REPORT ON

GEOCHEMICAL SURVEYS

by

P.J.S. BOYLE - B. Sc.

on the

DRIFTPILE PASS PROPERTY

(DPP # 1 - # 7 Claims, 111 Units)

Situated west of Gataga River

in the Liard Mining Division B.C.

58°05'N 125°50'W
N.T.S. 94K/4W

owned by

TEXASGULF CANADA LIMITED

December, 1977 Calgary, Alberta

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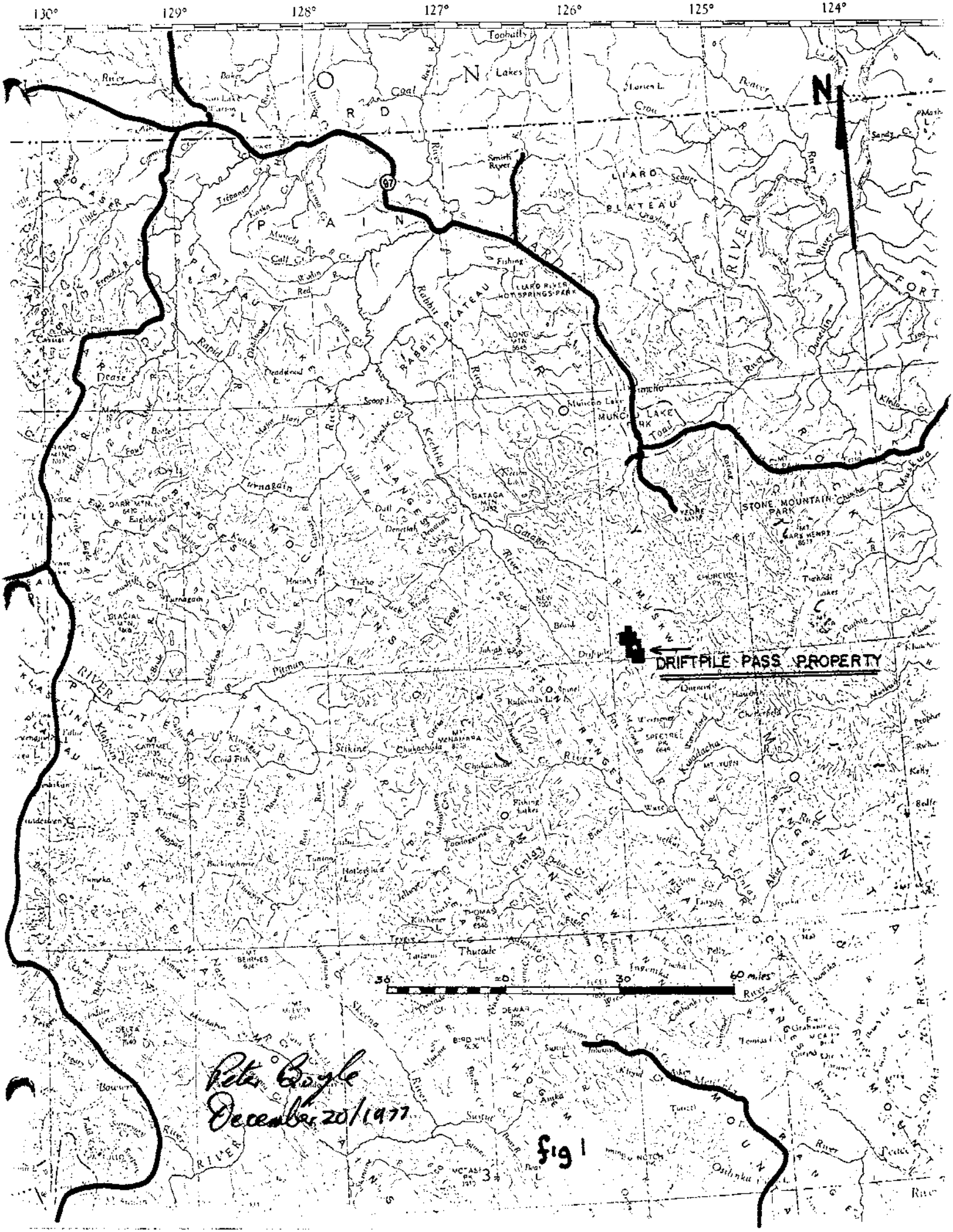
LIST OF FIGURES

*1" = 30 miles


130°
129°
128°
127°
126°
125°
124°
DRIFTPILE PASS PROPERTY
60 miles
Peter Bogle
December 20/1977
fig 1

INTRODUCTION

This report describes the results of a preliminary geochemical survey at the Driftpile Pass Property. A number of sphalerite and malachite occurrences were located in August, 1976. During August, 1977, a geochemical reconnaissance program was undertaken. The object of this survey was to establish the significance of the sulphide occurrences.

The Driftpile Pass property comprises a total of 111 Units in 7 contiguous claims (DPP #1 - #7). The claims were staked for Texasgulf Canada Limited in June, 1977.

WORK DONE

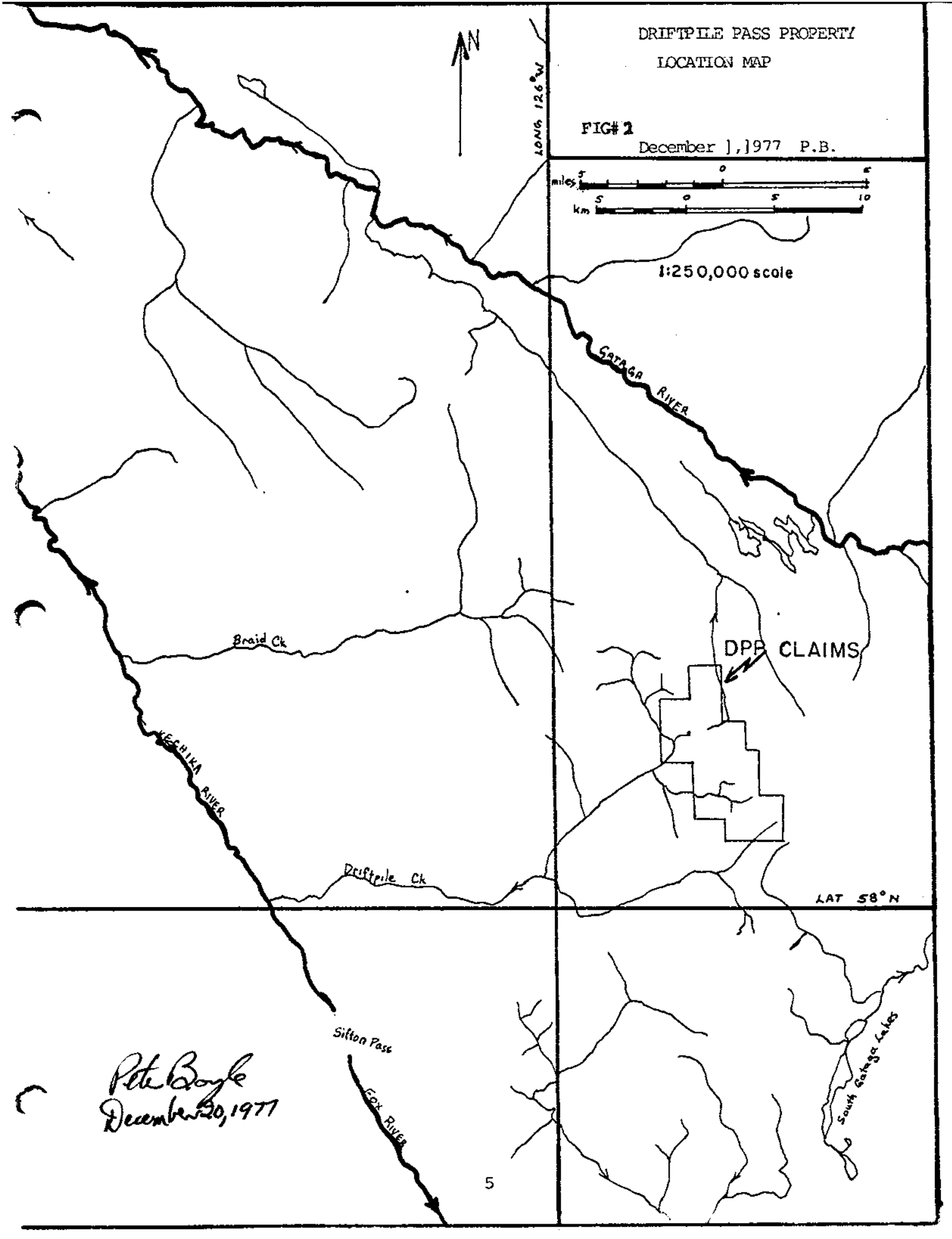
Thirty eight stream sediment samples were collected at 150 to 500 meter intervals, from the stream beds. Two lines of soil samples were completed 100 meters apart, for a total of 11.3 line km. Samples were collected at 50 meter intervals along the "pace and compass" lines. A total of 239 soil samples were collected.

OPERATOR

Texasgulf Inc. paid for all work done on the property and supplied the equipment for the project. Total cost of the work done was $4,032.00, (see statement of Expenditures - Appendix A for details).

CONCLUSION

Results of the stream sediment and soil sampling program, plotted on figures 5, 6 and 7 are satisfactory. On the basis of these results, more detailed work should be done on these claims. In particular, a better understanding of the geology and structure is required to permit evaluation of this property.


DRIFTPILE PASS PROPERTY
LOCATION MAP
FIG# 2
December 1, 1977 P.B.
N
LONG 126° W
miles 5 0 5
km 5 0 5 10
1:250,000 scale
GATAGA RIVER
Braid Ck
DPP CLAIMS
KECHIKA RIVER
Driftpile Ck
LAT 58° N
Sifton Pass
FOX RIVER
South Gataga Lakes
Pete Boyle
December 20, 1977

LOCATION, ACCESS & TERRAIN

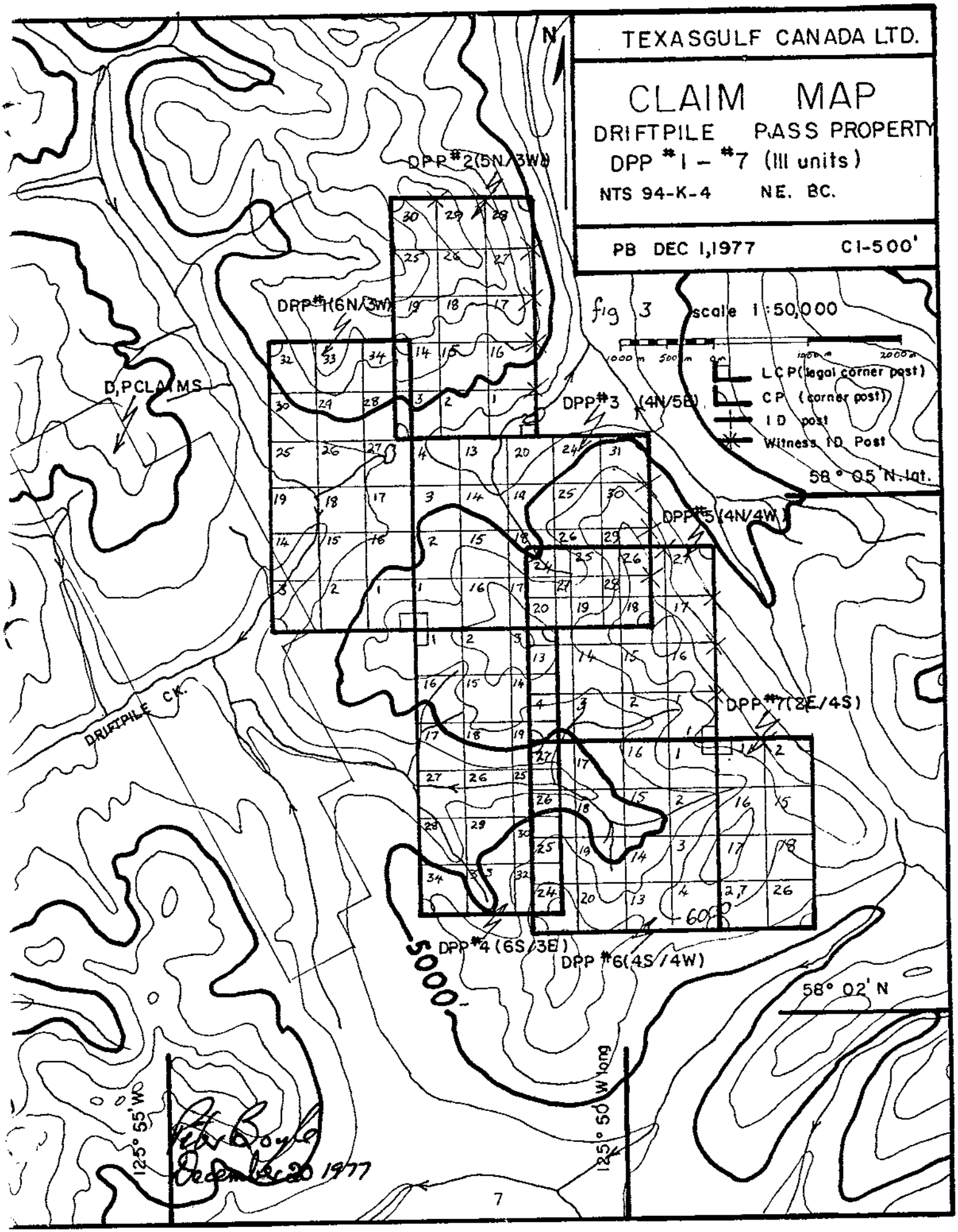
Figure 3 shows the location of the DPP Claims at Driftpile Pass southwest of the Gataga River, @ Lat. 58°05'N, Long. 125°50'W (N.T.S. 94K/4W).

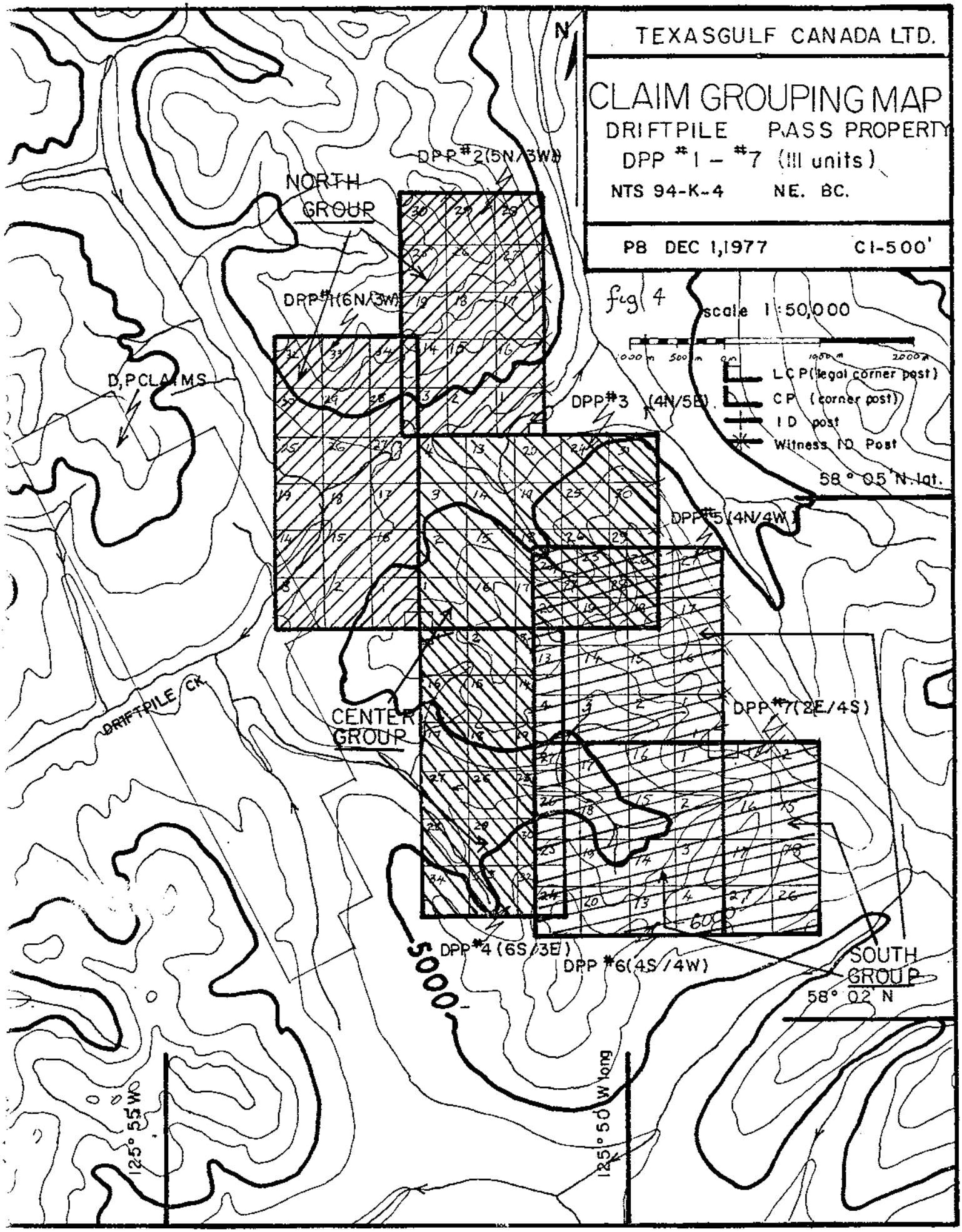
Access at present is by helicopter from the Texasgulf base camp, at Mayfield Lake 10 km to the northeast. Fixed wing support originates in Watson Lake. Mobilization and demobilization by float plane, was through Muncho Lake at Mile 464 on the Alaska Highway, 95 km north of the base camp.

From the broad Gataga River floor at 3000' elevation hills rise abruptly to the south and west, to northwest trending limestone ridges over 6500' high. These ridges are breached by a pass at 4500' at the headwaters of Driftpile Creek. The property lies west of the limestone ridges.

All the creeks on the property drain to the west to Driftpile Creek except one, which drains east and north from Driftpile Pass to join up with the northwest flowing Gataga River. The entire property lies above the tree line.

There is more than 70% outcrop exposure of the limestone. Frost action has resulted in large talus slopes at the foot of cliffs. Alpine soil over the shale is thin and only locally developed. Outcrop is largely restricted to the incised gullies and rounded ridges. Mass wastage on the steep hillsides is pronounced resulting in poor soil development.


TEXASGULF CANADA LTD.
CLAIM MAP
DRIFTPILE PASS PROPERTY
DPP *1 – *7 (111 units)
NTS 94-K-4 N.E. BC.
PB DEC 1,1977 C1-500'
fig 3 scale 1:50,000
LCP (legal corner post)
CP (corner post)
ID post
Witness ID Post
58° 05' N. lat.
58° 02' N
N
DPP*2(5N/3W)
DPP*1(6N/3W)
DPP*3 (4N/5E)
DPP*5(4N/4W)
DPP*7(2E/4S)
DPP*4 (6S/3E)
DPP *6(4S/4W)
D,P CLAIMS
DRIFTPILE CK.
5000
125° 55' W
125° 50' W long
December 20 1977
7


TEXASGULF CANADA LTD.
CLAIM GROUPING MAP
DRIFTPILE PASS PROPERTY
DPP #1 – #7 (III units)
NTS 94-K-4 NE. BC.
P8 DEC 1,1977 CI-500'
fig 4
scale 1:50,000
1000 m 500 m 0 1000 m 2000 m
LCP (legal corner post)
CP (corner post)
ID post
Witness ID Post
58° 05' N. lat.
N
NORTH GROUP
DPP #2 (5N/3W)
DPP #1 (6N/3W)
D, P CLAIMS
DPP #3 (4N/5E)
DPP #5 (4N/4W)
DRIFTPILE CK.
CENTER GROUP
DPP #7 (2E/4S)
DPP #4 (6S/3E)
DPP #6 (4S/4W)
5000
SOUTH GROUP
58° 02' N
125° 55' W long
125° 50' W long

GEOCHEMISTRY

SUMMARY

A total of 277 samples analyses were claimed for assessment credit. Thirty-eight stream sediment samples and 239 soil samples were collected. Pb, Zn and Cu results are shown on the geochemical plans (Fig. 5 to 8 incl.). The samples were collected between August 3 and August 12, 1977. (Appendix A). A statement of the qualifications of the personnel who actually conducted the survey is included in Appendix B. Samples were collected by personnel employed by Texasgulf Inc.

GEOLOGY

The eastern margin of the property is marked by limestone spires. The limestone dips to the southwest. It is overlain by a pellitic unit, comprised of siltstones, shales and slates, to the west. All the lithologies are isoclinally folded. A number of these anticlines and synclines are observed on the property. The structural relationship between these features is not apparent, however, they may be separated by thrusts.

Mapping by the Geological Survey of Canada has assigned the limestone to the Atan Group of Cambrian age. The pellitic unit is assigned to the graptolitic facies of the Kechika group of Ordovician-Silurian age. Reference - Taylor and Stott GSC Memoir 373 Tuchodi Lakes Map Area, 1973.

ANALYSES

Stream sediment and soil samples were collected in numbered Kraft paper bags, air dried, and shipped to Bondar-Clegg and Co. Limited in North Vancouver. At this lab, the -80 mesh fraction was analysed for Pb, Zn and Cu, using hot Aqua Regia extraction and Atomic Absorption analytical techniques. Results are quoted as ppm total metal.

STREAM SEDIMENT SAMPLING

PROCEDURE

Stream and spring sediment samples were collected from streams draining the property. Only active sediment was sampled. The topography on the property is rugged and most tributary gullies are deeply incised.

INTERPRETATION OF RESULTS

On the higher ridges, the ground is frozen much of the summer. Frost heaving of outcropping rock results in large talus slopes on the steep hillsides. These talus slopes are covered with only a thin veneer of soil since erosion of soils in this area is a relatively recent phenomena. Thus, mechanical weathering of any outcropping sulphides will be significant particularly for galena, if present. The sediments in the vicinity of springs are distinguished by high zinc values, a reflection of the acidity of their water and the scavanging action of the associated red limonite deposits. The copper values do not appear to be significant.

No meaningful statistical interpretation of the lead and zinc values can be made due to the small population. No significant "cut off" values are apparent in the streams.

SOIL SAMPLING

PROCEDURE

Soil samples were collected at 50 meter intervals on two parallel "pace and compass" traverses parallel to the limestone-shale contact. The location of the mineralized float and outcrop is indicated relative to the soil sample traverses. The alpine soils are comprised of a large proportion of rock fines.

INTERPRETATION OF RESULTS

The object of this survey was to establish the metal content of soils in close proximity to the know sulphide occurrences and to determine whether additional sulphides subcropped in the area. Outcrop of the shales, lying west of the limestone is very limited. The complex folding of these shales, except in close proximity to the limestone contact, determined the location of this preliminary survey.

Scattered high lead, zinc and copper values are apparent on the sample line closer to the limestone contact. These higher values coincide with the locations at which mineralization was noted. Values on the second line are unremarkable and uniformly low.

The secondary dispension of metals in this environment appears to be limited to frost heaving of the outcrop resulting in small scree fans. The lack of fine limestone fragments in the shale-soil samples indicated that effects mechanical dispension are severely limited with regard to the secondary despension of metals. Chemical weathering as a process of secondary dispension in this high alpine environment does not appear to be significant.

The areal distribution of the highest lead, zinc & copper values, suggest that subcropping mineralization may be limited to small occurrences, similar in size to those which outcrop at the limestone shale contact.

Peter Boyle

Peter Boyle

APPENDIX A

STATEMENT OF EXPENDITURES

Geochemical Survey

TEXASGULF INC.

STATEMENT OF EXPENDITURES

DRIFTPILE PASS PROPERTY (DPP #1 to #7 incl., III Units)

(GEOCHEMICAL SURVEY 1977)

FIELD

SALARIES AND FRINGE BENEFITS

P. Boyle - Supervision, Geologist, Blaster, B.Sc. Period Aug. 4-6 (1½ days), 12	3 days @ $80.00	$ 240.00	
B. Gardiner - Geologist, B.Sc. Period Aug. 4,6,7,8,12	5 days @ $55.00	$ 275.00	
P. Hubacheck - Geologist, B.Eng. Period Aug. 3,6,7,8	4 days @ $50.00	$ 200.00	
P. Mann - Assistant Period Aug. 7	1 day @ $40.00	$ 40.00	
J. Cosgrove - Assistant Period Aug. 6,8	2 days @ $40.00	$ 80.00	
S. Krystofiak - Assistant Period Aug. 7,12	2 days @ $35.00	$ 70.00	
R. Bryden - Assistant Period Aug. 3,8	2 days @ $30.00	$ 60.00	
B. Johnson - Cook Period Aug. 3-12	3 days @ $42.00	$ 126.00	
		$1,091.00	$1,091.00

CAMP COSTS

22 man-days @ $25.00/day		$ 550.00

GEOCHEMICAL ANALYSIS

239 samples @ $3.00/sample (soils)	$ 717.00	
38 samples @ $3.00/sample (stream seds)	$ 114.00	
	$ 831.00	$ 831.00

SAMPLE SHIPPING	$ 50.00
HELICOPTER (Quasar 206-B Jet Ranger) 1.5 hrs. @ $300.00/hour	$ 450.00
MOB & DEMOB (pro-rated)	$ 565.00
	$3,357.00

OFFICE

SALARIES $ FRINGE BENEFITS

P. Boyle - Report Writing, Map Preparation Period Nov. 1 to Dec. 15	4 days @ $80.00	$ 320.00	
J. Van Laar - Draftsman Period Nov. 1 - 30	2 days @ $50.00	$ 100.00	
Typing, Stationery, etc.		$ 87.20	$ 495.00
		$ 507.20	$ 4,044.20

CLAIM BY CLAIM BREAKDOWN OF COSTS INCURRED COMPLETING THE PRELIMINARY GEOCHEMICAL SURVEY, AUGUST, 1977

CLAIM		COST OF WORK	
DPP #1	2 Stream Seds	$29.20	$803.00
DPP #2	53 Soil Samples	$773.80	
DPP #3	5 Stream Seds 21 Soil Samples	$379.60	$530.20
DPP #4	11 Stream Seds	$150.60	
DPP #5	8 Stream Seds 94 Soil Samples	$1489.20	$2711.00
DPP #6	8 Stream Seds 5 Soil Samples	$189.80	
DPP #7	66 Soil Samples 4 Stream Seds	$1032.00	
	Total	$4044.20	

Peter Boyle

APPENDIX B

STATEMENT OF QUALIFICATIONS

STATEMENT OF QUALIFICATIONS

I Peter J.S. Boyle hereby certify that:

1) I am a geologist
2) I am a graduate of the University of Saskatchewan, (Saskatoon) with a BSc in geology (1972)
3) From 1972 to 1977 I have been engaged in mineral exploration in British Columbia.
4) I have been employed by Texasgulf Inc. since 1974
5) I personally supervised and participated in the field work and have assessed and interpreted all the data resulting from the work.
6) I have held a BC Blasters Certificate since 1975.

STATEMENT OF QUALIFICATIONS

F. Graham Geologist PhD.

F. Graham obtained his BSc at Queens University, Belfast in 1963. In 1967 he completed his MSc at Western University, Ontario. He received his PhD in 1970 from Western University. Since 1974 he has been employed as a geologist by Texasgulf Inc. in lead, zinc exploration in Europe and North America.

P. Hubacheck Geologist B.Eng.

P. Hubacheck was employed by Texasgulf Inc. as a geologist during the summer of 1977. He obtained his degree from the South Dakota School of Mines in May 1977.

This is his 5th summer of employment with Texasgulf Inc., and he is well regarded by his supervisors.

W. Gardiner Geologist BSc

W. Gardiner is employed by Texasgulf Inc. as a geologist during the summer of 1977. He obtained his degree from Memorial University New Brunswick, 1975.

At present he is enrolled in his second year of a Master's program at McGill University Quebec. He is a conscientious and competent field geologist.

P.W. Mann Assistant

Mr. Mann is enrolled in his 4th year of Geology at Acadia University Nova Scotia.

This is his third summer's work with Texasgulf.

He is a keen and thoroughly capable field assistant.

J. Cosgrove Assistant

J. Cosgrove is enrolled in his 4th year of Geology at the University of Calgary Alberta.

This is his second summer in the field. He is a keen and capable field assistant.

S. Krystofiak Assistant

Mr. Krystofiak is enrolled in his 3rd year of Geology at the University of Alberta. This was his first season of geological related field work.

R. Bryden Assistant

R. Bryden completed Grade twelve in Ontario this spring. This was his second summer with Texasgulf in geological related work. He is keen and conscientious.

Peter Boyle

TEXASGULF INC.
REGIONAL EXPLORATION CALGARY

DPP No. 1 TO No. 7 CLAIMS

Zn ppm — TOTAL METAL

SOIL AND STREAM SEDIMENT SAMPLING

DRIFTPILE PASS

DATE:	BY:	NTS:	C.I. = 500'
AUG. 4/77	P.B. / P.H.	94-K-4	SCALE = 1:10,000

TO ACCOMPANY ASSESSMENT REPORT ON GEOCHEMICAL SURVEYS ON THE DRIFTPILE PASS PROPERTY, (DPP No. 1 - No. 7 CLAIMS, 111 UNITS) DEC 1977
GATAGA RIVER - LIARD MINING DIVISION

FIG. 5

SUBMITTED BY: P. BOYLE, P. HUBACHECK, TEXASGULF, INC.

COMPILER / AUTHOR: Peter Boyle, Peter C. Hubacheck

DATE: December 20, 1977

NO. 6736

METERS 0 100 200 300 400 500 600 700 800

LEGEND

LEGAL CORNER POST	⊢⊣
CORNER POST	⊢⊣
IDENTIFICATION POST	⊢⊣
SOIL SAMPLE	△
STREAM SEDIMENT SAMPLE	○
MINERALIZED OUTCROP	X
MINERALIZED SCREE	'

SOIL SAMPLES

red	>1000 ppm
orange	500 - 1000
yellow	250 - 499
	<250

DPP 1
DPP 2
DPP 3
DPP No. 4
DPP 5
DPP 6
DPP 7

DRIFTPILE CREEK

58° 05' N Lat.
58° 02' N
125° 30' W Long

TYPES OF MATERIAL SAMPLED - ALPINE SOILS, SCREE FINES, ACTIVE STREAM SEDIMENTS
ANALYTICAL PROCEDURE - 80 MESH, HOT AQUA REGIA, ATOMIC ABSORPTION
ANALYSIS: BY BONDAR CLEGG LABORATORIES, VANCOUVER
FIELD WORK: AUG. 3 to AUG. 12, 1977

TEXASGULF INC.
REGIONAL EXPLORATION CALGARY

DPP No. 1 TO No. 7 CLAIMS

Pb ppm – TOTAL METAL

SOIL AND STREAM SEDIMENT SAMPLING

DRIFTPILE PASS

DATE:	BY:	NTS:	C.I. = 500'
AUG. 4/77	P.B. / P.H.	94-K-4	SCALE = 1:10,000

TO ACCOMPANY ASSESSMENT REPORT ON GEOCHEMICAL SURVEYS ON THE DRIFTPILE PASS PROPERTY, (DPP No. 1 - No. 7 CLAIMS, 111 UNITS) **DEC 1977**
GATAGA RIVER - LIARD MINING DIVISION

FIG 6

SUBMITTED BY P. BOYLE, P. HUBACHECK, TEXASGULF, INC.

COMPILER / AUTHOR Peter Boyle

DATE December 20 1977
Peter C. Hubacheck

MINERAL RES. NO. 6736

METERS 100 200 300 400 500 600 700 800

LEGEND

- LEGAL CORNER POST
- CORNER POST
- IDENTIFICATION POST
- SOIL SAMPLE △
- STREAM SEDIMENT SAMPLE ○
- MINERALIZED OUTCROP X
- MINERALIZED SCREE •

SOIL SAMPLES

red	> 100 ppm
orange	50 - 100
yellow	25 - 49
	< 25

DPP 1
DPP 2
DPP 3
DPP 5
DPP 6
DPP 7

DRIFTPILE CREEK

58° 05' N Lat.
58° 02' N
125° 30' W Long

TYPES OF MATERIAL SAMPLED ALPINE SOILS, SCREE FINES, **ACTIVE STREAM SEDIMENTS**
ANALYTICAL PROCEDURE -80 MESH, HOT AQUA REGIA, ATOMIC ABSORPTION
ANALYSIS BY BONDAR CLEGG LABORATORIES, VANCOUVER
FIELD WORK: AUG. 3 to AUG. 12, 1977

TEXASGULF INC.
REGIONAL EXPLORATION CALGARY

DPP No. 1 TO No. 7 CLAIMS

Cu ppm – TOTAL METAL

SOIL AND STREAM SEDIMENT SAMPLING

DRIFTPILE PASS

DATE:	BY:	NTS:	C.I. = 500'
AUG. 4/77	P.B. / P.H.	94-K-4	SCALE = 1:10,000

TO ACCOMPANY ASSESSMENT REPORT ON GEOCHEMICAL SURVEYS ON THE DRIFTPILE PASS PROPERTY, (DPP No. 1 - No. 7 CLAIMS, 111 UNITS) DEC 1977.
GATAGA RIVER - LIARD MINING DIVISION

FIG. 7

SUBMITTED BY: P. BOYLE, P. HUBACHECK, TEXASGULF, INC.

COMPILER / AUTHOR: Peter Boyle, Peter C. Hubacheck

DATE: December 20, 1977

NO. 6736

METERS 100 200 300 400 500 600 700 800

LEGEND

LEGAL CORNER POST	⊢
CORNER POST	⊢
IDENTIFICATION POST	⊢
SOIL SAMPLE	Δ
STREAM SEDIMENT SAMPLE	O
MINERALIZED OUTCROP	X
MINERALIZED SCREE	•

SOIL SAMPLES

red	> 100 ppm
orange	50 – 100
yellow	25 – 49
	< 25

DPP 1 · DPP 2 · DPP 3 · DPP No. 4 · DPP 5 · DPP 6 · DPP 7

DRIFTPILE CREEK

58° 05' N Lat.

58° 02' N

125° 30' W Long

TYPES OF MATERIAL SAMPLED: ALPINE SOILS, SCREE FINES, ACTIVE STREAM SEDIMENTS
ANALYTICAL PROCEDURE - 80 MESH, HOT AQUA REGIA, ATOMIC ABSORPTION
ANALYSIS: BY BONDAR CLEGG LABORATORIES, VANCOUVER
FIELD WORK: AUG. 3 to AUG. 12, 1977

TEXASGULF INC.
REGIONAL EXPLORATION CALGARY

DPP No. 1 TO No. 7 CLAIMS

SAMPLE LOCATION PLAN

SOIL AND STREAM SEDIMENT SAMPLING

DRIFTPILE PASS

DATE:	BY:	NTS:	C.I. = 500'
AUG. 4/77	P.B. / P.H.	94-K-4	SCALE = 1:10,000

TO ACCOMPANY ASSESSMENT REPORT ON GEOCHEMICAL SURVEYS ON THE DRIFTPILE PASS PROPERTY, (DPP No. 1 - No. 7 CLAIMS, 111 UNITS) DEC 1977
GATAGA RIVER - LIARD MINING DIVISION

FIG. 8

SUBMITTED BY: P. BOYLE, P. HUBACHECK — TEXASGULF, INC.

COMPILER / AUTHOR: Peter Boyle, Peter Hubacheck

DATE: December 30, 1977

NO. 6736

METERS 0 100 200 300 400 500 600 700 800

LEGEND

- LEGAL CORNER POST — LCP
- CORNER POST — CP
- IDENTIFICATION POST — IDP
- SOIL SAMPLE — △
- STREAM SEDIMENT SAMPLE — ○
- MINERALIZED OUTCROP — X
- MINERALIZED SCREE — •

DPP 1
DPP 2
DPP 3
DPP No. 4
DPP 5
DPP 6
DPP 7

DRIFTPILE CREEK

58° 05' N Lat.
58° 02' N
125° 30' W Long

TYPES OF MATERIAL SAMPLED ALPINE SOILS, SCREE FINES, **ACTIVE STREAM SEDIMENTS**
ANALYTICAL PROCEDURE -80 MESH, HOT AQUA REGIA, ATOMIC ABSORPTION
ANALYSIS BY BONDAR CLEGG LABORATORIES, VANCOUVER
FIELD WORK: AUG. 3 to AUG. 12, 1977

TEXASGULF INC.
REGIONAL EXPLORATION CALGARY

DPP No. 1 TO No. 7 CLAIMS

TOPOGRAPHY PLAN

DRIFTPILE PASS

DATE:	BY:	NTS:	C.I. = 500'
AUG. 4/77	P.B. / P.H.	94 - K - 4	SCALE = 1:10,000

TO ACCOMPANY ASSESSMENT REPORT ON GEOCHEMICAL SURVEYS ON THE DRIFTPILE PASS PROPERTY, (DPP No. 1 - No. 7 CLAIMS, 111 UNITS) DEC 1977
FIG. 9 GATAGA RIVER - LIARD MINING DIVISION

SUBMITTED BY: P. BOYLE, P. HUBACHECK — TEXASGULF, INC.

COMPILER / AUTHOR: Peter Boyle, Peter C. Hubacheck

DATE: December 20, 1977

MINERAL RESOURCES BRANCH
Assessment Report
NO. 6736

METERS
0 100 200 300 400 500 600 700 800

LEGEND

LEGAL CORNER POST	⊢⊣
CORNER POST	⊢
IDENTIFICATION POST	⊣
SOIL SAMPLE	△
STREAM SEDIMENT SAMPLE	○
MINERALIZED OUTCROP	X
MINERALIZED SCREE	•

red
orange
yellow

DPP 1
DPP 2
DPP 3
DPP No. 4
DPP 5
DPP6
DPP 7

DRIFTPILE CREEK

58° 05' N Lat.
58° 02' N
125° 30' W Long

△8116

TYPES OF MATERIAL SAMPLED ALPINE SOILS, SCREE FINES, ACTIVE STREAM SEDIMENTS
ANALYTICAL PROCEDURE -80 MESH, HOT AQUA REGIA, ATOMIC ABSORPTION
ANALYSIS: BY BONDAR CLEGG LABORATORIES, VANCOUVER
FIELD WORK: AUG. 3 to AUG. 12, 1977