

REPORT ON
GEOLOGICAL AND GEOCHEMICAL SURVEYS

by
I.G. Sutherland, B.Sc.

on the
JD-81 and MOOSE-81 GROUPS

situated at McClair Creek
in the Omenica Mining Division

57°28'N, 127°13'W

NTS 94E/6E

owned by
TEXASGULF CANADA LTD.

work by
TEXASGULF INC.

Dec. 1981

Vancouver, B.C.

9833

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INTRODUCTION

Location, Access and Terrain

The JD-81 and adjacent Moose-81 claim groups are located east of the Stikine River and north of the Toodoggone River in north-central British Columbia (see Figure 1). The nearest supply and transportation centres are Smithers, 300 km due south, and Watson Lake in the Yukon, 300 km to the north.

Access to the claims is by a combination of fixed wing aircraft from Smithers or Watson Lake to the Sturdee Valley Airstrip 30 km southeast of the property, and helicopter thereafter. There is no road access although it has been suggested that the Omineca mining road to the south may be extended into the Toodoggone River area in the future.

The claim groups are situated at the eastern boundary of the Spatsizi Plateau and cover moderate to steep ridges between the broad valleys of Moosehorn and McClair Creeks (see Figure 2). The main area of interest extends from east to west along a major ridge.

Vegetation below 1500 metres consists of a dense growth of spruce and fir trees. Alpine areas above 1500 metres are sparsely vegetated with moss, grasses and alpine flowers.

Property History

Attention was first focussed on McClair Creek in 1931 when Chas McClair was reported to have taken several thousand dollars worth of gold from placer workings near the confluence of this creek and the Toodoggone River. The remains of the placer workings are still to be found along the lower portion of McClair Creek.

The present property area was originally staked in 1971 to cover showings discovered by Sullivan and Rodgers, consultants who were undertaking a reconnaissance programme for Sumac Mines Ltd. Geochemical

LOCATION MAP

SCALE 1" = 140 Miles
(approx.)

ALASKA

YUKON
TERRITORY

DISTRICT OF
MACKENZIE

WHITEHORSE

SKAGWAY

WATSON LAKE

YELLOWKNIFE

BRITISH
COLUMBIA

JD-81 8
MOOSE-81

FORT
NELSON

STEWART

PRINCE
RUPERT

TERRACE

PRINCE
GEORGE

ALBERTA

FORT
S. JOHN

B.C.R.

C.N.R.

VICTORIA
VANCOUVER

EDMONTON

C.N.R.

CALGARY

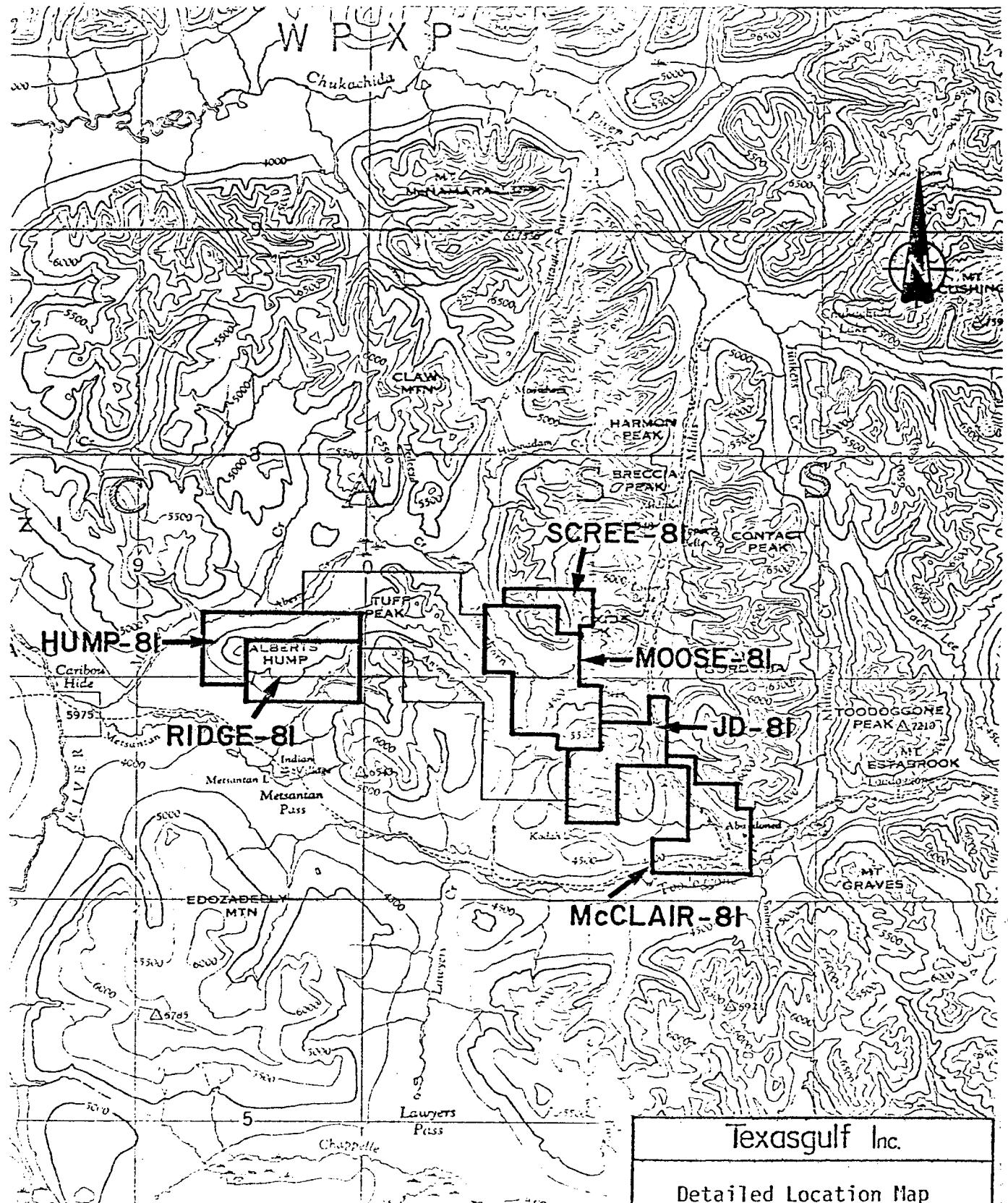
KAMLOOPS

C.P.R.

U. S. A.

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Fig. 1



Texasgulf Inc.

Detailed Location Map
MOOSE and JD Claims

WORK BY	DRAWN BY	DATE	DRAW NO.
2300	0	2300	7000 10,000

Map Sheet 94E "Toodoggone River" Figure 2

surveys and trenching in the area of the showings outlined two anomalous zones separated by a steep-sided valley. The detailed anomalies in Zn, Ag and Au were tested by one BQ diamond drill hole drilled in 1974 to a depth of about 122 metres; additional work was effectively pre-empted by the diversion of Sumac's exploration funds to the newly-found Kutcho Creek massive sulphide deposit. The claims were allowed to lapse in 1977, but were restaked the following year by Petra Gem and Energex interests, who completed limited additional geochemistry and trenching which served to enlarge the area of interest. In 1980, work by Texasgulf Inc. outlined an important zone of mineralized float with significant Au and Ag values in silicified breccia and added further details to the soil geochemistry of the property. Work described in this report was carried out by Texasgulf Inc. on behalf of its wholly owned subsidiary Texasgulf Canada Ltd., the current registered owner of the claims.

Summary of Work Completed

Geological surveys

Fieldwork in 1981 on the JD-81 and Moose-81 claim groups took place between June 2 and Sept 12 with most of the work done after July 1. D. Piroshco and I. Sutherland undertook mapping and rock sampling throughout this time. Mapping was carried out at a scale of 1:5000 (Figure 3), much of it with the aid of three chain and compass grids which were constructed to cover areas that had limited or no earlier detailed coverage. The grid lines were spaced 100 m apart with stations every 25 or 50 m. A total of 268 rock samples were analysed geochemically from the two claim groups; 236 from the JD-81 and 32 from the Moose-81 group. Figures 4 and 5 show the sample locations.

Geochemical surveys

Soil samples of B-horizon material were collected at 25 or 50 m intervals on the three grids and shipped to Bondar-Clegg and Co. Ltd. of

North Vancouver where all geochemical analyses were carried out.

A total of 687 soil samples were collected and analysed for Cu, Pb, Zn, Ag and Au with additional Mn and Hg analyses performed on all but 39 of these; 438 were taken on the JD-81 Group and 249 on the Moose-81 Group.

In addition, 46 stream silt samples were collected from the main drainage channels leading out from the centre of the property and were similarly analysed for Cu, Pb, Zn, Ag and Au.

Work Distribution

All work described herein was carried out on the JD-81 and Moose-81 claim groups. Credit is claimed proportional to the work done on each group.

GEOLOGY

Regional Setting

The property lies near the eastern margin of a Mesozoic volcanic arc assemblage bounded on the west and south by the Sustut and Bowser basin assemblages and to the east by the Omineca Crystalline Belt. Mapping by Gabrielse, et al. from 1971-1975 and a summary by Carter of the geology as understood in 1971 refer to a sequence known informally as the "Toodoggone" volcanic rocks, which underlies much of the region and the property.

Property Geology

The geology of the JD property was originally mapped at a scale of 1"=400' by T. Rodgers in 1972. Mapping by H.R. Schmitt in 1980 at a scale of 1:5000 corroborated and added to the earlier mapping, attempting to define in greater detail some of the differences in lithology, alteration and mineralization. Present mapping, also at a scale of 1:5000,

was based on the previous mapping but reinterpreted the lithologies and their variations in terms of a tuffaceous subaerial volcanic environment. A comprehensive interpretation of the geology is limited by scarcity of outcrop on most major slopes and by the rapid changes in lithologies characteristic of these subaerial volcanics.

In summary, the claims are underlain by a thick succession of Lower to Middle Jurassic feldspar-hornblende, andesitic crystal and crystal-lapilli tuffs and tuff breccias along with lesser volcanic flow and dyke equivalents. The general lack of exposed contacts makes differentiation of these lithologies difficult. These rocks are greyish-green to orangish-grey on the fresh surface and consist of up to 35% white to pink subhedral feldspar grains with less than 5% each of euhedral biotite flakes and subhedral, prismatic hornblende crystals. The crystal fragments or phenocrysts are less than 3 mm on average and are set in a greyish to locally maroon coloured, fine-grained andesitic matrix.

Tuff breccias, where recognizable, are generally of the same composition as their tuffaceous matrix and often can only be distinguished on clean, slightly weathered exposures. The general lack of such outcrops has made definition of these and other units most difficult.

Structure

The sequence of volcanic rocks has a prominent northwest strike with shallow to moderate, east and northeast dips.

Along McClair Creek the Toodoggone volcanic rocks lie in apparent fault contact with a multi-phase intrusive complex. It consists primarily of inequigranular to porphyritic phases of granodiorite with lesser diorite to diabase hybrids. Included blocks of Toodoggone volcanics occur rarely.

Various joint and fracture trends in the volcanic rocks reflect related regional to local faults. The most prominent joint set throughout the property is northwest-trending (125° to 140°) with moderate southwest

dips (ca. 60°) and corresponds to the major regional trend. There is some suggestion that this is the latest of the structural trends and that it is associated with normal block faulting. Relative displacements are not known. The best example is the fault which cuts through the "Schmitt Showing" (Area A, Figure 3). Similar faults occur throughout the property.

Two other fracture sets are recognized and reflect additional, larger-scale fault activity. One of these strikes at 070° to 100° dipping north at 60° to 80°. The main area of vein mineralization transects much of Area B (Figure 3) and corresponds with this structural trend in at least one locality. Here the vein lies in contact with about 1 m of hanging wall fault gouge.

The third fracture trend strikes 350° to 020° and dips west at 45° to 80°. Present mainly in outcrop, this fracture system does not appear to be associated with major faulting.

Alteration and Mineralization

The following are brief descriptions of the main mineralized zones and associated alteration. For descriptive purposes, the property has been divided into 9 areas as outlined on Figure 3 (Areas A through I).

Area A

The most significant mineralization occurs at the "Schmitt Showing" as a breccia vein located in a low saddle along the main ridge. The showing consists of well-defined trains of frost-heaved, breccia vein rubble. Angular fragments (≤ 2 cm) of mineralized quartz vein material are hosted in a fine-grained and locally amethystine silicified matrix and mineralized with chalcopyrite, galena, sphalerite, and acanthite. The mineralized float occurs in blocks as large as 70 cm which have been plucked from an east-west vein system. The showing is snow-covered for

9 to 10 months of the year and permafrost is present at shallow depths throughout the year.

Area B

A small train of very similar silicified and mineralized breccia material was found about 100 m east of the "Schmitt Showing" and may represent a fault-displaced extension of the same vein.

A third vein occurrence of a significantly different nature is present 200 m east of the "Schmitt Showing" and may also be part of the same vein system. This is the only exposure of in situ vein mineralization observed to date on the property and, hence, the only clear illustration of the true nature of the mineralization. Trenching exposed a mineralized carbonate breccia vein about 1 m wide along the footwall of a similar width of a gouge-filled fault. The vein and fault strike 080° and dip steeply to the north. Mineralization includes galena, sphalerite, acanthite, pyrite and minor chalcopyrite which occur mainly as fine-grained sulphides in aggregate masses within the carbonate breccia vein. On the hanging wall above the gouge is a zone of variably silicified and propylitized tuffaceous country rock. Only descriptive details for this zone are available at present. A subsequent report will describe the detailed results of recent trenching on the property when analytical results become available.

Near the centre of Area B is a long bench-like topographic feature which marks a roughly linear zone of abundant quartz vein float material. This appears to be a fault-displaced, easterly extension of the carbonate breccia vein and fault system. The massive silicified rock is typically white to grey and consists of an early, saccoidal quartz phase with varying amounts of hematite. Locally the hematite occurs as concentrated masses of grey specularite surrounded by blood-red zones of hematitic quartz. Sulphides are apparently absent here. Quartz vein material has been traced along this bench for more than 200 m with an apparent eastern limit 500 m from the "Schmitt Showing".

Vertically and structurally above this extensive vein system in both Areas A and B the country rocks are commonly extensively propylitized and variably stockworked with quartz veins and veinlets. The rock is typically medium greenish-grey where chlorite, epidote, and quartz (+ pyrite) alteration prevails. The quartz stockworking and, in many cases, the general degree of alteration is controlled by fractures in the rock. Pyrite occurs in amounts up to 3% and, where present, consists of fine disseminated grains in the quartz veinlets or, more commonly, along and within fractures in the altered wallrocks. The quartz veinlets are generally grey to white with local drusy vug fillings. By far the most conspicuous feature of these rocks is the striking irridescence of manganese oxides which coat most of the fractures in these rocks.

Along the north face of the main ridge in Area B just 50 m east of the "Schmitt Showing", banded quartz-carbonate vein material occurs in small trains on the talus slope. The grey quartz and white to brown carbonate are commonly banded and, to a lesser extent, brecciated. The dark grey, positive weathering of the irregular quartz gives this rock a most distinctive appearance. The vein material appears to come from one or more narrow, northwest-trending fault zones in the altered tuffaceous host. These veins are very likely podiform and similar to small, quartz-carbonate pods observed in outcrop nearby.

Area C

Poorly exposed, patchy zones of mineralization and alteration occur over much of the grass-covered hill near the western edge of this area. They are intensely silicified with accessory sulphides and sulphates. The alteration quartz is generally grey, hemititic and rusty with variable drusy vugs and scattered, disseminated pyrite, sphalerite, galena and chalcopyrite. Acanthite is probably also present as suggested by some of the silver values obtained.

Southeast of here in the central portion of this area sulphates become a more important element of the alteration with preferentially sulphatized feldspar crystals throughout the rocks. The extreme case is also present in the hot springs style alteration described below.

Area D

Several gossanous, sulphate alteration zones are present near the small lakes in the south-central region of the property. The largest of these zones is strongly hematitic and lies along a major, northwest-trending fault zone. A mixture of sulphates appears to be present but details of the mineralogy are scant at present. The limited extent and localized intensity of these zones is similar to other such alteration zones on the property and is typical of surface hot spring alteration systems of volcanic terrains. Intense sulphate alteration is sharply defined with a rapid decrease in sulphatization in the adjacent country rocks.

Area E

A similar zone of intense sulphate alteration which occupies the northwest corner of Area E is most distinct with its rusty orange colour. The irregular patch of alteration is roughly circular in outline, consists of sulphates with some accessory quartz and oxidized pyrite and grades quickly into relatively fresh tuff and tuff breccia host rock. The coincidence of linear topographic trends with this intense, localized alteration suggests the presence of a northwest-trending fault zone.

Area F

Topographically below the sulphate alteration zone of Area E is a system of veins hosted in heavily altered andesitic crystal tuff. The veins consist of a heterogeneous mixture of quartz, carbonate, sulphate, and minor hematite present in variable amounts with accessory galena,

sphalerite, pyrite and traces of chalcopyrite. The patchy and brecciated character of the vein components typifies these veins which strike 120° over 20 to 30 m. Where breccias occur within the vein, the dominant minerals are either quartz or carbonate with some amethystine quartz observed in one sample. Gypsum is apparently the dominant sulphate.

Area G

A banded and brecciated quartz-carbonate vein system transects this area and, in appearance, is nearly identical to the quartz-carbonate veins observed in Area B east of the "Schmitt Showing". The grey vein material has been traced along an east-west fracture structure for roughly 150 m.

Area H

Near the southern limit of this area, a very different style of alteration is present. The alteration zone here is only exposed as boulders of completely silicified rock which occur along a continuous northwest-trending train of float material. The silicification is typically white to grey to brown with some later quartz and sulphates in small vugs and cross-cutting veinlets. Very fine-grained disseminated pyrite ($\leq 3\%$) is present as patches in a few pieces of float but more common are accessory hematite and limonite, quite likely weathering products of this pyrite. The grassy plateau nearby also has a few scattered outcrops of quite fresh to strongly chloritized and sulphatized crystal tuff country rock along the steeper north- and south-facing slopes with some local patches of abundant frost-heaved rock. Some intense patchy sulphate alteration zones are present along the northwest fault zone between the "Schmitt Showing" and the northeast corner of Area H.

Area I

The intrusive complex along McClair Creek which occupies most of this area is characteristically altered with secondary quartz +

sericite ± chlorite ± epidote ± pyrite. Alteration is moderate to intense and is present zonally and along fracture-controlled veinlets. Pyrite is the only sulphide present and precious and base metals values appear to be absent.

GEOCHEMISTRY

A total of 687 soil samples were collected on the two claim groups and shipped to Bondar-Clegg and Co. Ltd. of North Vancouver for analysis.

Samples were taken of B-horizon material where possible, though soil development was generally poor. The minus 80 mesh fraction of soils was analysed for Cu, Pb, Zn, Ag and Au with additional Mn and Hg geochemical analyses performed on the majority of the samples.

Silt samples numbering 46 were taken along most of the major channelways draining the centre of the property. The samples were sands and sandy silts, primarily, taken from the banks of the streams. They were analysed geochemically as above for Au, Ag, Cu, Pb and Zn.

Rock samples taken were crushed and similarly analysed. Of the 268 rock samples, all but 34 were analysed geochemically for Au, Ag, Cu, Pb, Zn, Mn and Hg. These 34 samples from Area I were analysed geochemically for Au, Ag, Cu, Pb and Zn only. In addition, a total of 38 Au, 28 Ag, 1 Zn and 4 Pb assays were completed on various samples.

A summary of the extraction and analytical techniques is as follows:

<u>Element</u>	<u>Extraction</u>	<u>Analysis</u>
Ag, Pb, Zn, Cu, Mn	Hot Lefort Aqua Regia	Atomic Absorption
Au	Fire Assay & Hot Aqua Regia	Atomic Absorption
Hg	Aqua Regia	Closed cell flameless Atomic Absorption

The results of all soil geochemical analyses are plotted in Figure 6a to 6g and tabulated in Appendix C.

The 1981 soil sampling programme supported early survey results and provided a considerable amount of new information on previously unsurveyed terrain. In particular, the main area of known vein mineralization in Area B and its orientation are very sharply defined along the south slope of the ridge especially with respect to Au. A more zonal anomaly characterizes the base metals as well as Ag, Hg and Mn in this main, mineralized region. These same trends are present for Au as weaker anomalies extending west of Area B but here no good correspondence is observed with any other elements. Unlike Au, anomalies in Ag and, to a lesser degree Pb, Zn and Mn are sharply terminated just south of the "Schmitt Showing" supporting the idea of a northwest fault zone cutting through this region.

Perhaps the best Au anomaly occurs east of the small hill in Area E where a broad zone about 200 m wide trends roughly northeast with corresponding base metals and lesser Ag anomalies. No major zone of mineralization was observed but the values here are significant. The linear nature suggests fault control but this has not been verified.

In Area J a north-northwest fault zone observed in the field is reflected primarily in anomalous base metals values with only a single, yet very high, Au anomaly. In the east-central region of this area an irregular and complex mix of moderately anomalous base metals values is present with minor, accompanying Mn, Hg and Ag anomalies. These appear to be related to galena, sphalerite and chalcopyrite mineralization observed in quartz veinlets just west of the anomaly. This zone requires further investigation before its importance can be accurately evaluated.

Strong Hg values in the vicinity of the hot springs style

sulphate alteration zone characterize the soil geochemistry of Area D. Poor correlation between Hg and other elements is observed. A narrow Au anomaly occurs near the northeast corner of Area D and also is present in the absence of other element anomalies.

On the western regions of the property in Area H two zones of Au anomalies occur along with corresponding Pb and Zn anomalies. The stronger anomaly trends northwest off the corner of the grid and is possibly related to the nearby 'on line' train of silicified rock on the ridge to the southeast. The other anomaly trends northeast and is not well understood at present.

The results from the silt sampling were variable with only sporadic high precious metal values. These seem to correspond to source area soil anomalies to some extent but the sporadic nature makes them suspect as a "focusing" exploration tool.

DISCUSSION

The overall results from this recent programme are very encouraging and point to numerous areas of high Au-Ag potential. Follow-up work on the many unexplained soil geochemical anomalies is necessary as is more detailed work on the main zone of vein mineralization. A programme of trenching and drilling is required to further evaluate the extent and variations of mineralization discovered to date.

BIBLIOGRAPHY

CARTER, N.C. 1972. Toodoggone River Area. in Geology, Exploration and Mining in British Columbia 1971. British Columbia Department of Mines and Petroleum Resources, Victoria, pp. 63-64.

GABRIELSE, H., DODDS, C.J. AND MANSY, J.L. 1975. Geology - Toodoggone River (94E). Geological Survey of Canada, Open File 306.

APPENDIX A

Statement of Qualifications

STATEMENT OF QUALIFICATIONS

I.G. Sutherland - Geologist

Ian Sutherland obtained his B.Sc. (Hons) degree in Geology from the University of Western Ontario in 1976. He has held various geological positions in Industry and Government (Ontario Geological Survey) and joined Texasgulf in Vancouver in March 1981.

G.R. Peat Heath
08/12/81

APPENDIX B
Statement of Expenditures

STATEMENT OF EXPENDITURES

JD-81 Group

SALARIES AND FRINGE BENEFITS - TEXASGULF INC.

G. Cooper - Geologist		
Period June 5-8	3 days @ \$ 95	285.00
P.R. DeLancey - Geologist		
Period June 2-5	2 days @ \$200	400.00
D. Piroshco - Geologist		
Period June 5-Sept 6	17 days @ \$ 75	1,275.00
I.G. Sutherland - Geologist -Supervision		
Period June 5-Aug 25, 2 1/2 days @ \$140		350.00
S. Bending - Assistant		
Period June 29-Aug 20	9 days @ \$ 55	495.00
M. Cathro - Assistant		
Period Aug 9-Sept 2	5 1/2 days @ \$ 50	275.00
A. Costigan - Assistant		
June 13	1 day @ \$ 60	60.00
P. Edwards - Assistant		
Period July 30-Aug 2	2 days @ \$ 40	80.00
J. Etzkorn - Assistant		
Period June 2-13	3 days @ \$ 65	195.00
J. Gosselin - Assistant		
Period June 8-Aug 28	13 days @ \$ 60	780.00
L. Haering - Assistant		
Period June 2-Sept 2	11 days @ \$ 50	550.00
J. Leigh - Assistant		
Period July 30-Aug 28	3 days @ \$ 45	135.00
P. Moulday - Assistant		
Period June 5-9	3 days @ \$ 60	180.00
G. Murray - Assistant		
Period July 14-Aug 25	9 days @ \$ 55	495.00
F. Renaudat - Assistant		
Period June 2-Sept 5	10 days @ \$ 65	650.00
G. Ruckle - Assistant		
Period July 13-Aug 9	4 days @ \$ 40	<u>160.00</u>
		6,365.00
		6,365.00

C/Fwd.

G. R. Renaudat
08/12/81

JD-81

C/Fwd
6,365.00

ROOM AND BOARD

98 man-days @ \$ 70 6,860.00

HELICOPTER SUPPORT

Texasgulf Bell 206B 18 1/2 hrs @ \$400 7,400.00

ANALYTICAL COSTS

62 assays @ \$ 8.00 (Ag or Au)	496.00
1 assay @ \$ 6.50 (Zn)	6.50
4 assays @ \$ 6.00 (Pb)	24.00
399 soils @ \$14.10	5,625.90
39 soils @ \$ 9.85	394.00
46 silts @ \$ 9.85	453.10
202 rocks @ \$16.00	3,232.00
34 rocks @ \$11.75	399.50
share of shipping, handling,etc.	<u>750.00</u>
	11,381.00

REPORT PREPARATION

I.G. Sutherland 5 days @ \$140	700.00
Drafting (contract)	1,050.00
Drafting (in house)	420.00
Secretarial, reproductions, etc.	<u>400.00</u>
	2,570.00
	<u>2,570.00</u>
	34,576.00

Note: Of this total, \$20,250.00 has been claimed for assessment credit, as of Sept. 1, 1981. The remaining \$14,326.00 will be claimed at a later date.

G.R. Peatfield
08/12/81

STATEMENT OF EXPENDITURES

MOOSE-81 Group

SALARIES AND FRINGE BENEFITS - TEXASGULF INC.

D. Piroshco - Geologist		
Period June 29-Aug 26	2 days @ \$ 75	150.00
I.G. Sutherland - Geologist - Supervision		
Period July 1-Aug 25	2 1/2 days @ \$140	350.00
S. Bending - Assistant		
Period June 29-Aug 20	4 days @ \$ 55	220.00
M. Cathro - Assistant		
Period Aug. 22	1 day @ \$ 50	50.00
J. Gosselin - Assistant		
Aug 24, 25	2 days @ \$ 60	120.00
L. Haering - Assistant		
Period July 4-Sept 2	5 1/2 days @ \$ 50	275.00
J. Leigh - Assistant		
Period July 30-Aug 25	7 days @ \$ 45	315.00
G. Murray - Assistant		
Period Aug 4-11	2 days @ \$ 55	110.00
F. Renaudat - Assistant		
Period June 2-Aug 26	3 1/2 days @ \$ 65	227.50
G. Ruckle - Assistant		
July 13	1 day @ \$ 40	<u>40.00</u>
		1,857.50
		1,857.50

ROOM AND BOARD

30.5 man-days @ \$70	2,135.00
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HELICOPTER SUPPORT

Texasgulf Bell 206B, 5 1/2 hrs @ \$400	2,200.00
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ANALYTICAL COSTS

2 assays @ \$ 8.00 (Au)	16.00
2 assays @ \$ 8.00 (Ag)	16.00
249 soils @ \$14.10	3,510.90
32 rocks @ \$16.00	512.00
share of shipping, etc.	<u>400.00</u>
	4,454.90
	4,454.90

REPORT PREPARATION

I.G. Sutherland 3 days @ \$140	420.00
Drafting (contract)	633.00
Drafting (in house)	250.00
Secretarial, Reproductions, etc	200.00
	<u>1,503.00</u>
	<u>1,503.00</u>
	12,150.40

Note: None of these costs have been claimed for assessment credit. A filing will be made at a later date.

G.R. Peatfield
08/12/81

APPENDIX C
Analytical Data

SAMPLE NUMBER	Cu PPM	Pb PPM	Zn PPM	As PPM	Mn PPM	Hg PPB	Au PPB
71158	20	2	42	2.2	2200	25	ND
71159	1260	11	177	> 50.0	1330	55	5
71160	9400	12	99	26.0	1840	20	ND
71161	200	1850	1380	4.8	2200	40	3150
71162	38	61	650	0.5	2700	10	ND
71163	26	106	137	0.4	780	20	40
71164	161	800	180	4.7	1040	55	7750
71165	13	8	12	0.4	149	20	ND
71166	13	23	4	3.6	264	20	220
71167	9	2	2	0.4	195	10	15
71168	17	10	124	0.3	980	20	15

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Pb PPM	Zn PPM	As PPM	Au PPB
DP-04-81-088A		35	8	19	0.2	50
DP-04-81-088B		70	5	10	0.2	35
DP-04-81-088C		2	4	4	0.2	5
DP-04-81-088D		2	11	3	0.2	ND
DP-04-81-088E		4	255	12	0.2	ND
DP-04-81-088F		2	5	3	0.2	10
DP-04-81-088G		5	6	6	0.2	20
DP-04-81-089A		2	ND	9	0.2	45
DP-04-81-090A		15	2	9	0.3	55
DP-04-81-090B		7	18	37	0.2	35
DP-04-81-090C		15	6	5	0.2	15
DP-04-81-090D		20	6	7	0.2	40
DP-04-81-091A		145	178	1735	0.8	15
DP-04-81-092A		49	ND	63	0.2	5
DP-04-81-092B		64	3	55	0.2	10
DP-04-81-092C		8	5	8	0.2	10
DP-04-81-092D		20	33	149	0.2	10
DP-04-81-093		50	33	1240	0.2	25
DP-04-81-094A		23	2	126	0.2	ND
DP-04-81-094B		15	29	115	0.2	25
DP-04-81-095A		10	231	167	0.7	ND
DP-04-81-095C		19	142	71	0.7	ND
DP-04-81-095D		8	42	44	0.4	5
DP-04-81-095E		10	8	89	0.2	ND
DP-04-81-096A		18	87	560	1.5	5
DP-04-81-96B		6	25	85	0.2	25

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Pb PPM	Zn PPM	As PPM	Au PPB
DP-04-81-102A		41	16	80	0.2	ND
DP-04-81-102B		14	ND	21	0.2	ND
DP-04-81-102C		5	ND	5	0.2	10
DP-04-81-103A		13	6	65	0.2	ND
DP-04-81-104A		9	2	1	0.2	ND
DP-04-81-105A		16	40	110	0.2	ND
DP-04-81-105B		28	ND	172	0.2	ND
DP-04-81-106		5	3	35	0.6	ND

SAMPLE NUMBER	Cu PPM	Pb PPM	Zn PPM	As PPM	Mn PPM	Hg PPB	Au PPB
70455	29	387	465	3.2	810	70	440
70456	320	705	880	13.0	1450	205	1880
70457	250	292	790	5.8	1560	260	9250
70458	50	61	49	9.5	565	30	50
70990	16	24	105	5.0	2400	25	40
70991	9	16	95	1.8	3200	30	15
70992	10	9	80	1.0	2800	20	10
70993	17	8	62	0.5	1500	20	5
70994	21	7	100	13.0	3000	30	35
70995	17	13	94	28.0	2600	25	80
70996	35	750	1700	48.0	14800	260	115

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Pb PPM	Zn PPM	As PPM	Au PPB
JE-01-04-81		2	8	4	0.3	ND
JE-02		17	258	96	3.9	40
JE-03		6	8	10	0.2	ND
JE-04		13	53	70	1.3	50
JE-05		8	20	61	0.9	5
JE-06		1	12	4	0.4	ND
JE-07		10	18	66	0.2	ND
JE-08		125	1688	1080	2.0	6500
JE-09		16	43	250	0.2	20
JE-10		2	6	65	0.2	20
JE-11		15	41	120	0.2	10
JE-12		18	46	110	0.4	15
JE-13		17	92	110	0.8	10
JE-14		20	156	280	0.4	95
JE-15		35	267	450	0.2	250
JE-16		83	715	500	0.4	155
JE-17		220	2810	1100	0.6	10
JE-18		8	21	80	0.2	ND
JE-19		18	38	126	0.4	ND
JE-20		24	121	212	0.2	70
JE-21		11	61	35	2.0	40
JE-22		49	392	385	0.6	15
JE-23		15	44	96	0.2	30
JE-24		12	28	75	0.4	ND
JE-25		14	36	140	0.4	55
JE-26		29	77	258	0.6	65
JE-27		28	120	225	0.2	15
JE-28		31	174	290	0.4	225
JE-29		41	165	245	0.8	100
JE-30		57	540	560	0.7	240
JE-31		33	149	250	0.9	10
JE-32		23	114	210	0.8	60
JE-33		37	204	400	0.2	350
JE-34		19	81	192	0.5	85
JE-35		44	185	275	0.8	20
JE-36		24	124	250	0.2	125
JE-37		31	136	245	0.8	45
JE-38		12	38	132	0.2	10
JE-39		20	133	165	1.8	5

SAMPLE NUMBER	Cu PPM	Pb PPM	Zn PPM	As PPM	Mn PPM	Hg PPB	Au PPB
FR-001-04-81	36	12	94	0.2	680	20	35
002	13	12	57	0.2	1000	45	15
003	24	14	107	1.1	540	75	40
004	9	13	43	0.2	625	45	15
005	12	10	44	0.5	240	30	15
006	17	18	113	0.2	1400	15	25
007	11	12	50	0.2	480	40	65
008	9	11	36	0.4	410	20	5
009	16	26	65	0.2	770	25	5
010	11	16	56	0.3	620	20	5
011	12	12	59	0.2	635	20	20
012	10	17	48	0.2	1500	40	10
013	15	22	77	0.3	670	35	5
014	10	13	63	0.2	1050	25	10
015	14	13	60	0.2	1920	70	ND
016	17	31	83	0.4	1050	20	50
017	15	22	63	0.2	970	20	30
018	16	25	75	0.4	1290	60	5
019	15	27	85	0.2	1540	10	10
020	13	29	52	0.4	260	50	ND
021	13	15	65	0.5	3300	50	ND
022	11	34	13	1.1	60	340	5
023	5	67	17	0.2	110	200	40
024	9	17	44	0.2	360	340	5
025	12	16	78	0.2	1000	365	ND
026	9	7	74	0.2	1260	65	ND
027	8	5	55	0.2	620	30	5
028	12	28	74	0.6	8700	85	ND
029	9	8	78	0.2	950	30	5
030	7	7	62	0.3	2200	40	ND
031	9	6	61	0.2	950	60	ND
032	7	5	36	0.4	615	55	ND
033	12	17	63	0.2	980	45	15
034	13	8	45	0.2	760	25	ND
035	8	9	66	0.2	1090	50	5
036	4	11	63	0.3	1600	40	ND
037	4	12	68	0.2	1140	15	5
038	3	15	70	0.2	1110	20	ND
039	3	26	120	0.2	630	20	35
040	9	66	127	0.4	3800	45	35
041	12	44	109	0.2	3300	70	165
042	19	112	190	0.8	1500	30	175

SAMPLE NUMBER	Cu PPM	Pb PPM	Zn PPM	As PPM	Mn PPM	Hg PPB	Au PPB
043	10	84	60	0.6	2700	45	70
044	7	23	65	0.2	1100	20	150
045	10	16	55	0.2	1600	10	45
046	10	15	60	0.2	960	30	25
047	14	17	57	0.2	1660	40	ND
048	8	27	47	0.2	1260	30	ND
049	12	12	53	0.2	800	30	35
050	12	7	72	0.2	970	50	ND
051	44	12	100	0.2	750	30	65
052	12	22	65	0.2	1300	30	10
053	52	15	105	0.2	1000	30	45
054	34	11	96	0.2	820	20	25
055	24	20	79	0.2	350	20	10
056	33	8	142	0.6	1540	45	ND
057	12	15	136	0.2	2300	10	ND
058	16	13	74	0.2	2200	50	ND
059	12	16	73	0.4	4700	30	ND
060	11	18	18	0.5	170	10	ND
061	14	22	60	0.2	580	10	ND
062	15	31	70	1.0	900	30	5
063	13	18	50	0.3	1900	65	ND
064	8	15	77	0.2	1000	30	30
065	10	16	70	1.1	440	60	ND
066	6	12	40	0.2	500	50	55
067	10	20	66	0.2	1200	20	35
068	9	23	85	0.2	1500	60	40
069	11	24	80	0.5	1040	30	40
070	6	13	40	1.4	550	100	ND
071	8	15	31	0.7	680	85	ND
072	2	ND	7	0.2	40	30	ND
073	4	3	10	0.3	250	20	ND
074	5	4	24	0.2	150	80	ND
075	6	7	37	0.2	290	50	ND
076	9	17	87	0.6	630	25	ND
077	23	164	460	4.6	1245	200	20
078	7	8	37	0.4	580	100	5
079	5	11	27	0.3	210	35	105
080	2	6	11	0.2	25	600	ND
081	7	13	44	0.2	1140	50	ND
082	2	2	67	0.2	1240	20	ND
083	8	19	64	0.6	910	50	ND
084	10	11	94	1.2	225	70	ND
085	16	22	227	0.5	670	35	20
086	42	35	97	3.1	1040	495	10
087	22	62	77	1.7	980	160	45

SAMPLE NUMBER	Cu PPM	Pb PPM	Zn PPM	As PPM	Mn PPM	Hg PPM	Au PPB
088	11	66	134	0.5	1140	30	10
089	21	86	123	0.5	3300	100	40
090	12	12	54	0.2	1280	70	5
091	6	17	54	0.2	1900	70	5
092	14	90	186	0.2	790	50	50
093	14	60	135	0.2	915	100	15
094	14	40	95	0.2	980	80	145
095	17	42	91	0.8	2000	90	40
096	8	33	89	0.2	1300	90	10
097	8	15	25	0.3	420	40	5
098	8	15	62	0.2	740	60	60
099	9	20	63	0.2	1600	30	5
100	8	15	54	0.2	700	105	5
101	7	13	44	0.2	550	60	15
102	10	21	65	0.2	515	35	25
103	13	41	135	0.3	710	80	10
104	12	29	93	0.3	650	80	10
105	12	44	78	0.4	700	40	50
106	15	74	84	0.4	2800	80	85
107	9	40	50	0.5	500	55	100
108	12	57	94	0.3	610	30	55
109	15	44	95	0.4	950	35	75
110	11	38	70	0.7	810	80	25
111	18	46	120	0.2	1120	40	40
112	20	79	140	0.7	1200	15	60
113	13	66	98	0.8	870	80	115
114	17	81	138	0.6	1240	40	270
115	16	67	156	0.7	600	15	15
116	13	58	144	0.5	570	45	70
117	23	137	213	3.0	7500	110	15
118	16	74	206	1.6	12000	85	10
119	40	22	169	1.6	5800	20	15
120	31	54	150	2.1	4000	70	90
121	50	550	480	> 50.0	5400	115	2360
122	17	171	375	2.3	>20000	35	25
123	35	231	368	3.9	9000	45	395
124	19	185	640	2.8	>20000	80	ND
125	38	119	210	6.9	4700	15	865
126	26	44	131	2.8	950	55	55
127	20	460	340	1.2	>20000	80	10
128	27	196	720	0.4	11400	30	30
129	45	66	350	2.0	3600	105	10
130	14	56	117	3.3	2000	140	ND
131	50	101	155	8.8	5000	315	40
132	35	196	200	4.9	8400	210	ND
133	24	127	248	1.3	9200	165	ND
134	20	29	146	0.8	6000	140	ND

SAMPLE NUMBER	Cu PPM	Pb PPM	Zn PPM	As PPM	Mn PPM	Hg PPB	Au PPB
GM-01-04-81							
02	8	11	83	0.3	1930	40	ND
03	26	35	90	0.4	1000	20	ND
	13	18	85	0.2	1700	70	ND
04	15	26	70	0.2	650	70	ND
05	18	25	87	0.3	610	20	ND
06	13	12	75	0.2	950	40	ND
07	10	25	78	0.2	1720	50	ND
08	15	14	67	0.2	1300	20	15
09	14	13	62	0.2	540	75	15
10	18	25	68	0.9	2500	60	15
11	14	159	81	1.4	2600	60	10
12	13	55	125	1.3	1000	85	30
13	10	20	44	1.2	750	70	ND
14	14	18	75	1.9	865	40	ND
16	13	22	65	1.8	1220	30	10
17	11	29	67	1.1	315	45	5
19	13	13	77	1.0	765	25	ND
20	14	21	45	0.6	210	70	45
21	9	46	71	2.5	2200	10	180
22	5	36	31	0.5	330	80	10
23	19	107	124	0.8	1800	35	495
24	22	192	165	0.9	6600	10	180
25	7	26	62	0.4	2800	50	ND
26	17	18	118	0.3	3200	30	75
27	16	36	94	0.2	1900	5	35
29	23	26	92	0.8	1630	40	30
30	32	79	126	4.3	2000	60	670
31	9	31	55	1.2	1700	80	205
32	11	32	100	1.0	1240	60	85
33	9	43	108	1.0	2500	60	65
34	42	245	400	5.8	5700	50	520
35	15	39	100	1.6	1800	70	330
36	16	64	105	2.2	1210	20	165
37	14	23	69	1.4	320	35	40
38	13	24	55	1.1	380	40	420
39	13	21	70	0.6	350	25	15
40	25	135	160	2.0	1100	35	25
41	16	87	164	0.6	3000	10	20
42	15	58	68	1.0	2100	70	95
43	15	61	80	2.0	1880	70	125
44	16	56	77	1.6	600	25	60
45	16	54	74	2.2	940	95	20
46	22	161	89	3.7	1380	70	435

SAMPLE
NUMBER

	Cu PPM	Pb PPM	Zn PPM	As PPM	Mn PPM	Hg PPB	Au PPB
47	17	55	67	1.2	1500	30	310
48	38	635	228	3.0	3200	80	830
49	136	3270	300	10.0	9400	175	2380
50	36	1540	225	2.8	9400	65	785
51	20	26	57	0.3	1000	20	25
52	16	12	51	0.2	640	10	55
GR-01-04-B1	19	33	68	0.7	2600	95	250
02	21	26	64	0.2	1560	25	5
03	29	34	85	0.8	2400	30	125
04	31	56	123	0.6	2400	65	45
05	68	600	323	4.0	3500	50	520
06	33	465	165	3.5	3600	20	540
07	26	303	90	4.0	660	75	380
08	19	79	77	1.9	590	70	140
09	15	79	86	1.4	1820	20	55
10	10	68	40	3.8	750	60	320
11	14	167	73	1.5	430	60	170
12	25	60	137	1.6	600	ND	185
13	64	270	530	0.2	3400	25	60
14	42	189	520	0.2	1640	25	35
15	34	285	560	1.8	1600	30	50
16	21	97	340	0.5	4400	80	ND
17	20	46	103	0.6	2600	70	35
18	17	64	109	1.0	740	30	30
19	61	398	388	7.4	1680	50	460
20	59	265	143	3.4	1300	100	85
21	73	470	208	3.8	2400	40	3060
22	124	405	209	3.4	2800	75	340
23	43	530	263	4.4	3700	90	835
24	60	950	525	6.8	3900	70	720
25	25	376	213	2.6	1640	80	430
26	27	178	185	0.5	2600	80	145
27	25	39	95	0.7	900	10	10
28	64	157	216	0.2	1700	40	25
30	24	19	78	0.2	1300	35	5
32	25	376	420	0.5	2900	20	40
33	15	56	45	0.2	500	20	ND
34	26	101	194	0.2	1660	30	25
35	25	145	187	0.5	750	10	20
36	20	162	210	0.4	1180	50	350
37	33	307	255	0.4	1820	60	235
38	36	354	259	2.5	2400	30	80
39	17	50	61	0.5	300	40	45
40	82	291	265	2.9	1280	60	155
41	244	392	1000	4.7	1120	70	230

SAMPLE NUMBER	Cu PPM	Pb PPM	Zn PPM	As PPM	Mn PPM	Hg PPB	Au PPB
42	41	224	225	1.6	1820	50	60
43	19	60	134	0.4	2200	45	ND
44	32	199	410	0.4	3900	40	5
45	31	171	273	1.0	2400	35	155
46	83	840	191	1.6	1020	10	135
47	182	223	1120	1.2	5400	30	65
50	98	398	710	1.0	3300	50	40
51	23	98	170	0.4	980	60	60
52	56	150	400	0.5	3500	65	40
53	72	213	540	0.7	2800	40	55
56	173	176	400	0.6	1080	40	25
58	257	560	560	3.8	4000	40	70
59	275	253	870	1.8	6700	65	110
60	101	255	480	2.0	2600	40	20
61	42	164	307	0.7	1000	50	15
62	36	105	225	0.4	670	55	15
63	72	244	301	0.6	1140	60	140
64	23	61	67	0.2	195	30	10
66	84	94	330	0.8	640	70	160
67	70	405	400	0.7	2400	35	40
68	37	159	134	0.8	850	30	30
69	980	405	690	4.6	480	60	65
70	75	255	450	0.6	2100	50	25
71	36	82	235	0.2	930	60	90
72	62	165	328	0.4	1500	50	20
74	158	247	570	0.3	5700	40	50
JG-01-04-81	15	47	159	0.4	980	40	45
02	11	22	97	0.4	800	80	110
03	14	19	88	0.2	1120	40	85
04	9	14	89	1.0	1800	80	15
05	13	23	88	0.8	1500	50	55
06	8	17	72	0.7	1340	75	ND
07	15	19	68	2.0	820	65	65
08	16	35	126	0.8	1180	50	295
09	9	16	68	0.2	930	60	10
10	9	22	84	0.2	1380	40	40
11	24	21	72	0.4	680	40	15
12	62	37	109	0.7	1640	70	5
13	8	16	69	0.2	575	65	30
14	18	45	101	0.2	2100	50	25
15	10	20	80	0.2	470	40	20
16	18	25	106	0.2	570	60	75
17	16	21	85	0.2	470	40	5
18	18	8	90	0.2	1540	40	25
19	23	26	85	0.6	1920	40	20

SAMPLE NUMBER	Cu PPM	Pb PPM	Zn PPM	As PPM	Mn PPM	Hg PPB	Au PPB
20	36	121	190	1.4	890	160	15
21	14	17	124	0.6	1660	50	15
22	11	32	87	0.2	740	50	30
23	15	25	91	0.5	810	60	30
24	11	29	124	0.2	800	40	40
25	9	20	64	0.2	580	30	ND
26	11	34	106	0.2	810	50	40
27	10	25	77	0.2	875	40	10
28	10	20	51	0.3	460	60	130
29	9	17	66	0.2	390	70	55
30	28	42	81	0.2	680	85	10
31	8	20	45	0.2	730	90	35
32	18	61	138	0.2	1070	60	155
33	5	9	42	0.2	310	50	5
34	10	39	100	0.2	550	40	45
35	11	25	74	0.2	950	50	70
36	18	55	164	0.2	850	50	80
37	13	43	106	0.2	1560	30	985
38	13	44	112	0.2	665	40	150
39	12	28	102	0.2	1640	50	60
40	9	14	60	0.2	1440	30	15
41	30	73	127	1.0	1800	25	230
42	7	9	56	0.2	440	40	125
43	10	18	72	0.2	950	50	30
44	39	41	400	3.4	780	110	25
45	12	49	113	0.3	700	80	125
46	9	12	45	0.2	810	40	35
47	8	20	64	0.2	280	50	70
48	11	17	76	0.2	990	50	40
49	13	95	167	0.2	3700	40	45
50	14	83	195	0.2	2700	40	190
51	9	49	140	0.5	1720	50	55
52	20	73	210	0.8	1240	40	20
53	22	71	135	2.3	565	70	280
JL-068-04-81	10	16	100	0.2	4000	60	15
069	13	21	99	0.4	1800	60	15
070	14	39	100	0.2	1340	30	15
071	19	70	122	0.2	2000	70	35
072	20	67	125	0.2	1600	70	100
073	21	62	125	0.2	1480	50	120
074	24	73	125	0.3	2100	60	70
075	33	159	189	0.3	2600	60	180
076	45	101	170	0.4	1900	50	925
077	13	22	92	0.4	1280	70	40
078	11	42	97	0.2	2300	80	230

SAMPLE NUMBER	Cu PPM	Pb PPM	Zn PPM	As PPM	Mn PPM	Hg PPB	Au PPB
079	14	7	60	0.2	770	45	25
080	25	16	73	0.5	1820	45	35
081	26	65	105	1.5	3400	95	375
082	25	167	430	1.5	1340	110	460
083	15	15	67	0.4	1940	65	165
084	17	18	77	0.2	3100	60	30
085	12	17	63	0.2	1100	60	10
086	25	116	223	0.4	1340	60	45
087	17	103	179	0.2	2300	40	35
088	26	163	178	0.3	2200	50	50
089	22	142	190	0.2	1700	60	55
090	18	72	130	0.2	1920	40	20
091	22	37	100	0.4	4400	100	330
092	31	118	100	1.7	3700	130	85
093	24	64	93	0.3	9300	100	15
094	14	49	124	0.2	2200	40	15
095	19	38	167	0.2	2200	70	ND
096	13	17	95	0.2	2900	50	ND
097	11	40	106	0.2	1600	50	45
098	11	48	120	0.2	1980	50	345
099	24	80	114	0.8	2000	80	45
100	26	103	114	1.7	1800	80	165
101	33	209	148	1.0	2400	100	305
102	23	181	274	0.2	1300	40	70
103	10	94	167	0.5	4300	60	45
104	12	61	153	0.8	1620	60	215
105	20	152	240	0.2	1640	40	485
106	19	87	168	0.2	1800	60	235
107	10	21	105	0.2	800	30	10
108	10	27	96	0.2	1260	40	75
110	10	48	91	0.2	1130	50	45
110	18	70	141	0.2	2000	50	80
111	13	59	132	0.2	1000	40	370
112	12	63	145	0.2	2600	30	35
113	12	40	107	0.2	1700	30	325
114	10	51	108	0.2	1400	40	60
115	9	17	80	0.2	1700	45	25
116	10	13	97	0.2	1300	40	10
117	9	10	56	0.2	970	60	5
118	9	15	70	0.2	1200	40	15
119	6	12	73	0.2	1000	30	ND
120	14	263	214	1.0	1780	65	265
121	12	14	90	0.6	460	90	30
122	12	22	75	0.2	1200	30	10
123	7	9	90	0.2	1200	30	ND

SAMPLE NUMBER	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Mn PPM	Hg PPB	Au PPB
125	17	9	76	0.2	700	60	ND
126	9	10	77	0.2	1660	40	ND
127	9	7	85	0.2	540	40	5
128	10	7	65	0.2	1220	25	5
129	10	7	54	0.2	630	60	ND
130	11	6	60	0.3	850	50	5
131	10	9	53	0.2	1000	45	5
132	10	10	70	0.2	1080	50	ND
134	21	27	74	0.2	1300	50	15
135	14	24	86	0.2	2700	50	155
136	17	24	75	0.3	1420	50	30
137	16	27	95	0.2	1350	45	10
138	12	12	87	0.4	520	50	ND
139	11	16	88	0.2	1160	40	10
140	14	16	100	0.2	1600	30	10
141	13	16	104	0.2	1130	20	10
142	12	16	74	0.2	3400	50	ND
143	9	6	65	0.2	1080	30	ND
JL-145-04-81	8	5	59	0.5	340	50	ND
146	8	3	71	0.6	380	110	10
147	10	3	55	0.6	560	45	15
148	10	3	51	0.2	480	50	10
149	8	2	62	0.2	580	65	ND
150	12	ND	56	0.4	415	70	ND
151	10	4	56	0.2	875	65	ND
152	10	5	68	0.2	780	65	ND
153	4	ND	62	0.3	470	60	170
154	4	2	56	0.4	600	60	ND
155	7	4	64	0.5	410	75	ND
156	7	4	47	0.5	495	45	15
157	12	6	62	0.3	590	40	5
158	9	3	69	0.2	1140	80	55
159	20	5	53	0.4	520	90	20
160	13	3	60	0.3	415	60	ND
161	16	4	62	0.2	465	70	ND
162	14	3	55	0.2	650	60	5
163	8	2	51	0.4	400	60	ND
164	6	3	55	0.3	380	70	15
165	8	4	39	0.4	195	65	10
166	12	4	58	0.4	455	60	5
167	12	5	59	0.3	605	45	10
168	9	4	49	0.2	395	45	5
169	12	5	45	0.2	390	70	15

Sample Number	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Mn PPM	Hg PPB	Au PPB
170	9	3	46	0.4	480	50	5
171	9	3	54	0.3	345	65	10
172	10	3	53	0.7	585	70	10
173	10	5	54	0.2	480	90	5
174	12	4	78	0.4	645	80	5
175	10	5	45	0.5	310	100	ND
176	7	2	48	0.4	350	60	ND
177	16	7	76	0.6	1090	80	30
178	10	4	50	0.4	850	75	10
179	11	5	51	0.2	420	55	10
180	12	4	50	0.2	390	55	35
181	10	4	72	1.6	580	70	15
182	10	4	62	0.3	720	70	5
183	10	5	69	0.3	890	70	ND
184	11	ND	54	0.2	575	60	65
185	10	3	52	0.2	490	65	5
186	11	4	63	0.2	795	80	65
187	10	4	50	0.4	490	85	20
188	3	2	50	0.3	650	60	75
200	10	11	52	0.4	530	80	325
201	6	3	49	0.5	400	80	20
202	9	4	60	0.5	650	90	335
203	12	4	60	0.3	800	80	15
204	10	7	64	0.3	1000	90	10
205	10	5	58	0.3	740	80	10
206	10	2	80	0.3	725	60	ND
207	20	4	58	0.3	960	60	5
208	9	2	54	0.2	400	75	ND
209	9	4	72	0.2	940	75	5
210	10	2	51	0.4	910	70	10
222	6	ND	25	0.8	395	165	ND
223	6	3	38	0.3	400	100	30
224	8	3	24	0.6	160	110	20
225	12	6	65	0.2	685	90	185
226	24	11	95	0.3	2700	150	20
227	14	37	55	0.2	655	50	425
228	9	5	61	2.4	790	90	290
229	6	6	45	0.3	890	80	225
230	10	3	46	0.8	350	110	25
231	6	3	62	0.2	520	60	135
232	10	37	73	1.2	470	80	635
233	6	4	58	0.2	480	110	80
234	11	8	59	0.2	690	90	55
235	12	10	62	0.2	600	65	1250
236	14	4	60	0.2	680	55	290

SAMPLE NUMBER	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Mn PPM	Hg PPB	Au PPB
237	15	6	50	0.3	530	90	15
238	10	5	66	0.2	570	75	330
239	6	6	72	0.2	1680	75	30
240	9	3	54	0.2	460	95	170
241	8	6	75	0.4	470	70	250
242	8	6	65	0.2	660	65	5
243	9	6	60	0.3	580	60	10
244	9	5	60	0.2	700	50	35
245	18	9	43	0.7	580	120	15
246	10	7	62	0.6	575	50	40
247	9	5	60	0.2	440	35	30
248	5	5	57	0.2	315	55	ND
249	7	7	55	0.2	320	80	240
250	12	6	54	0.8	1070	100	ND
251	11	6	46	0.8	320	100	ND
252	8	17	80	0.2	585	40	30
253	8	12	64	0.2	385	55	15
254	24	6	63	0.5	760	90	5
255	8	4	51	0.2	390	50	20
256	6	5	45	0.2	320	50	25
257	7	6	39	0.7	645	35	495
258	13	9	59	0.3	565	55	85
259	12	7	65	0.2	530	55	10
260	13	6	65	0.2	600	65	30
261	12	5	51	0.2	560	65	25
262	8	6	65	0.2	665	60	10
263	12	5	66	0.2	615	60	10
264	10	7	54	0.2	540	40	145
265	8	4	59	0.4	655	45	15
266	8	4	66	0.2	550	45	200
267	13	13	65	0.6	340	110	285
268	7	6	51	0.6	400	80	15
269	6	6	42	0.3	275	70	10
270	10	14	38	0.2	240	60	ND
271	9	13	75	0.3	3900	80	20
272	9	5	55	0.3	315	65	85
273	9	13	70	0.2	300	85	35
274	6	8	68	0.5	260	50	10
275	6	9	65	0.3	310	65	280
276	8	13	79	0.2	465	35	35
277	8	34	120	0.2	390	70	215
278	33	242	260	0.3	650	50	1670
279	10	42	80	0.7	300	70	1210
280	12	230	335	0.7	970	100	1720
281	23	183	610	0.4	960	100	645

SAMPLE NUMBER	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Mn PPM	Hg PPB	Au PPB
282	11	7	40	0.2	300	100	15
283	8	4	57	0.2	320	110	20
284	6	5	56	0.2	340	70	30
285	6	6	50	0.2	370	70	10
286	8	10	69	0.2	620	65	505
287	9	7	72	0.4	680	60	>10000
288	4	6	40	0.4	370	40	50
289	6	8	41	0.2	230	40	35
290	8	7	56	0.2	520	40	5
291	7	6	38	0.2	185	55	50
LH-67-04-81	82	14	460	2.3	630	120	40
66	24	10	154	0.4	470	40	20
69	23	26	70	0.3	230	70	20
70	86	17	329	0.2	910	110	10
71	12	9	38	0.2	215	60	ND
72	5	6	37	0.2	220	50	10
73	6	8	29	0.2	245	40	ND
74	30	14	125	2.0	1760	210	15
75	6	8	32	0.2	260	30	10
76	13	13	35	1.0	1630	60	15
77	6	6	32	0.2	230	40	35
78	6	8	35	0.2	160	40	5
79	114	32	114	0.6	560	50	50
80	360	135	205	1.6	1600	100	60
81	100	106	99	1.2	810	100	40
82	8	9	60	0.2	465	55	ND
83	7	6	29	0.2	220	30	ND
84	20	20	60	0.3	485	60	45
85	21	29	90	0.8	335	80	40
86	30	18	131	1.6	1860	80	15
87	16	41	82	1.0	1330	100	245
88	18	42	85	0.6	1240	100	25
89	14	15	40	1.4	420	140	20
90	18	26	68	0.6	1620	60	15
91	14	17	59	0.6	525	60	45
92	16	14	60	0.2	630	60	20
93	18	16	63	0.2	530	60	445
94	15	9	29	0.2	370	40	15
95	18	15	65	0.4	1120	60	15
96	12	14	25	0.5	1030	100	30
97	18	16	70	0.2	780	70	15
98	24	28	84	0.8	810	50	200
99	32	187	167	2.0	1180	70	360
100	22	103	151	1.9	1290	100	320
101	16	61	150	2.1	1280	140	235

SAMPLE NUMBER	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Mn PPM	Hg PPB	Au PPB
102	30	222	237	3.8	1900	110	1250
103	30	90	122	12.0	2600	160	20
104	26	166	176	10.0	1690	220	50
105	20	144	145	2.1	2400	140	30
106	25	175	215	4.8	2700	160	30
107	40	216	270	9.4	3200	240	130
108	30	281	300	5.0	2000	80	315
109	27	162	190	2.4	5800	110	15
110	27	65	88	1.2	1440	60	380
111	22	162	140	1.5	7500	95	40
112	30	94	105	8.2	820	230	45
113	20	33	93	0.4	3400	50	325
114	22	37	80	0.8	7000	100	35
115	28	49	97	1.3	2700	110	435
116	24	26	81	2.3	1060	75	15
117	42	236	310	3.4	5000	110	75
118	35	192	190	2.0	2600	80	80
119	34	282	330	4.8	3000	100	55
120	126	1045	350	15.0	2400	200	2130
121	150	1160	297	42.0	2600	110	535
122	240	1655	620	30.0	3600	200	445
123	120	1625	600	15.0	>20000	200	160
124	54	1270	530	5.5	10400	110	465
125	48	923	610	4.4	14900	150	230
126	63	555	800	5.7	2900	140	175
127	200	1380	1280	11.0	3300	240	105
128	62	665	890	5.0	13900	210	55
129	104	490	1450	9.0	10900	200	55
130	34	119	230	3.2	1760	110	35
131	28	46	120	0.8	1400	60	135
132	14	18	54	0.6	820	65	30
133	18	22	81	0.2	1600	40	20
134	15	14	82	0.2	850	60	45
135	19	23	78	0.4	1700	65	50
136	30	31	105	2.4	1100	40	80
137	21	36	113	1.6	1250	30	35
138	14	15	68	0.4	1000	60	20
139	18	17	80	0.6	1350	60	20
140	19	14	70	0.2	860	50	15
141	21	14	65	0.4	1250	50	25
142	18	11	80	0.3	1700	70	40
143	19	16	65	0.5	2800	110	15
144	21	18	61	0.2	700	60	775
145	22	17	73	0.4	1660	90	15
146	18	17	65	0.4	820	60	35

SAMPLE NUMBER	Cu PPM	Pb PPM	Zn PPM	As PPM	Mn PPM	Hg PPB	Au PPB
147	16	16	65	0.6	3100	85	15
148	15	19	51	0.6	4200	135	60
LH-149-03-81	14	13	61	0.4	1050	80	15
150	12	16	66	0.4	3000	140	35
151	21	13	53	0.6	1980	80	ND
152	23	23	70	0.4	840	90	80
153	20	25	91	0.8	1880	110	20
154	24	27	74	1.7	2000	110	ND
155	24	48	121	0.7	1670	130	30
156	24	57	137	0.9	880	80	495
157	15	47	102	1.0	5350	120	15
158	22	59	94	2.2	2150	90	570
159	46	262	329	1.0	1700	90	1780
160	23	60	81	0.5	3350	70	195
161	28	26	75	0.6	1320	60	5
162	19	28	77	0.3	1330	70	55
163	49	28	84	0.9	1730	70	45
164	18	35	88	0.8	6400	80	ND
165	40	92	141	5.0	4300	110	40
166	33	100	124	2.4	3350	100	90
167	28	67	73	3.2	3500	100	70
168	31	44	78	0.5	3600	100	25
169	33	140	225	6.1	7000	120	435
170	42	139	217	3.8	5200	110	355
171	18	68	119	2.8	2850	160	20
172	34	42	122	1.4	2600	100	25
173	46	152	303	5.6	6650	150	70
174	34	57	126	9.0	3900	90	695
175	38	49	90	5.0	2250	70	240
176	36	25	62	5.8	5800	60	45
177	23	40	112	1.9	3000	120	80
178	28	26	74	2.3	3300	70	40
179	11	87	83	2.1	1130	110	80
180	17	63	119	2.6	670	110	30
181	8	19	83	1.1	410	110	60

SAMPLE NUMBER	Cu PPM	Pb PPM	Zn PPM	As PPM	Mn PPM	Au PPM	Hg PPM
PE-38-04-81	31	218	320	5.7	3200	70	80
-39	30	128	235	3.0	6500	20	110
-40	50	510	390	6.7	12600	240	120
-41	16	87	229	2.4	3300	70	80
-42	23	120	290	6.2	2300	255	70
-43	16	67	169	1.7	2800	75	40
-44	15	103	180	1.6	3500	760	30
-45	16	163	236	2.7	9600	210	40
-46	17	167	244	1.6	14900	10	50
-47	24	151	252	4.3	3000	155	70
-48	14	131	153	1.1	5400	45	80
-49	9	64	94	1.6	2000	40	70
-50	8	24	95	0.4	1660	5	30
-51	8	15	90	0.4	1680	5	40
-52	10	24	67	1.0	3100	185	40
-53	10	29	105	0.2	1000	30	30
-54	10	31	110	0.3	1540	40	30
-55	13	22	95	0.3	940	40	60
-56	12	72	109	0.2	2500	10	60
-57	10	36	100	0.2	1600	10	55
-58	10	20	71	0.2	2800	5	30
-59	9	50	74	0.2	2300	10	30
GM-04-81-15 RX	13	25	85	0.2	820	20	ND
18	4	10	14	0.2	40	60	ND
	28	8	4	0.2	1700	40	ND
GR-04-81-29	35	6	50	0.2	1000	20	5
-31	53	7	33	0.7	1500	10	375
-48	5	4	62	0.2	790	25	ND
-49	26	3	153	0.2	2300	20	ND
-54	4	2	70	0.2	1340	30	ND
-55	4	5	100	0.2	1200	20	ND
-57	5	13	150	0.2	1400	20	ND
-73	17	146	187	0.2	1200	30	ND

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Pb PPM	Zn PPM	As PPM	Au PPB
FR01	-05-81 S	18	66	195	1.0	10
FR02		14	52	300	0.5	10
FR03		13	50	250	0.3	25
FR04		12	43	235	0.3	20
FR05		18	50	255	1.3	10
FR06		19	52	265	0.9	135
FR07		16	49	250	1.1	75
FR08		11	35	220	0.3	10
FR09		9	34	200	0.2	60
FR10		14	8	70	0.2	365
FR11		8	13	85	0.2	ND
FR12		12	16	110	0.2	ND
FR13		15	21	125	0.7	15
FR14		15	26	135	0.4	10
FR15		12	20	70	0.2	ND
FR16		12	9	65	0.2	80
FR17		19	10	70	0.2	ND
FR18		12	7	73	0.2	ND
FR19		8	9	75	0.2	200
FR20		13	11	85	0.5	125
FR21		11	11	85	0.2	115
FR22		12	14	87	0.4	15
FR23		9	9	82	0.2	ND
FR24		10	12	75	0.4	90
FR25		9	8	80	0.2	260
FR26		20	9	105	0.6	80
FR27		13	12	85	0.3	5
FR28		10	9	75	0.2	1650
FR29		8	8	75	0.2	ND
FR30		6	8	70	0.2	335
PD01		50	168	700	1.4	20
PD02		48	141	690	1.0	20
PD03		48	149	700	1.0	30
PD04		20	73	135	1.2	100
PD05		32	100	330	0.9	1960
PD06		133	95	450	0.9	80
PD07		271	88	890	0.7	20
PD08		213	97	1020	1.0	480
PD09		48	164	620	1.3	15
PD10		333	455	1100	2.8	670
PD11		182	344	1700	2.1	30
PD12		130	256	1780	3.0	175
PD13		118	251	1700	1.6	220
PD14		76	191	1220	1.2	380
PD15		81	183	1320	1.2	1110
PD16		65	150	1200	1.0	1330

SAMPLE NUMBER	Cu PPM	Pb PPM	Zn PPM	As PPM	Mn PPM	Au PPB	Hg PPB
53901	30	241	238	13.0	1220	ND	115
53902	34	119	249	4.0	1320	ND	35
53903	29	72	158	6.7	800	ND	70
53904	60	5790	1270	> 50.0	870	65	800
53905	28	1100	2410	14.0	2600	IS	520
53906	15	515	650	10.0	3500	ND	120
53907	40	190	280	6.1	1740	10	110
53908	985	1155	374	> 50.0	360	470	900
53909	40	375	134	30.0	510	85	220
53910	29	23	93	2.7	1700	40	65
53911	31	2	57	0.6	3400	ND	20
53912	32	236	231	34.0	3200	65	120
53913	10	33	69	1.1	6900	ND	20
53914	29	54	94	2.9	1700	ND	105
53915	25	26	47	3.0	890	ND	120
53916	40	164	108	> 50.0	2600	40	90
53917	29	55	145	6.2	3800	ND	60
53918	79	5600	3900	> 50.0	11000	7530	190
53919	35	1260	1015	14.0	1060	40	80
53920	3150	3350	2890	40.0	1500	80	530
53921	82	3970	2410	32.0	2900	50	235
53922	43	755	1930	18.0	6400	45	460
53923	13	57	440	4.5	1040	10	75
53924	50	16	190	6.4	7200	ND	15
53925	32	385	730	> 50.0	1440	540	310
53926	172	1005	158	46.0	1340	150	460
53927	118	690	625	> 50.0	6000	250	65
53928	204	1575	1800	9.0	6200	7000	140
53929	9	410	1650	2.9	10800	10	40
53930	311	3200	775	> 50.0	1680	5210	230
53931	208	1720	840	36.0	4300	3740	195
53932	67	650	500	11.0	1340	1070	50
53933	24	399	292	6.2	1460	145	20
53934	12	327	259	6.3	640	15	35
53935	41	1735	1230	20.0	780	55	320
53936	12	212	249	5.6	1400	30	35
53937	8	31	580	6.2	1370	71	30
53938	234	248	470	14.0	1900	80	100
53939	23	745	420	28.0	2700	115	85
53940	45	1380	485	14.0	1140	70	120
53941	38	770	148	> 50.0	200	40	55
53942	12	256	343	9.0	1430	40	30
53943	181	560	282	21.0	530	85	80
53944	39	645	1065	> 50.0	3100	70	220
53945	29	148	126	13.0	320	32	35
53946	10	23	495	2.4	3600	ND	20

SAMPLE NUMBER	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Mn PPM	Au PPB	Hg PPB
53947	11	445	369	> 50.0	1200	185	90
53948	10	45	110	5.0	1140	400	30
53949	6	18	660	1.0	3200	ND	30
53950	17	950	760	4.7	5100	65	750
58626	19	410	285	7.6	1560	350	85
58627	7	245	258	2.1	860	70	50
58628	6	243	490	1.6	750	180	70
58629	15	194	670	2.9	2700	60	155
58630	35	228	460	1.8	2800	450	60
58631	6	156	480	1.0	1900	315	55
58632	4	76	345	0.7	1720	30	50
58633	6	505	510	0.4	3700	ND	30
58634	13	80	354	1.2	1600	830	75
58635	4	21	153	2.6	1200	10	20
58636	64	415	690	9.3	2400	>10000	140
58637	29	770	640	5.8	1240	60	175
58638	6	66	15	2.8	250	20	45
58639	14	127	168	> 50.0	3100	1240	35
58640	1170	2920	4490	> 50.0	510	210	750
58641	260	645	176	> 50.0	170	265	1250
58642	228	870	236	> 50.0	440	165	280
58643	188	1290	3950	> 50.0	14800	105	360
58644	18	20	239	4.3	1560	ND	120
58645	35	2170	2830	> 50.0	4000	15	350
58646	29	585	1090	14.0	2800	10	280
58647	33	251	274	9.0	1650	10	100
58648	16	32	172	5.0	1440	ND	160
58649	38	655	1125	22.0	2900	100	350
58650	35	795	314	12.0	650	ND	290
58651	17	114	68	4.9	1500	40	85
58652	14	328	490	28.0	1540	310	110
58653	74	1755	1830	> 50.0	1600	155	470
58654	88	222	396	15.0	1840	160	60
58655	24	152	137	4.1	3900	ND	70
58656	18	232	377	28.0	1740	50	120
58657	126	3730	555	14.0	210	60	265
58658	114	3860	760	14.0	60	35	500
58659	192	890	205	6.0	2300	115	85
58660	150	550	224	4.1	1400	150	50
58661	35	530	2350	9.6	7300	10	50

Area 3

SAMPLE NUMBER	Cu PPM	Pb PPM	Zn PPM	As PPM	Mn PPM	Au PPB	Hg PPB
58662	28	186	268	42.0	2600	70	125
58663	92	363	675	3.2	5900	515	40
58664	51	1620	380	38.0	460	355	270
58665	133	2010	6530	50.0	930	240	700
58666	16	735	540	14.0	1420	10	120
58667	397	910	610	15.0	2600	160	145
58668	41	148	21	4.2	850	40	40
58669	30	2510	610	9.2	210	560	365
58670	15	81	110	9.0	570	40	60
58671	51	455	1400	30.0	1720	55	100
58672	17	555	294	15.0	430	55	85
58673	15	65	94	6.2	1260	ND	50
58674	55	540	1250	14.0	2700	ND	320
58675	34	560	690	9.7	1460	220	80
58676	35	935	950	12.0	2100	ND	150
58677	57	2900	326	50.0	100	1490	290
58678	11	70	200	5.3	4000	ND	35
58679	18	246	365	9.2	770	ND	40
58680	13	10	520	1.5	8000	ND	20
58681	13	790	291	40.0	240	5	150
58682	21	8	80	1.2	3000	ND	20
58683	29	14	246	2.7	7700	ND	20
58684	24	12	126	3.0	4900	ND	20
58685	18	250	337	11.0	260	ND	90
58686	15	5	205	2.1	7800	ND	20
58687	154	585	301	48.0	200	690	170
58688	39	475	560	45.0	2500	8300	85
58689	2	11	9	0.6	70	60	50
58690	4	9	4	0.8	30	55	330
58691	16	16	14	7.8	310	ND	45
58692	45	720	360	3.6	700	600	100
58693	12	18	170	4.0	3100	995	20
58694	59	68	96	8.7	1460	170	50
58695	57	17	65	4.2	1300	ND	20
58696	37	21	187	4.7	1850	10	80
58697	28	57	27	15.0	1500	75	60
58698	19	12	107	1.5	1120	120	80
58699	16	42	73	0.6	1160	ND	30
58700	17	304	256	12.0	815	60	100
61451	24	825	1725	17.0	5800	60	130
61452	3	10	139	0.2	1540	ND	20
61453	84	25	47	0.8	1160	665	20
61454	85	12	53	0.3	1280	745	15
61455	76	1080	470	17.0	3200	>10000	85
61456	4	7	47	0.2	380	40	20

Area C
Trench

SAMPLE NUMBER	Cu PPM	Pb PPM	Zn PPM	As PPM	Mn PPM	Hg PPB	Au PPB
61457	580	3560	8630	15.0	3800	3500	>10000
61458	33	31	59	10.0	165	2750	170
61459	45	21	23	14.0	140	1700	250
61460	11	12	55	0.4	520	70	10
61461	25	213	144	9.4	260	500	80
61462	3	7	217	0.3	2500	40	ND
61463	555	13	8	14.0	135	2200	280
61464	6	29	11	0.6	650	45	ND
61465	32	26	28	11.0	350	450	85
61466	16	159	78	> 50.0	175	530	450
61467	5	7	4	1.0	165	510	1160
61468	3	8	3	0.2	40	45	ND
61469	42	234	193	34.0	4300	40	15
61470	81	460	335	16.0	4200	245	5
61471	90	26	5	38.0	185	1600	515
61472	27	61	760	1.7	2000	25	210
61473	88	397	163	> 50.0	520	190	>10000
70581	9	19	12	2.6	.59	60	265
70582	3	15	23	0.6	160	120	20
70576	35	1080	4240	6.4	4000	405	40
70577	31	273	231	9.7	675	100	20
70578	24	12	181	1.4	4200	80	10
70579	42	340	221	6.9	1880	100	40
70580	66	2350	1990	47.0	4000	2400	65
70585	2	14	366	0.4	9200	25	55
70586	5	32	425	0.6	5900	20	30
70587	51	750	1015	7.0	1800	155	420
70588	6	63	640	1.6	2550	20	45
70589	2	36	335	1.0	3900	20	25
70590	2200	7650	14700	25.0	3200	600	>10000
70594	360	1880	67	22.0	495	30	420
71101	16	39	132	0.9	2000	35	
71102	92	19	51	0.6	1040	40	
71103	35	31	47	9.6	675	50	
71104	19	9	314	0.2	3200	20	
71105	190	364	3320	4.8	3000	150	
71106	350	292	3650	6.6	3600	170	
71107	64	3080	2950	1.6	4700	80	
71108	27	465	1160	1.5	4300	50	
71109	35	204	465	0.8	1920	40	
71110	130	450	775	3.2	2100	20	
71111	1240	>10000	11490	17.0	1580	160	
71112	3500	>10000	>20000	44.0	3600	180	
71113	26	138	377	0.5	1600	20	
71114	4600	>10000	12000	48.0	1110	320	
71115	22	151	142	0.4	1560	20	

See Assay Results for Au

SAMPLE NUMBER	Cu PPM	Pb PPM	Zn PPM	As PPM	Mn PPM	Hg PPB	Au PPB
71116	19	128	192	0.7	460	20	
71117	3	26	90	0.2	810	20	
71118	330	>10000	8090	14.0	2500	140	
71119	6	147	223	0.5	3300	20	
71120	136	3340	2730	2.4	3300	50	
71121	64	920	580	> 50.0	2200	20	
71122	5600	172	2320	8.0	3100	20	
71123	2200	6290	109	12.0	95	180	
71124	35	61	215	0.2	980	220	
71125	30	249	27	7.6	180	20	
71126	15	187	85	6.1	730	60	
71127	42	187	945	3.8	1800	50	
71128	60	600	182	34.0	590	90	
71129	32	1345	164	12.0	142	90	
71130	104	1565	770	6.5	1310	45	
71131	108	1730	780	> 50.0	6800	110	
71132	105	580	131	> 50.0	940	80	
71133	11	184	455	1.2	2200	30	25
71134	4	70	510	0.6	4600	20	ND
71135	13	10	163	2.0	1480	25	15
71136	4	2	14	0.4	660	20	ND
71137	20	397	21	> 50.0	128	130	7690
71138	8	7	9	2.9	470	20	195
71139	240	695	135	> 50.0	480	65	1130
71140	47	163	57	> 50.0	770	30	3355
71141	27	120	27	> 50.0	165	40	4650
71142	43	225	134	46.0	1100	205	80
71143	32	18	7	4.6	290	20	85
71144	58	455	153	23.0	595	90	365
71145	4	5	1	0.5	40	10	10
71146	21	895	890	40.0	1820	310	8180
71147	428	435	1185	> 50.0	4200	470	3250
71148	42	246	264	> 50.0	8200	40	850
71149	19	16	31	1.5	2700	20	20
71150	68	137	153	50.0	4400	40	50
71151	34	19	52	12.0	3500	15	75
71152	18	9	96	1.2	1720	20	60
71153	21	122	289	28.0	12600	40	195
71154	15	43	341	5.5	2600	25	50
71155	27	78	195	14.0	3600	20	ND
71156	45	147	197	20.0	5700	20	ND
71157	3	6	31	0.2	1945	10	ND

See Assay Results for Au

SAMPLE NUMBER	Cu PPM	Pb PPM	Zn PPM	As PPM	Mn PPM	Hg PPB	Au PPB
71158	20	2	42	2.2	2200	25	ND
71159	1260	11	177	> 50.0	1330	55	5
71160	9400	12	99	26.0	1840	20	ND
71161	200	1850	1380	4.8	2200	40	3150
71162	38	61	650	0.5	2700	10	ND
71163	26	106	137	0.4	780	20	40
71164	161	800	180	4.7	1040	55	7750
71165	13	8	12	0.4	149	20	ND
71166	13	23	4	3.6	264	20	220
71167	9	2	2	0.4	195	10	15
71168	17	10	124	0.3	980	20	15

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Pb PPM	Zn PPM	As PPM	Au PPB
DP-04-81-088A		35	8	19	0.2	50
DP-04-81-088B		70	5	10	0.2	35
DP-04-81-088C		2	4	4	0.2	5
DP-04-81-088D		2	11	3	0.2	ND
DP-04-81-088E		4	255	12	0.2	ND
DP-04-81-088F		2	5	3	0.2	10
DP-04-81-088G		5	6	6	0.2	20
DP-04-81-089A		2	ND	9	0.2	45
DP-04-81-090A		15	2	9	0.3	55
DP-04-81-090B		7	18	37	0.2	35
DP-04-81-090C		15	6	5	0.2	15
DP-04-81-090D		20	6	7	0.2	40
DP-04-81-091A		145	178	1735	0.8	15
DP-04-81-092A		49	ND	63	0.2	5
DP-04-81-092B		64	3	55	0.2	10
DP-04-81-092C		8	5	8	0.2	10
DP-04-81-092D		20	33	149	0.2	10
DP-04-81-093		50	33	1240	0.2	25
DP-04-81-094A		23	2	126	0.2	ND
DP-04-81-094B		15	29	115	0.2	25
DP-04-81-095A		10	231	167	0.7	ND
DP-04-81-095C		19	142	71	0.7	ND
DP-04-81-095D		8	42	44	0.4	5
DP-04-81-095E		10	8	69	0.2	ND
DP-04-81-096A		18	87	560	1.5	5
DP-04-81-96B		6	25	85	0.2	25
DP-04-81-96C		5	29	55	0.2	15

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Pb PPM	Zn PPM	As PPM	Au PPB		
DP-04-81-102A		41	16	90	0.2	ND		
DP-04-81-102B		14	ND	21	0.2	ND		
DP-04-81-102C		5	ND	5	0.2	10		
DP-04-81-103A		13	6	65	0.2	ND		
DP-04-81-104A		9	2	1	0.2	ND		
DP-04-81-105A		16	40	110	0.2	ND		
DP-04-81-105B		28	ND	172	0.2	ND		
DP-04-81-106		5	3	35	0.6	ND		
SAMPLE NUMBER		Cu PPM	Pb PPM	Zn PPM	As PPM	Mn PPM	Hg PPB	Au PPB
70991		19	16	95	1.8	3200	30	15
70996		35	750	1700	48.0	14800	280	115

P.O. Box 10000
PAGE No. 1

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

BONDAR-CLEGG & COMPANY LTD.

REPORT NO. A21 - 1899

DATE: November 23, 1981

Samples submitted: November 12, 1981
Results completed: November 23, 1981

PROJECT: 04

CERTIFICATE OF ASSAY

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

MARKED SEE OUR GEOCHEM REPORT # 121 - 2751	GOLD		SILVER		Percent						
	Ounces per Ton	Grams per Metric Ton	Ounces per Ton	Grams per Metric Ton							
53904	-		4.05								
53908	-		3.00								
53916	-		3.60								
53918	0.31		25.90								
53925	-		3.30								
53927	-		5.97								
53930	-		2.01								
53941	-		5.10								
53944	-		1.71								
53947	-		1.86								
58639	-		2.76								
58640	-		14.40								
58641	-		11.55								
58642	-		6.90								
58643	-		3.60								
58645	-		2.49								
58653	-		2.17								
cc Mr. Ian Sutherland											

NOTE:

Rejects retained three weeks
Pulps retained three months
unless otherwise arranged.


..... Registered Assayer, Province of British Columbia

To: Texuguan Inc.

REPORT NO. A21 - 1729

PAGE No. 1

DATE: October 23, 1981

701 - 1281 West Georgia Street
Vancouver, B.C. V6C 3J7Samples submitted: October 15, 1981
Results completed: October 23, 1981

BONDAR-CLEGG & COMPANY LTD.

CERTIFICATE OF ASSAY

PROJECT: 04

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

MARKED	GOLD		SILVER		Percent						
	Ounces per Ton	Grams per Metric Ton	Ounces per Ton	Grams per Metric Ton							
SEE OUR GEOCHEM REPORT # 121 - 2751											
58636	0.62										
61455	0.44										
61457	0.41										
cc Mr. Ian Sutherland											

NOTE:

Rejects retained three weeks
Pulps refined three months
unless otherwise arranged.

R. H. Rogers
Registered Assayer, Province of British Columbia

To: Texasgulf, Inc.
PAGE No. 1

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

BONDAR-CLEGG & COMPANY LTD.

CERTIFICATE OF ASSAY

REPORT NO. A21 - 1767
DATE: October 30, 1981

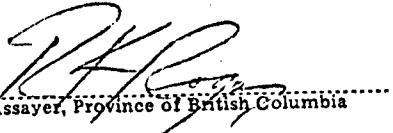
Samples submitted: October 21, 1981
Results completed: October 30, 1981
PROJECT: 04

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

MARKED	GOLD		SILVER		Percent						
	Ounces per Ton	Grams per Metric Ton	Ounces per Ton	Grams per Metric Ton							
SEE OUR GEOCHEM REPORT # 121 - 2881											
61473	0.42		6.06								
cc Mr. I. Sutherland											

NOTE:

Rejects retained three weeks
Pulps retained three months
unless otherwise arranged.


..... Registered Assayer, Province of British Columbia

To: Tennalif, Ltd.

PAGE No. 1

701 - 1281 West Georgia Street
Vancouver, B.C. V6C 3J7

BONDAR-CLEGG & COMPANY LTD.

REPORT NO. A21 - 1761

DATE: October 30, 1981

CERTIFICATE OF ASSAY

Sample submitted: October 21, 1981

Result completed: October 30, 1981

PROJECT: 04

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

MARKED	GOLD		SILVER		Percent						
	Ounces per Ton	Grams per Metric Ton	Ounces per Ton	Grams per Metric Ton							
SEE OUR GEOCHEM REPORT # 121 - 3111											
70590	0.35										

cc Mr. Ian Sutherland

NOTE:

Rejects retained three weeks
Pulps lined three months
unless otherwise arranged.

..... Registered Assayer, Province of British Columbia



BONDAR-CLEGG & COMPANY LTD.

130 PEMBERTON AVE., NORTH VANCOUVER, B.C. V7P 2R5 PHONE: 985-0681 TELEX: 04-352667

CERTIFICATE OF ASSAY

TO Texasgulf Inc
701 - 1281 West Georgia Street
VANCOUVER, B.C. V6E 3J7

A21 - 1283

October 9, 1981

PROJECT: 04

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

MARKED	RECEIVED	MARKED	RECEIVED	MARKED	Percent
	Au oz/ton		Au oz/ton		
71101	<0.002	71123	0.006		
71102	<0.002	71124	<0.002		
71103	<0.002	71125	0.022		
71104	<0.002	71126	0.002		
71105	0.004	71127	<0.002		
71106	0.005	71128	0.025		
71107	0.002	71129	0.049		
71108	0.004	71130	0.096		
71109	0.005	71131	0.007		
71110	0.002	71132	0.003		
71111	0.46				
71112	0.020				
71113	<0.002	cc Mr. Ian Sutherland			
71114	0.21				
71115	<0.002				
71116	0.002				
71117	<0.002				
71118	0.005				
71119	0.019				
71120	0.004				
71121	0.058				
71122	<0.002				

NOTE

Specimens retained two weeks
Puls retained three months
unless otherwise arranged.


Registered Assayer, Province of British Columbia

To: Reid 1
PAGE No.

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

EONEAR-CLEGG & COMPANY LTD

CERTIFICATE OF ASSAY

REPORT NO. A21 - 1709

DATE: October 21, 1981

Samples submitted: October 1, 1981
Results completed: October 21, 1981

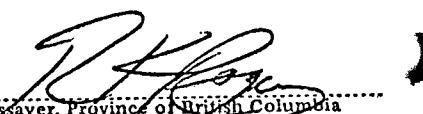
PROJECT: 04

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

MARKED	GOLD		SILVER		Pb	Zn						
	Ounces per Ton	Grams per Metric Ton	Ounces per Ton	Grams per Metric Ton	Percent							
SEE OUR GEOCHEM REPORT # 121 - 2878					1.20	-						
71111			-		2.17	3.15						
71112			-		2.53	-						
71114			-		1.30	-						
71118			-		1.84	-						
71121					1.74	-						
71131					4.35	-						
71132												
cc Mr. I Sutherland												

NOTE:

Rejects retained three weeks
Pulps retained three months
unless otherwise arranged.


R. H. Rosen
Registered Assayer, Province of British Columbia

To: Tenegulf, Inc.PAGE No. 1
701 - 1281 West Georgia Street
Vancouver, B.C. V6E 3J7REPORT NO. A21 - 1708

BONDAR-CLEGG & COMPANY LTD.

DATE: October 21, 1981

CERTIFICATE OF ASSAY

Samples submitted: October 8, 1981
Results completed: October 21, 1981

PROJECT: 04

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


MARKED	GOLD		SILVER		Percent						
	Ounces per Ton	Grams per Metric Ton	Ounces per Ton	Grams per Metric Ton							
SEE OUR GEOCHEM REPORT # 121 - 2983											
71137			6.15								
71139			7.45								
71140			3.39								
71141			2.33								
71147			1.98								
71148			2.30								
71159			7.26								

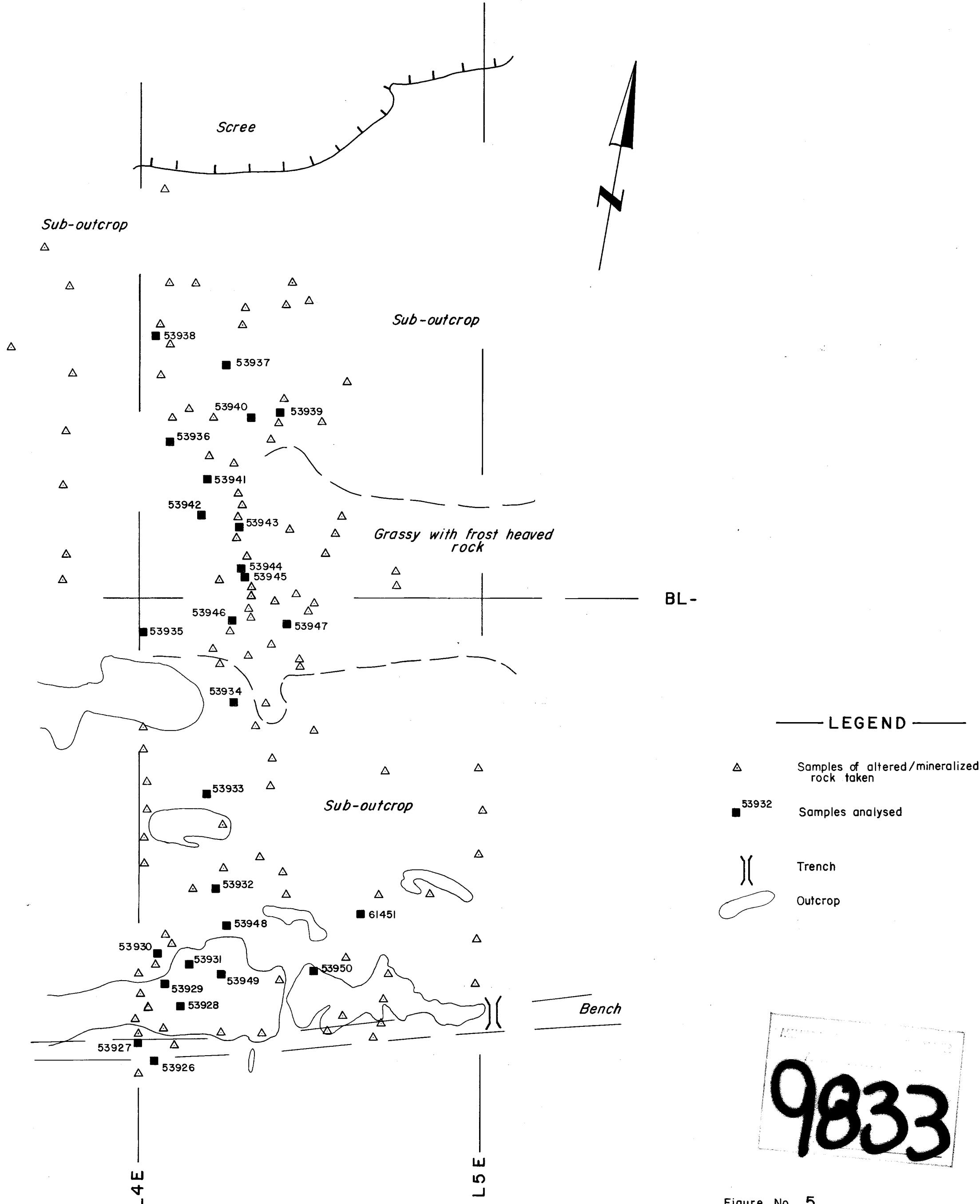
NOTE:

Rejects retained three weeks
Pulps retained three months
unless otherwise arranged.




Registered Assayer, Province of British Columbia



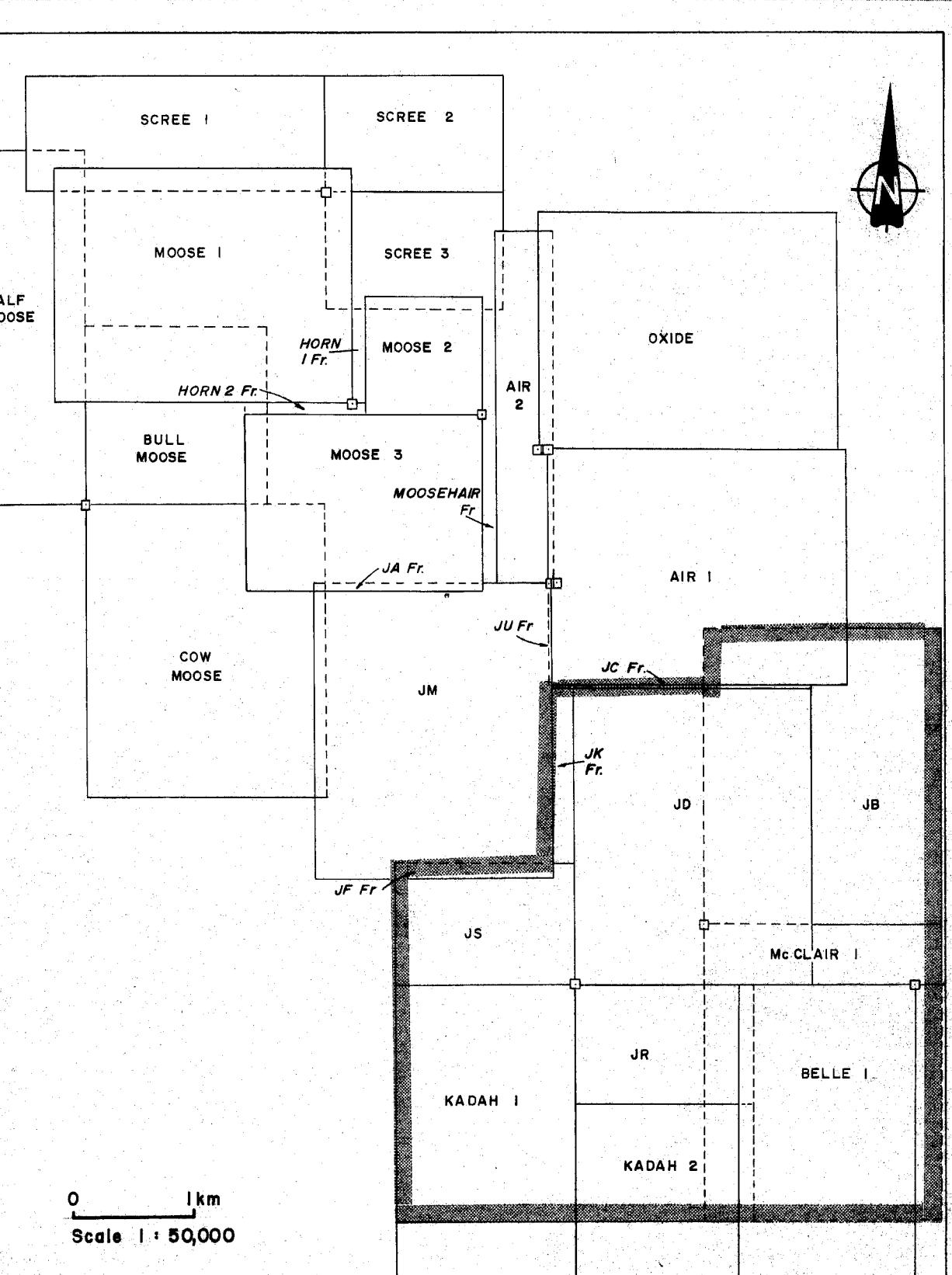



0 25 50 metres
SCALE 1 : 1,250

Texasgulf Inc.		
JD-81		
DETAILED ROCK SAMPLING		
JD-W GRID		
WORK BY	DRAWN BY	DATE
I.G.S.	E.R.	November 27, 1981







LEGEND

SYMBOL

- Soil Samples
- () Rock Samples
- Not detected
- △ Silt Samples

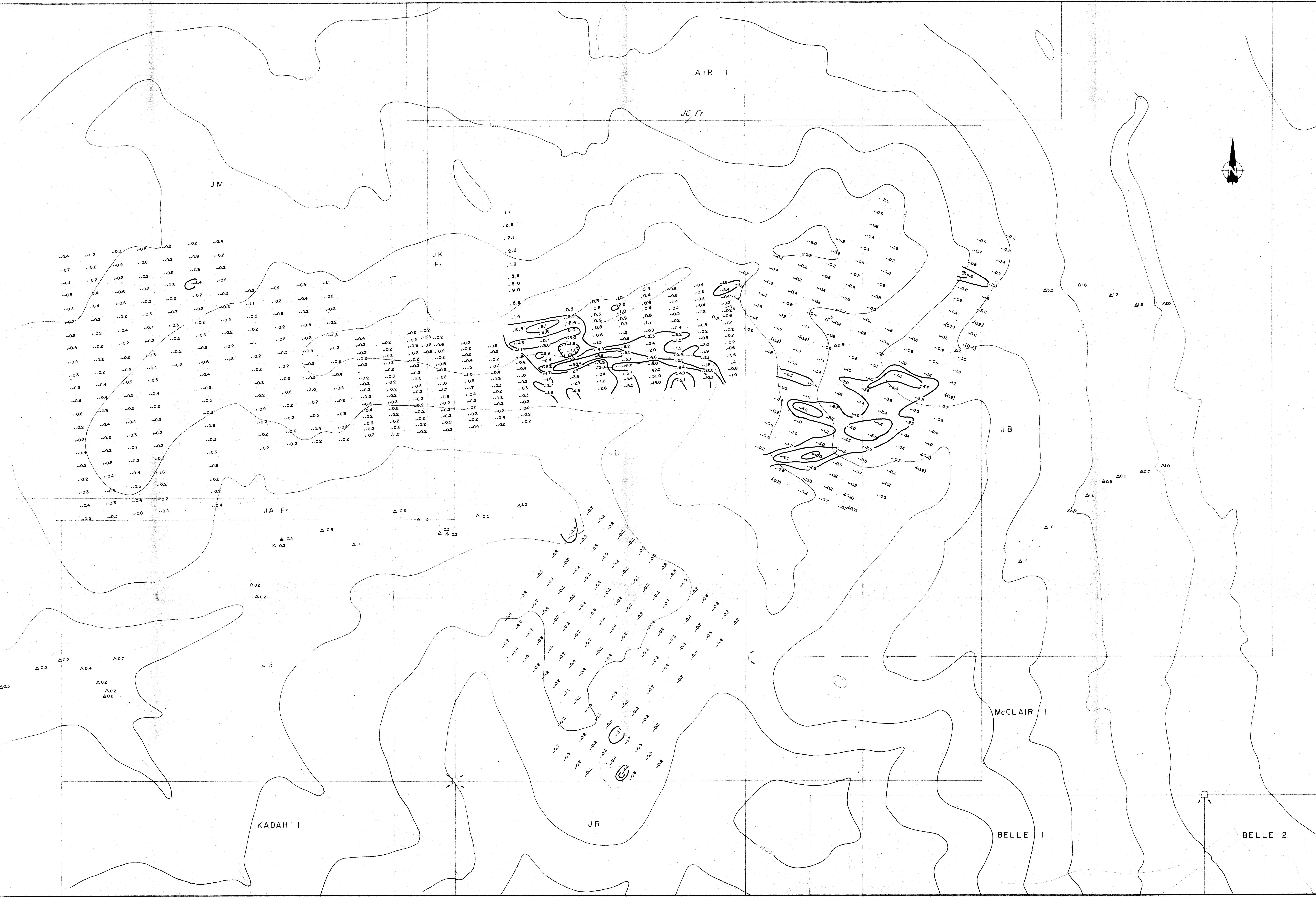
CONTOUR INTERVAL

- - 100 ppb
- 100 - 200 ppb
- 200 - 400 ppb
- 400 - 800 ppb
- +800 ppb

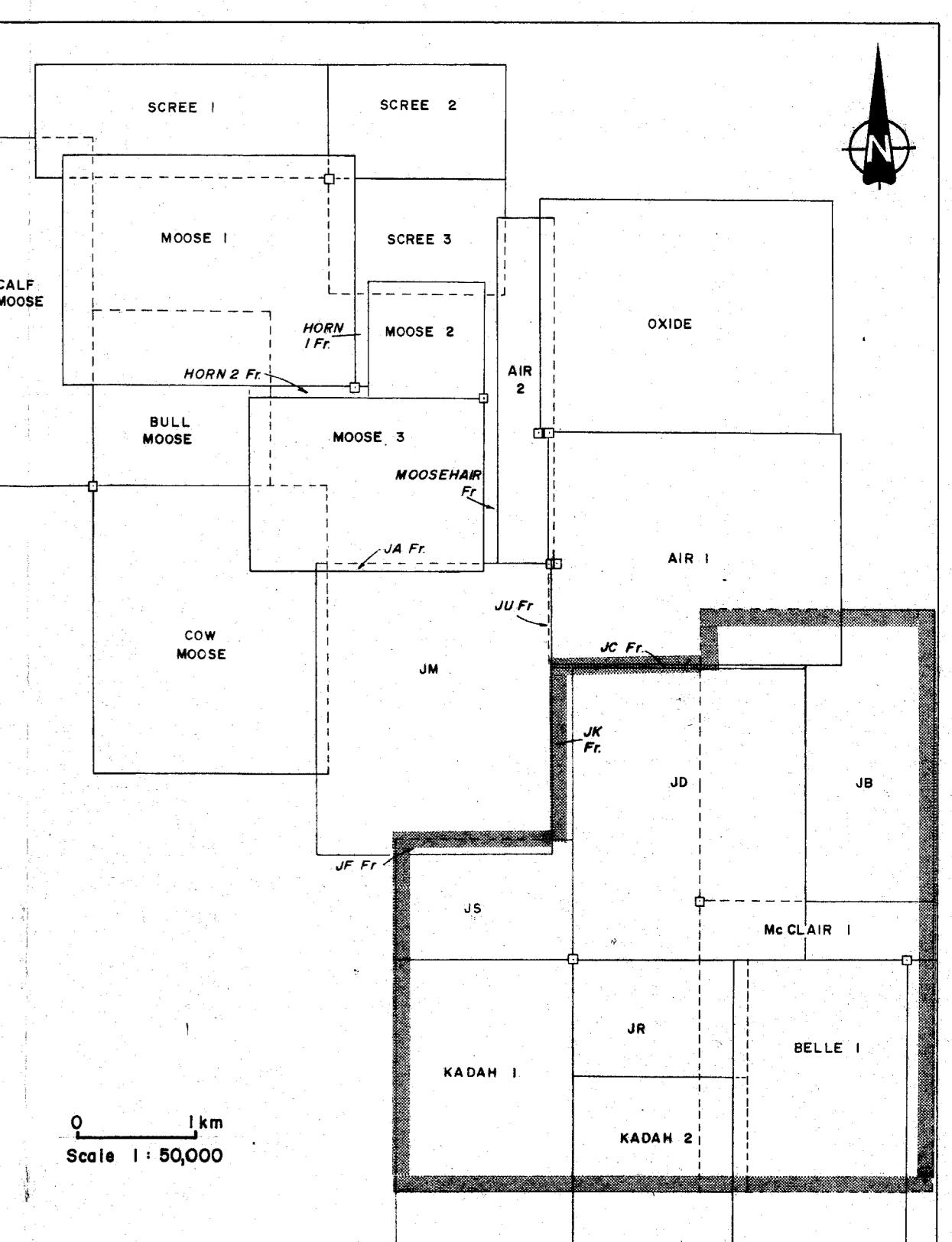

9833

FIG. NO. 7a

Texasgulf Inc.			
JD-81 & MOOSE-81 GEOCHEMICAL RESULTS Au in Soil (ppb)			
WORK BY	DRAWN BY	DATE	DRW.G NO.
IS	J.P.P	DEC-1-81	
100 0 100 200 300 400			SCALE IN METRES 1:5,000







LEGEND

SYMBOL

- Soil Samples
- () Rock Samples
- △ Silt Samples

CONTOUR INTERVAL


- 0 - 100 ppm
- 100 - 200 ppm
- 200 - 400 ppm
- + 400 ppm

(- Less than detection limits)

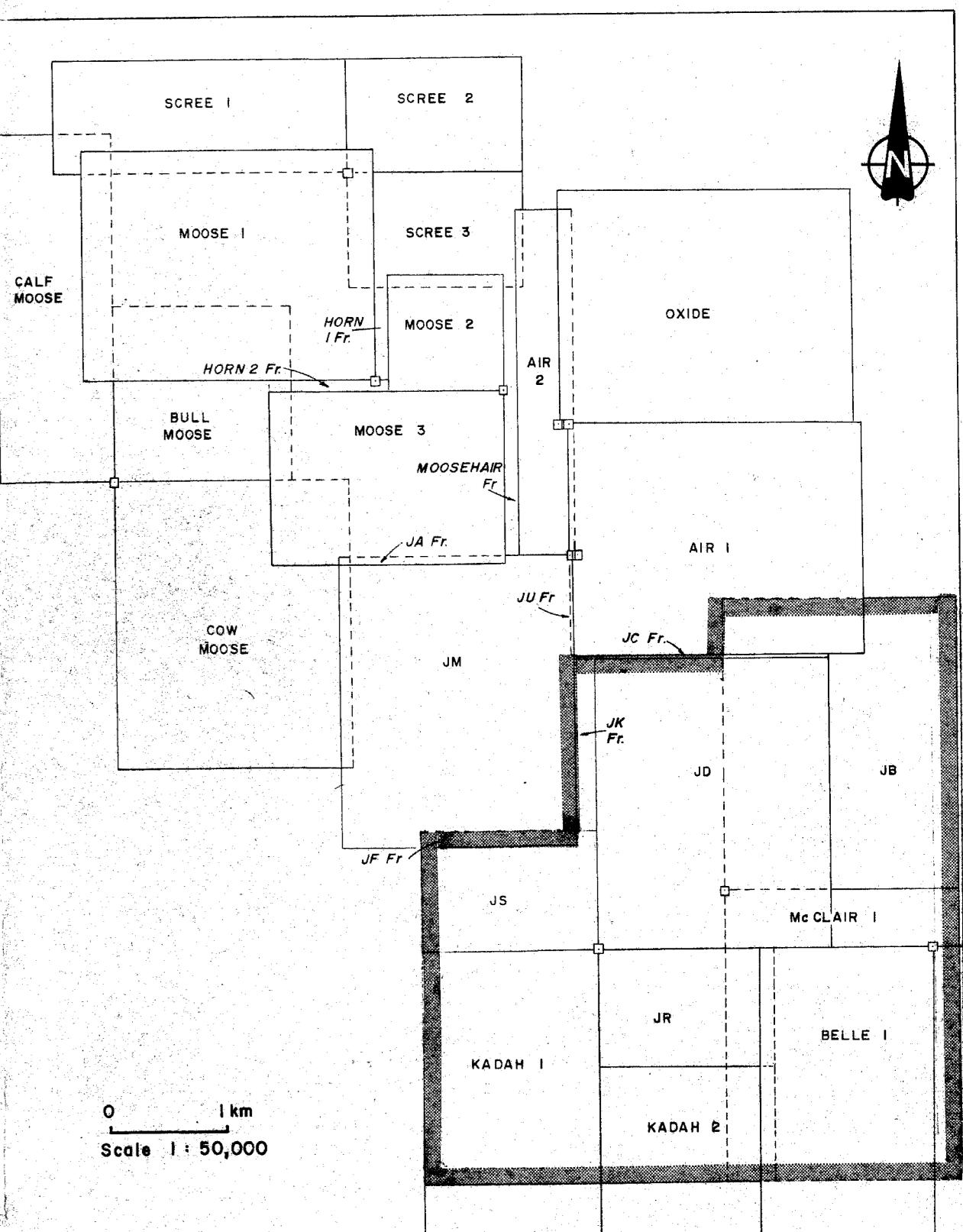
FIG. NO. 7d

9833

Texasgulf Inc.			
JD-8I & MOOSE-8I GEOCHEMICAL RESULTS Pb in Soil (ppm)			
WORK BY	DRAWN BY	DATE	DRW.G NO.
LS.	J.P.P.	DEC-1-81	
100	0	100	200 300 400
SCALE IN METRES 1 : 5,000			







LEGEND

- SYMBOL**
- Soil Samples
 - () Rock Samples
 - △ Silt Samples

CONTOUR INTERVAL

- 0 - 50 ppm
- 50 - 100 ppm
- 100 - 200 ppm
- 200 - 400 ppm
- * 400 ppm

Texasgulf Inc.

JD-81 & MOOSE-81 GEOCHEMICAL RESULTS

Hg in Soil (ppb)

WORK BY	DRAWN BY	DATE	DRW.G NO.
I.S.	J.P.P.	DEC-1-81	

100 0 100 200 300 400

SCALE IN METRES 1 : 5,000

923