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ASSESSMENT

Report on the

BONSAI 1 AND BONSAI 4 CLAIMS

OF

TEUTON RESOURCES CORP.

Eskay Creek Area Mining Division of Skeena, Northern British Columbia

North 56° 37' Latitude West 130° 34' Longitude N.T.S. 104 B/10 East

Period of Operation: Sept. 18th to Oct. 6th, 1989

Report and Operations by

International Field Services Ltd.

570 - 789 West Pender St. Vancouver, B.C. V6C 1112

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for

TEUTON RESOURCES CORP.

¢assandra Resources Inc.

Vancouver, B.C. GEOLOGICAL BRANCH ASSESSMENT REPORT

Dec. 28, 1989

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SUMMARY AND CONCLUSION

In August 1989 Cassandra concluded a venture option deal with Teuton Resources Corp., in which Cassandra acquired 2 claims totalling 30 units two miles to the west of the Calpine ore structure. The agreement was later amended to include 3 claims (50 units) directly adjoining the Granduc - Newhawk operation on their south border.

In mid September 1989 the company put into operation a three week program on the Bonsai claims, those to the west of the Calpine drilling. The program included a magnetometer survey, a VLF EM-16 survey, prospecting and geological reconnaissance. No work was carried out on the Lucky claims, those south of the Newhawk ground.

Coincidental anomalous areas from the magnetometer and EM-16 surveys were recorded in the vicinity of the three gossan areas in the eastern section of the claim group. Coupled with these findings are above average gold assays from some of the samples in this area. The western portion of the claims, underlain primarily by an alkaline intrusive, although highly sheared by a regional fault displayed weak assay results.

The formations in the eastern sector are, by description, similar to the host rock at the Calpine - Consolidated Stikine property. They have been defined as pyroclastics; a fine grained tuffaceous rock carrying variable amounts of pyrite. Andesitic tuffs and volcanics occur as poorly digested remnants adjacent to the quartz diorite plug in the western section of the examined area.

The property is primarily a precious metal prospect. Copper values are said to occur along the Unuk-Harrymel fault zone, a regional structure extending some 50 kilometers through the area. Copper oxides were spotted in two locations but were of small dimension.

Precious metal assays varied from less than 0.002 to a high of 0.124 ounces gold per ton. The majority of the above average assays occurred in the gossanous area of the claims. Because of the leaching effect associated with the gossans, precious metal values are normally low. The encouragement derived from these anomalous gold analyses has led to the recommendation to further investigate the gossan areas at depth by drilling.

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It should be noted that some zinc values were recorded from the soil sampling program but insufficient analysis were made to allow comment on any of the base metals.

It is recommended that Cassandra consider a diamond drill program for 1990. The proposal is advanced that some 7 drill holes totalling 4,000 feet be put down from three drill set-ups. The estimated cost of the program is \$ 357,000.

It is also recommended that investigation of the nunataks on the Lucky claims be undertaken. An estimate for this aerial supported survey is \$17,000.

RECOMMENDATIONS

claims of Cassandra Resources have shown a great deal The Bonsai of encouragement. Not only have they demonstrated that there are gold values in the gossans and surrounding areas, but initial reconnaissance has identified the host formation in the eastern section to be similar to the Mount Dilworth beds. Government mapping has located a folded limb of these felsic volcanics lying It is possible that (1) to the east of the Cassandra claims. this bed has multiple parallel occurrences extending westward into the Cassandra ground or (2) the bed is wider than originally thought or (3) has been wrongly located. Whatever may be the reason its presence has been established on the Cassandra claims.

The gossan developments, an integral part of the make-up of the Dilworth volcanics, are noteworthy in their presence within this formation on the Cassandra ground. In addition precious metal values have demonstrated their presence or past presence within It should be noted that these leached and the oxidized zones. oxidized near-surface reflections of а concentration of sulphides, especially iron-bearing ones such as pyrite, chalcopyrite etc is essentially a mass of hydrated iron oxides (limonites) from which copper, sulphur and any other metal have been removed by downward percolating waters. This process occasionally concentrates highly insoluble elements, such as gold, within the gossan. In addition secondary enrichment below the water table line can increase the valuable mineral content of the deposit.

The association of EM-16 conductive zones with high magnetic results in the area of the gossans makes them very important exploration targets.

All these important geological factors illustrate the potential of the Cassandra ground and are instrumental in the recommendations concerning the second phase of operations.

It is recommended that Cassandra for reasons mentioned move into a second phase of a work program on the Eskay Creek Bonsai claims. Surface drilling coupled with surface mapping is recommended for this Phase II.

It is recommended that diamond drilling to the aggregate of 4,000 feet be planned to investigate the gossanous areas from three drill set-ups. It is estimated that seven holes should be the initial effort of the program.

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To supplement the drilling and offer greater geologic knowledge, a detailed mapping program involving Bonsai 1 should be instituted in advance of the drilling. Indigenous with this mapping should be sampling of promising formations. The logging of sample 891004-09 revealed nil mineral but a highly oxidized, sheared rock which surprisingly ran 0.124 ounces gold per ton. It is possible that the absence of pyrite while not being a factor in the leaching process left the gold contents in place as opposed to transporting it.

To sum up, the recommendations are for a Phase II operation consisting of an early geologic and sampling program followed within three weeks by a diamond drill contract calling for some 4,000 feet of exploration drilling from three set-ups. It is realized and appreciated that the drill program will be helicopter-supported.

Examination of the Lucky claims could proceed during the above drill operations. Work on these claims would consist of geologic mapping and sampling of the nunstaks. It is recognized that this would require substantial helicopter trasportation.

N. Luckman, Geologist W.G. Hannsworth, P.Eng. W.G. Hainsworth, P.Eng. W.G. HAINSWORTH ERITISH

COST ESTIMATES - PHASE II (BONSAI CLAIMS)

(a) <u>Geologic Mapping</u> (3 weeks)

1 Geologist plus helper for:	
Three weeks\$	6,000
Camp Maintenance and Subsidence	2,500
Helicopter support	3,000
Transportation	1,500
Assaying	1,250

(b) <u>Diamond Drilling</u> (5 weeks)

Contract (to camp and operation) - 4,000 ft.	turnkey
price of \$60 per foot\$	240,000
Site of Prepartation	6,000
Helicopter support	30,000
Logger and Core Splitter	10,000
Supplies and assaying	10,000

(c) <u>Follow-up</u>

on report	
Contingency 10%	\$325,250 <u>32,250</u>

\$357,500

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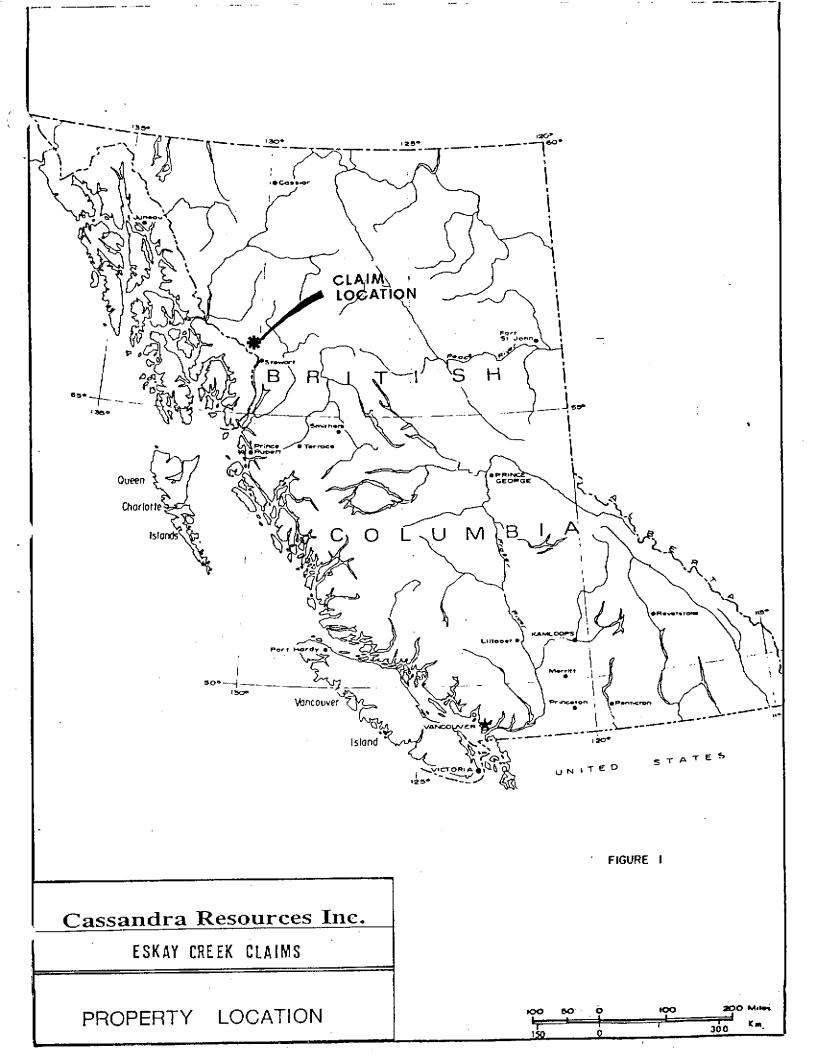
* * *

<u>COST ESTIMATES - PHASE I</u> (LUCKY CLAIMS)

Geologic Mapping (1 week)

1 Geologist, salary		\$ 1,500
Helocopter Support (20 hours)		12,000
Hostel and Subsidence		1,000
Assaying, misc		1,000
Contingency	10%	\$15,500

\$17,000



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INTRODUCTION

At the request of directors of Cassandra Resources Inc. International Field Services Inc. drew up an approximate budget for a reconnaissance field program on the company's two claims in the Eskay Creek area, Northern British Columbia.

The budget was estimated at roughly \$75,000 and included prospecting, reconnaissance geology, magnetometer and VLF EM-16 surveys plus soil sampling where applicable.

A crew was assembled by R.D.S. Services Inc. and five men were flown into the property on September 18th, 1989. The prospector was airlifted out six days later due to an injury. Camp was dismantled with the crew being transported to Vancouver on October 6th, 1989 following completion of the full program.

No work was done on the Lucky group of claims. Money was paid in lieu of work.

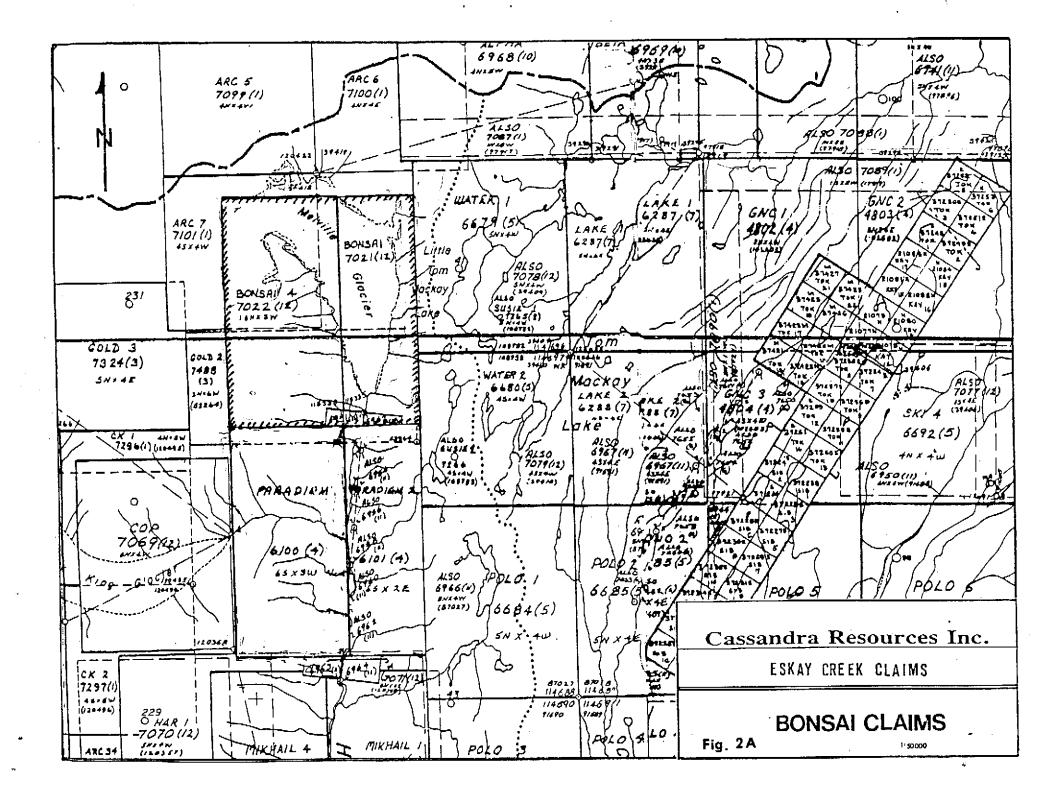
(It should be noted that agreement on these claims was effected by Tueton and Cassandra while investigation of the claims was underway. Although no official transfer has been noted at the date of this report, the report is specifically directed to the Cassandra organization.)

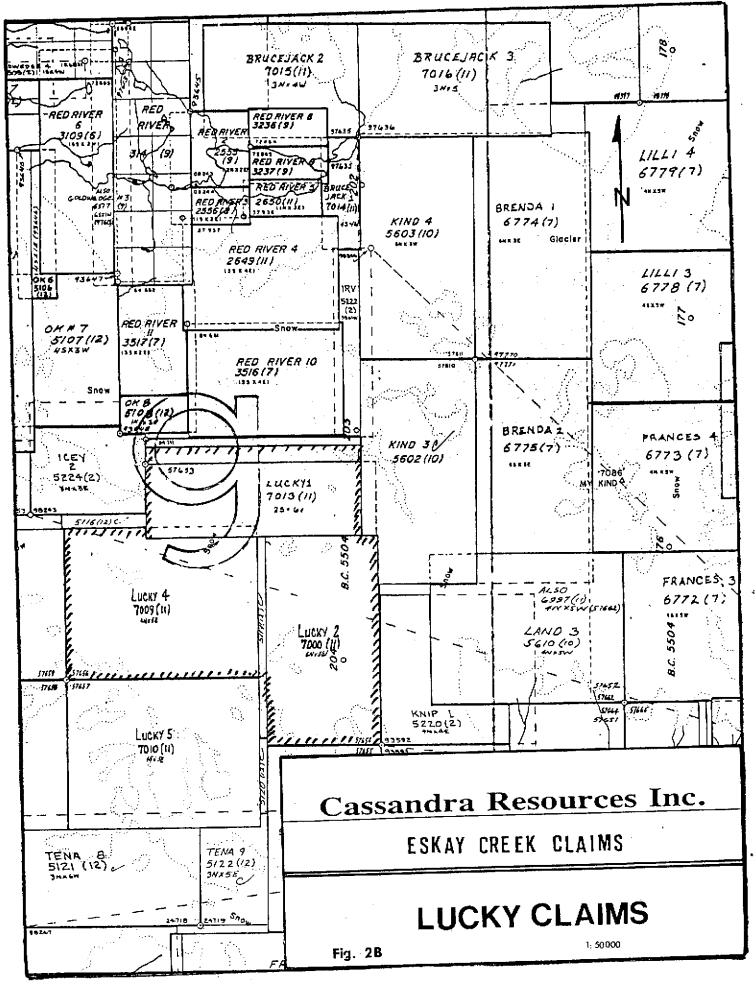
LOCATION AND ACCESS

The claim groups of Cassandra Resources Inc. are located northwest to north of Stewart in the Unuk River area. The Eskay Creek group is some 50 miles north northwest of Stewart while the Lucky group is 35 miles to the north of Stewart.

Access to both groups is by helicopter. The proposed Iskut road route will pass within 2 miles of Cassandra's Eskay Creek claims while the Newhawk-Granduc winter haulage road is less then 3 miles away from the Lucky claim group.

The claims are located within the Skeena Mining Divisions with the Eskay Creek Claim block centering on North 56° 37' latitude and West 130° 34' longitude. The Lucky group centers on North 56° 27' latitude and West 130° 12' longitude. The Eskay Creek group's N.T.S. location is 104 B/10 East while the Lucky group (15 miles to the southeast) is in the adjoining 104B/8 East map sheet.





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PROPERTY

The property separate group		5 claims	totalling 80 units in two
<u>Claim Name</u>	<u>Record No,</u>	<u>Units</u>	Expiry Date
Eskay Creek Gi	coup		
Bonsai 1	7021	12	December 5, 1991 *
Bonsai 4	7022	18	December 5, 1991 *
Lucky Group			
Lucky 1	7013	12	November 7, 1990
Lucky 2	7000	18	November 7, 1990
Lucky 4	7009	20	November 7, 1990

* Awaiting assessment acceptance.

The claims are all located in the Skeena Mining Division and are recorded in the name of Teuton Resources Corp. Transfer certificates are in the process of being prepared.

The Eskay Creek group of claims lie approximately 2 miles due west of the Calpine drilling area on the TOK claims.

The Lucky group of claims directly adjoins to the south of the Craigmont-Newhawk Red River claims.

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TOPOGRAPHY

<u>Eskay Creek Group</u>. This group is dominated by the Melville glacier which occupies one third of the area of Bonsai 1 claim with snowfields from it extending into the high reaches of the Bonsai 4 claim making more then half of that claim unreachable.

The glacier melt (Harrymel Creek) is at an altitude of 2,300 feet. The steep mountain ridges surrounding the valley extended up to 3,200 feet along the eastern claim boundary while heights in excess of 5,000 feet exist in the western portion of the claim block.

Glaciation has left little surface cover. Alder bushes are located in solid impenetrable clusters along the hillsides.

Melville Glacier is located halfway up the Bonsai 1 claim where a solid ten foot high ice wall is broken only by the strong flowing ice melt creek. An arm of the glacier projects up another valley in the northeast quadrant of this claim while the main glacier action arcuates to the west then southwest. It reenters the claim group as part of a huge icefield in the high (4,500'-5,000') mountain slopes of Bonsai 4 claim.

<u>Lucky Group</u>. This group is dominated by ice fields with nunataks of rock projecting though the ice sheets.

The ice fields are in the 5,000 foot elevations with the rock projections seldom higher than fifty feet above the ice level.

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HISTORY

The area has long been known for its mineralization but the bleakness and poor accessibility has relegated it to the back burners. Over the years individual companies have found and developed isolate mine sites but have never generated excitement for the area. Examples of rewarding perseverance are: Skyline Gold Corporation at their Johnny Mountain Mine (686,000 tons of 0.57 ounces gold per ton); Cominco Ltd. at their Snip project, north of Skyline (1.4 million tons of 0.64 ounces gold per ton); Echo Bay Mines Limited at their 50% owned Doc property (470,000 tons of 0.27 ounces gold per ton) and Newhawk at their 60% owned Sulphurets property (854,000 tons of 0.354 oz. gold and 22.94 oz. silver per ton).

In early 1988, Calpine Resources Incorporated concluded an option agreement with Consolidated Stikine Silver on the latters 14 crown granted claims at Eskay Creek in the Unuk River area. Consolidated Stikine had held the claims for some 25 years with sporadic exploration work by various venture partners being In 1988 Calpine expended more than \$1 million in carried out. surface exploration including diamond drilling with intriguing results originating near the end of the field season. Drill results early in 1989 showed favorable possibilities of an ore body. The mineralized structure, termed the 21 zone, has an indicated tonnage of 10 million with a grade of approximately 0.50 ounces gold per ton as perceived by certain calculators. The company itself has not put out a reserve figure. Drilling is continuing over the 1989-1990 winter season.

At the Sulphurets property, held 40% by Granduc and 60% by Newhawk, underground development from a decline with further surface drilling has uncovered 4 areas of potential economic The Snowfield gold zone at the north end of the claim value. block has an estimated reserve of 25 million tons grading 0.08 ounces gold per ton. The Sulphurets zone to the southwest is roughly estimated at 20 million tons of the same grade. The Catear Gold Wedge zone in the lower section of the claim block has been calculated to hold one million tons of half ounce gold ounce silver per ton. The West zone, 1,000 feet to the and four west, is the most exciting of the zones to date and has been the recipient of the most underground work. Development and drilling has outlined 854,000 tons running 0.354 ounces gold and 22.94 ounces silver per ton. In total this property has seen greater than 56,000 feet of surface drilling, 25,000 feet of underground drilling and some 6,000 feet of underground developments. Since exploration started in 1985, the joint venture has spent in excess of \$20 million on the project. A production declaration from the joint venturers is expected in early 1990.

WORK PROGRAM

Organization proceeded from the signing of the claim documents with Teuton Resources until the crew's departure from Vancouver on September 18, 1989. Camp was established the next day on Harrymel Creek several hundred meters south of the glacier front. The crew consisted of one graduate geologist, one experienced prospector, two field workers and a cook.

Although the initial post was not located, its location, employed as the base-line starting point, was judged, relatively accurately, from topographical features. From this base starting point, a baseline, utilizing hip chains, was run true east for 500 meters before meeting a series of steep cliffs. The baseline was then extended west for 400 meters at which point extremely precipitous cliffs stopped the extensions. Crosslines were laid out at 100 meter intervals along the baseline and then run true north until halted by terrain or glacier. Stations were marked at 25 meter spacings along the crosslines. AT 6+00 north on line 5+00 east the baseline was continued east for an addition 400 meters with an additional 3 crosslines added.

A total of 14 cross lines were run which coupled with the baseline aggregated 24,000 meters over the two claims. (See figure 3)

Over these lines, the crew ran a magnetic survey and a VLF electromagnetic survey. In addition the geologist made cursory notes re the claim group geology while traversing the lines. A soil sampling program was planned but due to the scouring nature of the glacier little soil cover was available for sampling. The prospector was given freedom of movement over the claims. Unfortunately while taking a sample from a cliff edge he fell and had to be helicoptered out to Stewart for repairs.

The extremely rugged nature of the mountains made movement slow. In addition Harrymel Creek could not be forded therefore two pedestrian bridges were built at one location.

With the weather threatening to blow in the crew was flown out and back to Vancouver on October 6th, 1989.

It was decided to strike the camp and store it in a safe location on site in preparation for the 1990 field season.

RECONNAISSANCE GEOLOGY

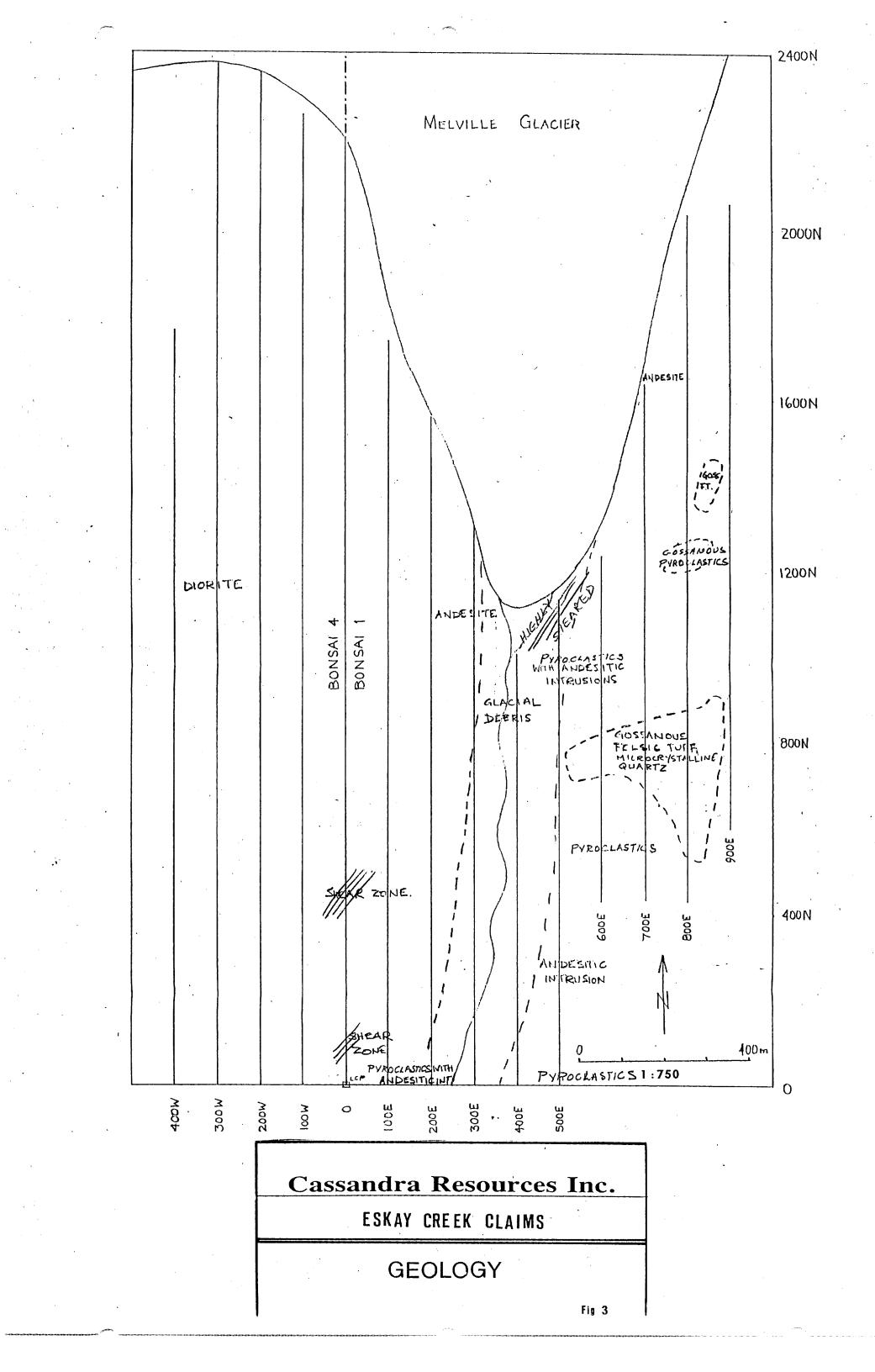
It is emphasized that the geology of the property was obtaining by observances during the running of the geophysical surveys. No formal mapping of the property was laid on due to the brevity of the operation.

The latest government mapping of the area is open file map 1989-10, a compilation of the area by the Geological Survey Branch of the Ministry of Energy, Mines and Petroleum Resources of the Province of British Columbia. It is entitled "Geology and Mineral Deposits of the Unuk Area."

This map shows the underlying formation of the Cassandra claims to be a green coloured, massive to poorly bedded andesite, a part of the Betty Creek Formation, of Lower Jurassic age. Intrusive into the flows is an elongated stock of quartz diorite extending some 9 kilometers in a rough north-south alignment while nestled against a prominent regional fault. In several of the observed areas, the formation was more reminiscent of a granodiorite than a quartz diorite.

Sampling and observations have shown that while there are some andesite flows within the claim block they are confined primarily to the western portion of the claims, that is on the west side of the intrusive. The intrusive, a quartz diorite, does not appear to be as wide as shown on the government map. It does extend from under the glacier south through the claim block. It is the dominating formation of the western slope extending up from the Shearing is prominent within the intrusive and normally creek. aligned along the long axis of the stock. The shearing intensifies the closer to the regional fault and has in some locations masked the true identity of the rock.

steep, cliff-strewn eastern slope is underlain by a light The coloured, fine grained, pyroclastic formation. Upon close examination the fragments are fine, 1/2 to 1 1/2 millimeters in dimension and are randomly distributed. No observations were The formation is highly made of larger fragments or bombs. pyritized running as high as 10% - 15% locally. The gossan areas lie within this formation. Government mapping classifies the formation as the same andesite beds which lie west of the However to this observer the physical characteristics intrusive. of the formation are more similar to the tuff beds of the Mount Dilworth Formation. In addition, the formation is lightly cut by chalcedonic quartz veins, which have weak dimensions and variable amounts of pyrite. Epidote alteration is common in the vicinity of the veins. A thin, contorted bed of the Mount Dilworth riding a synclinal structure has been mapped less than 1 kilometre east from the Cassandra border.



A major occurrence within the latter formation is gossanous areas. These areas are readily distinguished from the air by their light brown colouring. A sample out from a gossan area displays tremendous vugginess with cell walls often being supported by quartz. Scattered though the sample are grains of pyrite not affected by the leaching. Limonite, although scattered sufficiently though the structure to give it a distinctive colour, is not prevalent.

On the Cassandra ground there are three outstanding gossan zones, all confined to the eastern slope in Bonsai 1 claim. The major zone which has a rough mushroom outline extends from the 2,400 foot elevation contour some 375 meters laterally to the 3,100 foot contour on the eastern slope. Some 350 and 500 meters further north on this higher elevation contour line are two, more elliptical shaped, but smaller gossan zone. As was expected samples from the gossan zones returned weak precious metal grades.

A dominating structure though the Cassandra claims is the northsouth trending Unuk - Harrymel fault zone. This heavily sheared recognizable structure originates some 40 kilometers south of the claims where the South Unuk River is fed by the glacier waters of Sawyer Glacier. It trends slightly west of north paralleling the South Unuk River, past its junction with the Unuk River, then strikes north to follow the water course of the Harrymel Creek. It extends some 5 kilometers north of the Cassandra claim block before apparently dying out.

The fault zone is accompanied by strong shearing and in specific locations by heavy mylonitization of the host rock. It has apparently induced sympathetic shear action within the granodiorite - diorite within the Cassandra ground as it forms the eastern contact of the intrusive body. Government geologist have deduced the eastern side of the zone as the down-thrown segment.

survey utilizes the VLF-The VLF EM portion of the electromagnetic fields generated by submarine navigation and communication stations which operate in the 15 khz to 30 frequency band. The instrument had a choice of the Seattle on a frequency of 24.8 khz at a transmitting transmitter (NLK) power of 234 kilowatts or Culter, Maine transmitter (NAA) on a frequency of 24.0 khz at a transmitting power of 1,000 kilowatts. For maximum coupling, a transmitter station located in the same the geological strike of interest should be direction as selected, since the direction of the horizontal electromagnetic field is perpendicular to the direction from the transmitting station. Neither station represented this optimum condition. The Seattle, Washington station was selected due to its closeness amidst the mountains.

The field generated by these stations is primarily horizontal. A conductor of any nature (sulphides, water courses, wet shears of faults etc) will generate their own secondary field upon being infiltrated by the primary field. The instrument indicates the presence of this secondary field of the conductor as a distortion in this horizontal field. The distortion of this field produces an anomaly in the tilts angle and the quadrature which is a component of the field strength readings.

The dip angle, or In-phase, measurement the most important of the readings, detects a conductor from a considerable distance and is used primarily for the location of these conductors. The quadrature, or field strength measurement, does not detect the conductor until they are almost above it. Thus they are independent of regional trends and accurately define the shape and boundaries of the conductor.

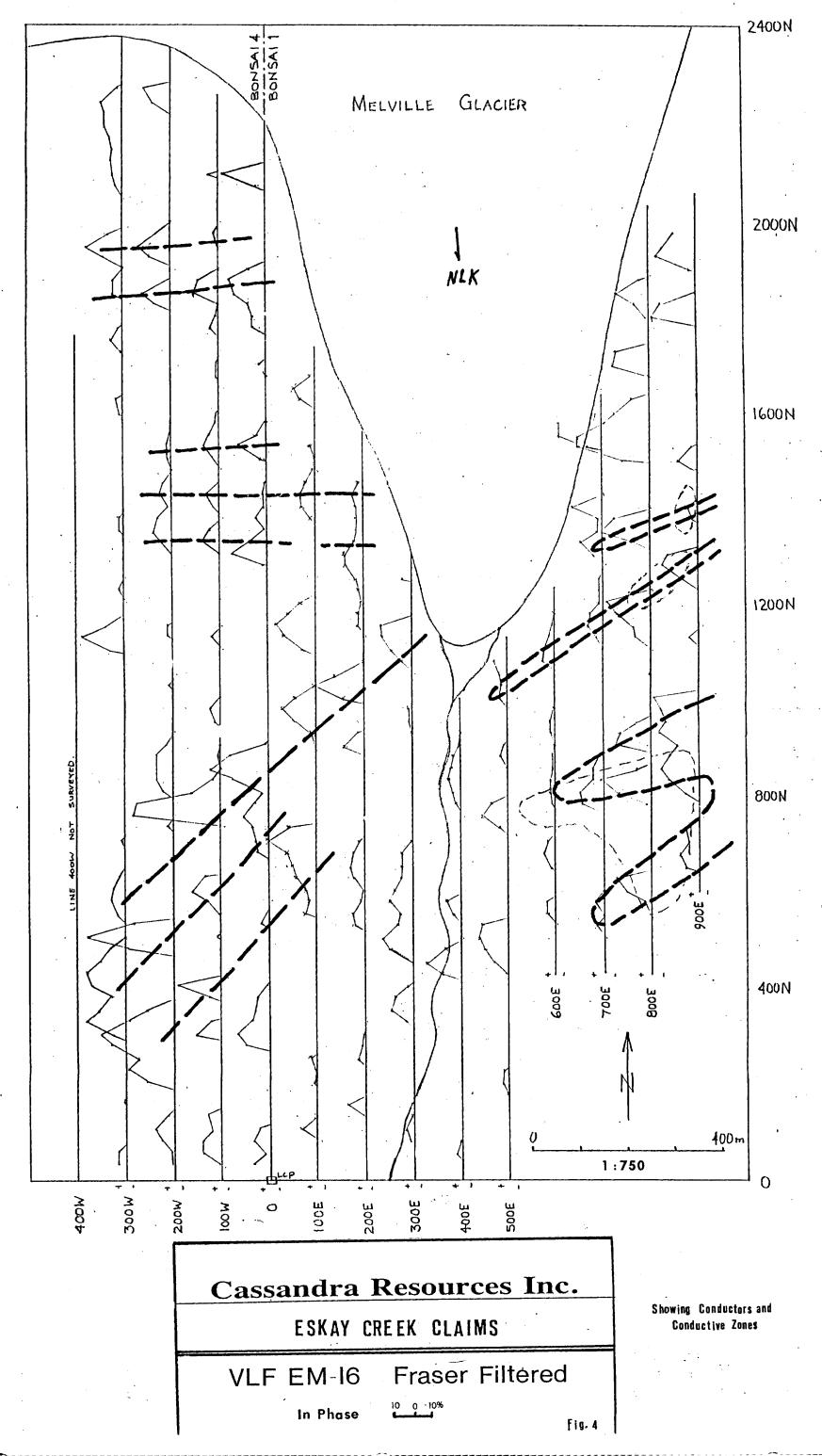
Mountainous terrain can produce an undulating VLF response that is characterized by cross overs in areas of zero topographic slope, easily confused with valid anomalies if the topography is ignored. While filtering tends to suppress the effect, it seems advisable to plot topography and slope along with VLF responses for direct comparison. This involves many measurements and is Several researchers recommend computing the consuming. time derivative of dip-angle to resolve anomalies from terrain of the Fraser filter (Fiq 4) the application effects; In the Fraser filter approach accomplishes much the same effect. only the positive results are plotted, the negatives have no meaning.

In an area which hosts a major fault structure, as the Unuk-Harrymel zone, lying in the scoured valley of a retreating

glacier, it is expected that anomalous conditions would exist due



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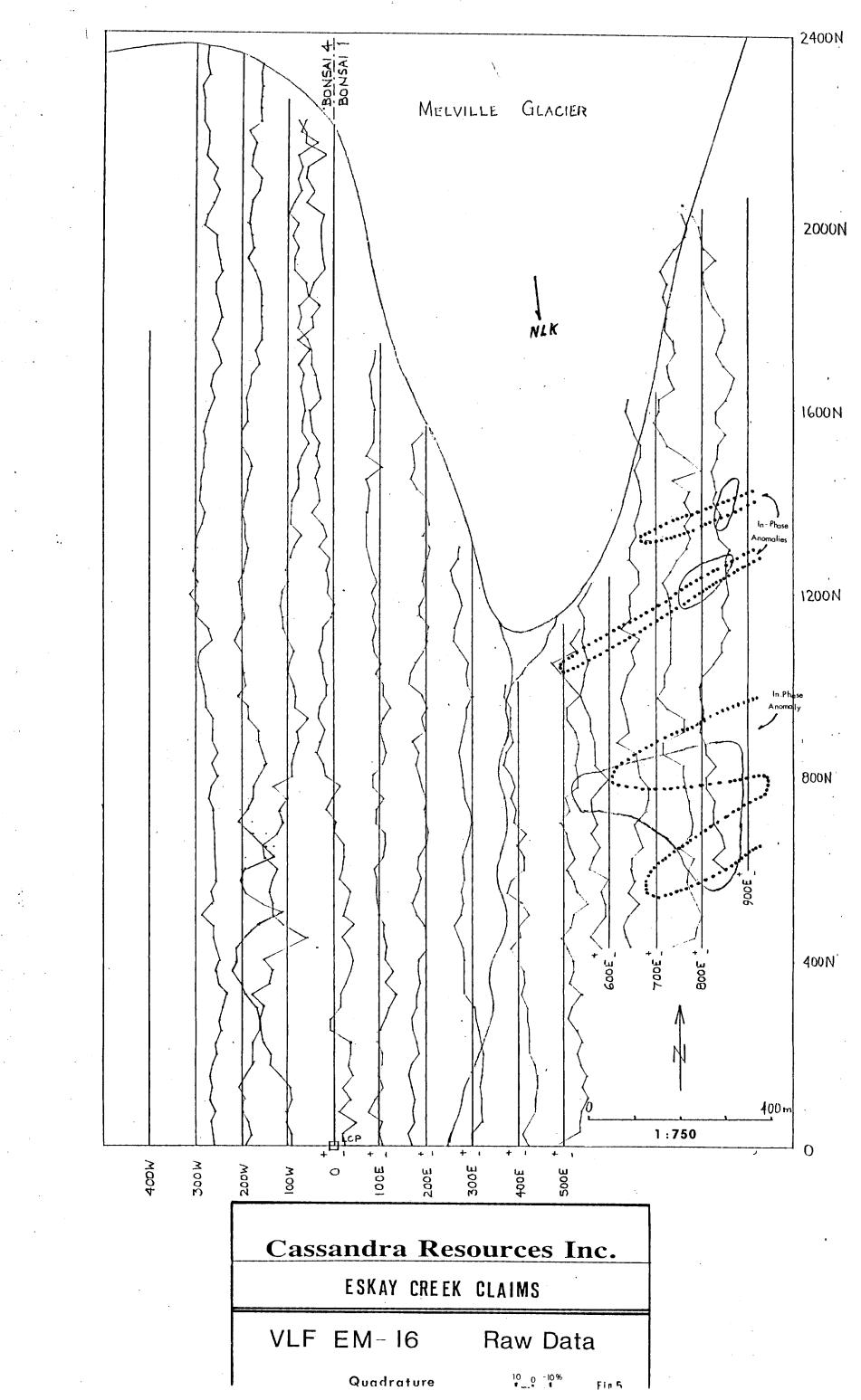


to the water filled shear structures developed. This is true to a certain extent but with the clay overburden laid down by the glacier the deep penetrability of the EM-16 is stymied by the conductivity of the clays suppressing the secondary fields. Therefore the valley shows very little effect.

The western slope from this valley produces numerous conductors trending with the regional strike (that is northeast). These responses lie within the quartz diorites and are presumably sympathetic shears of the major fault zone. However a major change in the strike direction occurs in the northern half of Bonsai 4 and 1 as the glacier is approached. The trend of the conductors is more east-west suggesting a radial or tension fracture pattern developing. The quadrature readings for the western slope tend to be positive and track with the in-phase response in a gentle undulating effect. The western slope reflects more of a tectonic conductor explanation than a lithological one.

The eastern slope of the valley which hosts the three gossan zones shows more unusual conditions responding to the conductors. These conductors appear to track with the gossan zones. This is rather surprising as gossan zones have generally, by their oxidative nature, been deprived of portions of any conductive sulphides. The quadrature response to the three gossan conductors, although positive in reading, does shows abrupt changes within the positive faction. This is by no means an ideal deep sulphide response but could indicate variations in oxide-sulphide contents with depth. The strength of the VLF EM responses here is of sufficient magnitude to suggest the possibility of sulphide mineralization at some depth.





MAGNETOMETER SURVEY

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The magnetometer survey was conducted using Proton MP-1 Fluxgate magnetometer. Diurnal corrections were made at the camp on a daily basis.

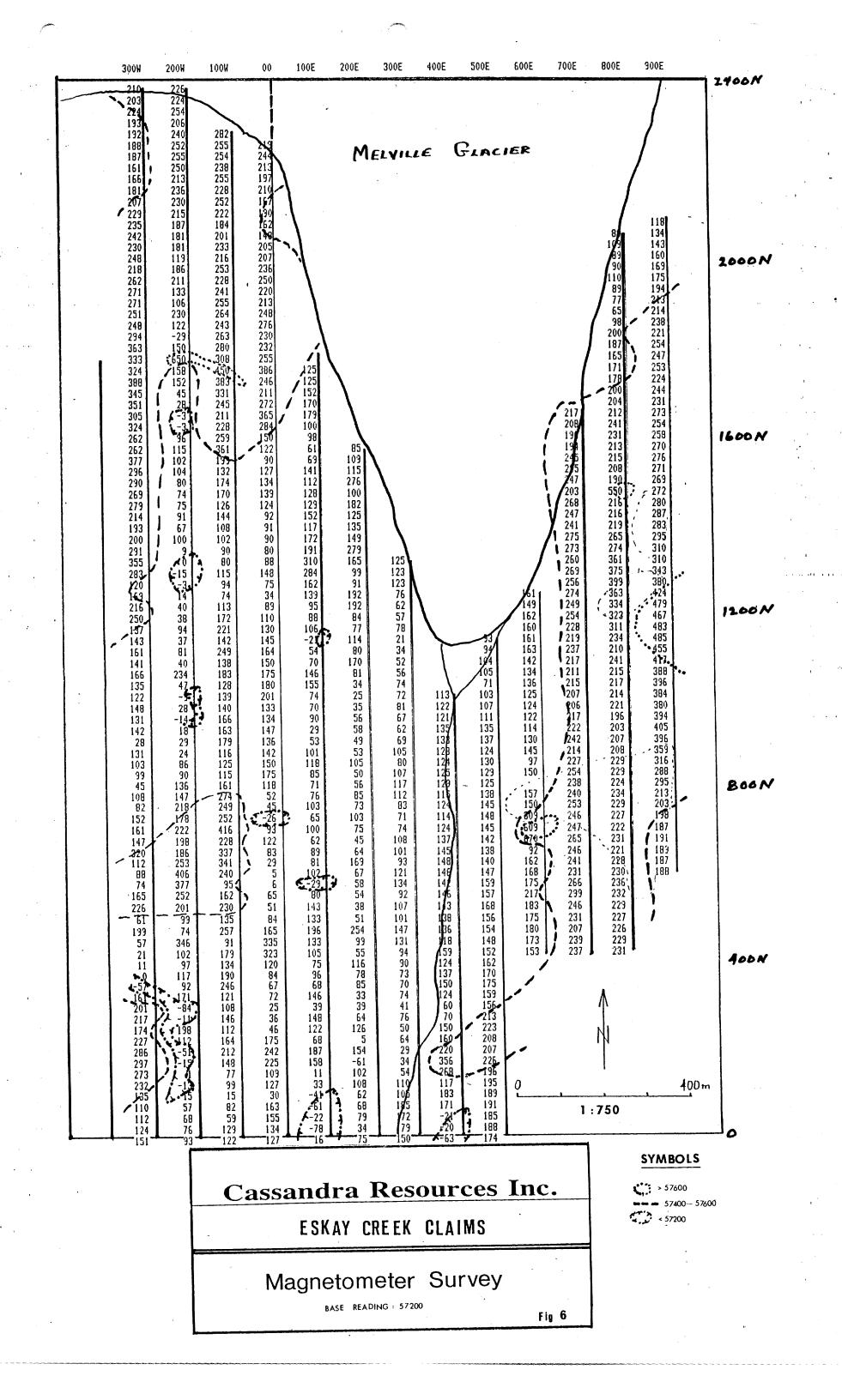
The magnetic intensity data, figure 6, shows very modest variations above a base reading of some 57,200 nt. The scattered magnetic lows are in the order of 100 nt less and generally appear as spikes confined to a single line. Magnetic highs are some 400 to 600 nt. above this level; as a result there are very few sharp contrasting magnetic values to define trends and linears. The greatest magnetic relief is in the order of 754 nt.

The survey results more define the lithological changes occurring within the claims than any tectonic occurrences. The creek valley and the western slope demonstrate a broad plateau of values suggestive of an intrusive structure containing a light amount of magnetic mafics. Included in this large area are undigested inliers of andesite or ferriginous pyroclastics. The light variable magnetite contents of the quartz diorites makes for variable readings.

The pyrite-rich pyroclastics appear on the eastern slopes and in the high cliff area of the northwest map corner. This formation carrying magnetic values on average little more than 250 nt. above the intrusive background is host to the gossan areas of the property. The highs are associated with these gossan zones as are above average readings. The data is suggestive of sulphides at depth.

The rather disappointing non-occurrences of strong magnetic linears must be balanced by the concentration of above average readings within the gossan ares.

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SOIL SURVEY

It was originally intended to soil sample the two claims, but examination upon arrival at the campsite showed this survey to be next to impossible due to elevation (above tree-line) and the glaciation action. Where there was mantle cover it was thin.

In effect only some fourteen soil samples were collected. These were from the lower elevations of two lines, Line 0+00 and Line 1+00 East. The samples were identified as to the location by their line number and station number on that line. See figure 7.

At the camp site the soils were dried and along with the rock chip samples sent to Chemex Laboratories in Vancouver for analysis of the gold and silver contents.

PROSPECTING AND SAMPLING

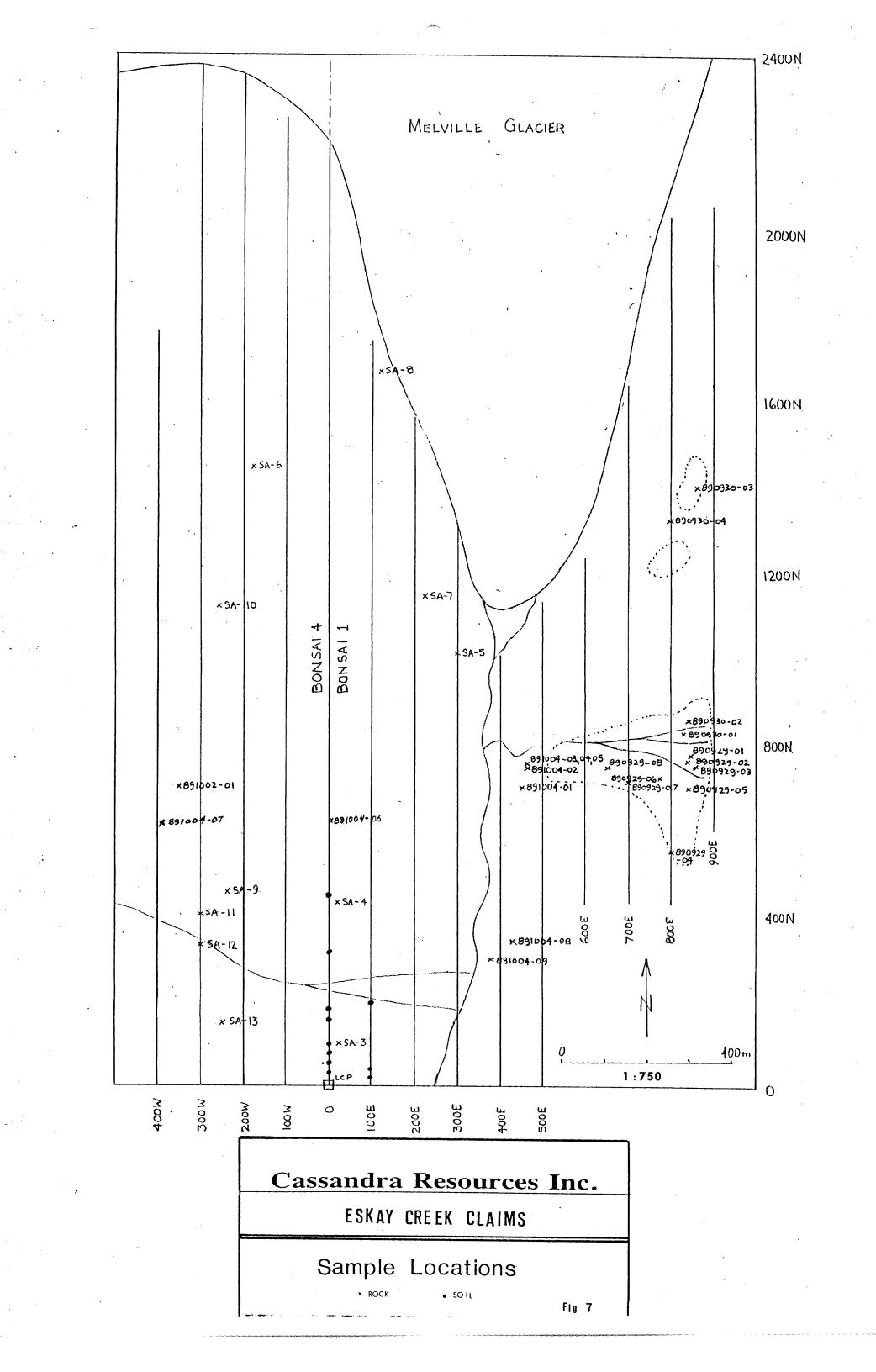
A prospector formed part of the survey party sent in to work the claims. His mandate allowed him to roam on his own intuition over the claims sampling as he moved. He was responsible to the geologist.

Initially the prospector worked the creek valley while moving up the western slope. His reactions led him into the sheared area of the intrusive body. A total of 11 rock chip samples were collected in this area.

While taking a sample on the western slopes, he slipped and badly cut himself. He was flown out next day. The geologist, took over his duties confining himself mainly to the eastern slope and the valley bottom east of the creek. Nineteen samples were collected, a good majority from within the gossan ares. See figure 7 for sample locations.

Some 48 samples were collected from various locations within the two claims. Results are tabulated in Appendix B.

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SAMPLE LOGS

- 890929-01 Black, coarse to fine pyrite, vuggy, some sl. boxworks, dk greenish alt.
- 890929-02 Pyroclastic, fragmented, whitish powder locally some oxidation with pitting, reddish to yellowish oxidation, fragmental pyrite.
- 890929-04 Pyroclastic silicified, finely pervasive pyrite and occ. stringer of fine pyrite, locally pitted and oxidized.
- 890929-05 Tuff, dark, fine pyrite, qtz veinlets, occ. oxidation & vugginess of edges of veinlets, yellowish to dk brown alt., porphyritic.
- 890929-06 Single specimen pyritic veinlet 1" thick, drusy, possibly some sphalerite, silica flooding.
- 890929-07 Heavily silica saturated and finely fragmented, light grey, fine diss. pyrite yellowish to brownish black irons.
- 890929-08 Small iron & silica nodules in a pittedyellowish brown fine crumbly material, gouge structure?
- 890930-01 Highly altered, dk grey, gz badly broken.
- 890930-02 Silica capping all silica with normal surface oxidation effects.
- 890930-03 Light grey, silicious finely disseminated pyrite, locally oxidized, pyroclastic.
- 890930-04 Sooty, siliceous, fine pyrite, on cleavage planes reddish-brown alt, hematite.
- 8910002-01 Greenstone, fracture lined with pyrite, surface gossan, brownish red, poor box work on surface exposure, diss. & pyrite threads.
- 891004-01 Highly altered, little gossan material.
- 891004-02 Large single sample float, dark reddish colour, nil pyrite occ. thin calcite-qtz veining.
- 891004-03 Gouge material, black, fine pyrite throughout, crumbly. 891004-04 - Pyroclastic with remnants of boxworks highly sheared, possibly some graphite.

- 891004-05 Heavy pyritic silica sheared rock, local leaching, some red and reddish brown gossanous areas, one area of light yellow dusting.
- 891004-06 Rock chips from line 0+00 6+25N (124), gossanous, sericitic, fine pyrite.
- 891004-07 Rock chips from 4+00W 6+64N yellowish stained, pyrite, surface pitted, brownish pitted gossan, well altered.
- 891004-08 -
- 891004-09 Altered, sheared, highly oxidized, quartz veining, nil visible mineral, angular boulder.
- SA 1 Highly sheared, granodiorite, pyritized, good lineation along shear planes.
- SA 2 Slightly gossanous, traces malachite in three places pyritized.
- SA 3 Sheared, lightly pyritized, locally oxidized, not granodiorite.
- SA 4 Float material, granodiorite? pyrite seams highly oxidized, some coarse pyrite.
- SA 5 Granodiorite with possibly some Andesite, pyritized finely on the fracture planes & where altered to brownish colour, light Cu mineral.
- SA 6 Single specimen from float heavy pyrite in oxidized boxwork, surface pitting around dk. brown gossanous sections.
- SA 7 Qtz with semi-parallel black gtz thin seams.
- SA 8 Granodiorite, light white, pyritized.
- SA 9 Gossanous area, oxidized, pitted areas, moderately pyritized, yellowish altered qtz, brownish iron oxides, some local heavy black pyritized areas.
- SA 10 Granodiorite, light greenish, traces pyrite.
- SA 11 Granodiorite, greenish some mafics breaking down to sericite, locally oxidized.
- SA 12 Granodiorite, lightly sheared, nil alt, nil mineral.
- SA 13 Granodiorite, lightly sheared, nil mineral.

1989 COST FIGURES

2

BONSAI 1 AND BONSAI 4 ESKAY CREEK AREA, DISTRICT OF SKEENA

Wages		.\$21,100.00
Helicopters		21,147.28
Camp Expenses		. 10,383.61
Travel, billotting		. 1,410.27
Air Fares		4,096.50
Camp Groceries		. 1,489.20
Ground Transport		. 3,427.64
Travel Expenses		1,569.36
Equipment Rental		. 1,501.70
Field Supplies		. 637.86
Radio		. 653.85
Generator		480.00
Expediting		. 209.50
Drafting		. 660.00
Reproductions		. 195.22
Supervision		. 1,500.00
Report		. 900.00
Assays		. 686.00
Surcharge		
2	••	\$77,290.73
		+

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CERTIFICATE

- I, Nigel Luckman, of Richmond, B.C. herewith state:
 - That I am a graduate geologist from the University of British Columbia, 1987.
 - (2) That I presently reside at 1375 Granville St., Richmond.
 - (3) That I have been employed by International Field Services Inc. over a period of one and a half years.
 - (4) That I was on the Cassandra Bonsai claims as project geologist from September 18th to October 6th, 1989.

N. Luckman, B.Sc. Geologist

APPENDIX "A"

CERTIFICATE

I, W.G. Hainsworth, P.Eng., of Vancouver, B.C. do hereby certify:

- (1) That I am a Consulting Geologist residing at 836 West 13th Avenue, Vancouver, B.C.
- (2) That I am a graduate of the University of Western Ontario, London, Ontario, Bachelor of Science Degree, Honours Geology.
- (3) That I have practiced my profession for some 30 years.
- (4) That I have been a continuous member of the Association of Professional Engineers of British Columbia since 1965 and am a Professional Geologist registered with the Association of Professional Engineers, Geologists and Geophysicists of Alberta since 1979.
- (5) That the information contained in this report is based on a visit to the Cassandra property on Oct. 2nd - 6th and perusal of all pertinent information available.
- (6) That I have read the accompanying report of N. Luckman and agree in principle with all that is written.

W.G. Hainswor Geol W. G. HAINSWORT

To Accompany: -

Report on the Bonsai 1 and Bonsai 4 Claims of Cassandra Resources Vancouver, B.C. Dec. 28, 1989

APPENDIX "B"

ASSAY RESULTS

<u>Soil Samples</u>

Line	Ħ	<u>Station #</u>	Gold ppb	<u>Silver ppm</u>	<u>Zinc ppm</u>
		0+00	15	<.2	150
0+00		0+25N	<5	<.2	90
		0+50N	<5	<.2	90
		0+75N	15	<.2	100
		1+00N	10	<.2	600
		1+50N	<5	<.2	82
		1+75N	<5	<.2	75
		3+25N	<5	<.2	76
		4+50N	<5	<.2	91
1+00	East	0+25N	10	<.2	89
		0+50N	<5	<.2	90
		2+00N	<5	<.2	123
4+70	East	6+00N	30	<.2	100
	East	8+25N	20	<.2	120

Rock Chip Samples

<u>Sample∦</u>		<u>Line#</u>	<u>Station#</u>	<u>Gold oz/t</u>	<u>Silver oz/t</u>
890929	-01	8+50E	7+70N	.036	.09
	-02	8+45E	7+60N	.034	.12
	-04	8+00E	5+55N	<.002	<.01
	-05	8+40E	7+00N	.018	.76
	-06	7 + 70E	7+25N	<.002	.03
	-07	7+00E	7+20N	<.002	<.01
	-08	6+50E	7+50N	.089	<.01
890930	-01	8+30E	8+25N	.020	. 41
	-02	8+40E	8+50N	.002	<.01
	-03	9+00E	14+00N	<.002	<.01
	-04	7+75E	13+25N	<.002	.01
891002	-01	3+60W	7+00N	<.002	<.01
891004	-01	4+50E	7+00N	<.002	<.01
	-02	4+60E	7 + 40 N	<.002	<.01
	-03	4+65E	7+50N	<.002	<.01
	-04	4+65E	7+50N	<.002	<.01
	-05	4+65E	7+50N	.008	.03
	-06	0+00	6+25N	<.002	.01
	-07	4+00W	6+64N	<.002	.01
	-08	4+20E	3+40N	<.002	<.01
	-09	3+80E	3+00N	.124	.90
SA	-01			<.002	<.01
	-02			<.002	.05
	-03	0+25E	1+00N	<.002	<.01
	-04	0+25E	4+35N	<.002	.01
	-05	3+00E	10+25N	<.002	<.01
	-06	1+75W	14+50N	<.002	<.01

s -e

-07	2+25E	11+50N	<.002	<.01	
-08	1+25E	16 + 75N	<.002	<.01	
-09	2+50W	4+50N	.002	.01	
-10	2+50W	11+25N	<.002	<.01	
-11	3+00W	4+00N	.002	< 01	
-12	3+00W	3+25N	<.002	<.01	
-13	2+50W	1+50N	<.002	<.01	

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GEOCHEMS

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Line 0+00

0+00; 0+25; 0+50N; 0+75N; 1+00N; 1+50; 1+75N; 3+25N; 4+50N; 6+25N (rocks)

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Line 1+00E

0+25N; 0+50N; 2+00N



Analytical Chemists * Geochemists * Registered Assayers 212 BROOKSBANK AVE., NORTH VANCOUVER, BRITISH COLUMBIA, CANADA V7J-2CI PHONE (604) 984-0221

APPENDIX "C"

570 - 789 W. PENDER ST. VANCOUVER, BC

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V6C	1 H2						
Project	:						
Comments	:						

Tt ASSANDRA RESOURCES

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CERTIFICATE OF ANALYSIS A8930200

SAMPLE DESCRIPTION	PREP CODE	Au oz/T	Ag oz/T	Zn %							
890929-01 890929-02 890929-04 890929-04 890929-05 890929-06	208 208 208 208 208	0.036 0.034 < 0.002 0.018 < 0.002	$ < 0.12 \\ < 0.01 \\ 0.76$	_					; ; ;	! 	
890929-07 890929-08 890930-01 890930-02 890930-03	208 208 208 208 208 208	<pre>< 0.002 0.089 0.020 0.002 < 0.002 < 0.002</pre>	$\left \begin{array}{c} < 0.01 \\ 0.41 \\ < 0.01 \end{array} \right $:		 		
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S-A10 S-A11 S-A12 S-A13	208 208 208 208	< 0 00	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			•					
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APPENDIX "C"

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CERTIFICATE OF ANALYSIS A8930201

SAMPLE DESCRIPTION	PREP CODE	Ац ррв FA+АА	Zn ppm	Ag ppm Aqua R		
0+00 0+00N 0+00 0+25N 0+00 0+50N 0+00 0+75N 0+00 1+00N	201 201 201 201 201 201	1 5 < 5 < 5 1 5 1 0	90 90 100	< 0.2 < 0.2 < 0.2		
0+00 1+50N 0+00 1+75N 0+00 3+25N 0+00 4+50N 1+00E 0+25N	201 201 201 201 201 201	<pre>< 5 < 10</pre>	8 2 7 5 7 6 9 1 8 9	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		
1+00E 0+50N 1+00E 2+00N 4+70E 6+00E 4+80E 8+25N	201 201 201 201	<pre>< 5 < 5 < 3 0 2 0</pre>	100	$ < 0.2 \\ < 0.2$		
	CERTIFICATION : Saut Bichler					



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