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GEOLOGICAL MAPPING, TRENCHING, SAMPLING,
GEOCHEMISTRY AND GEOPHYSICAL SURVEYS
REPORT ON THE GOLDEN STRANGER CLAIMS
1986

Latitude ~~57° 16.5' N~~ 22'
Longitude ~~127° 15.2' W~~ 22'
NTS 94E/6W

Omineca Mining Division

Prepared for
WESTERN HORIZONS RESOURCES LTD.
New Westminster, B. C.

Prepared by
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GEOLOGICAL BRANCH
ASSESSMENT REPORT

FILMED

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INTRODUCTION

TERMS OF REFERENCE

K. E. Northcote and Associates Ltd. was contracted by Western Horizons Resources Ltd. and their Joint Venture partners, Sutton Resources Ltd. and Redfern Resources Ltd., to conduct a geological mapping, VLF-EM, magnetometer survey and soil geochemistry program on the Golden Stranger and Golden Stranger II claims. This work was done by K. E. Northcote, Ph.D., P.Eng., assisted by B. K. Northcote in the period July 16 to August 14, 1986. Subsequently, macroscopic and microscopic petrographic studies were done to supplement fieldwork.

Gower, Thompson & Associates Ltd. carried out an extensive trenching and sampling program within the period July 24 to September 22, 1986, as part of an overall Toodoggone exploration effort. Work was also carried out on the Gord Davies and Silver Bluff, Silver Glance mineral prospects.

As a result of the Golden Stranger program, a new and significant gold/silver mineralized quartz breccia system has been confirmed. The confining structures consist of a main north-south silicious zone and a complimentary northwest trending splay, with numerous secondary north-west fault systems forming a central fan.

The main north south system was trenched at regular intervals over the most northerly 435 feet and samples procured for assay. This zone is interpreted to be a high level hydrothermal system based on petrographic and geological evidence. Additional trenches were cut along the west side of the main zone over its inferred strike length.

The most northerly trench cuts the main gold zone over a sample width of 3.9 metres (12.8 feet) with an average assay of 0.42 oz/ton gold.* The most southerly trench to cut the gold zone is located 390 metres (1,280 feet) on strike and assayed 0.04 oz/ton gold over 4 metres (13.2 feet). The central portion of the main system is covered by drift which requires excavation by backhoe trenching.

A weighted average over a strike length of 133 metres (435 feet) from the north end of the main zone assayed 0.21 oz/ton gold over a 3.5-metre (11.5-foot) width. The north end of the system displays a distinct increase in the overall width and intensity of alteration. A significant gold assay of 0.226 oz/ton has been discovered on the western splay zone.

Recommendations for the 1987 season include trenching, mapping and sampling and 100 metres of diamond drilling.

LOCATION

The Golden Stranger claims are located approximately 24 kilometres (15 miles) northwest of the Sturdee River airstrip. The property lies between the headwaters of Toodoggone and Chappelle Rivers and to the west of Lawyers Creek, at Latitude $57^{\circ}16^{\prime}22''N$, Longitude $127^{\circ}15^{\prime}22''W$, NTS 94E/6W in the Omineca Mining Division. The property is at approximately 1,500 metres (5,000 feet) elevation. See Figures 1 and 2. The claims are accessible by helicopter from Sturdee airstrip.

* $1 \text{ oz/ton} = 34.28 \text{ g/tonne}$

TEK

CLAIM STATUS

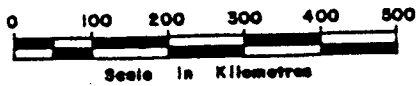
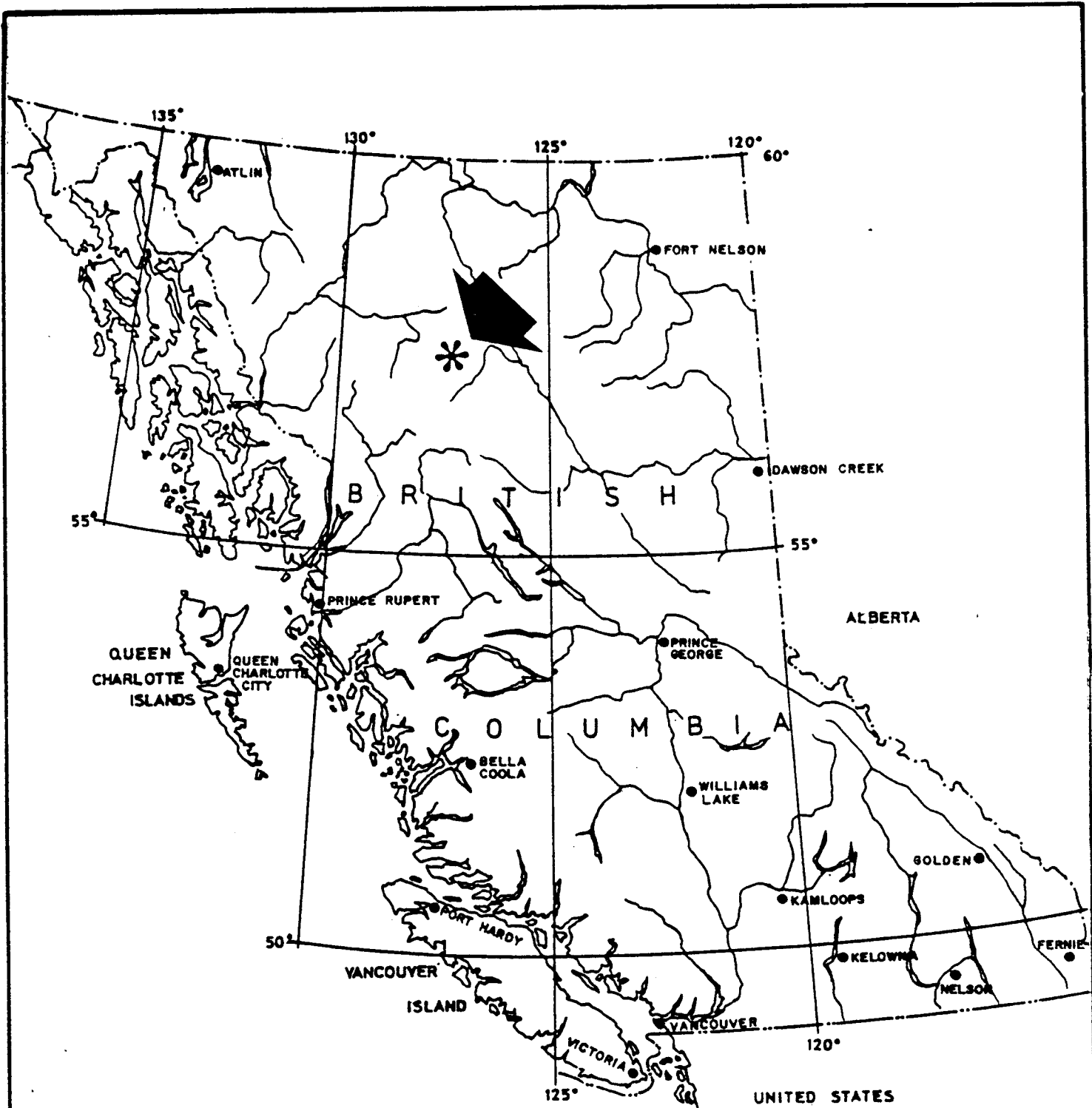
The claims comprising the Golden Stranger I group, totalling 12 units, are listed in Table I and are shown on Figure 3.

Table I.

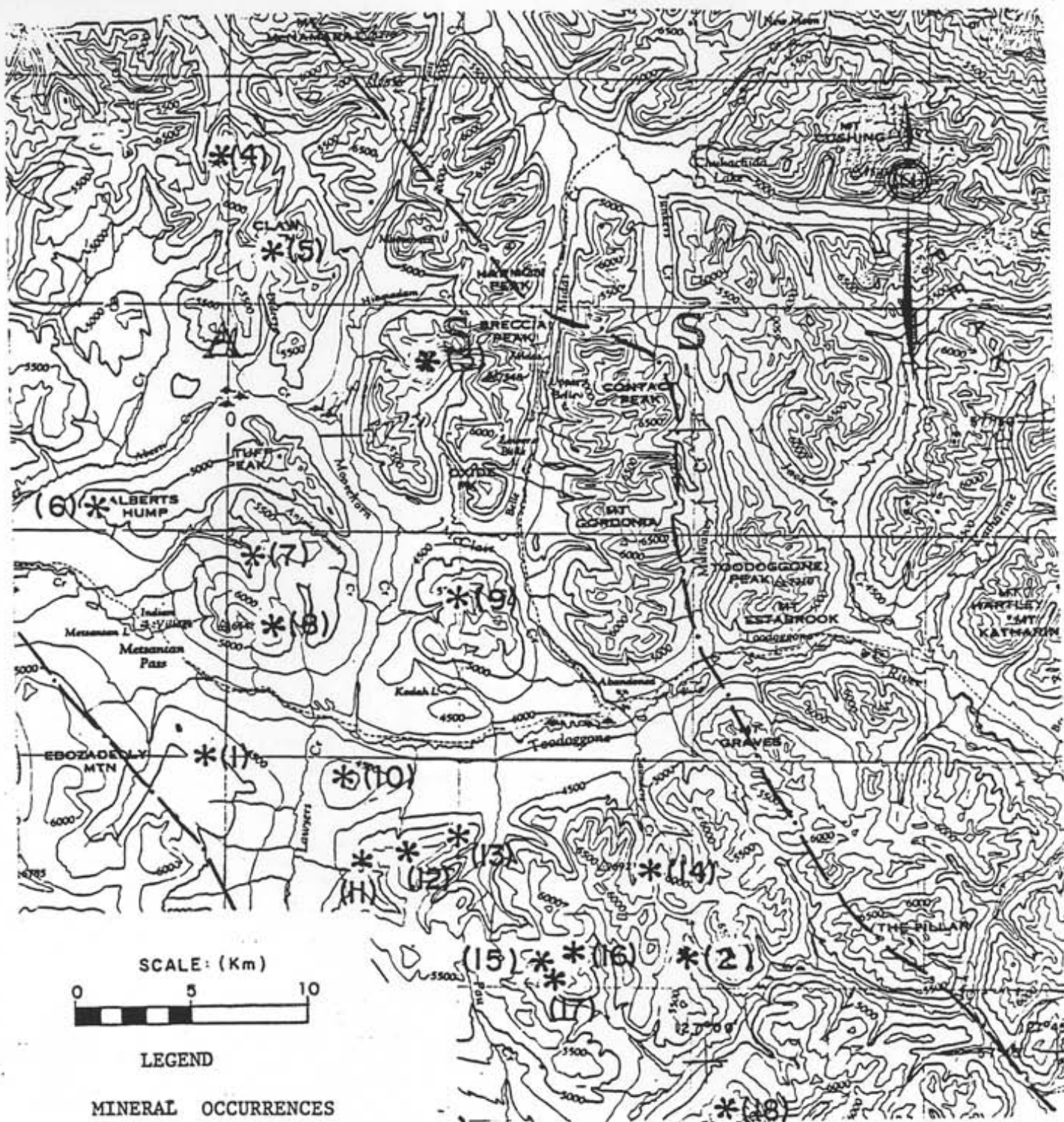
GOLDEN STRANGER I GROUP

<u>Claim</u>	<u>Units</u>	<u>Record No.</u>	<u>Anniversary Date</u>	<u>Expiry Date</u>
Golden Stranger	9	4882 (11)	November 3	1996
Golden Stranger II	3	5671 (8)	August 29	1996

Notice to Group Golden Stranger and Golden Stranger II was filed on October 31, 1983 under the group name, Golden Stranger #1. The legal corner post is located 5.5 kilometres (3.5 miles) southeast of Metsantan Lake and 6.5 kilometres (4 miles) northeast by east of Edozadelly Mountain. The Golden Stranger claim is owned by Western Horizons Resources Ltd., by Bill of Sale, August 2, 1983, from E. Thompson. The Golden Stranger II claims were staked on August 13 and 14, 1983 and recorded on August 29, 1983 by Western Horizons Resources Ltd. By successfully fulfilling commitments outlined in an agreement dated June 30, 1983, Sutton Resources Ltd. and Redfern Resources Ltd., both publicly trading companies on the Vancouver Stock Exchange, have earned a 33-1/3% interest each in the Golden Stranger claims. One additional year of work is claimed with this report extending the expiry date to 1997. An option agreement has been reached between Rule Resources and Western Horizons whereby Rule can earn Western's 33-1/3% interest by making a series of stock and cash payments.

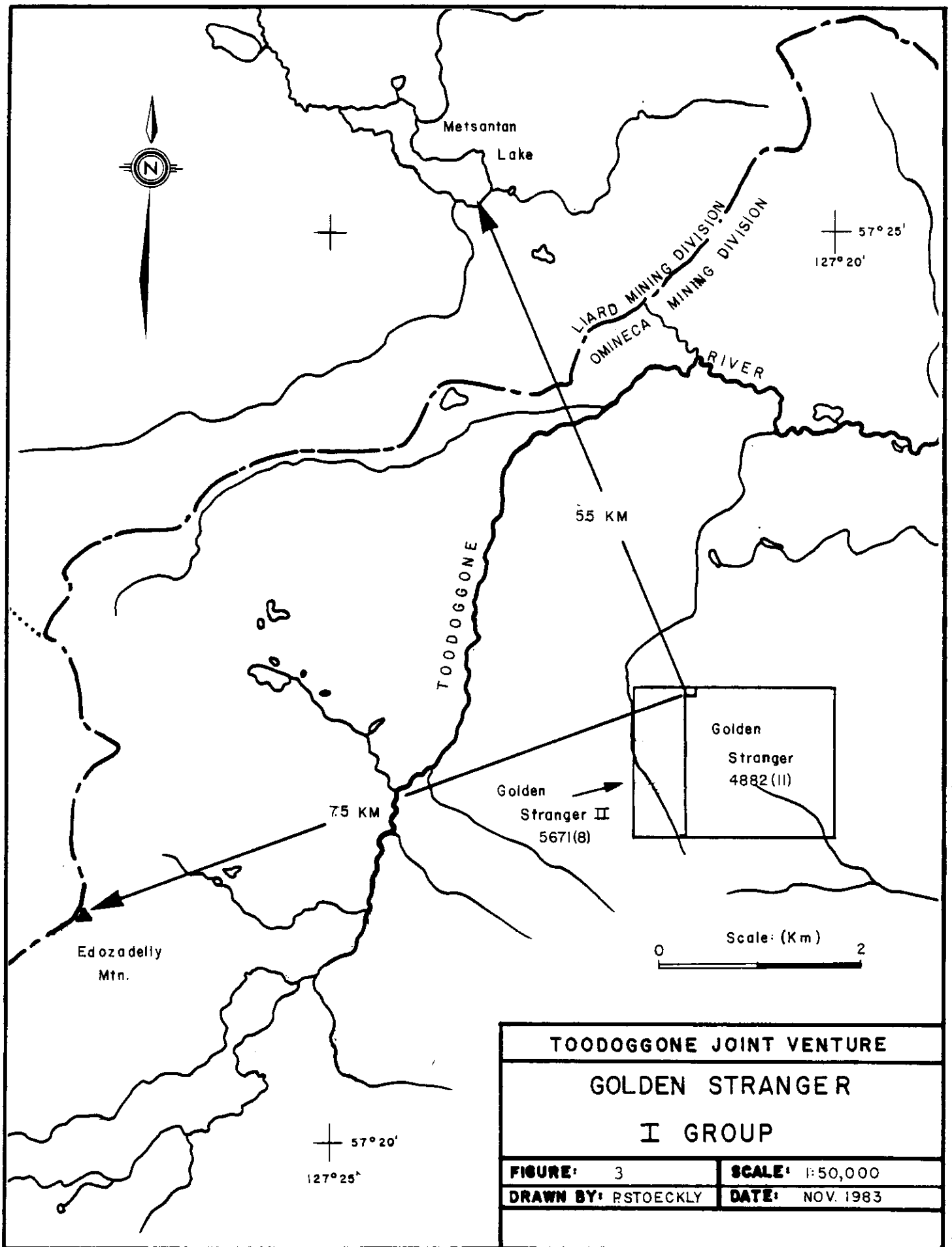


TOODOGGONE JOINT VENTURE	
LOCATION OF TOODOGGONE GOLD-SILVER DISTRICT	
FIGURE: I.	SCALE: 1:10,000,000
DRAWN BY: P.STOECKLY	DATE: NOV 1985



- | | |
|--------------------|---------------------|
| #1 GOLDEN STRANGER | #10 KODAH |
| 2 DAVE PRICE | 11 SILVER POND |
| 3 GORD DAVIES | 12 LAWYERS |
| 4 COPPER KING | 13 LAWYERS |
| 5 CLAW MTN. | 14 GOLDEN NEIGHBOUR |
| 6 ALBERTS | 15 BAKER |
| 7 NORTH METSANTAN | 16 BAKER |
| 8 METSANTAN | 17 BAKER |
| 9 J.D. | 18 SHA |

TOODOGGONE JOINT VENTURE	
LOCATION OF TOODOGGONE GOLD-SILVER DISTRICT MINERAL OCCURRENCES	
FIGURE: 2.	SCALE: 1:250,000
DRAWN BY: P.STOECKLY	DATE: Oct. 83



1986 PROGRAM

DESCRIPTION OF WORK

The 1986 program of geological mapping, geophysical, geochemical surveys was conducted by K. E. Northcote and Associates Ltd. in the period July 16 to August 14, 1986. The program required establishing a grid over an area measuring 750 metres (2,461 feet) by 500 metres (1,640 feet) with 50 metres (164 feet) between east-west lines and 25-metre (82-foot) spacing between stations on the lines. The grid was used to tie in geological mapping, as a base for VLF-EM surveys, using Seattle and Hawaii broadcasting stations, for a magnetometer survey and for soil sample sites. Macroscopic and microscopic petrographic analyses were completed from selected samples in the laboratory, following the field season.

TRENCHING AND SAMPLING

A program of blasting, mapping and sampling of trenches was carried out by Gower, Thompson & Associates Ltd. within the period July 24 to September 22, 1986. Trenches were blasted utilizing bombs made of Nilite (AMEX) explosive primed by 40% dynamite connected by trunk line and detonating cord. Fourteen trenches were blasted, totalling 232.8 metres (764 feet). The trenches were mapped on a scale of 1:100 and continuous channel samples procured using a hammer and moil. The samples were bagged in plastic and shipped to Min-En Laboratories in Vancouver for analysis.

RESULTS OF 1986 PROGRAM

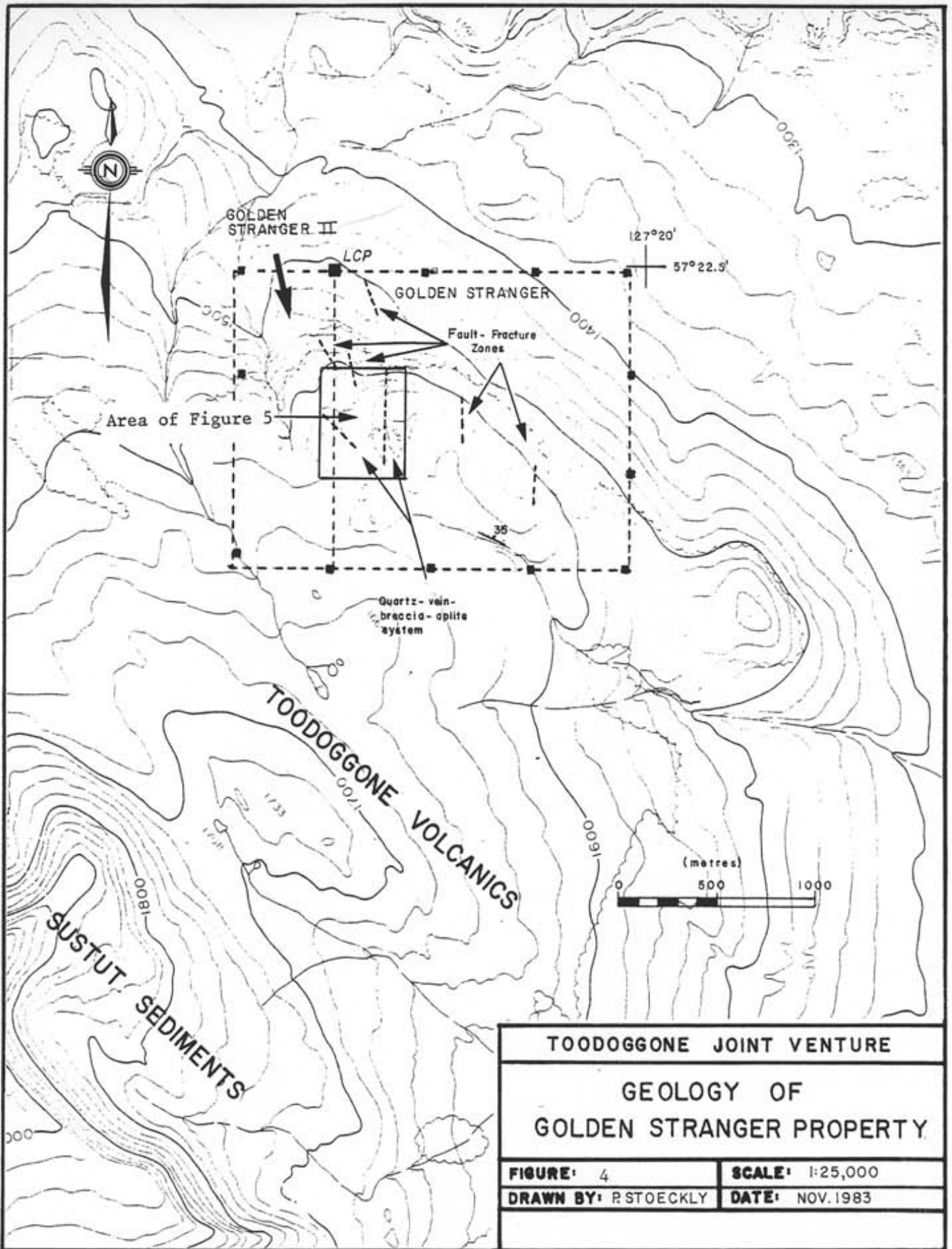
GEOLOGY OF THE GOLDEN STRANGER CLAIMS AREA

The Golden Stranger claims are underlain by massive Toodoggone volcanics consisting primarily of crystal lithic tuff and crystal lithic tuff breccia, of approximately rhyodacite composition, interbedded with lesser trachyandesite flows and flow breccias. Many of these volcanics contain primary hematitic lithic fragments or a hematitic matrix indicating sub-aerial deposition. The Toodoggone volcanics in the claims area correspond to Unit 6B of MEMPR Preliminary Map #61 by Diakow, Panteleyev and Schroeter, 1985.

The volcanic sequence was cut by a series of northerly to north-westerly trending deep-seated fracture systems some of which served as channelways for magmatic differentiates and hydrothermal solutions and have undergone successive episodes of structural movement over a long period of time. (See Figures 5, 6 and 7.) Irregular, elongate aplitic dyke-like bodies follow one or more of these northerly trending deep-seated fracture-fault systems.

Alteration associated with the fracture-fault systems ranges from disseminated pyrite with associated iron-staining through weak to strong epidotized, chloritized, carbonatized, propylitic alteration, associated with aplitic intrusion and hydrothermal alteration, to locally intense hydrothermal brecciation with its associated silicification, veining, argillic alteration and mineralization.

Quartz veining and silicified brecciation of varied intensity cuts both the altered volcanics and aplitic units. Quartz breccias and



multi-stage quartz veins are common. Some composite veins contain up to 10 or more successive quartz layers with chalcedonic quartz along some vein margins, with drusy quartz, or locally, amethystine quartz-lined vugs.

Variations in intensity of propylitic and hydrothermal alteration, quartz-breccia vein systems and the presence of aplitic bodies probably represent related magmatic-hydrothermal processes which reached different stratigraphic levels in the Toodoggone volcanic sequence.

Two divergent quartz breccia zones comprise the "main" and "west" zones. Their southerly and southeasterly projections intersect near 0+00N, 1+00E. A number of outcropping and frost-heaved exposures of quartz-vein breccias occur between the diverging "main" and "west" zones. These may represent northwest trending splays off the main north-south trending quartz breccia zone.

The "main" multi-stage aplite-silicified breccia-quartz vein-shear-gouge system on the east strikes approximately northerly and has near vertical dip. Where its full width is exposed, it measures more than 50 metres (164 feet) wide and extends northerly for a length of more than 600 metres (1,968.5 feet). Although the zone is continuous quartz veins within it are not. The veins have irregular, lensoidal, branching anastomosing habit with individual veins ranging from hairline to greater than 0.5 metres in width.

The "west" vein-breccia system does not appear to be as well developed as the "main" system to the east. (See Figure 6.) It is noted, however, that this system is flanked on the east by a parallel linear depression which may be the surface expression of a major fault-shear

structure. The best vein-breccia development was noted in exposures in closest proximity to this depression. There is potential, therefore, for improved vein-breccia development within or against this possible structure. A single high gold value of grab material from the zone assayed 0.226 oz/ton at location 2+50N, 0+75W.

It should be noted that the late shear-gouge zones, although they follow the older structure, do not intersect everywhere or incorporate the best mineralization.

STRUCTURE

Geological Map, Figure 5, shows the grid area is underlain by a strong northwesterly trending structural fabric which is "cut" by the strong northerly trending deep-seated structure of the "main" zone. The north trending "main" structure and northwesterly trending "west" structure intersect at about 0+50N, 1+00E at the southeast end of Golden Stranger pond. Subsidiary northwesterly trending structures occur in a fan-like arrangement between the two major structures with northwest trending ribs of more competent rock separating them.

The age and deep-seated nature of the "main" structure is shown by the manner in which it has influenced and controlled subsequent periods of fracturing, brecciation, aplitic intrusion, hydrothermal alteration and late shearing which follow it. To lesser extent, the "west" shows similar control over subsequent events following that zone.

MINERALIZATION

The mineralogy and mineralography of the Golden Stranger property have not yet been studied in detail. Preliminary mineralographic studies indicate the ubiquitous nature of pyrite which may be of several generations accompanying propylitic alteration and later stages of silicious hydrothermal alteration. Gold and silver values are not uniformly distributed along the "main" structure. Although the nature of gold and silver are not known, the better values of the precious metals have generally been associated with sulphides notably pyrite, chalcopyrite, galena, sphalerite, covellite which are locally enriched along the "main" zone. Gold and silver minerals have not yet been identified in polished sections. Additional mineralographic studies supported by X-ray diffraction, SEM and microprobe analyses, are required of better grade specimens.

GENERAL DESCRIPTIONS OF THE ROCK UNITS

(Resulting from Petrographic Study)

VOLCANIC MEMBERS

The volcanic members of the Toodoggone Formation on the Golden Stranger claims grid consist of crystal lithic tuff and crystal lithic tuff breccia, both of approximately rhyodacite composition, trachyandesite flows and flow breccias. High intensity propylitic alteration in the grid area commonly obliterates primary textures of the rock so that it is difficult to distinguish among the volcanic rock units. A clue to tuffaceous nature may be a proliferation of broken coarser crystals ("phenocrysts") set in a uniform appearing aphanitic matrix.

Some crystal lithic tuff breccias are readily visible because of lithic fragments of differing texture, composition and/or colour. All of the volcanic members locally have a dark purplish red matrix because of an abundance of primary and accompanying secondary hematite. Feldspar phenocrysts "fragments" are commonly stained yellowish orange by hematite.

Stained slabs almost invariably show strong, fine interstitial potassium content in the aphanitic to very fine-grained groundmass of tuffs and flows and in the matrix of lithic fragments of breccias. A few specimens show less intense potassium content. These are at some distance from the main structure. However, none lack positive potassium stain.

Crystal Tuff and Crystal Lithic Tuff Breccia

Crystal tuffs are distinguished from other volcanic rock units in thin section by the mixture of species of crystal fragments, the abundance of broken crystals and the very fine granular fragmental appearing matrix which contains fewer microphenocryst laths and microlites with less well developed preferred orientation as compared to flows. The crystal fragments are broken, angular or rounded subhedral and are composed of a mixed variety of minerals including embayed quartz, sanidine fragments similar to the aplitic unit; twinned plagioclase which has been sericitized to some degree from slight to total, chlorite, epidote, carbonate, iron-rich and altered mafic fragments including amphibole and mica of the flow and flow breccia units. The crystal tuff matrix is shown by stained slabs to have strong potassium content interstitial to feldspar microphenocrysts and microlites. The interstitial material is very fine, clouded with alteration. The presence of K-spar requires confirmation by X-ray diffraction studies.

Crystal lithic tuff breccias are similar to crystal tuffs with the addition of varied amounts of lithic fragments of crystal tuffs and flows. The lithic fragments are practically indistinguishable from crystal tuff matrix unless they differ in texture, composition and colour.

Primary and secondary hematite occur locally in both units and varied degrees of propylitic alteration show differences in intensity of chloritization, epidotization, carbonatization or pyritization which may be mappable on a larger scale. The most intense propylitic alteration occurs in close proximity to aplitic bodies. In and adjacent to the same deep-seated structures that controlled emplacement of aplite,

the crystal tuff and crystal lithic tuff breccias have also undergone differing intensity of hydrothermal fracturing, brecciation and silicious infilling and impregnation. Argillic alteration is also almost surely present, but was not noted in thin section probably because of the preponderance of other minerals with low birefringence in the finely comminuted matrix. See Appendix "A" for descriptions of selected specimens. See also Figures 6 and 7, Golden Stranger Geologic Map, Scale 1:500.

Trachyandesite Flows and Flow Breccias

Trachyandesite flows and flow breccias are distinguished from crystal tuffs and crystal lithic tuff breccias solely on the basis of well developed flow structures produced by alignment of plagioclase microphenocrysts and microlites, or by their interlocking felted texture in the rock matrix. Stained slabs show high potassium content, probably K-spar, which is interstitial to plagioclase microphenocrysts and microlites.

Multiple twinned, subhedral plagioclase phenocrysts An_{30} to 40 (to +2mm) comprise most of the phenocrysts. Sericite, carbonate, epidote alteration masks twin lamellae and ranges from a trace to near complete. Mafic minerals (to +0.3mm) are anhedral to shredded and are commonly altered to chlorite and lesser epidote. Some flows and flow breccias are strongly primary hematitic.

Some specimens tentatively assigned as flows or flow breccia are of questionable flow origin because of lesser amounts of microphenocrysts and microlites in matrix, they have a more fragmental appearance and contain a few sanidine and embayed quartz grains. These may well be of tuffaceous rather than flow origin. It is also probable that some

flows are, in fact, lithic flow fragments from a lithic tuff breccia. Flow breccias are evident if lithic fragments have elongate grains with different preferred orientation to the flow matrix, or are polymictic with differing texture, composition, colour, or are outlined by hematitic dusting, etc.

As for tuffaceous units, the flow rocks have been affected by varied degrees of propylitic alteration with differences in relative abundance of chloritization, epidotization, carbonatization and pyritization. Adjacent to deep-seated structures, the flow and flow breccia units have been affected by a range of intensities of hydrothermal fracturing, brecciation, silicification, impregnation, veining and argillic alteration. See Appendix "A" for descriptions of selected specimens. See also Figures 6 and 7, Golden Stranger Geologic Map, Scale 1:500.

APLITE MEMBER

Aplite is pinkish cream in colour with 10% to 20% fine-grained phenocrysts in a very fine-grained to aphanitic matrix. The phenocrysts consist of conspicuous rounded quartz grains (to about +1.0mm) less conspicuous feldspar grains (to about +2.0mm) visible because of cleavage planes and aggregates of very fine-altered mafic grains in aggregates forming diffuse spots. Stained slabs invariably produce a strong positive stain for potassium except in zones of intense argillic alteration which appear potassium deficient. Quartz veining, breccia matrix infilling, or partial infilling, accompanied by bleaching by argillic alteration are common.

In thin section, quartz may comprise to 10% of the section, generally as anhedral smooth, rounded, irregularly embayed grains, but may also

be near perfectly euhedral in the same section. Almost invariably, the quartz grains are surrounded by a diffuse, fibrous, outwards radiating, clouded halo which in the same section shows both sharp and diffuse contacts with the central quartz grains. The presence of the two textures is unexplained. The fibrous alteration halo requires identification by X-ray diffraction, but may be a fibrous variety of silica. Graphic intergrowths of quartz with feldspars (sanidine and sericitized plagioclase) is common. Sanidine comprises -5% to 10% of the sections in the form of anhedral broken grains (to +2.0mm). Sanidine is generally little altered except by patches of aggregates of very fine sericite and irregular, spotty diffuse dustings of hematite.

Sericite aggregates, comprising less than 5% of the sections, form irregular patches some of which are pseudomorphous after feldspar (plagioclase). Sericite/muscovite also occurs as a few isolated laths to 0.2mm. Mafic minerals have been altered to diffuse clots of chlorite aggregates.

The groundmass is shown by stained slabs to have a high potassium content. K-spar was not positively identified because of intensity of alteration, but is inferred to be present because of sanidine phenocrysts. Altered anhedral interlocking grains (-0.01 to 0.2mm) indicating a granitic texture are partially to almost completely altered by a fibrous mineral which radiates outwards from a central point in the grain. This fibrous radiating alteration is not distinguishable from the fibrous halo surrounding quartz phenocrysts. Quartz grains comprise part of the matrix and may be more abundant than thin sections indicate because of masking by alteration. A pervasive alteration dusting also permeates the matrix. Two additional forms of alteration are superimposed on the aplitic rocks described above. Several generations of

brecciation and filled and open-space veining by quartz are evident in aplite and in the surrounding volcanic wall rocks. Argillic alteration is evident in most thin sections where it can be seen accompanying veining and commonly in pseudolayers cutting aplite, probably following incipient fractures. In many cases, the argillic alteration affects the groundmass leaving quartz and sanidine phenocrysts in a fine-grained "clay" matrix. X-ray diffraction studies are required to identify the alteration assemblage of minerals. Zones of local mylonitization were noted in aplite adjacent to late major shear zones.

For description of selected specimens, see Appendix "A". See also Figures 6 and 7, Golden Stranger Geologic Map, Scale 1:500.

GEOPHYSICAL SURVEYS

A hand-held magnetometer survey was run on the Golden Stranger grid area. The instrument used is a Scintrx Model MF-2 Fluxgate Magnetometer. A base station was established at 0+00 B.L. and readings were taken at that point approximately every two hours of operation to permit correction for diurnal variation. Field data sheets for the magnetometer survey form part of Appendix "B" and results of the survey, showing corrected values, are contoured on Figure 10.

Two VLF-EM surveys were also run using a hand-held Crone Radem VLF-EM receiver utilizing Seattle, Washington, Laulualie, Hawaii. Seattle (frequency 24.8 KHz) and Hawaii (frequency 23.4 KHz) are located on azimuths 162° and 208° , respectively, from the Golden Stranger property. These stations provide about the optimum transmission directions that could be received with respect to the anticipated trend of the structures. Signals from Annapolis, Maryland, were also recorded since Seattle was not transmitting for a period of about a week. The Annapolis survey was not required. In order that diurnal corrections could be made for field strength, measurements were taken at the base station 0+00 B.L. approximately every two hours of operation. Field strength values showed so little variation over the grid that the values were not plotted or contoured. These values were recorded, however, in Appendix "B". Fraser filtered dip values are also recorded in Appendix "B" and are plotted on Figures 8 and 9.

MAGNETOMETER SURVEY

In general, the southwest half of the grid area is magnetically high with values ranging from 0 to (+)1,400 units with lower values ranging from 0 to (-)400 units on the northeast half of the grid, with the exception of an anomalous east-west trend of values 0 to (+)400 on line 1+50N between 1+25E and 3+00E. The east edge of the magnetic high area approximately (but not precisely) coincides with the north-west trending "west" structure to 2+00N, 0+25E, then swings almost directly east-west through a covered area. A trough of low values approximately coincides with the east flank of the northerly trending line of aplite bodies. A strong low cuts northeasterly across the southeast corner of the grid. See Figure 10.

VLF-EM SURVEYS

Seattle Transmission

Figure 9, VLF-EM Survey, Seattle, shows a persistent north-south trending line of cross-overs flanking the east side of the aplitic zone in the north, extending southerly along the east flank of the "main" structure. A second northwesterly trending line of persistent cross-overs coincides with the west margin of the "west" zone. A strong trough of negative values occurs between the two, disrupted by less persistent cross-overs, possibly representing subsidiary northwest trending structures. These cross-overs approximately coincide with structural and/or lithologic features shown on the geologic map, Figures 5, 6 and 7. Two unexplained north-northwesterly trending lines of cross-overs with a negative trough between passes under the covered area on the southwest part of the grid area.

Hawaii Transmission

Figure 8, VLF-EM Survey, Hawaii, shows similar persistent north-south trending lines of cross-overs with a negative trough between, roughly coinciding with the "main" structure. The northwest trending "west" structure is not evident on the Hawaii survey, but shows an intermittent structure parallel to and west of the "main" structure.

SOIL GEOCHEMISTRY

A total of 104 soil samples were collected on the Golden Stranger grid from line 0+00N B.L. to 200E to line 550N. These samples were collected by B. K. Northcote from the "B" horizon. The samples were sent to Min-En Laboratories, North Vancouver, B. C., for standard geochemical analyses for Ag and Au. See Analytical Reports and Certificates of Geochemistry in Appendix "C". Results are plotted on Figure 5. Of the 104 samples, 11 are anomalous in gold with values ranging from 15 ppb to 2,300 ppb Au and 7 are anomalous in silver with values ranging from 2.2 to 6.5 ppm.

The highest gold and silver values occur between 4+00N and 5+00N, 1+00E to 1+25E. These and other anomalous values are listed below.

It should be noted that low gold in soil values do not necessarily reflect underlying gold in rock. In the vicinity of trench #1, 2, 3-86, gold values of 0.04 oz/ton in rock are overlain by soil assaying only 5 ppb.

Table II.

ANOMALOUS SOIL SAMPLES

		<u>Ag ppm</u>	<u>Au ppb</u>
0+00	1+25E	0.8	20
0+00N	B.L.	0.7	20
1+50N	0+25E	1.6	25
1+50N	0+50E	0.8	15
2+50N	0+25E	0.8	15
3+50N	1+50E	2.2	5
4+00N	1+00E	3.0	25
4+00N	1+25E	2.6	60
4+50N	0+25E	2.2	5
4+50N	0+75E	1.3	20
4+50N	1+00E	3.4	370
5+00N	1+00E	6.5	2300
5+00N	1+25E	3.4	280
5+00N	2+00E	1.0	40
5+50N	2+00E	0.6	80

GENERAL TRENCH DATA - 1986 PROGRAM

<u>Number</u>	<u>Length</u>	<u>Direction of Sampling</u>	<u>Azimuth</u>	<u>Average Depth</u>
TR # 1-86	20.8 metres	east to west	258°	0.5 metres
TR # 2-86	14.9 metres	east to west	240°	0.5 metres
TR # 3-86	13.3 metres	east to west	250°	0.5 metres
TR # 4-86	23.2 metres	west to east	075°	1.0 metres
TR # 5-86	20.0 metres	east to west	275° - 270°	0.5 metres
TR # 6-86	approximately 15.0 metres	not sampled - pyrytic crystal tuff	250°	0.2 metres
TR # 7-86	approximately 15.0 metres	not sampled - pyrytic crystal tuff	250°	0.2 metres
TR # 8-86	12.5 metres	east to west	260°	0.5 metres
TR # 9-86	13.0 metres	east to west	280°	0.5 metres
TR #10-86	21.0 metres	east to west	245°	0.5 metres
TR #11-86	13.6 metres	east to west	265°	0.5 metres
TR #12-86	19.0 metres	east to west	250°	0.5 metres
TR #13-86	12.0 metres	not sampled - in overburden	270°	2.0 metres
TR #14-86	19.5 metres	east to west	293°	0.3 metres

SIGNIFICANT ASSAYS (1983 - 1986) IN ROCK

<u>Sample</u>	<u>Width</u>	<u>Ag</u>	<u>Au</u>	<u>Description</u>
20367	Grab	248.0 ppm	1150 ppb	Aplite, quartz breccia
ST-2-85-1017	1.2 m	-	0.01 oz/ton - Bondar 195 ppb - Min-En TR #2-85	Fault, clay
ST-3-85-1038	1.5 m	12.0 ppm	175 ppb - TR #3-85	Epidotized crystal tuff
ST-3-85-1041	2.0 m	3.1 ppm	0.02 oz/ton - Bondar 475 ppb - Min-En	Fault, clay shattered quartz vein
ST-4-85-1045	2.0 m	-	130 ppb - TR #4-85	Near massive quartz vein
ST-4-85-1047	0.8 m	-	115 ppb - TR #4-85	Crystal tuff
ST-4-85-1059	2.0 m	-	118 ppb - TR #4-85	Quartz breccia
ST-4-85-1062	2.0 m	-	100 ppb - TR #4-85	Quartz breccia
ST-4-85-1063	2.0 m	-	120 ppb - TR #4-85	Quartz breccia
ST-4-85-1067	2.0 m	-	100 ppb - TR #4-85	Quartz breccia
ST-4-85-1068	1.5 m	-	98 ppb - TR #4-85	Clay gouge, quartz fragments
ST-4-85-1069	2.0 m	-	95 ppb - TR #4-85	Epidotized crystal tuff
ST-8-85-1078	2.0 m	-	137 ppb - TR #8-85	Silicified crystal tuff
XP-85-101	Test pit	5.4 ppm	0.03 oz/ton - Bondar 600 ppm - Min-En	Aplite breccia, quartz veins

<u>Sample</u>	<u>Width</u>	<u>Ag</u>	<u>Au</u>	<u>Description</u>
XP-85-103	Test pit	-	135 ppb	Aplite breccia, quartz veins, galena
XP-85-104	Test pit	23.0 ppm	0.012 oz/ton - Bondar 280 ppb - Min-En	Silicified crystal tuff, galena
XP-85-105	Test pit	4.4 ppm	117 ppb	Brecciated crystal tuff
XP-85-106	Test pit	-	0.033 oz/ton - Bondar 390 ppb - Min-En	Silicified crystal tuff
XP-85-107	Test pit	-	113 ppb	Silicified crystal tuff
XP-85-109	Test pit	-	0.016 oz/ton - Bondar 340 ppb - Min-En	Pyritic crystal tuff
XP-85-110	Test pit	-	117 ppb	Quartz vein
XP-85-112	Test pit	-	125 ppb	Pyritic crystal tuff
XP-85-113	Test pit	-	104 ppb	Pyritic crystal tuff
XP-85-115	Test pit	3.1 ppm	254 ppb	Silicified crystal tuff
XP-85-121	Test pit	-	200 ppb	Silicified crystal tuff
XP-85-123	Test pit	-	162 ppb	Quartz vein, silicified crystal tuff
XP-85-124	Test pit	-	0.017 oz/ton - Bondar 230 ppb - Min-En	Crystal tuff
XP-85-125	Test pit	-	0.039 oz/ton - Bondar 500 ppb - Min-En	Crystal tuff, quartz stringers

<u>Sample</u>	<u>Width</u>	<u>Ag</u>	<u>Au</u>	<u>Description</u>
XP-85-126	Test pit	-	150 ppb	Silicified crystal tuff
ST-3-85-1042	1.7 m	7.0 ppm	0.26 oz/ton - Bondar 0.245 oz/ton - Min-En	Fault gouge quartz fragments
ST-3-85-1043	1.2 m	7.3 ppm	0.422 oz/ton - Bondar 0.438 oz/ton - Min-En	Fault gouge, quartz fragments
ST-7-85-1073	2.4 m	49.4 ppm	0.205 oz/ton - Bondar 0.104 oz/ton - Min-En	Fault gouge, quartz fragments
ST-7-85-1074	2.0 m	14.8 ppm	0.121 oz/ton - Bondar 0.125 oz/ton - Min-En	Fault zone, dyke rock
ST-86-4-001	1.0 m	12.0 ppm	0.671 oz/ton TR #4-86	Clay gouge and quartz vein
ST-86-4-002	1.0 m	6.8 ppm	510 ppb - TR #4-86	Quartz vein and silicious breccia
ST-86-4-008	2.0 m	-	0.033 oz/ton TR #4-86	Aplite breccia
ST-86-1-025	0.5 m	-	130 ppb - TR #1-86	Silicious aplite breccia
ST-86-1-026	2.5 m	-	122 ppb - TR #1-86	Crystal tuff, silicious zone
ST-86-1-028	2.5 m	-	147 ppb - TR #1-86	Crystal tuff, stringer zone
ST-86-2-031	1.8 m	-	315 ppb - TR #2-86	Crystal tuff, quartz stringers
ST-86-2-032	2.4 m	-	132 ppb - TR #2-86	Crystal tuff, quartz stringers
ST-86-2-033	0.8 m	4.2 ppm	430 ppb - TR #2-86	Epidotized crystal tuff
ST-86-2-034	1.3 m	3.1 ppm	0.035 oz/ton TR #2-86	Epidotized crystal tuff

<u>Sample</u>	<u>Width</u>	<u>Ag</u>	<u>Au</u>	<u>Description</u>
ST-86-2-035	0.8 m	-	0.042 oz/ton TR #2-86	Epidotized crystal tuff
ST-86-2-036	2.2 m	3.0 ppm	0.047 oz/ton TR #2-86	Epidotized crystal tuff
ST-86-3-041	2.0 m	-	500 ppb - TR #3-86	Epidotized crystal tuff
ST-86-3-042	3.0 m	-	132 ppb - TR #3-86	Epidotized crystal tuff
ST-86-3-043	1.0 m	-	125 ppb - TR #3-86	Epidotized crystal tuff
ST-86-3-044	1.7 m	-	310 ppb - TR #3-86	Epidotized crystal tuff
ST-86-3-045	3.3 m	-	255 ppb - TR #4-86	Epidotized crystal tuff
ST-86-8-046	0.6 m	7.9 ppm	240 ppb - TR #8-86	Crushed quartz and aplite
ST-86-8-047	1.0 m	13.6 ppm	0.106 oz/ton TR #8-86	Blue-grey quartz vein breccia
ST-86-8-048	0.4 m	8.0 ppm	0.067 oz/ton TR #8-86	Blue-grey quartz vein
ST-86-8-049	1.3 m	5.0 ppm	0.064 oz/ton TR #8-86	Clay gouge
CF-86-1002	Grab	-	124 ppb	quartz breccia
CF-86-1003	Grab	-	123 ppb	Quartz breccia
ST-86-062	0.8 m	3.6 ppm	175 ppb - TR #9-86	Quartz breccia
ST-86-063	1.2 m	7.8 ppm	345 ppb - TR #9-86	Quartz breccia
ST-86-064	0.6 m	7.0 ppm	0.047 oz/ton TR #9-86	Epidotized crystal tuff

<u>Sample</u>	<u>Width</u>	<u>Ag</u>	<u>Au</u>	<u>Description</u>
ST-86-065	0.7 m	6.3 ppm	160 ppb - TR #9-86	Complex breccia
ST-86-075	1.4 m	1.47 oz/ton	0.032 oz/ton TR #10-86	Complex breccia
ST-86-076	0.6 m	1.81 oz/ton	580 ppb - TR #10-86	Complex breccia
ST-86-077	0.5 m	13.7 ppm	0.042 oz/ton TR #10-86	Crushed breccia
ST-86-078	0.1 m	4.61 oz/ton	0.149 oz/ton TR #10-86	Seam of azurite and malachite
ST-86-079	0.6 m	2.98 oz/ton	0.134 oz/ton TR #10-86	Fault gouge
ST-86-080	1.2 m	10.0 ppm	345 ppb - TR #10-86	Complex breccia
ST-86-081	0.8 m	17.5 ppm	0.053 oz/ton TR #10-86	Complex breccia
ST-86-094	0.8 m	9.2 ppm	775 ppb - TR #11-86	Aplite breccia
ST-86-095	0.2 m	12.7 ppm	190 ppb - TR #11-86	Quartz breccia
ST-86-096	2.0 m	8.6 ppm	128 ppb - TR #11-86	Crystal tuff
ST-86-097	2.0 m	5.4 ppm	166 ppb - TR #11-86	Complex breccia
ST-86-100	0.1 m	-	175 ppb - TR #11-86	Fault gouge
ST-86-104	1.0 m	-	95 ppb - TR #12-86	Flat-lying quartz breccia
ST-86-105	0.4 m	-	175 ppb - TR #12-86	Quartz stockwork
ST-86-122	1.6 m	-	110 ppb - TR #5-86	Crystal tuff
E-85-051	Grab	9.8 ppm Bondar 7.4 ppm	320 ppb - Bondar Clegg 195 ppb	Trachyandesite, quartz stringers
2+50N, 0+75W	Grab	17.3 ppm	0.226 oz/ton	Silicified crystal tuff, west zone

ROCK SAMPLE DESCRIPTIONS

TRENCH #4 (1.0 m depth x 23.2 m)

ST-86-4-001 (0 - 1.0 m) - Clay gouge and fractured quartz vein, blue-black clouds in quartz material. Gouge jarositic.

Assay: 0.671 oz/ton Au
12.0 ppm Ag

ST-86-4-002 (1.0 - 2.0 m) - More competent vein material and silicious breccia, less clay gouge, blue-black sulphides in quartz.

Assay: 510 ppb Au
6.8 ppm Ag

ST-86-4-003 (2.0 - 3.0 m) - Complex silicious breccia, fractured, but in place, grey clouds of sulphides in quartz, pyrite.

Assay: 45 ppb Au
3.8 ppm Ag

ST-86-4-004 (3.0 - 3.8 m) - Jarositic clay gouge containing clay altered fragments of aplite.

Assay: 85 ppb Au
6.6 ppm Ag

ST-86-4-005 (3.8 - 5.0 m) - Highly jarositic clay zone, laminated north-south, 090° dip containing brecciated silicious veinlets.

Assay: 58 ppb Au
4.2 ppm Ag

ST-86-4-006 (5.0 - 6.0 m) - Fractured aplite exhibiting laminations with quartz stringers parallel to laminations.

Assay: 64 ppb Au
5.3 ppm Ag

ST-86-4-007 (6.0 - 8.0 m) - Aplite breccia, relatively massive, quartz infillings and stringers, jarosite staining.

Assay: 18 ppb Au
1.2 ppm Ag

ST-86-4-008 (8.0 - 10.0 m) - Aplite breccia, quartz infillings and stringers, stained.

Assay: 0.033 oz/ton Au
2.8 ppm Ag

ST-86-4-009 (10.0 - 12.0 m) - Aplite breccia, quartz infillings and stringers quartz eyes, some clay alteration. A brecciated structure cuts through at 11.5 - 12.0 m.

Assay: 9 ppb Au
2.6 ppm Ag

ST-86-4-010 (12.0 - 14.0 m) - Aplite breccia, occasional quartz stringer.

Assay: 17 ppb Au
2.4 ppm Ag

ST-86-4-011 (14.0 - 16.0 m) - Fractured aplite, jarositic along fractures occasional quartz stringer.

Assay: 28 ppb Au
1.2 ppm Ag

- ST-86-4-012 (16.0 - 18.0 m) - Complex aplite breccia containing infillings of quartz and quartz stringers.
Assay: 34 ppb Au
1.2 ppm Ag
- ST-86-4-013 (18.0 - 20.0 m) - Complex aplite breccia, as above.
Assay: 6 ppb Au
1.4 ppm Ag
- ST-86-4-014 (20.0 - 20.4 m) - Multi-coloured breccia of aplite fragments and blue-grey silicious fragments, jarositic.
Assay: 51 ppb Au
8.2 ppm Ag
- ST-86-4-015 (20.4 m) - Fault gouge material 165°/065°E underlying Sample 014.
Assay: 70 ppb Au
6.2 ppm Ag
- ST-86-4-016 (20.4 - 21.2 m) - Crystal lithic tuff breccia, abundant pyrite, jarosite along fractures.
Assay: 48 ppb Au
2.4 ppm Ag
- ST-86-4-017 (21.2 - 23.2 m) - Crystal lithic tuff breccia, pyritic, east dipping (60°) fault at 23.0 m.
Assay: 37 ppb Au
1.8 ppm Ag

TRENCH #1 (20.8 m x 1/2 m depth)

ST-86-1-018 (0 - 1.6 m) - Aplite breccia, re-absorbed textures, fairly massive, hematite, occasional quartz stringers.

Assay: 3 ppb Au
0.6 ppm Ag

ST-86-1-019 (16 - 3.5 m) - Aplite, epidotized matrix, fractured, quartz stringers.

Assay: 5 ppb Au
0.5 ppm Ag

ST-86-1-020 (3.5 - 5.3 m) - Aplite, quartz and epidote stringers along fractures 350°/090°, epidotized matrix, quartz breccia 4.6 - 5.0 m.

Assay: 6 ppb Au
0.7 ppm Ag

ST-86-1-021 (5.3 - 5.5 m) - Complex recemented quartz aplite breccia 005°/090°.

Assay: 10 ppb Au
0.8 ppm Ag

ST-86-1-022 (5.7 - 7.0 m) - Shattered aplite, epidotized matrix, iron and manganese staining, occasional quartz stringer.

Assay: 82 ppb Au
1.0 ppm Ag

ST-86-1-023 (7.0 - 7.8 m) - Shatter zone network of quartz and gypsum veinlets 335°/070°W in aplite.

Assay: 2 ppb Au
0.9 ppm Ag

- ST-86-1-024 (7.8 - 10.0 m) - Massive aplite, occasional quartz stringers, pyrite.
 Assay: 26 ppb Au
 0.8 ppm Ag
- ST-86-1-025 (10.0 - 10.5 m) - Silicious zone impregnating aplite breccia, pyrite, hematite, 345°/055°W.
 Assay: 130 ppb Au
 0.8 ppm Ag
- ST-86-1-026 (10.5 - 13.0 m) - Shatter zone in breccia, epidotized matrix, crystal lithic tuff breccia. Shattering most intense to east margin.
 Assay: 122 ppb Au
 1.8 ppm Ag
- ST-86-1-027 (13.0 - 13.5 m) - Breccia and stringer zone cutting crystal lithic tuff breccia, 355°/080°W.
 Assay: 38 ppb Au
 2.0 ppm Ag
- ST-86-028 (13.5 - 16.0 m) - Shattered crystal lithic tuff manganese and iron staining, 14.3 - 14.6 m quartz breccia zone, 15.7 - 15.9 m quartz breccia.
 Assay: 147 ppb Au
 1.3 ppm Ag
- ST-86-1-029 (16.0 - 19.3 m) - Shattered crystal lithic tuff, pyrite, fracture zone 17.2 - 17.4 m (330°/080°W).
 Assay: 32 ppb Au
 1.0 ppm Ag

ST-86-1-030 (19.3 - 20.8 m) - Clay gouge with some silicious fragments.

Assay: 86 ppb Au
1.6 ppm Ag

TRENCH #2 (1/2 m x 14.9 m)

ST-86-2-031 (0 - 1.8 m) - Crystal lithic tuff breccia, pyritic, chloritic hornblende, occasional quartz and gypsum stringer along fractures. Manganese and minute vugs.

Assay: 315 ppb Au
2.4 ppm Ag

ST-86-2-032 (1.8 - 4.2 m) - Crystal lithic tuff breccia, manganese and iron stained, specular hematite partially oxidized, occasional quartz stringer.

Assay: 132 ppb Au
1.4 ppm Ag

ST-86-2-033 (4.2 - 5.0 m) - Intensely epidotized crystal lithic tuff breccia, zeolite, manganese and quartz flooding.

Assay: 430 ppb Au
4.2 ppm Ag

ST-86-2-034 (5.0 - 6.2 m) - Intensely epidotized crystal lithic tuff breccia, manganese and iron staining.

Assay: 0.035 oz/ton Au
3.1 ppm Ag

ST-86-2-035 (6.2 - 7.0 m) - Intensely epidotized crystal lithic tuff breccia quartz flooding 6.2 - 6.3 m.

Assay: 0.042 oz/ton Au
2.0 ppm Ag

ST-86-2-036 (7.0 - 9.4 m) - As above, quartz flooding 7.0 - 7.2 m.

Manganese and iron staining.

Assay: 0.047 oz/ton Au

3.0 ppm Ag

ST-86-2-037 (9.4 - 11.4 m) - Shattered aplite, quartz infillings and veinlets, quartz eyes.

Assay: 14 ppb Au

1.8 ppm Ag

ST-86-2-038 (11.4 - 12.6 m) - Highly silicious aplite, shattered and brecciated, trace pyrite.

Assay: 78 ppb Au

3.4 ppm Ag

ST-86-2-039 (12.6 - 14.9 m) - As above, gypsum stringers towards west side of zone.

Assay: 42 ppb Au

2.1 ppm Ag

Trench continues to 15.6 in aplite - no sample.

TRENCH #3 (1/2 m deep x 13.3 m)

ST-86-3-040 (0 - 2.0 m) - Crystal lithic tuff breccia, epidotized matrix, occasional quartz stringer.

Assay: 64 ppb Au

0.7 ppm Ag

ST-86-3-041 (2.0 - 4.0 m) - Strongly epidotized crystal lithic tuff breccia. Displaced quartz stringers and quartz flooding common between 2 - 3 m. Strong quartz vein at 3.9 - 4.0 m.

Assay: 500 ppb Au
1.6 ppm Ag

ST-86-3-042 (4.0 - 7.0 m) - Intensely epidotized crystal lithic tuff breccia cut by disrupted quartz veinlets and quartz flooding. Relict hornblende.

Assay: 132 ppb Au
1.2 ppm Ag

ST-86-3-043 (7.0 - 8.0 m) - As above, becoming more silicious in matrix as progresses towards west. Quartz stringers, iron and manganese staining.

Assay: 125 ppb Au
1.6 ppm Ag

ST-86-3-044 (8.0 - 9.7 m) - As above, more shattered.

Assay: 310 ppb Au
1.5 ppm Ag

ST-86-3-045 (9.7 - 13.0 m) - Variably altered crystal lithic tuff breccia, epidote, chlorite, minor silicious networks and quartz veins, manganese and iron staining.

Assay: 255 ppb Au
1.0 ppm Ag

Trench continues to 13.2 in massive crystal lithic tuff breccia.

TRENCH #8 (1/2 m x 12.5 m)

ST-86-8-046 (0 - 0.6 m) - Fault zone against west wall of aplite body, crushed and ground cobbles of quartz veined aplite and clay. Occasional cobble mineralized with galena.

Assay: 240 ppb Au
7.9 ppm Ag

ST-86-8-047 (0.6 - 1.6 m) - Highly silicious blue-grey zone mineralized with galena, sphalerite, pyrite, minor chalcopyrite.

Assay: 0.106 oz/ton Au
13.6 ppm Ag

ST-86-8-048 (1.6 - 2.0 m) - As above.

Assay: 0.067 oz/ton Au
8.0 ppm Ag

ST-86-8-049 (2.0 - 3.3 m) - Fault gouge to 3.0 m; epidote rich clay 3.0 - 3.3 m. Rounded fragments of silicious material and altered andesite.

Assay: 0.064 oz/ton Au
5.0 ppm Ag

ST-86-8-050 (3.3 - 3.8 m) - Earthy green fault gouge, epidote rich, rounded fragments, altered and silicious volcanic fragments.

Assay: 24 ppb Au
1.6 ppm Ag

ST-86-8-051 (3.8 - 4.5 m) - Jarositic quartz vein, shattered and broken, bluish-grey in colour.

Assay: 19 ppb Au
1.4 ppm Ag

ST-86-8052 (4.5 - 5.0 m) - Jarositic quartz vein, shattered and broken, bluish-grey in colour, more clay.
Assay: 2 ppb Au
1.6 ppm Ag

ST-86-8-053 (5.0 - 5.7 m) - Shattered quartz vein, blue-grey quartz specks of galena.
Assay: 2 ppb Au
0.8 ppm Ag

ST-86-8-054 (5.7 - 6.5 m) - Fault gouge, orange-yellow in colour.
Assay: 1 ppb Au
1.3 ppm Ag

ST-86-8-055 (6.5 - 7.0 m) - Highly epidotized crystal lithic tuff breccia, earthy-green, included quartz fragments.
Assay: 1 ppb Au
1.6 ppm Ag

ST-86-8-056 (7.0 - 9.2 m) - Bluish crystal tuff, manganese and iron staining.
Assay: 3 ppb Au
1.0 ppm Ag

ST-86-8-057 (9.2 - 10.3 m) - As above, more shattered.
Assay: 1 ppb Au
1.4 ppm Ag

ST-86-8-058 (10.3 - 11.5 m) - Clay fault zone, orange-white colour.
Assay: 7 ppb Au
3.0 ppm Ag

ST-86-8-059 (11.5 - 12.5 m) - Quartz sericite clay zone, shattered,
jarositic, 345°/090°.

Assay: 25 ppb Au
2.6 ppm Ag

TRENCH #9 (1/2 m depth x 13.0 m)

ST-86-9-060 (0 - 0.5 m) - Aplite breccia, quartz stringers along
fractures.

Assay: 36 ppb Au
1.4 ppm Ag

ST-86-9-061 (0.5 - 1.4 m) - Highly silicious breccia, silica approxi-
mately 90% of components material. Cherty, 1-2% pyrite.

Assay: 39 ppb Au
2.7 ppm Ag

ST-86-9-062 (1.4 - 2.2 m) - As above.

Assay: 175 ppb Ag
3.6 ppm Ag

ST-86-9-063 (2.2 - 3.4 m) - Recemented quartz breccia, jarosite
around fragments, vuggy, trace galena, pyrite.

Assay: 345 ppb Au
7.8 ppm Ag

ST-86-9-064 (3.4 - 4.0 m) - Highly epidotized crystal lithic tuff,
fragments of quartz.

Assay: 0.047 oz/ton Au
7.0 ppm Ag

ST-86-9-065 (4.0 - 4.7 m) - Rubble breccia, recemented, matrix of greenish silica and jarosite, abundant clay alteration.

Assay: 160 ppb Au

6.3 ppm Ag

ST-86-9-066 (4.7 - 6.0 m) - Rubble breccia, more abundant bluish-green quartz, 010°/050°W.

Assay: 12 ppb Au

2.2 ppm Ag

ST-86-9-067 (6.0 - 6.7 m) - Complex breccia, very hard and tough, appears to have fine-grained K-spar around silicious fragments, trace pyrite.

Assay: 24 ppb Au

2.3 ppm Ag

ST-86-9-068 (6.7 - 7.3) - Fresh appearing crystal lithic tuff breccia, pyrite replacing eroded hornblende. Salmon pink (laumontite) fracture fillings.

Assay: 33 ppb Au

4.5 ppm Ag

ST-86-9-069 (7.3 - 7.4 m) - Complex silicious breccia, bluish-grey quartz fragments. 340°/090°.

Assay: 4 ppb Au

1.9 ppm Ag

ST-86-9-070 (7.4 - 9.4 m) - Crystal lithic tuff breccia hematite, pyrite, localized quartz breccia.

Assay: 6 ppb Au

1.5 ppm Ag

ST-86-9-071 (9.4 - 10.8 m) - Crystal lithic tuff breccia, vuggy quartz stringers, abundant pyrite along fractures.

Assay: 18 ppb Au
1.0 ppm Ag

ST-86-9-072 (10.8 - 13.0 m) - Crystal tuff locally clay altered with some silicious breccia along fractures, pyritic.

Assay: 15 ppb Au
1.9 ppm Ag

TRENCH #10 (1/2 m depth x 21.0 m)

ST-86-10-073 (0 - 2.0 m) - Aplite breccia, fractured, occasional quartz stringer.

Assay: 210 ppb Au
1.6 ppm Ag

ST-86-10-074 (2.0 - 3.6 m) - Aplite, progressively shattered to west.

Assay: 67 ppb Au
1.8 ppm Ag

ST-86-10-075 (3.6 - 5.0 m) - Complex silicious breccia, silvery mineral.

Assay: 0.032 oz/ton Au
1.47 oz/ton Ag

ST-86-10-076 (5.0 - 5.6 m) - Complex greenish silicious breccia abundant copper oxides and jarosite.

Assay: 580 ppb Au
1.81 oz/ton Ag

ST-86-10-077 (5.6 - 6.1 m) - Crushed complex greenish silicious breccia, abundant crushed malachite and azurite.

Assay: 0.042 oz/ton Au
1.37 ppm Ag

ST-86-10-078 (6.1 - 6.2 m) - Narrow seam of azurite and malachite fragments of quartz and silicious crystal tuff.

Assay: 0.149 oz/ton Au
4.61 oz/ton Ag

ST-86-10-079 (6.2 - 6.8 m) - Greenish fault gouge with fragments of greenish silicious rock.

Assay: 0.134 oz/ton Au
2.98 oz/ton Ag

ST-86-10-080 (6.8 - 8.3 m) - Complex breccia, pale green matrix, silicious infillings and fragmental quartz, disrupted quartz veinlets, hematite. 345°/090°.

Assay: 345 ppb Au
10.0 ppm Ag

ST-86-10-081 (8.3 m - 9.1 m) - Complex silicious breccia, blue-grey quartz fragments, pyrite, chalcopyrite, pale green matrix, vuggy.

Assay: 0.053 oz/ton Au
17.5 ppm Ag

ST-86-10-082 (9.1 - 9.8 m) - Complex breccia, green matrix, flooded by jarosite, iron and manganese, becoming progressively crushed to the west, fragmental quartz.

Assay: 75 ppb Au
3.4 ppm Ag

ST-86-10-083 (9.8 - 10.8 m) - Quartz vein and quartz breccia, plum coloured, epidote trace chalcopyrite.

Assay: 50 ppb Au
7.6 ppm Ag

ST-86-10-084 (10.8 - 11.2 m) - Quartz-barite vein, brittle, grey.

Assay: 36 ppb Au
10.3 ppm Ag

ST-86-10-085 (11.2 - 12.2 m) - Jarositic gouge with pale green fragments, some multi-coloured quartz fragments, vuggy.

Assay: 43 ppb Au
4.0 ppm Ag

ST-86-10-086 (12.2 - 12.8 m) - Jarositic gouge, silicious fragments.

Assay: 44 ppb Au
6.1 ppm Ag

ST-86-10-087 (12.8 - 13.6 m) - Fault gouge, epidote fragments, chloritized volcanics.

Assay: 15 ppb Au
1.9 ppm Ag

ST-86-10-088 (13.6 - 14.4 m) - Dyke rock, clay altered, fractured, plum-coloured veins, manganese and iron staining.

Assay: 20 ppb Au
1.7 ppm Ag

ST-86-10-089 (14.4 - 16.3 m) - Fault gouge containing rounded silicious crystal tuff fragments, pyritic.

Assay: 5 ppb Au
2.1 ppm Ag

ST-86-10-090 (16.3 - 16.8 m) - Chloritized crystal tuff, hematite.

Assay: 57 ppb Au
1.6 ppm Ag

ST-86-10-091 (16.8 - 17.4 m) - Altered crystal lithic tuff, silicious
and pyritic.

Assay: 24 ppb Au
1.5 ppm Ag

ST-86-10-092 (17.4 - 19.3 m) - As above.

Assay: 27 ppb Au
1.3 ppm Ag

ST-86-10-092 (19.3 - 21.0 m) - As above, alteration less intense.

Assay: 18 ppb Au
1.4 ppm Ag

TRENCH #11 (1/2 m depth x 13.6 m)

ST-86-11-094 (0 - 0.8 m) - Aplite breccia, silicious matrix.

Assay: 775 ppb Au
9.2 ppm Ag

ST-86-11-095 (0.8 - 1.0 m) - Quartz breccia, multi-coloured, manga-
nese, jarosite, sphalarite, 325°/080°W.

Assay: 190 ppb Au
12.7 ppm Ag

ST-86-11-096 (1.0 - 3.0 m) - Silicious crystal lithic tuff breccia.

Assay: 128 ppb Au
8.6 ppm Ag

ST-86-11-097 (3.0 - 5.0 m) - Complex rubble quartz breccia, multi-coloured, hematite, jarosite, laumontite.

Assay: 166 ppb Au
5.4 ppm Ag

ST-86-11-098 (5.0 - 7.2 m) - Breccia, highly epidotized, stringers of hematite, quartz fragments.

Assay: 82 ppb Au
2.8 ppm Ag

ST-86-11-099 (7.2 - 8.6 m) - Coarse breccia, iron and manganese staining, occasional silicious fragments, variably clay altered.

Assay: 60 ppb Au
3.2 ppm Ag

ST-86-11-100 (8.6 - 8.7 m) - Jarositic fault gouge, silicious fragments.

Assay: 175 ppb Au
1.8 ppm Ag

ST-86-11-101 (8.7 - 10.2 m) - Rubble breccia, iron and manganese staining, mainly green matrix with multi-coloured fragments.

Assay: 61 ppb Au
1.5 ppm Ag

ST-86-11-102 (10.2 - 11.1 m) - Crystal lithic tuff breccia, greenish brown matrix, flooded with matrix, oxidized ferromagnesium silicates.

Assay: 43 ppb Au
1.3 ppm Ag

ST-86-11-103 (11.1 - 13.6 m) - Crystal lithic tuff breccia, greenish brown matrix, flooded with matrix, oxidized ferro-magnesium silicates.

Assay: 52 ppb Au
1.7 ppm Ag

TRENCH #12 (1/2 m depth x 19 m)

ST-86-12-104 (0 - 1.0 m) - Relatively flat lying quartz breccia about 1.0 metre thick, epidote along fractures.

Assay: 95 ppb Au
2.3 ppm Ag

ST-86-12-105 (1.0 - 1.4 m) - Well developed quartz stockwork in crystal tuff about 0.5 metres thick parallels Sample 104. Epidotized, iron and manganese staining.

Assay: 175 ppb Au
2.3 ppm Ag

ST-86-12-106 (1.4 - 3.1 m) - Quartz stockwork in crystal tuff, epidotized matrix.

Assay: 65 ppb Au
1.1 ppm Ag

ST-86-12-107 (3.1 - 3.5 m) - Crystal tuff, fault intersections 100°/090°; sample across fault system.

Assay: 50 ppb Au
1.1 ppm Ag

ST-86-12-108 (3.5 - 4.9 m) - Highly epidotized crystal lithic tuff breccia, iron and manganese staining, quartz stringers.

Assay: 64 ppb Au
4.6 ppm Ag

ST-86-12-109 (4.9 - 5.9 m) - Flat lying fault breccia, crystal tuff fragments, epidotized, jarositic.

Assay: 34 ppb Au
1.1 ppm Ag

ST-86-12-110 (5.9 - 7.0 m) - Epidotized crystal tuff, weak fracture zone, 000°/070°E, iron and manganese staining.

Assay: 62 ppb Au
1.2 ppm Ag

ST-86-12-111 (7.0 - 8.2 m) - Fault gouge, progressive clay development to west, epidotized fragments, laumontite.

Assay: 31 ppb Au
1.4 ppm Ag

ST-86-12-112 (8.2 - 9.0 m) - Blue-grey quartz partially ground to clay, multi-coloured.

Assay: 48 ppb Au
3.5 ppm Ag

ST-86-12-113 (9.0 - 11.0 m) - Greenish fault clay with epidotized silicified fragments, abundant pyrite.

Assay: 40 ppb Au
2.4 ppm Ag

ST-86-12-114 (11.0 - 11.7 m) - Dark green crystal tuff, clay altered matrix, locally silicious.

Assay: 62 ppb Au, 2.1 ppm Ag

ST-86-12-115 (11.7 - 14.3 m) - Crystal tuff, blue-grey matrix, somewhat silicified, pyritic, quartz stringers.

Assay: 65 ppb Au
2.7 ppm Ag

ST-86-12-116 (14.7 - 15.2 m) - Jarositic fault gouge, silicious fragments.

Assay: 53 ppb Au
2.2 ppm Ag

ST-86-12-117 (15.2 - 15.5 m) - Quartz vein, blue-grey coloration, pyritic.

Assay: 58 ppb Au
5.0 ppm Ag

ST-86-12-118 (15.5 - 16.2 m) - Fault gouge, epidote, jarosite, fragments of blue-grey quartz.

Assay: 40 ppb Au
2.9 ppm Ag

ST-86-12-119 (16.2 - 17.8 m) - Crystal tuff, plum coloured, pyritic, silicious matrix, quartz veinlets.

Assay: 63 ppb Au
2.0 ppm Ag

ST-86-12-120 (17.8 - 18.4 m) - Progressively mylonized to fault clays, jarositic, pyritic.

Assay: 30 ppb Au
1.6 ppm Ag

ST-86-12-121 (18.4 - 19.0 m) - Crystal tuff, silicious matrix, pyrite.

Assay: 60 ppb Au
1.5 ppm Ag

TRENCH #5 (1.5 m depth x 11.5 m)

ST-86-5-122 (0 - 1.6 m) - Crystal lithic tuff breccia, strong jarosite staining, manganese, quartz stringers.

Assay: 110 ppb Au
1.8 ppm Ag

ST-86-5-123 (1.6 - 3.6 m) - Crystal lithic tuff breccia, quartz stringers, silicious matrix, pyrite, jarosite and manganese staining.

Assay: 59 ppb Au
3.6 ppm Ag

ST-86-5-124 (3.6 - 6.0 m) - As above, less silicification of matrix.

Assay: 83 ppb Au
1.9 ppm Ag

ST-86-5-125 (6.0 - 8.2 m) - Quartz stockwork, shattered, strong quartz veinlets, 000°/070°W.

Assay: 40 ppb Au
1.2 ppm Ag

ST-86-5-126 (8.2 - 10.2 m) - Strong amethystine quartz breccia.
Assay: 88 ppb Au
2.1 ppm Ag

ST-86-5-127 (10.2 - 11.5 m) - As above.
Assay: 56 ppb Au
1.2 ppm Ag

ST-86-5-128 (11.5 - 12.5 m) - Crystal tuff, epidote and chlorite
altered matrix, quartz stringers along fractures.
Assay: 62 ppb Au
1.5 ppm Ag

ST-86-5-129 (12.5 - 14.5 m) - Quartz breccia, amethystine vuggy,
chalcedonic.
Assay: 84 ppb Au
0.9 ppm Ag

ST-86-5-130 (14.5 - 15.5 m) - As above.
Assay: 63 ppb Au
1.4 ppm Ag

ST-86-5-131 (15.5 - 17.0 m) - As above.
Assay: 46 ppb Au
1.6 ppm Ag

ST-86-5-132 (17.0 - 18.7 m) - Epidotized crystal tuff, chlorite,
quartz, crystal tuff fragments.
Assay: 60 ppb Au
1.5 ppm Au

ST-86-5-133 (18.7 - 20.0 m) - Complex silicious breccia, epidotized matrix, crystal tuff fragments, disrupted quartz stringers.

Assay: 25 ppb Au
1.1 ppm Ag

TRENCH #14 (0.3 depth x 19.5 m) (Sampled from 16.5 m to 19.5 m)

ST-86-14-134 (16.5 - 18.2 m) - Sheared chloritic crystal tuff, network of fine veinlets.

Assay: 2 ppb Au
0.6 ppm Ag

ST-86-14-135 (18.2 - 19.0 m) - Crystal tuff, strongly epidotized, quartz fragments.

Assay: 13 ppb Au
1.4 ppm Ag

ST-86-14-136 (19.0 - 19.5 m) - Quartz breccia and clay gouge, epidotized and chloritized matrix of crystal tuff fragments.

Assay: 10 ppb Au
1.4 ppm Ag

TEST PITS XP-86-134 TO XP-86-137

XP-86-134 - Representative specimens of fault gouge containing pyritic crystal tuff.

Assay: 1 ppb Au
0.7 ppm Ag

XP-86-135 - Same pit as above, bluish crystal tuff, pyritic,
silicious matrix.

Assay: 7 ppb Au
1.2 ppm Ag

XP-86-136 - Second test pit, 8.0 m at 250° from 134-135. Jarositic
fault gouge adjacent to clay altered crystal tuff.

Assay: 2 ppb Au
0.9 ppm Ag

XP-86-137 - Same pit as above, altered and pyritic crystal tuff.

Assay: 1 ppb Au
0.8 ppm Ag

CONCLUSIONS

1. Geological Sequence of Events:

- Deposition of volcanic rhyodacite crystal tuffs and crystal lithic tuff breccias with interbedded trahyandesite flows and flow breccias. Controlled by deep-seated structure.
- Development of deep-seated structures probably following deeper early structure some forming conduits for aplitic bodies accompanied by propylitic alteration pyritization. Reaching different stratigraphic levels. Aplitic bodies emplaced in a shallow, near volcanic environment on the Golden Stranger property, accompanied by internal brecciation and local brecciation of wall rocks.
- Subsequent episodes of fracturing, hydrothermal brecciation followed or accompanied by several generations of silicification, both filled and open-space veining, argillic alteration and hydrothermal surface venting. Some silicification was accompanied by sulphide mineralization with associated gold and silver values.
- Late shear-gouge zones following the earlier structures locally intersecting and incorporating portions of the veins and silicic breccias and pods of mineralization within them.

- ### 2. Distribution of gold and silver values is expected to be irregular occurring in pods which may be closely associated with galena, sphalerite, chalcopyrite, covellite and quartz vein breccia associated pyrite.

3. Magnetometer survey approximates geology, lithology and structure. An anomalous low trending drift covered area between Line 2+00N at 0+25W to 2+00W requires investigation. Similarly, the more or less linear high on the east side warrants investigation.
4. VLF-EM survey cross-overs approximately delineate the "main" and "west" structures and subsidiary structures between them. Similar north-south trending cross-overs in south-west portions of the grid area are drift covered and require investigation.
5. Soil geochemistry highest gold values correspond with north end of "main" structure on the west (and east) flank(s) of aplite zone. To a lesser extent, the "west" structure in the vicinity of BL 1+75N. It is important to notice that low gold in soil values do not necessarily reflect low gold content in underlying rock.
6. A strong gold zone has been cut in trenches along the west side of the main structure. Closely spaced trenches over the most northerly 133 metres (465 feet) indicate an average grade of 0.21 oz/ton gold over a width of 3.5 metres (11.5 feet).

RECOMMENDATIONS

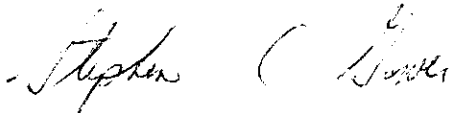
1. Trenching and sampling by backhoe and drilling and blasting -	\$ 20,000
2. Complete soil geochemistry over west side of grid 0+00N to 5+50N, BL to 2+00W -	5,000
3. Petrography, mineralography - utilize sections with highest gold and silver values -	10,000
4. Resistivity survey to delineate shear zones under drift cover -	10,000
5. Diamond drilling, camp costs, assays, supervision, logging: 3,400 feet @ \$75/foot -	<u>255,000</u>
TOTAL:	\$ 300,000 =====

CERTIFICATE

I, Stephen C. Gower, of 985 Gatsbury Street, Coquitlam, B. C., do hereby certify that:

1. I have been practising as a Professional Geologist for a period of 17 years for mining exploration and consulting companies.
2. I obtained a B.Sc. in Geology from the University of British Columbia in 1970 and have completed Masters courses in Property Evaluation and Exploration.
3. The portions of the report written by me are the result of work carried out between July 24 and September 22, 1986.
4. I am a Fellow of the Geological Association of Canada.
5. Western Horizons Resources Ltd. retains one-third (1/3) ownership of the Golden Stranger property. I am a Director and Officer of Western Horizons and own one-third (1/3) of Western Horizons' shares.
6. An option agreement exists to allow Rule Resources Ltd. to acquire Western Horizons Resources Ltd. one-third (1/3) interest in the property by fulfilling various stock and cash commitments.
7. I consent to the use of this report in or in connection with a prospectus relating to the raising of funds.

Dated at Coquitlam, B. C., this 16th day of January 1987.



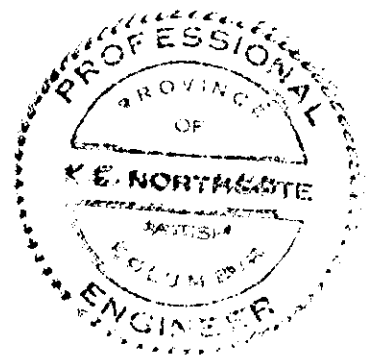
Stephen C. Gower, B.Sc., FGAC

CERTIFICATE

I, Kenneth E. Northcote of 2346 Ashton Road, R.R. #1 Agassiz, B.C. do hereby certify that:

- 1] I have been practising as a professional geologist for a period of approximately 25 years for petroleum exploration companies, mining exploration and consulting companies, federal and provincial agencies.
- 2] I obtained a Ph.D. in geology from U.B.C. in 1968 and qualified for registration with the Association of Professional Engineers of B.C. in 1967.
- 3] The geological mapping, petrographic analyses, magnetometer, VLF-EM and soil geochemistry surveys are the result of work done personally or by B.K. Northcote directly under my supervision.
- 4] Western Horizons Resources retains 1/3 ownership of the Golden Stranger property. I am a director and own 1/3 of Western Horizons' shares.
- 5] I consent to the use of this report in, or in connection with, a prospectus relating to the raising of funds.

Dated at Agassiz, B.C. this 15th day of January, 1987.



A handwritten signature in cursive script that reads "K.E. Northcote".

K.E. Northcote Ph.D., P.Eng.

STATEMENT OF COSTS

FIELD PERSONNEL

S. C. Gower, July 24 - August 2; August 4 - 21; August 23 - September 1; September 16 - 22. 45 days @ \$200/day (Geologist) -	\$ 9,000
E. M. Thompson, July 24 - August 2; August 4 - 21; August 23 - September 1; September 16 - 22. 45 days @ \$100/day (Blaster) -	4,500
K. E. Northcote - 30 days @ \$300/day -	9,000
B. K. Northcote - 30 days @ \$75 -	2,250
FOOD AND ACCOMMODATION -	4,810
MOBILIZATION AND DEMOBILIZATION -	2,000
AIRCRAFT SUPPORT	
Helicopter and fixed wing -	9,800
EQUIPMENT AND SUPPLIES	
Explosives, magazine (radios, geophysical - rental)	3,200
LABORATORY ANALYSIS	
Rocks - 125 ICP & Gold Assays, 140 Assays Au/Ag	
Soils - 104 Samples - Au/Ag	5,000
PETROGRAPHIC EXAMINATION -	1,500
REPORT PREPARATION -	<u>3,500</u>
	TOTAL: \$ 54,560 =====
Amount claimed for assessment -	\$ 50,000
Difference (not claimed) -	(\$ 4,560)

REFERENCES

- DIAKOW, L.J.; PANTELEYEV, A.; SCHROETER, T.G.; Teology of the
Toodoggone River Area, NTS 94E, MEMPR Preliminary Map 61,
August 1985.
- MEMPR Assessment Report on Exploration during 1983 on the Golden
Stranger Claims by Northcote and Gower, November 30, 1983.
- MEMPR Assessment Report on Soil Geochemistry, Trenching and Sampling
on the Golden Stranger Claims 1975, by Northcote and Gower;
January 1986.

APPENDICES

- A - PETROGRAPHIC DESCRIPTIONS OF
SELECTED SPECIMENS
- B - GEOPHYSICAL SURVEY NOTES
- C - GEOCHEMICAL ANALYSES -
MIN-EN LABORATORIES

APPENDIX "A"

PETROGRAPHIC DESCRIPTIONS

- I LITHIC TUFF BRECCIA SUITE
- II PORPHYRITIC TRACHYANDESITE SUITE
- III APLITE SUITE
- IV SILICIFIED BRECCIA SUITE

I LITHIC TUFF BRECCIA SUITE

3+00N 2+00W (2)

Lithic tuff breccia; strongly epidotized and chloritic matrix.

3+00N 2+00W (1)

Crystal lithic tuff breccia with very high fragment to matrix ratio. Fragments; fine fragmental tuff, feldspars, embayed quartz crystals, hematite in a fine feldspathic to microlitic matrix, weak aligned to felted chloritic interstitial clots abundant. Relict biotite. Tuffaceous matrix, very fine fragmental feldspathic. Locally strong hematitic dusting
Few hairline quartz veinlets

3+00N 1+50W

Porphyritic trachyandesite/dacite possibly a crystal tuff; 20 to 25% fine/medium-grained plagioclase phenocrysts and clusters of crystals with altered biotite in a very fine epidotized, chloritic, pyritic (propylitic altered) matrix. Few pinpoint vugs. Lithic fragments not conspicuous.

Plagioclase phenocrysts/fragments, subhedral some partially rounded, reaction rims on some grains, sericite and carbonate alteration. Mafic phenocrysts/fragments altered to clots of carbonate and chlorite. Others shredded cleavage remnants of chlorite, sericite (muscovite) carbonate and lesser epidote. Few scattered smooth rounded embayed weird-shaped quartz grains. (to +1.0mm) some with diffuse margins. Possible sanidine grains. Disseminated hematite crystals to 1.0mm. Hornblende grains. This non-equilibrium mix of minerals suggests lithic tuff breccia. Matrix contains significant amounts of plagioclase microphenocrysts and microlites showing preferred orientation throughout the section. Chloritic alteration. Stained slab shows pervasive K-rich interstitial material.
Weak diffuse quartz impregnation, aggregates of grains.

3+00N 0+50W (2)

Intensely altered crystal lithic tuff; see general descriptions. Strong silification, epidotization obliterating original textures. Crackle/dislocation breccia with open space quartz infilling. Disseminated pyrite. Iron-staining on fracture surfaces.

3+00N 0+50W (1)

Strong altered crystal lithic tuff breccia (?); see general descriptions. 10% altered fine-grained mafic in a siliceous, epidotized, chloritic matrix. Suggestion of lithic fragments with diffuse margins. Abundant very fine disseminated pyrite. Open space quartz veinlets. Iron staining on fractures.

3+00N BL to 0+25E

Crystal tuff; see general description. Strong epidote, pyrite, chlorite (porphyritic) alteration. Weak quartz impregnation and hairline quartz veinlets showing some quartz-lined drusy cavities.

3+00N 2+75E

Altered crystal tuff; see general descriptions. Crystal fragments broken euhedral and some rounding by reaction with matrix; moderate to strong sericitic. Consists of twinned plagioclase, sanidine and embayed quartz, altered mafic (15%) to hematite, chlorite, carbonate, granular texture with chlorite following remnant cleavage direction-form pseudomorphs. Show rounded corners of former mineral. Opaques 5% disseminated pyrite. Matrix weak sericite-carbonate, moderate chlorite and hematite.

85 ST-1 (4+75N 0+60E)

Crystal lithic tuff; see general description

Crystal fragments include twinned plagioclase, sanidine, embayed quartz, hornblende remnants and chloritized mafic. Plagioclase shows various degrees of sericitic alteration. Matrix contains randomly orientated plagioclase microlites with K-rich interstitial material. Contains scattered lithic fragments. Scattered irregular patches of siliceous impregnation, chloritic with lesser epidote, sericite alteration. Patches of iron staining.

4+50N 1+25E (1), (2) and (3) East side of Aplite Complex

- (1) Crystal tuff; see general description. Hematitic stained feldspar crystals, embayed quartz grains abundant epidote blebs in a mottled, siliceous, chloritic, epidote-rich matrix. 10% altered mafic
- (2) Crystal tuff; see above, with slightly coarser matrix mottled chloritic, siliceous. Fragmental nature of crystals is conspicuous in this specimen.
- (3) Crystal tuff; see above, hematitic stained feldspar crystal fragments in a silicified, pyritized, chloritized epidotized matrix. Late brecciation, silicification.

85 ST-7 Footwall (west side) of fault (4+45N 1+20E)

Altered crystal tuff (?); see general descriptions. Strong chloritic-epidotized matrix. Epidote alteration along margin of hairline quartz veinlet.

3+50N 0+50E (1) and (2)

- (1) Crystal tuff; see general descriptions. Quartz; plagioclase (An₃₀) sericitic, lesser epidote; sanidine, some show rounded ends and reaction rims. Mafic (mica) strong carbonate, epidote lesser chlorite forming ragged crystal remnants. Matrix strong chlorite, lesser carbonate and weak sericite alteration. Some pinpoint vuggyness in hand specimen.
- (2) Crystal tuff; as for (1) above.

3+50N 1+60E East wall of aplite complex
Crystal tuff (?); permeated by silica, diffuse quartz veining.
Original texture masked. Chlorite and epidote alteration. Iron-staining.

3+50N 1+50 to 1+75E (1) Suite of Specimens
Crystal tuff/porphyritic trachyandesite. Strongly epidotized feldspar phenocrysts/fragments and clusters of grains to 25% in an aphanitic cream-green and cream-brown mottled, chlorite-epidote altered matrix. Impregnated by quartz and cut by open space quartz veining.

3+50N 1+50E to 1+75E (2)
Crystal tuff; conspicuous fragmental texture shown by outlines of altered crystals and composite grains. Outlines of aggregates of grains pseudomorphous after feldspar. Intense propylitic alteration. Impregnations of silica. Iron staining. Pyritic suggestions of ghost-like outlines of lithic fragments.

3+50N 1+50E to 1+75E (3)
Crystal tuff; similar to (2), intense epidotization, conspicuous silicification. Texture appears to have been fine fragmental. Crystal tuff/lapilli. Outlines appear fragmental, suggestion of composite fragments now masked by intense epidote alteration.

2+50N 2+00W (1) (Suite of specimens)
Trachyandesite/crystal tuff; 20% plagioclase phenocrysts/fragments with 10 to 15% fine mafics in a cream-green mottled chloritic (albitic?) matrix. Pinpoint vugs. Trace of quartz grains which, from thin sections of similar rocks, suggests a crystal tuff.

2+50N 2+00W (2)
Trachyandesite porphyry breccia/crystal lithic tuff breccia; 25% plagioclase phenocrysts, medium to coarse-grained, clusters of grains hematite stained, in a fine chloritic altered matrix. Cut by hairline quartz veinlets.

Fine-grained feldspathic matrix, small laths somewhat felted but showing preferred orientation. Fine irregular ragged grains of mafic, cleavage present but not perfect, parallel extinction, brown pleochroic, high birefringence masked by iron-staining. Some embayed quartz grains. Strong hematitic. Some quartz veinlets and granular textured aggregate segregations. Generally with diffuse margins by individual grains jutting into matrix.

2+50N 0+75W .
Porphyritic rhyodacite/crystal tuff breccia. Locally lithic breccia fragments are clearly visible. Sericitic iron-stained feldspar crystals and glomerophenocrysts. Few embayed quartz grains. Hematitic mafic. Few scattered euhedral crystals of hematite. Matrix feldspathic broken microphenocrysts and microlites generally with strong preferred orientation. Potassium-rich interstitial material. Abundant scattered clots of chlorite. Quartz segregations.

2+50N 0+50E (1) and (2)

(1) Altered crystal tuff; see general descriptions. 15% altered mafic grains. Strong chlorite-epidote altered matrix. Disseminated very fine to fine pyrite.

(2) As for (1). Contains fragments of iron-stained crystal tuff in finer crystal tuff matrix, lacking iron-staining but showing epidote-chlorite alteration.

2+50N 1+25E (1) and (2)

(1) Hematitic crystal tuff breccia showing composite quartz veining. Disseminated pyrite.

(2) Silicified breccia; composite quartz veining. Shows fragments of different composition and texture. Disseminated pyrite.

XP 85-117-118 (2+35N 1+20E)

(1) Quartz-amethyst veining in brecciated altered porphyritic trachyandesite/crystal tuff.

(2) Silicified, brecciated, altered porphyritic trachyandesite/crystal tuff.

2+00N 1+25E

Crystal tuff; see general description. Epidote flecks and altered mafic grains in a very fine grained hematitic stained matrix. Scattered hematite grains and clots of epidote. Cut by narrow open space quartz veins and veinlets containing hematite. Quartz impregnations.

2+00N 1+25E

Crystal lithic tuff breccia; See general description. Disseminated hematite, epidote. Cut by braided open space quartz veins/veinlets.

2+00N 1+50E (1)

Crystal lithic tuff breccia; See general description. Lithic fragments, hematitic alteration of sanidine, clots of epidote, aggregates of irregular chloritic grains. Matrix shows fair preferred orientation of microphenocrysts and microlites. Weak diffuse quartz veining and segregations associated with epidote. Stained slab lithic fragments moderately "K-rich" matrix weak "K-content". Late brecciation, epidote infilling and some quartz-lined vugs.

2+00N 1+50E (2) to (4)

Suggestion of lithic fragment outlines become more apparent with close examination of several specimens. Matrix is of similar material but fragmental nature locally conspicuous. Strong patches of epidotization.

2+00N 2+00E

(1) Polymictic breccia, hematitic and chloritic porphyritic trachyandesite and crystal tuff in a finer lithic and crystal fragmental matrix.

2+00N 2+00E (Continued)

(2) Polymictic breccia, trachyandesite flow and crystal tuff fragments in a fine fragmental feldspathic matrix. Chlorite-rich matrix in many fragments with microphenocrysts and microlites showing preferred orientation other fragments felted. Moderate to strong carbonate and epidote alteration as irregular masses or clusters of grains in matrix. Some quartz impregnation.

1+50N BL to 1+75N BL (1) and (2)

(1) Crystal tuff; see general description. Plagioclase crystal fragments show moderate to strong sericitic alteration with hematite dusting. Possible sanidine. Embayed quartz. Matrix a felted mass of feldspathic grains with "K-rich" and chloritic interstitial material. Very strong carbonate and hematite alteration fine disseminated pyrite. Quartz veinlets and impregnations.

(2) Crystal tuff; see general description. Hematitic stained feldspars; -5% embayed quartz; 15% altered mafic. Zone of brecciation between parallel fractures.

1+50N 1+25E

Crystal lithic tuff breccia; see general description. Coarser crystal fragments consist of plagioclase, showing moderate sericite alteration and sanidine and embayed quartz crystals in a "K-rich" hematitic matrix showing chlorite-epidote alteration. Weak open space quartz veinlets.

1+50N 1+50E (1) and (2)

Crystal lithic tuff breccia; see general description. Cut surfaces of specimens show lithic fragments to several cms.

1+25N BL to 1+50N 0+25W

Crystal lithic tuff breccia; see general description. Approximately 15% chloritic altered mafic in a fine fragmental to aphanitic epidote-chlorite-rich matrix. Disseminated hematite grains. Has texture of lithic breccia. Matrix does not show felted to weak preferred orientation present in lithic fragments.

85 ST-10 (1+15N 1+70E)

Porphyritic trachyandesite/crystal tuff. Plagioclase and lesser sanidine crystal fragments, rounded margins some showing reaction with "K-rich" matrix. Low concentration of microphenocrysts and microlites but those present show preferred orientation. Strong hematitic dusting of matrix, very weak chloritic alteration. Mafics show strong hematitic replacement. Quartz veinlets and diffuse impregnations.

86 ST 2 Blast rock (1+25N 1+30E)

Altered crystal tuff (?)/porphyritic trachyandesite(?) strong epidote-hematite alteration of matrix, orange-stained feldspar fragments (?)/phenocrysts.

86 GS-1 (1+00N 2+00E)

Crystal tuff; see general description

0+00 2+25E (2)

Crystal lithic tuff breccia; plagioclase and sanidine(?) phenocrysts with plagioclase showing medium sericitic and carbonate alteration. Sanidine weak hematitic alteration. Scattered hematite grains/crystals. Replacement of mafic by hematite. Shows some quartz impregnations as diffuse aggregates of grains scattered through matrix. See general descriptions.

0+50S 2+75E

Crystal tuff; see general description Plagioclase phenocrysts show strong hematitic alteration dusting, lesser sericite. Mafic altered to hematitic pseudomorphs. Several crystals of brownish to yellowish pleochroic amphibole related (hornblende) mafics showing inclined extinction but birefringence only 1st order yellow. Matrix contains abundant microphenocrysts and microlites showing preferred orientation.

2+00S 1+75W

Lithic crystal tuff breccia/flow breccia; vesicular, very high fragment to matrix ratio. Lithic fragments crystal tuff/porphyritic, plagioclase, sanidine (?) and embayed quartz. Feldspar crystals are hematitic. Matrix of fragments and breccia matrix strong microporphyritic plagioclase content but do not have well developed preferred orientation. Moderate interstitial "K"-content, chloritic.

Note: Patches several mm consisting of plagioclase microlites go into extinction at the same time suggesting a fine fragmental (breccia) nature.

II PORPHYRITIC TRACHYANDESITE SUITE

86 ST 4-D (5+00N 1+25E)

Porphyritic altered porphyritic trachyandesite. Strongly altered, epidotized, fine to medium-grained feldspar phenocrysts, clusters of grains with finer altered mafics in a strongly chloritic, epidotized, pyritic groundmass. Iron-stained on fractures. Diffuse impregnation by silica. Lithic clasts not conspicuous.

85 ST-2 (4+80N 0+80E)

Altered porphyritic flow/crystal lithic tuff breccia; see general description. Siliceous, chloritic, epidotized matrix. Disseminated pyrite. Few composite and hematitic lithic fragments suggesting breccia

4+10N 1+65E (1)

Altered porphyritic flow/crystal tuff; matrix textures obliterated by chlorite/epidote alteration. 20% feldspar phenocrysts/fragments altered by epidote and sericite. Large number of broken grains, besides the euhedral crystals, suggest a fragmental nature. Ragged altered mafic grains (15%), very fine to fine-grained in an aphanitic matrix. Few scattered lithic fragments (to 0.5cm) with plutonic texture.

4+10N 1+65E (2)

Altered trachyandesite/trachyte; see general descriptions. Glomero-porphyrritic plagioclase phenocrysts, An₃₅, (to +3.0mm), weak sericite and epidote alteration. Mafic shredded, strong carbonate and lesser epidote alteration. Microphenocrysts and microlites somewhat felted but have a preferred orientation. Matrix strong chlorite, weaker epidote and carbonate alteration.

3+50N 1+25E (2)

Altered porphyritic trachyandesite flow. Plagioclase phenocrysts show strong epidote and lesser sericite and quartz alteration. Mafics completely altered to aggregates of chlorite, hematite. Weak to moderate developed preferred orientation of microphenocrysts and microlites in a very fine "K-rich" groundmass. Chloritic alteration. Diffuse quartz impregnations.

2+50N 2+25 to 2+50E

Porphyritic trachyandesite flow; with plagioclase phenocrysts An₃₇, partial epidote alteration, grain-margin reaction with matrix. Shredded biotite(?) altered to chlorite or epidote and carbonate. Matrix contains abundant flow aligned plagioclase microphenocrysts and microlites with interstitial K-rich material present but less abundant in stained slab than in most other specimens. Scattered blebs of calcite. Scattered small vugs lined with quartz crystals.

2+00N 1+00 to 1+25E (1) to (4)

- (1) Trachyandesite flow/crystal tuff; see general description, hematitic stained, chloritic, epidotized. Disseminated hematite grains and aggregates of grains. Widely scattered hairline quartz and hematite veinlets.
- (2) As above; see general description, crackle brecciated, filled or partly filled by quartz with open space quartz-lined cavities. Some diffuse silicification into the wall rock along the margins of the veins.
- (3) Similar to (2), more intense epidote alteration.
- (4) Similar to (2), more intense veining and silicification of wall rock. Late brecciation with quartz infilling among fragments.

XP 85-131 (1+10N 1+75E)

Porphyritic trachandesite/crystal tuff(?); see general description.

Some plagioclase phenocrysts partly resorbed or showing effects of reaction with matrix, (An 32 to 42), showing hematitic and sericitic alteration, lesser carbonate. Hematite also occurs as coarse disseminated grains and partly replacing mafic grains and as a finely divided dusting in matrix. Plagioclase microphenocrysts and microlites of matrix shows preferred orientation persisting throughout section/weakly felted.

1+00N BL

Porphyritic trachyandesite/crystal tuff; see general description, 30% hematite-stained feldspar phenocrysts with disseminated hematite grains in a chloritic, epidotized matrix.

1+00N 1+25E

Crystal lithic tuff breccia; composed of pliomictic lithic fragments and crystal fragments in a very fine fragmental hematite-stained matrix. Some fragments are epidotized and sericitic. Strong epidote alteration of mafic grains. Cut by quartz, epidote and hematite veinlets. Localized quartz impregnations.

86 GS-2 (1+00N 2+00E)

Porphyritic trachyandesite, see general description. Most plagioclase phenocrysts euhedral but many broken grains in a fine microporphyritic-microlitic matrix with "K-rich" interstitial material. Scattered hematite grains as phenocrysts and abundantly flecking the matrix. Plagioclase phenocrysts strongly to weakly carbonatized, weakly sericitic. Chloritic alteration of matrix interstitial to plagioclase microphenocrysts etc.

0+50N 1+75E

Porphyritic trachyandesite flow breccia with some nonporphyritic lithic fragments containing 25% mafic as acicular crystals in a felted arrangement. Plagioclase phenocrysts show strong carbonate, weak sericite, hematitic dusting. Sericite, carbonate clots. Weak diffuse quartz impregnation. Trace zircon.

See general description trachyandesite flow breccia.

III APLITE SUITE

86 ST-4-A (4+90N 1+10E)

Aplite crackle breccia. See general descriptions. Crackled, filled or partly filled with quartz, locally intensely brecciated/disrupted, bleaching (argillic alteration) associated with quartz veining and breccia infilling.

86 ST-4-B (4+90N 1+10E)

Aplite; See general description. Bleached argillic alteration containing diffuse remnants of less altered aplite. Weak crackle quartz-veining

MICROSCOPIC: See general description.

86 ST-4-C (4+90N 1+10E)

Aplite breccia; See general description. Aplite fragments (to 1 or 2cms) in a siliceous matrix. Fragments are argillic altered and less altered aplite fragments. Abundant vugs lined by quartz crystals and containing some sulphides.

4+50N 1+25E (4)

Aplite; see general descriptions. Cut by narrow pinching and swelling, branching quartz veinlets. Some bleaching, argillic alteration adjacent to quartz veinlets.

4+00N 1+25E (1) Suite #2

Argillic altered aplite; see general description and 4+00N 1+25E(a) Fine anhedral elongate argillic grains with clear outline and felted texture interstitial chloritic material. Contains zircon crystal (.05mm) surrounded by darkened "halo". Scattered brown mafic grains. Numerous pinpoint vugs with associated iron-staining.

4+00N 1+25E (2)

Aplite; See general descriptions. Granitic texture, bleaching by argillic alteration along irregular fractures, accompanied by iron-staining.

4+00N 1+25E (3)

Argillic altered aplite; bleached clay-like texture, fine granular, uniform, massive. Remnant altered feldspar crystals/fragments; quartz grains present, not conspicuous. See general descriptions. Almost completely argillic altered matrix showing patches of "K-rich" material almost completely altered to fibrous secondary mineral (See general description) with "K-rich" material still going into fairly uniform extinction with fibrous alteration superimposed.

4+00N 1+25E (5)

Hydrothermal aplite breccia; see general descriptions. Argillic altered aplite fragments in a siliceous matrix of several varieties including crystalline quartz and chalcedony. Some open space filling with inward directed quartz crystals. Altered aplite fragments with argillic altered outer margins with less altered aplite cores.

4+00N 1+25E (6)

Aplite; See general description. Weak layered fabric as a result of argillic alteration along former fractures.

4+00N 1+25E (7) and (7a)

Aplite crackle breccia, See general description.

4+00N 1+25E (b)

Argillic altered aplite, chalky texture, mottled pink, cream, light grey pinpoint drusyness layered appearance.

4+00N 1+25E (c)

Aplite; weak irregular layered appearance.

4+00N 1+25E (d)

Aplite; fine crystalline granitic texture.

4+00N 1+25E (e)

Aplite hydrothermal crackle breccia. Aplitic fragments fine crystalline to aphanitic containing composite grains-fragments. Crackle fractures filled or partly filled by quartz veinlets; open cavities with quartz crystals growing inwards.

Diffuse quartz veining accompanied by finer grain-size argillic alteration

4+00N 1+25E (f)

Aplite; shows diffuse chalky texture argillic alteration on two fracture surfaces in gradational contact with less altered aplite. See general description.

Mafic; -5%, irregular aggregates of grains, dark brown with greenish tint, locally weakly pleochroic with high birefringence when not masked by iron-stain. Probably some biotite. Trace of bladed aggregates of sericite (to 0.10mm). Less intensely altered K-rich matrix than most specimens. There are conspicuous bleached zones of argillic alteration $\frac{1}{4}$ " to $\frac{1}{2}$ " wide extending inwards from fracture surfaces. These zones have low K content and, in thin section, have abrupt (but not intrusive) contacts with K-rich groundmass.

4+00N 1+25E (h)

Argillic altered aplite

MICROSCOPIC See general description.

Strongly altered K-rich porphyritic aplite remnants in second stage "layered" argillic alteration with low K content.

4+00N 1+25E (i)

Altered aplite See general description.

The rock is impregnated by diffuse quartz veinlets associated with K-deficient argillic alteration consisting of linear zones of very fine-grained anhedral elongate interlocking weakly felted masses.

3+65N 1+45E (1) From west side of aplite complex

Aplite; See general description. Contains chloritic altered mafic clots and lithic fragments of plutonic texture. Some bleaching by argillic alteration accompanying quartz veining. Open space quartz-lined drusy cavities.

3+50N 1+50E

Aplite crackle breccia. See general aplite description.

Mafic; -5%, brown, iron-stained, shows strong birfringence and dark brown to light brown pleochroism locally, possibly biotite remnants with patches of much finer-grained aggregates of iron-stained sericite.

3+50N 1+50E to 1+75E

Aplite; See general descriptions.

Argillic alteration produces chalky texture. Flecked by iron-stained mafic (.02 to .05mm). Cut by quartz veinlets, discontinuous lines of quartz veinlets and scattered grains of interstitial quartz.

XP 85-130 (1+07N 1+80E)

Aplite; see general description.

1+00N 0+76E (1) and (2) (Suite of Specimens)

(1) Aplite crackle breccia; See general description. Sericitic component conspicuous, pseudomorphous after feldspar in graphic intergrowth with quartz. Close spaced quartz-filled crackles. Cut by wider quartz veins to 1 or 2cm.

(2) Aplite breccia as above, intensely brecciated, matrix composed of a core of chalcedony and coarse vitreous quartz. Iron-staining indication sulphides.

1+00N 1+25E (1)

Aplite breccia; see general description. Siliceous matrix. Crystal size differences suggest several generations of quartz. Later veining and impregnation.

1+00N 1+25E (2)

Aplite breccia; See general aplite description.

Aplite fragments in a "multistage" quartz matrix. Open space infilling of matrix by quartz. Aplite fragments show bleached, argillic alteration at contacts with quartz. K-rich matrix dusted by hematitic(?) alteration. Multistage quartz evident by zones of different grain-size. Generally anhedral to subhedral with euhedral crystals projecting inwards into open cavities.

0+50N 0+75E (22mNE)

Aplite; See general description.
Epidote in incipient fractures.

0+00 2+00E

Aplite; See general descriptions.

0+00 2+00E to 2+25E

Aplite; See general description. Few hairline quartz veinlets.

0+00 2+25E (1)

Aplite; See general description. Widely disseminated spots of epidote, irregular sericitic clots. Few very narrow quartz veinlets, minor interstitial quartz. Minor argillic alteration along fracture surfaces.

IV SILICIFIED BRECCIA SUITE

85 ST-3 (4+90N 0+95E)

Silicified breccia; some open space quartz but fairly uniform siliceous groundmass containing altered lithic fragments showing no appreciable "K" content. Fragments siliceous, generally very fine granular, dust-like dark material between grains (sulphides?), some sericitic feldspar. Chert-like fragments, probably also hydrothermal silica, some with hematitic stain. Finely disseminated sulphides.

REFLECTED LIGHT (2 polished thin sections)

Pyrite; -5% euhedral crystals (-0.01 to 0.5mm)

Sphalerite; -3% anhedral (-0.01 to 0.5mm), intergrown with galena, chalcopyrite, lesser pyrite.

Chalcopyrite; -1%, anhedral (-0.01 to 0.2mm) interstitial to pyrite and as exsolution in sphalerite.

Covellite; -0.5%, anhedral (-0.01 to 0.1mm) anhedral in cavities, rimming chalcopyrite, sphalerite.

Galena; -1%, anhedral, (-0.01 to 0.5mm) very irregular, interstitial to pyrite although occurs within a few pyrite grains, intergrown with sphalerite and chalcopyrite, contains blebs of chalcopyrite and pyrite.

86 ST-4-E (4+90N 1+10E)

Siliceous breccia, vein; medium crystalline and very fine siliceous (quartz-rich) fragments with some small argillic altered aplite fragments. Open space infilling with vugs lined by quartz. Disseminated pyrite, chalcopyrite, galena, sphalerite, chalcocite as determined in polished thin sections and polished sections.

85 ST-7 (2) and (3) (4+45N 1+17E)

(2) Siliceous breccia; containing altered fragments of aplitic complex and crystal lithic tuff or flow rock. Siliceous matrix, scattered sericitic segregations, mineralized by pyrite, chalcopyrite and black very finely divided unidentified material.

(3) Massive silicification with sulphide mineralization.

85 ST-7 (1) (4+45N 1+17E)

Aplite mylonite; aplitic lithic fragments, fine pink feldspar and rounded quartz grains in a mylonitic layered "glassy" or microgranular irregularly continuous groundmass. (Lacks shards and welded texture of a welded tuff) Some disseminated pyrite. Cut by hairline quartz veinlets.

85 ST-7-(1) & (2) Hanging wall of fault 4+45N 1+20E

(1) Mylonitic aplite; see general description. Strong altered diffuse aplitic fragments form irregular lensoids between wispy finely mylonitized layers which can be traced, with varied intensity and affected widths, through the section. (Lacks flattened pumice fragments and shards of a welded tuff) Disseminated pyrite.

85 ST-7 (2) (Continued)

(2) Breccia; siliceous, very finely pyritized groundmass of fine crystalline quartz containing widely scattered siliceous and argillic altered fragments cut by more finely brecciated zones of similar fragments in an iron-stained siliceous matrix.

XP85 - 104 (4+05N 1+17E)

Breccia; highly altered chloritic, epidotized pseudo(?) porphyritic lithic fragments in a siliceous matrix. Clusters of pyrite, galena and black non-metallic micaceous grains in quartz.

3+50N 1+25E to 4+00N 1+25E From west flank of Aplite Complex

- (1) Siliceous breccia; hematitic and less hematitic fragments from aplitic complex, permeated by silica with siliceous matrix between fragments. Few scattered pinpoint drusy cavities.
- (2) Breccia; bleached leucocratic, silicic and argillic altered lithic fragments, with crystal fragments in crushed crackle breccia with chlorite, (epidote) infilling. Iron stained, pitted, altered feldspar grains. Late diffuse siliceous veining.
- (3) Similar to (1) above, shows angular fragments of powder-like chlorite. Intensely silicified, permeated fragments and silica-rich matrix. Similar specimens to all of the above, with epidote coating fracture surfaces and forming discontinuous veinlets.

4+00N 1+25E (8) West flank of aplite body

Silicified breccia; Very fine to microgranular siliceous and hornfelsic silicified K-rich lithic fragments in a coarser crystalline quartz matrix.

The very fine to microgranular fragments contain light greenish grey interstitial low birefringent chloritic(?) material and as diffuse hairline veinlets.

Coarser grained crystal fragments of hornblende-like shredded lath-like grains and clusters of grains to 1st order yellow only. The rock is impregnated by silica and contains +5% euhedral pyrite disseminated throughout.

4+00N 1+25E (a) [Suite 1]

Hydrothermal Breccia; chalky textured argillic altered "aplitic" fragments in a siliceous pin-point drusy matrix, quartz crystals growing inwards into open spaces. Traces of iron staining.

XP85 - 111 (3+72N 1+20E)

Silicified breccia; altered hematitic and epidotized fragments in a brecciated siliceous groundmass.

XP 85-105 (3+70N 1+25E)

Siliceous aplite breccia; aplitic fragments, (see general description), chlorite/sericite flecks, segregations and "screens". Open cavities lined by quartz crystals. Iron staining.

XP85-106 (3+67N 1+31E)

Breccia; silicified aplite volcanic fragments (see general description) in a siliceous matrix. Cut by layers of argillic alteration which give the rock a bleached appearance, in association with quartz veins and segregations. Hematite in some quartz veins.

3+65N 1+45E (2) From west side of aplite complex

Silicified brecciated volcanic rock. Altered, silica impregnated volcanic lithic fragments with siliceous open space drusy matrix. Quartz veins. Iron-stained.

3+50N 1+25E (1)

Silicified aplite breccia, crackled argillic altered aplitic fragments in a siliceous matrix. Moderate iron-staining.

3+00N 1+50E to 2+00E

Silicified breccia; diffuse fragments (-1 to +2cm) weakly pseudo-porphyrific, silica impregnated, epidotized, chloritized. Disseminated pyrite. Iron-stained.

2+50N 0+75W (1)

Silicified breccia; dark porphyritic appearing fragments several cms, fine to medium feldspar phenocrysts in a light to medium grey siliceous, pyritic matrix. Cut by later composite quartz veins. Scattered drusy cavities. Iron-staining. Several generations of silicification and brecciation evident. Permeation by silica retaining former porphyritic/fragmental texture. Quartz veining. Late quartz-filled crackle brecciation. Open space drusy cavities. Abundant disseminated pyrite.

2+00N 2+00W (3)

Silicified breccia, altered trachyandesite porphyry/crystal tuff. Intensely epidotized breccia fragments in a siliceous (quartz) matrix. Disseminated pyrite. Iron-staining.

APPENDIX B

GEOPHYSICAL SURVEY NOTES

July 24/86

①

GOLDEN STRANGER MAGNETOMETER SURVEY

BASE @ 50 K 850 Y on 1000 scale

BASE

	STATION	TIME	GAMMAS	TIMELAPSE	CORR F.	DIFF	CORR T
	0+00	BL	600	0	0/17 (+40)	0	600 ⁴
	"	0+25W	825	1	1/17 (+40)	+7	827
	"	0+50W	330	2	2/17 (+40)	+5	335
	"	0+75W	420	3	3/17 (+40)	+7	427
	"	1+00W	660	4	4/17 (+40)	+9	669
	"	1+25W	980	5	5/17 (+40)	+12	992
	"	1+50W	1250	6	6/17 (+40)	+14	1264
	"	1+75W	1275	7	7/17 (+40)	+16	1291
	"	2+00W	1075	8	8/17 (+40)	+19	1094
	0+50N	2+00W	1425	9	9/17 (+40)	+21	1446
	"	1+75W	810	10	10/17 (+40)	+24	834
	"	1+50W	890	11	11/17 (+40)	+26	916
	"	1+25W	480	12	12/17 (+40)	+28	508
	"	1+00W	575	13	13/17 (+40)	+31	606
	"	0+75W	300	14	14/17 (+40)	+33	333
	"	0+50W	840	14	"	+33	873
	"	0+25W	1040	15	15/17 (+40)	+35	1075
	"	BL	1050	15	"	+35	1085
	0+25N	BL	1050	16	16/17 (+40)	+38	1088
BASE	0+00	BL	560	17	17/17 (+40)	+40	600 ^x
BASE	0+00	BL	560	0	0/40 (+20)+40	+40	600 ^x
	0+50N	0+25E	900	1	1/40 (+20)+40	+41	941
	"	0+50E	770	2	2/40 (+20)+40	+41	811
	"	0+75E	600	3	3/40 (+20)+40	+42	642
	"	1+00E	270	3	3/40 (+20)+40	+42	312
	"	1+25E	-130	5	5/40 (+20)+40	+43	-87
	"	1+50E	-200	5	5/40 (+20)+40	+43	-157
	"	1+75E	-240	6	6/40 (+20)+40	+43	-197
	"	2+00E	-260	7	7/40 (+20)+40	+44	-216
	"	2+25E	-220	8	8/40 (+20)+40	+44	-176
	"	2+50E	-60	9	9/40 (+20)+40	+45	-15
	"	2+75E	-130	9	9/40 (+20)+40	+45	-85
	"	3+00E	-110	10	10/40 (+20)+40	+45	-65

Plotted
Sept 17/86

SEPT 17/86

GOLDEN STRANGER MAGNETOMETER SURVEY (CONT)

STATION		TIME	GAMMAS	TIME LAPSE	CORR F	DIFF	CORR Y
1+00N	3+00E	11:54	-10	11	11/40 (+20)+40	+46	+36 ✓
"	2+75E	11:55	-60	12	12/40 (+20)+40	+46	-14 ✓
"	2+50E	11:56	+60	13	13/40 (+20)+40	+47	+107 ✓
"	2+25E	11:57	-110	14	14/40 (+20)+40	+47	-63 ✓
"	2+00E	11:57	-150	14	14/40 (+20)+40	+47	-103 ✓
"	1+75E	11:58	-110	15	15/40 (+20)+40	+48	-62 ✓
"	1+50E	11:59	-170	16	16/40 (+20)+40	+48	-122 ✓
"	1+25E	12:00	-160	17	17/40 (+20)+40	+49	-111 ✓
"	1+00E	12:01	+10	18	18/40 (+20)+40	+49	+59 ✓
"	0+76E	12:02	+425	19	19/40 (+20)+40	+50	+475 ✓
"	0+47E	12:03	+440	20	20/40 (+20)+40	+50	+490 ✓
"	0+25E	12:04	+290	21	21/40 (+20)+40	+51	+341 ✓
"	BL	12:05	+410	22	22/40 (+20)+40	+51	+461 ✓
0+75N	BL	12:06	+440	23	23/40 (+20)+40	+52	+491 ✓
1+00N	0+25W	12:07	+260	24	24/40 (+20)+40	+52	+312 ✓
"	0+50W	12:07	+150	24	24/40 (+20)+40	+52	+202 ✓
"	0+75W	12:08	+470	25	25/40 (+20)+40	+53	+523 ✓
"	1+00W	12:09	+460	26	26/40 (+20)+40	+53	+513 ✓
"	1+25W	12:10	+690	27	27/40 (+20)+40	+54	+744 ✓
"	1+50W	12:11	+535	28	28/40 (+20)+40	+54	+589 ✓
"	1+75W	12:12	+200	29	29/40 (+20)+40	+55	+255 ✓
"	2+00W	12:13	+230	30	30/40 (+20)+40	+55	+385 ✓
0+50S	2+00W	12:15	+730	32	32/40 (+20)+40	+56	+786 ✓
"	1+75W	12:16	+530	33	33/40 (+20)+40	+57	+587 ✓
"	1+50W	12:17	+830	34	34/40 (+20)+40	+57	+887 ✓
"	1+25W	12:17	+925	34	34/40 (+20)+40	+57	+982 ✓
"	1+00W	12:18	+810	35	35/40 (+20)+40	+58	+868 ✓
"	0+75W	12:19	+170	36	36/40 (+20)+40	+58	+228 ✓
"	0+50W	12:20	+70	37	37/40 (+20)+40	+59	+129 ✓
"	0+25W	12:21	+195	38	38/40 (+20)+40	+59	+254 ✓
"	BL	12:21	+270	38	38/40 (+20)+40	+59	+329 ✓
0+25S	BL	12:22	+200	39	39/40 (+20)+40	+60	+260 ✓
BASE	0+00	BL	+540	40	40/40 (+20)+40	+60	+600 *

Plotted
Sept 17/86

SEPT 17/86 (3)

GOLDEN STRANGER MAGNETOMETER SURVEY (CONT)

STATION	TIME	GAMMAS	TIME LAG	CORR F	DIFF	CORR S		
BASE	0+00	BL	12:23	+540	0	$\frac{0}{22}(+10)+60$	+60	+600
0+00	0+25 E	12:25	+820	2	$\frac{2}{22}(+10)+60$	+61	+881	
"	0+50 E	12:26	+215	3	$\frac{3}{22}(+10)+60$	+61	+276	
"	0+75 E	12:27	+385	4	$\frac{4}{22}(+10)+60$	+62	+447	
"	1+00 E	12:27	+225	4	$\frac{4}{22}(+10)+60$	+62	+287	
"	1+25 E	12:28	+110	5	$\frac{5}{22}(+10)+60$	+62	+172	
"	1+50 E	12:29	+50	6	$\frac{6}{22}(+10)+60$	+63	+113	
"	1+75 E	12:30	-210	7	$\frac{7}{22}(+10)+60$	+63	-147	
"	2+00 E	12:30	-160	7	$\frac{7}{22}(+10)+60$	+63	-97	
"	2+25 E	12:31	-325	8	$\frac{8}{22}(+10)+60$	+64	-261	
"	2+50 E	12:32	-195	9	$\frac{9}{22}(+10)+60$	+64	-131	
"	2+75 E	12:33	-240	10	$\frac{10}{22}(+10)+60$	+65	-175	
"	3+00 E	12:33	-325	10	$\frac{10}{22}(+10)+60$	+65	-260	
0+50S	3+00 E	12:35	-380	12	$\frac{12}{22}(+10)+60$	+65	-315	
"	2+75 E	12:36	-300	13	$\frac{13}{22}(+10)+60$	+66	-234	
"	2+50 E	12:36	-410	13	$\frac{13}{22}(+10)+60$	+66	-344	
"	2+25 E	12:37	-330	14	$\frac{14}{22}(+10)+60$	+66	-264	
"	2+00 E	12:38	-230	15	$\frac{15}{22}(+10)+60$	+67	-163	
"	1+75 E	12:39	-110	16	$\frac{16}{22}(+10)+60$	+67	-43	
"	1+50 E	12:40	+30	17	$\frac{17}{22}(+10)+60$	+68	+98	
"	1+25 E	12:41	+630	18	$\frac{18}{22}(+10)+60$	+68	+698	
"	1+00 E	12:42	+160	19	$\frac{19}{22}(+10)+60$	+69	+229	
"	0+75 E	12:42	+330	19	$\frac{19}{22}(+10)+60$	+69	+399	
"	0+50 E	12:43	+320	20	$\frac{20}{22}(+10)+60$	+69	+389	
"	0+25 E	12:44	+270	21	$\frac{21}{22}(+10)+60$	+70	+340	
"	BL	12:44	+260	21	$\frac{21}{22}(+10)+60$	+70	+330	
0+25S	BL	12:45	+200	22	$\frac{22}{22}(+10)+60$	+70	+270	
BASE	0+00	BL	12:45	+530	22	$\frac{22}{22}(+10)+60$	+70	+600
BASE	0+00	BL	1:06	+500	0	$\frac{0}{26}(+10)+100$	+100	+600
0+75S	BL	1:07	-30	1	$\frac{1}{26}(+10)+100$	+100	+70	
1+00S	BL	1:08	+490	2		+100	+590	
0+87.5S	BL	1:10	+310	4		+100	+410	
0+67.5S	BL	1:10	+90	4		+100	+190	
0+50S	BL	1:11	+27	5		+100	+127	

Plotted Sep

SEPT 17/86

GOLDEN STRANGER MAGNETMETER SURVEY (CONT)

④

	STATION	TIME	GAMMAS	TIME LASE	CORR F	DIFF	CORR γ
	1+00 S	0+25W	1:12	+65	6	+100	+165
	"	0+50W	1:13	+500	7	+100	+600
	"	0+75W	1:13	+670	7	+100	+770
	"	1+00W	1:14	+630	8	+100	+730
	"	1+25W	1:15	+400	9	+100	+500
	"	1+50W	1:15	+470	9	+100	+570
	"	1+75W	1:16	+620	10	+100	+720
	"	2+00W	1:17	+380	11	+100	+480
	1+50 S	2+00W	1:18	+420	12	+100	+520 ✓
	"	1+75W	1:19	+850	13	+100	+950 ✓
	"	1+50W	1:20	+630	14	+100	+730
	"	1+25W	1:21	+525	15	+100	+625
	"	1+00W	1:21	+690	15	+100	+790
	"	0+75W	1:22	+540	16	+100	+640
	"	0+50W	1:22	+510	16	+100	+610
	"	0+25W	1:23	+550	17	+100	+650
	"	BL	1:24	+400	18	+100	+500
	1+25 S	BL	1:24	+730	18	+100	+830
	1+00 S	BL	1:26	+460	20	+100	+560
	1+00 S	0+25E	1:26	+200	20	+100	+300
	"	0+50E	1:27	+10	21	+100	+110
	"	0+75E	1:28	+330	22	+100	+430
	"	1+00E	1:29	+460	23	+100	+560
	"	1+25E	1:29	+275	23	+100	+375
	"	1+50E	1:30	-50	24	+100	+50
	"	1+67.5E	1:30	+240	24	+100	+340
	"	1+75E	1:31	+40	25	+100	+140
	"	2+00E	1:32	-40	26	+100	+60
	"	2+25E	1:33	-360	27	+100	-260
	"	2+50E	1:34	-280	28	+100	-180
	"	2+75E	1:34	-350	28	+100	-250
	"	3+00E	1:35	-430	29	+100	-330
	1+50 S	3+00E	1:36	-550	30	+100	-450
	"	2+75E	1:37	-520	31	+100	-420

GOLDEN STRANGER MAGNETOMETER SURVEY (CONT)

Sept 17/86

(5)

STATION		TIME	GAMMAS	TIME LASE	CORR F	DIFF	CORR Y
1+50S	2+50E	1:38	-260	32		+100	-160
"	2+25E	1:39	-190	33		+100	-90
"	2+12.5E	1:40	+220	34		+100	+320
"	2+00E	1:40	-100	34		+100	0
"	1+87.5E	1:41	-80	35		+100	+20
"	1+75E	1:41	+50	35		+100	+150
"	1+62.5E	1:42	+190	36		+100	+290
"	1+50E	1:42	-40	36		+100	+60
"	1+37.5E	1:43	+40	37		+100	+140
"	1+25E	1:44	-40	38		+100	+60
"	1+00E	1:45	+240	39		+100	+340
"	0+75E	1:45	-60	39		+100	+40
"	0+50E	1:46	+370	40		+100	+470
"	0+25E	1:47	+420	41		+100	+520
"	BL	1:48	+410	42		+100	+510
1+25S	BL	1:50	+740	44		+100	+840
2+00S	2+00W	1:54	+235	48		+100	+235
"	1+75W	1:57	+270	51		+150	+370
"	1+50W	1:58	+430	52		+100	+530
"	1+25W	1:59	+295	53		+100	+395
"	1+00W	2:00	+450	54		+100	+550
"	0+75W	2:00	+215	54		+100	+315
"	0+50W	2:01	+50	55		+100	+150
"	0+25W	2:02	-10	56		+100	+90
"	BL	2:03	+100	57		+100	+200
1+75S	BL	2:04	+130	58		+100	+230
2+00S	0+25E	2:06	+230	60		+100	+330
"	0+50E	2:06	-40	60		+100	+60
"	0+75E	2:07	-130	61		+100	-30
"	1+00E	2:08	-90	62		+100	+10
"	1+25E	2:09	-240	63		+100	-140
"	1+50E	2:10	-310	64		+100	-210
"	1+75E	2:11	-440	65		+100	-340
"	2+00E	2:12	-540	66		+100	-440

Plotted 5/17

STATION		TIME	GAMMAS	TIME LASE	CORR F	DIFF	CORR Y
2+00 S	2+25 E	2:13	-720	67		+100	-620
"	2+50 E	2:14	-780	68		+100	-680
"	2+75 E	2:15	-790	69		+100	-690
"	3+00 E	2:15	-740	69		+100	-640
BASE	0+00	BL	2:23	+500	76	+100	+600*
AUGUST 4 / 86							
BASE	0+00	BL	11:33	+400	0	0/105(-110)+200	+200 +600*
1+50 N	2+00 W	11:42	-120	9	9/105(-110)+200	+191	+071
"	1+75 W	11:45	-020	12	12/105(-110)+200	+187	+167
"	1+50 W	11:47	+125	14	14/105(-110)+200	+185	+310
"	1+25 W	11:49	+25	16	16/105(-110)+200	+183	+208
"	1+00 W	11:50	+140	17	17/105(-110)+200	+182	+322
"	0+75 W	11:52	+210	19	19/105(-110)+200	+180	+390
"	0+50 W	11:54	-160	21	21/105(-110)+200	+178	+018
"	0+25 W	11:56	0	23	23/105(-110)+200	+176	+176
"	BL	11:58	+020	25	25/105(-110)+200	+174	+194
"	0+25 E	12:00	+360	27	27/105(-110)+200	+172	+532
"	0+50 E	12:02	-120	29	29/105(-110)+200	+170	+50
"	0+75 E	12:05	-220	32	32/105(-110)+200	+166	-54
"	1+00 E	12:06	-290	33	33/105(-110)+200	+165	-125
"	1+25 E	12:08	-420	35	35/105(-110)+200	+163	-257
"	1+50 E	12:13	+130	40	40/105(-110)+200	+158	+288
"	1+75 E	12:15	-110	42	40/105(-110)+200	+158	+048
"	2+00 E	12:17	+40	44	44/105(-110)+200	+154	+194
"	2+25 E	12:19	+380	46	46/105(-110)+200	+152	+532
"	2+50 E	12:21	+240	48	48/105(-110)+200	+150	+390
"	2+75 E	12:23	-240	50	50/105(-110)+200	+148	-92
"	3+00 E	12:26	+120	53	53/105(-110)+200	+144	+264
2+00 N	3+00 E	12:29	-180	56	54/105(-110)+200	+141	-039
"	2+75 E	12:32	-210	59	57/105(-110)+200	+138	-074
"	2+50 E	12:34	-410	61	61/105(-110)+200	+136	-274
"	2+25 E	12:36	-225	63	63/105(-110)+200	+134	-091
"	2+00 E	12:38	-510	65	65/105(-110)+200	+132	-378
"	1+75 E	12:40	-500	67	67/105(-110)+200	+130	-370

GOLDEN STRANGER MAGNETOMETER SURVEY.

STATION		TIME	GAMMAS	TIME LASE	CORR F	DIFF	CORR Y
2+00N	1+50E	12:42	-480	69	$\frac{69}{105}(-110)+200$	+128	-352
"	1+25E	12:44	-400	71	$\frac{71}{105}(-110)+200$	+126	-274
"	1+00E	12:47	-350	74	$\frac{74}{105}(-110)+200$	+122	-228
"	0+75E	12:49	-390	76	$\frac{76}{105}(-110)+200$	+120	-270
"	0+50E	12:51	-420	78	$\frac{78}{105}(-110)+200$	+118	-302
"	0+25E	12:53	-380	80	$\frac{80}{105}(-110)+200$	+116	-264
"	BL	12:55	-350	82	$\frac{82}{105}(-110)+200$	+114	-236
"	0+25W	12:57	-290	84	$\frac{84}{105}(-110)+200$	+112	-178
"	0+50W	12:59	-260	86	$\frac{86}{105}(-110)+200$	+110	-150
"	0+75W	1:00	-260	87	$\frac{87}{105}(-110)+200$	+109	-151
"	1+00W	1:02	-220	89	$\frac{89}{105}(-110)+200$	+107	-113
"	1+25W	1:04	-280	91	$\frac{91}{105}(-110)+200$	+105	-175
"	1+50W	1:06	-150	93	$\frac{93}{105}(-110)+200$	+103	-047
"	1+75W	1:08	-150	95	$\frac{95}{105}(-110)+200$	+100	-050
"	2+00W	1:10	-190	97	$\frac{97}{105}(-110)+200$	+99	-091
BASE	0+00	BL	+510	105	$\frac{105}{105}(-110)+200$	+90	+600*
WED AUG 6/86							
BASE	0+00	BL	+520	0	$\frac{0}{93}(-20)+80$	+80	+600
3+50N	BL	2:20	-490	8	$\frac{8}{93}(-20)+80$	+78	-412
"	0+25E	2:22	-480	10	$\frac{10}{93}(-20)+80$	+78	-402
"	0+50E	2:23	-470	11	$\frac{11}{93}(-20)+80$	+78	-392
"	0+75E	2:25	-450	13	$\frac{13}{93}(-20)+80$	+77	-373
"	1+00E	2:27	-440	15	$\frac{15}{93}(-20)+80$	+77	-363
"	1+25E	2:28	-440	16	$\frac{16}{93}(-20)+80$	+77	-363
"	1+50E	2:30	-450	18	$\frac{18}{93}(-20)+80$	+76	-374
"	1+75E	2:31	-490	19	$\frac{19}{93}(-20)+80$	+76	-414
"	2+00E	2:33	-450	21	$\frac{21}{93}(-20)+80$	+75	-375
4+00N	1+00E	2:43	-440	31	$\frac{31}{93}(-20)+80$	+73	-367
"	0+75E	2:45	-430	33	$\frac{33}{93}(-20)+80$	+73	-357
"	0+50E	2:46	-420	34	$\frac{34}{93}(-20)+80$	+73	-347
"	0+25E	2:47	-490	35	$\frac{35}{93}(-20)+80$	+72	-418
"	1+25E	2:50	-420	38	$\frac{38}{93}(-20)+80$	+72	-348
"	1+50E	2:52	-470	40	$\frac{40}{93}(-20)+80$	+71	-399
"	1+75E	2:54	-480	42	$\frac{42}{93}(-20)+80$	+71	-409
"	2+00E	2:56	-470	44	$\frac{44}{93}(-20)+80$	+71	-399

STATION		TIME	GAMMAS	TIME LATE	CORR F.	DIFF	CORR Y
4+50 N	2+00 E	3:01	-380	49	$\frac{49}{93}(-20) + 80$	+69	-311
"	1+75 E	3:03	-320	51	$\frac{51}{93}(-20) + 80$	+69	-251
"	1+50 E	3:04	-330	52	$\frac{52}{93}(-20) + 80$	+69	-261
"	1+25 E	3:06	-440	54	$\frac{54}{93}(-20) + 80$	+68	-372
"	1+00 E	3:08	-420	56	$\frac{56}{93}(-20) + 80$	+68	-352
"	0+75 E	3:09	-420	57	$\frac{57}{93}(-20) + 80$	+68	-352
"	0+50 E	3:11	-420	59	$\frac{59}{93}(-20) + 80$	+67	-353
"	0+25 E	3:12	-480	60	$\frac{60}{93}(-20) + 80$	+67	-413
5+00 N	1+00 E	3:16	-360	64	$\frac{64}{93}(-20) + 80$	+66	-294
"	1+25 E	3:18	-400	66	$\frac{66}{93}(-20) + 80$	+66	-334
"	1+50 E	3:20	-400	68	$\frac{68}{93}(-20) + 80$	+65	-335
"	1+75 E	3:22	-460	70	$\frac{70}{93}(-20) + 80$	+65	-395
"	2+00 E	3:23	-400	71	$\frac{71}{93}(-20) + 80$	+65	-335
5+50 N	2+00 E	3:27	-460	75	$\frac{75}{93}(-20) + 80$	+64	-396
	1+75 E	3:29	-460	77	$\frac{75}{93}(-20) + 80$	+64	-396
	1+50 E	3:32	-420	80	$\frac{80}{93}(-20) + 80$	+63	-357
	1+25 E	3:33	-400	81	$\frac{81}{93}(-20) + 80$	+63	-337
	1+00 E	3:34	-280	82	$\frac{82}{93}(-20) + 80$	+62	-218
BASE	0+00	BL.	+540	93	$\frac{93}{93}(-20) + 80$	+60	600

AUG 4/86

BASE

STATION	TIME	GAMMAS	LAPSED TIME	CORR F.	DIFF	CORR Y
0+00	BL	3:07	0	$\frac{0}{61} (+80) + 80$	+80	600
2+50N	2+00W	3:17	10	$\frac{10}{61} (+80) + 80$	+93	-297
"	1+75W	3:21	14	$\frac{14}{61} (+80) + 80$	+98	-292
"	1+50W	3:22	16	$\frac{16}{61} (+80) + 80$	+101	-279
"	1+25W	3:24	18	$\frac{18}{61} (+80) + 80$	+104	-296
"	1+00W	3:26	20	$\frac{20}{61} (+80) + 80$	+106	-354
"	0+75W	3:28	22	$\frac{22}{61} (+80) + 80$	+109	-371
"	0+50W	3:29	23	$\frac{23}{61} (+80) + 80$	+110	-350
"	0+25W	3:31	25	$\frac{25}{61} (+80) + 80$	+113	-437
"	BL	3:32	26	$\frac{26}{61} (+80) + 80$	+114	-366
"	0+25E	3:34	28	$\frac{28}{61} (+80) + 80$	+117	-328
"	0+50E	3:37	30	$\frac{30}{61} (+80) + 80$	+119	-341
"	0+75E	3:42	35	$\frac{35}{61} (+80) + 80$	+126	-284
"	1+00E	3:44	37	$\frac{37}{61} (+80) + 80$	+129	-341
"	1+25E	3:46	39	$\frac{39}{61} (+80) + 80$	+131	-389
"	1+50E	3:47	40	$\frac{40}{61} (+80) + 80$	+132	-318
"	1+75E	3:49	42	$\frac{42}{61} (+80) + 80$	+135	-405
"	2+00E	3:50	43	$\frac{43}{61} (+80) + 80$	+136	-434
"	2+25E	3:52	45	$\frac{45}{61} (+80) + 80$	+139	-411
"	2+50E	3:54	47	$\frac{47}{61} (+80) + 80$	+142	-198
"	2+75E	3:56	49	$\frac{49}{61} (+80) + 80$	+144	-136
"	3+00E	3:58	51	$\frac{51}{61} (+80) + 80$	+147	-063
BASE	0+00	BL	4:08	$\frac{61}{61} (+80) + 80$	160	600*

GOLDEN STRANGER.
MAGNETOMETER SURVEY

JULY 29/86

	STATION		TIME	GAMMAS	TIME LAPSE	CORR F	CORR Y
	0+00	BL	10:50	510	0	+90	600
✓	1+00N	BL	10:55	470 +89	5	$\frac{5}{107} \begin{matrix} -1 \\ (+30) \end{matrix}$ +90	+ 559
✓	1+25N	BL	11:00	310 +87	10	$\frac{10}{107} \begin{matrix} -3 \\ (+30) \end{matrix}$ +90	+ 397
✓	1+50N	BL	11:02	030 +87	12	$\frac{12}{107} \begin{matrix} -3 \\ (+30) \end{matrix}$ +90	+ 117
✓	1+75N	BL	11:05	- 050 +86	15	$\frac{15}{107} \begin{matrix} -4 \\ (+30) \end{matrix}$ +90	+ 36
✓	2+00N	BL	11:07	- 330 +85	17	$\frac{17}{107} \begin{matrix} -5 \\ (30) \end{matrix}$ +90	- 245
✓	2+25N	BL	11:10	- 400 +84	20	$\frac{20}{107} \begin{matrix} -6 \\ (30) \end{matrix}$ +90	- 316
✓	2+50N	BL	11:11	- 440 +84	21	$\frac{21}{107} \begin{matrix} -6 \\ (30) \end{matrix}$ +90	- 356
✓	2+75N	BL	11:14	- 480 +83	24	$\frac{24}{107} \begin{matrix} -7 \\ (30) \end{matrix}$ +90	- 397
✓	3+00N	BL	11:16	- 410 +83	26	$\frac{26}{107} \begin{matrix} -7 \\ (30) \end{matrix}$ +90	- 327
✓	3+25N	BL	11:20	- 500 +82	30	$\frac{30}{107} \begin{matrix} -8 \\ (30) \end{matrix}$ +90	- 418
	3+00N	2+00W	11:26	- 400 +80	36	$\frac{36}{107} \begin{matrix} -10 \\ (90) \end{matrix}$ +90	- 320
	"	1+75W	11:28	- 430 +79	38	$\frac{38}{107} \begin{matrix} -11 \\ (30) \end{matrix}$ +90	- 351
	"	1+50W	11:30	- 380 +79	40	$\frac{40}{107} \begin{matrix} -11 \\ (30) \end{matrix}$ +90	- 301
	"	1+25W	11:32	- 410 +78	42	$\frac{42}{107} \begin{matrix} -11 \\ (30) \end{matrix}$ +90	- 332
	"	1+00W	11:34	- 550 +78	44	$\frac{44}{107} \begin{matrix} -12 \\ (30) \end{matrix}$ +90	- 472
	"	0+75W	11:35	- 530 +77	45	$\frac{45}{107} \begin{matrix} -13 \\ (30) \end{matrix}$ +90	- 453
	"	0+50W	11:37	- 570 +77	47	$\frac{47}{107} \begin{matrix} -13 \\ (30) \end{matrix}$ +90	- 493
	"	0+25W	11:39	- 410 +76	49	$\frac{49}{107} \begin{matrix} -14 \\ (30) \end{matrix}$ +90	- 334
	3+00N	BL	11:41	- 430 +76	51	$\frac{51}{107} \begin{matrix} -14 \\ (30) \end{matrix}$ +90	- 354
	"	0+25E	11:43	- 350 +75	53	$\frac{53}{107} \begin{matrix} -15 \\ (30) \end{matrix}$ +90	- 275
	"	0+50E	11:45	- 440 +75	55	$\frac{55}{107} \begin{matrix} -15 \\ (30) \end{matrix}$ +90	- 365
	"	0+75E	11:48	- 410 +74	58	$\frac{58}{107} \begin{matrix} -16 \\ (30) \end{matrix}$ +90	- 336
	"	1+00E	11:50	- 420 +73	60	$\frac{60}{107} \begin{matrix} -17 \\ (30) \end{matrix}$ +90	- 347
	"	1+25E	11:51	- 450 +73	61	$\frac{61}{107} \begin{matrix} -17 \\ (30) \end{matrix}$ +90	- 377
	"	1+50E	11:53	- 410 +72	63	$\frac{63}{107} \begin{matrix} -18 \\ (30) \end{matrix}$ +90	- 338
	"	1+75E	11:56	- 450 +71	66	$\frac{66}{107} \begin{matrix} -19 \\ (30) \end{matrix}$ +90	- 379
	"	2+00E	11:58	- 460 +71	68	$\frac{68}{107} \begin{matrix} -19 \\ (30) \end{matrix}$ +90	- 389
	"	2+25E	12:02	- 410 +70	72	$\frac{72}{107} \begin{matrix} -20 \\ (30) \end{matrix}$ +90	- 340
	"	2+50E	12:08	- 270 +68	78	$\frac{78}{107} \begin{matrix} -22 \\ (30) \end{matrix}$ +90	- 202
	"	2+75E	12:14	- 300 +66	84	$\frac{84}{107} \begin{matrix} -24 \\ (30) \end{matrix}$ +90	- 234
	"	3+00E	12:16	+ 310 +66	86	$\frac{86}{107} \begin{matrix} -24 \\ (30) \end{matrix}$ +90	- 244
✓	0+00	BL	12:37	+ 540 +60	107	-30 - 490	600

AUG 11/86

GOLDEN STRANGER
VLF-EM SEATTLE.

LINE 5+00N
LINE 5+50N

①

LOCATION	DIP	FRASER-1	FRASER-2	FIL DIP	TIME	CORR FAC	CORR F
0+00 BL	-2				10:11	205 -5	200
5+00N 1+00E	-12	$(-12) + (-14)$	-26		11:37	225	
" 1+25E	-14	$(-14) + (-17)$	-31	$(-31) - (-26)$	-5	11:34	210
" 1+50E	-17	$(-17) + (-14)$	-31	$(-28) - (-31)$	+3	11:32	200
" 1+75E	-14	$(-14) + (-14)$	-28			11:29	200
" 2+00E	-14				11:27	200	
5+50N 1+00E	-13	$(-13) + (-11)$	-24		11:44	210	
" 1+25E	-11	$(-11) + (-15)$	-26	$(-29) - (-24)$	-5	11:48	205
" 1+50E	-15	$(-15) + (-14)$	-29	$(-31) - (-26)$	-5	11:50	210
" 1+75E	-14	$(-14) + (-17)$	-31			11:52	205
" 2+00E	-17				11:53	205	
0+00 BL	0				12:13	200	

GOLDEN STRANGER
VLF-EM SEATTLE.

LINE 3+50N
LINE 4+00N
LINE 4+50N

(2)

AUG 11/86

LOCATION	DIP	FRASER-1	FRASER-2	FIL DIP	TIME	CORR FAC	CORR F.
0+00 BL	-2				10:11	205 -5	200
3+50N BL	-3	-3 +(-2)	-5		10:22	230	
" 0+25E	-2	-2 +(-3)	-5	-8 -(-5)	10:24	225	
" 0+50E	-3		-8	-9 -(-5)	10:26	230	
" 0+75E	-5		-9	-12 -(-8)	10:28	230	
" 1+00E	-4		-12	-18 -(-9)	10:31	230	
" 1+25E	-8		-18	-21 -(-12)	10:32	235	
" 1+50E	-10		-21	-21 -(-18)	10:34	220	
" 1+75E	-11		-21		10:36	205	
" 2+00E	-10				10:38	205	
0+00 BL	0				12:13	200	
4+00N BL	-5		-11		10:58	220	
" 0+25E	-6		-11		10:56	220	
" 0+50E	-5		-11	0	10:54	220	
" 0+75E	-6		-10	+1	10:52	220	
" 1+00E	-4		-12	-19 -(-10)	10:50	225	
" 1+25E	-8		-19	-22 -(-12)	10:47	220	
" 1+50E	-11		-22		10:45	215	
" 1+75E	-11				10:43	205	
4+50N BL	-9		-15		11:02	210	
" 0+25E	-6		-13	-15 -(-15)	11:04	215	
" 0+50E	-7		-15	-16 -(-13)	11:06	215	
" 0+75E	-8		-16	-17 -(-15)	11:08	225	
" 1+00E	-8		-17	-23 -(-16)	11:10	225	
" 1+25E	-9		-23	-27 -(-17)	11:13	215	
" 1+50E	-14		-27	-27 -(-23)	11:15	220	
" 1+75E	-13		-27		11:17	210	
" 2+00E	-14				11:19	205	

LINE 3+50N

LINE 4+00N

LINE 4+50N

GOLDEN STRANGER.

LINE 3+00N

(3)

VLF-EM SEATTLE. AZIMUTH $\approx 160^\circ$



LOCATION	DIP	FRASER 1	FRASER 2	FIL	DIP	TIME	CORR FAC.	CORR FS
0+00 BL	+2					11:24	225 (-25)	200
JULY 30/86 3+50N BL	0	(0)+(0)	0			10:33 (17/60)		
3+25N BL	0	(0)+(0)	0	0-0	0	10:34 (18/60)		
3+00N BL	0	(0)+(0)	0	(-1)-(0)	-1	10:29 (19/60)		
2+75N BL	U	0+(-1)	=-1	(+1)-(0)	+1	10:22 (20/60)		
2+50N BL	1 E	(-1)+(2)	+1	(+3)-(-1)	+4	10:26 (21/60)		
2+25N BL	2 W	(+2)+(1)	+3	(+2)-(+1)	+1	10:25 (22/60)		
2+00N BL	1 W	(+1)+(1)	+2	(+3)-(+3)	-0	10:24 (23/60)		
1+75N BL	1 W	(+1)+(2)	+3	(+2)-(+2)	-0	10:22 (24/60)		
1+50N BL	2 W	(+2)+(0)	+2	(+2)-(+3)	-1	10:21 (25/60)		
1+25N BL	0	(0)+(2)	+2			10:19 (26/60)		
1+00N BL	2 W					10:18 (27/60)	210 - 7/60 (25)	
0+00 BL	0					10:16	200	200
3+00N 2+00W	0	0+(-1)	-1			10:38 (22/60)	-24/60 (25)	
" 1+75W	1 E	-1+(-1)	-2	(+1)-(-1)	+2	10:39 (23/60)	-24/60 (25)	
" 1+50W	1 E	-1+(+2)	+1	(0)-(-2)	+2	10:40 (24/60)	-24/60 (25)	
REV " 1+25W	2 W	+2+(-2)	0	(-2)-(+1)	-1	10:42 (25/60)	-24/60 (25)	
" 1+00W	2 E	(-2)+(0)	-2	(-3)-0	-3	10:45 (26/60)	-29/60 (25)	
" 0+75W	0	0+(-3)	-3	(-4)-(-2)	-2	10:47 (27/60)		
REV " 0+50W	3 E	(-3)+(-1)	-4	(-1)-(-3)	+2	10:48 (28/60)		
" 0+25W	1 E	(-1)+(0)	-1	(+1)-(+1)	+5	10:50 (29/60)		
REV " BL	0	(0)+(1)	+1	(+2)-(-1)	+3	10:52 (30/60)		
" 0+25E	1 W	(+1)+(1)	+2	(+1)-(+1)	-0	10:53 (31/60)		
" 0+50E	1 W	(+1)+(0)	+1	(-1)-(+2)	-3	10:55 (32/60)		
" 0+75E	0	0+(-1)	-1	(-7)-(+1)	-8	10:57 (33/60)		
" 1+00E	1 E	(-1)+(-6)	-7	(-13)-(-1)	-12	10:59 (34/60)		
" 1+25E	6 E	(-6)+(-7)	-13	(-14)-(-7)	-7	11:01 (35/60)		
" 1+50E	7 E	(-7)+(-7)	-14	(-14)-(-13)	-1	11:03 (36/60)		
" 1+75E	7 E	(-7)+(-7)	-14	(-15)-(-14)	-1	11:05 (37/60)		
REV " 2+00E	7 E	(-7)+(-8)	-15	(-14)-(-14)	-0	11:07 (38/60)		
" 2+25E	8 E	(-8)+(-6)	-14	(-9)-(-15)	+6	11:09 (39/60)		
" 2+50E	6 E	(-6)+(-3)	-9	(-6)-(-14)	+8	11:11 (40/60)		
" 2+75E	3 E	(+3)+(-3)	-6			11:13 (41/60)		
" 3+00E	3 E					11:14 (42/60)		
0+00 BL	2 W					11:24	225 -25	200

BASE LINE

3+00N LINE

Aug 2/86

GOLDEN STRANGER.
VLF-EM SEATTLE.

LINE 2+50N ④

LINE 2+50N

LOCATION	DIP	FRASER-1	FRASER-2	FIL DIP	TIME	CORR FAC	CORR P
0+00 BL	-1				9:50	200	200
2+50N 2+00W	0	0 + (-1)	-1		11:04	220	
" 1+75W	-1	(-1) + (-2)	-3	-4 - (-1)	11:05	215	
" 1+50W	-2	(-2) + (-2)	-4	-3 - (-3)	11:07	215	
" 1+25W	-2	(-2) + (-1)	-3	+2 - (-4)	11:09	215	
" 1+00W	-1	(-1) + (+5)	+4	+4 - (-3)	11:10	205	
" 0+75W	+5	(+5) + (-1)	+4	-4 - (+4)	11:12	220	
" 0+50W	-1	(-1) + (-3)	-4	-4 - (+4)	11:13	230	
" 0+25W	-3	(-3) + (-1)	-4	+2 - (-4)	11:15	225	
2+50N BL	-1	(-1) + (+3)	+2	+5 - (-4)	11:16	220	
" 0+25E	+3	(+3) + (+2)	+5	+5 - (+2)	11:18	220	
" 0+50E	+2	(+2) + (+3)	+5	+4 - (+5)	11:19	225	
" 0+75E	+3	(+3) + (+1)	+4	-4 - (+5)	11:21	230	
" 1+00E	+1	(+1) + (-5)	-4	-11 - (+4)	11:23	245	
" 1+25E	-5	(-5) + (-6)	-11	-12 - (-4)	11:25	240	
" 1+50E	-6	(-6) + (-6)	-12	-13 - (-11)	11:26	235	
" 1+75E	-6	(-6) + (-7)	-13	-12 - (-12)	11:28	230	
" 2+00E	-7	(-7) + (-5)	-12	-8 - (-13)	11:29	220	
" 2+25E	-5	(-5) + (-3)	-8	-4 - (-12)	11:30	215	
" 2+50E	-3	(-3) + (-1)	-4	-2 - (-2)	11:32	215	
" 2+75E	-1	(-1) + (-1)	-2		11:33	215	
" 3+00E	-1				11:35	220	
0+00 BL	-1				12:17	170 +30	200

GOLDEN STRANGER.
VLF-EM SEATTLE.

LINE 2+00N (5)

Aug 2/36

LOCATION	DIP	FRASER-1	FRASER-2	FILDIP	TIME	CORR FAC	CORR
0+00 BL	-1				9:50	200	200
2+00N 2+00W	+1		0		11:02	210	
" 1+75W	-1		-3	0 - (-3) +3	11:01	220	
" 1+50W	-2		-3	-2 - (-3) +1	10:59	215	
" 1+25W	-1		-2	-1 - (-3) +2	10:58	215	
" 1+00W	-1		-1	+2 - (-2) +4	10:57	215	
" 0+75W	0		+2	+6 - (-1) +7	10:55	210	
" 0+50W	+2		+6	+6 - (+2) +4	10:54	210	
" 0+25W	+4		+6	+3 - (+6) -3	10:52	215	
2+00N BL	+2		+3	+3 - (+6) -3	10:51	220	
" 0+25E	+1		+3	+6 - (+3) +3	10:50	225	
" 0+50E	+2		+6	+9 - (+3) +6	10:48	230	
" 0+75E	+4		+9	0 - (+6) -6	10:47	230	
" 1+00E	+5		0	-10 - (+9) -19	10:45	245	
" 1+25E	-5		-10	-10 - (0) -10	10:42	240	
" 1+50E	-5		-10	-10 - (-10) 0	10:40	225	
" 1+75E	-5		-10	-9 - (-10) +1	10:39	225	
" 2+00E	-5		-9	-8 - (-10) +2	10:38	220	
" 2+25E	-4		-8	-7 - (-9) +2	10:37	225	
" 2+50E	-4		-7	-8 - (-8) 0	10:35	220	
" 2+75E	-3		-8		10:34	215	
" 3+00E	-5				10:31	225	
0+00 BL	-1				12:17	170 +30	200

LINE 2+00N

GOLDEN STRANGER.

LINE 1+50 N ①

VLF-EM SEATTLE

AUG 2/86

STATION	DIP	FRASER-1	FRASER-2	FILDIP	TIME	CORR FAC	CORR F.
0+00 BL	-1				9:50	200	200
1+50N 2+00W	-1	(-1)+(1)	0		9:56	195	
" 1+75W	+1	(+1)+(-1)	0	(-3)-(0)	-3	9:58	205
" 1+50W	-1	(-1)+(-2)	-3	(-4)-(0)	-4	10:01	205
" 1+25W	-2	(-2)+(-2)	-4	(-3)-(-3)	0	10:03	205
" 1+00W	-2	(-2)+(-1)	-3	(-2)-(-4)	+2	10:05	205
" 0+75W	-1	(-1)+(-1)	-2	(-3)-(-1)	-2	10:07	210
" 0+50W	-1	(-1)+(0)	-1	(+1)-(-2)	+3	10:09	205
" 0+25W	0	(0)+(1)	+1	(+2)-(-1)	+2	10:11	210
1+50N BL	+1	(+1)+(1)	+2	(+2)-(+1)	+1	10:12	215
" 0+25E	+1	(+1)+(1)	+2	(+2)-(+2)	0	10:14	210
" 0+50E	+1	(+1)+(1)	+2	(-1)-(+2)	-3	10:15	220
" 0+75E	+1	(+1)+(-2)	-1	(-6)-(+2)	-8	10:16	230
" 1+00E	-2	(-2)+(-4)	-6	(-7)-(-1)	-6	10:18	230
" 1+25E	-4	(-4)+(-3)	-7	(-9)-(-6)	-3	10:20	230
" 1+50E	-3	(-3)+(-6)	-9	(-10)-(-7)	-3	10:22	215
" 1+75E	-6	(-6)+(-4)	-10	(-7)-(-9)	+2	10:23	215
" 2+00E	-4	(-4)+(-3)	-7	(-6)-(-10)	+4	10:25	215
" 2+25E	-3	(-3)+(-3)	-6	(-8)-(-7)	+1	10:27	215
" 2+50E	-3	(-3)+(-5)	-8	(-15)-(-8)	-7	10:28	235
" 2+75E	-5	(-5)+(-10)	-15			10:29	235
" 3+00E	-10					10:31	225
0+00 BL	-1				12:17	170 +30	200

LINE 1+50N

GOLDEN STRANGER.

LINE 1+00N

⑦

JULY 29/86

VLF - EM

SEATTLE

LOCATION	DIP	FRASER -1	FRASER -2	FIL DIP	TIME	CORR FAC	CORR F.S.
GLOG BL	+2				3:05	200	200
1+00N 2+00W	0	0 +0	0		5:22	175	
" 1+75W	0	0 +0	0	(-1) - (0)	5:24	180	
" 1+50W	0	0 +(-1)	-1	(-2) - (0)	5:26	180	
" 1+25W	-1	(-1) +(-1)	-2	(-2) - (-1)	5:29	180	
" 1+00W	-1	(-1) +(-1)	-2	(-1) - (-2)	5:32	180	
" 0+75W	-1	(-1) + (0)	-1	(+3) - (-2)	5:34	180	
" 0+50W	0	0 +(+3)	+3	(+6) - (-1)	5:37	185	
" 0+25W	+3	(+3) +(+3)	+6	(+6) - (+3)	5:38	180	
" BL	+3	(+3) +(+3)	+6	(+5) - (+6)	4:17	200	
" 0+25E	+3	(+3) +(+2)	+5	(-3) - (+6)	4:18	200	
" 0+47E	+2	(+2) +(-5)	-3	(-11) - (+5)	4:19	210	
" 0+76E	-5	(-5) +(-6)	-11	(-11) - (-3)	4:22	210	
" 1+00E	-6	(-6) +(-5)	-11	(-9) - (-11)	4:23	205	
" 1+25E	-5	(-5) +(-4)	-9	(-10) - (-11)	4:25	200	
" 1+50E	-4	(-4) +(-6)	-10	(-10) - (-9)	4:27	195	
" 1+75E	-6	(-6) +(-4)	-10	(-7) - (-10)	4:29	190	
" 2+00E	-4	(-4) +(-3)	-7	(-4) - (-10)	4:30	198	
" 2+25E	-3	(-3) +(-1)	-4	(-3) - (-7)	4:32	190	
" 2+50E	-1	(-1) +(-2)	-3	(-3) - (-4)	4:33	190	
" 2+75E	-2	(-2) +(-1)	-3		4:35	195	
" 3+00E	-1				4:37	205	
0+00 BL	+2				5:45	180	
1+00N BL	+3				5:40	190	
0+75N BL	0				5:41	185	
0+25S BL	0				5:44	180	

LINE 1+00N

GOLDEN STRANGER

LINE 0+50N

8

VLF - EM SEATTLE

LINE 0+50N

STATION	DIP	FRASER 1	FRASER 2	FILDIP	TIME	CORR FAC	CORR F.
0+00 BL	+2				3:05	200	200
0+50N 2+00W	+1	(+1) + (+1)	+2		3:55	175	
" 1+75W	+1	(+1) + (+4)	+5	(+4) - (+2)	+2	3:53	180
" 1+50W	+4	(+4) + (0)	+4	(+1) - (+5)	-4	3:52	185
" 1+25W	0	(0) + (+4)	+1	(+3) - (+4)	-1	3:50	200
" 1+00W	+1		+3	(+5) - (+1)	+4	3:49	185
" 0+75W	+2		+5	(+6) - (+3)	+3	3:48	185
" 0+50W	+3		+6	(+5) - (+5)	0	3:46	185
" 0+25W	+3		+5	(+8) - (+6)	+2	3:44	195
" BL	+2		+8	(+8) - (+5)	+3	3:42	190
" 0+25E	+6		+8	(+2) - (+8)	-6	3:41	200
" 0+50E	+2		+2	(-2) - (+8)	-10	3:39	210
" 0+75E	0		-2	(-7) - (+2)	-9	3:38	215
" 1+00E	-2		-7	(-10) - (-2)	-8	3:36	215
" 1+25E	-5		-10	(-9) - (-7)	-2	3:35	200
" 1+50E	-5		-9	(-9) - (-10)	+1	3:34	195
" 1+75E	-4		-9	(-10) - (-9)	-1	3:32	195
" 2+00E	-5		-10	(-8) - (-9)	+1	3:31	195
" 2+25E	-5		-8	(-5) - (-10)	+5	3:29	195
" 2+50E	-3		-5	(-4) - (-8)	+4	3:28	190
" 2+75E	-2		-4			3:27	190
" 3+00E	-2					3:25	195
0+00 BL	+1				4:09	190 +10	200

GOLDEN STRANGER

LINE 0+00

⑨

JULY 29/86

VLF - EM SEATTLE

STATION	DIP	FRASER 1	FRASER 2	FIL DIP	TIME	CORR FAC	CORR F.	
0+00 BL	+2				3:05	200	200	
0+00 2+00W	-1		-2		3:57	175		
" 1+75W	-1		+1	(+4) - (-2)	+6	3:58	180	
" 1+50W	+2		+4	(+6) - (+1)	+5	4:00	180	
" 1+25W	+2		+6	(+4) - (+4)	0	4:01	190	
" 1+00W	+4		+4	(-3) - (+6)	-9	4:03	190	
" 0+75W	0		-3	(-1) - (+4)	-5	4:05	190	
" 0+50W	-3		-1	(+3) - (-3)	+6	4:06	190	
" 0+25W	+2		+3	(+3) - (-1)	+4	4:08	185	
0+00 BL	+1		+3	(+6) - (+3)	+3	4:09	190 (+10)	200
" 0+25E	+2		+6	(+5) - (+3)	+2	3:07	200	
" 0+50E	+4		+5	(+1) - (+6)	-5	3:08	200	
" 0+75E	+1		+1	(-3) - (+5)	-8	3:10	210	
" 1+00E	0		-3	(-8) - (+1)	-9	3:12	220	
" 1+25E	-3		-8	(-9) - (-3)	-6	3:13	215	
" 1+50E	-5		-9	(-9) - (-8)	-1	3:14	205	
" 1+75E	-4		-9	(-9) - (-9)	0	3:15	200	
" 2+00E	-5		-9	(-10) - (-9)	-1	3:17	200	
" 2+25E	-4		-10	(-10) - (-9)	-1	3:18	200	
" 2+50E	-6		-10	(-8) - (-10)	+2	3:20	195	
" 2+75E	-4		-8			3:22	190	
" 3+00E	-4					3:23	195	
0+00 BL	+1				4:09	190 (+10)	200	
0+25N BL	+1				4:11	190		
0+50N BL	+2				4:13	185		
0+75N BL	+3				4:15	190		
1+00N BL	+3				4:17	200		
0+00 BL	+2				5:45	180 (+20)	200	

LINE 0+00

BASE LINE

CASE

GOLDEN STRANGER.
VLF-EM SEATTLE.

LINE 0750 S. (10)

JULY 29 / 86

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STATION	DIP	FRASER-1	FRASER-2	FILDIP	TIME	CORR FAC	CORR F
0400 BL	+2				3:05	200	200
0450S 2+00W	0	0+4	+4		5:15	165	
" 1+75W	+4	4+3	+7	(+6) -(+4)	+2	5:13	180
" 1+50W	+3	3+3	+6	(+6)-(+7)	-1	5:11	180
" 1+25W	+3	3+3	+6	(+5)-(+6)	-1	5:09	185
" 1+00W	+3	3+2	+5	(+1)-(+6)	-5	5:07	190
" 0+75W	+2	2+(-1)	+1	-2-(+5)	-7	5:05	195
" 0+50W	-1		-2	-1-(+1)	-2	5:03	200
" 0+25W	-1		-1	-2-(-2)	0	5:01	190
0450S BL	0		-2	-3-(-1)	-2	4:59	195
" 0+25E	-2		-3	-2-(-2)	0	4:58	195
" 0+50E	-1		-2	-2-(-3)	+1	4:56	200
" 0+75E	-1		-2	-4-(-2)	-2	4:54	195
" 1+00E	-1		-4	-8-(-2)	-6	4:53	200
" 1+25E	-3		-8	-11-(-4)	-7	4:51	200
" 1+50E	-5		-11	-11-(-8)	-3	4:50	200
" 1+75E	-6		-11	-11-(-11)	0	4:48	195
" 2+00E	-5		-11	-12-(-11)	-1	4:47	190
" 2+25E	-6		-12	-12-(-11)	-1	4:46	190
" 2+50E	-6		-12	-11-(-12)	+1	4:45	195
" 2+75E	-6		-11			4:43	185
" 3+00E	-5					4:42	190

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0400 BL	+2				5:45	180 +20	200
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GOLDEN STRANGER.

LINE 1400S.

(11)

ULF - EM SEATTLE.



WED JULY 30/36

LOCATION	DIP	FRASER-1	FRASER 2	FIL DIP	TIME	CURR FAC	CURR F.
1400S 2400W	2E	(2)+(1)	-1		11:47		
" 1475W	1W	(+1) + (0)	+1	(+3) - (-1)	+4	11:46	
" 1450W	0	(0) + (+3)	+3	(+2) - (+1)	+7	11:45	
REV " 1425W	3W	(+3) + (-5)	+8	(+7) - (+3)	+4	11:43	
" 1400W	5W	(+5) + (+2)	+7	(+7) - (+2)	-1	11:42	
" 0+75W	2W	(+2) + (+5)	+7	(+4) - (+1)	-3	11:40	
REV " 0+50W	5W	(+5) + (-1)	+4	(-1) - (+7)	-8	11:38	
" 0+25W	1E	(-1) + (0)	-1	(+5) - (+4)	+1	11:36	
REV " 1400S BL	0	(0) + (+5)	+5	(+1) - (-1)	+2	11:34 (12:42)	
" 0+25E	5W	(+5) + (-4)	+1	-9 - (-5)	-14	12:40	
REV " 0+50E	4E	(-4) + (-5)	-9	(-10) - (+1)	-11	12:39	
" 0+75E	5E	(-5) + (-5)	-10	(-2) - (-9)	+1	12:38	
" 1+00E	5E		-8	(-5) - (-10)	+5	12:37	
REV " 1+25E	3E		-5	(-5) - (-8)	+3	12:35	
" 1+50E	2E		-5	(-6) - (-5)	-1	12:34	
" 1+75E	3E		-6	(-9) - (-5)	-4	12:32	
" 2+00E	3E		-9	(-11) - (-6)	-5	12:31	
REV " 2+25E	6E		-11	(-10) - (-9)	-1	12:28	
" 2+50E	5E		-10	(-8) - (-11)	+3	12:27	
" 2+75E	5E		-8			12:25	
" 3+00E	3E					12:24 (60)	
14	0+00 BL				12:44		

700S LINE

14	0+00 BL	+2			11:24	225	225
	0+75S BL	-3			11:34	235	

GOLDEN STRANGER
VLF-EM SEATTLE

LINE 1+50 S

(12)

1+50 S LINE

BASE LINE

LOCATION	DIP	FRASER 1	FRASER 2	FIL DIP	TIME	CORR FAC	CORR FS
0+00 BL	+2				11:24	225	225
1+50S 2+00W	0		+1		11:49	200	
" 1+75W	+1		+2	(+4) - (+1)	+3	11:51	200
" 1+50W	+1		+4	(+6) - (+2)	+4	11:52	205
" 1+25W	+3		+6	(+6) - (+4)	+2	11:54	215
" 1+00W	+3		+6	(+3) - (+6)	-3	11:55	215
" 0+75W	+3		+3	(-2) - (+6)	-8	11:57	230
" 0+50W	0		-2	(-5) - (+3)	-8	11:58	230
" 0+25W	-2		-5	-6 - (-2)	-4	11:59	230
" BL	-3		-6	-5 - (-5)	0	12:01	225
" 0+25E	-3		-5	-6 - (-6)	0	12:05	220
" 0+50E	-2		-6	-7 - (-5)	-2	12:07	225
" 0+75E	-4		-7	-9 - (-6)	-3	12:08	225
" 1+00E	-3		-9	-12 - (-7)	-5	12:09	225
" 1+25E	-6		-12	-10 - (-9)	-1	12:11	225
" 1+50E	-6		-10	-5 - (-12)	+7	12:13	210
" 1+75E	-4		-5	-2 - (-10)	+8	12:14	210
" 2+00E	-1		-2	-4 - (-5)	+1	12:16	215
" 2+25E	-1		-4	-7 - (-2)	-5	12:17	225
" 2+50E	-3		-7	-11 - (-4)	-7	12:18	230
" 2+75E	-4		-11			12:20	230
" 3+00E	-7					12:22	230
0+00 BL	+1				12:44	215 +10	225
1+25S BL	-1				12:02	220	
1+75S	-3				12:04	225	

GOLDEN STRANGER

LINE 2+00S

(13)

VLF-EM SEATTLE

AZIMUTH $\approx 160^\circ$

VA

							TIME		CORR FS
0+00	BL	+2					2:23		200
2+00S	2+00W	-1		-1			2:30	190	
	1+75W	0		0	(+4) - (-1)	+5	2:33	190	
	1+50W	0		+4	(+9) - (0)	+9	2:34	185	
	1+25W	+4		+9	(+10) - (+4)	+6	2:37	190	
	1+00W	+5		+10	+5 - (+9)	-4	2:38	200	
	0+75W	+5		+5	-5 - (+10)	-15	2:39	215	
	0+50W	0		-5	-11 - (+5)	-16	2:41	230	
	0+25W	-5		-11	-11 - (-5)	-6	2:42	230	
	BL	-6		-11	-11 - (-11)	0	2:43	215	
	0+25E	-5		-11	-13 - (-11)	-2	2:49	210	
	0+50E	-6		-13	-12 - (-11)	-1	2:51	200	
	0+75E	-7		-12	-8 - (-13)	+5	2:52	205	
	1+00E	-5		-8	-6 - (-12)	+6	2:53	195	
	1+25E	-3		-6	-4 - (-8)	+4	2:55	195	
	1+50E	-3		-4	-1 - (-6)	+5	2:56	195	
	1+75E	-1		-1	+2 - (-4)	+6	2:58	200	
	2+00E	0		+2	+4 - (-1)	+5	2:59	195	
	2+25E	+2		+4	+9 - (+2)	+7	3:01	200	
	2+50E	+2		+9	+11 - (+4)	+7	3:03	200	
	2+75E	+7		+11			3:04	205	
	3+00E	+4					3:06	220	

2+00S LINE

VA

0+00	BL	+2					3:55	210	-10	200
------	----	----	--	--	--	--	------	-----	-----	-----

VA

0+00	BL	+2					2:23			200
2+25S	BL	-5					2:44	230		
2+50S	BL	-5					2:46	225		
2+75S	BL	-3					2:48	230		

BASE LINE

VA

0+00	BL	+2					3:55	210	-10	200
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GOLDEN STRANGER
VLF - EM SEATTLE

LINE 4+00S

(14)

LOCATION	DIP	FRASER 1	FRASER 2	TIME	CORR FAC	CORR AS
0+00 BL	+2			2:23		200
4+00S 2+00W	-6		-11	3:46	225	
" 1+75W	-5		-7	3:45	200	
" 1+50W	-2		-4	3:44	200	
" 1+25W	-2		-3	3:42	205	
" 1+00W	-1		-3	3:39	205	
" 0+75W	-2		0	3:37	205	
" 0+50W	+2		0	3:35	210	
" 0+25W	-2		-10	3:34	235	
" BL	-8		-14	3:26	215	
" 0+25E	-6		-11	3:24	205	
" 0+50E	-5		-9	3:23	200	
" 0+75E	-4		-8	3:22	200	
" 1+00E	-4		-9	3:21	200	
" 1+25E	-5		-8	3:19	205	
" 1+50E	-3		-8	3:18	200	
" 1+75E	-5		-12	3:17	210	
" 2+00E	-7		-14	3:15	200	
" 2+25E	-7		-14	3:14	195	
" 2+50E	-7		-13	3:13	190	
" 2+75E	-6		-11	3:11	185	
" 3+00E	-5			3:10	185	
0+00 BL	+2			3:55	216	200
3+75S BL	-6			3:27	215	
3+50S BL	-5			3:28	220	
3+25S BL	-3			3:29	220	
3+00S BL	-4			3:31	220	

LINE 4+00S

BASE LINE

GOLDEN STRANGER.

NS BASE LINE (15)

VLF-EM SEATTLE.

LOCATION	DIP	FRASER-1	FRASER-2	FIL DIP	CORR F
3+50N BL	0	0+0	0		
3+25N BL	0	0+0	0	0 - 0	0
3+00N BL	0	0+0	0	-1 - 0	-1
2+75N BL	0	0+(-1)	-1	+1 - 0	+1
2+50N BL	-1	-1+(+2)	+1	+3 - (-1)	+4
2+25N BL	+2	+2+(+1)	+3	+2 - (+1)	+1
2+00N BL	+1	+1+(+1)	+2	+3 - (+3)	0
1+75N BL	+1	+1+(+2)	+3	+2 - (+2)	0
1+50N BL	+2	+2+0	+2	+3 - (+3)	-0
1+25N BL	0	0+(+2)	+3	+6 - (+2)	+4
1+00N BL	+3	(+3)+(+3)	+6	+5 - (+3)	+2
0+75N BL	+3	(+3)+(+2)	+5	+3 - (+6)	-3
0+50N BL	+2	(+2)+(+1)	+3	+3 - (+5)	-2
0+25N BL	+1	(+1)+(+2)	+3	+2 - (+3)	-1
0+00 BL	+2	(+2)+(0)	+2	0 - (+3)	-3
0+25S BL	0	0+0	0	-3 - (+2)	-5
0+50S BL	0	0+(-3)	-3	-3 - (0)	-3
0+75S BL	-3	(-3)+0	-3	-3 - (-1)	-2
1+00S BL	0	0+(-1)	-1	-4 - (-3)	-1
1+25S BL	-1	(-1)+(-3)	-4	-6 - (-1)	-5
1+50S BL	-3	(-3)+(-3)	-6	-9 - (-4)	-5
1+75S BL	-3	(-3)+(-6)	-9	-11 - (-4)	-5
2+00S BL	-6	(-6)+(-5)	-11	-8 - (-9)	+1
2+25S BL	-5	(-5)+(-3)	-8	-6 - (-11)	+5
2+50S BL	-3	(-3)+(-3)	-6		
2+75S BL	-3				

VLF EM HAWAII

August 6/86

Station	Time	Offset	Frequency	Phase	Amplitude	Time	Range		
5000 S	0+00 BL	+3				3:56	R10		
	5+00N 1400E	+8		+15		5:56	185		
	" 1+25E	+7		+11	(+9) - (+15)	-6 ✓	5:52	195	
	" 1+50E	+4		+9	(+10) - (+11)	-1 ✓	5:48	190	
	" 1+75E	+5		+10			5:45	185	
	" 2+00E	+5					5:41	190	
0+00 BL	+5					6:46	180		
0+00 BL	+3					3:56	210		
5+50 N	5+50N 1400E	+9		+16	(+9) - (+16)	-9 ✓	6:02	170	
	" 1+25E	+9		+14			6:06	170	
	" 1+50E	+5		+9	(+7) - (+14)	-7 ✓	6:09	180	
	" 1+75E	+4		+7			6:12	174	
	" 2+00E	+3					6:15	170	
	0+00 BL	+5					6:46	180	
0+00 BL	+2					12:17	2120		
0+00 N	0+00 2+00W	+1		3			11:07	185	
	" 1+75W	+2		4	(+4) - (+3)	+1 ✓	11:05	185	
	" 1+50W	+2		4	(+4) - (+4)	0 ✓	11:03	190	
	" 1+25W	+2		4	(+5) - (+4)	+1 ✓	11:00	195	
	" 1+00W	+2		5	(+5) - (+4)	+1 ✓	10:55	190	
	" 0+75W	+3		5	(+4) - (+5)	-1 ✓	10:53	190	
	" 0+50W	+2		4			10:51	195	
	" 0+25W	+2		4	+5 - (+4)	+1 ✓	10:48	190	
	0+00 BL	+2		5			10:46	200	
	0+00 BL	+2				(+5) - (+4)	+1 ✓	12:17	2120
	0+00 0+25E	+3		5	(+3) - (+5)	-2 ✓	12:25	230	
" 0+50E	+2		3	1 - (+5)	-4 ✓	12:27	225		
" 0+75E	+1		1	-2 - (+3)	-5 ✓	12:29	230		
" 1+00E	0		-2	-4 - (+1)	-5 ✓	12:32	235		
" 1+25E	-2		-4	-5 - (-2)	-3 ✓	12:36	225		
" 1+50E	-2		-5	-9 - (-4)	-5 ✓	12:38	225		
" 1+75E	-3		-9	-8 - (-5)	-3 ✓	12:39	225		
" 2+00E	-6		-8	-8 - (-9)	+1 ✓	12:41	225		
" 2+25E	-2		-8	(-12) - (-9)	-4 ✓	12:43	215		
" 2+50E	-6					12:45	205		

July 23/86

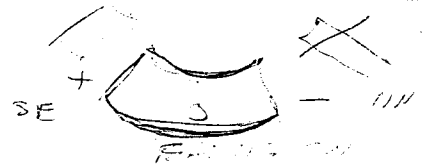
NOON	0+00 2+25E	-2		-8	$(-12) - (-8)$	-4	12:43	215
	" 2+50E	-6		-12	$(-8) - (-8)$	0	12:45	205
	" 2+75E	-6		-8			12:47	210
	" 3+00E	-2					12:48	210
	0+00 BL	+3					11:20	220
	0+00 BL	+2					10:46	200
	0+30N 2+00W	0		0			11:09	200
	" 1+75W	0		+1	$(+3) - (0)$	+3	11:12	190
	" 1+50W	+1		+3	$(+6) - (+1)$	+5	11:14	190
	" 1+25W	+2		+6	$(+6) - (+3)$	+3	11:16	200
	" 1+00W	+4		+6	$(+4) - (+6)$	-2	11:18	200
	" 0+75W	+2		+4	$(+2) - (+6)$	-4	11:20	200
	" 0+50W	+2	$(+2 + 0)$	+2	$(+2) - (+4)$	-2	11:22	200
	" 0+25W	0	$(0 + 2)$	+2			11:24	200
	0+30N BL	+2			$+5 - (+2)$	+3	11:26	210-25
	0+00 BL	+2					12:17	220
	0+30N BL	+1	$(+2 + 3)$	+5	$(+5) - (+2)$	+3	11:17	215
	" 0+25E	+3	$(+3 + 2)$	+5	$(+4) - (+5)$	-1	11:16	220
	" 0+50E	+2	$(2) + (6)$				11:14	230
	0+75E	0		+4	$+2 - (+5)$	-3	11:13	225
	" 0+75E	+2	$(+2) + (6)$				11:11	225
	0+75E	0		+2	$-1 - (+4)$	-5	11:09	225
	" 1+00E	0	$0 + (-1)$				11:07	225
	1+25E	+1	$(+1) + (-1)$	-1	$-2 - (+2)$	-4	11:06	225
	" 1+25E	-1	$(-1) + (-1)$	-2	$(-3) - (-1)$	-2	11:04	230
	" 1+50E	+1	$(-1) + (-2)$	-3	$-4 - (-2)$	-2	11:02	220
	" 1+75E	-2	$(-2) + (-2)$	-4	$-6 - (-3)$	-3	11:01	225
	" 2+00E	-2	$(+2) + (-4)$	-6	$-7 - (-4)$	-3	12:59	230
	" 2+25E	+4	$(-4) + (-3)$	-7	$-8 - (-6)$	-2	12:57	220
	" 2+50E	-3	$(-3) + (-5)$	-8	$-8 - (-7)$	-1	12:55	215
	" 2+75E	-5	$(-5) + (-3)$	-8			12:53	210
	" 3+00E	-3					12:51	215
	0+00 BL	+3					11:20	225

↑

N

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VLF EM HAWAII



WED AUG 6/56

STATION	DIP	FRASER - 1	FRASER - 2	FIL DIP	TIME	CORR FAC	CORR F.
□ 0+00 BL	+3				3:56	210	
3+50 N							
3+50 BL	+3				4:06	200	
" 0+25E	+3	(+3)+(+3)	+6	(+11)-(+6)	+5	4:10	200
" 0+50E	+5	(+3)+(+5)	+8	(+12)-(+8)	+4	4:13	200
" 0+75E	+6		+11	(+11)-(+11)	0	4:15	200
" 1+00E	+6		+12	(+9)-(+12)	-3	4:19	200
" 1+25E	+5		+11	(+10)-(+11)	-1	4:27	205
" 1+50E	+4		+9	(+11)-(+9)	+2	4:30	200
" 1+75E	+6		+10			4:34	195
" 2+00E	+5		+11			4:37	195
□ 0+00 BL	+5				6:46	180	
□ 0+00 BL	+3				3:56	210	
4+00 N							
4+00N 0+25E	+5	(+5)+(+5)	+10	(+10)-(+10)	0	5:06	185
" 0+50E	+5	(+5)+(+6)	+11	(+8)-(+11)	-3	5:03	190
" 0+75E	+6	(+6)+(+4)	+10	(+9)-(+10)	-1	5:00	190
" 1+00E	+4	(+4)+(+4)	+8	(+11)-(+8)	+3	4:57	195
" 1+25E	+4	(+4)+(+5)	+9	(+9)-(+9)	0	4:52	200
" 1+50E	+5	(+5)+(+6)	+11			4:49	195
" 1+75E	+6	(+6)+(+3)	+9			4:45	195
" 2+00E	+3					4:41	190
□ 0+00 BL	+5				6:46	180	
□ 0+00 BL	+3				3:56	210	
4+50 N							
4+50N 0+25E	+8		+15			5:10	185
" 0+50E	+7		+12	(+6)-(+15)	-9	5:16	190
" 0+75E	+5		+6	(+4)-(+12)	-8	5:19	195
" 1+00E	+1		+4	+5-(+6)	-1	5:22	190
" 1+25E	+3		+5	(+6)-(+4)	+2	5:26	185
" 1+50E	+2		+6	(+7)-(+5)	+2	5:29	185
" 1+75E	+4		+7			5:32	185
" 2+00E	+3					5:35	180
□ 0+00 BL	+5				6:46	180	

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0+00 BL	-3					10:46	200
1+00W 2+00W	0		1			11:54	210
" 1+75W	+1		1	(0) - (+1)	-1	11:52	205
1+50W	0		0	(2) - (+1)	1	11:50	205
1+25W	0		+2	(3) - (0)	3	11:48	200
1+00W	+2		+3	(4) - (2)	+2	11:46	205
0+75W	+1		+4	(5) - (3)	+2	11:40	200
0+50W	+3		+5	5 - 4	+1	11:38	205
0+25W	+2		+5			11:36	210
1+00N BL	+3			(+4) - (+5)	+1	11:34	205
0+00 BL	+2					12:17	220
0+00 BL	+3					1:20	225
1+00N BL	+1	x	+6	+6 - (+5)	+1	1:25	210
" 0+25E	+3		6			1:28	225
0+50E	+2		+6	0 - (+6)	-6	1:29	225
" 0+75E	+3		6			1:32	230
0+50E	5		0	-3 - (+6)	-9	1:34	235
" 0+76E	-3		6			1:36	225
0+75E	5		-3	-4 - (0)	-4	1:38	220
" 1+00E	0		-4	-6 - (-3)	-3	1:40	230
" 1+25E	-4		-6	(-2) - (-4)	+2	1:42	230
" 1+50E	-2		-2	(-2) - (-6)	+4	1:44	215
" 1+75E	0		-2	-4 - (-2)	-2	1:46	210
" 2+00E	-2		-4	-5 - (-2)	-3	1:48	215
" 2+25E	-2		-5	-8 - (-4)	-4	1:50	225
" 2+50E	-3		-8	(-11) - (-5)	-6	1:52	225
" 2+75E	-5		-11			1:53	220
" 3+00E	-6					1:55	220
0+00 BL	-3					2:31	225

NOON

VLF EM HAWAII

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0+00 BL	+3				10:46	200	
0+50S 2+00W	0		+3		11:58	190	
" 1+75W	+3		+5	$(+5) - (+3)$	+2	12:00	206
" 1+50W	+2		+5	$(+5) - (+3)$	+3	12:02	205
" 1+25W	+3		+8	$(+8) - (+5)$	+4	12:04	206
" 1+00W	+5		+9	$(+9) - (+8)$	0	12:06	210
" 0+75W	+4		+8	$+8 - (+8)$	-3	12:08	220
" 0+50W	+4		+6	$+6 - (+9)$	-3	12:10	225
" 0+25W	+2		+5	$+5 - (+8)$	-3	12:10	225
" BL	+3			$+7 - (+6)$	+1	12:14	230
0+00 BL	+2				12:17	220	
0+00 BL	+3				1:20	225	
0+50S BL	+2		+7	$+5 - (+5)$	0	2:28	246
" 0+25E	+4					2:28	230
0+25E	+2		+5	$+1 - (+7)$	-6	2:26	230
" 0+50E	+1					2:24	240
0+75E	+1		+1	$0 - (+5)$	-5	2:22	230
" 0+75E	0					2:20	235
0+75E	+2		0	$-3 - (+1)$	-4	2:18	230
" 1+00E	0					2:17	230
1+125E	0		-3			2:15	230
" 1+25E	-3			$-4 - (0)$	-4	2:13	225
1+25E	0		-4	$-5 - (-3)$	-2	2:12	225
" 1+50E	-1		-5	$-8 - (-4)$	-4	2:11	230
" 1+75E	-4		-8	$-6 - (-5)$	-1	2:08	220
" 2+00E	-4		-6	$-5 - (-8)$	+3	2:07	220
" 2+25E	-2		-5	$-4 - (-6)$	+2	2:06	205
" 2+50E	-3		-4	$-3 - (-5)$	+2	2:04	210
" 2+75E	-1		-3			2:02	205
" 3+00E	-2					2:00	210
0+00 BL	+3				2:31	225	

0+50S

VLF-EM HAWAII

July 23/86

0+00 BL	+3				3:58	220
H005 2+00W	+2		+5		4:20	200
" 1+75W	+3		+7	(+9) - (+5)	+4 ✓ 4:18	200
" 1+50W	+4		+9	(+9) - (+7)	+2 ✓ 4:16	200
" 1+25W	+5		+9	(+6) - (+9)	-3 ✓ 4:14	210
" 1+00W	+4		+6	(+10) - (+9)	+1 ✓ 4:12	220
" 0+75W	+2		+10	(+10) - (+6)	+4 ✓ 4:10	210
" 0+50W	+0		+10		4:08	220
" 0+25W	+2			(+4) - (+10)	-6 ✓ 4:06	230
1 BL	-2	(-3-2)	REF	LAT=0	4:03	220
1 0+12.5W	+2		+4	+1 - (+10)	-9 ✓ 5:29	210
" 0 BL	+2				5:26	210
1 0+12.5E	0		+1	(-2) - (+4)	-6 ✓ 5:28	210
" 0+25E	-1		-2	(-2) - (+1)	-3 ✓ 5:25	220
" 0+50E	-1		-2	(-2) - (-2)	0 ✓ 5:24	220
" 0+75E	-1		-2	(-3) - (-2)	-1 ✓ 5:22	210
" 1+00E	-1		-3	(-6) - (-2)	-4 ✓ 5:20	215
" 1+25E	-2		-4	(-6) - (-3)	-3 ✓ 5:19	210
" 1+50E	-4		-6	(-3) - (-6)	+3 ✓ 5:18	210
" 1+75E	-2		-3	(-4) - (-6)	+2 ✓ 5:16	190
" 2+00E	-1		-4	(-4) - (-3)	-1 ✓ 5:15	200
" 2+25E	-3		-4	(-3) - (-4)	+1 ✓ 5:13	200
" 2+50E	-1		-3	(-3) - (-4)	+1 ✓ 5:11	200
" 2+75E	-2		-5	(-5) - (-4)	-1 ✓ 5:09	190
" 3+00E	-3				5:07	200
0+00 BL	+2				5:31	200

1400 S

July 23/86

VLF - EM HAWAII

0100 BL	+3				3:58	220
1+50S 2+00W	+4		+8		4:23	200
" 1+75W	+4		+8	(+3) - (+8)	0 - 4:25	200
" 1+50W	+4		+8	(+12) - (+8)	+4 - 4:27	210
" 1+25W	+4		+12	(+16) - (+8)	+8 - 4:29	200
" 1+00W	+8		+16	(+13) - (+12)	+1 - 4:31	205
" 0+75W	+8		+13	(+6) - (+16)	-10 - 4:33	210
" 0+50W	+5		+6	(+3) - (+13)	-10 - 4:35	220
" 0+25W	+1		+3	(+2) - (+6)	-4 - 4:37	215
" BL	+2		+2	(+1) - (+3)	-2 - 4:38	220
" 0+25E	0		+1	-	- - 4:40	220
" 0+50E	+1		-	-4 - (+2)	-6 - 4:42	230
" 0+75E	-3		-4	-	- - 4:46	230
" 2+75E	-5		-	(-9) - (+1)	-10 - 4:44	235
" 0+87.5E	-5		-9	-8 - (-4)	-4 - 4:48	220
" 1+00E	-4		-8	(-6) - (-9)	+3 - 4:50	225
" 1+25E	-4		-6	(-4) - (-9)	+4 - 4:52	220
" 1+50E	-2		-4	(-5) - (-6)	+1 - 4:54	210
" 1+75E	-2		-5	(-6) - (-4)	-2 - 4:56	200
" 2+00E	-3		-6	(-5) - (-5)	0 - 4:58	200
" 2+25E	-3		-5	(-3) - (-6)	+3 - 5:00	200
" 2+50E	-2		-3	(-2) - (-5)	+3 - 5:02	200
" 2+75E	-1		-2		5:03	200
" 3+00E	-1				5:05	195
0+00 BL	+2				5:31	200

VLF-EM HAWAII

JULY 23/86

Time	BL	+2					Time	Count
0+00	BL	+2					5:31	200
2+00S	2+00W	+4		+7			5:39	190
"	1+75W	+3		+5	(+4) - (+7)	-3	5:41	200
"	1+50W	+2		+4	(+9) - (+5)	+4	5:43	200
"	1+25W	+2		+9	(+11) - (+4)	+7	5:45	200
"	1+00W	+7		+11	(+4) - (+5)	-5	5:48	200
"	0+75W	+4		+4			5:49	220
"	0+50W	0			(+2) - (+11)	-9	5:51	220
"	0+37.5	0		+2			5:58	220
"	0+25W	+2			0 - (+4)	-4	5:53	220
"	0+12.5	+2		0	0 - (+2)	-2	5:57	210
"	BL	-2					5:55	220
"	0+12.5E	0		0	(-7) - (0)	-7	6:04	210
"	0+25E	-2					6:06	220
"	0+37.5E	0		-7			6:07	220
"	0+50E	-5		-11	-14 - (-7)	-7	6:08	200
"	0+75E	-6		-14	-18 - (-11)	-7	6:10	200
"	1+00E	-8		-18	(-20) - (-14)	-6	6:12	190
"	1+25E	-10		-20	(-17) - (-15)	+1	6:13	190
"	1+50E	-10		-17	(-16) - (-20)	+4	6:14	180
"	1+75E	-7		-16	(-17) - (-17)	0	6:18	180
"	2+00E	-9		-17	(-16) - (-16)	0	6:18	180
"	2+25E	-8		-16	(-15) - (-17)	+2	6:19	180
"	2+50E	-8		-15	(-14) - (-16)	+2	6:21	185
"	2+75E	-7		-14			6:23	195
"	3+00E	-7					6:25	195
0+00	BL	+2					6:32	195

2+00S



Facing SW

VLF-EM HAWAII

July 29/86

1A	0+00 BL	+4					10:50	205
	3+00N 2+00W	+5	—————	+8			11:26	240
	" 1+75W	+3	—————	+2	-1 - (+3)	-9	11:28	240
	" 1+50W	-1	—————	-1	+1 - (+2)	-1	11:30	240
	" 1+25W	0	—————	+1	+1 - (-1)	+2	11:32	235
	" 1+00W	+1	—————	+1	+2 - (+1)	-1	11:34	235
	" 0+75W	0	—————	+2	+6 - (+1)	+5	11:35	230
	" 0+50W	+2	—————	+6	+7 - (+2)	+5	11:37	230
	" 0+25W	+4	—————	+7	+6 - (+6)	0	11:39	225
	" BL	+3	—————	+6	+10 - (+7)	+3	11:41	225
	" 0+25E	+3	—————	+10	+15 - (+6)	+9	11:43	230
	" 0+50E	+7	—————	+15	+15 - (+10)	+5	11:45	230
	0+75E	+8	—————	+15	+12 - (+15)	-3	11:48	240
	1+00E	+7	—————	+12	+8 - (+15)	-7	11:50	245
	1+25E	+5	—————	+8	+5 - (+12)	-7	11:51	255
	1+50E	+3	—————	+5	+2 - (+8)	-6	11:53	250
	1+75E	+2	—————	+2	+3 - (+5)	-2	11:56	250
	2+00E	0	—————	+3	+7 - (+2)	+5	11:58	245
	2+25E	+3	—————	+7	+9 - (+3)	+6	12:02	250
	2+50E	+4	—————	+5	+8 - (+7)	+1	12:08	250
	2+75E	+5	—————	+8			12:14	255
	3+00E	+3	—————				12:16	260
1B	0+00 BL	+2					12:37	245

3+00N

VLF-EM HAWAII

Sat August 2/86

0+00 BL	+4					1:38	205
1+50N 2+00W	+3		+5			1:49	200
n 1+75W	+2		+3	(+1) - (+5)	-4	1:53	200
n 1+50W	+1		+1	(+2) - (+3)	-1	1:57	185
n 1+25W	0		+2	(+6) - (+1)	+5	2:01	200
n 1+00W	+2		+6	(+6) - (+2)	+4	2:05	195
n 0+75W	+4		+6	(+5) - (+6)	-1	2:09	195
n 0+50W	+2		+5	(+6) - (+6)	0	2:12	195
n 0+25W	+3		+6	(+9) - (+5)	+4	2:16	195
n BL	+3		+9	(+10) - (+6)	+4	2:20	200
n 0+25E	+6		+10	(+9) - (+9)	0	2:30	200
n 0+50E	+4		+9	(+7) - (+10)	-3	2:33	210
n 0+75E	+5		+7	(-1) - (+9)	-10	2:37	220
n 1+00E	+2		-1	(-6) - (+7)	-13	2:41	225
n 1+25E	-3		-6	(-6) - (-1)	-5	2:45	210
n 1+50E	-3		-6	(-6) - (-6)	0	2:49	200
n 1+75E	-3		-6	-4 - (-6)	-2	2:52	200
n 2+00E	-3		-4	0 - (-6)	+6	2:55	260
n 2+25E	-1		0	+1 - (-4)	+5	2:59	200
n 2+50E	+1		+1	-3 - (0)	-3	3:02	205
n 2+75E	0		-3			3:05	210
n 3+00E	-3					3:08	205
0+00 BL	+3					3:23	200

1+50N

VAF EM HAWAII

SAT Aug 2/86

0+00 BL	+3				3:23	200	
2+00N 2+00W	+2		4		3:34	200	
" 1+75W	+2		3	(+2) - (+4)	-2	3:38	195
" 1+50W	+1		2	(+2) - (+3)	-1	3:41	200
" 1+25W	+1		2	(+2) - (+2)	0	3:45	195
" 1+00W	+1		2	(+4) - (+2)	+2	3:48	190
" 0+75W	+1		4	(+5) - (+2)	+3	3:51	190
" 0+50W	+3		5	(+5) - (+4)	+1	3:55	185
" 0+25W	+2		5	(+5) - (+5)	0	3:58	190
" BL	+3		5	(+7) - (+5)	+2	4:01	196
" 0+25E	+2		7	(11) - (+5)	+6	4:04	190
" 0+50E	+5		11	(12) - (7)	+5	4:07	190
" 0+75E	+6		12	(8) - (2)	-5	4:10	195
" 1+00E	+6		6	(-2) - (+2)	-14	4:13	205
" 1+25E	0		-2	(-3) - (+6)	-9	4:17	205
" 1+50E	-2		-3	(-2) - (-2)	0	4:20	205
" 1+75E	-1		-2	(-2) - (-3)	1	4:24	195
" 2+00E	-1		-2	0 - (-2)	2	4:27	195
" 2+25E	-1		0	2 - (-2)	4	4:30	190
" 2+50E	+1		+2		0	4:33	195
" 2+75E	+1		0			4:37	195
" 3+00E	-1					4:40	200
0+00 BL	+4				5:57	190	

2+00N

VLF - EM HAWAII

SAT Aug 2/86

② 0+00 BL +3						3:23	200	⑩
2+50N	2+00W	+3	6			5:49	185	
"	1+75W	+3	4	3 - (+6)	-3	5:46	190	
"	1+50W	+1	3	4 - (+4)	0	5:43	190	
"	1+25W	+2	4	5 - (+3)	+2	5:40	195	
"	1+00W	+2	5	5 - (+4)	+1	5:37	185	
"	0+75W	+3	5	3 - (+5)	-2	5:34	180	
"	0+50W	+2	3	6 - (+5)	+1	5:31	180	
"	0+25W	+1	6	5 - (+3)	+2	5:28	185	
"	BL	+5	9	10 - (+6)	+4	5:25	175	
"	0+25E	+4	10	12 - (+9)	+3	5:22	180	
"	0+50E	+6	12	16 - (+10)	0	5:18	190	
"	0+75E	+6	10	4 - (+12)	-8	5:15	195	
"	1+00E	+4	4		-10	5:11	200	
"	1+25E	0	0		-4	5:08	200	
"	1+50E	0	0		0	5:05	200	
"	1+75E	0	0		0	5:01	200	
"	2+00E	0	0	+1 - 0	+1	4:58	200	
"	2+25E	0	1	+1 - 0	+1	4:55	195	
"	2+50E	+1	1	-1 - (+1)	-2	4:51	195	
"	2+75E	0	-1			4:47	200	
"	3+00E	-1				4:45	205	
② 0+00 BL +4						5:57	190	

VLF-EM HAWAII

0+00 BL	+4					10:50	205
3+50N BL	+1		+5			11:20	225
3+25N BL	+4		+8	+7 - (+5)	+2	11:18	220
3+00N BL	+4		+7			11:16	225
2+75N BL	+3		+4	+4 - (+8)	-4	11:14	225
2+50N BL	+1		+2	+2 - (+7)	-5	11:11	225
2+25N BL	+1		+1	+1 - (+4)	-3	11:10	225
2+00N BL	+0		+2	+2 - (+2)	0	11:07	220
1+75N BL	+2		+5	+5 - (+1)	+4	11:05	215
1+50N BL	+3		+7	+7 - (+2)	+5	11:02	215
1+25N BL	+4		+7	+7 - (+5)	+2	11:00	215
1+00N BL	+3			+6 - (+7)	-1	10:55	220
0+00 BL	+2					12:37	245
0+00 BL	+3					10:46	200
1+00N BL	+3		+6	(+5) - (+7)	-2	11:34	205
0+75N BL	+3		+5	(+4) - (+6)	-2	11:32	210
0+50N BL	+2		+4	(+4) - (+5)	-1	11:26	210
0+25N BL	+2		+4			11:29	200
0+00 BL	+2			(+1) - (+4)	+2	12:17	220
0+00 BL	+2					2:02	205
0+25S BL	+4		+6	(+7) - (+4)	+3	2:57	205
0+50S BL	+3		+7	(+5) - (+6)	-1	2:55	210
0+75S BL	+2		+5	(+1) - (+7)	-6	2:54	210
1+00S BL	-1		+1	(-2) - (+7)	-7	2:52	215
1+25S BL	-1		-2	(-1) - (+1)	-2	2:50	210
1+50S BL	0		-1	(+2) - (-2)	+4	2:48	210
1+75S BL	+2		+2	+4 - (-1)	+5	2:46	230
2+00S BL	+2		+4	-1 - (+2)	-3	2:45	220
2+25S BL	+2		-1	-9 - (+4)	-13	2:45	220
2+50S BL	-3		-9	-11 - (-1)	-8	2:43	230
2+75S BL	-6		-11	-13 - (-9)	-4	2:41	220
3+00S BL	-5		-13	-14 - (-11)	-3	2:39	215
3+25S BL	-8		-14	-12 - (-13)	+1	2:38	200
3+50S BL	-6		-12	-11 - (-14)	+3	2:36	205
3+75S BL	-6		-11	-9 - (-12)	+4	2:35	200
4+00S BL	-5		-9			2:33	195
4+00S BL	-4					2:31	195
0+00 BL	+3					2:59	200

APPENDIX C

GEOCHEMICAL ANALYSES -
MIN-EN LABORATORIES

COMPANY: SOWER THOMPSON ASSOC.

MIN-EN LABS ICP REPORT

(ACT:GEO27) PAGE 1 OF 3

PROJECT NO: WESTERN HORIZONS RES. INC. 705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2

FILE NO: 6-371R/P1+2

ATTENTION: S. SOWER

(604)980-5814 OR (604)980-4524

* TYPE ROCK GEOCHEM *

DATE: JULY 2, 1986

(VALUES IN PPM)	AG	AL	AS	S	BA	BE	BI	CA	CD	CO	CU	FE
R2 ST-1-85-1001	1.1	13430	19	13	183	6.0	6	470	3.7	2	51	24950
R2 ST-1-85-1002	1.8	14090	19	11	175	6.3	6	380	3.9	2	36	27570
R2 ST-1-85-1003	1.1	12830	19	10	205	6.3	6	180	3.9	2	33	26810
R2 ST-1-85-1004	1.8	11610	16	9	196	5.6	5	170	3.7	2	65	22820
R2 ST-1-85-1005	1.5	4460	7	4	280	3.8	3	140	1.8	1	29	15180
R2 ST-1-85-1006	1.9	9650	21	8	253	5.2	5	190	3.0	2	21	21330
R2 ST-1-85-1007	1.6	11180	6	10	265	4.3	4	400	2.5	1	13	16930
R2 ST-1-85-1008	1.3	11420	10	9	262	5.8	5	550	3.1	2	18	23050
R2 ST-1-85-1009	.5	14750	11	11	180	6.2	4	1100	3.2	2	28	24130
R2 ST-1-85-1010	.8	14490	12	11	179	5.8	4	1430	2.8	3	24	24750
R2 ST-1-85-1011	.6	15350	3	11	149	4.6	3	1650	2.3	2	28	18790
R2 ST-1-85-1012	.5	19680	3	16	93	6.1	5	2420	3.5	5	22	24620
R2 ST-1-85-1013	1.5	16580	21	12	181	5.7	6	550	3.0	4	24	24550
R2 ST-2-85-1014	1.5	6070	21	5	162	5.7	5	150	2.1	2	15	23140
R2 ST-2-85-1015	7.5	6980	20	5	192	5.7	5	190	2.9	2	26	23980
R2 ST-2-85-1016	1.4	15240	14	13	182	6.0	5	540	3.7	2	34	24610
R2 ST-2-85-1017	2.3	8150	15	7	187	5.2	4	200	2.4	1	17	22310
R2 ST-2-85-1018	.4	20890	9	18	86	5.9	4	3390	3.8	4	22	32550
R2 ST-2-85-1019	1.4	11130	24	10	249	6.2	5	190	2.7	2	17	27820
R2 ST-2-85-1020	.8	14680	6	11	130	5.0	4	590	2.5	2	23	23780
R2 ST-2-85-1021	1.4	12250	21	10	133	6.0	5	370	3.2	3	27	28030
R2 ST-2-85-1022	.5	16890	12	13	97	5.8	5	580	3.0	3	40	26180
R2 ST-2-85-1023	1.0	13240	18	11	160	6.2	5	510	3.5	2	32	30810
R2 ST-2-85-1024	.4	17440	11	14	83	5.9	5	1330	3.6	3	25	40990
R2 ST-2-85-1025	1.3	15200	11	12	200	5.0	5	560	2.8	2	16	29280
R2 ST-2-85-1026	1.8	15940	11	14	388	5.6	5	510	3.6	2	22	44900
R2 ST-3-85-1027	1.0	18600	19	15	172	5.3	6	490	3.7	3	37	53190
R2 ST-3-85-1028	.3	21630	12	18	82	6.0	6	2390	3.6	6	20	62670
R2 ST-3-85-1029	.4	22580	10	18	104	4.7	6	880	3.4	5	35	80050
R2 ST-3-85-1030	1.3	13490	29	11	170	7.2	6	180	3.1	2	20	34940
R2 ST-3-85-1031	.8	19890	21	17	98	3.1	7	1630	2.6	5	35	115740
R2 ST-3-85-1032	1.0	18420	33	15	162	4.3	6	990	4.4	3	37	78060
R2 ST-3-85-1033	1.1	17310	31	13	196	2.4	6	1370	2.0	3	32	111020
R2 ST-3-85-1034	.6	20200	16	15	108	2.9	6	2440	2.8	5	35	105590
R2 ST-3-85-1035	1.5	16530	25	12	130	3.9	6	750	3.4	2	52	64820
R2 ST-3-85-1036	1.1	18110	9	13	162	2.7	5	890	2.1	3	107	92000
R2 ST-3-85-1037	1.5	18000	9	13	191	2.0	6	910	2.2	3	112	102480
R2 ST-3-85-1038	12.0	19040	36	14	144	2.2	7	960	1.9	4	172	112170
R2 ST-3-85-1039	4.1	11580	27	8	322	5.0	4	330	2.4	1	71	26880
R2 ST-3-85-1040	1.9	6650	1	4	196	2.8	2	220	1.2	1	13	13500
R2 ST-3-85-1041	3.1	6840	1	5	116	2.0	2	290	1.3	1	24	9970
R2 ST-3-85-1042	7.0	6130	1	24	140	3.0	2	370	1.4	1	32	15940
R2 ST-3-85-1043	7.3	5250	2	4	108	2.3	2	240	1.6	1	29	13800
R2 ST-4-85-1044	.6	13640	16	10	82	3.6	6	4760	2.0	6	11	91650
R2 ST-4-85-1045	.5	11420	8	9	65	2.6	5	6950	2.2	6	11	108390
R2 ST-4-85-1046	.6	11970	21	12	70	4.1	6	5570	3.0	6	10	94730
R2 ST-4-85-1047	1.6	11160	21	10	76	4.2	6	5160	2.5	6	15	81270
R2 ST-4-85-1048	.8	11260	35	9	84	4.1	6	3510	2.2	6	12	92990
R2 ST-4-85-1049	1.1	9570	30	6	70	3.9	4	2140	2.0	4	10	47430
R2 ST-4-85-1050	.6	9920	20	7	71	3.6	5	3390	1.8	4	9	51080
R2 ST-4-85-1051	.6	11880	12	9	76	2.8	7	5980	2.5	6	8	121320
R2 ST-4-85-1052	.8	14910	12	12	67	3.1	7	6030	2.2	7	8	117420
R2 ST-4-85-1053	.5	13090	20	10	77	3.4	6	5200	2.0	7	9	110090
R2 ST-4-85-1054	.1	11900	16	9	61	3.6	5	3290	2.1	6	12	87480
R2 ST-4-85-1055	.5	11990	38	10	68	4.7	6	4030	2.5	7	10	76710
R2 ST-4-85-1056	.4	14520	35	12	85	6.9	6	3820	3.2	6	10	50010
R2 ST-4-85-1057	.4	19830	38	17	104	9.6	8	2560	4.8	8	12	48900
R2 ST-4-85-1058	.1	18960	23	14	114	7.7	6	3270	4.3	8	11	39780
R2 ST-4-85-1059	1.4	10800	40	7	62	4.6	4	620	2.9	4	19	21670
R2 ST-4-85-1060	1.4	13380	37	9	71	5.2	5	790	2.5	6	15	25740

COMPANY: GOWER THOMPSON ASSOC.

MIN-EN LABS ICP REPORT

(ACT:GEO27) PAGE 2 OF 3

PROJECT NO: WESTERN HORIZONS RES. INC. 705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7N 1T2

FILE NO: 6-371R/P1+2

ATTENTION: S. GOWER

(604) 980-5814 DR (604) 988-4524

* TYPE ROCK GEOCHEM * DATE: JULY 2, 1986

(VALUES IN PPM)	K	LI	MG	MN	MO	NA	NI	P	PB	SB	SR	TH
R2 ST-1-85-1001	3620	9	4840	710	7	80	10	730	137	5	29	1
R2 ST-1-85-1002	4140	11	5480	688	6	140	11	760	161	6	28	2
R2 ST-1-85-1003	4210	10	4140	597	8	140	10	710	206	6	26	2
R2 ST-1-85-1004	3860	9	3910	537	9	110	11	810	1102	5	24	1
R2 ST-1-85-1005	3770	1	640	75	20	40	7	380	388	2	19	1
R2 ST-1-85-1006	4870	3	1890	228	10	60	8	660	133	4	28	1
R2 ST-1-85-1007	5170	3	1950	249	12	80	9	550	127	3	26	1
R2 ST-1-85-1008	5340	5	2120	274	7	140	9	830	57	4	36	1
R2 ST-1-85-1009	4050	9	4020	593	4	110	11	880	41	5	39	1
R2 ST-1-85-1010	4630	6	3540	561	4	90	10	860	62	4	41	1
R2 ST-1-85-1011	4160	9	3610	612	3	30	9	800	61	3	38	1
R2 ST-1-85-1012	3340	12	7040	1096	1	40	12	830	48	5	35	2
R2 ST-1-85-1013	4190	14	6260	918	2	80	12	850	82	5	36	1
R2 ST-2-85-1014	2920	2	2170	230	9	120	9	520	236	4	17	1
R2 ST-2-85-1015	3060	4	2760	259	11	120	11	590	156	5	18	1
R2 ST-2-85-1016	3710	8	5000	622	4	70	11	860	51	5	24	2
R2 ST-2-85-1017	4120	3	2110	202	11	90	10	630	123	4	17	1
R2 ST-2-85-1018	2450	13	9240	1046	2	140	12	750	35	5	34	2
R2 ST-2-85-1019	4190	5	3570	474	15	130	12	670	88	6	22	2
R2 ST-2-85-1020	3490	7	5090	665	1	110	10	560	39	5	27	1
R2 ST-2-85-1021	2770	8	5610	678	15	130	12	600	60	6	25	2
R2 ST-2-85-1022	2850	10	7100	951	2	100	12	740	35	6	27	2
R2 ST-2-85-1023	3700	7	4810	542	11	140	11	740	66	5	23	2
R2 ST-2-85-1024	2490	11	7850	1167	1	80	14	950	40	6	23	2
R2 ST-2-85-1025	5680	4	3370	347	5	80	11	820	32	5	28	1
R2 ST-2-85-1026	6450	6	4110	497	8	80	10	860	63	5	32	1
R2 ST-3-85-1027	3350	15	8350	994	1	60	14	800	39	5	30	1
R2 ST-3-85-1028	1860	18	11570	1995	1	100	15	1000	42	6	29	2
R2 ST-3-85-1029	2120	18	11030	1838	1	90	13	720	30	5	25	1
R2 ST-3-85-1030	5000	4	2480	233	12	50	12	1060	93	6	23	2
R2 ST-3-85-1031	2330	14	9810	1804	1	100	12	600	29	4	19	1
R2 ST-3-85-1032	4290	10	7090	1174	5	80	11	830	38	5	29	1
R2 ST-3-85-1033	3980	8	5520	868	3	120	8	740	22	3	29	1
R2 ST-3-85-1034	2690	12	8350	1307	1	110	10	600	22	4	27	1
R2 ST-3-85-1035	5070	5	4190	472	6	60	8	830	37	5	33	1
R2 ST-3-85-1036	4620	7	4900	689	1	90	8	710	120	4	26	1
R2 ST-3-85-1037	4500	6	5200	748	1	90	8	530	130	3	24	1
R2 ST-3-85-1038	4270	6	5850	814	1	90	8	540	51	3	29	1
R2 ST-3-85-1039	6760	2	1620	107	19	60	8	730	803	6	30	1
R2 ST-3-85-1040	4670	1	530	25	12	40	5	260	107	3	14	1
R2 ST-3-85-1041	4050	1	500	37	16	40	3	190	405	2	15	1
R2 ST-3-85-1042	4290	1	570	36	19	70	6	200	600	3	17	1
R2 ST-3-85-1043	4250	1	370	14	22	40	5	130	539	3	14	1
R2 ST-4-85-1044	2130	15	9250	1089	1	110	13	640	29	5	33	1
R2 ST-4-85-1045	1730	10	6770	895	1	120	13	500	20	3	30	1
R2 ST-4-85-1046	2120	10	6620	929	1	120	15	680	29	5	31	1
R2 ST-4-85-1047	2260	11	6990	936	1	70	14	640	26	5	27	1
R2 ST-4-85-1048	2360	9	5900	926	1	80	12	520	27	5	24	1
R2 ST-4-85-1049	1720	10	5780	850	3	60	13	590	25	5	18	1
R2 ST-4-85-1050	1760	9	5780	769	3	80	12	520	25	5	22	1
R2 ST-4-85-1051	1820	14	8600	936	1	100	13	450	15	4	24	1
R2 ST-4-85-1052	1890	18	11060	1128	1	90	15	490	22	4	33	1
R2 ST-4-85-1053	2200	18	10450	1077	1	50	14	560	23	4	19	1
R2 ST-4-85-1054	1800	14	8350	1228	1	40	13	610	21	4	18	1
R2 ST-4-85-1055	2040	14	9160	1183	2	50	15	690	29	6	17	1
R2 ST-4-85-1056	2240	15	8880	1328	6	70	18	940	36	8	19	2
R2 ST-4-85-1057	2340	24	10900	1830	8	40	22	1100	47	11	23	2
R2 ST-4-85-1058	2250	27	9110	2138	7	30	20	1160	40	9	22	2
R2 ST-4-85-1059	1280	13	6790	909	6	20	11	640	30	5	17	1
R2 ST-4-85-1060	1420	17	8210	1266	6	30	13	590	35	7	17	1

COMPANY: GOWER THOMPSON ASSOC.

MIN-EN LABS ICP REPORT

(ACT:GEO27) PAGE 3 OF 3

PROJECT NO: WESTERN HORIZONS RES. INC. 705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2

FILE NO: 6-371R/P1+2

ATTENTION: S. GOWER

(604)980-5814 OR (604)988-4524

* TYPE ROCK GEGCHEM * DATE: JULY 2, 1986

(VALUES IN PPM)	U	V	ZN	AU-PPB
R2 ST-1-85-1001	2	35.7	104	5
R2 ST-1-85-1002	1	51.7	90	3
R2 ST-1-85-1003	1	51.2	75	3
R2 ST-1-85-1004	1	48.2	87	9
R2 ST-1-85-1005	1	15.4	39	12
R2 ST-1-85-1006	3	24.1	43	24
R2 ST-1-85-1007	2	24.2	36	9
R2 ST-1-85-1008	1	23.8	43	1
R2 ST-1-85-1009	1	29.8	78	4
R2 ST-1-85-1010	1	30.2	69	2
R2 ST-1-85-1011	2	30.7	70	2
R2 ST-1-85-1012	2	32.8	100	1
R2 ST-1-85-1013	1	29.5	92	50
R2 ST-2-85-1014	1	30.3	40	2
R2 ST-2-85-1015	1	32.9	38	75
R2 ST-2-85-1016	1	59.7	97	3
R2 ST-2-85-1017	1	32.3	36	195
R2 ST-2-85-1018	1	57.1	104	8
R2 ST-2-85-1019	1	40.3	51	27
R2 ST-2-85-1020	2	48.7	75	1
R2 ST-2-85-1021	2	44.6	64	13
R2 ST-2-85-1022	2	46.2	94	3
R2 ST-2-85-1023	1	43.5	64	15
R2 ST-2-85-1024	1	52.9	97	1
R2 ST-2-85-1025	1	43.2	53	6
R2 ST-2-85-1026	1	41.4	54	4
R2 ST-3-85-1027	1	48.3	99	4
R2 ST-3-85-1028	1	57.5	121	1
R2 ST-3-85-1029	1	59.9	118	33
R2 ST-3-85-1030	1	43.1	61	5
R2 ST-3-85-1031	1	62.7	121	50
R2 ST-3-85-1032	1	56.9	89	2
R2 ST-3-85-1033	1	63.3	77	5
R2 ST-3-85-1034	1	68.0	94	13
R2 ST-3-85-1035	1	41.9	66	17
R2 ST-3-85-1036	1	45.4	86	31
R2 ST-3-85-1037	1	46.3	83	23
R2 ST-3-85-1038	1	51.3	90	175
R2 ST-3-85-1039	1	48.3	36	38
R2 ST-3-85-1040	1	22.4	11	56
R2 ST-3-85-1041	1	19.9	22	475
R2 ST-3-85-1042	1	21.6	21	
R2 ST-3-85-1043	2	18.4	14	
R2 ST-4-85-1044	1	99.9	58	60
R2 ST-4-85-1045	1	99.2	46	130
R2 ST-4-85-1046	1	103.8	57	82
R2 ST-4-85-1047	1	133.7	57	115
R2 ST-4-85-1048	1	116.2	46	18
R2 ST-4-85-1049	1	133.3	42	64
R2 ST-4-85-1050	1	127.1	36	12
R2 ST-4-85-1051	1	112.5	42	45
R2 ST-4-85-1052	1	127.4	59	1
R2 ST-4-85-1053	1	103.7	58	2
R2 ST-4-85-1054	1	93.8	53	45
R2 ST-4-85-1055	1	121.5	60	6
R2 ST-4-85-1056	1	175.3	58	50
R2 ST-4-85-1057	2	178.4	66	11
R2 ST-4-85-1058	2	224.1	73	45
R2 ST-4-85-1059	1	114.7	51	118
R2 ST-4-85-1060	1	174.7	57	93

COMPANY: GOWER THOMPSON ASSOC.

MIN-EN LABS ICP REPORT

(ACT:6E027) PAGE 1 OF 3

PROJECT NO: WESTERN HORIZONS RES. INC. 705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2

FILE NO: 6-371R/P3+4

ATTENTION: S. GOWER

(604)980-5814 OR (604)988-4524

* TYPE ROCK GEOCHEM * DATE: JULY 2, 1986

(VALUES IN PPM)	AG	AL	AS	B	BA	BE	BI	CA	CD	CO	CU	FE
R2 ST-4-85-1061	1.0	13920	21	13	70	5.3	4	1140	2.6	5	12	27310
R2 ST-4-85-1062	1.4	15380	30	11	70	5.8	3	1150	2.6	5	5	26210
R2 ST-4-85-1063	.9	14240	29	10	91	5.9	4	1470	2.5	6	7	24900
R2 ST-4-85-1064	1.5	16410	22	12	105	6.3	4	2050	3.0	6	15	31390
R2 ST-5-85-1065	1.1	22790	33	17	101	7.5	5	1630	4.5	7	21	36780
R2 ST-5-85-1066	2.9	14980	40	10	96	5.7	5	970	3.2	5	30	27900
R2 ST-5-85-1067	.8	14010	30	9	87	5.1	4	1110	3.0	4	25	28750
R2 ST-5-85-1068	.9	15130	41	10	71	5.7	4	800	3.0	5	16	27010
R2 ST-6-85-1069	.1	20240	7	16	90	3.5	6	6570	3.2	6	46	96560
R2 ST-6-85-1070	.4	18550	7	14	86	3.2	6	5390	2.7	6	14	101710
R2 ST-6-85-1071	.6	19230	12	15	86	4.4	7	6800	3.0	7	20	91740
R2 ST-6-85-1072	1.3	22850	1	23	60	2.8	8	12970	2.6	8	96	138950
R2 ST-7-85-1073	49.4	9310	26	7	292	4.4	6	270	2.2	1	370	20920
R2 ST-7-85-1074	14.8	8200	3	5	163	3.3	4	380	1.7	1	215	15520
R2 ST-7-85-1075	1.4	11880	1	8	157	3.3	2	500	2.0	1	25	17590
R2 ST-7-85-1076	2.0	19430	23	17	234	5.2	6	1510	2.9	2	42	52040
R2 ST-8-85-1077	2.3	16470	47	13	157	6.9	6	1500	3.6	6	12	57370
R2 ST-8-85-1078	2.1	13510	35	13	115	5.2	6	1710	3.5	6	17	62900
R2 ST-8-85-1079	2.1	11840	38	12	125	5.0	5	1240	2.9	6	17	48260
R2 ST-8-85-1080	.9	23060	1	18	194	4.0	5	6600	2.3	6	21	78220
R2 ST-9-85-1081	1.0	19300	29	15	139	7.1	7	2280	4.6	6	21	63160
R2 ST-9-85-1082	1.3	16540	16	14	106	4.7	6	2350	2.6	6	17	81500
R2 ST-9-85-1083	2.4	10490	6	8	98	2.6	5	1550	2.2	4	12	75450
R2 ST-9-85-1084	2.3	14290	33	10	114	5.0	7	1730	2.9	6	15	74320
R2 ST-10-85-1085	1.3	9230	50	7	68	3.8	4	4690	2.2	5	11	68490
R2 ST-10-85-1086	1.1	11280	62	9	63	4.3	6	2160	2.8	6	8	77810
R2 ST-10-85-1087	.5	10440	27	8	81	4.7	6	4910	2.4	6	19	60700
R2 ST-10-85-1088	.6	10460	39	7	61	5.0	4	6270	2.6	5	20	35750
R2 ST-10-85-1089	.8	8420	13	7	53	2.4	6	5410	1.9	6	22	117580
R2 XP-85-101	5.4	4210	1	22	109	1.2	3	190	7.7	1	184	8280
R2 XP-85-102	1.3	4760	1	4	66	.9	1	400	.7	1	53	6250
R2 XP-85-103	1.3	4430	1	2	51	.9	1	190	.6	1	55	6240
R2 XP-85-104	23.0	14020	30	12	83	4.6	8	560	60.3	4	667	31400
R2 XP-85-105	4.4	9690	1	7	60	2.6	3	1730	2.8	2	57	17880
R2 XP-85-106	.4	4920	1	1	93	.6	1	150	.8	1	30	6710
R2 XP-85-107	.6	17420	2	17	118	3.3	4	11090	3.2	4	14	29680
R2 XP-85-108	1.1	14750	6	12	70	3.1	5	8050	2.6	4	68	37680
R2 XP-85-109	2.0	17060	20	14	65	3.9	5	6080	4.9	5	20	42870
R2 XP-85-110	2.4	7250	1	4	47	2.0	2	570	1.1	1	82	11670
R2 XP-85-111	8.5	3940	1	1	37	1.3	1	270	.4	1	37	6630
R2 XP-85-112	2.3	14660	10	12	68	2.8	7	5520	3.5	6	41	124290
R2 XP-85-113	2.1	18220	3	14	92	3.1	8	6870	3.0	7	24	136230
R2 XP-85-114	1.8	5780	1	2	80	.8	1	420	.1	1	17	7090
R2 XP-85-115	3.1	15360	28	12	59	4.6	5	6180	4.2	7	10	37350
R2 XP-85-116	1.8	13210	54	34	74	4.4	5	890	3.1	4	13	27610
R2 XP-85-117	1.6	10030	4	9	67	2.9	3	1110	2.0	4	10	18930
R2 XP-85-118	1.1	9740	1	7	79	3.0	3	800	2.1	4	14	17600
R2 XP-85-119	.5	6130	5	3	42	2.3	3	1880	1.3	3	8	30530
R2 XP-85-120	.1	7860	4	6	72	3.3	3	750	2.2	4	7	27470
R2 XP-85-121	1.4	13040	25	9	54	3.9	5	1210	3.1	5	7	32550
R2 XP-85-122	.9	14690	26	12	67	4.6	5	1850	3.3	5	15	38510
R2 XP-85-123	1.4	9530	18	7	73	3.1	4	600	2.1	4	20	19910
R2 XP-85-124	1.6	15640	27	12	100	4.4	4	1070	2.8	5	35	24700
R2 XP-85-125	1.5	9480	4	6	65	3.0	3	680	2.1	3	16	16400
R2 XP-85-126	1.1	17320	17	15	99	6.3	6	1170	3.4	5	58	42670
R2 XP-85-127	1.8	8220	1	5	47	1.1	1	100	.4	1	8	6090
R2 XP-85-128	2.5	4030	1	2	44	1.1	1	110	.2	1	9	6760
R2 XP-85-129	1.3	4780	1	2	50	.9	1	90	.5	1	4	5110
R2 XP-85-130	.1	4190	1	1	50	.9	1	260	.5	1	2	5930
R2 XP-85-131	.6	19390	1	9	61	2.6	7	8460	2.1	6	83	113940

COMPANY: GOWER THOMPSON ASSOC.

MIN-EN LABS ICP REPORT

(ACT:6027) PAGE 2 OF 3

PROJECT NO: WESTERN HORIZONS RES. INC. 705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2

FILE NO: 6-371R/P3+4

ATTENTION: S. GOWER

(604)980-5814 OR (604)988-4524

* TYPE ROCK GEOCHEM *

DATE: JULY 2, 1986

(VALUES IN PPM)	K	LI	MG	MN	MO	NA	NI	P	PB	SB	SR	TH
R2 ST-4-85-1061	1670	18	7900	1699	6	30	13	610	35	6	17	1
R2 ST-4-85-1062	1360	19	9850	1199	7	20	15	690	37	6	17	1
R2 ST-4-85-1063	1820	17	6650	896	6	30	13	840	30	7	16	1
R2 ST-4-85-1064	1990	20	6120	739	7	70	15	590	30	6	21	1
R2 ST-5-85-1065	2020	24	13660	1668	8	30	19	930	43	9	25	2
R2 ST-5-85-1066	1430	17	8590	1331	7	30	14	690	33	7	17	1
R2 ST-5-85-1067	1490	14	8180	837	5	40	13	560	40	5	19	1
R2 ST-5-85-1068	1220	18	11340	1347	7	20	12	690	41	6	17	1
R2 ST-6-85-1069	1160	22	9490	2224	1	40	13	550	42	5	60	1
R2 ST-6-85-1070	1140	19	9680	2086	1	50	11	480	33	4	40	1
R2 ST-6-85-1071	1320	17	9830	1870	2	50	15	570	39	6	61	1
R2 ST-6-85-1072	1350	15	9830	1878	1	40	11	360	27	4	105	1
R2 ST-7-85-1073	4690	2	1690	173	21	50	6	600	3244	7	30	1
R2 ST-7-85-1074	3890	2	1180	110	14	40	5	460	1506	4	26	1
R2 ST-7-85-1075	4860	3	2050	148	6	60	6	330	86	4	23	1
R2 ST-7-85-1076	5870	8	4690	343	11	80	10	670	97	7	40	1
R2 ST-8-85-1077	1840	21	10280	783	7	120	15	730	47	8	31	2
R2 ST-8-85-1078	1460	17	8460	767	6	90	12	700	40	6	18	1
R2 ST-8-85-1079	1730	13	6120	775	13	80	13	530	32	6	19	1
R2 ST-8-85-1080	1850	16	7280	710	2	220	21	470	28	5	56	1
R2 ST-9-85-1081	1640	27	12780	812	7	100	15	870	43	8	22	2
R2 ST-9-85-1082	1890	19	9670	1112	10	90	13	660	27	5	18	1
R2 ST-9-85-1083	1830	11	5990	484	29	60	9	310	22	3	10	1
R2 ST-9-85-1084	1480	19	9290	863	15	50	13	550	44	6	15	1
R2 ST-10-85-1085	1930	8	4280	711	2	50	11	630	38	5	13	1
R2 ST-10-85-1086	2010	11	6140	744	2	60	16	770	31	6	13	1
R2 ST-10-85-1087	2060	12	6790	818	3	60	14	690	34	6	17	1
R2 ST-10-85-1088	1960	13	6880	891	6	40	14	680	29	6	15	1
R2 ST-10-85-1089	2000	7	4210	509	1	100	11	480	13	3	14	1
R2 XP-85-101	1800	1	960	234	5	60	5	70	4344	4	7	1
R2 XP-85-102	2260	2	940	201	2	30	4	60	235	1	8	1
R2 XP-85-103	1770	2	680	177	2	20	4	110	244	1	6	1
R2 XP-85-104	1460	14	8200	2306	9	20	15	630	4886	11	18	2
R2 XP-85-105	2040	6	2850	1190	4	20	7	480	306	4	19	1
R2 XP-85-106	2980	1	590	390	1	30	4	40	114	1	8	1
R2 XP-85-107	2690	10	3360	1814	4	20	12	580	53	7	70	1
R2 XP-85-108	1720	9	4560	1535	3	20	11	530	53	5	50	1
R2 XP-85-109	2590	11	7280	1733	4	20	15	590	99	7	36	1
R2 XP-85-110	1880	4	790	335	3	10	6	240	73	3	8	1
R2 XP-85-111	1080	3	440	142	2	10	5	150	50	1	7	1
R2 XP-85-112	1590	20	11410	729	4	110	13	470	36	5	22	1
R2 XP-85-113	1540	27	15310	962	1	90	17	480	36	6	27	1
R2 XP-85-114	2930	3	640	248	2	30	3	50	70	2	8	1
R2 XP-85-115	1650	17	10550	1826	6	40	19	780	51	8	17	2
R2 XP-85-116	1600	14	8680	1036	6	60	15	620	42	8	15	1
R2 XP-85-117	1080	16	5990	886	4	20	11	380	29	5	12	1
R2 XP-85-118	1420	12	4890	720	3	20	10	370	29	4	11	1
R2 XP-85-119	1040	7	4540	503	2	40	9	360	22	3	12	1
R2 XP-85-120	1440	9	4550	581	4	20	11	420	26	5	11	1
R2 XP-85-121	1490	16	9340	1408	5	40	14	570	41	7	15	1
R2 XP-85-122	1630	19	11450	1202	5	90	15	640	42	8	22	2
R2 XP-85-123	1420	11	6020	827	5	20	11	410	47	6	12	1
R2 XP-85-124	2480	18	10840	1095	6	20	15	680	49	7	19	1
R2 XP-85-125	1670	12	4870	883	4	20	11	380	61	5	11	1
R2 XP-85-126	3630	14	2830	934	5	30	14	800	57	10	18	2
R2 XP-85-127	3220	2	530	99	2	40	3	60	14	1	8	1
R2 XP-85-128	1900	3	440	121	2	30	5	70	13	1	6	1
R2 XP-85-129	2850	2	380	82	2	40	3	50	10	1	6	1
R2 XP-85-130	2520	3	940	193	1	40	3	60	12	1	7	1
R2 XP-85-131	1980	13	7140	726	1	70	12	490	19	4	10	1

COMPANY: GOWER THOMPSON ASSOC.

MIN-EN LABS ICP REPORT

(ACT:6EQ27) PAGE 3 OF 3

PROJECT NO: WESTERN HORIZONS RES. INC. 705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2

FILE NO: 6-371R/P3+4

ATTENTION: S. GOWER

(604)980-8814 OR (604)980-4524

* TYPE ROCK GEOCHEM * DATE: JULY 2, 1986

(VALUES IN PPM)	U	V	ZN	AU-PPB
R2 ST-4-85-1061	1	156.4	59	86
R2 ST-4-85-1062	1	197.7	66	100
R2 ST-4-85-1063	1	163.2	56	120
R2 ST-4-85-1064	1	152.1	47	78
R2 ST-5-85-1065	1	132.5	71	15
R2 ST-5-85-1066	1	110.4	60	63
R2 ST-5-85-1067	1	96.7	48	100
R2 ST-5-85-1068	1	124.3	61	98
R2 ST-6-85-1069	1	106.8	132	95
R2 ST-6-85-1070	1	87.3	103	87
R2 ST-6-85-1071	1	99.0	95	74
R2 ST-6-85-1072	1	139.8	85	30
R2 ST-7-85-1073	1	43.2	132	
R2 ST-7-85-1074	1	25.1	78	
R2 ST-7-85-1075	1	28.9	44	19
R2 ST-7-85-1076	2	59.4	68	26
R2 ST-8-85-1077	1	88.1	58	13
R2 ST-8-85-1078	1	75.6	56	137*
R2 ST-8-85-1079	1	71.0	42	34
R2 ST-8-85-1080	1	65.4	45	2
R2 ST-9-85-1081	1	64.8	107	5
R2 ST-9-85-1082	1	96.5	61	65
R2 ST-9-85-1083	1	58.9	39	34
R2 ST-9-85-1084	1	94.7	83	22
R2 ST-10-85-1085	1	152.2	41	61
R2 ST-10-85-1086	1	178.8	57	39
R2 ST-10-85-1087	2	134.9	52	65
R2 ST-10-85-1088	1	107.5	53	65
R2 ST-10-85-1089	1	108.2	39	7
R2 XP-85-101	2	14.4	658	600
R2 XP-85-102	2	11.1	415	28
R2 XP-85-103	1	15.0	402	135
R2 XP-85-104	1	88.1	4067	280
R2 XP-85-105	1	58.1	558	117
R2 XP-85-106	1	10.3	60	390
R2 XP-85-107	5	89.3	93	113
R2 XP-85-108	3	86.5	83	46
R2 XP-85-109	2	65.6	138	340
R2 XP-85-110	1	27.3	127	117
R2 XP-85-111	1	13.3	63	46
R2 XP-85-112	1	74.1	49	125
R2 XP-85-113	1	78.3	56	104
R2 XP-85-114	2	9.7	18	33
R2 XP-85-115	3	180.7	65	254
R2 XP-85-116	1	132.5	51	91
R2 XP-85-117	1	118.1	50	92
R2 XP-85-118	1	115.7	40	85
R2 XP-85-119	1	74.3	26	29
R2 XP-85-120	1	64.0	35	8
R2 XP-85-121	2	157.3	70	200
R2 XP-85-122	2	125.3	63	45
R2 XP-85-123	2	108.7	75	162
R2 XP-85-124	1	118.1	72	230
R2 XP-85-125	1	133.8	132	500
R2 XP-85-126	2	175.1	105	150
R2 XP-85-127	1	19.8	12	13
R2 XP-85-128	1	16.5	12	18
R2 XP-85-129	1	8.5	9	16
R2 XP-85-130	1	6.8	14	8
R2 XP-85-131	1	93.0	50	21

Wood Zone

Zone

COMPANY: GOWER THOMPSON ASSOC.

MIN-EN LABS ICP REPORT

(ACT:6EQ27) PAGE 1 OF 3

PROJECT NO: WESTERN HORIZONS RES. INC. 705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2

FILE NO: 6-371R/P5

ATTENTION: S. GOWER

(604)980-5814 OR (604)988-4524

* TYPE ROCK GEOCHEM * DATE: JULY 2, 1986

(VALUES IN PPM)	AG	AL	AS	B	BA	BE	BI	CA	CD	CO	CU	FE
R2 IP-85-132	.5	9000	16	8	78	3.6	5	3400	2.6	6	13	63410
R2 E-85-003	.9	17180	1	14	108	2.6	5	17790	3.4	7	12	111150
R2 E-85-051	7.4	10850	16	7	96	1.6	6	2950	1.8	4	165	94760
R2 E-85-122	.3	3950	1	1	29	1.3	1	720	.7	1	10	9400
R2 E-85-158	.3	14310	1	10	297	2.4	6	3880	1.9	5	28	104160

COMPANY: BOWER THOMPSON ASSOC.

MIN-EN LABS ICP REPORT

(ACT:6E027) PAGE 2 OF 3

PROJECT NO: WESTERN HORIZONS RES. INC. 705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2

FILE NO: 6-371R/P5

ATTENTION: S. GOWER

(604)980-5814 OR (604)988-4524

* TYPE ROCK GEOCHEM *

DATE: JULY 2, 1986

(VALUES IN PPM)	K	LI	HG	MN	MO	NA	NI	P	PB	SB	SR	TH
R2 XP-85-132	1940	12	6690	578	2	60	13	620	31	4	14	1
R2 E-85-003	2300	20	11550	1523	1	170	12	640	22	3	16	1
R2 E-85-051	1420	13	8650	477	3	100	10	370	31	3	14	1
R2 E-85-122	1350	1	800	117	3	380	5	70	11	1	7	1
R2 E-85-158	1630	17	8190	784	1	210	9	680	16	3	20	1

COMPANY: GOWER THOMPSON ASSOC.

MIN-EN LABS ICP REPORT

(ACT:6E027) PAGE 3 OF 3

PROJECT NO: WESTERN HORIZONS RES. INC. 705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2

FILE NO: 6-371R/PS

ATTENTION: S. GOWER

(604)980-5814 OR (604)988-4524

* TYPE ROCK GEOCHEM *

DATE: JULY 2, 1986

(VALUES IN PPM)	U	V	ZN	AU-PPB
R2 XP-85-132	1	93.5	53	1
R2 E-85-003	1	55.3	66	3
R2 E-85-051	1	52.3	33	195
R2 E-85-122	1	5.7	19	2
R2 E-85-158	1	57.3	66	1

COMPANY: WESTERN HORIZONS RESOURCES

MIN-EM LABS ICP REPORT

(ACT:GED27) PAGE 1 OF 3

PROJECT NO: WHR 8.S.

705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2

FILE NO: 6-826

ATTENTION: K.E. NORTHCOTE/S. GOWER

(604)980-5814 OR (604)988-4524

* TYPE ROCK GEOCHEM * DATE: SEPT 24, 1986

(VALUES IN PPM)	AG	AL	AS	B	BA	BE	BI	CA	CD	CO	CU	FE
3+50N 1+25E	8.5	8730	13	7	190	3.1	2	1370	2.9	4	59	24560
3+50N 1+50E	1.7	2630	1	1	64	.7	1	200	.6	1	12	3230
3+00N 0+50W	.9	14170	9	12	144	1.7	7	1910	1.6	5	19	182490
1+00N 1+25E	1.8	1730	1	1	22	.7	1	110	.4	1	5	4970
1+00N 0+76E	.6	5730	1	3	50	1.6	1	230	.9	2	7	11300
2+50N 0+75W	17.1	1840	1	1	98	1.2	1	80	4.6	1	103	8070
2+50N 2+00W	.8	7430	1	5	3028	.9	3	1070	.4	3	7	67720
4+00N 1+25E	1.9	8000	15	6	87	3.5	2	1030	3.3	4	25	41300

COMPANY: WESTERN HORIZONS RESOURCES

MIN-EM LABS ICP REPORT

(ACT:GED27) PAGE 2 OF 3

PROJECT NO: MHR G.S.

705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2

FILE NO: 6-826

ATTENTION: K.E.NORTHCOTE/S.BOWER

(604)980-5814 OR (604)988-4524

* TYPE ROCK GEOCHEM * DATE: SEPT 24, 1986

(VALUES IN PPM)	K	LI	MG	MN	MO	NA	NI	P	PB	SB	SR	TH
3+50N 1+25E	1540	7	2810	1153	5	20	15	330	360	5	15	1
3+50N 1+50E	2220	1	180	98	1	40	4	20	28	1	4	1
3+00N 0+50W	2110	15	7900	376	2	360	6	500	6	1	11	1
1+00N 1+25E	990	1	200	73	1	20	7	50	8	1	3	1
1+00N 0+7&E	2020	4	2270	338	2	40	8	120	27	2	7	1
2+50N 0+73W	1800	1	100	30	4	20	6	10	1988	2	4	1
2+50N 2+00W	1490	9	4390	144	1	110	2	230	17	1	19	1
4+00N 1+25E	1090	11	4590	585	6	40	9	430	109	3	12	1

COMPANY: WESTERN HORIZONS RESOURCES

MIN-EN LABS ICP REPORT

(ACT:6E027) PAGE 3 OF 3

PROJECT NO: WHR 8.S.

705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2

FILE NO: 6-826

ATTENTION: K.E.NORTHCOTE/S.BOWER

(604)980-5814 OR (604)988-4524

* TYPE ROCK GEOCHEM * DATE: SEPT 24, 1986

(VALUES IN PPM)	U	V	ZN	AU-PPB
3+50N 1+25E	1	57.3	470	46
3+50N 1+50E	1	4.1	14	3
3+00N 0+50N	1	108.2	39	34
1+00N 1+25E	1	7.0	9	7
1+00N 0+74E	1	29.5	22	41
2+50N 0+75N	1	3.0	631	6500
2+50N 2+00N	1	35.2	24	7
4+00N 1+25E	1	48.2	59	13

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705 West 15th Street North Vancouver, B.C. Canada V7M 1T2

PHONE: (604)980-5814 OR (604)988-4524

TELEX: VIA USA 7601067 UC

Certificate of GEOCHEM


Company: WESTERN HORIZON RESOURCES
Project: WHR G.S.
Attention: K.E. NORTHCOTE/S. GOWER

File: 6-B26
Date: SEPT 24/86
Type: ROCK GEOCHEM

We hereby certify the following results for samples submitted.

Sample Number	AG PPM
3+50N 1+25E ✓	7.9
3+50N 1+50E ✓	1.5
3+00N 0+50W ✓	0.7
1+00N 1+25E ✓	1.4
1+00N 0+76E ✓	0.6
2+50N 0+75W ✓	17.3
2+50N 2+00W ✓	0.8
4+00N 1+25E	2.2

Certified by _____


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PHONE: (604)980-5814 OR (604)988-4524

TELEX: VIA USA 7601067 UC

Certificate of ASSAY

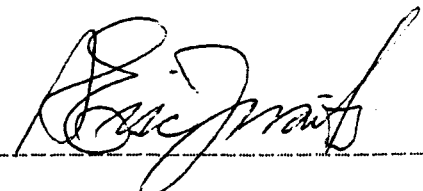
Company: WESTERN HORIZON RESOURCES
Project: WHR B.S.
Attention: K.E. NORTHCOTE/S. GOWER

File: 6-826
Date: SEPT 24/86
Type: ROCK ASSAY

We hereby certify the following results for samples submitted.

Sample Number	AU G/TONNE	AU OZ/TON
2+50N 0+75W	7.75	0.226

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Specialists in Mineral Environments

705 West 15th Street North Vancouver, B.C. Canada V7M 1T2

PHONE: (604) 980-5814 OR (604) 988-4524

TELEX: VIA USA 7601067 UC

Certificate of GEOCHEM

Company: WESTERN HORIZONS/K.E. NORTHCOTE
Project: GOLDEN STRANGER
Attention: S. GOWER/K.E. NORTHCOTE

File: 6-744
Date: SEPT 11/86
Type: ROCK GEOCHEM

We hereby certify the following results for samples submitted.

Sample Number	AG PPM	AU-FIRE PPB
GS 2+50N 2+00W	0.8	4
GS 3+50N 1+40W	0.9	20

Certified by _____


MIN-EN LABORATORIES LTD.

MIN-EN LABORATORIES LTD.

Specialists in Mineral Environments

705 West 15th Street North Vancouver, B.C. Canada V7M 1T2

PHONE: (604) 980-5814 OR (604) 988-4524

TELEX: VIA USA 7601067 UC

Certificate of GEOCHEM

Company: WESTERN HORIZONS RESOURCES
Project: WHR-GOLDEN STRANGER
Attention: K. NORTHCOTE

File: 6-675/P1
Date: AUGUST 29/86
Type: SOIL GEOCHEM

We hereby certify the following results for samples submitted.

Sample Number	AG PPM	AU PPB
GS 0+00 BL	0.6	5
GS 0+00 0+25E	0.8	10
GS 0+00 0+50E	0.8	10
GS 0+00 0+75E	0.7	10
GS 0+00 1+00E	1.0	5
GS 0+00 1+25E	0.8	20
GS 0+00 1+50E	0.9	5
GS 0+00 1+75E	0.8	5
GS 0+00 2+00E	0.8	5
GS 0+25N BL	0.6	10
GS 0+50N BL	0.6	5
GS 0+50N 0+25E	0.7	3
GS 0+50N 0+50E	0.6	5
GS 0+50N 0+75E	0.5	5
GS 0+50N 1+00E	0.8	5
GS 0+50N 1+25E	0.8	5
GS 0+50N 1+50E	1.4	5
GS 0+50N 1+75E	0.6	10
GS 0+50N 2+00E	0.8	5
GS 0+75N BL	0.6	5
GS 1+00N BL	0.7	20
GS 1+00N 0+25E	0.6	5
GS 1+00N 0+47E	0.6	5
GS 1+00N 0+76E	1.0	5
GS 1+00N 1+00E	1.2	5
GS 1+00N 1+25E	1.3	10
GS 1+00N 1+50E	0.8	5
GS 1+00N 1+75E	1.2	3
GS 1+00N 2+00E	0.6	5
GS 1+25N BL	1.0	5

Certified by



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705 West 15th Street North Vancouver, B.C. Canada V7M 1T2

PHONE: (604) 980-5814 OR (604) 988-4524

TELEX: VIA USA 7601067 UC

Certificate of GEOCHEM

Company: WESTERN HORIZONS
Project: WHR-GOLDEN STRANGER
Attention: K.E. NORTHCOTE

File: 6-675/P2
Date: AUGUST 29/86
Type: SOIL GEOCHEM

We hereby certify the following results for samples submitted.

Sample Number	AG PPM	AU PPB
GS 1+50N BL	0.9	5
GS 1+50N BLA	0.7	5
GS 1+50N 0+25E	1.6	25
GS 1+50N 0+50E	0.8	15
GS 1+50N 0+75E	1.2	5
GS 1+50N 1+00E	1.0	10
GS 1+50N 1+25E	1.8	5
GS 1+50N 1+50E	1.2	10
GS 1+50N 1+75E	0.6	5
GS 1+50N 2+00E	0.6	5
GS 1+75N BL	0.7	10
GS 2+00N BL	NO SAMPLE	
GS 2+00N 0+25E	0.6	5
GS 2+00N 0+50E	1.2	5
GS 2+00N 0+75E	0.9	10
GS 2+00N 1+00E	1.4	5
GS 2+00N 1+25E	0.9	5
GS 2+00N 1+50E	1.0	5
GS 2+00N 1+75E	0.9	10
GS 2+00N 2+00E	1.2	5
GS 2+25N BL	0.8	5
GS 2+50N BL	0.7	5
GS 2+50N 0+25E	0.8	15
GS 2+50N 0+50E	0.8	5
GS 2+50N 0+75E	0.7	10
GS 2+50N 1+00E	0.6	10
GS 2+50N 1+25E	0.8	5
GS 2+50N 1+50E	0.8	5
GS 2+50N 1+75E	0.7	10
GS 2+50N 2+00E	0.7	5

Certified by



MIN-EN LABORATORIES LTD.

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Specialists in Mineral Environments

705 West 15th Street North Vancouver, B.C. Canada V7M 1T2

PHONE: (604) 980-5814 OR (604) 988-4524

TELEX: VIA USA 7601067 UC

Certificate of GEOCHEM

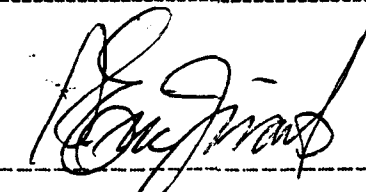
Company: WESTERN HORIZONS RESOURCES
Project: WHR-GOLDEN STRANGER
Attention: K. NORTHCOTE

File: 6-675/P3
Date: AUGUST 29/86
Type: SOIL GEOCHEM

We hereby certify the following results for samples submitted.

Sample Number	AG PFM	AU PPB
GS 2+75N BL	0.7	10
GS 3+00N BL	0.6	5
GS 3+00N 0+25E	0.7	5
GS 3+00N 0+50E	0.7	5
GS 3+00N 0+75E	0.7	10
GS 3+00N 1+00E	0.6	5
GS 3+00N 1+25E	1.0	10
GS 3+00N 1+50E	0.8	5
GS 3+00N 1+75E	0.7	5
GS 3+00N 2+00E	0.8	10
GS 3+25N BL	0.9	5
GS 3+50N BL	1.1	5
GS 3+50N 0+25E	1.0	5
GS 3+50N 0+50E	0.8	5
GS 3+50N 0+75E	1.2	5
GS 3+50N 1+00E	1.0	10
GS 3+50N 1+25E	1.1	10
GS 3+50N 1+50E	2.2	5
GS 3+50N 1+75E	1.6	3
GS 3+50N 2+00E	0.8	5
GS 4+00N 0+25E	0.8	5
GS 4+00N 0+50E	0.8	5
GS 4+00N 0+75E	1.4	5
GS 4+00N 1+00E	3.0	25
GS 4+00N 1+25E	2.6	60
GS 4+00N 1+50E	1.0	5
GS 4+00N 1+75E	1.2	5
GS 4+00N 2+00E	0.6	5
GS 4+50N 0+25E	1.2	5
GS 4+50N 0+50E	2.2	5

Certified by



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Specialists in Mineral Environments

705 West 15th Street North Vancouver, B.C. Canada V7M 1T2

PHONE: (604) 980-5814 OR (604) 988-4524

TELEX: VIA USA 7601067 UC

Certificate of GEOCHEM

Company: WESTERN HORIZONS RESOURCES
Project: WHR-GOLDEN STRANGER
Attention: K. NORTHCOTE

File: 6-675/P4
Date: AUGUST 30/86
Type: SOIL GEOCHEM

We hereby certify the following results for samples submitted.

Sample Number	AG PPM	AU PPB
GS 4+50N 0+75E	1.2	5
GS 4+50N 1+00E	1.3	20
GS 4+50N 1+25E	3.4	370
GS 4+50N 1+50E	0.9	5
GS 4+50N 1+75E	1.8	5
GS 4+50N 2+00E	0.9	5
GS 5+00N 1+00E	6.5	2300
GS 5+00N 1+25E	3.4	280
GS 5+00N 1+50E	1.0	10
GS 5+00N 1+75E	NO SAMPLE	
GS 5+00N 2+00E	1.0	40
GS 5+50N 1+00E	1.2	5
GS 5+50N 1+25E	0.8	10
GS 5+50N 1+50E	1.0	5
GS 5+50N 1+75E	0.7	10
GS 5+50N 2+00E	0.6	80

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PHONE: (604)980-5814 OR (604)988-4524

TELEX: VIA USA 7601067 UC

Certificate of GEOCHEM

Company: WESTERN HORIZONS RESOURCES

File: 6-683/P1

Project:

Date: AUGUST 29/86

Attention: S.GOWER/K.NORTHCOTE

Type: ROCK GEOCHEM

We hereby certify the following results for samples submitted.

Sample Number	AG FPM	AU-FIRE PPB
ST-86-4-001	12.0	15000
ST-86-4-002	6.8	510
ST-86-4-003	3.8	45
ST-86-4-004	6.6	85
ST-86-4-005	4.2	58
ST-86-4-006	5.3	64
ST-86-4-007	1.2	18
ST-86-4-008	2.8	1050
ST-86-4-009	2.6	9
ST-86-4-010	2.4	17
ST-86-4-011	1.2	28
ST-86-4-012	1.2	34
ST-86-4-013	1.4	6
ST-86-4-014	8.2	51
ST-86-4-015	6.2	70
ST-86-4-016	2.4	48
ST-86-4-017	1.8	37
ST-86-1-018	0.6	3
ST-86-1-019	0.5	5
ST-86-1-020	0.7	6
ST-86-1-021	0.8	10
ST-86-1-022	1.0	82
ST-86-1-023	0.9	2
ST-86-1-024	0.8	26
ST-86-1-025	0.8	130
ST-86-1-026	1.8	122
ST-86-1-027	2.0	38
ST-86-1-028	1.3	147
ST-86-1-029	1.0	32
ST-86-1-030	1.6	86

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TELEX: VIA USA 7601067 UC

Certificate of GEOCHEM

Company: WESTERN HORIZONS RESOURCES

File: 6-683/P2

Project:

Date: AUGUST 29/86

Attention: S. GOWER/K. NORTHCOTE

Type: ROCK GEOCHEM

We hereby certify the following results for samples submitted.

Sample Number	AG PPM	AU-FIRE PPB
ST-86-2-031	2.4	315
ST-86-2-032	1.4	132
ST-86-2-033	4.2	430
ST-86-2-034	3.1	1100
ST-86-2-035	2.0	1000
ST-86-2-036	3.0	1200
ST-86-2-037	1.8	14
ST-86-2-038	3.4	78
ST-86-2-039	2.1	42
ST-86-3-040	0.7	64
ST-86-3-041	1.6	500
ST-86-3-042	1.2	132
ST-86-3-043	1.6	125
ST-86-3-044	1.5	310
ST-86-3-045	1.0	255
ST-86-8-046	7.9	240
ST-86-8-047	13.6	2750
ST-86-8-048	8.0	1900
ST-86-8-049	5.0	1400
ST-86-8-050	1.6	24
ST-86-8-051	1.4	19
ST-86-8-052	1.6	2
ST-86-8-053	0.8	2
ST-86-8-054	1.3	1
ST-86-8-055	1.6	1
ST-86-8-056	1.0	3
ST-86-8-057	1.4	1
ST-86-8-058	3.0	7
ST-86-8-059	2.6	25

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PHONE: (604)980-5814 OR (604)988-4524

TELEX: VIA USA 7601067 UC

Certificate of ASSAY

Company: WESTERN HORIZONS RESOURCES

File: 6-683

Project:

Date: AUGUST 29/86

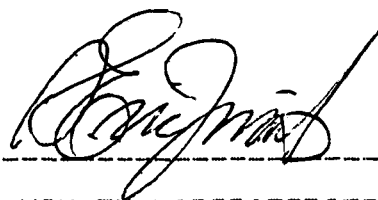
Attention: S.GOWER/K.NORTHCOTE

Type: ROCK ASSAY

We hereby certify the following results for samples submitted.

Sample Number	AU G/TONNE	AU OZ/TON
ST-86-4-008	1.13	0.033
ST-86-2-034	1.21	0.035
ST-86-2-035	1.44	0.042
ST-86-2-036	1.60	0.047
ST-86-8-047	3.65	0.106
ST-86-8-048	2.29	0.067
ST-86-8-049	2.20	0.064
ST-86-4-001	23.00	0.671

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PHONE: (604) 980-5814 OR (604) 988-4524

TELEX: VIA USA 7601067 UC

Certificate of GEOCHEM

Company: WESTERN HORIZON RESOURCES

Project:

Attention: S. GOWER

File: 6-866/P1

Date: OCT. 1/86

Type: ROCK GEOCHEM

We hereby certify the following results for samples submitted.

Sample Number	AG PPM	AU-FIRE PPB
CF86-1001	1.8	86
CF86-1002	1.6	124
CF86-1003	2.0	123
ST86-060	1.4	36
ST86-061	2.7	39
ST86-062	3.6	175
ST86-063	7.8	345
ST86-064	7.0	1200
ST86-065	6.3	160
ST86-066	2.2	12
ST86-067	2.3	24
ST86-068	4.5	33
ST86-069	1.9	4
ST86-070	1.5	6
ST86-071	1.0	18
ST86-072	1.9	15
ST86-073	1.6	210
ST86-074	1.8	67
ST86-075	43.0	1175
ST86-076	56.0	580
ST86-077	13.7	1180
ST86-078	142.0	4750
ST86-079	87.0	4300
ST86-080	10.0	345
ST86-081	17.5	1850
ST86-082	3.4	75
ST86-083	7.6	50
ST86-084	10.3	36
ST86-085	4.0	43
ST86-086	6.1	44

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TELEX: VIA USA 7601067 UC

Certificate of GEOCHEM

Company: WESTERN HORIZON RESOURCES

File: 6-866/P2

Project:

Date: OCT. 1/86

Attention: S. GOWER

Type: ROCK GEOCHEM

We hereby certify the following results for samples submitted.

Sample Number	AG PPM	AU-FIRE PPB
ST86-087	1.9	15
ST86-088	1.7	20
ST86-089	2.1	5
ST86-090	1.6	57
ST86-091	1.5	24
ST86-092	1.3	27
ST86-093	1.4	18
ST86-094	9.2	775
ST86-095	12.7	190
ST86-096	8.6	128
ST86-097	5.4	166
ST86-098	2.8	82
ST86-099	3.2	60
ST86-100	1.8	175
ST86-101	1.5	61
ST86-102	1.3	43
ST86-103	1.7	52
ST86-104	2.3	95
ST86-105	2.4	175
ST86-106	1.0	65
ST86-107	1.1	50
ST86-108	4.2	64
ST86-109	1.1	34
ST86-110	1.2	62
ST86-111	1.4	31
ST86-112	3.5	48
ST86-113	2.4	40
ST86-114	2.1	62
ST86-115	2.7	65
ST86-116	2.2	53

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NE: (604) 980-5814 OR (604) 988-4524

TELEX: VIA USA 7601067 UC

Certificate of GEOCHEM

Company: WESTERN HORIZON RESOURCES
Project:
Attention: S. GOWER

File: 6-866/P3
Date: OCT. 1/86
Type: ROCK GEOCHEM

We hereby certify the following results for samples submitted.

Sample Number	AG PPM	AU-FIRE PPB
ST86-117	5.0	58
ST86-118	2.9	40
ST86-119	2.0	63
ST86-120	1.6	30
ST86-121	1.5	60
ST86-122	1.8	110
ST86-123	3.6	59
ST86-124	1.9	83
ST86-125	1.2	40
ST86-126	2.1	88
86-127	1.2	56
ST86-128	1.5	62
ST86-129	0.9	84
ST86-130	1.4	63
ST86-131	1.6	46
ST86-132	1.5	60
ST86-133	1.1	25
ST86-134	0.6	2
ST86-135	1.4	13
ST86-136	1.4	10
XP86-134	0.7	1
XP86-135	1.2	7
XP86-136	0.9	2
XP86-137	0.8	1
GDB6-3001	2.8	18
GDB6-3002	23.5	20
GDB6-3003	4.2	64
GDB6-3004	15.5	55
GDB6-3005	0.9	15
GDB6-3006	1.6	12

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PHONE: (604) 980-5814 OR (604) 988-4524

TELEX: 04-352828

Certificate of ASSAY

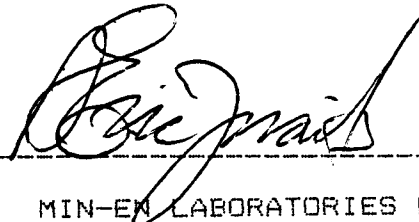
Company: GOWER THOMPSON & ASSOCIATES
Project: WESTER HORIZONS RES. INC.
Attention:

File: 6-371
Date: JULY 1/86
Type: ROCK

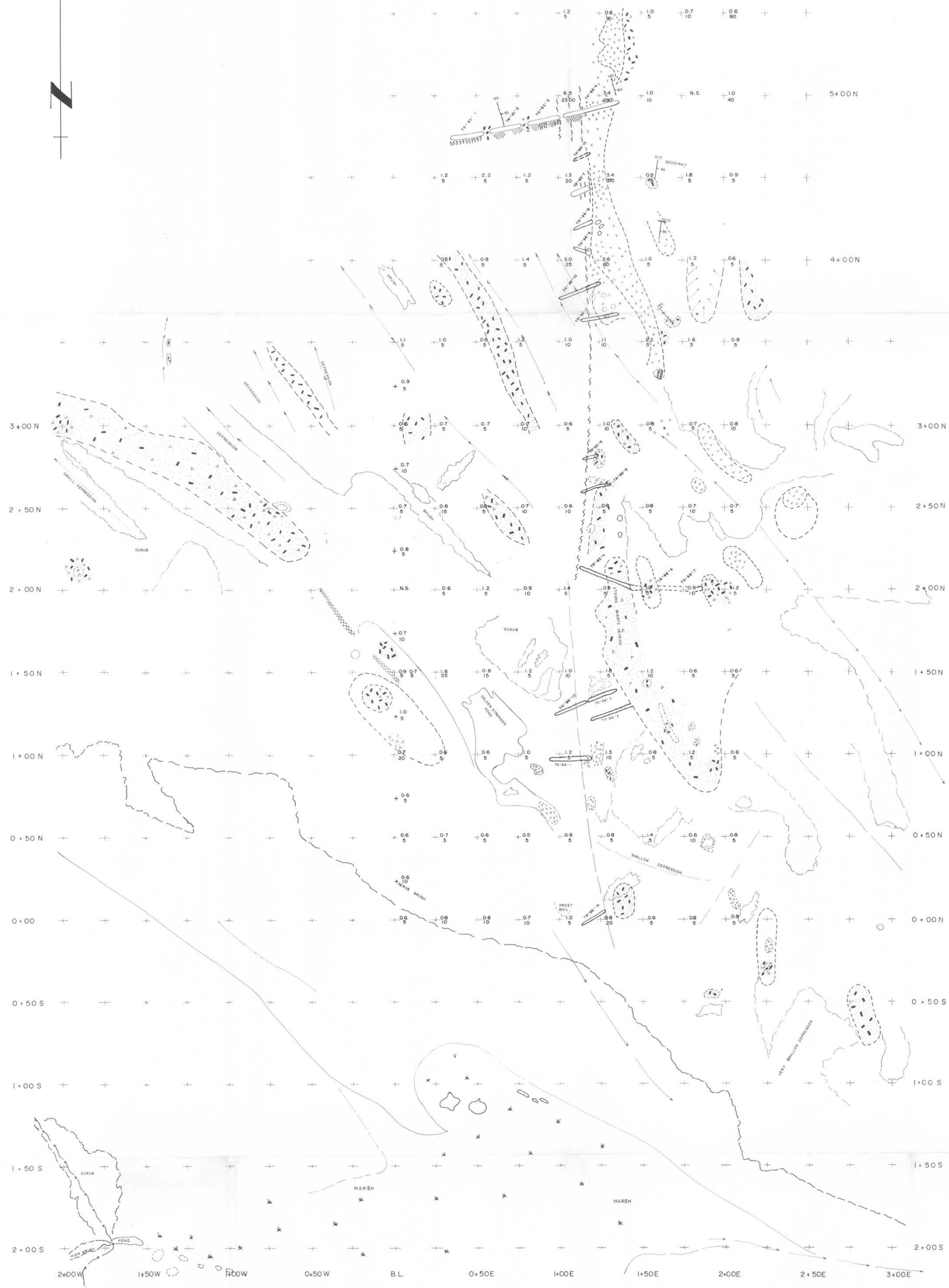
We hereby certify the following results for samples submitted.

Sample Number	AU G/TONNE	AU OZ/TON
R2ST-3-85-1042	8.40	0.245
R2ST-3-85-1043	15.00	0.438
R2ST-7-85-1073	3.56	0.104
R2ST-7-85-1074	4.30	0.125

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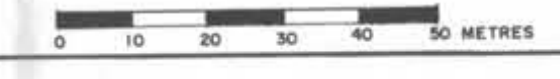


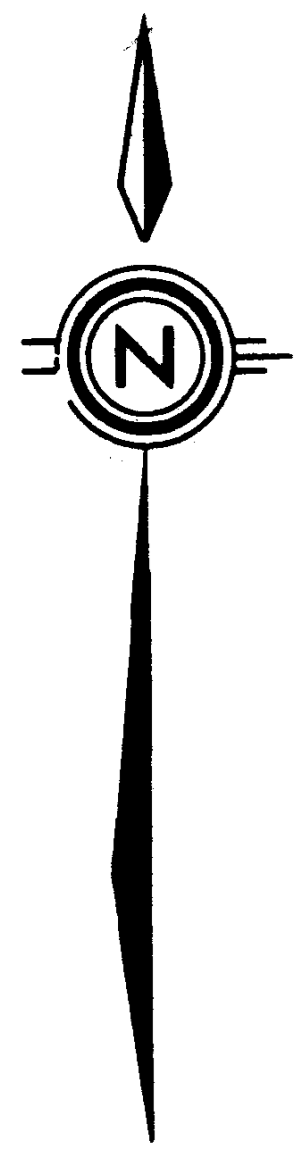
- APLITE
- APLITE BRECCIA
- CRYSTAL TUFF
- CRYSTAL LITHIC TUFF BRECCIA
- TRACHYANDESITE
- TRACHYANDESITE BRECCIA
- BEDDING
- FAULT, SHEAR
- JOINTING

Ag - ppm
Au - ppb

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**
15,633

WESTERN HORIZONS RESOURCES LTD
TODDGGONE JOINT VENTURE
GOLDEN STRANGER PROPERTY
GEOLOGY & GEOCHEMISTRY
DRAWN BY K.E.N. E.M.T. DATE: DECEMBER, 1986
FIG. 2 SCALE: 1:1000
GOWER, THOMPSON & ASSOCIATES LTD

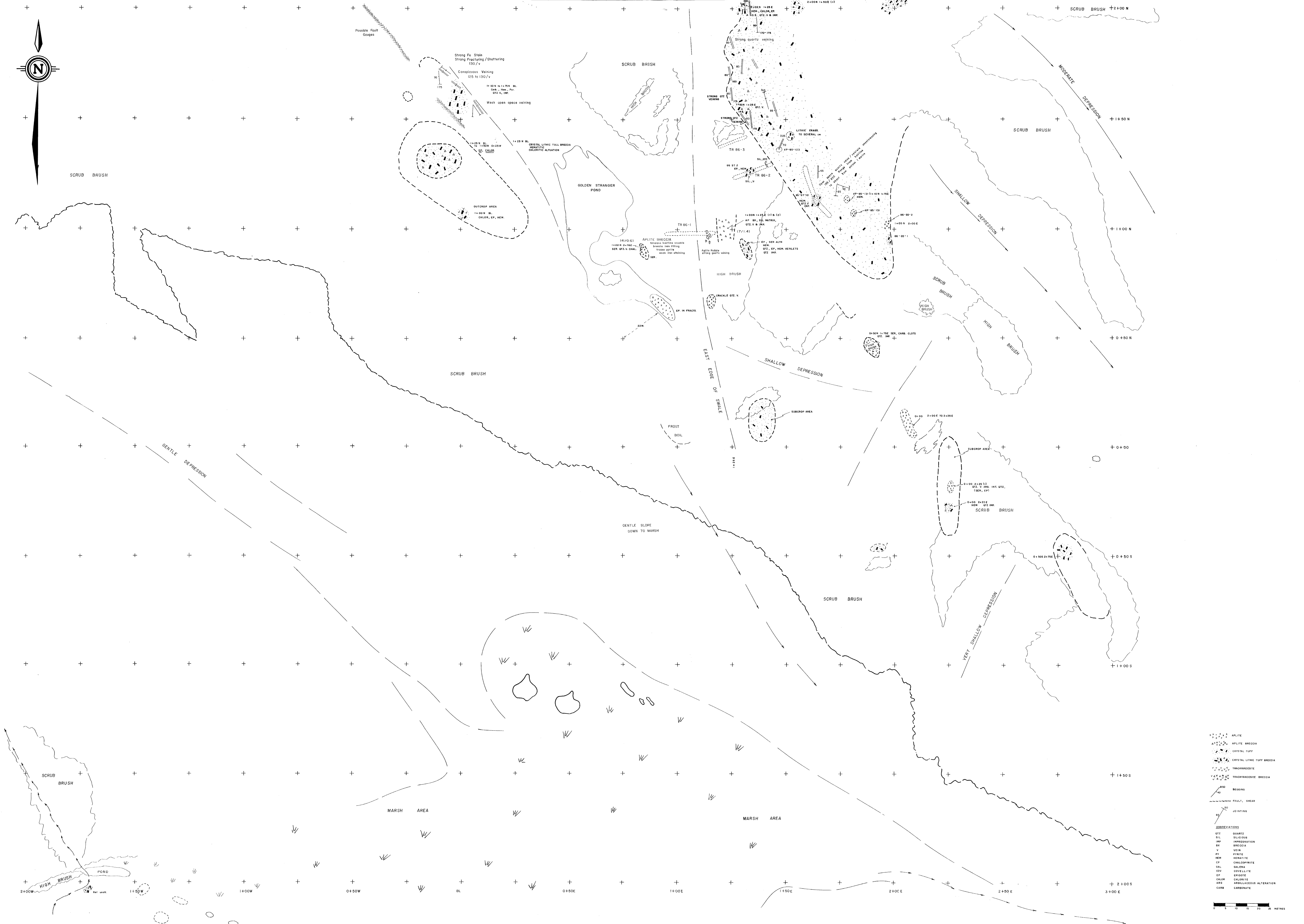
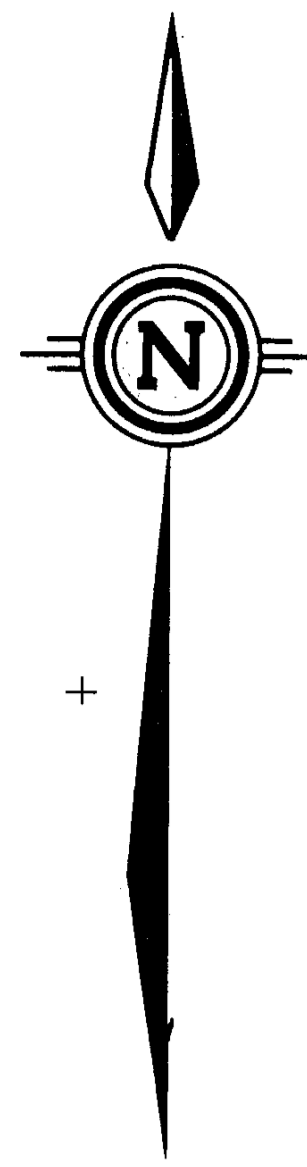




- APLITE BRECCIA
 - CRYSTAL TUFF
 - CRYSTAL LITHIC TUFF BRECCIA
 - TRACHANDESITE
 - TRACHANDESITE BRECCIA
 - BEDDING
 - FAULT, BREAK
 - JOINTING
- ABBREVIATIONS
- QZT QUARTZ
 - SLT SILICIOUS
 - IMP IMPREGNATION
 - BR BRECCIA
 - V VEIN
 - PH PYRITE
 - HEM HEAVY METALS
 - CP CHALCOPYRITE
 - BAL BALANCE
 - COV COVINGTONITE
 - EP EPIDOTE
 - CHLOR CHLORITE
 - AMF AMPLASION ALTERATION
 - CARB CARBONATE

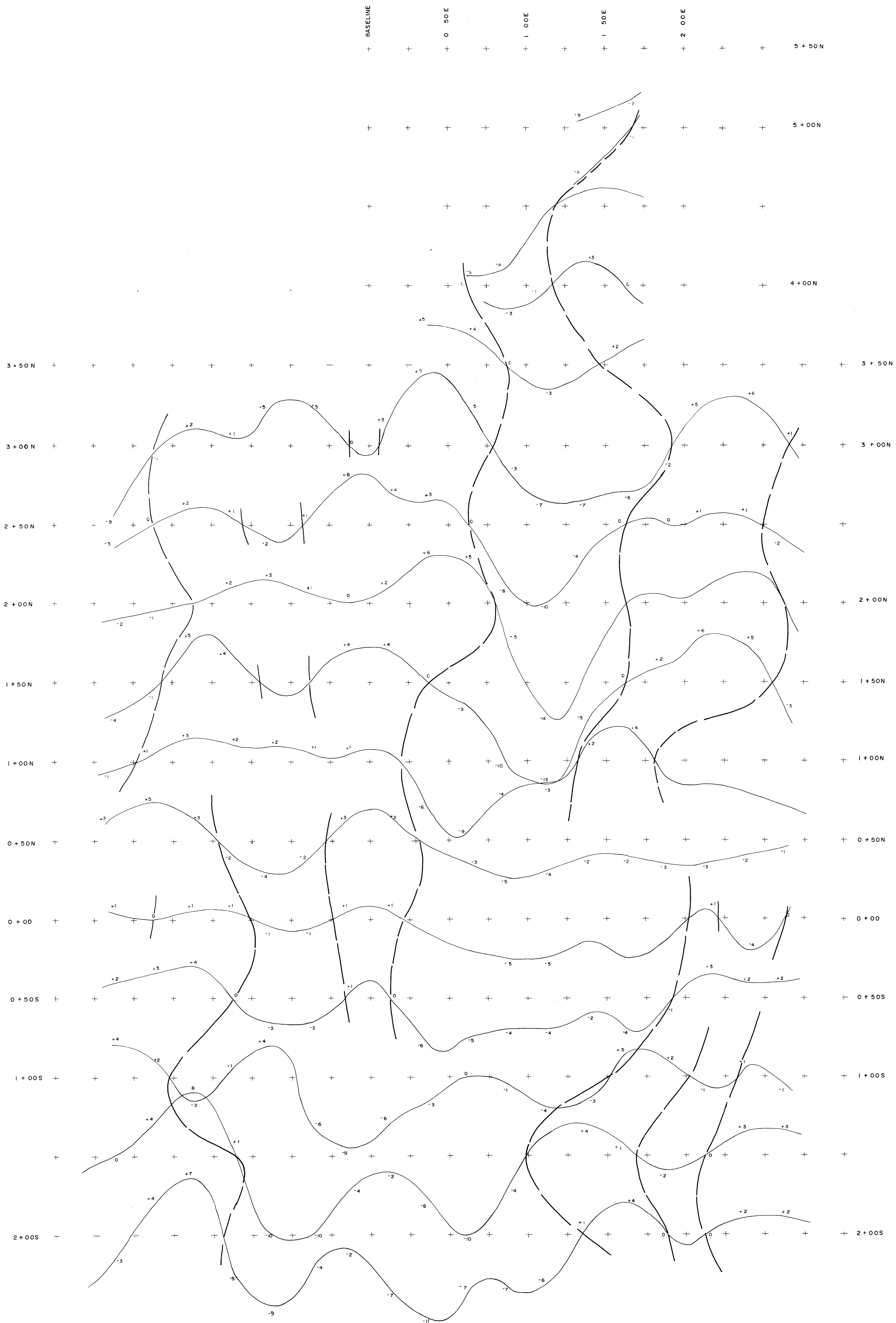
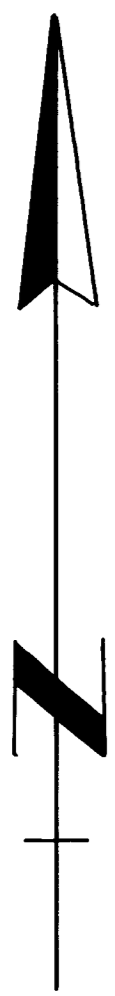
GEOLOGICAL BRANCH
ASSESSMENT REPORT
15,633

WESTERN HORIZONS RESOURCES LTD.	
TOODOGONE JOINT VENTURE	
GOLDEN STRANGER	
NORTH CENTRAL - GEOLOGY	
FIGURE: 6	SCALE: 1:500
DRAWN BY: P. STODOLY	DATE: DECEMBER 1987
K.E. NORTHCOTE AND ASSOCIATES LTD.	

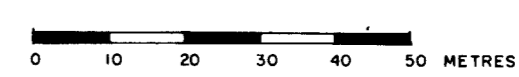
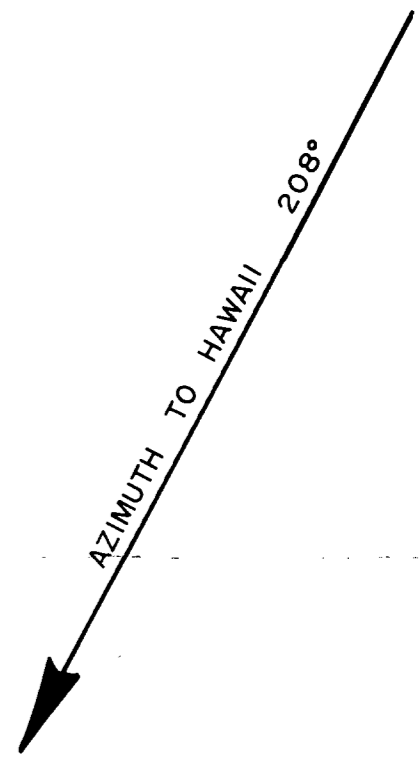


- APLITE
 - ▲▲▲▲▲▲▲▲▲▲ APLITE BRECCIA
 - ○ ○ ○ ○ ○ ○ ○ ○ ○ CRYSTAL TUFF
 - ○ ○ ○ ○ ○ ○ ○ ○ ○ CRYSTAL LITHIC TUFF BRECCIA
 - ○ ○ ○ ○ ○ ○ ○ ○ ○ TRACHANDESITE
 - ○ ○ ○ ○ ○ ○ ○ ○ ○ TRACHANDESITE BRECCIA
 - ○ ○ ○ ○ ○ ○ ○ ○ ○ BEDDING
 - FAULT, SHEAR
 - JOINTING
- ABBREVIATIONS**
- QTZ QUARTZ
 - SLI SILICONE
 - IMP IMPREGNATION
 - BRX BRECCIA
 - V VEIN
 - PR PRITE
 - HEM HEMATITE
 - CP CHALCOPRITE
 - SEL SELERA
 - COV COVELLITE
 - EP EPIDOTE
 - CLOR CHLORITE
 - ALN ANOMALOUS ALTERATION
 - CARB CARBONATE

15,633
 GEOLOGICAL BRANCH
 ASSESSMENT REPORT

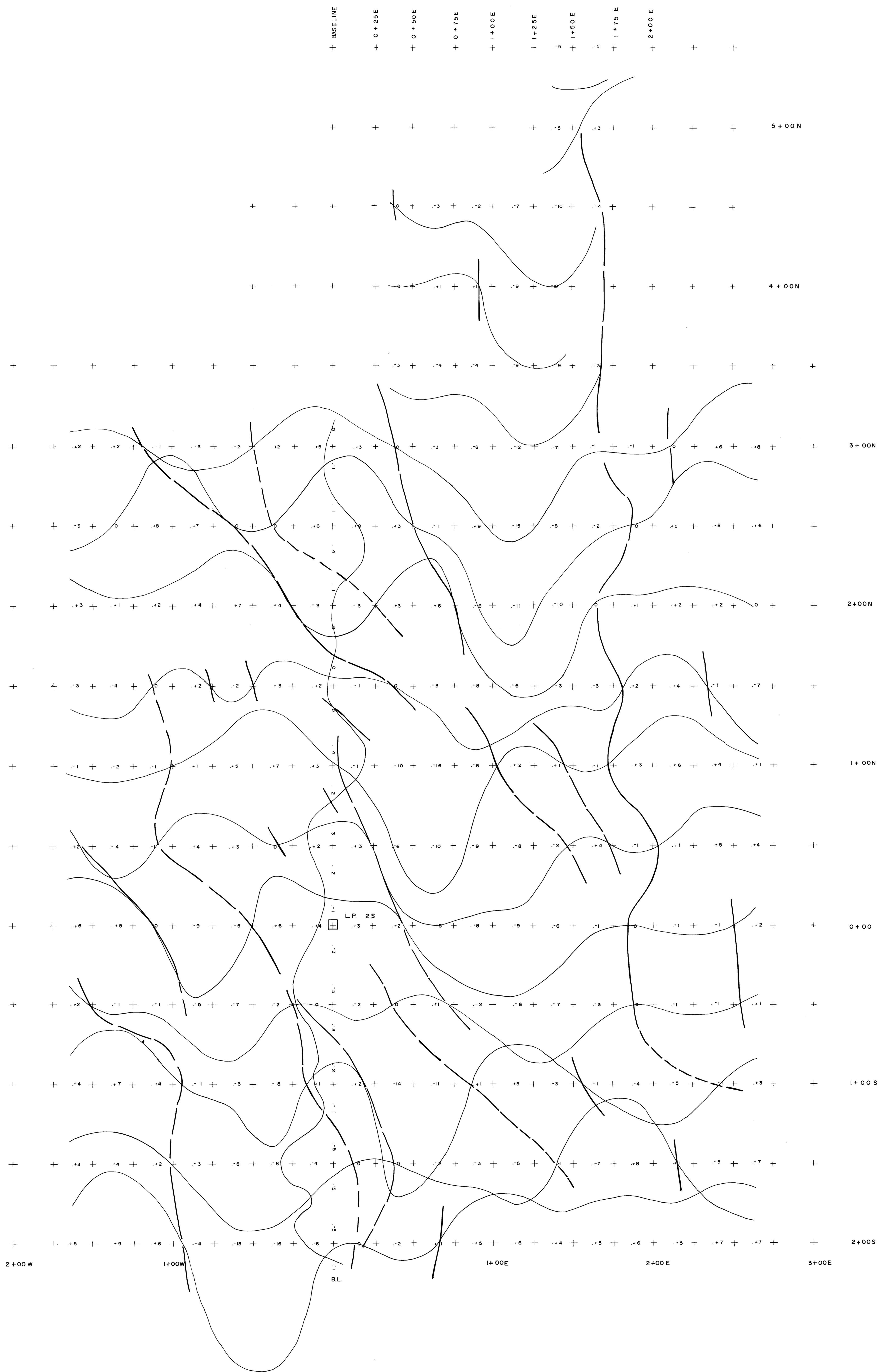


DIPS
+10
+9
+8
+7
+6
+5
+4
+3
+2
+1
0
-1
-2
-3
-4
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-6
-7
-8
-9
-10



GEOLOGICAL BRANCH
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WESTERN HORIZONS RESOURCES LTD.
TOODOGGONE JOINT VENTURE
GOLDEN STRANGER PROPERTY
VLF-EM SURVEY (HAWAII)
DRAWN BY: K.E.N. E.M.T. DATE: DECEMBER, 1986
FIG.: 8 SCALE: 1:1000
GOWER, THOMPSON & ASSOCIATES LTD.

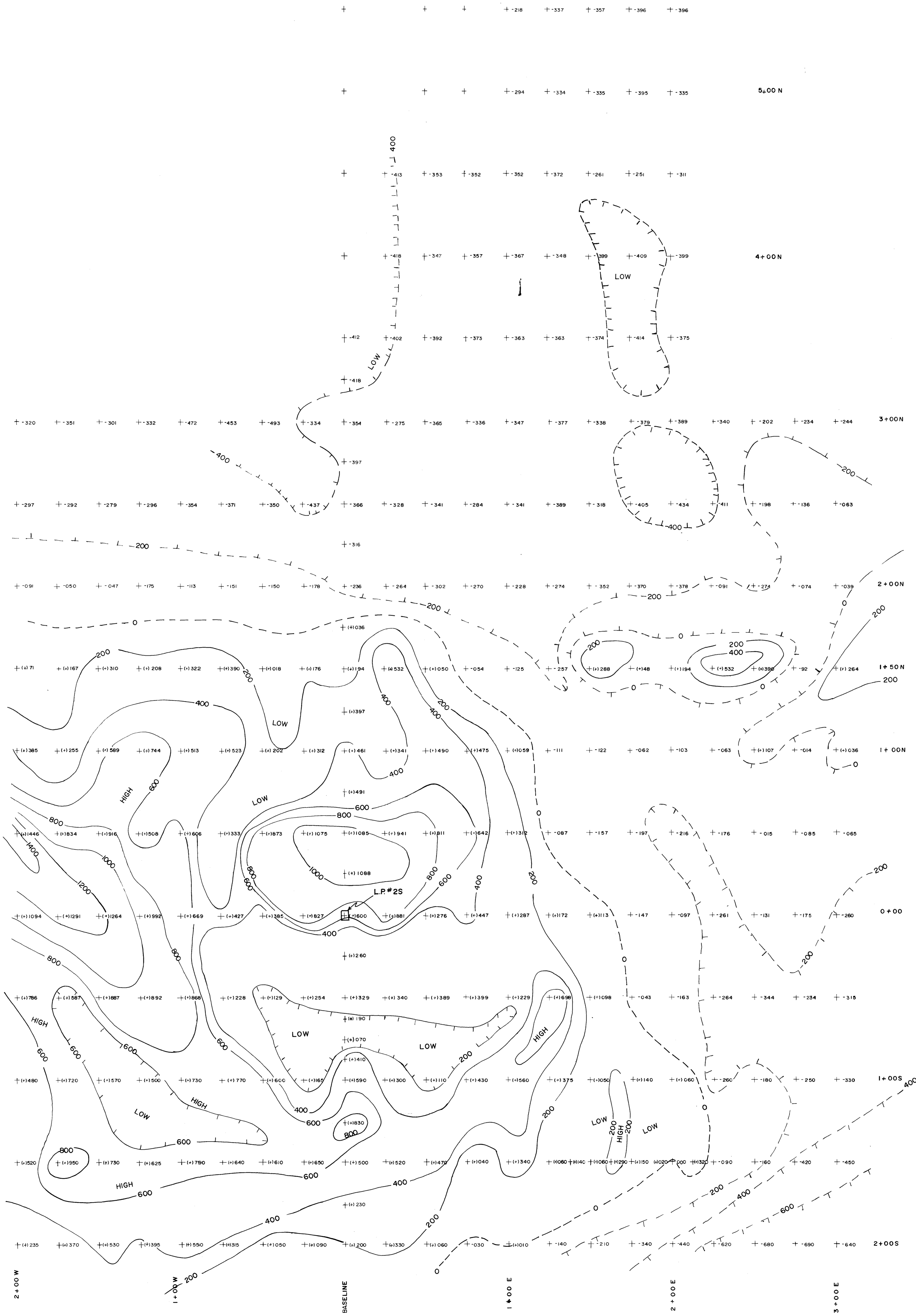


MINUTE TO SEATTLE ≈ 100 KM

GEOLOGICAL BRANCH
ASSESSMENT REPORT
15,633

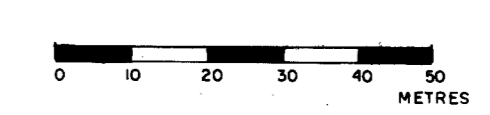
WESTERN HORIZONS RESOURCES LTD.
TOODOGGONE JOINT VENTURE
GOLDEN STRANGER PROPERTY VLF - EM (SEATTLE)
<small>DRAWN BY: K.E.N. E.M.T. DATE: DECEMBER, 1986 FIG. 9 SCALE: 1:1000</small>
GOWER, THOMPSON & ASSOCIATES LTD.

16
15
14
13
12
11
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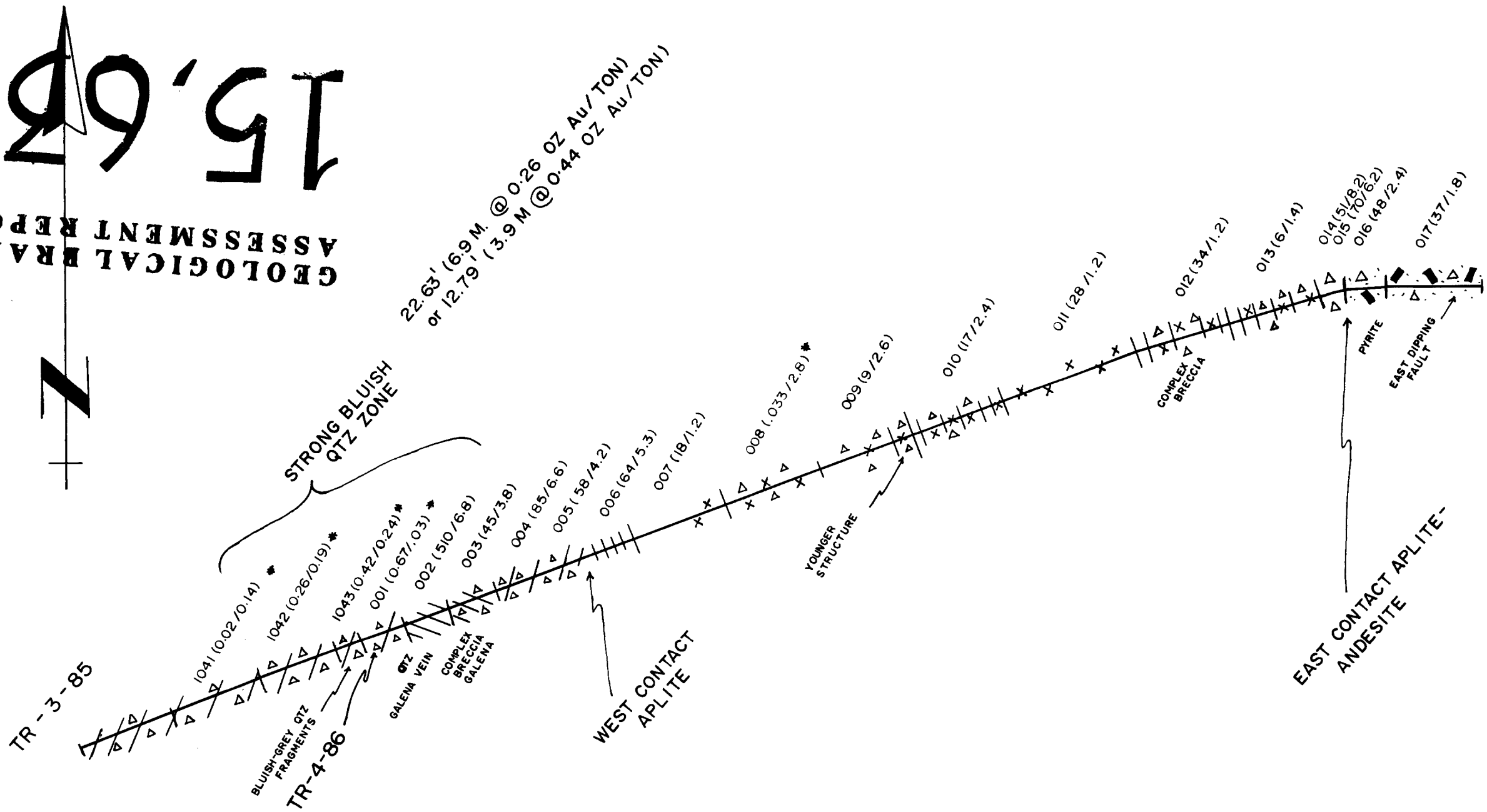
15,633
GEOLOGICAL BRANCH
ASSESSMENT REPORT

WESTERN HORIZONS RESOURCES LTD.	
TOODOGGONE JOINT VENTURE	
GOLDEN STRANGER PROPERTY MAGNETOMETER SURVEY	
DRAWN BY: K.E.N. E.M.T.	DATE: DECEMBER, 1986
FIG. 10	SCALE: 1:1000
GOWER, THOMPSON & ASSOCIATES LTD.	



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TOODOGGONE JOINT VENTURE

GOLDEN STRANGER PROPERTY
ASSAY PLAN & GEOLOGY
TR. NO. 3 & 4

DRAWN BY: K.E.N. EMT

DATE: DECEMBER, 1986

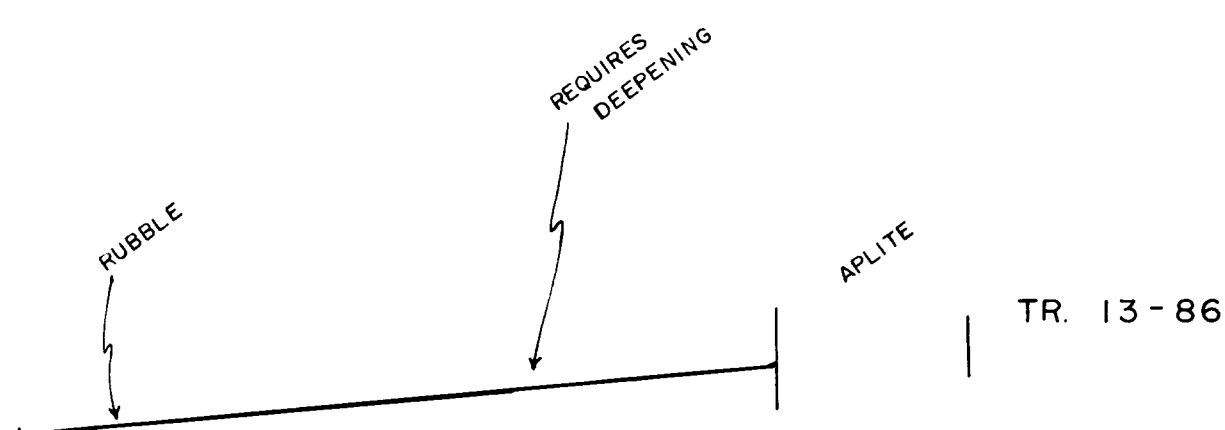
FIG. A

SCALE: 1:100 1 cm = 1 METRE

GOWER, THOMPSON & ASSOCIATES LTD.

- x x x x x APLITE
- △ △ △ △ △ BRECCIA
- ▬ ▬ ▬ ▬ ▬ CRYSTAL TUFF
- //// //// CLAY ZONE
- \\\\ \\\\ SILICIOUS ZONE
- SAMPLES (Au - ppb / Ag - ppm)
- * - (OZ / TON) Au / Ag

FIG. A



**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

15,633

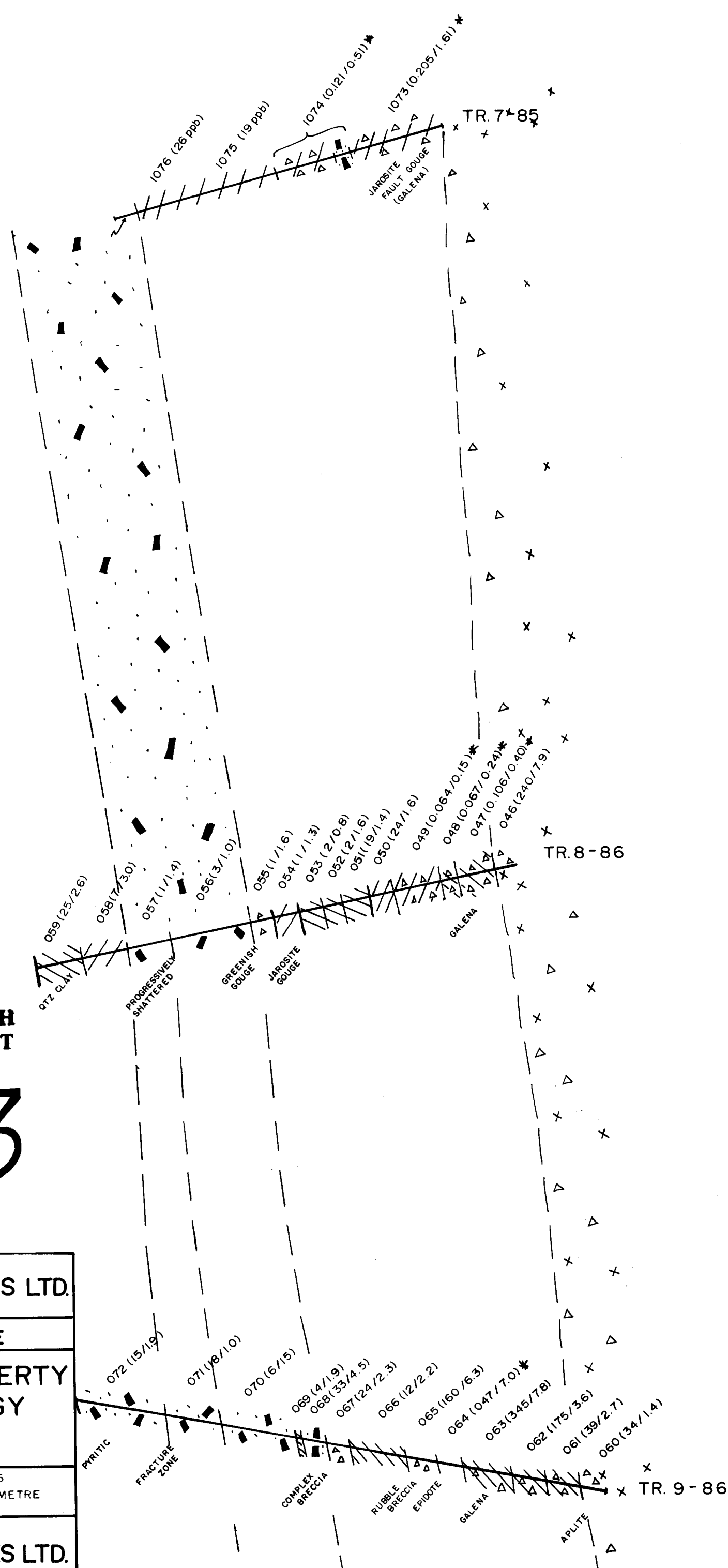
WESTERN HORIZONS RESOURCES LTD.

TOODOGGONE JOINT VENTURE

GOLDEN STRANGER PROPERTY
ASSAY PLAN & GEOLOGY
TR. NO. 7, 8 & 9

DRAWN BY: K.E.N. E.M.T. DATE: DECEMBER, 1986
FIG. B SCALE: 1:100 1cm = 1 METRE

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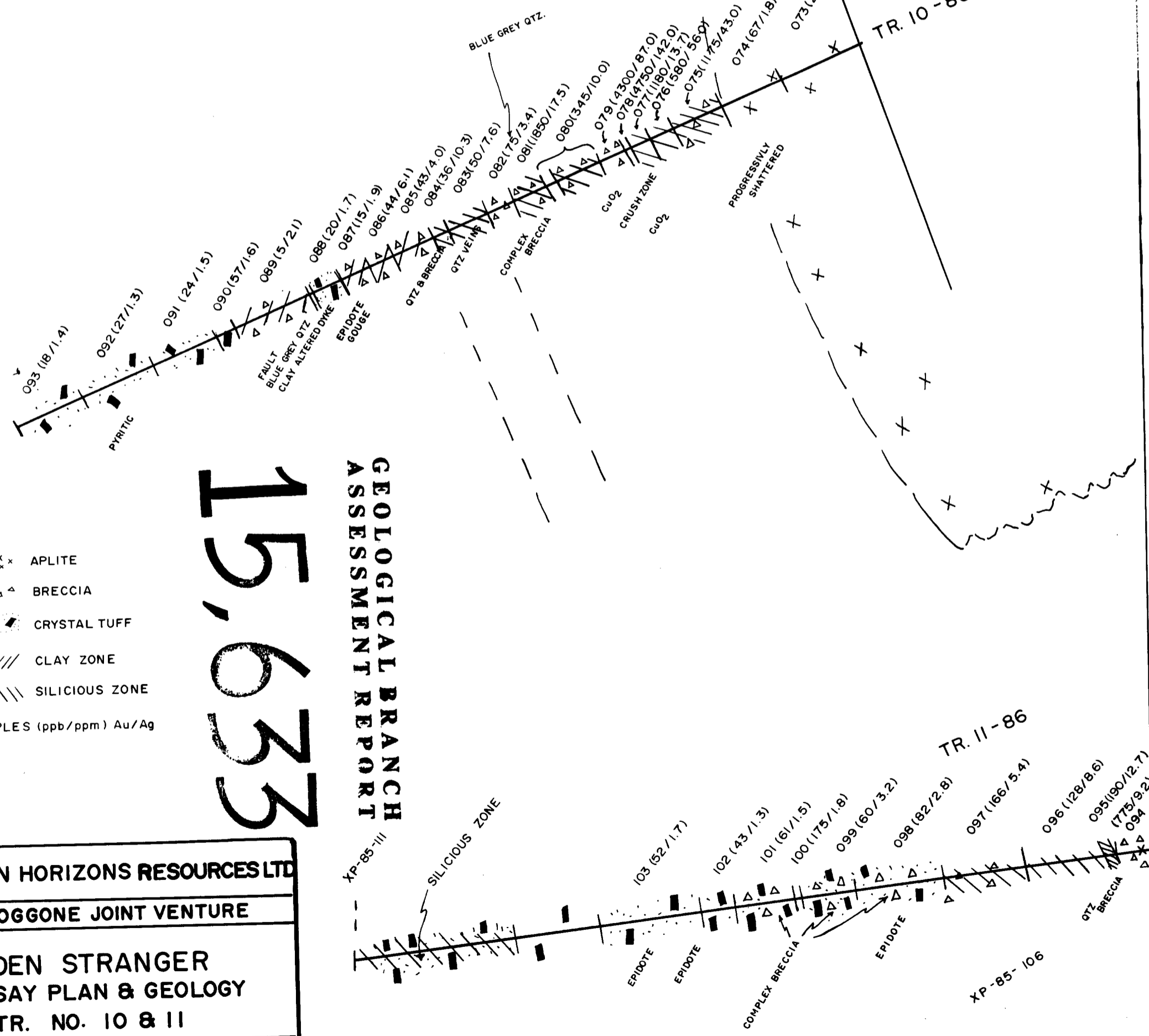
- ***** APLITE
- ▲▲▲▲ BRECCIA
- ■ ■ ■ CRYSTAL TUFF
- //// CLAY ZONE
- \\\\\\\\ SILICIOUS ZONE
- SAMPLES (ppb/ppm) Au/Ag
- * (OZ/TON) Au/Ag



LOCATION LINE

APLITE BODY

TR. 10-86



- xxxxxxx APLITE
- △△△△△ BRECCIA
- ▨▨▨▨▨ CRYSTAL TUFF
- ////// CLAY ZONE
- \\\\\\\\\\ SILICIOUS ZONE
- SAMPLES (ppb/ppm) Au/Ag

15,633

GEOLOGICAL BRANCH ASSESSMENT REPORT

WESTERN HORIZONS RESOURCES LTD

TOODOGGONE JOINT VENTURE

**GOLDEN STRANGER
 ASSAY PLAN & GEOLOGY
 TR. NO. 10 & 11**

DRAWN BY: K.E.N. E.M.T. DATE: DECEMBER, 1986
 FIG.: C SCALE: 1:100 1cm = 1 METRE

GOWER, THOMPSON & ASSOCIATES LTD.

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

15,633

TR-5-85



XP-85-115

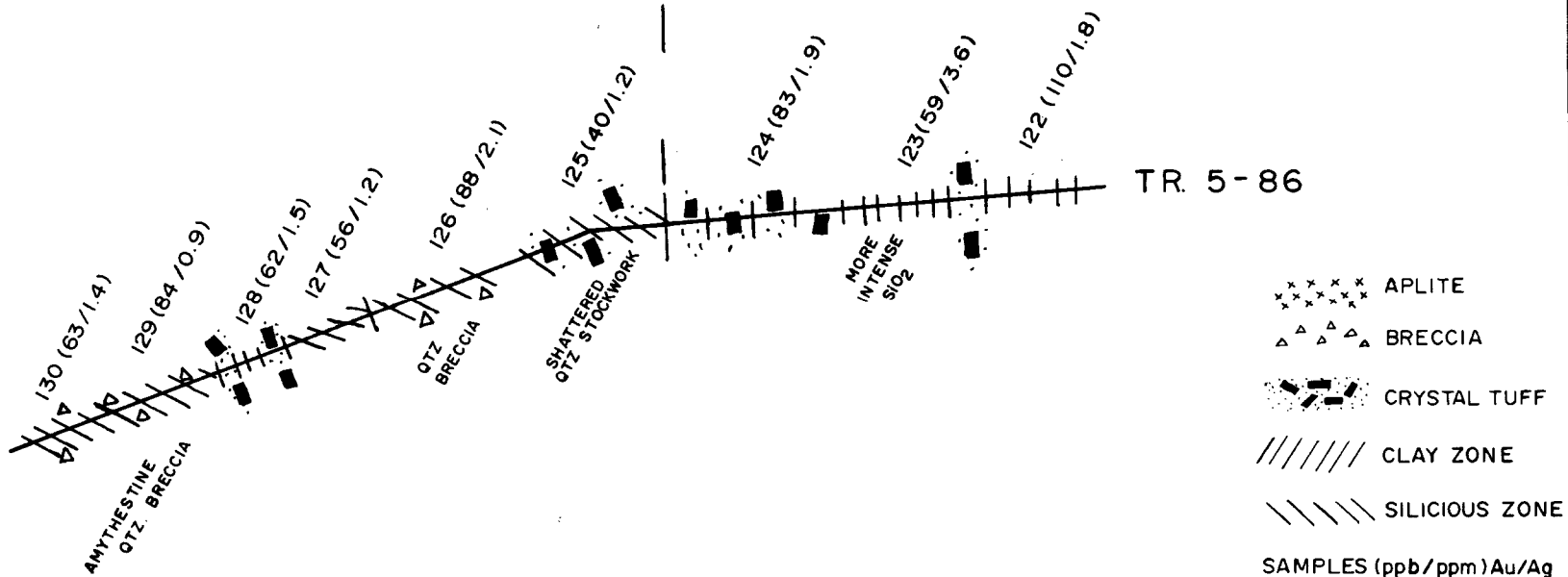
WESTERN HORIZONS RESOURCES LTD.

TOODOGGONE JOINT VENTURE

**GOLDEN STRANGER
ASSAY PLAN & GEOLOGY
TR. NO. 5**

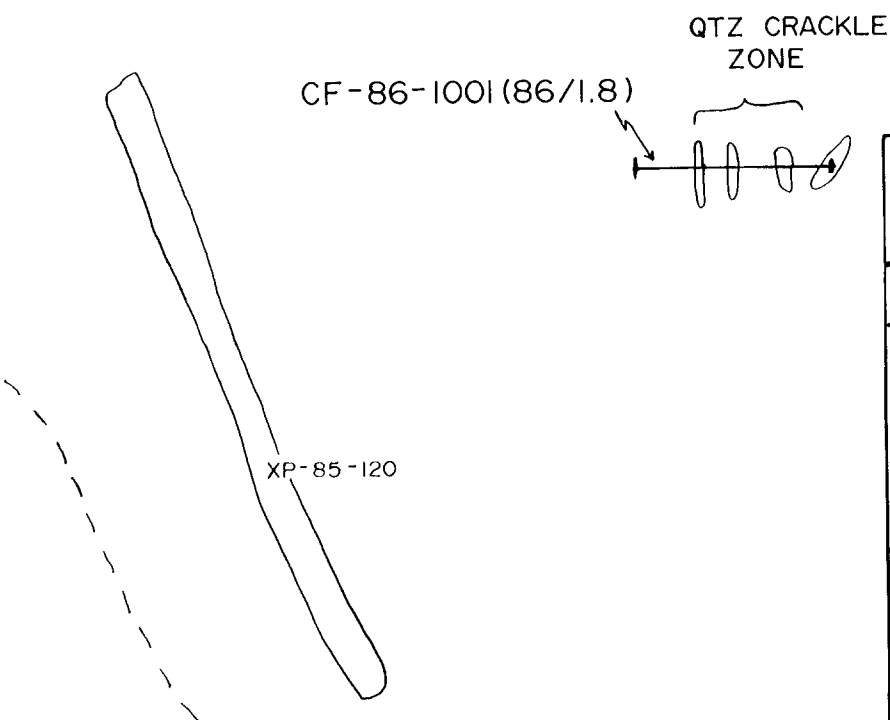
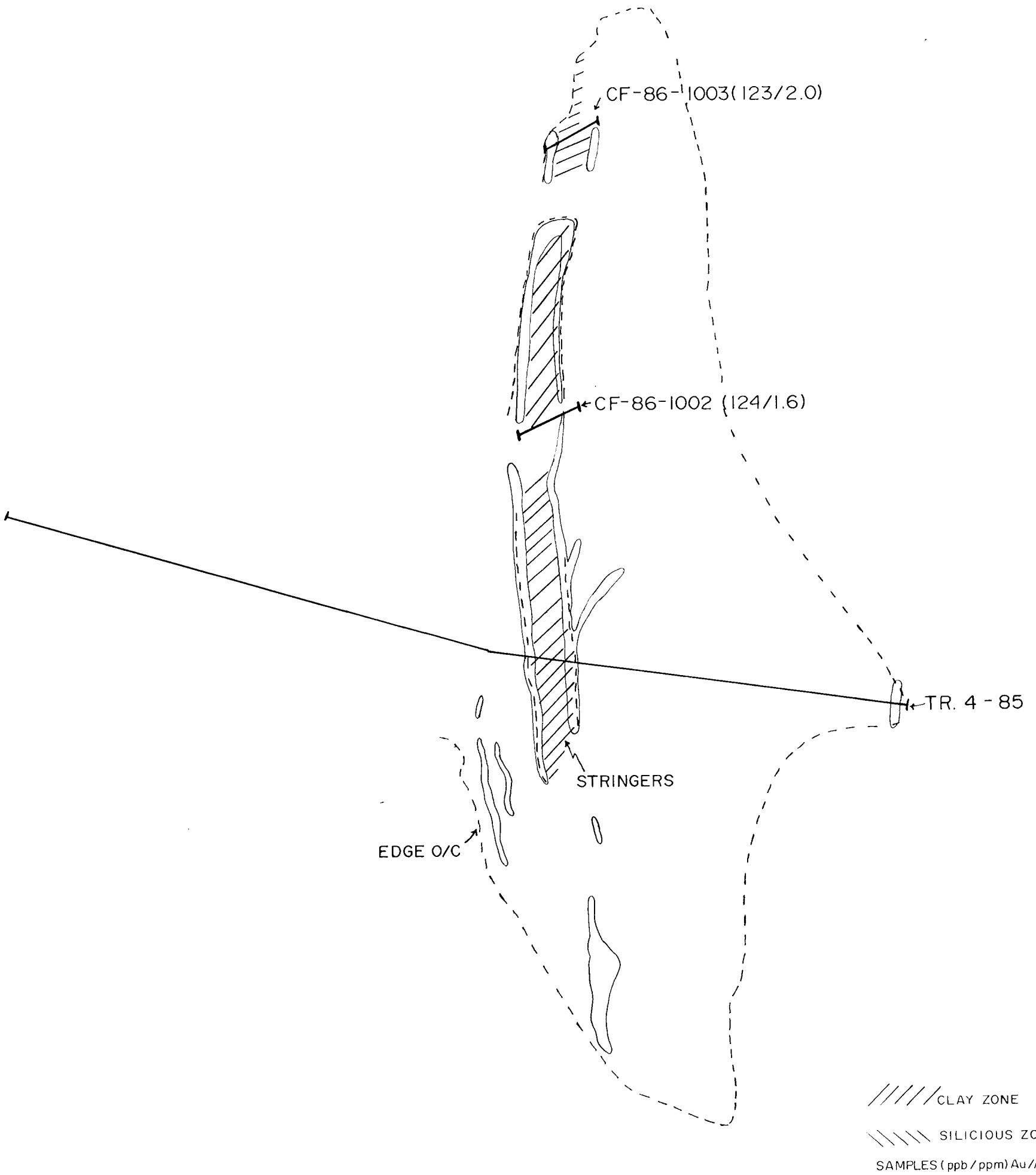
DRAWN BY: K.E.N. E.M.T. DATE: DECEMBER, 1986
FIG. D SCALE: 1:100 1cm = 1 METRE

GOWER, THOMPSON & ASSOCIATES LTD.



**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

15,633



WESTERN HORIZONS RESOURCES LTD.

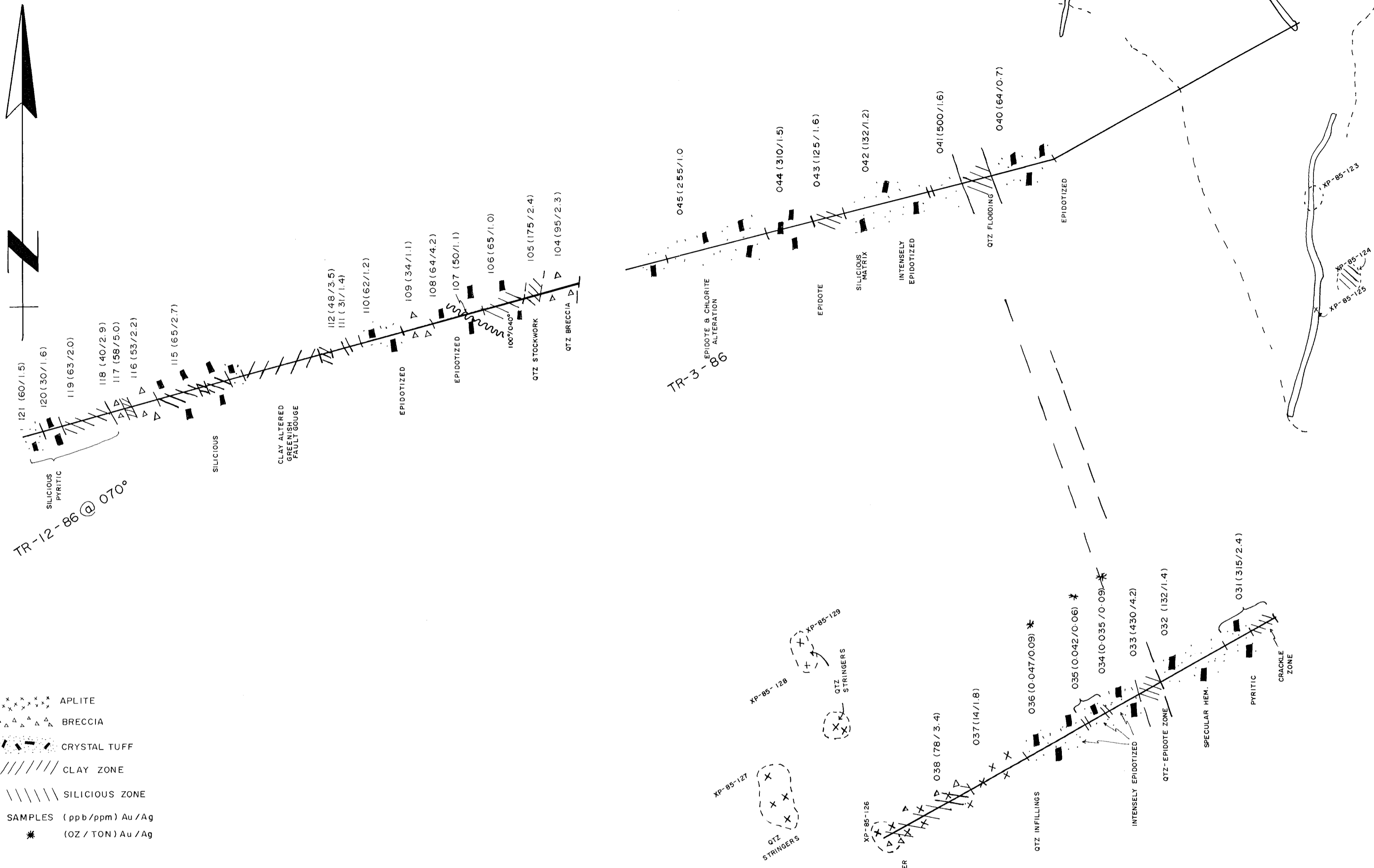
TOODOGGONE JOINT VENTURE

**GOLDEN STRANGER PROPERTY
ASSAY PLAN & GEOLOGY
COBRA FENCES 1001-1003**

DRAWN BY: K.E.N. E.M.T.
FIG. E

DATE: DECEMBER, 1986
SCALE: 1:100 1 cm = 1 METRE

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- x x x x x APLITE
- △ △ △ △ △ BRECCIA
- ■ ■ ■ ■ CRYSTAL TUFF
- //// //// CLAY ZONE
- |||| |||| SILICIOUS ZONE
- SAMPLES (ppb/ppm) Au/Ag
- * (OZ / TON) Au/Ag

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FIG.: F SCALE: 1:100 1cm = 1 METRE

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TR-2-86
(15.6 M. @ 240°)

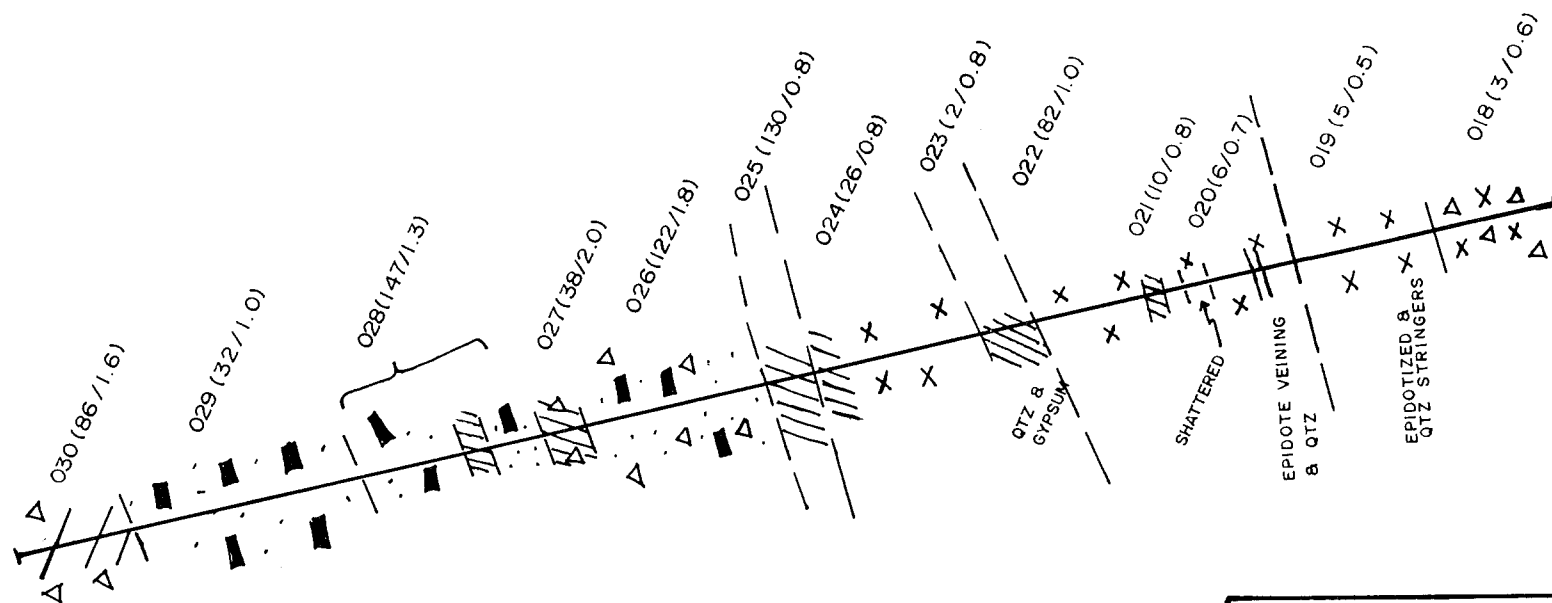
TR-3-86

TR-12-86 @ 070°

FIG. F

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ASSESSMENT REPORT

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TR. 1-86
(20.8 M. -078°)

- xxxxxx APLITE
- ▲▲▲▲ BRECCIA
- ■ ■ ■ CRYSTAL TUFF
- //// CLAY ZONE
- //// SILICIOUS ZONE
- SAMPLES (ppb/ppm) Au / Ag

WESTERN HORIZONS RESOURCES LTD.

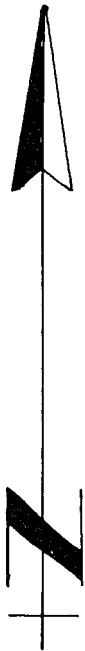
TOODOGGONE JOINT VENTURE

GOLDEN STRANGER PROPERTY
ASSAY PLAN & GEOLOGY
TR. NO. 1

DRAWN BY: K.E.N. E.M.T.
FIG.: G

DATE: DECEMBER, 1986
SCALE: 1:100 1 cm = 1 METRE

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TR. 14-86

1 + 25 E 0 + 00 N

136 (10/1.4)
 135 (13/1.4)
 134 (2/0.6)

QTZ BRECCIA
 EPIDOTITE
 QTZ FRAGS.
 SHEARED
 CHLORITIC

15,633

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TOODOGGONE JOINT VENTURE

GOLDEN STRANGER PROPERTY
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DATE: DECEMBER, 1986

FIG.: H

SCALE: 1:100 1cm = 1 METRE

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XXXXX APLITE

AAAAA BRECCIA

CRYSTAL TUFF

CLAY ZONE

SILICIOUS ZONE

SAMPLES (ppb/ppm) Au/Ag