GEOLOGICAL AND GEOCHEMICAL REPORT

on the

MCVICAR GROUP

Raffuse Creek Area, Vancouver Mining Division
92G 11E, Lat. 49°40' Long. 123°03'

by

Peter R. DeLancey, P.Eng.
H.R. Schmitt, B.Sc.

Owner: Texasgulf Canada Ltd. and
Matachewan Consolidated Mines Ltd.
Operator: Texasgulf Inc.

Vancouver, B.C. October, 1978.

TABLE OF CONTENTS

	PAGE
INTRODUCTION	1
SUMMARY	1
PROPERTY LOCATION, ACCESS AND TERRAIN	1
HISTORICAL OUTLINE	1
GEOLOGICAL SURVEYS	2
REGIONAL SETTING	2
PROPERTY GEOLOGY	3
Lithology	3
Garibaldi Volcanic Rocks	3
Coast Range Granitic Rocks	3
Mafic Volcanic Rocks	3
Sedimentary Rocks	4
Felsic Volcanic Rocks	4
Cherty Rhyolite	4
Rhyolite Tuff	4
Quartz-sericite Schist	4
Siliceous Stockwork or Breccia	4
Rhyodacite Porphyry	4
Rhyodacite Agglomerate	5
Rhyodacite Tuff	5
Structure	5
Mineralization	6
Whistler Showings	6
South Harding Showings	7
North Harding Showings	7
Rainstorm Showings	7
Lily, Rose and Grouse Fraction Showings	8
Cabin Fraction Showings	9
Violet Showings	9
Slide Creek Copper Showing	9
Interpretation	9
GEOCHEMICAL SURVEYS	10
LOCATION	10
FIELD PROCEDURE	11
ANALYTICAL PROCEDURE	11
INTERPRETATION AND EVALUATION OF RESULTS	11

APPENDICES

Appendix A	Authors' Qualifications
Appendix B	Itemized Cost Statement
Appendix C	Whistler Showing Assays

LIST OF ILLUSTRATIONS

Figure 1	Location Map McVicar Group 1:50,000	follows page 1
Figure 2	Geology of the Whistler Showings 1:500	follows page 6
Figure 3	Geology of the McVicar Group 1:5,000	in pocket
Figure 4	Claims and Geochemical Grid Location Map 1:5000	in pocket
Figure 5	Surface Trenches and Diamond Drill Holes Location Map 1:1200	in pocket
Figure 6	Geochemistry North Sheet Cu 1:1250	in pocket
Figure 7	Geochemistry North Sheet Pb 1:1250	in pocket
Figure 8	Geochemistry North Sheet Zn 1:1250	in pocket
Figure 9	Geochemistry South Sheet Cu 1:1250	in pocket
Figure 10	Geochemistry South Sheet Pb 1:1250	in pocket
Figure 11	Geochemistry South Sheet Zn 1:1250	in pocket

INTRODUCTION:

SUMMARY

Geological and geochemical surveys were conducted by Texasgulf Inc. on the McVicar Group during the period April 7, 1978 to August 30, 1978. The McVicar Group consists of 12 Crown Granted claims known as the McVicar Crown Grants, and the Baldwin 1, 2 and 3 Mineral Claims, totalling 28 M.G.S. units.

Geological mapping was carried out over the entire Group at a scale of 1:5,000. Base map preparation included the production of an ortho-photo map (1:10,000) and a topographic map (1:5,000). Geochemical soil sampling surveys were carried out in selected areas; samples were analyzed for Cu, Pb, and Zn. Several of the old workings were examined; chip samples were taken in a few trenches and assayed for Cu, Pb and Zn.

PROPERTY LOCATION, ACCESS AND TERRAIN

The McVicar Group (Lat. 49°40', Long. 123°03') is located 9 km southeast of the town of Squamish (see Figure 1).

Access is by 4-wheel drive vehicle on logging roads along the Mamquam River and Raffuse Creek.

The terrain is rugged; elevations range from 600 metres along Raffuse Creek to 1495 metres at the peak of Mt. Baldwin. Most of the showings are located at treeline.

The area receives abundant snowfall in the winter; much of this snow remains until mid-summer.

HISTORICAL OUTLINE

The "McVicar" mineral showings were discovered in the early 1900's. Work during this period was generally confined to surface trenching. In 1946 the property was obtained by Western Surf Inlet Company. Succeeding

work included diamond drilling of the Rainstorm, Harding and Whistler Showings. The McVicar Property was optioned to Croydon Mines in 1969. Work during the 1970-1972 season included 4,072 feet of NQ diamond drilling. In 1977 Texasgulf Canada staked the Baldwin 1, 2 and 3 Claims adjoining the McVicar Crown Grants, and subsequently optioned the Crown Granted Claims from Matachewan Consolidated Mines, who had acquired the interests of Western Surf Inlet.

GEOLOGICAL SURVEYS:

The McVicar Claim Group was mapped on a scale of 1:5,000. A topographic map, constructed from an ortho-photo (1:10,000), served as base map for this work (Figure 3). More detailed mapping (1:50 and 1:500) was done in the immediate area of the old trenches (Figure 2). Chip samples were taken across a few of the showings and were assayed for copper, lead and zinc (Appendix C).

The claim boundaries are shown in Figure 4. Figure 5 shows the location of the individual trenches and the old diamond drill holes.

REGIONAL SETTING

The McVicar Group lies within a northwest trending belt of volcanic rocks referred to as the Indian River Pendant. These rocks are thought to be correlative with the upper part of the Gambier Group of Upper Jurassic or Lower Cretaceous age (G.S.C. Memoir 335, Vancouver North, Coquitlam and Pitt Lake Map-Area, B.C., J.A. Roddick 1965). This belt, which is mostly surrounded by granitic rocks of the Coast Range Complex, is connected to the Britannia Belt by a narrow "bridge" of volcanic rock.

The Indian River Pendant tapers to the southeast and is in contact with younger Garibaldi volcanics to the north. The Pendant can be roughly divided into a western belt, composed largely of felsic pyroclastic rocks, and an eastern belt dominated by andesitic rocks.

PROPERTY GEOLOGY

Most of the area within the McVicar Group is underlain by felsic pyroclastic rocks. These rocks show great lithological variations over short distances and have undergone complex structural deformation and alteration.

Lithology

Five distinct assemblages occur in the area: Garibaldi volcanic rocks, Coast Range granitic rocks, mafic volcanic rocks, felsic volcanic rocks, and sedimentary rocks. The felsic assemblage has been divided into several rock types distinguishable in the field: cherty rhyolite tuff, quartz-sericite schist, siliceous stockwork, rhyodacite porphyry, rhyodacite agglomerate and rhyodacite tuff. These rock units are described below.

Garibaldi Volcanic Rocks

Dykes of the Garabaldi Volcanic Group (Pleistocene) are exposed locally. These dykes are generally of basic composition, fresh, and frequently have irregular shapes.

Coast Range Granitic Rocks

Granodiorites and quartz diorites are exposed long the western margins of the map-area. The contact follows the height of land between Mt. Baldwin and Mt. Mulligan. Local stock-like bodies are noted within the map-area. Contacts with the volcanic rocks of the Indian River Belt are generally sharp and are frequently along faults.

Mafic Volcanic Rocks

Andesitic rocks outcrop in the northeastern portion of the map-area. These rocks are dark green, frequently porphyritic and may show pyroclastic textures. Most characteristic is epidote alteration. The porphyritic andesites are frequently difficult to distinguish from the rhyodacite porphyries, especially where the andesites have been silicified.

Sedimentary Rocks

Relatively narrow sedimentary horizons occur locally throughout the volcanic pile. These units are generally lensy and occur within the pyroclastic sequences. Their composition ranges from chert to argillite to greywacke. These sedimentary lenses represent local basins in which sediments were deposited during periods of volcanic quiesence.

Felsic Volcanic Rocks

Cherty Rhyolite - These rocks are siliceous, leucocratic and generally aphanitic, although quartz and/or feldspar phenocrysts are noted locally. They are most often massive; flow lines are noted in some areas. Local lenses occur throughout the pile; larger masses occur in the northern part of the map-area.

Rhyolite Tuff - This rock is light buff to white, sugary textured and is generally massive. The tuffs are most frequent near the top of the volcanic pile.

Quartz-sericite Schist - This rock occurs most frequently as narrow bands associated with zones of shearing. These schists are generally derived from the alteration of the volcanic tuffs or porphyries.

Siliceous Stockwork or Breccia - This rock is actually an alteration phase, produced by the addition of quartz or chalcedony. The intensity of this silicification varies from a weak network of narrow veinlets to intense veining and breccia filling. Although these siliceous stockworks are cross-cutting, they are roughly parallel to the general stratigraphy and foliation direction. Silicification is most frequent and intense near the top of the volcanic pile and is intimately associated with the deposition of the base metal sulphides.

Rhyodacite Porphyry - This is the most common rock type in the map-area and several of the other rock types appear to be variations, alteration phases or volcaniclastic derivatives of this parent. The rock is characterized

by feldspar phenocrysts in a greenish grey aphanitic matrix. Both intrusive and extrusive phases are noted; the extrusive rocks frequently exhibit flow textures. The rhyodacite porphyry is believed to be the centre of a complex volcanic pile which is flanked by pyroclastic detritus.

Rhyodacite Agglomerate - This rock is characterized by angular to subangular fragments of variable composition and texture in a finer clastic matrix. The size of the fragment ranges from lapilli (4 mm to 32 mm) to large angular blocks with sides up to 1 metre. Most of the fragments are rhyodacite porphyry although fragments of cherty rhyolite, rhyolite tuff, andesite and argillite are also noted. The lithology of these fragments in a given area appears to be in part determined by the volume and lithology of the adjacent rock. These coarse pyroclastics show a crude stratification; tuff beds are noted locally. The rhyodacite agglomerates occur as a relatively thick sequence lateral to the main rhyodacite porphyry mass, and as lenses within the volcanic pile.

Rhyodacite Tuff - This rock is generally massive and consists of fragments of rhyodacite porphyry less than 4 mm in size. Broken feldspar phenocrysts are common. The tuff occurs above and lateral to the main rhyodacite porphyry pile. Lenses of tuff also occur within the volcanic pile. Where highly foliated these pyroclastic rocks appear as mottled chlorite schists.

Structure

The structure of this felsic volcanic belt is complex and not fully understood. Bedding attitudes have a general north-northwest trend with dips averaging 50° to the southwest. Although local flow directions are variable they are generally parallel to this regional trend. A regional foliation, imposed during tectonic movements associated with the emplacement of the Coast Range Intrusives, is parallel to sub-parallel to the bedding. Local dip reversals and small scale folds suggest a complex regional fold pattern. Faulting is common. Several of the creek drainages appear to be controlled by the larger fault structures. Shear zones, accompanied by the

development of strong schistosity and alteration, generally occur at small angles to the regional stratigraphic trend.

Mineralization

Most of the significant copper-lead-zinc showings are located on the McVicar Crown Grants. These include the Whistler, Harding, Rainstorm, Violet, Lily-Rose-Grouse Fraction and Cabin Fraction Showings, which are named after the mineral claim on which they are located. The Slide Creek showing is located on the Baldwin 3 Mineral Claim.

Much of the mineralization occurs as high-grade veins and lenses associated with the siliceous stockwork. Although the veins are frequently cross-cutting their general trend is parallel to the regional foliation and stratigraphy. Several of these mineralized zones can be followed along strike for several hundred metres.

Each showing is generally characterized by the dominance of one sulphide- either chalcopyrite, sphalerite or galena. The sulphides are generally massive and medium crystalline. Banding of sulphides is noted locally.

Disseminated pyrite is commonly associated with these silicified zones. Pyrite is also abundant along shear zones where it locally forms massive lenses. Some chalcopyrite is also noted in these zones. The significant showings are described below.

Whistler Showings

Several zinc, lead and copper sulphide occurrences are exposed on a ridge northeast of Mt. Baldwin. The mineralization is associated with intense quartz veining and silicification. Trenches, dug across the trend of the mineralized zones, have exposed high-grade sections of massive sulphides. Sphalerite is the most dominant, galena occurs locally as pods, and chalcopyrite as cross-cutting veins. Some banding of the sulphide is noted; this may be primary and related to a local bedded chert zone.

The immediate area of the trenches was mapped on a scale of 1:500 (see Figure 2). Chip samples were taken across three of the trenches and assayed for copper, lead and zinc. These results correspond fairly well with sampling done by Western Surf Inlet, significant widths and assays are as follows:

Trench #1 - 3.2 m of 1.3 oz/T Ag, 2.2% Cu, 0.7% Pb and 4.6% Zn
Trench #2 - 12.1 m of 0.4 oz/T Ag, 4.5% Cu, 0.9% Pb, 4.2% Zn
Trench #3 - 1.3 m of 2.8 oz/T Ag, 3.5% Cu, 10.2% Pb, and 15.6% Zn.

Four holes were drilled under the showing by Britannia Mining and Smelting; results are not known.

South Harding Showings

These workings are on trend with the Whistler Showings, about 250 metres to the north-northwest. Several cuts have exposed veins and fracture fillings of chalcopyrite in a rhyodacite porphyry. This zone of mineralization was tested and defined by an electromagnetic survey (J.P. Sheridan 1962). Diamond drilling by Britannia Mining and Smelting proved less than encouraging.

North Harding Showings

Several zones of massive pyrite with minor chalcopyrite are exposed along the sides of Canyon Creek. The host rocks are altered pyritic schists which occur along a north-south shear.

Rainstorm Showings

These showings are located about 500 metres north-northwest of the Harding workings. They are frequently referred to as the "copper showings" because of the interesting widths of massive chalcopyrite exposed in shallow cuts and trenches. The sulphides occur over a strike length of 90 metres. The adjacent rock is a highly siliceous rhyolite, which forms a lens-like body within a sequence of rhyodacite pyroclastic rocks. Contacts of the massive chalcopyrite with the siliceous host rock are sharp. In some parts

of the zone, the sulphides appear to be conformable lenses (frequently contorted), in other parts the sulphides appear more vein-like, and associated with the silicification.

Lily, Rose and Grouse Fraction Showings

The Lily and Rose workings lie about 270 metres east of the Whistler Showings. Several trenches and open cuts have exposed discontinuous pyrite-chalcopyrite veins in a quartz-stockwork.

A flat lying zone of massive galena with minor chalcopyrite is located on the Grouse Fraction, just south of the Lily Claim. This mineralization is associated with an anastomosing stockwork of quartz-chalcedony veins and a local zone of brecciation. Samples taken across two parallel veins .5 metres wide and .4 metres wide assayed .01 oz/T Au, 1.3 oz/T Ag, 5.7% Cu, 47% Pb, 3% Zn, and .01 oz/T Au, 1.3 oz/T Ag, 1.4% Cu, 22% Pb and 6% Zn respectively. This immediate area has been tested by diamond drilling (Croydon 1971); results were not encouraging.

The "Ruth" mineral occurrence, is located near the summit of the cat-road. There is no mention of this showing in the "McVicar" records and it is likely that it was exposed during the construction of the road (1970). Since the geology of this immediate area is complex, the outcrop was further uncovered by pick and shovel, and hydraulic washing. A 15 cm wide vein of sphalerite, pyrite, chalcopyrite and galena occurs in a siliceous breccia, characterized by large fragments of green rhyodacite porphyry in a white, quartz matrix. While the vein cuts across the north-northwest trend of the breccia unit, sulphides are present which appear roughly conformable. A local, south plunging (27°), fold structure occurs just south of the sulphide vein. To the east, the vein terminates against a north trending Garibaldi dyke.

Cabin Fraction Showings

These showings are the most northerly of the McVicar prospects. Semi-massive to disseminated pyrite with minor chalcopyrite and sphalerite occur in a wide zone of siliceous schist. This "shear zone" trends north-south across McVicar Creek and dips approximately 45° to the west. Little exploration work has been done in this area.

Violet Showings

These workings are situated on a steep slope 150 metres southwest of the Rainstorm Showings. Chalcopyrite, with lesser sphalerite and galena, occurs in a quartz-chalcedony stockwork which cuts rhyodacite porphyry. Samples selected from the trenches gave the following assays:

.010 oz/T Au, 2.24 oz/T Ag, 9.15% Cu, 2.16% Pb and 5.50% Zn.

.005 oz/T Au, 0.56 oz/T Ag, 1.14% Cu, 3.30% Pb and 6.05% Zn

.008 oz/T Au, 1.83 oz/T Ag, 3.28% Cu, 13.45% Pb and 18.70% Zn.

Local folding is noted in this area.

Slide Creek Copper Showing

This copper occurrence was discovered during the 1978 mapping project. A zone of fracture controlled chalcopyrite mineralization is exposed along a logging road just south of Slide Creek and about 1.5 km north of the McVicar Claims. The sulphides are hosted in a cherty rhyolite near the contact with a rhyodacite agglomerate. The mineralized fracture system can be traced along a north-south trend for approximately 100 metres. Selected grab samples average 3.4% copper.

Interpretation

The thick sequence of felsic volcanic rocks which underlies the McVicar Group represents a complex volcanic pile composed essentially of a rhyodacite porphyry core and flanking pyroclastic detritus. Lenses of crudely stratified agglomerates within the porphyry mass indicate several periods of eruption. A general increase in the frequency of these lenses and the presence of associated sedimentary horizons to the west suggests a gradual cessation of volcanic activity towards the top of the pile.

The base metal mineralization and associated siliceous stockworks represent one or more periods of hydrothermal activity associated with this volcanism. Local bedded chert horizons and associated lenses of massive sulphides indicate some of the mineralizing fluids reached surface.

Subsequent tectonic activity associated with the emplacement of the Coast Range Intrusive, led to the deformation of the Indian River Belt. Regional attitudes and stratigraphic correlation indicate a complex fold pattern, complicated by fault displacements. The stratigraphic sequence underlying the McVicar Group lies on the limb of a major fold.

GEOCHEMICAL SURVEYS:

LOCATION

Geochemical surveys were conducted in various locations on the property. Surveys are adjacent to areas of known base-metal mineralization and in areas of geochemical or geophysical anomalies outlined by previous exploration. Grid locations are shown on Figure 4. Four main areas were sampled in detail. From north to south these are:

1. Slide Creek Showing Grid; an area comprising about 100 metres by 200 metres at the north boundary of the Baldwin 3 Claim, and south of Slide Creek.
2. E-M anomaly Grid; sampling covered an area of about 320 metres by 550 metres on the north-east corner of Baldwin 3 Claim, near the junction of McVicar and Raffuse Creeks.
3. McVicar-Canyon Creek Grid; a small area 150 metres by 150 metres was sampled at the confluence of McVicar and Canyon Creeks.
4. Whistler Grid; the Whistler and Lily Crown Granted Claims were sampled by two grids. The first grid covers an area 120 metres by 200 metres. In addition to sampling the Whistler showing area, it samples the ground immediately to the north. The second grid covers an area 250 metres by 210 metres south of the Lily and Grouse Fraction Showings and overlaps the first grid on its southeast corner.

Limited soil sampling was also undertaken at the reconnaissance scale in the drainage basin of McVicar Creek.

FIELD PROCEDURE

Soil sample sites were determined by chain and compass. Sample sites were separated by 10 or 12 metres, on parallel lines 20 to 50 metres apart and tied in to an arbitrary coordinate reference point. Sample number and coordinate location are indicated on flags posted at each site.

In most cases the B horizon was sampled; a clay and pebble rich glacial till was sampled when the B horizon was absent. Soil samples were obtained by mattock at depths up to 50 centimetres, and placed in labelled, conventional Kraft sample bags. Location, sample number, and depth to soil horizon were noted. Soil characterisitics such as color, organic content, and particle size, and additional information on ground slope and vegetation, were also noted. Wet samples were partially dried prior to shipment.

ANALYTICAL PROCEDURE

Unprepared samples were sent to Bondar-Clegg and Co. Ltd. in North Vancouver where they were analyzed using hot acid extraction and standard atomic absorption techniques. The -80 mesh fractions were analyzed for total Cu, Pb and Zn. The results shown on the enclosed maps are quoted as ppm total metal.

INTERPRETATION AND EVALUATION OF RESULTS

1. Slide Creek Showing Grid: The grid was designed to test for possible on-strike extension of the newly discovered Slide Creek Copper Showing, described elsewhere in the report. Soils downslope of the road are thought to be transported during road construction. A total of 122 samples were taken. No extension of the copper showing to the southwest is indicated (Figures 6, 7 and 8).

2. E-M Anomaly Grid: The area west of the junction of McVicar with Raffuse Creek was covered by 172 samples (Figures 6, 7 & 8). A total of 6 anomalous copper, 4 anomalous lead and 48 anomalous zinc values were obtained. The grid was sampled to test for mineralization in an area of extensive overburden centred on two parallel electromagnetic conductors delineated during Western Surf Inlet's geophysical survey in 1962. The results outline a broad discontinuous anomalous zone extending north-south across the grid. This north-south zone has values ranging up to 568 ppm Cu, 329 ppm Pb, and 480 ppm Zn at its northern edge. These may reflect underlying mineralization related to Western Surf Inlet's geophysical conductors.

As well, a broad anomalous zone parallels and overlaps Camp Creek and McVicar Creek. This east-west anomalous zone has values ranging up to 298 ppm Cu, 181 ppm Pb, and 1116 ppm Zn. Although these values are interesting, their symmetry about Camp and McVicar Creeks suggests the source may be from known base metal mineralization upstream.

3. McVicar-Canyon Creek Grid: This grid of 52 samples (Figures 9, 10 & 11) was established as a detailed follow-up to a geochemical survey conducted by Anaconda American Brass Co. Ltd. in 1964. The present survey has many anomalous values, ranging up to 890 ppm. The coincidence of the geochemical anomalies with McVicar and Canyon Creek drainages suggest the results are derived from transported silt from known mineral occurrences upstream. This is supported by high silt and gravel content in many soil samples.

4. Whistler Grid: This grid comprised 248 samples as shown in Figures 9, 10 & 11. The purpose of this detailed sampling was to outline possible extensions of known mineralization in areas of favourable geology. Results show excellent correlation between soil geochemistry and known mineralization in the Whistler Showing area. Values range up to 2220 ppm copper, 20,000 ppm lead, and 4700 ppm zinc. Most high values are adjacent to mineralization exposed in trenches.

East of the Whistler Showings, metal values are not as high. No copper anomalies were outlined, and only 5 anomalous zinc values were recorded. In comparison, lead shows a broad irregular anomalous zone in the south-east corner of the grid, and high (up to 1220 ppm) isolated anomaly in the north-east corner. The latter anomaly is explained by its proximity to the "Lead" showing, located on the Grouse Fraction Crown Granted claim. The former anomaly does not appear related to known copper-zinc mineralization in the area, and deserves follow-up prospecting.

The absence of high zinc and copper values is thought to be due in part to high ion mobility in the soil environment, rather than a paucity of sulphide occurrences.

P.R. DeLancey

H.R. Schmitt

APPENDIX A

AUTHORS' QUALIFICATIONS

P.R. DeLancey, P.Eng.

P.R. DeLancey obtained his B.Sc., Honours Geology, in 1965 and his M.Sc. in 1969, from the University of Manitoba. He worked for Anaconda from 1967 to 1969. He joined the staff of Texasgulf Inc. in 1969 and has practised his profession since that time. In 1977 he became a member of the Association of Professional Engineers in the Province of British Columbia.

H.R. Schmitt, B.Sc.

H.R. Schmitt obtained his B.Sc. degree in geology from the University of British Columbia in 1977. While attending university, he was employed by Texasgulf during the 1975-76 summer field seasons. Since graduation he has again been employed by Texasgulf during the 1977-78 field seasons.

APPENDIX B

ITEMIZED COST STATEMENT

STATEMENT OF EXPENDITURES (GEOCHEMICAL)
McVICAR GROUP

SALARIES AND FRINGE BENEFITS - TEXASGULF INC.		
G.N. Mannard, labourer		
Period - June 19, 23-28, July 4, 7-8, 10-21, 24-26, 25, 31 August 1-11, 14-21, 26-30		
51 days at 32.50/day	1,657.50	
L. Westervelt, labourer		
August 3-11, 16-20, 22-27, 29		
21 days at 27.50/day	577.50	
	2,235.00	2,235.00
ROOM & BOARD		
Texasgulf personnel		
72 man-days at 20.00/day	1,440.00	1,440.00
TRANSPORTATION		
4-wheel drive Chev (lease)		
1 month at $1,000.00	1,000.00	1,000.00
SOIL SAMPLE PREPARATION AND ANALYSES		
390 samples at 2.90/samples	1,131.00	
65 samples at 3.50/sample	227.50	
	1,358.50	1,358.50
ROCK ASSAYS - 26 samples at 25.50/sample	663.00	663.00
TOTAL		$ 6,696.50

STATEMENT OF EXPENDITURES (GEOLOGICAL)

McVICAR GROUP

SALARIES AND FRINGE BENEFITS - TEXASGULF INC.

P.R. DeLancey, P.Eng. - geological mapping and supervision		
Period - June 19-20, July 4, 14, 31, August 1-2, 15-18		
11 days at $115/day	$1,265.00	
H.R. Schmitt, Geologist - geological mapping		
Period - April 7, 12-14, May 25, June 19-30, July 10-12, 14-21, 27-31, Aug. 1-5, 14-30		
55 days at $50/day	2,750.00	
C. Rockingham, Geologist - geological mapping		
Period - July 27-29, 31, August 1-11, 14-30		
32 days at $50/day	1,600.00	
	5,615.00	5,615.00
ROOM & BOARD		
Texasgulf personnel		
98 man-days at $20/day	1,960.00	1,960.00
TRANSPORTATION		
4-wheel drive Blazer (rental)		
2 months at $1,000.00/month	2,000.00	2,000.00
TOTAL		$ 9,575.00

STATEMENT OF EXPENDITURES (BASE MAP PREPARATION)

McVICAR GROUP

1:10,000 orthophoto map 1:5,000 topo map	$1,365.00

To: Texasgulf, Inc.

PAGE No. 1

REPORT No A28 - 516

DATE: August 11, 1978

BONDAR-CLEGG & COMPANY LTD.

701 - 1281 West Georgia Street
Vancouver, B.C. V6E 3J7

CERTIFICATE OF ASSAY

APPENDIX C

WHISTLER SHOWING ASSAYS

Samples submitted: August 3, 1978
Results completed: August 11, 1978

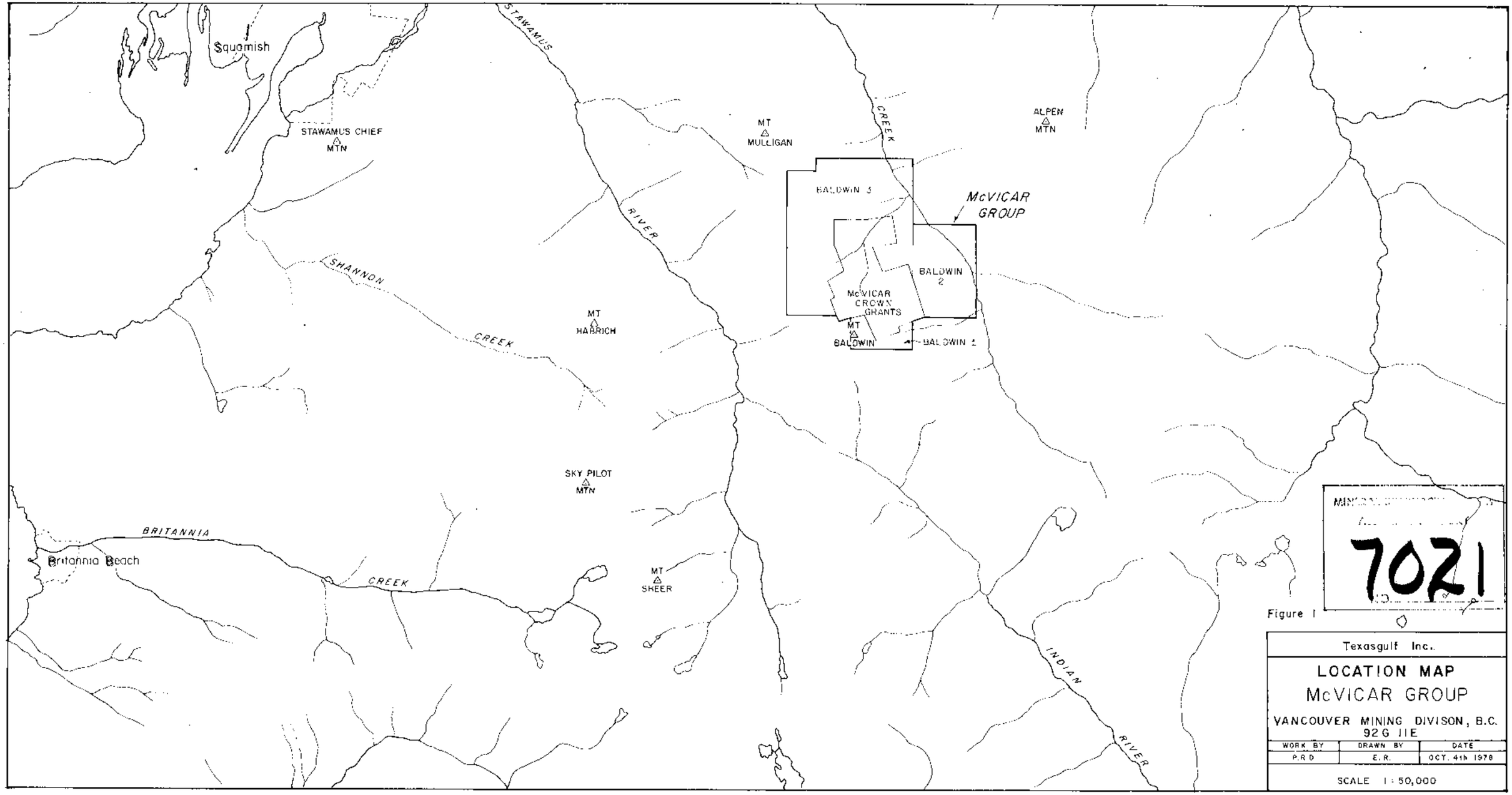
PROJECT: 57

I hereby certify that the following are the results of assays made by us upon the herein described ..... ore ..... samples.

MARKED		INTERVAL	WIDTH	GOLD Ounces per Ton	GOLD Value per Ton	SILVER Ounces per Ton	Cu Percent	Pb Percent	Zn Percent					TOTAL VALUE PER TON (2000 LBS.)
TRENCH #1	1460	0.0 - 0.8m	.8m	0.062		3.25	6.40	1.04	4.68					
	1461	0.8 - 2.0	1.2	0.010		0.24	0.37	0.24	0.62	3.2m of	1.3oz/t Ag,	2.2 % Cu,	0.7 % Pb,	4.6 % Zn
	1462	2.0 - 2.7	.7	0.020		1.60	2.03	1.05	13.05					
	1463	2.7 - 3.2	.5	0.005		0.31	0.20	1.06	2.24					
	1464	3.2 - 5.5	2.3	0.004		0.06	0.14	0.24	0.15					
TRENCH #2	1465	1.8 - 2.4	.6	0.003		0.05	0.01	0.04	0.08					
	1466	2.4 - 3.0	.6	0.005		0.37	0.64	0.29	4.08					
	1467	3.0 - 3.7	.7	0.010		2.00	2.10	6.90	24.50					
	1468	3.7 - 10.5	6.8	0.002		0.06	0.09	0.14	1.18	12.1m of	0.4oz/t Ag,	0.45 % Cu,	0.9 % Pb,	4.2 % Zn
	1469	10.5 - 11.5	1.0	0.005		0.14	0.23	0.07	0.39					
	1470	11.5 - 12.5	1.0	0.009		1.99	2.50	1.76	21.60					
	1471	12.5 - 14.5	2.0	0.020		0.59	0.14	1.78	0.53					
TRENCH #3	1472	0.0 - 5.5		0.002		0.04	0.01	0.04	0.03					
	1473	5.5 - 8.0		0.011		0.67	1.36	0.11	0.21					
	1474	8.0 - 10.0		0.005		0.08	0.02	0.10	0.04					
	1475	10.0 - 12.0		0.040		0.07	0.06	0.05	0.15					
	1501	12.0 - 14.0		0.010		0.33	0.54	0.04	1.14					
	1502	14.0 - 16.4		0.009		0.56	1.17	0.03	0.36					
	1503	16.4 - 17.5		0.004		0.07	0.03	0.04	0.03					
	1504	17.5 - 21.4		0.006		0.19	0.07	0.11	0.11					
	1505	21.4 - 22.7		0.010		0.03	0.17	0.10	0.16					
	1506	22.7 - 24.0	1.3m	0.019		2.79	3.48	10.20	15.65	1.3m of	2.8oz/t Ag,	3.5 % Cu,	10.2 % Pb,	15.6 % Zn

cc Mr. C. Rockingham

Registered Assayer, Province of British Columbia



MINERAL TITLE
7021

Figure 1

Texasgulf Inc.

LOCATION MAP

McVICAR GROUP

VANCOUVER MINING DIVISON, B.C.
92 G 11E

WORK BY	DRAWN BY	DATE
P.R.D	E.R.	OCT. 4th 1978

SCALE 1:50,000

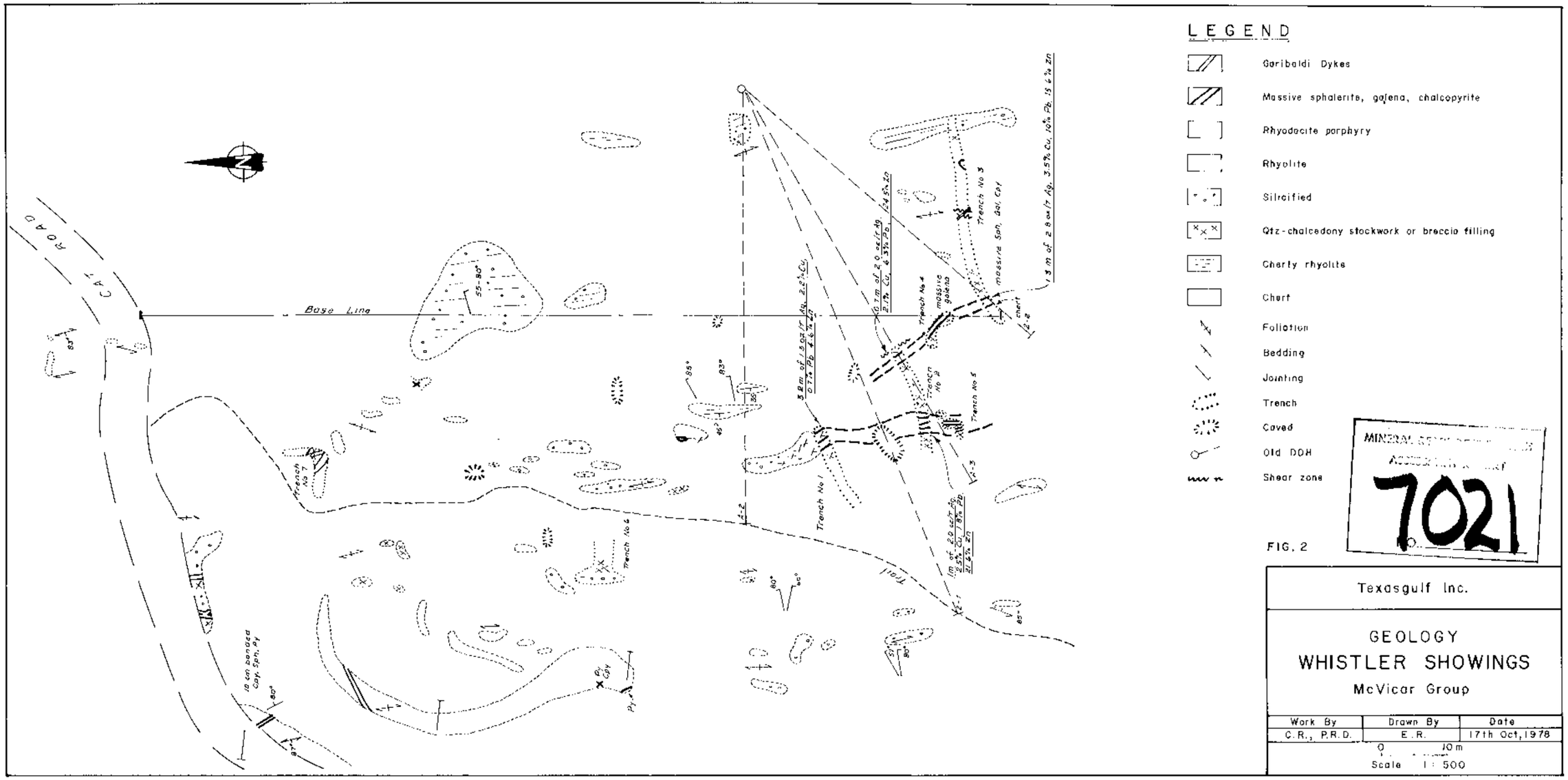


FIG. 2

LEGEND

SULPHIDES (py - pyrite, cp - chalcopyrite, sp - sphalerite, gn - galena)		RdA	RHYODACITE AGGLOMERATE
CR	CHERTY RHYOLITE	RdT	RHYODACITE TUFF
	SILICEOUS BRECCIA OR STOCKWORK	S	SEDIMENTARY ROCKS
RT	RHYOLITE TUFF	A	ANDESITIC ROCKS
QSS	QUARTZ-SERICITE SCHIST	Gr	GRANITIC ROCKS
Rd P	RHYODACITE PORPHYRY	GV	GARIBALDI VOLCANICS

SYMBOLS

geological contact	outcrop
bedding	trench or cut
bedding and/or foliation	adit
foliation	shaft
flow	road
jointing	trail
fault or shear zone	open area

Refuse

Cr.

X 14290

X 14655

X 13475

X 14055

X 14955 Mt Baldwin

X 14955

X 13965

X 14160

5,501,000N

5,500,000N

498,000E

499,000E

500,000E

TO ACCOMPANY
GEOLOGICAL AND GEOCHEMICAL REPORT
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by
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October, 1978

1021

FIG. 3

Texasgulf Inc.

McVICAR GROUP

GEOLOGY

Contour interval 20m

WORK BY	DRAWN BY	DATE	DRW.G NO.
R.S., P.D.	E.R.	26 Oct. 1978	

100 0 100 200 300 400

Scale In Metres

TEXASGULF INC.

MT. MULLIGAN PROJECT

McElhanney Surveying & Engineering Ltd
1200 West Pender Street, Vancouver B.C., Canada

Scale - 1:5000
Contour Interval - 20 metres
Date - May 5, 1978
Job No. - 06473-0
Sheet No - 2 of 2

SLIDE CREEK GEOCHEMICAL GRID
E-M GEOCHEMICAL GRID
McVICAR - CANYON CK. GEOCHEMICAL GRID
WHISTLER GEOCHEMICAL GRID
SLIDE FR.
NOONDAY L.6164
CABIN FR.
MAMQUAM
RAINSTORM
VIOLET
HARDING
ROSE
LILY
GROUSE FR.
HEATHER
WHISTLER
BALDWIN 1
BALDWIN 2
BALDWIN 3
LCP
Slide Ck
Rock Ck
McVICAR CREEK
Canyon Creek
Camp Ck
Center Ck
Ridge
5,503,000N
5,502,000N
5,501,000N
5,500,000N
498,000E
499,000E
500,000E

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FIG. 4

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT NO. 7021

Texasgulf Inc.

BALDWIN - McVICAR AREA

CLAIMS & GEOCHEMICAL GRID LOCATION MAP

WORK BY	DRAWN BY	DATE	DRW.G NO.
P.R.D.	E.R.	31st OCT 1978	

100 0 100 200 300 400
Scale in Metres 1:5000

Camp

Como Creek

Center Creek

Rock Creek

McVicar Creek

CABIN Fr. SHOWINGS

Core

No. 1

No. 2

No. 3

T-1

T-2

McVicar Creek

Cabin

X-17

Adit

X-18

X-12

X-10

X-11

X-9

X-13

RAINSTORM (COPPER) SHOWINGS

5-13

5-10

X-8

5-4

X-2

X-3

R-36-2

R-36-3

X-1

5-1

5-5

5-8

5-12

X-4

5-11

5-2

5-3

X-5

5-14

X-6

X-7

5-6

R-36-1

VIOLET SHOWINGS

No. 4

No. 3

No. 2

No. 1

T1-1

Old post

NORTH HARDING SHOWINGS

3-8

3-6

No. 7

No. 8

54-1

13-7

54-2

3-5

Old Camp

3-4

3-2

C-3

3-1

71-9

Old posts

71-8

No. 5

No. 4

C-2

C-1

3-3

3-9

SOUTH HARDING SHOWINGS

2-7

2-6

2-9

2-5

2-4

2-3

4350

4400

4450

LILY, ROSE & GROUSE Fr. SHOWINGS

CAMP

71-2

71-7

71-5

71-6

71-1

71-3

71-4

WHISTLER SHOWINGS

A-2

A-1

A-3

3-1

RUTH SHOWING

LEAD SHOWING

LEGEND

- Cat road
- Old trail
- No. 3 — Trenches or rock cuts
- C-2 — Diamond drill hole
- Rock cliff

Note: Contour interval 50'

TN

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October, 1978

Fig. 5

Texasgulf Inc.

BALDWIN - McVICAR AREA

SURFACE TRENCHES & DIAMOND DRILL HOLES

Note: Locations approx., map modified from Western Surf Inlet Map, 1962

WORK BY	DRAWN BY	DATE	DRW.G NO.
P.R.D., R.S.	E.R.	26-10-1978	

1 : 1200
Scale in Metres

TEXASGULF INC.

SLIDE CREEK

SLIDE CREEK SHOWING GRID

Limit of exposed outcrop

Slide Creek Showing
Assays:
1451 : Cu - 3.59%
Ag - 0.77oz/ton
1452 : Cu - 3.20%
Ag - 0.97oz/ton

E - M ANOMALY GRID

BASELINE

RAFFUSE CREEK

CAMP CREEK

CENTER CREEK

ROCK CREEK

McVICAR CREEK

1000

900

800

125 148 200 186 276 208 220 378 184

N

LEGEND

- Soil
- Silt
- Silt (1977)
- Rock Chip

Values in ppm except where noted

COPPER HISTOGRAM

408 = number of samples

TOTAL SAMPLES n = 689

CONTOUR INTERVALS

- ≤ 250 ppm
- 250 - 500 ppm
- 500 - 1000 ppm
- > 1000 ppm

% of total number of samples

ppm

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FIG. 6

Texasgulf Inc.

BALDWIN - McVICAR (NORTH SHEET)

GEOCHEMISTRY
COPPER

WORK BY	DRAWN BY	DATE	DRW.G NO
H.R.S, G.N.M.	E.R.	16th October '78	

0 25 50 75 100 125
Scale in Metres 1:1250

SLIDE CREEK

SLIDE CREEK SHOWING GRID

Limit of exposed outcrop

Slide Creek Showing
Assays:
1451 - Cu - 3.59%
Ag - 0.77oz/ton
1452 - Cu - 3.20%
Ag - 0.97oz/ton

E - M ANOMALY GRID

BASELINE

RAFFUSE CREEK

CAMP CREEK

CENTER CREEK

ROCK CREEK

McVICAR CREEK

1000

900

800

128 145 92 89 101 156 178 225 184

LEGEND

- Soil
- Silt
- Silt (1977)
- Rock Chip

Values in ppm except where noted

LEAD HISTOGRAM

TOTAL SAMPLES n = 689

352 = number of samples

CONTOUR INTERVALS

- < 250 ppm
- 250 - 500 ppm
- 500 - 1000 ppm
- > 1000 ppm

% of total number of samples

ppm

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October, 1978

FIG. 7

Texasgulf Inc

BALDWIN - McVICAR (NORTH SHEET)

GEOCHEMISTRY
LEAD

WORK BY	DRAWN BY	DATE	DRW.G NO.
H.R.S., G.N.M.	E.R.	16th October '78	

0 25 50 75 100 125
Scale in Metres 1:1250

SLIDE CREEK

900

SLIDE CREEK SHOWING GRID

Limit of exposed outcrop

Slide Creek Showing
Assays:
1451: Cu - 3.59%
Ag - 0.77oz/ton
1452: Cu - 3.20%
Ag - 0.97oz/ton

E - M ANOMALY GRID

BASELINE

RAFFUSE CREEK

2150

CAMP CREEK

1600

2350

2010

2350

CENTER CREEK

910

1000

1170

800

900

ROCK CREEK

McVICAR CREEK

LEGEND

- Soil
- Silt
- Silt (1977)
- Rock Chip

Values in ppm except where noted

ZINC HISTOGRAM

TOTAL SAMPLES n = 689

241 = number of samples

% of total number of samples

ppm

CONTOUR INTERVALS

- < 250 ppm
- 250 - 500 ppm
- 500 - 1000 ppm
- > 1000 ppm

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FIG. 8

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BALDWIN - McVICAR (NORTH SHEET)

GEOCHEMISTRY

ZINC

WORK BY	DRAWN BY	DATE	DRWG NO.
H.R.S., GN.M.	E.R.	16th October '78	

0 25 50 75 100 125

Scale in Metres 1:1250

McVICAR – CANYON CREEK SOIL GRID

McVICAR CREEK

CANYON CREEK

38 23 26 18 21 76 276 163 1850 141 19 153

42 28 43 50 69 15 255 136 214 198 49 117 83 105 250

400 405 177 194 164 119 185 143 156

332 275 390 154 82 111 58 80 45 90 202 178 185 214 174 28

McVICAR CREEK

340

200

82

LEGEND

- Soil
- Silt
- Silt (1977)
- Rock Chip

Values in ppm except where noted

COPPER HISTOGRAM

TOTAL SAMPLES n = 689

108 = number of samples

CONTOUR INTERVALS

- < 250 ppm
- 250 - 500 ppm
- 500 - 1000 ppm
- > 1000 ppm

% of total number of samples

ppm

WHISTLER SOIL GRID

BASELINE 00 E

BASELINE 00 N

Ruth Showing

Lily & Grouse Fraction Showing

Whistler Showings

31 25 8 35 6 24 40 34 16 12 44 107 176

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October, 1978

FIG. 9

Texasgulf Inc.

BALDWIN – McVICAR (SOUTH SHEET)

GEOCHEMISTRY

COPPER

WORK BY	DRAWN BY	DATE	DRW.G NO.
HRS, GN.M	E.R.	2nd October '78	

0 25 50 75 100 125

Scale in Metres 1:1250

McVICAR – CANYON CREEK SOIL GRID

McVICAR CREEK

CANYON CREEK

McVICAR CREEK

340

280

176

LEGEND

- Soil
- Silt
- Silt (1977)
- Rock Chip

Values in ppm except where noted

LEAD HISTOGRAM

TOTAL SAMPLES n = 689

352 = number of samples

CONTOUR INTERVALS

- < 250 ppm
- 250 - 500 ppm
- 500 - 1000 ppm
- > 1000 ppm

% of total number of samples

ppm

WHISTLER SOIL GRID

BASELINE 00 E

BASELINE 00 N

Ruth Showing

Whistler Showings

Lily & Grouse Fraction Showing

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FIG. 10

Texasgulf Inc.

BALDWIN - McVICAR (SOUTH SHEET)

GEOCHEMISTRY

LEAD

WORK BY	DRAWN BY	DATE	DRW.G NO.
	E.R.	2nd October '78	

0 25 50 75 100 125

Scale in Metres 1:1250

McVICAR - CANYON CREEK SOIL GRID

WHISTLER SOIL GRID

BASELINE 00 E

BASELINE 00 N

McVICAR CREEK

CANYON CREEK

Ruth Showing

Lily & Grouse Fraction Showing

Whistler Showings

660

1000

130

LEGEND

- Soil
- Silt
- Silt (1977)
- Rock Chip

Values in ppm except where noted

ZINC HISTOGRAM

TOTAL SAMPLES n = 689

241 = number of samples

% of total number of samples

ppm

CONTOUR INTERVALS

- < 250 ppm
- 250 - 500 ppm
- 500 - 1000 ppm
- > 1000 ppm

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FIG. 11

Texasgulf Inc.

BALDWIN - McVICAR (SOUTH SHEET)

GEOCHEMISTRY
ZINC

WORK BY	DRAWN BY	DATE	DRW.G NO
	E.R.	2nd October '78	

0 25 50 75 100 125
Scale in Metres 1:1250