A GEOLOGICAL REPORT ON THE
RON GROUPS NOS. 1, 2, & 3
139°38'W, 63°54'N
ELDORADO CREEK
CLAIM SHEET 115-O-14

January 2nd, 1979 G. J. McGinn, P.Eng.

090479

This report has been examined by the Geological Evaluation Unit and is recommended to the Commissioner to be considered as representation work in the amount of

$ 12,000.00

J. a Morin

A/ Resident Geologist or
Resident Mining Engineer

Considered as representation work under Section 53 (4) Yukon Quartz Mining Act.

B. R. BAXTER
Supervising Mining Recorder

for Commissioner of Yukon Territory

INTRODUCTION

During 1977, a privately funded prospecting syndicate was formed, and a grassroots prospecting program was carried out in the Klondike District of the Yukon Territory. As a result of this program, 40 Quartz claims were staked on Eldorado Creek. A work program was initiated on the claims with a view to completing the formulation of a geologic-geochemical model for the property which could be used, subsequently, to explore the claims for lode gold deposits. Various geochemical and geophysical tests were carried out with the intent of finding an effective means of exploring the property.

In early 1978, a 3,000,000 share company was incorporated and named Klon Exploration Co. Ltd. The Quartz claims were transferred to the new company and shares were issued to the syndicate members on a previously contracted formula. In addition, a previous commitment was honored by offering existing shareholders the right to purchase further shares. Money from this rights offering was used to finance a second phase of exploration during the summer of 1978.

The lode gold exploration program consisted of laying out baselines and crosslines, followed by V.L.F. and magnetic surveys.

A second program was launched to search for buried placer deposits on property owned by the Fry family, who leased subsurface (below 40') exploration and mining rights on eight placer claims to Klon Exploration. The claims lie above and below the confluence of

Eldorado and Bonanza Creeks. A detailed pace and compass magnetic survey was completed on lower Eldorado Creek (see Plate 2), and this was followed by drilling three six-inch diameter test holes (see Appendix II) which intersected a buried, auriferous placer deposit.

LOCATION AND ACCESS

The Klondike district may be reached by an all-weather road (Highway No. 2) which begins at the Alcan Highway just west of Whitehorse, Y.T., and leads in a northerly direction until it joins the Klondike Highway, which in turn leads in a westerly direction to Dawson City, Y.T.

Eldorado Creek lies some 25 miles south-southeast of Dawson City, and may be reached by an all-weather gravelled road leading up Bonanza Creek to the former site of the town of Grand Forks. A passable secondary road leads up Eldorado Creek to within two miles of its uppermost limits.

TOPOGRAPHY

The Klondike region is an upland that forms part of the Yukon Plateau. The plateau has been deeply dissected by streams and rivers and has a relief of approximately 1500 feet.

The Klondike district has not been glaciated; the rocks have been deeply weathered and the surface is generally mantled by decomposed bedrock. Bedrock is exposed occasionally on ridges, and has been exposed frequently in the valleys by trenching, pitting, and placer mining.

Permafrost to various depths is common throughout the district.

HISTORY

The Klondike district has a history dating back to the famed goldrush (stampede) of 1897-98. The reader is referred to Pierre Burton's recent book "Klondike" for background information on this momentous event.

The district developed an early and sustained reputation for being unpredictable. Eventually, it became clear that relatively few creeks (or parts of creeks) were rich, while the vast majority of the small watercourses contained little or no gold. Moreover, the pay zone of rich creeks tended to vary widely from claim to claim in both the coarseness and the quantity of gold per lineal foot of stream channel. This ore habit was noted to be in direct contrast to most gold placer deposits, which tend to be rich and coarse near the upper reaches of the pay zone and to become progressively poorer and finer downstream.

Eldorado and Bonanza Creeks have the reputation of being, mile for mile, the richest gold placer creeks ever discovered. However, accurate production statistics are not available.

Eldorado Creek gravels were originally mined by underground methods. Subsequently, the lower part of the creek was dredged, and, still later, the upper part was re-mined with earth moving equipment. Today, small operators are again re-mining portions of the creek with earth moving equipment. The creek is completely covered by placer claims, and, in the past few years, parts of the creek have been overstaked by quartz claims. Little work and no diamond drilling has been reported on any of these quartz claims,

which were, for the most part, allowed to lapse quickly. However, a recent attempt (1973) was made to churn drill the stream bed of lower Eldorado Creek ("false bedrock") and into buried placers reported on (pp.36-37, The Western Miner & Oil Review, July 1955) by A. Baird (see Appendix I), who published a section drawn by Dr. A. T. Hayden of a shaft sunk to a depth of 221 feet in 1902 (J. B. Tyrell, Eng. & Min. J., 75, (5), Jan. p.188). The section shows two more gravel pay zones below the "false bedrock". According to Baird, the shaft struck artesian water at 221 feet and was lost due to flooding. In the recent work (1974), three churn drill holes were drilled by W. Janner (pers. com.). The first hole was lost at 23 feet, the second at 65 feet, and the third at 41 feet. He states that the second hole stuck in wood at 65 feet (some 50 feet below "bedrock"), and, upon loosening the tool, pieces of wood floated to the surface. Janner considered that churn drilling was not practical for this drilling because surface water tended to flow down the outside of the well casing and flood the drill hole, and thus eliminate meaningful sampling via bailing. He suggested that future trials should employ a rotary drill.

GENERAL GEOLOGY

I) BEDROCK GEOLOGY

The Klondike gold fields are underlain in part by the Nasina Series and in part by the Klondike Series.

The Nasina Series consists of a structurally complex meta-sedimentary series consisting of dark grey rocks that grade from quartzites through micaceous quartzites to quartz mica schist. Occasionally, these rocks are intermingled with green chlorite schists, locally graphitic, and bands of crystalline limestones, phyllite, and shale.

The Klondike meta-sedimentary series consists principally of schists ranging from white to light grey and green; where chloritic they are medium to dark green. The series is described as sericite schist, but all gradations exist from hard flaggy, quartzitic varieties to very soft, strongly sheared, sericitic types.

Both the Nasina Series and the Klondike Series are cut by numerous barren quartz veins. Both series have been repeatedly intruded by large masses of foliated granite.

Here and there, tertiary sediments composed of shale, arkose, sandstone, tuffaceous sandstone and agglomerates to conglomerates overlie the sandstone.

Other rocks in the area include diabase dikes and occasional serpentinized ultrabasic rocks.

Placer gold deposits have been found in streams underlain by both the Nasina and the Klondike Series.

II) STRUCTURAL GEOLOGY

The Tintina Trench is the topographic expression of a huge dextral northwest trending fault with a net horizontal throw of some 250 miles. The movement commenced in Paleozoic time and continued into tertiary time with some 32 miles of throw during that era.

In the district southwest of the Trench there are numerous major faults and structurally controlled lineaments (see fig.1, courtesy of M. W. Milner, 1975) striking sub-parallel to parallel to the Tintina Trench. The writer was able to check a number of Milner's lineaments, as well as a number of other apparent lineaments. Evidence in the form of fracturing, brecciation and fault gouge indicated that these were also faults. These structures have traceable strike lengths of from five to fifty miles.

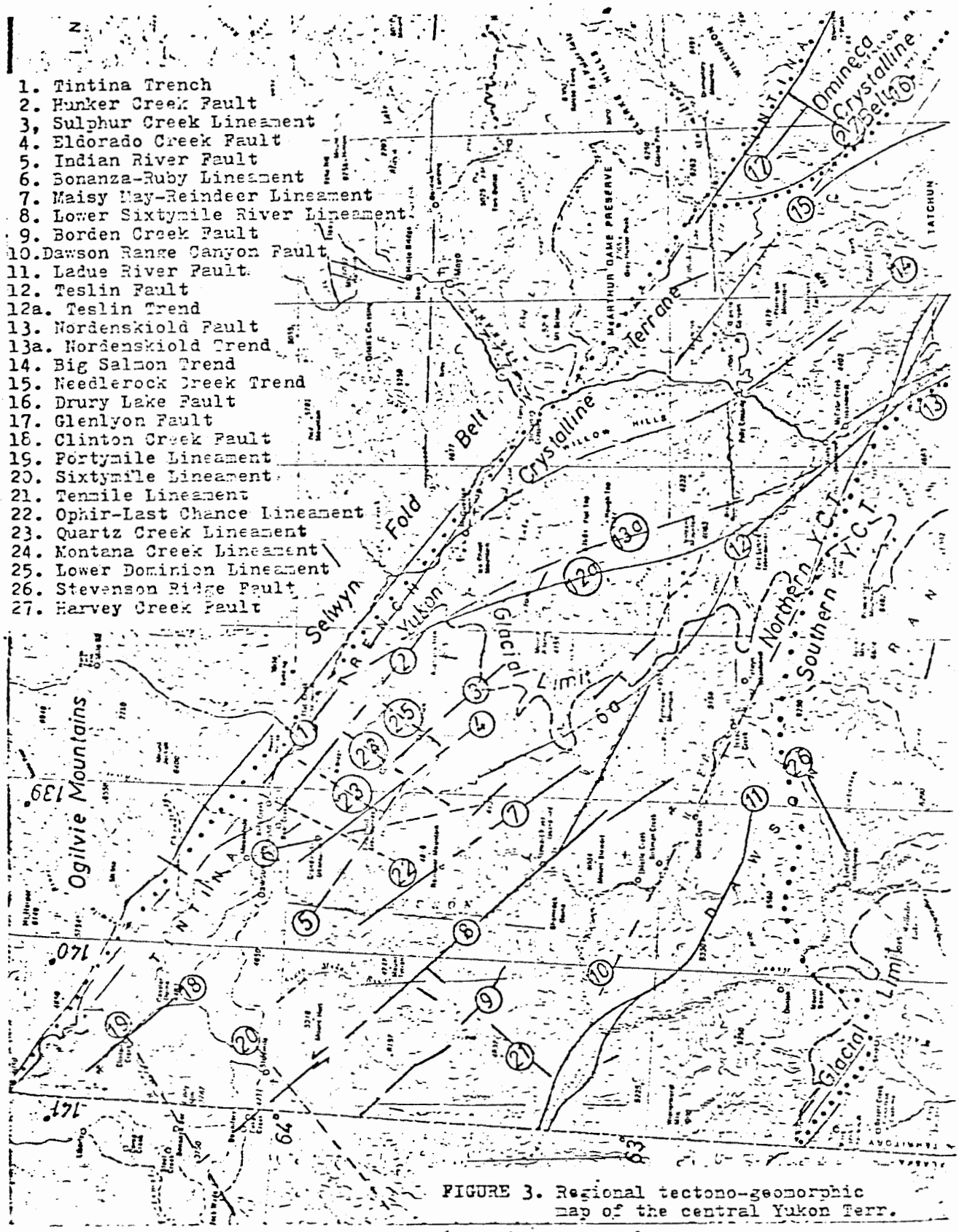

FIGURE 3. Regional tectono-geomorphic map of the central Yukon Terr.

Figure 1.
Courtesy M.W. Milner

Not all of the northwestern trending structures are known to have developed profitable gold placer deposits, but the converse is true. All of the really profitable creeks either; a) Follow a fault for part or all of their course, or; b) Are profitable below the point at which they cross such a structure. These include the following;

1) Eldorado Creek with its coincident Eldorado Creek Fault underlying the most prolific claims.
2) Hunker Creek with its Hunker Creek Fault.
3) Sulphur Creek with its Sulphur Creek lineament.
4) Upper Dominion Creek with its northwestern linearity throughout its productive zone.
5) Bonanza Creek with its Bonanza Creek lineament on lower Bonanza and the Victoria Gulch shear zone crossing upper Bonanza at McKay Gulch.
6) Adams Creek crossing the Eldorado Creek fault.
7) All Gold Creek crossing the Hunker Creek fault.
8) Quartz Creek crossing the Eldorado Creek fault extension.
9) Henderson Creek crossing the huge Maisy May - Reindeer Creek lineament.
10) Miller, Glacier and Little Gold Creeks on line with the lengthy Lower Sixty Mile River Fault.
11) Bear Creek with its own short lineament and accompanying breccia and gouge.
12) Clear Creek with its 5 miles lineament which is proving so productive in recent years.
13) Gold Run Creek with its northwest lineament.
14) Indian River with its Indian River Fault.

Many more minor placer showings could be explained if one takes into account that all of the major structures are almost certainly accompanied by minor parallel faults, cross faults, and fracture and joint systems.

It appears extremely likely that this system of faults has acted as mineralizing hydrothermal plumbing system for the whole district.

It has long been known (McConnell, 1903) that a section of the Klondike River and the area immediately south of it, including Bonanza Creek and lower Hunker Creek, was "uplifted" some 50,000 years ago. This "uplift" caused rapid downcutting of the respective stream channels and resulted in isolating parts of the old stream channel (the famous White Channel) as benches as high as 150' - 300' above the present channel. A new structural interpretation was made possible when Gleeson (1970, P.9) reported a thrust fault on the left limit (Adams Hill) of Bonanza Creek striking N 35°E and dipping 20° northwest with 30' to 40' of movement, and a similar thrust fault on the left limit (Paradise Hill) of Hunker Creek. This new information was augmented by Milner (1975, P.13) when he reported on a series of narrow bands of Nasina Series phyllite in Klondike schists on lower Bonanza Creek, which he suggests are "fault slices". Since thrust faults are normally repetitive, it would appear that the explanation of the local "uplift" is that it was due to crustal thickening as a result of repeated thrust faulting.

If the above conclusion is correct, then it would indicate that since thrust faulting caused the rapid elevation of the White Channel and subsequent rapid downcutting in lower Bonanza Creek, immediately above the last of the elevated bench gravels and above the zone of thrust faulting (i.e. in lower Eldorado Creek), there should have been a period of infilling while a deeper channel was being cut in Bonanza Creek. Moreover, there is the further possibility that not only Eldorado Creek but other Klondike streams in general might contain repeated lower channels, since it is common for youthful streams to form deep chasms which are subsequently infilled by rock and mud slides during the valley widening process. Using these

concepts, it would not be surprising if the 1902 shaft (Baird 1955) sunk in this locale did indeed intersect buried placers as reported by Dr. Hayden (see Appendix I).

III) PLACER GOLD SOURCE

While the district fault patterns, with their close identification with productive placer deposits, clearly point to the northwest tear faults as being responsible for the introduction of primary gold into the district in general, it is also clear, from studies of placer gold particles supplemented by published research, that the derivation of placer gold from the parent deposits must be indirect because the placer gold is apparently secondary. The evidence for this was fully discussed in a report on the property by the writer dated May 23rd, 1978. The most important conclusion of the earlier report was that the primary gold probably exists in the fault zones as a constituent of sulphides. This conclusion suggested that the district lode deposits could be explored by electromagnetic surveys conducted along the loci of the faults.

LOCAL GEOLOGY

The Ron group of claims is underlain by the Klondike Meta-sedimentary Series which includes cat's eye schist, sericite schist, chlorite schist, graphitic schist, and quartzites. Outcrop is scarce and the attitude of the schistosity does not in general conform with the bedding. Where observed, the rocks strike approximately east - west and dip steeply to the south.

The bedrock is sliced by the Eldorado Creek fault which strikes at 136° and dips to the southwest at 60°. The fault is generally traceable on aerial photographs in the area north of French Gulch. A study of the

photographs leads to the suspicion that there are several branches of the fault in the French Gulch locale. The Eldorado Creek fault is intersected by the Bonanza Creek Lineament (fault?) in the vicinity of (or south of) French Gulch.

With regard to economic surficial geology, the original upper placer gravels varied from zero to approximately 25 feet in thickness and were underlain by "bedrock". The term "bedrock"was used by miners to denote loose rock lying at the base of the stream. They used the term "benchrock" to denote solid rock or outcrop. The careless or wrongful use of the term "bedrock" almost certainly has been a major factor in the failure to explore adequately for deeper gravel beds, despite the fact that these were reported to exist as early as 1902. These early reports (see History) appear to be confirmed as a result of the drilling program supervised by the writer during September of 1978 (see Work Program below).

WORK PROGRAM

Field work on the Ron claims commenced on August 3rd, 1978, and was completed on September 26th, 1978. During this period, 44,550 feet of lines were cut and chained. 28,600 feet of lines were surveyed using a Geonics E M - 16 V.L.F. electromagnetic instrument, and 47,400 feet of crosslines were surveyed using an M - 700 McPhar magnetometer. In addition, 389 feet of holes were drilled and sampled, using a 6" rotary - percussion drill under contract from Midnight Sun Drilling Co. Ltd. of Whitehorse, Y.T.

I) V.L.F. Electromagnetic Survey

In general, crosslines were cut and chained at 800 foot intervals along the baseline and readings were

taken at 100 foot intervals along the crosslines. The low density of crosslines was dictated by difficult line-cutting conditions and available time.

The V.L.F. data were reduced in accordance with the Fraser method and plotted on Plate I. Despite the low crossline density, a major portion of the anomalous readings was found to be contourable, although even this portion could be enhanced by surveying more cross-lines.

The contourable anomalies fall along the course of the Eldorado Creek fault. The principle anomaly was traced for a strike length of 3200 feet (see Plate I). The anomaly narrows and disappears to the southeast. To the northwest, it broadens into two peaks and could not be contoured further because there is insufficient survey coverage to determine whether or not the anomaly joins with the strong anomaly on line 140+00 N or the weaker anomalies on lines 137+00 north and 145+00 north which cross the general course of the Bonanza Creek lineament.

A second strong anomaly was intersected by surveys on lines 84+00 north and 89+00 north, and is parallel but some 600 feet southwest of where the main anomaly disappears.

A third strong anomaly was intersected by surveys on lines 79+00 north and 84+00 north, and is approximately on the strike of the main anomaly.

A fourth weak anomaly was intersected by lines 73+00 north and 79+00 north, and is parallel to the baseline.

The general location and pattern of the anomalies, coupled with their discontinuity, and variations

in strength and width, are most encouraging. However, more V.L.F. surveying is definitely indicated, and the anomalies should also be surveyed using suitable horizontal loop electromagnetic equipment.

II) Magnetic Surveys

a) Despite the apparent lack of local magnetic relief on the G.S.C. aeromagnetic map 4309 G, and the discouraging results of tests conducted during the 1977 season, magnetic surveys were conducted over all V.L.F. survey lines. The results were not considered to be contourable or even useful. The diurnal errors (only partly reducible with a single instrument technique) were aggravated by slow surveying due to steep terrain, and undoubtedly were larger in many cases than the real variations from station to station. A general magnetic survey of this kind could only be justified on this property if an accurate proton magnetometer, complete with base recording station equipment, could be made available.

b) A section of lower Eldorado Creek was surveyed with the vertical component magnetometer, with lines spaced at 200 foot intervals, and stations at 50 foot intervals. 18,800 feet of line were surveyed, with the aim of finding magnetic lows which might reflect buried gravel channels.

Two traceable magnetic lows were found during this survey. One of these anomalies (see Plate 2) was followed back to an outcropping of a basic (diabase?) dike. Oddly, the dike material was found to be magnetic, although the anomaly along its course (and over the outcropping) was negative. The reasons for this seeming paradox (or its significance) have not so far been determined.

The second anomaly was traced from an initial magnetic low anomaly centered around the approximate position of the old Thomson shaft (see History). Surveying was carried out with great difficulty because of mining equipment (past and present) causing instrumental interference whenever approached. However, the anomaly was outlined and subsequently drilled.

DRILLING PROGRAM

Three holes were drilled, using a drill capable of drilling a six inch hole using either rotary (tricone) equipment or high speed downhole impact tools. Both drilling systems used compressed air to clear the drill cuttings. Generally, the unconsolidated material near the surface was triconed, and impact equipment was used thereafter. This equipment was chosen because of past (see History) drilling problems. In hindsight, it would appear that a properly equipped churn drill, operated by competent personnel, would be much more suitable for drilling and sampling the lower channel.

The impact - rotary drill created sampling problems because the sample was blown out of a 6" bull hose by compressed air at 25 p.s.i. This system worked fairly well in dry drilling, although there was a tendency to pulverize the sample, and thus render positive recognition of stream washing difficult. When a small amount of moisture was present, the cuttings tended to form mud plugs in the hose which were then ejected with considerable violence. The main problem was that when the lower zone was encountered, it was accompanied by a sudden heavy inflow of water, which made it very difficult to capture the fine (and more valuable) fraction of the sample. This heavy

inflow of water was sufficient to allow sluicing of the auriferous zone intersected from 60' - 65' in hole E-2, and, subsequently, to recover the contained gold from the concentrate.

In all three holes, there was a suspicion that once the drill passed through the lower zone, placer sediments were being carried into the hole and borne to the surface, thus contaminating samples below the aquifer.

The drilling program was successful in proving the existence of an auriferous lower channel, and more work is clearly justified to evaluate this previously unworked deposit.

CONCLUSIONS

A) Lode Gold Exploration

1) Discontinuous variable conductive bodies have been proven to exist along the approximate course of the Eldorado Creek fault.

2) It appears likely that these conductive anomalies are directly connected with the ore-genesis of the placer gold deposits, and are, quite possibly, caused by the primary ore deposits from which the placer gold deposits of Eldorado Creek were derived.

3) Further geophysical surveying, followed by diamond drilling, is strongly justified.

B) Placer Gold Exploration

1) The use of detailed magnetometer surveys to indicate the possible position of buried stream channels appears to be as fully justified in the Klondike district as it has been in other placer districts throughout the world.

2) With a method of locating drill sites, and an auriferous buried channel now proven, further magnetic surveys, and drill sectioning of selected magnetic anomalies, now appears to be fully justified to evaluate these previously unworked deposits.

RECOMMENDATIONS

A) Lode Gold Exploration

It is recommended that:

1) Provision be made for extending line cutting by a minimum of 60,000 line feet, to both extend and to increase the density of survey coverage.

2) All new crosslines should be surveyed using a Geonics E-M 16 instrument.

3) All anomalous areas should be surveyed using deep penetration horizontal - loop electromagnetic equipment.

4) Financing should include provision for 3000 linear feet of diamond drilling, so that at least five holes could be drilled, with sites to be determined following completion of the extended geophysical surveys.

Lode Gold Exploration Budget

1.	3000 feet diamond drilling @ $27/day	$ 81,000.00
2.	Line cutting and E-M surveys, four field men @ $1500/month, for 2 months	12,000.00
3.	One supervising prospector for 2 months @ $150/day	9,000.00
4.	One supervising engineer, 60 days @ $240/day	14,400.00
5.	Two engineering assistants, 1 month	3,000.00
6.	Board and lodging, 420 man days @ $25/day	10,500.00
7.	One ¾ ton 4x4 International truck, 7000 miles @ 46¢/mile	3,220.00

8.	Geochemical and assaying allowance	1,000.00
9.	Travel allowance	1,000.00
10.	Accounting	1,500.00
11.	Equipment rental (instruments, etc.)	2,500.00
12.	Legal costs	1,000.00
		140,120.00
13.	Contingency fund 10%	14,012.00
		154,132.00
14.	Final report	6,000.00
		$ 160,132.00

B) Placer Gold Exploration

It is recommended that:

1) A minimum of 20,000 feet of line be cut and chained.

2) 20,000 feet of magnetic surveys be done.

3) Provision be made for 5000 feet of churn drilling, to be drilled with an average depth of 120 feet, and closely spaced along section lines at 200 foot intervals along the magnetic low.

Placer Gold Exploration Budget

1.	5000 feet of churn drilling @ $14/foot	$ 70,000.00
2.	Line cutting and magnetometer surveying, 2 field men for 1 month	3,000.00
3.	One supervising prospector, 30 days @ $150/day	4,500.00
4.	One supervising geological engineer, 30 days @ $240/day	7,200.00
5.	Board and lodging - 120 man days @ $25/day	3,000.00

6.	One ¾ ton Chevrolet truck, 7000 miles @ 41¢/mile	2,870.00
7.	Assaying allowance	1,500.00
8.	Accounting	1,000.00
9.	Equipment rental	1,500.00
10.	Legal costs	500.00
11.	Drill site preparation	1,500.00
		96,570.00
12.	Contingency fund 10%	9,657.00
		106,227.00
13.	Final report	4,500.00
		$ 110,727.00

1.	Legal, accounting and independent engineering fees in connection with converting to a public company	30,000.00
2.	Payment of outstanding engineering fees to G. McGinn for 1978 season and subsequent report	7,500.00
3.	General corporate overheads	20,000.00
4.	Fund for rapid acquisition of more mineral rights in the Klondike District in the event of successful exploration	50,000.00
		$ 107,500.00

Total recommended budget $ 378,359.00

G. J. McGinn,
Prof. Eng.

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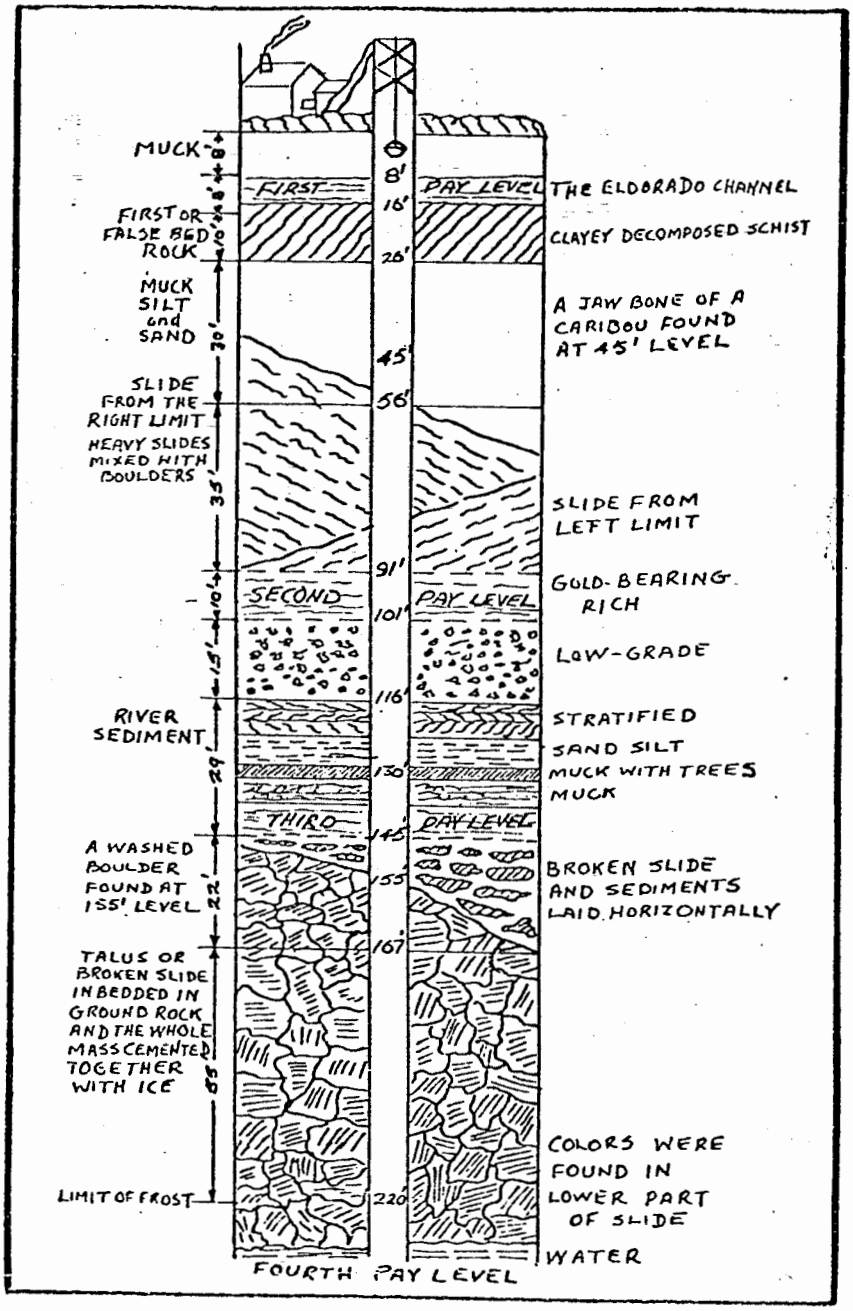
APPENDIX I

Search for a Submerged Channel

By A. Baird

Chief Accountant, The Yukon Consolidated Gold Corp. Ltd.



Cross-section of the ground below Eldorado Creek showing the different formations through which Dr. Hayden's shaft was sunk.

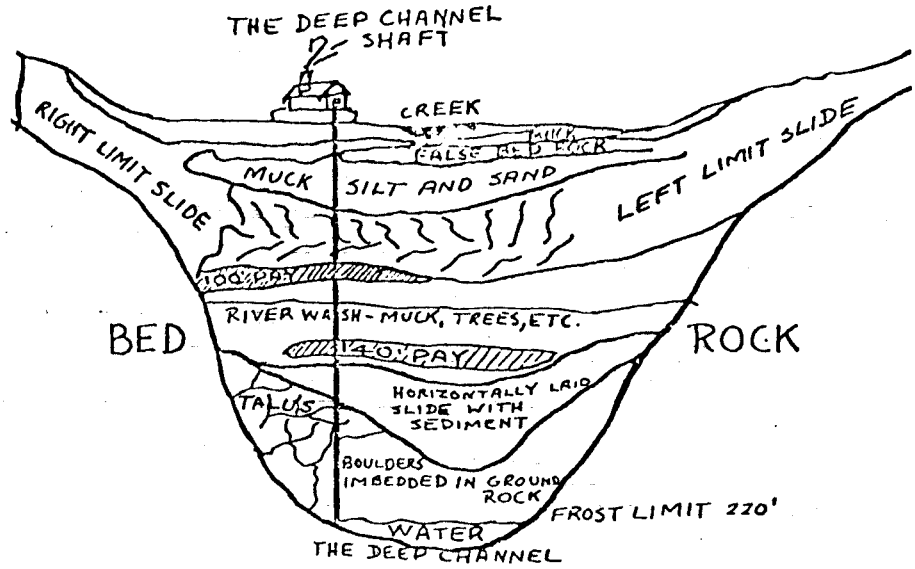
AN interesting episode in the history of placer mining in the Dawson area was the sinking of a deep shaft on Claim No. 3A on Eldorado Creek. The project was inspired by Dr. Asa Thurston Hayden, who had in former years been a professor in the University of Hawaii. He had as a partner a Mr. Thompson, commonly called "Deephole Thompson." Dr. Hayden, in the course of his studies in geology, had learned of the immensely rich deposits of placer gravel in the Clunes and Allendale districts in the State of Victoria, Australia, lying beneath a stratum of basalt varying in depth from two to five hundred feet.

Substantial profits were made from mining these. One company, the "Madam Berry" named for the wife of a premier of the State, with a capital expenditure of 15,875 pounds sterling, disbursed in dividends 885,450 pounds sterling. The major difficulty was the immense flow of water which had to be discharged from the mines, and pumps in those days weren't nearly as efficient as they are today. In the same area there were rich deposits of gravel at a depth varying from twenty to thirty feet, second only in their gold content to the famous gravels at Ballarat and Bendigo.

Dr. Hayden often spoke of these rich deposits of placer gravel lying on what he called a second bedrock and was obsessed with the idea that similar conditions might exist in the Klondike district. He chose No. 3A on Eldorado Creek as the scene of his first experiment because it was the centre of one of our rich placer areas.

He was a highly educated and capable man, well versed in geology and he kept a careful record of the different strata through which the shaft was

...e Yukon



Looking up Eldorado Creek where the shaft was put down on 3A claim.

blasted. The character of the different formations is systematically reproduced on the accompanying chart and with his notes make an impressive exhibit. Unfortunately an unmanageable flow of water was struck at a depth of 220 feet and the only result of the hard work of the two prospectors is the interesting record which Dr. Hayden fortunately preserved.

The flow of water was so great that ... inhabitants of Grand Forks, at the ... ion of Eldorado and Bonanza, feared that a glacier might form during the winter which would completely engulf the entire town site. In consequence the Government of the Yukon Territory had the shaft capped at an expense approximating $6,000. D. A. Mathieson was in charge of the crew which did the capping.

Dr. Hayden appeared to have implicit faith in a doodlebug which he used to locate the points where he searched for a submerged channel of gold-bearing gravel. His second attempt was on Sulphur Creek where he worked alone sinking a deep shaft until the funds which he could persuade his associates to furnish for the necessary ...der and provisions were exhausted. ... hat point he struck neither a sec... channel of gravel nor water.

His third attempt was on a creek on the left limit of the Yukon some distance below Dawson. This venture, which was financed by a new group of associates, was also a failure.

Although he was a strong man and ... pable workman he had several idio... racies. For years he never trimmed his hair nor beard. He occasionally told the story of Samson who lost his strength and his unusual endowments when his hair and beard were trimmed. Although he was an almost tireless walker when on a journey he invariably carried a staff in the manner of the patriarchs of old.

Among his many and varied capabilities was an uncommon endowment which enabled him to relieve those who were suffering intense pain. While he was working on Sulphur Creek my daughter when about a month old had for a time a severe attack of colic about 8 p.m. each evening. The pain was so great that she would gather herself in a knot and scream. My wife and I were helpless. Nothing we could do would bring relief. Dr. Hayden heard of our trouble and one evening, when I was walking the floor with the child in my arms, he came. The door was open and he heard her screams. He walked in and without saying a word took her from me, balanced her small body on the palm of his hand and walked around humming a tune. In a few minutes she was asleep and slept peacefully until morning. For two weeks, the duration of the trouble, he came every evening and never failed to relieve the pain and put her to sleep.

His work was eight miles from our operation and he walked sixteen miles every evening to relieve suffering which he alone of all the people on the creek had the power to alleviate.

That is only one of his many acts of helpfulness and we who reaped the benefit from his unusual power think of him in the role of the Good Samaritan rather than that of a prospector searching for a submerged channel of gold-bearing gravel.

Alcan Plant Expansion

THE largest single expansion of primary aluminum capacity in the world is under way in Canada, Nathanael V. Davis, president of Aluminium Limited, parent company of the Aluminum Company of Canada, Limited, testified on May 19th.

Mr. Davis made the statement in testimony prepared for delivery before a United States House of Representatives small business sub-committee investigating the aluminum supply situation.

The present capacity of the new aluminum smelter at Kitimat, British Columbia which went into operation last August, is 91,500 tons. An expansion programme now underway there and expected to be completed in 1959 will bring Kitimat capacity to 330,000 tons, Mr. Davis said.

Eventually Aluminium Limited contemplates expanding Kitimat to 550,000 tons of annual capacity, which is expected to make it the largest aluminum smelter in the world. Mr. Davis noted that the number of independent United States fabricators — those with no smelting facilities of their own — who buy aluminum from Canada, has risen from seven in 1946 to more than one hundred today. Aluminum Limited in 1953 voluntarily began to set aside 110,000 tons of primary metal a year for these fabricators.

Mr. Davis said that aluminum production based on "abundant low cost hydro-electric power, such as is available in Canada, offers the best opportunity for holding the line agaist increases in aluminum prices which would work to the detriment of all aluminum fabricators large and small."

APPENDIX II

6" Percussion Hole E - 1

0 - 20'	Casing - gravel and black organic material
20 - 65	Attempts to sample by sluicing abandoned, and grab sampling using dipper and screen commenced at 65.0 feet
65 - 70	Estimate 60% quartz and 40% schist, minor amounts of wood and bark chips. Quartz particles angular to sub-angular; did not observe any definitely stream-washed particles
70 - 75	Estimate 50% quartz and 50% schist particles, minor wood chips, most particles angular to sub-angular, several quartzite particles distinctly rounded and very probably stream washed. Many particles stained with limonite.
75 - 80	Estimate 40% quartz, 50% schist, 10% quartzite (minor sticks and chips of wood). Quartzite tends to be rounded and is probably stream washed. Quartzite is mainly small fragments. Schist tends to vary from one particle to another in limonite staining and mineralogical content -- might or might not be stream washed.
80 - 85	80% schist, 20% quartz; quartzitic varieties of schist frequently semi-rounded and micaceous varieties sub-angular.
85 - 90	80% schist, 10% quartz, 10% quartzite; quartzitic particles semi-rounded, schistose particles sub-angular, quartz fragments angular. Some limonitic staining and small sticks.
90 - 95	80% schist, 10% quartzite, 10% quartz; quartzitic particles semi-rounded, micaceous particles rounded to sub-angular -- some limonitic staining, minor wooden sticks.
95 - 100	Gravel - stones up to 2" diameter - well rounded and obviously stream washed - gravel was accompanied by sudden heavy water flow, which thereafter made sampling

much more difficult. Careful panning of partly sluiced material did not return any colors.

100 - 105 Gravel - obviously washed pebbles accompanied by smaller varied detritus including quartz fragments, quartzitic pebbles, and sub-angular pieces of various varieties of schist.

105 - 110 Principally schist - greenish grey, sericitic - appears fairly uniform except for some selective limonitic staining - sub-angular, no rounded particles observed.

110 - 115 Greenish grey schist, some quartz fragments - schist content much more uniform than that above gravel bed, some selective staining by limonite. Fragments sub-angular in shape.

115 - 120 Mainly sericitic schist, greenish grey, sub-angular, some limonitic staining, some angular quartz fragments.

120 - 125 Fine material similar to 115 - 120 sample, but accompanied by sub-angular (stream washed?) stones. Suspect these are from 95 - 105 section as a result of heavy inflow of water at gravel seam.

125 - 130 Mainly greenish grey sericitic schist with 10 - 15% quartz fragments - selective limonitic staining. Schist particles are sub-angular, and quartz fragments are angular.

130 - 135 Sericitic schist - 60%, quartzitic schist - 30%, quartz - 10%. Quartzitic material angular to semi-rounded. Some limonitic staining.

135 - 140 20% sericitic schist, 70% quartzitic schist, 10% quartz. Some wood chips and obviously stream washed pebbles (depth of origin not necessarily from this horizon).

140 - 145 Greenish grey quartzitic schist - sub-angular, minor quartz and occasional limonitic staining.

145 - 150	Greenish grey quartzitic schist, semi-rounded to sub-angular to angular -- sample contains large ($1\frac{1}{2}$") stream washed pebble (95 - 105?)
150 - 153	Greenish grey sericitic schist - sub-angular, frequent limonitic stain.
153.0'	End of hole.

6" Percussion Drill Hole E - 2

Note: Casing went down easily to 20', and then with difficulty to 30'. Casing was not recovered.

0 - 20' Gravel and black organic material.

20 - 40 Greenish grey sericite schist chips - no water - drilling slow.

40 - 45 Greenish grey sericite schist with 5 - 10% quartz. Particles appear to be broken fragments with some limonitic staining.

45 - 50 As before.

50 - 55 Greenish grey sericite schist with 5 - 10% quartz particles. Most particles appear to be freshly broken fragments, with a few which might be stream washed. Limonitic staining somewhat greater than previous 10 feet.

55 - 60 Struck heavy flow of water at 58 feet - sample is much finer in grain size - examination under 60x magnification indicates larger fragments are rounded and stream washed.

60 - 65 N.B. Sampling difficult due to heavy water flow - partial sluicing commenced at 60 feet and sample continued to 82 feet. Panning recovered colors from 60 - 65 feet during drilling. Subsequent panning of sluice concentrate recovered good gold sample of medium to fine gold. Panning of other drill samples indicated that only the 60 - 65 section contained gold.

Sample appears to be stream washed, with 40 - 50% of particles either rounded or sub-angular. Particles include sericite schist, biotite schist, quartzite, and quartz with considerable limonitic alteration.

65 - 70 Principally greenish grey sericite schist with 10 - 20% quartz and minor amounts of quartzite and biotite schist. 60 - 80% of particles appear to be fragments, 10 - 20% appear to be stream washed.

70 - 75	Grey schist - darker variety (less sericite and more biotite and quartz), 10 - 20% quartz, particles principally fragments with minor percentages possibly stream washed - limonitic stain decreased.
75 - 80	As before, except that rounded particle content seems to be higher and more definite.
80 - 85	As before, except with decrease of rounded particles, and increase in quartz fragments. Minor limonite.
85 - 90	Grey schist, 10 - 20% quartz fragments, some mineralized with pyrite and pale green chlorite crystals. No rounded particles observed. Minor limonite.
90 - 95	Grey schist as before.
95 - 100	Grey schist -- 15 - 20% quartz, minor limonite - no rounded particles observed.
100 - 105	Grey schist -- 15 - 20% quartz -- some (5 - 10%) weathered particles look stream washed - mainly angular fragments.
105 - 110	Grey schist -- 20 - 30% quartz particles, some weathered particles - some semi-rounded particles. 108 - driller reported even drilling pressure commenced - suggested he was drilling unconsolidated material to this point.
110 - 115	Grey schist, 20 - 30% quartz - some particles fresh fragments, others weathered, some limonitic schist particles, others contain fresh pyrite.
115 - 120	As before.
120 - 122	As before.
122'	End of hole.

Note: The continued showings of weathered particles below the definite sedimentary zone from 55 to 65 feet does not prove that underlying material is unconsolidated, since the gravel band was accompanied by a heavy inflow of water which could contaminate samples from below this zone.

6" Percussion Drill Hole E - 3

Cased to 30 feet, where casing was tight, and was not subsequently recovered.

0 - 40	Samples given to placer owner as per oral agreement.
40 - 45	Greenish grey sericite schist -- 10 - 20% quartz -- minor weathered particles - no obviously washed particles.
45 - 50	Greenish grey sericite schist -- 10 - 15% quartz -- 10% weathered particles -- 20% of particles are rounded to semi-rounded.
50 - 55	As before.
55 - 60	As before.
60 - 65	Sample much finer - 50% quartz rounded and semi-rounded grains predominate -- 20 - 30% of grains limonitic.
65 - 70	Fine and coarse fractions about equal, coarse fraction mainly fragments, fine fraction 50% rounded or semi-rounded grains - 10% of particles limonitic stained.
70 - 75	As before.
75 - 80	Coarse fraction largely greenish grey sericite schist fragments. Fine fraction is about 50% quartz particles. This fraction contains 5 - 10% rounded to semi-rounded particles - 10% limonite stained.
80 - 85	Mostly rounded or semi-rounded stream washed particles in both size ranges -- 20 - 30% stained with limonite. 85.0 - struck heavy water flow - hole dry to this depth.
85 - 90	85' Commenced sluicing - good set-up - sericite schist with 30 - 40% quartz particles, 10% of finer fraction are rounded or semi-rounded particles.
90 - 95	50% sericite schist and 50% quartz, 40% of particles appear to be stream washed.
95 - 100	60% of particles appear to be stream washed and weathered, rounded etc.

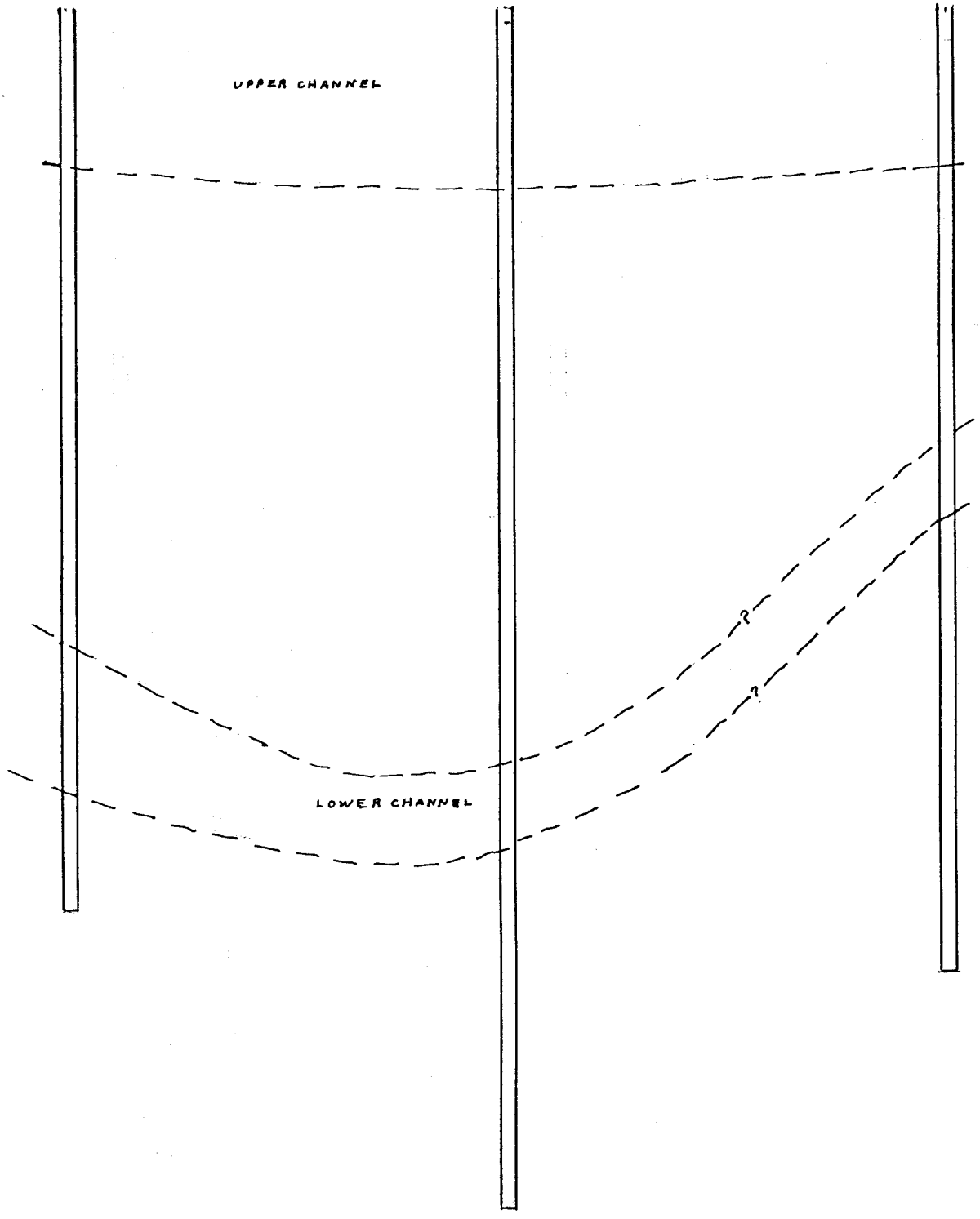
100 - 105 Sericite schist fragments in excess of 50% by volume. 20 - 30% of remainder are rounded to semi-rounded stream washed particles - 20% of particles stained with limonite.

105 - 110 Sericite schist - 70% -- 30% quartz -- 30% of material weathered -- 10 - 20% rounded to semi-rounded grains.

110 - 114 Sericite schist - 80 - 90%, 10% quartz. 10% of particles are limonite stained - 10% rounded or semi-rounded.

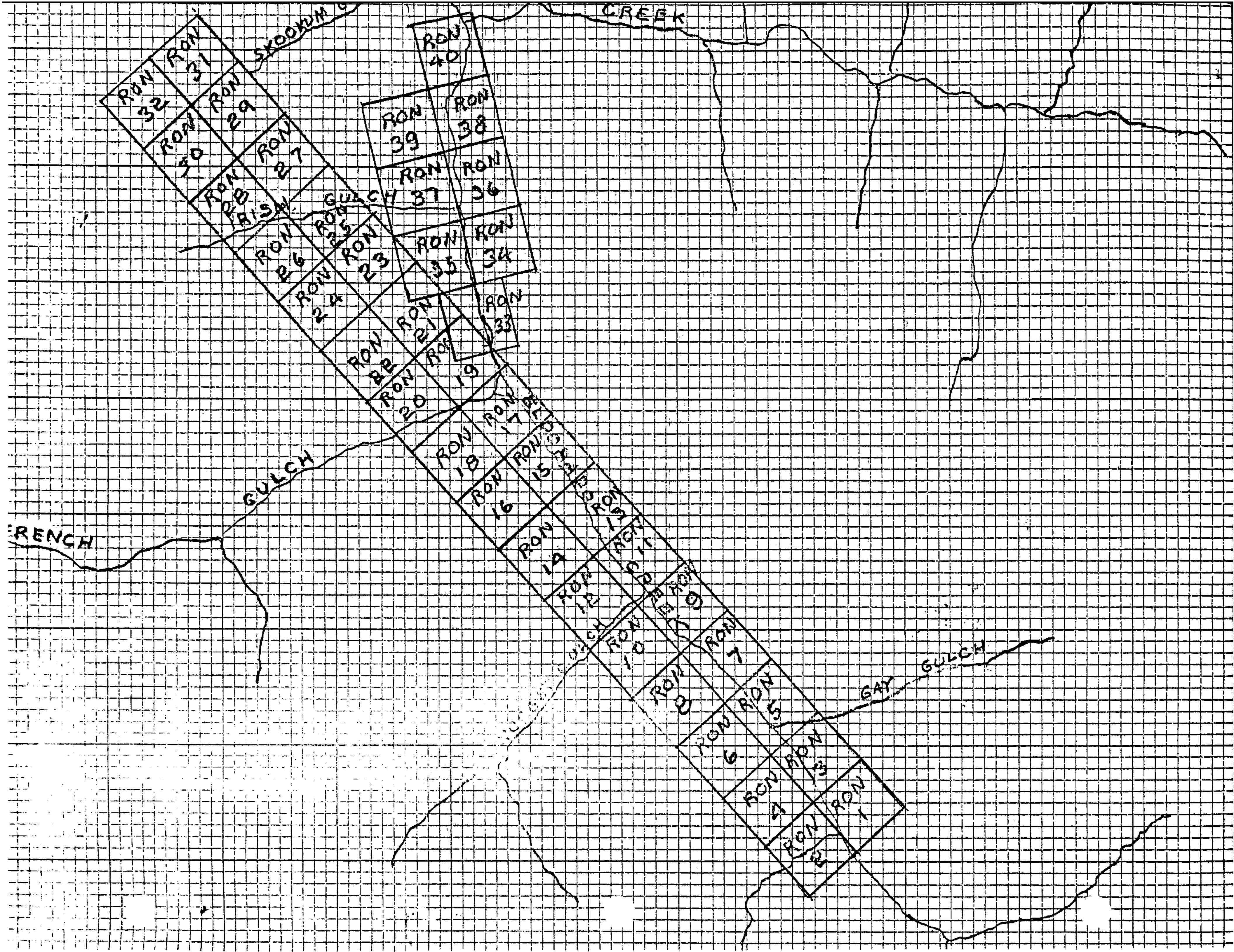
N.B. Main zone between 80 and 100 feet as exhibited by particle rounding and water flow which repeatedly became limonitic in this interval. No colors found in any of the samples from this hole.

114' End of hole.



SECTION 199+55
LOOKING NORTH
SCALE 1" = 20'

APPENDIX III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RON 32
RON 29
RON 30
RON 27
RON 28
IRISH
GULCH
RON 40
RON 39
RON 38
RON 37
RON 36
RON 35
RON 34
RON 26
RON 25
RON 23
RON 24
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RON 33
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RON 16
RON 13
RON 14
RON 11
RON 12
RON 9
RON 10
RON 7
RON 8
RON 5
RON 6
RON 3
RON 4
RON 1
RON 2
RENCH
GULCH
GAY GULCH

LIST OF CLAIMS

All owned by Klon Exploration Co. Ltd.

Group 1	No.	Group 2	No.
Ron 1	YA10300	Ron 17	YA10316
Ron 2	YA10301	Ron 18	YA10317
Ron 3	YA10302	Ron 19	YA10318
Ron 4	YA10303	Ron 20	YA10319
Ron 5	YA10304	Ron 21	YA10320
Ron 6	YA10305	Ron 22	YA10321
Ron 7	YA10306	Ron 23	YA10322
Ron 8	YA10307	Ron 24	YA10323
Ron 9	YA10308	Ron 25	YA10324
Ron 10	YA10309	Ron 26	YA10325
Ron 11	YA10310	Ron 27	YA10326
Ron 12	YA10311	Ron 28	YA10327
Ron 13	YA10312	Ron 29	YA10328
Ron 14	YA10313	Ron 30	YA10329
Ron 15	YA10314	Ron 31	YA10330
Ron 16	YA10315	Ron 32	YA10331

GROUP 3

	No.
Ron 33	YA10332
Ron 34	YA10333
Ron 35	YA10334
Ron 36	YA10335
Ron 37	YA10336
Ron 38	YA10337
Ron 39	YA10338
Ron 40	YA10339

AXIS OF MAGNETIC LOW
TRACED TO BASIC DIKE

WEST BANK

EAST BANK

APPROXIMATE AXIS
OF MAGNETIC LOW

BE3

BE1

BE2

N

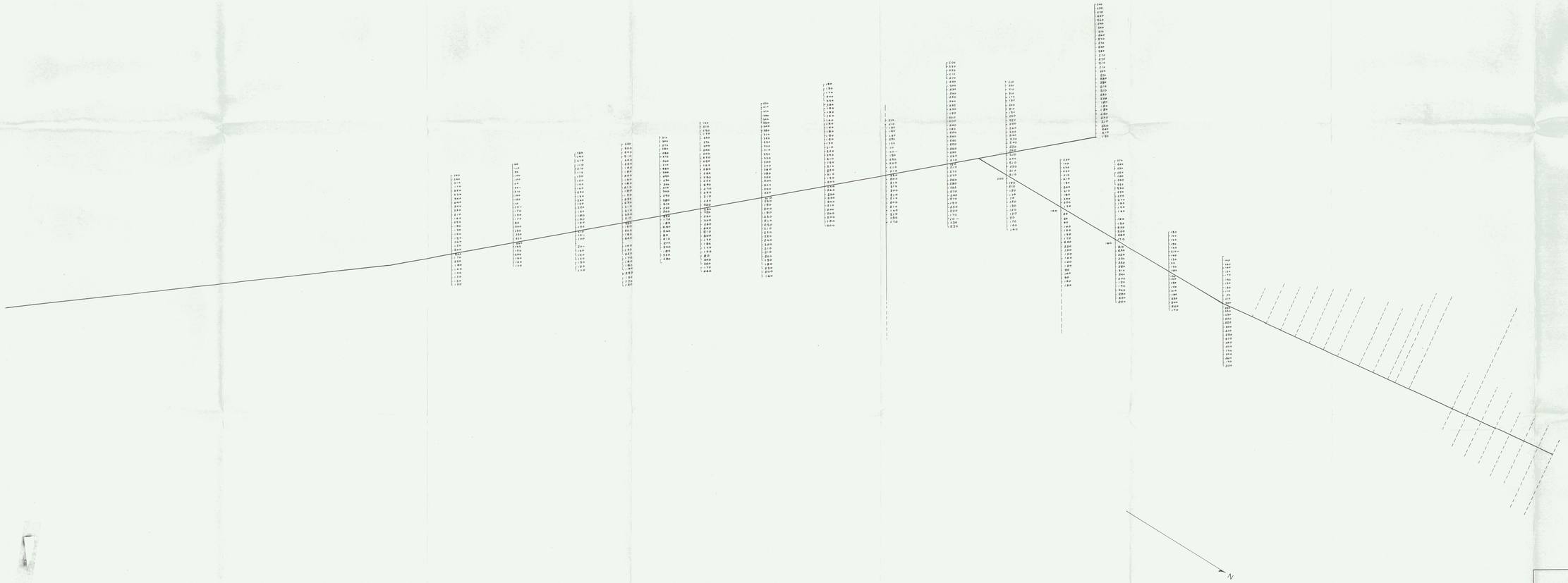
KLON EXPLORATION CO. LTD.

RON GROUP
YUKON TERRITORY
MAGNETIC SURVEY

SCALE 1" = 100'

DEC. 4, 1978 PLATE 2 G.J. MCGINN

165N 167N 169N 171N 173N 175N 177N 180N 182N 184N 185N 187N 193N 195N 197N 199N 201N 203N 205N 207N



LEGEND
MC PHAR M-700

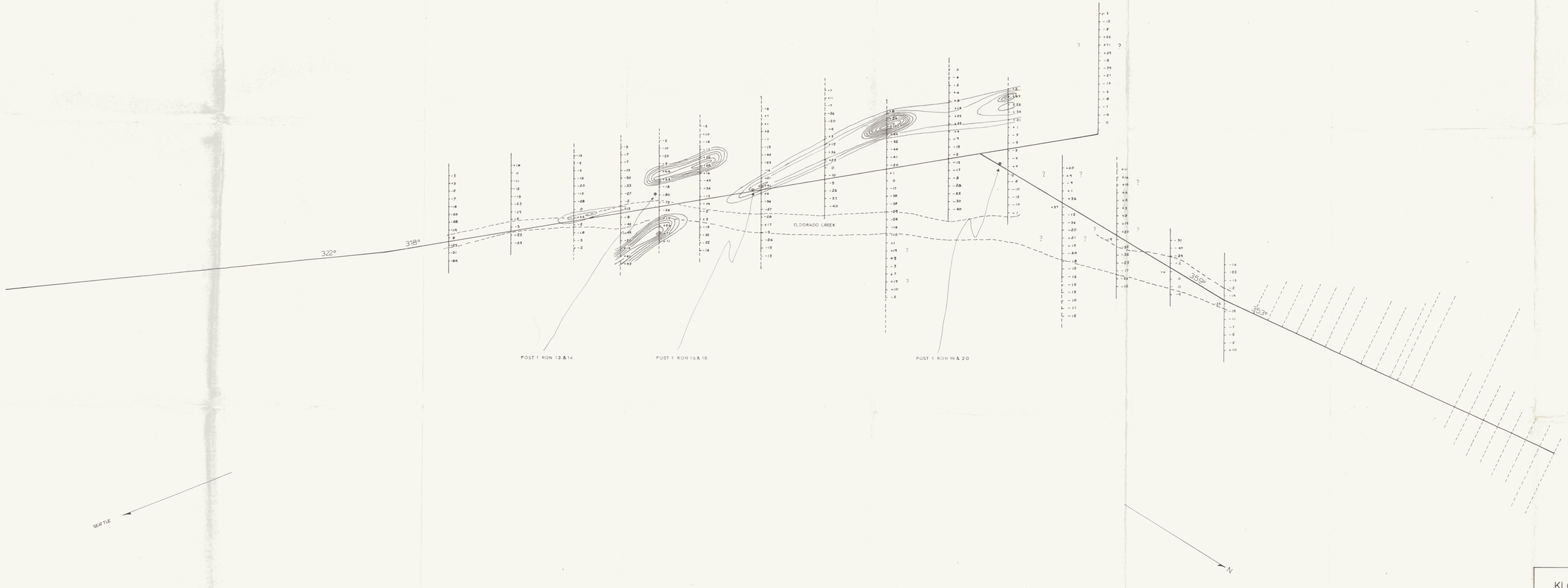
KLON EXPLORATION CO. LTD.

RON GROUP
YUKON TERRITORY
MAGNETIC SURVEY

SCALE 1" = 400'

DEC. 4, 1978

G. J. MC GINN



LEGEND

GEONICS EM16

CONTOUR INTERVAL ±10°

— CUT & CHAINED

--- PACE & COMPASS

KLON EXPLORATION CO. LTD.

RON GROUP

YUKON TERRITORY

V.L.F. SURVEY

SCALE 1":400

DEC. 4, 1978 PLATE 1 G. J. MCGINN