

APPENDIX III

MONITORING DATA:

1986 MOVEMENTS OF WASTE DUMP AND TAILINGS PILES

1985 ASBESTOS FIBRE DATA (CASSIAR MINING CORPORATION
LETTER OF NOVEMBER 7, 1985)

WOLVERINE TAILINGS PILENORTH LOBE

STATION	COORDINATES & ELEV. JULY '86	RATES OF MOVEMENT (ft/yr)					
		HORIZONTAL JUN. '84	JUN. '85	JUL. '86	VERTICAL JUN. '84	JUN. '85	JUL. '86
26	N 114490.87 E 108226.26 1891.24	0.27	1.55	0.20	- 0.67	+ 0.31	- 0.37
80.2	N 114320.91 E 108441.53 1818.47	0.40	1.41	0.05	- 0.17	- 0.06	- 0.24
26A	N 114482.69 E 108413.54 1835.92	0.17	0.84	0.41	- 1.42	- 0.09	- 0.41
80-1	N 114707.93 E 108419.85 1831.28	0.69	0.84	0.20	- 0.63	- 0.15	- 1.10
80-4	N 114020.46 E 108856.88 1665.42	1.05	0.36	1.26	- 0.54	- 0.39	- 0.90
80-5	N 114175.11 E 108953.25 1598.26	8.35	5.84	8.15	- 9.39	- 6.25	- 4.42
500-1	N 114499.71 E 108956.04 1582.09	33.33	34.06	41.75	-15.39	- 7.72	-18.57
650-1	N 114708.11 E 108894.21 1619.02	18.63	14.10	17.13	- 5.69	- 3.78	- 5.55
350-1A	N 114348.50 E 109225.64 1551.99	91.48	65.27	54.90	-34.05	-24.72	+18.41
500-2	N 114494.88 E 109307.70 1479.83	58.47	58.60	62.09	-29.31	-25.86	-23.14
650-2 (80.6)	N 114692.41 E 109249.50 1483.03	---	68.86	22.90	---	-31.48	-14.62
80-7	N 114501.57 E 109460.25 1425.92	59.88	55.95	50.55	-24.75	-23.01	-17.02
350-3A	N 114399.17 E 109501.38 1408.17	108.69	75.12	54.02	-29.03	-32.53	-21.66

WASTE DUMP CHANNEL CLOSURES

STATION	<u>RATE OF HORIZONTAL CLOSURE (ft/yr)</u>					<u>RATE OF VERTICAL MOVEMENT (ft/yr)</u>				
	JUN'82	JUN'83	JUN'84	JUN'85	JUL'86	JUN'82	JUN'83	JUN'84	JUN'85	JUL'86
A	2.15	1.99	1.63	1.10	0.72	-0.08	0.00	-0.66	+0.15	-0.07
B	1.54	1.56	0.91	DESTROYED	--	-0.07	-0.31	-0.14	DESTROYED	---
E	1.14	0.92	DESTROYED	-----		+0.06	+0.29	DESTROYED	-----	
F	1.99	1.89	1.21	1.17	0.91	-0.16	-0.09	-0.32	+0.02	+0.03
G	2.53	2.27	1.64	1.55	1.37	+0.01	+0.30	+0.12	-0.12	+2.30
J	--	--	1.17	1.01	0.92	--	--	+0.23	-0.36	-0.45
K	--	--	1.99	1.37	N.R.	--	--	+0.14	-0.05	N.R.
L	--	--	1.76	1.41	1.17	--	--	-0.10	+0.09	+3.15

MINE WASTE DUMPS

STATION	COORDINATES & ELEV. JUL '86	RATES OF MOVEMENT (ft/yr)							
		HORIZONTAL				VERTICAL			
		JUN '83	JUN '84	JUN '85	JUL '86	JUN '83	JUN '84	JUN '85	JUL '86
20A	N 110775.69 E 106809.62 1470.07	2.61	1.78	1.28	1.45	-0.66	-1.43	-0.07	-0.52
21A	N 110843.70 E 106346.38 1474.25	2.36	1.53	1.70	1.20	-0.92	-1.40	-0.30	-0.60
22A	N 110830.34 E 106106.76 1471.30	2.82	2.09	1.72	1.40	-1.28	-2.04	-1.09	-0.37
68	N 110951.97 E 107089.60 1434.58	2.69	N.R.	1.58	1.31	-1.25	-0.72	-0.07	-1.64
81-1	N 110208.65 E 106549.84 1500.70	2.15	1.29	1.79	1.09	-0.78	-1.68	-0.31	-0.42
81.2	N 110768.77 E 106661.46 1462.88	2.57	1.72	1.54	1.08	-0.47	-0.26	-0.21	-0.69
19	N 110492.77 E 107817.78 1420.69	----	N.R.	1.19	0.83	---	-0.76	-0.31	-1.33

WOLVERINE CREEK TAILINGS PILESOUTH LOBERATES OF MOVEMENT (ft/yr)

STATION	COORDINATES & ELEV. JULY '86	HORIZONTAL			VERTICAL		
		JUN.'84	JUN.'85	JUL.'86	JUN.'84	JUN.'85	JUL.'86
24A	N 113455.19 E 109022.77 1583.73	19.18	20.09	21.48	- 6.83	- 7.44	- 8.12
24B	N 113479.04 E 109213.07 1520.26	17.92	19.31	20.95	- 6.01	- 6.92	- 6.85
24D	N 113558.23 E 109538.87 1413.08	---	11.76	15.98	---	- 3.84	- 5.16
25C	N 113756.11 E 109826.77 1359.82	6.72	7.25	8.61	+ 2.69	+ 3.15	+ 2.54
80-9	NO REFLECTION	3.43	3.02	---	+ 1.41	+ 1.45	---

CASSIAR MINING CORPORATION

2000 - 1055 WEST HASTINGS STREET, VANCOUVER, B.C., CANADA V6E 3V3

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November 7, 1985

Mr. H.F. (Bud) McAlpine
Water Resources Division
Department of Indian &
Northern Affairs
200 Range Road
Whitehorse, Y.T.
Y1A 3V1

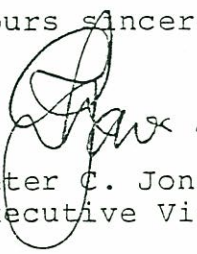
Dear Bud,

Re: Asbestos Fibres in Water - Clinton,
Wolverine, Forty Mile and Yukon River.

Please find attached copies of the data on water samples taken at points on the above mentioned water courses in the summer of 1985.

With the exception of a higher count on Wolverine Creek above its confluence with Clinton Creek, all values are low and in line with naturally occurring counts. It is interesting to note that the fibre count in the Yukon River, above its confluence with the Forty Mile River is higher than that below the confluence. We look forward to hearing from you later this month with regard to setting a date for discussion of the abandonment of the Clinton Creek site.

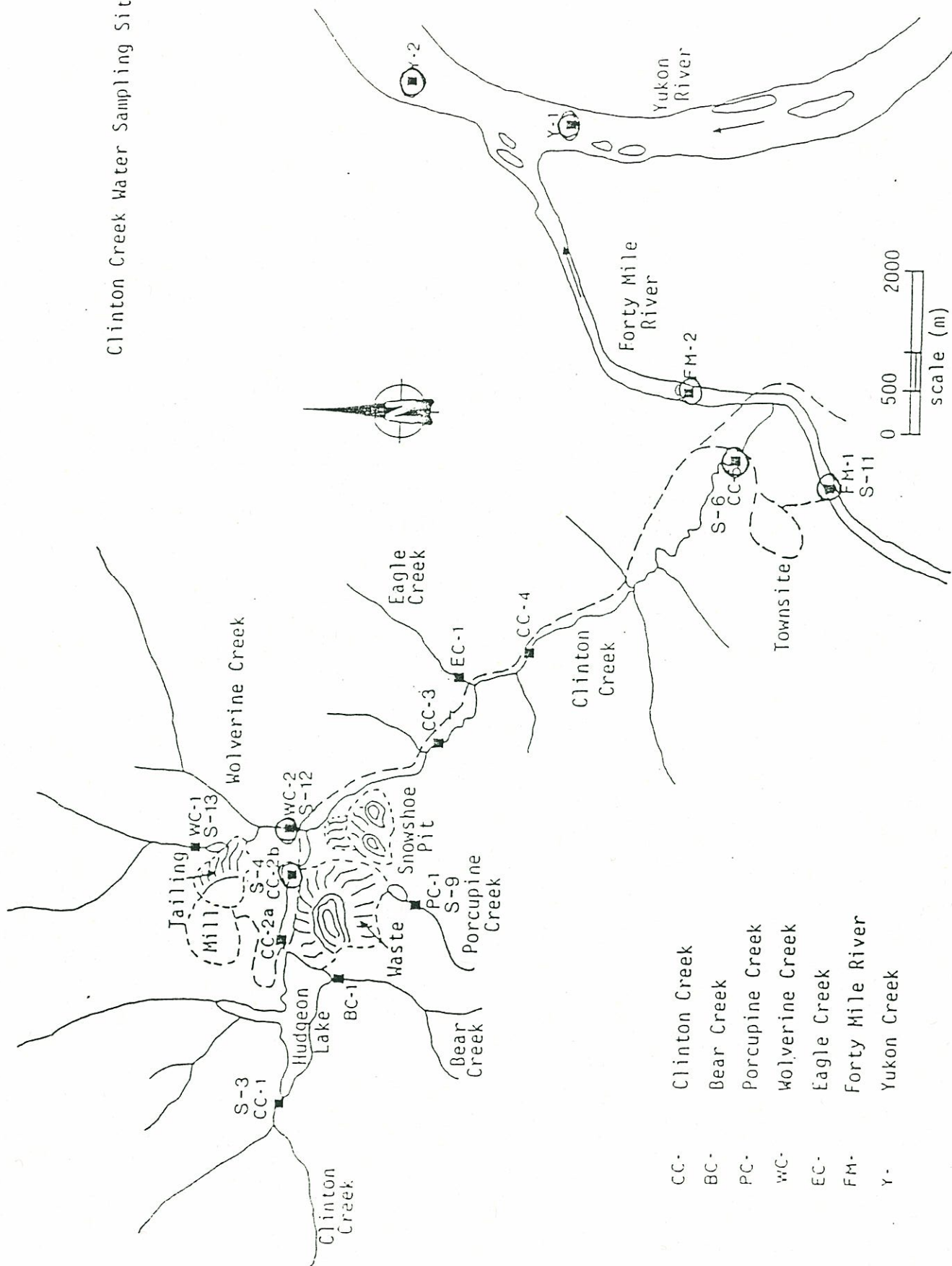
Yours sincerely,


Peter C. Jones
Executive Vice President

Encls.

cc: Mrs. Diane Granger
Chairman, Yukon Territory Water Board
Suite 200, 4114 Fourth Avenue
Whitehorse, Yukon
Y1A 4N7

Clinton Creek Water Sampling Sites.



- CC- Clinton Creek
- BC- Bear Creek
- PC- Porcupine Creek
- WC- Wolverine Creek
- EC- Eagle Creek
- FM- Forty Mile River
- Y- Yukon Creek

November 5, 1985

ASBESTOS IN WATER RESULTS - CLINTON CREEK (all results $\times 10^6$)

Date	S3 CC1	CC2A	S4 CC2B	CC3	CC4	S6 CC5	S11 FM-1	FM-2	Y-1	Y-2	S13 WC-1	S12 WC-2	EC-1	S9 PC-1	BC1
Aug. 1985	1.6	8.2	7.1	37.1	82.9	6.5	2.2	4.9	114.5	38.2	10.4	1,430.4	2.7	<0.5	5.4
July 1984	74.2	219.2	176.7	1,450.4	1,329.4	1,511.5	3.3	9.8	6.0	3.3	98.7	1,370.8	542.6	4,202.2	211.5
June 1983	0	8.7	4.4	3.3	18.5	8.7	3.8	1.6	16.5	16.5	79.1	3.8		3.3	2.2
Aug. 1982	27.3		26.1			16.4	6.0	1.6			3.3	51.8			
Sept. 1981		21.8	13.1			42.5	2.7	4.4			19.6	125.8			
June 1981		68.7	65.4			57.8	3.3	7.6			137.4	114.5			
Nov. 1980	H.D.		12.5			41.4	N.D.		7.1	0.5	3.3	208.3			
Sept. 1980	2.7	2.7	4.9	154.3	67.6	166.9	14.7	2.7	14.7	6	H.D.	188.7	0.5	4.4	
July 1979	H.D.		267.2			665.2	43.6		327.2	N.D.	16.4	395.3	10.9	3.3	
Oct. 1979	H.D.		398			3,094					20.7	54.5			
Aug. 1979	14.2		1,505			3,108					5.5	1,908.5		H.D.	
July 1979 (Q.A.H.A.)			517.9			36,690					101.4	1,381		5,442	
July 1979	1.6		396			14,449					5.5	143		33	
June 1979	6.6		1,292			36,024					38.5	401		55	
May 1979			9,760									45,580		137	
Feb. 1979												12			
Oct. 1978	5.5		396									1,040		11	
Sept. 1978	3.3		1,091									53,546		140.7	
Aug. 1978	1.6		1,700									18,299		30.2	
July 1978	H.D.		67,451									58,344		H.D.	
June 1978	H.D.		1,205									730,676		16.4	
May 1978	5.5	141.8	7,917				114.5	330.8				173,399		27.5	
May 1978												127,596			