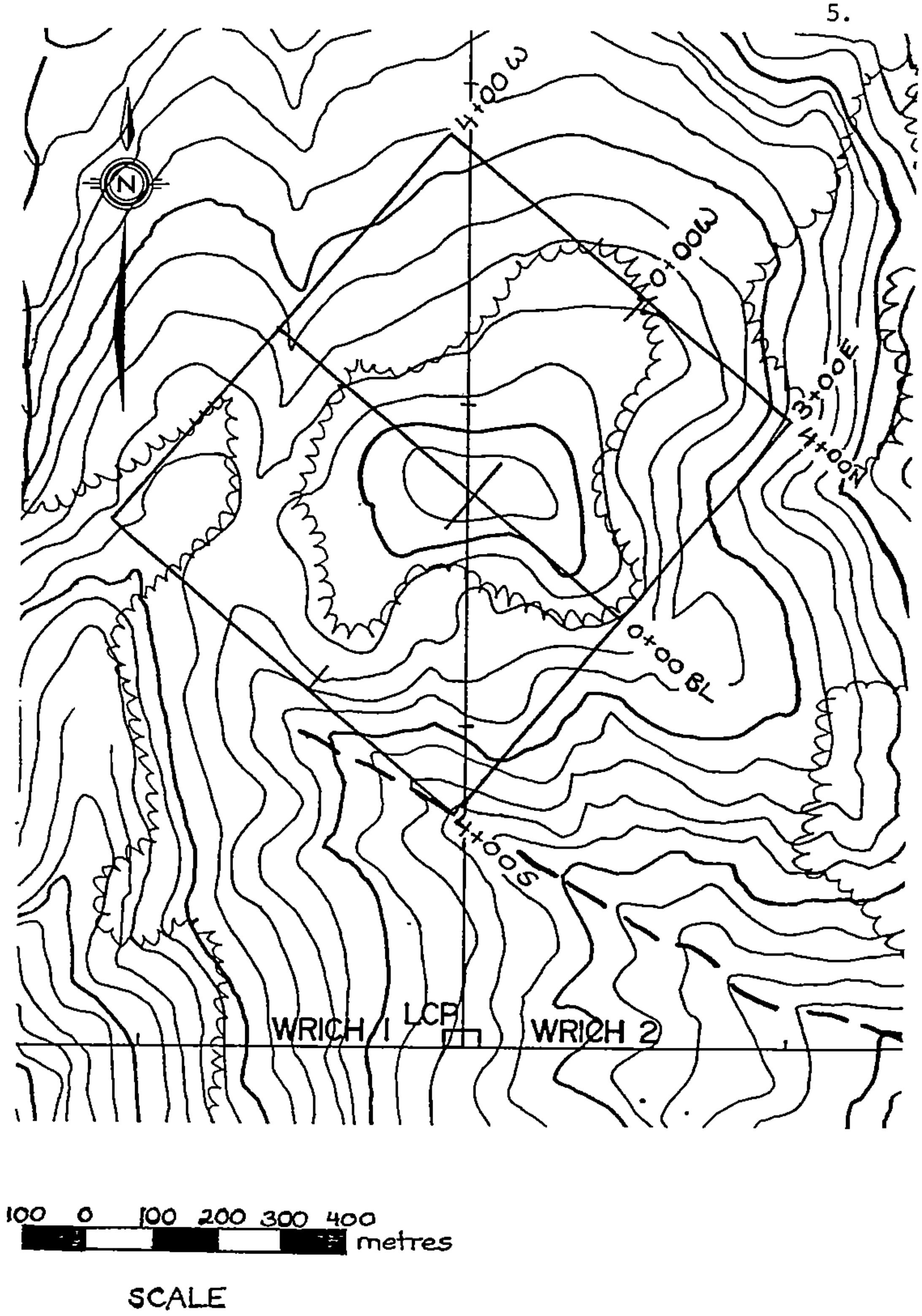


Figure 3. Wrich Claims: Location of soil grid area.

GEOLOGY

The claims are underlain by Toodoggone and Takla volcanic rocks.

Toodoggone volcanic rocks occur on the Wrich 2 and Wrich 3 claims and on the eastern portion of the Wrich 1 claim (Figure 4a). These volcanics consist of crystal and lapilli tuffs. On the Wrich 3 claim, it appears that the rocks were deposited as thick ash falls.

Welded crystal lapilli tuff, similar in composition to the ash fall tuffs, outcrops in the southeast portion of Wrich 2 and southwest portion of Wrich 1. Welding is indicated by strong flattening of lapilli, darker colour and higher density.

Rocks which have not been subjected to hydrothermal alteration have purple to medium to dark grey groundmass. The purple colour is due to the presence of hematite and the grey to the presence of mafic minerals. The rocks contain 15-30% fine to coarse, cream-coloured feldspar phenocrysts. The proportions of potassic to plagioclase feldspars cannot be determined visually.

Takla volcanic rocks are present on the Wrich 3 claim in fault contact with the Toodoggone rocks to the east. These are dark green to grey rocks with white plagioclase, dark green pyroxene and pyrite phenocrysts. Limestone and chert occur southwest of the claims. The volcanics are intruded by quartz monzonite (?) dikes.

Detailed geological mapping was carried out on the soil grid area (Figure 5) at 1:2000 scale. This area is underlain mainly by crystal tuff of the Toodoggone group.

The crystal tuffs vary from purple to green in colour, depending on proportions of hematite to mafic minerals in the groundmass. Predominant joint patterns are 130°, 080° and 010°. Quartz-chalcedony breccias trend 40°, 80° and 100°.

The crystal tuff is bounded on the east side by welded tuff. The welded tuff exhibits flattened lapilli. On the west side, crystal tuff is in fault contact with the Takla mafic volcanic rocks. The fault trends from 10° to 160°, and is displaced approximately 15 metres by another fault trending 070°. The Takla mafic volcanic rocks within the soil grid area consist of plagioclase, dark green pyroxene and pyrite phenocrysts in a dark green groundmass.

ALTERATION AND MINERALIZATION

A zone of intense, fumerolic-type clay-pyrophyllite alteration occurs in the Toodoggone volcanic rocks within the soil grid area. Rocks are altered to clay + chalcedony + manganese oxides + iron oxides ± quartz ± alunite ± pyrophyllite. Chalcedony occurs as matrix in breccias and as veinlets. Quartz is relatively rare and occurs in vugs and as fracture-fillings. Minor pyrophyllite is associated with quartz and chalcedony. Banded chalcedony was also observed. Clay composition is not known, as it can be determined only by X-ray methods.

The clay-pyrophyllite alteration zone trends approximately 160°. It is about 150 metres wide and 700 metres long (Figure 5), and is bordered by a propylitic zone consisting mainly of chlorite. The association of propylitic and clay alteration zones can also be observed on a hand specimen scale.

To date, no significant mineralization has been discovered in association with the clay alteration zone. The exception is one grab sample of chalcedony-clay-iron oxides and breccia, collected in 1981, which assayed 20.40 oz/ton silver and .192 oz/ton gold. 61 rock samples were collected in 1982 and assayed for gold and silver. None of the samples returned significant assays.

The relationship of alteration with soil geochemical results is discussed in the Interpretation section.

Quartz veins are common in the Takla volcanics. Colour of the quartz is white, clear, grey or rarely amethystine and textures include cockscomb, massive and banded varieties. The veins are very narrow, not more than 20 cm wide, and trend approximately 110°. Propylitic and local clay alteration are associated with the veins. In the main gossan, quartz veins contain as much as ten percent combined copper, lead and zinc as chalcopyrite, galena, sphalerite, azurite and malachite. Silver values (up to 2.6 oz/ton) and rare molybdenite are associated with the base metals. The veins are probably too small and sparse to be economic. Veins which do not contain any base metals also appear to be barren in gold and silver.

GEOCHEMICAL SILT AND SOIL SAMPLING

Silt samples were taken from streams draining the Wrich 1 and 2 claims at 150 metre intervals. Samples were collected from active material, that is, under flowing water, and placed in brown paper envelopes. The stream gradient is moderate to gentle and the flow rate moderate to slow.

Soil samples were taken at 100 to 150 metre intervals on traverses at approximately constant elevation. Topofil was used to control distance and the localities were plotted on a 1:10,000-scale topographic map.

For the soil survey grid, a baseline was set with compass and surveyor's chain and picketed every fifty metres. Soil lines were run with Topofil and compass, using the baseline as control.

Soil was placed in brown paper envelopes, and characteristics such as depth of sampling, horizon, colour, grain size and amount of organic material were noted. Soil is residual except in a few talus areas where it is subject to downslope creep. In many localities, it was observed that the soil was formed by weathering of highly leached and altered bedrock. Most samples were taken from the C horizon, or B horizon where developed. A few are from pockets of organic accumulation and contain some organic matter.

GEOCHEMICAL ANALYSES

The samples were sent to Min-En Laboratories in North Vancouver where they were analysed for gold, silver, copper, lead, zinc and molybdenum. The analytical procedures are briefly described below:

> The samples are dried at 95° C. Soil and stream sediment samples are screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed and pulverized by ceramic plated pulverizer.
>
> For gold, a suitable sample, weight 5 or 10 grams, is pretreated with HNO_3 and $HClO_4$ mixture.
>
> After pretreatment, the samples are digested with Aqua Regia solution, and after digestion the samples are taken up with 25% HCl to suitable volume.
>
> Sample solutions are prepared with Methyl Iso-Butyl Ketone for the extraction of gold.
>
> With a set of suitable standard solutions, gold is analysed by Atomic Absorption instruments. The obtained detection limit is 5 ppb.
>
> For silver, copper, lead, zinc and molybdenum, samples weighing 1.0 gram are digested for 6 hours with HNO_3 and $HClO_4$ mixture.
>
> After cooling, the samples are diluted to standard volume. The solutions are analysed by Atomic Absorption Spectrophotometers using the CH_2H_2-Air Flame combination for silver, copper, lead and zinc. The C_2H_2-NO_2 mixture is used for molybdenum.

ASSAYS AND ROCK GEOCHEMICAL ANALYSES

Grab samples were selected from talus slopes or outcrops with favourable geology. The rock type and locality were noted and plotted on a 1:10,000-scale topographic map. Rocks were assayed by atomic absorption in the Serem laboratory in Smithers, which is run by personnel from Min-En Laboratories in North Vancouver. Some 1981 samples were assayed or analysed at Min-En Laboratories in North Vancouver. In these samples, the gold was assayed by fire technique. Geochemical analytical techniques are the same as for soils and silts.

RESULTS AND INTERPRETATION

Gold, silver, copper, lead and zinc geochemical analyses for silts and contour soils are plotted on Figures 6a to 6e respectively. Circles or triangles are completely blackened for anomalous values and partially for threshold values. Gold values are as high as 760 ppb in streams and 790 ppb in soils: anomalous values are scattered and do not clearly define any one zone. Silver is anomalous (as high as 9.0 ppm Ag) in several soil samples and at the head of the stream draining Wrich 1, correlating with gold anomalies in one area. Lead and zinc are marginally anomalous; the exception is one 920 ppm lead value occurring in an area of galena mineralization. Marginally anomalous copper values correspond to known areas of chalcopyrite mineralization.

Gold and silver analyses from the soil grid survey are plotted on Figures 7a and 7b. The values are contoured. Soils from the grid area returned gold values as high as 890 ppb and silver values as high as 29.5 ppm. Gold and silver anomalies coincide with each other remarkably, as well as with the clay-pyrophyllite alteration zone. The soil silver anomaly is approximately 150 to 200 metres wide and 700 metres long with values greater than 2 ppm. The soil gold anomaly occurs over an area 100 metres by 600 metres with values greater than 50 ppb. The anomalies are open to the north.

Rock sample locations are plotted on Figures 4b and 8. The assay and analytical results, along with rock descriptions, are listed in Tables 1a, 1b and 2 (pages 14-17). As discussed previously, no significant results were obtained (with one exception). It is possible that the alteration zone from which the samples were taken is hydrothermally leached.

Table 1a. Assays (1981)

Sample No.	Rock Description	F=Float O=Outcrop	Gold oz/ton	Silver oz/ton
SC-40-81- 4	Quartz-hematite-epidote-pyrite fracture filling	F	<.01*	.3
- 7	Vuggy quartz + chalcopyrite vein	F	<.01*	.1
- 9	Vuggy quartz-calcite vein + galena, sphalerite + Cu stain	F	<.01*	2.6
-13	Quartz vein breccia	O	<.01*	<.1
-14	"	O	<.01*	<.1
-17	Volcanic altered to quartz-clay-alunite-oxides	O	.01*	.8
-18	"	O	<.01*	.2
SC-46-81-14	Quartz veinlets in quartz-clay-pyrite altered volcanics	O	.006	.13
-15	Grey quartz ± calcite veins in volcanic	O	.005	.10
-16	"	O	.002	.11
SC-48-81-12	Clay-oxide-silica altered volcanic	O	.192	20.40
GD-41-81- 7	Quartz vein containing chalcopyrite, galena, pyrite, sphalerite, azurite -2% to 10% combined, in mafic volcanics	F	<.01*	.6
- 8	"	F	<.01*	.5
-11	"	F (base of cliff)	.01*	<.1
-16	"	"	<.01*	.1
-17	"	"	<.01*	<.1
-18	"	"	<.01*	<.1
CG-LT- 6	Quartz vein + galena, chalcopyrite and pyrite	O	.003	.58
-15	Quartz vein + pyrite, chalcopyrite, galena, sphalerite and azurite	O	.007	1.78 Cu .413% Pb 5.89% Zn 3.16%
-18	Banded grey quartz vein	F	.005	.09

* Au and Ag assayed by atomic absorption in Smithers field laboratory.

Table 1b. Geochemical Analyses (1981)

Sample No.	Rock Description	F=Float O=Outcrop	Au ppb	Ag	Cu	Pb ppm	Zn	Mo
SC-40-81- 9	See Assays	F			3420	50,000	1030	66
SC-46-81-13	Quartz vein	O	5	6.8	72			

Table 2. Rock Assays (1982)

Sample No.	Rock Description	F=Float O=Outcrop	Silver oz/ton	Gold oz/ton
EDW 1	Hematized, clay-altered tuff	O	0.1	0.04
2	Quartz vein in chlorite-altered tuff	F	<0.1	0.02
3	Silicified tuff	O	<0.1	0.01
4a	Grey quartz vein (5 m wide)	O	0.1	<0.01
4b	"	O	0.2	0.02
5	Iron-stained tuff	F (near O)	<0.1	<0.01
6	Quartz-chalcedony vein	F (near O)	<0.1	0.01
7	Quartz vein	F (near O)	<0.1	<0.01
8	Quartz vein (talus slope)	F	0.1	<0.01
9	not described (clay-altered tuff?)	F	0.1	0.02
10	"	F	0.4	0.03
11	Pyritic, hematized tuff	F	0.1	<0.01
12	Intensely hematized tuff	F	0.2	0.02
13	"	F	0.1	<0.01
14	Silicified, intensely hematized tuff	F	0.1	<0.01
15	Quartz-hematite vein	F	<0.1	<0.01
16	Quartz	F	<0.1	<0.01
17	Quartz	F	<0.1	<0.01
18	Quartz	F	<0.1	<0.01
19	Fault Zone	F	<0.1	<0.01
20	not described (base of cliff)	F	<0.1	<0.01
21	Grey quartz (float train 20mx0.5m)	F	<0.1	<0.01
22	"	F	<0.1	<0.01
23	"	F	<0.1	<0.01
24	"	F	<0.1	<0.01
25	Quartz vein (uphill from outcrop)	F	0.2	<0.01
26	Quartz veinlets	O	<0.1	<0.01
27	"	O	<0.1	<0.01
28	Quartz veinlets in tuff, intensely hematized	O	0.5	<0.01
29	" (2 m wide zone)	O	0.1	0.01
30	" (4 m wide zone)	O	<0.1	<0.01

Continued ...

Table 2. (Continued)

Sample No.	Rock Description	F=Float O=Outcrop	Silver oz/ton	Gold oz/ton
EDW 31	Quartz veining, massive in places, in tuff (15 m long)	O	0.3	0.01
32	" (1 m wide)	O	0.2	<0.01
33	" (.5 m wide)	O	0.1	<0.01
34	Narrow grey quartz stringers dipping steeply to west	O	0.2	<0.01
35	Quartz vein breccia in tuff, (.5 m wide)	O	<0.1	<0.01
36	Quartz vein breccia in hematized purple tuff	O	0.3	0.01
37	Vuggy quartz vein breccia	O	0.2	<0.01
38	Large boulder of quartz	F	<0.1	<0.01
39	Quartz vein (.5 m wide)	O (?)	0.1	<0.01
40	Altered tuff	F	1.2	<0.01
41	Hematitic quartz veins in chlorite-altered tuff	O	0.1	<0.01
42	Quartz vein	O	0.2	<0.01
43	Rusty quartz vein	F (near O)	1.1	0.03
44	Quartz veinlets in tuff	O	0.2	<0.01
45	Quartz vein	F (near O)	0.4	0.01
46	Massive dark quartz	F	<0.1	<0.01
47	not described (at base of outcrop)	F	0.4	<0.01
48	"	F	<0.1	0.01
49	Quartz-veined tuff (.5 m wide)	O	<0.1	<0.01
50	Hematitic dark quartz (.5 m wide)	O	<0.1	0.01
51a	Hematitic quartz with abundant pyrite	O	0.1	<0.01
51b	"	O	<0.1	<0.01
60	Quartz stringers in epidotized silicified tuff	F	<0.1	<0.01
61	Quartz breccia in chloritized volcanic	F	<0.1	<0.01

CONCLUSIONS AND RECOMMENDATIONS

Although there is a lack of significant assay results from rock sampling, the significant geochemical anomalies with values up to 890 ppb gold and 29.5 ppm silver, the extensive clay-pyrophyllite zone with associated propylitic zones and favourable geology make the property very interesting. The association of fumarolic clay-pyrophyllite alterations with strong geochemical gold and silver anomalies indicates that the area of alteration probably represents the top of a gold-silver-bearing epithermal system. The lack of significant rock assays suggests that this is a typical leached "cap". There is good potential for underlying gold-silver quartz-chalcedony veins and breccias.

From the outcrop pattern at various elevations, it appears that the clay-pyrophyllite alteration zone is quite deep. Trenching and trench sampling probably will not return any significant results and therefore are not useful in assessing the area. Exploratory drilling may be the only answer to test the economic potential of the property. A few long drill holes across the alteration zone are recommended to determine any variation of alteration patterns and presence of mineralization.

CERTIFICATE OF QUALIFICATIONS

I, SHEILA A. CRAWFORD, certify that:

1. I am a geologist, employed by Serem Ltd.

2. I have an Honours Bachelor of Science degree (First Class) in Geology from Carleton University in Ottawa, Ontario.

3. I have worked in mineral exploration or geological mapping since 1976 and have acted in responsible positions since 1979.

4. I personally examined the property and directed the geochemical survey in 1981.

5. I have no financial interest, either direct or indirect, in the property.

Sheila A. Crawford,
Geologist.

Vancouver, B.C.
October 1982

CERTIFICATE OF QUALIFICATIONS

I, MOHAN R. VULIMIRI, certify that:

1. I am a geologist, employed by Serem Ltd.

2. I am a graduate with a Master of Science degree in Economic Geology from the University of Washington.

3. I have been involved in mineral exploration in British Columbia since 1970 and have acted in responsible positions since 1974.

4. I personally examined the property and directed the geochemical survey in 1982.

5. I have no financial interest, either direct or indirect, in the property.

Mohan Vulimiri

Mohan R. Vulimiri,
Geologist.

Vancouver, B.C.
October 1982

STATEMENT OF EXPENDITURES - 1981

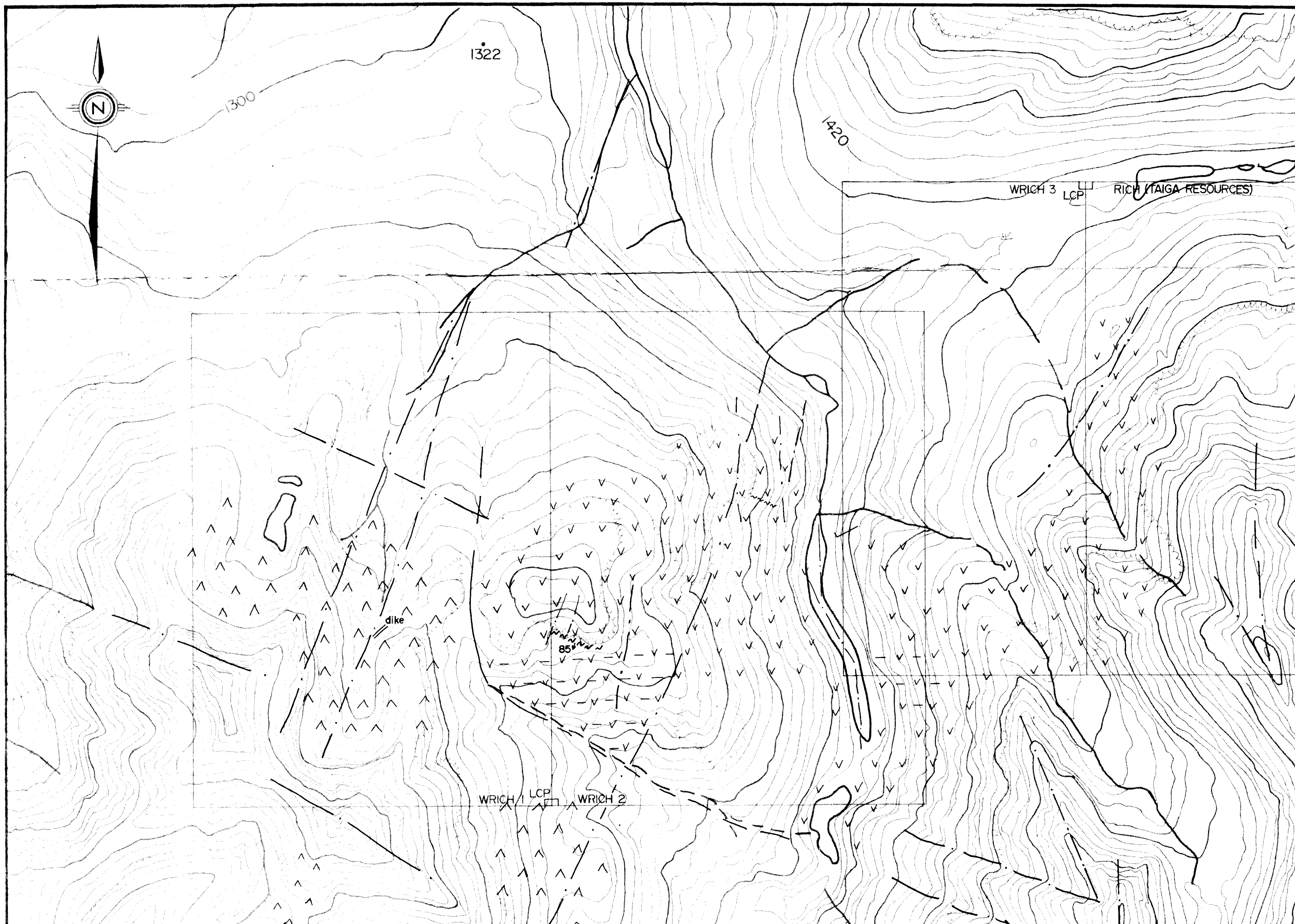
(Applicable to Wrich 1 and Wrich 2 only.)

Analyses			
66 soil and silt samples analysed for Au, Ag, Cu, Pb, Zn	@ $10.55	$ 696.30	
11 rocks assayed for Au, Ag (Smithers Lab)	@ $15.00	165.00	
7 rocks assayed for Au, Ag (fire assay)	@ $19.25	134.75	
1 rock assayed for Au, Ag, Cu, Pb, Zn	@ $40.25	40.25	
1 rock assayed for Au, Ag and analysed for Cu, Pb, Zn, Mo	@ $23.95	23.95	
1 rock analysed for Au, Ag, Cu	@ $10.15	10.15	
Sample shipment from Smithers to Vancouver 74 samples	@ $ 0.30	22.20	
			$1,092.60
Wages			
Geochemical soil, silt and rock sampling G. Dawson, C. Greig, August 27th, 1981, C. Lormand, B. Lane, August 30th, 1981			
2 days	@ $ 50/day	$ 100.00	
1 day	@ $ 56/day	56.00	
1 day	@ $ 58/day	58.00	
Geology, supervision and evaluation S. Crawford, August 27, 31, 1981			
2 days	@ $ 92/day	184.00	
Report writing, map preparation S. Crawford			
2 days	@ $112/day	224.00	
			$ 622.00
Board, Lodging and Field Expenses			
6 man-days	@ $ 52/day		$ 312.00
Transportation			
Helicopter: 1 hr. 20 min. @ $475/hour, including fuel			$ 633.33
Drafting Materials			$ 50.00
		Total	$2.709.93

STATEMENT OF EXPENDITURES - 1982

(Applicable to Wrich 1, 2 and 3)

Analyses				
191 soils analysed for Au, Ag		@ $ 7.35	$1,403.85	
55 rocks assayed for Au, Ag (a.a.)		@ $15.00	825.00	
Sample shipment from Smithers to Vancouver 191 samples		@ $ 0.30	57.30	
				$2,286.15
Wages				
Soil sampling, P. Powers, M. Cullen, D. MacIsaac, M. Sangster, P. Newman, August 28, September 2, 1982				
	5 days	@ $ 58/day	$ 290.00	
	1 day	@ $ 66/day	66.00	
	1 day	@ $102/day	102.00	
Prospecting and rock sampling, E. DeBock, August 20, 21, 28, 1982				
	3 days	@ $102/day	306.00	
Geology, supervision and evaluation M. Vulimiri, S. Crawford, August 20, 21, 28, September 2, 1982				
	1 day	@ $120/day	120.00	
	4 days	@ $150/day	600.00	
Report writing, map preparation and drafting				
S. Crawford	3 days	@ $120/day	360.00	
M. Vulimiri	2 days	@ $150/day	300.00	
				$2,144.00
Board, Lodging and Field Expenses				
	15 man-days	@ $ 52/day		$ 780.00
Transportation				
Helicopter: 4 hours @ $400/hr + $169/hr (fuel)				$2,276.00
Drafting Materials				$ 30.00
			Total	$7,516.15



LEGEND

- Toodoggone crystal - lapilli tuff.
- Welded tuff.
- Takla mafic volcanic rocks and derived greywacke and conglomerate.
- Fault zone, observed.
- Lineaments interpreted from airphotos and ground observations: fault related fracture systems.

SEREM LTD.

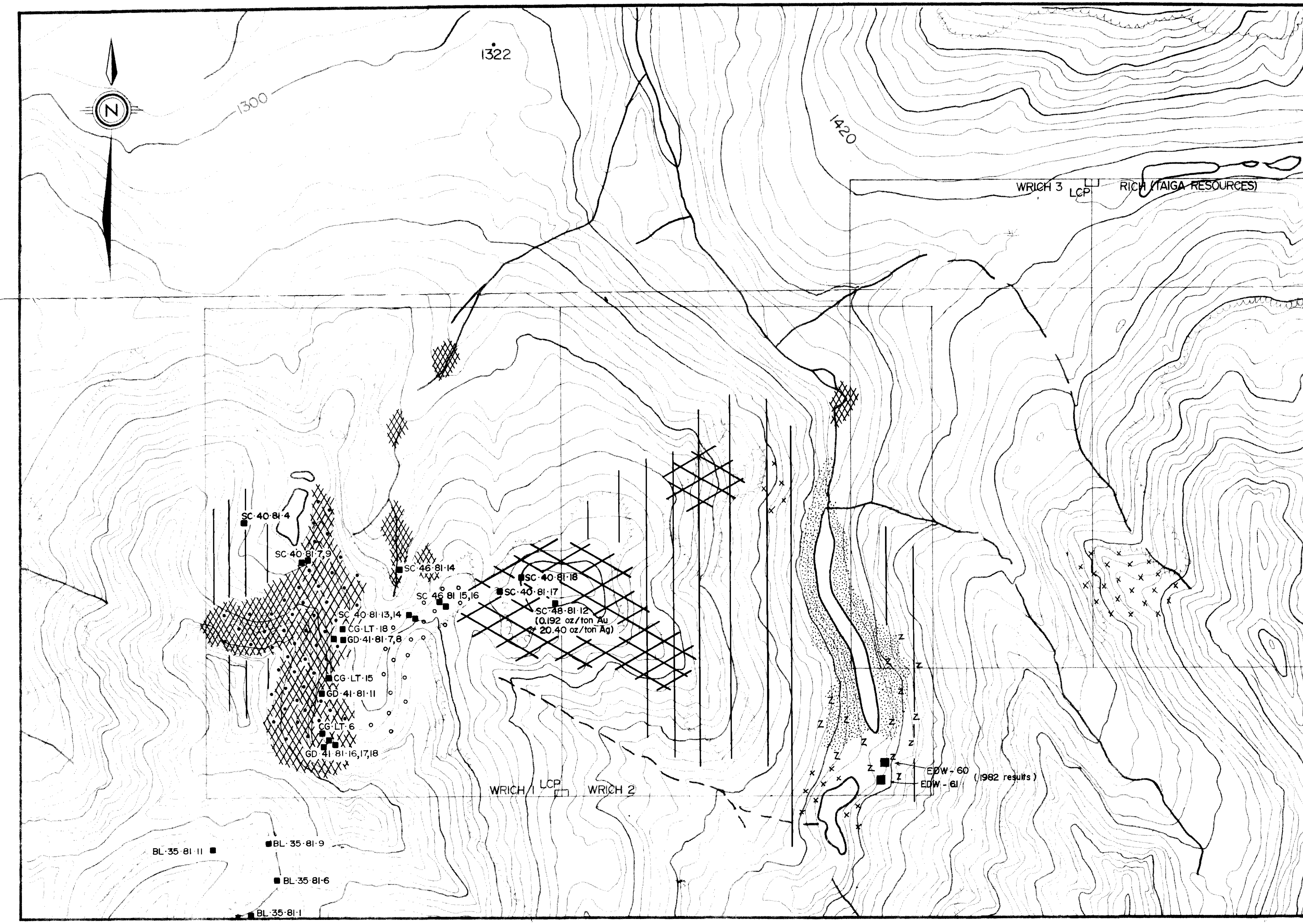
PROJECT: *TOODOGGONE*

TITLE: WRICH CLAIMS GEOLOGY

DATE: JAN 82 revised Oct 82	DATA: S.C.
N.T.S. 94E/2E & 2W	DRAWN: C.G
SCALE: 1:10,000	CHECKED: SC

0 100 200 300 400 500 600 Metres

FIGURE: 4a



LEGEND

- Disseminated pyrite.
- Limonite gossans derived from oxidation of pyrite ± other sulphides.
- "Fumarolic" alteration: intensely leached and oxidized zone; rocks altered to clay, Fe and Mn oxides, silica ± alunite ± pyrophyllite.
- Propylitic alteration (chlorite + epidote ± calcite).
- Hematized volcanics.
- Orange zeolite alteration.
- Quartz veins containing chalcopyrite ± galena ± sphalerite ± trace molybdenite ± silver.
- Barren quartz veins.
- ■ SC·46·81·14 Rock sample location (see Table I for assays).

SEREM LTD.

PROJECT: *TOODOGGONE*

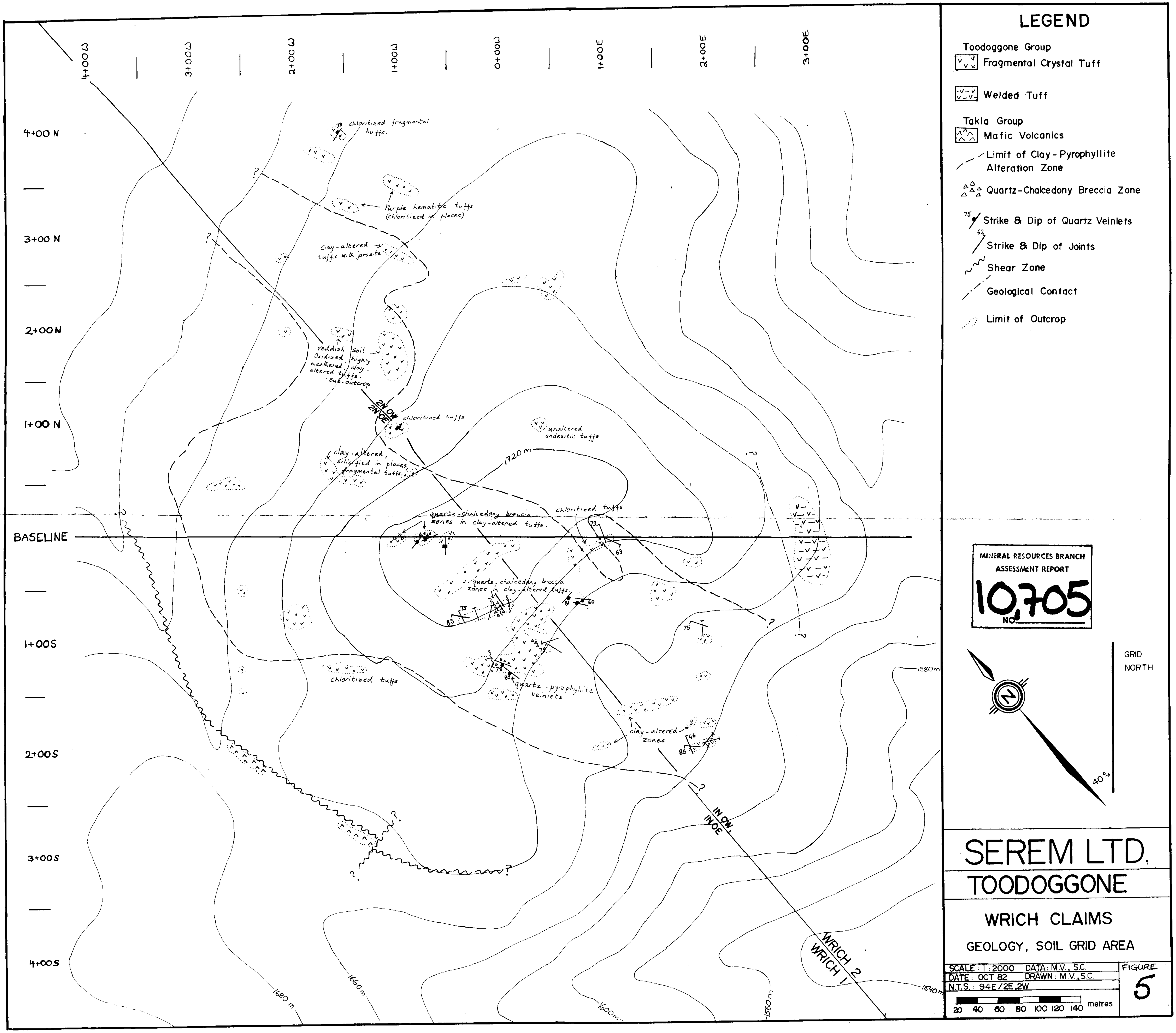
TITLE: WRICH CLAIMS: ALTERATION ZONES, MINERALIZATION AND ROCK SAMPLE LOCATIONS

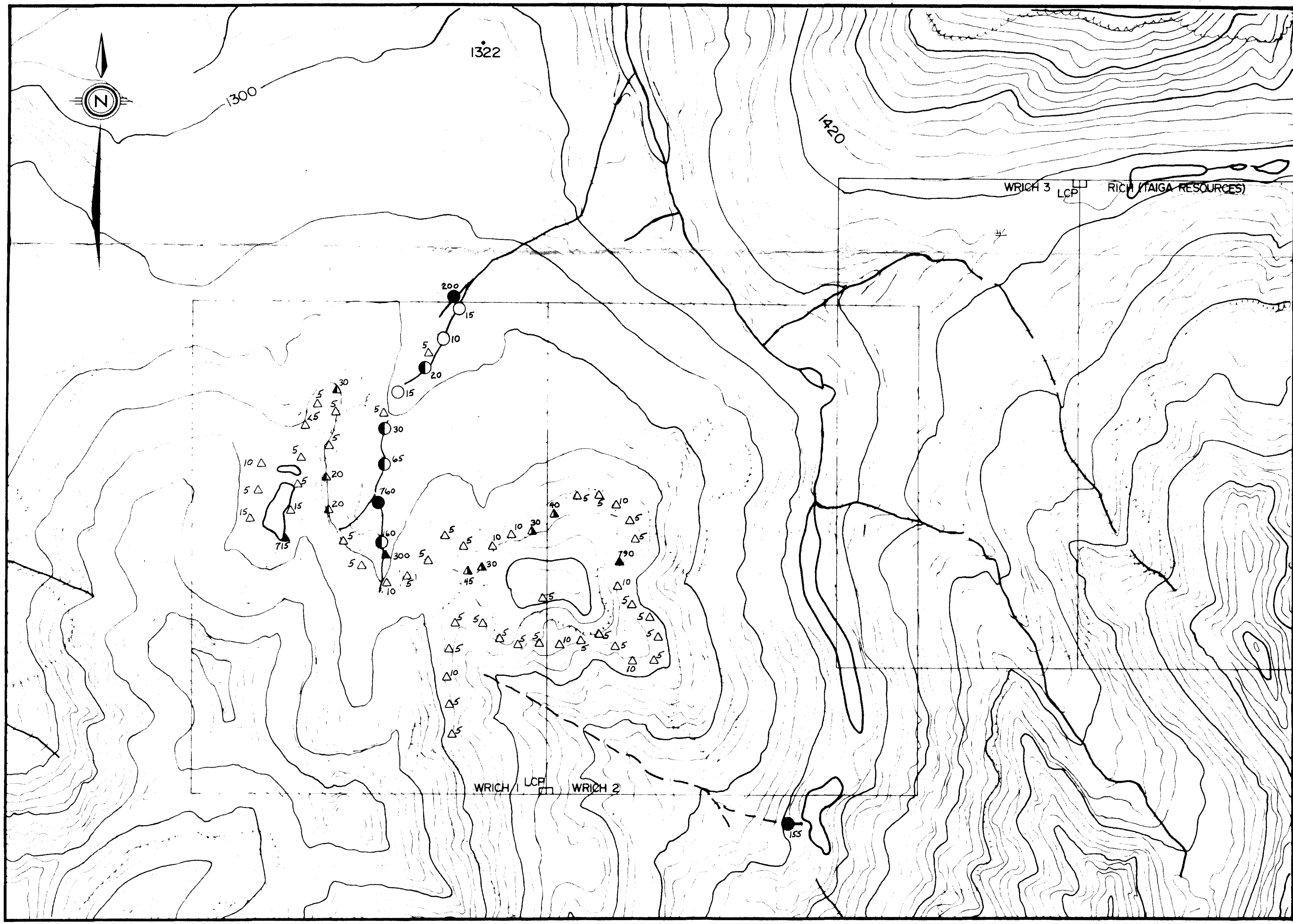
DATE: JAN 82 (updated Oct 82)	DATA: S.C.
N.T.S. 94E/2E & 2W	DRAWN: C.G.
SCALE: 1:10,000	CHECKED: SC

0 100 200 300 400 500 600 Metres

FIGURE: 4b


N
1322
1300
1420
WRICH 3
LCP
RICH (TAIGA RESOURCES)
WRICH 1
LCP
WRICH 2
SC·40·81·4
SC·40·81·7,9
SC·46·81·14
SC·46·81·15,16
SC·40·81·18
SC·40·81·17
SC·48·81·12
(0.192 oz/ton Au
20.40 oz/ton Ag)
Best Assay 1981
(Grab Sample)
WRICH2
SC·40·81·13,14
CG·LT·18
GD·41·81·7,8
CG·LT·15
WRICH 1
Best Assay 1981
EDW-60
EDW-61
(1982 results)
BL·35·81·11
BL·35·81·9
BL·35·81·6
BL·35·81·1
LEGEND
Disseminated pyrite.
Limonite gossans derived from oxidation of pyrite ± other sulphides.
"Fumarolic" alteration: intensely leached and oxidized zone; rocks altered to clay, Fe and Mn oxides, silica ± alunite ± pyrophyllite.
Propylitic alteration (chlorite + epidote ± calcite).
Hematized volcanics.
Orange zeolite alteration.
Quartz veins containing chalcopyrite ± galena ± sphalerite ± trace molybdenite ± silver.
Barren quartz veins.
SC·46·81·14
Rock sample location (see Table I for assays).
MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
NO. 10,705
SEREM LTD.
PROJECT: TOODOGGONE
TITLE: WRICH CLAIMS: ALTERATION ZONES, MINERALIZATION AND ROCK SAMPLE LOCATIONS
DATE: JAN 82 (updated Oct 82)
DATA: S.C.
N.T.S. 94E/2E & 2W
DRAWN: C.G.
SCALE: 1:10,000
CHECKED:
FIGURE: 4b
0 100 200 300 400 500 600
Metres


LEGEND
Toodoggone Group
Fragmental Crystal Tuff
Welded Tuff
Takla Group
Mafic Volcanics
Limit of Clay-Pyrophyllite Alteration Zone
Quartz-Chalcedony Breccia Zone
Strike & Dip of Quartz Veinlets
Strike & Dip of Joints
Shear Zone
Geological Contact
Limit of Outcrop
MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
10,705
NO
GRID NORTH
40°
SEREM LTD.
TOODOGGONE
WRICH CLAIMS
GEOLOGY, SOIL GRID AREA
SCALE: 1:2000
DATA: M.V., S.C.
DATE: OCT 82
DRAWN: M.V., S.C.
N.T.S.: 94E/2E,2W
20 40 60 80 100 120 140 metres
FIGURE 5
4+00W
3+00W
2+00W
1+00W
0+00W
1+00E
2+00E
3+00E
4+00 N
3+00 N
2+00N
1+00 N
BASELINE
1+00S
2+00S
3+00S
4+00S
chlorilized fragmental tuffs
Purple hematitic tuffs (chloritized in places)
Clay-altered tuffs with jarosite
reddish soil. Oxidized highly weathered clay-altered tuffs. - Sub-outcrop
2N OW
2N OE
chloritized tuffs
unaltered andesitic tuffs
clay-altered, silicified in places fragmental tuffs
1720 m
quartz-chalcedony breccia zones in clay-altered tuffs.
chloritized tuffs
quartz-chalcedony breccia zones in clay-altered tuffs.
chloritized tuffs
quartz-pyrophyllite veinlets
clay-altered zones
1580m
IN OW
IN OE
WRICH 2
WRICH 1
1680 m
1660 m
1600m
1560m
1540m



LEGEND

5 △ Soil sample site, ppb Au.
- ▲ ≥ 20 ppb Au.
- ▲ ≥ 100 ppb Au.

15 ○ Silt sample site, ppb Au.
- ◐ ≥ 20 ppb Au.
- ● ≥ 100 ppb Au

SEREM LTD.

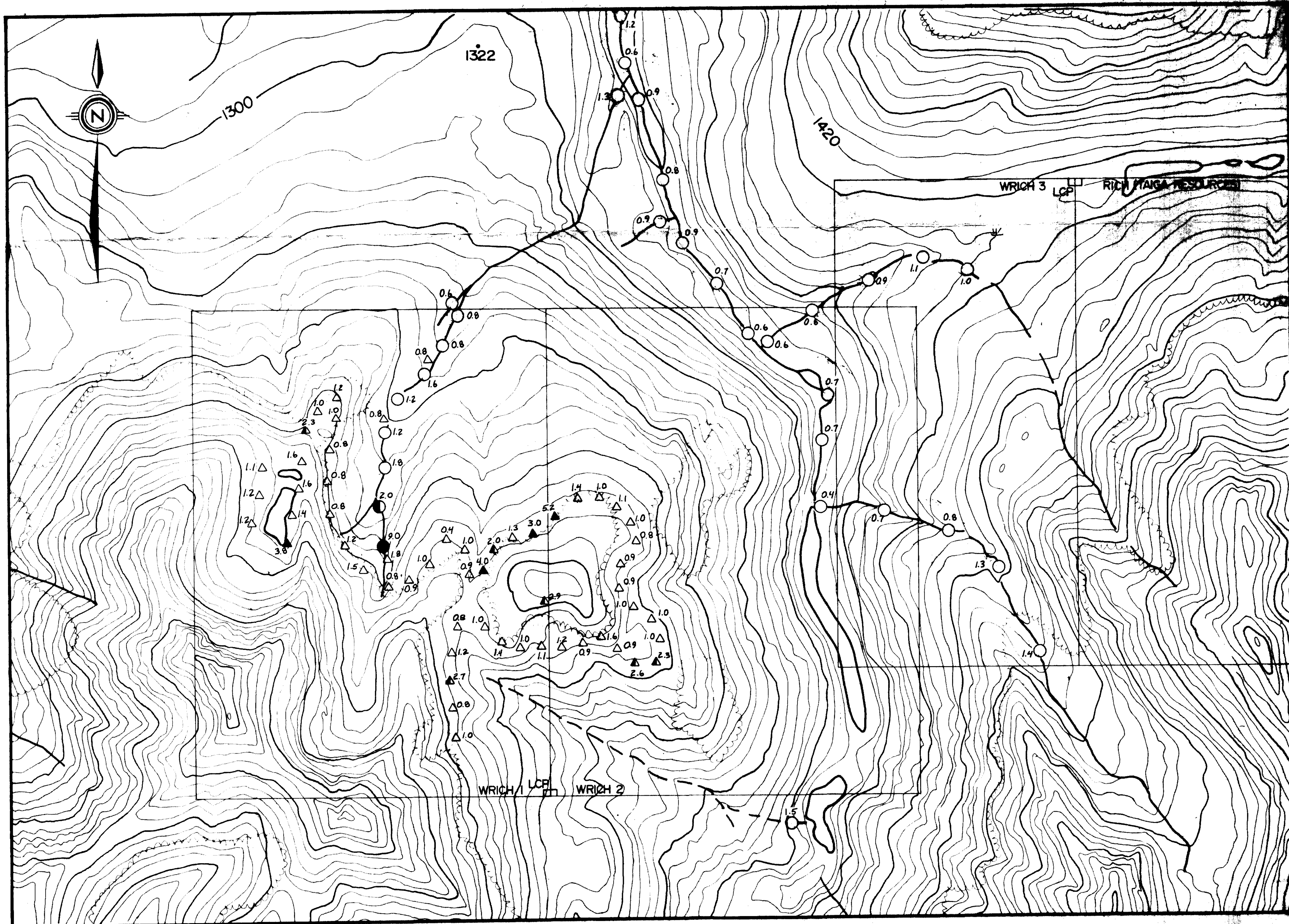
PROJECT: *TOODOGGONE*

TITLE: WRICH CLAIMS
GOLD VALUES IN SILTS AND SOILS

DATE JAN 82	DATA S.C.
N.T.S. 94E/2E & 2W	DRAWN C.G.
SCALE 1:10,000	CHECKED:

0 100 200 300 400 500 600 Metres

FIGURE: 6a



SEREM LTD.

PROJECT: *TOODOGGONE*

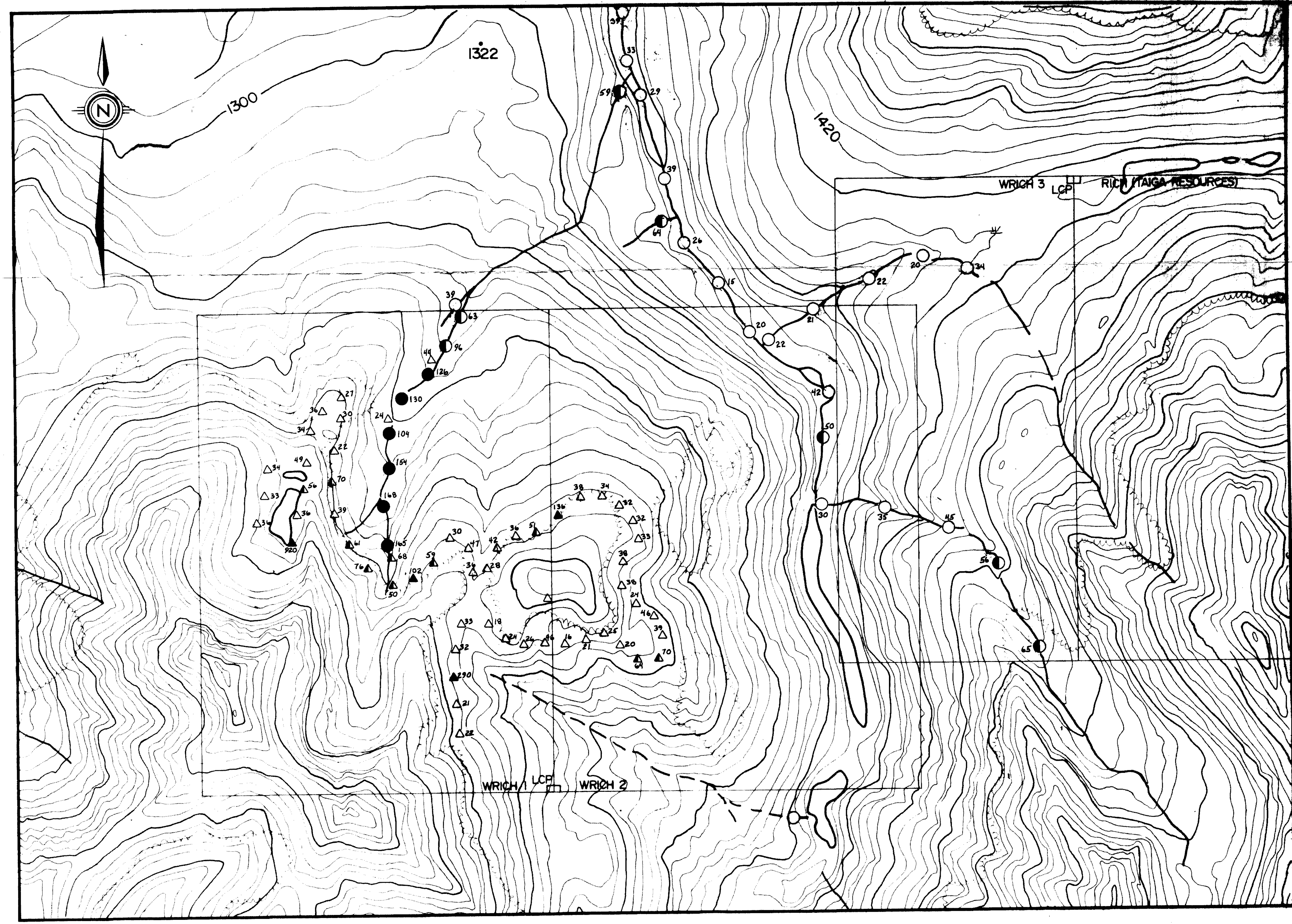
TITLE: WRICH CLAIMS
SILVER VALUES IN SILTS AND SOILS

DATE: JAN 82	DATA: S.C.
N.T.S.: 94E/2E & 2W	DRAWN: C.G.
SCALE: 1:10,000	CHECKED:

0 100 200 300 400 500 600 Metres

FIGURE: 66


1322
1300
1420
WRICH 3
LCP
RICH (TAIGA RESOURCES)
WRICH 1
LCP
WRICH 2
LEGEND
69 △ Soil sample site, ppm Cu.
≥ 100 ppm Cu.
≥ 200 ppm Cu.
38 ○ Silt sample site
≥ 100 ppm Cu.
≥ 200 ppm Cu.
MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
NO. 10,705
SEREM LTD.
PROJECT: TOODOGGONE
TITLE: WRICH CLAIMS
COPPER VALUES IN SILTS AND SOILS
DATE JAN. 82
DATA: S.C.
N.T.S. 94E/2E & 2W
DRAWN: C.G.
SCALE: 1:10,000
CHECKED:
FIGURE: 6C
0 100 200 300 400 500 600 Metres



LEGEND

27 △ Soil sample site, ppm Pb.
▲ ≥50 ppm Pb.
▲ ≥100 ppm Pb.

33 ○ Silt sample site, ppm Pb.
◐ ≥50 ppm Pb.
● ≥100 ppm Pb.

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
10,705 Nº

SEREM LTD.

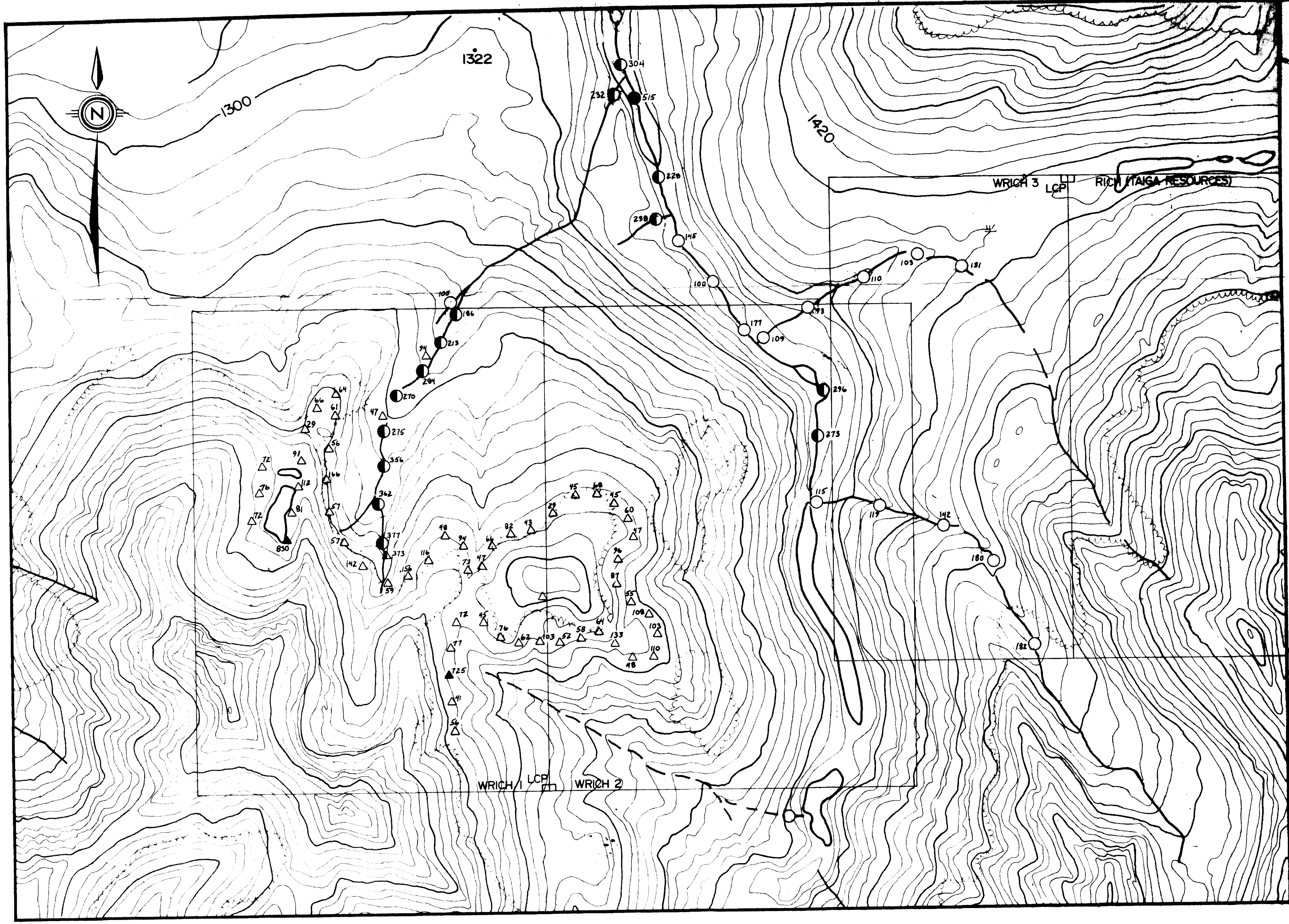
PROJECT: *TOODOGGONE*

TITLE: WRICH CLAIMS
LEAD VALUES IN SILTS AND SOILS

DATE JAN 82	DATA: S.C.
N.T.S. 94E/2E & 2W	DRAWN: C.G.
SCALE 1:10,000	CHECKED:

0 100 200 300 400 500 600 Metres

FIGURE: 6d



LEGEND

△ Soil sample site, ppm Zn.
▲ ≥ 200 ppm Zn.
▲ ≥ 400 ppm Zn.

○ Silt sample site, ppm Zn.
◐ ≥ 200 ppm Zn.
● ≥ 400 ppm Zn.

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
No 10,705

SEREM LTD.

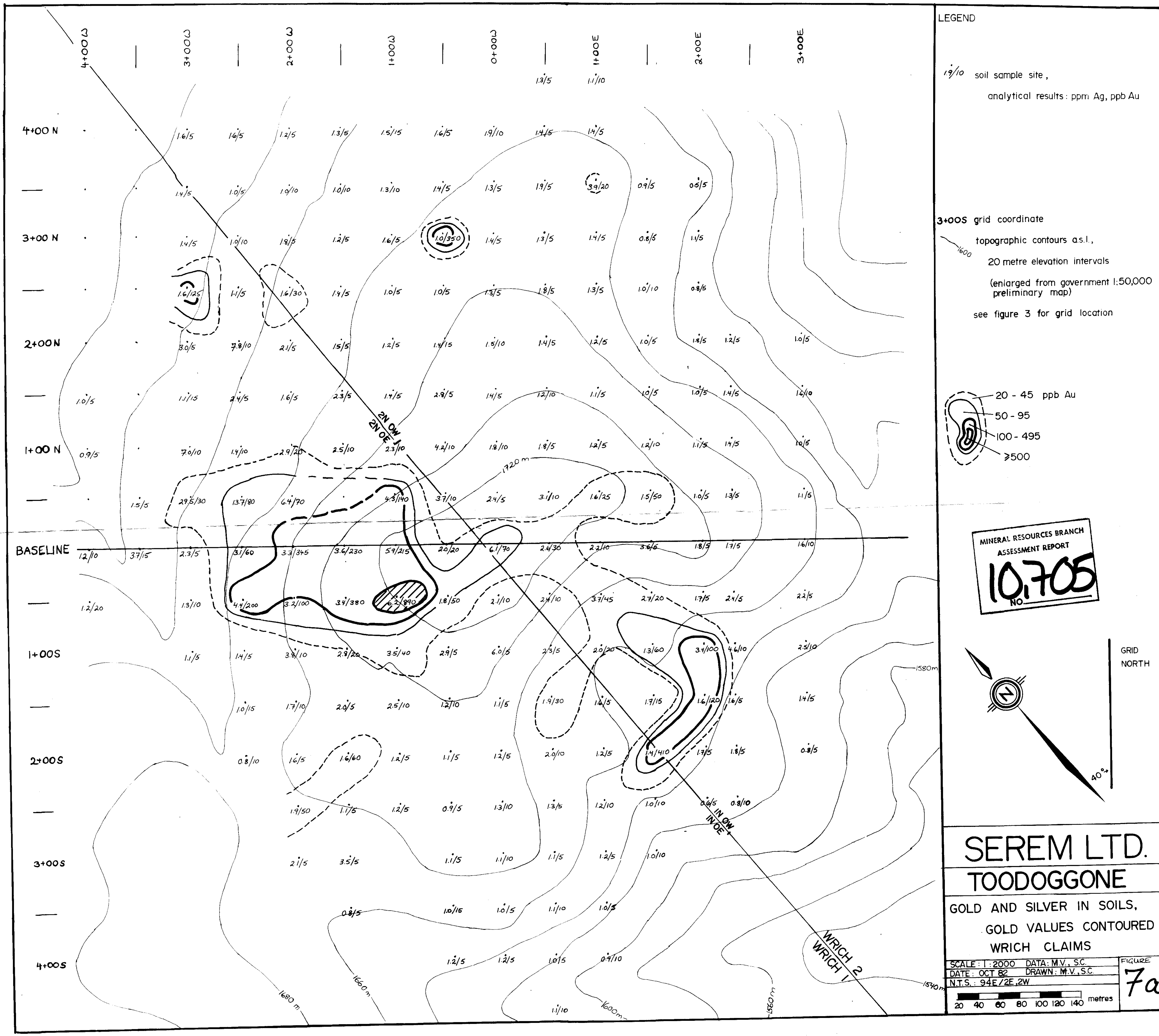
PROJECT: *TOODOGGONE*

TITLE: WRICH CLAIMS
ZINC VALUES IN SILTS AND SOILS

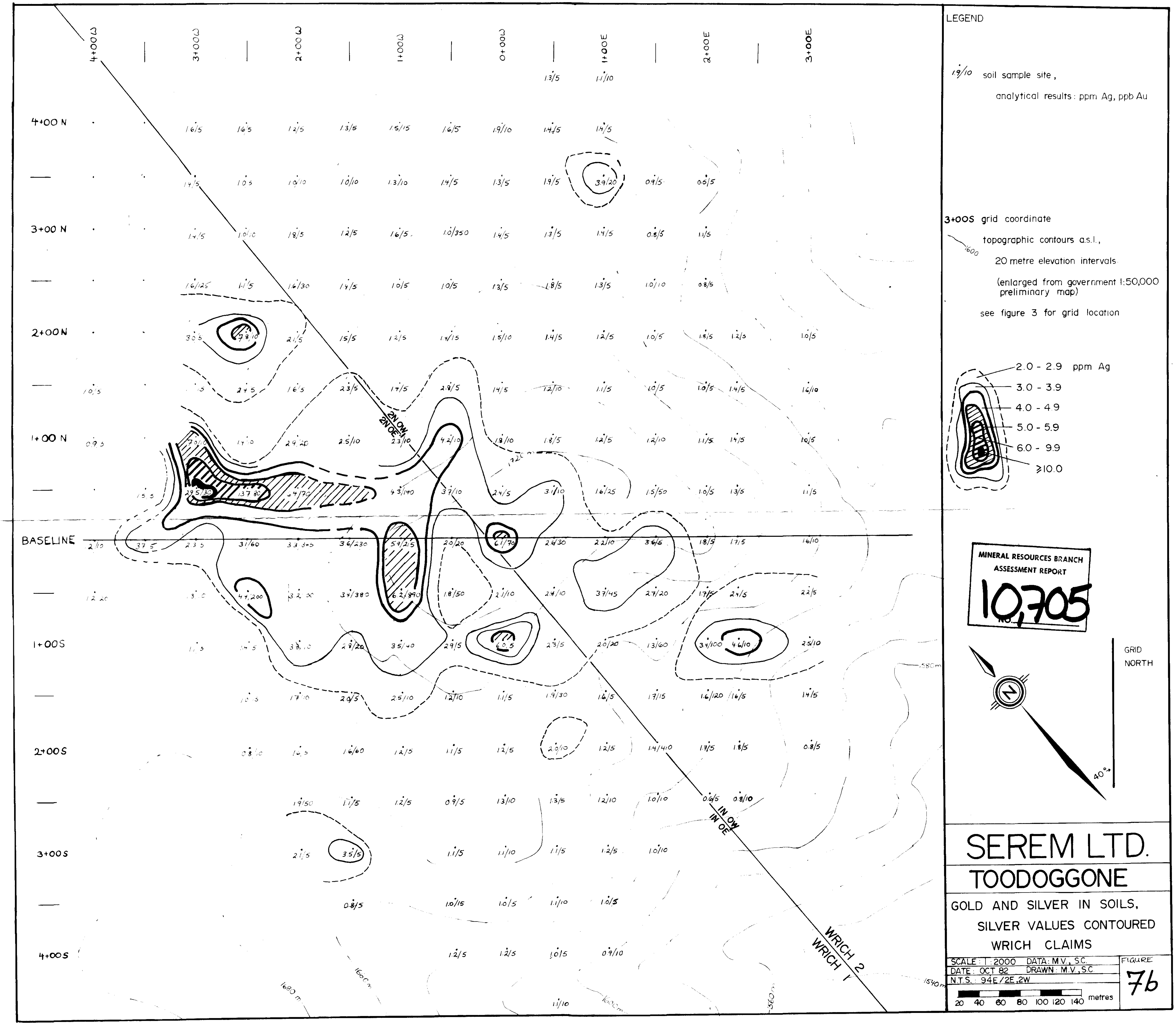
DATE: JAN 82	DATA: S.C.
N.T.S.: 94E/2E & 2W	DRAWN: C.G.
SCALE: 1:10,000	CHECKED:

0 100 200 300 400 500 600 Metres

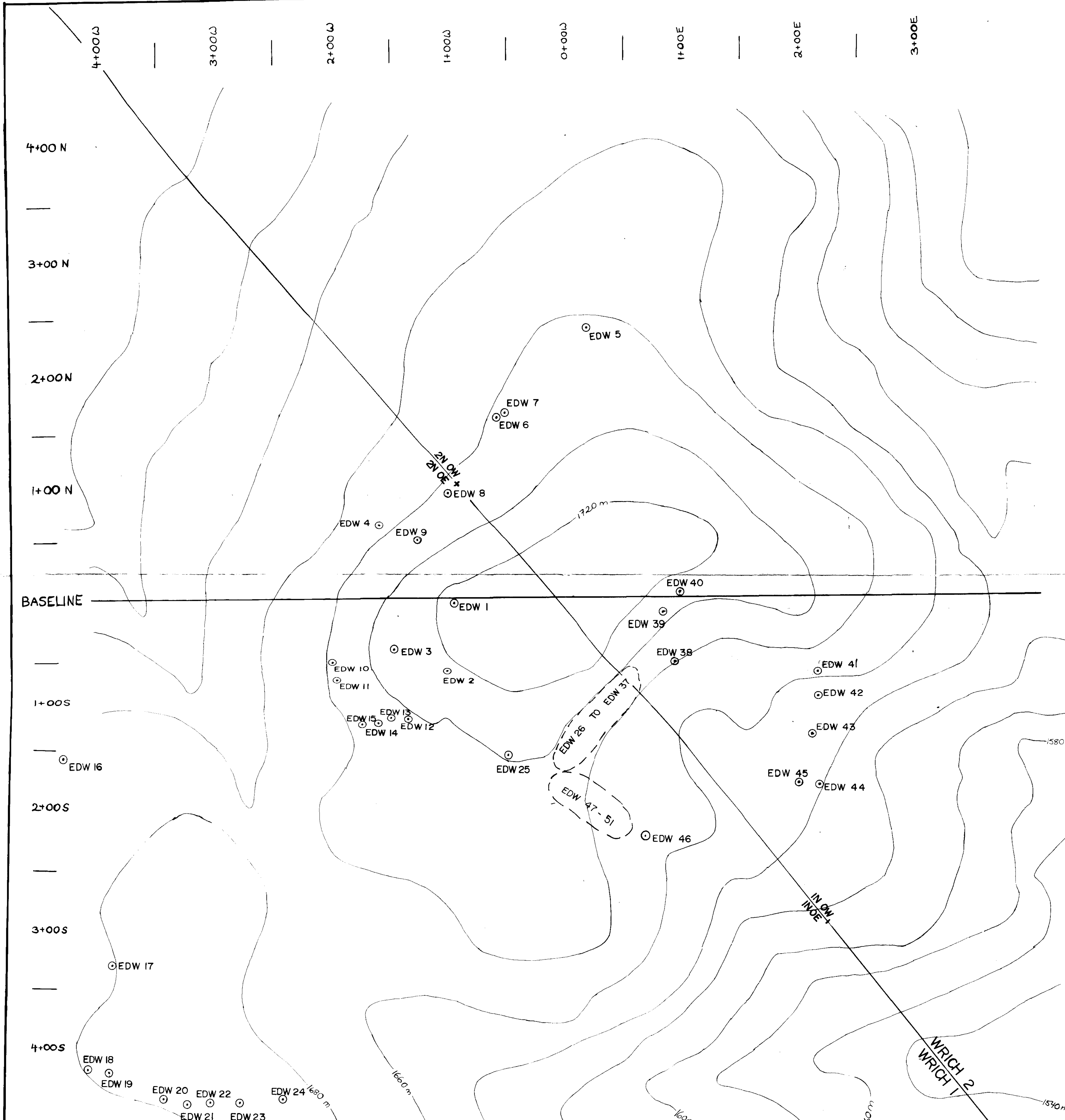
FIGURE: 6e



LEGEND
1.9/10 soil sample site, analytical results: ppm Ag, ppb Au
3+00S grid coordinate
1600 topographic contours a.s.l., 20 metre elevation intervals (enlarged from government 1:50,000 preliminary map)
see figure 3 for grid location
20 - 45 ppb Au
50 - 95
100 - 495
≥500
MINERAL RESOURCES BRANCH ASSESSMENT REPORT
NO. 10,705
GRID NORTH
40°
BASELINE
2N OW
2N OE
1N OW
1N OE
WRICH 2
WRICH 1
1720 m
1680 m
1660 m
1600 m
1580 m
1560 m
1540 m
SEREM LTD.
TOODOGGONE
GOLD AND SILVER IN SOILS, GOLD VALUES CONTOURED
WRICH CLAIMS
SCALE: 1:2000
DATA: M.V., S.C.
DATE: OCT 82
DRAWN: M.V., S.C.
N.T.S.: 94E/2E,2W
FIGURE 7a
20 40 60 80 100 120 140 metres



LEGEND
1.9/10 soil sample site, analytical results: ppm Ag, ppb Au
3+00S grid coordinate
topographic contours a.s.l., 20 metre elevation intervals (enlarged from government 1:50,000 preliminary map)
see figure 3 for grid location
2.0 - 2.9 ppm Ag
3.0 - 3.9
4.0 - 4.9
5.0 - 5.9
6.0 - 9.9
≥10.0
MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
NO. 10,705
GRID NORTH
40°
BASELINE
4+00W
3+00W
2+00W
1+00W
0+00W
1+00E
2+00E
3+00E
4+00N
3+00N
2+00N
1+00N
1+00S
2+00S
3+00S
4+00S
2N OW
2N OE
IN OW
IN OE
WRICH 2
WRICH 1
SEREM LTD.
TOODOGGONE
GOLD AND SILVER IN SOILS,
SILVER VALUES CONTOURED
WRICH CLAIMS
SCALE: 1:2000 DATA: M.V., S.C.
DATE: OCT 82 DRAWN: M.V., S.C.
N.T.S.: 94E/2E,2W
FIGURE 7b
20 40 60 80 100 120 140 metres



LEGEND

EDW 7 ⊙ Rock Sample Location with Sample Number

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
NO. 10,705

GRID NORTH
40°

SEREM LTD.

TOODOGGONE

WRICH CLAIMS

ROCK SAMPLE LOCATIONS

SOIL GRID AREA

SCALE: 1:2000	DATA: M.V., S.C.	FIGURE
DATE: OCT 82	DRAWN: M.V., S.C.	8
N.T.S.: 94E/2E,2W		

20 40 60 80 100 120 140 metres