

CONFIDENTIAL

TABLE 4-4

BURNT RIVER BULK SAMPLE
PRELIMINARY DROP/SHATTER TEST

	<u>mm</u>	<u>Initial Size</u> <u>Distribution</u>	<u>After Drop/Shatter</u> <u>% Misplaced</u> <u>Material in Fraction</u>
Lower Seam	+ 25	37.1%	24.9%
	- 25 + 5	29.5%	21.5%
	- 5	33.3%	
Upper Seam	+ 25	44.1%	12.7%
	- 25 + 5	32.6%	5.2%
	- 5	23.3%	

TABLE 4-5

BURNT RIVER BULK SAMPLE
TRAIN SCBEDULE

Date	<u>Train #</u>	<u>Tonnage</u>	<u>%- 5mnl</u>	<u>% H₂O</u>
Nov. 13	215	8,998	50	6.5
14	216	9,029	38	4.1
26	223	8,884	34	4.8
28	225	6,229"	42	5.5
29	226	5,411**	n/s	n/s

* 69 cars
** 62 cars

TABLE 4-6

BURNT RIVER BULK SAMPLE
SCREEN ARRANGEMENTS

	<u>Top Deck</u>	<u>Bottom Deck</u>	<u>Yield*</u> <u>%</u>	<u>Comments</u>
Prior to Onset of Rain:	50 mm	6 mm x 90 mm	48	Efficient
After Onset of Rain: 1)	50 mm	6 mm x 90 mm	100	No under- size
2)	20 mm	6 mm x 90 mm	100	no under- size
3) half	25 mm	none	100	no under- size
half	20 mm			
4) half	20 mm	none	100	No under- size
half	6 mm			
5)	20 mm	none	30-35	Fines carryover dependent on feed rate

* % of total feed reporting as product

0

TABLE 4-7

BURNT RIVER BULK SAMPLE
PROXIMATE ANALYSIS

	<u>H₂O</u>	V	M	<u>Ash</u>	<u>S</u>	<u>CV</u>
Drill Holes - Lower	0.8	13.2		11.6	.63	13,544
- Upper	0.7	13.1		9.2	.44	13,900
Ssangyong Sample	1.04	12.8		8.3	.5	14,050
50/50 100% - 80 mm 9% - 5 mm						
Nissho Iwai Sample	0.3	13.3		9.5	.47	13,800
50/50 100% - 50 mm 40% - 5 mm						
Final	6.0	13.8		11.5	.47	13,550
50/50 9.6% + 80 mm 8% - 5mm						

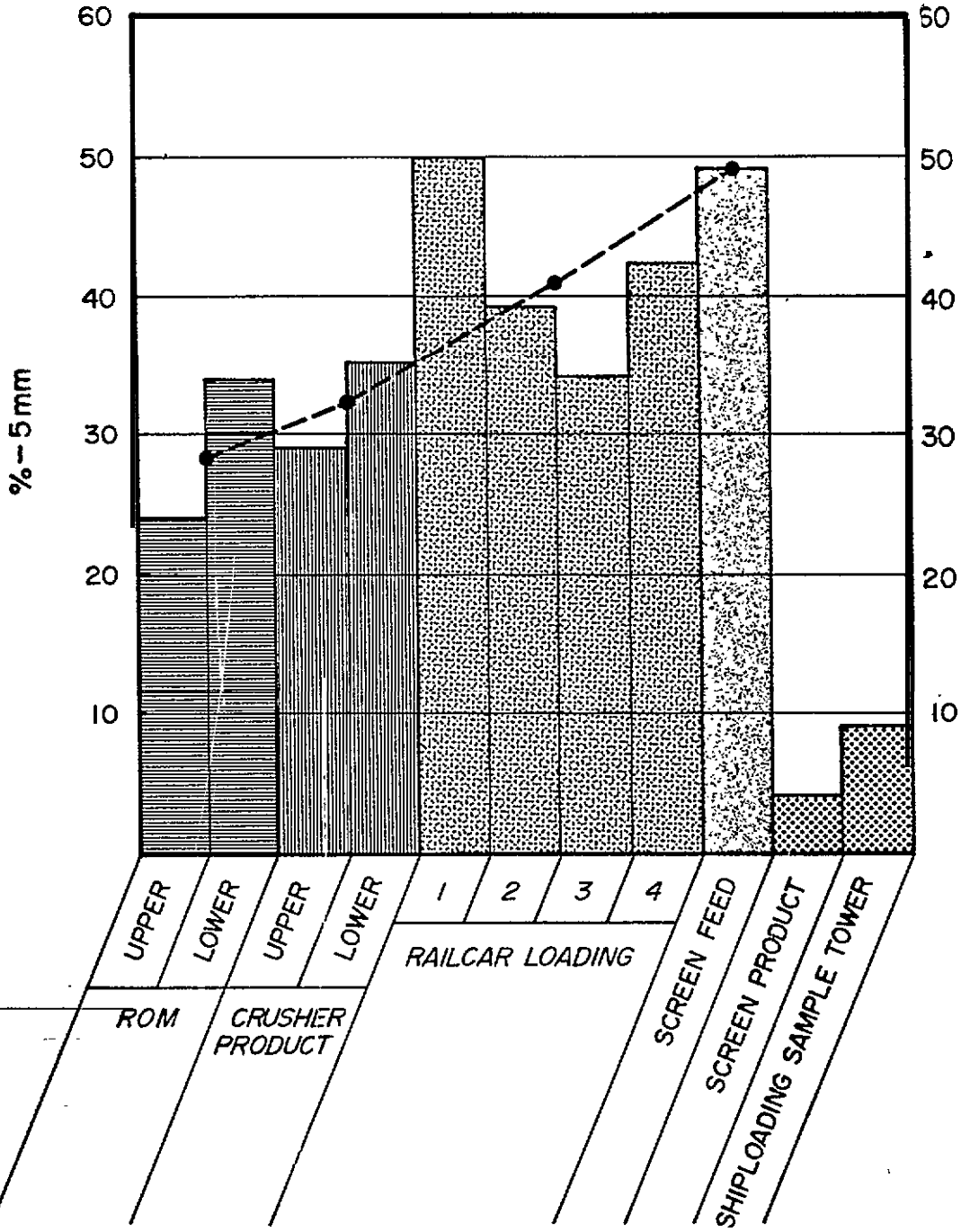
Notes: The Ssangyong and Nissho ~~Iwai~~ samples were composited from initial crusher product and sent to the respective parties.

TABLE 4-S
 BURNT RIVER BULK SAMPLE
ASB FUSION TEMPERATURES (°F)

	OXIDIZING				REDUCING			
	_ID	_ST	HT	FT	ID	ST	HT_	FT_
Drill Holes								
- Lower Seam	2380	2565	2655	2790	2330	2545	2645	2790
- Upper Seam	2360	2615	2635	2760	2350	2530	2610	2740
Ssangyong Sample (50%/50%) Upper/Lower	2570	2800	2800	2800	2460	2790	2800	2800
100% - 80 mm								
9% - 5 m m								
Nissho Iwai Sample (50/50)	2520	2720.	2800	2800	2470	2680	2800	2800
100% - 50 mm								
40% - 5 mm								

0

PERCENT OF COAL PASSING A 5mm SCREEN



BULLMOOSE OPERATING CORP.	
AREA BURNT RIVER BULK SAMPLE	
SUBJECT FINES GENERATION CHART	
SCALE: N.T.S.	FIGURE 4-10

SCREEN COARSE PRODUCT = 48% OF SCREEN FEED

APPENDIX B

SAMPLE ANALYSIS DATA

Proximate Analysis (BOC)

H ₂ O (surface)	H ₂ O (residual)	H ₂ O (total)	VM %	Ash %	FC %	S %	CV BTU
2.26	1.04	3.30	12.77	8.31	77.88	0.50	14,046
% - 4.75 mm = 9.1%							

Proximate Analysis (Birtley Coal Testing)

H ₂ O (surface)	H ₂ O (residual)	H ₂ O (total)	VM %	Ash %	FC %	S %	cv BTU
1.6	1.9	3.5	12.7	8.6	76.8	0.48	13,901

Ash Fusion Temperature (Birtley)

Oxidizing °F				Reducing °F			
ID	ST	HT	FT	ID	ST	HT	FT
2570	2800+	2800+	2800+	2460	2790	2800+	2800+

Ultimate Analysis (Birtley)

H ₂ O	C	H	N	S	Ash	O ₂ (by diff)	CL
1.94	82.69	3.99	0.85	0.48	8.58	1.47	0.05

Size Distribution (Birtley),

	+ 80	14.4%
-80	+ 50	5 %
-50	+ 25	20.3%
-25	+ 12.5	14.3%
- 12.5	+ 5	13.4%
- 5		17.1%

0

APPENDIX B

SAMPLE ANALYSIS DATA - Cont'dAsh Analysis

SiO ₂	68.39
Al ₂ O ₃	20.96
Ti O ₂	1.20
Fe ₂ O ₃	1.39
CaO	1.18
MgO	0.55
Na ₂ O	1.33
K ₂ O	1.77
P ₂ O ₅	1.64
S ₂ O	0.41
SrO	0.12
BaO	0.67
MnO ₂	.01
Mn ₂ O ₄	.01

Nissho Iwai Samples Shipped November 13th, 1985
 Birtley Analysis (Proximate)

AD	RM	Vol.	Ash	S	cv	CL	HG
6.1	0.3 (low)	13.3	9.5	.47	13,810	.046	62

Size Distribution:	+50	12.5
	+25	20.3
	+12.5	12.3
	+ 5	11.2
	- 5	~43.7

Ultimate

H ₂ O	C	H	N	S	Ash	O ₂ (by diff.)
.27	82.75	3.86	0.89	.47	9.47	2.29

0

APPENDIX B

SAMPLE ANALYSIS DATA - Cont'd

Ash Fusion Temperatures °F

Oxidizing				Reducing			
<u>_ID</u>	<u>ST_</u>	<u>HT</u>	<u>FT</u>	<u>_ID</u>	<u>ST_</u>	<u>HT</u>	<u>FT</u>
2520	2720	2800+	2800+	2470	2680	2800+	2800+

Ash-Mineral Matter Analysis

SiO ₂	66.43
Al ₂ O ₃	21.15
TiO ₂	1.22
Fe ₂ O ₃	1.74
CaO	2.28
MgO	0.68
Na ₂ O	1.31
K ₂ O	1.63
P ₂ O ₅	1.25
SO ₃	1.02
MnO ₂	0.01
SrO	0.13
BaO	0.60 Und. 0.55

0



CERTIFICATE OF ANALYSIS



SGS SUPERVISION SERVICES INC.
General Testing Laboratories Division
 1001 East Pender Street,
 Vancouver, B.C., Canada. **V6A 1W2**
 Telephone: (604) 254-1647
 Telex: **04-507514**

TECK CORPORATION,
 1199 WEST HASTINGS STREET,
VANCOUVER, B.C.
V6E 2K5

ate: December 10th, 1985.

o.:
 ile: PR85-8910

WE HEREBY CERTIFY THAT WE HAVE SAMPLED AND ANALYZED A CARGO OF:

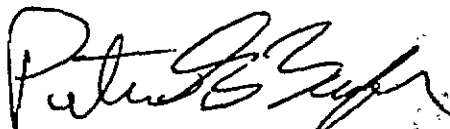
3,732.8 METRIC TONS OF BURNT RIVER ANTHRACITE COAL

ABOARD : M.V. "YON EUN" (HOLD NO. 1)
 SHIPMENT NO. : BR-1-A
 LOADED AT : RIDLEY TERMINALS, PRINCE RUPERT, BRITISH COLUMBIA, CANADA.
 LOADING DATES : DECEMBER 7th, 1985.

WITH THE FOLLOWING RESULTS:

TOTAL MOISTURE	(%)	9.5
<u>AIR DRY BASIS</u>		
INHERENT MOISTURE	(%)	0.48
ASH	(%)	10.63
VOLATILE MATTER	(%)	14.93
SULPHUR	(%)	0.56
GROSS CALORIFIC VALUE	KCAL/KG	7,602
<u>SIZE (mm)</u>		
	+ 80	(%)
	+ 50	(%)
	+ 25	(%)
	+ 12.5	(%)
	+ 5	(%)
	5	(%)

CARGO **WAS** SAMPLED USING AUTOMATIC SAMPLING METHODS


PETER TAYLOR - CHEMIST
 SIGNATURE AND TITLE

THIS COMPANY ACCEPTS NO RESPONSIBILITY EXCEPT FOR THE DUE PERFORMANCE OF INSPECTION AND/OR ANALYSIS IN GOOD FAITH AND ACCORDING TO THE RULES OF THE TRADE AND OF SCIENCE

CERTIFICATE OF ANALYSIS



SOS SUPERVISION SERVICES IMC.
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1001 East Pender Street,
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Telex: 04-507514

TECK CORPORATION,
1199 WEST HASTINGS STREET,
VANCOUVER, B.C.
V6E 2K5

Date: December 10th, 1985.

No.:
File: PR85-8910

WE HEREBY CERTIFY THAT WE HAVE SAMPLED AND ANALYZED A CARGO OF:

15,506.1 METRIC TONS OF BURNT RIVER ANTHRACITE COAL

ABOARD : M.V. "YON EUN" (HOLDS NOS. 2, 3, 4 and 5)

SHIPMENT NO. : BR-1-B

LOADED AT : RIDLEY TERMINALS, PRINCE RUPERT, BRITISH COLUMBIA, CANADA.

LOADING DATES : DECEMBER 6th and 7th, 1985.

WITH THE FOLLOWING RESULTS:

TOTAL MOISTURE	(%)	6.0
AIR DRY BASIS		
INHERENT MOISTURE	(%)	0.57
ASH	(%)	11.47
VOLATILE MATTER	(%)	13.78
SULPHUR	(%)	0.47
GROSS CALORIFIC VALUE	KCAL/KG	7,530
SIZE (mm)		
+ 80	(%)	9.63
- 80 + 50	(%)	18.58
- 50 + 25	(%)	14.55
- 25 + 12.5	(%)	36.97
- 12.5 + 5	(%)	12.19
- 5	(%)	8.08

CARGO WAS SAMPLED USING AUTOMATIC SAMPLING METHODS

PETER TAYLOR - CHEMIST

SIGNATURE AND TITLE

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