GEOLOGICAL

AND

GEOCHEMICAL REPORT

on the

CH 1 to 224 Mineral Claims inclusive

by

T. R. Scott

Sheets 106-D-4 and 105-M-13

Latitude: 64° North
Longitude: 135° 35' West
Date: June 10 - Sept. 15, 1974

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SUMMARY

The CH Mineral Claims (1 - 224 inclusive) were staked in a geologically favorable area containing the northern limb of the Galena Hill - Keno Hill quartzites.

The main portion of the claim group lies on the main and northern portions of what is known as Chamber Hill. The area is heavily wooded and contains less than 2% outcrop.

A preliminary geological mapping survey was conducted over most of the claim group to delineate favorable geological horizons (e.g. - Quartzites or large greenstone bodies). This aided in determining areas suitable for soil sampling and in the interpretation of geochemical results. A limited amount of trenching and detailed mapping was conducted in one area.

In addition, a reconnaissance geochemical soil sampling survey was conducted, as it was felt that results would give indications of possible vein zones in the area and would possibly indicate areas for more detailed follow-up work.

A four man crew, consisting of a party chief and three soil samplers commenced work on June 10, 1974 on the claim group. Late in the season a bulldozer was contracted and a blaster added for detailed trench work. The program was concluded on September 15, 1974.

HISTORY

According to various old records and staking sheets, the Chambers Hill - Lynx Creek area appears to have received considerable attention only during the 1960's. However showings on the Shanghai property on Chambers Hill have been known since 1931, and prospecting in the Lynx Creek - Dublin Gulch area was probably earlier.

In 1961, the Shanghai and U.R. properties (Northlimb) were staked by C. Poli and A. Aho. During the following six years, Silver Titan Mines, with various partners did considerable work in the area. Several northeast trending vein faults were found in a section of "Keno Hill Quartzite" and greenstone comparable in thickness and charcter to that on Galena Hill. (A. E. Aho, 1964) On the U.R. group, a vein fault was trenched and traced for about a mile, but major mineralization was not found. Underground exploration and development was conducted on the Shanghai group as a result of trenching and diamond drilling on several vein zones. With the exception of a few minor high-grade silver indications, most mineralization was relatively low in silver and high in zinc, with pyrite and sphalerite predominant in the vein sections. (Green and Godwin, 1962, 1963; Green, 1964, 1965; Findlay, 1966). Much of the Shanghai and all of the U.R. claims were lapsed by 1969 and little work has been done in the Chambers Hill area since that time.

Further north, in the Lynx Creek area, early prospecting was probably for placer gold. Much of the area was staked in the early 1960's following activity in Haggart Creek-Potato Hill region.

Indications are that the Bob 1 - 120 claims, staked in 1963, were soil sampled at that time. On the basis of results of "G.S.C. Geochemical Survey" of stream sediments, United Keno Hill Mines Limited staked the G 1 -34 claims in 1965. Mapping, soil sampling and hand trenching revealed two silver-lead-zinc-antimony veins above a tributary of Lynx Creek. (Green, 1965) The isolation and size considerations of this showing discouraged further work at the time. In 1966, the G.S.C. published geochemical maps for 13 individual elements of stream sediments in the area. In 1968, the Jay 1 - 16 claims were staked to cover the former "G" showing and were acquired by Altair Mining Corp. Ltd. A geochemical survey in 1969 outlined a major easterly trending soil anomaly related to the veins. In 1968, United Keno Hill Mines Ltd. staked the Erin 1-187 claims immediately northwest of the Jay group, on ground formerly covered by the Bob claims. Reconnaissance mapping and a geochemical soil survey were carried out in 1969. A major northest trending lead anomaly was indicated in the southwest portion of the claim block, but little geological support was found. Geochemical analysis for tungsten in the vicinity of numerous small granodiorite stocks did not indicate any major trends. No further work has been done on the claims since 1970. In 1974, Belmoral Mines (NPL) optioned the Jay group from J. R. Lerner and G. C. Gutrath, and conducted detailed mapping, enlargement and resampling of the hand trenches, and a small diamond drill program (Deighton, 1974). Very poor core recovery hampered any interpretation of the drilling; and resampling of the showing failed to prove ore-grade mineralization.

PROPERTY

The CH 1 - 224 Mineral Claims were staked for and are held by United Keno Hill Mines Limited. They were staked between February 25 and March 12, 1974 and consist of the following claims:

CH (1-114)	Grant Nos. Y87340 - Y87453 (recorded on March 14, 1974.)
CH (115-224)	Grant Nos. Y87577-Y87686 (recorded on March 25, 1974.)

LOCATION AND ACCESS

The claim block is situated on Chambers Hill, Mayo Mining District (claim sheets 105-M-13 and 106-D-4), and is bounded by the South McQuesten River to the south, Shanghai Creek to the west, and Lynx Creek to the north. The claims are approximately 6 miles northwest of Elsa, Yukon Territory.

Access to the claim block is mainly by helicopter. Two 4-wheel drive trails, one from the South McQuesten Road to the Shanghai workings and one from the Hansen Lake Road to vicinity of the old U. R. Group, do provide access to near the southern claim group boundary, but these are in poor condition at present.

TOPOGRAPHY AND VEGETATION

The claim group lies entirely below treeline with elevations ranging from 2100 to 3900 feet. Most of the claim group is relatively gentle in relief at higher elevations, but steep slopes are encountered in most major drainage basins.

Vegetation consists mainly of crab spruce with considerable buckbrush and willow, especially near creek beds. A deep moss covering is universally present. There is less than 2% outcrop on the claim block.

GENERAL GEOLOGY

The general geology of the area has been described in part by Bostock (1943), Green and Roddick (1962), and Boyle (1965). The consolidated rocks underlying the CH Group belong to the Yukon Group, and are Cretaceous? in age. The metamorphosed sediments consist of graphite schist, quartz-sericite schist, thick and thin-bedded quartzites, and minor limestone. These are intruded by small stocks of granodiorite, occasional sills of quartz-feldspar porphyry, and biotite lamprophyre, and numerous sill-like bodies of greenstone (altered gabbro or diorite).

I. GEOLOGICAL SURVEY

A. GENERAL

The CH 1 - 224 claims were staked to cover the favorable "Central Quartzite Formation" as depicted on Map 1147A (Boyle, 1965). It has long been inferred that the geologic sequence found on Chambers Hill represents the north limb of an anticline, the axis of which trends parallel to the South McQueston River Valley, and the south limb of which occurs on Galena Hill (Boyle, 1965). Templeman-Kluit (1971) invisages a somewhat similar relationship, except that he theorizes a high angle normal fault between Galena Hill and Chambers Hill.

Although the upper and lower contacts of the Central Quartzite Formation cannot be picked with complete certainty in claim group, the sequence of geologic units mapped does closely resemble those found on Galena Hill. With a slightly more restricted upper boundary on the quartzite formation and a more complex structural style, it would seem that the favorable quartzite formation can be traced (with geologic uncertainty) across Chambers Hill to the Lynx Creek area.

B. DETAILED GEOLOGY

Approximately 98% of the claim group is drift-covered. Areas of little topographical relief are swampy and heavily moss-covered. Therefore, the geological mapping was concentrated on the steeper slopes and along stream drainage to try and piece together the sequence of stratigraphic units covered by the claim group. Outcrop mapping was done with as much detail as possible for a working map scale. Geological unit boundaries are interpreted on the basis of strike projection, structured relationships, examined rock-type similarities between individual beds, and data from examining local float where possible. Mapping was hampered in most cases by lack of outcrop and by dense willow and buckbrush on the southeast facing slope of Chambers Hill. Closer spaced traverses to find small "hidden" outcrops and examine changes in local float distribution would undoubtedly add to the information needed for a more complete geological interpretation.

The regional strike of the south-western portion of the claim group is northeast to east with dips from 10 to 35° northwest, with local variations. From the vicinity of CH 19 and 21, the strike gradually changes to north, northwest, dipping west-southwest towards the Lynn Creek area. The northwest, dipping southwest trend of the rocks north of the major creek through CH 60, 61, 108 is unexplained. Possibly due to a local folding or major fault tilting.

Rocks occuring in the area are:

Unit 1	Quartzite (thick and thin-bedded varieties)
Unit 2	Graphite Quartzite
Unit 3	Graphite Schist
Unit 4, 4A	Quartz-sericite schist, coarse siliceous schist.

Unit 5	Limestone
Unit 6	Skarn
Unit 7	Granodiorite
Unit 8	Quartz-feldspar Porphyry
Unit 9, 9A	Greenstone, altered
Unit 10	Biotite Lamprophyre

(a) Unit 1. Quartzite - Quartzite occur as both thin and thick-bedded varieties, with the thin-bedded quartzite predominating in the area mapped. (see Geology Maps of the CH 1-180, 181-224 Mineral Claims) Notable occurrances of thick-bedded or massive quartzite occur on the Reuben claims, below the trenches on CH 19 and 21, CH 106, in the vicinity of the trenches on CH 29, 31, 64, and on large talus slopes on CH 217-218, 220, 222, in all cases weathering to large well jointed blocks.

The quartzites range from pale brown to light grey,to dark grey, the light grey varieties predominating. Most quartzites exhibit a layering, which may represent bedding, and is enhanced by films or layers of sericite, graphite or carbonate alternating with relatively pure quartz. Warping and local drag folding is common in all varieties, but especially in the thin-bedded varieties of lesser competence. Milky white quartz veinlets and boudins occur universally both along inferred bedding planes and cutting across bedding. These would appear to be due to regional metamorphism, in which silica was remobilized in the sediments and later recrystallized. Some of these quartz stringers contain traces of pyrite, pyrrhotite and arsenopyrite, with limonitic remnants common. Usually a distinct graphitic or sericitic schist envelope enclosed the quartz in the more competent rocks. There is some discrepancy as to the division between dark grey quartzites and graphitic quartzites (Unit 2) and between thin-bedded quartzites and coarse silicious schists (Unit 4a). All types intermediate between these units are found, and some units seem to grade to others. This may represent original sedimentary facies changes or local variations in regional metamorphism. In any case, the unit divisions are arbitrary and based upon general percentage compositions of major consitiuents, differences in competency, and general character of the outcrops observed. Individual beds of quartzite are separated by phyllitic or schistose menbers (Units 3, 4 and 4A) from 1/16 inch to many feet in thickness.

(b) Unit 2. Graphitic Quartzite - Graphitic quartzite is dark grey to almost black in color and occurs generally as a thin-bedded variety. The most extensive occurance of this unit is stratigraphically above the massive quartzites in the vicinity of CH 215, 216 and 205, and on the southern side of the grandiorite stock in this area. The extent of this unit to the west and southeast is unknown, but it generally seems to thin to the southest.

The graphitic quartzite is composed mainly of interlayered laminae of quartzite and graphitic schist or quartzite containing a high percentage of graphite and carbonaceous partings between quartz grains. The competence of these beds seems to be about the same as thin-bedded varieties of quartzite. Quartz veinlets, stringers and boudins are less common in the graphitic quartzite than in the other sedimentary units, but where they do occur, limonite and remnants of ferro-sulfide metallics are common.

The unit grades to both quartzite (Unit 1) and graphitic schist (Unit 3) in both extremes of graphitic content, but was mapped as a separate unit mainly due to its exhibited competency and character in the outcroppings examined.

(c) Unit 3. Graphitic Schist - Graphitic schist occurs as a dark grey to black phyllitic and generally very thin-bedded unit. It weathers easily to soft crumbly black schistose fragments and rarely forms good outcrops. It was only observed in definite beds in trenches or in larger outcrops interbedded with other sedimentary units of greater competence. Fresh hand specimens are grey to black and exhibit well developed schist planes, foliation and locally wrinkle lineations. When wet it possesses a dull to shiny sheen which is due to fine grained white mica and graphite along schist planes. The schist consists essentially of graphite and carbonaceous matter, with minor quartz, sericite, chlorite and feldspar. Small lenses and stringers of quartz are very common, especially in crumpled and warped sections and pyrite or its limonitic remnants are common as metacrysts.

Gradations from phyllite to schist to graphitic quartzites are present, but the poor competency and easy weathering of this unit are distinctive.

(d) Unit 4, 4a. Quartz-sericite Schist, Coarse Silicious Schist-Unit 4, herein named Quartz-Sericite Schist, consists of a variety of somewhat similar rocks ranging from sericitic or chloritic phyllites to quartz-sericite schists or quartz-sericite-chlorite schists. More calcareous and silicous varieties are also present. This unit is widespread throughout the map area; and large areas both stratigraphically above and below the major quartzite horizons consist almost completely of these schists. The major distinguishing feature of this unit are the marked schistocity in all occurances, relative incompetence, and the presence of varying amounts of quartz and sericite (white mica), with lesser anounts of chlorite, carbonate, graphite and pyrite. Color ranges from pale grey or buff to greenish, with a silvery sheen whan wet. The unit properly belongs to the lower grade greenschist metamorphic facies.

These schists and phyllites weather almost as easily as the graphitic schists and only form good outcrops on the steeper slopes in the area. Most outcrops exhibit crenulated, warped and dragged layers containing numerous stringers, lenses, and boudins of quartz (up to 20% of rock). Irregular cleavages, S-surfaces and wrinkle lineations as well as drag folds, box folds and gleitbrett structures (McTaggart, 1960) are exhibited locally. The unit often contains very thin (1 foot) beds of quartzite, but these were not mapped separately due to map scale considerations.

With lesser amounts of quartz, the rock grades to a fissile phyllite consisting mostly of fine white mica and chlorite. With increasing amounts of quartz, the rock grades to a coarse layered siliceous schist (Unit 4a). These schists (and schists they are texturally) consist of layers of quartz about 1/8 inch - 1/4 inch thick separated by layers of sericite and chlorite. Individual quartz eyes and grains up to 1/4 inch long are enclosed by wisps of sericite, graphite, and chlorite. The "Coarse Silicious Schists" were mapped as a separate unit mainly because of their greater competence relative to Unit 4, which is probably due to the increased silica content. They also exhibit less deformation and form good outcrops in many cases. Unit 4a may thus be considered a gradational unit between the schists of Unit 4 and the thin-bedded quartzites of Unit 1.

(e) Unit 5. Limestone - Limestones are relatively rare in the map area, but several lenses of two distinct types were found stratigraphically above the major quartzite horizon. Thin lenses of finely laminated dark grey limestone were found interbedded with sericite schists and graphitic schists. Calcite inter-layered with carbonaceous matter produced a distinctly dark layered limestone in three localities. The lenses were generally less than three feet thick and could not be traced laterally for more than several tens of feet.

A coarsely crystalline limestone was noted elsewhere near quartzite-schist contacts. This limestone was distinctly white and grey, with a gneissic texture of pure white calcite alternating with darker impure calcareous matter. Beds of this type of limestone were up to thirty feet thick in one location and formed prominent coherent outcrops wherever found. The lateral extent of these beds again was not extensive enough to call them anything but lenses.

(f) Unit 6. Skarn - A poorly developed skarn was noted in one locality (CH 206) between a thick lense of limestone and a granodiorite stock. Its extent could not be traced out of the immediate area and it is likely that the skarn is present only as a small irregular body resulting from the contact metamorphism of the limestone lense by the intrusion of the nearby granodiorite stock. The skarn rocks were greenish-brown and coarse grained, witn a mottled texture, consisting of quartz, carbonate, diopside, amphibole, plagioclase, and a little pyrrhotite.

(g) Unit 7. Granodiorite - Two small stocks of granodiorite (to possibly quartz-diorite) in composition occur in the map area (CH 195, 193, 206, 219). The smaller and more southerly stock forms a prominent hill, but is badly weathered to a mass of rubble containing many large blocks, but no outcrops. Fresh samples are grey in color and consist of medium grained quartz, plagioclase, orthoclase, biotite and muscovite. Weathered samples are light grey to buff in color, the biotite easily being altered to chlorite and serecite. On a cliff on the west side of the larger stock a contact between the granodiorite and thick-bedded quartzite was observed. The contact was relaticely sharp, the quartzite only being altered for about three inches. Minor pyrite and pyrrhotite was observed in the granodiorite near this contact.

(h) Unit 8. Quartz-Feldspar Porphyry - Fragments of sill-like intrusions of quartz-feldspar porphyry occur in two localities in the map area. The best exposure is in the trench area of CH 21 (Trenches 6 & 8). As examined, the contact between the porphyry and thick-bedded quartzite appears to be a high angle; but these rocks are in a drag folded zone near a fault and the local attitude of the beds in the vicinity indicate high dips. A fault passes through the porphyry in Trench 6 as a zone of intense fracturing about eight feet wide. Little movement is inferred on this break and no vein filling has occured in this tight break.

The porphries are light grey rocks consisting of numerous coarse phenocrysts of clear quartz, orthoclase and biotite in a medium grained groundmass of quartz, plagioclase and muscovite, with minor magnetite also noted. Weathered surfaces are pale grey to buff, appearing bleached with much of the biotite weathered away. The use of this unit as a marker horizon may have merit if the sills are continuous.

(i) Unit 9, 9a. Greenstone, Altered Greenstone - Numerous small and medium sized bodies of what is locally referred to as greenstone occur throughout the map area, but seem to be concentrated in certain stratigraphic horizons within the schists and quartzites. The greenstones are thought to be altered equivalents of dioritic to gabbroic rocks which were intruded as sills within the sediments before regional deformation and metamorphism. They presently occur as elongated lenses or boudins fairly conformable with the enclosing sediments. Boyle (1965) and McTaggart (1960) have discussed in some detail theories as to the origin and present structural relationships of these greenstone bodies.

The greenstones (Unit 9) are greyish green to dark green rocks, generally with a schistose texture, and conxist mainly of hornblend, artinolite, plagioclase,chlorite, biotite and sericite, and carbonate minerals. Quartz and pyrite are common in some bodies, and the greenstones on CH 220, 222, contain veinlets and fracture fillings of calcite with pyrrhotite. The greenstones are very competent and form good outcrops in most cases. Often they are well jointed and talus slopes of greenstone consist angular slabs of rock. The greenstones within the major quartzite horizons seem to be more continuous and larger in size, exhibiting a schistose layering almost conformable with surrounding bedding planes.(CH 19 & 21, CH 13, 170, CH 62, 64) Where enclosed by schists the greenstones bodies are smaller, more irregular and often show a higher degree of alteration. (CH 38, 127).

In the vicinity of later faulting, the greenstones have undergone a further alteration to a soft, yellow green, schistose rock consisting essentially of chlorite, sericite, and quartz with numerous disseminations and fracture fillings of siderite and limonite. These altered greenstones (Unit 9a) were found mainly near the vein faults on CH 19 and 21, but also near faults in the schists of CH 125, 127. In Trench 4, the altered greenstone has fracture fillings of siderite, galena and sphalerite near the contacts of enclosing quartzites and thus seems to be a favorable host for vein type mineralization.

(j) Unit 10. Biotite Lamprophyre - Several small discontinuous sills of dark brownish-grey biotite lamprophyre occur throughout the southern half of the map area. The lamprophyres consist of porphyritic biotite in a fine to medium groundmass of quartz, chlorite carbonate and sericite. Disseminated pyrite is common in some bodies (Rueben). This unit may also be valuable as a marker horizon if the sills are more continuous in the same horizon.

C. STRUCTURE

Due to the heavy overburden cover on much of the claim group it is difficult ot evaluate any structural trends except on the steeper slopes or where drainage enhances the structural style of the area. Aerial photo interpretation of the area suggests three major structural trends of both drainage and lineations. The approximate strike of these trends is northeast-southwest, north-south and northwest-southeast. Geological investigation of some of these lineations is not conclusive but some interpretations may be made for specific areas. On the Shanghai 14 and 16 claims and CH 69, 70 71, two unmineralized and what appear to be major cross-faults have a northwest-southeast trend, with apparent horizontal roght-hand movement of a few hundred feet. A small vertical component would also seem to be apparent. Mineralized vein faults on the Reuben and CH 19 and 21 were found to be of the northeast-southwest type. A left-hand-horizontal movement is indicated, but horizontal displacement could not be measured. There are numerous lineations with a similar trend which would require closer inspection. The north-south trending lineations could not be correlated to faulting with any certainty at all due to lack of outcrop exposure in these areas.

A stereonet analysis of the attitude all measured fractures, joints, and veins encountered on the CH Group seems to correlate quite closely to the major structural trends inferred above. Four major groups were indicated. The first had trends from 20° -35° azimuth (northeast-southwest). A second group plotted 10° either side of 90° azimuth (east-west; a third group plotted from 340° to 360° azimuth (north-south to northwest-southeast); and a fourth minor, but widespread group plotted from 300° to 330° azimuth (northwest-southeast). The majority of dips were 30° either side of vertical, the northwest dips being more common for measured vein faults with a northeast strike.

A distinct schistosity is present in almost all rock types and very nearly parallels inferred bedding planes in the metamorphosed sediments. A wrinkle lineation also occurs in many of the schists with a predominant southwest plunge. Small scale drag and isoclinal folds were examined and found to have their axial planes nearly parallel to the bedding and foliation of the enclosing rock. Drag folds associated with faulting were also noted in many locations. Larger scale folding is probable in some areas and may explain sudden changes in bedding attitude and rock type distrubution, but folds of this scale were not observed directly and remain only as possibilities.

Bedding plane low angle faults were observed directly only in two localities, but is probable that these are much more common in the area than indicated.

It is difficult, if not impossible, to relate all the structural folding and faulting in the area to any larger scale regional structural features because of the several episodes of deformation indicated within the rock units. Possibly a computer statistical analysis using much more data than presently available would aid in a structural interpretation of the whole region.

D. MINERALIZATION

Geological mapping and prospectingdid not reveal any major silver-lead-zinc mineralization, although numerous occurances of pyrite, siderite, arsenopyrite, pyrrhotite and quartz and calcite-vein material were found . All major galena,sphalerite showings examined were in older trenches or found by bulldozer trenching during the field season. Limonitic quartz veins were common in all sediments, but assays of this material proved disappointing. Pyrite and arsenopyrite were common in quartz veins in thich-bedded quartzite in the Skate Creek area. Also common in this area was pyrrhotite in calcite veinlets within greenstone bodies. Galena and associated lead, zinc sulfides were found in three localities; and siderite and other manganese and iron oxides were common in these zreas. Calcite veins were noted in quartzites, schists and greenstone bodies. Three occurrences of breccias with interesting assays but no visible sulfides were also of importance.

On the following chart ("CH GROUP - ROCK AND TRENCH ASSAYS") brief descriptions of the showing examined and corresponding assay results are given. All assays were done at the Elsa Assay Laboratory under the supervision of Mr. Fred Burgess, Chief Chemist for U.K.H.M.

CH GROUP ROCK AND TRENCH SAMPLES

SAMPLE No.	LOCATION	DESCRIPTION	Au oz/ton	Ag oz/ton	Pb %	Zn %	Cu %	Fe %	Mn %	As %	Sb %
09101	Reuben No. 6 M.C.	near caved adit, Siderite with PbS & FeS_2, limonite		32.4	2.34	3.13	0.16	31.39	3.97		
09102	Shanghai No. 16 M.C.	in cross fault. Quartz vein material with limonite in veinlets		0.3				1.38	0.09		
09103	Reuben No. 4 M.C.	trench on fault zone. Mn stained quartz vein material		0.1	0.02	0.14					
09105	CH No. 29, Trench 10	Calcite vein 5" wide stained with limonite		1.8	0.24	0.02		1.84			
09108	CH No. 29	Pyrolusite and limonite in quartz veinlets		4.2	0.54	0.02		0.87		0.02	
09106	CH No. 21	Pyrolusite and siderite in small quartz veinlets in greenstone		1.1	0.19	0.02					0.01
09107	CH No. 21	Pyrolusite and siderite fracture filling in quartzite		3.4	0.38	0.05		5.38	3.43		0.01
09114	CH No. 19, Trench 2	Channel sample 2-1/8', limonite stained quartz, graphitic schist		0.3	0.02	0.01					
09115	CH No. 19, Trench 2	Channel sample 2-2/8', lim., Mn stained quartz, graphitic schist		0.4	0.03	0.05					
09116	CH No. 19, Trench 2	Channel sample 2-3/10' lim. stain quartzite, graphitic schist		0.2	0.01	0.01					
09117	CH No. 19, Trench 2	Channel sample 2-4/10' lim. stained quartzite, graphitic schist		0.1	0.01	0.01					
09118	CH No. 21, Trench 3	Chan. sample 3-1/12' qzte, grnst, graph schist-siderite fractures		0.2	0.04	0.02					
09119	CH No. 21, Trench 3	Chan. sample 3-2/7' qzte, grnst, graph schist-siderite fractures		0.6	0.10	0.05					
09120	CH No. 21, Trench 4	Chan sample 4-1/12' graph sch., qtz with disseminated galena		0.3	0.05	0.07					
09121	CH No. 21, Trench 4	Chan sample 4-2/15' graphitic qzte, qtz with disseminated PbS		0.7	0.04	0.05					
09122	CH No. 21, Trench 4	Chan sample 4-3/8' altered grnst, graph qzte, siderite vein, Tr. PbS		1.0	0.44	0.29					
09123	CH No. 21, Trench 4	Chan sample 4-4/5' altered grnst, siderite at graph qzte contact		0.8	0.11	0.15					
09124	CH No. 21, Trench 4	Chan sample 4-5/5' quartzite, altered greenstone, minor siderite		0.4	0.06	0.12					
09125	CH No. 21, Trench 4	Chan sample 4-6A/8' graph qzte, 6" siderite vein with Tr PbS, ZnS		0.7	0.08	0.31					
09126	CH No. 21, Trench 4	Chan sample 4-6B/10' graphitic quartzite with minor siderite		0.6	0.07	0.07					
09127	CH No. 21, Trench 4	Chan sample 4-6C/10' altered grnst with ½" fractures FeS_2, PbS, ZnS		1.8	0.39	0.86					
09128	CH No. 21, Trench 5	Chan sample 5-1/8' fault gouge, graphitic quartzite		4.1	0.29	0.09					
09129	CH No. 21, Trench 5	Chan sample 5-2/6' graphitic qzte fault gouge, massive quartz		13.4	1.10	0.12					
09130	CH No. 21, Trench 6	Chan sample 6-1/8' fractured quartz-feldspar porphyry, qzte	0.01	0.5	0.02						
09113	CH No. 206	southern Jay showing, PbS, jamesonite, limonite from vein fault		11.1	2.69	3.19					0.48
09111	CH No. 207	main Jay showing, 20' sheeted shear zone, FeS_2, PbS, ZnS, siderite		6.4	7.40	16.3					0.93
09110	CH No. 216	fault breccia float, no visible sulfides		4.7	0.79	0.17			0.13	0.01	
09109	CH No. 221	arsenopyrite and minor pyrite and tourmaline	0.01	1.9				2.52	0.17	2.36	0.02
09112	CH No. 222	pyrrhotite and limonite in calcite veinlets in greenstone		0.1	0.13		0.01	7.40		0.05	

II GEOCHEMICAL SURVEY

A. GENERAL

The claim baselines were used for establishing a grid for sampling purposes. Preliminary soil sampling was done on a 300 foot line spacing with samples taken every 100 feet on the lines. A small area in the vicinity of CH 19 and 21 was detail sampled on 100 foot line spacing.

A total of 4,852 soil samples were taken in the course of the work and these were analyzed for silver, lead and zinc. Samples of approximately 1 cup in size were taken using a mattock from holes 6 inch - 18 inches deep, depending upon permafrost conditions, to as closely as possible represent the "B" (organic free) soil horizon.

In addition, 12 stream sediment samples were taken from various streams in the claim block and were analyzed for silver, lead, zinc and in some cases, gold.

B. LAB. PROCEDURE

Sample analysis were carried out at the Elsa Assay Laboratory under the direction of Mr. Fred Burgess, Chief Chemist for United Keno Hill Mines Limited.

The samples were dried and screened through a -80 mesh standard nylon screen. 1.00 grams of the minus 80 mesh material was digested in a solution of HNO_3 and HCl (Aqua Regia) for a minimum of 8.0 hours under heat lamps. After cooling, the samples were brought up to a 20 ml. volume with deionized water and were analyzed for silver, lead and zinc by a "Perkin Elmer 303" atomic absorption spectrophotometer. Results were obtained in parts per million. A split of all samples was kept for further reference.

C. INTERPRETATION OF RESULTS

Previous work in the Galena Hill - Keno Hill region has proven soil sampling to be an effective exploration tool for locating vein zones in areas of relatively shallow overburden (to 10 feet). A three-metal determination (Ag, Pb, Zn.) was done on all soil samples. Experience has shown that lead is the most reliable indicator element due to its low mobility in the chemical-physical environment of this area. Therefore highly anomalous lead values should indicate a nearby source for this element and heaviest emphasis is placed on the resultant lead plots. The mobility of both lead and the geochemical results for these elements are more widespread and erratic, making overall interpretation more difficult.

The variety of materials sampled also complicates interpretation. In some cases the ideal depth for sample material could not be reached due to excessive permafrost conditions; and often samples of this type were too organic for proper evaluation. Samples taken from residual soils were generally considered reliable.

But samples from t ills and clayey bog-type soils have many complicating characteristics. If the till cover is very shallow and of local origin, the geochemical response of these soils may be of some value; but if deep overburden exists, soil analysis will not reflect bedrock characteristics. The half-bog soils often show a slight enrichment of silver and zinc relative to residual soils. These elements would seem to be accumulated in organic material and by iron and manganese oxides and hydroxides in the clay minerals. A more total chemical attack, such as potassium bisulfate fusions, may have proved slightly more reliable in analysis of these soils. Generally it is not felt that samples taken from deep tills or bog-type soils will reflect the presence of any underlying mineralization.

There is also probably considerable background variation for all metals due to the differences in underlying rock types. Generally background values are lower in quartzite areas than in schist areas. Soils above graphitic schists may have higher than normal background values for some metals, reflecting the higher concentrations of these metals in that rock type.

In contouring, lead values in excess of 50 p.p.m. have arbitrarily been selected as being anomalous. Silver is contoured above 1.0 p.p.m. and zinc above 100 p.p.m. It should be noted that in specific areas lower values might also be considered anomalous and may give better definition of anomalous trends or vein extensions. The reverse is probably true in some drainage areas.

Anomaly Descriptions

(1). Soil Sample Plots for CH 1 - 180

Anomaly 1.- This is a low order zinc and silver anomaly. Corresponding lead values are below 50 p.p.m. It occurs on a relatively well-drained slope and may in part reflect a major cross-fault expressed at the top of the hill. Drainage from this fault notch is probably responsible for the widespread dispersion downslope.

Anomly 2. - All three metals are anomalous here. Silver is most widespread. A sub-parallel cross-fault is defined immediately uphill from this anomaly, thus indicating similar features to Anomaly 1.

Anomaly 3. - This is a relatively high order silver and low order lead anomaly approximately 900 feet northeast of Anomaly 2. Although restricted in extent, these values may be significant and should be further investigated.

Anomaly 4. - This widespread silver and more restricted zinc and lead anomaly probably represents an extension of Anomaly 2 or 3, and may reflect downslope drainage of the above.

Anomalies 5, 6 and 7. - These low order anomalies may all be related. Anomalous lead values only occur in Anomaly 7, while silver and zinc are anomalous in all three anomalies. These anomalies are all sub-parallel with a northwest-southeast trending long axis. Drainage and organic accumulation may be reflected in part, but the overall trend would suggest the possible presence of a cross-fault similar to those expressed in Anomalies 1 and 2. There is no geological support for this interpretation, but topographic considerations give rise to this possibility.

Anomaly 8. - Anomaly 8 is a large and erratic low order silver and zinc anomaly. Lead is very restricted. This anomaly probably includes many small and possibly significant anomalies, but the overall trend of all anomalous values suggested the grouping of the whole area. Much of this anomaly occurs on a relatively flat lying bog-type terrain, especially the northern part. But some northeast trending segments may reflect a geological projection of vein faults known on the Reuben claims to the southwest. Therefore, the area is considered favorable; and more detailed work is warranted.

Anomaly 9. - This is an isolated, but high silver anomaly without any lead or zinc support. Its isolation and lack of any geological or geochemical support tends to preclude a reliable interpretation.

Anomaly 10. - This segmented low order silver, zinc anomaly would seem to be of little importance, except that it lies on the projection of a northeast trending drainage lineation.

Anomaly 11. - This high order zinc and low order silver and lead anomaly lies on an assumed cross-fault. Drainage accumulations probably enhance the zinc contrast. Silver values to the northwest may reflect an extension to this anomaly.

Anomaly 12. - This small low order lead, zinc anomaly lies on an assumed fault lineation, but may be due to drainage accumulation.

Anomaly 13. - A low order silver, zinc anomaly, again on an assumed fault lineation, but also in an organic drainage environment.

Anomaly 14. - This small silver, lead, zinc anomaly lies on the trace of a vein fault and may reflect mineralization.

Anomaly 15. - This isolated, but very high order silver, lead, zinc anomalies lies on the trace of a known vein fault within 100 feet of a silver, lead, zinc mineralized outcrop showing. Nearby samples failed to reflect vein mineralization, probably due to organic clay and silt accumulations in the overburden cover. It is unknown why or how this one sample is so anomalous in the same environment.

Anomaly 16. - All three metals are anomalous in a low lying area which drains the above noted vein zone. Thus, they probably do not reflect immediate mineralization, but only a downslope dispersion and accumulation of metals.

Anomaly 17. - This is a lead, zinc anomaly which probably reflects the northward extension of the vein zone of Anomaly 15. Further investigation in this direction is indicated.

Anomaly 18. - This is a low order silver, zinc anomaly with a north-east trend. Many segments probably represent downslope drainage conditions. The anomaly is not considered of much importance.

Anomaly 19. - This is a high lead, zinc anomaly accompanied by low order silver values. It occurs upslope from major drainage and does not seem to be related to organic accumulations. This anomaly may reflect nearby mineralization and should be further investigated.

(2). Soil Sample Plots for CH 181 - 224

Anomaly 1. - All three metals (silver, lead, zinc) show very highly anomalous values which definitely reflect known lead, zinc, silver mineralization exposed in trenches on the main "Jay" showing. Much of the anomaly is downslope of the actual mineralization, but this is to be expected with metal dispersion in the soils. Better definition on both projected extensions of this vein should be obtained.

Anomaly 2. - Although more restricted, lead, zinc and silver again reflect known mineralization in the south vein zone. Zinc is slightly more widespread than silver and lead. Overburden cover is slightly thicker in this area.

Anomaly 3. - This lower order silver and zinc anomaly may reflect the northwestern extension of the vein indicated by Anomaly 2 or it may be entirely separate. It would not seem to due to organic accumulation in this area and should be investigated further.

Anomaly 4. - This high order lead anomaly, with attendant values in zinc and silver would again appear ot reflect nearby mineralization. It may represent an extension of the main Jay vein zone(Anomaly 1), based on geological projection. The zinc values to the northwest would seem to support this conclusion. Its extension to the southeast is abruptly terminated for reasons unknown. Further investigation is warranted.

Anomaly 5. - This anomaly is well defined by lead and zinc (and by a single silver high) and seems to parallel Anomaly 4 and possibly converge into it. Based on geological projection of a vein fault north of Anomaly 1, this anomaly may reflect the presence of a weaker sub-parallel vein. The extension to the northwest should be further defined.

It should be noted that Anomalies 4 and 5 occur on or near a granodiorite stock. Their relation to this stock is not well defined and may be important.

Anomaly 6. - These lead highs and lower silver and zinc values have not been correlated to any presently known geological feature, and it is unclear as to what causes this anomaly. The slope is well drained and overburden cover is not thought to be excessive.

Further investigation is possibly warranted.

Anomaly 7. - The long axis of this relatively low order anomaly would seem to parallel downslope drainage, but parts of it also lie on geological projection of a fault with known mineralization. Better definition and further geological investigation is needed before any conclusions can be reached.

Anomaly 8. - This is a small isolated low order silver and lead anomaly with no corresponding zinc definition. No interpretation is possible without added information.

(3) Stream Sediment Samples

Twelve silt samples were taken on various streams in the claim group and analyzed for lead, zinc, silver (three for gold as well). Results obtained were of very low order, and it is thought that the method of collection and analysis were not of optimum value. Therefore, the results of these samples have not been plotted and no interpretation is attempted.

CONCLUSIONS

Most of the claim block has been glaciated, as tills are common in most areas. The claim block has less than 2% outcrop exposure and thick bush conditions on many slopes greatly hampers outcrop mapping.

Geological mapping was valuable in delineating the major favorable quartzite horizons on the claim group. Valuable information on the distribution of all rock types and the apparent structural complenities of the area was also obtained.

The geological section examined would seem to represent an anticlinal repetition of the similar section found on Galena Hill. Intervening structural relationships can only be theorized.

Vein faults, cross faults and low angle bedding faults similar to those found on Galena Hill, are present on the claim block, but the vein faults notably suggest a complex system of faulting, although further investigation is needed to prove the existence of these faults.

Lead, zinc, silver mineralization was found in these locations in the claim group, all of which had recieved varying amounts of previous exploration.

Geochemical soil sampling was generally dissappointing. Only a handful of high order anomalies would seem to indicate underlying mineralization.

Lead is more restricted than silver and zinc, and is probably more reliable for geochemical interpretation of soil samples.

Many of the very low order anomalies may be important in this environment because of the inhibited metal dispersion thought to be due to the character of the overburden cover.

RECOMMENDATIONS

1. That further geochemical mapping be done in the following areas:
   - (a) on the newly acquired Reuben 1-6 Mineral Claims (former Tex Group), especially in relation to vein faults present there.
   - (b) in the area covered by CH 1 and CH 33-38, paricularly investigating possible geologic features suggesting an extension to the Reuben veins.
   - (c) in the areas of CH 15-20 inclusive. Geological correlation between the CH 13 area and the vein fault on CH 19 is needed.
   - (d) in the area CH 95-102, with special reference to air photo lineations.
   - (e) in the area CH 61-68 and 105-114 inclusive. The boundaries of the quartzite formation (especially the lower boundary) need further delineation in the area. This would also be considered a favorable area for detailed prospecting and soil sampling.

(f) in the area of CH 139-150 and 171-186. This area would seem to have little or no outcrop. Drainage lineation need investigation and the mapping of local float may prove valuable.
(g) in the area of CH 188-192 and CH 197-200. No major outcroppings are known in this area and therefore mapping of local float is recommended. This area is considered low priority.
(h) in the area of CH 207-210 And CH 223,224 , to delineate the northward extension of the quartzite horizon.

2. Detailed prospecting is recommended for the following :
   (a) float with an interesting silver assay, found in rubble on CH31 should be traced.
   (b) fault breccia float, carrying interesting silver values, found on a lineation on CH 216 should be traced.
   (c) known vein faults should recieve further work to trace possible extensions.

3. Hand trenching or bulldozer trenching is of probable value in the following areas :
   (a) for tracing extensions of the vein fault on CH 19 and 21.
   (b) to check the high soil anomoly on CH 104 (anomoly 19).
   (c) to test northeast trending assumed fault lineations such those occuring on CH 11, CH 15, CH 48, CH 50, and CH 53.

4. That further geochemical soil sampling be done in the following areas :
   (a) over the Reuben 1-6 Mineral Claims.
   (b) in the area of CH 1,3,34, and 36 ,adjacent to the Reuben Claims.
   (c) on the claims CH 47-52, CH 15-18, and parts of CH 19 and 20, to fill in a sample area and test for vein extensions.
   (d) in the area of CH 29, 31, 62, 64-68, 109-114. This area is of relatively high priority as it is at lest partially underlain by quartzite and overburden cover is not exceessive.
   (e) in the area of CH 206-210 and 219-224, to further delineate anomalous soil trends south of the area and in conjunction with furher recommended mapping.

5. That some claims (listed in the Appendix) be allowed to lapse. These claims do not appear to be in favorable geologic setting (probably in the "Upper Shist") and further work in this area is not recommended.

6. That attempts be made to acquire additional information on previous exploration in the area.

7. That a semi-statistical analysis be attempted on structural data for the whole region.

8. That further investigations as to the depth and type of overburden on the claim group be made previous to Recommendation 10.

9. That a field program be initiated and carried out in 1975, with respect to some of the above recommendations prior to Recommendation 10.

10. That Overburden Drilling be initiated on parts of the claim group:
    (a) once favorable target areas have been located by geology and soil sampling.
    (b) starting with a widespread reconnaisance grid on the hillslope facing Elsa, and South McQueston River valley.
    (c) with detail grid drilling in the vicinity of known vein fualts in the claim group (including the Reuben group).

CH GROUP

STATEMENT OF COSTS

Geological mapping and a Geochemical survey was carried out on the CH Group of 224 Mineral Claims between June 10 and September 18, 1974.

Salaries and Labour Overhead

1 Party Chief @ $800.00/month 3 Field Helpers @ $700.00/month	. . . . $11,670.00
Camp Equipment and Supplies	. . . . $ 3,234.00
Food	. . . . $ 2,289.00
Fuel	. . . . $ 360.00
Helicopter Charter	. . . . $ 5,363.00
Geochemical Supplies	. . . . $ 912.00
Total	. . . . $23,828.00

Soil Analysis and Rock Assays

Total Soil Samples 4,852

Analysis for lead, zinc, and silver @ $0.75/determination . . $10,917.00

Total Silt Samples 12

8 samples (analysis for Pb, Zn, Ag) @ $0.75/determination . . $ 18.00

4 samples (analysis for Pb,Zn,Ag,Au)@ $0.75/determination . . $ 12.00

Total Rock Assays: 171

171 determinations (Pb, Zn, Ag, Au, W, Cu, Fe, Mn, Sb) @ $1.00 . $171.00

Total Assaying Costs . . . $11,118.00

Overall Cost CH Group $34,946.00

Bulldozer Trenching - CH Group September, 1974

Location	Dimensions	Volume of Material	Type of Material	Value
Trench 1, CH No. 19	90'X13'X8'	87 cubic yards	Muck @ $0.75/yd	$ 65.25
Trench 1, "	"	260 " "	Rock @ $1.00	$260.00
Trench 2, CH No. 19	90'X13'X16'	693.3 " "	Rock @ $1.00	$693.30
Trench 3, CH No. 21	70'X13'X5'	168.5 " "	Rock @ $1.00	$168.50
Trench 4, "	100'X13'X14'	674.1 " "	Rock @ $1.00	$674.10
Trench 5, CH No. 21	100'x13'x4' 50'x13'x3'	264.8 " "	Muck @ $0.75	$198.60
Trench 5, "	150'x13'x8'	577.8 " "	Rock @ $1.00	$577.80
Trench 6, "	35'x14'x4'	72.6 " "	Rock @ $1.00	$ 72.60
Trench 8, "	90'x13'x3'	130.0 " "	Muck @ $0.75	$ 97.50
Trench 8, "	90'x13'x5'	216.7 " "	Rock @ $1.00	$216.70
Trench 10, CH No. 31	200'x14'x4'	414.8 " "	Rock @ $1.00	$414.80
Trench 11, CH No. 29	100'x14'x2'	103.7 " "	Rock @ $1.00	$103.70
Trench 12, CH No. 31	60'x15'x2'	66.7 " "	Muck @ $0.75	$ 50.03
Trench 12, "	60'x15'x1'	33.3 " "	Rock @ $1.00	$ 33.30
Trench 13, CH No. 19	50'x13'x3'	54.1 " "	Muck @ $0.75	$ 41.56
Trench 13 "		18.1 " "	*Fr Gd @ $2.00	$ 36.20
Trench 14, "	70'x15'x3'	87.5 " "	Muck @ $0.75	$ 64.63
Trench 14, "		29.2 " "	*Fr Gd @ $2.00	$ 58.40
Trench 15, CH No. 21	150'x13'x3'	216.7 " "	Muck @ $0.75	$162.53
Total		4,168.9 cubic yards		$3,989.50

* Frozen Ground

Representation Work

3,214.8 cubic yards	of Rock	@ $1.00/cu. yd.	=	$3,214.80
906.8 cubic yards	of Muck	@ $0.75/cu. yd.	=	$ 680.10
47.3 cubic yards	of Frozen Ground	@ $2.00/cu. yd.	=	$ 94.60
		Total		$3,989.50

Hand Trenching - CH Group September, 1974

Drilling with 'Cobra' portable drill and using explosives, through rock.

Date	Location	Number of Holes	Yards Moved
Sept. 10/74	CH No. 19, Trench 1	5	8 cubic yards
Sept. 11	CH No. 19, Trench 1	22	42 cubic yards
Sept. 12	CH No. 21, Trench 3	3	3 cubic yards
Sept. 13	CH No. 21, Trench 4	23	21 cubic yards
Total		53	74 cubic yards

Hand Trenching Labour	Account 400-505	$521.00
Hand Trenching Equipment, Supplies	Account 400-506	$ 21.00

Assessment Work Applied: 74 cubic yards @ $25.00 per cubic yard = $1,850.00

DISTRIBUTION OF GEOLOGICAL AND GEOCHEMICAL WORK

ON THE CH GROUP

Claim	Grant	Renewal Period Per Claim	Claim Years
CH No. 1 to 4	Y87340-Y87343	3 years	12
CH No. 33 to 47	Y87372- Y87386	2 years	30
CH No. 48 to 68	Y87387-Y87407	3 years	63
CH No. 69 to 114	Y87408-Y87453	2 years	92
CH No. 133 to 154	Y87595-Y87616	2 years	44
CH No. 166 to 180	Y87628-Y87642	2 years	30
CH No. 184	Y87646	2 years	2
CH No. 186	Y87648	2 years	2
CH No. 188 to 224	Y87650-Y87686	2 years	74
		Total	349 Claim Years

The following claims will be allowed to lapse on March 25, 1975:

CH No. 115 to 132	Y87577-Y87594
CH No. 155 to 165	Y87617-Y87627
CH No. 181 to 183	Y87643-Y87645
CH No. 185	Y87647
CH No. 187	Y87649

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J. R. Deighton, 1974, Geological Report on the JAY 1-16 Mineral Claims of Belmoral Mines Ltd. (NPL), Mayo mining District, Y. T. (for Agilis Engineering Ltd.)

A F F I D A V I T

I, Terry Levicki, of Elsa, in the Yukon Territory, Exploration Geologist, do solemnly declare:

1. I have caused the above mentioned work to be performed to the best of my ability and have a personal knowledge of the facts and matters herein declared.
2. I make this solemn declaration conscientiously believing it to be true and knowing that it is of the same force and effect as if made under oath and by virtue of the Canada Evidence Act.

Declared before me at

Elsa, in

the Yukon Territory,

this 26 day of

March 1975.

T. Levicki

J. Berg

Notary Public in and for the

Yukon Territory.

CERTIFICATE

I, Alex Smith, of P.O. Box 57, Galiano, British Columbia do hereby certify that:

1. The work on the CH No. 1 to 224 Mineral Claims, Chambers Hill Area, Mayo Mining District was performed by and for United Keno Hill Mines Limited under my reccommendation and supervision.

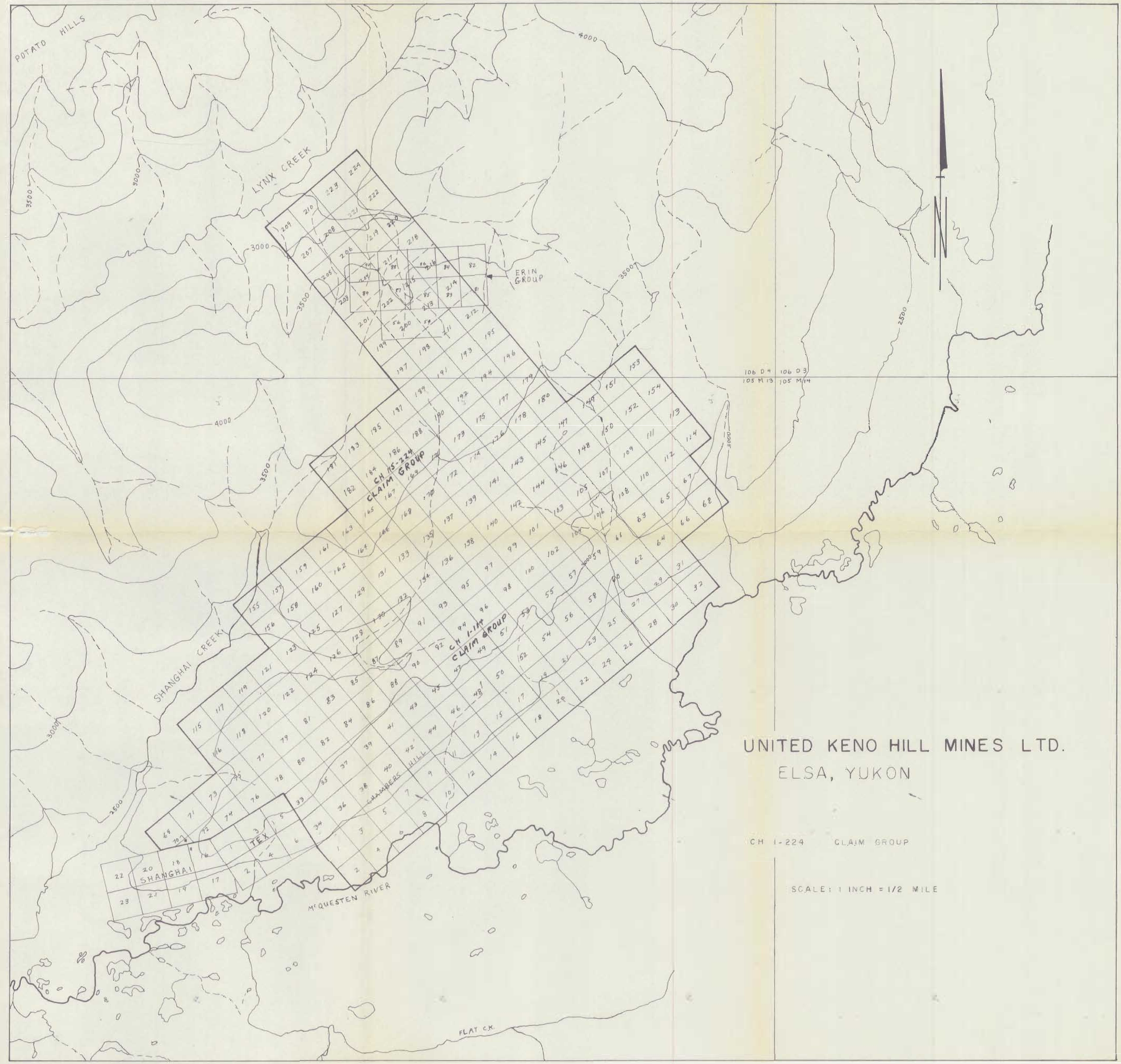
2. I am a registered member, in good standing, of the Association of Professional Engineers of British Columbia.

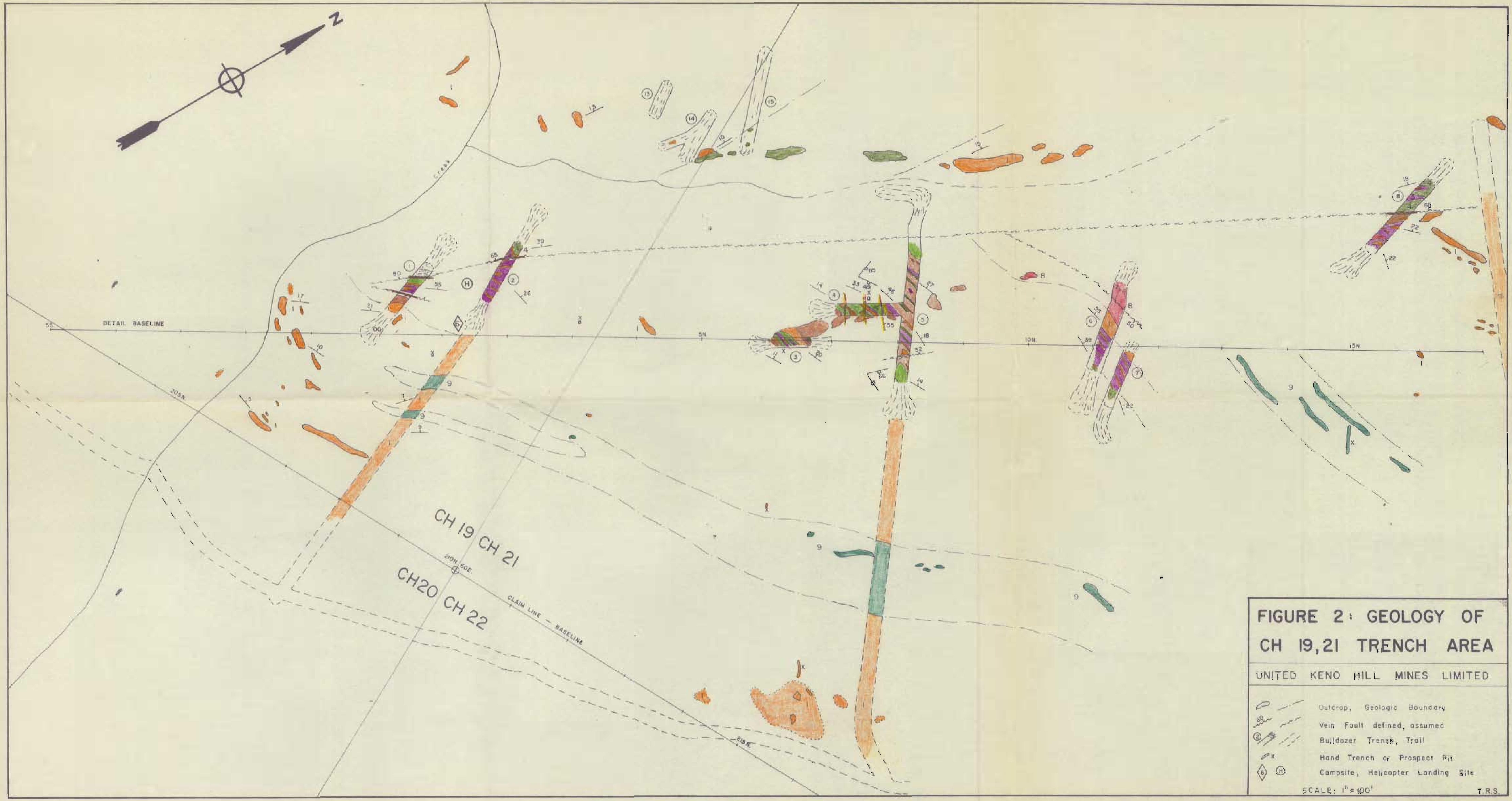
3. I am a consulting geologist for Falconbridge Nickel Mines Limited, and United Keno Hill Mines Limited.

A. C. Smith P. Eng.

Dr. Alex Smith, PhD, P. Eng.
Consulting Geologist

Elsa, Yukon
March 25, 1975


UNITED KENO HILL MINES LTD.
ELSA, YUKON
CH 1-224 CLAIM GROUP
SCALE: 1 INCH = 1/2 MILE
POTATO HILLS
LYNX CREEK
ERIN GROUP
CH 115-224 CLAIM GROUP
CH 1-114 CLAIM GROUP
SHANGHAI CREEK
CHAMBERS HILL
TEX
SHANGHAI
McQUESTEN RIVER
FLAT CK.
106 D4
106 D3
105 M13
105 M14



DETAIL BASELINE
5N
10N
15N
205N
210N 60E
218N
CH 19 CH 21
CH20 CH 22
CLAIM LINE — BASELINE
Creek
FIGURE 2: GEOLOGY OF CH 19,21 TRENCH AREA
UNITED KENO HILL MINES LIMITED
Outcrop, Geologic Boundary
Vein Fault defined, assumed
Bulldozer Trench, Trail
Hand Trench or Prospect Pit
Campsite, Helicopter Landing Site
SCALE: 1" = 100'
T.R.S.


CH 70
CH 72
CH 74
CH 76
CH 78
CH 80
CH 82
CH 84
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CH 14
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CH 18
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CH 28
CH 30
CH 32

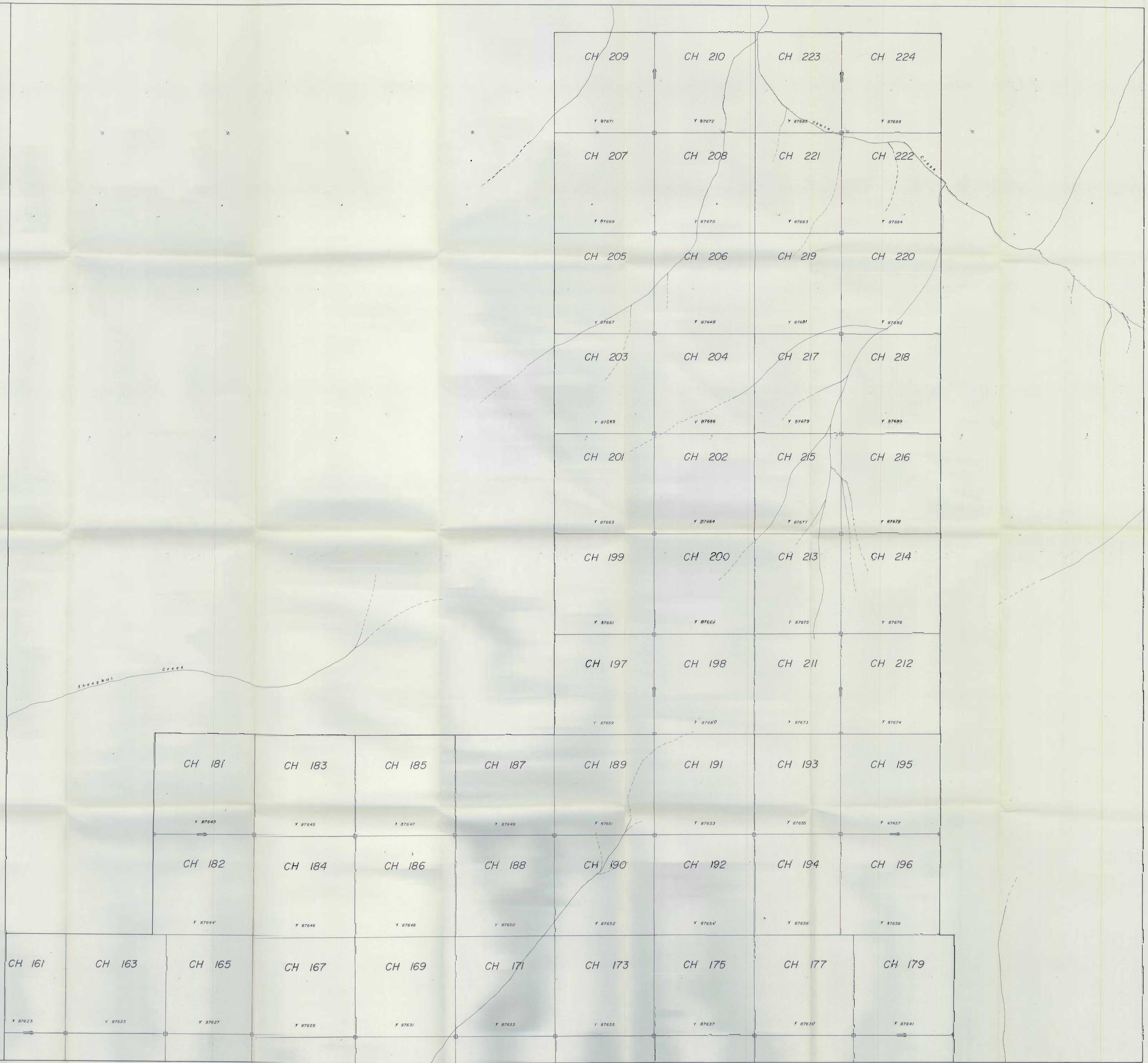

UNITED KENO HILL MINES LIMITED
ELSA YUKON
EXPLORATION DEPARTMENT
GEOLOGY MAP
OF THE
CH MINERAL CLAIMS 1–180
SURFACE LEGEND
Metamorphosed Sediments
Quartzite
Graphitic Quartzite
Graphitic Schist
Quartz-sericite Schist, Coarse Silicious Schist
Limestone
Skarn
Intrusives
Granodiorite
Quartz-feldspar Porphyry
Greenstone, altered
Biotite Lamprophyre
Vein Material
Quartz
Calcite
Sulfides
Fault Breccia (without visible sulfides)
Outcrop
Talus, Area of local float
Geologic contact (observed)
Geologic contact (projected or assumed)
Vein Fault (observed)
Vein Fault (projected or assumed)
Fault (observed)
Fault (projected or assumed)
Bedding
Schistosity
Lineation
Fracture or joint (inclined, vertical)
Trench
Hand Trench, Prospect Pit
Adit
Shaft
Diamond Drill Hole
U.K.H.M. Campsite, Old Campsite
Helicopter Landing Sites
Bulldozer Trails
Lakes or Sloughs
River
Creek, intermittent
400
200
0
400
800
1200
1600
Scale: 1 inch = 400 feet


Arsenop., Tourm.
(1.3 oz./T Ag)
Lim.
Bedding fault contact
Pyrr., Garb.
Slate Creek
Gal., Sphal., Jamest.,
Py., Sid., Lim.
(6.4 oz./T Ag)
(7.4 % Pb)
(16.5 % Zn)
(0.33 % Sb)
Gal., James., Lim.
(3.1 oz./T Ag)
(2.89 % Pb)
(3.19 % Zn)
drag folds
Fault Breccia
(4.7 oz./T Ag)
(0.79 % Pb)

UNITED KENO HILL MINES LIMITED
ELSA YUKON

EXPLORATION DEPARTMENT

PLAN MAP
OF THE
CH MINERAL CLAIMS 181–224



Scale: 1 inch = 400 feet

SURFACE LEGEND

(to accompany Fig. 2 Series)

Metamorphosed Sediments

- Quartzite
- Graphitic Quartzite
- Graphitic Schist
- Quartz — sericite Schist, Coarse Silicious Shist
- Limestone
- Skarn

Intrusives

- Granodiorite
- Quartz — feldspar Porphyry
- Greenston, altered
- Biotite Lamprophyre

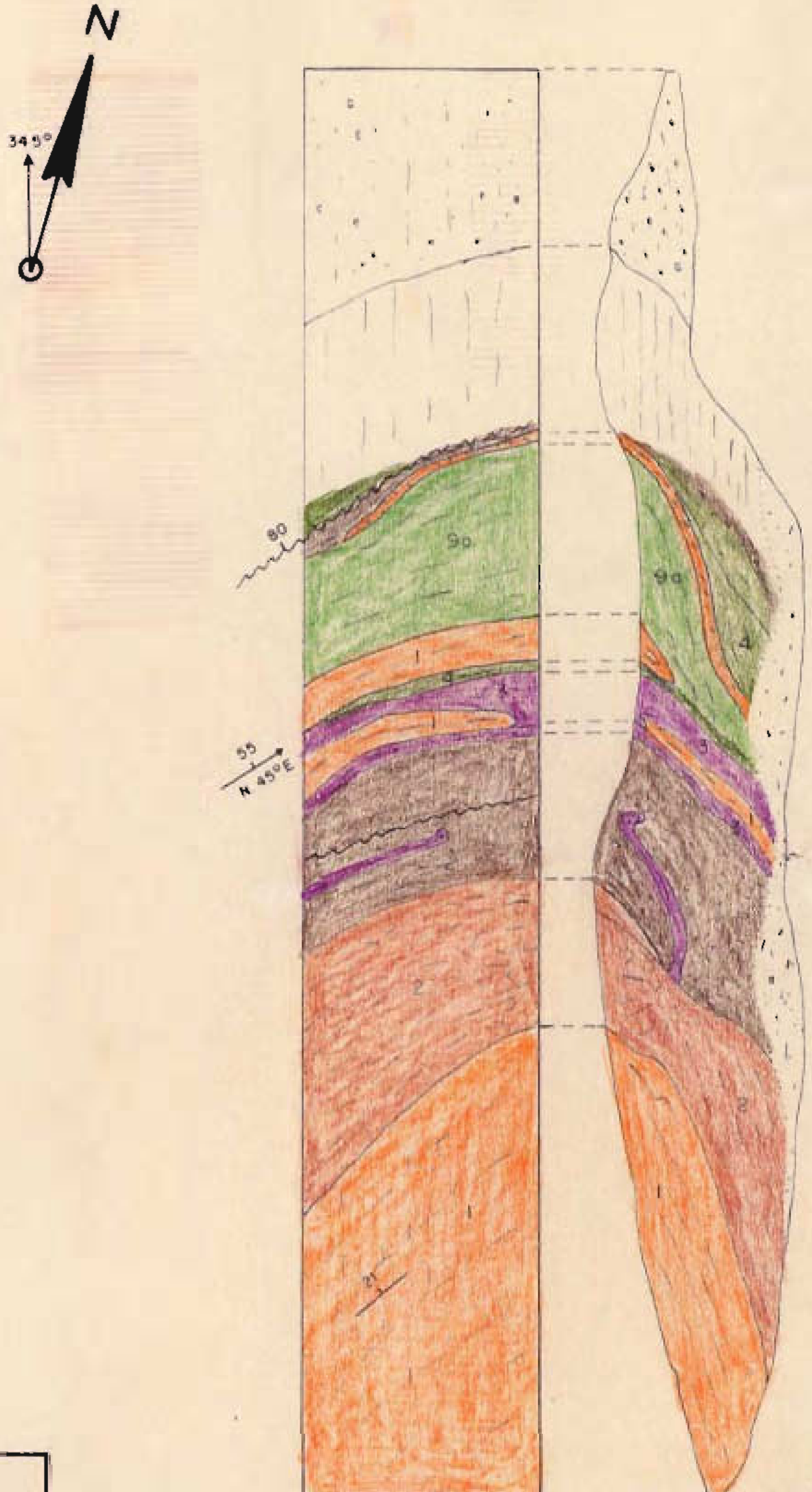
Vein Material

- Quartz, with sulfides
- Calcite
- Fault Breccia or bouge (without visible sulfides)
- Siderite, with sulfides (gal., sphal.)

Recent Material

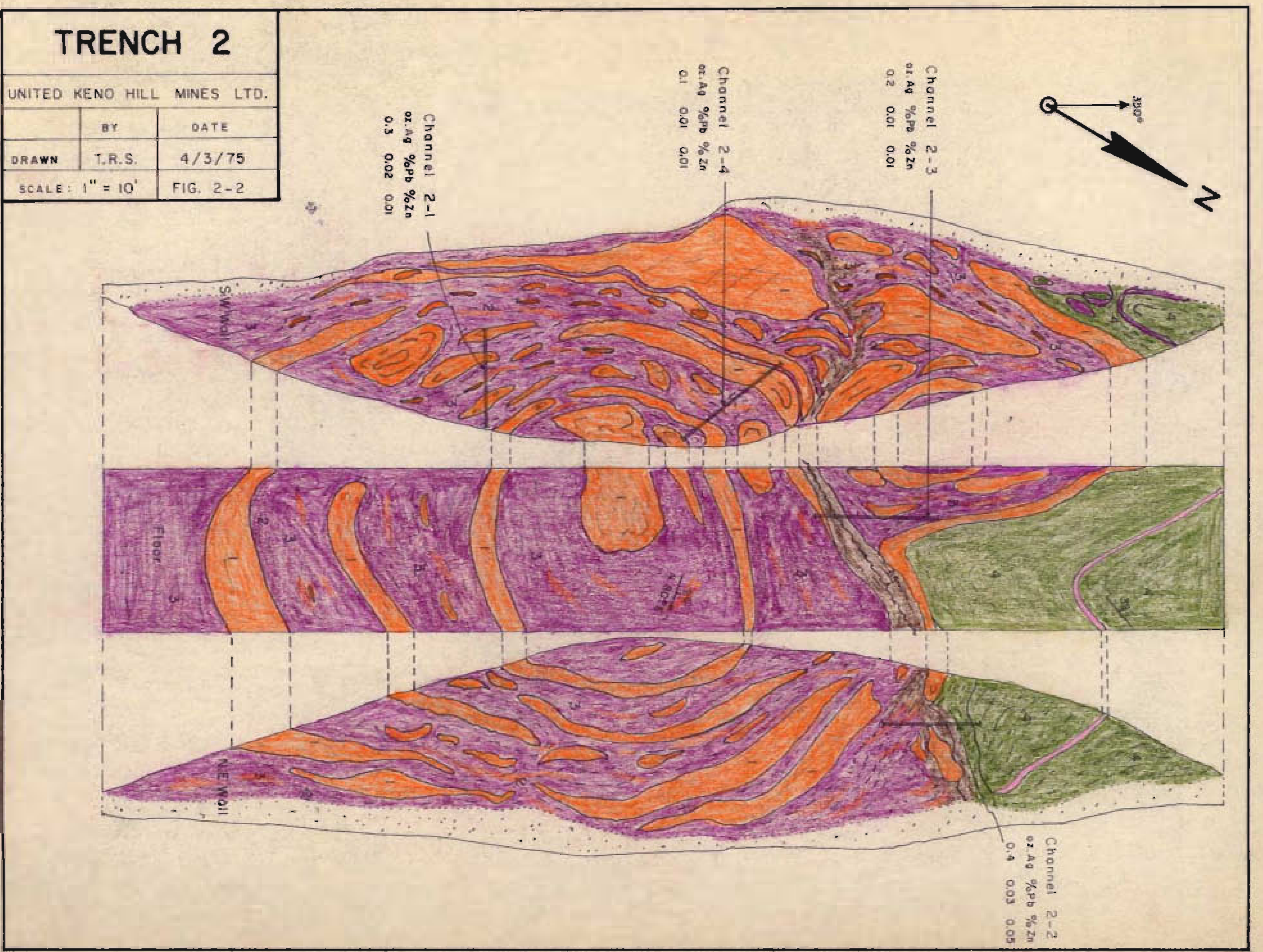
- Drift (till)
- Clay & Silt

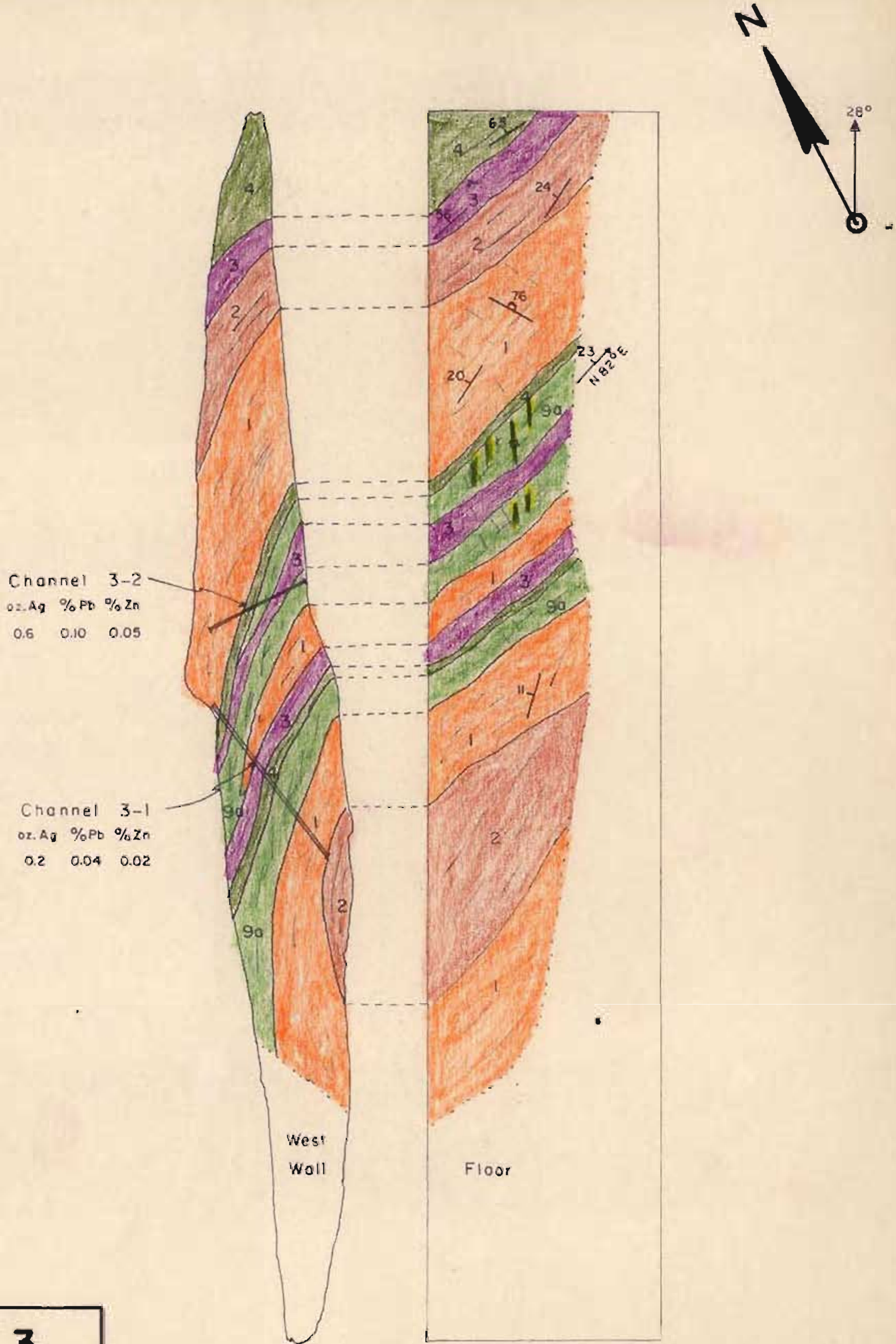
- Outcrop, Talus or Local Float
- Geologic contact observed, assumed
- Vein Fault observed, assumed
- Bulldozer Trench
- Hand Trench or Prospect Pit
- Bulldozer Trails
- Creek
- Bedding
- Schistocity
- Fracture or joint inclined
- Fracture or joint vertide
- U. K. H. M Campsite
- Helicopter Landing Site



TRENCH I

UNITED KENO HILL MINES LTD.		
	BY	DATE
DRAWN	T.R.S.	4/3/75
SCALE: 1" = 10'		FIG. 2-1


TRENCH 2
UNITED KENO HILL MINES LTD.
BY
DATE
DRAWN
T.R.S.
4/3/75
SCALE: 1" = 10'
FIG. 2-2
Channel 2-1
oz.Ag %Pb %Zn
0.3 0.02 0.01
Channel 2-4
oz.Ag %Pb %Zn
0.1 0.01 0.01
Channel 2-3
oz.Ag %Pb %Zn
0.2 0.01 0.01
Channel 2-2
oz.Ag %Pb %Zn
0.4 0.03 0.05
N
330°
SW Wall
Floor
NE Wall



TRENCH 3

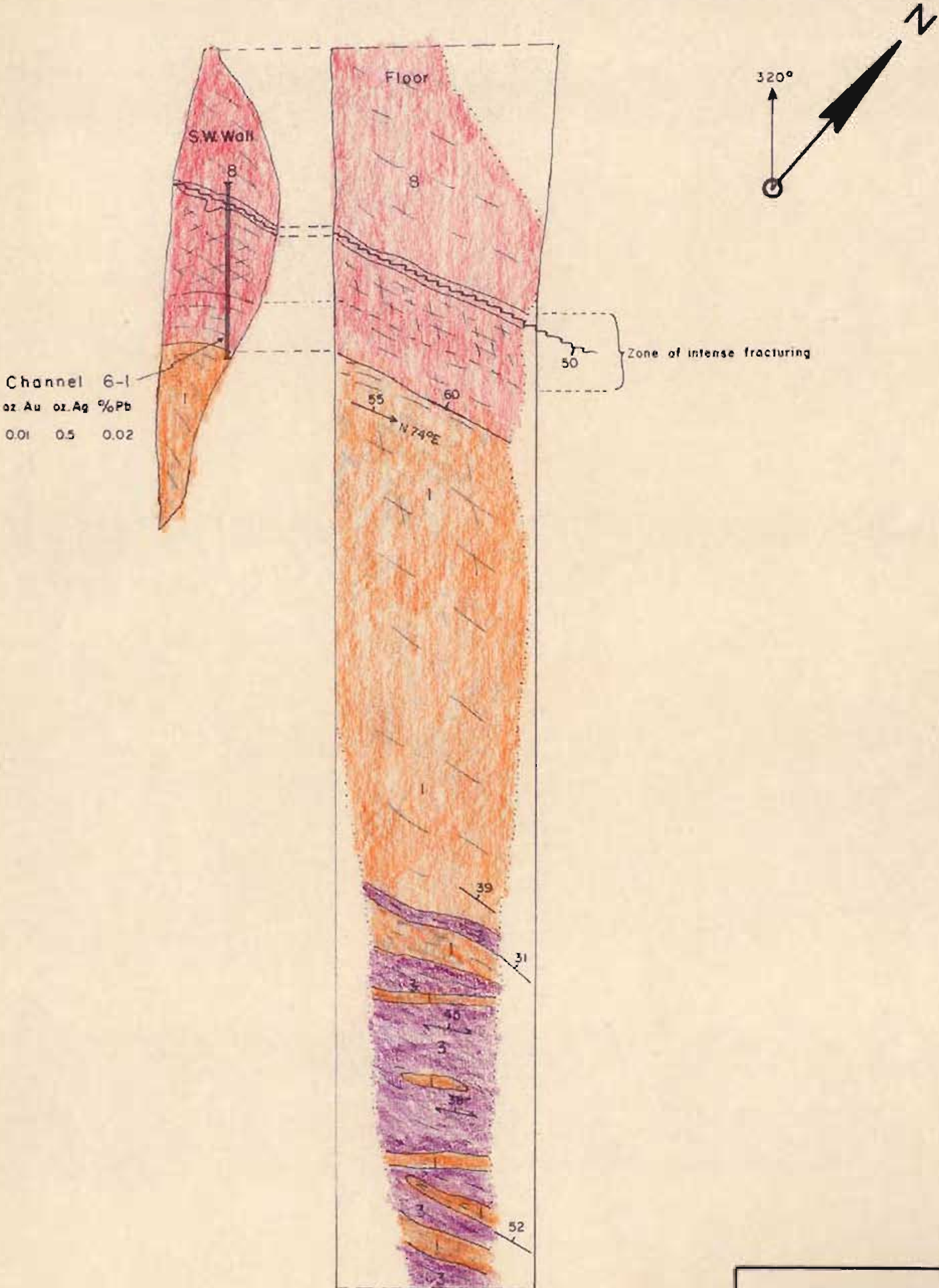
UNITED KENO HILL MINES LTD.

	BY	DATE
DRAWN	T.R.S.	4/3/75
SCALE: 1" = 10'		FIG. 2-3

TRENCH 4		
UNITED KENO HILL MINES LTD.		
	BY	DATE
DRAWN	T.R.S.	4/3/75
SCALE: 1" = 10'		FIG. 2-4

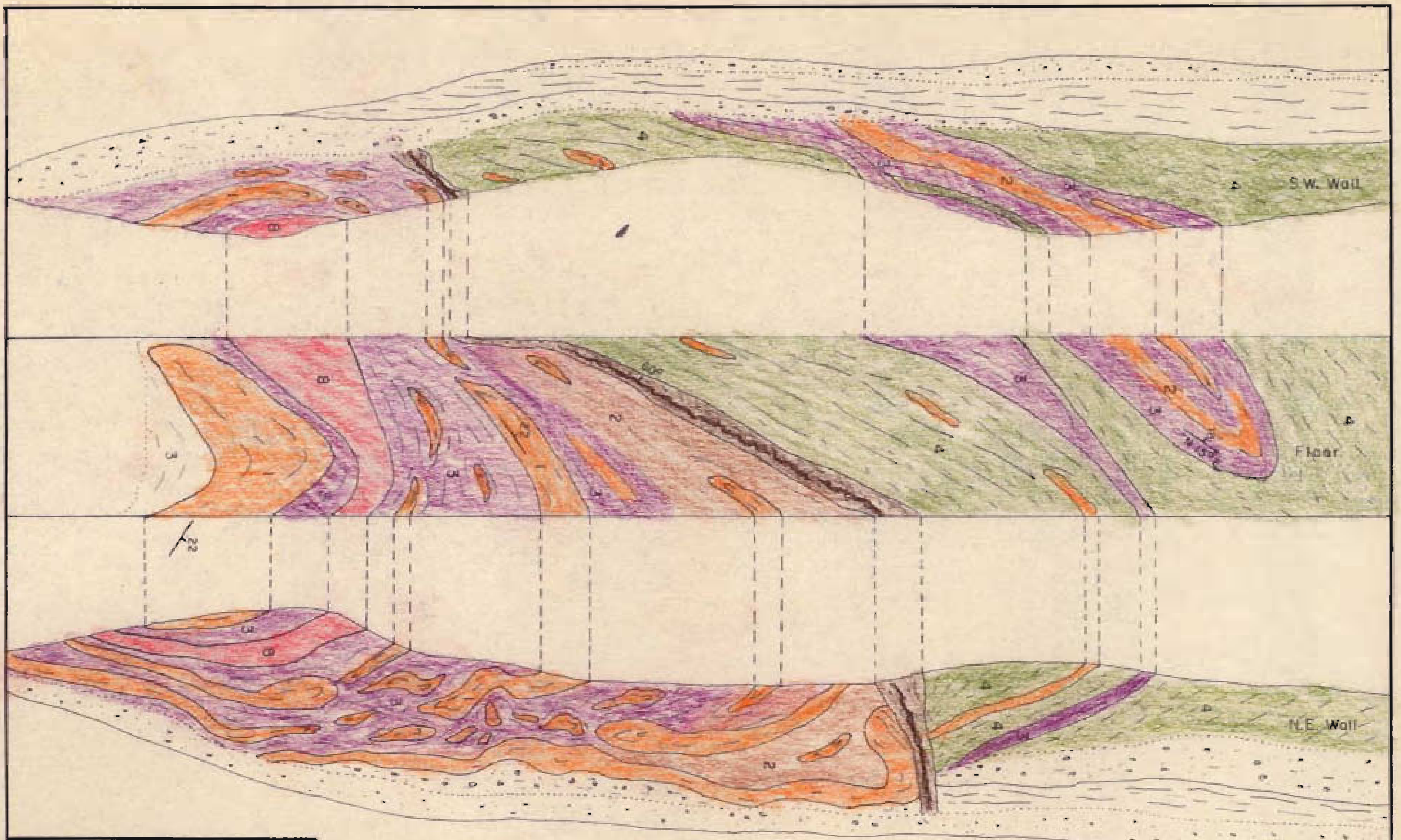
TRENCH 5

UNITED KENO HILL MINES LTD.		
	BY	DATE
DRAWN	T.R.S.	4/3/75
SCALE: 1" = 10'	FIG. 2-5	



TRENCH 6

UNITED KENO HILL MINES LTD.		
	BY	DATE
DRAWN	T.R.S.	4/3/75
SCALE: 1" = 10'		FIG. 2-6



TRENCH 8

UNITED KENO HILL MINES LTD.

	BY	DATE
DRAWN	T.R.S.	4/3/75
SCALE: 1" = 10'	FIG. 2-7	

TRENCHES 10,11,12

UNITED KENO HILL MINES LTD		
	BY	DATE
DRAWN	T.R.S	4/3/75
SCALE:	1" = 100'	FIG. 2.8


UNITED KENO HILL MINES LIMITED
ELSA YUKON
EXPLORATION DEPARTMENT
SOIL SAMPLING
SILVER PLOT
OF THE
CH MINERAL CLAIMS 1-180
CONTOUR INTERVALS IN PARTS PER MILLION (P.P.M.)
0.1 — 0.9
1.0 — 1.9
2.0 — 3.9
4.0 — 7.9
8.0 — 15.9
16.0 — 31.9
>32.0
Claim post location
Baseline
Sample location
Insufficient Sample (Organic)
Anomaly Number
400 200 0 400 800 1200 1600
Scale: 1 inch = 400 feet

UNITED KENO HILL MINES LIMITED
ELSA YUKON

EXPLORATION DEPARTMENT

SOIL SAMPLING
LEAD PLOT
OF THE
CH MINERAL CLAIMS 1-180

CONTOUR INTERVALS IN PARTS PER MILLION (P.P.M.)

- 0 — 49
- 50 — 99
- 100 — 199
- 200 — 399
- 400 — 799
- 800 — 1599
- 1600 — 3199
- >3200
- Claim post location
- Baseline
- Sample location
- Insufficient Sample (Organic)
- Anomaly Number

Insufficient Sample (Organic)
Anomaly Number

400 200 0 400 800 1200 1600

Scale: 1 inch = 400 feet

UNITED KENO HILL MINES LIMITED
ELSA YUKON

EXPLORATION DEPARTMENT

SOIL SAMPLING
SILVER PLOT
OF THE
CH MINERAL CLAIMS 181-224

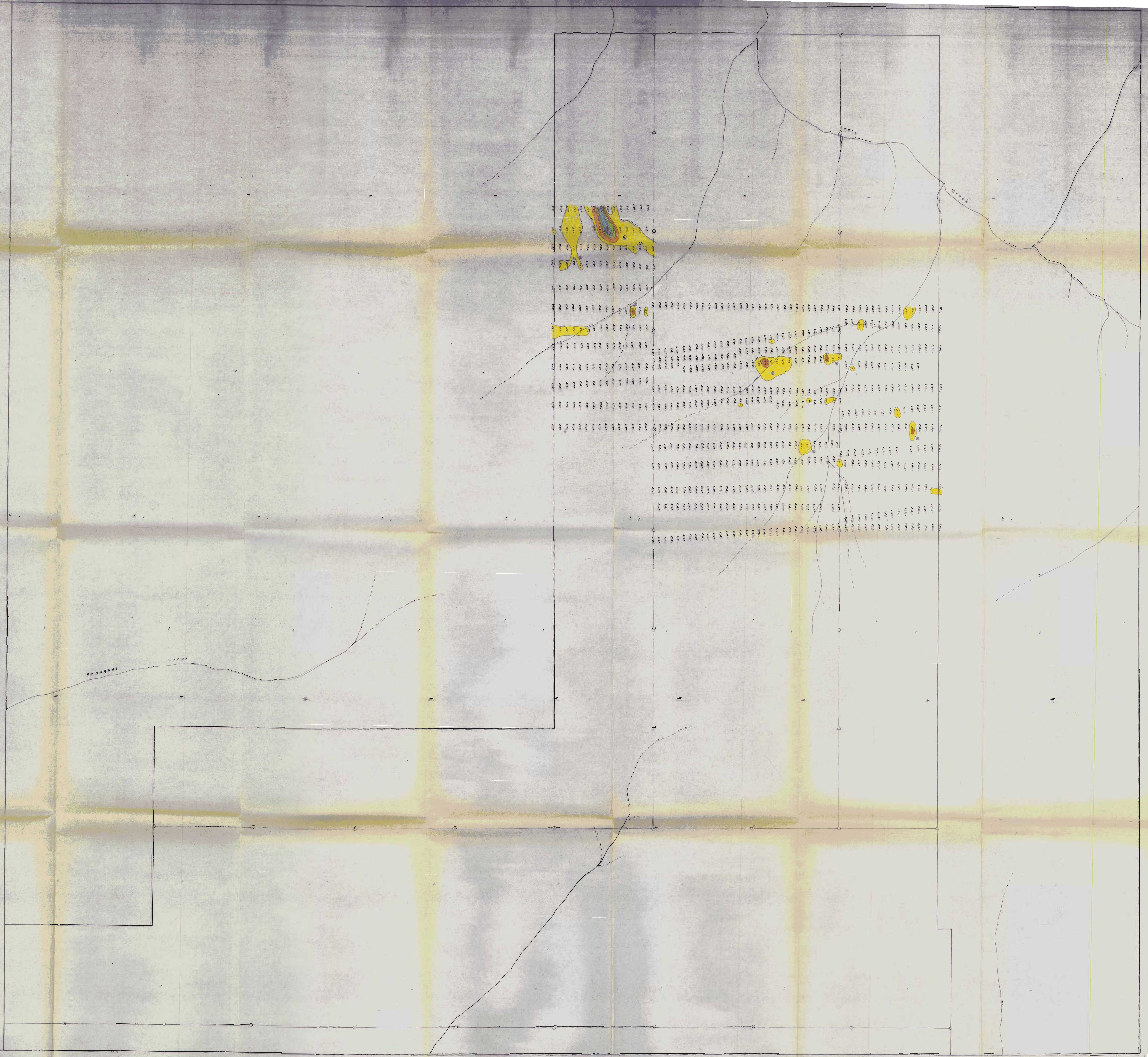
CONTOUR INTERVALS IN PARTS PER MILLION (P.P.M.)

0.1 — 0.9
1.0 — 1.9
2.0 — 3.9
4.0 — 7.9
8.0 — 15.9
16.0 — 31.9
>32.0

Claim post location
Baseline
Sample location
Insufficient Sample (Organic)
Anomaly Number

400 200 0 400 800 1200 1600

Scale: 1 inch = 400 feet



UNITED KENO HILL MINES LIMITED
ELSA YUKON

EXPLORATION DEPARTMENT

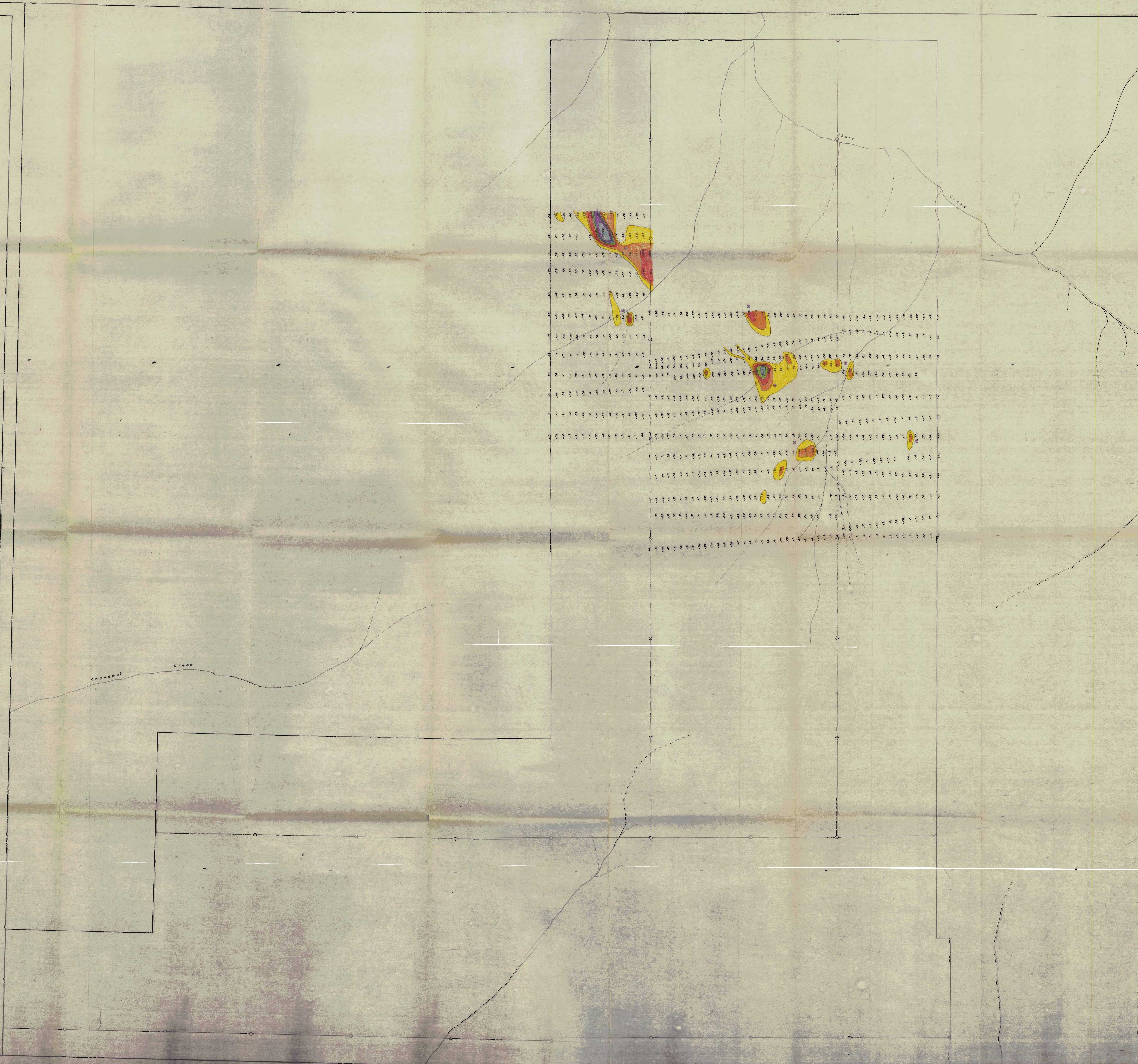
SOIL SAMPLING
LEAD PLOT
OF THE
CH MINERAL CLAIMS 181-224

CONTOUR INTERVALS IN PARTS PER MILLION (P.P.M.)

0 — 49
50 — 99
100 — 199
200 — 399
400 — 799
800 — 1599
1600 — 3199
>3200
Claim post location
Baseline
Sample location
Insufficient Sample (Organic)
Anomaly Number

400 200 0 400 800 1200 1600

Scale: 1 inch = 400 feet



UNITED KENO HILL MINES LIMITED
ELSA YUKON

EXPLORATION DEPARTMENT

SOIL SAMPLING
ZINC PLOT
OF THE
CH MINERAL CLAIMS 1-180

CONTOUR INTERVALS IN PARTS PER MILLION (P.P.M.)

0 — 99	1600 — 3199
100 — 199	3200 — 6399
200 — 399	>6400
400 — 799	
800 — 1599	

Claim post location
Baseline
Sample location
Insufficient Sample (Organic)
Anomaly Number

Scale: 1 inch = 400 feet

UNITED KENO HILL MINES LIMITED
ELSA YUKON

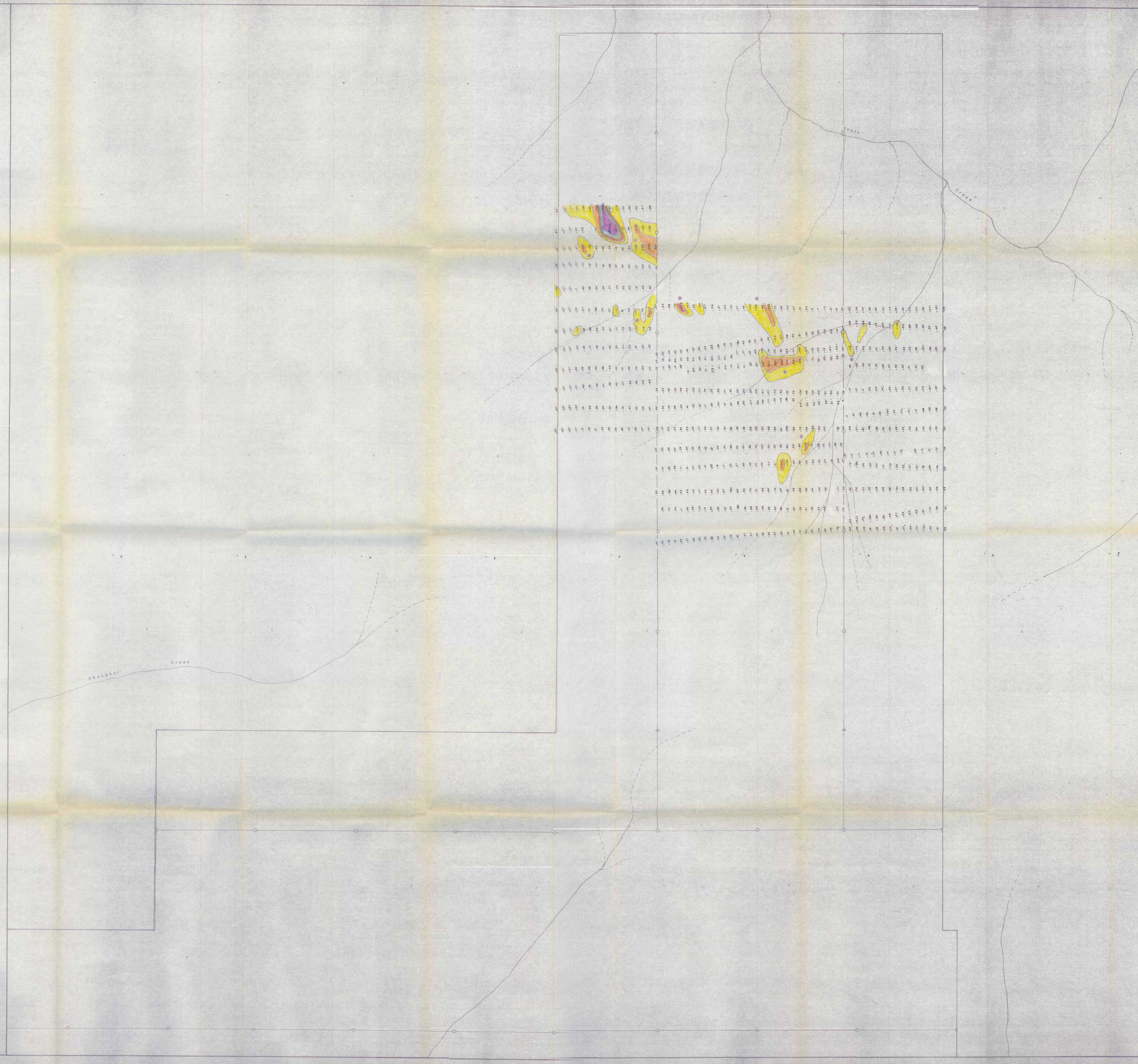
EXPLORATION DEPARTMENT

SOIL SAMPLING
ZINC PLOT
OF THE
CH MINERAL CLAIMS 181-224

CONTOUR INTERVALS IN PARTS PER MILLION (P.P.M.)

0 — 99	1600 — 3199
100 — 199	3200 — 6399
200 — 399	>6400
400 — 799	
800 — 1599	

Claim post location
Baseline
Sample location
Insufficient Sample (Organic)
Anomaly Number



Scale: 1 inch = 400 feet