APPENDIX 6A

COAL BANK SAMPLE

COAL:CWMBARGOED GRADE:COBBLES SEAM:

BCC COAL RANK CODE:301b ECE / ISO CLASSIFICATION:534

PROXIMATE ANALYSIS (% a.d.)	
Moisture	1.0
Ash	2.8
Volatile matter	28.5
Fixed carbon	67.7
Volatile matter (dmmf)	29.8
CAKING PROPERTIES	
Swelling Index	5
Gray-King Coke Type	G5
CALORIFIC VALUE	
kJ / kg (daf)	36280
ASH FUSION RANGE (°C) *	
Deformation temp.	>1500
Hemisphere temp.	>1500
Flow temp.	>1500

ULTIMATE ANALYSIS (%)	
Carbon (dmmf)	88.5
Hydrogen (dmmf)	4.9
Oxygen (dmmf)	4.2
Nitrogen (dmmf)	1.56
Organic sulphur (db)	0.84
Sulphate as S (db)	0.00
Pyritic sulphur as S (db)	0.03
Chlorine (db)	0.03
Carbon dioxide (db)	0.00
Mineral matter (db)	3.20
MACERAL ANALYSIS (% by volume , mmf)	
Vitrinite	54
Exinite	16
Inertinite	30

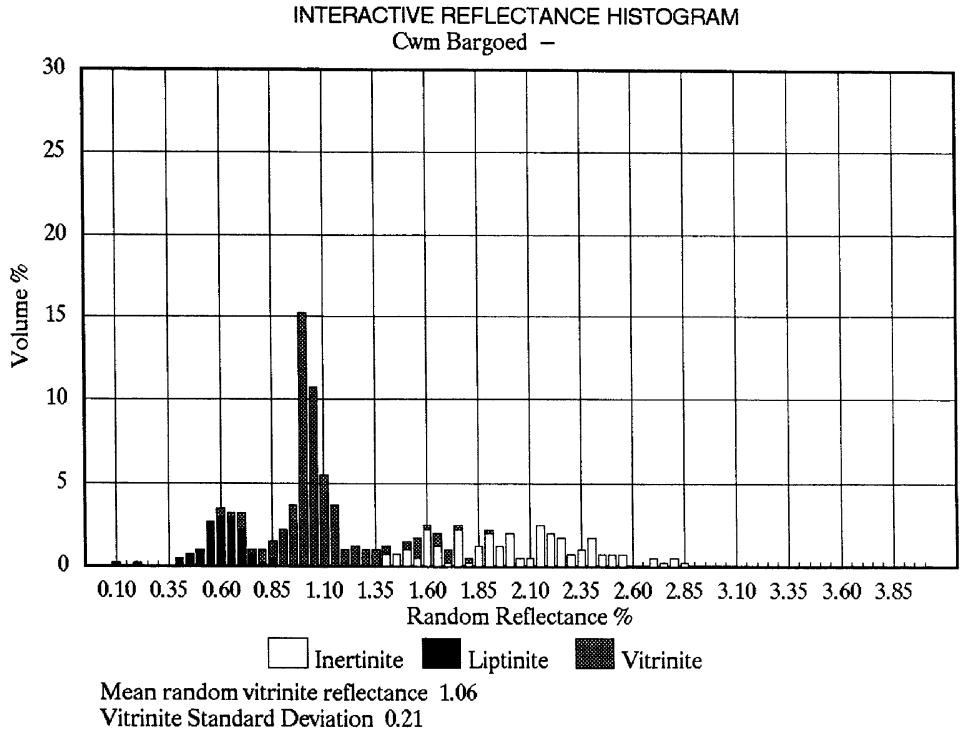
ASH ANALYSIS (% on ash)	
Na_2O	0.6
K_2O	<0.5
CaO	2.7
MgO	0.4
Fe_2O_3	3.5
Al_2O_3	38.0
SiO_2	36.3
SO_3	0.8
TiO_2	1.2
Mn_3O_4	<0.1
P_2O_5	10.2

*Test atmosphere: reducing (50% CO_2 / 50% H_2)

This analysis is typical of this specially selected sample, but there may be slight variations between the data given above and that of the actual sample supplied.

ad: as analysed
db: dry basis
daf: dry , ash free
dmmf: dry , mineral matter free
mmf: mineral matter free

APPENDIX 6B



APPENDIX 7A

COAL BANK SAMPLE

COAL:CORTONWOOD

GRADE:SPECIAL

SEAM:SILKSTONE

BCC COAL RANK CODE:501

ECE / ISO CLASSIFICATION:634

PROXIMATE ANALYSIS (% a.d.)	
Moisture	1.0
Ash	2.2
Volatile matter	34.7
Fixed carbon	62.1
Volatile matter (dmmf)	36.0
CAKING PROPERTIES	
Swelling Index	8.5
Gray-King Coke Type	G8
CALORIFIC VALUE	
kJ / kg (daf)	36200
ASH FUSION RANGE (°C) *	
Deformation temp.	1110
Hemisphere temp.	1140
Flow temp.	1190

ULTIMATE ANALYSIS (%)	
Carbon (dmmf)	87.2
Hydrogen (dmmf)	5.6
Oxygen (dmmf)	4.8
Nitrogen (dmmf)	1.7
Organic sulphur (db)	0.60
Sulphate as S (db)	0.02
Pyritic sulphur as S (db)	0.36
Chlorine (db)	0.09
Carbon dioxide (db)	0.35
Mineral matter (db)	2.73
MACERAL ANALYSIS (% by volume , mmf)	
Vitrinite	82
Exinite	9
Inertinite	9

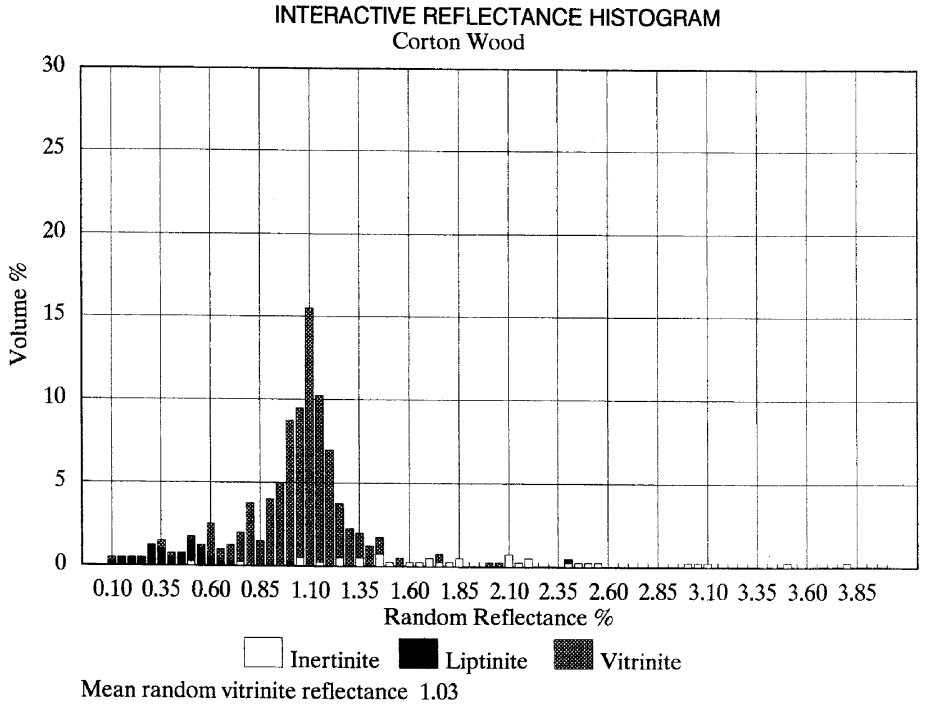
ASH ANALYSIS (% on ash)	
Na_2O	0.8
K_2O	0.4
CaO	3.9
MgO	1.2
Fe_2O_3	6.4
Al_2O_3	28.4
SiO_2	52.9
SO_3	3.1
TiO_2	1.9
Mn_3O_4	0.2
P_2O_5	0.3

*Test atmosphere: reducing (50% CO_2 / 50% H_2)

This analysis is typical of this specially selected sample, but there may be slight variations between the data given above and that of the actual sample supplied.

ad: as analysed
db: dry basis
daf: dry , ash free
dmmf: dry , mineral matter free
mmf: mineral matter free

APPENDIX 7B



Mean random vitrinite reflectance 1.03
Vitrinite Standard Deviation 0.22

APPENDIX 8A

COAL BANK SAMPLE

COAL:POINT OF AYR

GRADE:SINGLES

SEAM:

BCC COAL RANK CODE:702

ECE / ISO CLASSIFICATION:632

PROXIMATE ANALYSIS (% a.d.)	
Moisture	2.4
Ash	9.8
Volatile matter	32.7
Fixed carbon	55.1
Volatile matter (dmmf)	38.0
CAKING PROPERTIES	
Swelling Index	5
Gray-King Coke Type	G
CALORIFIC VALUE	
kJ / kg (daf)	34940
ASH FUSION RANGE (°C) *	
Deformation temp.	1170
Hemisphere temp.	1200
Flow temp.	1250

ULTIMATE ANALYSIS (%)	
Carbon (dmmf)	87.2
Hydrogen (dmmf)	5.80
Oxygen (dmmf)	4.6
Nitrogen (dmmf)	1.62
Organic sulphur (db)	0.63
Sulphate as S (db)	0.03
Pyritic sulphur as S (db)	1.03
Chlorine (db)	0.15
Carbon dioxide (db)	0.48
Mineral matter (db)	11.92
MACERAL ANALYSIS (% by volume , mmf)	
Vitrinite	73
Exinite	16
Inertinite	11

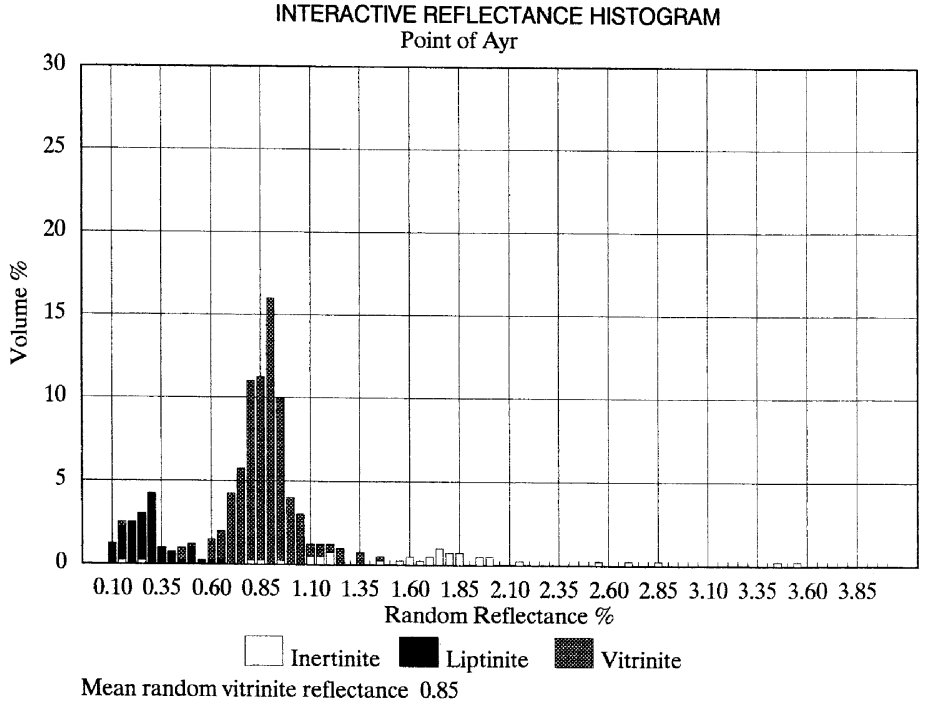
ASH ANALYSIS (% on ash)	
Na_2O	0.5
K_2O	2.8
CaO	4.5
MgO	2.0
Fe_2O_3	12.7
Al_2O_3	24.8
SiO_2	46.0
SO_3	4.0
TiO_2	1.0
Mn_3O_4	0.1
P_2O_5	0.6

*Test atmosphere: reducing (50% CO_2 / 50% H_2)

This analysis is typical of this specially selected sample, but there may be slight variations between the data given above and that of the actual sample supplied.

ad: as analysed
db: dry basis
daf: dry , ash free
dmmf: dry , mineral matter free
mmf: mineral matter free

APPENDIX 8B



Mean random vitrinite reflectance 0.85
Vitrinite Standard Deviation 0.15

APPENDIX 9A

COAL BANK SAMPLE

COAL:CRESWELL GRADE:TREBLES SEAM:THREEQUARTERS

BCC COAL RANK CODE:502 ECE / ISO CLASSIFICATION:634

PROXIMATE ANALYSIS (% a.d.)	
Moisture	2.5
Ash	2.6
Volatile matter	34.7
Fixed carbon	60.2
Volatile matter (dmmf)	36.8
CAKING PROPERTIES	
Swelling Index	6.5
Gray-King Coke Type	G8
CALORIFIC VALUE	
kJ / kg (daf)	35380
ASH FUSION RANGE (°C) *	
Deformation temp.	1100
Hemisphere temp.	1150
Flow temp.	1230

ULTIMATE ANALYSIS (%)	
Carbon (dmmf)	86.2
Hydrogen (dmmf)	5.2
Oxygen (dmmf)	5.6
Nitrogen (dmmf)	1.91
Organic sulphur (db)	0.95
Sulphate as S (db)	<0.05
Pyritic sulphur as S (db)	0.40
Chlorine (db)	0.21
Carbon dioxide (db)	0.15
Mineral matter (db)	3.39
MACERAL ANALYSIS (% by volume , mmf)	
Vitrinite	81
Exinite	7
Inertinite	12

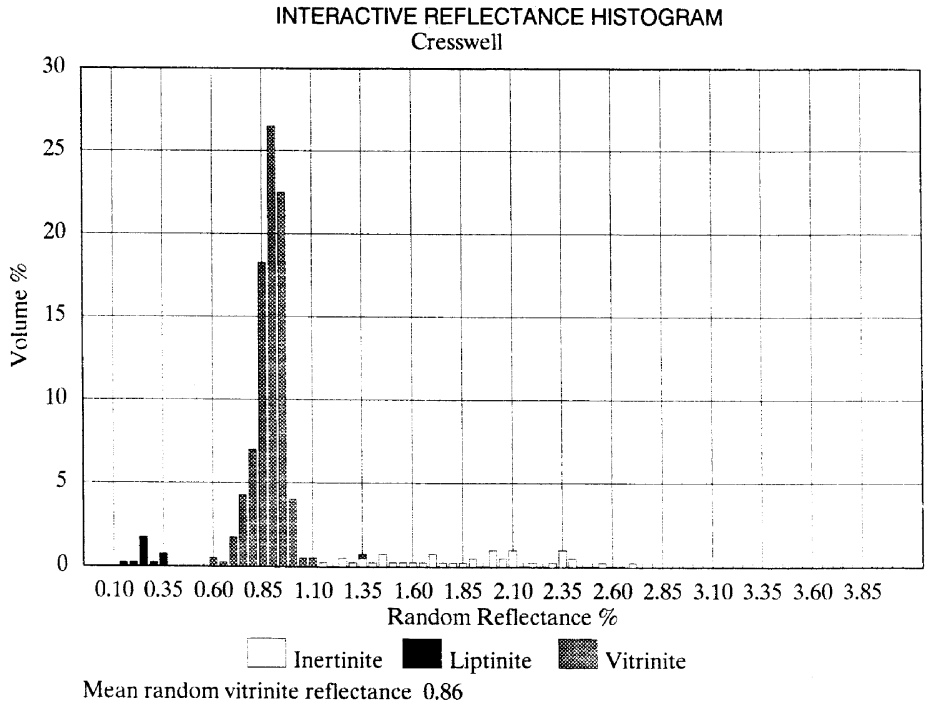
ASH ANALYSIS (% on ash)	
Na_2O	4.8
K_2O	2.6
CaO	1.4
MgO	0.8
Fe_2O_3	29.1
Al_2O_3	24.9
SiO_2	35.5
SO_3	0.7
TiO_2	0.9
Mn_3O_4	<0.1
P_2O_5	0.2

*Test atmosphere: reducing (50% CO_2 / 50% H_2)

This analysis is typical of this specially selected sample, but there may be slight variations between the data given above and that of the actual sample supplied.

ad: as analysed
db: dry basis
daf: dry , ash free
dmmf: dry , mineral matter free
mmf: mineral matter free

APPENDIX 9B



Mean random vitrinite reflectance 0.86
Vitrinite Standard Deviation 0.08

APPENDIX 10A

COAL BANK SAMPLE

COAL:GOEDEHOOP

GRADE:CRUSHED

BCC COAL RANK CODE:

PROXIMATE ANALYSIS (% a.d.)	
Moisture	2.8
Ash	13.3
Volatile matter	26.5
Fixed carbon	57.4
Volatile matter (dmmf)	32.5
CAKING PROPERTIES	
Swelling Index	0.5
Gray-King Coke Type	B
CALORIFIC VALUE	
kJ / kg (daf)	33380
ASH FUSION RANGE (°C) *	
Deformation temp.	1290
Hemisphere temp.	1370
Flow temp.	1500

ULTIMATE ANALYSIS (%)	
Carbon (dmmf)	85.5
Hydrogen (dmmf)	4.58
Oxygen (dmmf)	7.1
Nitrogen (dmmf)	2.06
Organic sulphur (db)	
Sulphate as S (db)	
Pyritic sulphur as S (db)	
Chlorine (db)	0.00
Carbon dioxide (db)	1.48
Mineral matter (db)	16.15
MACERAL ANALYSIS	
(% by volume , mmf)	
Vitrinite	66
Liptinite	3
Inertinite	31

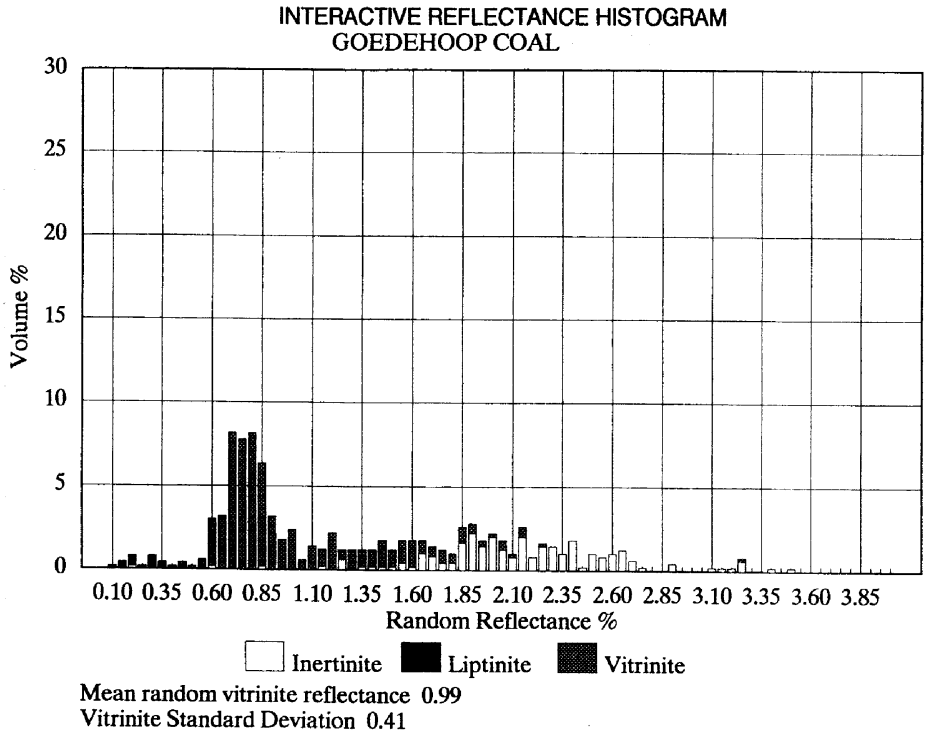
ASH ANALYSIS (% on ash)	
Na_2O	0.3
K_2O	0.5
CaO	14.0
MgO	3.5
Fe_2O_3	5.0
Al_2O_3	31.0
SiO_2	35.9
SO_3	8.8
TiO_2	1.6
Mn_3O_4	0.1
P_2O_5	2.3

*Test atmosphere: reducing (50% CO_2 / 50% H_2)

This analysis is typical of this specially selected sample, but there may be slight variations between the data given above and that of the actual sample supplied.

ad: as analysed
db: dry basis
daf: dry , ash free
dmmf: dry , mineral matter free
mmf: mineral matter free

APPENDIX 10B



Mean random vitrinite reflectance 0.99
Vitrinite Standard Deviation 0.41