

CYCLONE ENGINEERING
SALES LTD.

SEPARATION OF BULK MATERIALS

Manufacturing, Engineering, Testing Services

9751 - 51 Avenue
Edmonton, Alberta T6E 4Z5
Telephone: (403) 436-1385

Cable Address:
Cyclone, Edmonton
Telex: 037-3793

Ref: S1-210

October 7, 1976

Mr. T.J. Adamson
Project Geologist
Cyprus Anvil Mining Corporation
330, 355 Burrard Street
Vancouver, B.C.

Dear Tom:

This is to acknowledge receipt of compositing instructions regarding analyses of coal samples from your Carmacks project.

We have assigned numbers for all the samples as follows:

Composite Samples:

<u>Composite #</u>	<u>Sample #</u>
T1	C-3 single
T2	C-4 & C-5
T3	C-8 single
T4	C-10 & C-11
T5	C-12 to C-18, inclusive
T6	C-19 & C-20
T7	C-24 & C-25
T8	C-26 to C-31, inclusive
T9	C-33 to C-35, inclusive
T10	C-36 & C-37
T11	C-38 to C-42, inclusive

Samples that requires raw analysis only:

A1	C-6
A2	C-21
A3	C-32

Cyprus Anvil Mining Corporation
October 7, 1976
Page 2

Samples for storage only:

<u>Composite #</u>	<u>Sample #</u>
N1	C-9
N2	C-22
N3	C-23

These numbers will be used in reports and communications later.

Yours very truly,

CYCLONE ENGINEERING SALES LTD.

Per: 

B.Y.H. Wong

BYHW:sw

CES EDM

ANVIL VCR

OCTOBER 4/76

TO CYCLONE ENGINEERING SALES LTD
EDMONTON ALBERTA
ATTN BRIAN WONG

FROM T J ADAMSON
CYPRUS ANVIL MINING CORPORATION
VANCOUVER B C

SUBJECT INSTRUCTIONS RE ANALYSES OF CARMACKS, Y T COAL SAMPLES
(SAMPLES C-3 TO C-12) AIR EXPRESSED FROM WHITEHORSE TO
CYCLONE ENGINEERING SEPTEMBER 30

IN ANY ONE COMPONENT SYSTEM OR MULTI COMPONENT COMPOSITE, IF
THE RAW COMPOSITE HEAD SAMPLE ANALYSIS SHOWS LESS THAN 9 PERCENT
ASH AND AN FSI OF 1 OR LESS, THEN DO NOT PROCEED WITH ANALYSES
BEYOND THIS POINT ON THE FLOW CHART (I.E. DO ONLY RAW COMPOSITE
PROXIMATE, FSI, BTU AND S - DO NOT PROCEED WITH FLOAT-SINK
ANALYSES

SAMPLE	HOLE	FROM	TO	INTERVAL	INSTRUCTIONS
-----	----	----	--	-----	-----
✓ C-3	C76-1	386	394	8	TREAT AS 1 COMPONENT SYSTEM
✓ C-4	C76-1	668.5	674.5	6	2 COMPONENT COMPOSITE
✓ C-5	C76-1	674.5	681	6.5	
✓ C-6	C76-2	411	416	5	RAW PROX. FSI, BTU ONLY
✓ C-7	NO SAMPLE				
✓ C-8	C76-3	311	320	9	1 COMPONENT SYSTEM
✓ C-9	C76-3	344	347	3	NO ANALYSIS - STORE
✓ C-10	C76-3	350	356.5	6.5	2 COMPONENT COMPOSITE
✓ C-11	C76-3	356.5	363	6.5	

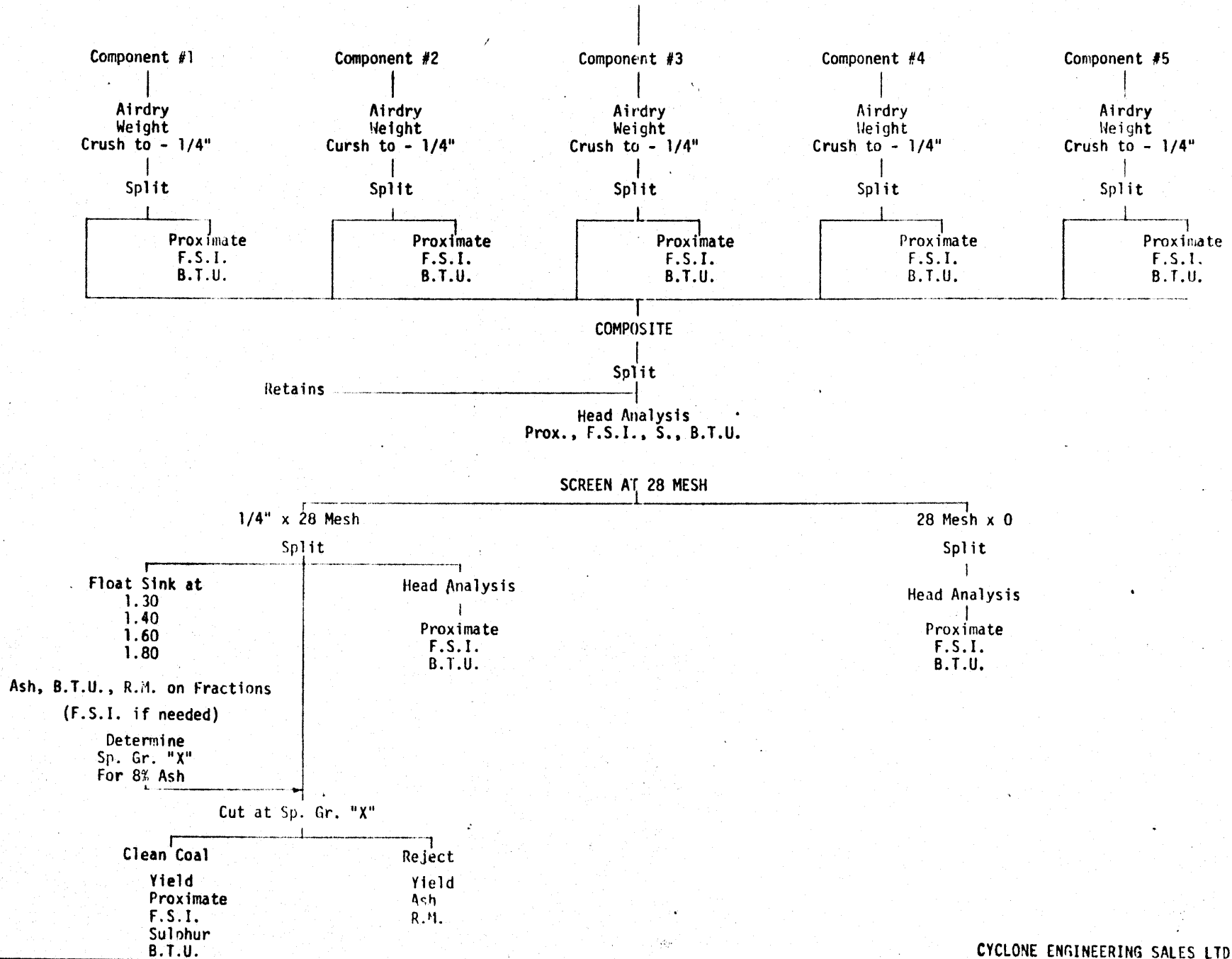
C-12	(C76-4	261	266	5	C-12 THROUGH C-18 7 COMPONENT COMPOSITE FSI only 1/2 but low and.
C-13	"	266	271	5	
C-14	"	271	276	5	
C-15	"	276	281	5	
C-16	"	281	286	5	
C-17	"	286	291	5	
C-18	"	291	297	6	
C-19	C76-5	47	53.5	6.5	2 COMPONENT COMPOSITE
C-20	C76-5	33.5	60	6.5	
C-21	(C76-5	432	447	9	RAW PROX, FSI, BTU ONLY
C-22	C76-5	477	481	4	NO ANALYSIS REQUIRED - STORE
C-23	C76-5	484	488	4	NO ANALYSIS REQUIRED - STORE
C-24	C76-6	294	299	5	2 COMPONENT COMPOSITE } FSI 6 1/2 low
C-25	C76-6	299	304.5	5.5	
C-26	C76-6	308	313	5	C-26 THROUGH C-31 6 COMPONENT COMPOSITE } FSI 0 low-mid high at, low at 40%
C-27	"	313	318	5	
C-28	"	318	323	5	
C-29	"	323	328	5	
C-30	"	328	333	5	
C-31	"	333	339	6	
C-32	(C76-6	352	357	5	RAW PROX, BTU, FSI ONLY FSI 6 1/2 low
C-33	C76-6	363	368	5	3 COMPONENT COMPOSITE FSI 0 low high at
C-34	"	368	373	5	
C-35	"	373	378	5	
C-36	C76-6	393	398	5	2 COMPONENT COMPOSITE low and AS 14 low and high at
C-37	"	398	403	5	
C-38	C76-5	891	896	5	C-38 THROUGH C-42 5 COMPONENT COMPOSITE
C-39	"	896	901	5	
C-40	"	901	906	5	
C-41	"	906	911	5	
C-42	"	911	915	4	

CES EDM

ANVIL VCR

CYPRUS ANVIL MINING CORPORATION

CORE TESTING FOR CARMACKS PROJECT



CARMACKS SOUTH - SUMMARY OF ANALYSES, 1976

HOLE #	FOOTAGE	SAMPLE #	LAB. COMPOSITE #	TYPE OF ANALYSIS (*)	MOISTURE %	ASH %	VOLATILES %	FIXED CARBON %	SULPHUR %	B.T.U./Lb.	F.S.I.	FLOAT-SINK S.G.	FOR 8% ASH YIELD %.	
C-76-4	261.0-266.0	C-12	T-5	A.R.	0.84	16.24	22.56	60.36	—	12,050	1			
	266.0-271.0	C-13	T-5	A.R.	0.94	26.35	23.17	49.54	—	9,980	1			
	271.0-276.0	C-14	T-5	A.R.	0.99	11.23	20.23	67.55	—	13,000	1/2			
	276.0-281.0	C-15	T-5	A.R.	0.85	28.51	19.11	51.53	—	9,970	1			
	281.0-286.0	C-16	T-5	A.R.	0.80	21.57	21.58	56.05	—	11,110	1/2			
	286.0-291.0	C-17	T-5	A.R.	0.78	21.63	20.07	57.52	—	11,020	1			
	291.0-297.0	C-18	T-5	A.R.	0.76	28.92	21.20	49.16	—	9,650	1/2			
	Composite		T-5	A.R.	0.81	23.06	21.46	54.67	0.63	11,040	1/2			
	Composite		T-5	F-S		0.91	7.81	22.11	69.17	0.75	14,000	1/2	1.46	54.96
C-76-6	294.0-299.0	C-24	T-7	A.R.	0.83	19.49	22.56	57.12	—	12,180	7			
	299.0-304.5	C-25	T-7	A.R.	0.94	23.75	21.80	53.51	—	10,840	4 1/2			
	Composite		T-7	A.R.	0.93	21.91	21.84	55.32	0.53	11,420	6			
	Composite		T-7	F-S		0.93	8.07	22.26	68.74	0.67	14,080	6 1/2	1.46	52.00
C-76-6	308.0-313.0	C-26	T-8	A.R.	0.51	27.71	21.02	50.76	—	10,750	7			
	313.0-318.0	C-27	T-8	A.R.	0.50	29.86	20.97	48.67	—	10,180	7			
	318.0-323.0	C-28	T-8	A.R.	0.54	27.94	21.98	49.54	—	10,600	7 1/2			
	323.0-328.0	C-29	T-8	A.R.	0.53	30.54	21.03	47.90	—	10,160	5 1/2			
	328.0-333.0	C-30	T-8	A.R.	0.56	32.68	19.81	46.95	—	9,720	5 1/2			
	333.0-339.0	C-31	T-8	A.R.	0.56	28.17	21.88	49.39	—	10,500	7			
	Composite		T-8	A.R.	0.54	29.00	22.12	48.34	0.69	10,270	6 1/2			
	Composite		T-8	F-S		0.57	7.98	24.49	66.96	0.78	14,200	8	1.40	39.27
	C-76-6	352.0-357.0	C-32	A-3	A.R.	0.49	27.02	21.26	51.23	—	10,710	6 1/2	—	—
C-76-6	363.0-368.0	C-33	T-9	A.R.	0.52	52.52	17.16	29.80	—	6,390	2 1/2			
	368.0-373.0	C-34	T-9	A.R.	0.46	19.01	22.82	57.71	—	12,510	7 1/2			
	373.0-378.0	C-35	T-9	A.R.	0.41	42.07	17.77	39.75	—	7,830	2			
	Composite		T-9	A.R.	0.46	40.35	18.04	41.15	0.74	8,310	4			
	Composite		T-9	F-S		0.45	7.96	23.77	67.82	0.80	14,310	8 1/2	1.46	30.00
C-76-6	393.0-398.0	C-36	T-10	A.R.	0.51	62.89	15.60	21.00	—	4,300	—			
	398.0-403.0	C-37	T-10	A.R.	0.67	43.70	17.36	38.27	—	7,450	1/2			
	Composite		T-10	A.R.	0.58	51.13	16.55	31.74	0.65	6,290	1/2			
	Composite		T-10	F-S		0.83	7.96	23.13	68.08	0.74	14,010	1 1/2	1.43	14.00

(*) A.R. = As received, air dried, crushed to 1/4"
 F-S = Float-sink of 1/4" x 28 Mesh fraction for approximately 8% ash in floats.

CARMACKS SOUTH - SUMMARY OF ANALYSES, 1976

HOLE #	FOOTAGE	SAMPLE #	LAB. COMPOSITE #	TYPE OF ANALYSIS (*)	MOISTURE %	ASH %	VOLATILES %	FIXED CARBON %	SULPHUR %	B.T.U./Lb.	F.S.I.	FLOAT-SINK S.G.	FOR 5% ASA YIELD %
C-76-A	261.0-266.0	C-12	T-5	A.R.	0.84	16.24	22.56	60.36	—	12,050	1		
	266.0-271.0	C-13	T-5	A.R.	0.94	26.35	23.17	49.54	—	9,980	1		
	271.0-276.0	C-14	T-5	A.R.	0.99	11.23	20.23	67.55	—	13,000	1/2		
	276.0-281.0	C-15	T-5	A.R.	0.85	28.51	19.11	51.53	—	9,970	1		
	281.0-286.0	C-16	T-5	A.R.	0.80	21.57	21.58	56.05	—	11,110	1/2		
	286.0-291.0	C-17	T-5	A.R.	0.78	21.63	20.07	57.52	—	11,020	1		
	291.0-297.0	C-18	T-5	A.R.	0.76	28.92	21.20	49.16	—	9,650	1/2		
	Composite		T-5	A.R.	0.81	23.06	21.46	54.67	0.63	11,040	1/2		
	Composite		T-5	F-S	0.91	7.81	22.11	69.17	0.75	14,000	1 1/2	1.46	54.96
C-76-B	294.0-299.0	C-24	T-7	A.R.	0.83	19.49	22.56	57.12	—	12,180	7		
	299.0-304.5	C-25	T-7	A.R.	0.94	23.75	21.80	53.51	—	10,840	4 1/2		
	Composite		T-7	A.R.	0.93	21.91	21.84	55.32	0.53	11,420	6		
	Composite		T-7	F-S	0.93	8.07	22.26	68.74	0.67	14,080	6 1/2	1.46	52.00
C-76-C	308.0-313.0	C-26	T-8	A.R.	0.51	27.71	21.02	50.76	—	10,750	7		
	313.0-318.0	C-27	T-8	A.R.	0.50	29.86	20.97	48.67	—	10,180	7		
	318.0-323.0	C-28	T-8	A.R.	0.54	27.94	21.98	49.54	—	10,600	7 1/2		
	323.0-328.0	C-29	T-8	A.R.	0.53	30.54	21.03	47.90	—	10,160	5 1/2		
	328.0-333.0	C-30	T-8	A.R.	0.56	32.68	19.81	46.95	—	9,720	5 1/2		
	333.0-339.0	C-31	T-8	A.R.	0.56	28.17	21.88	49.39	—	10,500	7		
	Composite		T-8	A.R.	0.54	29.00	22.12	48.34	0.69	10,270	6 1/2		
	Composite		T-8	F-S	0.57	7.98	24.49	66.96	0.78	14,200	8	1.40	39.27
C-76-D	352.0-357.0	C-32	A-3	A.R.	0.49	27.02	21.26	51.23	—	10,710	6 1/2	—	—
C-76-E	363.0-368.0	C-33	T-9	A.R.	0.52	52.52	17.16	29.80	—	6,390	2 1/2		
	368.0-373.0	C-34	T-9	A.R.	0.46	19.01	22.82	57.71	—	12,510	7 1/2		
	373.0-378.0	C-35	T-9	A.R.	0.41	42.07	17.77	39.75	—	7,830	2		
	Composite		T-9	A.R.	0.46	40.35	18.04	41.15	0.74	8,310	4		
	Composite		T-9	F-S	0.45	7.96	23.77	67.82	0.80	14,310	8 1/2	1.46	30.00
C-76-F	393.0-398.0	C-36	T-10	A.R.	0.51	62.89	15.60	21.00	—	4,300	—		
	398.0-403.0	C-37	T-10	A.R.	0.67	43.70	17.36	38.27	—	7,450	1 1/2		
	Composite		T-10	A.R.	0.58	51.13	16.55	31.74	0.65	6,290	1/2		
	Composite		T-10	F-S	0.83	7.96	23.13	68.08	0.74	14,010	1 1/2	1.43	14.00

(*) A.R. = As received, air dried, crushed to 1/4"
 F-S = Float-sink of 1/4" x 28 Mesh fraction for approximately 8% ash in floats.

TABLE CLASSIFICATION OF CARMACKS SOUTH COAL BY RANK (A.S.T.M. SPECIFICATIONS)

COMPOSITE #	MOISTURE % (RAW COAL)	ASH % (RAW COAL)	FIXED CARBON % (RAW COAL)	B.T.U./LB. (RAW COAL)	FIXED CARBON % (DRY, ASH-FREE)	B.T.U./LB. (MOIST, ASH-FREE)	F.S.I.	A.S.T.M. RANK.
T-5	0.81	23.06	54.67	11,040	71.6	—	$\frac{1}{2}$	Medium Volatile Bituminous
T-7	0.93	21.91	55.32	11,420	71.5	—	6	Medium Volatile Bituminous
T-8	0.54	29.00	48.34	10,270	68.3	14,606	$6\frac{1}{2}$	High Volatile A Bituminous
A-3	0.49	27.02	51.23	10,710	70.7	—	$6\frac{1}{2}$	Medium Volatile Bituminous
T-9	0.46	40.35	41.15	8,310	69.1	—	4	Medium Volatile Bituminous
T-10	0.58	51.13	31.74	6,290	65.3	13,040	$\frac{1}{2}$	High Volatile B Bituminous

TABLE CLASSIFICATION OF CARMACKS SOUTH COAL BY RANK (A.S.T.M. SPECIFICATIONS)

COMPOSITE #	MOISTURE % (RAW COAL)	ASH % (RAW COAL)	FIXED CARBON % (RAW COAL)	B.T.U./LB. (RAW COAL)	FIXED CARBON % (DRY, ASH-FREE)	B.T.U./LB. (MOIST, ASH-FREE)	F.S.I.	A.S.T.M. RANK.
T-5	0.81	23.06	54.67	11,040	71.6	—	½	Medium Volatile Bituminous
T-7	0.93	21.91	55.32	11,420	71.5	—	6	Medium Volatile Bituminous
T-8	0.54	29.00	48.34	10,270	68.3	14,606	6½	High Volatile A Bituminous
A-3	0.49	27.02	51.23	10,710	70.7	—	6½	Medium Volatile Bituminous
T-9	0.46	40.35	41.15	8,310	69.1	—	4	Medium Volatile Bituminous
T-10	0.58	51.13	31.74	6,290	65.3	13,040	½	High Volatile B Bituminous

TABLE CLASSIFICATION OF CARMACKS NORTH COAL BY RANK (A.S.T.M. SPECIFICATIONS)

SEAM #	COMPOSITE #	MOISTURE% (RAW COAL)	ASH % (RAW COAL)	FIXED CARBON% (RAW COAL)	B.T.U./LB. (RAW COAL)	FIXED CARBON% (DRY, ASH-FREE)	B.T.U./LB. (MOIST, ASH-FREE)	A.S.T.M. RANK.	
1	T-6	10.37	35.74	26.95	5,350	49.6	9,388	Subbituminous	C
2	T-1	4.87	11.90	50.21	11,250	60.0	12,865	High Volatile	C Bituminous
2	A-1	1.81	12.86	52.76	12,350	61.8	14,173	High Volatile	A Bituminous
2	A-2	1.95	30.43	38.75	9,500	57.3	13,655	High Volatile	B Bituminous
3	T-2	1.50	14.69	55.46	12,220	66.0	14,412	High Volatile	A Bituminous
3R	T-3	1.38	62.43	18.62	4,680	51.5	12,457	High Volatile	C Bituminous
3	T-4	1.68	16.70	52.39	11,380	65.4	13,899	High Volatile	B Bituminous
3	T-11	1.28	16.77	50.56	11,380	61.4	13,774	High Volatile	B Bituminous
3	C-1	2.31	8.65	58.83	12,570	66.4	13,835	High Volatile	B Bituminous
3	C-2	2.49	15.20	52.42	11,390	63.5	13,432	High Volatile	B Bituminous

TABLE CLASSIFICATION OF CARMACKS NORTH COAL BY RANK (A.S.T.M. SPECIFICATIONS)

SEAM #	COMPOSITE #	MOISTURE % (RAW COAL)	ASH % (RAW COAL)	FIXED CARBON % (RAW COAL)	B.T.U./LB. (RAW COAL)	FIXED CARBON % (DRY, ASH-FREE)	B.T.U./LB. (MOIST, ASH-FREE)	A.S.T.M. RANK.
1	T-6	10.37	35.74	26.95	5,350	49.6	9,388	Subbituminous C
2	T-1	4.87	11.90	50.21	11,250	60.0	12,865	High Volatile C Bituminous
2	A-1	1.81	12.86	52.76	12,350	61.8	14,173	High Volatile A Bituminous
2	A-2	1.95	30.43	38.75	9,500	57.3	13,655	High Volatile B Bituminous
3	T-2	1.50	14.69	55.46	12,220	66.0	14,412	High Volatile A Bituminous
3R	T-3	1.38	62.43	18.62	4,680	51.5	12,457	High Volatile C Bituminous
3	T-4	1.68	16.70	52.39	11,380	65.4	13,899	High Volatile B Bituminous
3	T-11	1.28	16.77	50.56	11,380	61.4	13,774	High Volatile B Bituminous
3	C-1	2.31	8.65	58.83	12,570	66.4	13,835	High Volatile B Bituminous
3	C-2	2.49	15.20	52.42	11,390	63.5	13,432	High Volatile B Bituminous

TABLE SUMMARY OF ANALYSES, 1976 - CARMACUS NORTH

SEAM #	HOLE #	FOOTAGE	SAMPLE #	LAB. COMPOSITE #	TYPE OF ANALYSIS	MOISTURE %	ASH %	VOLATILES %	FIXED CARBON %	SULPHUR %	B.T.U./U.	K.S.I.	Float-sink for 8% ash	YIELD %
*				#	* #								S.G.	
1	C-76-5	47.0-53.5	C-19	T-6	A.R.	10.06	32.88	25.77	31.29	—	5,420	—	1.60	28.62
		53.5-60.0	C-20	T-6	A.R.	10.54	35.77	26.92	26.77	—	5,340	—		
		Composite		T-6	A.R.	10.37	35.74	26.94	26.95	0.48	5,350	—		
		Composite		T-6	F-S	11.43	12.60	38.00	37.97	0.52	7,800	—		
2	C-76-1	386.0-394.0	C-3	T-1	A.R.	4.87	11.90	33.02	50.21	0.66	11,250	—	1.80	92.79
				T-1	F-S	4.35	7.30	35.69	52.66	0.66	12,050	—		
2	C-76-2	411.0-416.0	C-6	A-1	A.R.	1.81	12.86	32.57	52.76	—	12,350	—		
2	C-76-5	438.0-447.0	C-21	A-2	A.R.	1.95	30.43	28.97	38.75	—	9,500	1		
3	C-76-1	668.5-674.5	C-4	T-2	A.R.	1.48	14.15	27.83	56.54	—	12,210	1/2	1.54	82.99
		674.5-691.5	C-5	T-2	A.R.	1.59	13.68	28.39	56.34	—	12,230	1		
		Composite		T-2	A.R.	1.50	14.69	28.35	55.46	0.52	12,220	1		
		Composite		T-2	F-S	1.53	8.17	29.53	60.77	0.60	13,210	1		
? 3 R	C-76-3	311.0-320.0	C-8	T-3	A.R.	1.38	62.43	17.57	18.62	—	4,680	—	1.41	7.60
				T-3	F-S	1.68	7.87	34.47	55.98	0.80	13,260	1 1/2		
3	C-76-3	350.0-356.5	C-10	T-4	A.R.	1.70	14.29	29.70	54.31	—	12,050	1/2	1.62	73.50
		356.5-363.0	C-11	T-4	A.R.	1.54	19.25	28.09	51.12	—	11,000	1/2		
		Composite		T-4	A.R.	1.68	16.70	29.23	52.39	0.45	11,380	1/2		
		Composite		T-4	F-S	2.00	8.18	30.52	59.30	0.40	12,970	1		
3	C-76-5	891.0-896.0	C-38	T-11	A.R.	1.16	22.75	30.69	45.40	—	10,600	1	1.53	65.00
		896.0-901.0	C-39	T-11	A.R.	1.38	13.98	32.96	51.68	—	11,760	1		
		901.0-906.0	C-40	T-11	A.R.	1.30	15.44	32.66	50.60	—	11,460	1		
		906.0-911.0	C-41	T-11	A.R.	1.25	11.43	30.69	56.63	—	12,320	1		
		911.0-915.0	C-42	T-11	A.R.	1.19	19.64	29.35	49.82	—	11,190	1		
		Composite		T-11	A.R.	1.28	16.77	31.59	50.56	0.62	11,380	1		
		Composite		T-11	F-S	1.76	7.90	32.42	57.92	0.63	13,300	1		
3	Open Pit	Channel	C-1	C-1	A.R.	2.31	8.65	30.21	58.83	0.50	12,570	1/2	—	100.00
				C-1	F-S	2.19	8.20	30.15	59.46	0.46	12,620	1/2		
3	Open Pit	Stockpile	C-2	C-2	A.R.	2.49	15.20	29.89	52.42	0.40	11,390	—	1.66	83.40
				C-2	F-S	2.24	7.95	30.38	59.43	0.48	12,709	—		

* 1 = New Seam
 2 = "Hangingwall Seam"
 3 = "Main Seam"
 R = Rider

** A.R. = As received, air-dried, crushed to 1/4" topsize
 F-S = Float-sink of 1/4" x 28 mesh fraction for 8% ash in floats.

TABLE SUMMARY OF ANALYSES, 1976. - CARMACKS NORTH

SEAM # *	HOLE #	FOOTAGE	SAMPLE #	LAB. COMPOSITE #	TYPE OF ANALYSIS **	MOISTURE %	ASH %	VOLATILES %	FIXED CARBON %	SULPHUR %	B.T.U./Lb.	F.S.I.	FLOAT-SINK FOR 8% ASH S.G.	YIELD %
1	C-76-5	47.0-53.5 53.5-60.0 Composite Composite	C-19	T-6	A.R.	10.06	32.88	25.77	31.29	—	5,420	—	1.60	28.62
			C-20	T-6	A.R.	10.54	35.77	26.92	26.77	—	5,340	—		
				T-6	A.R.	10.37	35.74	26.94	26.95	0.48	5,350	—		
				T-6	F-S	11.43	12.60	38.00	37.97	0.52	7,800	—		
2	C-76-1	386.0-394.0	C-3	T-1	A.R.	4.87	11.90	33.02	50.21	0.66	11,250	—	1.80	92.79
				T-1	F-S	4.35	7.30	35.69	52.66	0.66	12,050	—		
2	C-76-2	411.0-416.0	C-6	A-1	A.R.	1.81	12.86	32.57	52.76	—	12,350	—		
2	C-76-5	438.0-447.0	C-21	A-2	A.R.	1.95	30.43	28.97	38.75	—	9,500	1		
3	C-76-1	668.5-674.5 674.5-681.5 Composite Composite	C-4	T-2	A.R.	1.48	14.15	27.83	56.54	—	12,210	1/2	1.54	82.99
			C-5	T-2	A.R.	1.59	13.68	28.39	56.34	—	12,230	1		
				T-2	A.R.	1.50	14.69	28.35	55.46	0.52	12,220	1		
				T-2	F-S	1.53	8.17	29.53	60.77	0.60	13,210	1		
?3R	C-76-3	311.0-320.0	C-8	T-3	A.R.	1.38	62.43	17.57	18.62	—	4,680	—	1.41	7.60
				T-3	F-S	1.68	7.87	34.47	55.98	0.80	13,260	1/2		
3	C-76-3	350.0-356.5 356.5-363.0 Composite Composite	C-10	T-4	A.R.	1.70	14.29	29.70	54.31	—	12,050	1/2	1.62	73.50
			C-11	T-4	A.R.	1.54	19.25	28.09	51.12	—	11,000	1/2		
				T-4	A.R.	1.68	16.70	29.23	52.39	0.45	11,380	1/2		
				T-4	F-S	2.00	8.18	30.52	59.30	0.40	12,970	1		
3	C-76-5	891.0-896.0 896.0-901.0 901.0-906.0 906.0-911.0 911.0-915.0 Composite Composite	C-38	T-11	A.R.	1.16	22.75	30.69	45.40	—	10,600	1	1.53	65.00
			C-39	T-11	A.R.	1.38	13.98	32.96	51.68	—	11,760	1		
			C-40	T-11	A.R.	1.30	15.44	32.66	50.60	—	11,460	1		
			C-41	T-11	A.R.	1.25	11.43	30.69	56.63	—	12,320	1		
			C-42	T-11	A.R.	1.19	19.64	29.35	49.82	—	11,190	1		
				T-11	A.R.	1.28	16.77	31.59	50.56	0.62	11,380	1		
				T-11	F-S	1.76	7.90	32.42	57.92	0.63	13,300	1		
3	Open Pit	Channel	C-1	C-1	A.R.	2.31	8.65	30.21	58.83	0.50	12,570	1/2	—	100.00
				C-1	F-S	2.19	8.20	30.15	59.46	0.46	12,620	1/2		
3	Open Pit	Stockpile	C-2	C-2	A.R.	2.49	15.20	29.89	52.42	0.40	11,390	—	1.66	83.40
				C-2	F-S	2.24	7.95	30.38	59.43	0.48	12,709	—		

* 1 = New Seam
2 = "Hanging wall Seam"
3 = "Main Seam"
R = Rider

** A.R. = As received, air-dried, crushed to 1/4" topsize.
F-S = Float-sink of 1/4" x 28 mesh fraction for 8% ash in floats.

CYPRUS ANVIL MINING CORPORATION

Analytical Report

for

Core Testing

PROJECT:

DRILL HOLE #: C-76-2

AREA: Carmacks, Y.T.

SEAM:

DATE SAMPLED:

LAB COMPOSITE #: A1

DATE ANALYZED: Nov. 18/76

COMPOSITE NO.: A1
HOLE NO.: C-76-2
SEAM:

T A B L E 1. COMPONENTS AND ANALYSIS

	<u>Ash %</u>	<u>R.M %</u>	<u>V.M. %</u>	<u>F.C. %</u>	<u>B.T.U./LB.</u>	<u>F.S.I.</u>
Number: C-6	12.86	1.81	32.57	52.76	12,350.	1
Footage: 411 - 416						
Weight: 3,982 gm.						

End of Analysis

Number:

Footage:

Weight:

Number:

Footage:

Weight:

Number:

Footage:

Weight:

Number:

Footage:

Weight:

CYPRUS ANVIL MINING CORPORATION

Analytical Report
for
Core Testing

PROJECT:

DRILL HOLE #: C76-5

AREA:

SEAM:

DATE SAMPLED:

LAB COMPOSITE #: A2

DATE ANALYZED:

COMPOSITE NO.: A2
HOLE NO.: C-76-5
SEAM:

T A B L E 1. COMPONENTS AND ANALYSIS

	<u>Ash %</u>	<u>R.M %</u>	<u>V.M. %</u>	<u>F.C. %</u>	<u>B.T.U./LB.</u>	<u>F.S.I.</u>
Number: C-21	30.43	1.95	28.87	38.75	9,500	1
Footage: 438 - 447						
Weight: 4,436 gm.						

End of Analysis

Number:

Footage:

Weight:

Number:

Footage:

Weight:

Number:

Footage:

Weight:

Number:

Footage:

Weight:

CYPRUS ANVIL MINING CORPORATION

Analytical Report

for
Core Testing

PROJECT:

AREA: Carmacks, Y.T.

DATE SAMPLED:

DATE ANALYZED: September 20, 1976

DRILL HOLE #:

SEAM:

LAB COMPOSITE #: C-1

COMPOSITE NO.: C-1

HOLE NO.:

SEAM:

T A B L E 1. COMPONENTS AND ANALYSIS

	<u>Ash %</u>	<u>R.M %</u>	<u>V.M. %</u>	<u>F.C. %</u>	<u>B.T.U./LB.</u>	<u>F.S.I.</u>
Number: C-1	8.65	2.31	30.21	58.83	12,570	½
Footage: -						
Weight: 8,146. gms.						

Number:

Footage:

Weight:

Number:

Footage:

Weight:

Number:

Footage:

Weight:

Number:

Footage:

Weight:

COMPOSITE NO.: C-1

HOLE NO.:

SEAM:

T A B L E 2. ANALYSIS OF COMPOSITE HEAD SAMPLE

Ash %	8.65
R.M. %	2.31
V.M. %	30.21
F.C. %	58.83
S. %	0.50
B.T.U./LB.	12,570
F.S.I.	$\frac{1}{2}$

T A B L E 3. SIZE CONSIST OF COMPOSITE HEAD SAMPLE

<u>Size</u>	<u>Wt. %</u>
1/4" x 28 M.	75.33
28 M. x 0	24.67
<hr/>	
Total	100.00

T A B L E 4. ANALYSIS OF SIZE FRACTIONS

	<u>1/4" x 28 M.</u>	<u>28 M. x 0</u>	<u>Total</u>
Ash %	8.20	9.85	8.61
R.M. %	2.19	2.99	2.39
V.M. %	30.15	31.05	30.37
F.C. %	59.46	56.11	58.63
B.T.U./LB.	12,620	12,170	12,510
F.S.I.	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$

COMPOSITE NO.: C-1

HOLE NO.:

SEAM:

T A B L E 5. FLOAT-SINK AND ANALYSIS OF 1/4" x 28 MESH
(Fractional Basis)

<u>Sp. Gr.</u>	<u>Wt. %</u>	<u>R.M. %</u>	<u>Ash %</u>	<u>B.T.U./Lb.</u>
- 1.30	16.58	2.38	2.91	13,950
1.30 - 1.40	57.28	2.31	4.03	13,480
1.40 - 1.60	18.22	2.53	13.39	11,420
1.60 - 1.80	4.17	1.96	29.75	7,930
+ 1.80	3.75	1.13	50.84	4,420
TOTAL	100.00	2.31	8.38	12,610

T A B L E 6. FLOAT-SINK AND ANALYSIS OF 1/4" x 28 MESH
(Cumulative Basis)

<u>Sp. Gr.</u>	<u>Wt. %</u>	<u>R.M. %</u>	<u>Ash %</u>	<u>B.T.U./Lb.</u>	<u>F.S.I.</u>
- 1.30	16.58	2.38	2.91	13,950	
- 1.40	73.86	2.34	3.78	13,580	
- 1.60	92.08	2.38	5.68	13,160	
- 1.80	96.25	2.36	6.72	12,930	
TOTAL	100.00	2.31	8.38	12,610	

COMPOSITE NO.: C-1

HOLE NO.:

SEAM:

T A B L E 7. WASHABILITY FOR 1/4" x 28 MESH FRACTION

Sp. Gr.	Fractional		Cumulative			
	Wt. %	Ash %	Floats		Sinks	
			Wt. %	Ash %	Wt. %	Ash %
- 1.30	16.58	2.91	16.58	2.91	100.00	8.38
1.30 - 1.40	57.28	4.03	73.86	3.78	83.42	9.46
1.40 - 1.60	18.22	13.39	92.08	5.68	26.14	21.37
1.60 - 1.80	4.17	29.75	96.25	6.72	7.92	39.74
+ 1.80	3.75	50.84	100.00	8.38	3.75	50.84
Total	100.00	8.38				

COMPOSITE NO.: C-1

HOLE NO.:

SEAM:

T A B L E 8. FLOAT-SINK OF 1/4" x 28 MESH FOR 8% ASH IN FLOATS

Specific Gravity: -
Yield of Floats: 100.00 %

Analysis of Floats:

Ash %	8.20
R.M. %	2.19
V.M. %	30.15
F.C. %	59.46
S. %	0.46
B.T.U./Lb.	12,620
F.S.I.	$\frac{1}{2}$

Analysis of Sinks:

Ash %	-
R.M. %	-

FIGURE

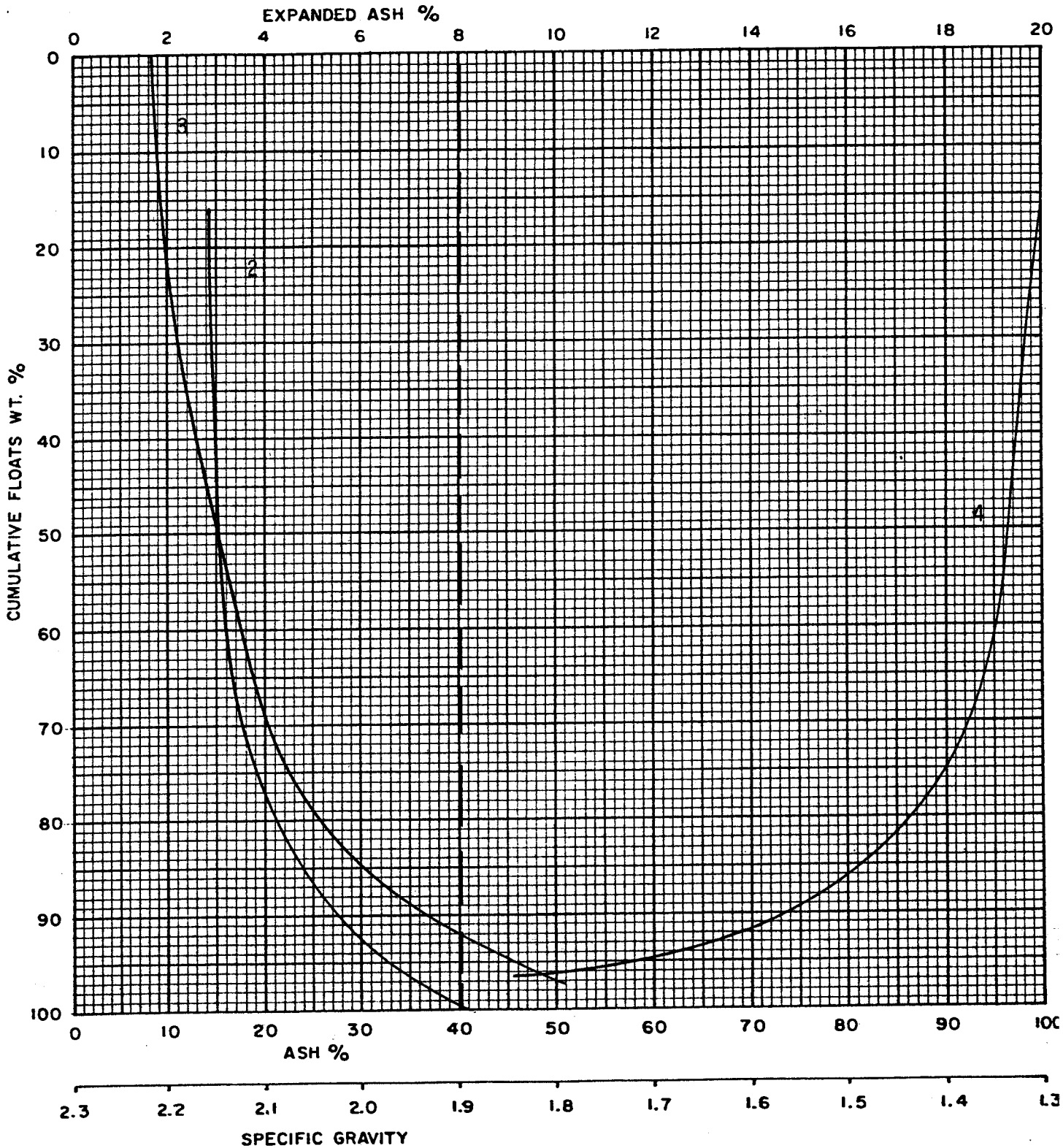
COMPANY Cyprus Anvil Mining Corporation

SAMPLE C-1 1/4" x 28 m

CURVE LEGEND

- 1 - FLOATS
- 2 - EXPANDED FLOATS
- 3 - SINKS
- 4 - SPECIFIC GRAVITY
- 5 - ELEMENTARY ASH
- 6 - NEAR GRAVITY MATERIAL

WASHABILITY CURVES



DATE

CYCLONE ENGINEERING SALES LTD.
EDMONTON ALBERTA CANADA

CYPRUS ANVIL MINING CORPORATION

Analytical Report

for
Core Testing

PROJECT:

DRILL HOLE #:

AREA: Carmacks, Y.T.

SEAM:

DATE SAMPLED:

LAB COMPOSITE #: C-2

DATE ANALYZED: September 20, 1976

COMPOSITE NO.: C-2

HOLE NO.:

SEAM:

T A B L E 1. COMPONENTS AND ANALYSIS

	<u>Ash %</u>	<u>R.M %</u>	<u>V.M. %</u>	<u>F.C. %</u>	<u>B.T.U./LB.</u>	<u>F.S.I.</u>
Number: C-2	15.20	2.49	29.89	52.42	11,420	N.A.
Footage: -						
Weight: 10,100 gms.						

Number:

Footage:

Weight:

Number:

Footage:

Weight:

Number:

Footage:

Weight:

Number:

Footage:

Weight:

COMPOSITE NO.: C-2

HOLE NO.:

SEAM:

T A B L E 2. ANALYSIS OF COMPOSITE HEAD SAMPLE

Ash %	15.20
R.M. %	2.49
V.M. %	29.89
F.C. %	52.42
S. %	0.40
B.T.U./LB.	11,390
F.S.I.	N.A.

T A B L E 3. SIZE CONSIST OF COMPOSITE HEAD SAMPLE

<u>Size</u>	<u>Wt. %</u>
1/4" x 28 M.	72.72
28 M. x 0	27.28
<hr/>	
Total	100.00

T A B L E 4. ANALYSIS OF SIZE FRACTIONS

	<u>1/4" x 28 M.</u>	<u>28 M. x 0</u>	<u>Total</u>
Ash %	15.03	15.35	15.12
R.M. %	2.30	2.86	2.45
V.M. %	30.14	30.88	30.34
F.C. %	52.53	50.91	52.09
B.T.U./LB.	11,410	11,310	11,380
F.S.I.	N.A.	N.A.	N.A.

COMPOSITE NO.: C-2

HOLE NO.:

SEAM:

T A B L E 5. FLOAT-SINK AND ANALYSIS OF 1/4" x 28 MESH
(Fractional Basis)

<u>Sp. Gr.</u>	<u>Wt. %</u>	<u>R.M. %</u>	<u>Ash %</u>	<u>B.T.U./Lb.</u>
- 1.30	12.96	1.88	3.21	13,780
1.30 - 1.40	45.35	2.30	5.31	13,130
1.40 - 1.60	23.45	2.28	14.36	11,330
1.60 - 1.80	5.83	1.80	27.55	8,240
+ 1.80	12.41	1.29	65.71	2,930
TOTAL	100.00	2.09	15.95	11,130

T A B L E 6. FLOAT-SINK AND ANALYSIS OF 1/4" x 28 MESH
(Cumulative Basis)

<u>Sp. Gr.</u>	<u>Wt. %</u>	<u>R.M. %</u>	<u>Ash %</u>	<u>B.T.U./Lb.</u>	<u>F.S.I.</u>
- 1.30	12.96	1.88	3.21	13,780	
- 1.40	58.31	2.21	4.84	13,280	
- 1.60	81.76	2.23	7.57	12,720	
- 1.80	87.59	2.20	8.90	12,290	
TOTAL	100.00	2.09	15.95	11,130	

COMPOSITE NO.: C-2

HOLE NO.:

SEAM:

T A B L E 7. WASHABILITY FOR 1/4" x 28 MESH FRACTION

Sp. Gr.	Fractional		Cumulative			
	Wt. %	Ash %	Floats		Sinks	
			Wt. %	Ash %	Wt. %	Ash %
- 1.30	12.96	3.21	12.96	3.21	100.00	15.95
1.30 - 1.40	45.35	5.31	58.31	4.84	87.04	17.85
1.40 - 1.60	23.45	14.36	81.76	7.57	41.69	31.49
1.60 - 1.80	5.83	27.55	87.59	8.90	18.24	53.51
+ 1.80	12.41	65.71	100.00	15.95	12.41	65.71
Total	100.00	15.95				

COMPOSITE NO.: C-2

HOLE NO.:

SEAM:

T A B L E 8. FLOAT-SINK OF 1/4" x 28 MESH FOR 8% ASH IN FLOATS

Specific Gravity: 1.66
Yield of Floats: 83.40 %

Analysis of Floats:

Ash % 7.95
R.M. % 2.24
V.M. % 30.38
F.C. % 59.43
S. % 0.48
B.T.U./Lb. 12,709
F.S.I. N.A.

Analysis of Sinks:

Ash % 56.24
R.M. % 1.56

FIGURE

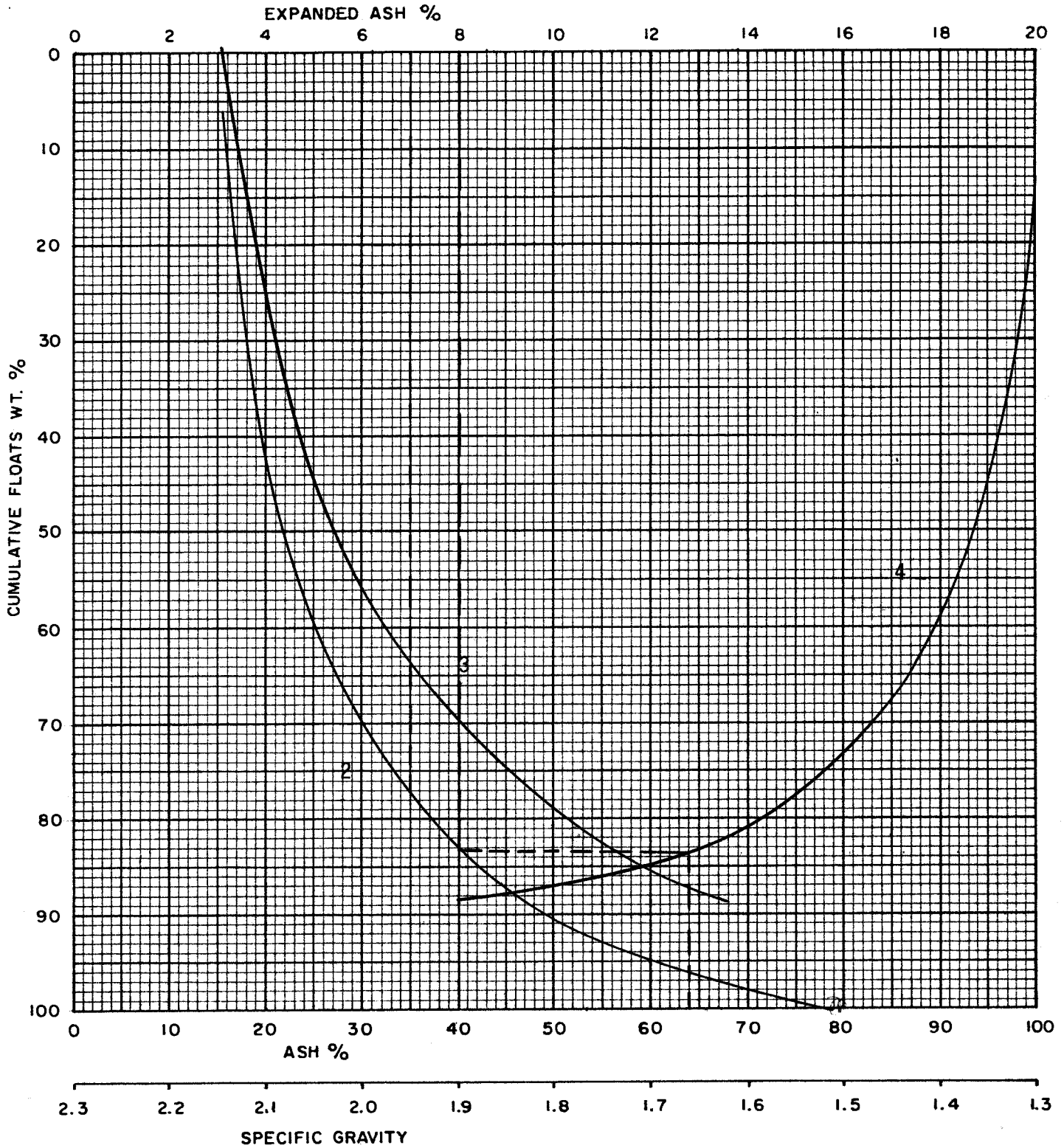
COMPANY Cyprus Anvil Mining Corporation

SAMPLE C-2 1/4" x 28 m

CURVE LEGEND

- 1 - FLOATS
- 2 - EXPANDED FLOATS
- 3 - SINKS
- 4 - SPECIFIC GRAVITY
- 5 - ELEMENTARY ASH
- 6 - NEAR GRAVITY MATERIAL

WASHABILITY CURVES



DATE

CYCLONE ENGINEERING SALES LTD.
EDMONTON ALBERTA CANADA

CYPRUS ANVIL MINING CORPORATION

Analytical Report
for
Core Testing

PROJECT:

DRILL HOLE #: C-76-1

AREA: Carmacks, Y. T.

SEAM:

DATE SAMPLED:

LAB COMPOSITE #: T1

DATE ANALYZED: December 3, 1976

COMPOSITE NO.: T-1
HOLE NO.: C-76-1
SEAM:

T A B L E 1. COMPONENTS AND ANALYSIS

	<u>Ash %</u>	<u>R.M %</u>	<u>V.M. %</u>	<u>F.C. %</u>	<u>B.T.U./LB.</u>	<u>F.S.I.</u>
Number: C-3	11.90	4.87	33.02	50.21	11,250	N. A.
Footage: 386-394						
Weight: 4,870						

Number:
Footage:
Weight:

Number:
Footage:
Weight:

Number:
Footage:
Weight:

Number:
Footage:
Weight:

COMPOSITE NO.: T-1
HOLE NO.: C-76-1
SEAM:

T A B L E 2. ANALYSIS OF COMPOSITE HEAD SAMPLE

Ash %	11.90
R.M. %	4.87
V.M. %	33.02
F.C. %	50.21
S. %	0.66
B.T.U./LB.	11,250
F.S.I.	N. A.

T A B L E 3. SIZE CONSIST OF COMPOSITE HEAD SAMPLE

<u>Size</u>	<u>Wt. %</u>
1/4" x 28 M.	80.56
28 M. x 0	19.44
<hr/> Total	100.00

T A B L E 4. ANALYSIS OF SIZE FRACTIONS

	<u>1/4" x 28 M.</u>	<u>28 M. x 0</u>	<u>Total</u>
Ash %	11.86	12.18	11.92
R.M. %	4.44	6.03	4.75
V.M. %	32.77	32.95	32.80
F.C. %	50.93	48.84	50.53
B.T.U./LB.	11,310	11,220	11,300
F.S.I.	N.A.	N.A.	N.A.

COMPOSITE NO.: T-1

HOLE NO.: C-76-1

SEAM:

T A B L E 5. FLOAT-SINK AND ANALYSIS OF 1/4" x 28 MESH
(Fractional Basis)

<u>Sp. Gr.</u>	<u>Wt. %</u>	<u>R.M. %</u>	<u>Ash %</u>	<u>B.T.U./Lb.</u>
- 1.30	0.00	--	--	--
1.30 - 1.40	65.21	4.21	3.05	13,200
1.40 - 1.60	22.79	6.12	11.75	9,990
1.60 - 1.80	4.79	2.95	43.44	6,360
+ 1.80	<u>7.21</u>	<u>1.71</u>	<u>79.03</u>	<u>2,330</u>
TOTAL	100.00	4.40	12.44	11,360

T A B L E 6. FLOAT-SINK AND ANALYSIS OF 1/4" x 28 MESH
(Cumulative Basis)

<u>Sp. Gr.</u>	<u>Wt. %</u>	<u>R.M. %</u>	<u>Ash %</u>	<u>B.T.U./Lb.</u>	<u>F.S.I.</u>
- 1.30	0.00	--	--	--	--
- 1.40	65.21	4.21	3.05	13,200	--
- 1.60	88.00	4.70	5.30	12,370	Not Required
- 1.80	<u>92.79</u>	<u>4.61</u>	<u>7.27</u>	<u>12,060</u>	
TOTAL	100.00	4.40	12.44	11,360	

COMPOSITE NO.: T-1

HOLE NO.: C-76-1

SEAM:

T A B L E 7. WASHABILITY FOR 1/4" x 28 MESH FRACTION

Sp. Gr.	Fractional		Cumulative			
	Wt. %	Ash %	Floats		Sinks	
			Wt. %	Ash %	Wt. %	Ash %
- 1.30	0.00	--	--	--	--	--
1.30 - 1.40	65.21	3.05	65.21	3.05	100.00	12.44
1.40 - 1.60	22.79	11.75	88.00	5.30	34.79	30.06
1.60 - 1.80	4.79	43.44	92.79	7.27	12.00	64.82
+ 1.80	7.21	79.03	100.00	12.44	7.21	79.03
Total	100.00	12.44				

COMPOSITE NO.: T-1

HOLE NO.: C-76-1

SEAM:

T A B L E 8. FLOAT-SINK OF 1/4" x 28 MESH FOR 8% ASH IN FLOATS

Specific Gravity: 1.80 53

Yield of Floats: 92.79 % 65%

Analysis of Floats:

Ash %	7.30	7.9
R.M. %	4.35	1.70
V.M. %	35.69	32.42
F.C. %	52.66	57.92
S. %	0.66	.63
B.T.U./Lb.	12,050	13,330
F.S.I.	N.A.	0.

Analysis of Sinks:

Ash %	78.93
R.M. %	1.71

FIGURE

COMPANY CYPRUS ANVIL MINING CORP.

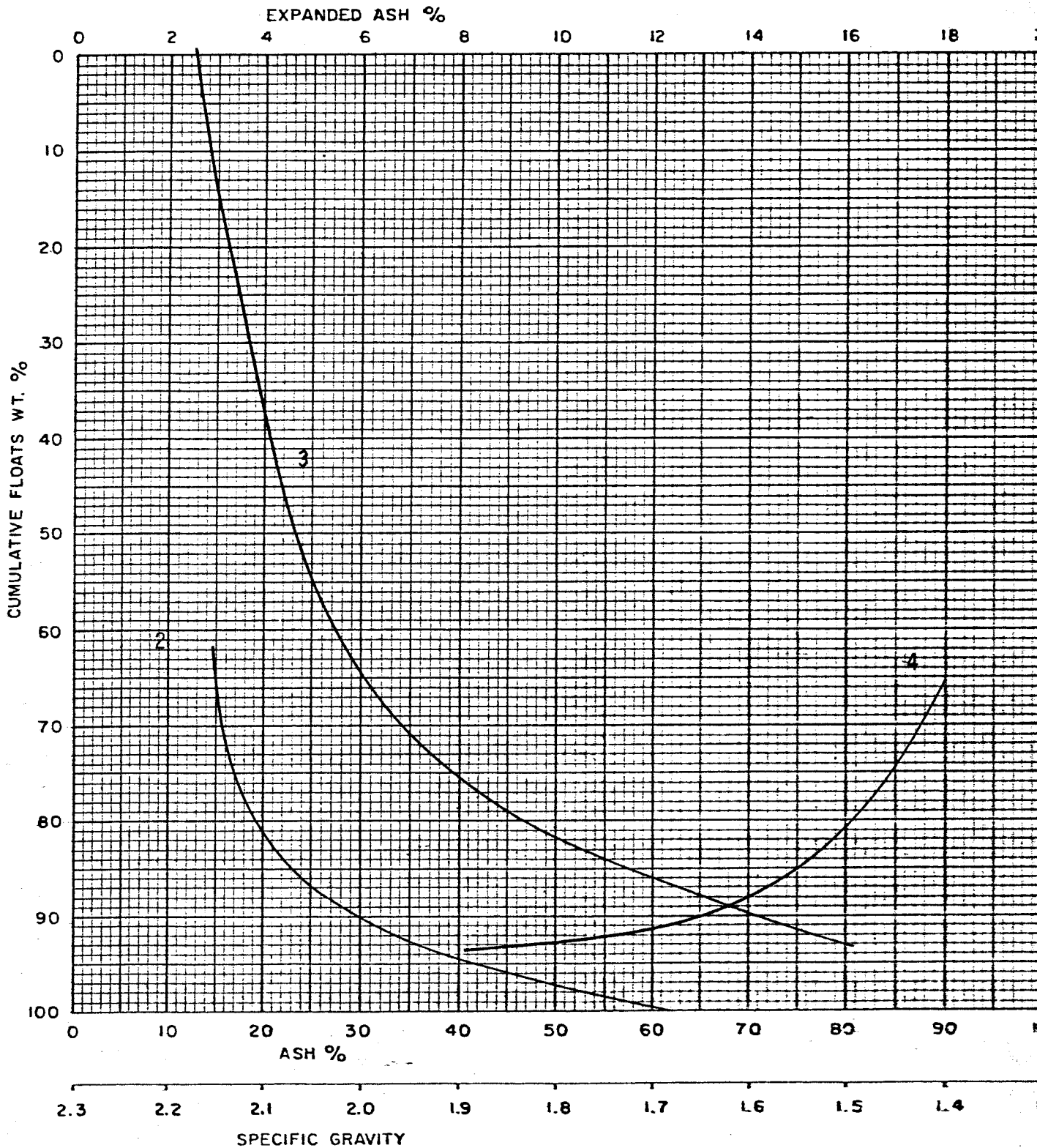
SAMPLE T-1

Size 1/4" x 28 Mesh

CURVE LEGEND

- 1 - FLOATS
- 2 - EXPANDED FLOATS
- 3 - SINKS
- 4 - SPECIFIC GRAVITY
- 5 - ELEMENTARY ASH
- 6 - NEAR GRAVITY MATERIAL

WASHABILITY CURVES



DATE

CYCLONE ENGINEERING SALES LTD

CYPRUS ANVIL MINING CORPORATION

Analytical Report

for

Core Testing

PROJECT:

AREA: Carmack, Y. T.

DATE SAMPLED:

DATE ANALYZED: December 1, 1976

DRILL HOLE #: C-76-1

SEAM:

LAB COMPOSITE #: T2

COMPOSITE NO.: T2
HOLE NO.: C-76-1
SEAM:

T A B L E 1. COMPONENTS AND ANALYSIS

	<u>Ash %</u>	<u>R.M %</u>	<u>V.M. %</u>	<u>F.C. %</u>	<u>B.T.U./LB.</u>	<u>F.S.I.</u>
Number: C-4	14.15	1.48	27.83	56.54	12,210	½
Footage: 668.5 - 674.5						
Weight: 1,556 gms.						

Number: C-5	13.68	1.59	28.39	56.34	12,230	1
Footage: 674.5 - 681						
Weight: 3,244						

Number:
Footage:
Weight:

Number:
Footage:
Weight:

Number:
Footage:
Weight:

COMPOSITE NO.: T2

HOLE NO.: C-76-1

SEAM:

T A B L E 2. ANALYSIS OF COMPOSITE HEAD SAMPLE

Ash %	14.69
R.M. %	1.50
V.M. %	28.35
F.C. %	55.46
S. %	0.52
B.T.U./LB.	12,220
F.S.I.	1

T A B L E 3. SIZE CONSIST OF COMPOSITE HEAD SAMPLE

<u>Size</u>	<u>Wt. %</u>
1/4" x 28 M.	85.80
28 M. x 0	<u>14.20</u>
<u>Total</u>	100.00

T A B L E 4. ANALYSIS OF SIZE FRACTIONS

	<u>1/4" x 28 M.</u>	<u>28 M. x 0</u>	<u>Total</u>
Ash %	14.76	11.60	14.31
R.M. %	1.51	1.53	1.51
V.M. %	28.95	28.63	28.90
F.C. %	54.78	58.24	55.28
B.T.U./LB.	12,190	12,580	12,250
F.S.I.	1	1	1

COMPOSITE NO.: T2

HOLE NO.: C-76-1

SEAM:

T A B L E 5. FLOAT-SINK AND ANALYSIS OF 1/4" x 28 MESH
(Fractional Basis)

<u>Sp. Gr.</u>	<u>Wt. %</u>	<u>R.M. %</u>	<u>Ash %</u>	<u>B.T.U./Lb.</u>
- 1.30	23.11	1.74	3.38	14,060
1.30 - 1.40	39.96	1.57	6.66	13,730
1.40 - 1.60	24.82	1.53	18.40	11,560
1.60 - 1.80	7.32	1.33	39.71	7,550
+ 1.80	<u>4.79</u>	<u>1.05</u>	<u>65.00</u>	<u>4,340</u>
TOTAL	100.00	1.56	14.03	12,360

T A B L E 6. FLOAT-SINK AND ANALYSIS OF 1/4" x 28 MESH
(Cumulative Basis)

<u>Sp. Gr.</u>	<u>Wt. %</u>	<u>R.M. %</u>	<u>Ash %</u>	<u>B.T.U./Lb.</u>	<u>F.S.I.</u>
- 1.30	23.11	1.74	3.38	14,060	
- 1.40	63.07	1.63	5.46	13,850	
- 1.60	87.89	1.60	9.11	13,200	NOT REQUIRED
- 1.80	95.21	1.58	11.47	12,770	
TOTAL	100.00	1.56	14.03	12,360	

COMPOSITE NO.: T2

HOLE NO.: C-76-1

SEAM:

T A B L E 7. WASHABILITY FOR 1/4" x 28 MESH FRACTION

Sp. Gr.	Fractional		Cumulative			
	Wt. %	Ash %	Floats		Sinks	
			Wt. %	Ash %	Wt. %	Ash %
- 1.30	23.11	3.38	23.11	3.38	100.00	14.03
1.30 - 1.40	39.96	6.66	63.07	5.46	76.89	17.23
1.40 - 1.60	24.82	18.40	87.89	9.11	36.93	28.67
1.60 - 1.80	7.32	39.71	95.21	11.47	12.11	49.71
+ 1.80	4.79	65.00	100.00	14.03	4.79	65.00
Total	100.00	14.03				

COMPOSITE NO.: T2

HOLE NO.: C-76-1

SEAM:

T A B L E 8. FLOAT-SINK OF 1/4" x 28 MESH FOR 8% ASH IN FLOATS

Specific Gravity: 1.54
Yield of Floats: 82.99%

Analysis of Floats:

Ash % 8.17
R.M. % 1.53
V.M. % 29.53
F.C. % 60.77
S. % 0.60
B.T.U./Lb. 13,210
F.S.I. 1

Analysis of Sinks:

Ash % 45.04
R.M. % 1.16

FIGURE

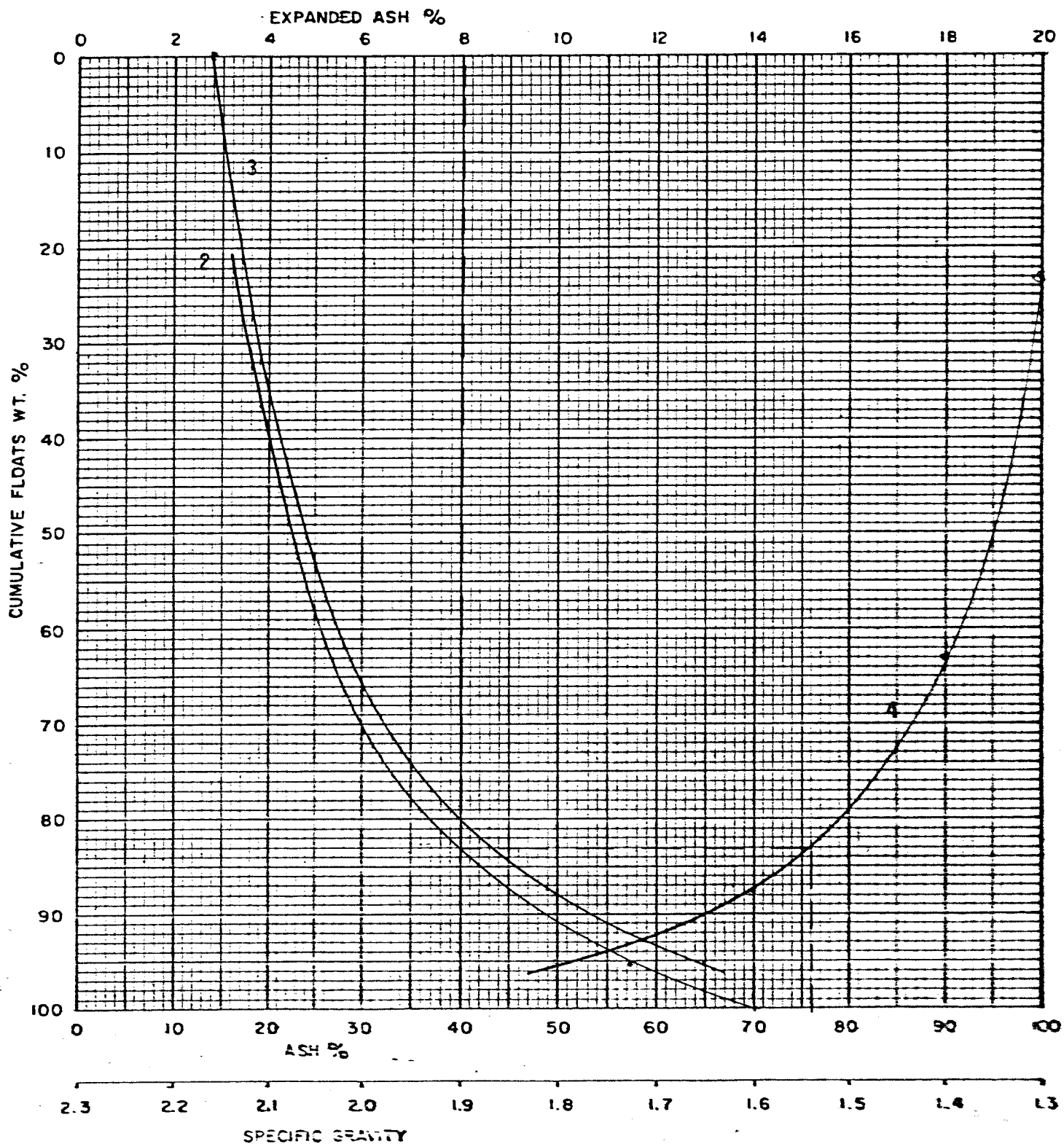
COMPANY CYPRUS ANVIL MINING CORP.

SAMPLE C-76-1 Composite T2

Size 1/4" x 28 Mesh

- CURVE LEGEND
- 1 - FLOATS
 - 2 - EXPANDED FLOATS
 - 3 - SINKS
 - 4 - SPECIFIC GRAVITY
 - 5 - ELEMENTARY ASH
 - 6 - NEAR GRAVITY MATERIAL

WASHABILITY CURVES



DATE

CYCLONE ENGINEERING SALES LTD.
EDMONTON ALBERTA CANADA

CYPRUS ANVIL MINING CORPORATION

Analytical Report
for
Core Testing

PROJECT:

DRILL HOLE #: C76-3

AREA: Carmacks, Y. T.

SEAM:

DATE SAMPLED:

LAB COMPOSITE #: T3

DATE ANALYZED: December 8, 1976

COMPOSITE NO.: T-3

HOLE NO.: C-76-3

SEAM:

T A B L E 1. COMPONENTS AND ANALYSIS

	<u>Ash %</u>	<u>R.M %</u>	<u>V.M. %</u>	<u>F.C. %</u>	<u>B.T.U./LB.</u>	<u>F.S.I.</u>
Number: C-8	62.43	1.38	17.57	18.62	4,680	N.A.
Footage: 311 - 320						
Weight: 14,346 gms.						

Number:

Footage:

Weight:

Number:

Footage:

Weight:

Number:

Footage:

Weight:

Number:

Footage:

Weight:

COMPOSITE NO.: T-3
HOLE NO.: C-76-3
SEAM:

T A B L E 2. ANALYSIS OF COMPOSITE HEAD SAMPLE

Ash %	62.43
R.M. %	1.38
V.M. %	17.57
F.C. %	18.62
S. %	0.82
B.T.U./LB.	4,680
F.S.I.	N.A.

T A B L E 3. SIZE CONSIST OF COMPOSITE HEAD SAMPLE

<u>Size</u>	<u>Wt. %</u>
1/4" x 28 M.	95.16
28 M. x 0	4.84
<hr/> Total	100.00

T A B L E 4. ANALYSIS OF SIZE FRACTIONS

	<u>1/4" x 28 M.</u>	<u>28 M. x 0</u>	<u>Total</u>
Ash %	63.06	51.75	62.51
R.M. %	1.38	1.37	1.38
V.M. %	17.61	21.53	17.80
F.C. %	17.95	25.35	18.31
B.T.U./LB.	4,650	6,070	4,720
F.S.I.	N.A.	½	N.A.

COMPOSITE NO.: T-3

HOLE NO.: C-76-3

SEAM:

T A B L E 5. FLOAT-SINK AND ANALYSIS OF 1/4" x 28 MESH
(Fractional Basis)

<u>Sp. Gr.</u>	<u>Wt. %</u>	<u>R.M. %</u>	<u>Ash %</u>	<u>B.T.U./Lb.</u>
- 1.30	2.93	1.97	2.83	14,130
1.30 - 1.40	4.56	1.67	10.83	12,810
1.40 - 1.60	9.68	1.36	29.27	9,930
1.60 - 1.80	12.59	1.36	45.29	7,530
+ 1.80	70.24	1.26	76.17	2,540
TOTAL	100.00	1.32	62.61	4,690

T A B L E 6. FLOAT-SINK AND ANALYSIS OF 1/4" x 28 MESH
(Cumulative Basis)

<u>Sp. Gr.</u>	<u>Wt. %</u>	<u>R.M. %</u>	<u>Ash %</u>	<u>B.T.U./Lb.</u>	<u>F.S.I.</u>
- 1.30	2.93	1.97	2.83	14,130	
- 1.40	7.49	1.79	7.70	13,330	NOT REQUIRED
- 1.60	17.17	1.55	19.86	11,410	
- 1.80	29.76	1.47	30.62	9,770	
TOTAL	100.00	1.32	62.61	4,690	

COMPOSITE NO.: T-3

HOLE NO.: C-76-3

SEAM:

T A B L E 7. WASHABILITY FOR 1/4" x 28 MESH FRACTION

Sp. Gr.	Fractional		Cumulative			
	Wt. %	Ash %	Floats		Sinks	
			Wt. %	Ash %	Wt. %	Ash %
- 1.30	2.93	2.83	2.93	2.83	100.00	62.61
1.30 - 1.40	4.56	10.83	7.49	7.70	97.07	64.42
1.40 - 1.60	9.68	29.27	17.17	19.86	92.51	67.06
1.60 - 1.80	12.59	45.29	29.76	30.62	82.83	71.48
+ 1.80	70.24	76.17	100.00	62.61	70.24	76.17
Total	100.00	62.61				

COMPOSITE NO.: T-3
HOLE NO.: C-76-3
SEAM:

T A B L E 8. FLOAT-SINK OF 1/4" x 28 MESH FOR 8% ASH IN FLOATS

Specific Gravity: 1.41%
Yield of Floats: 7.60%

Analysis of Floats:

Ash % 7.87
R.M. % 1.68
V.M. % 34.47
F.C. % 55.98
S. % 0.80
B.T.U./Lb. 13,260
F.S.I. 1½

Analysis of Sinks:

Ash % 67.10
R.M. % 1.30

FIGURE

COMPANY CYPRUS ANVIL MINING CORP.

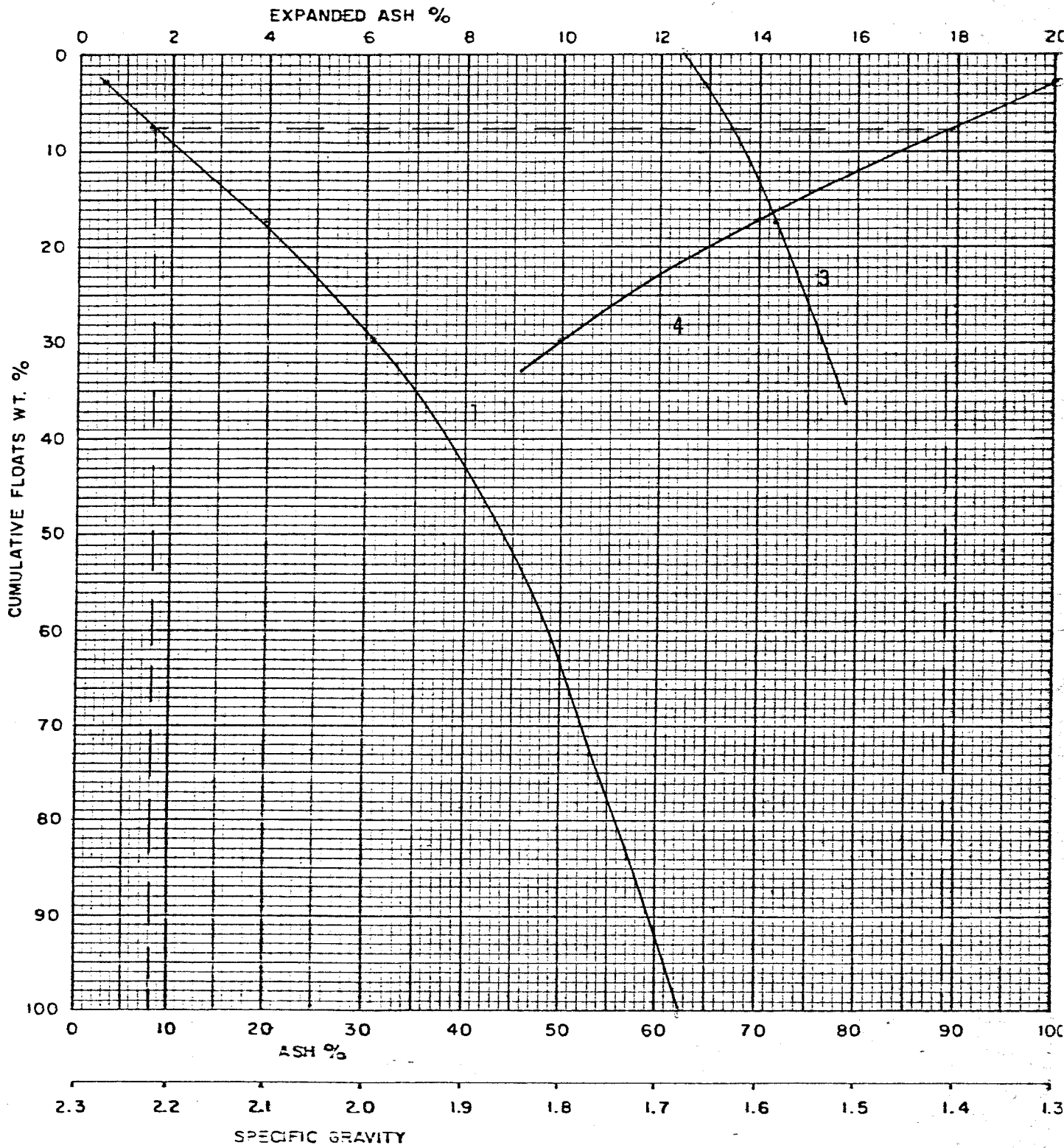
SAMPLE T-3

Size 1/4" x 28 Mesh

WASHABILITY CURVES

CURVE LEGEND

- 1 - FLOATS
- 2 - EXPANDED FLOATS
- 3 - SINKS
- 4 - SPECIFIC GRAVITY
- 5 - ELEMENTARY ASH
- 6 - NEAR GRAVITY MATERIAL



DATE

CYCLONE ENGINEERING SALES LTD.

CYPRUS ANVIL MINING CORPORATION

Analytical Report

for
Core Testing

PROJECT:

DRILL HOLE #: C-76-3

AREA: Carmack, Y. T.

SEAM:

DATE SAMPLED:

LAB COMPOSITE #: T4

DATE ANALYZED: December 1, 1976

COMPOSITE NO.: T4

HOLE NO.: C-76-3

SEAM:

T A B L E 1. COMPONENTS AND ANALYSIS

	<u>Ash %</u>	<u>R.M %</u>	<u>V.M. %</u>	<u>F.C. %</u>	<u>B.T.U./LB.</u>	<u>F.S.I.</u>
Number: C-10	14.29	1.70	29.70	54.31	12,050	$\frac{1}{2}$
Footage: 350 - 356.5						
Weight: 5,112 gms.						

Number: C-11	19.25	1.54	28.09	51.12	11,000	$\frac{1}{2}$
Footage: ^{356.5} 365.5 - 363						
Weight: 4,710 gms.						

Number:

Footage:

Weight:

Number:

Footage:

Weight:

Number:

Footage:

Weight:

COMPOSITE NO.: T4
 HOLE NO.: C-76-3
 SEAM:

T A B L E 2. ANALYSIS OF COMPOSITE HEAD SAMPLE

Ash % 16.70
 R.M. % 1.68
 V.M. % 29.23
 F.C. % 52.39
 S. % 0.45
 B.T.U./LB. 11,380
 F.S.I. ½

T A B L E 3. SIZE CONSIST OF COMPOSITE HEAD SAMPLE

<u>Size</u>	<u>Wt. %</u>
1/4" x 28 M.	73.38
28 M. x 0	<u>26.62</u>
<u>Total</u>	100.00

T A B L E 4. ANALYSIS OF SIZE FRACTIONS

	<u>1/4" x 28 M.</u>	<u>28 M. x 0</u>	<u>Total</u>
Ash %	18.83	11.64	16.92
R.M. %	1.65	1.61	1.64
V.M. %	29.15	28.98	29.10
F.C. %	50.37	57.77	52.34
B.T.U./LB.	10,970	12,440	11,360
F.S.I.	½	½	½

COMPOSITE NO.: T4
HOLE NO.: C-76-3
SEAM:

T A B L E 5. FLOAT-SINK AND ANALYSIS OF 1/4" x 28 MESH
(Fractional Basis)

<u>Sp. Gr.</u>	<u>Wt. %</u>	<u>R.M. %</u>	<u>Ash %</u>	<u>B.T.U./Lb.</u>
- 1.30	18.80	1.93	3.40	14,000
1.30 - 1.40	35.24	1.83	5.93	13,430
1.40 - 1.60	18.36	1.87	15.70	11,380
1.60 - 1.80	9.89	1.85	28.80	8,350
+ 1.80	17.71	0.91	62.94	3,790
TOTAL	100.00	1.70	19.61	10,950

T A B L E 6. FLOAT-SINK AND ANALYSIS OF 1/4" x 28 MESH
(Cumulative Basis)

<u>Sp. Gr.</u>	<u>Wt. %</u>	<u>R.M. %</u>	<u>Ash %</u>	<u>B.T.U./Lb.</u>	<u>F.S.I.</u>
- 1.30	18.80	1.93	3.40	14,000	
- 1.40	54.04	1.86	5.05	13,630	
- 1.60	72.40	1.87	7.75	13,060	
- 1.80	<u>82.29</u>	<u>1.86</u>	<u>10.29</u>	<u>12,490</u>	
TOTAL	100.00	1.70	19.61	10,950	NOT REQUIRED

COMPOSITE NO.: T4

HOLE NO.: C-76-3

SEAM:

T A B L E 7. WASHABILITY FOR 1/4" x 28 MESH FRACTION

Sp. Gr.	Fractional		Cumulative			
	Wt. %	Ash %	Floats		Sinks	
			Wt. %	Ash %	Wt. %	Ash %
- 1.30	18.80	3.40	18.80	3.40	100.00	19.61
1.30 - 1.40	35.24	5.93	54.04	5.05	81.20	23.37
1.40 - 1.60	18.36	15.70	72.40	7.75	45.96	36.74
1.60 - 1.80	9.89	28.88	82.29	10.29	27.60	50.74
+ 1.80	17.71	62.94	100.00	19.61	17.71	62.94
Total	100.00	19.61				

COMPOSITE NO.: T4

HOLE NO.: C-76-3

SEAM:

T A B L E 8. FLOAT-SINK OF 1/4" x 28 MESH FOR 8% ASH IN FLOATS

Specific Gravity: 1.62

Yield of Floats: 73.50

Analysis of Floats:

Ash % 8.18

R.M. % 2.00

V.M. % 30.52

F.C. % 59.30

S. % 0.40

B.T.U./Lb. 12,970

F.S.I. 1

Analysis of Sinks:

Ash % 51.50

R.M. % 1.03

FIGURE

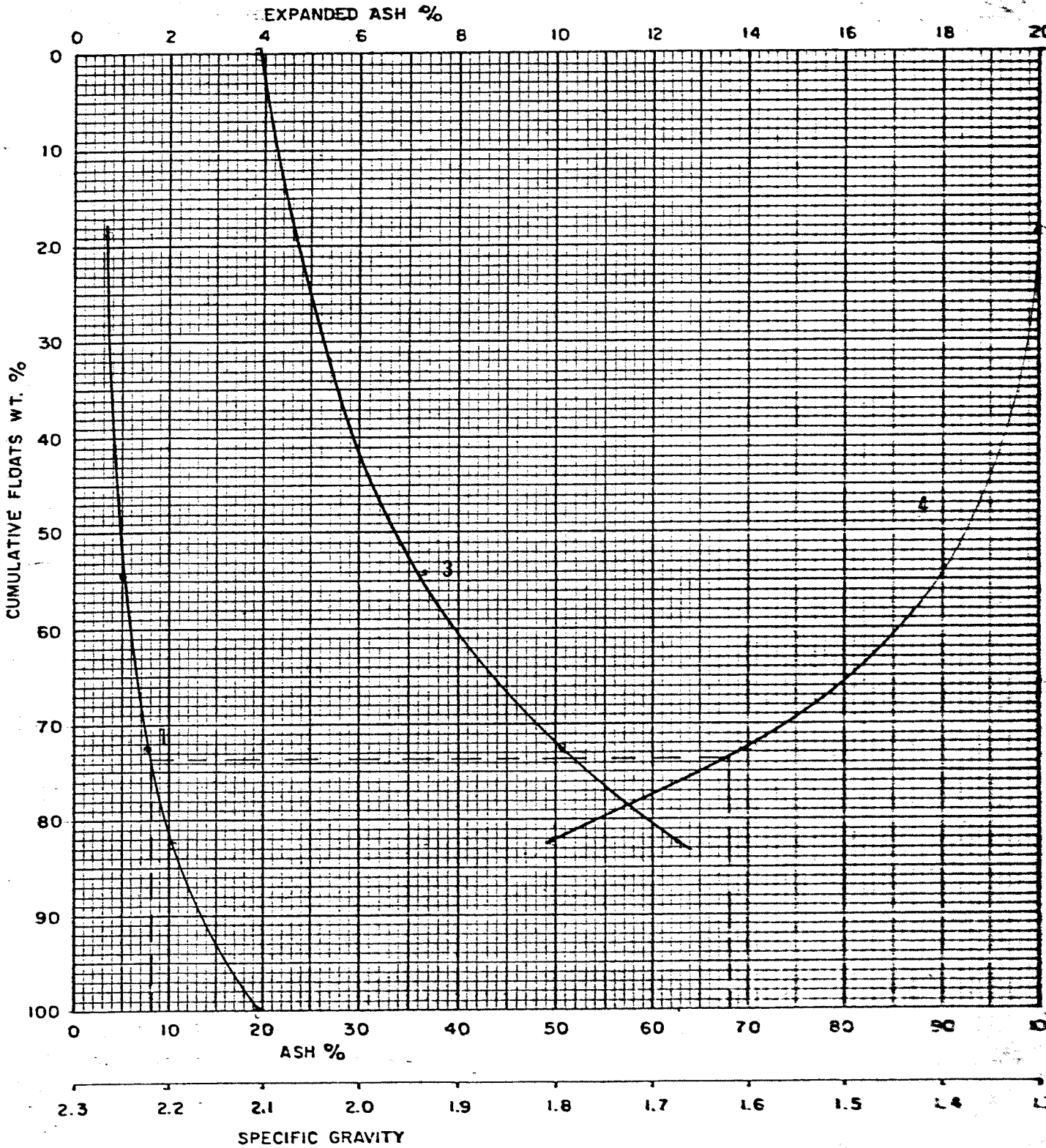
COMPANY CYPRUS ANVIL MINING CORP.

SAMPLE C-76-3 Composite T4

Size 1/4" x 28 Mesh

WASHABILITY CURVES

- CURVE LEGEND
- 1 - FLOATS
 - 2 - EXPANDED FLOATS
 - 3 - SINKS
 - 4 - SPECIFIC GRAVITY
 - 5 - ELEMENTARY ASH
 - 6 - NEAR GRAVITY MATERIAL



DATE

CYCLONE ENGINEERING SALES LTD

CYPRUS ANVIL MINING CORPORATION

Analytical Report
for
Core Testing

PROJECT:

AREA: Carmack, Y. T.

DATE SAMPLED:

DATE ANALYZED: December 8, 1976

DRILL HOLE #: C-76-5

SEAM:

LAB COMPOSITE #: T6

COMPOSITE NO.: T6
HOLE NO.: C-76-5
SEAM:

T A B L E 1. COMPONENTS AND ANALYSIS

	<u>Ash %</u>	<u>R.M %</u>	<u>V.M. %</u>	<u>F.C. %</u>	<u>B.T.U./LB.</u>	<u>F.S.I.</u>
Number: C-19	32.88	10.06	25.77	31.29	5,420	N.A.
Footage: 47-53.5						
Weight: 1,392 gms.						

Number: C-20	35.77	10.54	26.92	26.77	5,340	N.A.
Footage: 53.5 - 60						
Weight: 4,536 gms.						

Number:
Footage:
Weight:

Number:
Footage:
Weight:

Number:
Footage:
Weight:

COMPOSITE NO.: T6

HOLE NO.: C-76-5

SEAM:

T A B L E 2. ANALYSIS OF COMPOSITE HEAD SAMPLE

Ash %	35.74
R.M. %	10.37
V.M. %	26.94
F.C. %	26.95
S. %	0.48
B.T.U./LB.	5,350
F.S.I.	N.A.

T A B L E 3. SIZE CONSIST OF COMPOSITE HEAD SAMPLE

<u>Size</u>	<u>Wt. %</u>
1/4" x 28 M.	47.94
28 M. x 0	52.06
<hr/> Total	100.00

T A B L E 4. ANALYSIS OF SIZE FRACTIONS

	<u>1/4" x 28 M.</u>	<u>28 M. x 0</u>	<u>Total</u>
Ash %	41.05	31.71	36.18
R.M. %	8.57	11.16	9.92
V.M. %	25.48	28.66	27.13
F.C. %	24.90	28.47	26.77
B.T.U./LB.	4,910	5,690	5,320
F.S.I.	N.A.	N.A.	N.A.

COMPOSITE NO.: T6

HOLE NO.: C-76-5

SEAM:

T A B L E 5. FLOAT-SINK AND ANALYSIS OF 1/4" x 28 MESH
(Fractional Basis)

<u>Sp. Gr.</u>	<u>Wt. %</u>	<u>R.M. %</u>	<u>Ash %</u>	<u>B.T.U./Lb.</u>
- 1.30	0.00	--	--	--
1.30 - 1.40	0.00	--	--	--
1.40 - 1.60	28.62	11.43	12.60	7,800
1.60 - 1.80	27.20	9.99	28.88	6,040
+ 1.80	44.18	4.92	68.70	2,460

TOTAL

T A B L E 6. FLOAT-SINK AND ANALYSIS OF 1/4" x 28 MESH
(Cumulative Basis)

<u>Sp. Gr.</u>	<u>Wt. %</u>	<u>R.M. %</u>	<u>Ash %</u>	<u>B.T.U./Lb.</u>	<u>F.S.I.</u>
- 1.30	0.00	--	--	--	
- 1.40	0.00	--	--	--	NOT REQUIRED
- 1.60	28.62	11.43	12.60	7,800	
- 1.80	55.82	10.73	20.53	6,940	
TOTAL	100.00	8.16	41.81	4,960	

COMPOSITE NO.: T6

HOLE NO.: C-76-5

SEAM:

T A B L E 7. WASHABILITY FOR 1/4" x 28 MESH FRACTION

Sp. Gr.	Fractional		Cumulative			
	Wt. %	Ash %	Floats		Sinks	
			Wt. %	Ash %	Wt. %	Ash %
- 1.30	--	--	--	--	--	--
1.30 - 1.40	--	--	--	--	--	--
1.40 - 1.60	28.62	12.60	28.62	12.60	100.00	41.81
1.60 - 1.80	27.20	28.88	55.82	20.53	71.38	53.53
+ 1.80	44.18	68.70	100.00	41.81	44.18	68.70
Total	100.00	41.81				

COMPOSITE NO.: T6
HOLE NO.: C-76-5
SEAM:

T A B L E 8. FLOAT-SINK OF 1/4" x 28 MESH FOR 8% ASH IN FLOATS

Specific Gravity: 1.60
Yield of Floats: 28.62 %

Analysis of Floats:

Ash % 12.60
R.M. % 11.43
V.M. % 38.00
F.C. % 37.97
S. % 0.52
B.T.U./Lb. 7,800
F.S.I. N.A.

Analysis of Sinks:

Ash % 53.53
R.M. % 6.85

CYPRUS ANVIL MINING CORPORATION

Analytical Report

for
Core Testing

PROJECT:

AREA: Caramacks, Y.T.

DATE SAMPLED:

DATE ANALYZED: December 20, 1976

DRILL HOLE #: C-76-5

SEAM:

LAB COMPOSITE #: T-11

COMPOSITE NO.: T-11

HOLE NO.: C-76-5

SEAM:

T A B L E 1. COMPONENTS AND ANALYSIS

		<u>Ash %</u>	<u>R.M %</u>	<u>V.M. %</u>	<u>F.C. %</u>	<u>B.T.U./LB.</u>	<u>F.S.I.</u>
Number:	C-38	22.75	1.16	30.69	45.40	10,600	1
Footage:	891-896						
Weight:	2,739						
Number:	C-39	13.98	1.38	32.96	51.68	11,760	1
Footage:	896-901						
Weight:	2,192						
Number:	C-40	15.44	1.30	32.66	50.60	11,460	1
Footage:	901-906						
Weight:	2,628						
Number:	C-41	11.43	1.25	30.69	56.63	12,320	1
Footage:	906-911						
Weight:	2,086						
Number:	C-42	19.64	1.19	29.35	49.82	11,190	1
Footage:	911-915						
Weight:	2,036						

COMPOSITE NO.: T-11

HOLE NO.: C-76-5

SEAM:

T A B L E 2. ANALYSIS OF COMPOSITE HEAD SAMPLE

Ash %	16.77
R.M. %	1.28
V.M. %	<u>31.59</u>
F.C. %	50.56
S. %	0.62
B.T.U./LB.	11,380
F.S.I.	<u>1</u>

T A B L E 3. SIZE CONSIST OF COMPOSITE HEAD SAMPLE

<u>Size</u>	<u>Wt. %</u>
1/4" x 28 M.	59.51
28 M. x 0	40.49
<hr/>	<hr/>
Total	100.00

T A B L E 4. ANALYSIS OF SIZE FRACTIONS

	<u>1/4" x 28 M.</u>	<u>28 M. x 0</u>	<u>Total</u>
Ash %	20.91	10.25	16.59
R.M. %	1.31	1.27	1.29
V.M. %	30.63	31.93	31.16
F.C. %	47.15	56.55	50.96
B.T.U./LB.	10,730	12,500	11,450
F.S.I.	1	1	1

COMPOSITE NO.: T-11

HOLE NO.: C-76-5

SEAM:

T A B L E 5. FLOAT-SINK AND ANALYSIS OF 1/4" x 28 MESH
(Fractional Basis)

<u>Sp. Gr.</u>	<u>Wt. %</u>	<u>R.M. %</u>	<u>Ash %</u>	<u>B.T.U./Lb.</u>
- 1.30	13.03	1.49	3.43	14,150
1.30 - 1.40	30.99	1.82	5.97	13,480
1.40 - 1.60	26.47	1.53	16.86	11,450
1.60 - 1.80	10.21	1.21	30.85	8,420
+ 1.80	19.30	0.73	56.59	4,200
TOTAL	100.00	1.30	20.83	10,720

T A B L E 6. FLOAT-SINK AND ANALYSIS OF 1/4" x 28 MESH
(Cumulative Basis)

<u>Sp. Gr.</u>	<u>Wt. %</u>	<u>R.M. %</u>	<u>Ash %</u>	<u>B.T.U./Lb.</u>	<u>F.S.I.</u>
- 1.30	13.03	1.49	3.43	14,150	Not
- 1.40	44.02	1.72	5.22	13,680	Required
- 1.60	70.49	1.65	9.59	12,840	
- 1.80	80.70	1.44	12.28	12,280	
TOTAL	100.00	1.30	20.83	10,720	

COMPOSITE NO.: T-11

HOLE NO.: C-76-5

SEAM:

T A B L E 7. WASHABILITY FOR 1/4" x 28 MESH FRACTION

Sp. Gr.	Fractional		Cumulative			
	Wt. %	Ash %	Floats		Sinks	
			Wt. %	Ash %	Wt. %	Ash %
- 1.30	13.03	3.43	13.03	3.43	100.00	20.83
1.30 - 1.40	30.99	5.97	44.02	5.22	86.97	23.44
1.40 - 1.60	26.47	16.86	70.49	9.59	55.98	33.11
1.60 - 1.80	10.21	30.85	80.70	12.28	29.51	47.68
+ 1.80	19.30	56.59	100.00	20.83	19.30	56.59
Total	100.00	20.83				

COMPOSITE NO.: T-11

HOLE NO.: C-76-5

SEAM:

T A B L E 8. FLOAT-SINK OF 1/4" x 28 MESH FOR 8% ASH IN FLOATS

Specific Gravity: 1.53
Yield of Floats: 65.00 %

Analysis of Floats:

Ash % 7.90
R.M. % 1.76
V.M. % 32.42
F.C. % 57.92
S. % 0.63
B.T.U./Lb. 13,300
F.S.I. 1

Analysis of Sinks:

Ash % 44.04
R.M. % 0.86

FIGURE

COMPANY CYPRUS ANVIL MINING CORPORATION

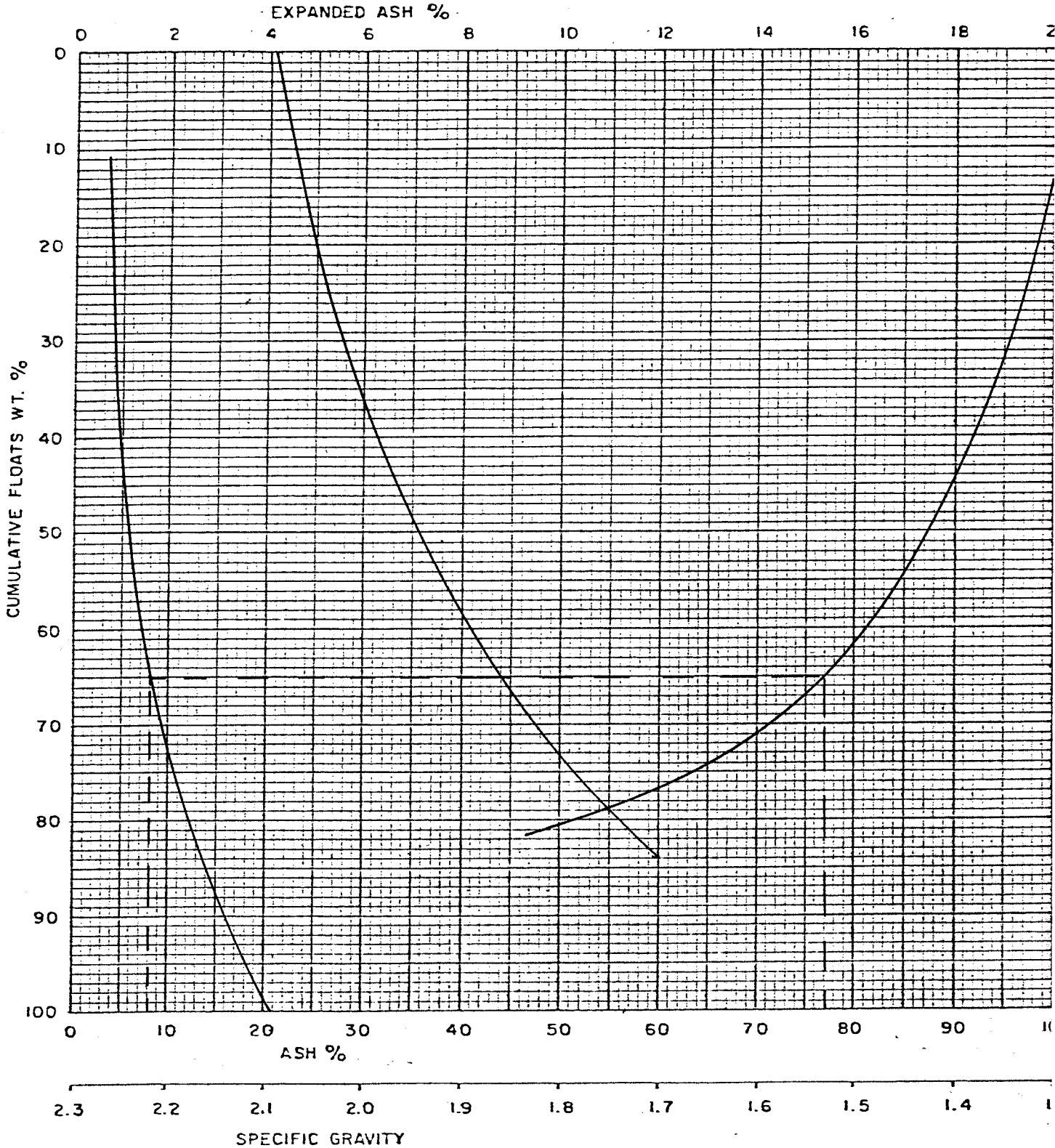
SAMPLE T-11

Size 1/4" x 28 Mesh

CURVE LEGEND

- 1 - FLOATS
- 2 - EXPANDED FLOATS
- 3 - SINKS
- 4 - SPECIFIC GRAVITY
- 5 - ELEMENTARY ASH
- 6 - NEAR GRAVITY MATERIAL

WASHABILITY CURVES



DATE

CYCLONE ENGINEERING SALES LTD

EDMONTON ALBERTA CANADA

CYPRUS ANVIL MINING CORPORATION

Analytical Report

for
Core Testing

PROJECT:

DRILL HOLE #: C-76-4

AREA: Carmacks, T. Y.

SEAM:

DATE SAMPLED:

LAB COMPOSITE #: T5

DATE ANALYZED: December 10, 1976

COMPOSITE NO.: T5
 HOLE NO.: C-76-4
 SEAM:

T A B L E 1. COMPONENTS AND ANALYSIS

	<u>Ash %</u>	<u>R.M %</u>	<u>V.M. %</u>	<u>F.C. %</u>	<u>B.T.U./LB.</u>	<u>F.S.I.</u>
Number: C-12	16.24	0.84	22.56	60.36	12,050	1
Footage: 261-266						
Weight: 6,885 gms.						
Number: C-13	26.35	0.94	23.17	49.54	9,980	1
Footage: 266-271						
Weight: 6,187 gms.						
Number: C-14	11.23	0.99	20.23	67.55	13,000	½
Footage: 271-276						
Weight: 5,868 gms.						
Number: C-15	28.51	0.85	19.11	51.53	9,970	1
Footage: 276-281						
Weight: 5,545 gms.						
Number:						
Footage:						
Weight:						

COMPOSITE NO.: T-5

HOLE NO.: C-76-4

SEAM:

T A B L E 1. COMPONENTS AND ANALYSIS

	<u>Ash %</u>	<u>R.M %</u>	<u>V.M. %</u>	<u>F.C. %</u>	<u>B.T.U./LB.</u>	<u>F.S.I.</u>
Number: C-16	21.57	0.80	21.58	56.05	11,110	½
Footage: 281-286						
Weight: 3,612 gms.						

Number: C-17	21.63	0.78	20.07	57.52	11,020	1
Footage: 286-291						
Weight: 5,504 gms.						

Number: C-18	28.92	0.76	21.20	49.12	9,650	½
Footage: 291-297						
Weight: 7,266						

Number:

Footage:

Weight:

Number:

Footage:

Weight:

COMPOSITE NO.: T-5
 HOLE NO.: C-76-4
 SEAM:

T A B L E 2. ANALYSIS OF COMPOSITE HEAD SAMPLE

Ash %	23.06
R.M. %	0.81
V.M. %	21.46
F.C. %	54.67
S. %	0.63
B.T.U./LB.	11,040
F.S.I.	$\frac{1}{2}$

T A B L E 3. SIZE CONSIST OF COMPOSITE HEAD SAMPLE

<u>Size</u>	<u>Wt. %</u>
1/4" x 28 M.	68.53
28 M. x 0	31.47
<hr/> Total	100.00

T A B L E 4. ANALYSIS OF SIZE FRACTIONS

	<u>1/4" x 28 M.</u>	<u>28 M. x 0</u>	<u>Total</u>
Ash %	28.16	14.19	23.76
R.M. %	0.86	0.67	0.80
V.M. %	21.24	22.57	21.66
F.C. %	49.74	62.57	53.78
B.T.U./LB.	10,410	12,540	11,080
F.S.I.	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$

COMPOSITE NO.: T-5
HOLE NO.: C-76-4
SEAM:

T A B L E 5. FLOAT-SINK AND ANALYSIS OF 1/4" x 28 MESH
(Fractional Basis)

<u>Sp. Gr.</u>	<u>Wt. %</u>	<u>R.M. %</u>	<u>Ash %</u>	<u>B.T.U./Lb.</u>
- 1.30	2.47	0.89	2.67	14,970
1.30 - 1.40	39.67	1.10	6.36	14,180
1.40 - 1.60	26.84	0.98	18.97	12,130
1.60 - 1.80	7.69	0.88	40.61	8,180
+ 1.80	23.33	0.66	73.94	2,150
TOTAL	100.00	0.94	28.05	10,380

T A B L E 6. FLOAT-SINK AND ANALYSIS OF 1/4" x 28 MESH
(Cumulative Basis)

<u>Sp. Gr.</u>	<u>Wt. %</u>	<u>R.M. %</u>	<u>Ash %</u>	<u>B.T.U./Lb.</u>	<u>F.S.I.</u>
- 1.30	2.47	0.89	2.67	14,970	NOT REQUIRED
- 1.40	42.14	1.09	6.14	14,230	
- 1.60	68.98	1.05	11.13	13,410	
- 1.80	76.67	1.03	14.09	12,890	
TOTAL	100.00	0.94	28.05	10,380	

COMPOSITE NO.: T5

HOLE NO.: C-76-4

SEAM:

T A B L E 7. WASHABILITY FOR 1/4" x 28 MESH FRACTION

Sp. Gr.	Fractional		Cumulative			
	Wt. %	Ash %	Floats		Sinks	
			Wt. %	Ash %	Wt. %	Ash %
- 1.30	2.47	2.67	2.47	2.67	100.00	28.05
1.30 - 1.40	39.67	6.36	42.14	6.14	97.53	28.70
1.40 - 1.60	26.84	18.97	68.98	11.13	57.86	44.01
1.60 - 1.80	7.69	40.61	76.67	14.09	31.02	65.68
+ 1.80	23.33	73.94	100.00	28.05	23.33	73.94
Total	100.00	28.05				

COMPOSITE NO.: T-5
HOLE NO.: C-76-4
SEAM:

T A B L E 8. FLOAT-SINK OF 1/4" x 28 MESH FOR 8% ASH IN FLOATS

Specific Gravity: 1.46
Yield of Floats: 54.96%

Analysis of Floats:

Ash % 7.81
R.M. % 0.91
V.M. % 22.11
F.C. % 69.17
S. % 0.75
B.T.U./Lb. 14,000
F.S.I. 1½

Analysis of Sinks:

Ash % 53.60
R.M. % 0.98

FIGURE

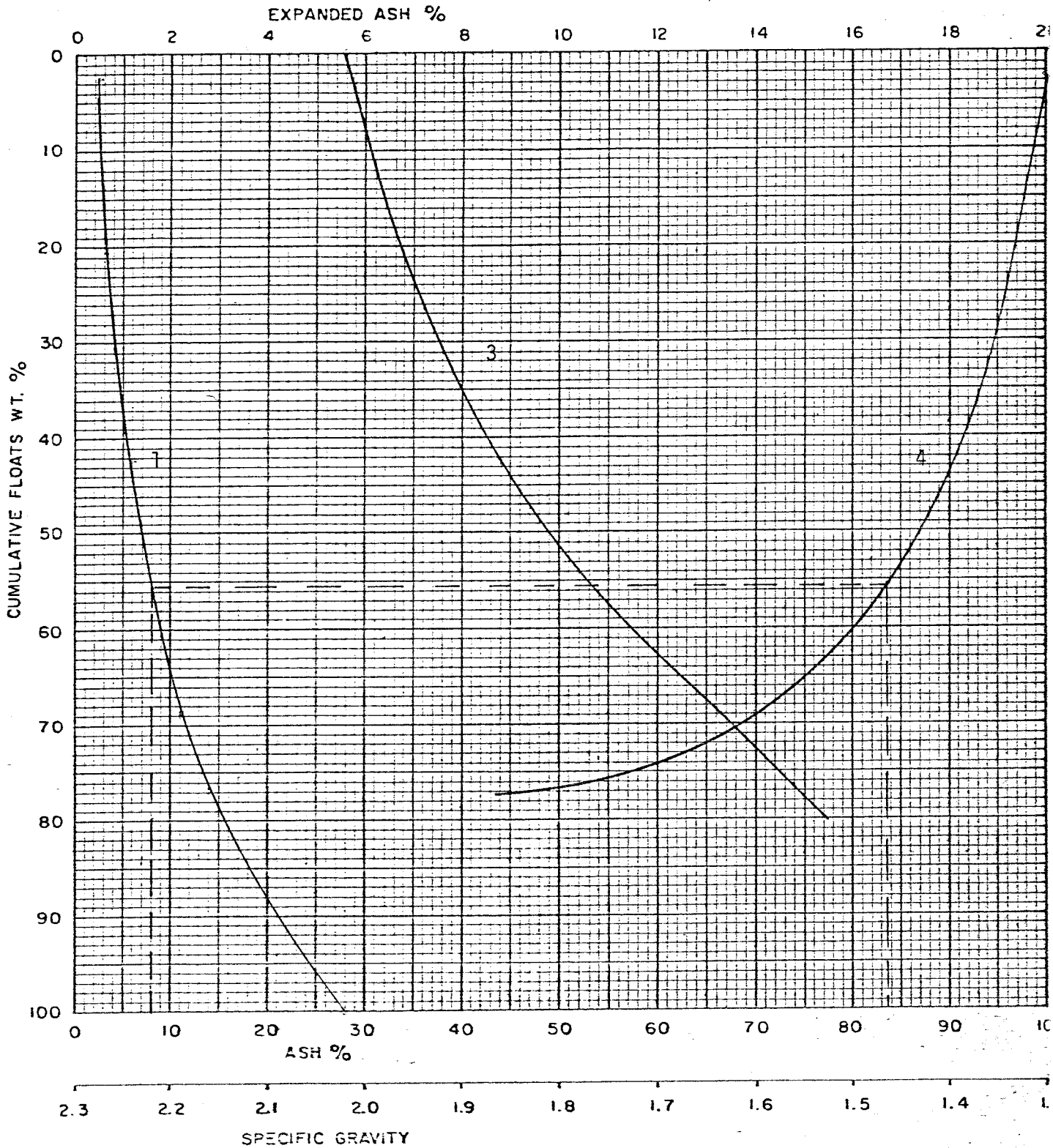
COMPANY CYPRUS ANVIL MINING CORP.

SAMPLE T-5

Size 1/4" x 28 Mesh

WASHABILITY CURVES

- CURVE LEGEND
- 1 - FLOATS
 - 2 - EXPANDED FLOATS
 - 3 - SINKS
 - 4 - SPECIFIC GRAVITY
 - 5 - ELEMENTARY ASH
 - 6 - NEAR GRAVITY MATERIAL



DATE

CYCLONE ENGINEERING SALES LTD
EDMONTON ALBERTA CANADA

CYPRUS ANVIL MINING CORPORATION

Analytical Report

for
Core Testing

PROJECT:

AREA: Caramacks, Y.T.

DATE SAMPLED:

DATE ANALYZED: December 13, 1976

DRILL HOLE #: C76-6

SEAM:

LAB COMPOSITE #: T7

COMPOSITE NO.: T7

HOLE NO.: C-76-6

SEAM:

T A B L E 1. COMPONENTS AND ANALYSIS

	<u>Ash %</u>	<u>R.M %</u>	<u>V.M. %</u>	<u>F.C. %</u>	<u>B.T.U./LB.</u>	<u>F.S.I.</u>
Number: C-24	19.49	0.83	22.56	57.12	12,180	7
Footage: 294 - 299						
Weight: 4,036						

Number: C-25	23.75	0.94	21.80	53.51	10,840	4½
Footage: 299 - 304.5						
Weight: 6,395						

Number:

Footage:

Weight:

Number:

Footage:

Weight:

Number:

Footage:

Weight:

COMPOSITE NO.: T7

HOLE NO.: C-76-6

SEAM:

T A B L E 2. ANALYSIS OF COMPOSITE HEAD SAMPLE

Ash %	21.91
R.M. %	0.93
V.M. %	21.84
F.C. %	55.32
S. %	0.53
B.T.U./LB.	11,420
F.S.I.	6

T A B L E 3. SIZE CONSIST OF COMPOSITE HEAD SAMPLE

<u>Size</u>	<u>Wt. %</u>
1/4" x 28 M.	63.47
28 M. x 0	36.53
<hr/>	<hr/>
Total	100.00

T A B L E 4. ANALYSIS OF SIZE FRACTIONS

	<u>1/4" x 28 M.</u>	<u>28 M. x 0</u>	<u>Total</u>
Ash %	23.68	16.54	21.07
R.M. %	0.87	0.87	0.87
V.M. %	21.21	23.50	22.05
F.C. %	54.24	59.09	56.01
B.T.U./LB.	10,620	12,700	11,380
F.S.I.	6	7	6

COMPOSITE NO.: T7
HOLE NO.: C-76-6
SEAM:

T A B L E 5. FLOAT-SINK AND ANALYSIS OF 1/4" x 28 MESH
(Fractional Basis)

<u>Sp. Gr.</u>	<u>Wt. %</u>	<u>R.M. %</u>	<u>Ash %</u>	<u>B.T.U./Lb.</u>
- 1.30	12.27	0.86	3.07	15,240
1.30 - 1.40	28.71	1.00	7.84	14,150
1.40 - 1.60	25.79	1.01	20.68	11,860
1.60 - 1.80	9.92	0.89	38.12	8,540
+ 1.80	23.31	0.94	71.17	2,880
TOTAL	100.00	0.96	28.33	10,510

T A B L E 6. FLOAT-SINK AND ANALYSIS OF 1/4" x 28 MESH
(Cumulative Basis)

<u>Sp. Gr.</u>	<u>Wt. %</u>	<u>R.M. %</u>	<u>Ash %</u>	<u>B.T.U./Lb.</u>	<u>F.S.I.</u>
- 1.30	12.27	0.86	3.07	15,240	8½
- 1.40	40.98	0.96	6.41	14,480	6½
- 1.60	66.77	0.98	11.92	13,470	5
- 1.80	76.69	0.97	15.31	12,830	4½
TOTAL	100.00	0.96	28.33	10,510	4

COMPOSITE NO.: T7

HOLE NO.: C-76-6

SEAM:

T A B L E 7. WASHABILITY FOR 1/4" x 28 MESH FRACTION

Sp. Gr.	Fractional		Cumulative			
	Wt. %	Ash %	Floats		Sinks	
			Wt. %	Ash %	Wt. %	Ash %
- 1.30	12.27	3.07	12.27	3.07	100.00	28.33
1.30 - 1.40	28.71	7.84	40.98	6.41	87.73	31.87
1.40 - 1.60	25.79	20.68	66.77	11.92	59.02	43.55
1.60 - 1.80	9.92	38.12	76.69	15.31	33.23	61.30
+ 1.80	23.31	71.17	100.00	28.33	23.31	71.17
Total	100.00	28.33				

COMPOSITE NO.: T7

HOLE NO.: C-76-6

SEAM:

T A B L E 8. FLOAT-SINK OF 1/4" x 28 MESH FOR 8% ASH IN FLOATS

Specific Gravity:	1.46
Yield of Floats:	52.00 %

Analysis of Floats:

Ash %	8.07
R.M. %	0.93
V.M. %	22.26
F.C. %	68.74
S. %	0.67
B.T.U./Lb.	14,080
F.S.I.	6½

Analysis of Sinks:

Ash %	49.53
R.M. %	0.93

FIGURE

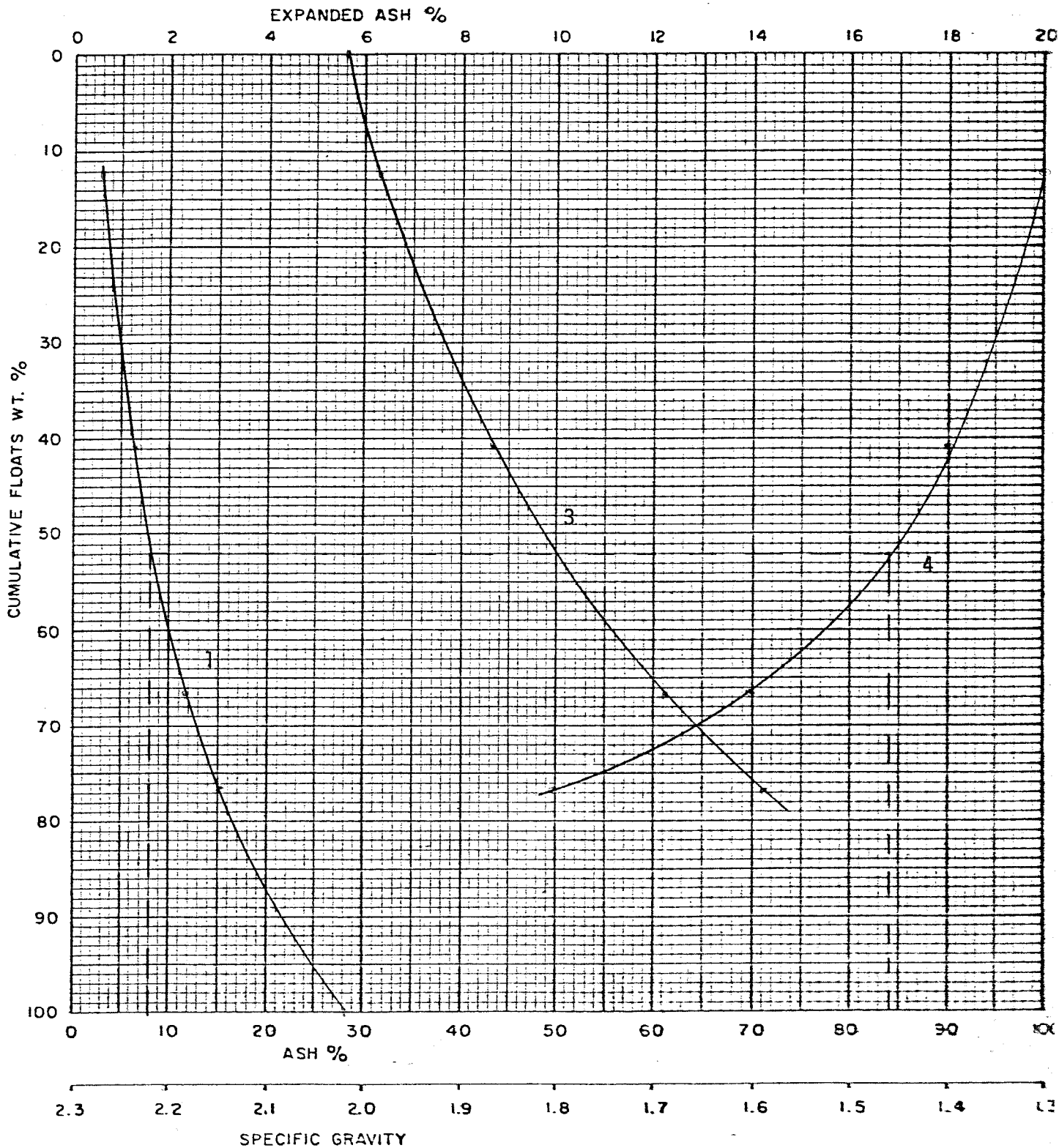
COMPANY CYPRUS ANVIL MINING CORP.

SAMPLE T-7

Size 1/4" x 28 Mesh

WASHABILITY CURVES

- CURVE LEGEND
- 1 - FLOATS
 - 2 - EXPANDED FLOATS
 - 3 - SINKS
 - 4 - SPECIFIC GRAVITY
 - 5 - ELEMENTARY ASH
 - 6 - NEAR GRAVITY MATERIAL



DATE

CYCLONE ENGINEERING SALES LTD.
EDMONTON ALBERTA CANADA

CYPRUS ANVIL MINING CORPORATION

Analytical Report
for
Core Testing

PROJECT:

DRILL HOLE #: C-76-6

AREA: Caramacks, Y.T.

SEAM:

DATE SAMPLED:

LAB COMPOSITE #: T-8

DATE ANALYZED: December 16, 1976

COMPOSITE NO.: T-8

HOLE NO.: C-76-6

SEAM:

T A B L E 1. COMPONENTS AND ANALYSIS

	<u>Ash %</u>	<u>R.M %</u>	<u>V.M. %</u>	<u>F.C. %</u>	<u>B.T.U./LB.</u>	<u>F.S.I.</u>
Number: C-26	27.71	0.51	21.02	50.76	10,750	7
Footage: 308-313						
Weight: 2,812						
Number: C-27	29.86	0.50	20.97	48.67	10,180	7
Footage: 313-318						
Weight: 5,168						
Number: C-28	27.94	0.54	21.98	49.54	10,600	7½
Footage: 318-323						
Weight: 4,813						
Number: C-29	30.54	0.53	21.03	47.90	10,160	5½
Footage: 323-328						
Weight: 5,836						
Number: C-30	32.68	0.56	19.81	46.95	9,720	5½
Footage: 328-333						
Weight: 4,460						

COMPOSITE NO.: T-8

HOLE NO.: C-76-6

SEAM:

T A B L E 1. COMPONENTS AND ANALYSIS

	<u>Ash %</u>	<u>R.M %</u>	<u>V.M. %</u>	<u>F.C. %</u>	<u>B.T.U./LB.</u>	<u>F.S.I.</u>
Number: C-31	28.17	0.56	21.88	49.39	10,500	7
Footage: 333-339						
Weight: 6,554						

Number:

Footage:

Weight:

Number:

Footage:

Weight:

Number:

Footage:

Weight:

Number:

Footage:

Weight:

COMPOSITE NO.: T-8

HOLE NO.: C-76-6

SEAM:

T A B L E 2. ANALYSIS OF COMPOSITE HEAD SAMPLE

Ash %	29.00
R.M. %	0.54
V.M. %	22.12
F.C. %	48.34
S. %	0.69
B.T.U./LB.	10,270
F.S.I.	6½

T A B L E 3. SIZE CONSIST OF COMPOSITE HEAD SAMPLE

<u>Size</u>	<u>Wt. %</u>
1/4" x 28 M.	70.89
28 M. x 0	29.11
<hr/> Total	<hr/> 100.00

T A B L E 4. ANALYSIS OF SIZE FRACTIONS

	<u>1/4" x 28 M.</u>	<u>28 M. x 0</u>	<u>Total</u>
Ash %	32.36	21.37	29.16
R.M. %	0.56	0.53	0.55
V.M. %	21.84	22.61	22.06
F.C. %	45.24	55.49	48.23
B.T.U./LB.	9,630	11,760	10,250
F.S.I.	6	7	6

COMPOSITE NO.: T-8

HOLE NO.: C-76-6

SEAM:

T A B L E 5. FLOAT-SINK AND ANALYSIS OF 1/4" x 28 MESH
(Fractional Basis)

<u>Sp. Gr.</u>	<u>Wt. %</u>	<u>R.M. %</u>	<u>Ash %</u>	<u>B.T.U./Lb.</u>
- 1.30	10.05	0.49	3.30	15,010
1.30 - 1.40	29.22	0.63	9.60	14,340
1.40 - 1.60	19.86	0.53	22.77	11,550
1.60 - 1.80	9.61	0.66	39.48	8,130
+ 1.80	31.26	0.84	70.70	2,610
TOTAL	100.00	0.66	33.55	9,590

T A B L E 6. FLOAT-SINK AND ANALYSIS OF 1/4" x 28 MESH
(Cumulative Basis)

<u>Sp. Gr.</u>	<u>Wt. %</u>	<u>R.M. %</u>	<u>Ash %</u>	<u>B.T.U./Lb.</u>	<u>F.S.I.</u>
- 1.30	10.05	0.49	3.30	15,010	9
- 1.40	39.27	0.59	7.98	14,510	8½
- 1.60	59.13	0.57	12.95	13,520	7½
- 1.80	68.74	0.58	16.66	12,760	7
TOTAL	100.00	0.66	33.55	9,590	6

COMPOSITE NO.: T-8

HOLE NO.: C-76-6

SEAM:

T A B L E 7. WASHABILITY FOR 1/4" x 28 MESH FRACTION

Sp. Gr.	Fractional		Cumulative			
	Wt. %	Ash %	Floats		Sinks	
			Wt. %	Ash %	Wt. %	Ash %
- 1.30	10.05	3.30	10.05	3.30	100.00	33.55
1.30 - 1.40	29.22	9.60	39.27	7.98	89.95	36.93
1.40 - 1.60	19.86	22.77	59.13	12.95	60.73	50.09
1.60 - 1.80	9.61	39.48	68.74	16.66	40.87	63.36
+ 1.80	31.26	70.70	100.00	33.55	31.26	70.70
Total	100.00	33.55				

COMPOSITE NO.: T-8

HOLE NO.: C-76-6

SEAM:

T A B L E 8. FLOAT-SINK OF 1/4" x 28 MESH FOR 8% ASH IN FLOATS

Specific Gravity: 1.40
Yield of Floats: 39.27 %

Analysis of Floats:

Ash % 7.98
R.M. % 0.57
V.M. % 24.49
F.C. % 66.96
S. % 0.78
B.T.U./Lb. 14,200
F.S.I. 8

Analysis of Sinks:

Ash % 50.09
R.M. % 0.58

FIGURE

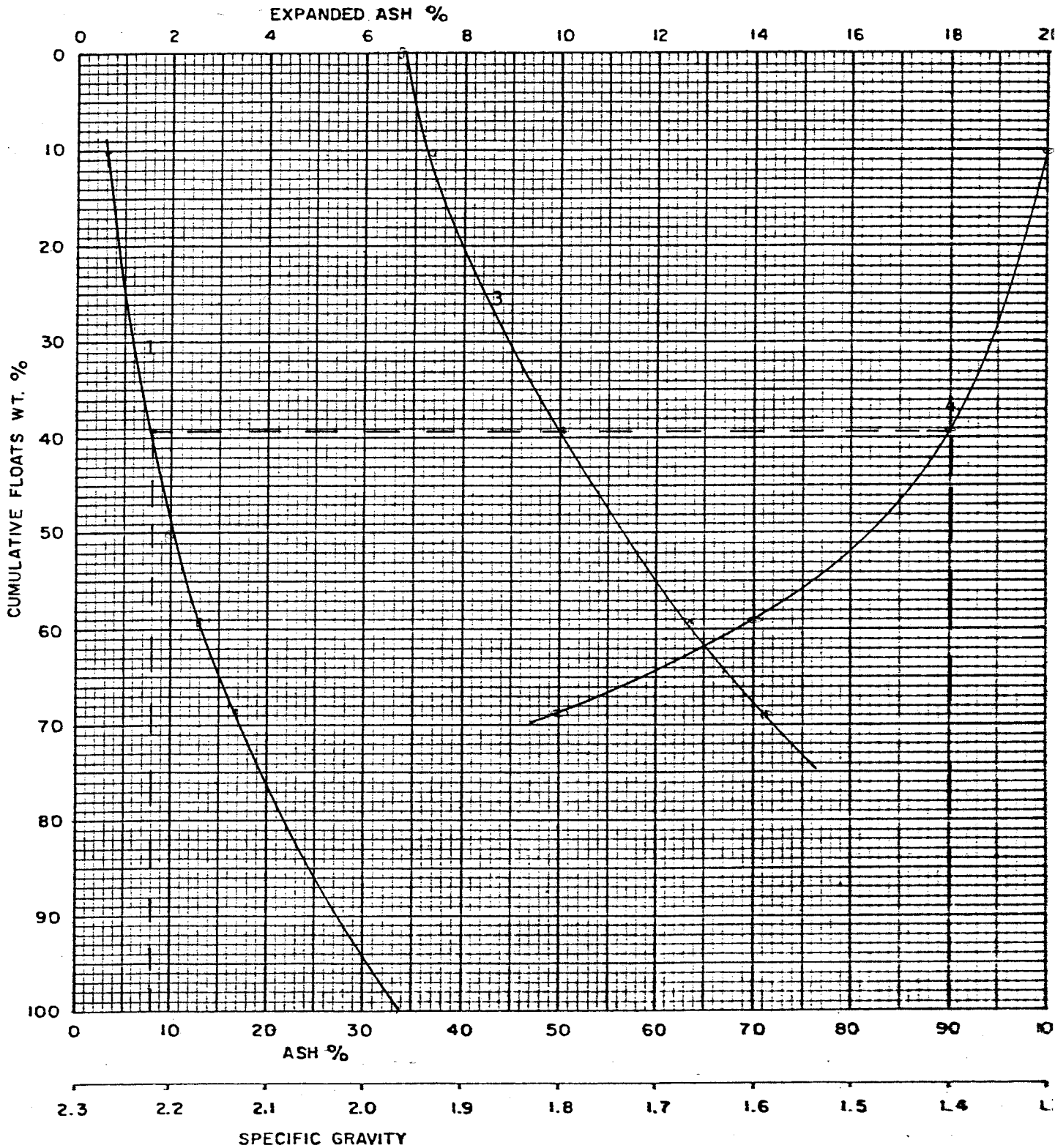
COMPANY CYPRUS ANVIL MINING CORP.

SAMPLE T - 8

Size 1/4" x 28 Mesh

WASHABILITY CURVES

- CURVE LEGEND
- 1 - FLOATS
 - 2 - EXPANDED FLOATS
 - 3 - SINKS
 - 4 - SPECIFIC GRAVITY
 - 5 - ELEMENTARY ASH
 - 6 - NEAR GRAVITY MATERIAL



DATE

CYCLONE ENGINEERING SALES LTD.
EDMONTON ALBERTA CANADA

CYPRUS ANVIL MINING CORPORATION

Analytical Report

for

Core Testing

PROJECT:

DRILL HOLE #: C76-6

AREA:

SEAM:

DATE SAMPLED:

LAB COMPOSITE #: A3

DATE ANALYZED:

COMPOSITE NO.: A3
HOLE NO.: C-76-6
SEAM:

T A B L E 1. COMPONENTS AND ANALYSIS

	<u>Ash %</u>	<u>R.M %</u>	<u>V.M. %</u>	<u>F.C. %</u>	<u>B.T.U./LB.</u>	<u>F.S.I.</u>
Number: C-32	27.02	0.49	21.26	51.23	10,710	6½
Footage: 352 - 357						
Weight: 5,674 gm.						

End of Analysis

Number:
Footage:
Weight:

Number:
Footage:
Weight:

Number:
Footage:
Weight:

Number:
Footage:
Weight:

CYPRUS ANVIL MINING CORPORATION

Analytical Report

for
Core Testing

PROJECT:

DRILL HOLE #: C-76-6

AREA: Caramacks, Y.T.

SEAM:

DATE SAMPLED:

LAB COMPOSITE #: T-9

DATE ANALYZED: December 16, 1976

COMPOSITE NO.: T-9

HOLE NO.: C-76-6

SEAM:

T A B L E 1. COMPONENTS AND ANALYSIS

	<u>Ash %</u>	<u>R.M %</u>	<u>V.M. %</u>	<u>F.C. %</u>	<u>B.T.U./LB.</u>	<u>F.S.I.</u>
Number: C-33	52.52	0.52	17.16	29.80	6,390	2½
Footage: 363-368						
Weight: 3,131						
Number: C-34	19.01	0.46	22.82	57.71	12,510	7½
Footage: 368-373						
Weight: 2,212						
Number: C-35	42.07	0.41	17.77	39.75	7,830	2
Footage: 373-378						
Weight: 4,384						
Number:						
Footage:						
Weight:						
Number:						
Footage:						
Weight:						

COMPOSITE NO.: T-9

HOLE NO.: C-76-6

SEAM:

T A B L E 2. ANALYSIS OF COMPOSITE HEAD SAMPLE

Ash %	40.35
R.M. %	0.46
V.M. %	18.04
F.C. %	41.15
S. %	0.74
B.T.U./LB.	8,310
F.S.I.	4

T A B L E 3. SIZE CONSIST OF COMPOSITE HEAD SAMPLE

<u>Size</u>	<u>Wt. %</u>
1/4" x 28 M.	75.05
28 M. x 0	24.95
<hr/> Total	<hr/> 100.00

T A B L E 4. ANALYSIS OF SIZE FRACTIONS

	<u>1/4" x 28 M.</u>	<u>28 M. x 0</u>	<u>Total</u>
Ash %	47.05	22.43	40.91
R.M. %	0.46	0.45	0.46
V.M. %	17.43	21.08	18.34
F.C. %	35.06	56.04	40.29
B.T.U./LB.	7,120	11,350	8,180
F.S.I.	3½	6½	4

COMPOSITE NO.: T-9

HOLE NO.: C76-6

SEAM:

T A B L E 5. FLOAT-SINK AND ANALYSIS OF 1/4" x 28 MESH
(Fractional Basis)

<u>Sp. Gr.</u>	<u>Wt. %</u>	<u>R.M. %</u>	<u>Ash %</u>	<u>B.T.U./Lb.</u>
- 1.30	12.63	0.41	3.38	15,270
1.30 - 1.40	12.00	0.52	8.67	14,200
1.40 - 1.60	13.85	0.50	22.53	11,570
1.60 - 1.80	8.00	0.49	40.34	8,500
+ 1.80	53.52	0.51	73.99	2,380
TOTAL	100.00	0.50	47.41	7,190

T A B L E 6. FLOAT-SINK AND ANALYSIS OF 1/4" x 28 MESH
(Cumulative Basis)

<u>Sp. Gr.</u>	<u>Wt. %</u>	<u>R.M. %</u>	<u>Ash %</u>	<u>B.T.U./Lb.</u>	<u>F.S.I.</u>
- 1.30	12.63	0.41	3.38	15,270	9
- 1.40	24.63	0.46	5.96	14,750	9
- 1.60	38.48	0.48	11.92	13,600	7½
- 1.80	46.48	0.48	16.81	12,720	6½
TOTAL	100.00	0.50	47.41	7,190	3½

COMPOSITE NO.: T-9

HOLE NO.: C-76-6

SEAM:

T A B L E 7. WASHABILITY FOR 1/4" x 28 MESH FRACTION

Sp. Gr.	Fractional		Cumulative			
	Wt. %	Ash %	Floats		Sinks	
			Wt. %	Ash %	Wt. %	Ash %
- 1.30	12.63	3.38	12.63	3.38	100.00	47.41
1.30 - 1.40	12.00	8.67	24.63	5.96	87.37	53.78
1.40 - 1.60	13.85	22.53	38.48	11.92	75.37	60.96
1.60 - 1.80	8.00	40.34	46.48	16.81	61.52	69.61
+ 1.80	53.52	73.99	100.00	47.41	53.52	73.99
Total	100.00	47.41				

COMPOSITE NO.: T-9

HOLE NO.: C-76-6

SEAM:

T A B L E 8. FLOAT-SINK OF 1/4" x 28 MESH FOR 8% ASH IN FLOATS

Specific Gravity: 1.46
Yield of Floats: 30.00 %

Analysis of Floats:

Ash % 7.96
R.M. % 0.45
V.M. % 23.77
F.C. % 67.82
S. % 0.80
B.T.U./Lb. 14,310
F.S.I. 8½

Analysis of Sinks:

Ash % 63.55
R.M. % 0.44

FIGURE

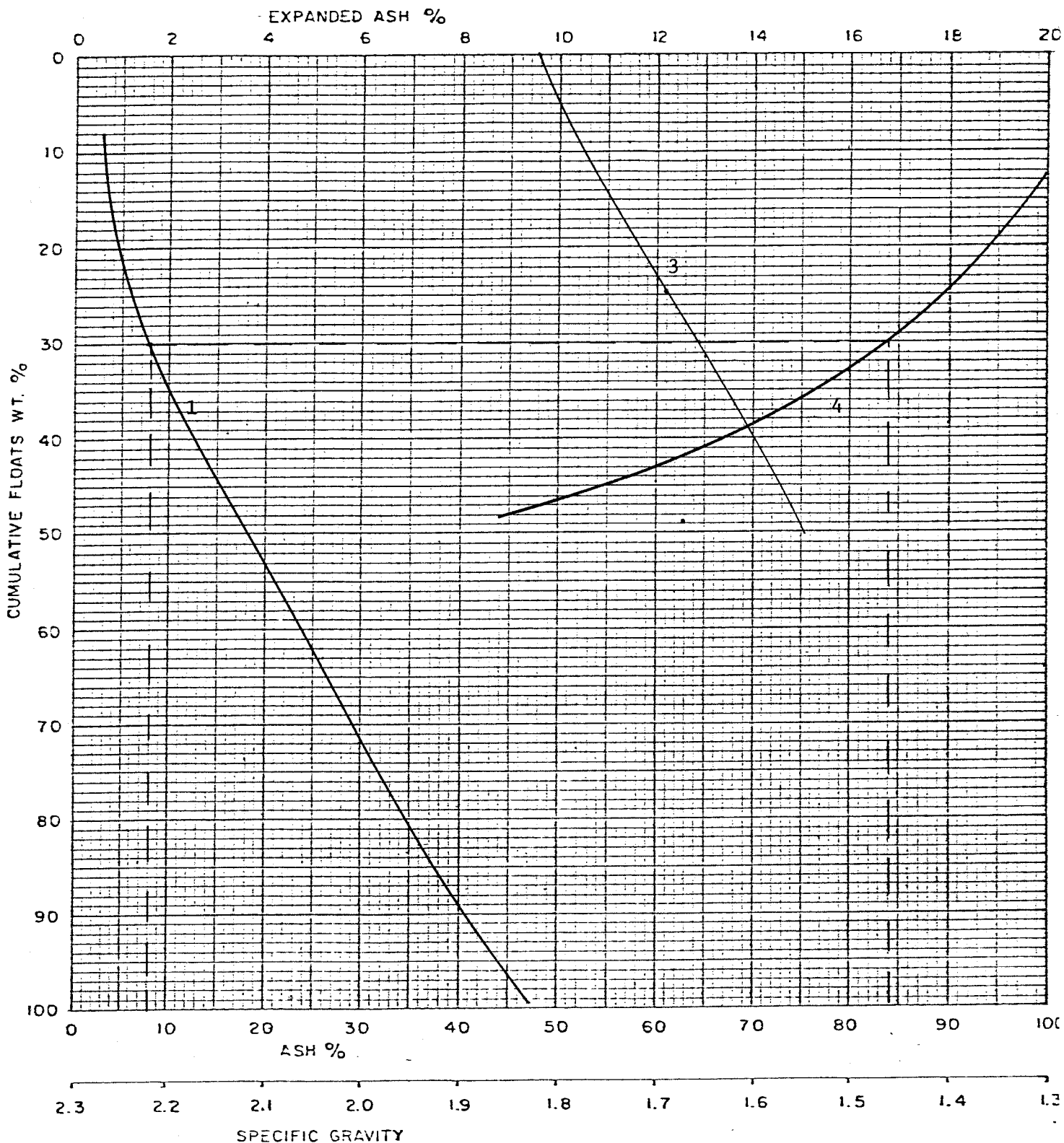
COMPANY CYPRUS ANVIL MINING CORP.

SAMPLE T-9

Size 1/4" x 28 Mesh

WASHABILITY CURVES

- CURVE LEGEND
- 1 - FLOATE
 - 2 - EXPANDED FLOATE
 - 3 - SINKS
 - 4 - SPECIFIC GRAVITY
 - 5 - ELEMENTARY ASH
 - 6 - NEAR GRAVITY MATERIAL



DATE

CYCLONE ENGINEERING SALES LTD.

EDMONTON, ALBERTA, CANADA

CYPRUS ANVIL MINING CORPORATION

Analytical Report

for
Core Testing

PROJECT:

DRILL HOLE #: C76-6

AREA: CARMACKS, Y.T.

SEAM:

DATE SAMPLED:

LAB COMPOSITE #: T10

DATE ANALYZED: December 17, 1976

COMPOSITE NO.: T10
HOLE NO.: C76-6
SEAM:

T A B L E 1. COMPONENTS AND ANALYSIS

	<u>Ash %</u>	<u>R.M %</u>	<u>V.M. %</u>	<u>F.C. %</u>	<u>B.T.U./LB.</u>	<u>F.S.I.</u>
Number: C-36	62.89	0.51	15.60	21.00	4,300	N.A.
Footage: 393-398						
Weight: 3,357						

Number: C-37	43.70	0.67	17.36	38.27	7,450	1/2
Footage: 398-403						
Weight: 5,394						

Number:
Footage:
Weight:

Number:
Footage:
Weight:

Number:
Footage:
Weight:

COMPOSITE NO.: T10

HOLE NO.: C76-6

SEAM:

T A B L E 2. ANALYSIS OF COMPOSITE HEAD SAMPLE

Ash %	51.13
R.M. %	0.58
V.M. %	16.55
F.C. %	31.74
S. %	0.65
B.T.U./LB.	6,290
F.S.I.	$\frac{1}{2}$

T A B L E 3. SIZE CONSIST OF COMPOSITE HEAD SAMPLE

<u>Size</u>	<u>Wt. %</u>
1/4" x 28 M.	83.82
28 M. x 0	16.18
<hr/>	
Total	100.00

T A B L E 4. ANALYSIS OF SIZE FRACTIONS

	<u>1/4" x 28 M.</u>	<u>28 M. x 0</u>	<u>Total</u>
Ash %	54.35	34.03	51.06
R.M. %	0.59	0.69	0.61
V.M. %	16.00	18.17	16.35
F.C. %	29.06	47.11	31.98
B.T.U./LB.	5,680	9,080	6,230
F.S.I.	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$

COMPOSITE NO.: T10

HOLE NO.: C76-6

SEAM:

T A B L E 5. FLOAT-SINK AND ANALYSIS OF 1/4" x 28 MESH
(Fractional Basis)

<u>Sp. Gr.</u>	<u>Wt. %</u>	<u>R.M. %</u>	<u>Ash %</u>	<u>B.T.U./Lb.</u>
- 1.30	0.33	-*	2.47	14,920
1.30 - 1.40	11.64	0.83	6.51	14,240
1.40 - 1.60	15.37	0.70	22.08	11,380
1.60 - 1.80	13.23	0.65	38.77	8,250
+ 1.80	59.43	0.49	74.07	2,080
TOTAL	100.00	0.58	53.31	5,780

T A B L E 6. FLOAT-SINK AND ANALYSIS OF 1/4" x 28 MESH
(Cumulative Basis)

<u>Sp. Gr.</u>	<u>Wt. %</u>	<u>R.M. %</u>	<u>Ash %</u>	<u>B.T.U./Lb.</u>	<u>F.S.I.</u>
- 1.30	0.33	-*	2.47	14,920	
- 1.40	11.97	0.83	6.40	14,260	Not
- 1.60	27.34	0.76	15.21	12,640	
- 1.80	40.57	0.72	22.90	11,210	Required.
TOTAL	100.00	0.58	53.31	5,780	

* Not determined due to small sample.

COMPOSITE NO.: T10

HOLE NO.: C76-6

SEAM:

T A B L E 7. WASHABILITY FOR 1/4" x 28 MESH FRACTION

Sp. Gr.	Fractional		Cumulative			
	Wt. %	Ash %	Floats		Sinks	
			Wt. %	Ash %	Wt. %	Ash %
- 1.30	0.33	2.47	0.33	2.47	100.00	53.31
1.30 - 1.40	11.64	6.51	11.97	6.40	99.67	53.48
1.40 - 1.60	15.37	22.08	27.34	15.21	88.03	59.69
1.60 - 1.80	13.23	38.77	40.57	22.90	72.66	67.64
+ 1.80	59.43	74.07	100.00	53.31	59.43	74.07
Total	100.00	53.31				

COMPOSITE NO.: T10

HOLE NO.: C76-6

SEAM:

T A B L E 8. FLOAT-SINK OF 1/4" x 28 MESH FOR 8% ASH IN FLOATS

Specific Gravity:	1.43
Yield of Floats:	14.00 %

Analysis of Floats:

Ash %	7.96
R.M. %	0.83
V.M. %	23.13
F.C. %	68.08
S. %	0.74
B.T.U./Lb.	14,010
F.S.I.	1½

Analysis of Sinks:

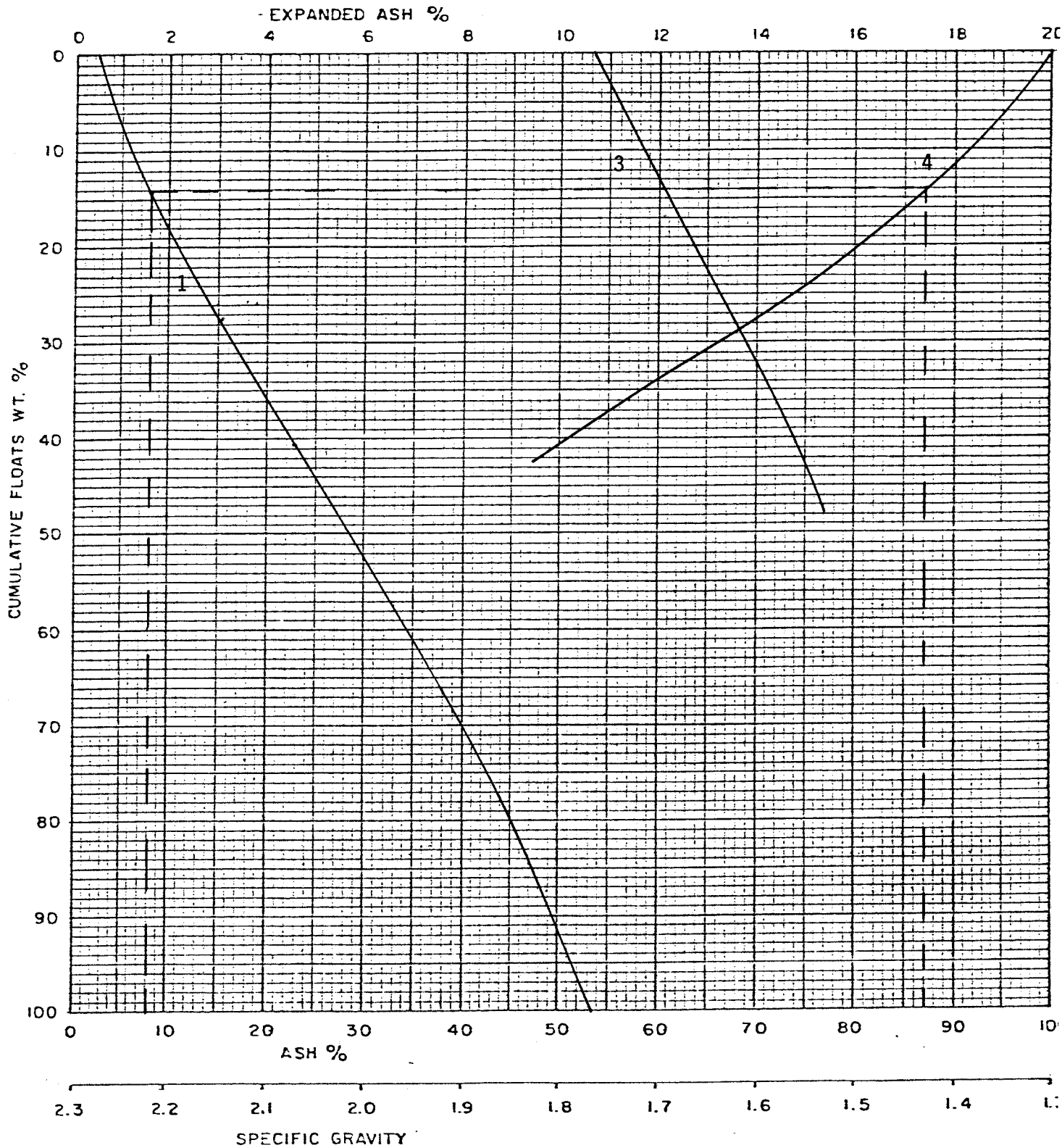
Ash %	59.36
R.M. %	0.51

FIGURE

COMPANY CYPRUS ANVIL MINING CORP.
SAMPLE C76-6 Composite T10
Size 1/4" x 28 Mesh

- CURVE LEGEND
- 1 - FLOATS
 - 2 - EXPANDED FLOATS
 - 3 - SINKS
 - 4 - SPECIFIC GRAVITY
 - 5 - ELEMENTARY ASH
 - 6 - NEAR GRAVITY MATERIAL

WASHABILITY CURVES



DATE

CYCLONE ENGINEERING SALES LTD.
EDMONTON ALBERTA CANADA