5710

GEOCHEMICAL SURVEY OF TREN #2 MINERAL CLAIM

La France Creek Nelson Mining District

October 8, 1975 Copies: Mr. R.G. Trenaman Dept. of Mines & Petroleum Resources (2) File



TABLE OF CONTENTS

D -

		Fage
Introductio	n	1
Location an	d Topography	1
General Geo	logy	1
The Geochem	ical Survey	3
Grid and Ge	ochemical Method	3
Survey Data		3
Treatment o	f Geochemical Results	4
Presentatio	n of Geochemical Data	5
Discussion	of Survey Results - Tren #2 Claim	
1. Backg	round Considerations	5
2. Comme	nts on Specific Results	6
Recommendat	ions	7
Apprndix A	Soil Sampling Procedure	9
Appendix B	Analyses Procedure - Total Cold Extractable Method	10
Appendix C	Details of Individual Samples	14

MAPS

1

#1	Index Map	Between page 1 and 2
2	Geochemical Results	Folded at Back

GEOCHEMICAL SURVEY OF TREN #2 MINERAL CLAIM - LA FRANCE CREEK, NELSON MINING DISTRICT

This report describes the geochemical sampling technique used and discusses the results obtained on one of the four claims, the Tren #2. The survey was recommended by the writer as a suitable technique to pinpoint suitable areas for detailed exploration.

The report was requested by the claim owner, Mr. R.G. Trenaman of 4399 Eagle Nest Crescent, Prince George, B.C., formerly Box 608 Creston, B.C., to be used in partial fulfillment of assessment requirements on the Tren group of claims.

The field work and soil analysis were carried out between July 20 and August 9, 1975.

LOCATION AND TOPOGRAPHY

The Tren Group of four claims straddle La France Creek, extending up both the North and South slopes of the main valley at a distance approximately seven miles east of Kootenay Lake (see attached index map). Access to the claim group is by a well graded logging road which passes through the center of the claim area. Much of the land encompassed by the claim boundaries has been logged within the last five years and logging main and skid roads provide easy access to all but the northernsections of the claims.

The claim area north of La France Creek slopes upward at approximately 35⁰. The plant cover on this part of the claims (except for the area logged) consists, to a large extent, of a dense cover of youthful hemlock, fir and western cedar. Less extensive is a dense mat of tag alders and buckbrush.

The claim area south of the creek rises more gently (approximately 20⁰) and prior to logging was forested by over mature cedar, hemlock and spruce. Much of this area has been logged but remnant patches of non economic wood still exists.

GENERAL GEOLOGY

Although most of the claim area for 800 feet north and south of La France Creek is covered by a heavy blanket of glacial till and slide debris a good idea of the stratigraphy and composition of the underlying rocks may be determined by extrapolating data obtained on the higher stopes to north and south.



The rocks underlying the claim area are north trending, generally vertically dipping sediments of the Kitchen-Siyeh (Lower Purcell age) and Dutch Creek formations of upper Purcell age.

The upper beds of the Kitchener-Siyeh which underlay the east half of the Tren #2 and #4 claims, consist of light grey quartzites in beds up to 12 inches thick, alternating with thin laminated sandy argillites, and limy quartzites. Certain of these latter beds exhibit a striking color pattern of browns, buffs and creams. At least three interbedded grey green sills (tuffs?) up to 40 feet thick occur in the portion of the formation covered by the claims. This is the most westerly that these sills were observed. Based on the criteria developed by S.J. Schofield and followed by Walker, Rice and other investigators, this establishes the upper limits of the Kitchener-Siyeh and base of the Dutch Creek formation.

Overlying the above described sequence apparently conformably to the west, is a series of limy quartzites, light colored shales, limestones and cream colored dolomites. Few beds exceed 6 inches in thickness, with the exception of an occasional bed of massive cream colored dolomite which might reach 2 feet. The maximum measured thickness of this series is 300 feet. It is suspected that intertongues to black shale reduce the thickness along strike. A distinctive breccia structure is characteristic of certain limy members of this series and is thought to reflect collapse features. These beds are assumed to be the basal strata of the Upper Purcell-Dutch Creek formation.

A massive series of blue, grey and black shales overlie the predominately limy strata described above. On the ridge north of La France Creek this series has a measured thickness of 1300 feet. Closer to LaFrance Creek, it appears somewhat thinner, and contains insterbedded limestones. Thin light colored lime partings characterize certain sections of the sequence and slatey cleavage has been well developed at other locations.

The basal members of the Mount Nelson formation lie near the west edge of the claim area. Most rock exposures in the claim area reflect the effects of major stress. Tight chevron folds are well developed in the shaley beds supporting the suspicion that local thickening has taken place. Regional stresses have provided crenulated folds in most rocks exposed. The axis of these folds dips gently to the north.

-2-

Most rocks have undergone medium grade metamorphism. Shales have been altered to phyllites, and clay components in limy rocks have been upgraded to mica.

The basal limy members of the Dutch Creek formation in the La France Creek area and for some distance north has been the subject of mineral exploration dating back to the 1890's. Minor disseminations of gelena, sphalerite, tetrahedrite and pyrite have been observed and tested by test pits and other methods at various places for a distance of up to 8 miles along strike.

A number of old test pits and trenches were located within the claim area while conducting the geochemical survey.

THE GEOCHEMICAL SURVEY

General

The primary aim when considering a preliminary exploration technique for this group of claims was/a method which would point up exploration targets under conditions of medium overburden with a minimum of expense. Geological reconnaissance of the adjacent areas provided a reasonable idea of the location of favorable limy strata within the claim area. Either geochemical or geophysical techniques offered promise; a geochemical survey was chosen on the basis of cheaper cost.

Grid and Geochemical Method

Favorable limestone beds in the claim area strike generally north-south and dip approximately vertically. The minerals which occur in the area are galena, tetrahedrite and minor sphalerite. Weighing these factors it was decided to run the grid east-west at 200 ft. spacing. Samples would be taken at 100 foot intervals along grid lines in areas where limestone beds were anticipated; otherwise, at 200 ft. intervals. Follow up samples would be taken at 50 ft. intervals to bracket anomolous areas. The claim location line of the claims, since it ran north-south, was chosen as base line.

A total metal cold extractable dithozone geochemical method of analysis was chosen. The sampling technique is described in Appendix A. The field analysis procedure for the cold extractable method is included as Appendix B.

SURVEY DATA

A parallel objective during the collection of soil samples was to collect

-3-

information for the development of a suitable map of the claim area which could be used for displaying geochemical information, and possibly subsequent geological or geophysical information.

Information for the construction of a 200 ft. to the inch map using tape and Brunton data was collected during the running of the survey. This data formed the basis of the map on which geochemical results are shown. Contour and other tie-in data was transposed from the 1:50,000 Dept. of Energy, Mines and Resources Series, Crawford Bay Sheet 1974, supplemented by Aneroid altimeter readings taken at selected points.

TREATMENT OF GEOCHEMICAL RESULTS

Some 600 samples were collected and analysed during the survey period** Approximately 400 of these were treated in the following manner to point out truly anomalous values. As a starting point, the results were studied to establish the most common background value ("Median"), and an estimation of the standard deviation of other results from the median. Values greater than 5 times the median were omitted from the calculation of standard deviation, as these results are obviously unusually high in the context of the data and not typical of background. The actual calculation is shown below:

m1 cs	dit hea	(a) thozone avy metals	No. of samples	(c) Deviation from (Median)	(bxc)
*	3		149	0	0
	5		79	4	316
	10		32	49	1570
	15		31	149	4470
	20		10(291)	SOT	ie 6356
	25		11)	fc	or 291 results
	30		3)		(Standard Deviation) ²
	40		4)		= 6356/n-1 = 6356/290 = 22
	45 50		4) 2) omi	tted from	
	55		3) cal	culation	
	60		9)		
	65		2)	There	fore, 1 standard deviation =
	70 75		2)		22 - 4.4 or 5 to nearest 5 ml
	80	(A =	25		
	85		4)	Thresh	old estimated at median + 2 standard
	90		0 (devia	1005 - 3 + (2x5) = 15 mT
	100		11	Anomalous values ther	efore 20 ml or more
+ '	100		8)		
			385		
*	(1)	Median cle	arly 3 ml	(2) Median x 5 than 15 an	5 = 15 therefore all results greater re omitted from calculation.
	(3)	Seandard d	eviation e	estimated to be 5 ml.	(4) Threshold est. at median + $2\pm(2\times5) = 13$ ml
-	(5)	Anomalous	values = 2	20 ml +. 2 x stand	aru uev. = 5+(2x5) = 15 mi.

Refer to Appendix for C for detailed information on individual samples of Tren #2.

PRESENTATION OF GEOCHEMICAL DATA

Sample grid lines along with sample locations were plotted on the 200 scale (see pocket at back of report. Total metal values(in millimeters of dithozone) based on cold extractable analysis technique were plotted to right of sample location. Symbols, representing the nature of samples were plotted to left of values. The following symbols were used to identify sample composition:

N - normal soil

S - sand

X fine sand or silt

C - clay

- G gravel
- H organic

T - Sample collected from active drainage area

A large, followed by a small letter denotes a sample composed mainly of the first letter named with subordinate quantities of the second named; e.g. N^G - normal soil with subordinate gravel.

On the basis of the plotting of the survey results, follow up samples were collected with the intention of bracketting anomalous values. The results of such subsequent samples were plotted and helped appreciably in defining the actual extent of anomalous areas. As a final step anomalous areas were contoured.

DISCUSSION OF SURVEY RESULTS - TREN #2 CLAIM

1. Background Considerations

As discussed under the section on Geology, the basal limy members of the Dutch Creek formation may be seen in outcrop only on the higher slopes north and south of LaFrance Creek.

Within the claim area the only exposures occur near the northern boundary of the Tren #2 claim. To the north of the claim these limy members may be mapped in a number of locations either in the walls, or bed of the south flowing creek identified on the map as No. 2 Fork North. In fact, because of their preferential susceptibility to erosion, No. 2 Fork follows closely the surface exposure of these limy members for a distance approaching 7000 ft. down the north wall of La France Creek valley. Based on these observations the approximate bedrock position of the limy members within the claim area may be established with a reasonable degree of certainty. Knowing the location of the limy members within the claim area assists the interpretation of survey results significantly.

2. Another factor to be alert to when evaluating the survey results is the

possibility of anomalous readings resulting from mineralized material transported from other locations. Certainly, #2 Fork in the past has been a slide channel of significant importance, as the sizable fan structure adjacent to La France Creek attests to. At the same time, mineral occurrences are known to occur on the northern slopes of La France Creek. Without doubt some of this mineralization would, during erosion, find its way into the No. 2 Fork drainage channel and become part of the slide material.

 It must be pointed out, when evaluating survey results that two aspects of the results are very important, namely (1) the magnitude of anomalous values, (a) the areal extent of the anomaly.

It is a fair statement to make that when overburden is not excessive, insignificant mineral occurrences may produce spectacular anomolies due to drainage restrictions and other factors, but certainly large mineral occurrences will not go undetected.

Comments on Specific Results

Now, turning to the survey results obtained on the Tren #2 claim, in the light of the comments made above, the following conclusions may be drawn. (Refer to drawing in pocket for lettered anomalies referred to below).

Dealing first with the total results the following points may be made:

- (a) Areas underlain by Kitchener-Siyeh or Upper Dutch Creek shales offer no promise for follow up exploration work based on the results obtained.
- (b) Based on this survey, the sampling method provides consistently reproducible results.
- (c) The geochemical anomalies outlined, are small in areal extent. They are not indicative of significant nearby base metal mineralization. Notwithstanding this statement they occur in a consistent pattern over a limy sequence, and

-6-

this alone, warrents some follow up work.

Now, turning to a look at the individual anomalies, which are identified on the map as : A, B, C, D and E.

Anomalous areas A and B are certainly over or adjacent to the limy members of the basal Dutch Creek formation and anomaloy C is suspected to be. Two lower value anomalies (marked D and E) occur on slide debris, and may well indicate proximity to mineralized material carried from higher up the mountain.

Anomaly A is the result of one high reading, surrounded by background readings. It might almost be considered an erratic. Overburden is not deep. Anomaly B offers more promise in that it is some 500 ft. long and 200 ft. wide. In addition, a halo of above background readings surrounds this anomaly. Again, overburden is not deep. Anomaly C was obtained over considerable overburden and in very moist ground conditions. It is not extensive, as subsequent sample bracketting indicates, but may be more significant than Anomaly B when the masking effects of overburden are considered.

Anomaly D and E, as mentioned earlier, occur in slide material which might be 50 feet deep. Follow up work on these anomalies would be recommended only if encouragement was obtained from anomalies B and C first.

RECOMMENDATIONS

In view of the conclusions drawn above, a limited program of surface trenching is recommended to test anomalies B and C. The following work is specifically recommended:

- East-west trenches with a bulldozer on Anomaly B at 100 ft. intervals commencing on survey line T-East and working south. Total footage of trenching required 1000 feet, depending on results obtained.
- 2. Trenching on Anomaly C / survey line X east. After some minor preliminary work with a bulldozer, this work might be best done with a backhoe. Total estimated footage required 400 ft.

3. If encouragement is obtained as a result of the trenching on anomalies B or C, then Anomaly E should be tested, commencing along survey line Y-east with subsequent trenches to the south. If the overburden exceeds 20 ft., as suspected, then the only practical method is by diamond drilling.

The estimated cost of the trenching program under Recommendations (1) and (2) is \$ 2,500.

T. Trenaman, P. Eng. R.

October 8, 1975

1

APPENDIX A

Soil Sampling Procedure

Samples were collected at designated locations along grid lines by taking a scoop full of material from the B(2) or C horizons (where possible) and placing in 3-1/2 x 9-1/2 inch Kraft paper bags. The various soil horizons were first exposed by cutting an opening with a grub hoe. In actual practice, it was often impossible, due to the nature of the material (glacial till and slide debris) to collect samples from these more ideal horizons. Information on the location, nature of the sample (where it varied from ideal), moisture content, proximity to drainage areas and direction, as well as information on nearby geological features, were noted on the sample bag for later reference.

APPENDIX B

ANALYSIS PROCEDURE - TOTAL METAL COLD EXTRACTABLE METHOD (Field Kit designed by Bondon-Clegg and Co. Ltd., Vancouver)

The following procedure was adhered to in analyzing samples collected in the Tren Group of claims:

1. Samples were dried for twelve hours at 200⁰F.

- 2. A suitable portion of sample was screened with 80 mesh stainless steel sieve. The oversize from screening was returned to the Kraft sample bag, the undersized was now ready for treatment to determine metal content adhereing to procedures outlined below:
 - (a) General notes on method

This method of geochemical prospecting is based on the premise that some of the metal in a sample of soil or stream sediment is loosely attached to the surfaces of the mineral grains or organic materials. This absorbed or "loosely bonded" metal, which may amount to as much as 20% of the total metal in the sample, may be removed by leaching the sample with a dilute solution of ammonium citrate, or even water. The heavy metal thus removed is then determined by reacting it with dithizone to form a colored product. The color produced is a measure of the metal content of the sample.

Because the method is designed for speed and ease of use in the field, samples are not weighed but are measured with a small scoop. A scoopful of the sample is placed in the analysis tube and the ammonium citrate buffer solution is added. The function of the buffer solution is to dissolve the "loosely bonded" metal referred to above, and to maintain the acidity of the sample solution at a pH of 8.5, the point at which the dithizone reacts most rapidly and completely with the greatest number of metals. The dithizone-benzene solution is then added to the tube, the tube is corked, and then shaken. The benzene layer is allowed to separate and is observed for a color change which may range from the original bright green to red, through the sequence, green, blue-green, blue, blue-purple, purple and finally red. Any color other than green is an indication of the presence of metal. Additional amounts of the dithizone-benzene solution are added with shaking until a standard color, or end point, usually a blue or grey-blue, is reached. The amount of dithizone required to reach this point is then a measure of the cold extractable heavy-metal content of the sample.

(b) Analytical procedure

Preparation of Working Solutions

1. Dithizone Solution (0.001% M/V)

Place one dithizone vial into the graduated squeeze bottle. Add benzene to the 100 ml mark, cap, and allow to soak for about 10 minutes; then shake for at least one minute. When squeeze bottle is empty, the vial may be removed with a gentle, rolling action.

- Notes: (1) <u>BENZENE</u> is <u>FLAMMABLE</u>. Benzene fumes are noxious; always carry out tests where there is abundant ventilation.
 - (2) Avoid prolonged exposure of dithizone vials and solutions to heat or sunlight.
- Buffer Solution pH 8.5 Ready for use. Transfer to second graduated squeeze bottle for use in the field.

Analysis

- Fill large scoop (0.5 gm) with sample. Transfer to the 25 ml graduated test tube.
- Add buffer solution up to the 5 ml mark.
- 3. Add 1 ml of 0.001% dithizone solution, stopper the tube and shake vigorously for 30 seconds. (If running the copper test with buffer specific for copper, pH 2.0 (see notes) shake for at least one minute, as the wine-brown copper color develops slowly).
- 4. Allow phases to separate by holding the tube at 45° and slowly revolving the tube until the color of the dithizone layer can be observed.
- If color is the original green, record as 0. If blue-green or grey-blue, record as 1. Test is finished.

-11-

- 6. If dithizone layer is blue, purple, or red, add dithizone in successive increments of 2, 4 and 8 mls, shaking for 10 seconds and observing the color each time, until a blue-grey end point color is obtained. Record the total volume of dithizone added to reach the blue-grey end point as an index of the cold extractable heavy-metal content.
- 7. If after the addition of 15 mls of dithizone, the solution still remains red, purple or blue, repeat steps 1-5 using the small scoop (0.1 gm). Multiply the final volume of dithizone by 5 to obtain the comparable index value for cold extractable heavy-metals. If red, purple or blue persists after adding 10 mls of dithizone to the 0.1 gm sample, simply record as 50+.

PRECAUTIONS

- Each day before attempting to analyze samples, run a blank determination (steps 2 -.6). Repeat until the dithizone layer is green. Failure to produce a green color with 1 ml of dithizone indicates contamination of the equipment or reagents. Always keep spare laboratory sealed reagents on hand.
- Periodically through the day, carry out a blank determination as a check for possible contamination.
- 3. Always keep dithizone solutions away from direct sunlight and heat. Dithizone solutions must be prepared fresh daily.
- 4. Keep the cork used in the analysis tube from becoming contaminated. Never touch the lower part of the cork with the fingers and at no time should a finger be used to cover the tube in place of a cork.
- 5. At the end of each determination, when the grey-blue end point has been reached, the tube and cork are free of metal and require no further cleaning. The contents of the tube are shaken and emptied, and the next determination can be started. If however, the determination is terminated at the blue, purple or red color, the tube must be thoroughly rinsed with de-ionized water and a blank check carried out. This blank check must be repeated until a green color remains after shaking.

REMARKS

 In the present of high copper, the dithizone layer may give an orange-brown color, particularly after addition of the first increment (1 ml) of dithizone. This color makes the test specific for copper and "copper-brown" should be recorded. In some instances, organic samples will also give a brownish cast to the dithizone layer in the first increment. A true copper-brown will result in a high final result and more dithizone should be added. The organic effect will normally be observed on samples with low cold extractable metal values (5).

- 2. In some samples, the amount of metal determined will depend on the length of time the tube is shaken. For this reason, it is important the amount of shaking be constant for all determinations, so that results will be comparable.
- 3. When working in areas where the metal values are consistently low, or where the contrast between background and anomalous values are low, it is advisable to use the smaller 10 ml graduated analysis tube and to add dithizone in constant increments of 1 ml.
- 4. A similar test which is specific for copper can be performed using the same equipment, procedure and reagents (except for the buffer) as are employed for the T-400 Total Heavy Metals Kit. When running the copper test, with specific copper buffer (pH 2.0), a shaking time of one minute is required, as the copper reaction is slower than the THM reaction using the THM (pH 8.5) buffer.
- When ordering chemical, specify exactly what you want, including pH of the Buffer. Chemicals may be ordered separately.

APPENDIX C

Details of Individual Samples Obtained on Tren #2 Claim

<u>Sample L</u> Gridline	ocation Ftge.	Related Information	Soil Designation	Total Metal Cold Extractable ml Dithozone
А	0	Loam with phyllite gravel	NG	7 m]
А	100	Shaley loam- considerable pyr. in phyllite	NS	5 m1
А	150	Shaley loam - side of cut on skid road	NG	2 m1
Α	200	Moist crumbly phyllite. 20'S of La France on bank	\mathbf{g}^{T}	7 m]
А	250	Sample 20'N of LaFrance. Gravelly silt	NGT	5 m1
А	300	Gravelly Loam LaFrance 20'N	NGT	10 m1
А	350	Sandy silt. LaFrance 50'South	Х	5 m1
А	400	Loam Rd 40'N	N	3 ml
А	450	Gravelly silt. Cut disturbed. Rd side	х ^G	10 ml
А	500	Dark red loam. N side of rd. Next to temporary drain	NT	10 m1
A	550	Loamy clay with gravel. Cut disturbed. Rd. 20' S	c ^G	20 m1
А	600	Silty loam. Rd. 30' S	NX	5 ml
A	700	Gravelly silt-qtzitic. May be cut disturbed	x ^G	3 m1
А	900	Loam. Cabin shows about 670'E on B lin	e N	3 m1
A	1100	Loam in boulder till. Edge of dry drain from north	NG	3 m1
А	1300	Loam in boulder till. Creek from N crosses at A + 1200 E	NG	3 m1
A	1500	Sandy loam. Rd. crosses to left up at 1420'E Rd. above is 30'N at 550°E	NS	1 m1
3				
Z	0	Loam +"A" soil profile	Ν	5 ml
Z	200	Gravelly loam. Nr. old trench 50'N of LaFrance Creek near old drainage	NG	25 m1
Z	250	Sandy silt. Main Rd. 35'N on slide area from North	x	20 m1

-

15
-10-

Sample L	ocation		Soi1	Total Metal Cold Extractable
Gridline	Ftge. E.	Related Information	Designation	ml Dithozone
Z	300	Sandy silt next to S flowing Ck. on centre line Rd. cat disturbed	хт	35 m]
Z	350	Silty loam in boulder till. 25'E of S flowing creek	х ^N т	5 m1
Z	400	Yellow red loam - 60' E of S flowing Ck.	N	5 m]
Z	450	Red loam	N	5 m]
Z	500	Gravelly loam on switchback of skid rd. Cut disturbed	NG	10 m1
Z	550	Red loam - old skid Rd. 40'N	N	15 m1
Z	600	Sandy loam in boulder till. 60'W of drainage	NS	30 m1
Z	650	Dark br. loam in boulder till	NG	25 m1
Z	700	Light br. loam in boulder till	NG	2 m1
Z	800	Gravelly silt. Side of cut - N side skid rd.	х ^G	2 m1
Z	900	Gravel. N side of skid road	G	3 m1
Z	1100	Reddish yellow loam. 30'N of skid rd. near switchback	N	2 m1
Z	1300	Moist loam. W side of S flowing creek	NT	1 m1
Z	1500	Gravelly silt and clay in cut bank - switchback at 1460'E	x ^G	3 m1
Y	0	Brown loam - cat disturbed. Ck.@ bridge is Y-D+75'S	N	10 m]
Y	40	Cat distrubed clay and gravel centre line skid road	c ^G	10 m1
Y	150	Sandy loam. Rd. @ 200E	NS	10 m1
Y	250	Loam and phyllite gravel	NG	1 m1
Y	350	Loam and "A" soil in boulder till (toe of slide)	NG	2 m]
Y	450	Loam and gravel and humus. W rim of Ck. bed. Ck. centre line @ 500'E	NH	20 m1
Y	550	Gravel and clay. 15'E of ck. line almost parallels Ck. here	с ^G т	15 m1
Y	610	Gravelly loam. E rim of creek	NG	10 m1
γ	670	Gravelly loam. May be alternate Ck bed	NGT	10 m1
Y	720	Reddish brown loam on rim of S slope of valley to S flowing Ck.	N	5 m1

-

~

.

Sample L	ocation		Soi1	Total Metal-Cold Extractable
Gridline	Ftge.	Related Information	Designation	ml Dithozone
Y	900	Gravelly clay. Centre line Rd. just below switchback	c ^G	2 m]
Y	1100	Loam. Top side of Rd. Dry drainage at 1150E	N	2 m1
Y	1300	Gravelly loam	NG	1 m]
Y	1500	Clay, humus and loam. 20'S of S flowin creek on bank	^g с ^Н т	5 m1
Х	0	Reddish - gravel and loam. Rd. side	N	6 m1
Х	200	Light yellow loam in qtzite boulder til	1 N ^G	2 m]
х	300	Gravelly loam	NG	2 m1
х	400	Gravelly loam in qtzite boulder till. Next to phyllite o/c	NG	5 ml
X	600	Light yellow gravelly loam. On rim - west of S flowing Ck.	NG	3 m]
X	700	Loam in shaley gravel. 15'W of Ck. Cen line	tre _N G	5 m1
X	750	Clay loam - active drainage to S flowin creek. End of skid rd. off first switc	g hb.N ^C T	20 m1
Х	800	Loam. Active drainage running west	NT	10 m1
Х	850	Sandy loam with humus. Active drainage to west	N ^Н т	60 m1
Х	900	Choc. br. loam. above active drainage. terrain breaks to S	NT	2 m1
X	1100	Br. loam in gravel till. E edge of S drain to LaFrance dry ck. bed running S	М ^G T	2 m1
Х	1 300	Loam	N	2 m]
Х	1500	Reddish gravelly loam	NG	5 ml
W	0	Red loam. On claim centerline	N	5 m1
W	175	Shaley (phyllite) loam	NG	3 m1
W	230	Brown yellow loam	N	1 m1
W	400	Loam in phyllite till. o/c @ W+425E	NG	15 ml
W	500	Reddish br. loam in qtzite & phyllite gravel	NG	2 m]
W	600	Yellow br. loam with gravel	NG	2 m1
W	650	Shaley loam	NG	7 m]

...

-17-

Sample Loc Gridline	cation Ftge. E	Related Information	Soil Designation	Total Metal-Cold Extractable ml Dithozone
W	675	Shaley loam	NG	2 m1
W	700	Phyllitic gravel with some loam	G ^N	3 m1
W	750	Reddish yellow loam. W rim of canyon	N	2 m1
W	800	Shaley loam and humus - 25'W of S flowing creek	N ^Н Т	3 m1
W	850	Gravelly loam. 20'E of S flowing ck.	NG	5 m1
W	900	Gravel till. slope of creek	G	8 m1
W	950	Yellow br. loam in boulder till. o/c at U+975E	NG	3 m1
W	1000	Light br. loam - gravelly - tag alders	NG	1 m1
W	1100	Sandy clay - tag alders	c ^S	2 m1
W	1200	Clay, loam and "A" profile - tag alders	c ^N	2 m1
W	1400	Gravel and loam	NG	1 m]
W	1600	Yellow br. gravelly loam - Alt. 5300'	N ^G	2 m1
v	0	Yellow br. loam in phyllite till	NG	10 m1
v	300	Light br. loam in phyllite till. relict crumpling	NG	3 m1
۷	500	Reddish br. loam in phyllite till - o/c nearby	NG	4 m]
۷	700	Reddish loam in phyl. gravel. Lst from 830-890	NG	3 m1
٧	850	Reddish br. loam - sandy, from limy are	a N ^S	45 ml
۷	900	Light grey loam in phyllite till. Ck @ 930E	NG	30 m1
V	1000	Light grey sandy loam. Light grey limy shale. Slope to Ck.	NS	3 m1
V,	1100	Gravelly loam in limy shale. W slope t ck. tag alders	° NG	3 m1
۷	1200	Gravelly loam in qtzitic gravel. Tag alders	NG	2 m1
V	1300	Dry yellow br. loam in qtzitic till. Slope to small ck. tag alders	NG	1 m]
٧	1400	Red br. loam & clay. Somewhat moist. tag alders	NC	1 m]
V	1600	Dry tan loam. drainage 30'W. Alt. 5445	Ν	2 m]

T

Sample Lo Gridline	Etge. E.	Related Information	Soil Designation	Total Metal-Cold Extractable ml Dithozone
U	0	Loam in phyllite gravel	NG	3 m]
U	200	Light br. loam in phyllite till. o/c nearby Alt. 5130'	NG	4 m]
U	400	Loam & phyllite gravel in phyllitic till - slatey	NG	4 m]
U	600	Light br. loam in phyllite and qtzitic till - slatey	NG	6 m1
U	750	Reddish br. loam in lime & qtzitic till	NG	10 m1
U	800	Gravel in 1st and phyllite till. High point @ 750 E	G	130 m1
U	900	Dark br. loam. 50'NW of ck. centre line. Buff lst. o/c	N	25 m]
U	1000	Moist sandy clay in qtzitic gravel 20'E of ck.	с ^G т	15 m1
U	1100	Light gravelly clay. W sloping drainag dry	e c ^G	3 m1
U	1200	Dry yellow br. loam in gravel. Alt. 53	50' N ^G] m]
U	1300	Yellow br. loam in qtzitic gravel. tag alders	NG	2 m1
U	1500	Reddish br. loam - some "A" profile in qtzitic till	NG	1 m1
т	0	Light yellow loam in phyllite till	NG	3 m1
Т	200	Phyllite gravel & loam in phyllite till o/c 3-400 E	• NG	6 m1
т	400	Sandy br. loam in phyllite till. o/c 450-550 E	NG	5 m1
Т	600	Reddish br. loam & phyllite gravel in phyllite till	NG	3 m1
Т	800	Reddish br. loam in N edge of limestone	e N	17 m]
Т	850	Choc. br. loam in 1st. till	N	60 m]
Т	900	Choc. br. loam with limestone fragments in SE slope	N	30 ml
т	950	Light br. loam. Limestone area. 25'E of active drainage	NT	2 m1
т	1000	Reddish br. loam with limestone frags.	Ν	4 m1
т	1100	Reddish br. loam in rushy qtzitic till. Centreline at 1120 E	NG	120 m1

f F -18-

-19-

Sample Lo Gridline	cation Ftge.E	Related Information De	Soil esignation	Total Metal-Cold Extractable ml Dithozone
Ť	1200	Clay and loam. Moist. in qtzite and phyllite till	N ^G T	3 m1
Т	1300	Sandy loam in qtzite and phyllite till - drainage sloping W	Ν ^S Τ	2 ml
т	1400	Reddish br. loam in atzitic and phyllite till	NG	2 m1
Т	1500	Yellow br. loam (gravelly) jackpine forest. Alt. 5510'	NG	2 ml
YA	650	Gravelly loam in phyllite till 25'W of C	K. N ^G	3 m1
YA	700	Moist gravelly clay. 20'E of ck.	с ^G т	4 ml
YA	750	Gravelly clay. W edge of rd. near end	c ^G	1 m]
YA	800	Yellow br. loam. 30'N of rd.	N	35 ml
YA	850	Moist humus and loam. Doainage to South	н ^N T	13 m1
ХА	700	Light br. loam in phyllite till. Phylli o/c nearby	te NG	5 m1
ХА	750	Loam and gravel in phyllite till. Creek cnetreline at XA + 765' E	NG	8 m1
XA	800	Moist gravelly clay in qtzitic till. Stope to ck.	c ^G	3 m1
ХА	850	Rich yellow loam in qtzitic till. Phyllite boulders	NG	2 m1
XA	900	Rich br. loam - drainage slope to SW	N	2 m1
ХА	950	Light yellow loam in gravel	N ^G	2 m1

~

-

v i i.

LEGEND

SOIL SAMPLE SYMBOLS

- N normal soil
- S sand
- X fine sand or silt

- C clay G gravel H humus T sample collected from active drainage

SANDY

No 3 FORK SOUTH

PINITIAL | POST

D.D. WICKLUND

POSTS

wit

GEOCHEMICAL ANOMOLOUS VALUES

20-50 ml. 50-75 ml. 75-100 ml. +100 ml.

nny

Drainage Channel Logging Road Skid Road. ---- Claim Boundary

Gir.

