

LOG NO: <i>May 3/91</i>	RD.
ACTION:	
FILE NO:	

ASSESSMENT REPORT

SYLVAN # 1

Frank Fairclough
402 Briar Ave.
Cranbrook, B.C.
ph. 426-2796.

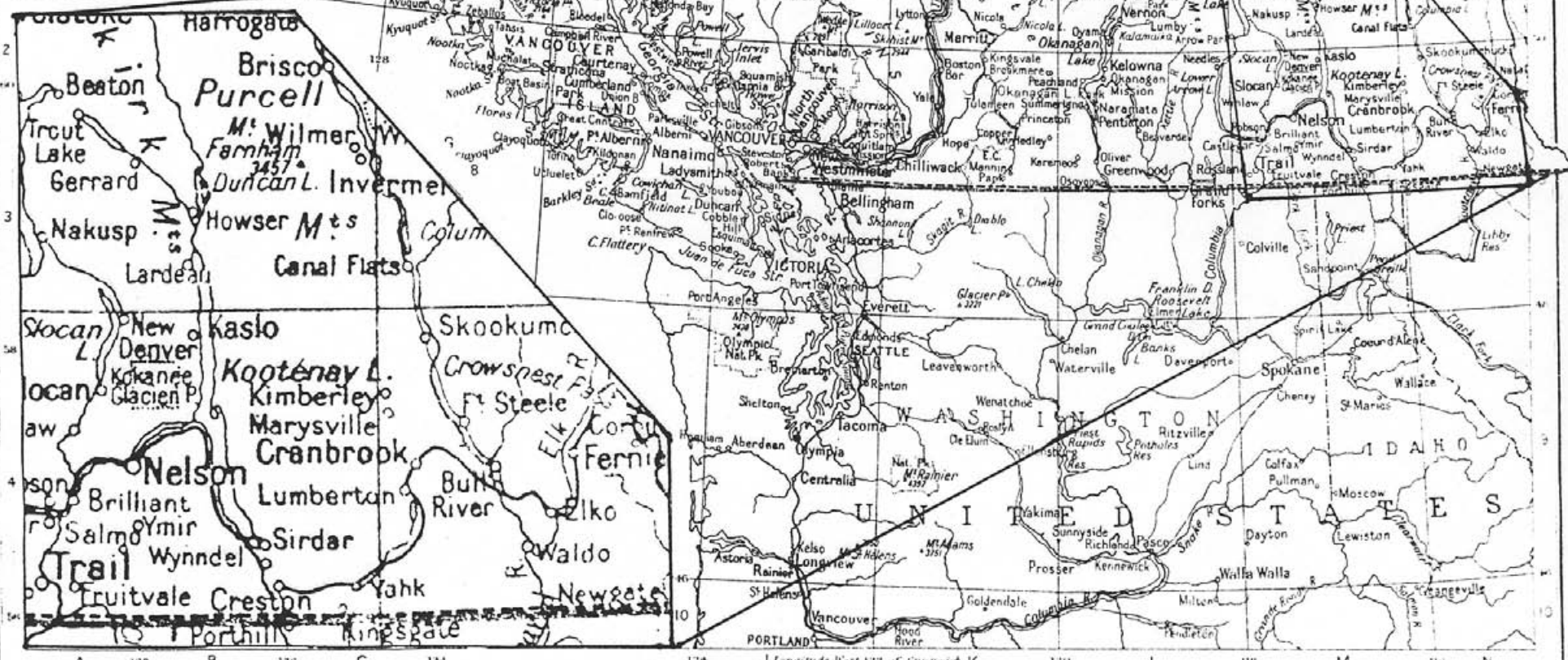
by

N. Gass
Gass and Associates Ltd.,
2604 Exshaw Rd. N.W.,
Calgary Alberta. T2M4E5
ph. 282-7179.

April, 1991.

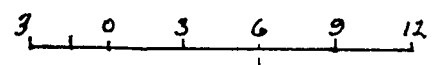
**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

21,263



REGIONAL GEOLOGY CRANBROOK AREA B.C.

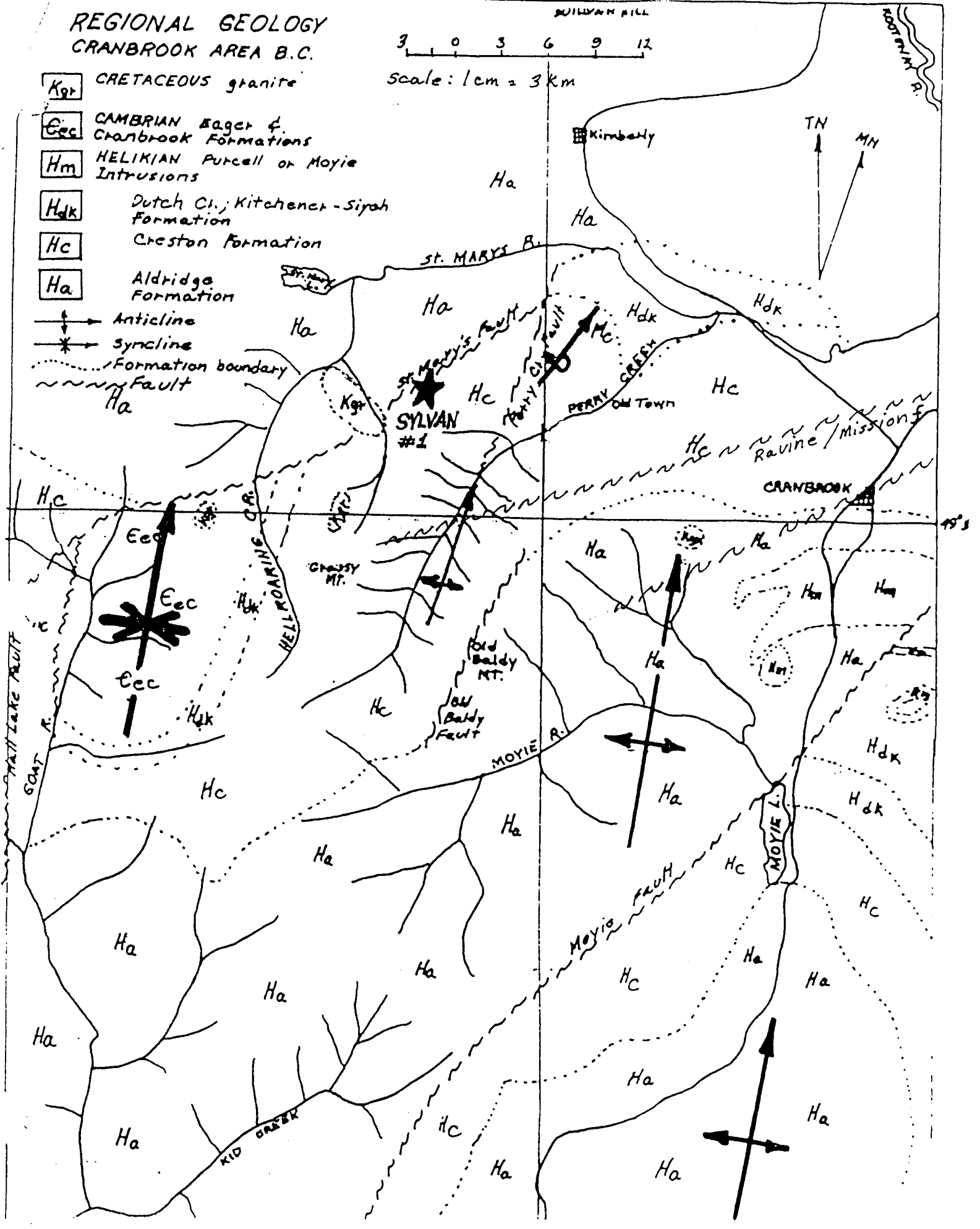
SULLIVAN HILL



Scale: 1cm = 3 Km

- Kgr CRETACEOUS granite
- Eec CAMBRIAN Eager & Cranbrook Formations
- Hm HELIKIAN Purcell or Moyie Intrusions
- Hdk Dutch Cr.; Kitchener-Siyah Formation
- Hc Creston Formation
- Ha Aldridge Formation

- Anticline
- Syncline
- Formation boundary
- Fault



SYLVAN #1 CLAIMS MAP

Scale 1/2" = 1 mi

LUCKY DAY #3
3794 (11)

LUCKY DAY #1
3796 (11)

LUCKY DAY #4
3793 (11)

LUCKY DAY #2
3795 (11)

121611
115256

BURN
3145(7)
25x6E

PERRY
255
4N x
104460

KELLY
2062(11)
4N x 3W

PERRY
2556
35x2

WELL 3
EXPIRES 1857(7)
JU 18, 1929

WELL 4
1858(7)
4N x 4E

SYLVAN #3
3526(7) 3'

MONECA
2035(12)
5N x 4E

90015 90016

Radio Beacon

ANGUS

WELLINGTON
1590(11)
5S x 4E

SYLVAN No. 1
3064(2)
4N x 5W

LEADER A
1834(7)
3N x 3E

115275

121529

92381

ANGUS
3123(6)
3N x 6W
(115220)

121524

121523

EASY
3142(7)
5S x 3E

121546

SYLVAN NO. 4
3453(5)
3S x 2W

LEADER #3
3061(2)
6S x 3W
(121524)

LOOK OUT
3060(2)
6S x 3E

121602
115224

GOLD POT
3124(6)
6N x 3W
(115212)

191611

INTRODUCTION

The Sylvan prospect is based on the hypothesis that a primoidal basement rift deflected the NE-SW St. Mary's fault to an E-W direction. These E-W basement rifts are further hypothesized to be the locus for control of pre cambrian base metal mineralization as well as Cretaceous granite with attendant quartz veining and the introduction of gold. Yttrium is present in aplite dykes believed to be associated with the cretaceous granite.

PROPERTY DESCRIPTION LOCATION AND ACCESS.

The Sylvan #1 block consists of twenty claims approximately one and one half kilometres east of Angus Creek and west of the radio beacon, latitude 49° 33'N longitude 116° 07' W. Much of the centre of the claim block is alluvium and has been clearcut. Slopes are generally quite gentle with the exception of a cliff face on a west trending spur of the radio beacon ridge.

Access to the claims is by paved road 17km west from Marysville to the east end of St. Mary's Lake. Here an all weather gravel road (the River Road) heads south and east. 1.7Km along this road a good logging road goes south up Angus creek. About 10Km along this road a switchback on the east side takes one 3Km onto the property.

REGIONAL STRUCTURE

There is an emerging consensus among structural geologists and stratigraphers who have studied the Southern Purcell and Kootenay ranges that later faulting reflects earlier basement rifting. McMechan and Price (1981) state: "thickness and facies variations in Purcell strata and changes in the level of erosion beneath the sub-Devonian unconformity imply that many of the important structural boundaries in the Mount Fisher area and also the normal faults along the souther Rocky Mountain Trench follow the locus of older structures that were active in the Middle proterozoic and the early Palaeozoic." McMechan (1981) states: "Contrasting stratigraphic relationships on opposite sides of the Moyie-Dibble Creek, St. Mary-Boulder Creek and the Hall Lake Faults beneath the sub-Devonian and/or sub-Eocambrian unconformities show that each fault follows the locus of an older structure along which the northwest side was downdropped while early Palaeozoic strata were accumulating." These original basement rifts are postulated to be evidenced by the E-W "shadow traces or lineations" on the regional geology map. They are thought to be the key to understanding base metal mineralization in the area. As such they will be dealt with in a subsequent section.

Surface features conveniently divide the Regional Geology Map into 6 structural areas:

1. Intrusion of the Cretaceous Bayonne Batholith west of the Hall Lake Fault;

2. Two large north plunging anticlines of the Purcell Anticlinorium on the south edge of the map sheet;
3. The S.W.- N.E. faults of the central Cranbrook area;
4. The Imbricate faults south of the St. Mary's fault;
5. The Kimberley Horst;
6. The Rocky Mountain Cordillera east of the Rocky Mountain Trench.

THE BAYONNE BATHOLITH

The tectonics of mountain building that preceded the granite intrusion are responsible for most of the structure in evidence. The steeping action of the magma appears to have negated all but a very minimal bending of the Hall Lake Fault. Six granitic stocks related to this age of intrusion have had little but very local effects.

THE ANTICLINES

The Goat River anticline appears to have been a fairly symmetrical fold. The Hall Lake fault has repeated a large percentage of the Aldridge core so that the west limb appears to be two to three times as broad as the east limb. The bedding dips remain relatively similar (50-55°) except as they steepen up on the N.W. side approaching the granite. The plunge is seen to vary from 11° to 55° north but probably averages approximately 35°N. The plunge in the surviving east limb of the syncline to the north varies from 65°N on the west side to 48°N near the centre. Imbricate faulting has piled up the sediments to the east. These structures may have significantly altered the plunge. A very tight anticline just east of Perry Creek plunges 20°N.

The Moyie Lake anticline has obviously been skewed to the east by the movement of the huge block of sediment N.W. of the Moyie fault. It too may have been fairly symmetrical, but now the very gentle 10°-20° dips of the east limb become 25°-30° on the west limb, increasing to 55°-60° as the fault is approached. The fold plunges about 25°N.

THE S.W. - N.E. FAULTS

The Moyie and St. Mary's faults bound a wedge of middle Proterozoic sediments that parallel the isopach boundaries of the depositional wedge of the basinal re-entrant (McMechan 1981). More properly perhaps, the Mather Creek fault should be accorded the distinction of the north boundary of the structure bounding the depositional wedge. It is the only significant SW-NE fault identified in the Kimberley horst north of the St. Mary's fault.

Movement on the St. Mary's fault is indeterminate but the north side of the Moyie fault may have moved as little as 10 miles or as much as 20. Parallel faults: the Cranbrook, Mission and Wycliff faults appear to have moved much less and appear to disappear under the sole fault of the imbricates to the west. Indeed, the Ravine fault which runs SW from the junction of Liverpool and Perry Creeks

appears to be a reflection or re-activation of the underlying Mission fault expressed right through the overlying plate of imbricate faults.

THE IMBRICATE FAULTS

The push from the west appears to have activated a glide plane located in the Lower Creston and Upper Aldridge subtidal argillites over the nose of the north plunging Ghost River anticline. This sole fault interface cuts down section into the top of the Middle Aldridge along the old Baldy fault south of Weaver Creek. North to the Wycliff fault it cuts upsection into the base of the Middle Creston. To the west, a whole series of imbricate thrusts have developed. A unique feature of this structural belt is that a glide plane in the Kitchener has produced three fault slices of this formation, four if the Wycliff graben is included.

THE KIMBERLEY FAULT

The St. Mary's fault truncates the imbricate fault belt along the south boundary of the Kimberley Horst. This major uplift brings Middle and Lower Aldridge in contact with Middle Creston to Cambrian, Cranbrook and Eiger formations, a stratigraphic distance of some 10 000 feet. The actual maximum throw is probably 5 000-6 000 feet. The most significant result of this feature is bringing the Sullivan intraformational conglomerate horizon near the top of the Lower Aldridge to within detectable reach of surface prospecting.

The Kimberley fault itself is judged to have been an older basement fault reactivated in late Lower Aldridge time. The renewed activity is credited with producing the intraformational conglomerate. The actual ore body is at the intersection of three faults which may have had something to do with this particular location having developed a sea floor fumarole or "smoker" to deposit the sulfides in the conglomerate aquifer.

THE ROCKY MOUNTAIN CORDILLERA

The complexities of this fold belt will not be dealt with. Suffice to say, that at least some of the Purcell structures cross the Trench and are reflected in the Rockies, albeit changed, in many cases to the point of being almost unrecognizable.

The most noteworthy expressions are: the Dibble Creek fault, which is probably a reflection of the Moyie fault. The Boulder Creek fault is probably a reflection of the St. Mary's. The Kootenay King Mine and the Summer lake intrusive, are on the projection of the Kimberley fault.

THEORY

The occurrence of the Sullivan ore body at Kimberley is understood

to be the result of a sea floor "smoker" situated on the E-W Kimberley fault. It is proposed that this fault reflects a rift in the primordial basement rock and that such rifts occur with a frequency averaging 6-7Km separation throughout the area (see composite map of regional geology). These basement features are reflected in present day topography through subsequent movement or drape processes causing preferential erosion patterns that are traceable through present topographic expression such as the orientations of E-W valleys and ridges as well as offsets of the major N-S valleys (see SW, Alta. and SE. B.C relief map). These surface traces of proposed basement rifting have been dubbed shadow lineations. The basement rifts may probably have been the locii for the introduction of the diorite sills into the poorly consolidated lower and middle Aldridge sediments. Subsequent movement on these original rifts developed the intraformational breccias that provided the aquifers for hydrothermal solutions to emplace the bedded sulfide replacement deposits similar to the Sullivan.

During the cretaceous orogeny a wedge of Aldridge turbidites was thrust north eastward up the incline of the depositional re-entrant proposed by McMechan (1982). This massive movement created a series of NE-SW faults. The Moyie fault appears to be the southern boundary and the St. Mary's fault has been deflected to the east at two intervals which coincide with shadow lineations #13 & 14.

Later in the orogeny the same zones of crustal weakness that gave rise to the shadow lineations became the locii for the intrusion of granitic stocks along the forefront of the Bayonne batholith. Quartz veins from these intrusions carried gold and not infrequently cut through the bedded sulfides. Base metal ions were remobilized and redeposited at higher elevations.

SHADOW LINEATION #13

The topographic expression of this lineation is somewhat tenuous, although a case can be made for its existence from the south flank of the Cypress hills in Alberta to the south facing slope of the valley NW of Nelson B.C. Nowhere is it as well defined as some of the other lineations. Granite intrusions and mineral occurrences along the trend perhaps make a better case.

On the west side of Angus creek is a large body of pre cambrian pegmatite. This rock contains a prodigious amount of tourmaline the boron of which has been suggested as an indicator of sea floor "smokers." The main St. Mary's fault is offset by the Angus creek fault but on the east side a cretaceous granitic (Monzonite) stock adds credence to this as a major intrusive location along lineation #13. The Leader prospect on the SE flank of the Angus creek stock produced a small tonnage of economic gold and base metal ore. This occurrence is perceived as a typical case of ion remobilization from original bedded sulfides. Although it could be regarded as stretching a point, the Storm King copper occurrence to the west lies along the same trend. Further east, Quartz Hill exhibits just

sub economic gold and base metal values. Similarly the Price claims show borderline economic gold and base metal values. It is alleged that an occurrence on the Birdie Lode claims produced some tonnage of lead-silver ore. Still further east near the Palmer Bar fault regional aeromagnetics suggest a granitic stock west of Booth Lake.

PREVIOUS WORK

Bulk sampling of the quartz vein on the Leader property on the S.W. corner of the Sylvan claims produced some 20 tons of selected ore which was never processed. It does appear to be viable ore grade material but appears to have been abandoned because of the low tonnage.

Turnstall Resources did some soil sampling mostly on the Well and Wellington claims between Sylvan and Angus Creek. A small gold anomaly appears on the north side of the main fault on the steep slope down to Angus Creek.

The present owner/operator did some drilling and trenching, the results of which suggest a possible future yttrium development. Present economics of this rare earth preclude further development on this basis alone.

1990 FIELD SEASON

Objectives for this year's undertaking were twofold: (1) an attempt to improve gold and base metal values to enhance option desirability and, (2) further delimit the occurrence of yttrium bearing aplite. Accordingly, three trenches were dug along the fault and three on the north side of the fault as well as additional sampling of the bedrock previously exposed on landing number two. Particular attention was paid this time to trying to sample pyrite associated with quartz veining.

Trench #1 was dynamited down to unweathered bedrock on the eastern limit of the outcrop. The rock was a mixture of altered diorite, silicified "country rock", and some very fine grained felsic material interpreted as aplite. Many small 1/8 to 1/4" quartz veins appeared to follow the foliation while larger 1" veins cut across the rock fabric. Vein margins of the smaller veins tended to be very indistinct suggesting either somewhat contemporaneous emplacement or a very high degree of contact alteration. The larger cross veins appeared to be much more distinct and definitely later. Much of the pyrite sampled was euhedral and appeared to be a metamorphic product of altered diorite.

Trenches two and three were dug and blasted down to what appeared to be bedrock very similar to trench #2.

Trench #4 was located in a bit of a swale which was thought to give

the best chance of getting down to bedrock. Many 30-50lb. boulders were excavated until what appeared to be bedrock was encountered at approximately 6 feet. This rock appeared to be an altered diorite with considerable euhedral pyrite.

Trench #5&6 consisted of blasting into the bank at the side of the road. The rock was similar to that in trench #1 with considerably more less altered diorite.

Sampling of landing #2 consisted of attempting to select maximum pyrite concentrations. There is not a lot of pyrite here so in some instances what appeared to be altered contact with quartz veining was taken.

SUMMARY AND CONCLUSIONS

None of the sampling gave any indication of enhanced base metal or gold values.

The difference between true aplite and altered diorite remains to be delineated. There is some suspicion that although there are definite aplite dykes in the area the felsic material interpreted as aplite on the fault may be a silicified facies of the Aldridge diorite. The hypothesis that the very pyritic material would run higher in yttrium was not supported.

It would appear that nothing at this elevation is going to produce enhanced values.

SUGGESTIONS FOR FURTHER WORK

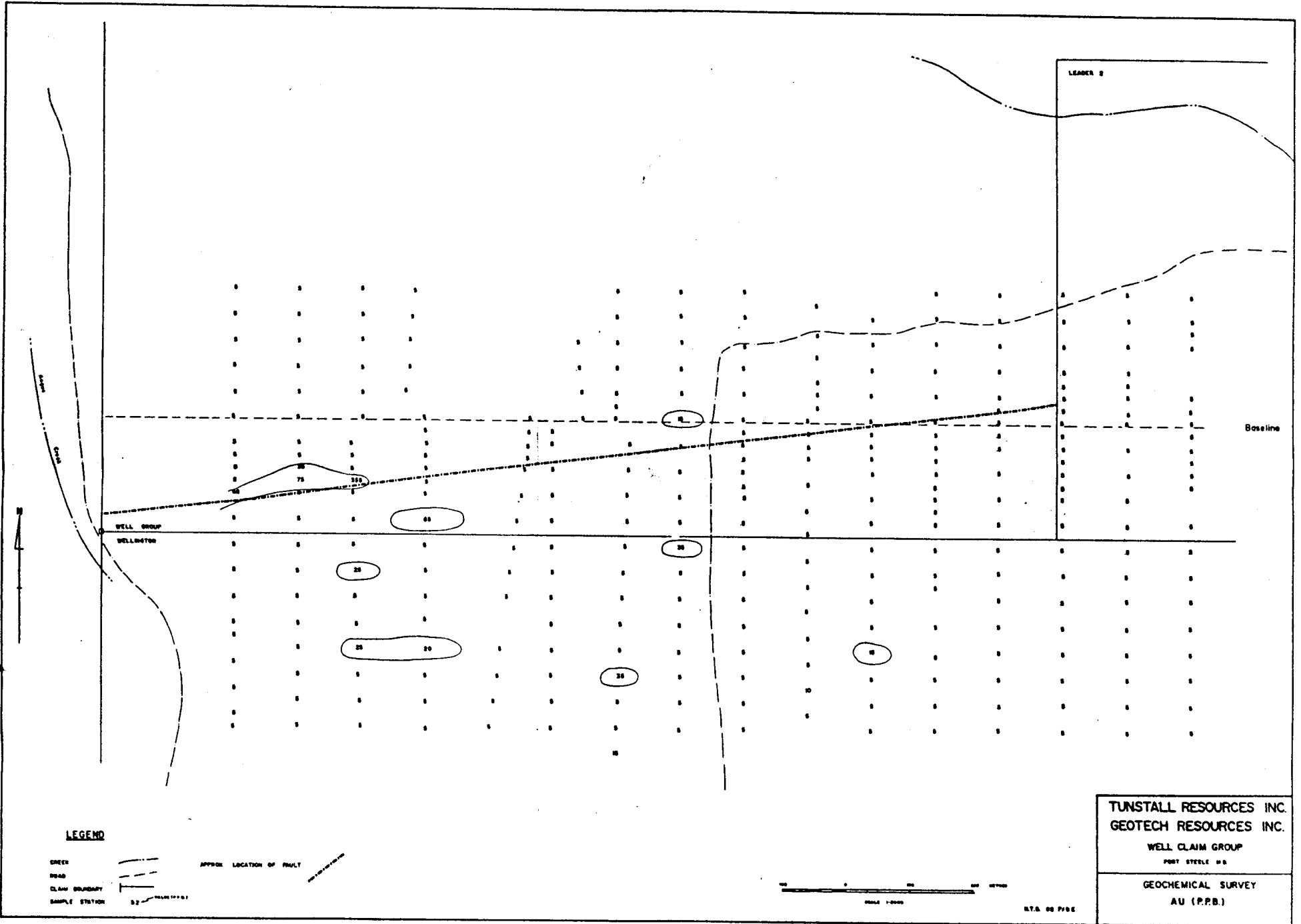
One further attempt will be made to locate the intersection of the Grassy Mountain (Leader) fault and the St. Mary's fault with the idea that the base metals and gold contained in the leader vein may concentrate at the intersection.

Six to eight claims will be staked to the west along the fault when they came open. Soil sampling and trenching will attempt to verify the Tunstall soil sample gold anomaly.

Appn. A

QUALIFICATIONS

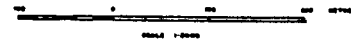
- 14.1 The writer, N. Gass, obtained his B.Sc. in geology from Dalhousie University, Halifax, N.S. in 1955 and his M.Sc. in geology from the same institution in 1957.
- 14.2 Experience
- 1955 Detailed mapping & prospecting American Smelting and Refining Ltd., Newfoundland.
- 1956 Regional mapping and detailed study of Pegmatites of the Winnipeg River, Manitoba Department of Mines.
- 1957-62 Surface and subsurface exploration, mapping, wellsite and special projects in Saskatchewan, Alberta, & British Columbia. Chevron Standard Oil Co. Ltd.
- 1963 Wellsite consultant, Chevron Standard.
- 1964 Developed House Mt. Oil field for Chevron Standard.
- 1971 Uranium and base metal exploration in Saskatchewan for V. Zay Smith and Associates, Calgary.
- 1976 Uranium exploration northern Saskatchewan for Rio Alto Exploration Ltd.
- 1979 Drilling program on fossil placer, Gay's River, N.S., Calgary syndicate.
- 1980 Drilling program Nelson, B.C. for Dekalb Mining.
- 1981 Geological mapping and geophysical survey, La France Creek, B.C., Dekalb Mining.
- 1982 Lithium, tantalium, gemanium prospecting and reconnaissance survey, Winnipeg River, Manitoba, Dekalb Mining.
- 1983-90 Base metals, gold/silver prospecting, Cranbrook, B.C.



LEGEND

- CREEK
- ROAD
- - - CLAIM BOUNDARY
- SAMPLE STATION
- - - APPROX. LOCATION OF FAULT

TUNSTALL RESOURCES INC.
 GEOTECH RESOURCES INC.
 WELL CLAIM GROUP
 POST STEELE #3
 GEOCHEMICAL SURVEY
 AU (P.P.B.)



N.T.S. ON PICE

Appn. C

APPN. D

ACME ANALYTICAL LABORATORIES LTD.
852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6
PHONE (604) 253-3158 FAX (604) 253-1716

DATE RECEIVED: AUG 7 1990

DATE REPORT MAILED: Aug. 10. / 90.

GEOCHEMICAL ANALYSIS CERTIFICATE

Frank Fairclough FILE # 90-3189
402 Briar Ave, Cranbrook BC V1C 4B5

Page 1

SAMPLE#	AU* ppb
ANGUS NO.3	3
#B.1.N.W. CORNER	3
#2.B.N.W. CORNER	1
NO.B3 NW	1
NO.003	2

- SAMPLE TYPE: Rock AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

SIGNED BY..... *C. Leong* D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Tl	Hg
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	%	ppm	ppm	ppm
ANGUS NO.1	1	43	10	4	.1	7	6	178	28.06	3	5	ND	1	1	1.0	2	2	67	.01	.004	2	8	.01	6	.01	2	.08	.01	.01	17	2	1
ANGUS NO.2	2	8	6	7	.1	13	10	75	3.33	2	5	ND	2	14	.2	2	2	47	.02	.021	3	25	.29	7	.01	2	.47	.02	.02	1	2	1
NO.B.4. CAMP SITE	1	2	2	10	.1	10	3	46	1.02	2	5	ND	7	2	.2	2	2	6	.01	.010	33	14	.77	22	.01	2	1.00	.01	.13	1	3	1
STANDARD C	18	59	42	131	7.0	68	31	1053	3.98	36	21	7	36	52	18.5	15	19	56	.51	.099	36	59	.87	179	.07	39	1.90	.06	.14	13	2	3

ACME ANALYTICAL LABORATORIES LTD.
852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6
PHONE(604)253-3158 FAX(604)253-1716

DATE RECEIVED: JUL 12 1990

DATE REPORT MAILED: *July 19/90*

ASSAY CERTIFICATE

Frank Fairclough FILE # 90-2465
402 Briar Ave, Cranbrook BC V1C 4B5

SAMPLE#	Ag** oz/t	Au** oz/t	Y ppm
46 SYLVAN	.02	.001	43
0+314 N03N	.02	.001	33
0+314 N04	.01	.001	35
ZINC 0+4N (GOLD/BAR)	.02	.005	-

AG** AND AU** BY FIRE ASSAY FROM 1 A.T.
- SAMPLE TYPE: Rock

SIGNED BY *C. Leong* D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

Aug 4

SAMPLE#	Pb ppm	Zn ppm	Ag ppm	Au* ppb
SY-1	39	33	.1	54
SY-2	11	46	.1	5
SY-3	30	35	.1	2
SY-3A	13	29	.1	2
SY-4	20	32	.1	1
SY-5	16	29	.1	2
SY-9	17	30	.1	2
SY-10	18	51	.1	6
SY-11	24	43	.1	1
SY-12	13	20	.1	1
SY-13	20	48	.2	1
SY-14	14	29	.2	1
SY-15	21	59	.3	1
STANDARD C	41	132	7.3	-

APPENDIX E

ACME ANALYTICAL LABORATORIES LTD.

PHONE: 253-3158

852 East Hastings St., Vancouver, B.C. V6A 1R6

File: 90-4578

Date: Sep 25 1990

FRANK FAIRCLOUGH
402 Briar Ave
Cranbrook, BC
V1C 4B5

TERMS:
NET TWO WEEKS -
1 1/2% PER MONTH CHARGED ON
OVERDUE ACCOUNTS.

NUMBER	ASSAY	PRICE	AMOUNT
42	SPECIAL PRICE - 30 ELEMENT ICP ANALYSIS @	3.25	136.50
42	GEOCHEM AU ANALYSIS BY ACID LEACH (10 gm) @	4.50	189.00
39	SOIL SAMPLE PREPARATION @	0.85	33.15
3	ROCK SAMPLE PREPARATION @	3.00	9.00
TOTAL			367.65

ACME ANALYTICAL LABORATORIES LTD.

PHONE: 253-3158

852 East Hastings St., Vancouver, B.C. V6A 1R6

File: 90-2465

Date: Jul 19 1990

FRANK FAIRCLOUGH
402 Briar Ave
Cranbrook, BC
V1C 4B5

TERMS:
NET TWO WEEKS -
1 1/2% PER MONTH CHARGED ON
OVERDUE ACCOUNTS.

NUMBER	ASSAY	PRICE	AMOUNT
✓1	31 ELEMENT ICP ANALYSIS @	3.95	3.95
✓1	GEOCHEM HG ANALYSIS BY FLAMELESS AA @	2.50	2.50
✓4	AG & AU BY FIRE ASSAY @	12.00	48.00
✓3	GEOCHEM Y ANALYSIS @	3.75	11.25
✓4	ROCK SAMPLE PREPARATION @	3.00	12.00
TOTAL			77.70

PLEASE PAY LAST AMOUNT →

PLEASE RETURN THIS COPY WITH PAYMENT

Appn. E

PHONE: 253-3158

852 East Hastings St., Vancouver, B.C. V6A 1R6

File: 90-2954

Date: Aug 4 1990

FRANK FAIRCLOUGH
402 Briar Ave
Cranbrook, BC
V1C 4B5

TERMS:
NET TWO WEEKS -
1% PER MONTH CHARGED ON
OVERDUE ACCOUNTS.

NUMBER	ASSAY	PRICE	AMOUNT
5	GEOCHEM PB ZN AG & W ANALYSIS @	3.25	16.25
✓ 13	GEOCHEM PB ZN & AG ANALYSIS @	3.25	42.25
13 ✓ 31	GEOCHEM AU ANALYSIS BY ACID LEACH (10 gm) @ } 13 Sylvan	4.50	139.50
3	31 ELEMENT ICP ANALYSIS @	3.95	11.85
3	GEOCHEM HG ANALYSIS BY FLAMELESS AA @	2.50	7.50
TOTAL			217.35

ACME ANALYTICAL LABORATORIES LTD.

PHONE: 253-3158

852 East Hastings St., Vancouver, B.C. V6A 1R6

File: 90-2826

Date: Aug 8 1990

FRANK FAIRCLOUGH
402 Briar Ave
Cranbrook, BC
V1C 4B5

TERMS:
NET TWO WEEKS -
1% PER MONTH CHARGED ON
OVERDUE ACCOUNTS.

NUMBER	ASSAY	PRICE	AMOUNT
9	31 ELEMENT ICP ANALYSIS @	3.95	35.55
✓ 9	GEOCHEM HG ANALYSIS BY ICP @	2.25	20.25
2	SOIL SAMPLE PREPARATION @	0.85	1.70
5 7	ROCK SAMPLE PREPARATION @ } 5 Sylvan	3.00	21.00
			78.50
SURCHARGE FOR UNDER 10 SAMPLES PER BATCH			5.00
TOTAL			83.50
NOTE: MS/ICP RESULTS TO FOLLOW			

PLEASE PAY LAST AMOUNT

DISTRIBUTION of TIME for ASSESSMENT REPORT # 21263 - SYLVAN # 1

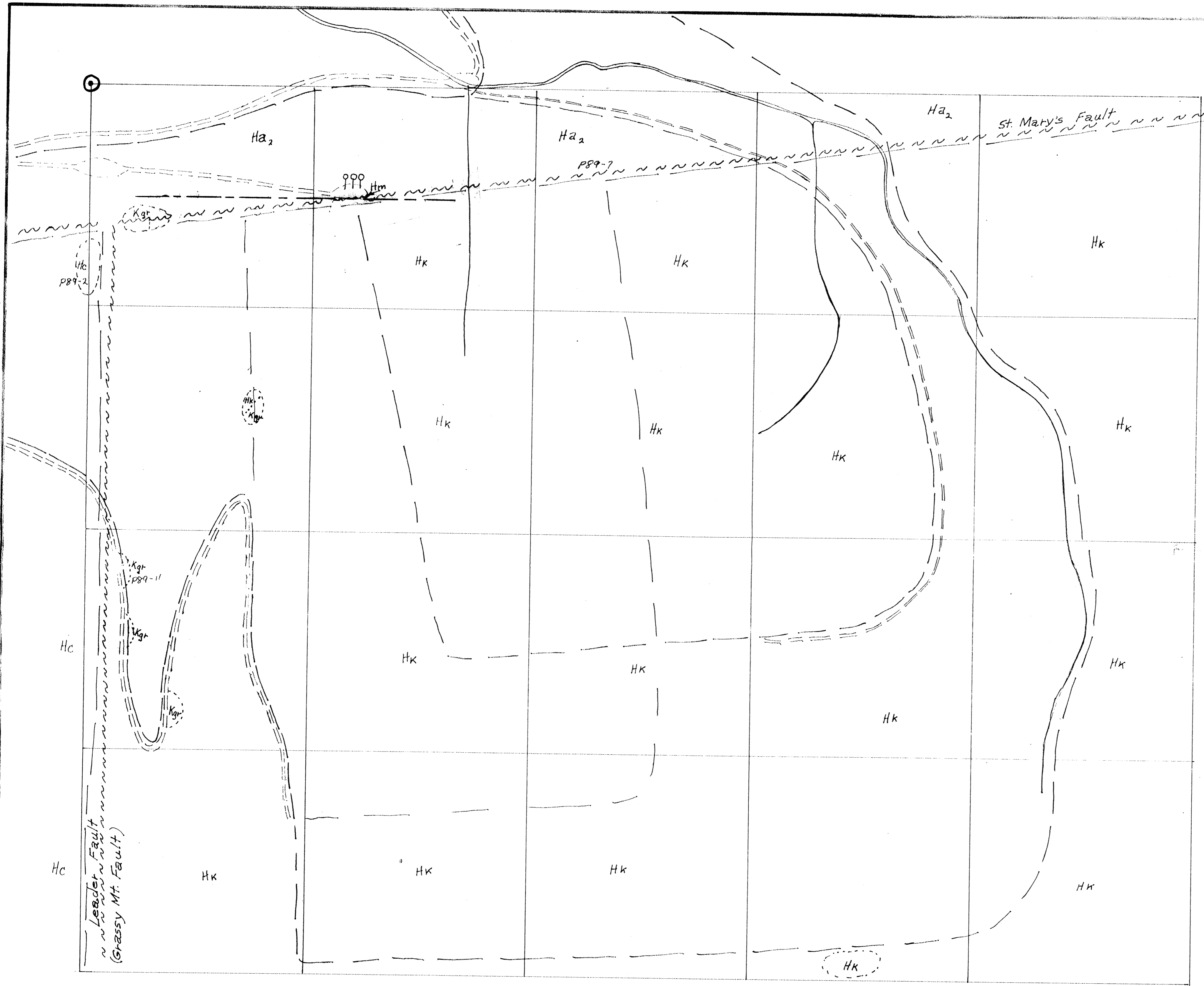
23 June	2 men @ \$125	Sample landing #2 Dig trench #1	250
26 "	1 man	} prospecting (not included)	
27 "	1 man		
28 "	1 man		
8 July	2 men @ \$125	Complete Trench #1 Dig Trench #6 (Aplite in Diorite)	250
18 July	2 men @ \$125	Dig Trench #2 soil sample	250
19 July	2 men @ \$125	Dig Trench #3 soil sample	250
20 July	2 men @ \$125	Dig Trench #5	250
23 July	1 man @ \$125	Geologist @ \$350 Additional samples Landing #2 & Trench #1 Sample Trench #6	475
30 July	1 man @ \$125	Geologist @ \$350 Sample mag vein & Trench #5, #2, #3	475
2 Aug	1 man @ \$125	Geologist @ \$350 Dig & sample Trench #4	475
			2675

21,263

LEGEND



- MESOZOIC**
- CRETACEOUS**
- Kgr** Granite/Granodiorite/monzonite
Quartz veins & silicification
- HELIKIAN**
- Hk** KITCHENER FM. green argillite,
dolomitic argillite, silty
argillite
- Hc** MIDDLE CRESTON FM. grey siltstone
& argillite, some green or purplish
siltstone and fine sandstone
- Hm** DIORITE med. to fn. grained
very pyritic
- Ha₂** MIDDLE ALDRIDGE grey fine
quartzite & siltstone & dark
grey argillite, very rusty weathering
- PROTEROZOIC**
- claim lines
— traverse
~ stream
= logging road
- - - geochem baseline
○ rock outcrop
..... geological boundary
~~~~ fault (defined)  
~ ~ ~ fault (approximate)  
~ ~ ~ fault (assumed)  
♀ diamond drill hole  
♀ proposed dd.h.  
⊙ corner post



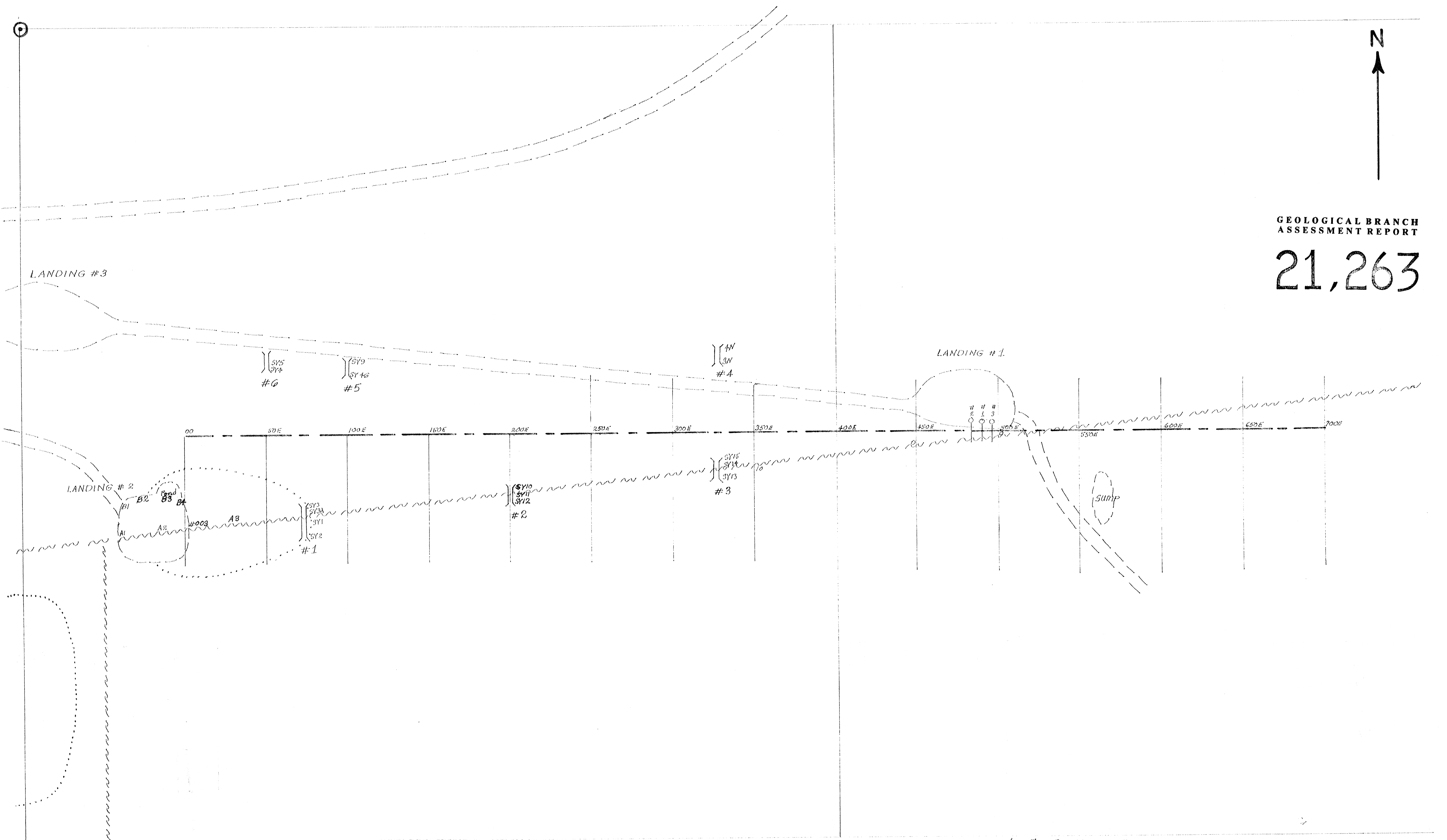
MAP#1  
**SYLVAN#1**  
by N. Gass  
Rev. 1  
GEOLOGY

Scale: 1:5000, 1cm = 50M  
100 50 0 100 200 300 400



GEOLOGICAL BRANCH  
ASSESSMENT REPORT

21,263



MAP # 2  
GEOCHEMICAL & PHYSICAL  
claims 4W4N, 5W4N

**SYLVAN # 1**  
by N. Gass Revised '91  
scale: 1:1000, 1cm. = 10M

L E G E N D

- Baseline
- Road or Landing
- Outcrop
- baseline
- fault (defined)
- fault (approximate)
- fault (assumed)
- diamond drill hole
- trench
- SY 10 assayed sample



# 21,263

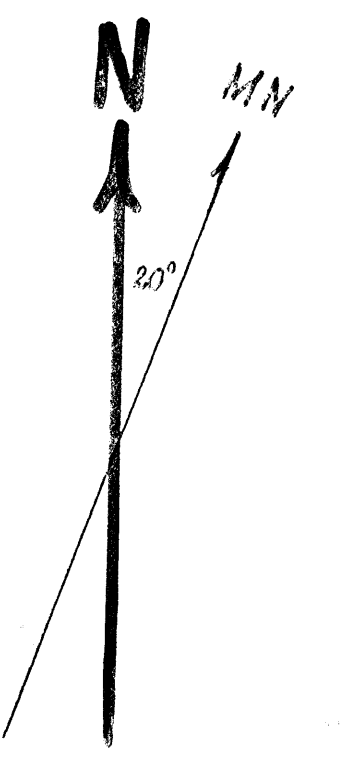
## COMPOSITE MAP OF REGIONAL GEOLOGY CRANBROOK AREA B.C.

after: Leech 50-52, Leech 55-59  
McMahan 79, Hoy 82-83  
Bessor 80-81, Gass 86-90  
by N. Gass '90

### LEGEND

- Cgr CRETACEOUS quartz monzonite
- Cec CAMBRIAN eiger and cranbrook formations
- Hgr HELIKIAN Purcell Super Group
- K Purcell intrusive granites or pegmatites
- C kitchener & dutch cr. equivalents (or sylvan)
- d cruston
- A<sub>2</sub> aldrige middle & upper
- A<sub>1</sub> aldrige lower
- anticline
- monocline
- anticline overturned
- formation boundary
- major fault
- minor fault
- E-W shadow lineation
- mineral occurrence or mine

Scale: 1 cm. = 1000 m







# LEGEND 21263

- shadow lineations established by E-W orientation of valleys, ridges, waterways or offsets of major N-S valleys
- ..... shadow lineations assumed
- granitic (monzonite, qtz. monzonite) stock exposed
- granitic stock assumed as indicated by magnetic high
- ⊗ mine or major mineral occurrence

SW. ALTA. & S.E. B.C.  
 RELIEF MAP  
 showing  
 location of proposed shadow  
 lineations  
 by  
 N. GASS  
 scale 1cm = approx 6.63km.

