

1983 EXPLORATION PROGRAM

on the  
RUSTY SPRINGS PROPERTY  
Yukon Territory  
N.T.S. 116K/8, 9

claims: Rio 1-104, Carb 1-16,  
Nate 3-14, HG 1-146,  
JP 1-54, Moose 1-48

**091504**

Latitude 66°30' North  
Longitude 140°25' West

prepared for  
KENTON NATURAL RESOURCES CORPORATION  
Fort Steele, British Columbia

by

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Calgary, Alberta T2R 1B2



*(mirrored text from reverse side)*  
This report is prepared under section 23 (4) Yukon Quartz Mining Act and is allowed as representation work in the Yukon

Regional Manager, Exploration  
Geological Services for Communities  
of Yukon Territory  
July - September 1983

102100

This report has been examined by  
the Geological Evaluation Unit  
under Section 53 (4) Yukon Quartz  
Mining Act and is allowed as  
representation work in the amount  
of \$ 81,700.00.

*K. Hayes*

Regional Manager, Exploration and  
Geological Services for Commissioner  
of Yukon Territory.

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Certificate: C. H. Aussant  
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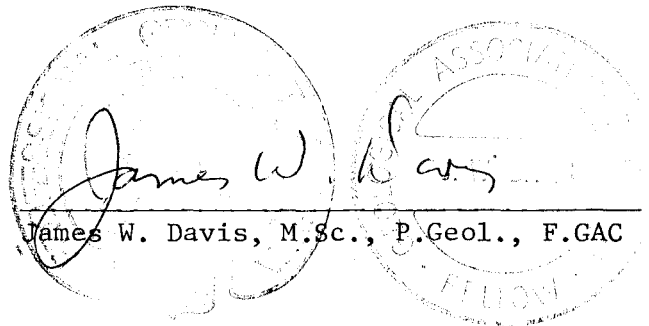
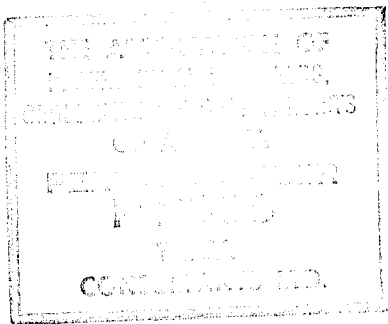
CERTIFICATE

I, the undersigned, of 116 MacEwan Drive N.W., Calgary, Alberta, a geologist, certify that:

1. I am a Consulting Geologist with the firm of Taiga Consultants Ltd., with offices at #100, 1300 - 8th Street S.W., Calgary, Alberta.
2. I am a graduate of St. Louis University with a B.Sc. (1967) and a M.Sc. (1969) in Geology, and that I have practised my profession continuously for 15 years since graduation.
3. I am a member in good standing of the Association of Professional Engineers, Geologists and Geophysicists of Alberta; and a Fellow of the Geological Society of Canada.
4. I have personally worked on the claims and supervised exploration work described in this report during the period August 30 to September 7, 1983.
5. I have not received nor do I expect to receive any interest, direct or indirect, in the property described herein or in Kenton Natural Resources Corporation.

DATED at Calgary, Alberta, this 21 day of December, A.D. 1983.

Respectfully submitted,



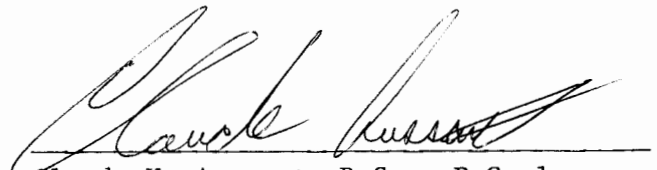
CERTIFICATE

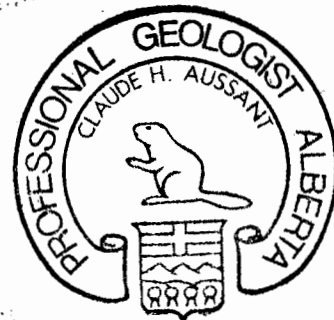
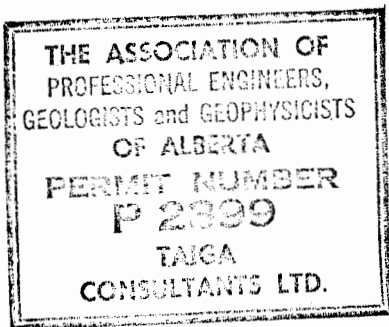
I, the undersigned, of 31 Templebow Way N.E., Calgary, Alberta, a geologist, do hereby certify that:

1. I am a Consulting Geologist with the firm of Taiga Consultants Ltd., with offices at #100, 1300 - 8th Street S.W., Calgary, Alberta.
2. I am a graduate of the University of Calgary with a B.Sc. (1976) in Geology.
3. I have practised my profession for seven years since graduation.
4. I am a member in good standing since 1979 of the Association of Professional Engineers, Geologists and Geophysicists of Alberta.
5. I have personally worked on the claims mentioned herein, and supervised exploration work carried out thereon.

DATED at Calgary, Alberta, this 21 day of December, A.D. 1983.

Respectfully submitted,

  
Claude H. Aussant, B.Sc., P.Geol.



SUMMARY

In June 1983, a 1400-foot airstrip was constructed on the top of Orma Hill at an oblique angle to the previous airstrip. A drill road was built from the old camp at the base of Mike Hill to the top of Mike Hill in preparation for a future drill program.

To detail several geochemical anomalies detected on the margins of the grid on Mike Hill, 315 soil samples were collected. This additional data refined and extended the geochemically anomalous areas previously outlined on Mike Hill. In addition, 9 km of VLF-EM survey lines were completed on Mike Hill detailing the main area of anomalous silver in the soils. A number of weak to moderate strength conductors, with coincident anomalous soil geochemistry, were delineated by the survey near the top of Mike Hill. These coincident geochemical anomalies and conductors provide excellent drill targets on Mike Hill.

In September 1983, two drill holes totalling 487 metres (1600 feet) were drilled on Orma Hill. Although subsurface mineralization was not encountered, the overall exploration of the property has been advanced by delineating what appears to be a fundamental structural control for the distribution of mineralization on Orma Hill. The absence of the veins in the subsurface was interpreted, utilizing the additional structural and stratigraphic data, as the result of the displacement of the veins westward along a low-angle reverse fault by several hundred feet. Because of this improved understanding of the geology, a more systematic evaluation of the property is now possible.

## INTRODUCTION

At the request of Kenton Natural Resources Corporation, Taiga Consultants Ltd. was contracted to carry out an exploration program on Kenton's Rusty Springs property in the northern Yukon Territory.

From June 15 to June 27, 1983, additional soil geochemical samples were collected on Mike Hill to detail geochemical anomalies detected during previous surveys. In addition, further VLF-EM surveying was completed on Mike Hill to further aid in target identification.

Coincidental with these surveys, a new 1400-foot airstrip was constructed on the top of Orma Hill in order to facilitate access to the property for future exploration programs. An access road was built to the top of Mike Hill in preparation for future drilling.

During the period August 26 to September 11, 1983, a total of 488 metres (1600 feet) of diamond drilling at two locations was completed in order to further evaluate the grade and continuity of mineralization on Orma Hill.

### Location and Access

The location and access to the property are illustrated on Figure 1. Rusty Springs is situated in the northwestern part of the Yukon Territory at approximately 67° North latitude and 140° West longitude in N.T.S. 116K/8 and 116 K/9. The property is about 8 km south of the Arctic Circle and 29 km east of the Alaska border.

Access to the property is via wheel- or ski-equipped aircraft or by winter road. The first of two existing airstrips on the property is approximately 365 metres (1200 feet) long, suitable for winter use only, and the second is approximately 236 metres (775 feet) long, adequate for use in the summer months. A new 1400-foot airstrip was completed in the summer of 1983 in order to more safely accommodate aircraft servicing the drilling program. All three strips can accommodate aircraft up to the size of a Twin Otter. Road access has been previously developed for winter

BEAUFORT SEA

MACKENZIE BAY

INUVIK

OLD CROW

RUSTY SPRINGS

CHANCE GAS FIELD

ARCTIC CIRCLE

Mackenzie R.

YUKON

N.W.T.  
CADILLAC EXPLORATION  
(Prairie Creek deposit)

TERRITORY

DAWSON CITY

Yukon R.

ALASKA

WHITEHORSE

B.C.

100 miles to Bering Sea

Porcupine R.

DEMPSTER

**FIGURE 1**

- +++++ Railroad
- All Weather Road
- ..... Proposed All Weather Road
- ✈ Government Airfield

**LOCATION MAP**

SCALE: 1 : 5,000,000

1" = 80 Miles approx.  
1" = 130 Kilometers approx.

haulage from Mile 123 (Ogilvie Crossing) on the Dempster Highway over a distance of 193 km (120 miles). The Dempster Highway is a government-maintained all-weather road providing access from the south. The winter road access traverses gently sloping terrain without any major topographic obstacles. A base camp consisting of seven half-frame tents is situated on the northwestern slope of Orma Hill in the eastern part of the property.

### Claims Status

The Rusty Springs property is comprised of 380 Quartz Claims totalling 7,943 hectares (19,627 acres) (see Table I).

A thorough search of the claims records on file in Rio Alto Exploration Ltd.'s Calgary office was performed by R. T. Heard, P.Eng., in March 1980. This included the original claims affidavits, transfer documents, grouping certificates, and certificates of work. To this writer's knowledge, all claims are validly located and registered in the name of Rio Alto Exploration Ltd. All claims are in good standing until 1985 or later.

Fifteen overlying Iron Claims (Yeti 1-12, Rio 1-3; also registered in the name of Rio Alto Exploration) are not included in this project.

The claims are documented on claim sheets 116 K/8 and 116 K/9, Dawson Mining District, Yukon Territory. Assessment work requirements in the Yukon are \$100 per claim per year.

### Physiography

The Rusty Springs property lies within the Porcupine Ranges of the Ogilvie Mountains. Maximum relief on the property is 245 metres (800 feet), varying from approximately 550 to 790 metres (1800 to 2600 feet) ASL. The topography consists of broad gently sloping valleys and rounded hills. The entire property area lies within that portion of the Yukon which is unglaciated. As a result, a thick regolith has developed in the area. Permafrost conditions exist throughout the area which has resulted in solifluction and extensive down-slope creep of the regolith.

TABLE I  
RUSTY SPRINGS PROJECT  
CLAIMS STATUS

<u>Quartz Claims</u>	<u>Record Numbers</u>	<u>Expiry Dates</u>
Rio 1-4	YA 2826-2829	Oct. 16, 1988
5-11	YA 2830-2836	1989
12	YA 2837	1990
13	YA 2838	1988
14	YA 2839	1989
15	YA 2840	1988
16-24	YA 2841-2849	1989
25-26	YA 2850-2851	1990
27	YA 2852	1991
28	YA 2853	1990
29	YA 2854	1989
30	YA 2855	1990
31	YA 2856	1989
32	YA 2857	1990
33	YA 2858	1988
34-38	YA 2859-2863	1989
39	YA 2864	1989
40-46	YA 2865-2871	1988
47	YA 2872	1989
48	YA 2873	1988
49	YA 2874	1989
50-60	YA 2875-2885	1988
61-62	YA 10160-10161	May 31, 1992
63-67	YA 10162-10166	1988
68	YA 10167	1992
69	YA 10168	1988
70	YA 10169	1992
71	YA 10170	1988
72	YA 10171	1992
73	YA 10172	1988
74	YA 10173	1992
75	YA 10174	1989
76-104	YA 10175-10203	1988
Nate 3-6	YA 2902-2905	Oct. 16, 1989
7-11	YA 2906-2910	1990
12-14	YA 2911-2913	1989
Carb 1	YA 2886	Oct. 16, 1988
2-8	YA 2887-2893	1989
9-16	YA 2894-2900	1988
HG 1-4	YA 10944-10947	Nov. 29, 1988
5-14	YA 10948-10957	1986
15-19	YA 10958-10963	1987
20-38	YA 10964-10981	1986

<u>Quartz Claims</u>	<u>Record Numbers</u>	<u>Expiry Dates</u>
HG 39-44	YA 10982-10987	Nov. 29, 1987
45-55	YA 10988-11000	1986
56-70	YA 29401-29413	1987
71-76	YA 29414-29419	1988
77-90	YA 29420-29433	1987
91-102	YA 29434-29445	1988
103-114	YA 29446-29457	1987
115-126	YA 29458-29469	1988
127-134	YA 29470-29477	1987
135-146	YA 29478-29489	1988
JP 1-54	YA 29490-29543	Nov. 29, 1988
Moose 1	YA 10820	Oct. 3, 1986
2	YA 10821	1985
3-5	YA 10822-10824	1986
6	YA 10825	1985
7	YA 10826	1986
8	YA 10827	1985
9	YA 10828	1986
10-20	YA 10829-10839	1985
21	YA 10840	1986
22-33	YA 10841-10852	1985
34-35	YA 10853-10854	1986
36	YA 10855	1985
37	YA 10856	1986
38-48	YA 10857-10867	1985

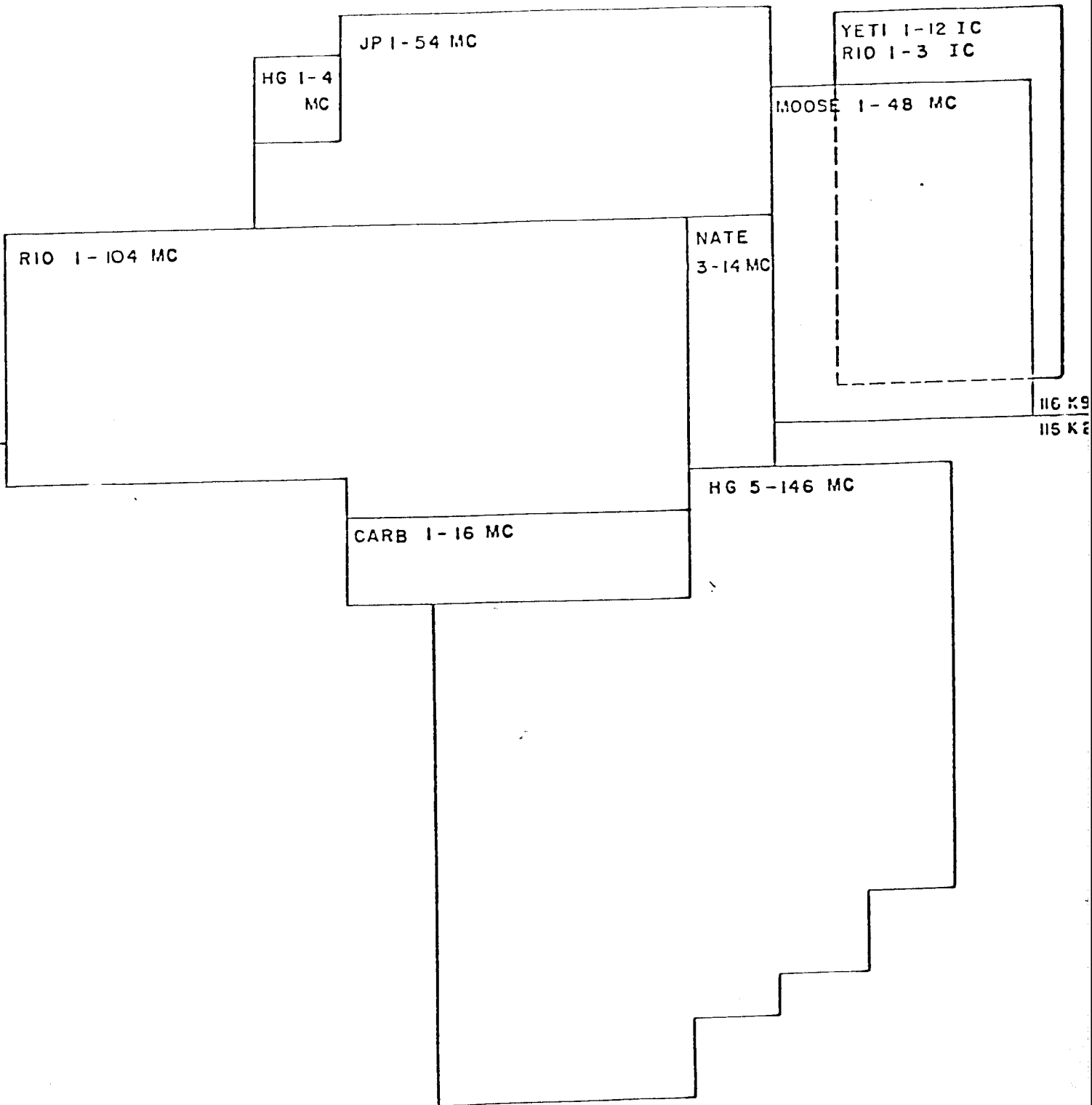


FIGURE 2

**RUSTY SPRINGS  
MINERAL PROSPECT**

CLAIM MAP  
NTS SHTS. Nos. 116K 8 & 9  
SCALE 1 in. = 1 mi.

### HISTORY OF EXPLORATION

During the fall of 1975, while investigating an oolitic iron formation, a rusty spring-seep was observed by R. W. Termuende and M. N. Chernoff. Upon investigation, the seep was found to be associated with high-grade silver, lead, zinc, and copper mineralization. A total of 92 quartz claims and 15 iron claims were staked during the fall and winter seasons.

During the 1976 summer season, a preliminary investigation of the property was conducted by Rio Alto Exploration Ltd., under the supervision of M. N. Chernoff. Exploration completed included helicopter-supported geological mapping, prospecting, sampling of mineralized float, and limited soil geochemical sampling. This work established the structural setting, confirmed the presence of high-grade silver values, and demonstrated the usefulness of soil geochemistry. The mineral occurrences were considered to be *hydrothermal vein systems with supergene enrichment possibilities*.

Based on encouraging results from this preliminary reconnaissance, a follow-up field program consisting of geological mapping, soil geochemical sampling, and 975 metres (3200 feet) of diamond drilling was conducted in 1977. Again, the results were considered positive, even though poor drill core recoveries were obtained. Additional ground was staked to give a total of 380 quartz claims and 15 iron claims.

A geological thesis by G. Schoel concluded that the *mineralization was probably Mississippi Valley type*.

During the winter of 1978, fuel, drill equipment, and supplies were ferried to the property by tractor train. That summer, two picket grids (totalling 67 line km) were established over the claims. Further geological mapping, soil geochemical sampling, diamond drilling (1840 metres), and metallurgical sampling were also completed. Poor drill core recovery once again hampered the effectiveness of the program.

A geological thesis was undertaken by D. Hansen, again *emphasizing a Mississippi Valley type model* for the mineralization.

Exploration during the period 1975 to 1978 inclusive was funded by Rio Alto Exploration.

In 1979, detailed geological mapping, a soil geochemical survey, an Induced Polarization survey, and a gravity survey were completed. Joint funding of this work was by Rio Alto and E & B Exploration Ltd. of Calgary, Alberta.

A geological thesis by J. Bankowski indicated a *hydrothermal exhalative nature*.

In 1980, E & B Exploration undertook 1830 metres (6000 feet) of diamond drilling, 'cat' trenching, and some detailed geological mapping. Core recoveries were not significantly improved over previous years.

Aside from brief visits to the property by various parties, no further work was conducted on the prospect during 1981.

The most recent research work, carried out by Jill Kirker, strongly supports a *hydrothermal origin for the mineralization*.

In 1982, Taiga Consultants Ltd. carried out an exploration program consisting of soil and rock geochemical sampling, geological mapping, VLF-EM surveying, 'cat' trenching, and diamond drilling on the property. Based on previous geochemical data, a series of four bulldozer trenches were completed which uncovered high-grade Pb/Ag/Cu veins on Orma Hill. A subsequent 510-metre (1673-foot) diamond drilling program revealed this mineralization was present at a shallow depth beneath the surface veins, but deeper drilling failed to prove the continuity of these veins at depth. This exploration work demonstrated beyond question the hydrothermal nature of the veins encountered on the property.

REGIONAL GEOLOGY

The regional geology, as illustrated in Figure 3, is based on a recent photogeologic interpretation by Taiga Consultants. Bedrock exposures within this region range in age from Devonian to Cretaceous. The oldest rock units exposed in the Rusty Springs area are the carbonates of the Middle Devonian Ogilvie Formation. All of the mineral occurrences discovered in this area to date are hosted by this unit.

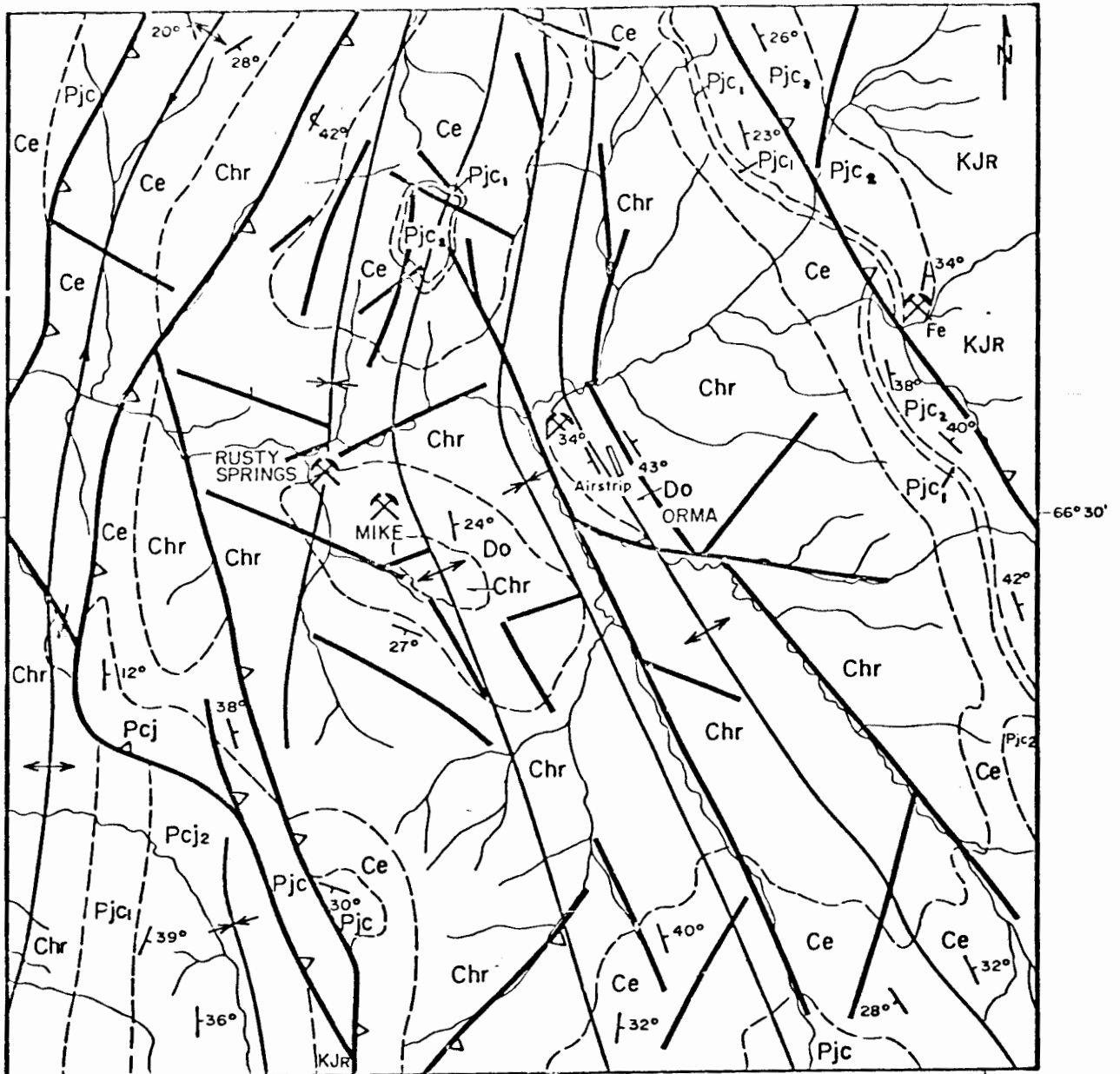
Disconformably overlying the Ogilvie Formation are the shale, siltstone, and minor limestone units which comprise the Carboniferous Hart River Formation. The Hart River is succeeded by the late Carboniferous Ettrain Formation which consists of shale and carbonate units.

The Ettrain is disconformably overlain by the Permian Jungle Creek Formation, which in turn has been subdivided into a lower carbonate and clastic sequence and an upper shale sequence.

The Jungle Creek is unconformably overlain by the Jurassic (Lower Cretaceous?) Kingak Formation. The Kingak consists predominantly of shale with minor siltstone.

Structurally, the property lies along the axes of two northerly oriented anticlines. Locally, along the axes of the structures, a culmination or dome occurs in the Orma Hill and the Mike Hill areas. This domal structure may be the expression of one or more intrusives emplaced along the axial portion of these anticlines. Close examination of the axial portion of these folds reveals that the axis of culmination is displaced several times by easterly trending tear faults.

TABLE 2	TABLE OF FORMATIONS	
Jurassic (Cretaceous?)	Kingak Formation	
Permian	Jungle Creek Formation	upper
		lower
		undifferentiated
Carboniferous	Ettrain Formation	
	Hart River Formation	
Middle Devonian	Ogilvie Formation	



Scale 1: 60,000 (approx.)

Figure 3

GEOLOGY OF THE RUSTY SPRINGS AREA

KJR	Kingak Fm. - shale	Pjc	Undifferentiated	15°	Strike and dip (estimated)
Pjc <sub>2</sub>	Jungle Cr. Fm. (shale unit)			↗	Overtured dip
Pjc <sub>1</sub>	Jungle Cr. Fm. (carbonate unit)			↕	Anticline
Ce	Etrain Fm. - shale and limestone			↕	Syncline
Chr	Hart River Fm. shale, siltstone and limestone			—	Fault, lineament
Do	Ogilvie Fm. - limestone			—	Thrust fault
				---	Geological contact

EXPLORATION MODEL

Based on re-evaluation of previous work on the property and observations made during this summer's program, the mineralization present at Rusty Springs has been identified as "epithermal vein-type". Mineralization is essentially confined to vertical veins and is characteristic of hydrothermal systems in the temperature range of 200°C. This model designation is supported by the presence of widespread silicification, clay alteration, and the mineralogy of the veins.

The widespread presence of high-grade Ag mineralization indicates a good possibility of discovering "Bonanza-type" silver deposits in the area. These relatively low-temperature hydrothermal deposits are related to hot-spring activity with the boiling point of fluid systems critical to depositional control of ore minerals. Such deposits often exhibit considerable lateral as well as vertical zonation.

These deposits do not necessarily form large-tonnage situations, but due to the grade of mineralization, are capable of becoming economic in remote environments. In addition, a strong possibility of considerable supergene enrichment exists in this unglaciated terrain.

AIRSTRIP AND DRILL ROAD CONSTRUCTION

In June 1983, a new 1400-foot airstrip was constructed in order to more safely accommodate aircraft servicing the camp. This airstrip is located at the top of Orma Hill cutting across the previous airstrip at an oblique angle. The new airstrip has a solid shale base with a 2-foot change in elevation from one end of the strip to the other. Both airstrips have a common starting point at the south end of Orma Hill, thus allowing for the use of either strip depending on wind conditions and pilot discretion.

A drill road was built from the old camp at the base of Mike Hill to the top of Mike Hill in preparation for a future drill program. This road goes up the west side of Mike Hill following a gentle gully to the top of the hill. A solid rock base was encountered along most of its entire length, thus ensuring a very stable road surface. Due to permafrost conditions along some sections of the road, only the surface cover was removed. This will, however, ensure that the dirt in these sections will thaw and will thus make it possible to build a gentle grade on the road.

SOIL GEOCHEMICAL SURVEY

To detail geochemical anomalies detected on the margins of the grid on Mike Hill, 315 soil samples were collected. These samples were analyzed by Loring Laboratories Ltd. (Calgary, Alberta) for Cu, Pb, Zn, and Ag. The analytical results are presented in Appendix I. A series of maps (7 to 14) have been recontoured for each of the elements analyzed. These maps incorporate this new geochemical information in addition to all of the previous survey results.

The geochemical coverage on the top of Mike Hill refined the extent of the geochemical anomalies previously outlined. The main anomaly orientation remains east-west, transecting the top of Mike Hill. This trend was not significantly altered with the additional coverage. The geochemical values remain anomalous to the base of Mike Hill. The anomalous values extending in this direction are interpreted as due to a drainage dispersion pattern. Permafrost and muskeg prevent additional sampling in an easterly direction.

The geochemical coverage on the northern end of the grid did not outline any additional anomalous zones. The geochemically anomalous area previously detected remains confined to a zone approximately 70 x 150 metres.

The extremely high soil sample collected on L 16S,8+00E which returned 326 ppm Ag (9.52 oz/ton) and 560 ppm Cu, was re-sampled and returned only 0.2 ppm Ag and 10 ppm Cu. Prospecting of the surrounding area did not uncover any mineralization. Contamination of this sample during laboratory procedures remains the only explanation for these erratic results.

VLf-EM SURVEY

In addition to the soil sampling, 9 km of VLF-EM survey lines were completed on Mike Hill using a Geonics EM-16 unit and employing Seattle, Washington, as the transmitting station. It was originally planned that the Cutler, Maine, transmitting station be used; however, the range of reception from this station does not extend over the Rusty Springs property. The VLF-EM survey was completed between Line 24+00S and Line 8+00S inclusive, on 30 metre (100 foot) line and station spacings, from the Baseline to Line 24+00E detailing the main area of anomalous silver in the soil. The results are presented in profile format on Maps 3 and 4, and in Fraser Filtered contoured format on Maps 5 and 6. These maps incorporate data from the previous VLF-EM survey.

A moderately strong, discontinuous VLF-EM conductor was delineated from L 25S to L 17S near the top of Mike Hill. The nature of this conductor resembles those delineated on Orma Hill. No significant new conductors were delineated over the remainder of the grid area.

1983 DRILL PROGRAM

Drilling and geological supervisory personnel were mobilized into the Rusty Springs camp on August 26 in order to complete the drilling of two diamond drill holes totalling 487 metres (1600 feet) in length on Orma Hill. The first drill hole (83-1) was drilling during the period from August 30 to September 7 to a total depth of 320 metres (1050 feet). Hole 83-2 was completed September 7 to 11, to a total depth of 167 metres (550 feet). The crew was demobilized on September 12.

The objectives of this drilling program were to establish the subsurface continuity of the vein systems exposed by surface trenching on Orma Hill, and to acquire additional structural and stratigraphic control for the mineralization present. Secondary objectives were to improve the drilling procedures for the type of lithologies encountered on the property, and to evaluate the VLF-EM conductors in the area.

The objective of establishing the continuity of mineralization at depth was not achieved. The absence of the veins in the subsurface was interpreted, utilizing the additional structural and stratigraphic data, as the result of the displacement of the veins by thrust faulting. The surface veins have been displaced westward along a low-angle reverse fault by several hundred feet. With this new information, a new structural interpretation of the property is now possible.

With regard to drill procedures utilized on the property, it is significant to note that both holes were completed with a minimum of difficulty. This is in marked contrast to all previous drilling which was plagued by difficult drilling and consequent poor recovery. This new procedure required surface casing be driven below the regolith/bedrock contact to avoid blocking problems which have forced abandonment of other drill holes on the property. With this new technique, better recovery and more efficient drilling can be expected.

Evaluation of VLF-EM anomalies carried out in Hole 83-1 did not allow direct correlation between VLF-EM conductors and subsurface miner-

alization to be made. As with any geophysical response, several interpretations of the data are possible. In the case of Hole 83-1, the VLF-EM response appears to be related to structural and stratigraphic phenomena rather than to mineralization.

Detailed logs for the two diamond drill holes of 1983 are presented in the appendices. Figure 4 illustrates the location across Orma Hill of the cross-section which is shown in Figure 5. The interpretation of the geology presented in this cross-section is that there exists a low-angle reverse fault which displaces the mineralized vein system (exposed by trenching) westward relative to the continuation of this vein system at depth. The subsurface continuation of this vein system is thought to be a parallel VLF-EM conductor located east of the exposed vein. A pulse-EM survey in the area will be necessary to confirm this conductor as a future drill target.

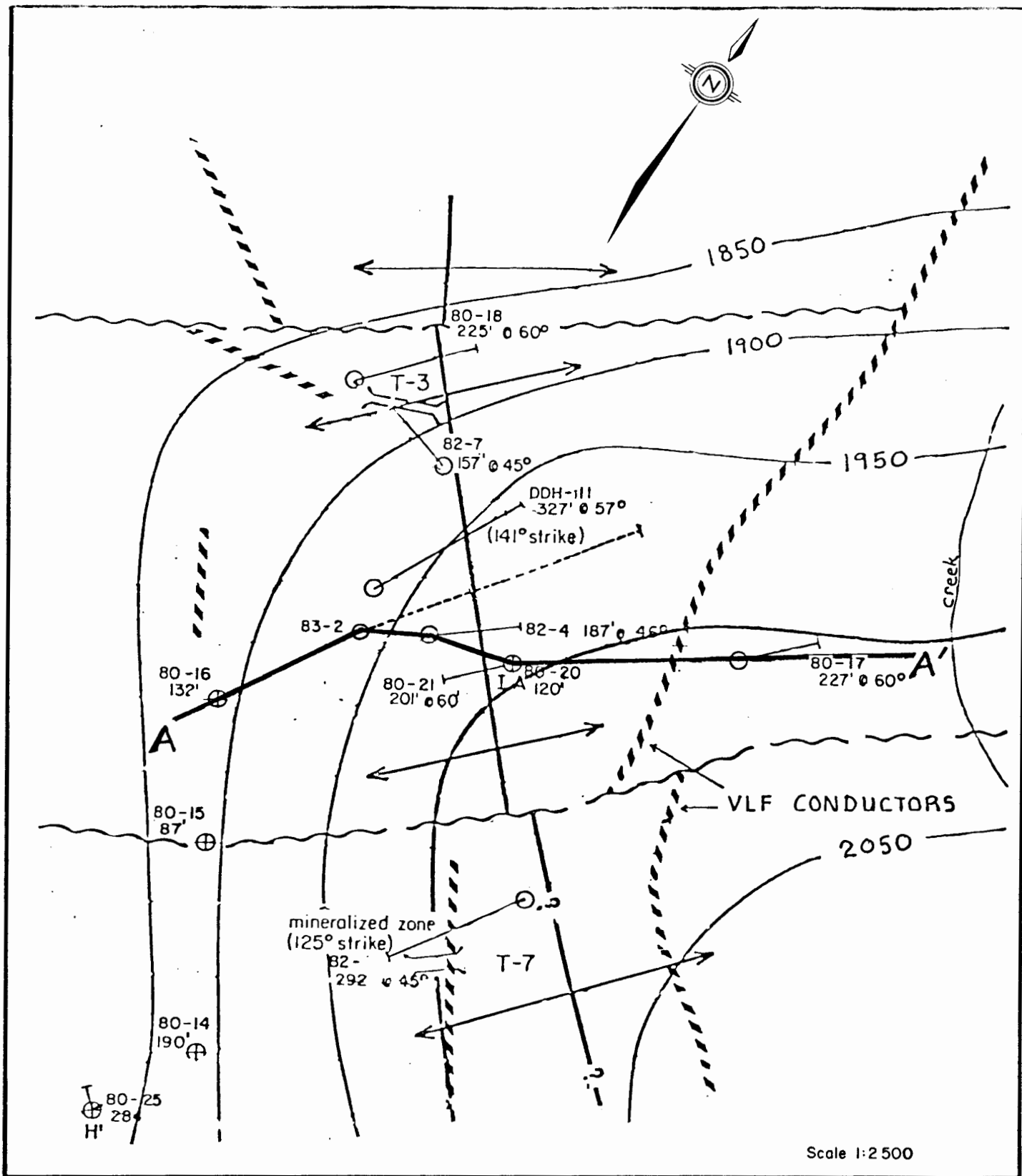
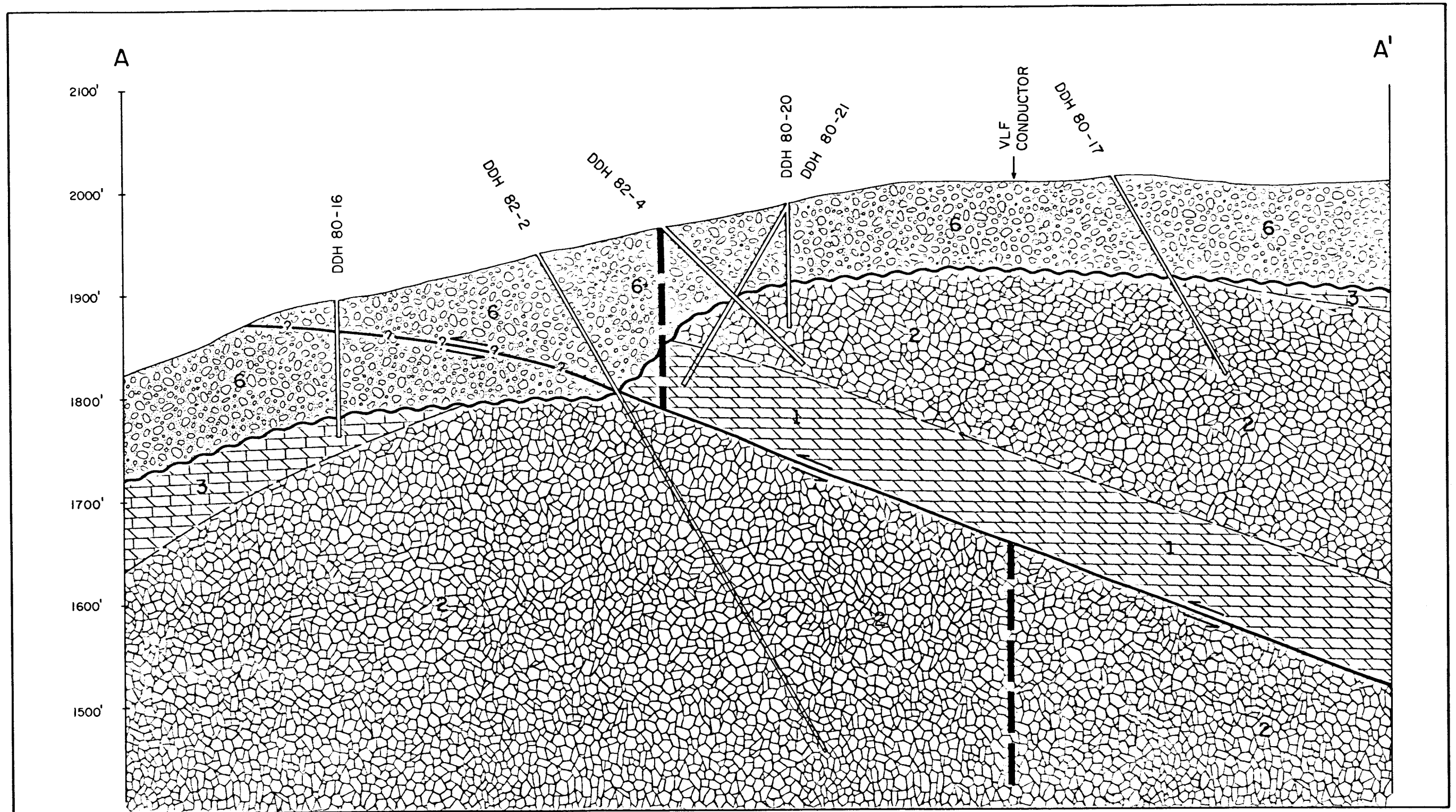
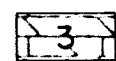


Figure 4  
 LOCATION OF CROSS-SECTION A-A'  
 ORMA HILL, RUSTY SPRINGS



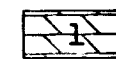
Regolith: orange to rusty colouring, highly fragmented, intensely weathered, siliceous, strongly limonitic.



Carbonaceous Dolomite Breccia: medium to dark grey, white dolomite breccia filling, occasional pyritic mudstone seams, often fetid.



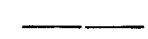
Crystalline Dolomite Breccia: fine to coarsely crystalline, light to medium grey to beige dolomite, grey weathering with white dolomite breccia filling, locally vuggy and porous.



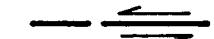
Carbonaceous Dolomite Breccia: medium to dark grey, white dolomite breccia filling and sub-lithographic, locally fossiliferous.



Unconformable base of regolith.



Contact



Fault



Vein



Figure 5

CROSS-SECTION A - A', ORMA HILL

RECOMMENDATIONS

1. Additional trenching should be conducted to aid in defining the extent and style of the mineralization.
2. A Pulse-EM survey should be conducted (21 line km of coverage on Orma Hill and 33 line km on Mike Hill) to determine the depth to and the continuity of the VLF-EM conductors delineated by the previous surveys (see the appendices for Proposed Coverage). A Geonics instrument capable of a 250 to 300 m depth determination should be employed.
3. Concurrent with the Pulse-EM survey, additional geochemical surveying and prospecting of the remainder of the property should be undertaken to explore for additional mineralization.
4. Approximately 915 metres (3000 feet) of diamond drilling should be completed on Mike Hill in order to further evaluate the nature and distribution of the lead/zinc/copper/silver mineralization present there.

A P P E N D I X I

SUMMARY OF EXPENSES  
 Rusty Springs Property  
 Lat. 66° 30' North  
 Long. 140° 25' West  
 Yukon Territory

June 15 - 27, 1983  
 AIRSTRIP CONSTRUCTION

Pre-Field Preparation		660.00
<u>Field Personnel</u>		
Cat Skinner	\$25/hr. for 90 hours	2,250.00
Helper	\$165/day for 9 days	1,485.00
Cook	\$175/day for 9 days	<u>1,575.00</u>
		5,310.00
<u>Field Accommodation</u>		
Camp Food	3 men for 9 days @\$25/man day	675.00
Camp Equipment	3 men for 9 days @\$5/ man day	<u>135.00</u>
		810.00
<u>Travel Expenses</u>		
Travel time	1.5 days (4.5 man days) @\$540/day	810.00
Airfares, hotels, meals, etc.		<u>1,271.70*</u>
		2,081.70
<u>Equipment Rental</u>		
Radio-telephone (Search & Supply)		287.25*
Generator	750 w 9 days @\$7 diem	63.00
Water pump	9 days @\$10 diem	90.00
Chainsaw	9 days @\$ 6 diem	54.00
D-7 caterpillar	90 hrs @\$150/hr	13,500.00
Truck rental (Hertz)		<u>31.60*</u>
		14,025.85
<u>Charter Transportation</u>		
Trans North Turbo Air Ltd. (Whitehorse to Rusty Springs)		4,150.00*
<u>Fuel</u>		
Propane		241.50*
Camp fuel/heating oil		60.00
Turbo-B		405.00
Diesel		<u>1,417.50</u>
		2,124.00
<u>Miscellaneous</u>		
Disposable supplies		178.31
Courier & freight		375.45
Expediting charges		230.00
Reproduction, maps		75.00
Telephone charges		<u>171.62</u>
		1,030.38*

Post-Field Compilation

Report writing	625.00	
Drafting, secretarial	<u>100.00</u>	.725.00

\*Handling Charge on all third-party  
expenditures @12% of 7012.43

841.49

TOTAL		<u>\$31,758.42</u>
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SUMMARY OF EXPENSES  
 Rusty Springs Property  
 Lat 66° 30' North  
 Long. 140° 25' West  
 Yukon Territory

June 15 - 27, 1983  
 DRILL ROAD CONSTRUCTION

Pre-Field Preparation		660.00
<u>Field Personnel</u>		
Cat Skinner	\$25/hr. for 20 hrs.	500.00
Helper	\$165.00 for 2 days	330.00
Cook	\$175.00 for 2 days	<u>350.00</u>
		1,180.00
<u>Field Accommodation</u>		
Camp food 3 men for 2 days @\$25/man day		150.00
Camp Equipment 3 men for 2 days \$5/ man day		<u>30.00</u>
		180.00
<u>Travel Expenses</u>		
Travel time 1.5 days (4.5 man days) @\$540/day		810.00
Airmiles, hotels, meals, etc.		<u>1,271.70*</u>
		2,081.70
<u>Equipment Rental</u>		
Radio-telephone (Search & Supply)		287.25*
Generator 750 w 2 days @\$7 diem		14.00
Water pump 2 days @\$10 diem		20.00
Chainsaw 2 days @\$6 diem		12.00
D-7 caterpillar 20 hrs. @\$150/hr		3,000.00
Truck rental (Hertz)		<u>31.60*</u>
		3,364.85
<u>Charter Transportation</u>		
Trans North Turbo Air Ltd. (Whitehorse to Rusty Springs)		4,150.00*
<u>Fuel</u>		
Propane		241.50*
Camp fuel/heating oil		60.00
Turbo-B		405.00
Diesel		<u>315.00</u>
		1,021.50
<u>Miscellaneous</u>		
Disposable supplies		178.31*
Courier & freight		375.45*
Expediting charges		230.00*
Reproduction, maps		75.00*
Telephone charges		<u>171.62*</u>
		1030.38

Post-Field Compilation

Report writing	625.00	
Drafting, secretarial	<u>100.00</u>	725.00

* <u>Handling Charge</u> on all third-party expenditures @12% of 7012.43		<u>841.49</u>
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TOTAL		<u>\$15,234.92</u>
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Miscellaneous

Disposable supplies	1,107.70	
Courier & freight (Expediting)	1,641.02	
Reproduction, maps	333.99	
Telephone charges	<u>276.88</u>	3,359.59*

Post-Field Compilation

Report writing, data compilation	4,675.00	
Drafting, secretarial	<u>476.00</u>	5,151.00

\*Handling Charge on all third-party  
expenditures @12% of 20,433.89 2,452.07

TOTAL		<u>\$ 118,422.86</u>
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PERSONNEL

TAIGA CONSULTANTS LTD.

James W. Davis	Project Supervisor	Aug. 30 - Sep. 07
Claude Aussant	Project Geologist	June 15 - June 27
Tim Termuende	Cook	June 15 - June 27
John Termuende	Catskinner	June 15 - June 27
Terri Millinoff	Cook/Assistant Geologist	Aug. 30 - Sep. 07

E. CARON DIAMOND DRILLING

	Driller	Aug. 26 - Sep. 07
Lech Wajakowski	Driller	Aug. 26 - Sep. 07
	Driller	Aug. 26 - Sep. 07
	Driller	Aug. 26 - Sep. 07

CLIENT: KENTON NATURAL RESOURCES CORPORATION

DIAMOND DRILL HOLE No.: 83-1

PROJECT: Y-83-1D

DRILLING CONTRACTOR: E. Caron Diamond Drilling

LOCATION: 22 m, bearing 122° from  
BEARING: 092° L2+00S and 3+00W

TOTAL LENGTH: 1,050'  
ELEVATION: 1,940' ASL

LOGGED BY: J.W.Davis & T.B.Millinoff

INCLINATION AT COLLAR: 50°  
DIP TEST(S): 500' 52°  
981' 53°

CORE SIZE: NQ  
LOG SCALE: feet 1cm = 5'  
metres 1cm = 1.52 m

DATE COLLARED: Aug. 30/83  
DATE COMPLETED: Sep. 7/83


DEPTH ft. m.	LITHOLOGY	GEOLOGICAL DESCRIPTION	% REC.
0		overburden (tricone drilling)	0
10'		Regolith composed of weathered dolomite	
BOX 1		Silicified, carbonaceous Dolomite Breccia with limonite staining. The dolomite is dark grey brecciated and veined with white to clear quartz. Limonite and drusy quartz occur along joint and fracture surfaces. The dolomite is carbonaceous and well indurated. Porosity is approximately 3%.	20
30'	10m	Porous, carbonaceous, silicified Dolomite Breccia with minor quartz veining. Well indurated. Dark grey. Porosity approximately 5%	20
40'			
50'		No Recovery (46' to 56')	0
60'		Dark grey, highly porous, and vuggy, siliceous Dolomite. Vugs and fractures are filled with limonite. Porosity approximately 20%. Low permeability.	<1
70'	20m	No Recovery (66' to 70')	0
80'		Black to dark grey Regolith composed of dolomite breccia. Extremely weathered, weakly silicified, poorly indurated, and limonite stained with minor quartz veining. Porosity approx. 10%, low permeability.	70
90'		as above, except porosity ~25%, rock is permeable	70
100'		Light grey Dolomite Breccia with black manganese stringers, veined with dolomite. Vuggy, well indurated and finely crystalline. Manganese appears to be replacing dol stringers	100
110'		Light to med grey to orange & white Regolith, composed of weathered frags of dolomite, sand, and clay. V. poorly indurated. White alteration mineral present.	70
120'		Dark grey Dolomite Breccia, v. finely crystalline and mod well indurated with abundant dol frac filling. Dolomite is also carbonaceous and porosity is about 5%.	50
130'		Regolith composed of dk. grey friable, clayey dolomitic sand with white dolomite grains interspersed in a clay matrix. The white dol grains are remnants of dol frac fillings.	40
140'	30m	V. poorly indurated, carbonaceous, and porosity is about 20%.	40
150'		Dolomite Breccia, dk. grey, v. finely crystalline, mod well indurated, veined with white sparry dolomite which composes the matrix. Clasts are carbonaceous and vuggy. Porosity 10%	40
160'		Regolith composed of clayey dol sand with minor intervals of well indurated dol breccia. Carbonaceous stringers up to 2 mm in width.	10
170'		Dolomite Breccia lt. grey to white with black carbonaceous breccia filling. Mod well indurated, finely crystalline and weakly carbonaceous breccia frags.	90
180'		Regolith of clayey dolomitic sand; v. poorly indurated, rusty brown, highly weathered. Porosity about 15%	5%
190'			
200'		Dolomite Breccia lt. to med. grey to cream in colour. Finely crystalline, mod well indurated, slightly carbonaceous. Cream to white fracture filling.	75
210'	40m		
220'		Dolomite Breccia, coarsely crystalline: lt. grey with dark carbonaceous pyritic mudstone breccia filling. Clasts are coarsely crystalline with minor 1-2 mm vugs and pinpoint porosity (about 10%). Pyrite is v. finely crystalline to finely crystalline and anhedral to euhedral.	95
230'			
240'			
250'			
BOX 4			

DEPTH		LITHOLOGY	GEOLOGICAL DESCRIPTION	% REC
ft.	m.			
160'	50m		Coarsely Crystalline Dolomite Breccia: lt. to med. grey; mod well indurated. Black carbonaceous pyritic mudstone breccia filling and minor white dolomite veining. Porosity (about 5-10%) consists of pinpoint and intercrystalline.	100
	BOX 5			
180'			as above	100
190'	60m			
200'			as above, except the dolomite is white to lt. grey, with increase in Py content and occ quartz-carb veins. Py is v. finely crystalline and disseminated throughout the black carb mudstone breccia filling and accounts for 1-2% of rock. A qtz-carb vein at 225.5' consists of qtz crystals in dolomite. Quartz is subhedral, coarsely crystalline	100
220'	BOX 7			
230'			Lt to med grey Carbonaceous Dolomite Breccia. Finely crystalline, slightly more brecc'd with more white dolomite frac filling, less quartz. Up to 2% v. fine to medium crystalline pyrite within the minor carb mudstone breccia filling. Microbreccia may contain up to 5% pyrite in the mudstone filling. Quartz-carbonate vein with subhedral med. grained quartz crystals at 246.7'. Qtz-carb veins and breccia filling account for 25% of the rock.	100
240'	BOX 8			
250'			Dolomite Breccia, Finely Crystalline: mottled dk. grey to white breccia with some colloform dolomite around the breccia clasts. Vugs occur in breccia filling and are lined with euhedral dolomite crystals and subhedral to euhedral quartz crystals. Traces of sphalerite as dk. red subhedral crystals in vugs. Quartz-carbonate veins at 247.5', 253', 254', and 259.5'. Breccia filling and quartz veins account for 40-50% of the rock. Pyrite occurs with dk. dolomitic mudstone. Porosity is about 10%.	100
260'	80m			
270'			As above, but with 3-5% v. fine-grained disseminated pyrite in dolomitic mudstone frac fillings and stringers. 271'-272.5': 5-8% pyrite. 285.5'-286': coarsely crystalline dolomite breccia; dolomite crystals sometimes twinned. White dolomite breccia filling accounts for 40-50% of total rock mass.	100
280'	BOX 10			
290'			As Above. 295', gradational contact with the Coarsely Crystalline Dolomite Breccia	100
300'	90m			
310'			Dolomite Breccia, Coarsely Crystalline: lt. to med. grey, with minor interstitial dark pyritic carbonaceous mudstone breccia filling. Moderately well indurated.	100
320'	BOX 12			
330'	100m		As above, except this section contains two seams of pyrite (2-5 mm thick) at 332' and 326.2'	100
340'	BOX 14			
			Dolomite Breccia, Coarsely Crystalline: lt. to med. grey, with minor pyritic mudstone breccia filling	100

DEPTH		LITHOLOGY	GEOLOGICAL DESCRIPTION	% REC.
ft.	m.			
350'				
	BOX 14 cont			
-360'				
	BOX 15 110m		Dolomite Breccia, Coarsely Crystalline: as above	100
-370'				
-380'				
	BOX 16		Dolomite, Coarsely Crystalline, weakly brecciated: lt. grey to buff-brown and vuggy. Mod well indurated and occ'ly veined with white dolomite. Breccia filling consists of dolomitic, pyritic mudstone. Porosity is about 15%. Vugs vary in size from 5 mm to 7 cm. Limonite stains fractures.	90
-390'				
	120m			
-400'				
	BOX 17		as above, except for a minor 2-4 mm quartz vein. Some vugs are lined with sparry dolomite.	80
-410'				
-420'				
	BOX 18		as above	90
-430'				
	130m			
-440'				
	BOX 19		Dolomite Breccia, Coarsely Crystalline: med. to lt. grey; vuggy; porosity about 15%; minor limonite and minor pyritic mudstone breccia filling.	80
-450'				
-460'				
	BOX 20		Dolomite Breccia, med to lt grey with fault breccia. Two calcite veins (5 mm to 2 cm in width) dip 45° and 20° to the core axis. Fracture near fault breccia contains laminated dolomite. Styolites noted at 466.8' and 478.8 m. Styolites consist of black mudstone. Porosity about 10%.	95
-470'				
	140m			
-480'				
	BOX 21		Dolomite Breccia, Crystalline: med to lt grey with mottled appearance. Veined occasionally with white dolomite; vein angles to core axis are 20° and 42°. Moderately well indurated. Porosity about 10%.	100
-490'				
	150m			
-500'				
	BOX 22		as above 501.5': styolite noted	75
-510'				
-520'				
	BOX 23		as above 517.2': 2 cm calcite vein noted	100
-530'				
	160m			
-540'				
	BOX 24		as above; 546.2': calcite vein (3.5 cm in width) noted Styolites noted at end of Box 24	100
-540'				



DEPTH		LITHOLOGY	GEOLOGICAL DESCRIPTION	% REC.
ft.	m.			
730'				
		BOX 34 cont		
		BOX 35		
-740'			Dolomite Breccia, Coarsely Crystalline: weakly brecciated with white dolomite and lt. to med. to dk. grey mudstone stringers and fracture fillings. Mudstone is slightly pyritic. Dolomite is vuggy and porosity is about 10%.	100
		-750'		
	230m			
		BOX 36		
-760'			Dolomite, weakly to moderately brecciated, coarsely crystalline; 769': 7 cm dolomite vein 756'-758' and 766.5'-767': vugginess increases Note: when dolomite or calcite-dolomite veins are present, there is an increase in the degree of brecciation on either side of vein.	100
		-770'		
		BOX 37		
-780'			Dolomite, brecciated, crystalline: appears to have been brecciated in situ with mudstone fracture filling, i.e., a highly fractured interval with minimal movement.	100
		240m		
		-790'		
		BOX 38		
			as above 799'-802': vugginess increases; vugs range in size from 5 mm to 2 cm; lined with euhedral dolomite crystals. 811'-812.5': brecciation increases in intensity	100
		-800'		
		-810'		
		BOX 39		
			weakly brecciated coarsely crystalline Dolomite	100
		-820'		
	250m			
		-830'		
		BOX 40		
			as above but more white dolomite veins, which are vuggy and filled with euhedral quartz crystals and dolomite crystals. 845': quartz-carbonate veins 3 cm in width 845.9' 3 cm in width 846.2' 70 cm in width 849': dk. grey finely crystalline dolomite breccia occurs and continued into Box 41	100
		-840'		
		-850'		
		BOX 41		
		260m	The finely crystalline Dolomite Breccia ends at 858'. 858'-868': lt. grey weakly brecciated, coarsely crystalline Dolomite Breccia. 860': massive 50 cm wide quartz-carbonate vein	100
		-860'		
		-870'		
		BOX 42		
			Dolomite Breccia, Coarsely Crystalline: veined with white dolomite at 879.6' (28 cm wide)	100
		-880'		
		270m		
		BOX 43		
-890'			Dolomite, weakly brecciated, coarsely crystalline, vuggy, grey to lt. grey; sparse infilling with dk. grey mudstone but more commonly filled with white dolomite.	100
		900'		
		BOX 44		
			Dolomite Breccia, Coarsely Crystalline: lt. to med. grey, with white dolomite fracture filling. Mod well indurated and vuggy with euhedral dolomite crystals lining vugs. 920'-922': quartz-carbonate vein which has been brecciated, up to 926'; 927'-930': very vuggy.	100
		-910'		
		280m		
		-920'		

DEPTH ft. m.	LITHOLOGY	GEOLOGICAL DESCRIPTION	% REC.
930' BOX 45		Dolomite Breccia, Coarsely Crystalline: intermittent white speckled mudstone clasts in dolomite breccia. 940': quartz-carbonate vein 5 cm thick	100
-940' BOX 46		as above 946': brecciated quartz-carbonate vein 10 cm thick	100
-950' 290m		950'-954.5': white calcite-dolomite (75%:25%) vein consisting of coarsely crystalline euhedral to anhedral calcite and dolomite.	
-960' BOX 47		Dolomite Breccia, med. to dk. grey; blebs and stringers of dk. grey pyritic, carbonaceous, and argillaceous dolomite occur within this and the next interval. 965': quartz-carbonate vein 1 cm thick	100
-970'			
BOX 48 300m		as above 989': quartz-carbonate vein 5 mm thick	100
-990'			
BOX 49 1000'		as above	100
-1010'			
BOX 50 1020'		as above 1022': calcite vein 5 cm wide 1026' and 1032': slightly finer crystalline dolomite, weakly brecciated, and silicified	100
-1030'			
BOX 51 1040'	Dolomite Breccia, vuggy; strongly brecciated from 1034.5' - 1039' and from 1043.5' - 1048.7'. Fragments of dk. grey to black carbonaceous mudstone occur within this interval. Breccia has been brecciated several times with minor stringers of dolomite offset, refilled with dolomite, and brecciated again (fault breccia).	100	
-1050' 320.02m			

CLIENT: KENTON NATURAL RESOURCES CORPORATION

DIAMOND DRILL HOLE No: 83-2

PROJECT: Rusty Springs Y-83-1

DRILLING CONTRACTOR: E. Caron Diamond Drilling

LOCATION: L 9+00N and 4+00W

TOTAL LENGTH: 550'

BEARING: 050°

ELEVATION: 1,925'

LOGGED BY: J.W.Davis & T.B.Millinoff

INCLINATION AT COLLAR: 60°

CORE SIZE: NQ

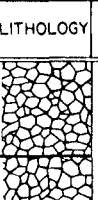
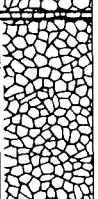
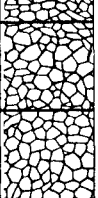
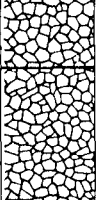
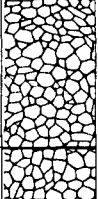
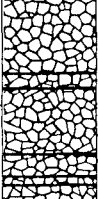
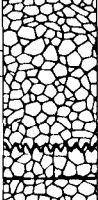
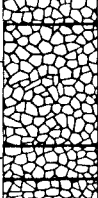
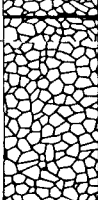

DATE COLLARED: Sept. 7/83

DIP TEST(S): 50° 60°

LOG SCALE: 1 cm = 5 feet

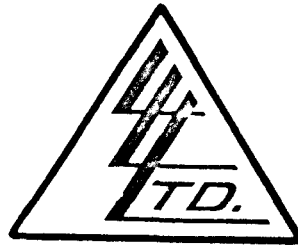
DATE COMPLETED: Sep. 11/83

DEPTH		LITHOLOGY	GEOLOGICAL DESCRIPTION	% REC
ft.	m.			
0	0			0
BOX 1				
0			0'-33' regolith (No Recovery)	
10'				
20'				
30'				
10m			33'-41': black to dk.grey dolomite breccia. Vuggy, iron-stained in part, well indurated. Quartz veins up to 2 cm wide. Porosity 10-15%.	12
40'			41'-58.5': recovered material consists of white bull quartz with minor dolomite rock fragments. Quartz is limonite stained.	6-7
50'				
60'			58.5'-60': weathered and fragmented white quartz which is vuggy, limonite stained on fractures, brecciated, and filled with more quartz.	90
20m			60'-88': quartz as above, with boxwork, vuggy texture in part	10
70'				
80'				
90'			88'-116': white bull quartz and dk.grey dolomite breccia with white dolomite breccia filling, vuggy and silicified in part. Moderately well indurated.	7
100'	30m			
110'				
120'			116'-117': White bull quartz	10
120'			117'-127': No Recovery	0
130'				
40m			127'-137': dk.grey finely crystalline dolomite breccia with porosity at about 5%. Moderately well indurated with white dolomite breccia filling.	1
140'			137'-147': No Recovery	0
150'			147'-167': dk.grey dolomite breccia with white calcite fracture filling and quartz veining. Moderately well indurated with porosity at about 5%. 150': shear zone marked by 10 cm of brecciation and slickenside-marked surfaces.	25
160'	50m			
170'			167'-170': lt.grey to buff brown-grey coarsely crystalline dolomite breccia (Middle Breccia Unit). Poorly indurated and highly weathered with porosity at about 10%	15
BOX 2				

DEPTH ft. m	LITHOLOGY	GEOLOGICAL DESCRIPTION	% REC.
170' BOX 2 cont.		Coarsely crystalline dolomite breccia. Pyrite occurs with black to dk.grey carbonaceous stringers and with quartz-carbonate veins. Pyrite also found within dolomite next to veins. Quartz carbonate veins: 180' (1 cm), 195.5' (1 cm), 196.5' (3 cm), 217.5' (2 cm), 208.5' (1 cm). Pyrite is v.f.g., euhedral to anhedral. Vuggy porosity characteristic of coarsely crystalline unit.	100
-180'			
BOX 3		As above	100
-190'			
60m			
-200'			
BOX 4		As above	100
-210'			
-220'			
BOX 5		As above styolitic with minor quartz-carbonate veins and argillaceous, dolomitic mudstone interbeds. Moderately well indurated. Porosity about 10-15%.	100
-230'			
70m			
-240'			
BOX 6		As above 248.3'-249': dk.grey carbonaceous pyritic mudstone. 251'-251.9': highly brecciated and veined Coarsely Crystalline Dolomite 256.3': 1 mm seam of carbonaceous mudstone	100
-250'			
-260'			
BOX 7		As above 267'-271': vuggy interval, 2 mm to 1 cm, filled with dolomite crystals. 263.7': quartz-carbonate vein 1 cm 276.6': quartz-carbonate vein 4 mm 278.6': quartz-carbonate vein 7 mm 272.6'-273.2': dk.grey dolomitic mudstone rock fragments	100
-270'			
80m			
BOX 8		as above 284.6': carbonaceous pyritic mudstone seams 2-7 mm thick; minor dk.grey argillaceous dolomite fragments and seams; dolomite vuggy in part and lined with white sparry dolomite. 285.3', 288.4', 287.8': white sparry dolomite veins 4-6 mm in width.	100
-290'			
90m			
BOX 9		as above 306.2'-307.3': shear zone marked by well-developed slickensides. 298.3'-306.2': vuggy porosity, vugs lined with euhedral dolomite crystals up to 5 cm in length and 1 cm wide. 309.5': white calcite vein 8 mm thick 314': white calcite vein 4 mm thick. Breccia is well indurated.	100
-300'			
300'			
-310'			
BOX 10		Coarsely crystalline dolomite breccia with lt.grey to dk.grey minor pyritic carbonaceous dolomite seams and clasts. 327.2', 331', 334.5': white dolomite veins, all less than 1 cm thick. 335': quartz-carbonate vein 8 mm thick	100
-320'			
100m			
-330'			
BOX 11		As above 341.4': minor 3 mm wide white dolomite vein. carbonaceous mudstone stringers. Styolitic in part with a number of thin irregular dk.grey argillaceous dolomite stringers.	100
-340'			
-350'			
BOX 12		Med. to dk.grey coarsely crystalline dolomite breccia. Styolitic and porous. 355.6', 368.2': calcite veins both 6 mm thick.	
-360'			
110m			

DEPTH ft. m.	LITHOLOGY	GEOLOGICAL DESCRIPTION	% REC.
360' 110m		357.7': pyritic mudstone seams 1-8 mm thick; also 369'-369.3'. 369.3'-370': dolomite very brecc'd, breccia filling of pyritic mudstone. 370': shear zone marked by slickensides 70° to core axis. 366.6': thin (less than 1 cm) quartz-carbonate vein 15° to core axis. 368.6': small calcite vein.	Porosity about 15%
-370'			
BOX 13		As above. 375.6'-376.1': brecciated coarsely cryst.dolomite with pyritic mudstone as breccia filling. 376.6': thin quartz-carbonate vein with minor stringers of pyritic carbonaceous mudstone 381.5': 2-8 mm quartz-carbonate vein with an outer 1-2 mm thick pyritic envelope. 384.4': 1 cm quartz-carbonate vein 20° to core axis. 383.3' and 388.3': 5 mm thick quartz-carbonate veins. 391.1': beginning of another highly brecciated interval.	100
-380'			
-390'			
BOX 14 120m		Brecciation at the end of Box 13 continues to 392.8'. After this, the dolomite is a fine to medium crystalline dolomite breccia. White calcite veins and minor pyritic mudstone seams occur in this interval. 398': 3 cm seam of dk.grey dolomitic, pyritic mudstone. 399'-399.6': interval of this mudstone. 06', 407.4', 409': 1-2 cm thick quartz-carbonate veins.	100
-400'			
BOX 15 130m		As above. Fine to medium crystalline Dolomite Breccia 426.6': 8 mm quartz-carbonate vein. several small (3 - 6 mm) dolomite veins occur throughout interval.	100
-420'			
BOX 16 130m		436.4': quartz-carbonate vein without a pyritic envelope. 447.2': quartz-carbonate vein 3 cm wide with 1-2 mm wide pyrite envelope.  core is generally more pyritic.	
-440'			
BOX 17 140m		Lithology as above; vuggy, 1-5 mm vugs. 456': 1 cm quartz-carbonate vein 457.1': 7 cm quartz-carbonate vein, bifurcates at 463.2' and 463.5' 457.9': 1-2 cm quartz-carbonate vein, pyritic mudstone seams and blebs 458.4': 4 cm quartz-carbonate vein Limonite-coated joints	100
-460'			
BOX 18 140m		468': 5 mm quartz-carbonate vein with disseminated pyrite adjacent to vein 472.5', 477', 482.2', 486.5': limonite seams	100
-470'			
BOX 19 150m		488.6': ½ cm quartz-carbonate vein 491.4': 3 cm quartz-carbonate vein 494.4': 2 cm quartz-carbonate vein 500.4': 5 cm quartz-carbonate vein Limonite seams at 497', 498', 499.3', 499.4', 499.6', 500.1', 500.3', and 500.7'	Lithology as above 100
-490'			
BOX 20 160m		Coarsely crystalline Dolomite breccia. Highly brecciated 509'-513'; within the breccia, there is more pyritic mudstone as seams, blebs, and breccia filling. Quartz-carbonate veins consist of euhedral to subhedral coarsely crystalline quartz in a white dolomite matrix. 509.2': 5 cm quartz-carb vein 512': 3 cm quartz-carb vein 515.2': 3 cm quartz-carb vein 515.8': 3 cm quartz-carb vein 517.5': 5 cm quartz-carb vein	Note: there is an increase in width and density of quartz-carbonate veins 100
-510'			
BOX 21 160m		Mottled coarsely crystalline dolomite breccia 524.5'-529.4': mottled texture very pronounced; med to dk.grey pyritic mudstone blebs. 531': 1 cm small quartz-carbonate vein. 2-4 mm thick quartz veins randomly oriented throughout the section	100
-530'			
BOX 22 167.65m		542' and 548.9': white dolomite veins. 549': dolomite lt.grey to buff-brown, poorly indurated, probably weathered by groundwater action; several minor white dolomite veins, several minor pyrite-mudstone stringers No criteria for continuing this hole.	100
-550'			

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Page # 1

SAMPLE No.	ppm Cu	ppm Pb	ppm Zn	ppm Ag
<b>"Soil Samples"</b>				
10+00-20+00 E	49	19	145	.2
22+00	32	30	139	.2
23+00	41	11	167	.1
24+00	35	25	235	.2
1+00N-20+00 E	12	16	343	Nil
21+00	34	14	52	.1
1+00S-16+00 E	43	130	640	.6
17+00	52	102	508	.5
18+00	48	112	590	1.1
19+00	117	38	550	.9
20+00	47	29	154	.3
21+00	29	11	163	.3
22+00	32	23	162	.3
23+00	35	13	314	.2
24+00	40	13	96	.3
2+00S-16+00 E	30	85	443	.5
17+00	79	86	700	1.0
18+00	45	34	234	.4
19+00	111	152	580	2.1
20+00	62	89	436	.7
21+00	42	21	115	.2
22+00	42	15	144	.1
3+00S-16+00 E	47	122	630	.9
17+00	35	64	281	.4
18+00	148	97	+1000	1.9
19+00	79	189	720	1.5

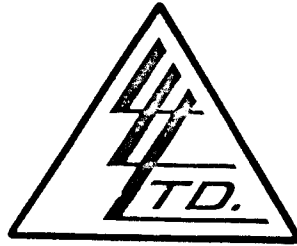
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Page # 2

SAMPLE No.	ppm		ppm	
	Cu	Pb	Zn	Ag
3+00S-20+00 E	78	37	419	.5
21+00	59	14	109	.3
22+00	42	19	158	.4
24+00	42	55	179	.4
4+00S-16+00 E	69	164	920	1.7
17+00	68	163	840	1.4
18+00	168	270	+1000	3.9
19+00	162	142	+1000	2.1
20+00	100	24	271	.5
21+00	79	18	136	.4
22+00	50	15	148	.4
23+00	82	13	305	.7
24+00	57	11	221	1.0
11+00N-0+00	9	25	122	.2
1+00 W	22	17	640	.2
2+00	24	13	352	.2
4+00	25	15	56	.3
5+00	6	25	51	.1
6+00	13	19	33	.2
7+00	24	13	36	.3
9+00	16	26	45	.1
10+00	9	21	32	.1
11+00N-1+00 E	23	51	502	.2
2+00	26	56	192	.3
3+00	27	53	209	.3
4+00	31	75	208	.2
5+00	17	40	165	.1
6+00	21	53	115	.1

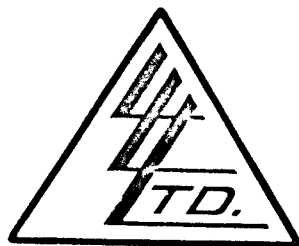
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Page # 3

SAMPLE No.	ppm Cu	ppm Pb	ppm Zn	ppm Ag
11+00N-7+00 E	22	50	162	.2
8+00	18	68	92	.1
9+00	10	29	99	.1
10+00	16	42	124	.1
11+00	19	36	176	.2
12+00	16	35	112	.2
13+00	18	46	770	.1
14+00	11	16	303	.1
13+00N-0+00	21	36	373	.1
1+00 W	9	26	81	Nil
2+00	24	9	42	.1
3+00	26	19	78	.3
4+00	23	10	52	.3
5+00	42	42	122	.6
7+00	15	38	79	.1
8+00	17	24	55	.1
9+00	9	21	41	.1
10+00	30	17	39	.3
11+00N-1+00 E	14	30	70	.1
2+00	9	20	39	.6
3+00	20	26	100	.2
4+00	18	33	139	.2
5+00	14	14	81	.1
6+00	13	14	91	.1
7+00	12	13	65	.1
8+00	11	16	63	.1
9+00	9	15	46	.1
10+00	17	17	44	.1
11+00	10	19	52	.1

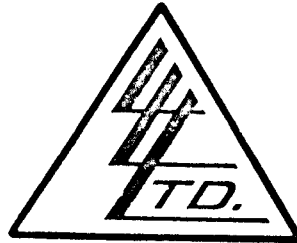
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Page # 4

SAMPLE No.	ppm Cu	ppm Pb	ppm Zn	ppm Ag
13+00N-12+00 E	11	13	23	.3
13+00	20	37	72	.8
14+00	8	24	55	.1
16+00-17+00 E	350	740	+1000	3.9
18+00	132	500	+1000	2.3
19+00	161	260	+1000	2.1
20+00	360	191	+1000	3.8
21+00	91	114	+1000	.8
22+00	52	68	600	.5
23+00	39	83	488	.4
24+00	36	58	394	.5
25+00	40	56	521	.7
26+00	37	30	261	.3
27+00	60	38	335	.4
16+00S-8+00 W	10	96	357	.2
17+00S-7+00 W	11	169	405	.1
8+00	9	68	119	.1
9+00	9	83	134	.1
10+00	12	76	129	.1
11+00	11	89	166	.1
12+00	11	68	171	.2
13+00	10	54	316	Nil
14+00	11	63	153	.1
15+00	12	69	201	.2
17+00S-17+00 E	149	184	+1000	1.9
18+00	154	70	+1000	1.3
19+00	114	77	770	.7

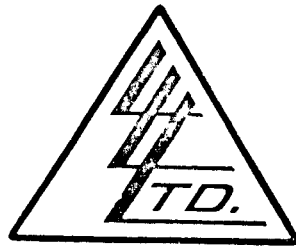
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Page # 5

SAMPLE No.	ppm Cu	ppm Pb	ppm Zn	ppm Ag
17+00S-20+00 E	71	84	670	.3
21+00	31	56	425	.4
22+00	36	69	476	.6
23+00	45	61	580	.6
24+00	18	31	213	.4
25+00	46	26	286	.3
26+00	47	41	343	.3
27+00	75	46	385	.7
18+00S-7+00 W	26	84	321	.2
8+00	12	75	207	.1
9+00	34	58	353	.3
10+00	19	93	336	.2
11+00	10	43	118	.1
12+00	12	103	620	.1
13+00	11	64	244	.1
14+00	15	102	404	.2
15+00	20	64	234	.2
19+00S-6+00 W	18	12	124	.1
8+00	28	21	201	.1
9+00	32	14	202	Nil
10+00	28	10	236	.1
11+00	33	57	373	.1
12+00	11	41	160	.1
13+00	28	136	479	.2
14+00	21	91	580	.3
19+00S-17+00 E	34	104	690	.6
18+00	43	100	890	.9
19+00	36	48	419	.1

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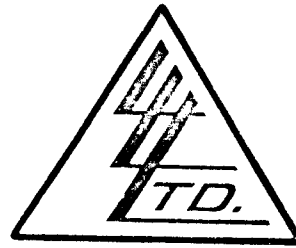
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Page # 6

SAMPLE No.	ppm Cu	ppm Pb	ppm Zn	ppm Ag
19+00S-20+00 E	86	86	720	.8
21+00	41	81	425	.8
22+00	47	68	458	.8
23+00	25	42	354	.5
24+00	58	20	276	.4
25+00	73	55	427	1.3
26+00	57	28	274	.4
27+00	79	43	310	.8
20+00S-6+00 W	27	21	109	.1
7+00	35	18	135	.2
8+00	39	33	406	.3
9+00	31	24	303	.2
10+00	40	38	361	.2
11+00	33	40	268	.4
12+00	12	69	284	.1
13+00	8	18	56	.1
14+00	19	90	550	.4
15+00	29	25	363	.2
20+00S-17+00 E	32	37	335	.5
18+00	11	16	347	.3
19+00	36	60	469	.8
20+00	10	24	54	.2
21+00	35	47	730	.9
22+00	107	98	600	1.6
23+00	65	50	466	.7
24+00	78	43	426	.5
25+00	78	55	412	.9
26+00	77	52	345	1.0
27+00	61	38	412	.7

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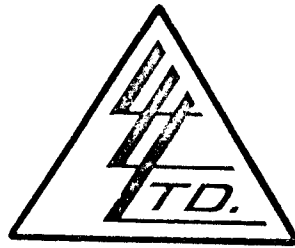
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Page # 7

SAMPLE No.	ppm Cu	ppm Pb	ppm Zn	ppm Ag
21+00S-6+00 W	53	82	269	.4
7+00	33	16	161	.3
8+00	37	32	369	.4
9+00	34	27	325	.3
10+00	25	33	309	.3
11+00	31	44	379	.2
12+00	24	51	236	.3
13+00	37	82	430	.3
14+00	25	28	245	.4
15+00	11	19	247	.2
21+00S-17+00 E	21	33	237	.1
18+00	10	34	276	.2
19+00	10	30	112	.2
20+00	22	20	171	.2
21+00	28	59	346	.4
22+00	27	46	417	.3
23+00	66	41	315	.7
24+00	87	65	398	.9
25+00	56	43	304	1.0
26+00	45	39	417	.9
27+00	56	42	411	.9
22+00S-16+00 E	24	61	388	.6
17+00	20	30	289	.5
18+00	26	28	307	1.5
19+00	16	19	172	.3
20+00	57	46	512	.5
21+00	56	30	374	.4
22+00	103	27	258	.7
23+00	49	62	373	1.0

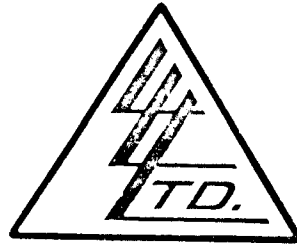
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Page # 8

SAMPLE No.	ppm Cu	ppm Pb	ppm Zn	ppm Ag
22+00S-24+00 E	58	50	333	1.0
23+00S-16+00 E	19	28	349	.2
17+00	44	37	510	.5
18+00	22	34	203	.2
19+00	16	39	214	.2
20+00	20	12	59	.1
21+00	38	26	131	.5
22+00	41	36	267	.6
23+00	39	19	280	.3
24+00	69	44	488	1.0
25+00S-0+00	27	148	467	.6
1+00 W	37	73	335	.3
2+00	64	177	+1000	.7
3+00	52	163	770	.6
4+00	34	47	273	.3
5+00	45	47	248	.4
6+00	42	45	294	.2
25+00S-1+00 E	30	129	266	.4
2+00	51	260	486	1.1
3+00	28	133	417	.5
4+00	36	104	433	.6
5+00	8	14	161	.4
6+00	12	17	93	Ni1
7+00	42	61	292	.5
8+00	25	38	155	.2
9+00	38	26	228	.1
10+00	25	17	157	.1
11+00	16	17	104	.2

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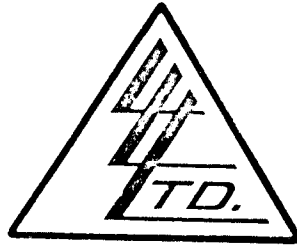
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Page # 9

SAMPLE No.	ppm Cu	ppm Pb	ppm Zn	ppm Ag
25+00S-12+00 E	15	15	78	.1
13+00	23	24	101	Nil
14+00	25	18	140	.2
15+00	37	24	381	.3
16+00	37	39	391	.3
17+00	109	60	740	2.5
18+00	64	34	420	.7
19+00	87	39	514	1.3
20+00	52	27	383	.7
21+00	39	24	183	.4
22+00	20	22	197	.4
23+00	72	25	242	.6
24+00	56	24	341	.5
27+00S-0+00	36	59	201	.1
1+00 W	34	54	243	.3
2+00	49	105	398	.6
3+00	46	29	200	.4
4+00	42	35	209	.4
5+00	27	115	295	.5
6+00	44	168	403	.7
27+00S-1+00 E	23	50	178	.1
2+00	27	38	174	.1
3+00	37	19	98	.1
4+00	23	19	168	Nil
6+00	45	12	64	Nil
7+00	100	18	143	.2
9+00	18	18	46	Nil
10+00	22	19	198	.1
11+00	12	15	57	.1

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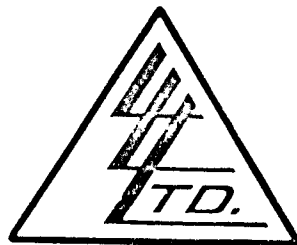
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Page # 10

SAMPLE No.	ppm Cu	ppm Pb	ppm Zn	ppm Ag
27+00S-12+00 E	11	14	56	.1
13+00	12	44	82	Nil
14+00	8	12	42	Nil
15+00	29	13	121	.1
16+00	20	30	447	.2
17+00	93	36	640	.7
18+00	19	12	93	.1
19+00	18	19	246	.1
20+00	41	21	178	.4
21+00	10	20	92	Nil
22+00	15	17	166	.3
23+00	33	28	273	.5
24+00	25	27	255	.4
29+00S-0+00	11	17	44	.3
1+00 W	12	17	35	Nil
2+00	14	17	62	Nil
3+00	9	24	29	.3
6+00	30	32	119	.1
29+00S-2+00 E	11	14	38	.1
3+00	14	19	45	.3
4+00	31	15	53	.5
5+00	10	14	31	.1
6+00	12	12	32	.1
7+00	13	10	21	.2
8+00	13	14	47	.2
9+00	10	14	41	.2
10+00	17	16	48	.2
11+00	14	15	50	.2
12+00	15	14	59	.3

**I Hereby Certify** THAT THE ABOVE RESULTS ARE THOSE  
 ASSAYS MADE BY ME UPON THE HEREIN DESCRIBED SAMPLES . . . .

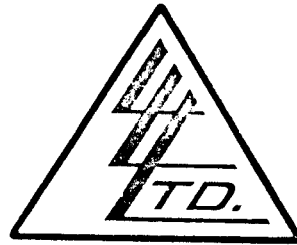
Rejects Retained one month.

Pulps Retained one month  
 unless specific arrangements  
 made in advance.

*C. Aussant*  
 Assayer

To: TAIGA CONSULTANTS LTD.,  
 100, 1300 - 8th Street S.W.,  
 Calgary, Alta. T2P 1B2

File No. 24973  
 Date July 26, 1983  
 Samples Soil  
 Rusty Springs Project



ATTN: C. Aussant

Certificate of  
**ASSAY** of  
**LORING LABORATORIES LTD.**

Page # 11

SAMPLE No.	ppm Cu	ppm Pb	ppm Zn	ppm Ag
29+00S-13+00 E	13	13	45	.2
14+00	21	13	78	.4
15+00	20	11	39	.4
16+00	22	14	66	.4
17+00	19	14	67	.2
18+00	23	17	62	.5
21+00	13	19	91	.9
22+00	29	17	183	.3
23+00	28	19	172	.4
24+00	28	21	236	.5
31+00S-0+00	17	17	66	.2
1+00 W	7	15	36	.1
2+00	7	11	19	.3
3+00	6	13	30	.1
4+00	10	22	38	.2
5+00	78	31	296	.2
6+00	46	19	139	.3
31+00S-1+00 E	8	17	25	1.2
3+00	9	18	24	.2
4+00	14	28	29	.4
5+00	20	20	36	.2
6+00	16	16	39	.2
9+00	13	20	32	.2
10+00	16	23	46	.4
11+00	45	32	51	.8
12+00	48	24	82	.3
14+00	39	20	67	.4
16+00	22	15	73	.2
17+00	7	13	30	.3

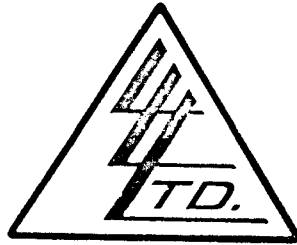
**I Hereby Certify** THAT THE ABOVE RESULTS ARE THOSE  
 ASSAYS MADE BY ME UPON THE HEREIN DESCRIBED SAMPLES . . . .

Rejects Retained one month.  
 Pulps Retained one month  
 unless specific arrangements  
 made in advance.

Assayer

To: TAIGA CONSULTANTS LTD.,  
 100, 1300 - 8th Street S.W.,  
 Calgary, Alta. T2P 1B2

ATTN: C. Aussant



File No. 24973  
 Date July 26, 1983  
 Samples Soil  
 Rusty Springs Project

Certificate of  
**ASSAY** of  
**LORING LABORATORIES LTD.**

Page # 12

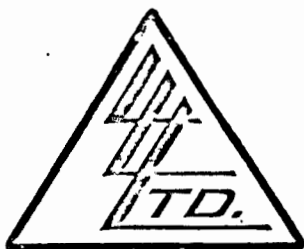
SAMPLE No.	ppm Cu	ppm Pb	ppm Zn	ppm Ag
31+00S-18+00 E	14	13	32	.2
19+00	12	16	61	.2
23+00	13	17	65	.2

**I** **Hereby Certify** THAT THE ABOVE RESULTS ARE THOSE  
 ASSAYS MADE BY ME UPON THE HEREIN DESCRIBED SAMPLES . . . .

Rejects Retained one month.

Pulps Retained one month  
 unless specific arrangements  
 made in advance.

*[Signature]*  
 Assayer



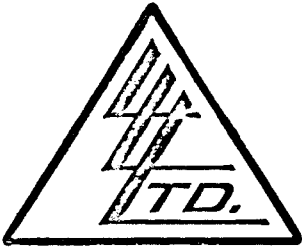
629 Beaverdam Rd. N.E.  
Calgary, Alberta T2K 4W2

# LORING LABORATORIES LTD.

Phone 274-2777

## Cu, Pb, Zn Assays on A.A.

- 1) .5 gm. sample in 150 ml beaker
- 2) Wet with H<sub>2</sub>O
- 3) Add 10 ml HNO<sub>3</sub> + 10 ml HCl + 5 ml HClO<sub>4</sub>
- 4) Boil to perchloric fume
- 5) Take off and let cool
- 6) Add 10 ml HCl, boil and filter into 200 ml flasks. (#2 filter paper & paper pulp)
- 7) Use appropriate standards for the 3 elements



629 Beaverdam Rd. N.E.  
Calgary 67, Alberta

# LORING LABORATORIES LTD.

Phone 274-2777

## FIRE ASSAYING OF GOLD & SILVER

A  $\frac{1}{2}$  or 1 assay ton of -100 mesh pulp is weighed into a 30 gram crucible. The sample is fluxed according to the minerology of the sample.

i.e.: For siliceous ores make monosilicate slags.

For basic ores containing any of the following:  $\text{Fe}_2\text{O}_3$ ,  $\text{Fe}_3\text{O}_4$ ,  $\text{CaCO}_3$ ,  $\text{MgCO}_3$  or  $\text{MnO}_2$  make bisilicate slags.

For basic ores containing any of the following: Pb, Zn, Fe, As, Sb, Cu and Te make mono or sesquisilicate slags.

## FUSING

Crucibles are loaded into a muffle at  $1650^\circ\text{F}$ . Temperature is turned up to  $1900^\circ\text{F}$  or  $2000^\circ\text{F}$  if heavy sulfides are present. About 1 hour is required to complete the fusion. Crucibles are then poured into conical shaped molds, cooled and then the slag is separated from the lead buttons. The buttons are then cubed for easier handling and cleaning.

## CUPELLATION

Cupels are charged in the muffle and heated at  $1650^\circ\text{F}$  for 10 minutes. Lead buttons are then charged into the muffle which has a temperature of  $1650^\circ$ . The door is lowered and buttons are allowed to open. When all buttons are open the temperature is lowered to  $1400^\circ$  and as soon as the temperature has reached this point the recorder is set at  $1350^\circ\text{F}$ . The temperature shall be turned up to  $1500^\circ$  5 minutes before the finish. Cupels are removed from the muffle and allowed to cool. Beads are then removed from cupels and then placed into coor cups and then weighed. When all beads are weighed, the silver is then parted from the gold by dissolving it with 1:7 nitric acid. The gold bead is then washed, annealed and weighed. The weight of the gold bead is deducted from the total weight and we have both answers for gold and silver.

A P P E N D I X   I I

## PHASE I

PROPOSED BUDGET 1984 PULSE-EM SURVEY

on the Rusty Springs Project, Yukon

PRE-FIELD

Contract negotiations; logistics \$ 2,500

FIELDContractor

1 man plus equipment rental and field plotting	55 days @ \$1200/diem	66,000	
Jens Hansen field	7 days @ \$300/diem	<u>2,100</u>	68,100

Taiga Personnel

2 geophysical assistants	55 days @ \$175/diem	19,250	
Sr. Prospector/Geologist	55 days @ \$240/diem	<u>13,200</u>	32,450

Camp Costs

Food	227 man days @ \$25/diem	5,675	
Equipment Rentals	227 man days @ \$ 5/diem	1,135	
Radio Rental 100w base (from Search & Supply)		940	
Water Pump	55 days @ \$25/diem	<u>1,375</u>	9,125

Mob and Demob

Geophysical contractor (personnel and freight from Toronto to Inuvik)		5,000	
Taiga personnel from Calgary to Rusty Springs		<u>10,000</u>	15,000

Service Flights

8 Twin Otter flights from Inuvik (one per week)			18,400
---	--	--	--------

Miscellaneous

Expediting, freight, disposable supplies, radio-telephone calls, etc.			5,500
---	--	--	-------

POST-FIELD

Data compilation and interpretation			
Jens Hansen	27 days @ \$300/diem	8,100	
Report preparation, drafting, materials, reproductions		<u>5,825</u>	13,925
			<u>\$ 165,000</u>

CONTINGENCY ALLOWANCE

	15,000
	<u>\$ 180,000</u>

Orma Hill 21 line km of coverage  
Mike Hill 33 line km of coverage

## PHASE II

PROPOSED BUDGET 1984 DRILLING PROGRAM

on the Rusty Springs Project, Yukon

PRE-FIELD

Drill contract negotiations; logistics

\$ 2,500

FIELDDiamond Drill Program

3000 feet (915 m) NQ drilling @ Estimated Gross \$50/foot (\$164.04/metre); including mob to and demob from Mile 150 on Dempster Highway, casing overburden, drilling, drill moves, water supply, core boxes, mud, dip tests, etc.

150,000

Taiga Personnel

Project Geologist	42 days @ \$275/diem	11,550	
Prospector/Assistant	42 days @ \$175/diem	7,350	
Cook	42 days @ \$120/diem	5,040	
Catskiner (10 hrs/day)	42 days @ \$ 45/hour	<u>18,900</u>	42,840

Camp Costs

Food (incl drill crew)	336 man days @ \$25/diem	8,400	
Equipment rentals	336 man days @ \$ 5/diem	1,680	
Radio rental 100w base (from Search & Supply)		940	
Wajax pump	42 days @ \$25/diem	1,050	
VLF-EM unit	42 days @ \$10/diem	<u>420</u>	12,490

Mob and Demob

Drill contractor, from Mile 150 to Rusty Springs	15,000	
Taiga personnel, from Calgary to Rusty Springs	10,000	
Camp move (helicopter 15 hours @ \$500)	<u>7,500</u>	32,500

Service Flights

6 Twin Otter flights from Inuvik (one per week) 13,800

Assaying and Geochemistry

25,000

Miscellaneous

Expediting, freight, disposable supplies, radio-telephone calls, etc.

5,500

POST-FIELD

Data compilation, report preparation, drafting, reproductions, materials

	<u>10,370</u>
	\$ 295,000

CONTINGENCY ALLOWANCE

	<u>25,000</u>
	<u>\$ 320,000</u>



- Trenches
- Sampled interval
- Stripped area - not down to bedrock
- Dip and strike of bedding
- Dip and strike of veining
- Geologic contact
- Outcrop area
- Fault
- Anticline
- Syncline
- VLF-EM conductors
- Diamond drill holes
- Cross section line

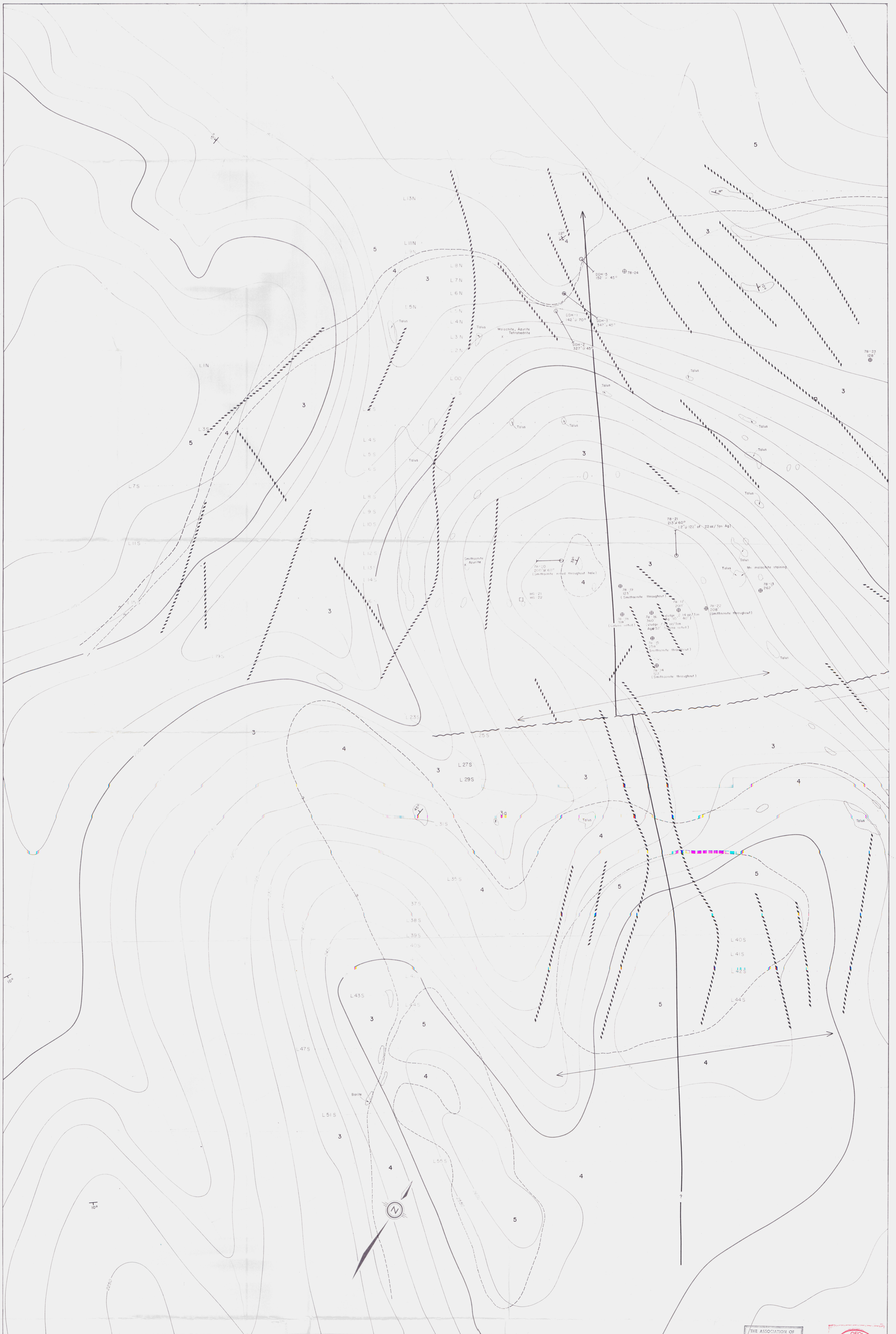
- 6 Regolith: orange to rusty colouring, highly fragmented, intensely weathered, siliceous, strongly limonitic.
- 5 Siltstone and Shale: lt. grey weathering with occ rusty stains, black carb, slightly arg siltstones, laminated, thinly bedded with minor interbedded carb chert. Thin to med bedded med well indurated and very well sorted.
- 4 Chert, brecciated, carbonaceous
- 3 Carbonaceous Dolomite Breccia: grey to buff, occ mottled purple and green weathering, med to dk grey dol, white dolomite infilling, oolitic mudstone seams, ferrid, siliceous.
- 2 Crystalline Dolomite Breccia: fine to coarsely crystalline, lt. to med grey to beige dol, grey weathering with white dolomite breccia filling, locally vuggy and porous.
- 1 Carbonaceous Dolomite Breccia: med to dk grey, white dolomite breccia filling and sub-lithographic, locally fossiliferous.

THE ASSOCIATION OF PROFESSIONAL ENGINEERS, GEOLGISTS AND GEOPHYSICISTS OF ALBERTA  
 PERMIT NUMBER P 2399  
 TACA CONSULTANTS LTD.

KENTON NATURAL RESOURCES CORPORATION  
**RUSTY SPRINGS, YUKON ORMA HILL GEOLOGY**

DATE: OCTOBER, 1982 NTS: 116K/8,9  
 PROJECT: Y-81-1  
 SCALE: 1:2500  
 TACA CONSULTANTS LTD. MAP 1  
 REVISED: 1983





- Dip and strike of bedding
- Dip and strike of veining
- Geologic contact
- Outcrop
- Fault
- Anticline
- VLF-EM conductors
- Diamond drill holes

- 6** Regolith: orange to rusty colouring, highly fragmented, intensely weathered, siliceous, strongly limonitic.
- 5** Siltstone and Shale: lt. grey weathering with occ rusty stains, black carb, slightly arg siltstone, laminated, thinly bedded with minor interbedded carb chert. Thin to med bedded med well indurated and very well sorted.
- 4** Chert, brecciated, carbonaceous unconformity
- 3** Carbonaceous Dolomite Breccia: grey to buff, occ mottled purple and green weathering, med to dk grey dol, white dolomite infilling, occ pyritic mudstone sandy, ferric, siliceous.
- 3a** Unbrecciated, fossiliferous limestone.
- 2** Crystalline Dolomite Breccia: fine to coarsely crystalline, lt. to med grey to beige dol, grey weathering with white dolomite breccia filling, locally vuggy and porous.
- 1** Carbonaceous Dolomite Breccia: med to dk grey, white dolomite breccia filling and sub-lithographic, locally fossiliferous.

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 OF ALBERTA  
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 P 2399  
 TAIGA  
 CONSULTANTS LTD.

KENTON NATURAL RESOURCES CORPORATION

**RUSTY SPRINGS, YUKON**  
**MIKE HILL**  
**GEOLOGY**

OCTOBER, 1982 116K/8.9  
 Y-B1-1 C. AUSSANT  
 1:2500

REVISÉ: 1983



Trenches  
 Sampled interval  
 Stripped area - not down to bedrock

0 0 ? VLF-EM anomalies (strong, medium, weak)  
 VLF-EM interpreted conductor axis (strong, medium, weak)  
 A Conductor system designation  
 Interpreted fault or shear zone

Instrument VLF-EM 16  
 Station Seattle, Wash  
 Direction to Transmitter 144°  
 Operators Don Hay  
 Tony Morris  
 Tim Termuende  
 Darryl Thompson  
 Profiles 1cm = 10%  
 in phase  
 out of phase

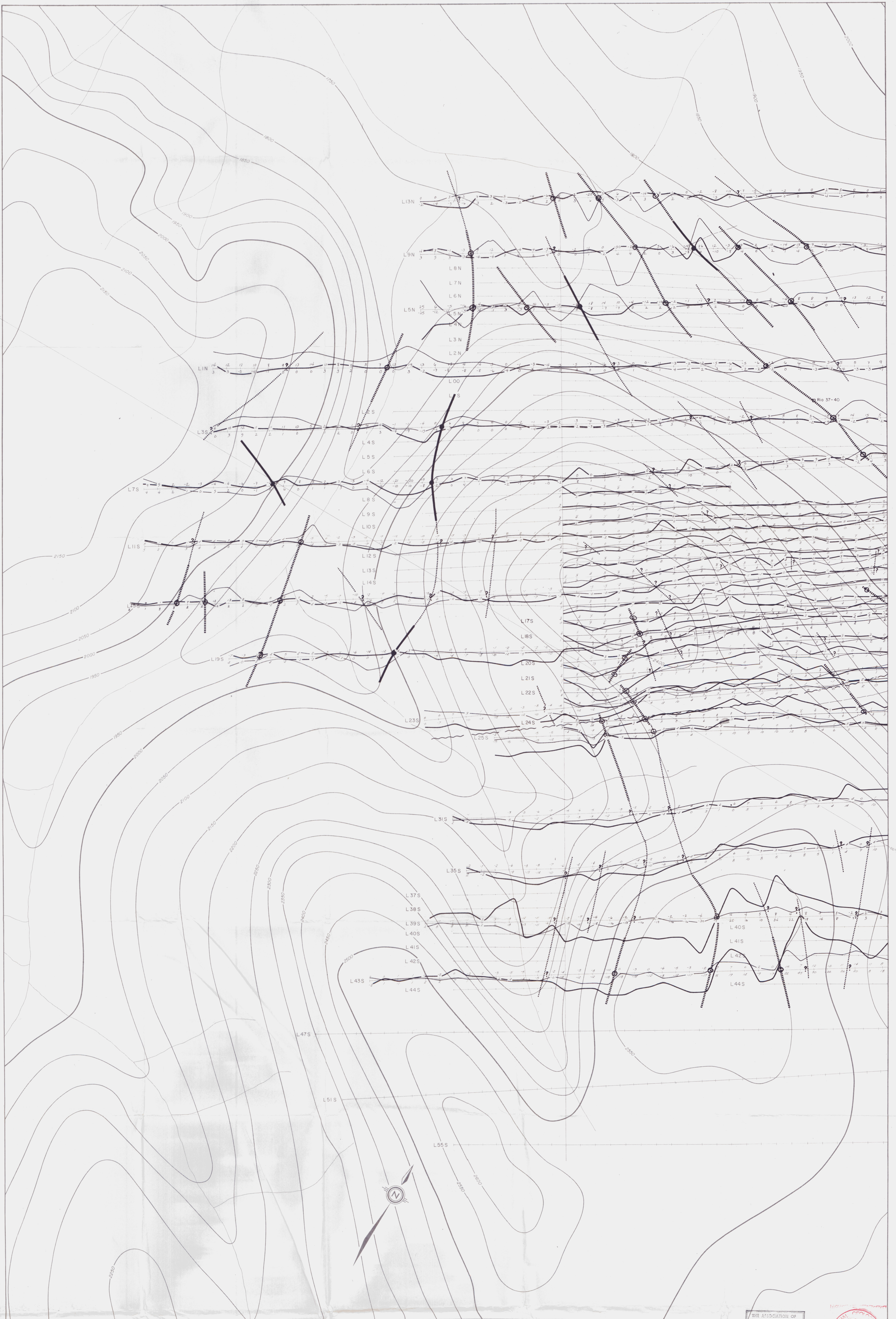
THE ASSOCIATION OF PROFESSIONAL ENGINEERS AND GEOSCIENTISTS OF ALBERTA  
 PERMIT NUMBER P 2399  
 TAUSA CONSULTANTS LTD.

KENTON NATURAL RESOURCES CORPORATION

**RUSTY SPRINGS, YUKON  
 ORMA HILL  
 VLF-EM PROFILES**

DATE JULY 1982 NTS 116K/8,9  
 PROJECT Y-81-1 MAPPED/DRAWN BY C. AUSSANT  
 SCALE 1:2500

TAUSA CONSULTANTS LTD. MAP 3  
 REVISED: 1983



● ○ ? VLF-EM anomalies (strong, medium, weak)  
 ——— VLF-EM interpreted conductor axis (strong, medium, weak)  
 - - - - - Interpreted fault or shear zone

Instrument: VLF-EM 16  
 Station: Seattle, Wash  
 Direction to Transmitter: 144°  
 Operators: Dan Hoy  
 Tony Morris  
 Tim Termuende  
 Darryl Thompson  
 Profiles: 1 cm = 10%  
 in phase ———  
 Out of phase ———

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 PERMIT NUMBER  
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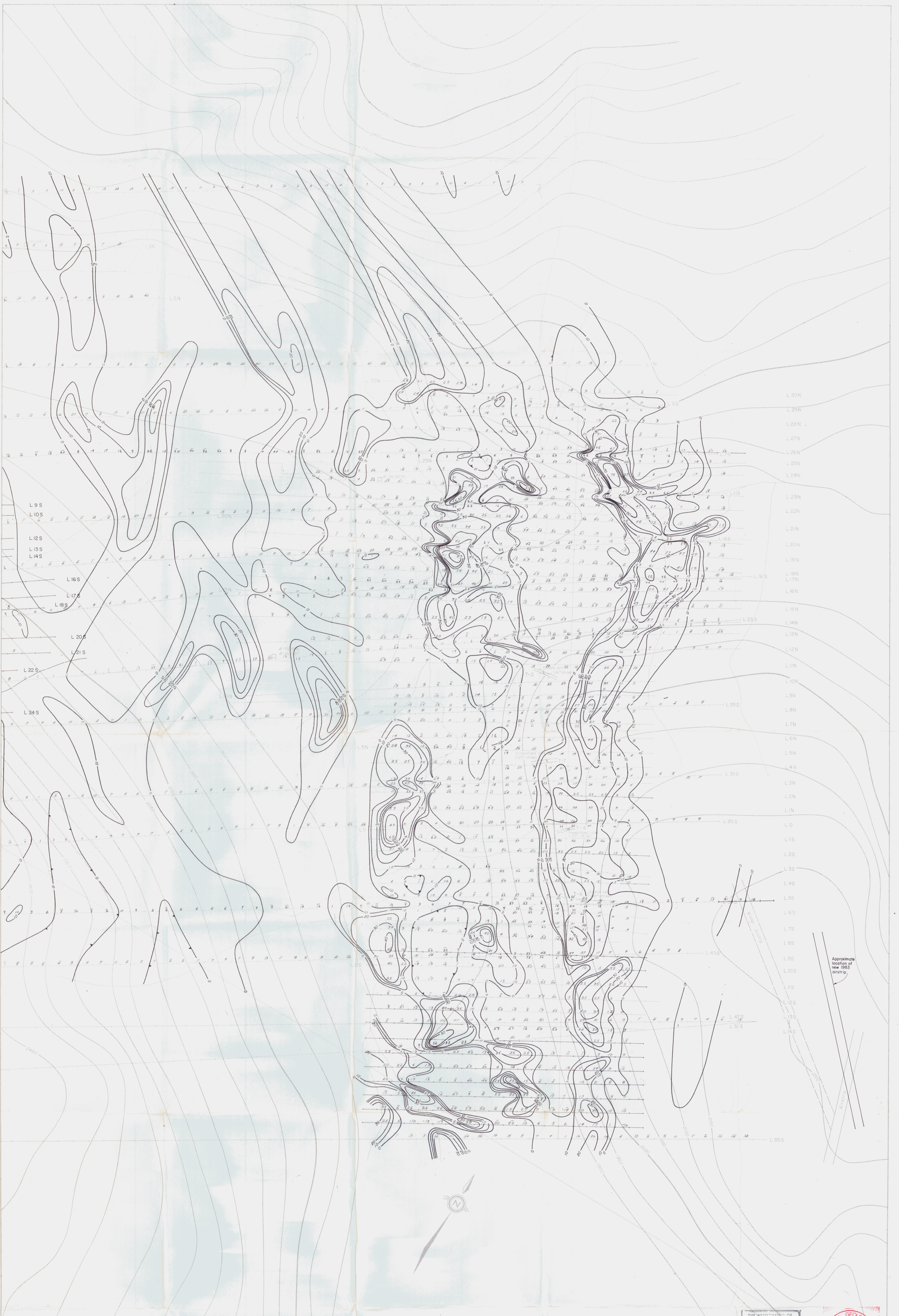


KENTON NATURAL RESOURCES CORPORATION

**RUSTY SPRINGS, YUKON**  
**MIKE HILL**  
**VLF-EM PROFILES**

DATE	NTS 116K/8,9
PROJECT	Y-81-1
SCALE	1:2500
TAIGA CONSULTANTS LTD. MAP 4	

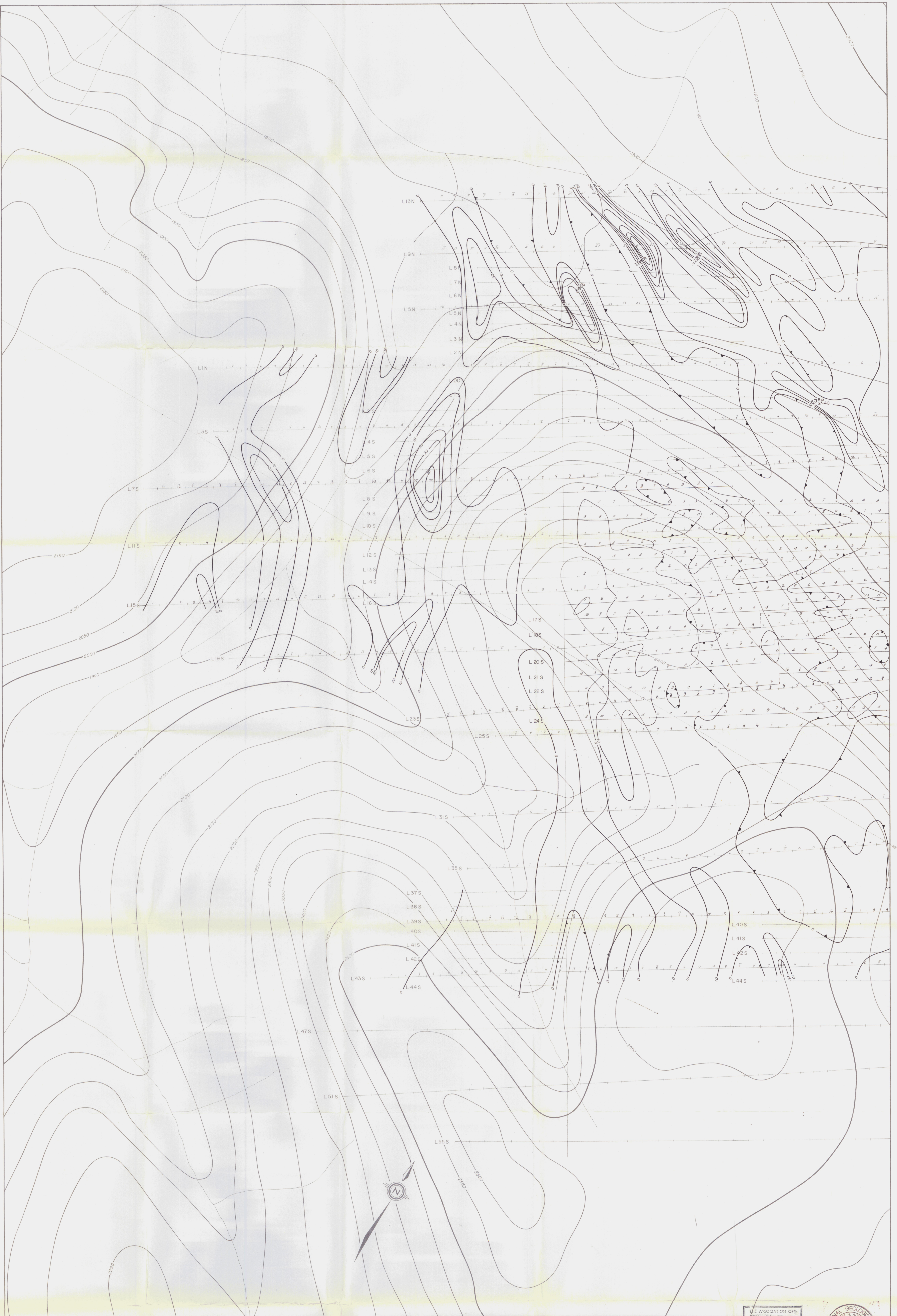
REVISED: 1983



Trenches  
 Sampled interval  
 Stripped area - not down to bedrock

Contour interval: 10

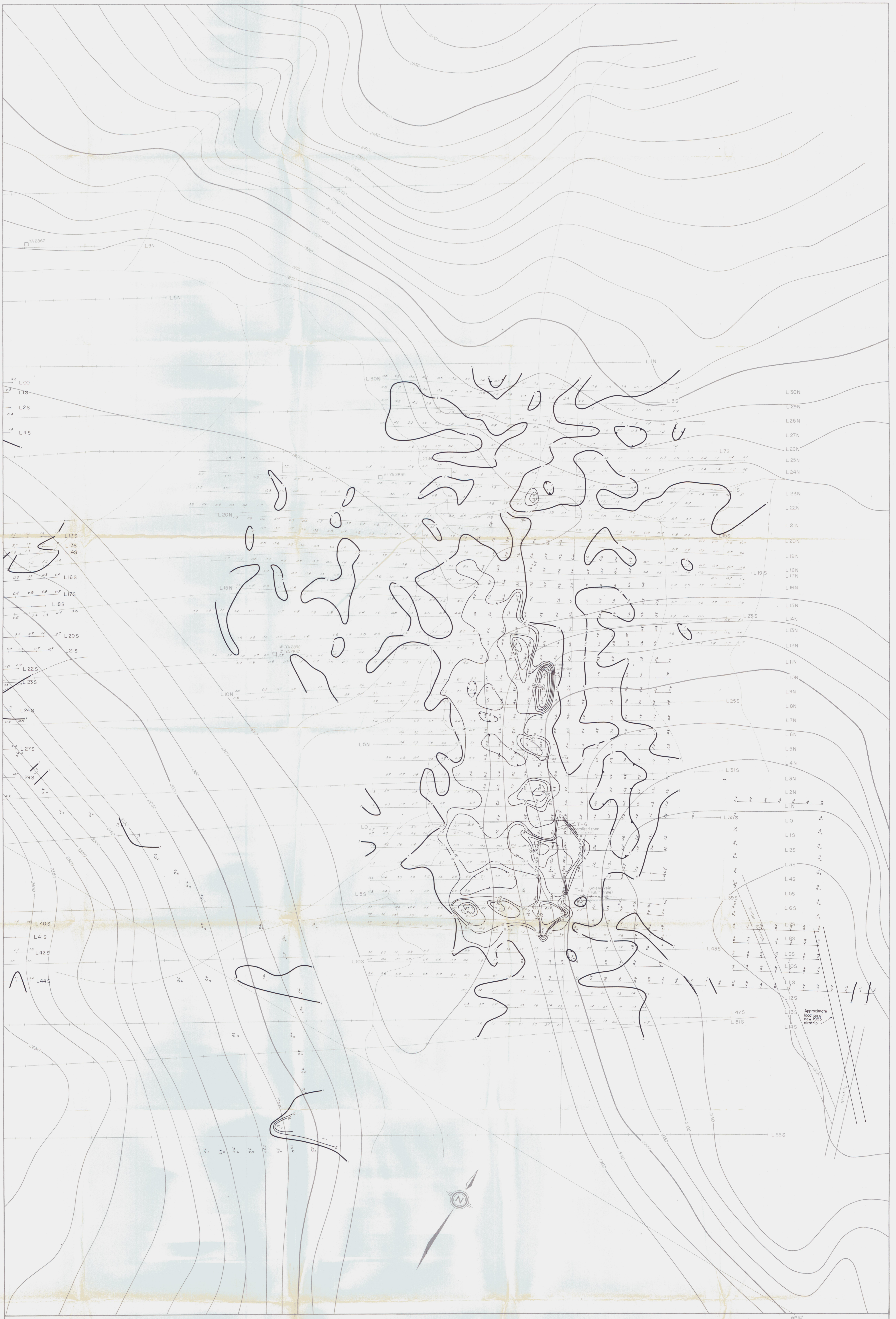
THE ASSOCIATION OF PROFESSIONAL GEOLOGISTS AND GEOLOGISTS OF ALBERTA PERMIT NUMBER P 2399 TUSA CONSULTANTS LTD.		
KENTON NATURAL RESOURCES CORPORATION		
<b>RUSTY SPRINGS, YUKON</b> <b>ORMA HILL</b> <b>FRASER FILTERED VLF-EM</b>		
DATE OCTOBER, 1982	PROJECT Y-81-1	NTS 116K/8,9
SCALE 1:2500		MAP 5
TUSA CONSULTANTS LTD.		
REVISED: 1983		



Contour interval 10

THE ASSOCIATION OF PROFESSIONAL GEOLOGISTS OF ALBERTA PERMIT NUMBER F 2359 TAIGA CONSULTANTS LTD.		
KENTON NATURAL RESOURCES CORPORATION		
<b>RUSTY SPRINGS, YUKON</b> <b>MIKE HILL</b> <b>FRASER FILTERED VLF-EM</b>		
DATE OCTOBER, 1982	NTS 116K/8,9	
PROJECT Y-81-1	MAPPED/ DRAWN BY C. AUSSANT	
SCALE 1:2500		
TAIGA CONSULTANTS LTD	MAP 6	

REVISED: 1983

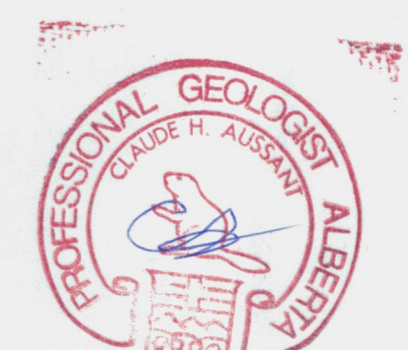


Trenches:  
 Sampled interval  
 Stripped area - not down to bedrock

Colour intervals:

1982 geochem sampling  
 23.0  
 previous geochem sampling

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 PERMIT NUMBER  
 P 2050  
 TAJSA  
 CONSULTANTS LTD.

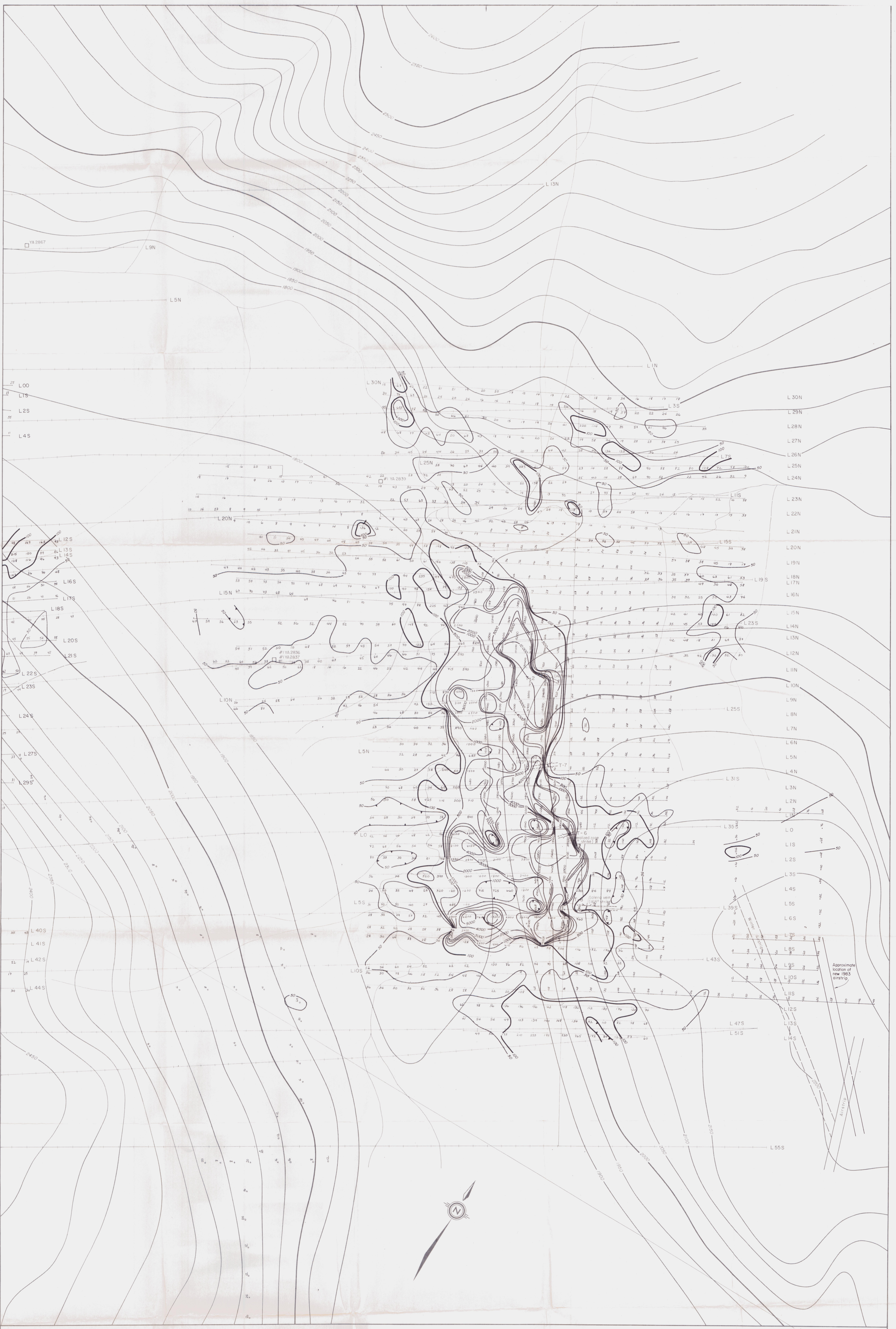


KENTON NATURAL RESOURCES CORPORATION

RUSTY SPRINGS, YUKON  
 ORMA HILL  
 SOIL GEOCHEMISTRY - Ag (ppm)

DATE OCTOBER, 1982 NTS 116K/8.9  
 PROJECT Y-81-1 MAP/PRINTED BY C. AUSSANT  
 SCALE 1:2500 0 50 100 METRES  
 TAIGA CONSULTANTS LTD MAP 7

REVISED: 1983

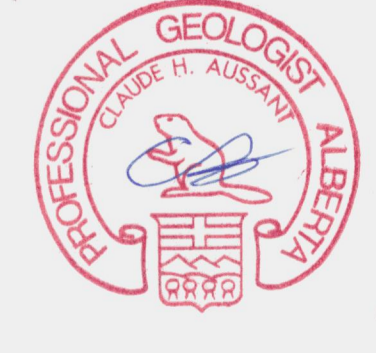


Trenches:  
 - - - - - Sampled interval  
 - - - - - Stripped area - not down to bedrock

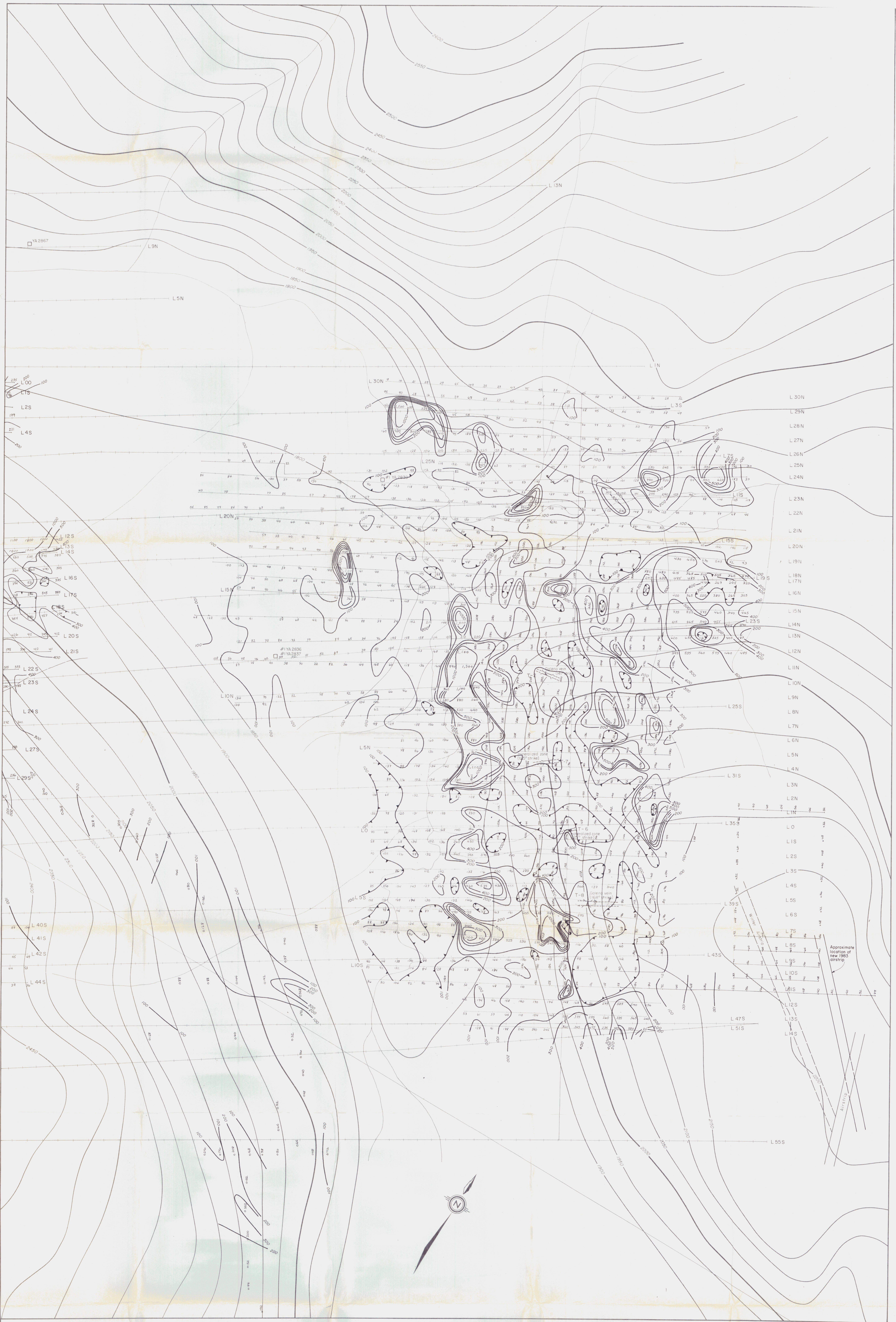
Contour intervals:  
 50 ppm  
 100 ppm  
 500 ppm  
 1000 ppm  
 2000 ppm  
 3000 ppm  
 4000 ppm  
 5000 ppm  
 10,000 ppm

1982 geochem sampling  
 - - - - - Previous geochem sampling

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 OF ALBERTA  
 PERMIT NUMBER  
 P 2399  
 TUGA CONSULTANTS LTD.



KENTON NATURAL RESOURCES CORPORATION  
 RUSTY SPRINGS, YUKON  
 ORMA HILL  
 SOIL GEOCHEMISTRY - Pb (ppm)  
 DATE: OCTOBER, 1982 NTS 116K/8,9  
 PROJECT: Y-81-1 MAPREF: C. AUSSANT  
 SCALE: 1:2500 METRES  
 TUGA CONSULTANTS LTD. MAP 8  
 REVISED: 1983

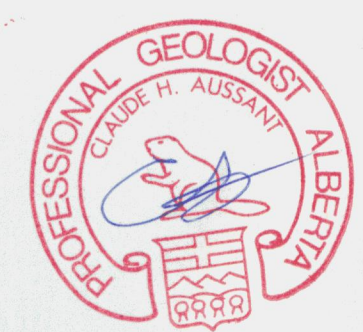


Trenches  
 --- Sampled interval  
 --- Stripped area - not down to bedrock

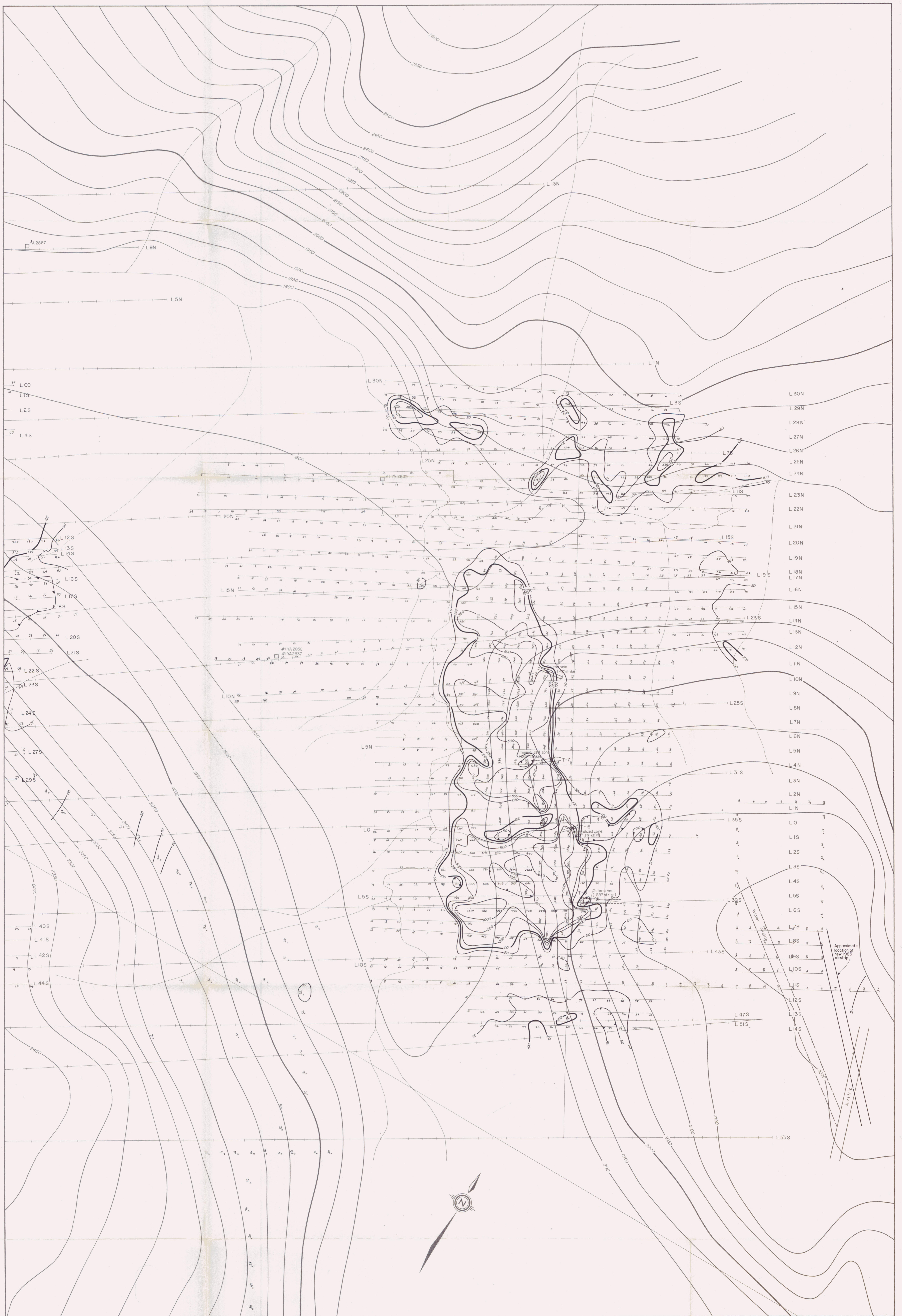
Contour intervals:  
 100 ppm  
 200 ppm  
 300 ppm  
 400 ppm  
 500 ppm  
 1000 ppm  
 5000 ppm

1982 geochem sampling  
 previous geochem sampling

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 OF ALBERTA  
 PERMIT NUMBER  
 P 2099  
 TAIGA  
 CONSULTANTS LTD.



KENTON NATURAL RESOURCES CORPORATION  
**RUSTY SPRINGS, YUKON**  
**ORMA HILL**  
**SOIL GEOCHEMISTRY - Zn (ppm)**  
 DATE: OCTOBER, 1982 NTS: 116K/8,9  
 PROJECT: Y-81-1 MAPPED/DRAWN BY: C. AUSSANT  
 SCALE: 1:2500  
 TAIGA CONSULTANTS LTD. MAP 9  
 REVISED: 1983

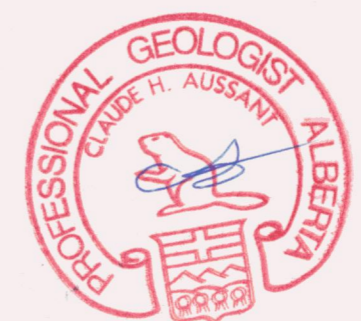


Trenches:  
 - - - - - Sampled interval  
 - - - - - Stripped area - not down to bedrock

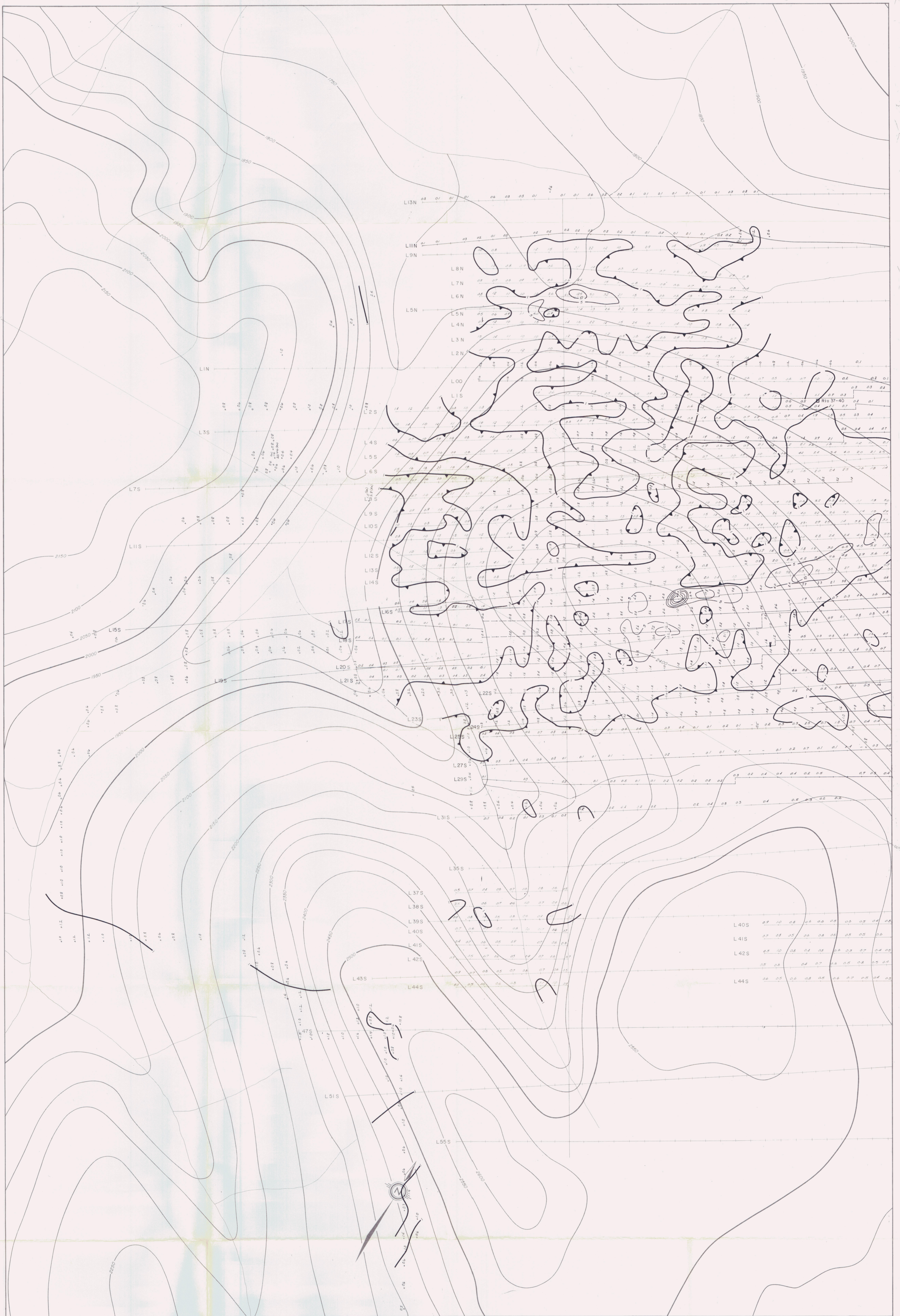
Contour intervals:  
 - - - - - 50 ppm  
 - - - - - 100 ppm  
 - - - - - 250 ppm  
 - - - - - 500 ppm  
 - - - - - 1000 ppm

1982 geochem sampling  
 - - - - - previous geochem sampling

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 PERMIT NUMBER  
 P 2399  
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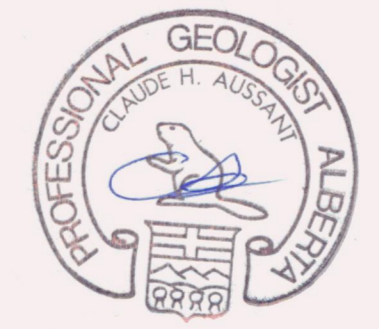
KENTON NATURAL RESOURCES CORPORATION  
 RUSTY SPRINGS, YUKON  
 ORMA HILL  
 SOIL GEOCHEMISTRY - Cu (ppm)  
 DATE OCTOBER, 1982 NTS 116K/8.9  
 PROJECT Y-81-1 MAPPED/DRAWN BY C. AUSSANT  
 SCALE 1:2500  
 TAIGA CONSULTANTS LTD MAP 10  
 REVISED: 1983



- Contour intervals
- 1 ppm
  - 5 ppm
  - 10 ppm
  - 20 ppm
  - 30 ppm
  - 40 ppm
  - 50 ppm

Previous geochem sampling  
1982 geochem sampling

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PROFESSIONAL GEOLOGISTS  
AND GEOPHYSICISTS  
OF ALBERTA  
PERMIT NUMBER  
P 2399  
TARVA  
CONSULTANTS LTD.



KENTON NATURAL RESOURCES CORPORATION

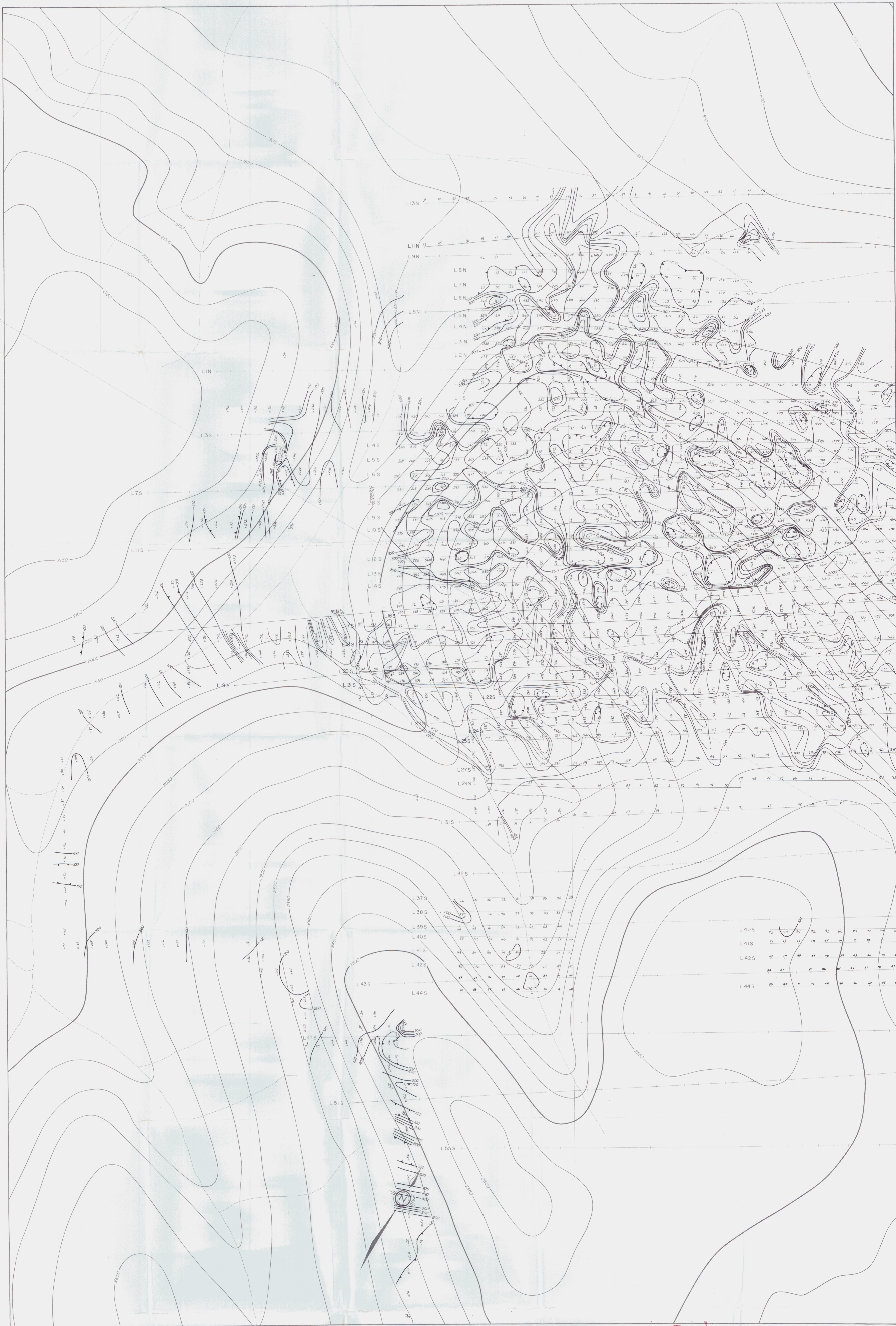
**RUSTY SPRINGS, YUKON**

**MIKE HILL**

**SOIL GEOCHEMISTRY - Ag (ppm)**

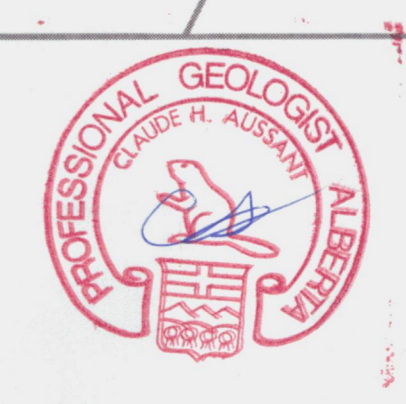
DATE OCTOBER, 1982	NTS 116K/8,9
PROJECT Y-B1-1	DRAWN BY C AUSSANT
SCALE 1:2500	METRES
TARVA CONSULTANTS LTD	MAP 11

REVISED: 1983



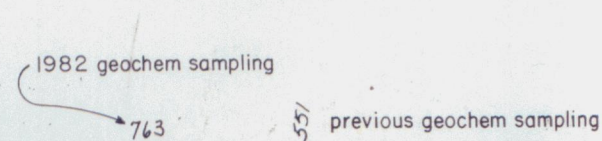
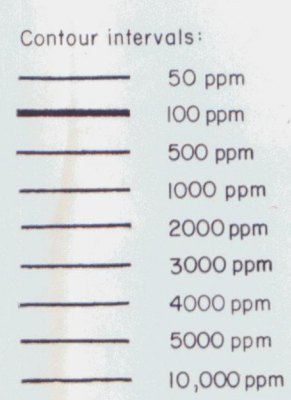
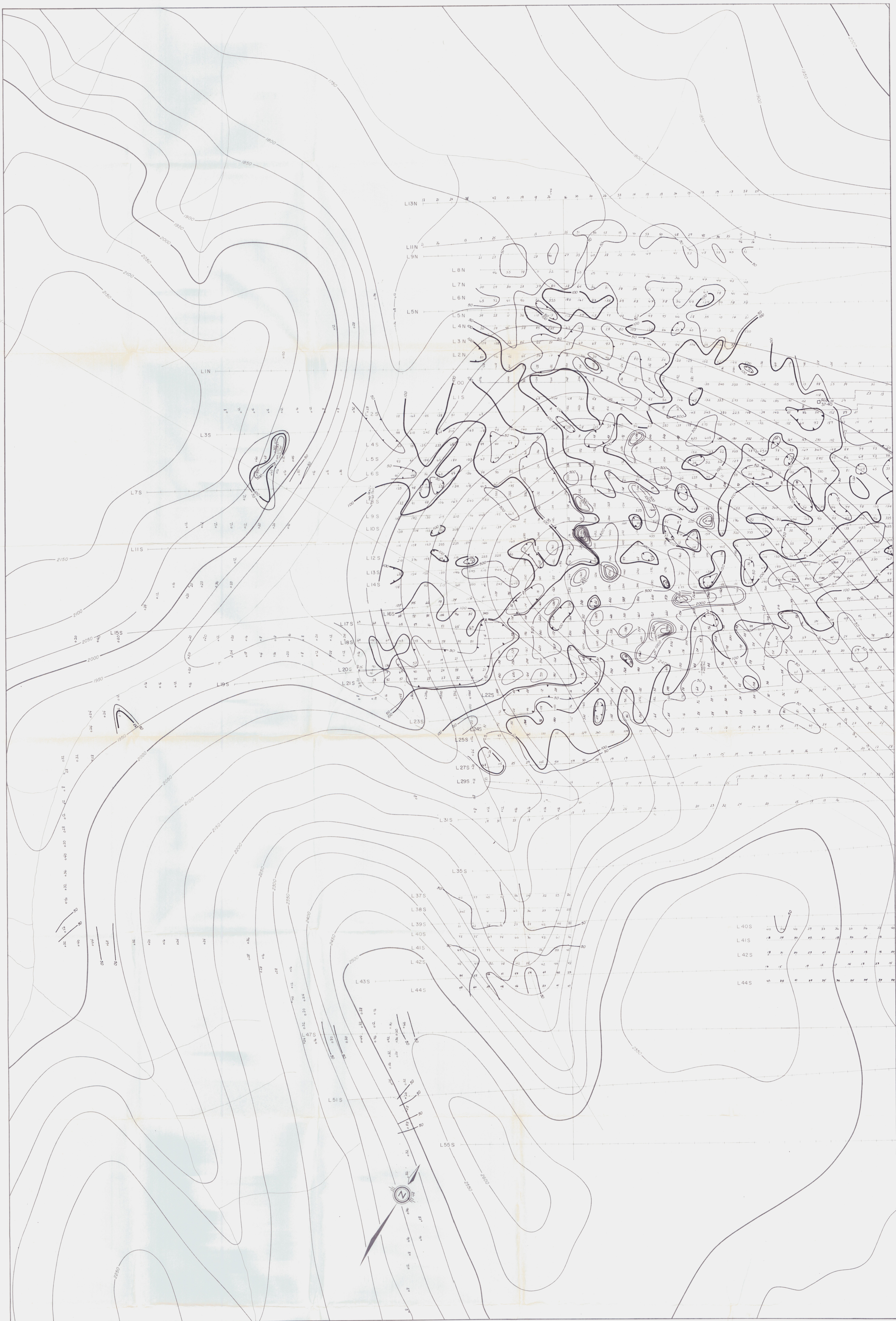
Contour Intervals  
 100 ppm  
 200 ppm  
 300 ppm  
 400 ppm  
 500 ppm  
 1000 ppm  
 5000 ppm

1982 geochem sampling  
 previous geochem sampling

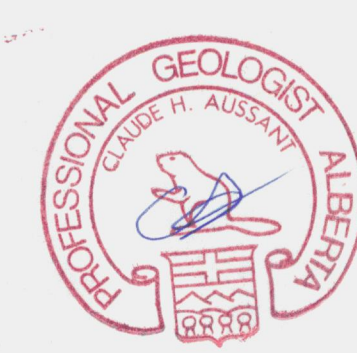


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 PERMIT NUMBER  
 P 2993  
 TAUSA  
 CONSULTANTS LTD.

KENTON NATURAL RESOURCES CORPORATION  
 RUSTY SPRINGS, YUKON  
 MIKE HILL  
 SOIL GEOCHEMISTRY - Zn (ppm)  
 DATE OCTOBER, 1982 NTS 116K/B,9  
 PROJECT Y-B1-1 MAPPED BY C. AUSSANT  
 SCALE 1:2500  
 TAUSA CONSULTANTS LTD. MAP 13  
 REVISED: 1983



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CONSULTANTS LTD.



KENTON NATURAL RESOURCES CORPORATION

**RUSTY SPRINGS, YUKON**

**MIKE HILL**

**SOIL GEOCHEMISTRY - Pb (ppm)**

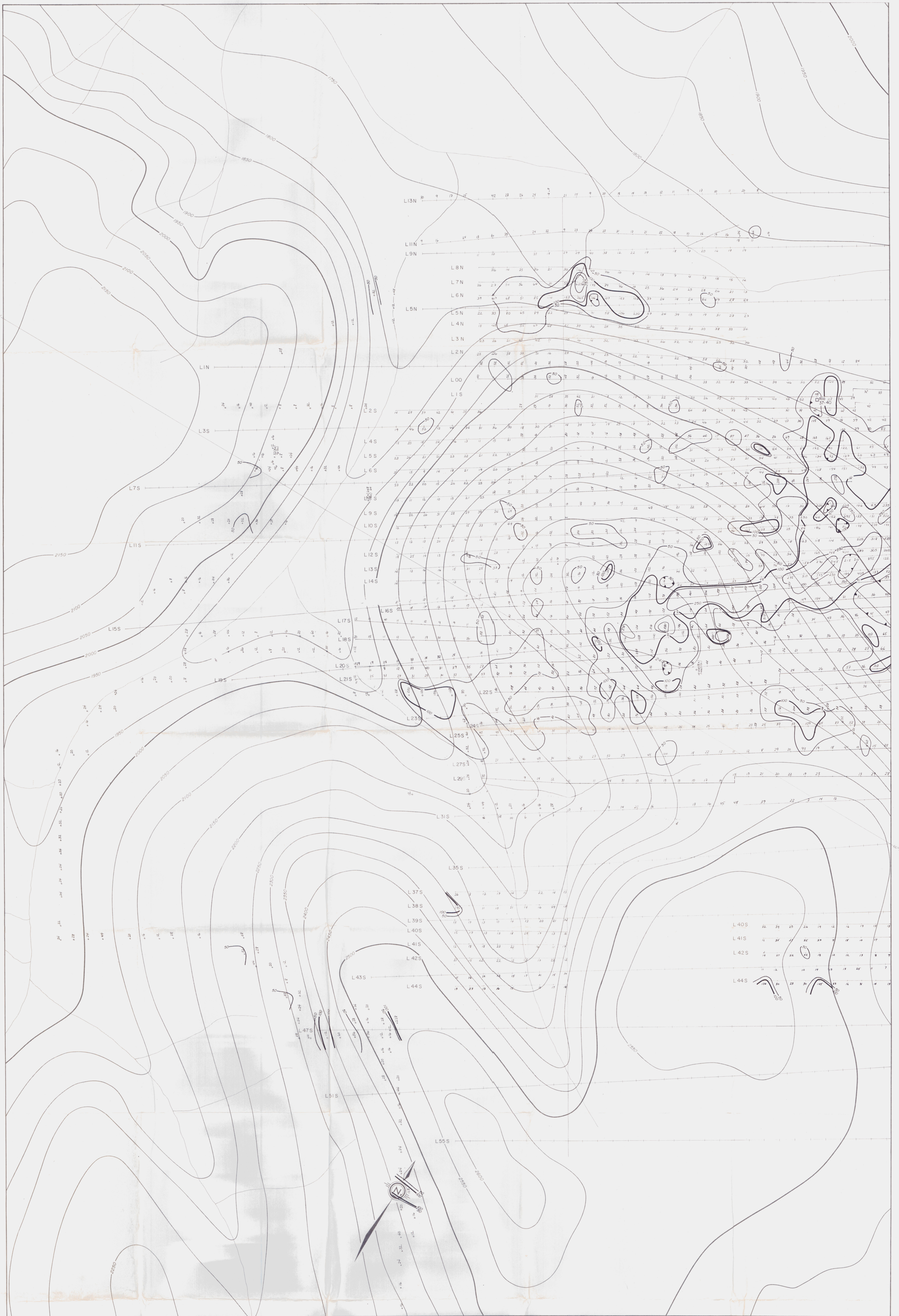
DATE: OCTOBER, 1982      NTS 116K/8,9

PROJECT Y-81-1      MAPPED BY C. AUSSANT

SCALE 1:2500

TAUGA CONSULTANTS LTD.      MAP 12

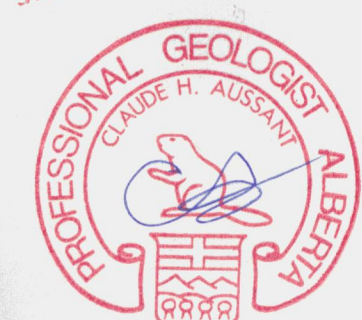
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Contour intervals  
 50 ppm  
 100 ppm  
 250 ppm  
 500 ppm  
 1000 ppm

1982 geochem sampling  
 1983 geochem sampling

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KENTON NATURAL RESOURCES CORPORATION  
 RUSTY SPRINGS, YUKON  
 MIKE HILL  
 SOIL GEOCHEMISTRY - Cu (ppm)  
 DATE OCTOBER, 1982 NTS 116K/8.9  
 PROJECT Y-BI-1 MAPPED BY C. AUSSANT  
 SCALE 1:2500  
 TAIGA CONSULTANTS LTD MAP 14  
 REVISED: 1983