

REPORT ON  
GEOCHEMICAL SURVEYS

by  
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on the  
Miller 1 and Miller 2 Mineral Claims

situated 9.3 km north-northeast of Skidegate Mission,

Queen Charlotte Islands

in the

SKEENA MINING DIVISION

Lat. 53°20'N Long. 131°59'W

NTS 103G/5W



owned by  
TEXASGULF CANADA LTD.  
now known as  
KIDD CREEK MINES LTD.

work by  
TEXASGULF INC.

March 1982

Vancouver, B.C.

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## INTRODUCTION

### Location, Access and Terrain

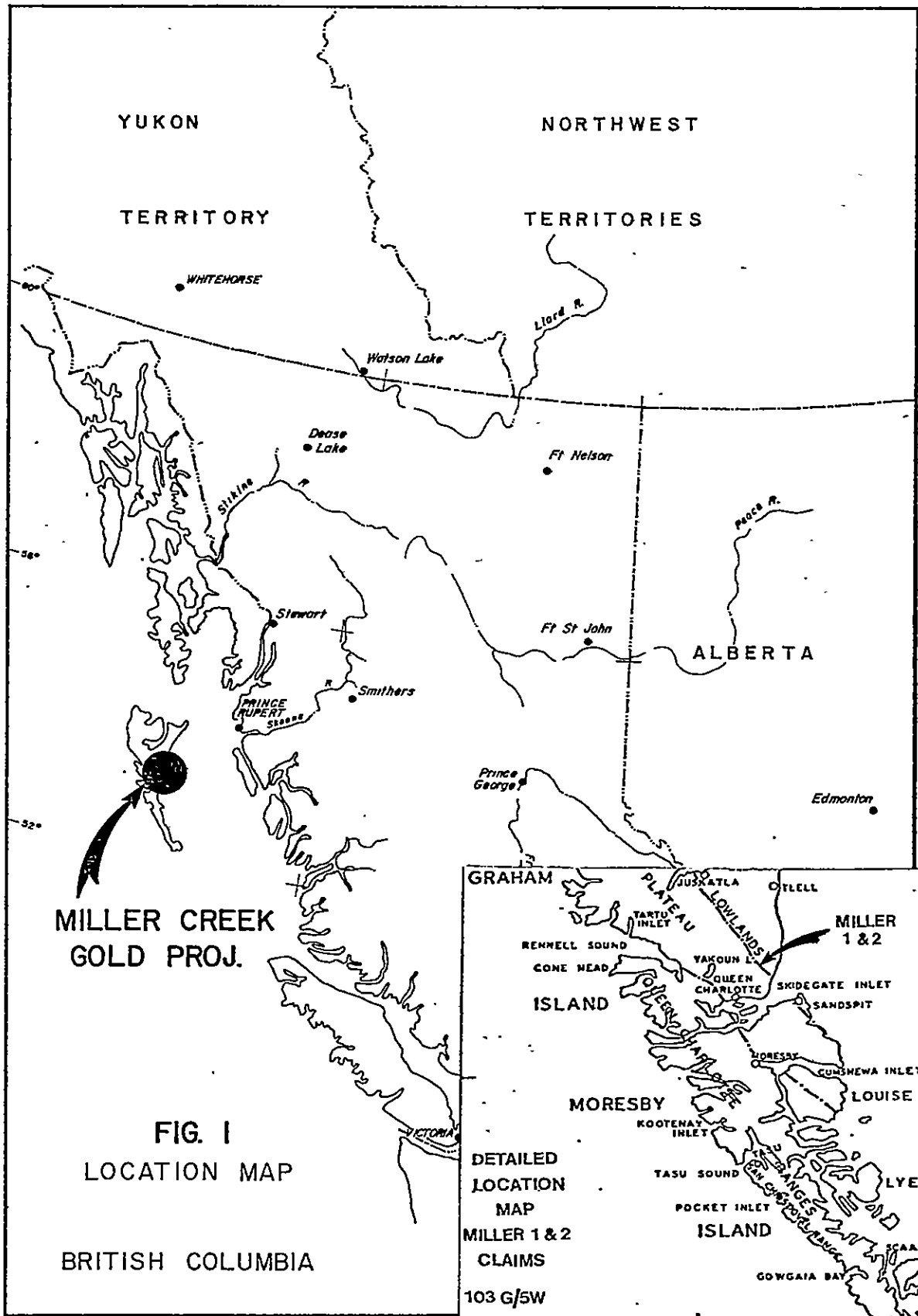
The Miller 1 and 2 claims are located 9.3 km north-northeast of Skidegate Mission on southeastern Graham Island, Queen Charlotte Islands (Figure 1 and 2). Access to the property is by helicopter from the town of Sandspit or by truck from Queen Charlotte City along the eastern coastal road to Dead Tree Point and hence, 2.5 km west along logging roads and an old trail.

The terrain is generally flat except for a slight rise along the trace of the Sandspit Fault which marks the physiographic boundary between the Queen Charlotte Lowlands (east) and the Skidegate Plateau (west). The Tlell River, flowing through the northwest corner of the Miller 2 claim, forms a steep gorge some 30 metres deep. Most of the claim area is poorly drained and marked by areas of swamp, muskeg, scrubby cypress, spruce and poplar. The two main easterly flowing creeks and Tlell River have well drained slopes which support the growth of large cedar and spruce.

### Property History and Definition

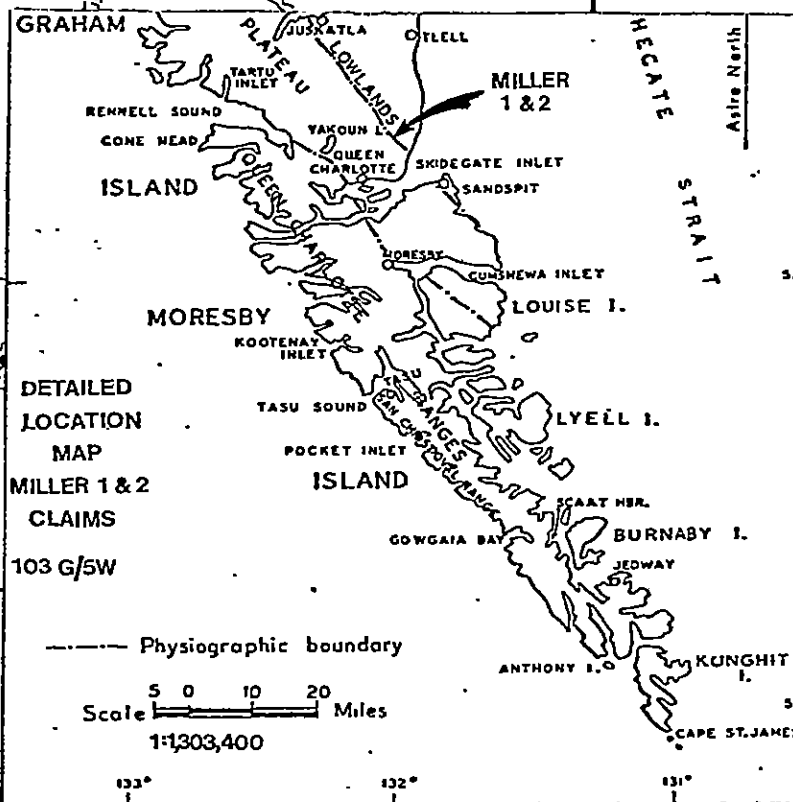
The claim area has no history of mineral exploration activity. Local copper and molybdenum mineralization is found in an altered and fractured granodiorite exposed along Miller Creek, 5 km to the south. Consolidated Cinola's gold deposit lies some 25 km northwest along the projection of the Sandspit Fault.

On March 29, 1980 the Miller 1 claim, comprising 20 MGS units, was staked to cover a single anomalous gold value obtained by the re-analysis of silt samples collected during a regional exploration program in 1970. The Miller 1 claim was recorded on April 22, 1980 (Record No. 2209). The Miller 2 claim (15 MGS units) was staked on April 7 and 8, 1981, to cover an area immediately northwest of the Miller 1 claim.



**FIG. 1**  
LOCATION MAP

BRITISH COLUMBIA



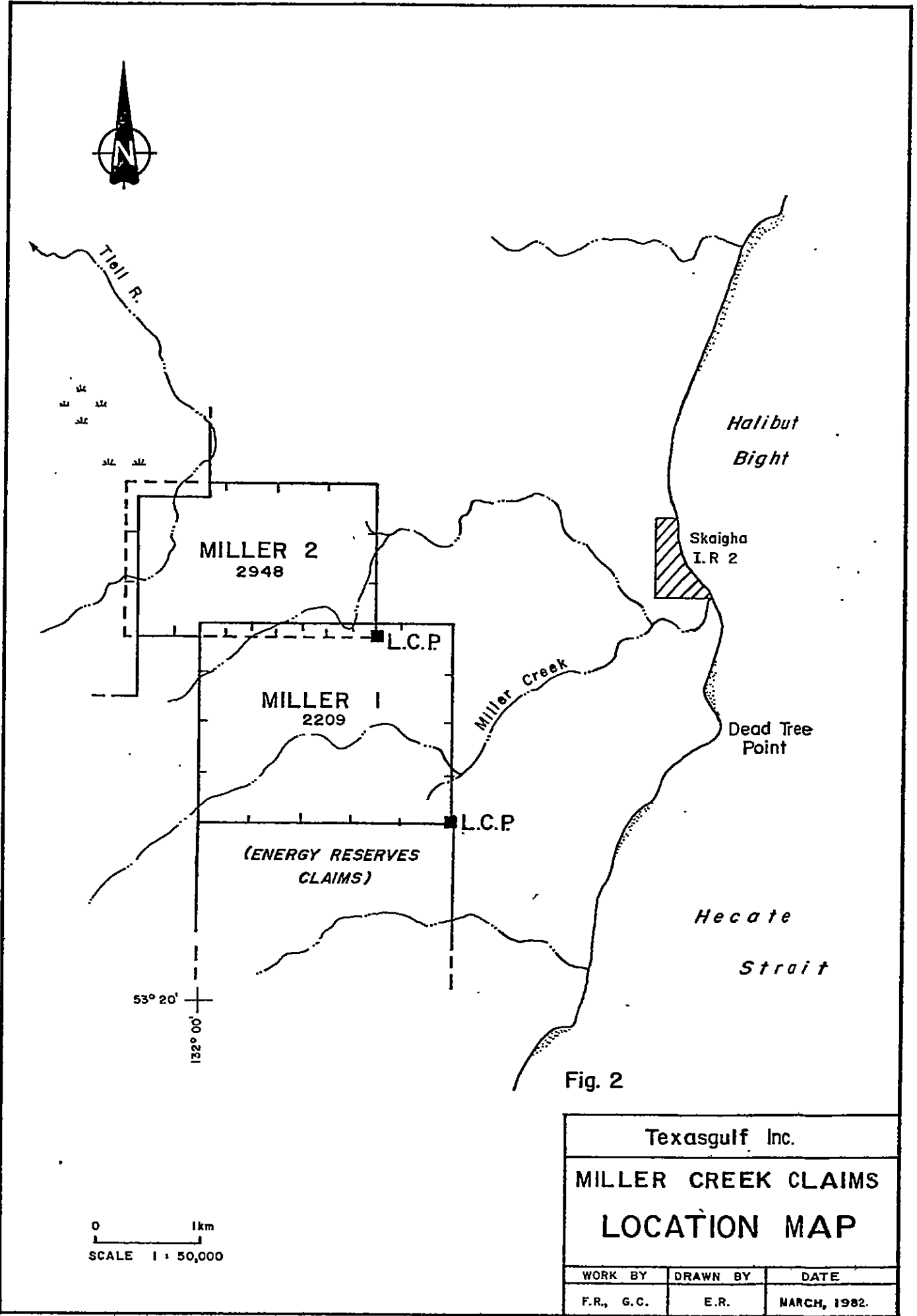


Fig. 2

Texasgulf Inc.		
<b>MILLER CREEK CLAIMS LOCATION MAP</b>		
WORK BY	DRAWN BY	DATE
F.R., G.C.	E.R.	MARCH, 1982.

The Miller 2 claim was recorded on April 15, 1981 (Record No. 2948).

The work described in this report was undertaken by Texasgulf Inc. on behalf of its wholly owned subsidiary Texasgulf Canada Ltd. Ownership of these claims has recently been transferred to its successor, Kidd Creek Mines Ltd.

#### Summary of Work Completed in 1981

A total of 42 man-days of soil sampling, silt sampling, rock sampling and limited geological mapping were carried out on the Miller claims. G.N. Cooper, assisted by L. Haering, collected 30 silt samples and 15 rock samples. F. Renaudat, G. Nalivko, A. Costigan and L. Haering collected 367 soil samples. Sample locations were plotted on 10 x enlargements of 1:50,000 topographic maps and 1:5,000 air photo enlargements. The sample locations and corresponding metal values are shown on 1:5,000 base maps (Figures 3 to 6). Results from the 1980 program are also plotted on these maps.

#### Work Distribution

All soil, silt and rock samples collected for geochemical analyses were taken from the Miller 1 and Miller 2 claims.

#### GEOLOGY (DeLancey, 1981)

#### Regional Setting

Regional mapping by Sutherland Brown, B.C. Dept. of Mines Bulletin #54, indicates that the Miller claims straddle the northwest trending Sandspit Fault which marks the contact between a granodiorite stock (Cretaceous) and Yahoun Formation andesites (Jurassic) to the southwest and poorly consolidated sediments of the Skonun Formation (Late Tertiary) to the northeast. Sutherland Brown classifies the granodiorite as a post-tectonic intrusive; such intrusives appear to have been emplaced along major fault zones. The Sandspit Fault dips

about 65° eastward; the eastern block has been dropped many thousands of feet relative to the western block. The fault appears to have been active from Cretaceous to Recent times.

#### Property Geology

Because of the paucity of outcrop, little is known about the geology of the property. Several poorly exposed outcrops of altered granodiorite and andesite are found along the major creek. No outcrop was found east of the presumed trace of the Sandspit Fault.

#### GEOCHEMISTRY

##### General Statement

In all, 367 soil samples, 30 silt samples and 15 rock samples were collected on the Miller claims in the spring of 1981. Rock sampling was limited because of the paucity of outcrop. Silt samples were taken approximately every 200 to 400 metres along the major drainages. Soil samples were taken every 50 metres on lines 100 metres apart, running east-west from a baseline trending north-northwest (Figure 3).

Rock samples were pyritic granodiorite and epidote-carbonate altered andesite; both are cut by local quartz veins. Silt samples consisted of silt- to gravel-sized sediment. Where possible, soil samples were obtained from the B horizon, however due to the swampy terrain, large amounts of organic material were incorporated in many samples. The depth of the soil samples ranges from 0.1 m in well drained soil to over 1.2 m in swamps.

The samples were analysed by Chemex Labs. of North Vancouver. A total of 198 soil samples were analysed for Au, Hg and As; 169 soil samples were analysed for Au and As; 30 silt samples were analysed for Au and As; 15 rock samples were analysed for Au, Hg and As.



### Analytical Technique

Silt samples were sieved to a -80 mesh fraction. Where insufficient fines were present, the -35 mesh fraction was pulverized and homogenized in a ring grinder to approximately -100 mesh size fraction for analysis. The following extraction and analytical techniques were used:

<u>Element</u>	<u>Method of Extraction</u>	<u>Method of Analysis</u>
As	Perchloric nitric acid digestion	Standard Hydroxide
Hg	Nitric acid digestion	Atomic Absorption
Au	Fire Assay pre-concentration	Atomic Absorption

### Results

The results are presented in table form (Appendix A) and are plotted in Figures 3 to 6. Using standard formulas after Krumbein and Graybill (1965), the mean and standard deviation for soil samples was calculated (see Appendix B) defining the following statistical levels:

	<u>As ppm</u>	<u>Hg ppb</u>	<u>Au ppb</u>
Threshold	19	174	27
Anomalous	24	213	38

Because of the low population density of silt and rock samples no statistical analysis was performed on these samples.

### Interpretation and Evaluation of Results

The statistical study outlined 8 anomalous gold values and 5 threshold gold values in 367 soil samples. The number of mercury and arsenic anomalous values was also low. Only 1 anomalous gold value was detected in the rock samples. No obvious correlation between the individual metal values was noted. The anomalous soil values do not show any particular trend or grouping and no relationship is apparent to the underlying geology.

A thick cover of glacial till and outwash deposits covers the property, particularly on the eastern, downthrown side of the Sandspit Fault. The area is poorly drained; a large portion of the area is covered by swamp. Basic soil sampling does not appear to be a reliable exploration technique for the evaluation of the mineral potential of this area.

*P.R. Y. Young*  
*April 1, 1982*

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APPENDIX A  
TABLE OF GEOCHEMICAL RESULTS

## APPENDIX A

MILLER CR.

SOIL

Sample description	Prep code	As ppm	Hg ppm	AU-FA+AA ppm		
94-R1-81	217	10	60	<5	---	---
94-R2-81	217	11	100	40	---	---
94-R3-81	217	11	100	10	---	---
94-R4-81	217	7	50	10	---	---
94-R5-81	217	9	90	<5	---	---
94-R6-81	217	5	110	10	---	---
94-R7-81	217	10	120	10	---	---
94-R8-81	217	9	110	20	---	---
94-R9-81	217	10	130	10	---	---
94-R10-81	217	10	130	10	---	---
94-R11-81	217	11	110	25	---	---
94-R12-81	217	11	190	<5	---	---
94-R13-81	217	5	100	5	---	---
94-R14-81	217	11	150	5	---	---
94-R15-81	217	15	120	10	---	---
94-R16-81	217	15	150	<5	---	---
94-R17-81	217	11	80	<5	---	---
94-R18-81	217	22	190	<5	---	---
94-R19-81	217	11	110	<5	---	---
94-R20-81	217	11	110	<5	---	---
94-R21-81	217	7	80	5	---	---
94-R22-81	217	6	70	5	---	---
94-R23-81	217	9	90	<5	---	---
94-R24-81	217	9	60	10	---	---
94-R25-81	217	11	110	<5	---	---
94-R26-81	217	9	70	<5	---	---
94-R27-81	217	6	60	5	---	---
94-R28-81	217	10	120	5	---	---
94-R29-81	217	14	130	15	---	---
94-R30-81	217	9	140	10	---	---
94-R31-81	217	11	130	<5	---	---
94-R32-81	217	16	110	<5	---	---
94-R33-81	217	11	120	90	---	---
94-R34-81	217	17	70	15	---	---
94-R35-81	217	16	80	10	---	---
94-R36-81	217	9	100	5	---	---
94-R37-81	217	12	160	<5	---	---
94-R38-81	217	11	100	<5	---	---
94-R39-81	217	9	110	5	---	---
94-R40-81	217	11	110	<5	---	---
94-R41-81	217	6	90	<10	---	---
94-R42-81	217	6	140	N.S.S.	---	---
94-R43-81	217	9	60	15	---	---
94-R44-81	217	6	80	10	---	---
94-R45-81	217	11	70	30	---	---
94-R46-81	217	6	40	<5	---	---
94-R47-81	217	6	90	10	---	---
94-R48-81	217	7	80	<5	---	---
94-R49-81	217	5	40	<5	---	---
94-R50-81	217	5	50	5	---	---
94-R51-81	217	11	100	<5	---	---
94-R52-81	217	16	80	<5	---	---
94-R53-81	217	7	90	<5	---	---
94-R54-81	217	11	190	<5	---	---
94-R55-81	217	11	80	30	---	---

Sample description	Prep code	As ppm	Hg ppb	AU-FA+AA ppb		
94-R56-81	217	10	60	15	--	--
94-R57-81	217	7	90	<5	--	--
94-R58-81	217	12	70	<5	--	--
94-R59-81	217	14	100	<5	--	--
94-R60-81	217	12	80	10	--	--
94-R61-81	217	15	150	<5	--	--
94-R62-81	217	6	80	<5	--	--
94-R63-81	217	7	80	<5	--	--
94-R64-81	217	6	70	<5	--	--
94-R65-81	217	5	140	<5	--	--
94-R66-81	217	4	80	<5	--	--
94-R67-81	217	7	90	<5	--	--
94-R68-81	217	6	110	5	--	--
94-R69-81	217	11	90	<5	--	--
94-R70-81	217	12	50	<5	--	--
94-R71-81	217	7	100	<5	--	--
94-R72-81	217	38	50	<5	--	--
94-R73-81	217	12	140	<5	--	--
94-R74-81	217	12	80	<5	--	--
94-R75-81	217	11	100	<5	--	--
94-R76-81	217	11	80	<5	--	--
94-R77-81	217	12	50	5	--	--
94-R78-81	217	11	70	<5	--	--
94-R79-81	217	9	110	10	--	--
94-R80-81	217	7	100	15	--	--
94-R81-81	217	12	200	5	--	--
94-R82-81	217	7	80	15	--	--
94-R83-81	217	6	150	15	--	--
94-R84-81	217	9	40	<5	--	--
94-R85-81	217	43	70	<5	--	--
94-R86-81	217	12	100	<5	--	--
94-R87-81	217	6	80	<5	--	--
94-R88-81	217	5	70	5	--	--
94-R89-81	217	4	30	20	--	--
94-R90-81	217	5	70	5	--	--
94-R91-81	217	10	150	<5	--	--
94-R92-81	217	9	100	<5	--	--
94-R93-81	217	6	60	100	--	--
94-R94-81	217	10	180	<5	--	--
94-R95-81	217	5	110	<5	--	--
94-R96-81	217	16	80	30	--	--
94-R97-81	217	7	90	<5	--	--
94-R98-81	217	7	50	<5	--	--
94-R99-81	217	9	160	<5	--	--
94-R100-81	217	7	90	<5	--	--
94-R101-81	217	7	50	<5	--	--
94-R102-81	217	7	90	<5	--	--
94-R103-81	217	6	90	5	--	--
94-R104-81	217	5	100	<5	--	--
94-R105-81	217	9	110	<5	--	--
94-R106-81	217	6	50	<5	--	--
94-R107-81	217	14	130	5	--	--
94-R108-81	217	4	120	<5	--	--
94-R109-81	217	6	40	<5	--	--
94-R110-81	217	5	50	<5	--	--

Sample description	Prep code	As ppm	Hg ppb	AU-FA+AA ppb		
94-R111-81	217	10	80	<5	---	---
94-R112-81	217	6	50	<5	---	---
94-R113-81	217	7	250	<5	---	---
94-R114-81	217	7	110	<5	---	---
94-R115-81	217	4	80	<5	---	---
94-R116-81	217	10	50	<5	---	---
94-R117-81	217	9	110	<5	---	---
94-R118-81	217	9	100	<5	---	---
94-R119-81	217	10	100	<5	---	---
94-R120-81	217	14	110	<5	---	---
94-R121-81	217	7	270	<5	---	---
94-R122-81	217	5	200	<5	---	---
94-R123-81	217	5	150	<5	---	---
94-R124-81	217	3	100	<5	---	---
94-R125-81	217	15	80	<5	---	---
94-R126-81	217	7	100	<5	---	---
94-R127-81	217	6	120	<5	---	---
94-R128-81	217	11	140	<5	---	---
94-R129-81	217	6	100	<5	---	---
94-R130-81	217	10	50	<5	---	---
94-R131-81	217	9	50	<5	---	---
94-R132-81	217	10	80	<5	---	---
94-R133-81	217	5	50	<5	---	---
94-R134-81	217	6	150	<5	---	---
94-R135-81	217	11	110	<5	---	---
94-R136-81	217	7	90	<5	---	---
94-R137-81	217	9	70	<5	---	---
94-R138-81	217	6	90	<5	---	---
94-R139-81	217	14	100	<5	---	---
94-R140-81	217	14	160	<5	---	---
94-R141-81	217	30	80	<5	---	---
94-R142-81	217	12	110	<5	---	---
94-R143-81	217	11	110	55	---	---
94-R144-81	217	9	100	<5	---	---
94-R145-81	217	6	70	<5	---	---
94-R146-81	217	6	200	<5	---	---
94-R147-81	217	6	120	<5	---	---
94-R148-81	217	69	130	<5	---	---
94-R149-81	217	6	120	<5	---	---
94-R150-81	217	6	90	<5	---	---
94-R151-81	217	9	70	<5	---	---
94-R152-81	217	6	70	<5	---	---
94-R153-81	217	4	110	<5	---	---
94-R154-81	217	4	50	<5	---	---
94-R155-81	217	5	100	<5	---	---
94-R156-81	217	6	90	<5	---	---
94-R157-81	217	6	80	<5	---	---
94-R158-81	217	6	50	<5	---	---
94-R159-81	217	6	50	<5	---	---
94-R160-81	217	7	80	<5	---	---
94-R161-81	217	9	80	<5	---	---
94-R162-81	217	4	120	<5	---	---
94-R163-81	217	6	70	<5	---	---
94-R164-81	217	6	50	10	---	---
94-R165-81	217	5	100	<5	---	---

Sample description	Prep code	As ppm	Hg ppb	AU=FA+AA ppb		
94-R166-81	217	5	60	<5	---	---
94-R167-81	217	3	40	<5	---	---
94-R168-81	217	4	100	<5	---	---
94-R169-81	217	3	50	5	---	---
94-R170-81	217	4	60	<5	---	---
94-R171-81	217	4	90	<5	---	---
94-R172-81	217	5	70	<5	---	---
94-R173-81	217	7	100	<5	---	---
94-R174-81	217	7	80	<5	---	---
94-R175-81	217	7	90	<5	---	---
94-R176-81	217	6	80	<5	---	---
94-R177-81	217	5	50	<5	---	---
94-R178-81	217	5	50	<5	---	---
94-R179-81	217	6	50	<5	---	---
94-R180-81	217	10	210	<5	---	---
94-R181-81	217	7	60	<5	---	---
94-R182-81	217	5	110	<5	---	---
94-R183-81	217	11	60	<5	---	---
94-R184-81	217	5	60	<5	---	---
94-R185-81	217	6	70	<5	---	---
94-R186-81	217	9	70	<5	---	---
94-R187-81	217	6	90	<5	---	---
94-R188-81	217	10	120	<5	---	---
94-R189-81	217	12	60	<5	---	---
94-R190-81	217	7	60	<5	---	---
94-R191-81	217	5	150	<5	---	---
94-R192-81	217	5	80	<5	---	---
94-R193-81	217	7	70	<5	---	---
94-R194-81	217	7	80	<5	---	---
94-R195-81	217	4	90	<5	---	---
94-R196-81	217	3	70	<5	---	---
94-R197-81	217	5	100	<5	---	---
94-R198-81	217	4	80	45	---	---
94-R199-81	201	20	--	15	---	---
94-R200-81	201	14	--	15	---	---
94-R201-81	201	15	--	10	---	---
94-R202-81	201	12	--	15	---	---
94-R203-81	201	10	--	20	---	---
94-R204-81	201	14	--	15	---	---
94-R205-81	203	9	--	10	---	---
94-R206-81	201	11	--	<5	---	---
94-R207-81	201	7	--	5	---	---
94-R208-81	203	16	--	10	---	---
94-R209-81	203	27	--	15	---	---
94-R210-81	203	22	--	10	---	---
94-R211-81	201	19	--	50	---	---
94-R212-81	201	80	--	5	---	---
94-R213-81	201	11	--	15	---	---
94-R214-81	201	12	--	10	---	---
94-R215-81	203	9	--	15	---	---
94-R216-81	201	11	--	10	---	---
94-R217-81	201	11	--	20	---	---
94-R218-81	201	6	--	15	---	---
94-R219-81	201	7	--	5	---	---
94-R220-81	201	11	--	<5	---	---
94-R221-81	201	10	--	<5	---	---
94-R222-81	201	7	--	<5	---	---



Sample description	Prep code	AS ppm	Hg ppb	AU-FA+AA ppb		
94-R223-81	203	7	---	30	---	---
94-R224-81	217	5	---	<5	---	---
94-R225-81	217	7	---	<5	---	---
94-R226-81	217	10	---	<5	---	---
94-R227-81	201	9	---	5	---	---
94-R228-81	203	6	---	<5	---	---
94-R229-81	203	10	---	90	---	---
94-R230-81	203	10	---	<5	---	---
94-R231-81	201	9	---	<5	---	---
94-R232-81	201	9	---	<5	---	---
94-R233-81	201	17	---	<5	---	---
94-R234-81	203	9	---	<5	---	---
94-R235-81	203	9	---	<5	---	---
94-R236-81	201	7	---	<5	---	---
94-R237-81	217	6	---	<5	---	---
94-R238-81	203	9	---	<5	---	---
94-R239-81	201	9	---	<5	---	---
94-R240-81	201	7	---	<5	---	---
94-R241-81	201	11	---	<5	---	---
94-R242-81	201	9	---	10	---	---
94-R243-81	203	10	---	10	---	---
94-R244-81	201	32	---	5	---	---
94-R245-81	203	15	---	<20	---	---
94-R246-81	217	10	---	10	---	---
94-R247-81	201	17	---	15	---	---
94-R248-81	201	10	---	10	---	---
94-R249-81	201	7	---	10	---	---
94-R250-81	201	9	---	<5	---	---
94-R251-81	203	9	---	5	---	---
94-R252-81	201	17	---	10	---	---
94-R253-81	201	7	---	15	---	---
94-R254-81	201	14	---	<5	---	---
94-R255-81	201	7	---	5	---	---
94-R256-81	201	6	---	10	---	---
94-R257-81	201	11	---	15	---	---
94-R258-81	201	17	---	15	---	---
94-R259-81	201	6	---	10	---	---
94-R260-81	203	5	---	10	---	---
94-R261-81	201	10	---	15	---	---
94-R262-81	203	9	---	<5	---	---
94-R263-81	217	10	---	5	---	---
94-R264-81	217	6	---	<5	---	---
94-R265-81	201	6	---	<5	---	---
94-R266-81	203	11	---	<5	---	---
94-R267-81	217	5	---	<5	---	---
94-R268-81	203	5	---	<5	---	---
94-R269-81	201	6	---	<5	---	---
94-R270-81	217	10	---	<5	---	---
94-R271-81	203	6	---	310	---	---
94-R272-81	201	11	---	20	---	---
94-R273-81	201	22	---	<5	---	---
94-R274-81	201	11	---	<5	---	---
94-R275-81	201	11	---	<5	---	---
94-R276-81	203	10	---	<5	---	---
94-R277-81	201	11	---	<5	---	---

Sample description	Prep code	AS ppm	Hg ppb	AU-FA+AA ppb		
94-R278-81	217	4	---	10	---	---
94-R279-81	217	5	---	<5	---	---
94-R280-81	217	11	---	<5	---	---
94-R281-81	217	6	---	<5	---	---
94-R282-81	201	10	---	<5	---	---
94-R283-81	201	11	---	<5	---	---
94-R284-81	217	10	---	<5	---	---
94-R285-81	201	6	---	<5	---	---
94-R286-81	201	11	---	<5	---	---
94-R287-81	201	10	---	<5	---	---
94-R288-81	217	11	---	<5	---	---
94-R289-81	201	12	---	<5	---	---
94-R290-81	201	12	---	<5	---	---
94-R291-81	201	9	---	<5	---	---
94-R292-81	201	6	---	<5	---	---
94-R293-81	201	17	---	<5	---	---
94-R294-81	201	10	---	<5	---	---
94-R295-81	201	11	---	<5	---	---
94-R296-81	217	7	---	<5	---	---
94-R297-81	201	9	---	<5	---	---
94-R298-81	201	7	---	<5	---	---
94-R299-81	201	5	---	<5	---	---
94-R300-81	201	12	---	<5	---	---
94-R301-81	201	10	---	<5	---	---
94-R302-81	201	12	---	<5	---	---
94-R303-81	201	15	---	<5	---	---
94-R304-81	201	10	---	<5	---	---
94-R305-81	201	15	---	<5	---	---
94-R306-81	201	19	---	<5	---	---
94-R307-81	201	9	---	<5	---	---
94-R308-81	201	5	---	<5	---	---
94-R309-81	201	10	---	<5	---	---
94-R310-81	201	9	---	<5	---	---
94-R311-81	201	10	---	<5	---	---
94-R312-81	201	9	---	<5	---	---
94-R313-81	201	10	---	<5	---	---
94-R314-81	201	14	---	<5	---	---
94-R315-81	201	10	---	<5	---	---
94-R317-81	201	7	---	<5	---	---
94-R318-81	201	<1	---	<5	---	---
94-R319-81	201	9	---	<5	---	---
94-R320-81	201	9	---	<5	---	---
94-R321-81	201	9	---	<5	---	---
94-R322-81	201	11	---	<5	---	---
94-R323-81	201	6	---	<5	---	---
94-R324-81	201	9	---	<5	---	---
94-R325-81	201	7	---	<5	---	---
94-R326-81	201	4	---	<5	---	---
94-R327-81	201	7	---	<5	---	---
94-R328-81	201	16	---	<5	---	---
94-R329-81	203	7	---	<5	---	---
94-R330-81	203	9	---	10	---	---
94-R331-81	201	6	---	5	---	---
94-R332-81	201	7	---	5	---	---
94-R333-81	201	9	---	<5	---	---

Sample description	Prep code	AS ppm	Hg ppb	AU-FA+AA ppb		
94-R334-81	201	12	---	<5	---	---
94-R335-81	201	12	---	<5	---	---
94-R336-81	201	7	---	<5	---	---
94-R337-81	217	9	---	5	---	---
94-R338-81	201	10	---	<5	---	---
94-R339-81	201	9	---	<5	---	---
94-R340-81	201	16	---	<5	---	---
94-R341-81	217	10	---	<5	---	---
94-R342-81	217	16	---	5	---	---
94-R343-81	203	7	---	<5	---	---
94-R344-81	201	12	---	10	---	---
94-R345-81	203	7	---	10	---	---
94-R346-81	201	14	---	5	---	---
94-R347-81	201	16	---	10	---	---
94-R348-81	203	9	---	30	---	---
94-R349-81	217	7	---	15	---	---
94-R350-81	217	6	---	10	---	---
94-R351-81	203	12	---	5	---	---
94-R352-81	201	9	---	5	---	---
94-R353-81	201	16	---	10	---	---
94-R354-81	203	16	---	5	---	---
94-R355-81	201	15	---	20	---	---
94-R356-81	217	11	---	5	---	---
94-R357-81	217	7	---	5	---	---
94-R358-81	217	5	---	5	---	---
94-R360-81	203	6	---	10	---	---
94-R361-81	201	9	---	5	---	---
94-R362-81	201	11	---	5	---	---
94-R363-81	201	14	---	5	---	---
94-R364-81	217	11	---	5	---	---
94-R365-81	203	10	---	5	---	---
94-R366-81	201	12	---	5	---	---
94-R367-81	203	11	---	5	---	---
94-R368-81	217	10	---	<5	---	---
94-R369-81	201	11	---	<5	---	---

Sample description	Prep code	As ppm	AU-FA+AA ppb	MILLER CR.	Silts
94-D2-81	201	40	10	--	--
94-C1-81	201	10	20	--	--
94-GC-2-81	203	25	<5	--	--
94-GC-3-81	203	27	<5	--	--
94-GC-5-81	203	29	<5	--	--
94-GC-7-81	203	22	5	--	--
94-GC-10-81	203	23	<5	--	--
94-GC-11-81	203	23	70	--	--
94-GC-13-81	203	7	<5	--	--
94-GC-14-81	203	6	10	--	--
94-GC-15-81	203	6	<5	--	--
94-GC-17-81	203	15	<5	--	--
94-GC-18-81	203	17	<5	--	--
94-GC-19-81	203	16	<5	--	--
94-GC-20-81	203	20	<5	--	--
94-GC 25-81	203	16	5	--	--
94-GC 26-81	203	12	5	--	--
94-GC 27-81	203	20	<5	--	--
94-GC 29-81	201	16	10	--	--
94-GC 30-81	203	14	5	--	--
94-GC 31-81	203	12	5	--	--
94-GC 32-81	201	16	5	--	--
94-GC 35-81	203	19	<5	--	--
94-GC 36-81	203	10	5	--	--
94-GC 37-81	201	9	5	--	--
94-GC 38-81	203	11	5	--	--
94-GC 39-81	203	15	5	--	--
94-GC 40-81	203	7	<5	--	--
94-GC 41-81	201	12	15	--	--
94-GC 42-81	203	6	5	--	--

Sample description	Prep code	As ppm	Hg ppb	AU-FA+AA ppb	Rock
94-D1-81	205	6	60	35	--
D1-81	205	77	420	55	--
94-GC-4-81	205	4	40	5	--
94-GC-6-81	205	5	30	<5	--
94-GC-8A-81	205	4	40	<5	--
94-GC-8B-81	205	30	60	30	--
94-GC-9-81	205	9	120	<5	--
94-GC-12-81	205	19	60	<5	--
94-GC-16-81	205	10	50	<5	--
94-GC-21-81	205	16	30	<5	--
94-GC 22-81	205	9	80	5	--
94-GC 24-81	205	9	30	40	--
94-GC 28-81	205	160	360	385	--
94-GC 33-81	205	11	110	15	--
94-GC 34-81	205	9	60	5	--

APPENDIX B  
METHOD OF DETERMINING STATISTICAL LEVELS

## APPENDIX B

### METHOD OF DETERMINING STATISTICAL LEVELS

The basic procedure for evaluating geochemical results includes calculation of the mean and standard deviation of a group of samples (Krumbein and Greybill 1965). The resulting mean ( $\bar{X}'$ ) plus 5 standard deviations ( $S'$ ) equals a cutoff value. Samples with values exceeding this cutoff value ( $\bar{X}' + 5S'$ ) are discarded from the group. A new mean ( $\bar{X}''$ ) and standard deviation ( $S''$ ) are calculated from the remaining samples. By using the following:

$$\bar{X}'' + 2S'' = \text{Threshold Anomalous Level}$$

$$\bar{X}'' + 3S'' = \text{Anomalous Level}$$

There is a 95% confidence in all values greater than the mean plus 3 standards of deviation being anomalous. There is an 85% confidence in all values greater than the mean plus 2 standards of deviation being anomalous.

Calculations involve the following mathematical relationships:

$$\text{Mean} = \frac{1}{N} \sum_{i=1}^N X_i$$

$$\text{Std. Dev.} = \sqrt{\text{variance}}$$

$$\text{Var.} = \frac{1}{N} \sum_{i=1}^N (X_i - \text{Mean})^2$$

Where:  $N = 367$ , total number of samples in the group  
 $X =$  individual values of samples within the group eg. 10 ppm, 35 ppm, etc.  
 $i =$  individual, sample eg. 1, 2, 3 . . .

APPENDIX C  
STATEMENT OF EXPENDITURES

APPENDIX C  
STATEMENT OF EXPENDITURES  
MILLER-82 GROUP (Miller 1 AND Miller 2)

SALARIES AND FRINGE BENEFITS - TEXASGULF INC.

P.R. DeLancey, P.Eng. Period: Apr 7-May 26	1 day @ \$200	200.00	
I.G. Sutherland, geologist Period: Apr 7-May 26	1 day @ \$140	140.00	
G. Cooper Period: Apr 7-May 26	6 days @ \$ 95	570.00	
F. Renaudat Period: Apr 7-May 26	12 days @ \$ 65	780.00	
G. Nalivko Period: Apr 7-May 26	8 days @ \$ 70	560.00	
A. Costigan Period: Apr 7-May 26	10 days @ \$ 60	600.00	
L. Haering Period: Apr 7-May 26	4 days @ \$ 50	<u>200.00</u>	
		3,050.00	\$ 3,050.00

ROOM AND BOARD

42 man-days @ \$80/day	3,360.00
------------------------	----------

AIR FARES

proportioned	490.14
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HELICOPTERS

Queen Charlotte Helicopters (invoiced costs)	1,527.90
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ANALYTICAL COSTS (CHEMEX LABS)

Geochemistry (silt)	30 samples @ \$10.75	322.50	
Geochemistry (rock)	15 samples @ \$14.25	213.75	
Geochemistry (soil)	198 samples @ \$14.25	2,821.50	
	169 samples @ \$10.75	<u>1,816.75</u>	
		5,174.50	5,174.50

SHIPPING

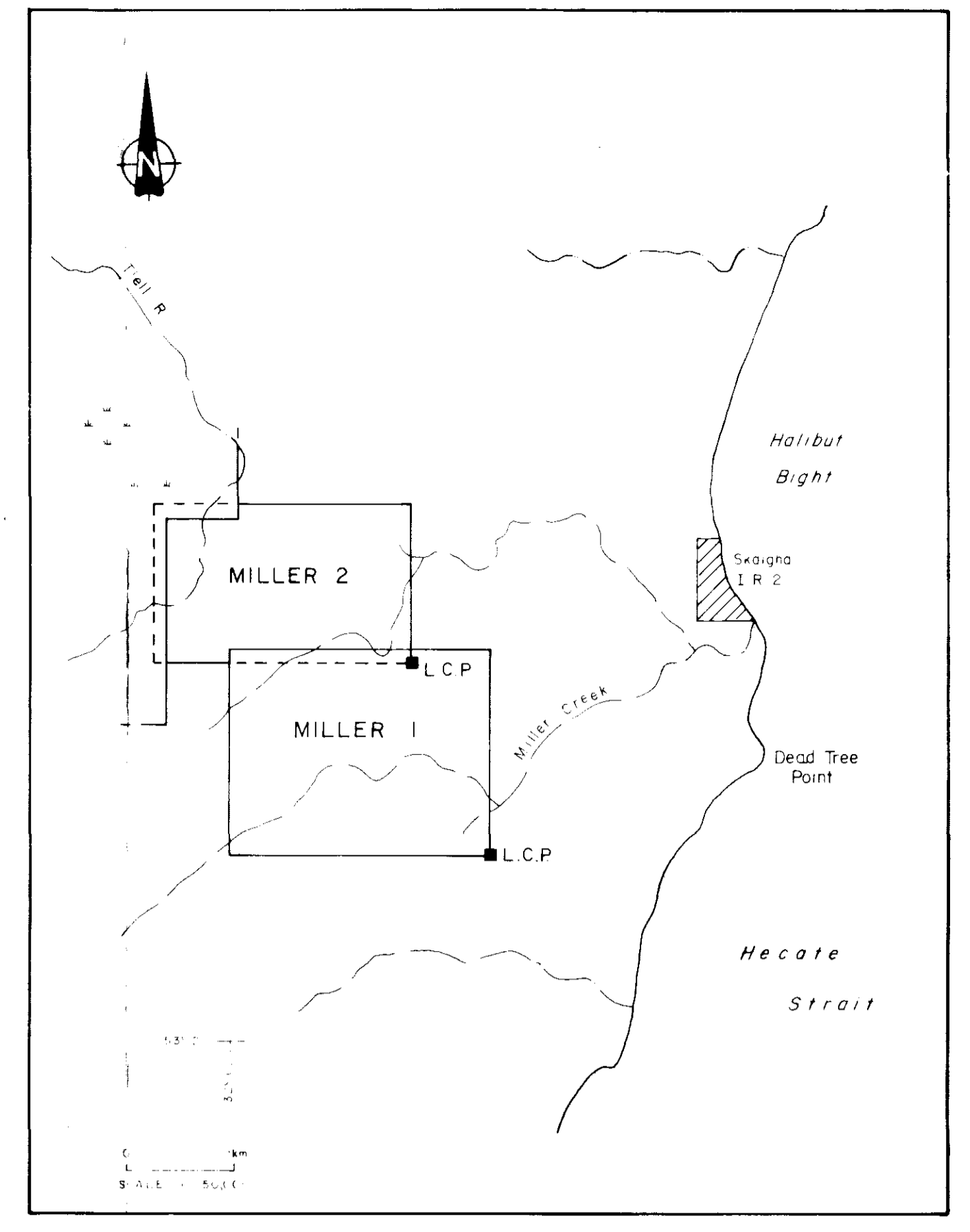
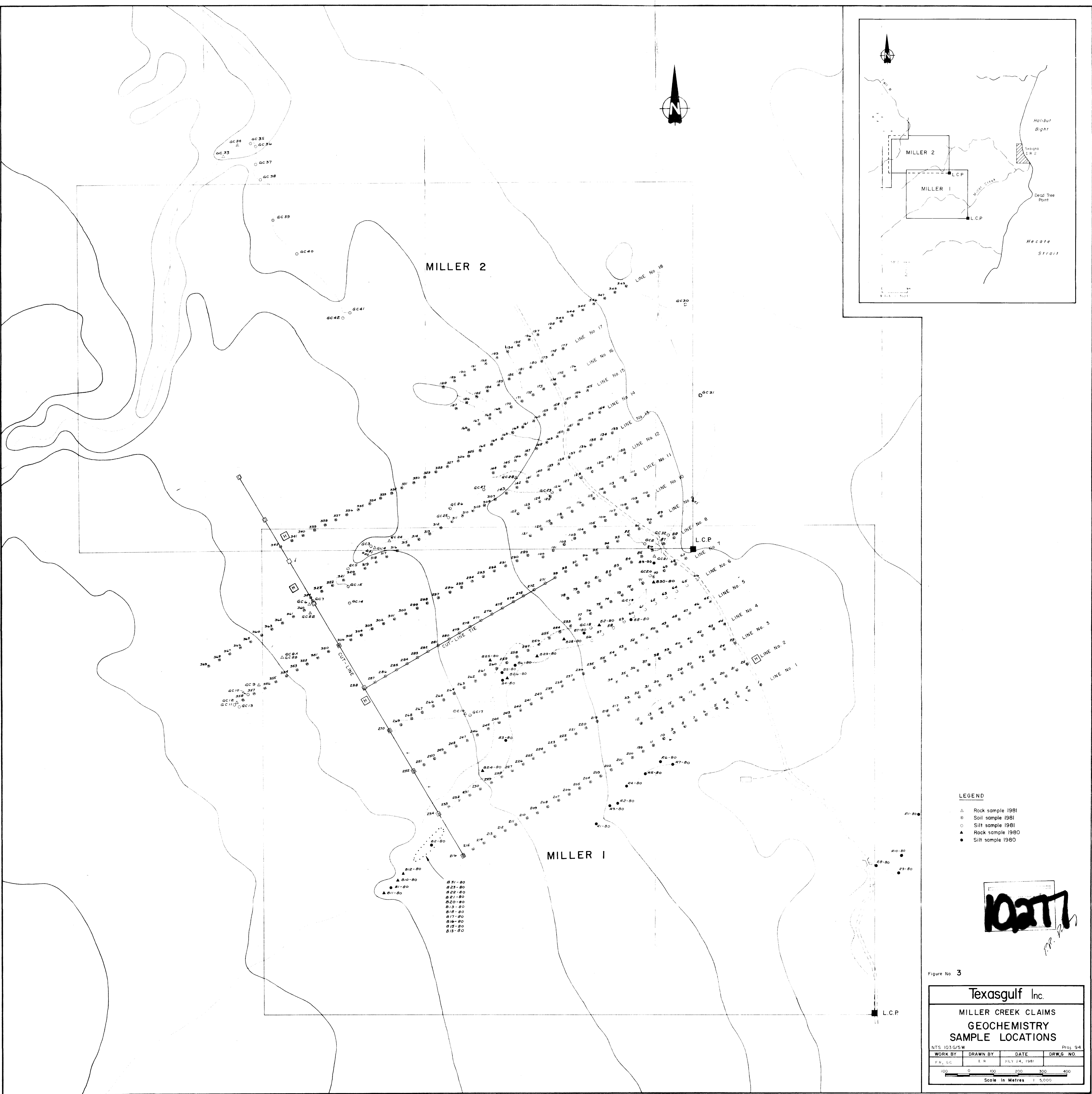
146.95

REPORT PREPARATION

P.R. DeLancey, P.Eng.	1.5 days @ \$200	300.00	
Drafting, reproductions, secretarial		<u>200.00</u>	
		500.00	<u>500.00</u>

TOTAL 14,249.49





- LEGEND**
- ▲ Rock sample 1981
  - ⊗ Soil sample 1981
  - Silt sample 1981
  - ▲ Rock sample 1980
  - Silt sample 1980

**IOATI**  
R.R.

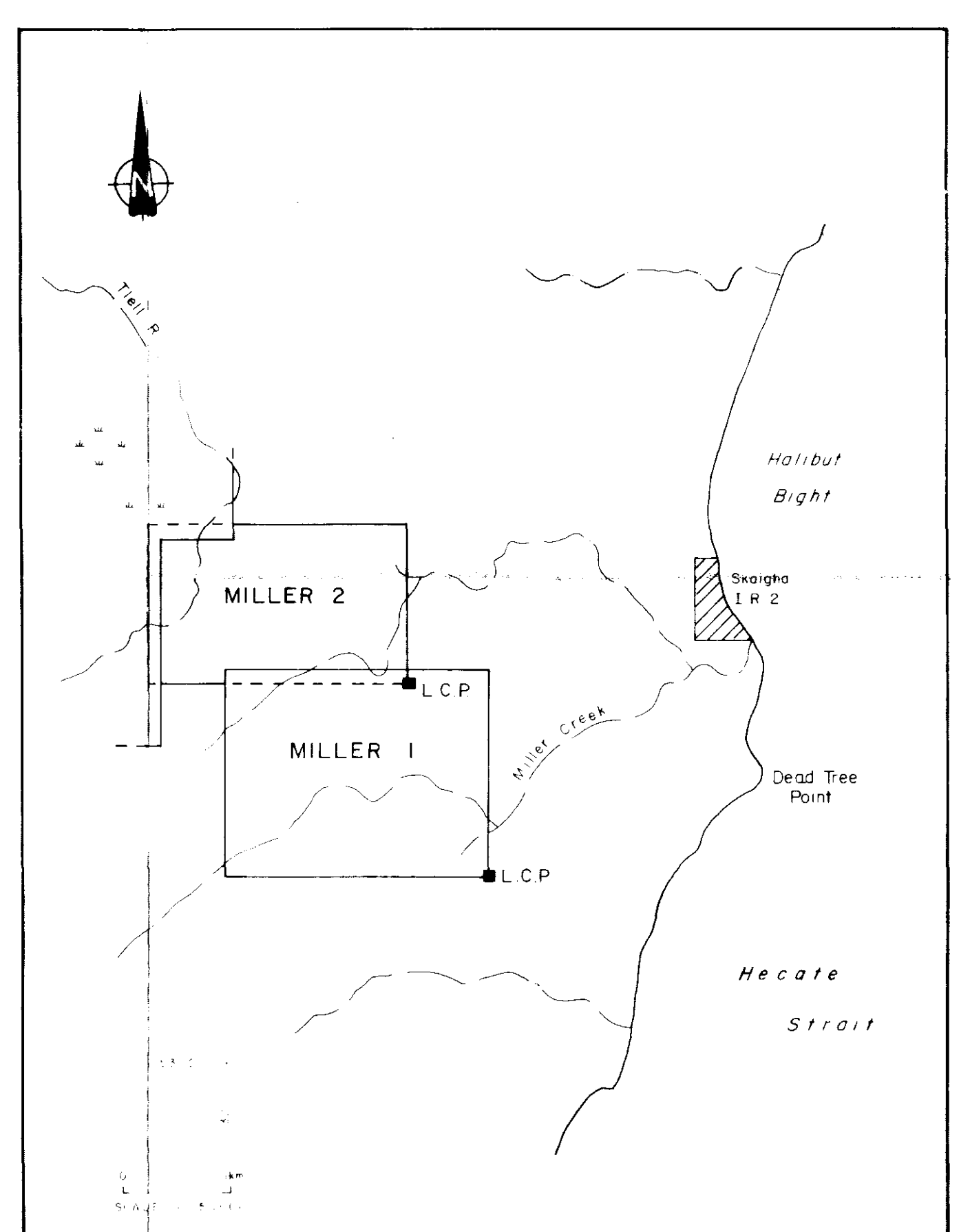
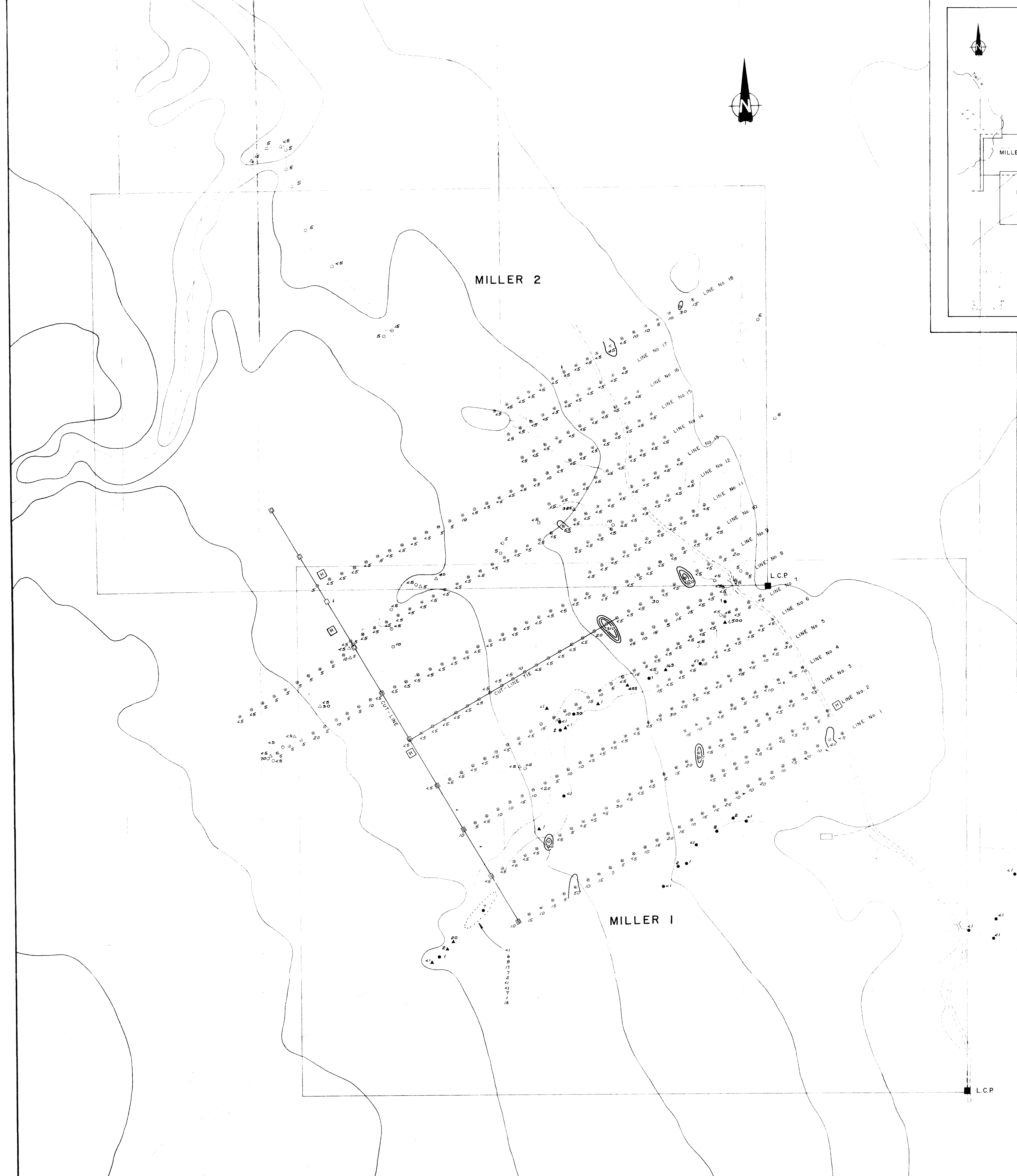
Figure No. 3

**Texasgulf Inc.**

**MILLER CREEK CLAIMS  
GEOCHEMISTRY  
SAMPLE LOCATIONS**

NTS 103G/5W				PROJ. 94
WORK BY	DRAWN BY	DATE	DRWG. NO.	
FR, G.C.	E.R.	JULY 24, 1981		

Scale In Metres 1 5,000



- LEGEND**
- Rock sample 1981
  - \* Soil sample 1981
  - △ Silt sample 1981
  - ▲ Rock sample 1980
  - Silt sample 1980
  - Contour levels

**10277**

*P.R. Fleming*

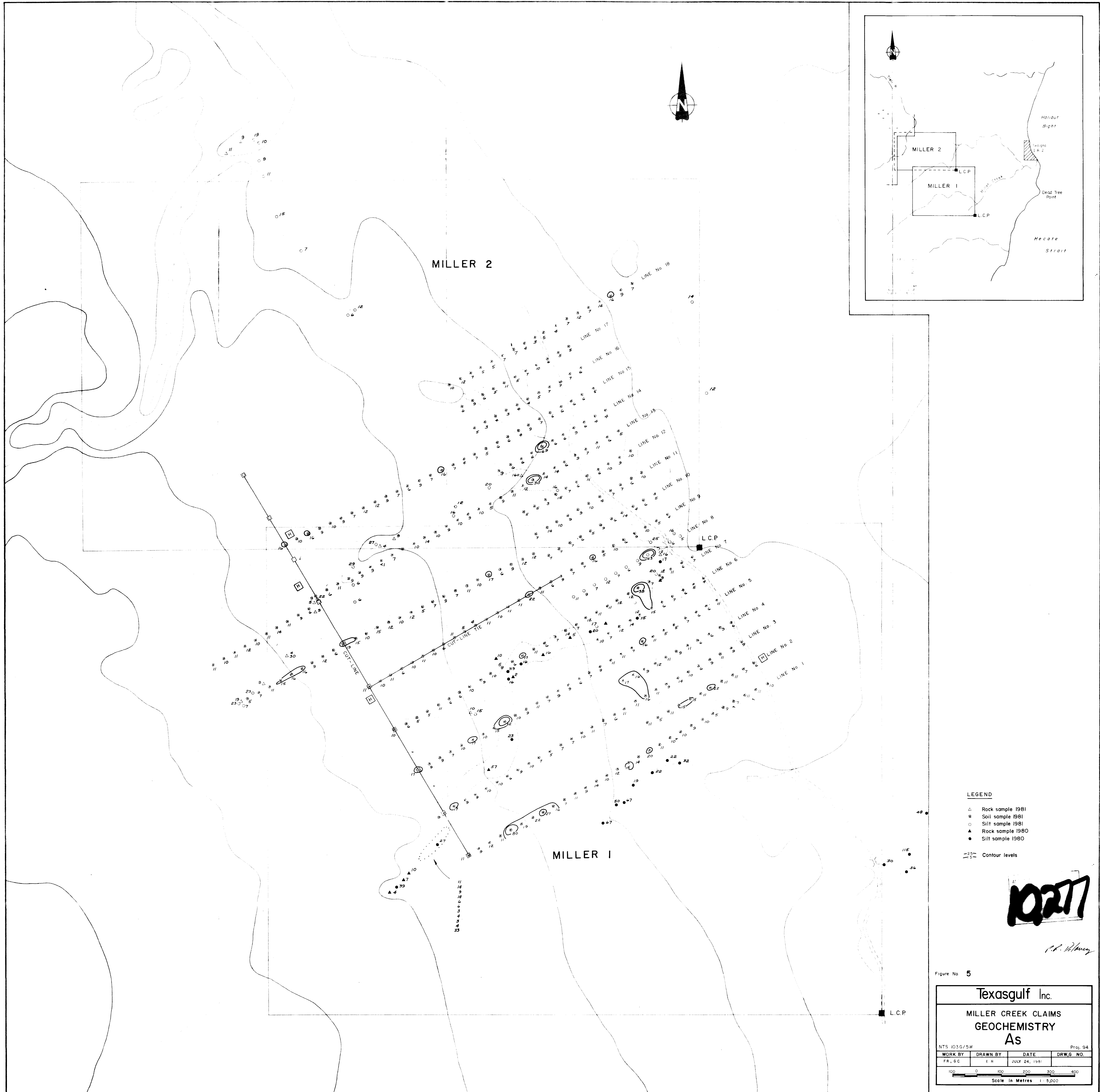
Figure No. 4

**Texasgulf Inc.**

**MILLER CREEK CLAIMS  
GEOCHEMISTRY  
Au**

NTS 103G/5W		Proj 94	
WORK BY	DRAWN BY	DATE	DRWG. NO.
FR., G.C.	E.R.	JULY 24, 1981	

Scale in Metres 1 : 5000



- LEGEND**
- △ Rock sample 1981
  - \* Soil sample 1981
  - Silt sample 1981
  - ▲ Rock sample 1980
  - Silt sample 1980
  - 25- Contour levels
  - 35- Contour levels

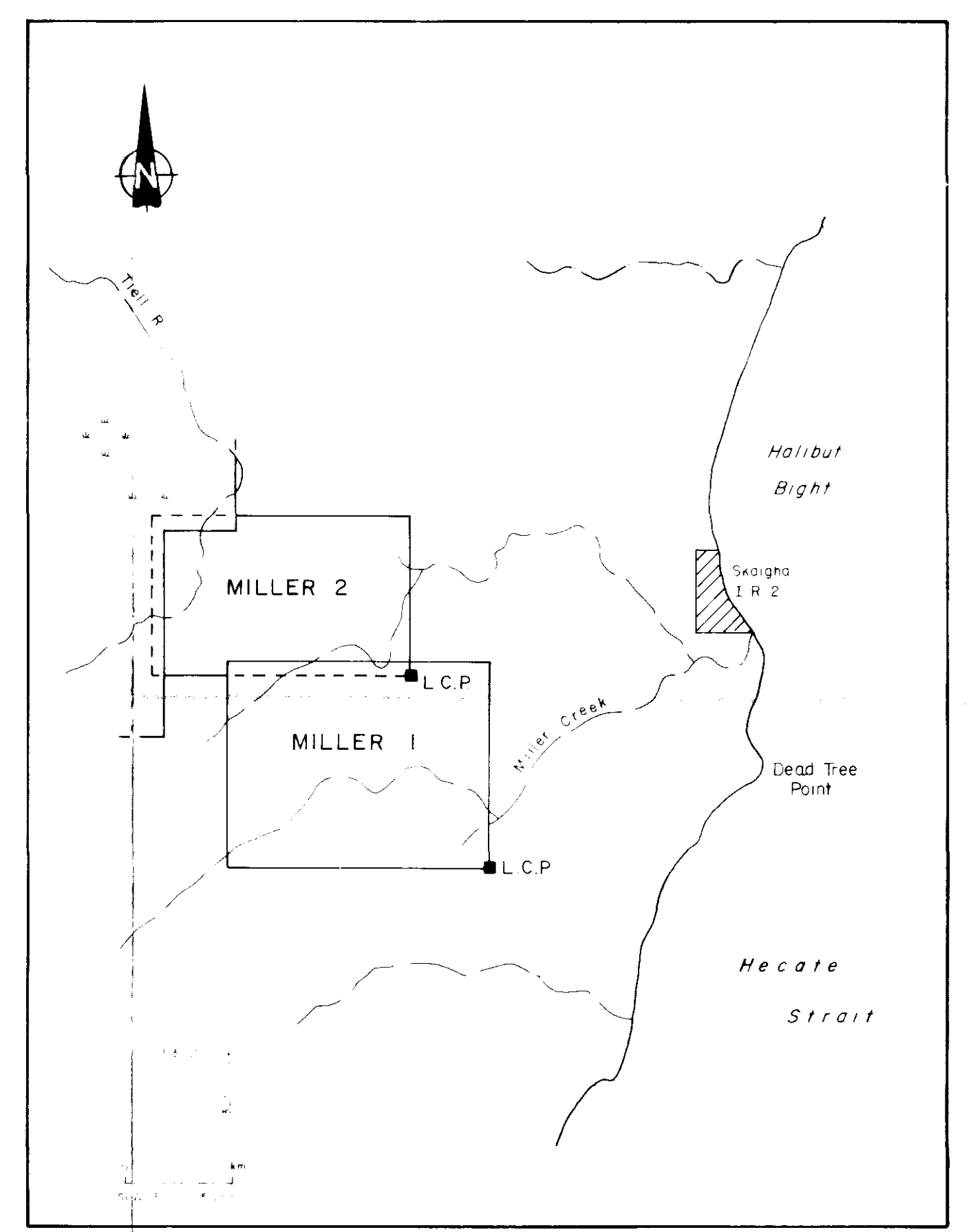
**10277**

*P.R. W. Agency*

Figure No. 5

<b>Texasgulf Inc.</b>			
<b>MILLER CREEK CLAIMS</b>			
<b>GEOCHEMISTRY</b>			
<b>As</b>			
NTS 103 G/5W		Proj. 94	
WORK BY	DRAWN BY	DATE	DRWG. NO.
F.R., G.C.	E.P.	JULY 24, 1981	
Scale in Metres 1 : 5,000			





- LEGEND**
- △ Rock sample 1981
  - \* Soil sample 1981
  - Silt sample 1981
  - ▲ Rock sample 1980
  - Silt sample 1980

-250-  
-200-  
-150- Contour levels

**10277**

*P.R. P. King*

Figure No. 6

<b>Texasgulf Inc.</b>			
<b>MILLER CREEK CLAIMS</b>			
<b>GEOCHEMISTRY</b>			
<b>Hg</b>			
NTS 1036/5W		Proj. 94	
WORK BY	DRAWN BY	DATE	DRWG. NO.
FR, G.C.	E.R.	JULY 24, 1981	
Scale in Metres 1:5,000			