85-529
13957

5/86

VLF AND MAGNETOMETER SURVEY

TROITSA GROUP
(Hugo, Whiskey, Ted, Lefty, Triple)

OMENICA MINING DIVISION

93E 11E, 6E; 53°31', 127°10'

Whitesail Lake Map Area 93E British Columbia

For

Westrex Development Corp.
860 - 625 Howe St.
Vancouver, B.C.

And

Whitecap Energy Corp.
711 - 475 Howe St.
Vancouver, B.C.

GEOLOGICAL BRANCH
ASSESSMENT REPORT

13,957

June, 1985

by
Dr. T.A. Richards
R.R. #1, Hazelton, B.C.

TABLE OF CONTENTS

LOCATION AND ACCESS

The claims are approximately centered about 53° 31' north latitude and 127° 10' west longitude, on map sheet 93E, seven kilometers north of the west end of Whitesail Lake. The distance to the nearest rail, power, highway and permanent settlement (of Houston, B.C.), is some 140 air kilometers. Good gravel roads from Houston terminate on Tahtsa Reach, 18 km north of the claims.

Present access is easiest by helicopter from Houston or Smithers.

PHYSIOGRAPHY

The claims cover the area bounded by the confluence of Coles Creek with Troitsa Creek. Topography in Coles Creek is a broad valley (elev. 900) modified by low, northerly elongated hills. Troitsa Creek is deeply incised between moderate elevation (1300m) rounded hills. The eastern portion of the claims rises to 1600m on a rounded mountain, containing the only alpine area on the property. The claims are heavily timbered by mature spruce, balsam and hemlock. Swampy terrain is abundant in the Coles Creek Valley. The claims are mostly free of snow from mid-June to November, although significant snow may fall at anytime after late September.

The area is transitional between the Nechako Plateau and the Hazelton Mountain physiographic subdivision.

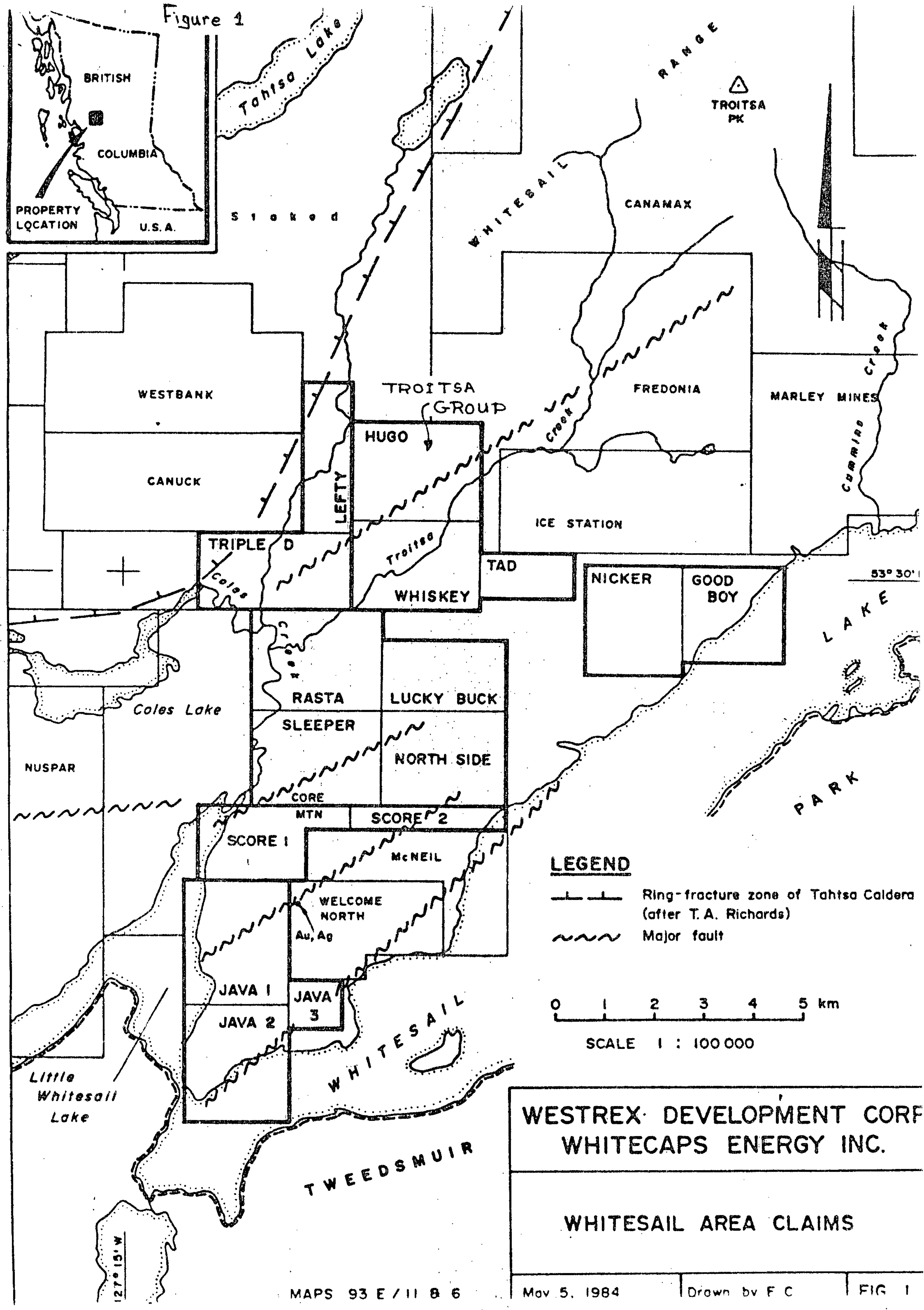


Figure 1
BRITISH
COLUMBIA
PROPERTY LOCATION
U.S.A.
Tahtsa Lake
Staked
WHITESAIL RANGE
TROITSA PK
CANAMAX
WESTBANK
CANUCK
LEFTY
TROITSA GROUP
HUGO
FREDONIA
MARLEY MINES
Creek
Cummins Creek
ICE STATION
TRIPLE D
Troitsa
WHISKEY
TAD
NICKER
GOOD BOY
53° 30'
LAKE
Coles Creek
Coles Lake
RASTA
LUCKY BUCK
SLEEPER
NORTH SIDE
NUSPAR
CORE MTN
SCORE 2
SCORE 1
McNEIL
PARK
LEGEND
Ring-fracture zone of Tahtsa Caldera (after T. A. Richards)
Major fault
WELCOME NORTH
Au, Ag
JAVA 1
JAVA 2
JAVA 3
0 1 2 3 4 5 km
SCALE 1 : 100 000
WHITESAIL
Little Whitesail Lake
TWEEDSMUIR
127° 15' W
WESTREX DEVELOPMENT CORP
WHITECAPS ENERGY INC.
WHITESAIL AREA CLAIMS
MAPS 93 E / 11 & 6
May 5, 1984
Drawn by F. C.
FIG. 1

CLAIMS AND OWNERSHIP

The claims are owned jointly by Westrex Development Corp., 860 - 625 Howe St., and Whitecaps Energy Inc., 711 - 475 Howe St., both of Vancouver, B.C.

The Troitsa Group comprises 78 units listed below. The Tad 1 - 8 claims are two-post claims.

Claim	Units	Record No.	Expiry
Hugo	20	5132	May 6, 1985
Whisky	20	5133	May 6, 1985
Tad 1-8	8	5134-41	May 6, 1985
Lefty	12	5320	June 23, 1985
Triple D	18	5321	June 23, 1985

PREVIOUS WORK

In April, 1983, a VLF - EM survey was completed on the eastern portion of the Group to attempt to identify the extension of a set of north-east trending faults that transect the southern flank of the Whitesail Range, known to be directly associated with precious metal mineralization within the Whitesail Range. This work formed the basis of an assessment report filed on the Troitsa Group in 1984.

Regional reconnaissance in 1982, by T. Richards in conjuntion with a grubstake arrangement with Ucex Minerals Ltd., revealed strongly anomalous silts in the eastern portion of the calims, with one silt giving the following anomalous results (in ppm); Cu-643, Zn-155, Ag-1.5, As-2776 and Sb-29.

PRESENT WORK

Present work comprised a VLF - EM and magnetometer survey on the eastern protion of the claims to continue the exploration for the trace of the north-east trending structures, to locate and delineate major structures that define the Coles Creek Valley, and to complete the geophysical cross-section of the claims commenced in 1984.

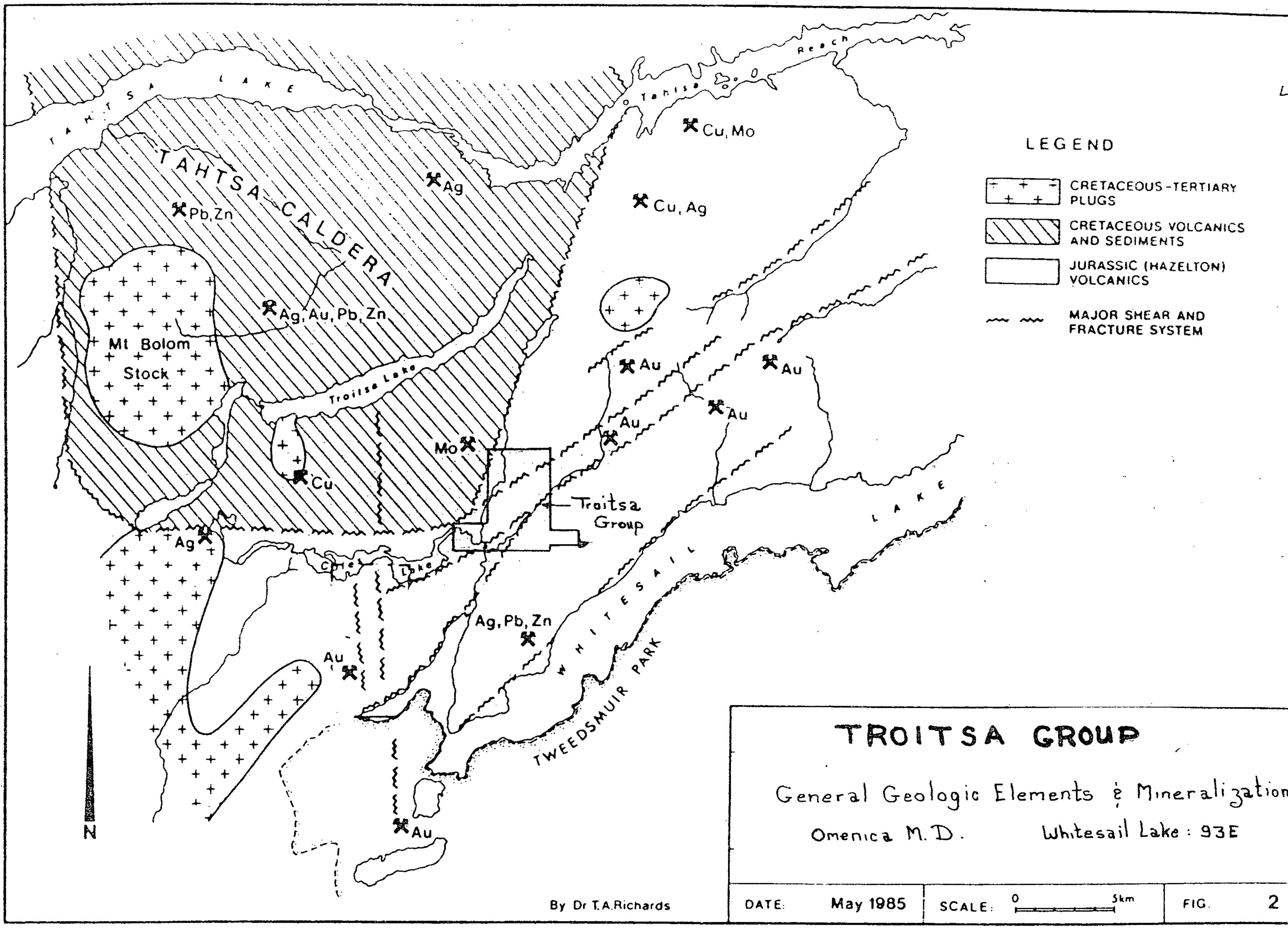
Two men, Dr. T.A. Richards and B. Holden, spent six days on the property, completing 14.5 line kilometers of VLF - EM and magnetometer survey. The investigation was based from a fly-camp by Coles Creek. Snow depth was approximately 2 meters depth during this period.

GEOLOGICAL SETTING

The Whitesail area lies along the eastern margin of the Coast Plutonic Complex. Upper Paleozoix metamporphic rocks within the Coast Plutonic Complex represent the oldest rocks known in the area. Immediately east of the Coast Plutonic Complex, Lower Jurassic volcanic and sedimentary rocks of the Hazelton Group predominate. These are overlain by generally epiclastic rocks of the Upper Jurassic Ashman Formation and the Lower Cretaceous Skeena Group, followed by volcanic rocks of the Upper Cretaceous Kasalka Group. The final major rock-forming events in the area were episodes of Tertiary volcanism that deposited the siliceous volcanic rocks of the Ootsa Lake Group and the basalts of the Endako Group. A variety of intrusive rocks outcrop in the area. They range in composition from granite to gabbro and they range in age from Paleozic (?) to Tertiary. The area is cut by major systems of generally north-easterly or northerly trending faults. For detailed geological descriptions see Duffell (1959), Hodder and MacIntyre (1980), Tipper et al. (1979) and Woodsworth (1980).

A resurgent caldera (Tahtsa caldera), at least 20 km in diameter, was mapped about 7 km north of the claims by D.G. MacIntyre. The collapsed caldera centre is occupied by rocks of the Kasalka and Skeena Groups and by a variety of intrusions. Several potentially economic mineral deposits are associated with small granodioritic stocks around the priphery of the caldera, possibly localized at intersections between ring and radial fractures related to caldera development (Hodder and MacInyre, 1980). Recent work by T.A. Richards (1984) and G. Woodsworth (1980) indicates that the caldera extends further south than previously mapped and that a section of the caldera ring fracture zone underlies the Coles property.

Figure 2



TROITSA GROUP

General Geologic Elements & Mineralization

Omenica M.D. Whitesail Lake: 93E

DATE: May 1985 | SCALE: 0 5km | FIG. 2

GEOLOGY OF CLAIMS

The claims are underlain by volcanic and sedimentary rocks of the Jurassic Hazelton Group, which are cut by dykes and stocks, probably related to the Upper Cretaceous Kasalka Volcanics. During most investigations of the claims, heavy snow cover has prevented any definitive geologic interpretation.

The eastern portion of the claims are underlain by massive bedded lapilli tuffs, feldspar porphyry andesite and red tuff-aceous mudtones. Rhyolitic to andesite dykes are known to intrude these volcanics in Troitsa Creek, and on the rounded mountain underlain by the Tad Claims, exposures of pink quartz Monzonite and granite are known. In the eastern portion of the claims, bed rock geology comprises interbedded volcanic siltstone, sandstone, lapilli tuff and flow rocks. Certain sandstone members contain abundant pelecypod an ammonite fauna correlative with species found in the Jurassic Hazelton Group elsewhere in west-central British Columbia. Limited exposures of feldspar porphyry were noted on some of the low hills in the Coles Creek Valley. A prominent mag-high in the eastern part of the grid area is likely a small dioritic plug, common locally in this region of the Whitesail Lake map-area.

No obvious zones of mineralization were noted, albiet overburden and deep snow cover restricted greatly such exploration.

GEOPHYSICAL SURVEY

A Phoenix VLF - 16 EM unit and a magnetometer were used together to run the geophysical survey. Readings were standardized at the beginning and end of each days traverse at the 0+00N, 0+00E station as shown on the grids. Station spacings were at 50 meter intervals. Grid lines were placed by hip-chain and compass. A north-south base line was established in using a 100m nylon chain, to tie in the east-west lines. Snow conditions were excellent for snow-shoe run traverse lines.

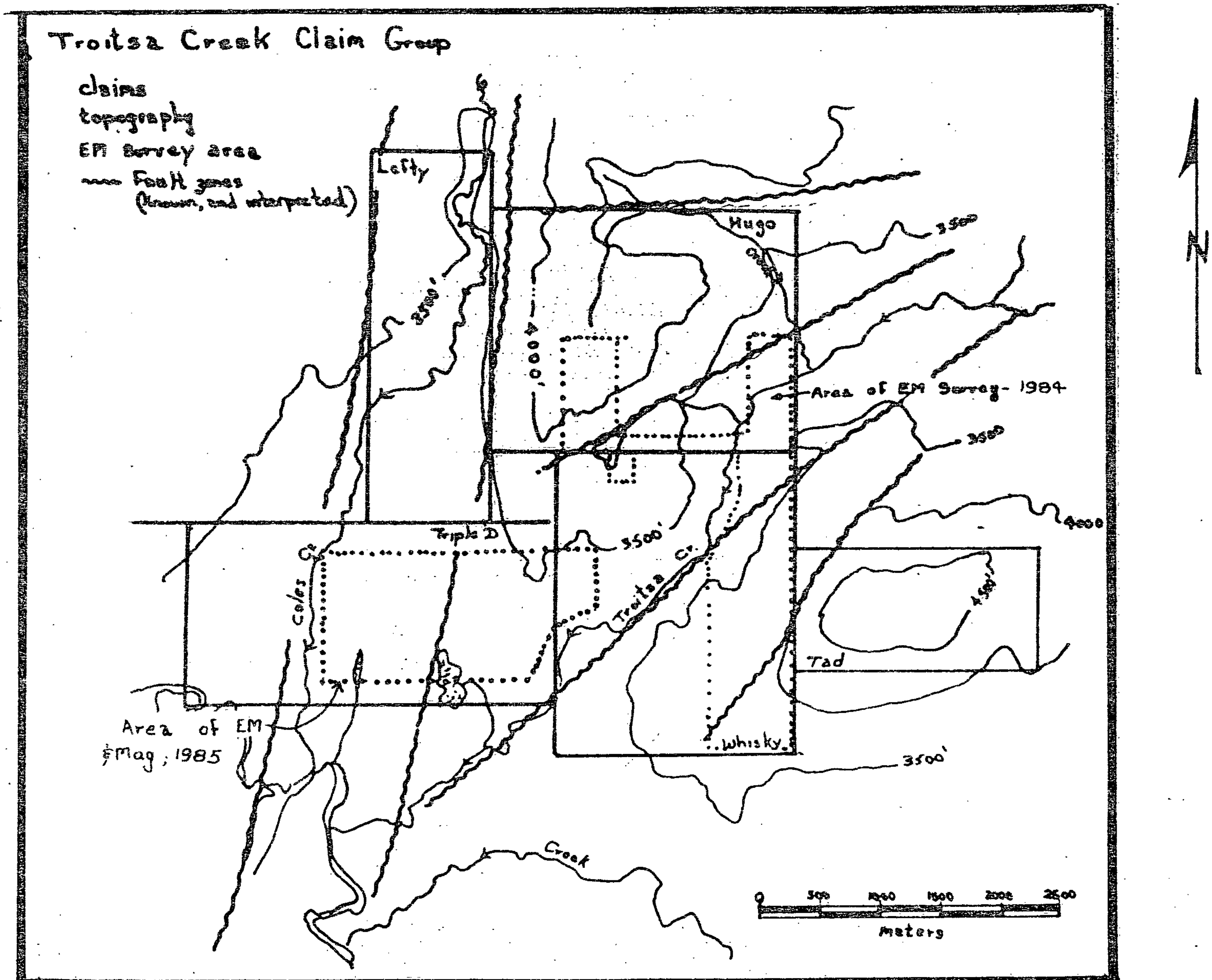
Transmitting stations used in the survey were Annapolis at 21.4 KHz on channel F-1 and Seattle at 24.8 KHz on channel F-2. Both stations transmitted continually during the survey. Annopolis station nulled at bearing 100^{o} and Seattle at 150^{o}, giving a 50^{o} separation in readings at each station.

A proton precission magnetometer was used for the magnetic survey. The grid used was as for the VLF survey, with 50 meter stations. Magnetic fluxuations at the 0+00N, 0+00E base station are as follows:

	A.M.	P.M.
May 3	57341	57333
May 4	57331	57344
May 5	57346	57384
May 6	57375	57361

Contours were plotted at 200 gamma intervals (in pocket).

Figure 3: Location of VLF-EM Survey and Magnetometer Survey



MAGNETOMETER RESULTS

Values obtained from the magnetometer survey range between 56,500 and 59,000 gammas. Contour intervals on the accompanying figure (Magnetic Data; in pocket) where chosen at 200 gammas, with 57,000 gammas chosen as the zero contour.

Contoured data display a marked north-trending alignment, parallel to the lcoal grain of the country. Magnetic highs are represented along both the eastern and western portions of the grid separated by a broad plateau with very little magnetic relief. The eastern belt of highs displays the largest magnetic contrast and is in abrupt contact with lows on both its western and eastern borders.

A single high of 59,436 gammas in this region is in excess of 1,000 gammas above its closest competitor. The western belt of magnetic highs rises progressively off the magnetic plateau from the east, and slopes gently towards the western margin of the grid. Central to this western high are a series of minor magnetic depressions.

VLF - EM RESULTS

Two stations, Annapolis and Seattle were received to deduce conductor anomalies. Data are plotted in the accompanying figure, in the pocket.

Annapolis station nulled at bearing 100°, approximately perpendicular to the morphologic grain of the study area. Results, in general, gave very subdued tilt profiles, with a limited set of cross-overs. Because of the paucity of cross-overs, definitive interpretation of the orientation of conductors will be suspect. Locus of cross-overs tend to trend in a general northeasterly direction, and are located to the northwest and southwest portions of the grid.

The Seattle station nulled at bearing 150° and gave a complex set of well developed cross-overs. The main locus of cross-overs trend in a northerly direction, parallel to the topographic grain of the study area. Cross-overs are concentrated in the eastern and western portions of the grid.

INTERPRETATION OF RESULTS

Magnetometer data and VLF - EM data from the Seattle transmitting station gave coincident patterns that mimic the topographic trend of the Coles Creek Valley. The persistence of northerly-trending cross-overs on the east and west portion of the grind are likely reflecting the trace of fault zones that have been hpothesized to occupy the Coles Creek Valley. A lack of faults in the central portions of the grid is apparent from both the lack of cross-overs and the magnetic plateau that typify this area. Mag-highs in the eastern portion of the grid likely reflect the presence of basic intrusions, probably microdiorite dykes that are common features in this region of the Whitesail Lake map-area. Dykes frequently occupy fault zones. Dyking is a likely phenomenon along the western protion of the grid, as the mag-highs, and VLF cross-overs are coincident with the trend of low, northerly elongate ridges. Magnetic depressions associated with these anomalous zones possibly reflet beaching, alteration and/or oridation associated with shearing.

Interpretation of Annapolis VLF - EM data is less definitive. A north-east trend is apparent along the northwest and southeast parts of the grid. This trend possibly represents cross-faults or tension-gash shears that are related to the main north-south trend outlined by Seattle VLF - EM data, magnetometer data and topography. This northeast trend is correlative with the well developed north-east trending Whitesail fault system that parallels the southern margin of the Whitesail Range. This trend was also strongly developed in the VLF - EM data noted in the 1984 Assessment Report - Troitsa Property, in the eastern portion of the property. Elsewhere in the Whitesail area, significant mineralized and alteration zones are associated with tension-gash shear systems related to major faults.

REFERENCES

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Tipper, H.W., Campbell, R.B., Taylor, G.C., and Stott, D.F., 1979, Parsnip River British Columbia: Geol. Survey of Canada, Map 1424A, Sheet 93, Scale 1:1 000 000.

Woodsworth, G., 1980, Geology of Whitesail Lake (93E) map-area B.C.: Geol. Survey of Canada, O.F. 708.

AUTHORS RESUME

Dr. T.A. Richards
RR#1,
Hazelton, B.C.
VOJ IYO

1. Collection, interpretation and presentation of data is wholly the reponsibility of Dr. T.A. Richards.

2. I received my B Sc., Geology from the University of B.C. in 1965 and my Ph D.,Geology from the University of B.C. in 1971.

3. I am a Fellow of the Geological Association of Canada.

4. I was a Research Scientist with the Geological Survey of Canada, Cordilleran Section from 1972 to 1978.

5. I have been involved in mineral exploration in British Columbia from 1979 to the present.

ITEMIZED COST STATEMENT:

Wages:			
T.A. Richards	8 days @$350/day	$2,800.00	
B. Holden	7 days @$150/day	1,050.00	
Employee Expenses		157.00	$ 4,007.50
Transportation:			
Helicopter		$1,300.12	
Truck/Fuel		213.92	1,514.04
Food			187.84
Equipment Rental (EM and Mag.)			500.00
Camp Costs			250.00
Supplies (Ribbon, filament, bags)			100.00
Shipping			109.00
Meals and Accommodation			108.32
Office, epiditing			200.00
Travel			150.00
Report Preparation, drafting, secretarial			900.00
	TOTAL COSTS		$ 8,026.70

Specifications PHOENIX VLF - EM - 2 ELECTROMAGNETIC UNIT

Parameters Measured	:	Orientation and magnitude of the major and minor axes of the ellipse of polarization.
Frequency Selection, Front Panel	:	Dual channel, front panel selectable (F1 or F2) each with independent precision 10-turn dial gain control.
Frequency Selection, Internal	:	F1 and F2 can be selected by internal switches within the range 14.0 to 29.9 kHz in 100 Hz increments.
Detection And Filtering	:	Superheterodyne detection and digital filtering provide a much narrower bandwidth and thus greater rejection of interfering stations and 60 cycle noise than conventional receivers.
Meter Display	:	2 ranges: 0 to 300 or 0 to 1000. Background is typically set at 100. Meter is also used as dip angle null indicator and battery test.
Audio	:	Crystal speaker. 2500 Hz used as null indicator.
Clinometer	:	$\pm 90°$, $+0.5°$ resolution. Normal locking, push button release.
Battery	:	One standard 9v transistor radio battery. Average life expectancy - 1 to 3 months (battery drain is 3 mA)
Temperature Range	:	-40° to + 60° C.
Dimensions	:	8 x 22 x 14 cm (3 x 9 x 6 inches).
Weight	:	850 grams (1.9 pounds).

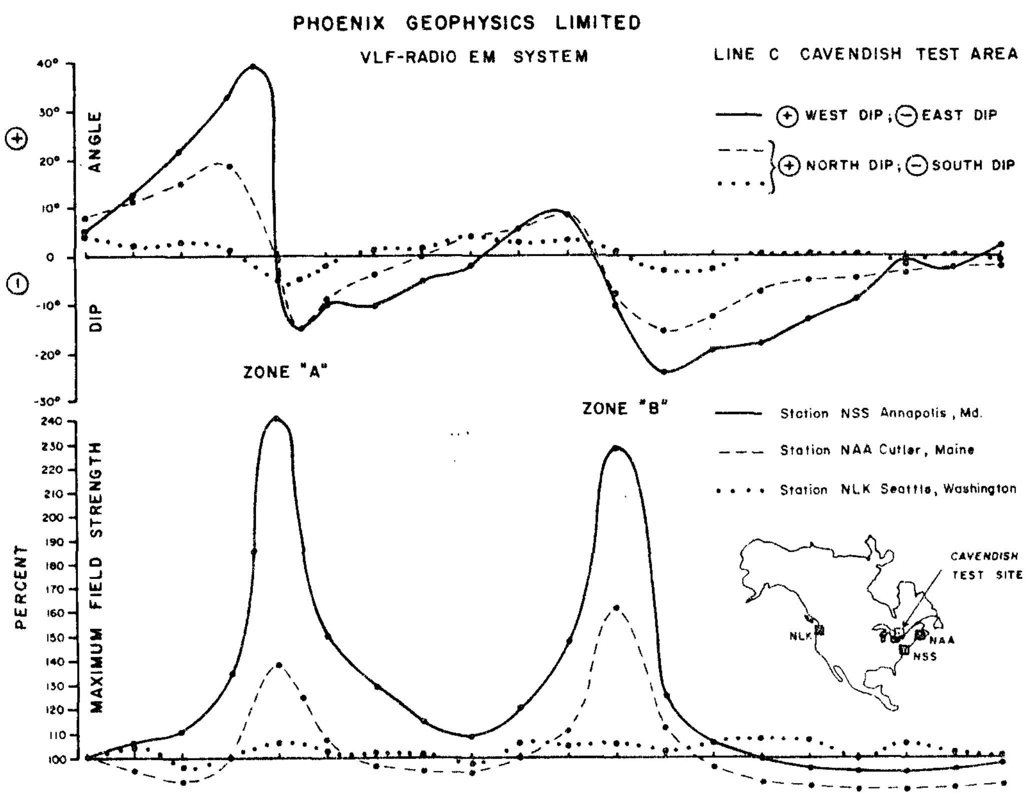
All of the established stations may be selected, or alternatively, a local VLF transmitter may be used which transmits at any frequency in the range 14.0 to 29.9 kHz.

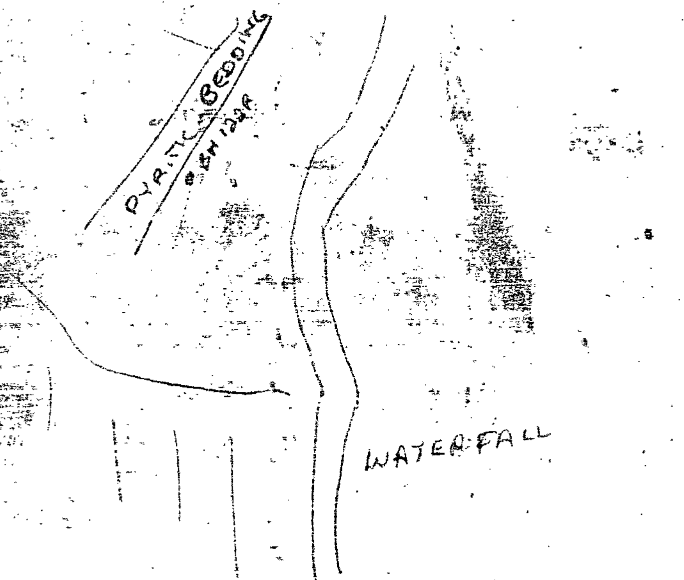
VLF Station	Frequency (kHz)
Bordeaux, France	15.1
Odessa (Black Sea)	15.6
Rugby, U.K.	16.0
Moscow, U.S.S.R.	17.1
Yosamai, Japan	17.4
Hegaland, Norway	17.6
Malabar, Java	19.0
Oxford, U.K.	19.6
Paris, France	20.7
Annapolis, Maryland	21.4
Northwest Cape, Australia	22.3
Laulualei, Hawaii	23.4
Buenos Aires, Argentina	23.6
Cutler, Maine	24.0
Seattle, Washington	24.8
Rome, Italy	27.2
Aguada, Puerto Rico	28.5

Field Data

The results below illustrate the need for using two orthogonal stations when the strike of the prospective conductor is not well-known. The dip angle and amplitude data measured using station NLK in Seattle, Washington, show only a very weak anomaly associated with the two conductive sulphide zones at Cavendish, Ontario.

The results obtained using Cutler, Maine reveal a more prominent anomaly, but the best response was obtained using Annapolis, Maryland since the station lies almost due south and the transmitted electromagnetic field is thus maximum-coupled with the North-South trending conductors.





May 3, 85 B. Holden T. Richards
Mag Survey Coles Creek
Baseline 1a - EM also

0+00 NS 0+00E - 57341 - extra
testing machine on baseline
0+50 N — 57[illegible]1
1+00 N - 57420
1+50 N - 573[illegible]

Line 0	0+50E	57377
	1+00E	57665
	1+50E	57421
	2+00E	57709
	2+50E	57614
	3+00	57448
	3+50	57332
	4+00	57255
	4+50	57431
	5+00	57405
	5+50	57702
	6+00	57565
	6+50	57298
	7+00	57404

f1 Annapolis 07° rt(?)

O-3

~~0+50 68~~ 74		8°R
1+00	65	5°R
1+50	69	0°R
2+00	69	2°L
2+50	70	2°R
3+00	73	5°L
3+50	75	5°L
4+00	76	2°L
4+50	80	3°L
5+00	76	0°
5+50	76	4°R
6+00	74	0°
6+50	74	2°L
7+00	74	4°L
7+50	71	4°L
8+00	73	2°L
8+50	74	0°
9+00	73	2°L
9+50	70	0
10+00	64	6°L

Angle is determined while facing East to south

f2 Hawaii (~~Seattle~~)

50	5°R(N)
offscale	6°R(N)
~~offscale~~ 58	5°R
60	0°R
56 - 4°L	4°L
off	2°R
off	5°L
~~off~~	4°L
off	4°L
—	4°L
—	0°
—	2°R
—	4°L
—	10°L — Linear gulley
—	11°L
—	7°L
—	8°L
—	2°L
—	4°R
—	6°R
—	4°L

Mag Readings Line 0

7+50 E		57401
8+00		57344
8+50		57338
9+00		57315
9+50		57299
10+00		57319
10+00E	0+50N	57343
10+00E	1+00N	57345
10+00E	1+50N	57426
1+50N	9+50E	57299
	9+00E	57237
	8+50E	57309
	8+00E	57363
	7+50E	57410
	7+00	57401
	6+50	57425
	6+00	57408
	5+50	57597
	5+00	57499
	4+50	57502
	4+00	57236
	3+50	57108
	3+00	57637
	2+50	57357
	2+00	57332

1+50 E	57339
1+00 E	57438
50 E	57424
0+00 1+00N	57439
0E 50N	57396
0E 0N	57333

Line	f1	deg	f2	deg	
0+50N - 10+00E	64	4° L	/	6° L	east
1+00N 10+00E	63	5° L	/	10° L	NE
1+50N 10+00E	66	2° L	/	14° L	
1+50N 9+50E	68	3° L	/	5° L	
9+00	67	2° H L	/	0°	
8+50	66	2° L	/	2° L	
8+00	67	2° HL	/	[illegible]° L	EN
7+50	69	3° HL	/	6° L	
7+00	70	0°	/	7° L	
6+50	70	0°	/	5° L	
6+00	70	4° L	/	8° L	
5+50	69	5° L	/	6° L	
5+00	66	3° L	/	4° L	
4+50	68	2° LH	/	3° R	
4+00	70	3° LH	/	0	
3+50	70	7° LH	/	12° L	
3+00	72	9° L	/	12° L	
2+50	79	10° LH	/	6° L	
2+00	84	0	/	4° R	
1+50	82	0	/	0	
1+00	87	0	/	4° L	
50	88	3° R	/	0	
1+00 W0E	88	0	/	2° LH	H.T. Line at
50 W0E	84	0	/	0	990 m
0N 0E	86	5° LH	/	3° L	89 M - S of sta

May 4 .85 BV + TR

continuing survey.

Control mag 57331 — 0+00 station

EM f1 60 Dip 4°L f2 52 dip

Line 0	Mag. Reading	Line
10+50 E	57389	
11+00	57530	
11+50	57410	
12+00	57579 / 57820	
12+50	57982	
13+00	57548	
13+50	57400	
14+00	57635	
14+50	57173	
15+00	57207	
15+50	57267	
16+00	57869	
16+50	57687	
17+00	57258	
17+50	57235	
18+00	57275	
18+50	57559	
19+00	57503	
19+50 S	57333	
20+00 S	57438	

Day 2 survey →

f2 adjusted for scale and redoing readings

Mag. Reading

EM Line 0

f2

Sta	fs	dip
0 E	50	5L
0+50		
1+00	58	5L
1+50	60	0
2+00	56	3R
2+50	51	0
3+00	54	5°L
3+50	58	5°L
4+00	56	3°L
4+50	56	4°L
5+00 E	57	0
5+50	58	2°R
6+00	47	4°L
6+50	46	10°L
7+00	55	11°L
7+50	53	8°L
8+00	52	9°L
8+50	53	4°L
9+00	56	0
9+50	53	4°R
10+00	46	5°L

f1

Sta	fs	dip
10+00	27	2°L

Line	F1	deg dip	F2	dip deg
0N 10E	60	4°L	52	4°L
0N 10+50E	25	6°L	47	12°L
11+00	23	4°L	57	4°L
11+50	23	0	52	8°L
12+00	24	0	53	5°L
12+50	25	0-1°L	56	9°L
13+00	23	2°L	56	0
13+50	21	3°L	52	4°L
14+00	23	3°L	54	5°L
14+50	21	3°L	59	11°L
15+00	19	3°L	63	2°L
15+50	20	3°L	61	6°R
16+00	20	3°L	52	4°R
16+50	21	1°L	52	0
17+00	20	1°L	58	0
17+50	19	2°L	56	4°L
18+00	19	2°L	61	6°L
18+50	19	0	61	4°L
19+00	20	0	61	7°L
19+50S (E)	20	3°L	62	3°L
~~20+00S~~ 19+00E	22	5°L	65	4°L

At approx 10+25 hill dips to east ridge runs on linear norm

At 11+50 slope becomes 20° up to East. 13+00 start Sidehilling

14+00 Bottom of sidehill - 17+00 facing Troltsa and Ridge of Core

Line	F1	deg dip		F2	deg dip	Mag
100S 1850E	22	2°L		68	6°L	57402
150S 1950E	21	6°L		68	6°L	57323
150S 19+00E	23	4°L		67	8°L	57278
150S 17+50E	22	2°L		69	4°L	57227
17+00	21	3°L		62	6°L	57475
16+50	24	3°L		67	6°R	57123
16+00	25	0		70	12°R	57727
15+50	24	2°L	Needle sticks	88 ?	4°R	57319
15+00	25	5°L		82	12°L	57265
14+50	24	3°L		74	9°L	58099
14+00	23	0		72	8°L	58050
13+50	22	4°L		74	0	57844
13+00	24	3°L		80	7°L	57427
12+50	25	2°L		74	8°L	57322
12+00	28	0		79	5°L	57276
11+50	25	2°L		79	9°L	57398
11+00	26	2°L		68	8°L	57425
10+50	27	1°L		76	0	57430
10+00	26	2°L		86	2°L	57414
9+50	30	4°L		84	8°L	57405
9+00	30	3°L		78	9°L	57407
8+50	29	4°L		84	12°L	57441
8+00	29	6°L		85	12°L	57339
7+50	29	6°L		74	11°L	57340
7+00	27	3°L		74	6°L	57282
6+50	29	0		76	3°L	57270
6+00	30	0		74	4°L	57439

Line	F1	deg dip	
150S 550E	21	0	
500E	31	0	
450	31	0	
400	30	0	
3+50	32	0	
3+00	31	3°R	
2+50	31	0	
2+00	29	0	
1+50	29	1°L	
1+00	32	0	
+50	35	1°L	
0	34	0	
Hit this zero line at 2+50S			
150S +50W	34	0	
150S 1+00W	33	0	
150S 1+50W	32	0	
2+00W	37	5°R	
2+50W	35	0	
3+00S 2+50W	36	4°R	
3+50S 2+50W	36	0	
4+00S 2+50W	36	0	
4+00S 2+00W	33	0	
4+00S 1+50W	32	0	
4+00S 1+00W	33	0	
4+00S 0+50W	32	0	
4+00S 0 W	34	1°L	

F2	deg dip	Mag	
74	3°L	57380	
74	2°L	57381	
74	0	57359	
78	4°R	57302	
76	1°R	57398	
78	6°R	57468	
90	0	57506	
82	8°L	57436	
78	8°L	57587	
80	4°L	57408	
84	9°R	57514	
90	10°R	57579	
Out by 100 metres South			
100 plus / off scale	8°R	57667	
off scale	0	57405	
off scale	2°L	57362	
100 plus /	0	57432	
off scale	4°L	57393	creek bank
off scale	1°L	57517	
~	5°L	57517	
~	6°L	57432	
~	5°L	57364	
~	4°L	57393	
~	3°R	57578	
~	10°R	57851	
~	7°R	57585	← came to Base Line at 4+50

Sta	f1	deg. dip		f2	deg dip	Mag
4+50 S 0+50E	34	0		100	0	57338
4+50S 1+00E	34	0		95	2°L	57375
1+50E	33	0		88	6°L	57947
2+00E	34	0		94	10°L	57576
Sort of dry [illegible] → 2+50E	40	0		off scale a little	6°L	57499
3+00E	32	0		94	0	57474
4+50S 3+50E	32	0		90	0	57343
4+00E	30	0		83	1°R	57315
4+50	30	0		82	2°R	57324
5+00	29	0		87	0	57442
5+50	26	0		80	2°L	57378
6+00	28	0		83	4°L	57468
6+50	26	0		83	3°L	57326
7+00	26	0		76	3°L	57321
7+50	26	0		80	0	57309
8+00	25	0		81	0	57318
8+50	25	0		74	6°L	57354
Control 9+00	30	4°L		81	3°L	57345
9+50	END	of day				
10+00						

F_1	I	∡	F_2
00+00	40	3L	
Base chk			

(F_2) Reset;

Left F_2 → 150° facing

left F_1 – facing 100°

∆ 11+00 E Top of hill

∆ 11+50 Slope to Lake

∆ 11+89 Edge of NS Linear Lake,

STN	F_1 I	∡	F_2 I	∡	
00+00N(SE)W	40	3L	46	9L	57346
					57354
8+50E 4+50S	32	2L	32	4L	
9+00E "	32	2L	32	6L	57352
9+50E "	33	6L	36	2L	57359
10+00E, 4+50S	30	0	34	1L	57449
10+50E "	32	2L	30	2R	57439
11+00E "	30	0	28	4L	57246
11+50E "	30	0	28	8L	~~57129~~ 57150
12+00E "	30	0	32 (4L)	4L	57293
12+50E, 4+50S	28	4L	28	2L	57123
East side of NS Swamp					
13+00	28	6R	28	2L	57537
13+50E 4+50S	29	5R	26	2L	57964
14+00E, "	28	3R	28	1R	57555
Large knob to [illegible] of knob					
14+50E	28	4R on	25 [illegible]	3R	59436
15+00E, 4+50S	30	6L	27	1R	57477
15+50	28	6L on	30 Flat	14R	57205
16+00, 4+50S	26	0	24	13R	57554
16+50 ✓	25	0 on	22 Flat	9R	58480
17+00 ✓	24	3L	22	1L	57193
17+50 ✓	22	6L	22	1R	57180

30 m to edge of Canyon

Stn		F1		F2	mag
	I	∠		∠	
16+50E 5+00S	26	1R	24	6R	58196
[illegible]+50 5+50S	26	6L	29	9R	56728
[illegible]+50E 6+00S	25	4R	26	12R	57387
16+00E, 6+00	31	8R	34	15R	57346
15+50E, 6+00	30	0	34	0	57425
15+00E	32	4R	37	2R	57615
[illegible]+50E	[illegible], [illegible] SE slope				
14+50E side hill to S	28	2L	38	1R	57530
14+00	32	11L	40	4L	58280
13+50, 6+00S	33	8L	42	10L	58230
13+00	34	4L	44	4L	58366
12+50E 6+00S	36	0	48	6L	58190
12+00; [illegible]	34	2R	56	1L	57840
11+50E, in prom[illegible] N-S [illegible]	34	3L	52	17L	57322
11+00E [illegible]	32	3L	48	2L	57593
10+50E,	32	4L	50	2R	57440
10+00E	33	3L	50	1R	57365
9+50E NE of lake area	28	6L	46	0	57423
9+00E 6+00S ([illegible] large open area)	32	4L	46	5L	57385
8+50E	32	4L	44	3R	57310
8+00 6+00S	32	3L	42	0	57285
7+50	34	6R	45	1L	57367

Flat

Flat + tip?

Slope

Top small NS ridge

gully NS at 3+95

at small NS [illegible]

Base of hill

Slope

Top

Along edge of [illegible] Creek

	F, I	∡	(B) I	∡	
7+00E 6+00S	32	0	46	2L	57265
6+50	32	1L	44	0	57195
6+00E 6+00	32	1R	42	2L	57250
5+50E -	32	0	38	2L	57440
5+00 - 6+00S	30	0	38	6L	57581
4+50E	32	3L	34 (41)	4R	57530
4+00 E	34	0	36	0	57340
3+50	34	2L	38	3R	57256
03+00E, 6+00S	34	0	40	1L	57300
02+50E	36	6L	40	12L	57245
02+00E,	36	6L	36	8L	57690
01+50	34	4L	36	4L	57680
01+00	36	0	36	0	57712
00+50	34	0	38	2R	57350
00+00, 6+40S	36 35	0	32	3R	57566
Line Lts at			06+40S		~ B.L.
00+50W, 6+50S	32	1L	34	12R	57602
01+00W,	32	0	36	12R	57729
01+50W,	34	3R	40	1R	57577
02+00W, 6+50S	32	0	40	0	57370
02+50W, 6+50	34	3R	36	6L	57300
02+50W, 07+00S	35	1R	37	6L	57342
02+00W 07+50S	34	0	36	6L	57340
02+50W 08+00	36	2R	38	5L	57365

Crest of hill

west side long linear

S tilt

on NS Lines

Running level on 8+00S → gentle slopes

Large open lake

Near E side of lake

Swamp open

	f1		f2		mag.
02+00W, 8+00S	36	0	40	2L	57500
01+50W, 8+00S	34	0	38	2R	57767
01+00W,	36	0	34	8R	57680
00+50W	36	2R	34	[illegible]R	57710
00+00 + 08+00S	36	0	32	2R	57874
00+50E, 8+00S	34	0	32	3R	58070
01+00E	34	0	30	2R	57750
01+50E	34	1L	26	3L	57677
02+00	34	3L	24	8L	57332
02+50E, 8+00S	32	8L	28	8L	57332
03+00E,	32	4L	30	3L	57298
03+50E	32	4L	28	2L	57187
04+00E	30	2R	26	3R	57600
04+50E	32	2R	28	4L	57532
05+00E, 8+00S	33	3R	32	7L	57367
05+50E	34	2R	32	3L	57317
06+00E	32	3R	30	0	57272
06+50E, 8+00S	32	2L	30	0	57311
07+00	30	2L	28	2L	57333
07+50	36	2L	24	0	57315
08+00E 8+00S	30	0	24	0	57372
08+50E	30	4R	26	1R	57873
09+00E	28	2L	26	0	57410
09+50	30	0	26	5R	57465
10+00E 8+00S	30	3L	24	0	57344
10+50E	28	4L	22	2L	57364
11+00E	28	4L	22	8L	57524
11+50	28	8L	20	14L	57485
12+00	26	5L	24	12L	57610
12+50	26	4L	24	1R	57650
13+00	22	0	20	2L	~~57[illegible]~~ 57944
13+50E 8+00S	22	8L	19	6L	57816
14+00	20	6L	20	4L	57380

	(P1)		(F)		mag
14+50E, 8+00S	20	2L	20	①	58000
00+00, 00+00	22	2L	20	①	57387 57384 57386

MAY 6,

Sunny, Crisp, cool, windy

Bounce on EM TR on map

Run N point of Circle N sloping ... opening

west ... facing slope 5°

25±° W slope

Knob

N side ... on a knob, ... South

EW Axis ... knobs

S face ... hill

Flat slope base

(AM ...)	(T1) I	∡	(T2) I	∡	Mag
00+00, 00+00	32	6L	52	– 0	57375 / 57366
...					
9+00E 1+50N	26	8L	45	10L	57428
10+50E	30	4L	54 (54)	4L	57537
11+00E	28	4L	52	2L	57601
11+50E	30	6L	52	5L	57621
12+00E	30	4L	50	2L	57717
12+90E, 1+50N	28	3L	48	10L	57702
13+00E	30	7L	52	10L	57892
13+50E	30	10L	52	9L	57840
14+00	30	10L	50	12L	57617
14+50E	30	12L	56	12L	57492
15+00E 1+50N	30	6L	64	5L	57538
15+50+	32	10L	62	1L	57834
16+00	29	8L	64	4L	57314
16+00E, 2+00N	30	3L	64	0	57807
16+00E 2+50N	30	5L	65	3R	57424
16+00E 3+00N	28	7L	62	0	57402
15+00E 3+50N	24	6L	64	0	57306
16+00 4+00N	30	9L	75	2L	57373
16+50E, 3+00N	30	14L	84	4L	57309
17+00E,	28	10L	88	10L	57241
17+50E, 300 N	32	10L	100	7L	57286
18+00	32	8L	>	4L	57257
18+50 3	32	10L	96	0	57491

18+76 N-S gulley + stop

uniform gentle slope,
low abberations,

flat gentle w

flat, open

Tie onto Base line at 02+50N

Stn	F_1 I	F_1 ∡	F_2 I	F_2 ∡	mag
15+50 E, 3+00N	26	4L	off scale	2R	57268
15+00E	32	3L	"	5L	57165
14+50E	34	4L	✓	7L	57247
14+00	33	6L	✓	12L	57448
13+50	36	8L	✓	6L	57830
13+00, 3+00N	38	7L	✓	10L	57869
12+50	30	7L	✓	12L	57326
12+00	38	6L	✓	12L	57870
11+50	30	5L	✓	7L	57780
11+00	34	5L	✓	5L	57683
10+50	40	6L	✓	5L	57631
10+00	40	6L	✓	7L	57501
9+50E, 3+00N	42	10L	✓	12L	57343
9+00	42	5L	✓	8L	57255
8+50	46	4L	✓	4L	57266
8+00	43	3L	✓	6L	57325
7+50	42	2L	✓	9L	57425
7+00	42	4L	✓	10L	57392
6+50E, 3+ N	42	6L	✓	9L	57415
6+00	40	7L	✓	6L	57531
5+50	30	8L	✓	12L	57439
5+00	42	7L	✓	6L	57429
4+50E	40	9L	✓	6L	57275
4+00	42	6L	✓	4R	57242
3+50E 3+00N	40	4L	✓	2L	57235
3+00E 3+00N	38	2R	✓	4L	57455
2+50	39	2L	96	0	57833
2+00	30	0	100+	2L	57476
1+50E	42	0	off sc	0	57364
1+00	38	1L	"	5L	57,557
0+50E	40	0	100	4L	57470
0+00 2+50	38	2L	94	3L	57499

(in E Cobs Creek meanderplain)

Open Lake

Stn	F1 I	F1 ∢	F2 I	F2 ∢	Mag
00+50W, 02+50N	36	2L	off Sc.	3R	57371
01+00W	38	0	↘	3R	57491
01+50W	40	2L	↘	3L	57291
02+00	40	3L	↘	3L	57197
02+50W	40	0	↘	3L	57017
02+50W 02+00N	42	0	↘	1L	57101
02+00W, 02+00N	38	0	↘	2L	57284
02+00W, 01+50N	38	1L	↘	3L	57304
02+00W, 01+00N	36	2L	86	3L	57274
01+50W, 01+00N	38	4L	98	2L	57330
01+00W, 01+00N	34	0	100	1L	57456
00+50W, 01+00N	34	2L	off Sc.	0	57343
00+00, 1+00N	40	2R	off Sc.	0	57428
00+00, 00+00	42	4L	98	2L	57346
					357
					370
					369
					361
					365
					363
					361
					361
					363
					361
					361
00+50W, 00+00	40	2L	100	2L	57502
01+00W	37	1L	>100	2L	57318
01+50W	40	2L	>100	0	57782
02+00W	38	0	off scale	2L	57370

(Soil (wet))

GEOLOGICAL BRANCH
ASSESSMENT REPORT

13,957

TROITSA GROUP

VLF - Eletromagnetic & Magnetics

Omenica M.D. ; Whitesail Lake (93E).