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

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

prepared for

KENTON NATURAL RESOURCES CORPORATION

Fort Steele, British Columbia

by

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July — September 1983

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Certificate: J. W. Davis

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,

THE ASSOCIATION OF
PROFESSIONAL ENGINEERS,
GEOLOGISTS and GEOPHYSICISTS
OF ALBERTA
PERMIT NUMBER
P [illegible]
TAIGA
CONSULTANTS LTD.

GEOLOGICAL ASSOCIATION OF CANADA
J. W. DAVIS
FELLOW

PROFESSIONAL GEOLOGIST ALBERTA
JAMES W. DAVIS

James W. Davis, M.Sc., P.Geol., F.GAC

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.

THE ASSOCIATION OF
PROFESSIONAL ENGINEERS,
GEOLOGISTS and GEOPHYSICISTS
OF ALBERTA
PERMIT NUMBER
P 2399
TAIGA
CONSULTANTS LTD.

PROFESSIONAL GEOLOGIST ALBERTA
CLAUDE H. AUSSANT

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.

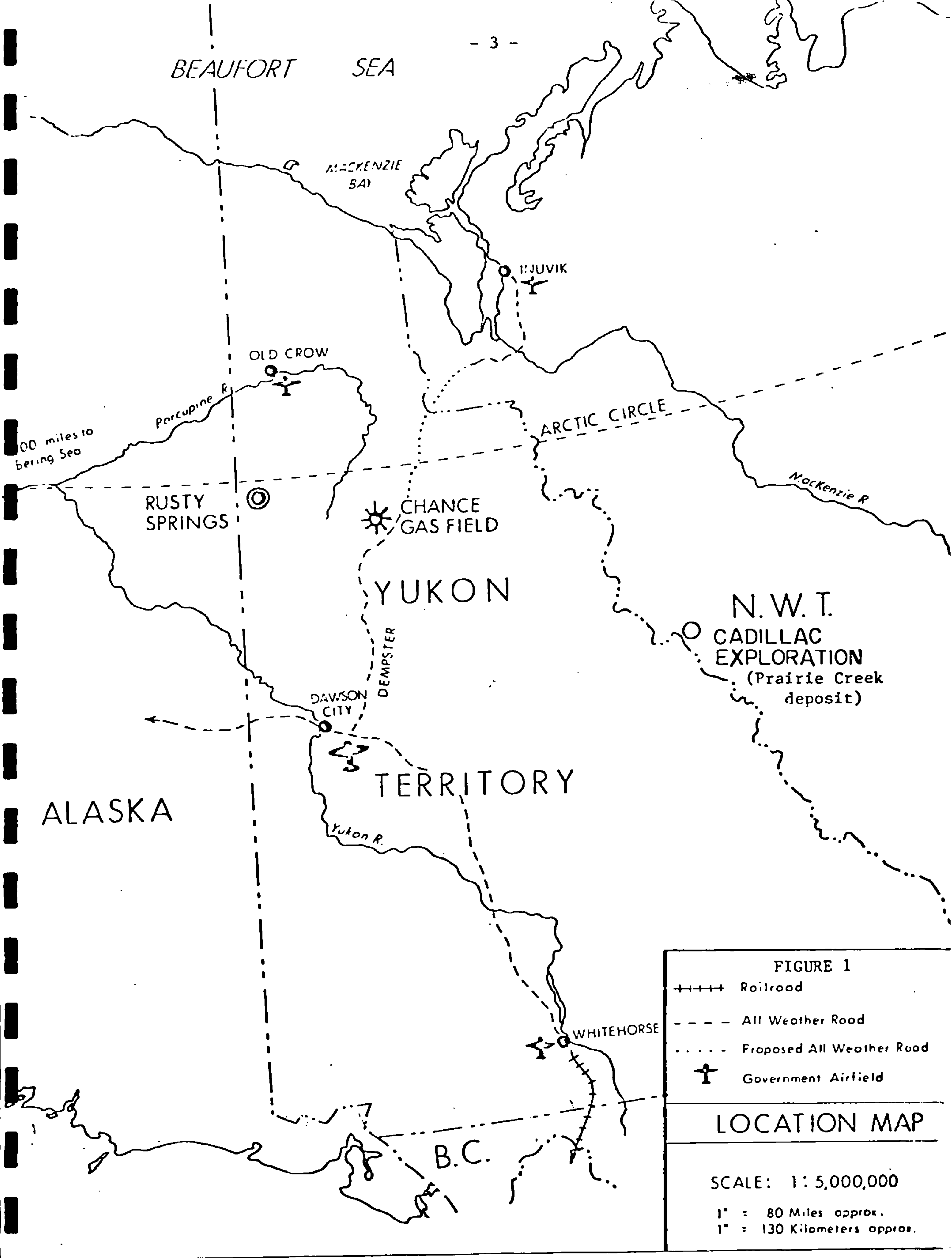
Coincidental with these surveys, a new 1400-foot airstrip was constructed on the top of Orma Hill in order to facilitate access to the property for future exploration programs. An access road was built to the top of Mike Hill in preparation for future drilling.

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^{o} North latitude and 140^{o} 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
Porcupine R.
00 miles to Bering Sea
ARCTIC CIRCLE
MacKenzie R
RUSTY SPRINGS
CHANCE GAS FIELD
YUKON
N.W.T.
CADILLAC EXPLORATION
(Prairie Creek deposit)
DEMPSTER
DAWSON CITY
TERRITORY
ALASKA
Yukon R.
WHITEHORSE
B.C.
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

Quartz Claims		Record Numbers	Expiry Dates
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

Quartz Claims	Record Numbers	Expiry Dates
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

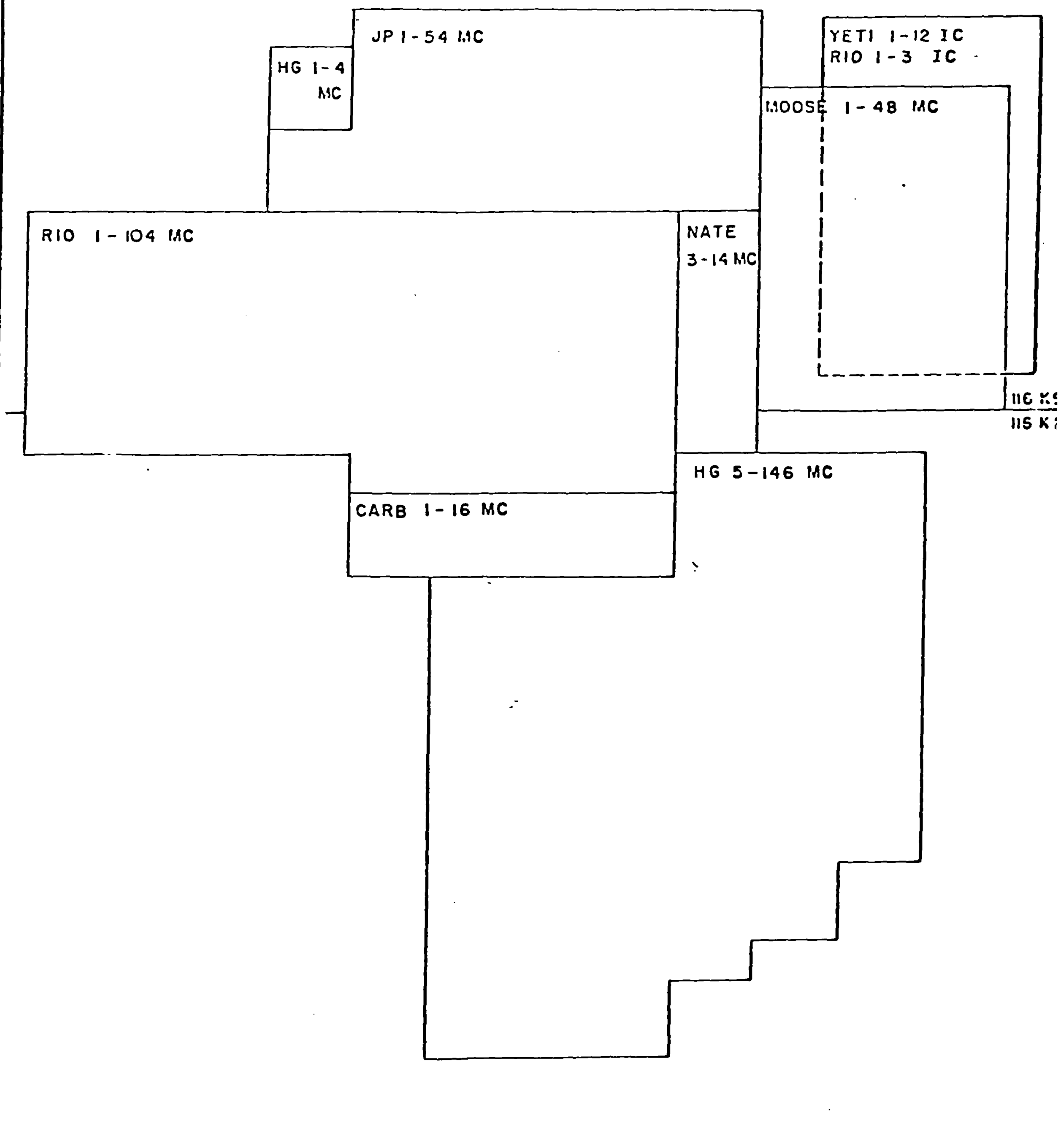


FIGURE 2

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.

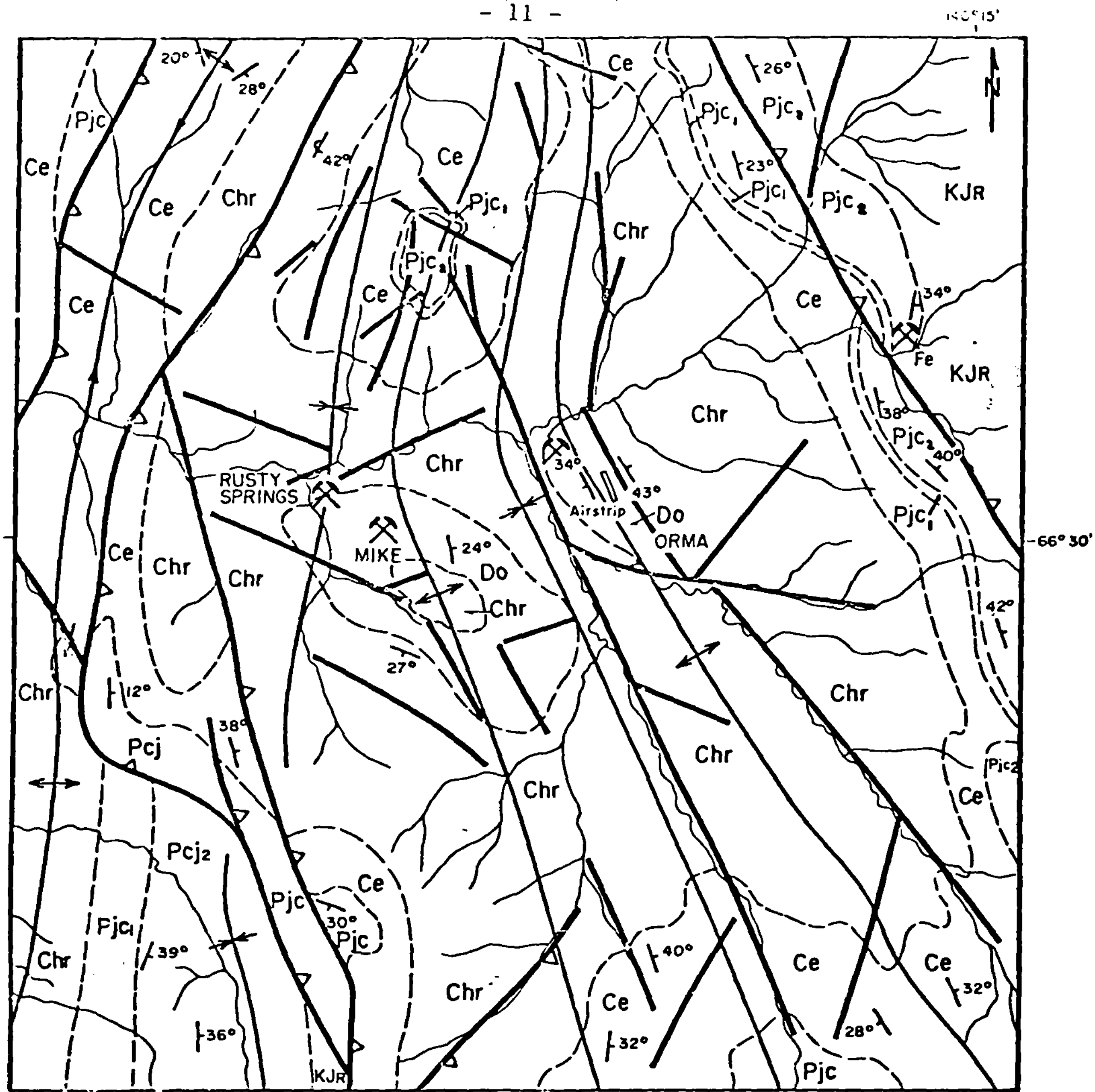
Disconformably overlying the Ogilvie Formation are the shale, siltstone, and minor limestone units which comprise the Carboniferous Hart River Formation. The Hart River is succeeded by the late Carboniferous Ettrain Formation which consists of shale and carbonate units.

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	15°	Strike and dip (estimated)
Pjc2	Jungle Cr. Fm. (shale unit) — Pjc Undifferentiated		Overturned dip
Pjc1	Jungle Cr. Fm. (carbonate unit)		Anticline
Ce	Ettrain 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 gulley 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 mineralization 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.

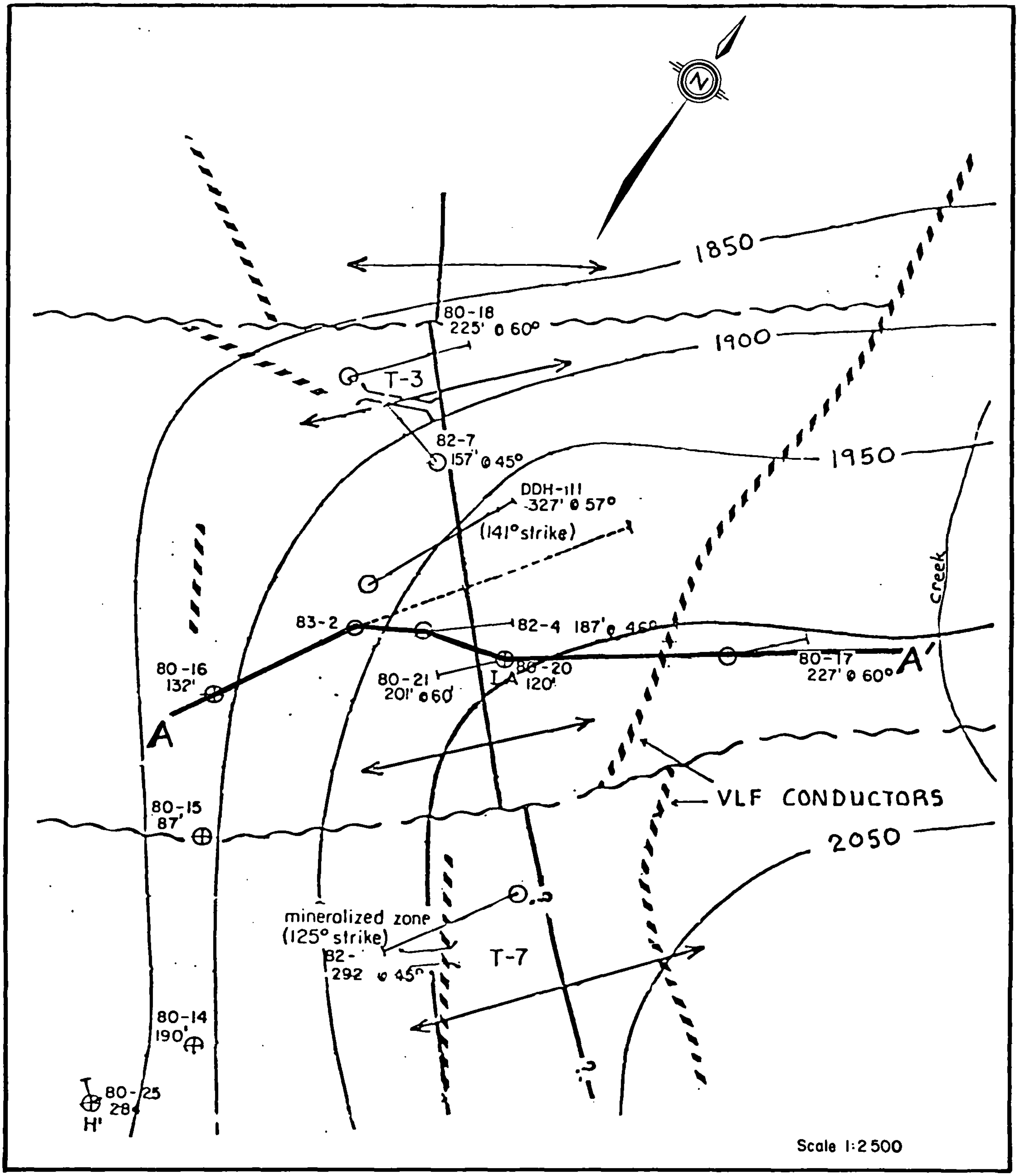
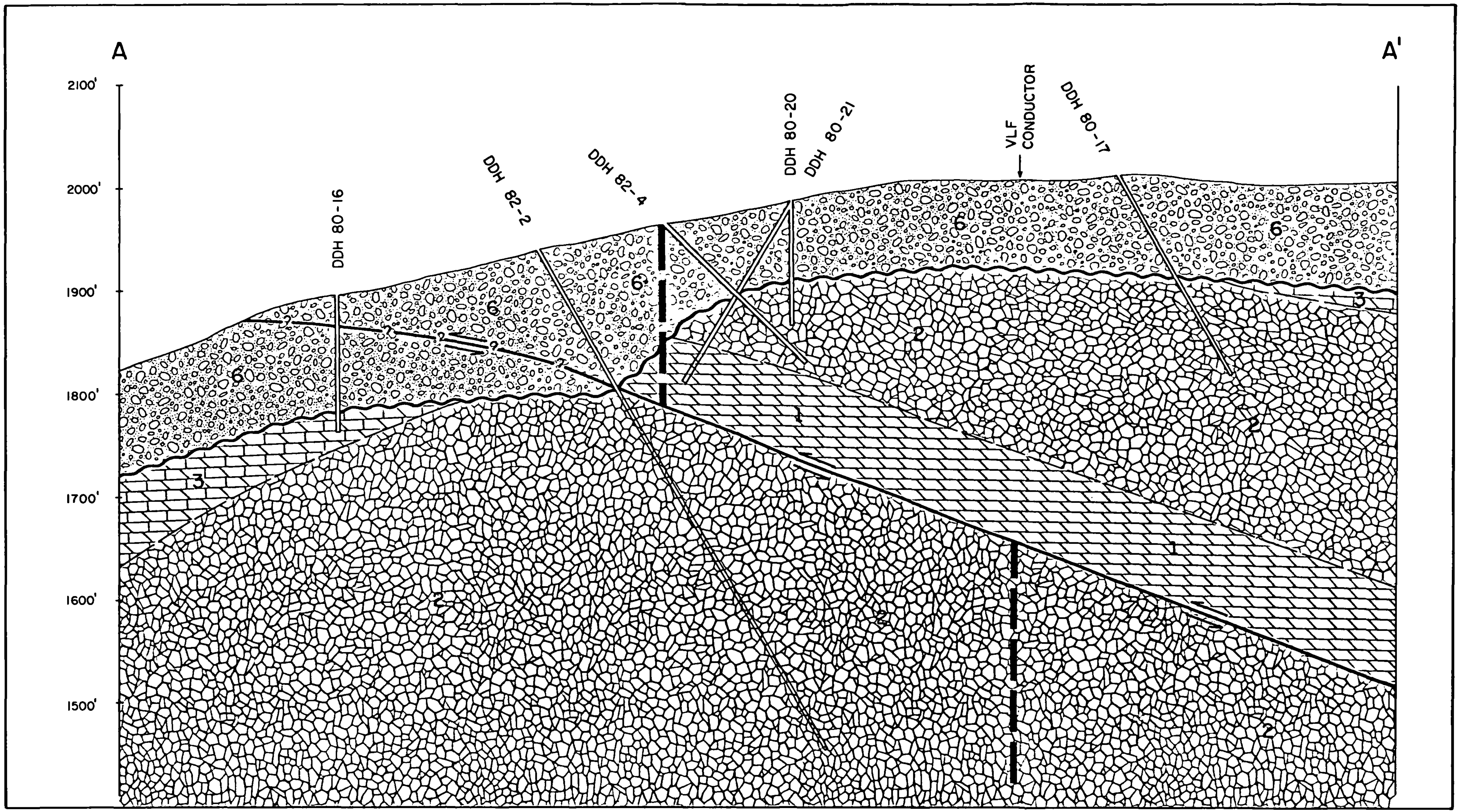


Figure 4

LOCATION OF CROSS-SECTION A - A'

ORMA HILL, RUSTY SPRINGS



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

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

2 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.

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

Unconformable base of regolith.

Contact

Fault

Vein

0 100 200
FEET

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.

APPENDIX 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
Field Personnel			
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	1,575.00	5,310.00
Field Accommodation			
Camp Food	3 men for 9 days @$25/man day	675.00	
Camp Equipment	3 men for 9 days @$5/ man day	135.00	810.00
Travel Expenses			
Travel time	1.5 days (4.5 man days) @$540/day	810.00	
Airfares, hotels, meals, etc.		1,271.70*	2,081.70
Equipment Rental			
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)	31.60*	14,025.85
Charter Transportation			
Trans North Turbo Air Ltd. (Whitehorse to Rusty Springs)			4,150.00*
Fuel			
Propane		241.50*	
Camp fuel/heating oil		60.00	
Turbo-B		405.00	
Diesel		1,417.50	2,124.00
Miscellaneous			
Disposable supplies		178.31	
Courier & freight		375.45	
Expediting charges		230.00	
Reproduction, maps		75.00	
Telephone charges		171.62	1,030.38*

Post-Field Compilation		
Report writing	625.00	
Drafting, secretarial	100.00	725.00
*Handling Charge on all third-party expenditures @12% of 7012.43		841.49
	TOTAL	$31,758.42

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
Field Personnel			
Cat Skinner	$25/hr. for 20 hrs.	500.00	
Helper	$165.00 for 2 days	330.00	
Cook	$175.00 for 2 days	350.00	1,180.00
Field Accommodation			
Camp food	3 men for 2 days @$25/man day	150.00	
Camp Equipment	3 men for 2 days $5/ man day	30.00	180.00
Travel Expenses			
Travel time	1.5 days (4.5 man days) @$540/day	810.00	
Airfares, hotels, meals, etc.		1,271.70*	2,081.70
Equipment Rental			
Radio-telehone (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)		31.60*	3,364.85
Charter Transportation			
Trans North Turbo Air Ltd.			
(Whitehorse to Rusty Springs)			4,150.00*
Fuel			
Propane		241.50*	
Camp fuel/heating oil		60.00	
Turbo-B		405.00	
Diesel		315.00	1,021.50
Miscellaneous			
Disposable supplies		178.31*	
Courier & freight		375.45*	
Expediting charges		230.00*	
Reproduction, maps		75.00*	
Telephone charges		171.62*	1030.38

Post-Field Compilation		
Report writing	625.00	
Drafting, secretarial	100.00	725.00
*Handling Charge on all third-party expenditures @12% of 7012.43		841.49
	TOTAL	$15,234.92

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

August 23 to September 16, 1983
1983 DRILL PROGRAM

Pre-Field Preparation			1,925.00
Field Personnel			
Project Geologist/Supervisor	18 days @$325 diem	5,850.00	
Assitant Geologist/Cook	18 days @$225 diem	4,050.00	9,900.00
Field Accommodation			
Camp Food 104 man days (including drill crew)	@$25/man day	2,600.00	
Camp equipment 104 man days (including drill crew)	@$5/man day	520.00	3,120.00
Travel Expenses			
Travel time		1,100.00	
Airfares, hotels, meals, etc.		1,962.85*	3,062.85
Equipment Rentals			
Truck		45.00	
Radio telephone		150.00	
Generator 750 w	18 days @$7 diem	126.00	
Water pump	18 days @$10 diem	180.00	
Chainsaw	18 days @$6 diem	108.00	
D-7 caterpillar	12 hrs. @150/hr.	1,800.00	2,409.00
Charter Transportation			
Mob-demob, service flights			15,111.45*
Drilling Contractor: E. Caron Drilling			
Hole 83-1 1050 ft., hole 83-2 550 ft.			
Total footage 1600 ft.			62,764.50
Fuel			
Diesel		6,300.00	
Fuel oil		630.00	
Camp fuel		56.40	
Turbo-B		1,215.00	
Propane		966.00	9,167.40

Miscellaneous		
Disposable supplies	1,107.70	
Courier & freight (Expediting)	1,641.02	
Reproduction, maps	333.99	
Telephone charges	276.88	3,359.59*
Post-Field Compilation		
Report writing, data compilation	4,675.00	
Drafting, secretarial	476.00	5,151.00
*Handling Charge on all third-party expenditures @12% of 20,433.89		2,452.07
	TOTAL	$ 118,422.86

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

TAIGA CONSULTANTS LTD.

DIAMOND DRILL LOG

SHEET 1 OF 6

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 L2+00S and 3+00W

TOTAL LENGTH: 1,050'

BEARING: 092°

ELEVATION: 1,940' ASL

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

INCLINATION AT COLLAR: 50°

CORE SIZE: NQ

DATE COLLARED: Aug. 30/83

DIP TEST(S): 500' 52°, 981' 53°

LOG SCALE: feet 1cm = 5'; metres 1cm = 1.52 m

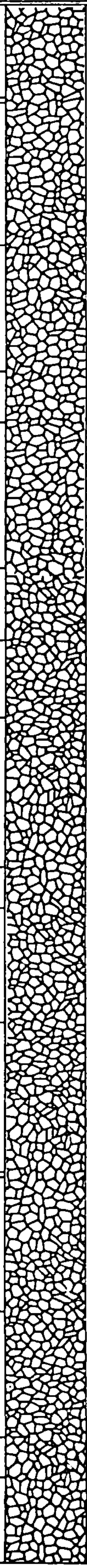
DATE COMPLETED: Sep. 7/83

DEPTH ft. / m.	LITHOLOGY	GEOLOGICAL DESCRIPTION	% REC.
0–10'		overburden (tricone drilling)	0
		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
50'		No Recovery (46' to 56')	0
60' / 20m		Dark grey, highly porous, and vuggy, siliceous Dolomite. Vugs and fractures are filled with limonite. Porosity approximately 20%. Low permeability.	<1
			50
70'		No Recovery (66' to 70')	0
		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
		as above, except porosity ~25%, rock is permeable	70
80'		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
BOX 2		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
		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
90'		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. V.poorly indurated, carbonaceous, and porosity is about 20%.	40
30m / 100'		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
		Regolith composed of clayey dol sand with minor intervals of well indurated dol breccia. Carbonaceous stringers up to 2 mm in width.	10
		Dolomite Breccia lt.grey to white with black carbonaceous breccia filling. Mod well indurated, finely crystalline and weakly carbonaceous breccia frags.	90
110'		Regolith of clayey dolomitic sand; v.poorly indurated, rusty brown, highly weathered. Porosity about 15%	5%
120' / BOX 3		Dolomite Breccia lt.to med.grey to cream in colour. Finely crystalline, mod well indurated, slightly carbonaceous. Cream to white fracture filling.	75
130' / 40m			
140'		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
150' / BOX 4			

DIAMOND DRILL HOLE No 83-1 SHEET 2 OF 6

DEPTH ft. m.	LITHOLOGY	GEOLOGICAL DESCRIPTION	% REC.
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'			
BOX 6 190' 60m 200'		as above	100
BOX 7 220'		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
BOX 8 230' 240'		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
BOX 9 250' 260' 80m		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
BOX 10 270' 280'		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
BOX 11 290' 90m 300'		As Above. 295', gradational contact with the Coarsely Crystalline Dolomite Breccia	100
BOX 12 310' 320'		Dolomite Breccia, Coarsely Crystalline: lt.to med.grey, with minor interstitial dark pyritic carbonaceous mudstone breccia filling. Moderately well indurated.	100
BOX 13 100m 330' 340'		As above, except this section contains two seams of pyrite (2 - 5 mm thick) at 332' and 326.2'	100
BOX 14		Dolomite Breccia, Coarsely Crystalline: lt. to med. grey, with minor pyritic mudstone breccia filling	100

DIAMOND DRILL HOLE No: 83-1 SHEET 3 OF 6



DEPTH ft. m.	GEOLOGICAL DESCRIPTION	% REC.
350' BOX 14 cont. 360'		
BOX 15 110m 370'	<u>Dolomite Breccia</u>, Coarsely Crystalline: as above	100
380' BOX 16 390' 120m	<u>Dolomite</u>, 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
400' BOX 17 410'	as above, except for a minor 2 - 4 mm quartz vein. Some vugs are lined with sparry dolomite.	80
420' BOX 18 130m 430'	as above	90
BOX 19 440' 450'	<u>Dolomite Breccia</u>, Coarsely Crystalline: med.to lt.grey; vuggy; porosity about 15%; minor limonite and minor pyritic mudstone breccia filling.	80
BOX 20 460' 140m 470'	<u>Dolomite Breccia</u>, 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
BOX 21 480' 490' 150m	<u>Dolomite Breccia</u>, 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
BOX 22 500'	as above 501.5': styolite noted	75
BOX 23 520' 160m 530'	as above 517.2': 2 cm calcite vein noted	100
BOX 24 540'	as above; 546.2': calcite vein (3.5 cm in width) noted Styolites noted at end of Box 24	100

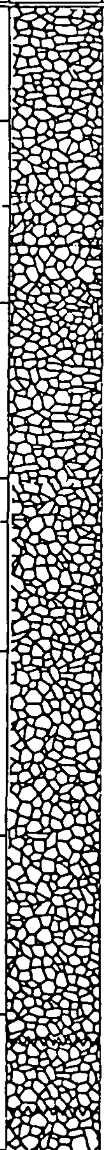
DIAMOND DRILL HOLE No · 83-1 SHEET 4 OF 6

DEPTH ft. m.	LITHOLOGY	GEOLOGICAL DESCRIPTION	% REC.
540' BOX 24 cont. 550'			
BOX 25 170m 560'		as above; except for several 1-2 mm calcite veins and dolomite has a more mottled appearance.	90
570' BOX 26 580'		as above; fewer calcite veins, and veins are more dolomitic	90
BOX 27 590' 180m 600'		as above	95
BOX 28 610' 620' 190m		as above; except more brecciated, with one 4 cm dolomite vein	100
BOX 29 630' 640'		as above; 631.5': styolites noted	100
BOX 30 650' 200m 660'		as above; calcite-dolomite vein at 663' which continued into Box 31	100
BOX 31 670' 680'		as above; calcite-dolomite vein continued from Box 30 for a total width of·45 cm, then 15' of extremely brecciated crystalline dolomite, then another calcite-dolomite vein 12 cm in width.	100
BOX 32 210m 690'		Dolomite Breccia, Coarsely Crystalline; vuggy and porous	80
BOX 33 710'		as above 715.8' - 719.8' dark grey argillaceous dolomite. core is weakly brecciated, medium crystalline Dolomite, carbonaceous and argillaceous	100
720' 220m BOX 34 730'		Dolomite Breccia, Medium to Coarsely Crystalline: continues after end of dark grey argillaceous dolomite at 719.8'. There is another interval of dark grey argillaceous dolomite at 720.5' that is 1.3' thick.	100

DIAMOND DRILL HOLE No: 83-1 SHEET 5 OF 6

DEPTH ft. m.	LITHOLOGY	GEOLOGICAL DESCRIPTION	% REC.
730' BOX 34 cont.			
BOX 35 740' 750' 230m		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
BOX 36 760' 770'		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
BOX 37 780' 240m 790'		Dolomite, brecciated, crystalline: appears to have been brecciated in situ with mudstone fracture filling, i.e., a highly fractured interval with minimal movement.	100
BOX 38 800' 810'		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
BOX 39 820' 250m 830'		weakly brecciated coarsely crystalline Dolomite	100
BOX 40 840'		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
850' BOX 41 260m 860'		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
870' BOX 42 880' 270m		Dolomite Breccia, Coarsely Crystalline: veined with white dolomite at 879.6' (28 cm wide)	100
BOX 43 890' 900'		Dolomite, weakly brecciated, coarsely crystalline, vuggy, grey to lt.grey; sparse infilling with dk. grey mudstone but more commonly filled with white dolomite.	100
BOX 44 910' 280m 920'		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

DIAMOND DRILL HOLE No : 83-1 SHEET 6 OF 6



DEPTH ft. m.	GEOLOGICAL DESCRIPTION	% REC.
930' BOX 45 940'	Dolomite Breccia, Coarsely Crystalline: intermittent white speckled mudstone clasts in dolomite breccia. 940': quartz-carbonate vein 5 cm thick	100
BOX 46 950' 290m 960'	as above 946': brecciated quartz-carbonate vein 10 cm thick 950'-954.5': white calcite-dolomite (75%:25%) vein consisting of coarsely crystalline euhedral to anhedral calcite and dolomite.	100
BOX 47 970'	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
BOX 48 300m 990'	as above 989': quartz-carbonate vein 5 mm thick	100
BOX 49 1000' 1010'	as above	100
BOX 50 1020' 1030'	as above 1022': calcite vein 5 cm wide 1026' and 1032': slightly finer crystalline dolomite, weakly brecciated, and silicified	100
BOX 51 1040' 1050' 320.02m	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

TAIGA CONSULTANTS LTD

DIAMOND DRILL LOG

SHEET 1 OF 3

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

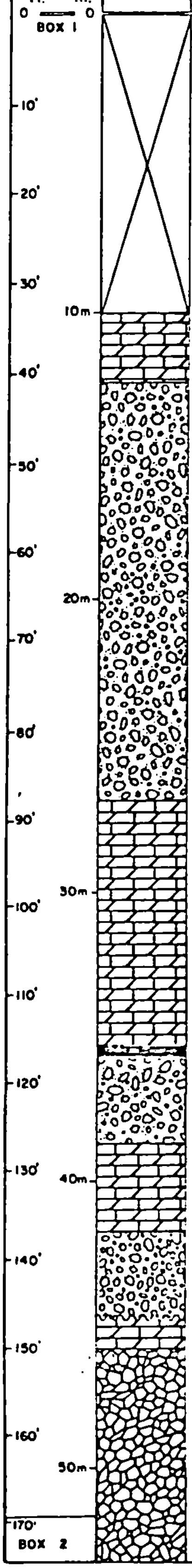
DATE COLLARED: Sept. 7/83

DIP TEST(S): 500' 60°

LOG SCALE: 1 cm = 5 feet

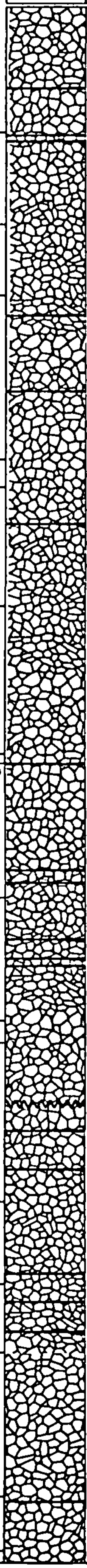
DATE COMPLETED: Sep. 11/83

DEPTH ft. m. | LITHOLOGY



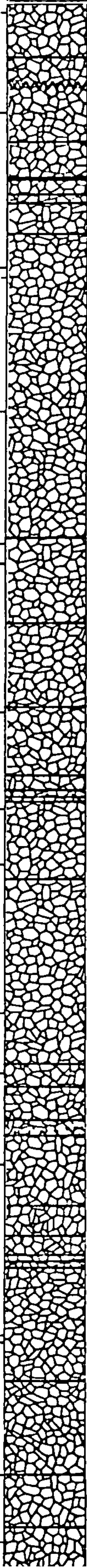
GEOLOGICAL DESCRIPTION	% REC
0'-33' regolith (No Recovery)	0
33'-41': black to dk.grey dolomite breccia. Vuggy, iron-stained in part, well indurated. Quartz veins up to 2 cm wide. Porosity 10-15%.	12
41'-58.5': recovered material consists of white bull quartz with minor dolomite rock fragments. Quartz is limonite stained.	6-7
58.5'-60': weathered and fragmented white quartz which is vuggy, limonite stained on fractures, brecciated, and filled with more quartz.	90
60'-88': quartz as above, with boxwork vuggy texture in part	10
88'-116': white bull quartz and dk.grey dolomite breccia with white dolomite breccia filling, vuggy and silicified in part. Moderately well indurated.	7
	10
116'-117': White bull quartz	
117'-127': No Recovery	0
127'-137': dk.grey finely crystalline dolomite breccia with porosity at about 5%. Moderately well indurated with white dolomite breccia filling.	[illegible]
137'-147': No Recovery	0
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.	[illegible]
167'-170': lt.grey to buff brown-grey coarsely crystalling dolomite breccia (<u>Middle Breccia Unit</u>). Poorly indurated and highly weathered with porosity at about 10%	15

DIAMOND DRILL HOLE No.: 83-2 SHEET 2 OF 3



DEPTH ft. m.	GEOLOGICAL DESCRIPTION	% REC.
170' BOX 2 cont. 180'	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
BOX 3 190' 60m 200'	As above	100
BOX 4 210' 220'	As above	100
BOX 5 230' 70m 240'	As above styolitic with minor quartz-carbonate veins and argillaceous, dolomitic mudstone interbeds. Moderately well indurated. Porosity about 10-15%.	100
BOX 6 250' 260'	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
BOX 7 80m 270'	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
BOX 8 290' 90m	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
BOX 9 300' 310'	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
BOX 10 320' 100m 330'	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
BOX 11 340' 350'	As above 341.4': minor 3 mm wide white dolomite vein. carbonaceous mudstone stringets. Styolitic in part with a number of thin irregular dk.grey argillaceous dolomite stringers.	100
BOX 12 360' 110m	Med. to dk.grey coarsely crystalline dolomite breccia. Styolitic and porous. 355.6', 368.2': calcite veins both 6 mm thick.	

DIAMOND DRILL HOLE No: 83-2 SHEET 3 OF 3



DEPTH ft. m.	GEOLOGICAL DESCRIPTION	% REC.
360' 110m 370'	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%	
BOX 13 380' 390'	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
120m BOX 14 400'	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
BOX 15 420' 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
430' BOX 16 440'	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.	
BOX 17 450' 140m 460'	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
BOX 18 470' 480'	468': 5 mm quartz-carbonate vein with disseminated pyrite adjacent to vein 472.5', 477', 482.2', 486.5': limonite seams	100
BOX 19 490' 150m 500'	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
BOX 20 510' 520' 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
BOX 21 530' 540'	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
BOX 22 550' 167.63m	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

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Samples Soil
Rusty Springs Project

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SAMPLE No.	ppm Cu	ppm Pb	ppm Zn	ppm Ag
"Soil Samples"				
L0+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

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.

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SAMPLE No.	ppm Cu	ppm Pb	ppm Zn	ppm 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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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
13+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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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+00S-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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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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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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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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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	Nil
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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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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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

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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

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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

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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 H2O
3) Add 10 ml HNO3 + 10 ml HCl + 5 ml HClO4
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 ½ 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: Fe_2O_3, Fe_3O_4, $CaCO_3$, $MgCO_3$ or 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°F. Temperature is turned up to 1900°F of 2000°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°F for 10 minutes. Lead buttons are then charged into the muffle which has a temperature of 1650°. The door is lowered and buttons are allowed to open. When all buttons are open the temperature is lowered to 1400° and as soon as the temperature has reached this point the recorder is set at 1350°F. The temperature shall be turned up to 1500° 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.

APPENDIX II

PHASE I

PROPOSED BUDGET 1984 PULSE-EM SURVEY

on the Rusty Springs Project, Yukon

PRE-FIELD			
Contract negotiations; logistics			$ 2,500
FIELD			
Contractor			
1 man plus equipment rental and field plotting	55 days @ $1200/diem	66,000	
Jens Hansen field	7 days @ $300/diem	2,100	68,100
Taiga Personnel			
2 geophysical assistants	55 days @ $175/diem	19,250	
Sr.Prospector/Geologist	55 days @ $240/diem	13,200	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	1,375	9,125
Mob and Demob			
Geophysical contractor (personnel and freight from Toronto to Inuvik)		5,000	
Taiga personnel from Calgary to Rusty Springs		10,000	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		5,825	13,925
			$ 165,000
CONTINGENCY ALLOWANCE			15,000
			$ 180,000

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
FIELD			
Diamond 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	
Catskinner (10 hrs/day)	42 days @ $ 45/hour	18,900	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	420	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)		7,500	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			10,370
			$ 295,000
CONTINGENCY ALLOWANCE			25,000
			$ 320,000

66° 30'

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
- E' E Cross section line

THE ASSOCIATION OF PROFESSIONAL ENGINEERS, GEOLOGISTS and GEOPHYSICISTS OF ALBERTA
PERMIT NUMBER
P 2399
TAIGA CONSULTANTS LTD.

PROFESSIONAL GEOLOGIST
CLAUDE H. AUSSANT
ALBERTA

Tertiary		6	Regolith: orange to rusty colouring, highly fragmented, intensely weathered, siliceous, strongly limonitic.
Carboniferous	Hart River Formation	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 mod well indurated and very well sorted.
		4	Chert, brecciated, carbonaceous
			unconformity
Devonian	Ogilvie Formation	3	Carbonaceous Dolomite Breccia: grey to buff, occ mottled purple and green weathering, med to dk grey dol, white dolomite infilling, occ pyritic mudstone seams, fetid, 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.

KENTON NATURAL RESOURCES CORPORATION

RUSTY SPRINGS, YUKON

ORMA HILL

GEOLOGY

DATE OCTOBER, 1982	NTS 116K/8,9
PROJECT Y-81-1	MAPPED/ DRAWN BY C. AUSSANT
SCALE 1:2500	0 25 50 75 100 METRES
TAIGA 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

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PERMIT NUMBER P 2399
TAIGA CONSULTANTS LTD.

PROFESSIONAL GEOLOGIST ALBERTA
CLAUDE H. AUSSANT

Tertiary		6	Regolith: orange to rusty colouring, highly fragmented, intensely weathered, siliceous, strongly limonitic.
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		4	Chert, brecciated, carbonaceous
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Devonian	Ogilvie Formation	3	Carbonaceous Dolomite Breccia: grey to buff, occ mottled purple and green weathering, med to dk grey dol, white dolomite infilling, occ pyritic mudstone seams, fetid, 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.

KENTON NATURAL RESOURCES CORPORATION

RUSTY SPRINGS, YUKON

MIKE HILL

GEOLOGY

OCTOBER, 1982 116K/8,9

Y-81-1 C. AUSSANT

1:2500

0 25 50 75 100
METRES

2

REVISED: 1983

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

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 Hoy, Tony Morris, Tim Termuende, Darryl Thompson

Profiles: 1cm = 10%
- in phase
- out of phase

PROFESSIONAL GEOLOGIST CLAUDE H. AUSSANT ALBERTA

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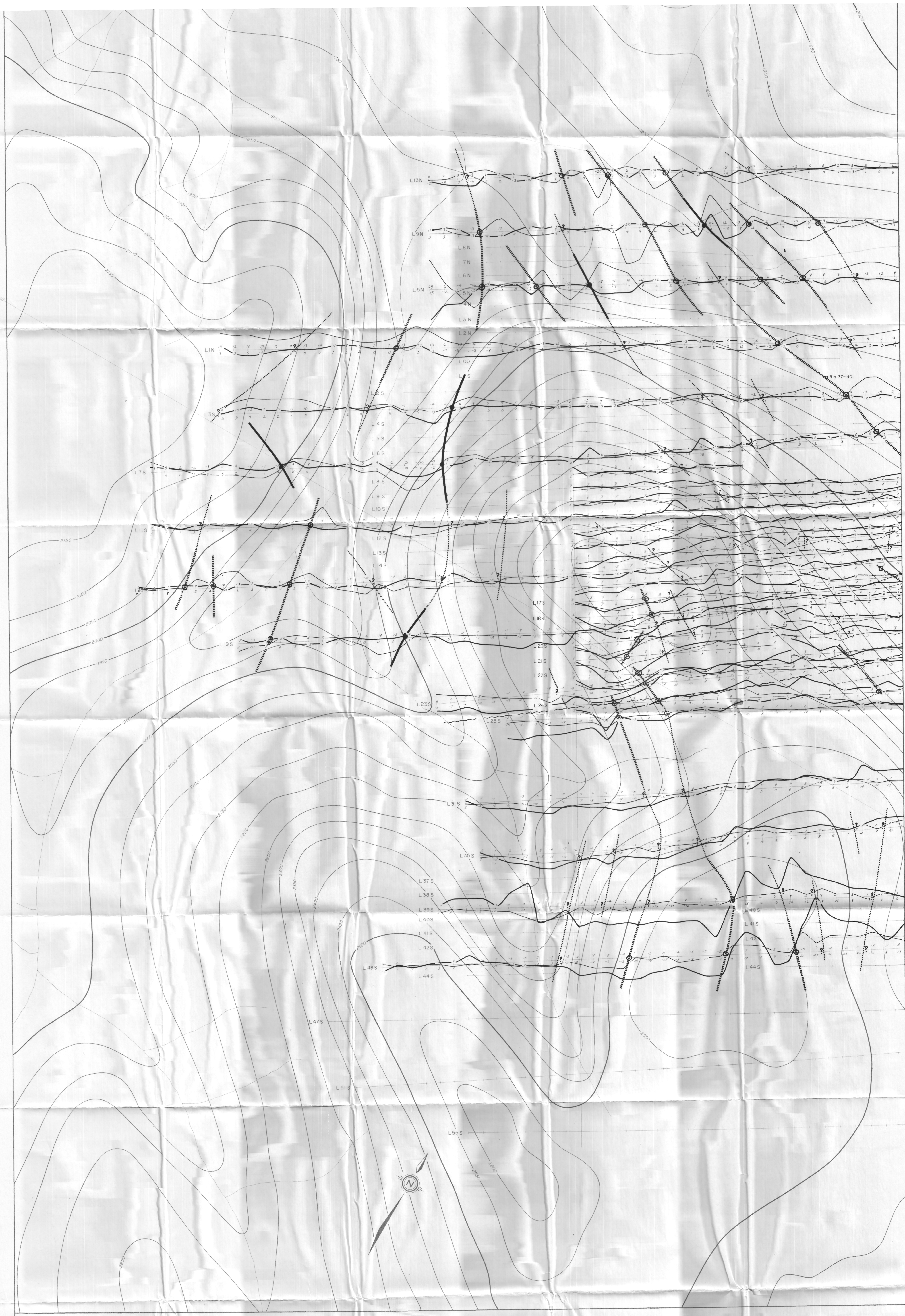
KENTON NATURAL RESOURCES CORPORATION	
RUSTY SPRINGS, YUKON ORMA HILL VLF-EM PROFILES	
DATE JULY 1982	NTS 116K/8,9
PROJECT Y-81-1	MAPPED/ DRAWN BY C. AUSSANT
SCALE 1:2500	0 25 50 75 100 METRES
TAIGA CONSULTANTS LTD	MAP 3

REVISED: 1983



● O ? 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: Don Hoy
Tony Morris
Tim Termuende
Darryl Thompson

Profiles: 1 cm = 10%
In phase
Out of phase

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PROFESSIONAL GEOLOGIST
CLAUDE H. AUSSANT
ALBERTA

KENTON NATURAL RESOURCES CORPORATION

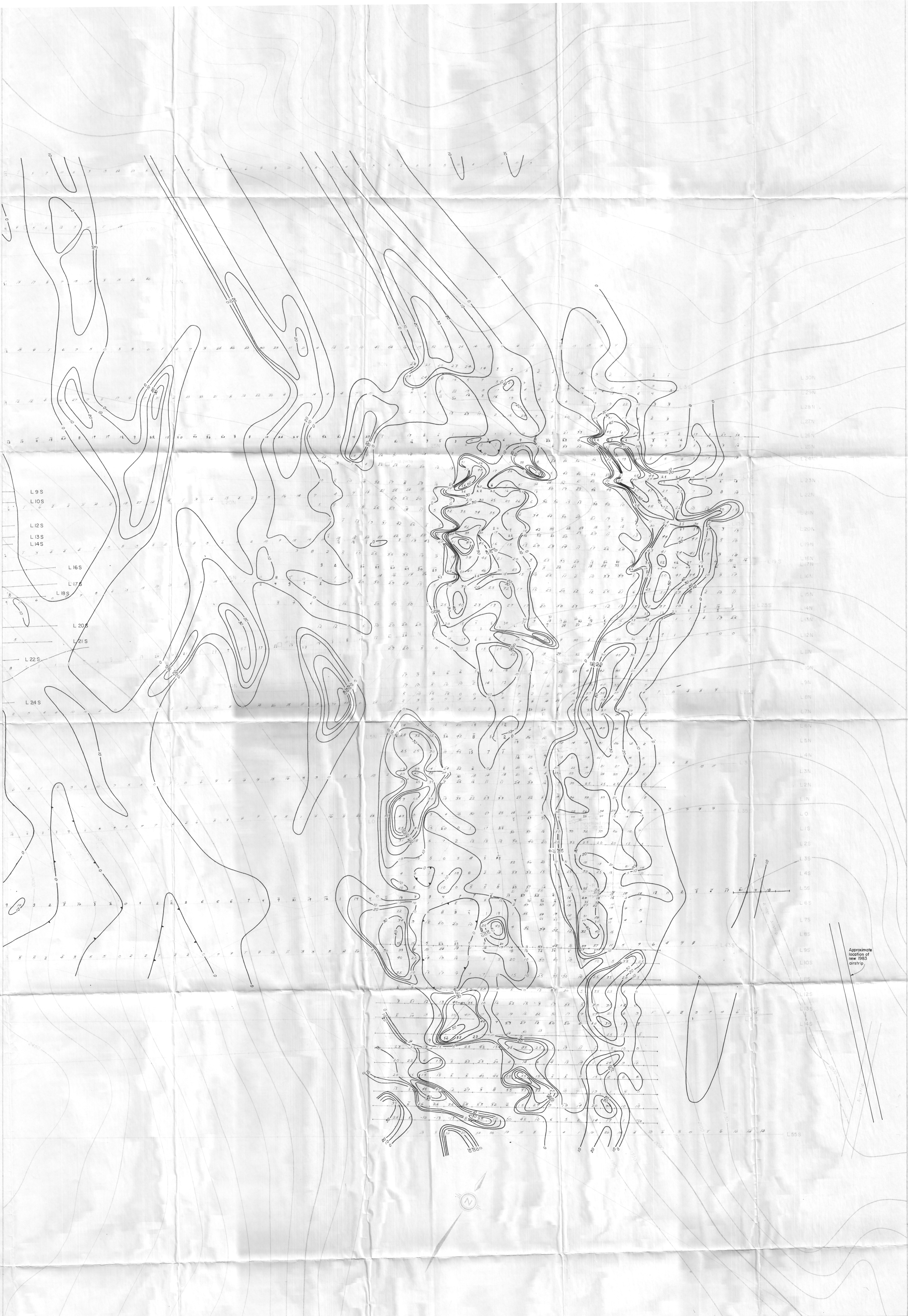
RUSTY SPRINGS, YUKON

MIKE HILL

VLF-EM PROFILES

DATE	NTS 116K/8,9
PROJECT Y-81-1	MAPPED/ DRAWN BY
SCALE 1:2500	0 25 50 75 100 METRES
TAIGA CONSULTANTS LTD	MAP 4

REVISED: 1983



Trenches:

Sampled interval

Stripped area – not down to bedrock

Contour interval: 10

PROFESSIONAL GEOLOGIST ALBERTA
CLAUDE H. AUSSANT

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PERMIT NUMBER P 2399
TAIGA CONSULTANTS LTD.

KENTON NATURAL RESOURCES CORPORATION	
RUSTY SPRINGS, YUKON ORMA HILL FRASER FILTERED VLF-EM	
DATE OCTOBER, 1982	NTS 116K/8,9
PROJECT Y-81-1	MAPPED/ DRAWN BY C. AUSSANT
SCALE 1:2500	0 25 50 75 100 METRES
TAIGA CONSULTANTS LTD	MAP 5

REVISED: 1983

Contour interval: 10

KENTON NATURAL RESOURCES CORPORATION

RUSTY SPRINGS, YUKON

MIKE HILL

FRASER FILTERED VLF-EM

DATE OCTOBER, 1982	NTS 116K/8,9
PROJECT Y-81-1	MAPPED/ DRAWN BY C. AUSSANT
SCALE 1:2500	0 25 50 75 100 METRES
TAIGA CONSULTANTS LTD	MAP 6

REVISED: 1983

Trenches:

Sampled interval

Stripped area - not down to bedrock

Contour intervals:

1 ppm
5 ppm
10 ppm
20 ppm
30 ppm
40 ppm
50 ppm

1982 geochem sampling

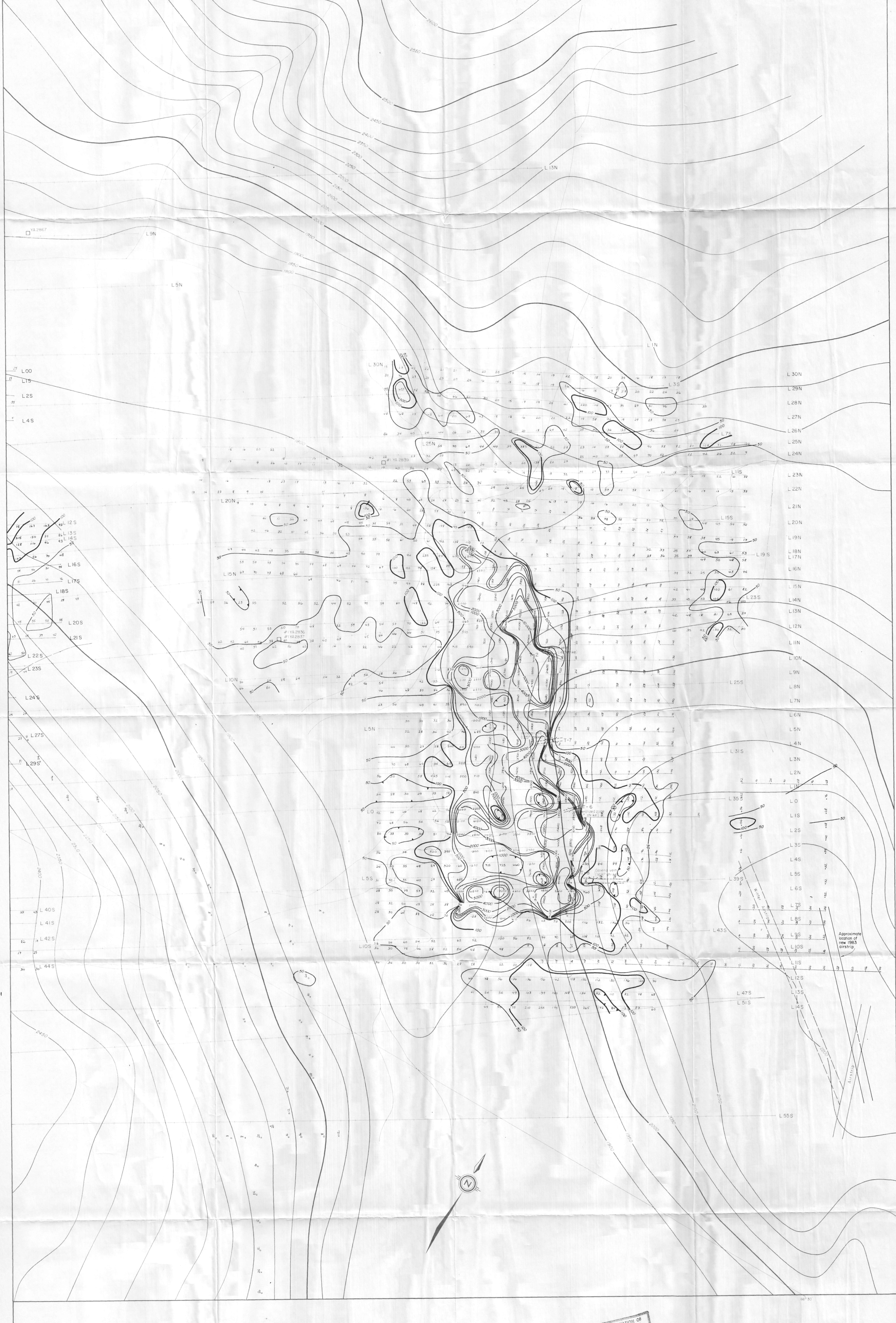
23.0 27.6 previous geochem sampling

KENTON NATURAL RESOURCES CORPORATION

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

DATE OCTOBER, 1982	NTS 116K/8,9
PROJECT Y-81-1	MAPPED/ DRAWN BY C. AUSSANT
SCALE 1:2500	0 25 50 75 100 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
3000ppm
4000 ppm
5000 ppm
10,000 ppm

1982 geochem sampling
6200
3140 previous geochem sampling

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PROFESSIONAL GEOLOGIST ALBERTA

KENTON NATURAL RESOURCES CORPORATION

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

DATE OCTOBER, 1982	NTS 116K/8,9
PROJECT Y-81-1	MAPPED/ DRAWN BY C. AUSSANT
SCALE 1:2500	0 25 50 75 100 METRES
TAIGA 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

PROFESSIONAL GEOLOGIST ALBERTA
CLAUDE H. AUSSANT

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KENTON NATURAL RESOURCES CORPORATION

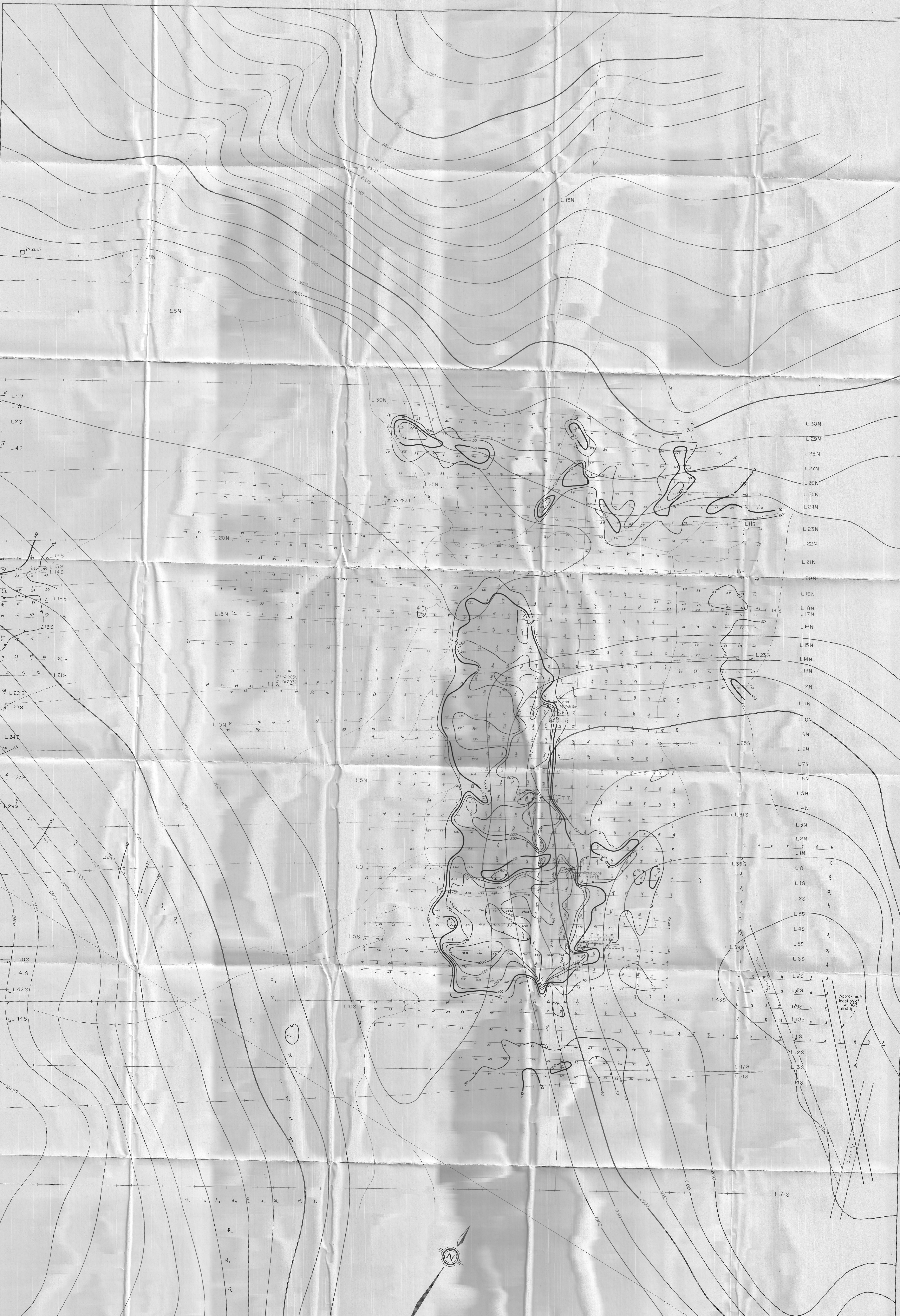
RUSTY SPRINGS, YUKON

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	0 25 50 75 100 METRES
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 1120

695 previous geochem sampling

PROFESSIONAL GEOLOGIST CLAUDE H. AUSSANT ALBERTA

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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	0 25 50 75 100 METRES
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
3.5
1982 geochem sampling
2.7

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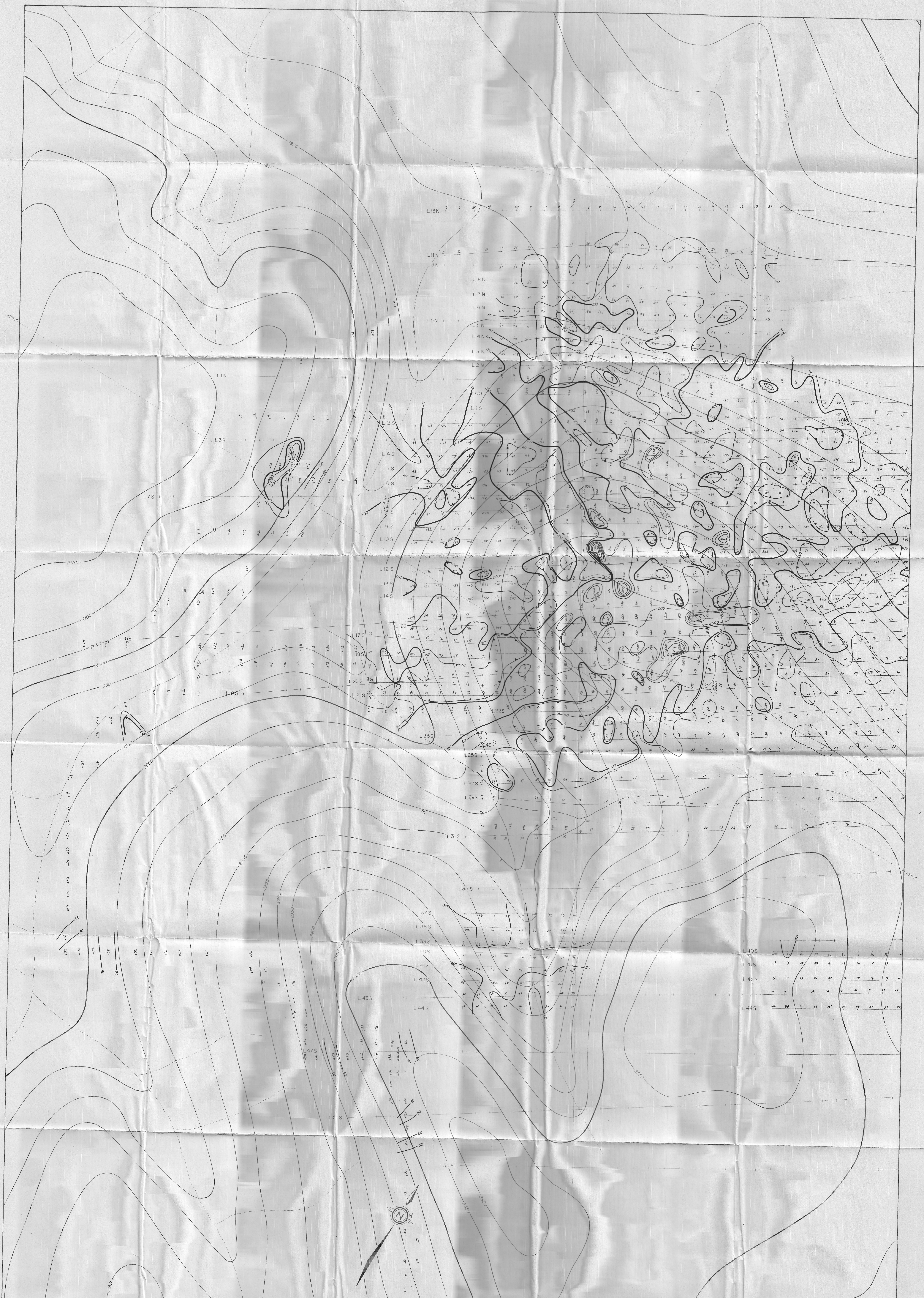
PROFESSIONAL GEOLOGIST ALBERTA
CLAUDE H. AUSSANT

KENTON NATURAL RESOURCES CORPORATION	
RUSTY SPRINGS, YUKON MIKE HILL SOIL GEOCHEMISTRY - Ag (ppm)	
DATE OCTOBER, 1982	NTS 116K/8,9
PROJECT Y-81-1	MAPPED/ DRAWN BY C. AUSSANT
SCALE 1:2500	0 25 50 75 100 METRES
TAIGA CONSULTANTS LTD	MAP 11

REVISED: 1983



Contour intervals:

- 50 ppm
- 100 ppm
- 500 ppm
- 1000 ppm
- 2000 ppm
- 3000 ppm
- 4000 ppm
- 5000 ppm
- 10,000 ppm

1982 geochem sampling 763

551 previous geochem sampling

PROFESSIONAL GEOLOGIST ROGER H. AUSSANT ALBERTA

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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/ DRAWN BY C. AUSSANT
SCALE 1:2500	0 25 50 75 100 METRES
TAIGA CONSULTANTS LTD	MAP 12

REVISED: 1983

Contour Intervals:

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

1982 geochem sampling

549

318 previous geochem sampling

PROFESSIONAL GEOLOGIST ALBERTA
CLAUDE H. AUSSANT

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KENTON NATURAL RESOURCES CORPORATION	
RUSTY SPRINGS, YUKON MIKE HILL SOIL GEOCHEMISTRY - Zn (ppm)	
DATE OCTOBER, 1982	NTS 116K/8,9
PROJECT Y-81-1	MAPPED/ DRAWN BY C. AUSSANT
SCALE 1:2500	0 25 50 75 100 METRES
TAIGA CONSULTANTS LTD	MAP 13

REVISED: 1983

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

1982 geochem sampling 316

401 previous geochem sampling

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PROFESSIONAL GEOLOGIST
CLAUDE H. AUSSANT
ALBERTA

KENTON NATURAL RESOURCES CORPORATION

RUSTY SPRINGS, YUKON
MIKE HILL
SOIL GEOCHEMISTRY - Cu (ppm)

DATE OCTOBER, 1982	NTS 116K/8,9
PROJECT Y-81-1	MAPPED/ DRAWN BY C. AUSSANT
SCALE 1:2500	0 25 50 75 100 METRES
TAIGA CONSULTANTS LTD	MAP 14

REVISED: 1983

GEOLOGICAL REPORT

86-028

on the

RUSTY SPRINGS PROPERTY

Yukon Territory

N.T.S. 116 K/8 and 116 K/9

Latitude 66°30' North

Longitude 140°25' West

prepared for

KENTON NATURAL RESOURCES CORPORATION

Fort Steele, B.C.

by

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

TAIGA CONSULTANTS LTD.
#100, 1300 - 8th Street S.W.
Calgary, Alberta T2R 1B2

JANUARY 1984

86-028

R.W. Termuende project management

ROBERT W. TERMUENDE, P.Geol.

November 29, 1986

Diamond Drilling 1986 Rusty Springs, Yukon Territory

The objective of the 1986 diamond drilling program at Rusty Springs was to test a previously untested First Priority geophysical anomaly located on Claim Rio 14 (Record No. YA 2839) and more specifically located on the enclosed Map 5 - Geophysical Interpretation.

E. Caron Diamond Drilling of Whitehorse, Yukon was contracted to carry out the drilling program on a turn-key basis.

Drilling of Hole #1 commenced on August 26, 1986 and was completed to 1000 feet (3048 meters) on September 1, 1986. The hole was drilled 195 degrees azimuth with an initial inclination of 45 degrees. Overburden was 0 - 22 feet.

Hole #2 commenced on September 1, 1986 and was completed to 326 feet (994 meters) on September 5, 1986. This hole was drilled with NQ at an azimuth of 015 degrees with an initial inclination of 45 degrees. Overburden was 0 - 20 feet.
A description of the core is attached, and the core is located at E. Caron Diamond Drilling Ltd at 7 Roundel Road in Whitehorse. Instructions have been given to E. Caron Drilling to transport the core from Hole #1 to the Exploration & Geological Services Division, 200 Range Road, Whitehorse.

A geological report on the property prepared in January, 1984 by Taiga Consultants is enclosed. This report describes prior work done on the claims.

R. W. Termuende, P. Geol.

MEMBER
Canadian Institute of Mining and Metallurgy
Canadian Society of Petroleum Geologists
Association of Professional Engineers, Geologists and Geophysicists of Alberta

KENTON NATURAL RESOURCES CORP.

Coord.:

Elev.:
Core Size: ~~BX~~ NQ .

Length: 1000'
Azimuth: 195°
Dip: -45°

Project: Diamond Drill Program
Location: Rusty Springs, Yukon
Purpose: Exploration

Hole No.: 86-1
Date: September 26,1986
Logged By: J.A. Chamberlain
(at Whitehorse)

0	22	CASING	
22	30	BROKEN CORE (Box # 1)	Dark grey-black shaley dolomite mixed with blk silty gouge-like material.
30	34	DOLOMITE	Med grey, massive.
34	35	SHEAR	Blk silty, mud-like, possibly in-filling from 22' to 30'.
35	68	DOLOMITE	Med grey, massive w white, irreg calcite strs.
68	69	"VEIN"	White calcite over 4" with broken core.
69	77.5	DOLOMITE	
77.5	89	SHEAR ZONE (?)	Broken core, mixed with brown to orange limonitic "gouge". Solution cavities in dol are filled or partly filled with limonite. Soft, incompetent section. No attitudes determined. Few carbon-coated slips.
89	190	DOLOMITE	Med to dk grey, mainly massive. Poss local bedding at 45° to c.a. but becoming quickly massive or brecciated (healed). 186-190 Broken core with limonite-coated tract.
190	193	SHEAR (?)	Possible shear structure filled with black shaley material containing high organics. Quite plastic and soft.
193	222	DOLOMITE	As 89 to 190.
222	234	SHEAR(?)	Much broken core, not due to drilling. Hematite coated fractures. Section is hematite stained, probably due to high permeability of rock which is locally a sandy siltstone.

Hole No.: 86-1

234	405	DOLOMITIC LIMESTONE	Med grey dol, mainly massive but local bedding suggested at 50° to c.a. Few grains possible shalerite as discontinuous strs and blebs. 253 to 255 but not associated with any signif alteration or structure. 287' 6" of bleached, vuggy siliceous mat'l. No sulps. 375' 4" as at 287'.	
405	406	SHALE	Blk, limey. Reliable attitude of bedding 70° to c.a. Pale grey, siliceous locally. Also graphitic slips in places gen'y high angle to c.a. However, bedding attitudes appear variable because at 418' bedding is only 20° to c.a. in this more limey-siliceous section.	
437	438	SHEAR	One foot of broken dol with grey, clayey gouge mat'l at 60° to c.a.	
438	475	DOLOMITE	Med grey, massive. 451' broken core, shattered, but no alt'n. 451 to 460 numerous fractures all at 30° to c.a. possibly bedding plane fractures (?).	
475	487	DOLOMITE, (HEM.)	Red-grey blotching from 30 to 50% hematite, very fine, contorted and patchy. Rock remains fairly hard and competent, with hematite well heeled (or primary) in this unfractured rock.	
487	527	DOLOMITE	Grey, streaked from silt or clay impurities. Bedding clear at 45° to c.a. near start but flattening to 0° to c.a. at around 500'.	
527	535	QUARTZITE	Pale grey, gritty, well bedded at 45° to c.a. Limey in places.	
535	565	DOLOMITE	Impure, grey blk, shaley with sheared zone with graphitic mat'l at 568'. Fine pyrite at 535 to 536.5 and over 4" at 545'.	core box 29
565	576	SHALE	Blk to grey blk, locally limey, f.g. bedding variable, with local shearing and development of graphite (or shiney carbonaceous material) along curving fracture surfaces.	

KENTON NATURAL RESOURCES CORP.

Hole No.: 86-1

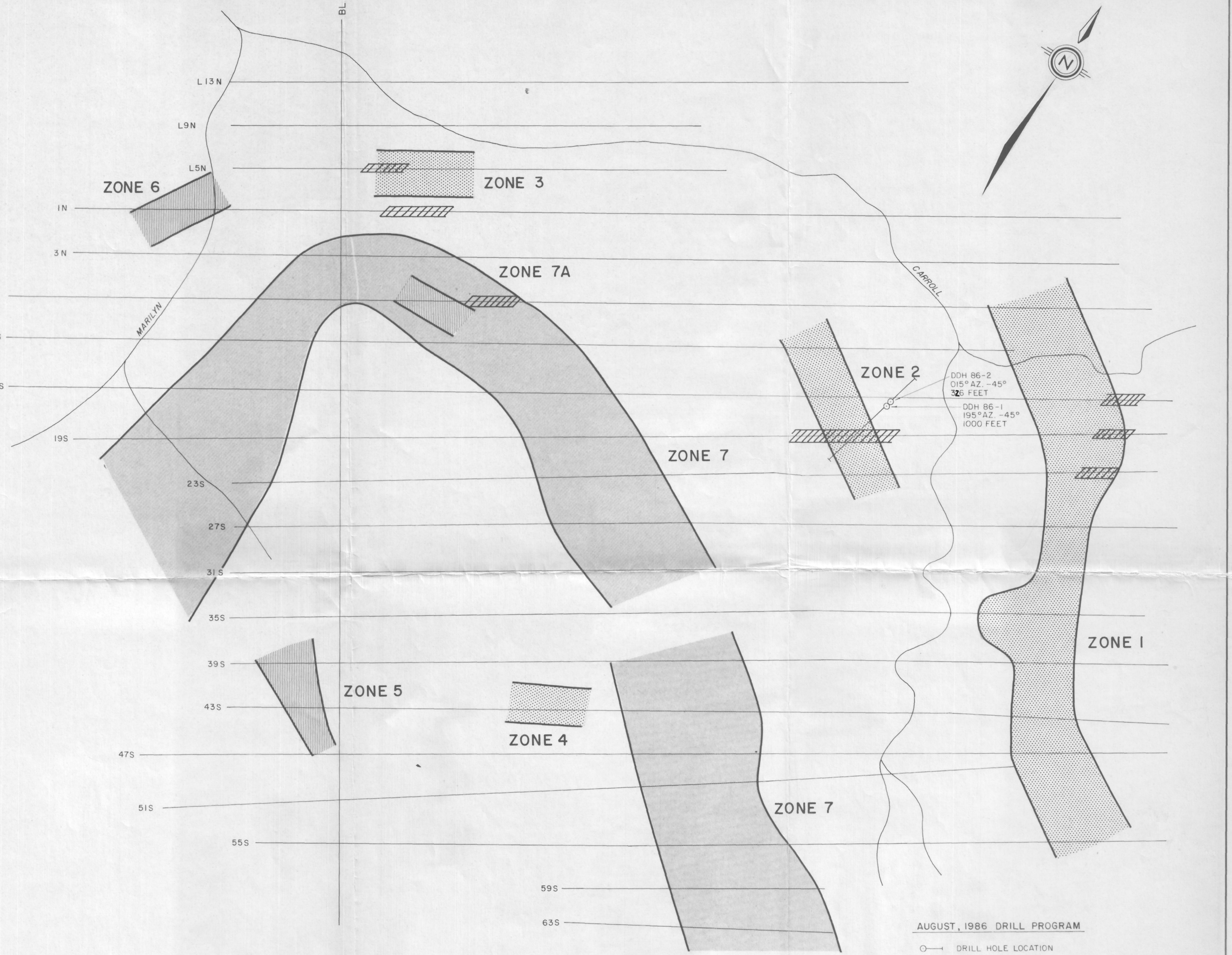
576	592	DOLOMITE	Grey, massive.
592	593.5	STRUCTURE	Blk pulverized shaley "gouge", now partly recemented from drying. Much carbonaceous material along with assortment of fine rock fragments.
593.5	619	LIMESTONE	Pale grey siliceous, with abundant fine py from 596 to 608, otherwise clean. Core quite broken up. Pyrite section is in Box 33 if sampling needed.
619	706	DOLOMITE	Siliceous, pale grey, clean, competent. 689-691 vuggy, porous ls. Monotenous section.
706	708	LIMESTONE	Impure, streaked with blk bands at high angle to c.a.
708	751	DOLOMITE	Dolomitic limestone, massive.
751	753	SHALE	Blk fg with 4 to 6" of massive sulps.
753	1000	DOLOMITE	Siliceous, clean, bedding locally clear @ 45^{o} to c.a. 772-788 Vuggy from solution cavities (minor). Occasional similar vuggy, siliceous sections to end of hole. Most rock siliceous dolomite, pale grey, massive. No mineralization or significant structures.

Overall core recovery excellent.

KENTON NATURAL RESOURCES CORP.

Coord.:						**Hole No.:**	86-2
		Length:	326'	**Project:**	Diamond Drill Program	**Date:**	September 26,1986
Elev.:	NQ	**Azimuth:**	015°	**Location:**	Rusty Springs, Yukon	**Logged By:**	J.A. Chamberlain
Core Size:	BX	**Dip:**	-45°	**Purpose:**	Exploration		(at Whitehorse)

0	20	CASING	
20	32	QUARTZITE	Impure, grey-white, dolomitic. Clay gouge @ 25'. Vague bedding 80° to c.a.
32	39	SHEAR (?) Box #1	Orange-brn "clay", plastic w local fragments fresh dol.
39	72	DOLOMITE	Pale grey, massive. White carbonate threads. Local crinoid stems (?). Some dolomitic limestone.
72	74	BROKEN CORE	White calcite, grey dolomite. Possible structure, but no gouge or alteration.
74	93	DOLOMITE	Grey, blotchy. Limey sections. Fragmental textures, massive, no bedding.
93	93.6	"VEIN"	White qtz with blk X ls possible sphalerite. Apparent dip 80° to c.a.
93.6	275	DOLOMITE	Grey, massive erratic white carb stringers to 1/4" wide. Clean. No important structures. Local hematite-coated fractures. Possible bedding @ 45° to c.a. in places, but gen'y massive. 212' ground core. 236' 1" veinlet carrying possible sphal in white calcite, dipping @ 35° to c.a. 256' good bedding @ 50° to c.a. 1" wide shaley beds.
275	276	SHEAR (?)	Broken core, brown limonitic gouge. Dip 50° to c.a. Probably represents fault movement.
276	326	DOLOMITE	Grey, geny massive. Erratic strgs & patches white calcite.
E.O.H.		(Box # 17)	310' Hematite coated fractures.



LEGEND

Gravity Survey
- 1st Priority Zone
- 2nd Priority Zone
- Higher Density, Low Priority

Induced Polarization Survey
- Possibly Significant Induced Polarization Responses

NOTE: Zone outlines are based on the gravity data.

This map is an overlay to the other geophysical maps accompaning the AGAR and Associates report, September 1979.

Interpretation by Jens Hansen, Geophysicist.

KENTON NATURAL RESOURCES	
RUSTY SPRINGS AREA	
MAP 5 - GEOPHYSICAL INTERPRETATION	NTS 116K/8,9
PROJECT Y-81-1	APRIL 15, 1982
SCALE 1:6000	0 60 120 180 240 300 METRES
TAIGA CONSULTANTS LTD.	

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INTRODUCTION

In April 1982, Kenton Natural Resources Corporation commissioned Taiga Consultants Ltd. to review all of the exploration which had been accomplished over this property, to initiate a program of exploration, and to prepare a Geological Report.

Mr. James W. Davis, M.Sc., P.Geol., F.GAC, supervised a program of geological mapping, geochemical sampling, geophysical surveying, and trenching on the property which was accomplished during the period from June 14 to July 8, 1982. From August 13 to September 15, 1982, Mr. Aussant supervised a diamond drilling program on the property.

In June 1983, additional geophysical surveying and geochemical sampling were undertaken to detail VLF-EM conductors and geochemical zones previously outlined. From August 30 to September 12, 1983, Mr. Davis supervised additional diamond drilling on the property.

In October 1983, Taiga Consultants was commissioned by Kenton Natural Resources to prepare a geological report for inclusion in a prospectus of Statement of Material Facts.

These reports, which were prepared by Taiga Consultants and submitted to Kenton, provide background data and detailed maps which will augment the report being submitted herewith.

PROPERTY AND TITLE

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

A thorough search of the claim records on file in the offices of Rio Alto Exploration Ltd. in Calgary was performed by R. Y. Heard, P.Eng., in March 1980. This included the original claim 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 1983 or later.

The attached map (Appendix "A") shows the outline of the Rusty Springs property. The tabulation (Appendix "B") provides data on each of the claims: name, record number, and date of expiry.

LOCATION AND ACCESS

The Rusty Springs Ag/Pb/Zn/Cu prospect is situated in the northwestern part of the Yukon at approximately $66^{o}30'$ North latitude and $140^{o}25'$ West longitude in N.T.S. 116 K/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. Dawson City is 282 km south of the property. The first of two airstrips on the property is approximately 400 metres (1200 feet) long, suitable for winter use only; the second is approximately 245 metres (800 feet) long, suitable in any season. Both strips can accommodate aircraft up to the size of a Twin Otter. Road access has been previously developed for winter haulage from Mile 123 (Ogilvie Crossing) on the Dempster Highway over a distance of 193 km. 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.

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 recoveries 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 Explorations Ltd. of Calgary, Alberta.

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

In 1980, E & B Explorations 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.

In 1982, Taiga Consultants Ltd. was contracted by Kenton Natural Resources Corporation to carry out a geological evaluation of the property and subsequently a comprehensive mineral exploration and diamond drilling program. During this period, 510 metres (1673 feet) of diamond drilling were completed, as well as a soil geochemical survey, a geophysical (VLF-E.M.) survey, detailed geological mapping of the property, and six trenches dug in order to define the style of mineralization.

The most recent research work, carried out by Jill Kirker (April 1982), strongly supports a *hydrothermal origin for the mineralization*.

In 1983, additional geophysical surveying and geochemical sampling were completed by Taiga Consultants to detail geophysical conductors and geochemical zones previously outlined. During the fall of 1983, 488 metres (1600 feet) of diamond drilling were completed.

REGIONAL GEOLOGY

The regional geology, as illustrated on the attached geological map (Appendix "C"), 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 to 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 Orma Hill reveals that the axis of culmination is displaced several times by westerly trending tear faults. Recent drilling results indicate the presence of a low-angle reverse fault on Orma Hill which may displace the vein system at depth.

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

MINERALIZATION

Since 1974, approximately 3000 soil samples have been collected for geochemical analyses. The analytical results have been contoured on a series of maps prepared by C. H. Aussant (Appendix "H" — back pocket). A number of features are obvious from this contoured data.

The first obvious feature is that the geochemical signatures for the Mike Hill and Orma Hill areas are radically different. This suggests that the style and type of mineralization to be expected in each area may vary considerably. The second feature is that solifluction effects have been important in the down-slope migration and scatter of the geochemical values.

The Orma Hill geochemistry has outlined two extremely strong, multi-element anomalies, one of which is open to the south. Solifluction effects, as well as down-slope migration of metals, have apparently displaced the geochemical signature in respect to the mineralization. This has been substantiated by trenching.

In the Mike Hill area, high zinc values predominate, with the other metal values more restricted. Two multi-element anomalies, one fanning off to the east and open in this direction, have been outlined.

During 1979, C. A. Agar & Associates completed a geophysical program over the Rusty Springs grid area. Gravity and Induced Polarization surveys were completed and a considerable number of targets were outlined. None of these targets has been trenched nor diamond drilled.

During 1982, Taiga Consultants completed a ground magnetic and VLF-E.M. survey on the property. The VLF-E.M. survey indicated a strong correlation between known veins and VLF-E.M. conductors as well as a downward continuation of these veins. The VLF-E.M. data also confirm the extent and en echelon nature of the veins.

A total of 33 locations of mineralized float have been outlined on the property. These have been described by Bankowski and Hansen (1979;

Appendix "F"). Considering the extent of vegetative and overburden cover in this area, mineralization must be very widespread within the property region.

A D7F caterpillar has been used to carry out trenching on Orma and Mike Hills by E & B Explorations in 1980 and in 1982 by Taiga Consultants. The location of each trench dug by Taiga Consultants is outlined on the attached geological map (Appendix "D"). Descriptions of these trenches follow.

Trench #2

A massive, nearly vertical, 70 cm-wide galena/tetrahedrite vein was delinated within a broad gossan zone in Trench #2. The entire mineralized interval was channel sampled. Assay results confirm the presence of a mineralized zone of both primary and secondary nature, of 34.74 oz/ton Ag over 2 metres which includes 0.8 metre of primary mineralization assaying 32.64 oz/ton Ag. Diamond drill holes 82-5 and 82-6 were drilled above this trench and encountered the mineralization uncovered in Trench #2 at depth.

Trench #3

Trench #3 was dug in order to determine the source of mineralized boulders exposed in this area. The trench was dug to a depth of approximately six metres with no primary mineralization discovered and only traces of secondary mineralization. A slight enrichment in silver content is noted throughout the trench which consists of deeply weathered dolomite. This enrichment is probably the remnants of a deeply weathered quartz/galena/tetrahedrite/silver vein. Diamond drill hole 82-7 was drilled in the hope of intersecting the mineralization encountered in Trench #3 at depth; however, the hole was abandoned due to drilling problems before an adequate depth was reached.

Trench #6

Trench #6 was dug in order to better expose mineralization known to be present. A thin, high-grade vein was exposed along with two broad gossan zones. Channel samples taken from this trench indicate a broad gossan zone yielding 18.31 oz/ton Ag over 8.0 metres which further includes a higher grade primary zone assaying 48.53 oz/ton Ag over 2 metres. A grab sample of massive tetrahedrite taken from the primary vein yielded 386.76 oz/ton Ag. Diamond drill hole 82-2 was drilled to test the continuity of this mineralization. Assay results from the core indicated a slight supergene enrichment in silver content.

Trench #7

Trench #7 was located where an abrupt cut-off in soil geochemical values was noted. In this trench, a half-metre wide galena/tetrahedrite vein was noted along with three zones of secondary copper and lead mineralization. While well exposed in the north face of the trench, the massive vein is more deeply weathered in the middle and in the south face of the trench. Assay results indicate a combined secondary and primary mineralized zone with a width of 3.9 metres assaying 5.6 oz/ton Ag which includes 0.5 metre of massive galena/tetrahedrite assaying 14.06 oz/ton Ag. Diamond drill hole 82-1 was drilled to intersect this mineralization at depth. A 5-foot cavity rather than a mineralized vein was encountered at the appropriate depth. This cavity could possibly be the weathered out expression of the mineralized vein encountered in the trench.

Trench #8

Trench #8 was located on the upslope side of a strong soil geochemical anomaly. A massive one-metre wide galena/tetrahedrite vein was uncovered within a 7-metre wide mineralized gossan area with abundant secondary copper mineralization. Assay results delinated a broad gossan zone 6 metres in width, assaying 13.65 oz/ton Ag which includes the higher grade massive galena/tetrahedrite vein which ran 42.12 oz/ton Ag over one metre.

Diamond drill hole 82-3 was drilled to test the depth continuity of the mineralization. Once again, a cavity was encountered which corresponds to a vertical extension of the surface mineralization. The possibility exists that this cavity is a result of the weathering out of mineralization at depth.

Trench #10

Trench #10 is the southernmost trench completed, located on a VLF-EM conductor axis. This trench was dug to a very shallow depth due to permafrost conditions and consequently bedrock was not reached. Samples were collected along its length with no significant assay results.

Diamond drill programs were undertaken in 1977 (975 m/3200 ft), 1978 (1840 m/6035 ft), 1980 (1829 m/6000 ft), 1982 (510 m/1673 ft), and 1983 (488 m/ 1600 ft). This drilling was concentrated primarily on the Orma and Mike Hill areas. The locations of these drill holes are shown on the attached geological map (Appendix "D") with the drill hole data summarized in Appendix "E".

A total of 56 holes were drilled in the Orma Hill area. Of these, 20 holes intersected significant mineralization. These intersections were encountered over a distance of 450 m. The relevant intersections along this trench are tabulated below:

DDH #	Dip	Interval (ft)	Length	Ag oz/ton	% Cu	% Pb	% Zn
77-8	$270^{\circ}/-45^{\circ}$	0.0-123.0'	123'	33.3	2.30	4.72	
78-2	$240^{\circ}/-70^{\circ}$	58.0- 63.0'	5'	8.47	0.25	17.72	
78-104	$060^{\circ}/-60^{\circ}$	93.0- 98.0'	5'	17.58	0.01	0.01	Tr
80-1	vertical	29.0- 50.0'	21'	17.5	1.49	8.37	
80-3	vertical	72.0- 77.0'	5'	25.47	3.34	13.72	
80-4	vertical	112.5-115.0'	2.5'	8.97	0.90	9.94	
80-5	vertical	124.0-129.0'	5'	36.5	1.65	23.3	0.24
80-7	NE $/-60^{\circ}$	149.0-155.0'	-	minor tetrahedrite			
80-14	vertical	175.0-190.0'	15'	27.2	0.69	5.30	0.07
80-15	vertical	0.0- 25.0'	25'	1.39	0.05	0.41	0.11
82-5	$120^{\circ}/-45^{\circ}$	17.0- 68.3'	51.3'	0.90	-	2.66	-
"	"	107.0-115.0'	8'	8.02	0.16	6.60	0.07
82-6	$120^{\circ}/-60^{\circ}$	43.0- 47.0'	4'	9.80	0.11	1.19	0.05
82-7	$284^{\circ}/-45^{\circ}$	59.5- 65.0'	5.5'	1.95	0.01	0.2	0.01

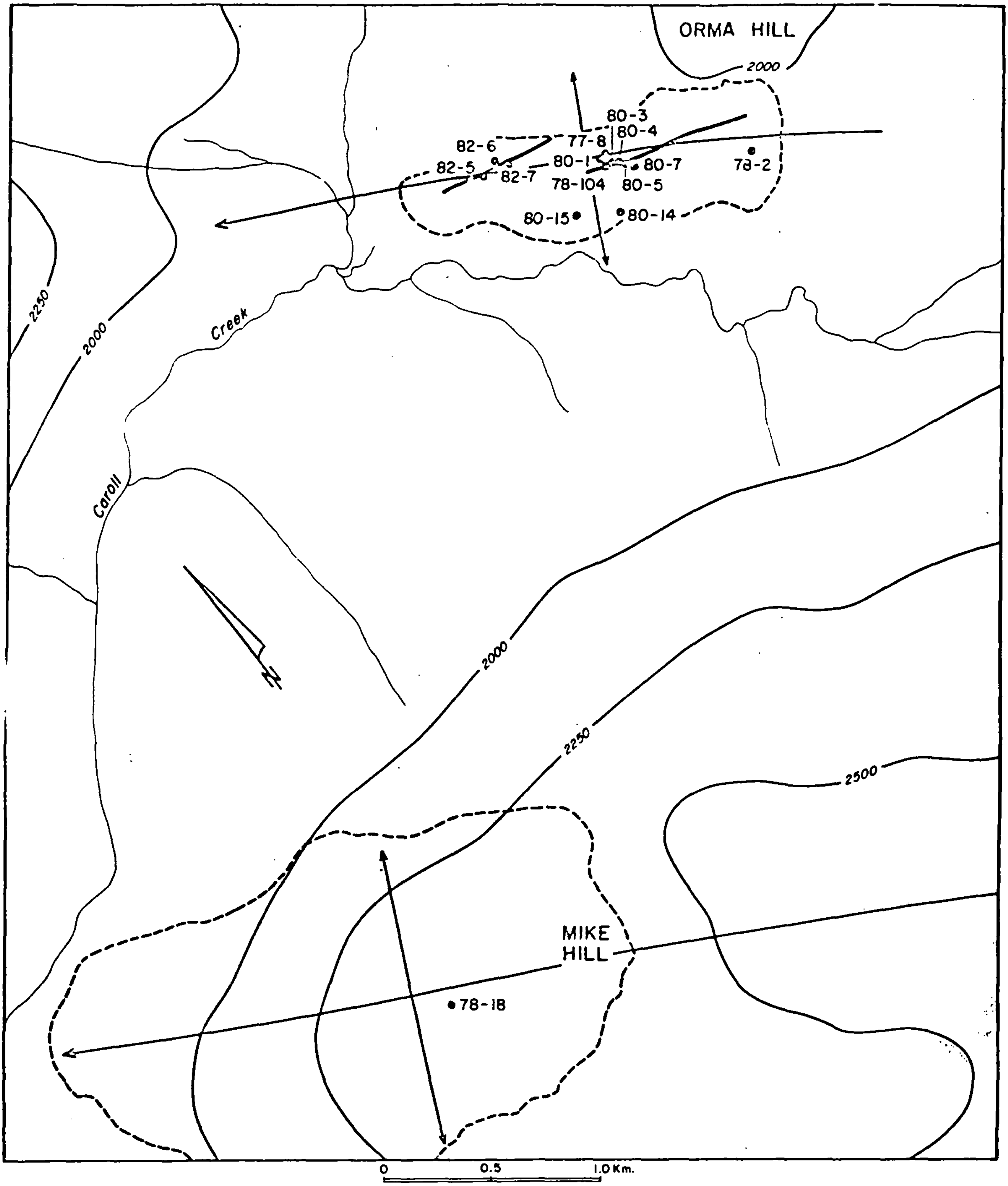
Ten vertical holes were completed in the Mike Hill area. Traces of secondary copper and zinc minerals were apparently encountered in the majority of the drill holes. Only one hole (DDH 78-18) encountered significant mineralization with key results tabulated below:

Interval	Length	Ag oz/ton	% Cu	% Zn	% Pb	Sample Type
33-38'	5'	5.08	0.14	0.09	0.93	core
10-13'	3'	2.15	0.24	0.24	2.40	sludge
13-28'	15'	2.15	0.24	0.24	2.90	sludge
28-33'	5'	9.40	0.41	4.60	1.63	sludge
33-38'	5'	10.63	0.19	0.22	2.23	sludge
38-43'	5'	14.07	0.46	1.80	2.23	sludge
avg 28-43'	15'	11.37	0.35	2.21	2.03	sludge

A total of six holes were completed in the vicinity of the Tim Showing. Only one hole (DDH 77-5) apparently encountered significant mineralization. From 133' to 152', sphalerite and galena mineralization was apparently associated with quartz veining and breccia. The hole was lost within this zone. Assay results are not available.

Figure 1 depicts the areas of anomalous geochemical response and the locations of diamond drill holes which encountered significant mineralization.

In many respects, the showings at Rusty Springs are very similar to the property on Prairie Creek which is being developed by Cadillac Explorations Ltd. The Cadillac deposit consists of a series of northerly trending argentiferous lead/zinc veins cutting Lower to Mid-Paleozoic limestone, shale, and dolomite. The mineralization consists of coarse galena, tetrahedrite, and sphalerite within a quartz gangue. At Rusty Springs, the argentiferous veins are hosted by the Devonian Ogilvie Formation, which is composed of dolomite. The mineralogy of the veins at Rusty Springs consists of the primary minerals galena, tetrahedrite, and minor sphalerite within a quartz gangue. Vein systems on both properties occupy shear zones. While the mineralization on both properties appears intrusive related, there are no intrusives exposed on either property.



RUSTY SPRINGS PROPERTY

Surface trace of vein system

• Mineralized drill hole locations

Area of anomalous geochemical response (Silver/Lead/Zinc/Copper)

Anticlinal axis

FIGURE 1

RESERVES

Exploration results on the Rusty Springs property to date have not established proven ore reserves. Until the extent and continuity of the mineralization are confirmed by further drilling, estimations of potential ore reserves would be highly speculative. Accordingly, this property must be considered to be without a known body of commercial ore.

CONCLUSIONS

1. The Rusty Springs property encompasses numerous high-grade Ag/Pb/Zn/Cu occurrences exposed in outcrop and in float of apparent hydrothermal "fissure-vein" type setting in a mid-Devonian carbonate sequence.

2. The property has been actively explored since 1976. This exploration has consisted of 67 km of cut-and-picket grid, an Induced Polarization survey, a gravity survey, a VLF-E.M. survey, soil geochemistry, detailed mapping and prospecting, 'cat' trenching, and 5642 metres of diamond drilling.

3. The Cadillac Mines' deposit at Prairie Creek, N.W.T., which is presently going into production, is apparently very similar to Rusty Springs, aside from the secondary minerals present. Both consist of quartz vein systems with galena, tetrahedrite, and sphalerite within the Devonian strata well removed from any known intrusive activity.

4. On Orma Hill, mineralization is exposed at the surface in trenches, in samples of diamond drill core, and inferred from geochemical surveys, over a distance of 760 metres in a north-northwest direction. A steeply dipping north - south epithermal vein system appears to be the primary source of the mineralization. Grade and tonnage of this zone have not yet been defined.

5. On Mike Hill, at least two possible fissure-vein systems are indicated on the basis of surface showings, coincidental geochemical anomalies, and very limited drilling. These require further investigation.

6. A number of gravity and Induced Polarization targets have been outlined; however, none of these has been trenched nor diamond drilled.

7. A program of diamond drilling will be required to test the geophysical anomalies and the mineralization present on the Rusty Springs property.

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 of coverage on Mike Hill) to determine the depth to and the continuity of the VLF-EM conductors delineated by the previous surveys (see Appendix D 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.

PHASE I — PROPOSED BUDGET 1984 PULSE-EM SURVEY

on the Rusty Springs Project, Yukon

PRE-FIELD			
Contract negotiations; locistics			$ 2,500
FIELD			
Contractor			
1 man plus equipment rental and field plotting	55 days @ $1200/diem	66,000	
Jens Hansen — field	7 days @ $300/diem	2,100	68,100
Taiga Personnel			
2 geophysical assistants	55 days @ $175/diem	19,250	
Sr.Prospector/Geologist	55 days @ $240/diem	13,200	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	1,375	9,125
Mob and Demob			
Geophysical contractor (personnel and freight from Toronto to Inuvik)		5,000	
Taiga personnel from Calgary to Rusty Springs		10,000	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		5,825	13,925
			$ 165,000
CONTINGENCY ALLOWANCE			15,000
			$ 180,000

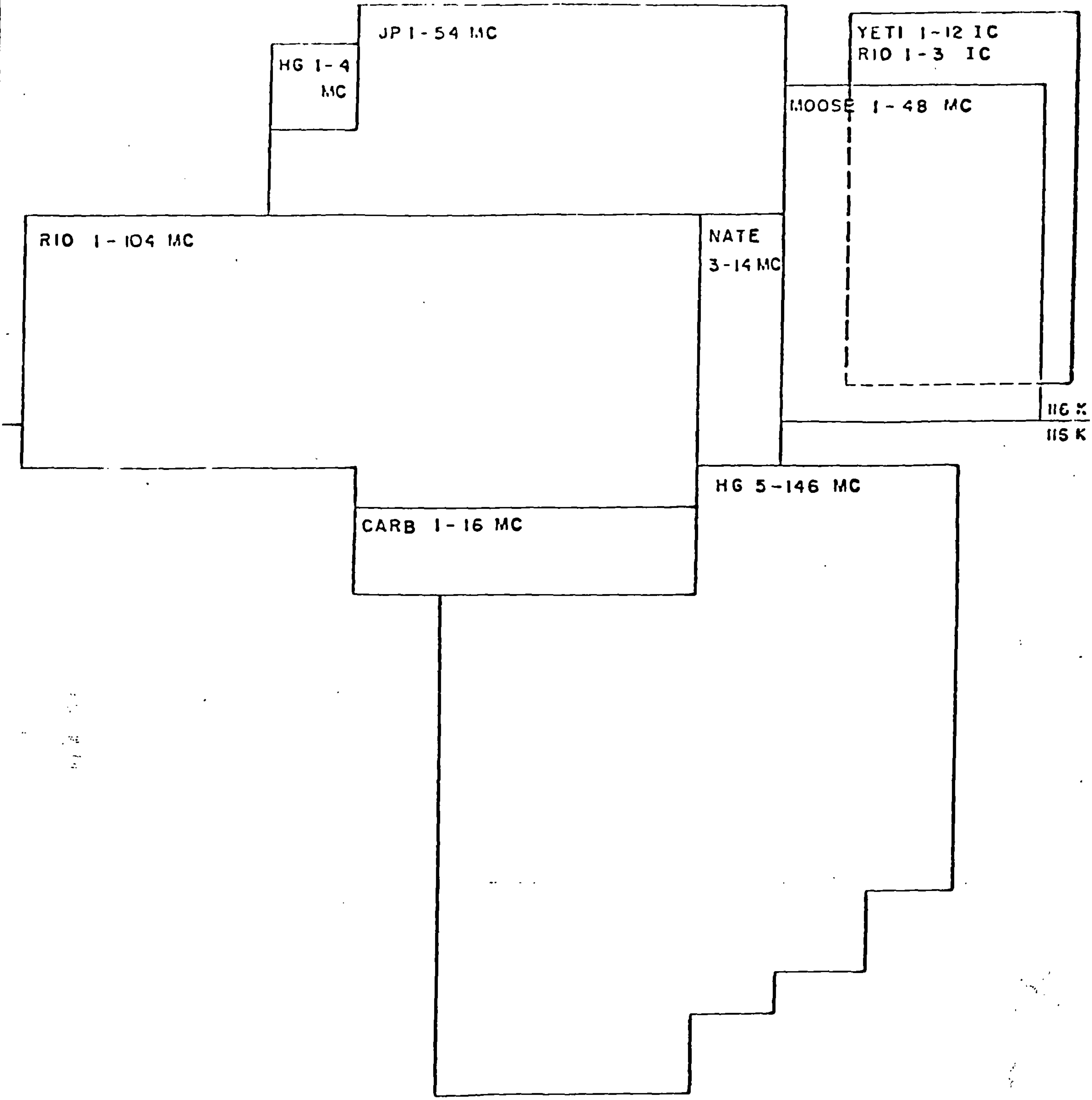
Orma Hill 21 line km of coverage
Mike Hill 33 line km of coverage

PHASE II **PROPOSED BUDGET 1984 DRILLING PROGRAM**

on the Rusty Springs Project, Yukon

PRE-FIELD			
Drill contract negotiations; logistics			$ 2,500
FIELD			
Diamond 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	
Catskinner (10 hrs/day)	42 days @ $ 45/hour	18,900	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	420	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)		7,500	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			10,370
			$ 295,000
CONTINGENCY ALLOWANCE			25,000
			$ 320,000

APPENDIX "A"



RUSTY SPRINGS
MINERAL PROSPECT

CLAIM MAP

NTS SHTS. Nos. 116K 8 & 9

SCALE 1 in. = 1 mi.

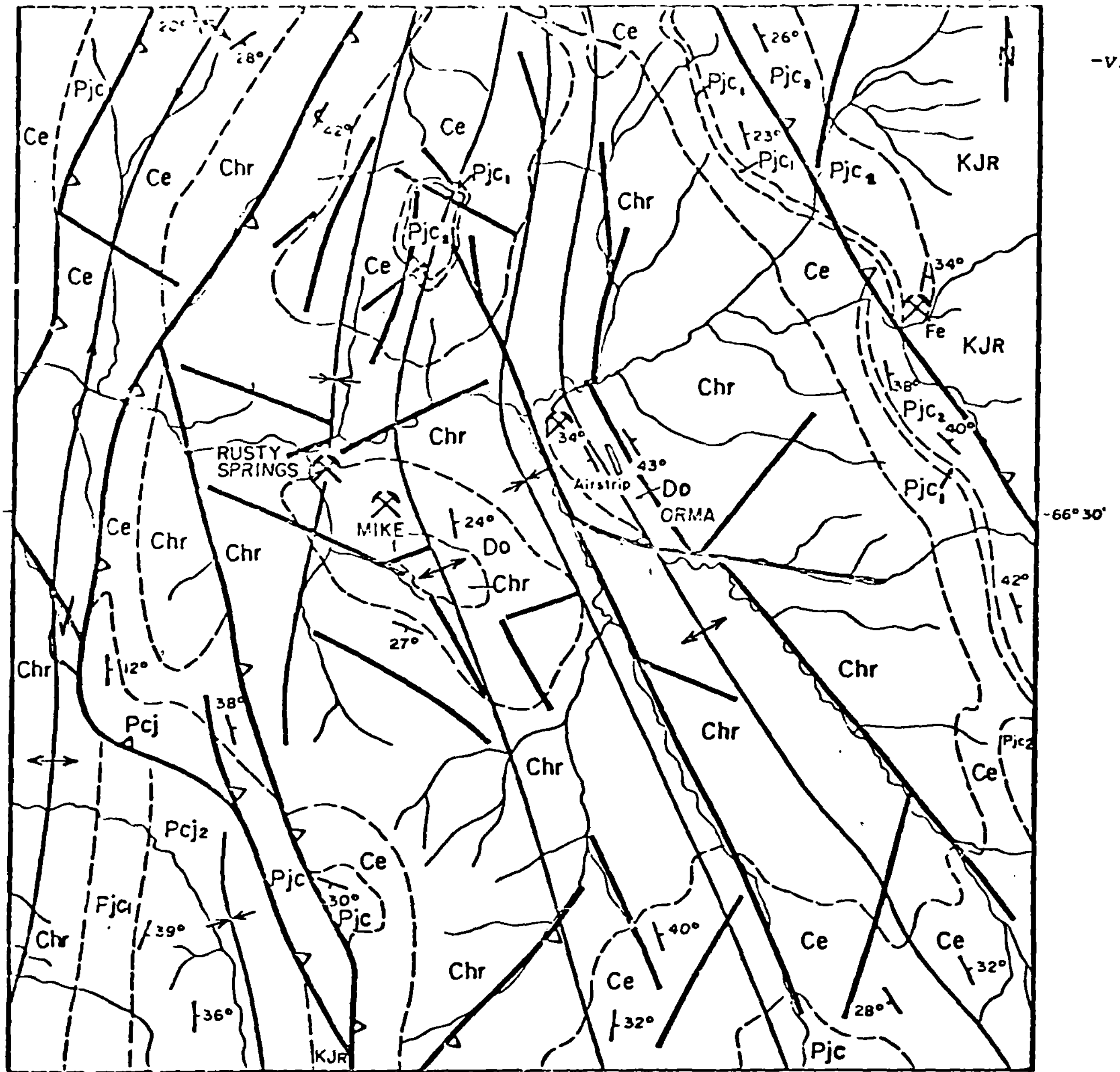
APPENDIX "B"

Claims Status

Quartz Claims	Record Numbers	Expiry Dates
RIO 1-11	YA2826 - YA2836	Oct. 16/88
12	YA2837	Oct. 16/89
13-24	YA2838 - YA2849	Oct. 16/88
25-26	YA2850 - YA2851	Oct. 16/89
27	YA2852	Oct. 16/90
28	YA2853	Oct. 16/89
29	YA2854	Oct. 16/88
30	YA2855	Oct. 16/89
31	YA2856	Oct. 16/88
32	YA2857	Oct. 16/89
33-38	YA2858 - YA2863	Oct. 16/88
39	YA2864	Oct. 16/89
40-46	YA2865 - YA2871	Oct. 16/88
47	YA2872	Oct. 16/89
48	YA2873	Oct. 16/88
49	YA2874	Oct. 16/89
50-60	YA2875 - YA2885	Oct. 16/88
61-62	YA10160-10161	May 31/92
63-67	YA10162-10166	May 31/88
68	YA10167	May 31/92
69	YA10168	May 31/88
70	YA10169	May 31/92
71	YA10170	May 31/88
72	YA10171	May 31/92
73	YA10172	May 31/88
74	YA10173	May 31/92
75	YA10174	May 31/89
76-104	YA10175-10203	May 31/88
NATE 3- 6	YA2902 - YA2905	Oct. 16/88
7-14	YA2906 - YA2913	Oct. 16/89
CARB 1-16	YA2886 - YA2900	Oct. 16/88
HG 1- 4	YA10944-10947	Nov. 29/84
5- 14	YA10948-10957	Nov. 29/83
15- 20	YA10958-10963	Nov. 29/84
21- 38	YA10964-10981	Nov. 29/83
39- 44	YA10982-10987	Nov. 29/84
45- 57	YA10988-11000	Nov. 29/83
58- 70	YA29401-29413	Nov. 29/83
71- 76	YA29414-29419	Nov. 29/84
77- 90	YA29420-29433	Nov. 29/83
91-102	YA29434-29445	Nov. 29/84
103-114	YA29446-29457	Nov. 29/83
115-126	YA29458-29469	Nov. 29/84
127-134	YA29470-29477	Nov. 29/83
135-146	YA29478-29489	Nov. 29/84

Quartz Claims	Record Numbers	Expiry Dates
JP 1-54	YA29490-29543	Nov. 29/84
MOOSE 1-21	YA10820-10840	Oct. 3/85
22	YA10841	Oct. 3/84
23-35	YA10842-10854	Oct. 3/85
36	YA10855	Oct. 3/84
37	YA10856	Oct. 3/85
38	YA10857	Oct. 3/84
39	YA10858	Oct. 3/85
40	YA10859	Oct. 3/84
41	YA10860	Oct. 3/85
42	YA10861	Oct. 3/84
43	YA10862	Oct. 3/85
44	YA10863	Oct. 3/84
45	YA10864	Oct. 3/85
46	YA10865	Oct. 3/84
47	YA10866	Oct. 3/85
48	YA10867	Oct. 3/84

A P P E N D I X " C "



Scale 1: 60,000 (approx.)

GEOLOGY OF THE RUSTY SPRINGS AREA

KJR	Kingak Fm. - shale
Pjc2	Jungle Cr. Fm. (shale unit)
Pjc1	Jungle Cr. Fm. (carbonate unit)
Pjc	Undifferentiated
Ce	Ettrain Fm. - shale and limestone
Chr	Hart River Fm. shale, siltstone and limestone
Do	Ogilvie Fm. - limestone

15° Strike and dip (estimated)

Overturned dip

Anticline

Syncline

Fault, lineament

Thrust fault

Geological contact

APPENDIX "E"

1977 DRILLING

DDH #1
drilled at 70°
bearing S57°E
depth 142'
recovery 100%
barren

DDH #2
drilled at 45°
bearing S57°E
depth 327'
recovery: no core 31'-40'; 50% 285'-303'
barren

DDH #3
drilled at 45°
bearing S87°E
depth 347'
recovery 100%
barren

DDH #4
drilled vertical
depth 566'
broken core 282'-291'
no recovery 390'-402'
barren

DDH #5
drilled at 45°
bearing S57°E
no recovery 12'-19'
depth 152'
hole terminated due to excessive pressure on rods.
numerous quartz veins 1" to 4" thick with abundant pyrite, sphalerite, and galena described from 133' to T.D.

DDH #6
drilled vertical
depth 207'
lost core 30'-52'
essentially barren
Tr Cu stain at 82' and 98'

DDH #7
drilled at 45°
bearing S26½°E
depth 297'
recovery 100%
essentially barren
1" Cu stained ferricrete at 55'

DDH #8
drilled at 45°
westerly bearing
depth 202'
log missing
quote: 52' over which assays were quoted as 20.8 oz/ton Ag to 132.8 oz/ton Ag.
0-123' average assays 33.27 oz/ton Ag, 4.72 % Pb, 2.30 % Cu, mn Zn

DDH #8 continued		oz/ton Ag	% Cu	% Zn	% Pb
	0'- 27'	78.34	3.85	0.28	6.67
	27'- 37'	0.85	2.35	0.14	3.28
	37'- 47'	20.80	0.35	Tr	3.80
	47'- 57'	1.09	0.44	0.01	2.05
	57'- 62'	1.15	0.13	0.01	0.22
	62'- 67'	73.92	1.45	0.02	20.33
	67'- 77'	132.8	4.20	0.10	10.31
	77'- 87'	0.59	0.73	0.06	2.80
	87'- 97'	0.85	1.94	0.44	16.74
	97'-107'	1.18	2.27	0.50	2.65
	107'-117'	1.03	4.30	0.16	4.50
	117'-123'	1.65	2.07	0.86	1.55

DDH #9 drilled at 45°
bearing N56°E
depth 152'
recovery 0-102' overburden No recovery
103-112' no recovery
112-122' 40% recovery
132-139' 15% recovery
essentially barren
malachite & azurite staining on fractures at 144'

DDH #10 vertical
depth 242'
barren
no recovery 0-147' overburden
7% recovery 147-162'
23% recovery 166-177'

DDH #11 drilled at 57°
bearing N13°E
depth 327'
recovery 3% 0-162'
60% 177-182'
barren

DDH #12, DDH #13 } same collar, no logs

1978 DRILLING

78-1 drilled 70°, bearing 240°, depth 102'
very poor recovery; barren

78-2 drilled 70°, bearing ?? (assumed same as 78-1); depth 173'
very good recovery

depth	oz/ton Ag	% Cu	% Zn	% Pb
43'-48'	0.03	0.02	0.01	Tr
48'-52'	0.01	0.02	0.01	0.02
52'-58'	Tr	0.01	Tr	0.01
58'-63'	8.47	0.25	0.04	17.72

78-3 vertical; depth 175'
0'-118' - 1% core recovery (overburden); sludge sample

depth	oz/ton Ag	% Cu	% Zn	% Pb
40'-90'	0.36-0.98	0.11-0.21	0.13-0.46	0.09-0.19
40'-50'	0.36	0.13	0.17	0.10
50'-55'	0.50	0.12	0.14	0.14
55'-60'	0.34	0.11	0.13	0.06
60'-65'	0.98	0.13	0.14	0.11
65'-70'	0.60	0.14	0.16	0.13
70'-75'	0.66	0.12	0.13	0.09
65'-80'	0.58	0.21	0.24	0.19
80'-85'	0.56	0.20	0.41	0.15
85'-90'	0.44	0.21	0.46	0.10

78-4 vertical; depth 268'
very poor core recovery 0'-121' (overburden)
essentially barren

78-5 vertical; depth 187'
poor recovery 0'-98' (overburden); barren

78-6 vertical; depth 200'
very good recovery; barren; heavily pyritic

78-7 drilled at 45°, bearing 330°; depth 202'
poor core recovery 0'-55' (overburden)
barren, pyritic

78-8 vertical; depth 203'
very good recovery; barren (pyritic)

78-9 drilled at 45°, bearing 330°; depth 213'
very good recovery; barren (pyritic)

78-10 vertical; depth 195'
no recovery 0'-20' (overburden)
barren

1980 DRILLING

80-1 drilled vertically; depth 227'
average core recovery 90.9%
27-29' white, massive quartz pebbles, Cu-carbonate staining
38'4"-7" (3") massive tetrahedrite
38'7"-50'5" quartz and decomposed limestone, minor Cu carbonate

Sample	Depth	Width	oz/ton Ag	% Pb	% Cu	% Cd
1	25'-29'	4'	0.04	0.69	0.21	.003
2	29'-34'	5'	2.99	0.57	0.19	.003
3	38'-43'	5'	59.08	24.57	2.53	.004
4	34'-37'	3'	0.82	0.78	0.24	.002
5	37'-38'	1'	44.73	17.13	2.80	.003
6	43'-48'	5'	0.77	4.4	0.99	.003
7	48'-50'4"	2'4"	4.21	4.66	4.31	.004
8	60'3"-64'6"	4'3"	2.29	1.94	2.5	.005

80-2 vertical; depth 87'; average core recovery 49.9%
59'-87' slight Cu-carbonate staining

Sample	Depth	Width	Au	Ag	Pb	Zn	Cu all ppm
1	12'-18'	6'		19.7	314	747	143
2	12'-26'	14'	0.01	22.2	400	865	176
3	18'-37'	19'		19.5	170	1037	24
4	26'-49'	23'	0.04	16.8	170	1080	31
5	37'-54'	17'	16.	16.1	134	802	835
6	49'-54'	5'	0.03	44.2	364	738	956
7	54'-59'	5'		12.0	600	990	924
8	54'-59'	5'	0.01	13.4	460	950	851

80-3 vertical; depth 97'; average core recovery 86.6%
0'-22', 72'-73'7", slight Cu-carbonate staining
73'7"-74', massive tetrahedrite (3")
74'-77', minor tetrahedrite, Cu-carbonate

Sample	Depth	Width	oz/ton Ag	% Cu	% Pb	% Cd
9	72'-77'	5'	25.47	3.34	13.72	.002

			Au	Ag	Pb	Zn	Cu ppm
A-31	0'-22'	22'	-	14.0	475	698	1000+
A-32	22'-37'	15'	-	17.5	172	952	628
A-33	37'-57'	20'	-	9.0	88	971	30
A-34	57'-72'	15'	-	19.3	362	912	345
B-31	22'-37'	15'	.01	16.5	176	1045	468
B-32	37'-57'	15'	.03	5.4	78	990	45
B-33	57'-72'	15'	.01	20.6	502	950	400

80-4 vertical; depth 132'; average core recovery 73%
108'7"-112', minor galena
113'-118'9", minor tetrahedrite, Cu-carbonates

Sample	Depth	Width	oz/T Ag	% Cu	% Pb	% Cd
10	108'7"-112'6"	3'9"	1.41	0.05	0.75	.001
11	112'6"-115'0"	2'4"	8.97	0.90	9.94	.002
12	115'0"-119'4"	4'4"	1.16	0.25	0.3	.003

Sample	Depth	Width	Au	Ag	Pb	Zn	Cu	ppm
A-41	0'-22'	22'	-	19.9	104	1350	60	
A-42	22'-42'	20'	-	21.8	70	1200	130	
A-43	46'-62'	16'	-	8.4	1150	1175	462	
A-44	62'-82'	20'	-	12.5	148	1120	61	
A-45	82'-102'	20'	-	7.7	282	865	246	
B-41	0'-22'	22'	.03	18.4	180	1350	57	
B-42	22'-42'	20'	.03	21.8	66	1120	116	
B-43	42'-62'	16'	.01	8.8	825	1120	400	
B-44	62'-82'	20'	.03	17.2	100	1080	46	
B-45	82'-102'	20'	.03	7.3	218	770	283	

80-5 vertical; depth 209' average core recovery 79%
125'3"-129', massive tetrahedrite, minor quartz

Sample	Depth	oz/T Au	oz/T Ag	% Cu	% Pb	% Zn	% As	% Sb
13	124'-129'	.002	36.5	1.65	23.3	0.24	1.05	0.79

80-6 vertical; depth 128'; average core recovery 68.9%
essentially barren

80-7 drilled 60°, bearing northeast; depth 367'; avg.recovery 84%
very minor tetrahedrite patches 149'-155'

80-8 vertical, depth 197'; average core recovery 72.4%
132'1"-132'10", massive tetrahedrite

Sample	Depth	oz/T Au	oz/T Ag	% Cu	% Pb	% Zn	% As	% Sb
14	132'1"-132'10"	<.002	26.3	2.59	16.5	0.31	1.30	0.58

80-9 vertical; depth 125'; average core recovery 64%
essentially barren

80-10 vertical; depth 150'; average core recovery 84.8%
minor Cu-carbonate traces 96'10"-100'

80-11 vertical; depth 372'; average core recovery 56.7%
essentially barren

continued

(80-11)

Sample	Depth	oz/T Ag	% Cu	% Pb	% Zn
01	25'-50'	0.26	0.05	0.06	0.45
02	50'-75'	0.13	0.02	0.04	0.28
03	75'-100'	0.16	0.02	0.03	0.28
04	100'-125'	0.09	<0.01	0.02	0.06
05	125'-150'	0.12	<0.01	0.01	0.04
06	150'-175'	<0.05	<0.01	0.02	0.03
07	175'-200'	0.07	<0.01	0.01	0.05
08	200'-225'	0.18	0.01	0.01	0.03
09	225'-250'	0.06	<0.01	<0.01	0.10
10	250'-275'	<0.05	<0.01	<0.01	0.03
11	275'-300'	<0.05	0.01	<0.01	0.09
12	300'-325'	<0.05	0.01	0.04	0.09
13	325'-350'	<0.05	<0.01	<0.01	0.01
14	350'-372'	<0.05	<0.01	<0.01	0.01

80-12 vertical; depth 527'; essentially barren

80-13 vertical; depth 202'; essentially barren

80-14 vertical; depth 190'; minor native Cu 182'-187'

Sample	Depth	oz/T Ag	% Cu	% Pb	% Zn
15	0'- 25'	0.16	0.02	0.03	0.11
16	25'- 50'	0.06	0.01	0.01	0.19
17	50'- 75'	0.09	<0.01	0.02	0.17
18	75'-100'	0.10	0.01	0.01	0.62
19	100'-125'	<0.05	<0.01	0.01	0.04
20	125'-150'	0.07	<0.01	0.07	0.50
21	150'-175'	0.18	0.03	0.09	0.58
22	175'-190'	27.2	0.69	5.30	0.07

80-15 vertical; depth 87'; essentially barren

Sample	Depth	oz/T Ag	% Cu	% Pb	% Zn
23	0'-25'	1.39	0.05	0.41	0.11
24	25'-50'	0.15	<0.01	0.06	0.03
25	50'-75'	0.19	<0.01	0.06	0.01
26	75'-87'	0.28	0.02	0.04	0.17

80-16 vertical; depth 132'; essentially barren

Sample	Depth	oz/T Ag	% Cu	% Pb	% Zn
27	0'- 25'	0.12	0.03	0.07	0.07
28	25'- 50'	0.12	0.02	0.13	0.13
29	50'- 75'	0.09	0.01	0.05	0.08
30	75'-100'	0.20	0.01	0.05	0.09
31	100'-125'	0.07	0.01	0.05	0.05
32	125'-132'	0.32	0.01	0.04	0.04

80-17	drilled 60°, northeast bearing; depth 227' Cu-carbonate 104'-104'1"
80-18	drilled 60°, bearing northeast; depth 225'; barren
80-19	vertical; depth 137'; barren
80-20	vertical; depth 120'; barren
80-21	drilled 60°, bearing southwest; depth 201'; essentially barren
80-22	vertical; depth 126'; essentially barren
80-23	vertical; depth 125'; essentially barren
80-24	vertical; depth 12'; barren terminated due to lack of drilling water
80-25	vertical; depth 284'; essentially barren
80-26	drilled 60°, bearing northeast; depth 77'; barren terminated to facilitate camp break-up

1982 DRILLING

82-1 drilled -45°, bearing 215°, depth 292'
Essentially barren.

82-2 drilled -45°, bearing 43°, depth 300'
Minor malachite staining noted throughout the regolith. Assay results from this section indicate a slight supergene enrichment in silver content.

82-3 drilled -45°, bearing 235°, depth 221'

depth	oz/ton Au
82.5-84.5	.016
86.0-87.0	.012

82-4 drilled -46°, bearing 50°, depth 187'
Specks of galena in white crystalline quartz noted at 26' and 43'; however, recovery poor within these sections.

82-5 drilled -45°, bearing 120°, depth 197'
Disseminated galena noted from 55' to 67'.

Sample Interval (feet)	oz/ton Ag	% Pb
17'0"-27'0"	3.22	1.63
27'0"-34'0"	0.36	0.25
34'0"-42'0"	0.40	1.07
42'0"-47'0"	0.70	1.68
47'0"-55'0"	0.58	1.45
55'0"-57'7"	3.40	8.73
57'7"-58'0"	3.34	16.65
58'0"-59'0"	6.36	23.42
59'0"-59'9"	1.88	9.83
59'9"-62'0"	13.92	52.61
62'0"-62'3"	1.16	10.92
62'3"-64'0"	1.00	3.01
64'0"-64'8"	1.38	3.25
64'8"-67'0"	8.38	1.77
67'0"-68'3"	0.54	0.21
107'0"-115'0"	8.02	6.60

1.86 oz/ton Ag
5.92% Pb over
12 feet (3.6 m)
true width
3 feet (0.93 m)

0.90 oz/ton Ag, 2.66% Pb, over 51¼ feet (15.6m), true width 13 feet (3.9 m).

82-6 drilled -60°, bearing 120°, depth 67'
Core recovery very poor.

Sample Interval (feet)	oz/ton Ag	% Pb	% Recovery
43'0"-47'0"	9.80	1.19	100%
47'0"-51'0"	1.60	0.60	56%
57'0"-67'0"	9.34	31.22	3%

82-7 drilled -45°, bearing 284°, depth 157'
Core recovery very poor

Sample Interval (feet)	oz/ton Ag
59.5'-62.5'	1.96
62.5'-65.0'	1.94
78.0'-80.0'	1.58

82-8 drilled -45°, bearing 70°, depth 252'
Barren

83-1 drilled -60°, bearing 092°, depth 1050'
Barren

83-2 drilled -50°, bearing 050°, depth 550'
Barren

APPENDIX "F"

APPENDIX A

A DETAILED DESCRIPTION OF THE MINERALIZED SHOWINGS OF THE RUSTY SPRINGS PROSPECT

(a) Showings Found Prior To 1978

TIM SHOWING (1)
Co-ordinates: L4+50N - 5E

Mineralization of this showing consists of galena, tetrahedrite altering to malachite + (azurite) and amber sphalerite altering to smithsonite, in a matrix of white, crystalline quartz and calcite as open-space filling of a porous dolostone host. The host rock is a grey, porous, vuggy and fractured dolomitized limestone which is silicified in the area of mineralization. Tetrahedrite altering to malachite + (azurite) is seen in blebs up to one inch (2.5 cm) in diameter, usually within white crystalline quartz, as is cubic galena averaging ¼" x ¼" (6 mm x 6 mm) and amber sphalerite approximately 90% altered to smithsonite.

Figure A illustrates a generalized relationship seen within a mineralized open-space filling from this showing.

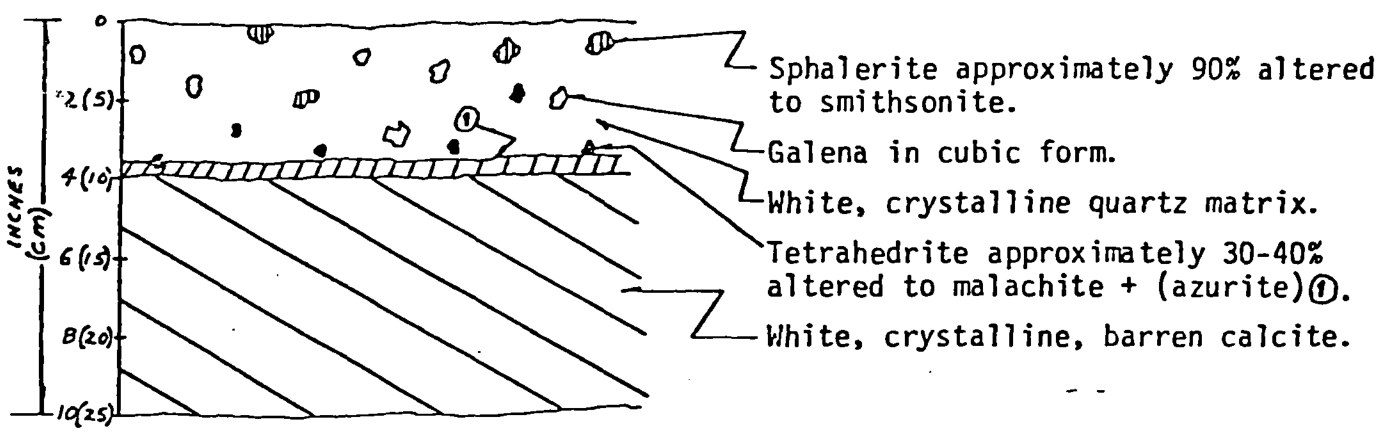


Figure A - Generalized Section

Colonial coral was also seen at this location. The mineralization occurs as talus blocks averaging 4" x 4" (10 cm x 10 cm) with no outcrop present. The size of the showing is approximately 150 x 100 feet (45 x 30 m).

TIP SHOWING (2)
Co-ordinates: L4N - 4E

The mineralization at this showing consists of galena, pyrite, tetrahedrite altering to malachite + (azurite) and amber sphalerite altering to smithsonite within a matrix of white, crystalline quartz and calcite as open-space filling in a porous dolostone host. The host rock is a grey, porous, vuggy and fractured dolomitized limestone locally silicified in the general area of mineralization. Tetrahedrite, approximately 30% altered to malachite + (azurite) is seen in blebs averaging ½" x ½" (1.3 x 1.3 cm) and is in close spatial relationship with amber sphalerite approximately 50% altered to smithsonite in blebs up to one inch (2.5 cm) in diameter. Pyrite is also seen closely related with the sphalerite and tetrahedrite in fine-grained disseminated form.

The sphalerite, tetrahedrite and disseminated pyrite usually occur within white, crystalline calcite. Pyritohedrons up to one inch (2.5 cm) in diameter were also noted in the calcite. Galena in cubic form averaging ¼" x ¼" (6 x 6 mm) is seen in white, crystalline quartz.

The area of mineralization is approximately 100 x 200 feet (30 x 60 m) and occurs as talus blocks.

BRUCE SHOWING (3)
Co-ordinates: L9N - 26E

The mineralization at this showing consists of tetrahedrite altering to malachite + (azurite) and amber sphalerite altering to smithsonite in a matrix of white crystalline quartz and minor calcite as open-space filling in a porous dolostone host. The host rock is a grey, porous, vuggy and fractured, dolomitized limestone which is locally silicified in the general area of mineralization. Quartz is the predominant mineral in the matrix and is extremely crystalline, with individual crystals up to 4" x 1" (10 cm x 2.5 cm). White, crystalline calcite comprises a small part of the matrix but is more common and massive along the periphery of mineralization in blocks up to 6" x 6" (15 cm x 15 cm). Tetrahedrite is seen approximately 10% altered to malachite + (azurite) in blebs up to 2" x 2" (5 cm x 5 cm) within the quartz matrix. Amber sphalerite approximately 10% altered to smithsonite in massive form up to 8" (20 cm) in diameter is also found in the quartz matrix. Well-developed, light brown, dolomite crystals lining vugs and fracture surfaces are common.

Some small vugs were seen to be lined with dolomite crystals and small amounts of pyrobitumen. Colonial coral is also abundant in the general area.

The showing is approximately 100 feet x 50 feet (30 m x 15 m) in size and occurs as talus blocks.

GALENA BOULDER SHOWING (4)
Co-ordinates: L24S -.63E

The mineralization at this showing consists of massive galena occurring as open-space filling of a porous dolostone host. The host rock is a grey, porous, vuggy and fractured, dolomitized limestone. The galena occurs as massive blocks up to 3' (1 m) in diameter within a coarse, iron-stained sand derived from the erosion of the pre-existing host dolostone. The galena is composed of coarse-grained anhedral to subhedral crystals denoting more rapid cooling than the cubic form galena found elsewhere on the property. Blocks of extremely leached, gossanned dolostone with a specific gravity of approximately 1.5 are common, as are blocks of botryoidal hemotite up to 1" (2.5 cm) thick. Abundant white, crystalline, barren quartz is also present.

The showing is approximately 50' x 100' (15 m x 30 m) in size.

ORMA SHOWING (5)
Co-ordinates: L35S - 62.5E

Mineralization at this showing consists of tetrahedrite altering to malachite + (azurite) and substantial plumbojarosite in a matrix of white, crystalline quartz occurring as open-space filling in a porous dolostone host. The host rock is a grey, porous, fractured and vuggy, dolomitized limestone which is heavily leached and silicified in the general area of mineralization. Tetrahedrite, approximately 50-60% altered to malachite + (azurite), is most abundant. Plumbojarosite is seen in close spatial relationship with the malachite, giving the rock a greenish-yellow oxide appearance. Plumbojarosite mineralization is more abundant here than anywhere else on the property and in general, this area has the heaviest and most abundant economic mineralization seen to date within the Prospect.

Large blocks, up to approximately 10" x 10" (25 x 25 cm) of white, coarse-grained quartz containing numerous pyritohedrons averaging ¼" (6 mm) in diameter are common, as are blocks of hematite up to 4" (10 cm) thick. Some botryoidal hematite was noted lining the surface of a block of quartz. Small pieces of gypsum and anhydrite averaging 1-2" (2.5-5 cm) in diameter were found at 39S-60.5E and 38S-59.5E respectively, indicating a small evaporitic basin at that location.

The mineralized float is found within a coarse, iron-stained sand formed from the leaching and erosion of pre-existing dolostone. This showing is Cu, Pb and Ag rich and Zn poor, with an area of approximately 225' x 225' (70 m x 70 m). A bulk sample of oxidized material collected from 0-0 on the Orma grid in September of 1978 by P. White and helpers yielded the following results:

Sample	% Cu	% Pb	% Zn	Oz/ton Ag	Weight
1938 A	2.24	24.8	0.06	59.04	315 lbs
1938 B	2.44	24.7	0.07	63.20	

MIKE SHOWING (6)
Co-ordinates: L11S - 9.5E

The mineralization at this showing consists of tetrahedrite altering to azurite + (malachite) in a matrix of white, crystalline quartz as open-space filling of a porous dolostone host. The host rock is a grey, porous, vuggy and fractured, dolomitized limestone which is locally silicified in the area of mineralization. The tetrahedrite is approximately 60% altered to azurite + (malachite) in blebs up to 1" x 1" (2.5 cm x 2.5 cm) predominantly occurring in a narrow horizon 18" - 20" (45 cm x 50 cm) below the surface. The showing consists of talus blocks and is approximately 150' x 300' (50 m x 100 m) in size.

TETRAHEDRITE SHOWING (7)
Co-ordinates: L12.5S - 60E

Mineralization at this showing consists of slickensided, massive tetrahedrite, 5-6" (12-15 cm) wide occurring as a fracture filling and also as disseminated tetrahedrite in a white, crystalline quartz matrix both as open-space filling of a porous dolostone host. The host rock is a grey, porous, vuggy and fractured, dolomitized limestone. The showing occurs as outcrop and is approximately 20' x 20' (6 m x 6 m) in size.

PYRITE SHOWING (8)
Co-ordinates: 12.5S - 59E

The mineralization at this showing consists of blebs, pyritohedrons and cubes of pyrite in a matrix of white, crystalline quartz occurring as open-space filling in a porous dolostone host. The host rock is a grey, porous, vuggy and fractured, dolomitized limestone. The pyrite blebs are massive and up to 2" x 2" (5 cm x 5 cm) while the pyrite cubes and pyritohedrons average approximately ¼" x ¼" (.6 cm x .6 cm) in size. The showing occurs as outcrop and is approximately 20' x 20' (6 m x 6 m) in size.

ROWAN SHOWING (9)
Co-ordinates: L41S - 62.5E

The mineralization at this showing consists primarily of tetrahedrite altering to malachite + (azurite) with subordinate amounts of plumbojarosite and rare galena in a matrix of white, coarse-grained quartz, occurring as open-space infilling of fractures and vugs in the dolostone host. The host rock is a grey, porous, vuggy and fractured dolomitized limestone which is locally leached and silicified in the area of mineralization. Tetrahedrite predominates and is approximately 50-60% altered to malachite + (azurite). Minor plumbojarosite is seen intimately associated with the malachite and gives the rock a greenish-yellow appearance. Galena is also present but is rare. The tetrahedrite, plumbojarosite and galena occur along with abundant quartz and much infilling of vugs in the dolostone host is seen to consist entirely of crystalline quartz.

This showing is Cu-Ag rich and Zn poor.

The size of the showing is approximately 140' x 340' (40 m x 100 m) with mineralization occurring as float in a coarse, iron-stained sand. No outcrop is seen.

The following are the results of a bulk sample, predominantly of galena, taken in 1978 at the Rowan Showing:

*	Cu	.32%
	Pb	52.1%
	Zn	.01%
	Ag	14.2 oz/ton

* Weight of sample = 62 lbs

(b) Showings Found in 1978

GALENA CORAL SHOWING (10)
Co-ordinates: L10.5S - 2.5W

The mineralization at this showing consists of galena and smithsonite in a fossiliferous dolomitized limestone. The host rock is a grey, vuggy dolostone with abundant rugose corals. Galena occurs as fracture fillings and in vugs in the dolostone. One sample contained galena completely infilling the calyx of a coral.

This showing measures 6' x 6' (2 m x 2 m).

AZURITE SHOWING (11)
Co-ordinates: L15.5S - 7E

The mineralization at this showing consists of tetrahedrite altering to azurite + (malachite) in a white, coarse-grained quartz matrix within a dolostone host. The grey, porous, vuggy and fractured, dolomitized limestone hosts these minerals. The tetrahedrite is 50% altered to azurite + (malachite) and is contained within a matrix of white crystalline quartz which infills vugs and fractures in the dolostone.

The size of the showing is 30' x 20' (9 m x 6 m).

BEK SHOWING (12)
Co-ordinates: L77S - 26E

The mineralization at this showing consists of lemon yellow barite and hemimorphite crystals lining fractures and vugs in a dolostone host. The host rock is a grey, porous, vuggy and fractured dolomitized limestone. Barite occurs as well-developed crystals .12" (6 mm) long, lining fracture and vug surfaces within the dolostone host.

This mineralization can be traced for 60' (20 m) in outcrop. This outcrop contains the best-developed barite crystal found at the Rusty Springs Prospect.

JENNIFER SHOWING (13)
Co-ordinates: L15S-13.5E

The mineralization at this showing consists of tetrahedrite altering to azurite and malachite in a matrix of coarse-grained white quartz occurring as fracture and vug fillings in dolostone. Mineralization is generally found 18-20" (46-51 cm) below surface.

The size of the showing is 20' x 20' (6 m x 6 m).

TALUS SHOWING (14)
Co-ordinates: L76S - 38E

The mineralization consists of ruby sphalerite in a white, coarse-grained quartz matrix. The quartz crystals terminate to the centre of vugs in grey porous dolomitized limestone. Only one sample was found in the talus slope.

MA SHOWING (15)
Co-ordinates: L3S - 13.5W

The mineralization at this showing consists of ruby sphalerite and smithsonite in a matrix of white, coarse-grained quartz filling vugs and fractures in the dolostone host. The host rock is a grey porous, vuggy and fractured dolomitized limestone.

The size of the showing is three feet (one metre) square.

(c) Showings Found in 1979

JOE SHOWING (16)
Co-ordinates: L5.5S - 20W

The economic minerals at this showing consist of anhedral patches of well-formed cubic crystals of galena, often in intimate association with masses of amber sphalerite altering to smithsonite. The host rock is a grey, highly silicified, porous, vuggy dolomitized limestone, with silicification increasing towards the mineralized zones. The most abundant sulphide is galena which occurs as infilling of vugs and fractures, intergrown with calcite, quartz, amber sphalerite and smithsonite. The galena, often with a cerussite coating, is found in shapeless masses up to 6" x 4" (15 cm x 10 cm) consisting of well-formed cubic crystals averaging .06" (1.6 mm).

Some crystals display bent faces, indicative of anomalous silver content (F. Beck, 1979, pers. comm.) The galena is often intergrown with amber sphalerite. This sphalerite is about 90% altered to smithsonite leaving abundant sphalerite box-work structures. Before alteration, sphalerite would have been slightly more abundant than galena. Masses of white calcite displaying well-formed rhombohedral crystals are often seen in close spatial relationship with the galena and sphalerite. White quartz crystals, up to 2" (5 cm) long are common, intergrown with the sulphides. Well-formed dolomite crystals occur nearby, sometimes overlain by pyrobitumen, then calcite.

The showing is 150' x 75' (45 m x 22 m). An assay of the galena yielded 20.44 oz/ton silver and 79.92% lead.

ULLR SHOWING (17)
Co-ordinates: L6.5S - 21.5W

The mineralization at this showing consists of tetrahedrite altering to malachite + (azurite), galena and amber sphalerite altering to smithsonite. The host rock is a relatively tight, grey, dolomitized limestone with few vugs or fractures. The economic minerals occur with calcite and white quartz as fracture fillings in the dolomite host. The matrix of the fracture fillings consists of equal proportions of white quartz crystals .3" long (8 mm) and calcite. The mineralization occurs as small (.25", 6 mm) patches spread randomly through the matrix.

Colonial coral, Favosites Sp., is common at this showing. Mineralization is confined by an area 10' x 10' (3 x 3 m).

JACKSON SHOWING (18)
Co-ordinates: L5S - 7W

The mineralization at this showing consists of galena, sphalerite, smithsonite, tetrahedrite, malachite and azurite in a grey, porous, vuggy dolostone host. The mineralization occurs in a quartz matrix as fracture fillings. The sphalerite is greater than 90% altered to smithsonite, leaving abundant sphalerite box-work structures. The quartz matrix is coarse-grained.

Crystals are .2" x .06" (.5 cm x .2 cm) and the seams are .4" to .8" (1 to 2 cm) thick. The showing is 100' x 100' (30 m x 30 m) on a talus slope.

CHIVAS SHOWING (19)
Co-ordinates: L8S - 10W

The mineralization at this showing consists of smithsonite within a calcite and white, coarse-grained quartz matrix, infilling a grey, porous, vuggy, dolomitized limestone. No sphalerite box-work structures were noted.

The area of mineralization is 6' x 6' (2 m x 2 m) on a talus slope.

Soil Sample:	Cu	24 ppm
	Pb	160 ppm
	Zn	196 ppm
	Ag	1 ppm
Rock:	Cu	248 ppm
	Pb	140 ppm
	Zn	>10,000 ppm
	Ag	5.8 ppm

REEF SHOWING (20)
Co-ordinates: L13S - 10W

The mineralization at this showing consists of amber sphalerite altering to smithsonite, galena, tetrahedrite, azurite and malachite. These minerals occur as infilling of vugs in a grey, porous, vuggy, silicified dolostone. Small crystals of galena are found in white quartz and also intimately associated with sphalerite box-work structures. Several pieces of azurite, malachite and smithsonite on surface measured 2" x 4" (5 x 10 cm). Calcite is found associated with the mineralization as small (.25" x .25" - 6 x 6 mm) white crystals and as blocks up to 2" x 2" (5 cm x 5 cm) in the general area. Travertine, a lime-green cave-lining calcite displaying concentric growth rings, was also found in the general area. Sink holes averaging 1.5' (.5 m) in depth were seen locally. *Favosites Sp.* is abundant in the area.

The size of the showing is 300' x 300' (100 m x 100 m).

ANDREA SHOWING
Co-ordinates: L20S - 9E

The mineralization at this showing consists of tetrahedrite altering to malachite + (azurite), plumbojarosite and amber sphalerite altering to smithsonite. The host rock is a very porous and vuggy, leached, dolomitized limestone. The economic minerals at this showing are mostly supergene and have their origin as infilling of vugs and fractures within the dolostone host. Tetrahedrite is almost completely altered to malachite stain with no azurite noted. The malachite stain is intergrown with plumbojarosite which gives the rock an overall green-yellow colour. Rocks in the general area are heavily gossanned. Amber sphalerite is almost completely altered to smithsonite, leaving sulphide box-work structures.

The area of mineralization is approximately 6 x 6' (2 x 2 m). Mineralization is in small blocks of talus with no outcrop seen. Soil and rock samples at this showing yielded the following results:

Rock:		* ppm
	Cu	> 10,000
	Pb	> 10,000
	Zn	3456
	Ag	23.5
Soil:	Cu	1460
	Pb	8400
	Zn	> 10,000
	Ag	33.0
	Ba	> 10,000

MARILYN SHOWING (22)
Co-ordinates: L45S - 13.5W

The mineralization at this showing consists of barite crystals, calcite crystals, pyritohedrons and tetrahedrite altering to malachite + (azurite) in a dolostone host. The host rock is a grey, vuggy and porous dolomitized limestone. The tetrahedrite is found in a matrix of coarse-grained, white quartz and coarse-grained, white calcite infilling vugs and fractures in the host, and is relatively fresh with approximately 20% altered to malachite + (azurite). Pyritohedrons, averaging .25" (.6 cm), are also common in the quartz. Crystals of clear calcite and pale barite both averaging .25" x .125" (.6 x .3 cm) are common as vug fillings in the dolostone. Tetrahedrite from this showing assayed at 186 oz/ton silver.

The showing is 100 x 30' (30 x 10 m) in size. Minerals occur in talus, with no outcropping being present.

WHITE SHOWING (23)
Co-ordinates: L48S - 12.5W

The mineralization here consists of botryoidal hematite overlying and intergrown with layers of barite crystals. The host rock is a dark grey, porous, dolomitized limestone. The host rock is heavily iron-stained and heavily silicified with some infilling of vugs by quartz. Lemon-yellow barite crystals are more plentiful than the hematite. These crystals average .25" x .125" (.6 x .3 cm) although they can range to .4" x .25" (1 cm x .6 cm). Botryoidal hematite occurs up to .4" (1 cm) thick. The minerals form as fracture and vug linings in the dolostone host.

The mineralized area is approximately 10' x 14' (3 m x 4 m) in talus close to the chert-dolostone contact.

DON SHOWING (24)
Co-ordinates: L93.5S - 13.5E

The minerals at this location consist of botryoidal hematite lining fracture surfaces in the dolostone host. The host rock is a leached, porous, vuggy, grey, dolomitized limestone. The hematite forms botryoidal layers .06" to .4" (1.6 mm to 10 mm) thick with spheres .06" to .25" (1.6 mm to 6 mm). Mineralization occurs in a 25 x 25 foot (7.6 x 7.6 m) part of a talus slope with the largest mineralized block being 3' (1 m) in length.

MIA SHOWING (25)
Co-ordinates: L87-5S - 12.5E

The mineralization at this showing consists of botryoidal hematite underlain by crystalline barite, lining fractures and vugs in a dolostone host. The host rock is a leached, porous and vuggy grey dolomitized limestone. The minerals consist of green-yellow barite crystals approximately .3" (.8 mm) long, overlain by botryoidal hematite .2" to .4" (.5 cm to 1 cm) thick with spheres to .25" (.6 cm). The minerals occur as vug and fracture coatings. The host dolostone is silicified in the area of mineralization but is generally leached. The showing comprises an area 30' square (9 m square) in outcrop and talus.

CHRIS SHOWING (27)
Co-ordinates: L76.5S - 32.5E

The mineralization at this showing consists of barite crystals and sulphide box-works occurring as open-space filling of a porous dolostone host. The host rock is a dark grey, porous, vuggy and fractured dolomitized limestone which is partially silicified in the area of mineralization. Pale yellow barite crystals averaging ¼" x ¼" (.6 cm x .6 cm) are found on iron-stained fracture and vug surfaces. Gossanned sulphide box-works are seen in a white, crystalline quartz matrix and average approximately ½" x ½" (1.3 x 1.3 cm) in size. The showing occurs as talus blocks and is approximately 50' x 50' (15 m x 15 m) in size.

TARA SHOWING (28)
Co-ordinates: L52S - 64E

The mineralization at this showing consists of lemon-yellow barite crystals averaging ¼" x ¼" (.6 x .6 cm) overlain by botryoidal hematite 1/8" to 2" (3 mm to 5 cm) thick with spheres averaging 1/8" (.3 cm) in diameter lining vug and fracture surfaces in a porous dolostone host. The host rock is a grey, porous, vuggy and fractured, dolomitized limestone which is locally extremely leached and gossanned.

The specific gravity of some dolostone blocks was estimated to be as low as 1.5. The showing is composed of talus blocks and is approximately 150 x 100 feet (45 x 30 m) in size.

EAGLE'S NEST SHOWING (29)
Co-ordinates: L8N - 34.5E

The mineralization at this showing consists of tetrahedrite altering to azurite + (malachite) in a white, crystalline quartz and calcite matrix occurring as open-space filling in a fractured dolostone host. The host rock is a grey, moderately-fractured dolomitized limestone. The tetrahedrite occurs as small blebs averaging 1/8" - 1/4" (.3 - .6 cm) in diameter and is approximately 20% altered to azurite + malachite. The mineralized fracture fillings are small, averaging 1/16" - 3/4" (.15 - 2 cm) in width. Well-developed, light-brown dolomite crystals are abundant in the area.

The showing occurs as outcrop and is approximately 6' x 15' (2 m x 5 m) in size.

SOUTHERLY SHOWING (30)
Co-ordinates: L97S - .5W

Mineralization at this showing consists of pale-yellow barite crystals lining vugs and fractures in a grey, porous, vuggy dolomitized limestone. The barite crystals average .25" (6 mm) filling fractures in the dolomite.

The showing is 3' x 5' (1 m x 1.6 m) in size.

NEW SHOWING (31)
Co-ordinates: L17S - 1W

The mineralization consists of auricalcite, plumbojarosite, galena, tetrahedrite altering to malachite + (azurite), goethite and sphalerite altering to smithsonite, in a quartz matrix infilling fractures and vugs in a grey, porous, vuggy, dolomitized limestone. The matrix is white quartz with crystals to .4" (1 cm) in length. Weathered tetrahedrite is the most common sulphide found with minor plumbojarosite and auricalcite. Sphalerite box-work structures and galena are found separately in the quartz. The showing comprises 60' x 60' (20 m x 20 m) of a talus slope.

NEW GALENA SHOWING (32)
Co-ordinates: L14S - .5W

The minerals at this showing consist of galena, sphalerite and smithsonite in a quartz and calcite matrix infilling a tight, moderately-fractured grey dolomitized limestone. Galena masses .2" (.5 cm) appear in intimate association with sphalerite box-works and smithsonite in a matrix of white, coarse-grained calcite and quartz. The minerals infill small fractures, .4" (1 cm), in the dolostone.

This 42-square-foot (4 square metres) showing occurs in a talus slope.

QUARTZ BRECCIA (33)
Co-ordinate: L49S - 14W

Mineralization at this location consists of an outcrop 10' x 3' (3 m x 1 m) which contains a quartz breccia in a quartz and silicified dolomite matrix. Origin seems to be a collapse breccia of white, fine-grained anhedral quartz fragments, up to .8" (2 cm) in a matrix of relatively clean, fine-grained quartz and dark-grey, silicified dolostone. Rare goethite is seen in small (.4" x .4" - 10 x 10 mm) vugs.

This breccia occurs near the chert-dolostone contact.

A P P E N D I X "G"

DDH
77-8

XXX 41

DATE AUGUST 20, 1977

FILE NO. 10016- 12

ASSAY CERTIFICATE

WHITEHORSE ASSAY OFFICE LTD.
BOX 4518 WHITEHORSE Y. T.
PHONE 667 2694 Y1A 2R8

SAMPLE RECEIVED FROM MR. P. WHITE

SAMPLE NO.	GOLD Oz. Per Ton	SILVER Oz. Per Ton	LEAD	ZINC	COPPER			
D.D.H. # 8:								
0'- 27'		78.34	6.67	.28	3.85			
27'- 37'		.85	3.28	.14	2.35			
37'- 47'		20.80	3.80	TR	.35			
47'- 57'		1.09	2.05	.01	.44			
57'- 62'		1.15	.22	.01	.13			
62'- 67'		73.92	20.33	.02	1.45			
67'- 77'		132.8	10.31	.10	4.20			
77'- 87'		.59	2.80	.06	.73			
87'- 97'		.85	16.74	.44	1.94			
97'- 107'		1.18	2.65	.50	2.27			
107'- 117'		1.03	4.50	.16	4.30			
117'- 123'		1.65	1.55	.86	2.07			

ASSAYER. K. Heyland, for GEO. SPALDI

XXX iv

78-2

8.47 oz/Ag

DATE SEPTEMBER 5, 1978

FILE NO. 182- 14

ASSAY CERTIFICATE

WHITEHORSE ASSAY OFFICE LTD.
BOX 4518 WHITEHORSE Y. T.
PHONE 667 2694 Y1A 2R8

SAMPLE RECEIVED FROM RIO ALTO EXPLORATION

SAMPLE NO.	GOLD Oz. Per Ton	SILVER Oz. Per Ton	LEAD %	ZINC %	COPPER %	BARIUM BaSO4		
RS- 1177		TR	.03	.05	.02	-		
1178		.01	TR	.05	.02	-		
1179		.01	.01	.04	.02	-		
1180		.01	TR	.08	.02	-		
1181		.01	TR	.09	.01	-		
1182		TR	.01	.09	.02	-		
1183		.01	.01	.16	.03	-		
1184		TR	.01	.14	.02	-		
1185		.01	TR	.11	.02	-		
1186		.03	TR	.01	.02	-		
1187		.01	.02	.01	.02	-		
1188		TR	.01	TR	.01	-		
1189	58-63	8.47	17.72	.04	.25	-		
1190		.01	.03	TR	.01	To Follow		

ASSAYER K. Hyland for GEO. SPALDING

Good Hol
Hol # 78-18

ASSAY CERTIFICATE

WHITEHORSE ASSAY OFFICE LTD.
BOX 4518 WHITEHORSE Y. T.
PHONE 667 2694 Y1A 2R8

[illegible]M RIO ALTO EXPLORATION

SAMPLE NO.	GOLD Oz. Per Ton	SILVER Oz. Per Ton	LEAD %	ZINC %	COPPER %	CADMIUM %	IRON % Fe
RS- 1036		.01	.02	.39	.01	-	-
1037		TR	.03	.08	.01	-	-
1038		.29	.03	.45	.08	-	-
1039		TR	TR	TR	.01	—	6.82
1040		TR	TR	TR	.01	-	8.57
1041		7.79	24.58	2.40	.21	TR	-
1042		2.15	2.90	.24	.24	-	-
1043		1.40	.42	4.75	.26	.01	-
1044		.53	.43	.72	.38	-	-
1045		9.40	1.63	4.60	.41	.02	-
1046		10.63	2.23	.22	.19	-	-
1047		14.07	2.70	.18	.46	-	-
1048		TR	.01	TR	.01	-	-
1049		TR	.01	21.70	.02	.10	-
1050		.03	.03	.05	.01	-	-
1051		TR	.03	6.43	.02	.04	-
105[illegible]		TR	.02	.90	.01	-	-
10[illegible]		.12	.03	.25	.01	-	-
1054		.29	.01	.15	.01	-	-
1055		.29	.04	.10	.02	-	-
1056		.18	.03	.11	.02	-	-
1057		.21	.02	.15	.01	-	-
1058		.02	.05	.20	.06	-	-
1059		.01	.06	.15	.05	-	-
1060		.01	.13	.10	.04	-	-
1061		.26	.14	.03	.02	-	-
1062		.01	.13	.05	.02	-	-
1063		.06	.25	.07	.04	-	-

ASSAYER

ASSAY CERTIFICATE

DATE AUGUST 28, 1978

NO. 166- 172 Page 4

DDH 78-104

17.58 oz

WHITEHORSE ASSAY OFFICE LTD.
BOX 4518 WHITEHORSE Y. T.
PHONE 667 2694 Y1A 2R8

SAMPLE RECEIVED FROM ... ORATION

SAMPLE NO.	GOLD Oz. Per Ton	C		ZINC %	COPPER %			
RS-								
S- 2032		TR	.16	.08	.05			
2033		.03	.23	.08	.04			
2034		TR	TR	.01	.01			
2035		17.58	.34	.01	.01			
2036		.01	.04	TR	.01			
2037		TR	.11	.02	.01			
2038		.01	.30	.08	.03			
2039		.32	.21	.27	.10			
2040		.01	.02	.01	.02			
2041		.01	TR	TR	.01			
2042		TR	TR	TR	.01			
2043		TR	.01	TR	.01			
2044		.02	TR	TR	.01			
2045		.03	TR	TR	.01			
2046		.09	.01	.01	.01			
2047		.02	.01	TR	.01			
2048		.06	.01	.08	.02			
2049		.06	TR	.19	.06			
2050		TR	TR	.03	.02			
2051		TR	.01	.04	.02			
2052		.01	.01	.26	.03			
2053		.01	.04	.24	.03			
2054		TR	TR	.06	.03			
2055		.01	TR	.04	.01			
2056		.01	.01	.18	.01			
2057		.02	.08	TR	.01			
2058		.01	.09	TR	.01			
2059		TR	.18	TR	.01			

ASSAYER GEO. SPALDING

XXX vii

eral Testing Laboratories
ivision of SGS Supervision Services Inc.
1001 EAST PENDER ST. VANCOUVER B.C., CANADA V6A 1W2
PHONE (604) 254-1647 TELEX 04-507514 CABLE: SUPERVISE

SGS

DDH 80-1
DDH 80-3
DDH 80-4

TO:
RIO ALTO EXPLOI
Suite 710, 610
Calgary, Albert
T2P 1G5

CERTIFICATE OF ASSAY

No.: 8006 - 0953 DATE: June 19, 1980

...eby certify that the following are the results of assays on: Ore

MARKED	Depth in feet	GOLD (oz/st)	SILVER (oz/st)	Copper Cu (%)	Lead Pb (%)	Cadmium Cd (%)	XXX	XXX	XXX
	25 - 29	0.002	0.40	0.21	0.69	0.003			
	29 - 34	0.002	2.99	0.19	0.57	0.003			
	38 - 43	0.002	59.08	2.53	24.57	0.004			
	34 - 37	0.002	0.82	0.24	0.78	0.002			
	37 - 38	0.002	44.73	2.80	17.13	0.003			
	43 - 48	0.002	0.77	0.99	4.40	0.003			
	48 - 60'4"	0.002	4.21	4.31	4.66	0.004			
	60'3"-64'6"	0.002	2.29	2.50	1.94	0.005			
	72 - 77	0.002	25.47	3.34	13.72	0.002			
	108'7"-112'6"	0.002	1.4	0.05	0.75	0.001			
	112'6"-115	0.002	8.97	0.90	9.94	0.002			
	115 - 119'4"	0.002	1.16	0.25	0.30	0.003			

PROVINCIAL ASSAYER

L. WONG

BONDAR-CLEGG & COMPANY LTD.

DDH 80-15

136B INDUSTRIAL RD, WHITEHORSE, YUKON Y1A 4X1

PHONE: (403) 667-6523
TELEX: 036-8-460

Certificate of Analysis

TO Rio Alto Exploration
Box 45[illegible]
Whitehorse, Yukon

REPORT NO. A-49-9[illegible]

DATE August 2[illegible], 1980

Page 2

I hereby certify that the following are the results of analyses made by us upon the herein described rock samples

MARKED		oz/ton Ag	% Cu	% Pb	% Zn						
DDH80-14	16 25'-50'	0.06	0.01	0.01	0.19						
	17 50'-75'	0.07	L0.01	0.02	0.17						
	18 75'-100'	0.10	0.01	0.01	0.62						
	19 100'-125'	L0.03	L0.01	0.01	0.04						
	20 125'-150'	0.07	L0.01	0.07	0.50						
	21 150'-175'	0.19	0.03	0.09	0.59						
	22 175'-200'	27.2	0.69	5.00	0.07						
DDH80-15	23 0'-25'	1.09	0.06	0.41	0.11						
	24 25'-50'	0.15	L0.01	0.06	0.08						
	25 50'-75'	0.12	L0.01	0.06	0.01						
	26 75'-8[illegible]	0.28	0.02	0.04	0.17						
DDH80-16	27 0'-25'	0.12	0.03	0.07	0.07						
	28 25'-50'	0.12	0.02	0.13	0.13						
	29 50'-75'	0.09	0.01	0.05	0.08						
	30 75'-100'	0.20	0.01	0.05	0.09						

NOTE:
Rejects retained two weeks
Pulps retained three months
unless otherwise arranged.

BONDAR-CLEGG & COMPANY LTD.

Steven Simpson

XL i

To: TAIGA CONSULTANTS LTD.,
1300 - 8th Street S.W.,
Calgary, Alta. T2R 1B2

ATTN: Jim Davis

File No. 24008
Date October 19, 1982
Samples Core

Certificate of ASSAY
LORING LABORATORIES LTD.

Page # 5

SAMPLE No.	OZ/TON Gold	OZ/TON Silver	% Cu	% Pb	% Zn
82-5					
17-27	Trace	3.22	.03	1.63	.01
27-34	Trace	.36	.04	.25	.01
34-42	Trace	.40	.08	1.07	.09
42-47	Trace	.70	.10	1.68	.21
47-55	Trace	.58	.15	1.45	.11
55-57.7	Trace	3.40	.21	8.73	.06
57.7-58	Trace	3.34	.02	16.65	.01
58-59	Trace	6.36	.02	23.42	Trace
59-59.9	Trace	1.88	.08	9.83	.01
59.9-62	Trace	13.92	.02	52.61	Trace
62-62.3	Trace	1.16	.42	10.92	.07
64-64.8	.006	1.38	.04	3.25	.01
64.8-67	Trace	8.38	.10	1.77	.02
67-68.3	Trace	.54	.01	.21	.02
62.3-64	Trace	1.00	.27	3.01	.02
107-115	Trace	8.02	.16	6.60	.07
82-6					
43-47	Trace	9.80	.11	1.19	.05
47-51	Trace	1.60	.10	.60	.01

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

XL ii

To: TAIGA CONSULTANTS LTD.,
1300 -8th Street S.W.,
Calgary, Alta. T2R 1B2

ATTN: Jim Davis

File No. 24008
Date October 19, 1982
Samples Core

Certificate of ASSAY
LORING LABORATORIES LTD.

Page # 6

SAMPLE No.	OZ/TON Gold	OZ/TON Silver	% Cu	% Pb	% Zn
82-6					
57-67	Trace	9.34	.07	31.22	.01
82-7					
59.5-62.5	Trace	1.96	.01	.13	.02
62.5-65	Trace	1.94	.01	.28	.01
65-72	Trace	.44	.01	.12	Trace
72-74	Trace	.46	.01	.05	Trace
74-78	Trace	.04	.01	.05	Trace
78-80	Trace	1.58	.03	.31	.02
80-83	Trace	.38	.57	.12	.05
83-85	Trace	.64	.21	.27	.03
85-86	Trace	.36	.03	.08	.01
108-109	Trace	.28	.06	.09	.03
82-8					
90-92	Trace	Trace	Trace	.01	Trace
92-97	Trace	.02	.01	.01	Trace
97-102	Trace	Trace	.01	.01	.02
102-107	Trace	Trace	.01	.01	.01
107-112	Trace	.12	.01	.01	.01

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

A P P E N D I X "I"

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1978 Jan.	Preliminary Report, Rusty Springs Zn/Pb/Cu/Ag Prospect (Gary Schoel)
1978 Jan.	Report of 1977 Exploration, Rusty Springs Mineral Project (Paul S. White, P.Eng.)
1978 July	Interim Geologic Report, Rusty Springs Prospect (Paul S. White, P.Eng.; Frederick M. Beck)
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1979 Mar.	Rusty Springs Prospect, a Brief Summary (D. W. Hilland, President; Rio Alto Explorations)
1979 Mar.	Report of 1978 Exploration, Rusty Springs Mineral Prospect (Paul S. White, P.Eng.)
1979 Apr.	A Geological Model of the Rusty Springs Prospect (David Hansen)
1979 Aug.	Report of Geological Program, Rusty Springs Prospect May 15 to August 1, 1979 (David Hansen; Joseph Bankowski)
1979 Aug.	Exploration Progress (F. M. Beck)
1979 Sep.	Gravity and I.P. Surveys, Rusty Springs Prospect (Charles A. Ager, Ph.D., P.Eng.)
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1980 Jan.	Re-evaluation of 1979 Gravity (Maps) (R. Galeski)
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1980 Mar.	Summary Report on Rusty Springs Mineral Prospect (R. T. Heard, P.Eng.)
1980 Sep.	Report on Geochemical Sampling, Rusty Springs, Y.T. (D. Hoy; J. Bankowski)
1980 Sep.	Report on 1980 Exploration Programme, Rusty Springs, Y.T. (J. Bankowski for Rio Alto Explorations)
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1980	Critique of Report on Exploration, Rusty Springs (G. Liedtke)
1981 Dec.	Evaluation of Geophysical Data, Rusty Springs rea (J. Hansen)
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1982 Apr.	A Geological Evaluation of the Rusty Springs Prospect (Taiga Consultants Ltd., for Kenton Natural Resources)
1982 July	Interim Report on the Rusty Springs Property (J. W. Davis, M.Sc., P.Geol.)
1982 Aug.-Sep.	Drilling Report on the Rusty Springs Property (Taiga Consultants Ltd., for Kenton Natural Resources)
1983 July-Sep.	Exploration Program of the Rusty Springs Property (Taiga Consultants Ltd., for Kenton Natural Resources)

APPENDIX "J"

CERTIFICATE

I, the undersigned, of the City of Calgary in the Province of Alberta, do hereby certify that:

1. I am a practising Professional Geologist with offices at Suite 100, 1300 - 8th Street S.W., Calgary, Alberta.

2. I am a graduate of the University of Calgary (B.Sc. Geology, 1976).

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 the exploration work carried out thereon.

6. I have no interest, either directly or indirectly, in Kenton Natural Resources Corporation, nor do I expect to receive any.

DATED at Calgary, Alberta, this 24th day of January, A.D. 1984.

THE ASSOCIATION OF PROFESSIONAL ENGINEERS, GEOLOGISTS and GEOPHYSICISTS OF ALBERTA
PERMIT NUMBER
P 2399
TAIGA CONSULTANTS LTD.

Claude H. Aussant, B.Sc., P.Geol.
TAIGA CONSULTANTS LTD.

PROFESSIONAL GEOLOGIST
CLAUDE H. AUSSANT
ALBERTA

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-E.M. Conductors
- Diamond Drill Holes
- Cross Section Line

Tertiary		6	Regolith: orange to rusty colouring, highly fragmented, intensely weathered, siliceous, strongly limonitic
Carboniferous	Hart River Formation	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, mod well indurated, very well sorted.
		4	Chert, brecciated, carbonaceous
			unconformity
Devonian	Ogilvie Formation	3	Carbonaceous Dolomite Breccia: grey to buff, occ mottled purple and green weathering, med to dk grey dol, white dolomite infilling, occ pyritic mudstone seams, fetid, 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

Proposed lines over which a pulse EM Survey should be conducted

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ALBERTA

KENTON NATURAL RESOURCES CORPORATION

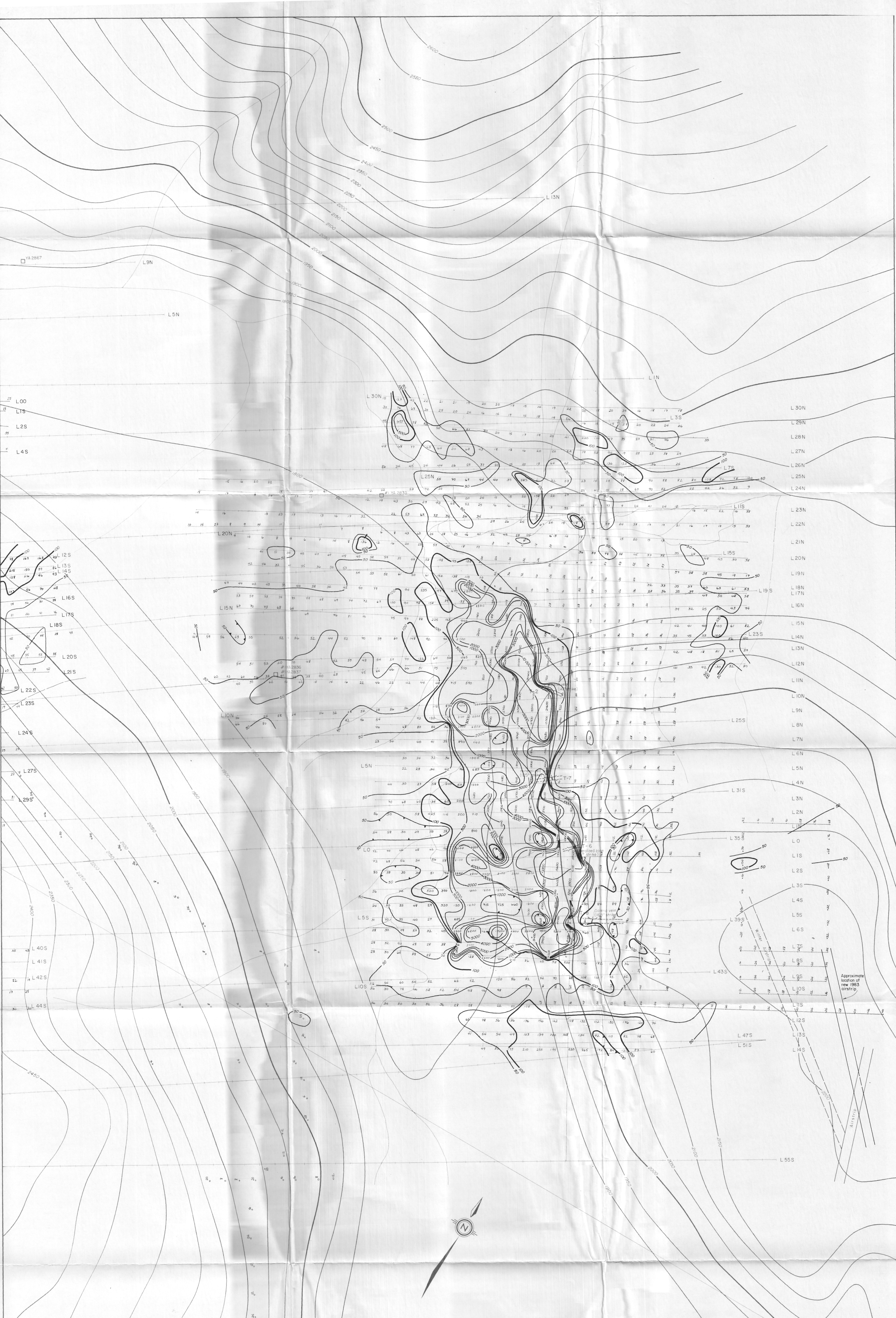
RUSTY SPRINGS, YUKON

MIKE HILL / ORMA HILL

GEOLOGY

DATE	OCTOBER 1983	NTS	116 K/8, 116 K/9
PROJECT	Y-81-1	MAPPED/ DRAWN BY	C. AUSSANT
SCALE	1:5000		
TAIGA CONSULTANTS LTD		MAP	APPENDIX "D"

Trenches:
Sampled interval
Stripped area - not down to bedrock
Contour intervals:
1 ppm
5 ppm
10 ppm
20 ppm
30 ppm
40 ppm
50 ppm
1982 geochem sampling
23.0
27.6
previous geochem sampling
66° 30'
KENTON NATURAL RESOURCES CORPORATION
RUSTY SPRINGS, YUKON
ORMA HILL
SOIL GEOCHEMISTRY - Ag (ppm)
DATE OCTOBER, 1982
NTS 116K/8,9
PROJECT Y-81-1
MAPPED/ DRAWN BY C. AUSSANT
SCALE 1:2500
0 25 50 75 100
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

6200

3440 previous geochem sampling

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PROFESSIONAL GEOLOGIST ALBERTA

KENTON NATURAL RESOURCES CORPORATION

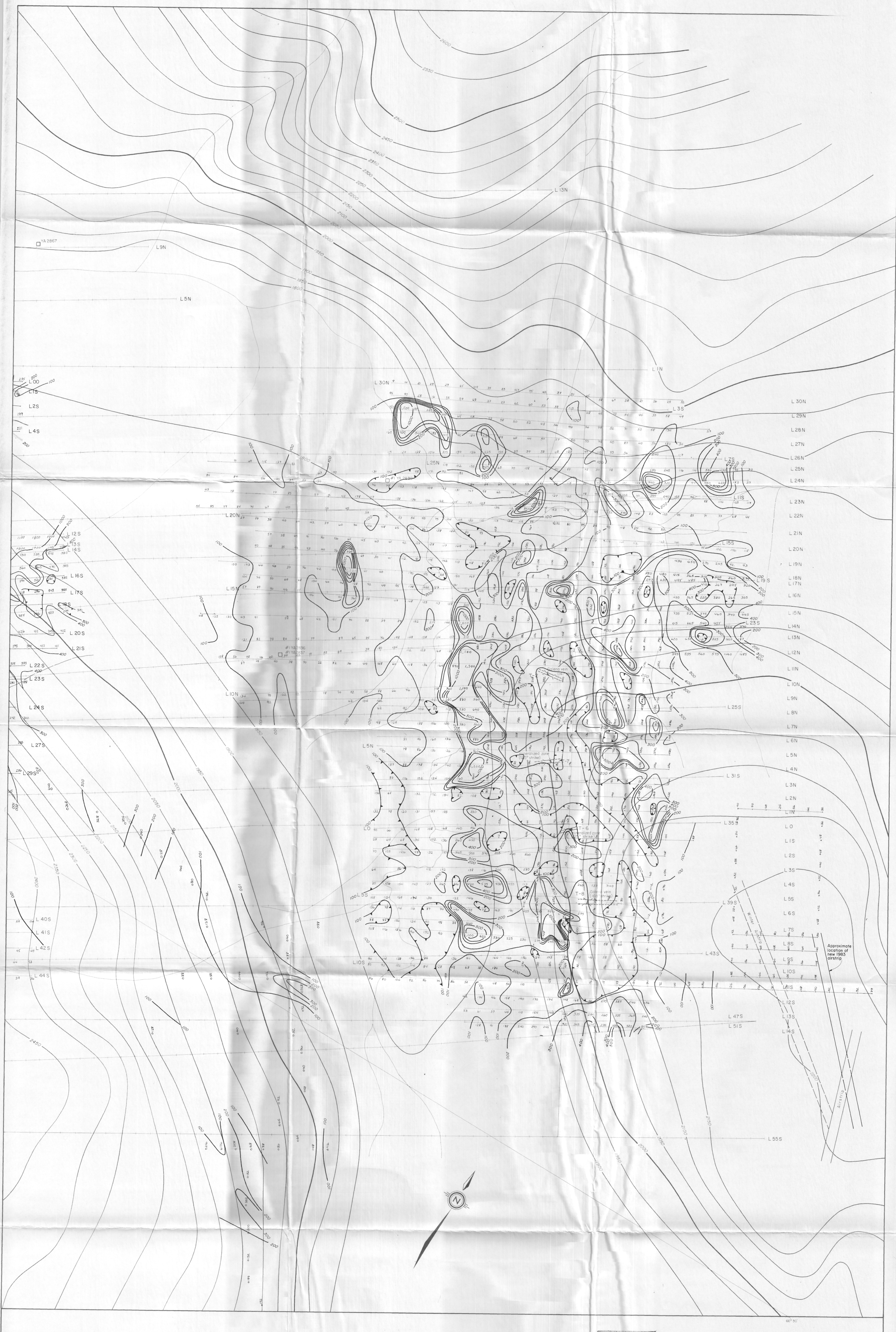
RUSTY SPRINGS, YUKON

ORMA HILL

SOIL GEOCHEMISTRY – Pb (ppm)

DATE OCTOBER, 1982	NTS 116K/8,9
PROJECT Y-81-1	MAPPED/ DRAWN BY C. AUSSANT
SCALE 1:2500	0 25 50 75 100 METRES
TAIGA 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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CLAUDE H. AUSSANT

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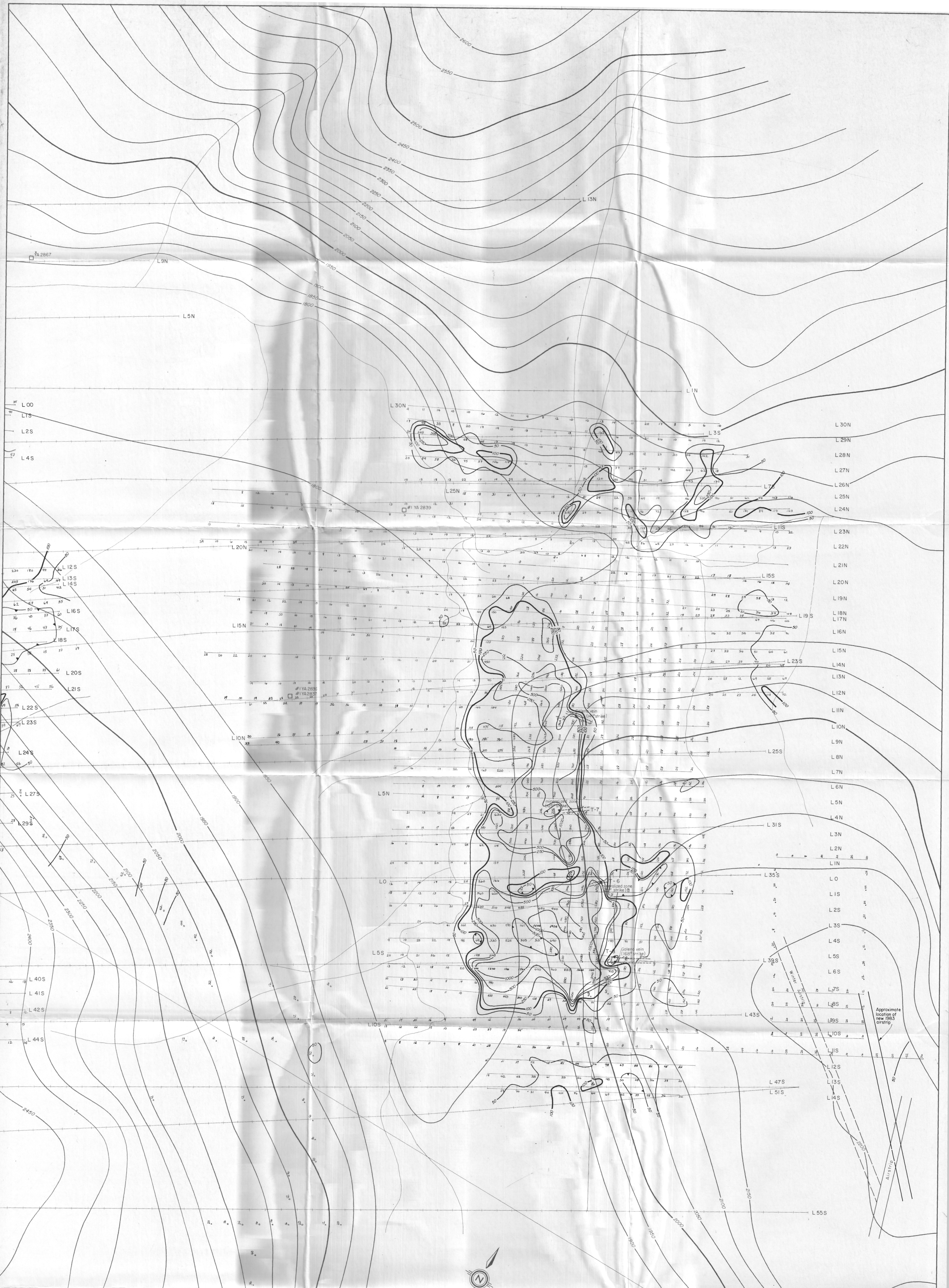
RUSTY SPRINGS, YUKON

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	0 25 50 75 100 METRES
TAIGA CONSULTANTS LTD	MAP 9

REVISED: 1983



Trenches:

Sampled interval

Stripped area – not down to bedrock

Contour intervals:

50 ppm

100ppm

250ppm

500ppm

1000ppm

1982 geochem sampling 1120

695 previous geochem sampling

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CLAUDE H. AUSSANT

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	0 25 50 75 100 METRES
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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CLAUDE AUSSANT

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RUSTY SPRINGS, YUKON

MIKE HILL

SOIL GEOCHEMISTRY - Ag (ppm)

DATE OCTOBER, 1982	NTS 116K/8,9
PROJECT Y-81-1	MAPPED/ DRAWN BY C. AUSSANT
SCALE 1:2500	0 25 50 75 100 METRES
TAIGA CONSULTANTS LTD	MAP 11

REVISED: 1983

Contour intervals:

- 50 ppm
- 100 ppm
- 500 ppm
- 1000 ppm
- 2000 ppm
- 3000 ppm
- 4000 ppm
- 5000 ppm
- 10,000 ppm

1982 geochem sampling

763 551 previous geochem sampling

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CLAUDE H. AUSSANT

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/ DRAWN BY C. AUSSANT
SCALE 1:2500	0 25 50 75 100 METRES
TAIGA CONSULTANTS LTD	MAP 12

REVISED: 1983

Contour Intervals:
100 ppm
200 ppm
300 ppm
400 ppm
500 ppm
1000 ppm
5000 ppm
1982 geochem sampling
549
318
previous geochem sampling
PROFESSIONAL GEOLOGIST ALBERTA
CLAUDE H. AUSSANT
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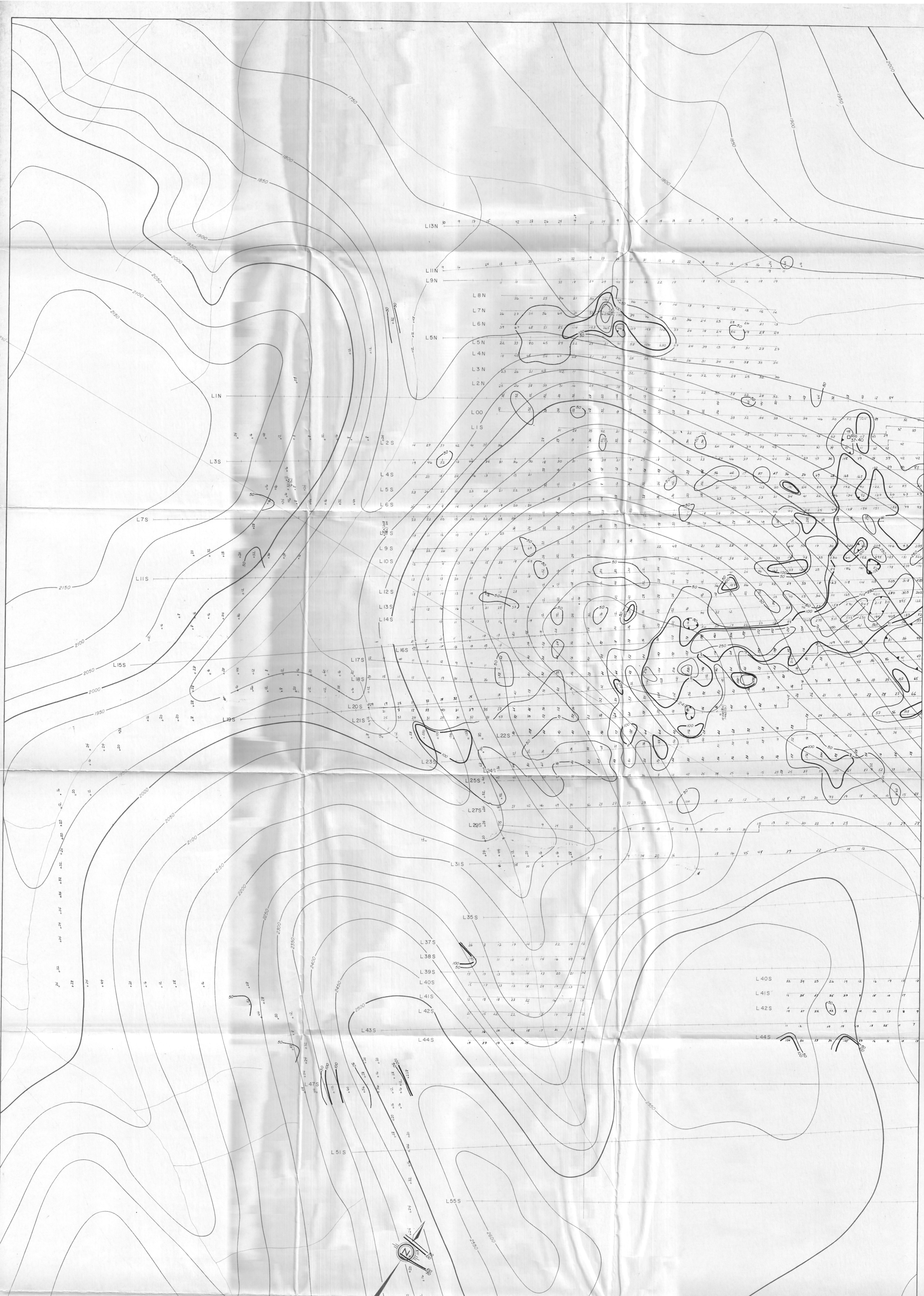
KENTON NATURAL RESOURCES CORPORATION
RUSTY SPRINGS, YUKON
MIKE HILL
SOIL GEOCHEMISTRY - Zn (ppm)
DATE OCTOBER, 1982
NTS 116K/8,9
PROJECT Y-81-1
MAPPED/ DRAWN BY C. AUSSANT
SCALE 1:2500
0 25 50 75 100
METRES
TAIGA CONSULTANTS LTD
MAP 13
REVISED: 1983



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

1982 geochem sampling
316
401
previous geochem sampling

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TAIGA CONSULTANTS LTD.

PROFESSIONAL GEOLOGIST ALBERTA
C. AUSSANT

KENTON NATURAL RESOURCES CORPORATION	
RUSTY SPRINGS, YUKON MIKE HILL SOIL GEOCHEMISTRY - Cu (ppm)	
DATE OCTOBER, 1982	NTS 116K/8,9
PROJECT Y-81-1	MAPPED/ DRAWN BY C. AUSSANT
SCALE 1:2500	0 25 50 75 100 METRES
TAIGA CONSULTANTS LTD	MAP 14

REVISED: 1983