REPORT ON

DIAMOND DRILLING

by

G.R. Peatfield - P.Eng.

on the

BOYA NO. 7 MINERAL CLAIM

Situated west of Graveyard Lake in the Liard Mining Division

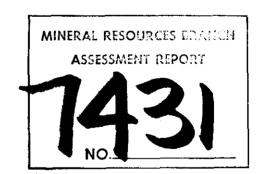
59°15'N, 127°30'W

owned by

TEXASGULF CANADA LTD.

work by

TEXASGULF, INC.



Sept. 1979

Vancouver, B.C.

### TABLE OF CONTENTS

	THE OF CONTENTS	PAGE
INTRODUCTION		1
Location, Access and Ter	rain	1
Property History and Def	inition	1
Summary of Work Complete	d	5
Diamond drilling		5
Work distribution		5
GEOLOGY		5
DIAMOND DRILLING		5
BIBLIOGRAPHY		7
APPENDIX A: Sum	many Dwill Logs	
	mary Drill Logs	
-	mary of Assays	
	tement of Qualification	
APPENDIX D: Sta	tement of Expenditure	

### LIST OF FIGURES

Fig. No.	Title	Scale	<u>Page</u>
1	Location Map	c. 1:9,100,000	2
2	Detailed Location Map	1:250,000	3
3	Claim Sketch Map	1:50,000	4
4N	Property Geology-North Sheet	1:5,000	in pocket

#### INTRODUCTION

Location, Access and Terrain

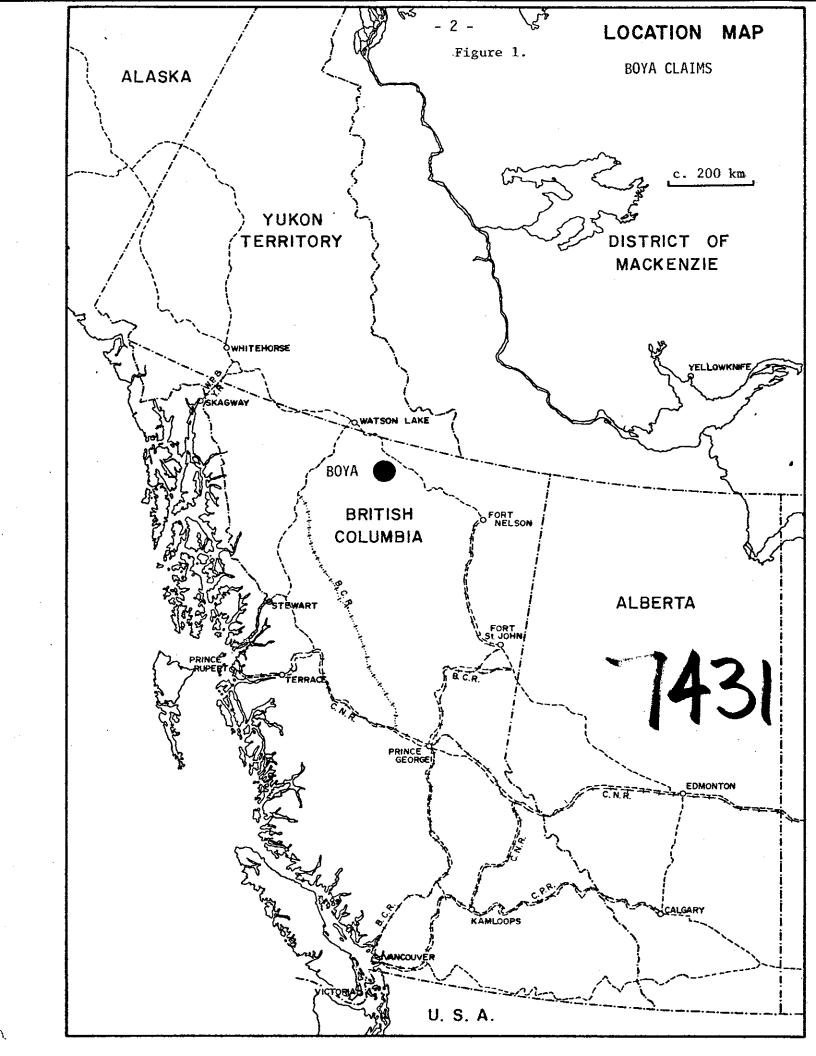
The BOYA property is located immediately northeast of the confluence of the Kechika and Turnagain Rivers, in northeastern British Columbia (see Figure 1). The nearest supply and transportation centre is Watson Lake, Yukon, some 115 km to the northwest.

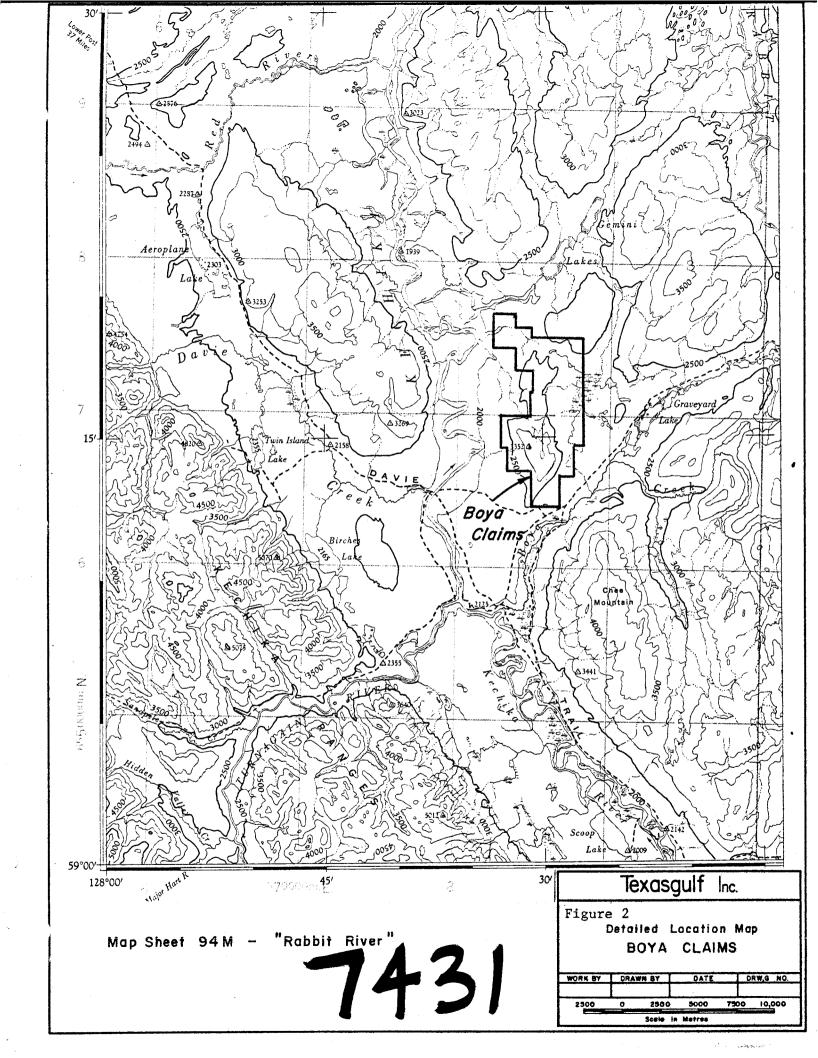
Access to the claims is presently by helicopter from various points on the Alaska Highway, the nearest being the settlement of Fireside, near the confluence of the Kechika and Liard Rivers some 50 km to the north-northeast. Fixed-wing aircraft can land at Graveyard Lake (see Figure 2), where the present base-camp is located. There is no road access to the area.

The claims are located in the extreme southwestern corner of the Liard Plain and cover most of a small hill rising some 300 m above a surrounding gravel-covered area. The maximum elevation on the hill is approximately 1050 m. Local relief is abrupt, especially along the eastern side of the hill (the 'Main Face' area), but the surface is subdued in areas of extensive overburden. Forest cover is essentially complete, commonly comprising dense second growth, in large burned areas, which makes foot travel difficult. Open grass-covered slopes are found on the southern and southeastern portions of the hill. Water on the property is scarce, but abundant supplies are available within a few kilometres.

### Property History and Definition

The first BOYA claims were located in June 1977, with additional staking during 1978 and 1979. Work on the property has been completed by Texasgulf, Inc., on behalf of its wholy owned subsidiary, Texasgulf Canada Ltd., the registered owner of the claims. Investigations undertaken to date have been previously reported on (Peatfield, et al, 1978; Peatfield, 1979a, 1979b).





At the time this work was completed, the property consisted of 17 MGS claims and three fractional claims, totalling 181 units (see Figure 3 for the relevant section of the property). Further staking has recently been completed, north of BOYA 7.

#### Summary of Work Completed

#### Diamond drilling

During the period June 25 to July 2, 1979, two BQ diamond drill holes, totalling 211.5 m and 160.6 m respectively, were drilled from a single setup. The core was assayed for  $MoS_2$  and  $WO_3$ .

#### Work distribution

The work described in this report was restricted to the BOYA 7 mineral claim.

#### **GEOLOGY**

The geology of the property has been described in a previously submitted assessment work report (Peatfield, 1979a). The geology map of the relevant portion of the property is included with this report as a convenience for the reader (Figure 4N).

#### DIAMOND DRILLING

As a part of a more extensive programme of diamond drilling, two BQ holes were drilled from a single site on BOYA 7, as shown on Figure 4N. Survey data for these holes are included with the summary logs (Appendix A), and assays are tabulated in Appendix B. The core is stored on the property.

The holes were drilled to test surface showings of molybdenite and scheelite in skarn, and the downward projection of strongly altered and quartz veined quartz-biotite porphyry.

The results shown in the logs and summaries of assays indicate that the holes intersected a portion of a molybdenite-bearing quartz vein stockwork in porphyritic intrusive rocks, although grades are very low. More work is necessary.

G.R. Peatfield, P.Eng.

### BIBLIOGRAPHY

- PEATFIELD, G.R. 1979a. Report on geological, geochemical and geophysical surveys and line-cutting on the BOYA NO. 1-8, B.B. 1 Fr. Mineral Claims. Report submitted to the British Columbia Ministry of Energy, Mines and Petroleum Resources for assessment work credit, May 1979.
- PEATFIELD, G.R. 1979b. Report on a geochemical survey on the BOYA NO. 3 Mineral Claim. Report submitted to the British Columbia Ministry of Energy, Mines and Petroleum Resources for assessment work credit, July 1979.
- PEATFIELD, G.R., NEWELL, J.M., and BOYLE, P.J.S. 1978. Report on geological and geochemical surveys and topographic mapping on the BOYA NO. 1 to 4 Mineral Claims. Report submitted to the British Columbia Ministry of Mines and Petroleum Resources for assessment work credit, June 1978.

# APPENDIX A

Summary Drill Logs

PROPERTY: BOYA

LOCATION(grid) 8720N, 3640E

LOCATION(survey)

AZIM: 340° ELEV: c. 850m DIP: -70°

DEPTH: 211.5 m CORE SIZE: BQ

STARTED: June 25, 1979

COMPLETED: June 29, 1979

CORE RECOVERY: good to excellent

DEPTH REC'Y

FROM TO

# TEXASGULF INC.

DRILL HOLE LOG

DIP TEST

DEPTH AZIM DIP

211 m 330° -76°

HOLE NO. DDH-B-2-79

CLAIM: BOYA 7

SECTION:

LOGGED BY: G.R. Peatfield

DATE LOGGED: June 29-July 2, 1979

DRILLING CO.: Longyear Canada

DEPTH		REC'Y	DESCRIPTION						
FROM	то	RECT	DESCRIPTION CONTRACTOR						
0	1.5m	-	Overburden, cased.						
1.5	5.lm	50%	Pale green sericitic altered quartz-feldspar porphyry, weak quartz veining, traces						
•			of molybdenite.						
5.1	9.4m	95%	Finely banded light and dark calc-silicate 'skarns' short sections of heavy pyrrhotite,						
			traces of scheelite and chalcopyrite, rare quartz veinlets with traces of molybdenite.						
9.4	21.2m	95%	Dark brown and purplish hornfels, strongly fractured, bleaching along fractures. Some						
			sections have weak to moderate quartz veining with pyrite, traces of scheelite.						
21.2	24.5m	95%	Coarse dark green diopside skarn, some pyrrhotite, locally strong molybdenite, traces						
		-	of scheelite.						
24.5	31.5m	95%	Brown hornfels, bleached on fractures and with a few narrow quartz veinlets. Traces						
			of scheelite and molybdenite in veins.						
31.5	33.Om	98%	Fine-grained pale green skarn (or skarnified intrusive) with moderate amounts of fine						
			disseminated scheelite.						
33.0	85.1m	98%	Long sections of biotite-bearing quartz feldspar porphyry, with locally strong quartz						
			veining. The unaltered rock is generally dark grey, but much of it has been altered						
		· · · · · · · · · · · · · · · · · · ·	along abundant fractures to a pale green sericitic quartz porphyry. The quartz veins						
			contain traces to locally moderate concentrations of molybdenite and scheelite, traces						
			of pyrite, and very rare bismithinite (similar material nearby on surface confirmed						

HOLE NO. BOYA PROPERTY: TEXASGULF INC. DDH-B-3-79 LOCATION (grid) 8720N, 3640E DRILL HOLE LOG LOCATION(survey) CLAIM: BOYA 7 ELEV: c. 850m DIP: -90° AZIM: -SECTION: DIP TEST DEPTH: 160.6 m CORE SIZE: B.Q. LOGGED BY: G.R. Peatfield June 29, 1979 STARTED: DEPTH AZIM DIP DATE LOGGED: July 2-4, 1979 July 2, 1979 COMPLETED: 100° 160 m -88° DRILLING CO.: Longyear Canada good to excellent CORE RECOVERY: DEPTH REC'Y DESCRIPTION FROM TO Overburden, cased 0 5 1.5m 1.5 3.9m 80% Pale green sericite altered quartz-feldspar porphyry, weak quartz veining and traces of molybdenite. Finely banded light and dark green calc-silicate 'skarn', local sections of heavy 3.9 9.2m 95% pyrrhotite mineralization. Traces of molybdenite, scheelite and chalcopyrite. 26.6m 95% Mostly dark brown hornfels with weak fracturing and alteration and a few quartz veins 9.2 with traces of molybdenite and scheelite. A one-metre section of dark green skarn from 19 to 20 m has moderate scheelite mineralization. Semi-massive pyrrhotite in dark green skarn, probably diopside. Mineralization contains 26.6 33.5m 98% small amounts of chalcopyrite and some fine disseminated scheelite. The bottom 10 cm of the section is heavy pyrite mineralization. 33.5 Dark hornfels with considerable fracturing and some quartz veinlets with pyrite and 39.0m 95% traces of molybdenite, and some very short sections of dark green pyrrhotite bearing skarn 39.0 40.2m 98% Wispy semi-massive pyrite, fine-grained and granular with very weak scheelite mineralization. 40.2 42.5m 98% Transition zone of grey-green skarn with abundant scheelite, some quartz veining with traces of molybdenite. 42.5 Long section of biotite-quartz-feldspar porphyry with abundant quartz veins and many 1154.0 98% sections where the rock has been altered along fractures to a pale green sericitic

EX.	ASGUL	F INC.	DRILL HOLE LOG	HOLE NO. DDH-B-3-79	PAGE NO
DE ROM	РТН то	REC'Y	DESCRIPTION	•	
			quartz porphyry. The quartz veins often contain moderate amo	ounts of fine moly	bdenite
54.0	160.6m	75%	Dark brown hornfels with weak alteration (bleaching) along fr	ractures and some	sections
		·	of quartz veining with traces of molybdenite and scheelite.	· · · · · · · · · · · · · · · · · · ·	
			E.O.H. at 160.6 m.		7 15-11
<u> </u>				R. R. Ver	HEN.
				12/09/	177
<del></del> .					· · · · · · · · · · · · · · · · · · ·
					<del></del>
			•		
					,
					· · · · · · · · · · · · · · · · · · ·

# APPENDIX B

Summary of Assays

ELEVATION: 850 m DIP: at PAGE 1 of 2

ELEVATI	0N: 850 m				DIP:	<del></del>	_ at	PAGE	<u> </u>	of 2
SAMPLE No.	METR	ES		MoS <sub>2</sub>	%			WO3		
	FROM	TO	ASSAYS	AVG	AVG	AVG	ASSAYS	AVG	AVG	AVO
18101	1.5	3.0	0.018	1	<u> </u>	-	0.01			
22	3.0	6.0	0.023	1			0.06	Į		
3	6.0	9.0	0.012	1			0.06		ļ	
4	9.0	12.0	0.010				0.03			
5	12.0	15.0	0.003	]			0.02			
6	15.0	18.0	0.003				0.07			
7	18.0	21.0	0.002	]			0.09			
8	21.0	24.0	0.640			1	0.22		1	
9	24.0	27.0	0.220				0.05		-	
18110	27.0	30.0	0.008				< 0.01	-		1
1	30.0	33.0	0.035			1	0.26		1	
' 2	33.0	36.0	0.015				0.09			
3	36.0	39.0	0.007	}			0.02			
4	39.0	42.0	0.012				0.08	!		
5	42.0	45.0	0.017			1	0.11			
6	45.0	48.0	0.027	1			0.06		ļ ·	
7	48.0	51.0	0.220	1	,		0.03			
8	51.0	54.0	0.020				0.04			
9	54.0	57.0	0.027			1	0.01			
18120	57.0	60.0	0.037			1	0.04			
1	60.0	63.0	0.011			<u> </u>	0.02			
2	63.0	66.0	0.030				0.01			
3	66.0	69.0	0.037				0.01			
4	69.0	72.0	0.012				< 0.01			
5	72.0	75.0	0.010			<u> </u>	< 0.01			
6	75.0	78.0	0.010				< 0.01			
7	78.0	81.0	0.008			}	0.02			
8	81.0	84.0	0.008				0.06	!		
9	84.0	87.0	0.023				0.03			
18130	87.0	90.0	0.003				0.03			1
1	90.0	93.0	0.008				0.01			
2	93.0	96.0	0.005				0.01			
3	96.0	99.0	0.010				0.26			
4	99.0	102.0	0.017				0.06			
5	102.0	105.0	0.007		İ		0.04			•
6	105.0	103.0	0.007				0.04			l
7	108.0	111.0	0.008				0.01			
8	111.0	114.0	0.008			•	0.02	ļ		1
9										1
9	114.0	117.0	0.012		İ		0.02	Ī		l

	LATITUD	Œ:		AZIMUTH:	-	DIP:		- at	HOLE NO	$0: \frac{b-2}{b}$	- / 3
	LONGITU	DE :		DIP:	<del>,</del>	DIP:		_ at	HOLE T	YPE: di	<u>amon</u> c
	ELEVATI	ON:				DIP:		_at	PAGE 2	01	2
•	SAMPLE No.	METRI	ES		MoS <sub>2</sub>	%			WO <sub>3</sub> %		
		FROM	TO	ASSAYS	AVG	AVG	AVG	ASSAYS	AVG	AVG	AVG
	18140	117.0	120.0	0.052				0.06		·	
	1	120.0	123.0	0.010				0.01			
	2	123.0	126.0	0.012				0.01			
	3	126.0	129.0	0.007			}	0.01			
	4	129.0	132.0	0.008				0.02			
	5	132.0	135.0	0.023				0.01			
	6	135.0	138.0	0.003				0.02			
	7	138.0	141.0	0.033	·			0.02	·		
	8	141.0	144.0	0.012	·			0.04			
	9	144.0	147.0	0.003		ı	-	< 0.01			
	18150	147.0	150.0	0.008			İ	0.04			
	<u>'</u>	150.0	153.0	0.023				0.02			
	2	153.0	156.0	0.018				0.01			
	3	156.0	159.0	0.013			<u> </u>	0.01			
	4	159.0	162.0	0.005				0.01			
	5	162.0	165.0	0.013				0.02			
	. 6	165.0	168.0	0.008				0.02			
	7	168.0	171.0	0.012				0.03			
	8	171.0	174.0	0.006				0.02			
	9	174.0	177.0	0.010	· ·		1	0.04			
	18160	177.0	180.0	0.020				0.02			
	1	180.0	183.0	0.012				0.01			
	2	183.0	186.0	0.010				0.04			
,	3	186.0	189.0	0.007				0.02			
	4	189.0	192.0	0.015				0.03			-
	5	192.0	195.0	0.007	]			0.05			
	6	195.0	198.0	0.010	<u> </u>			0.02	-		
	7	198.0	201.0	0.008	<u> </u>	1		0.02			
	8	201.0	204.0	0.010				0.04	·	•	
	9	204.0	207.0	0.012	1			0.09			
	18170	207.0	210.0	0.007	<u> </u>			0.23			
	18171	210.0	211.5	0.005	]			0.05		1	
		<u> </u>			1.				D /	K 11	
		ļ							a tal	YXV ·	
					? [		0	N. 0 E	1/	0	
								12/0	9/7	7	
								ļ			
		<del> </del>	▼		1			<u> </u>			
		<b></b>	<u> </u>		4						
	1	1		1	1	1	1	1			Ŧ.

	DE: <u>8720</u>		AZIMUTH:		DIP:	100°/-	88°at <u>160</u>	m HOLE	No.: <u>B-3</u>	-79
		E	DIP: -90	)°	DIP:		_ at	_ HOLE	TYPE:di	amond
ELEVATI	ON: 850 n				DIP:		at			of <u>2</u>
SAMPLE No.		1	<u> </u>	MoS <sub>2</sub>		·		W03	%	
	FROM	TO	ASSAYS	AVG	AVG	AVG	ASSAYS	AVG	AVG	AVG
18176 7	1.5	3.0	0.012	1		1	0.02	_		
<del></del>	3.0	6.0	0.020				0.05	4		
8	6.0	9.0	0.032	-			0.03	-		
9	9.0	12.0	0.003	-			0.02	_		
18180	12.0	15.0	0.003	1			0.03	_		-
1	15.0	18.0	0.003	1		]	0.03	_		
2	18.0	21.0	0.047	1		1	0.05	1.	-	
3	21.0	24.0	0.022				0.02			
4	24.0	27.0	0.020	-		1	0.03	1		
5	27.0	30.0	0.003			ŀ	0.16			
6	30.0	33.0	0.003		ł		0.12			
, 1	33.0	36.0	0.003				0.04	· .		
8	36.0	39.0	0.003				0.06	]	Į.	
9	39.0	42.0	0.043		ļ		0.38	]		
18190	42.0	45.0	0.015				0.16	]		
]	45.0	48.0	0.010	ļ			0.02	1	·	
2	48.0	51.0	0.013				0.02			
3	51.0	54.0	0.11	]		]	0.03	1		
4	54.0	57.0	0.039				0.03	]		
5	57.0	60.0	0.21				0.04	1	Ì	
6	60.0	63.0	0.020			· ·	0.03	]		
7	63.0	66.0	0.037				0.02	<b>]</b>		
8	66.0	69.0	0.045				0.05			
9	69.0	72.0	0.032		-		0.22			
18200	72.0	75.0	0.040				0.05			
1	75.0	78.0	0.080				0.07			
2	78.0	81.0	0.040		:	Ì	0.04			
3	81.0	84.0	0.047				0.10			
4	84.0	87.0	0.013				0.05			
5	87.0	90.0	0.070				0.05		1	
6	90.0	93.0	0.057				0.05			
7	93.0	96.0	0.055				0.04			
8	96.0	99.0	0.033				0.04		[ ·	
9	99.0	102.Q	0.012				0.06			
18210	102.0	105.0	0.100	٠			0.03			
1	105.0	108.0	0.070			1	0.03			
2	108.0	111.0	0.097				0.06			
3	111.0	114.0	0.017	•	i		0.04			
18214	114.0	117.0	0.013				0.07			
					j					

	LATITUD	E:	<del> </del>	AZIMUTH:		DIP:		at	HOLE No	$b : \frac{b-3}{b}$	-/9
	LONGITU	DE:		DIP:		DIP:		at	HOLE TY	γρε: di	amond
	ELEVATION	ON:						at			
	SAMPLE No.	METRE	ES		MoS <sub>2</sub>				WO <sub>3</sub> %		- <del> </del>
		FROM	TO.	ASSAYS	AVG	AVG	AVG	ASSAYS	AVG	AVG	AVG
	18215	117.0	120.00	0.053				0.05			
	6	120.0	123.0	0.038				0.05			
	7	123.0	126.0	0.030				0.05	·		
	8	126.0	129.0	0.018				0.11			
	9	129.0	132.0	0.040				0.12			
	18220	132.0	135.0	0.022				0.06			
	1	135.0	138.0	0.025				0.04			
	2	138.0	141.0	0.050	•			0.05			
	3	141.0	144.0	0.023				0.04			
	44	144.0	147.0	0.025				0.05			
	5	147.0	150.0	0.017				0.06	·		
	6	150.0	153.0	0.013			,	0.05			
	7	153.0	156.0	0.033				0.15		•	
	8	156.0	159.0	0.027				0.11			
	18229	159.0	160.6	0.018	•			0.04			
										÷	
							_	0//		JI	
							G.	K. Del	17/10	N -	
								11/0	179		
								10,47	, , ,		
•			ļ. <u></u>								
						:					
										· •	
				<u> </u>							
				<u></u>							
				<u> </u>					·		
	-										
				<u> </u>						;	İ
				<u> </u>							
					i	1					
				<u> </u>							]
			<u> </u>								
		<u> </u>	<u> </u>		ļ			<u> </u>			
		<u> </u>									
			}	1	j						

# APPENDIX C

Statement of Qualification

### STATEMENT OF QUALIFICATION

### J. Gosselin - Assistant

J. Gosselin is an undergraduate student in Geography and Geology at Université de Sherbrooke. This is his second field season of employment with Texasgulf.

6. R. Peachtett

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT

# APPENDIX D

Statement of Expenditure

# STATEMENT OF EXPENDITURES

# BOYA 7

(Diamond Drilling)

SALARIES	AND	FRINGE	BENEFITS	_	TEXASGULF,	INC.

ONE THE THE PETER TO TEXTIONERS THOS		
G.R. Peatfield - P.Eng. Period June 23 - July 4 - 10 days @ \$150 =	1,500.00	_
J. Gosselin - Assistant Period June 30 - July 5 - 6 days @ \$40.00	240.00 1,740.00	1,740.00
ROOM AND BOARD		
Tg personnel 16 man-days @ \$50.00 = Longyear 40 man-days @ \$50.00 = (includes fixed-wing mob. & re-supply charges)	800.00 2,000.00 2,800.00	2,800.00
HELICOPTER (Texasgulf Bell 206B)	• •	
15 hours @ \$305.00		4,575.00
FIXED-WING CHARTER		
portions of charter applicable to drilling		1,000.00
DIAMOND DRILLING		
Longyear invoice charges for drilling, survey, core boxes, moving time, etc., but exclusive of diamond costs.		27,919.32
HELICOPTER (Texasgulf Bell 206B)  15 hours @ \$305.00  FIXED-WING CHARTER  portions of charter applicable to drilling  DIAMOND DRILLING  Longyear invoice charges for drilling, survey, core boxes, moving time, etc., but exclusive	2,800.00	4,575.00 1,000.00

38,034.32

GR. Peat-field 12/09/19

