

85-30-13479

2/84

REPORT ON GROUND MAGNETOMETER SURVEY
ON THE
VALLEY VIEW AND GOLDTOP CLAIMS
AGASSIZ-HARRISON AREA B.C.

New Westminster Mining Division
Latitude 49°15.5'N Longitude 121°51'W
NTS 92H/5W & 4W

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

13,479

Prepared for
STAR MOUNTAIN RESOURCES INC.

by
K.E. NORTHCOTE AND ASSOCIATES LTD.
AGASSIZ B.C.

January 31, 1985

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

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VALLEY VIEW PROPERTY

COSTS TO BE APPLIED TO ASSESSMENT WORK

PROFESSIONAL FEES	<i>Nov 21 - Dec 7/84</i> ^{KEN}	\$1 760.00
J.F. Bristow P.Eng.	4 days @ 300/	\$1 200.00
K.E. Northcote	1 day @ 300	300.00
G.Tomaszewski	2 days @ 80 (line flagging)	160.00
B.Needham	1 day @ 100 " "	100.00
MAGNETOMETER		75.00
Rental	3 days @ \$25.00/day	
TRANSPORTATION		160.00
Bristow Vancouver-Agassiz	640 km @ 25¢	
REPORT PREPARATION		225.00
Typing	50.00	
Draughting	135.00	
Reproduction (report, maps)	40.00	
MISCELLANEOUS		40.00
Telephone	25.00	
Field supplies	15.00	
MANAGEMENT FEE		250.00
K.E. Northcote and Associates Ltd.		
TOTAL		<u>\$2 510.00</u>



REPORT ON GROUND MAGNETOMETER SURVEY
ON THE VALLEY VIEW AND GOLDTOP CLAIMS
AGASSIZ-HARRISON AREA B.C.
NEW WESTMINSTER, M.D.

INTRODUCTION

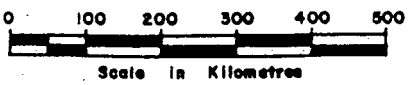
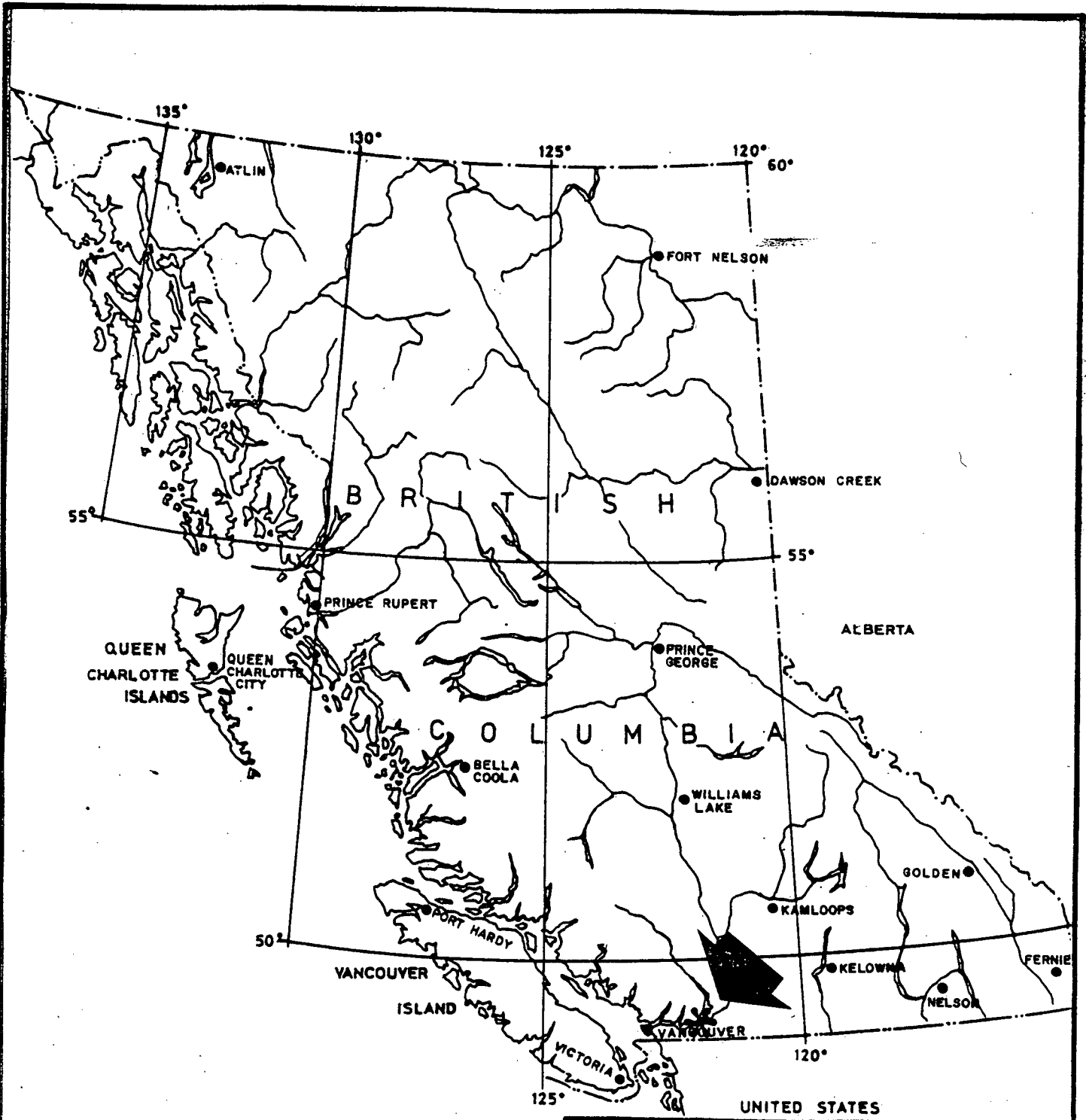
TERMS OF REFERENCE

K.E. Northcote and Associates Ltd. were contracted by Star Mountain Resources Inc. to carry out a ground magnetometer survey on the VALLEY VIEW and GOLDTOP claims, prepare a report outlining the results of this work. This work was done in the period November 21 to December 7, 1984 by J.F. Bristow, P.Eng., of Rooi Enterprises Ltd. under direction of K.E. Northcote and Associates Ltd.

LOCATION

The VALLEY VIEW-GOLDTOP claims are located in the New Westminister Mining Division approximately 7 kilometres west of Agassiz on the east flank of Mount Woodside, Latitude $49^{\circ}15.5'N$, Longitude $121^{\circ}51'W$, NTS 92H/4W & 5W.

Access to the property is by the Mount Woodside-Mount Agassiz forestry access road leading north from Lougheed Highway #7 about 10 kilometres west of Agassiz. Permission may be obtained allowing access to the main showings near the base of the east flank of Mount Woodside through private property of Klaas Schroevers, a resident dairy farmer.



STAR MOUNTAIN RESOURCES INC.	
LOCATION OF VALLEY VIEW PROPERTY	
FIGURE: 1	SCALE: 1:10 000 000
DRAWN BY: PSTOECKLY	DATE: FEB. 84
K.E. NORTHCOTE & ASSOCIATES LTD.	
GOWER THOMPSON & ASSOCIATES LTD.	

Elevations on the property range from approximately 35 metres at the level of Agassiz prairie rising steeply to 900 metres near the top of Mount Woodside. Exploration and development can be conducted on the property throughout the year with exception of occasional short periods of snowfall during the winter months.

CLAIMS STATUS

The claims comprising the Valley View #1 group containing 29 units and 2 internal two-post claims are listed in Table 1 and are shown on Figure 2.

TABLE I

VALLEY VIEW #1 GROUP

CLAIMS	UNITS	RECORD NO.	ANNIVERSARY DATE
GOLDTOP I	20	2336-(2)	February 6 1987*
GOLDTOP II	4	2338-(2)	February 13 1987*
GOLDTOP III	5	2337-(2)	February 13 1987**
VALLEY VIEW I	Two-post claim	1827-(2)	February 24 1987**
VALLEY VIEW II	" " "	1828-(2)	February 24 1987

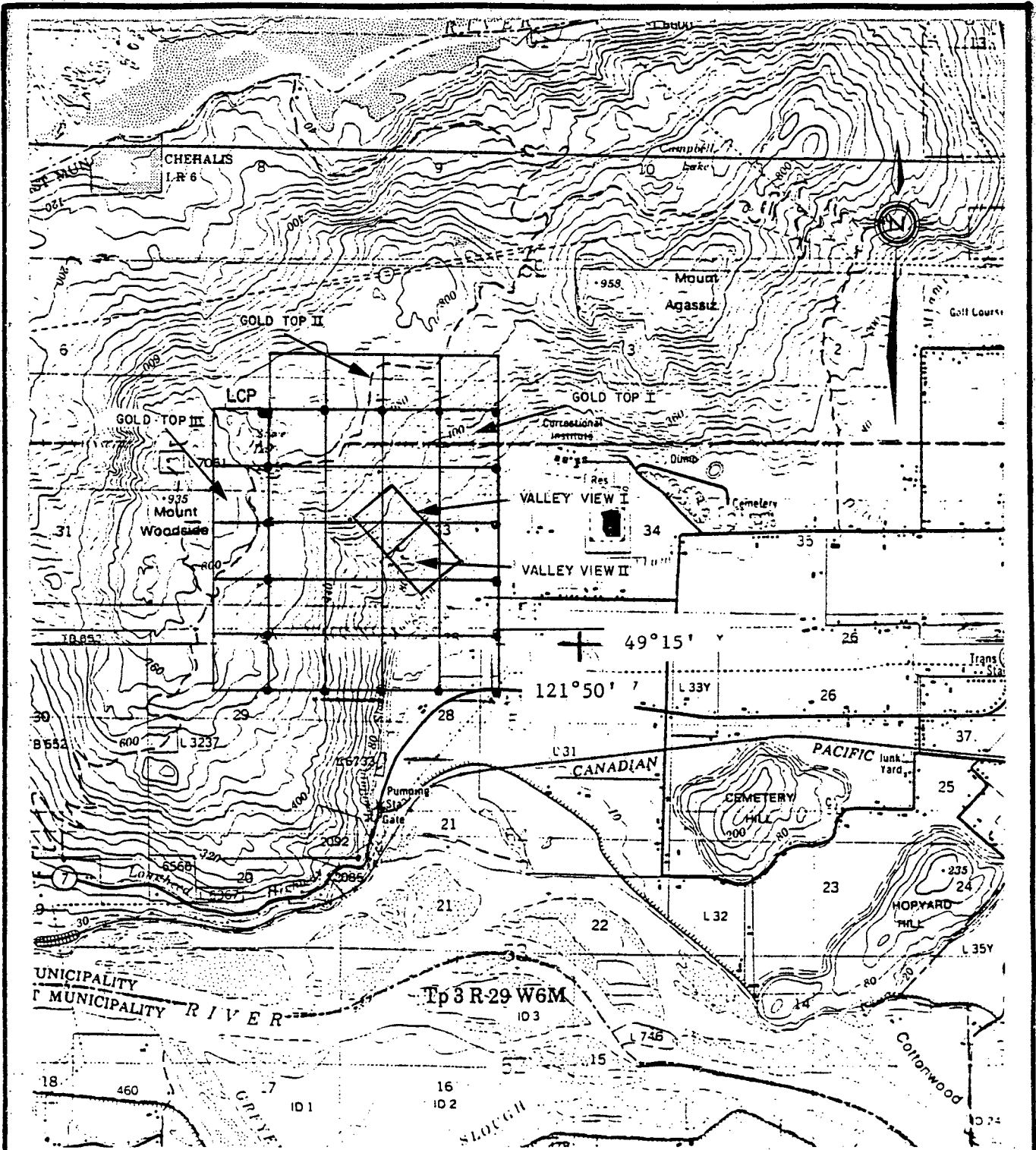
Total 31 units and two-post claims.

The common GOLDTOP legal corner post is situated 200 metres northeast of Stacey Lake near the crest of Mount Woodside. The initial post of the VALLEY VIEW claims is located 1830 metres southeast of Stacey Lake on the lower east flank of Mount Woodside.

The VALLEY VIEW I and II claims were staked by S.C. Gower on January 31, 1983, transferred by Bill of Sale to Western Horizons Ltd. and then sold

* 2 years assessment approved July 25/84 on GOLDTOP I, II, III.

** 3 years assessment approved July 25/84 on VALLEY VIEW I, II.



SCALE 0 2 km

0 2 miles

STAR MOUNTAIN RESOURCES INC.

LOCATION OF VALLEY VIEW AND GOLDTOP CLAIMS

FIGURE: 2

SCALE: 1: 50 000

DRAWN BY: PSTOECKLY

DATE: FEB. 84

K.E. NORTHCOTE & ASSOCIATES LTD.

GOWER THOMPSON & ASSOCIATES LTD.

to W. Schoenbaechler by Bill of Sale dated November 21, 1983. GOLDTOP I, II and III were staked by K.E. Northcote as agent for W. Schoenbaechler and recorded in February 1984. All claims were staked in accordance with the Mineral Act. VALLEY VIEW I, II, and GOLDTOP I, II, and III were grouped as Valley View I Group. Legality of the claims and their maintenance in good standing is the responsibility of the registered owner.

GEOLOGY OF THE VALLEY VIEW PROPERTY

Geologic maps of the Harrison Lake area by C.H. Crickmay, 1924, and Map 12-1969, Paper 69-47 by Monger, 1969, indicate that the Valley View property is underlain by Harrison Lake Formation, possibly straddling contacts with Mysterious Creek and Kent Formations on the north and Agassiz Prairie Formation on the northeast. Crickmay includes Harrison Lake, Mysterious Creek and Echo Island Formations in the Porphyrite Series and the Kent and Agassiz Prairie Formations in the Agassiz Series.

THE PORPHYRITE SERIES (C.H. Crickmay, 1924)

The Middle Jurassic Porphyrite Series is estimated to be about 14,500 feet (4,500 metres) thick with the lower part consisting of volcanic deposits; the middle part subaqueous pyroclastic materials; and the upper part of black argillite of marine origin. On the basis of these three distinct lithologies the Porphyrite Series is subdivided into the lower Harrison Lake, middle Mysterious Creek and upper Echo Island Formations.

The Harrison Lake Formation is composed of interbedded effusive and pyroclastic rock including tuff and agglomerate with minor chert and argillite with a total estimated thickness of greater than 9,000 feet

(2750 metres). The lower portion of the flows resemble intrusive porphyries as a result of their commonly strongly porphyritic texture in the lower parts of the flows.

Rock of the Echo Island Formation lie on the south side of Harrison River, to the north of GOLDTOP II claims, resting conformably on the Harrison Lake Formation. At the type locality on Echo Island it is estimated to be over 1000 feet (300 metres) thick consisting of interbedded sandstone, arkose, tuff, chert, argillite and minor agglomerate. It is well stratified and contains no intercalated flows and very few coarse pyroclastic beds.

Mysterious Creek Formation consists almost entirely of black argillite with very minor limestone and arkose interbeds for an estimated total thickness of approximately 2500 feet (750 metres). The argillite is slightly arenaceous at the top of the formation.

THE AGASSIZ SERIES (C.H. Crickmay, 1924)

The Upper Jurassic Agassiz Series is readily divisible into two formations: the Kent and Agassiz Prairie Formations.

The Kent Formation on Mount Woodside-Agassiz Mountain consists of approximately 3000 feet (900 metres) of conglomerate containing interbedded shale and sandstone with very minor effusive rock at the top of the sequence.

The Agassiz Prairie Formation is composed of approximately 3700 feet (1100 metres) of black argillite containing much gypsum with some interbeds of quartzite, arkose, tuffs and limestone.

Geologic Mapping on Valley View Property (Previously reported)

The rocks exposed in the vicinity of mineralization on VALLEY VIEW I and II claims consists of volcanic flow and tuff breccia pyroclastic rocks containing interbedded volcanic-sedimentary fine to coarse-grained greywacke, tuff and minor arkose probably of the Harrison Lake Formation. The lower part of Stacey Creek on GOLDTOP I claim contains interbedded chert, arkose, tuff and agglomerate. There is some uncertainty regarding which formation these rocks represent but they too are probably part of the Porphyrite Series.

A strong northeasterly trending zone of hydrothermal alteration extending for 350 metres pervades the volcanogenic rocks on VALLEY VIEW I and II claims. This alteration consists of chlorite, locally strong sericite, lesser epidote with some pervasive impregnation by feldspar (albite?) and quartz. Disseminated pyrite occurs throughout the alteration zone with much lesser localized pyrrhotite. Southeasterly trending vertical to steep southwesterly and northeasterly dipping mineralized open space quartz-sericite-(carbonate)-epidote veins are superimposed on the alteration zones. These veins locally extend several centimetres outwards pervading and replacing wall rock and are mineralized by coarse crystalline pyrite, lesser chalcopyrite, minor sphalerite and galena with silver values and noneconomic but locally significant trace amounts of gold.

A second very significant zone of hydrothermal alteration and mineralization is located in the lower reaches of Stacey Creek where it is well exposed on the recently scoured northeast bank and locally in the streambed. The zone extends for approximately 75 metres along the stream bank from stations 15 to 22 and for an unknown distance to the southeast. The southwest wall of the gully does not appear to contain the same intensity of alteration. Virtually unaltered volcanics occur on the

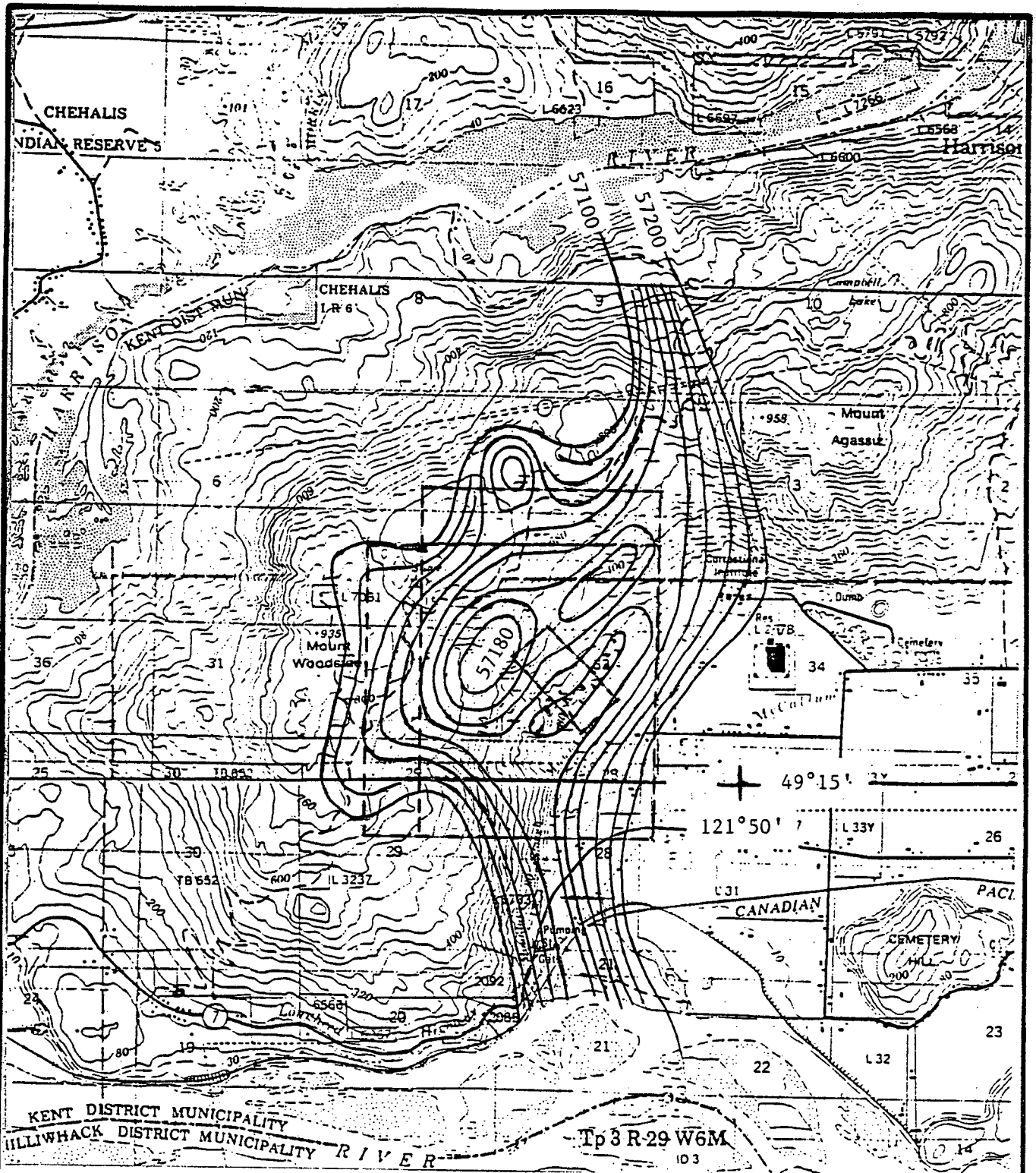
north side of a fault between stations 22 and 23. See Figure 6. The altered zone occurs in bedded siliceous rocks, chert, arkose, breccias which have undergone extensive sericitic, and lesser but locally very strong brecciation with strong silicic and feldspathic impregnation and veining. An irregular vein to 0.5 metres wide of barite occurs in an intensely sericitic, (pyrophyllite) brecciated alteration at station 19 in the streambed. Minor sulphide mineralization consisting of pyrite, chalcopyrite, galena and sphalerite occurs locally in association with sericitic and siliceous alteration. Significant differences between the Stacey Creek (Constantine) zone and Valley View zone is much more intense sericitic (pyrophyllite) alteration, stronger brecciation and much less disseminated pyrite and other sulphides in the former.

Aeromagnetic Survey

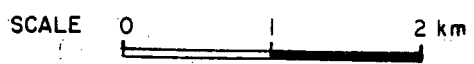
An aeromagnetic survey run jointly by federal and provincial agencies, Maps 8537 G and 8538 G shows an anomalous magnetic pattern over the claims area. A northeasterly trending trough of 57,140 gammas extends from the southwest side of Stacey Creek on GOLDTOP I claim northeasterly across VALLEY VIEW I and II claims and is flanked on the northwest by a high ranging from 57,170 to 180 gammas. The low trough corresponds almost perfectly with the zones of intense hydrothermal alteration and mineralization. The high sulphide content of this zone would be expected to result in higher magnetic values in this zone, particularly if pyrrhotite is present. Possibly intense chloritic and sericitic alteration with destruction of magnetite accounts for regionally lower magnetic values in this small area. See Figure 3.

PRESENT WORK

An orientation ground magnetometer survey was conducted by J.F. Bristow, P.Eng.



FROM EMR/MEMPR AEROMAGNETIC
MAPS 8537 G and 8538 G



STAR MOUNTAIN RESOURCES INC.	
AEROMAGNETIC SURVEY	
FIGURE: 3	SCALE: 1:50 000
DRAWN BY: P. STOECKLY	DATE: MAR 84
K.E. NORTHCOTE & ASSOCIATES LTD.	
GOWER THOMPSON & ASSOCIATES LTD.	

covering the west half of the Valley View grid and tying in with the previous survey over the east half of the grid documented in a report by K.E. Northcote and Associates Ltd., dated March, 1984. For convenience the ground magnetics of the full grid, east and west halves comprise Figure 4. Instrument and survey documentation are given in Appendix A.

RESULTS

Ground Magnetometer Survey

East Half of Grid, Figure 4 (reported March, 1984)

The ground magnetometer survey run by J.F. Bristow, P.Eng., indicates slightly higher magnetic values of up to 57,017 gammas across the intensely altered pyritized mineralized zone on VALLEY VIEW I and II claims with a slight decrease in values on the flanks of the altered zone, the order of 56,700 to 56,850 gammas. There is a suggestion of slightly increasing values in fresher volcanigenic rocks to the northwest. The narrow northeasterly trending magnetic pattern of ground magnetics outlines quite closely the zone of most intense alteration, pyritization, and (pyrrhotitization). See Figure 4.

West Half of Grid, Figure 4 (resulting from survey Nov.21-Dec.7, 1984)

A narrow northeasterly trending high of 56,850+ gammas in the vicinity of 4 + 00 to 4 + 500 SW, 0+ 50 to 0+ 75 SE corresponds to a propylitic altered mineralized zone containing significant copper and silver values and weakly anomalous gold. Chip samples from a small pit produced 9300 ppm Cu, 50.0 ppm Ag and 80 ppb Au. See Figure 4.

A similar southwest trending high of 56,800 to 56,850 gammas extending

along the baseline from 5+75 SW to 7+00 SW may indicate a similar sulphide bearing zone. See Figure 4.

Highs of 56,850+ gammas on the northwest end of lines 6+50 SW and 7+00 SW may also indicate presence of sulphide zones or in this case fresher volcanics richer in magnetite. See Figure 4.

A broad area of low magnetics -56,700 gammas in the vicinity of Stacey Creek, Figure 4, corresponds very well with the previous geologic interpretation of siliceous sediments and sericite-silical-(barite)brecciated alteration zone containing scattered pods and disseminations of galena, sphalerite and chalcopyrite containing silver values and anomalous gold. The best values obtained from chip samples across mineralized zone are 2950 ppm Cu, 9000 ppm Pb, 14,000 ppm Zn, 30.0 ppm Ag and 450 ppb Au.

CONCLUSIONS

The ground magnetometer survey has proven its applicability to locating two kinds of alteration-mineralization on the Valley View property.

(a) Narrow northeasterly trending zones of higher magnetics the order of 56,800 to 56,900 gammas, where bedrock is exposed, correspond to zones of propylitic alteration with sulphides as disseminations and fracture fillings. Covered areas with similar northeasterly trending zones of higher magnetics require investigation. The method used would be dependent upon depth of overburden.

(b) The broad southeasterly trending low ranging from 56,700 to less than 56,650 gammas at the southwest end of the grid corresponds to a zone of bedded siliceous sediments and metavolcanics (?) and sericite-silica- (barite) alteration with localization of significant sulphides. Scattered lows within the survey area, particularly where associated

with adjacent highs, are also worthy of investigation.

RECOMMENDATIONS

The program outlined in the report, dated March 1984, by K.E. Northcote and Associates Ltd. should be carried out. Use of ground magnetometer surveys would be an asset in specific areas where more direct methods for detection of zones of alteration and mineralization cannot be used.

It is further recommended that VLF-EM survey be run on the existing grid. This survey method might prove useful in conjunction with additional magnetometer surveys during the course of exploration of the Valley View property.



REFERENCES

- Cairnes C.E. 1944, Hope: GSC Map 737A
- Crickmay C.H., 1925, The Geology and Paleontology of the Harrison Lake District British Columbia, Together with a General Review of the Jurassic Faunas and Stratigraphy of Western North America. Ph.D. Thesis Leland Stanford Junior University, 1925.
- EMR/MEMPR Aeromagnetic surveys Maps 8537G Chilliwack, 8538G Harrison Lake
- MEMPR MMAR 1955-74; 1961-88; 1966-62
 GEM 1970-247; 1971-264; 1974-105; 1975-E62
 MINFILE 92H SW 015 Valley View Property File
 92H SW & NW; 92 G NE
- Monger J.W.H. 1969 Hope Map-Area West Half (92H W $\frac{1}{2}$) British Columbia
GSC Paper 69-47 pp75
- Northcote K.E. Geological and Geophysical Survey of Valley View and Goldtop
Claims, March, 1984, MEMPR Assessment Report.
- Sutherland Brown A. 1974, Britannia Mine MEMPR GEM 1974 pp 190-197

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.

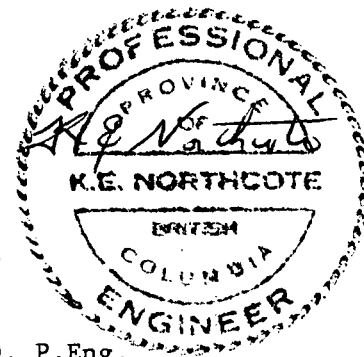
2] I obtained a Ph.D. in geology from U.B.C. in 1968 and qualified for registration with the Association of Professional Engineers of B.C. in 1967.

3] This report is a result of work done by J.F. Bristow, P.Eng under my supervision on the Valley View property during the period November 21 to December 7, 1984. Use was made of available pertinent maps and publications.

4] I have no interest either directly or indirectly in the properties or securities of Star Mountain Resources Inc., nor do I expect to receive any.

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 31 st day of January, 1985



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

APPENDIX A
MAGNETOMETER SURVEY

December 7, 1984.

K.E. Northcote & Associates Ltd.,
2346-Ashton Road, R.R. #1,
Agassiz, B.C. V0M 1A0.

Dear Ken:

Re: Magnetometer Survey - Valley View Claims.

Further to our telephone conversation of December 6, 1984, attached is the data promised.

1. The survey was conducted using a Scintrex Portable Proton Precession Model MP-2 - instrument serial number 8208840.
2. Lines 6+50 to 8+50 were flagged every 12½ metres with stations marked every 25 metres.
3. Readings were taken every 12½ metres at the S.W. end of the grid so that minor rock type changes might hopefully be detected.
4. The readings were corrected for diurnal variation and adjusted to base stations established along the base line.
5. They were plotted in plan at 1:1000 scale and contoured to show 50 gamma variations.
6. In plan, the results are more subtle than I had hoped. However, in profile one gets the impression that possibly the survey area is underlain by a thick weakly magnetic bed dipping steeply into the hill flanked by two zones of slightly less magnetic altered rock.

If this interpretation fits your geological mapping, we might just have a technical success on our hands.

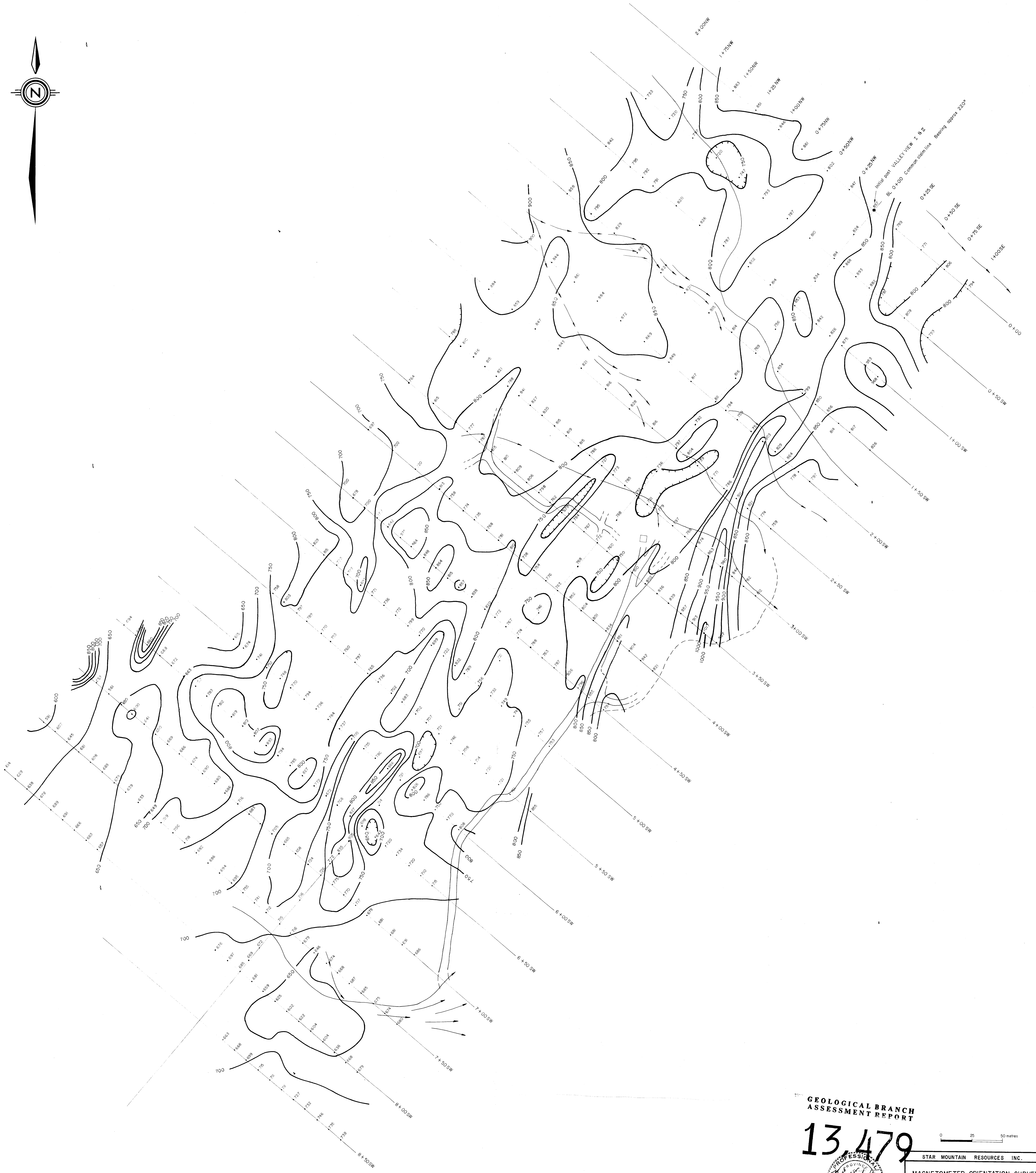
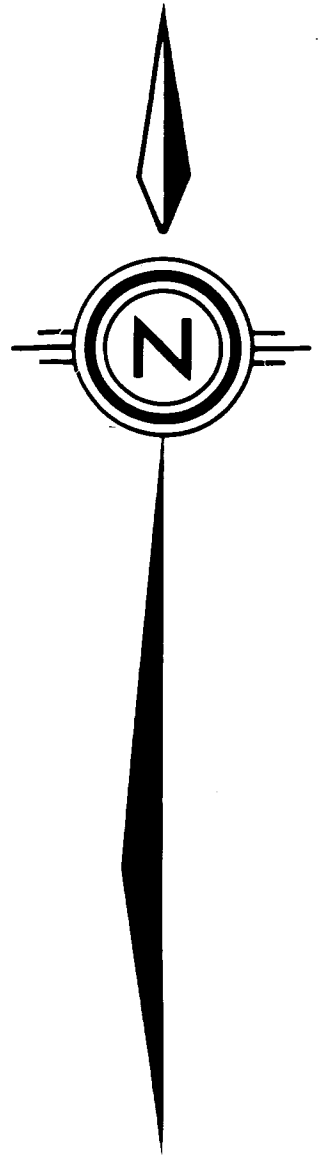
It would be interesting to quickly check out these two "possible" altered zones on the ground.

The outcrop in the creek below the base line on Line 8+00 S.W. warrants a little blasting so that a few fresh mineralized samples might be assayed.

I hope the magnetics are of some help.

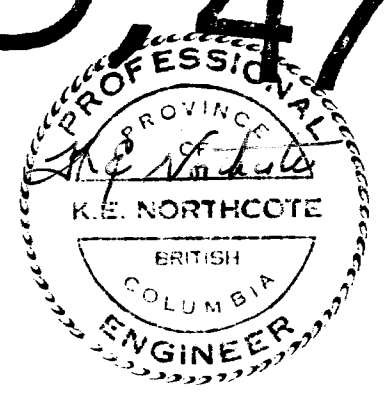
Regards,

James F. Bristow, P. Eng.



GEOLOGICAL BRANCH
ASSESSMENT REPORT

13,479



STAR MOUNTAIN RESOURCES INC.

MAGNETOMETER ORIENTATION SURVEY
VALLEY VIEW CLAIMS

FIGURE 4	SCALE 1:1000
DRAWN BY P-STOCKLEY	DATE DEC 84
K.E. NORTHCOTE & ASSOCIATES LTD.	

NOTE: 756 = 56756 Gauss

Magnetometer Survey By, J.F. BRISTOW, P.Eng.