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Evaluation of the Environmental Effects of Western Surface Coal Mining

Volume II: Mine Inventory

Interagency Energy/Environment R&D Program Report

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February 1979

EVALUATION OF THE ENVIRONMENTAL EFFECTS OF WESTERN SURFACE COAL MINING

VOLUME II: MINE INVENTORY

by

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Contract No. 68-03-2226

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FOREWORD

When energy and material resources are extracted, processed, converted, and used, the pollutional impact on our environment and even on our health often requires that new and increasingly more efficient pollution control methods be used. The Industrial Environmental Research Laboratory-Cincinnati (IERL-CI) assists in developing and demonstrating new and improved methodologies that will meet these needs both efficiently and economically.

This report contains a tabular summary of information on the physical and technological characteristics of 37 surface coal mines active in the western United States during 1975, and seven additional mines under development during that year. The information was used in classifying western mining situations into categories within which physical and technological factors were fairly homogeneous, in identifying the potential extent and severity of the effects of those mining operations on the environment, and in determining the frequency of use of alternative reclamation practices. The sources of the information were coal company mining and reclamation plans filed with government regulatory agencies, research reports, and articles in trade journals. The data contained in this report should prove beneficial to those individuals interested in the development of western surface coal mining. For further information, contact the Resource Extraction and Handling Division.

David G. Stephan
Director
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ABSTRACT

This report is a companion volume to the report entitled, "Evaluation of the Environmental Effects of Western Surface Coal Mining". This report containing a tabular summary of general information is specifically designed to evaluate the surface mining methods presently employed in the mining of western coal in arid and semi-arid regions and to evaluate the effects these methods have on the environment. The information was used in classifying western mining situations into categories within which physical and technological factors were fairly homogeneous in identifying the potential extent and severity of the effects of those mining operations on the environment, and in determining the frequency of use of alternative reclamation practices. This report was submitted in fulfillment of Contract No. 68-03-2226 by Mathematica, Inc. under the sponsorship of the U.S. Environmental Protection Agency. This report covers the period June 30, 1975 to June 1977 and the work was completed as of March 1978.

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ACKNOWLEDGMENTS

The information presented in this volume was compiled with the cooperation and assistance of the U.S. Geological Survey and the state reclamation agencies in Colorado, Montana, New Mexico, North Dakota and Wyoming.

INTRODUCTION

This report is a companion volume to the report entitled, "Evaluation of the Environmental Effects of Western Surface Coal Mining". It contains a tabular summary of general information for 37 surface coal mines active in the western United States during 1975 and for seven additional mines that were under development in that year. In total, 44 mines in the following states are included:

State	Number of Mines
Arizona	2
Colorado	9
Montana	5
New Mexico	4
North Dakota	8
Wyoming	16
TOTAL	44

The following six different types of information are presented in this volume for each of those 44 mines:

- General production information, including 1975 production and projected maximum production; mine life; employment; and disturbed acreage.
- Coal seam characteristics, including average thickness, heating value, sulfur content, and ash content.
- Reclamation practices.
- Types of mining and reclamation research studies in progress.
- Overburden characteristics, pit geometry, and mining methods.

- Equipment types and capacities for major stripping equipments only.

All information in this volume was obtained from public sources. The major sources were the following ones:

- Mining and reclamation plans submitted by mining companies to state reclamation agencies.

- Environmental impact statements prepared by Federal government agencies for mines at which Federally owned coal is being or is planned to be surface-mined.

- Articles in trade journals, primarily Coal Age, Mining Congress Journal, and Coal Mining and Processing.

- Newsletters published by state and Federal geological agencies.

- Research reports published by mining companies, state universities, or Federal government agencies.

- Personal conversations with representatives of state reclamation agencies and with state geologists.

The first versions of the information, which were compiled in July 1976, were reviewed for accuracy and completeness and were edited by specialists in the state reclamation agencies. The edited version was then updated in March 1977. The updated version appears in this volume.

The English system of measurement was used.* Coal seam thicknesses, overburden and interburden depths, highwall heights, pit widths, and pit lengths are expressed in feet. Average annual precipitation and topsoil depths are expressed in inches. Areas of non-applicability and missing data are denoted by zero entries. For example, a zero entry for overburden depth means that the depth was not specified in public sources. In contrast, an entry of zero for the factor, "No. of Irrigated Growing Seasons" means that no irrigation is used. Accordingly, judgment must be used in interpreting zero entries.

The information in this volume, supplemented by information gathered during seasonal field surveys of nine western mines, was the basis for the statistics presented in Section 6 of the accompanying volume.

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*A metric conversion table is contained in Appendix A.

ARIZONA

- BLACK MESA
- KAYENTA

MINE NAME		
BLACK MESA	STATE	ARIZONA
	COUNTY	NAVAJO
	COMPANY	PEABODY
	1975 SURFACE COAL TONNAGE	3822265
	1975 ACRES DISTURBED BY MINING	100
	PROJECTED MAXIMUM ANNUAL TONNAGE	5000000
	FIRST YEAR AT MAXIMUM TONNAGE	1977
	NUMBER OF PITS	3
	MINE OPENING YEAR	1969
	REMAINING MINE LIFE	30
	1975 MINE EMPLOYMENT	157
	STRIP RATIO(CU YD PER TON)	3.0
	SURFACE RIGHTS OWNER(S)	INDIAN
	MINERAL RIGHTS OWNER(S)	INDIAN
	AVERAGE ANNUAL PRECIPITATION	7
	TOPOGRAPHY	ROLLING
	ALTIDUDE	6550
	PREMINING LANDUSE(S)	SHEEP GRAZING
	PRODUCTIVITY(ACRES PER AUM)	4.42
	POSTMINING LANDUSE(S)	SHEEP GRAZING

MINE NAME		
BLACK MESA	SEAM NAME	RED
	AVERAGE THICKNESS	25
	SEAM NAME	N
	AVERAGE THICKNESS	0
	TYPE OF COAL	BITUMINOUS
	BTU	11000
	PERCENT SULFUR	.5
	PERCENT ASH	8.0
	MARKET	ELECTRIC UTILITY
	TOTAL NUMBER OF SEAMS SURFACE MINED	1

THICKNESS OF ALL SEAMS SURFACE MINED	25
UNDERGROUND MINING OF THE SAME SEAMS	NO
BLEND COAL TO MEET CONTRACT SPECS.	NO
MINE MOUTH POWER PLANT	NO
ASH DISPOSAL ON MINE SITE	NO
PERCENT DIP OF COAL	5

MINE NAME		
BLACK MESA	AQUIFER IN OVERBURDEN OR COAL	YES
	TYPE OF AQUIFER	CONFINED
	STRATA CONTAINING AQUIFER	CONSOLIDATED OVERBURDEN
	FUNCTION OF AQUIFER STRATA	RECHARGE
	DEPTH TO WATER IN NEARBY WELLS	ABOVE AND BELOW THE COAL
	PREMINING WELL YEILD (GAL PER MIN)	0
	USE OF NEARBY WELLS	MINE-DOMESTIC-LIVESTOCK
	DIVERSION DITCHES TO CONTROL RUNOFF	NO
	STREAM DIVERSION	NO
	PUMP PIT	YES
	SEDIMENT BASINS	YES
	CHEMICAL TREATMENT OF DRAINAGE	NO
	RESTORE CONTOUR	YES
	MAX PERCENT SLOPE ON BOX CUT SPOILS	APPROXIMATE ORIGINAL CONTOUR
	MAX PERCENT SLOPE ON OTHER SPOILS	APPROXIMATE ORIGINAL CONTOUR
	REDUCE LAST-CUT HIGHWALL	IMPOUNDMENT
	MAX HEIGHT OF LAST-CUT HIGHWALL	130
	MAX SLOPE ON REDUCED HIGHWALL	NOT REDUCED
	GRADING EQUIPMENT	DOZER

MINE NAME		
BLACK MESA	TERRACE SPOIL	NO
	MECHANICAL SPOIL MANIPULATION	NO
	TOPSOIL	NO
	TOPSOIL AND SUBSOIL SEGREGATED	NO
	STOCKPILE TOPSOILING MATERIAL	NO
	EROSION CONTROL ON STOCKPILES	NO
	TOPSOILING EQUIPMENT	NOT APPLICABLE
	DEPTH REPLACED (INCHES)	0
	BORROW TOPSOIL	NO
	SEEDING METHOD	DRILL
	PLANT TYPES USED FOR REVEGETATION	GRASSES-LEGUMES-SHRUBS
	PRIMARILY NATIVE GRASSES FOR RANGE	YES
	SOIL AMENDMENTS	NO
	MULCH	NO
	IRRIGATION	NO
	NO OF IRRIGATED GROWING SEASONS	0
	DEDICATED RECLAMATION EQUIPMENT	YES
	SEGRATION OF PROBLEM STRATA	YES

MINE NAME		
BLACK MESA	STUDIES UNDERTAKEN AT MINE	REVEGETATION-HYDROLOGY
	SIGNIFICANT ENVIRONMENTAL PROBLEMS	HIGH SAR AND CLAYEY OVERBURDEN PARTING

MINE NAME	PIT NAME		
BLACK MESA	BE1260	PIT ORIENTATION	STRIKELINE
		PERCENT OF MINE TONNAGE FROM PIT	34.
		MINING METHOD	AREA
		NUMBER OF SEAMS	1
		NUMBER OF OVERBURDEN LIFTS	2
		STRIPPING SUBSYSTEM	DUAL
		STRIPPING EQUIPMENT	DRAGLINE-SCRAPER-DOZER
		AVERAGE OVERBURDEN DEPTH	85
		AVG DEPTH OF UNCONSOLIDATED MATERIAL	13
		AVERAGE INTERBURDEN DEPTH	0
		POSITION WHEN STRIPPING INTERBURDEN	NOT APPLICABLE
		LGTHX	0
		PIT WIDTH	0
		DO INCLINES DROP SHARPLY INTO PIT	NO
		DISTANCE BETWEEN INCLINES (FEET)	0

MINE NAME	PIT NAME		
BLACK MESA	M7800	PIT ORIENTATION	STRIKELINE
		PERCENT OF MINE TONNAGE FROM PIT	33
		MINING METHOD	AREA
		NUMBER OF SEAMS	1
		NUMBER OF OVERBURDEN LIFTS	1
		STRIPPING SUBSYSTEM	SINGLE
		STRIPPING EQUIPMENT	DRAGLINE
		AVERAGE OVERBURDEN DEPTH	80
		AVG DEPTH OF UNCONSOLIDATED MATERIAL	0
		AVERAGE INTERBURDEN DEPTH	0
		POSITION WHEN STRIPPING INTERBURDEN	NOT APPLICABLE
		LGTHX	0
		PIT WIDTH	0
		DO INCLINES DROP SHARPLY INTO PIT	NO
		DISTANCE BETWEEN INCLINES (FEET)	0

MINE NAME	PIT NAME		
BLACK MESA	M8750	PIT ORIENTATION	STRIKELINE
		PERCENT OF MINE TONNAGE FROM PIT	33
		MINING METHOD	AREA
		NUMBER OF SEAMS	1
		NUMBER OF OVERBURDEN LIFTS	1
		STRIPPING SUBSYSTEM	SINGLE
		STRIPPING EQUIPMENT	DRAGLINE
		AVERAGE OVERBURDEN DEPTH	80
		AVG DEPTH OF UNCONSOLIDATED MATERIAL	0
		AVERAGE INTERBURDEN DEPTH	0
		POSITION WHEN STRIPPING INTERBURDEN	NOT APPLICABLE
		LGTHX	0
		PIT WIDTH	0
		DO INCLINES DROP SHARPLY INTO PIT	NO
		DISTANCE BETWEEN INCLINES (FEET)	0

MINE NAME	PIT NAME	EQUIPMENT TYPE	MODEL	NO OF UNITS	CAPACITY (CU YD)	BOOM LENGTH (FEET)
BLACK MESA	BE1260	DRAGLINE	BE1260	1	36	250
		SCRAPER	WABCO	1	0	0
		DRAGLINE	CATDS	0	0	0
	M7800	DRAGLINE	M7800	1	30	175
	M8750	DRAGLINE	M8750	1	0	275

MINE NAME		
KAYENTA	STATE	ARIZONA
	COUNTY	NAVAJO
	COMPANY	PEABODY
	1975 SURFACE COAL TONNAGE	2977735
	1975 ACRES DISTURBED BY MINING	120
	PROJECTED MAXIMUM ANNUAL TONNAGE	8000000
	FIRST YEAR AT MAXIMUM TONNAGE	1977
	NUMBER OF PITS	2
	MINE OPENING YEAR	1973
	REMAINING MINE LIFE	30
	1975 MINE EMPLOYMENT	111
	STRIP RATIO(CU YD PER TON)	.0
	SURFACE RIGHTS OWNER(S)	INDIAN
	MINERAL RIGHTS OWNER(S)	INDIAN
	AVERAGE ANNUAL PRECIPITATION	7
	TOPOGRAPHY	ROLLING
	ALTITUDE	6600
	PREMINING LANDUSE(S)	SHEEP GRAZING
	PRODUCTIVITY(ACRES PER AUM)	4.42
	POSTMINING LANDUSE(S)	SHEEP GRAZING

MINE NAME		
KAYENTA	SEAM NAME	GREEN
	AVERAGE THICKNESS	5
	SEAM NAME	BLUE
	AVERAGE THICKNESS	8
	TYPE OF COAL	BITUMINOUS
	BTU	11000
	PERCENT SULFUR	.5
	PERCENT ASH	8.0

MARKET	ELECTRIC UTILITY
TOTAL NUMBER OF SEAMS SURFACE MINED	2
THICKNESS OF ALL SEAMS SURFACE MINED	13
UNDERGROUND MINING OF THE SAME SEAMS	NO
BLEND COAL TO MEET CONTRACT SPECS.	NO
MINE MOUTH POWER PLANT	NO
ASH DISPOSAL ON MINE SITE	NO
PERCENT DIP OF COAL	5

MINE NAME		
KAYENTA	AQUIFER IN OVERBURDEN OR COAL	YES
	TYPE OF AQUIFER	CONFINED
	STRATA CONTAINING AQUIFER	CONSOLIDATED OVERBURDEN
	FUNCTION OF AQUIFER STRATA	RECHARGE
	DEPTH TO WATER IN NEARBY WELLS	ABOVE AND BELOW THE COAL
	PREMINING WELL YEILD (GAL PER MIN)	0
	USE OF NEARBY WELLS	MINE-DOMESTIC-LIVESTOCK
	DIVERSION DITCHES TO CONTROL RUNOFF	NO
	STREAM DIVERSION	NO
	PUMP PIT	YES
	SEDIMENT BASINS	NO
	CHEMICAL TREATMENT OF DRAINAGE	NO
	RESTORE CONTOUR	YES
	MAX PERCENT SLOPE ON BOX CUT SPOILS	APPROXIMATE ORIGINAL CONTOUR
	MAX PERCENT SLOPE ON OTHER SPOILS	APPROXIMATE ORIGINAL CONTOUR
	REDUCE LAST-CUT HIGHWALL	IMPOUNDMENT
	MAX HEIGHT OF LAST-CUT HIGHWALL	130
	MAX SLOPE ON REDUCED HIGHWALL	NOT REDUCED
	GRADING EQUIPMENT	DOZER

MINE NAME		
KAYENTA	TERRACE SPOIL	NO
	MECHANICAL SPOIL MANIPULATION	NO
	TOPSOIL	NO
	TOPSOIL AND SUBSOIL SEGREGATED	NO
	STOCKPILE TOPSOILING MATERIAL	NO
	EROSION CONTROL ON STOCKPILES	NO
	TOPSOILING EQUIPMENT	NOT APPLICABLE
	DEPTH REPLACED (INCHES)	0
	BORROW TOPSOIL	NO
	SEEDING METHOD	DRILL
	PLANT TYPES USED FOR REVEGETATION	GRASSES-LEGUMES-SHRUBS
	PRIMARILY NATIVE GRASSES FOR RANGE	YES
	SOIL AMENDMENTS	NO
	MULCH	NO
	IRRIGATION	NO
	NO OF IRRIGATED GROWING SEASONS	0
	DEDICATED RECLAMATION EQUIPMENT	NO
	SEGRATION OF PROBLEM STRATA	YES

MINE NAME		
KAYENTA	STUDIES UNDERTAKEN AT MINE	NONE
	SIGNIFICANT ENVIRONMENTAL PROBLEMS	HIGH SAR AND CLAYEY OVERBURDEN PARTING

MINE NAME	PIT NAME		
KAYENTA	BE2570	PIT ORIENTATION	STRIKELINE
		PERCENT OF MINE TONNAGE FROM PIT	50
		MINING METHOD	AREA
		NUMBER OF SEAMS	1
		NUMBER OF OVERBURDEN LIFTS	1
		STRIPPING SUBSYSTEM	SINGLE
		STRIPPING EQUIPMENT	DRAGLINE
		AVERAGE OVERBURDEN DEPTH	0
		AVG DEPTH OF UNCONSOLIDATED MATERIAL	0
		AVERAGE INTERBURDEN DEPTH	0
		POSITION WHEN STRIPPING INTERBURDEN	NOT APPLICABLE
		LGTHX	0
		PIT WIDTH	0
		DO INCLINES DROP SHARPLY INTO PIT	NO
		DISTANCE BETWEEN INCLINES (FEET)	0

MINE NAME	PIT NAME		
KAYENTA	M8750	PIT ORIENTATION	STRIKELINE
		PERCENT OF MINE TONNAGE FROM PIT	50
		MINING METHOD	AREA
		NUMBER OF SEAMS	1
		NUMBER OF OVERBURDEN LIFTS	1
		STRIPPING SUBSYSTEM	SINGLE
		STRIPPING EQUIPMENT	DRAGLINE
		AVERAGE OVERBURDEN DEPTH	0
		AVG DEPTH OF UNCONSOLIDATED MATERIAL	0
		AVERAGE INTERBURDEN DEPTH	0
		POSITION WHEN STRIPPING INTERBURDEN	NOT APPLICABLE
		LGTHX	0
		PIT WIDTH	0
		DO INCLINES DROP SHARPLY INTO PIT	NO
		DISTANCE BETWEEN INCLINES (FEET)	0

MINE NAME	PIT NAME	EQUIPMENT TYPE	MODEL	NO OF UNITS	CAPACITY (CU YD)	BOOM LENGTH (FEET)
KAYENTA	BE2570	DRAGLINE	BE2570	1	90	0
	M8750	DRAGLINE	M8750	1	84	300

COLORADO

- COLOWYO
- CORELY S&A
- CRAIG
- EDNA
- ENERGY
- MARR NO 1
- NUCLA
- SENECA
- WILLIAMS FORK

MINE NAME		
COLOWYO	STATE	COLORADO
	COUNTY	MOFFAT
	COMPANY	W.R.GRACE
	1975 SURFACE COAL TONNAGE	0
	1975 ACRES DISTURBED BY MINING	0
	PROJECTED MAXIMUM ANNUAL TONNAGE	3000000
	FIRST YEAR AT MAXIMUM TONNAGE	1979
	NUMBER OF PITS	1
	MINE OPENING YEAR	1976
	REMAINING MINE LIFE	30
	1975 MINE EMPLOYMENT	0
	STRIP RATIO(CU YD PER TON)	5.7
	SURFACE RIGHTS OWNER(S)	PRIVATE-FEDERAL
	MINERAL RIGHTS OWNER(S)	PRIVATE-FEDERAL
	AVERAGE ANNUAL PRECIPITATION	18
	TOPOGRAPHY	HILLY
	ALTIDUDE	7300
	PREMINING LANDUSE(S)	CATTLE AND SHEEP GRAZING
	PRODUCTIVITY(ACRES PER AUM)	6.25
	POSTMINING LANDUSE(S)	CATTLE AND SHEEP GRAZING

MINE NAME		
COLOWYO	SEAM NAME	F SEAM
	AVERAGE THICKNESS	5
	SEAM NAME	E SEAM
	AVERAGE THICKNESS	7
	TYPE OF COAL	BITUMINOUS
	BTU	10728
	PERCENT SULFUR	0.6
	PERCENT ASH	6.0

MARKET	ELECTRIC UTILITY
TOTAL NUMBER OF SEAMS SURFACE MINED	8
THICKNESS OF ALL SEAMS SURFACE MINED	52
UNDERGROUND MINING OF THE SAME SEAMS	NO
BLEND COAL TO MEET CONTRACT SPECS.	NO
MINE MOUTH POWER PLANT	NO
ASH DISPOSAL ON MINE SITE	NO
PERCENT DIP OF COAL	10

MINE NAME

COLOWYO

AQUIFER IN OVERBURDEN OR COAL	NO
TYPE OF AQUIFER	NOT APPLICABLE
STRATA CONTAINING AQUIFER	NOT APPLICABLE
FUNCTION OF AQUIFER STRATA	NOT APPLICABLE
DEPTH TO WATER IN NEARBY WELLS	NO WELLS
PREMINING WELL YEILD (GAL PER MIN)	0
USE OF NEARBY WELLS	
DIVERSION DITCHES TO CONTROL RUNOFF	YES
STREAM DIVERSION	YES
PUMP PIT	YES
SEDIMENT BASINS	YES
CHEMICAL TREATMENT OF DRAINAGE	NO
RESTORE CONTOUR	YES
MAX PERCENT SLOPE ON BOX CUT SPOILS	25
MAX PERCENT SLOPE ON OTHER SPOILS	25
REDUCE LAST-CUT HIGHWALL	YES
MAX HEIGHT OF LAST-CUT HIGHWALL	390
MAX SLOPE ON REDUCED HIGHWALL	APPROXIMATE ORIGINAL CONTOUR
GRADING EQUIPMENT	DOZER

MINE NAME		
COLOWYO	TERRACE SPOIL	YES
	MECHANICAL SPOIL MANIPULATION	NO
	TOPSOIL	YES
	TOPSOIL AND SUBSOIL SEGREGATED	NO
	STOCKPILE TOPSOILING MATERIAL	IF NECESSARY
	EROSION CONTROL ON STOCKPILES	IF NECESSARY
	TOPSOILING EQUIPMENT	SCRAPER
	DEPTH REPLACED (INCHES)	9
	BORROW TOPSOIL	NO
	SEEDING METHOD	DRILL
	PLANT TYPES USED FOR REVEGETATION	GRASSES-LEGUMES-SHRUBS
	PRIMARILY NATIVE GRASSES FOR RANGE	YES
	SOIL AMENDMENTS	FERTILIZER
	MULCH	NO
	IRRIGATION	NO
	NO OF IRRIGATED GROWING SEASONS	0
	DEDICATED RECLAMATION EQUIPMENT	YES
	SEGRATION OF PROBLEM STRATA	IF NECESSARY

MINE NAME		
COLOWYO	STUDIES UNDERTAKEN AT MINE	REVEGETATION-HYDROLOGY
	SIGNIFICANT ENVIRONMENTAL PROBLEMS	EROSION AND SEDIMENTATION
		SHALLOW SOILS
		WIND EROSION

MINE NAME	PIT NAME		
COLOWYO	MAIN	PIT ORIENTATION	STRIKELINE
		PERCENT OF MINE TONNAGE FROM PIT	100
		MINING METHOD	MODIFIED OPEN PIT
		NUMBER OF SEAMS	8
		NUMBER OF OVERBURDEN LIFTS	1
		STRIPPING SUBSYSTEM	DUAL
		STRIPPING EQUIPMENT	DRAGLINE-SHOVEL-TRUCK
		AVERAGE OVERBURDEN DEPTH	14
		AVG DEPTH OF UNCONSOLIDATED MATERIAL	0
		AVERAGE INTERBURDEN DEPTH	79
		POSITION WHEN STRIPPING INTERBURDEN	INTERBURDEN
		PIT LENGTH	4000
		PIT WIDTH	120
		DO INCLINES DROP SHARPLY INTO PIT	NOT APPLICABLE
		DISTANCE BETWEEN INCLINES (FEET)	0

MINE NAME	PIT NAME	EQUIPMENT TYPE	MODEL	NO OF UNITS	CAPACITY (CU YD)	BOOM LENGTH (FEET)
COLOWYO	MAIN	DRAGLINE	BE1300	1	40	285
		DRAGLINE	BE800W	1	28	195
		TRUCK	N	7	170	0
		LOADING SHOVEL	N	1	15	0

MINE NAME		
COREL Y S&A	STATE	COLORADO
	COUNTY	FREEMONT
	COMPANY	CANNON COAL
	1975 SURFACE COAL TONNAGE	110764
	1975 ACRES DISTURBED BY MINING	20
	PROJECTED MAXIMUM ANNUAL TONNAGE	0
	FIRST YEAR AT MAXIMUM TONNAGE	0
	NUMBER OF PITS	1
	MINE OPENING YEAR	1973
	REMAINING MINE LIFE	0
	1975 MINE EMPLOYMENT	22
	STRIP RATIO(CU YD PER TON)	13.2
	SURFACE RIGHTS OWNER(S)	PRIVATE
	MINERAL RIGHTS OWNER(S)	PRIVATE
	AVERAGE ANNUAL PRECIPITATION	13
	TOPOGRAPHY	ROLLING
	ALTIDUDE	6000
	PREMINING LANDUSE(S)	CATTLE GRAZING-MINING
	PRODUCTIVITY(ACRES PER AUM)	5.50
	POSTMINING LANDUSE(S)	CATTLE GRAZING

MINE NAME		
COREL Y S&A	SEAM NAME	UNKNOWN
	AVERAGE THICKNESS	4
	SEAM NAME	N
	AVERAGE THICKNESS	0
	TYPE OF COAL	BITUMINOUS
	BTU	0
	PERCENT SULFUR	.0
	PERCENT ASH	.0

MARKET	ELECTRIC UTILITY-DOMESTIC
TOTAL NUMBER OF SEAMS SURFACE MINED	1
THICKNESS OF ALL SEAMS SURFACE MINED	4
UNDERGROUND MINING OF THE SAME SEAMS	NO
BLEND COAL TO MEET CONTRACT SPECS.	NO
MINE MOUTH POWER PLANT	NO
ASH DISPOSAL ON MINE SITE	NO
PERCENT DIP OF COAL	12

MINE NAME		
CORELY S&A	AQUIFER IN OVERBURDEN OR COAL	NO DATA
	TYPE OF AQUIFER	NO DATA
	STRATA CONTAINING AQUIFER	NO DATA
	FUNCTION OF AQUIFER STRATA	NO DATA
	DEPTH TO WATER IN NEARBY WELLS	ABOVE THE COAL
	PREMINING WELL YEILD (GAL PER MIN)	5
	USE OF NEARBY WELLS	DOMESTIC-LIVESTOCK
	DIVERSION DITCHES TO CONTROL RUNOFF	NO
	STREAM DIVERSION	NO
	PUMP PIT	NO
	SEDIMENT BASINS	NO
	CHEMICAL TREATMENT OF DRAINAGE	NO
	RESTORE CONTOUR	YES
	MAX PERCENT SLOPE ON BOX CUT SPOILS	33
	MAX PERCENT SLOPE ON OTHER SPOILS	33
	REDUCE LAST-CUT HIGHWALL	YES
	MAX HEIGHT OF LAST-CUT HIGHWALL	70
	MAX SLOPE ON REDUCED HIGHWALL	33
	GRADING EQUIPMENT	DOZER

MINE NAME		
CORELY S&A	TERRACE SPOIL	NO
	MECHANICAL SPOIL MANIPULATION	NO
	TOPSOIL	YES
	TOPSOIL AND SUBSOIL SEGREGATED	NO
	STOCKPILE TOPSOILING MATERIAL	IF NECESSARY
	EROSION CONTROL ON STOCKPILES	NO
	TOPSOILING EQUIPMENT	SCRAPER
	DEPTH REPLACED (INCHES)	6
	BORROW TOPSOIL	NO
	SEEDING METHOD	DRILL-BROADCAST
	PLANT TYPES USED FOR REVEGETATION	GRASSES
	PRIMARILY NATIVE GRASSES FOR RANGE	YES
	SOIL AMENDMENTS	NO
	MULCH	NO
	IRRIGATION	NO
	NO OF IRRIGATED GROWING SEASONS	0
	DEDICATED RECLAMATION EQUIPMENT	NO
	SEGRATION OF PROBLEM STRATA	NO

MINE NAME		
CORELY S&A	STUDIES UNDERTAKEN AT MINE	NONE
	SIGNIFICANT ENVIRONMENTAL PROBLEMS	SHALLOW SOILS

MINE NAME	PIT NAME		
CORELY S&A	MAIN	PIT ORIENTATION	STRIKELINE
		PERCENT OF MINE TONNAGE FROM PIT	100
		MINING METHOD	AREA
		NUMBER OF SEAMS	1
		NUMBER OF OVERBURDEN LIFTS	2
		STRIPPING SUBSYSTEM	DUAL
		STRIPPING EQUIPMENT	DRAGLINE-SCRAPER-DOZER
		AVERAGE OVERBURDEN DEPTH	60
		AVG DEPTH OF UNCONSOLIDATED MATERIAL	0
		AVERAGE INTERBURDEN DEPTH	0
		POSITION WHEN STRIPPING INTERBURDEN	NOT APPLICABLE
		PIT LENGTH	1250
		PIT WIDTH	200
		DO INCLINES DROP SHARPLY INTO PIT	NO
		DISTANCE BETWEEN INCLINES (FEET)	0

MINE NAME	PIT NAME	EQUIPMENT TYPE	MODEL	NO OF UNITS	CAPACITY (CU YD)	BOOM LENGTH (FEET)
CORELY S&A	MAIN	DRAGLINE	N	1	2	60
		SCRAPER	N	2	25	0
		DOZER	N	3	0	0

MINE NAME		
CRAIG	STATE	COLORADO
	COUNTY	MOFFAT
	COMPANY	UTAH INTERNL
	1975 SURFACE COAL TONNAGE	C
	1975 ACRES DISTURBED BY MINING	0
	PROJECTED MAXIMUM ANNUAL TONNAGE	2900000
	FIRST YEAR AT MAXIMUM TONNAGE	1980
	NUMBER OF PITS	3
	MINE OPENING YEAR	1976
	REMAINING MINE LIFE	37
	1975 MINE EMPLOYMENT	0
	STRIP RATIO(CU YD PER TON)	7.8
	SURFACE RIGHTS OWNER(S)	PRIVATE-STATE
	MINERAL RIGHTS OWNER(S)	PRIVATE-FEDERAL-STATE
	AVERAGE ANNUAL PRECIPITATION	14
	TOPOGRAPHY	HILLY
	ALTIDUDE	7000
	PREMINING LANDUSE(S)	CROPLAND-CATTLE AND SHEEP GRAZING
	PRODUCTIVITY(ACRES PER AUM)	10.0
	POSTMINING LANDUSE(S)	CATTLE AND SHEEP GRAZING

MINE NAME		
CRAIG	SEAM NAME	UNKNOWN
	AVERAGE THICKNESS	12
	SEAM NAME	Q SEAM
	AVERAGE THICKNESS	4
	TYPE OF COAL	BITUMINOUS
	BTU	0
	PERCENT SULFUR	.0
	PERCENT ASH	.0

MARKET	ELECTRIC UTILITY
TOTAL NUMBER OF SEAMS SURFACE MINED	2
THICKNESS OF ALL SEAMS SURFACE MINED	16
UNDERGROUND MINING OF THE SAME SEAMS	NO
BLEND COAL TO MEET CONTRACT SPECS.	YES
MINE MOUTH POWER PLANT	YES
ASH DISPOSAL ON MINE SITE	NO
PERCENT DIP OF COAL	12

MINE NAME		
CRAIG	AQUIFER IN OVERBURDEN OR COAL	YES
	TYPE OF AQUIFER	CONFINED
	STRATA CONTAINING AQUIFER	CONSOLIDATED OVERBURDEN-COAL
	FUNCTION OF AQUIFER STRATA	RECHARGE
	DEPTH TO WATER IN NEARBY WELLS	NO DATA
	PREMINING WELL YEILD (GAL PER MIN)	0
	USE OF NEARBY WELLS	NO DATA
	DIVERSION DITCHES TO CONTROL RUNOFF	YES
	STREAM DIVERSION	YES
	PUMP PIT	YES
	SEDIMENT BASINS	YES
	CHEMICAL TREATMENT OF DRAINAGE	NO
	RESTORE CONTOUR	YES
	MAX PERCENT SLOPE ON BOX CUT SPOILS	33
	MAX PERCENT SLOPE ON OTHER SPOILS	20
	REDUCE LAST-CUT HIGHWALL	YES
	MAX HEIGHT OF LAST-CUT HIGHWALL	120
	MAX SLOPE ON REDUCED HIGHWALL	APPROXIMATE ORIGINAL CONTOUR
	GRADING EQUIPMENT	DOZER

MINE NAME		
CRAIG	TERRACE SPOIL	YES
	MECHANICAL SPOIL MANIPULATION	NO
	TOPSOIL	YES
	TOPSOIL AND SUBSOIL SEGREGATED	NO
	STOCKPILE TOPSOILING MATERIAL	IF NECESSARY
	EROSION CONTROL ON STOCKPILES	COVER CROP
	TOPSOILING EQUIPMENT	SCRAPER
	DEPTH REPLACED (INCHES)	6
	BORROW TOPSOIL	NO
	SEEDING METHOD	DRILL
	PLANT TYPES USED FOR REVEGETATION	GRASSES-LEGUMES-TREES-SHRUBS
	PRIMARILY NATIVE GRASSES FOR RANGE	YES
	SOIL AMENDMENTS	IF NECESSARY
	MULCH	NO
	IRRIGATION	NO
	NO OF IRRIGATED GROWING SEASONS	0
	DEDICATED RECLAMATION EQUIPMENT	YES
	SEGRATION OF PROBLEM STRATA	YES

MINE NAME		
CRAIG	STUDIES UNDERTAKEN AT MINE	NONE
	SIGNIFICANT ENVIRONMENTAL PROBLEMS	NONE

MINE NAME	PIT NAME		
CRAIG	ALL	PIT ORIENTATION	DIPLINE
		PERCENT OF MINE TONNAGE FROM PIT	100
		MINING METHOD	AREA
		NUMBER OF SEAMS	2
		NUMBER OF OVERBURDEN LIFTS	1
		STRIPPING SUBSYSTEM	SINGLE
		STRIPPING EQUIPMENT	DRAGLINE
		AVERAGE OVERBURDEN DEPTH	100
		AVG DEPTH OF UNCONSOLIDATED MATERIAL	0
		AVERAGE INTERBURDEN DEPTH	35
		POSITION WHEN STRIPPING INTERBURDEN	SPOIL
		LGTHX	0
		PIT WIDTH	100
		DO INCLINES DROP SHARPLY INTO PIT	NO
		DISTANCE BETWEEN INCLINES (FEET)	0

MINE NAME	PIT NAME	EQUIPMENT TYPE	MODEL	NO OF UNITS	CAPACITY (CU YD)	BOOM LENGTH (FEET)
CRAIG	ALL	DRAGLINE	P752	3	0	320

MINE NAME		
EDNA	STATE	COLORADO
	COUNTY	ROUTT
	COMPANY	P&M
	1975 SURFACE COAL TONNAGE	760381
	1975 ACRES DISTURBED BY MINING	80
	PROJECTED MAXIMUM ANNUAL TONNAGE	1100000
	FIRST YEAR AT MAXIMUM TONNAGE	1980
	NUMBER OF PITS	1
	MINE OPENING YEAR	1946
	REMAINING MINE LIFE	15
	1975 MINE EMPLOYMENT	52
	STRIP RATIO(CU YD PER TON)	8.0
	SURFACE RIGHTS OWNER(S)	PRIVATE
	MINERAL RIGHTS OWNER(S)	PRIVATE-FEDERAL
	AVERAGE ANNUAL PRECIPITATION	20
	TOPOGRAPHY	HILLY
	ALTIDUDE	8000
	PREMINING LANDUSE(S)	CATTLE AND SHEEP GRAZING
	PRODUCTIVITY(ACRES PER AUM)	8.00
	POSTMINING LANDUSE(S)	CATTLE AND SHEEP GRAZING

MINE NAME		
EDNA	SEAM NAME	WADGE
	AVERAGE THICKNESS	6
	SEAM NAME	N
	AVERAGE THICKNESS	0
	TYPE OF COAL	BITUMINOUS
	BTU	10850
	PERCENT SULFUR	.0
	PERCENT ASH	7.0

MARKET	INDUSTRIAL-ELECTRIC UTILITY
TOTAL NUMBER OF SEAMS SURFACE MINED	1
THICKNESS OF ALL SEAMS SURFACE MINED	6
UNDERGROUND MINING OF THE SAME SEAMS	NO
BLEND COAL TO MEET CONTRACT SPECS.	NO
MINE MOUTH POWER PLANT	NO
ASH DISPOSAL ON MINE SITE	NO
PERCENT DIP OF COAL	12

MINE NAME		
EDNA	AQUIFER IN OVERBURDEN OR COAL	NO
	TYPE OF AQUIFER	NOT APPLICABLE
	STRATA CONTAINING AQUIFER	NOT APPLICABLE
	FUNCTION OF AQUIFER STRATA	NOT APPLICABLE
	DEPTH TO WATER IN NEARBY WELLS	NO WELLS
	PREMINING WELL YEILD (GAL PER MIN)	0
	USE OF NEARBY WELLS	
	DIVERSION DITCHES TO CONTROL RUNOFF	NO
	STREAM DIVERSION	NO
	PUMP PIT	NO
	SEDIMENT BASINS	YES
	CHEMICAL TREATMENT OF DRAINAGE	NO
	RESTORE CONTOUR	YES
	MAX PERCENT SLOPE ON BOX CUT SPOILS	APPROXIMATE ORIGINAL CONTOUR
	MAX PERCENT SLOPE ON OTHER SPOILS	APPROXIMATE ORIGINAL CONTOUR
	REDUCE LAST-CUT HIGHWALL	YES
	MAX HEIGHT OF LAST-CUT HIGHWALL	100
	MAX SLOPE ON REDUCED HIGHWALL	33
	GRADING EQUIPMENT	DOZER

MINE NAME		
EDNA	TERRACE SPOIL	NO
	MECHANICAL SPOIL MANIPULATION	NO
	TOPSOIL	YES
	TOPSOIL AND SUBSOIL SEGREGATED	NO
	STOCKPILE TOPSOILING MATERIAL	IF NECESSARY
	EROSION CONTROL ON STOCKPILES	IF NECESSARY
	TOPSOILING EQUIPMENT	SCRAPER
	DEPTH REPLACED (INCHES)	12
	BORROW TOPSOIL	NO
	SEEDING METHOD	DRILL
	PLANT TYPES USED FOR REVEGETATION	GRASSES-LEGUMES-TREES-SHRUBS
	PRIMARILY NATIVE GRASSES FOR RANGE	YES
	SOIL AMENDMENTS	NO
	MULCH	NO
	IRRIGATION	NO
	NO OF IRRIGATED GROWING SEASONS	0
	DEDICATED RECLAMATION EQUIPMENT	YES
	SEGRATION OF PROBLEM STRATA	NO

MINE NAME		
EDNA	STUDIES UNDERTAKEN AT MINE	REVEGETATION
	SIGNIFICANT ENVIRONMENTAL PROBLEMS	WIND EROSION

MINE NAME	PIT NAME		
EDNA	MAIN	PIT ORIENTATION	STRIKELINE
		PERCENT OF MINE TONNAGE FROM PIT	100
		MINING METHOD	AREA
		NUMBER OF SEAMS	1
		NUMBER OF OVERBURDEN LIFTS	1
		STRIPPING SUBSYSTEM	SINGLE
		STRIPPING EQUIPMENT	DRAGLINE
		AVERAGE OVERBURDEN DEPTH	55
		AVG DEPTH OF UNCONSOLIDATED MATERIAL	0
		AVERAGE INTERBURDEN DEPTH	0
		POSITION WHEN STRIPPING INTERBURDEN	NOT APPLICABLE
		LGTHX	2500
		PIT WIDTH	100
		DO INCLINES DROP SHARPLY INTO PIT	NO
		DISTANCE BETWEEN INCLINES (FEET)	0

MINE NAME	PIT NAME	EQUIPMENT TYPE	MODEL	NO OF UNITS	CAPACITY (CU YD)	BOOM LENGTH (FEET)
EDNA	MAIN	DRAGLINE	BE	1	40	215

MINE NAME		
ENERGY	STATE	COLORADO
	COUNTY	ROUTT
	COMPANY	ENERGY FUELS
	1975 SURFACE COAL TONNAGE	2603404
	1975 ACRES DISTURBED BY MINING	250
	PROJECTED MAXIMUM ANNUAL TONNAGE	5000000
	FIRST YEAR AT MAXIMUM TONNAGE	1977
	NUMBER OF PITS	4
	MINE OPENING YEAR	1962
	REMAINING MINE LIFE	20
	1975 MINE EMPLOYMENT	186
	STRIP RATIO(CU YD PER TON)	6.0
	SURFACE RIGHTS OWNER(S)	PRIVATE
	MINERAL RIGHTS OWNER(S)	PRIVATE-FEDERAL-STATE
	AVERAGE ANNUAL PRECIPITATION	16
	TOPOGRAPHY	HILLY
	ALTITUDE	7100
	PREMINING LANDUSE(S)	CROPLAND-CATTLE GRAZING
	PRODUCTIVITY(ACRES PER AUM)	5.50
	POSTMINING LANDUSE(S)	CROPLAND-CATTLE GRAZING

MINE NAME		
ENERGY	SEAM NAME	WADGE
	AVERAGE THICKNESS	9
	SEAM NAME	FISH CREEK
	AVERAGE THICKNESS	4
	TYPE OF COAL	BITUMINOUS
	BTU	11000
	PERCENT SULFUR	.4
	PERCENT ASH	6.0

MARKET	ELECTRIC UTILITY
TOTAL NUMBER OF SEAMS SURFACE MINED	2
THICKNESS OF ALL SEAMS SURFACE MINED	14
UNDERGROUND MINING OF THE SAME SEAMS	NO
BLEND COAL TO MEET CONTRACT SPECS.	YES
MINE MOUTH POWER PLANT	NO
ASH DISPOSAL ON MINE SITE	NO
PERCENT DIP OF COAL	27

MINE NAME

ENERGY

AQUIFER IN OVERBURDEN OR COAL	YES
TYPE OF AQUIFER	CONFINED
STRATA CONTAINING AQUIFER	CONSOLIDATED OVERBURDEN-COAL
FUNCTION OF AQUIFER STRATA	RECHARGE
DEPTH TO WATER IN NEARBY WELLS	BELOW THE COAL
PREMINING WELL YEILD (GAL PER MIN)	0
USE OF NEARBY WELLS	DOMESTIC-LIVESTOCK
DIVERSION DITCHES TO CONTROL RUNOFF	NO
STREAM DIVERSION	YES
PUMP PIT	YES
SEDIMENT BASINS	YES
CHEMICAL TREATMENT OF DRAINAGE	NO
RESTORE CONTOUR	YES
MAX PERCENT SLOPE ON BOX CUT SPOILS	APPROXIMATE ORIGINAL CONTOUR
MAX PERCENT SLOPE ON OTHER SPOILS	APPROXIMATE ORIGINAL CONTOUR
REDUCE LAST-CUT HIGHWALL	YES
MAX HEIGHT OF LAST-CUT HIGHWALL	120
MAX SLOPE ON REDUCED HIGHWALL	33
GRADING EQUIPMENT	DOZER

MINE NAME		
ENERGY	TERRACE SPOIL	NO
	MECHANICAL SPOIL MANIPULATION	YES
	TOPSOIL	YES
	TOPSOIL AND SUBSOIL SEGREGATED	NO
	STOCKPILE TOPSOILING MATERIAL	IF NECESSARY
	EROSION CONTROL ON STOCKPILES	IF NECESSARY
	TOPSOILING EQUIPMENT	SCRAPER
	DEPTH REPLACED (INCHES)	18
	BORROW TOPSOIL	NO
	SEEDING METHOD	DRILL-BROADCAST
	PLANT TYPES USED FOR REVEGETATION	GRASSES-LEGUMES-TREES-SHRUBS
	PRIMARILY NATIVE GRASSES FOR RANGE	YES
	SOIL AMENDMENTS	IF NECESSARY
	MULCH	IF NECESSARY
	IRRIGATION	NO
	NO OF IRRIGATED GROWING SEASONS	0
	DEDICATED RECLAMATION EQUIPMENT	YES
	SEGRATION OF PROBLEM STRATA	NO

MINE NAME		
ENERGY	STUDIES UNDERTAKEN AT MINE	REVEGETATION-OVERBURDEN
	SIGNIFICANT ENVIRONMENTAL PROBLEMS	WIND EROSION
		EROSION AND SEDIMENTATION

MINE NAME	PIT NAME		
ENERGY	AREA 1	PIT ORIENTATION	DIPLINE
		PERCENT OF MINE TONNAGE FROM PIT	19
		MINING METHOD	AREA
		NUMBER OF SEAMS	1
		NUMBER OF OVERBURDEN LIFTS	1
		STRIPPING SUBSYSTEM	SINGLE
		STRIPPING EQUIPMENT	DRAGLINE
		AVERAGE OVERBURDEN DEPTH	60
		AVG DEPTH OF UNCONSOLIDATED MATERIAL	0
		AVERAGE INTERBURDEN DEPTH	0
		POSITION WHEN STRIPPING INTERBURDEN	NOT APPLICABLE
		LGTHX	3000
		PIT WIDTH	85
		DO INCLINES DROP SHARPLY INTO PIT	NO
		DISTANCE BETWEEN INCLINES (FEET)	1500

MINE NAME	PIT NAME		
ENERGY	AREA 2	PIT ORIENTATION	DIPLINE
		PERCENT OF MINE TONNAGE FROM PIT	13
		MINING METHOD	AREA
		NUMBER OF SEAMS	1
		NUMBER OF OVERBURDEN LIFTS	1
		STRIPPING SUBSYSTEM	SINGLE
		STRIPPING EQUIPMENT	DRAGLINE
		AVERAGE OVERBURDEN DEPTH	60
		AVG DEPTH OF UNCONSOLIDATED MATERIAL	0
		AVERAGE INTERBURDEN DEPTH	0
		POSITION WHEN STRIPPING INTERBURDEN	NOT APPLICABLE
		LGTHX	3000
		PIT WIDTH	85
		DO INCLINES DROP SHARPLY INTO PIT	NO
		DISTANCE BETWEEN INCLINES (FEET)	1500

MINE NAME	PIT NAME		
ENERGY	MINE 2	PIT ORIENTATION	STRIKELINE
		PERCENT OF MINE TONNAGE FROM PIT	48
		MINING METHOD	AREA
		NUMBER OF SEAMS	1
		NUMBER OF OVERBURDEN LIFTS	1
		STRIPPING SUBSYSTEM	SINGLE
		STRIPPING EQUIPMENT	DRAGLINE
		AVERAGE OVERBURDEN DEPTH	30
		AVG DEPTH OF UNCONSOLIDATED MATERIAL	0
		AVERAGE INTERBURDEN DEPTH	0
		POSITION WHEN STRIPPING INTERBURDEN	NOT APPLICABLE
		LGTHX	3000
		PIT WIDTH	85
		DO INCLINES DROP SHARPLY INTO PIT	NO
		DISTANCE BETWEEN INCLINES (FEET)	1500

MINE NAME	PIT NAME		
ENERGY	MINE 3	PIT ORIENTATION	STRIKELINE
		PERCENT OF MINE TONNAGE FROM PIT	20
		MINING METHOD	AREA
		NUMBER OF SEAMS	1
		NUMBER OF OVERBURDEN LIFTS	1
		STRIPPING SUBSYSTEM	SINGLE
		STRIPPING EQUIPMENT	SCRAPER
		AVERAGE OVERBURDEN DEPTH	40
		AVG DEPTH OF UNCONSOLIDATED MATERIAL	0
		AVERAGE INTERBURDEN DEPTH	0
		POSITION WHEN STRIPPING INTERBURDEN	NOT APPLICABLE
		LGTHX	2000
		PIT WIDTH	70
		DO INCLINES DROP SHARPLY INTO PIT	NO
		DISTANCE BETWEEN INCLINES (FEET)	1500

MINE NAME	PIT NAME	EQUIPMENT TYPE	MODEL	NO OF UNITS	CAPACITY (CU YD)	BOOM LENGTH (FEET)
ENERGY	AREA 1	DRAGLINE	BE770	1	21	265
	AREA 2	DRAGLINE	M7400	1	14	215
	MINE 2	DRAGLINE	M4600	2	8	120
	MINE 3	SCRAPER	N	0	0	0

MINE NAME		
MARR NO1	STATE	COLORADO
	COUNTY	JACKSON
	COMPANY	TMC COAL
	1975 SURFACE COAL TONNAGE	237476
	1975 ACRES DISTURBED BY MINING	5
	PROJECTED MAXIMUM ANNUAL TONNAGE	0
	FIRST YEAR AT MAXIMUM TONNAGE	0
	NUMBER OF PITS	1
	MINE OPENING YEAR	1974
	REMAINING MINE LIFE	0
	1975 MINE EMPLOYMENT	36
	STRIP RATIO(CU YD PER TON)	2.5
	SURFACE RIGHTS OWNER(S)	PRIVATE
	MINERAL RIGHTS OWNER(S)	PRIVATE
	AVERAGE ANNUAL PRECIPITATION	12
	TOPOGRAPHY	ROLLING
	ALTIDUDE	8100
	PREMINING LANDUSE(S)	CATTLE GRAZING
	PRODUCTIVITY(ACRES PER AUM)	9.00
	POSTMINING LANDUSE(S)	CATTLE GRAZING

MINE NAME		
MARR NO1	SEAM NAME	SUDDUTH
	AVERAGE THICKNESS	55
	SEAM NAME	N
	AVERAGE THICKNESS	0
	TYPE OF COAL	SUBBITUMINOUS
	BTU	10800
	PERCENT SULFUR	.5
	PERCENT ASH	8.0

MARKET	ELECTRIC UTILITY
TOTAL NUMBER OF SEAMS SURFACE MINED	1
THICKNESS OF ALL SEAMS SURFACE MINED	55
UNDERGROUND MINING OF THE SAME SEAMS	NO
BLEND COAL TO MEET CONTRACT SPECS.	NO
MINE MOUTH POWER PLANT	NO
ASH DISPOSAL ON MINE SITE	NO
PERCENT DIP OF COAL	173

MINE NAME		
MARR N01	AQUIFER IN OVERBURDEN OR COAL	NO
	TYPE OF AQUIFER	NOT APPLICABLE
	STRATA CONTAINING AQUIFER	NOT APPLICABLE
	FUNCTION OF AQUIFER STRATA	NOT APPLICABLE
	DEPTH TO WATER IN NEARBY WELLS	NO WELLS
	PREMINING WELL YEILD (GAL PER MIN)	0
	USE OF NEARBY WELLS	
	DIVERSION DITCHES TO CONTROL RUNOFF	YES
	STREAM DIVERSION	NO
	PUMP PIT	NO
	SEDIMENT BASINS	YES
	CHEMICAL TREATMENT OF DRAINAGE	NO
	RESTORE CONTOUR	YES
	MAX PERCENT SLOPE ON BOX CUT SPOILS	20
	MAX PERCENT SLOPE ON OTHER SPOILS	20
	REDUCE LAST-CUT HIGHWALL	YES
	MAX HEIGHT OF LAST-CUT HIGHWALL	150
	MAX SLOPE ON REDUCED HIGHWALL	33
	GRADING EQUIPMENT	DOZER

MINE NAME		
MARR NO1	TERRACE SPOIL	NO
	MECHANICAL SPOIL MANIPULATION	NO
	TOPSOIL	YES
	TOPSOIL AND SUBSOIL SEGREGATED	NO
	STOCKPILE TOPSOILING MATERIAL	YES
	EROSION CONTROL ON STOCKPILES	NO
	TOPSOILING EQUIPMENT	SCRAPER
	DEPTH REPLACED (INCHES)	5
	BORROW TOPSOIL	NO
	SEEDING METHOD	DRILL
	PLANT TYPES USED FOR REVEGETATION	GRASSES
	PRIMARILY NATIVE GRASSES FOR RANGE	YES
	SOIL AMENDMENTS	NO
	MULCH	NO
	IRRIGATION	NO
	NO OF IRRIGATED GROWING SEASONS	0
	DEDICATED RECLAMATION EQUIPMENT	NO
	SEGRATION OF PROBLEM STRATA	NO

MINE NAME		
MARR NO1	STUDIES UNDERTAKEN AT MINE	REVEGETATION
	SIGNIFICANT ENVIRONMENTAL PROBLEMS	WIND EROSION

MINE NAME	PIT NAME		
MARR NO1	MAIN	PIT ORIENTATION	STRIKELINE
		PERCENT OF MINE TONNAGE FROM PIT	100
		MINING METHOD	MODIFIED OPEN PIT
		NUMBER OF SEAMS	1
		NUMBER OF OVERBURDEN LIFTS	1
		STRIPPING SUBSYSTEM	DUAL
		STRIPPING EQUIPMENT	SCRAPER-DOZER
		AVERAGE OVERBURDEN DEPTH	150
		AVG DEPTH OF UNCONSOLIDATED MATERIAL	0
		AVERAGE INTERBURDEN DEPTH	0
		POSITION WHEN STRIPPING INTERBURDEN	NOT APPLICABLE
		LGTHX	1500
		PIT WIDTH	300
		DO INCLINES DROP SHARPLY INTO PIT	NOT APPLICABLE
		DISTANCE BETWEEN INCLINES (FEET)	0

MINE NAME	PIT NAME	EQUIPMENT TYPE	MODEL	NO OF UNITS	CAPACITY (CU YD)	BOOM LENGTH (FEET)
MARR NOI	MAIN	SCRAPER	N	2	30	0
		DOZER	CATDS	1	0	0

MINE NAME		
NUCLA	STATE	COLORADO
	COUNTY	MONTROSE
	COMPANY	PEABODY
	1975 SURFACE COAL TONNAGE	104980
	1975 ACRES DISTURBED BY MINING	15
	PROJECTED MAXIMUM ANNUAL TONNAGE	105000
	FIRST YEAR AT MAXIMUM TONNAGE	1975
	NUMBER OF PITS	1
	MINE OPENING YEAR	1963
	REMAINING MINE LIFE	0
	1975 MINE EMPLOYMENT	18
	STRIP RATIO(CU YD PER TON)	5.4
	SURFACE RIGHTS OWNER(S)	PRIVATE
	MINERAL RIGHTS OWNER(S)	PRIVATE
	AVERAGE ANNUAL PRECIPITATION	8
	TOPOGRAPHY	ROLLING
	ALTIDUDE	5600
	PREMINING LANDUSE(S)	IRRIGATED CROPLAND-CATTLE AND SHEEP
	PRODUCTIVITY(ACRES PER AUM)	5.33
	POSTMINING LANDUSE(S)	CATTLE AND SHEEP GRAZING

MINE NAME		
NUCLA	SEAM NAME	UPPER BENCH
	AVERAGE THICKNESS	2
	SEAM NAME	LOWER BENCH
	AVERAGE THICKNESS	4
	TYPE OF COAL	BITUMINOUS
	BTU	11500
	PERCENT SULFUR	.8
	PERCENT ASH	9.0

MARKET	ELECTRIC UTILITY
TOTAL NUMBER OF SEAMS SURFACE MINED	2
THICKNESS OF ALL SEAMS SURFACE MINED	6
UNDERGROUND MINING OF THE SAME SEAMS	NO
BLEND COAL TO MEET CONTRACT SPECS.	YES
MINE MOUTH POWER PLANT	YES
ASH DISPOSAL ON MINE SITE	NO
PERCENT DIP OF COAL	3

MINE NAME		
NUCLA	AQUIFER IN OVERBURDEN OR COAL	YES
	TYPE OF AQUIFER	CONFINED
	STRATA CONTAINING AQUIFER	CONSOLIDATED OVERBURDEN-COAL
	FUNCTION OF AQUIFER STRATA	DISCHARGE
	DEPTH TO WATER IN NEARBY WELLS	ABOVE THE COAL
	PREMINING WELL YEILD (GAL PER MIN)	3
	USE OF NEARBY WELLS	DOMESTIC-LIVESTOCK
	DIVERSION DITCHES TO CONTROL RUNOFF	YES
	STREAM DIVERSION	NO
	PUMP PIT	NO
	SEDIMENT BASINS	YES
	CHEMICAL TREATMENT OF DRAINAGE	NO
	RESTORE CONTOUR	YES
	MAX PERCENT SLOPE ON BOX CUT SPOILS	4
	MAX PERCENT SLOPE ON OTHER SPOILS	4
	REDUCE LAST-CUT HIGHWALL	YES
	MAX HEIGHT OF LAST-CUT HIGHWALL	50
	MAX SLOPE ON REDUCED HIGHWALL	APPROXIMATE ORIGINAL CONTOUR
	GRADING EQUIPMENT	DOZER

MINE NAME		
NUCLA	TERRACE SPOIL	NO
	MECHANICAL SPOIL MANIPULATION	YES
	TOPSOIL	YES
	TOPSOIL AND SUBSOIL SEGREGATED	NO
	STOCKPILE TOPSOILING MATERIAL	IF NECESSARY
	EROSION CONTROL ON STOCKPILES	NO
	TOPSOILING EQUIPMENT	SCRAPER
	DEPTH REPLACED (INCHES)	4
	BORROW TOPSOIL	NO
	SEEDING METHOD	BROADCAST
	PLANT TYPES USED FOR REVEGETATION	GRASSES-LEGUMES
	PRIMARILY NATIVE GRASSES FOR RANGE	YES
	SOIL AMENDMENTS	NO
	MULCH	NO
	IRRIGATION	NO
	NO OF IRRIGATED GROWING SEASONS	0
	DEDICATED RECLAMATION EQUIPMENT	YES
	SEGRATION OF PROBLEM STRATA	YES

MINE NAME		
NUCLA	STUDIES UNDERTAKEN AT MINE	REVEGETATION-HYDROLOGY
	SIGNIFICANT ENVIRONMENTAL PROBLEMS	SHALLOW SOILS
		SALINE SOILS
		DARK COLORED SPOILS

MINE NAME	PIT NAME		
NUCLA	MAIN	PIT ORIENTATION	STRIKELINE
		PERCENT OF MINE TONNAGE FROM PIT	100
		MINING METHOD	AREA
		NUMBER OF SEAMS	2
		NUMBER OF OVERBURDEN LIFTS	1
		STRIPPING SUBSYSTEM	SINGLE
		STRIPPING EQUIPMENT	DRAGLINE
		AVERAGE OVERBURDEN DEPTH	35
		AVG DEPTH OF UNCONSOLIDATED MATERIAL	10
		AVERAGE INTERBURDEN DEPTH	8
		POSITION WHEN STRIPPING INTERBURDEN	INTERBURDEN
		LGTHX	1000
		PIT WIDTH	80
		DO INCLINES DROP SHARPLY INTO PIT	NO
		DISTANCE BETWEEN INCLINES (FEET)	0

MINE NAME	PIT NAME	EQUIPMENT TYPE	MODEL	NO OF UNITS	CAPACITY (CU YD)	BOOM LENGTH (FEET)
NUCLA	MAIN	DRAGLINE	8E5W	1	0	0

MINE NAME		
SENECA	STATE	COLORADO
	COUNTY	ROUTT
	COMPANY	PEABODY
	1975 SURFACE COAL TONNAGE	710313
	1975 ACRES DISTURBED BY MINING	57
	PROJECTED MAXIMUM ANNUAL TONNAGE	1500000
	FIRST YEAR AT MAXIMUM TONNAGE	1980
	NUMBER OF PITS	1
	MINE OPENING YEAR	1964
	REMAINING MINE LIFE	28
	1975 MINE EMPLOYMENT	29
	STRIP RATIO(CU YD PER TON)	4.2
	SURFACE RIGHTS OWNER(S)	PRIVATE-STATE
	MINERAL RIGHTS OWNER(S)	PRIVATE-FEDERAL-STATE
	AVERAGE ANNUAL PRECIPITATION	16
	TOPOGRAPHY	HILLY
	ALTIDUDE	7000
	PREMINING LANDUSE(S)	CATTLE AND SHEEP GRAZING
	PRODUCTIVITY(ACRES PER AUM)	8.00
	POSTMINING LANDUSE(S)	CATTLE AND SHEEP GRAZING

MINE NAME		
SENECA	SEAM NAME	WADGE
	AVERAGE THICKNESS	12
	SEAM NAME	N
	AVERAGE THICKNESS	0
	TYPE OF COAL	BITUMINOUS
	BTU	12500
	PERCENT SULFUR	.5
	PERCENT ASH	.0

MARKET	ELECTRIC UTILITY
TOTAL NUMBER OF SEAMS SURFACE MINED	1
THICKNESS OF ALL SEAMS SURFACE MINED	12
UNDERGROUND MINING OF THE SAME SEAMS	NO
BLEND COAL TO MEET CONTRACT SPECS.	NO
MINE MOUTH POWER PLANT	YES
ASH DISPOSAL ON MINE SITE	NO
PERCENT DIP OF COAL	24

MINE NAME		
SENECA	AQUIFER IN OVERBURDEN OR COAL	YES
	TYPE OF AQUIFER	CONFINED
	STRATA CONTAINING AQUIFER	CONSOLIDATED OVERBURDEN-COAL
	FUNCTION OF AQUIFER STRATA	RECHARGE
	DEPTH TO WATER IN NEARBY WELLS	NO DATA
	PREMINING WELL YEILD (GAL PER MIN)	0
	USE OF NEARBY WELLS	NO DATA
	DIVERSION DITCHES TO CONTROL RUNOFF	YES
	STREAM DIVERSION	NO
	PUMP PIT	YES
	SEDIMENT BASINS	YES
	CHEMICAL TREATMENT OF DRAINAGE	NO
	RESTORE CONTOUR	YES
	MAX PERCENT SLOPE ON BOX CUT SPOILS	33
	MAX PERCENT SLOPE ON OTHER SPOILS	25
	REDUCE LAST-CUT HIGHWALL	YES
	MAX HEIGHT OF LAST-CUT HIGHWALL	100
	MAX SLOPE ON REDUCED HIGHWALL	33
	GRADING EQUIPMENT	DOZER

MINE NAME		
SENECA	TERRACE SPOIL	NO
	MECHANICAL SPOIL MANIPULATION	IF NECESSARY
	TOPSOIL	YES
	TOPSOIL AND SUBSOIL SEGREGATED	NO
	STOCKPILE TOPSOILING MATERIAL	IF NECESSARY
	EROSION CONTROL ON STOCKPILES	COVER CROP
	TOPSOILING EQUIPMENT	SCRAPER
	DEPTH REPLACED (INCHES)	13
	BORROW TOPSOIL	NO
	SEEDING METHOD	BROADCAST-AERIAL
	PLANT TYPES USED FOR REVEGETATION	GRASSES-LEGUMES-TREES-SHRUBS
	PRIMARILY NATIVE GRASSES FOR RANGE	YES
	SOIL AMENDMENTS	NO
	MULCH	NO
	IRRIGATION	NO
	NO OF IRRIGATED GROWING SEASONS	0
	DEDICATED RECLAMATION EQUIPMENT	YES
	SEGRATION OF PROBLEM STRATA	NO

MINE NAME		
SENECA	STUDIES UNDERTAKEN AT MINE	REVEGETATION
	SIGNIFICANT ENVIRONMENTAL PROBLEMS	CLAYEY SOILS
		EROSION AND SEDIMENTATION

MINE NAME	PIT NAME		
SENECA	MAIN	PIT ORIENTATION	STRIKELINE
		PERCENT OF MINE TONNAGE FROM PIT	100
		MINING METHOD	AREA
		NUMBER OF SEAMS	1
		NUMBER OF OVERBURDEN LIFTS	1
		STRIPPING SUBSYSTEM	SINGLE
		STRIPPING EQUIPMENT	DRAGLINE
		AVERAGE OVERBURDEN DEPTH	55
		AVG DEPTH OF UNCONSOLIDATED MATERIAL	0
		AVERAGE INTERBURDEN DEPTH	0
		POSITION WHEN STRIPPING INTERBURDEN	NOT APPLICABLE
		LGTHX	5000
		PIT WIDTH	110
		DO INCLINES DROP SHARPLY INTO PIT	NO
		DISTANCE BETWEEN INCLINES (FEET)	2500

MINE NAME	PIT NAME	EQUIPMENT TYPE	MODEL	NO OF UNITS	CAPACITY (CU YD)	BOOM LENGTH (FEET)
SENECA	MAIN	DRAGLINE	BE650B	1	15	215

MINE NAME		
WILLIAMS FK	STATE	COLORADO
	COUNTY	MOFFAT
	COMPANY	BRASEL&SIMMS
	1975 SURFACE COAL TONNAGE	238396
	1975 ACRES DISTURBED BY MINING	40
	PROJECTED MAXIMUM ANNUAL TONNAGE	0
	FIRST YEAR AT MAXIMUM TONNAGE	0
	NUMBER OF PITS	2
	MINE OPENING YEAR	1975
	REMAINING MINE LIFE	10
	1975 MINE EMPLOYMENT	26
	STRIP RATIO(CU YD PER TON)	.0
	SURFACE RIGHTS OWNER(S)	STATE
	MINERAL RIGHTS OWNER(S)	STATE
	AVERAGE ANNUAL PRECIPITATION	15
	TOPOGRAPHY	ROLLING
	ALTITUDE	6000
	PREMINING LANDUSE(S)	CROPLAND
	PRODUCTIVITY(ACRES PER AUM)	10.0
	POSTMINING LANDUSE(S)	CROPLAND

MINE NAME		
WILLIAMS FK	SEAM NAME	UNKNOWN
	AVERAGE THICKNESS	9
	SEAM NAME	N
	AVERAGE THICKNESS	0
	TYPE OF COAL	BITUMINOUS
	BTU	0
	PERCENT SULFUR	.0
	PERCENT ASH	.0

MARKET	ELECTRIC UTILITY
TOTAL NUMBER OF SEAMS SURFACE MINED	1
THICKNESS OF ALL SEAMS SURFACE MINED	9
UNDERGROUND MINING OF THE SAME SEAMS	NO
BLEND COAL TO MEET CONTRACT SPECS.	NO
MINE MOUTH POWER PLANT	NO
ASH DISPOSAL ON MINE SITE	NO
PERCENT DIP OF COAL	5

MINE NAME		
WILLIAMS FK	AQUIFER IN OVERBURDEN OR COAL	NO
	TYPE OF AQUIFER	NOT APPLICABLE
	STRATA CONTAINING AQUIFER	NOT APPLICABLE
	FUNCTION OF AQUIFER STRATA	NOT APPLICABLE
	DEPTH TO WATER IN NEARBY WELLS	NO DATA
	PREMINING WELL YEILD (GAL PER MIN)	0
	USE OF NEARBY WELLS	NO DATA
	DIVERSION DITCHES TO CONTROL RUNOFF	YES
	STREAM DIVERSION	NO
	PUMP PIT	NO
	SEDIMENT BASINS	NO
	CHEMICAL TREATMENT OF DRAINAGE	NO
	RESTORE CONTOUR	YES
	MAX PERCENT SLOPE ON BOX CUT SPOILS	10
	MAX PERCENT SLOPE ON OTHER SPOILS	10
	REDUCE LAST-CUT HIGHWALL	YES
	MAX HEIGHT OF LAST-CUT HIGHWALL	0
	MAX SLOPE ON REDUCED HIGHWALL	APPROXIMATE ORIGINAL CONTOUR
	GRADING EQUIPMENT	DOZER

MINE NAME		
WILLIAMS FK	TERRACE SPOIL	NO
	MECHANICAL SPOIL MANIPULATION	NO
	TOPSOIL	YES
	TOPSOIL AND SUBSOIL SEGREGATED	NO
	STOCKPILE TOPSOILING MATERIAL	IF NECESSARY
	EROSION CONTROL ON STOCKPILES	NO
	TOPSOILING EQUIPMENT	SCRAPER
	DEPTH REPLACED (INCHES)	6
	BORROW TOPSOIL	NO
	SEEDING METHOD	DRILL
	PLANT TYPES USED FOR REVEGETATION	GRASSES-LEGUMES-SHRUBS
	PRIMARILY NATIVE GRASSES FOR RANGE	YES
	SOIL AMENDMENTS	NO
	MULCH	NO
	IRRIGATION	NO
	NO OF IRRIGATED GROWING SEASONS	0
	DEDICATED RECLAMATION EQUIPMENT	NO
	SEGRATION OF PROBLEM STRATA	NO

MINE NAME		
WILLIAMS FK	STUDIES UNDERTAKEN AT MINE	NONE
	SIGNIFICANT ENVIRONMENTAL PROBLEMS	NONE

MINE NAME	PIT NAME		
WILLIAMS FK	NO 1	PIT ORIENTATION	STRIKELINE
		PERCENT OF MINE TONNAGE FROM PIT	50
		MINING METHOD	AREA
		NUMBER OF SEAMS	1
		NUMBER OF OVERBURDEN LIFTS	1
		STRIPPING SUBSYSTEM	SINGLE
		STRIPPING EQUIPMENT	DRAGLINE
		AVERAGE OVERBURDEN DEPTH	90
		AVG DEPTH OF UNCONSOLIDATED MATERIAL	0
		AVERAGE INTERBURDEN DEPTH	0
		POSITION WHEN STRIPPING INTERBURDEN	NOT APPLICABLE
		LGTHX	0
		PIT WIDTH	0
		DO INCLINES DROP SHARPLY INTO PIT	NO
		DISTANCE BETWEEN INCLINES (FEET)	0

MINE NAME	PIT NAME		
WILLIAMS FK	NO 2	PIT ORIENTATION	STRIKELINE
		PERCENT OF MINE TONNAGE FROM PIT	50
		MINING METHOD	AREA
		NUMBER OF SEAMS	1
		NUMBER OF OVERBURDEN LIFTS	1
		STRIPPING SUBSYSTEM	DUAL
		STRIPPING EQUIPMENT	SHOVEL-TRUCK-LOADER
		AVERAGE OVERBURDEN DEPTH	6
		AVG DEPTH OF UNCONSOLIDATED MATERIAL	0
		AVERAGE INTERBURDEN DEPTH	0
		POSITION WHEN STRIPPING INTERBURDEN	NOT APPLICABLE
		LGTHX	0
		PIT WIDTH	0
		DO INCLINES DROP SHARPLY INTO PIT	NO
		DISTANCE BETWEEN INCLINES (FEET)	0

MINE NAME	PIT NAME	EQUIPMENT TYPE	MODEL	NO OF UNITS	CAPACITY (CU YD)	BOOM LENGTH (FEET)
WILLIAMS FK	NO 1	DRAGLINE	N	1	2	60
	NO 2	LOADER	N	0	0	0
		LOADING SHOVEL	N	0	0	0
		TRUCK	N	0	0	0

MONTANA

- BIG SKY
- COLSTRIP
- DECKER
- SARPY CREEK
- SAVAGE

MINE NAME		
BIG SKY	STATE	MONTANA
	COUNTY	ROSEBUD
	COMPANY	PEABODY
	1975 SURFACE COAL TONNAGE	2080412
	1975 ACRES DISTURBED BY MINING	41
	PROJECTED MAXIMUM ANNUAL TONNAGE	4000000
	FIRST YEAR AT MAXIMUM TONNAGE	0
	NUMBER OF PITS	1
	MINE OPENING YEAR	1969
	REMAINING MINE LIFE	30
	1975 MINE EMPLOYMENT	64
	STRIP RATIO(CU YD PER TON)	2.0
	SURFACE RIGHTS OWNER(S)	PRIVATE-FEDERAL
	MINERAL RIGHTS OWNER(S)	PRIVATE-FEDERAL
	AVERAGE ANNUAL PRECIPITATION	16
	TOPOGRAPHY	ROLLING
	ALTIDUDE	3350
	PREMINING LANDUSE(S)	CATTLE GRAZING
	PRODUCTIVITY(ACRES PER AUM)	3.33
	POSTMINING LANDUSE(S)	CATTLE GRAZING-WILDLIFE

MINE NAME		
BIG SKY	SEAM NAME	ROSEBUD
	AVERAGE THICKNESS	26
	SEAM NAME	MCKAY
	AVERAGE THICKNESS	9
	TYPE OF COAL	SUBBITUMINOUS
	BTU	8450
	PERCENT SULFUR	.8
	PERCENT ASH	10.4
	MARKET	ELECTRIC UTILITY
	TOTAL NUMBER OF SEAMS SURFACE MINED	2
	THICKNESS OF ALL SEAMS SURFACE MINED	35

	UNDERGROUND MINING OF THE SAME SEAMS	NO
	BLEND COAL TO MEET CONTRACT SPECS.	YES
	MINE MOUTH POWER PLANT	NO
	ASH DISPOSAL ON MINE SITE	NO
	PERCENT DIP OF COAL	2
MINE NAME		
BIG SKY	AQUIFER IN OVERBURDEN OR COAL	YES
	TYPE OF AQUIFER	CONFINED
	STRATA CONTAINING AQUIFER	UNCONSOLIDATED OVERBURDEN
	FUNCTION OF AQUIFER STRATA	DISCHARGE
	DEPTH TO WATER IN NEARBY WELLS	ABOVE IN AND BELOW
	PREMINING WELL YEILD (GAL PER MIN)	7
	USE OF NEARBY WELLS	DOMESTIC-LIVESTOCK
	DIVERSION DITCHES TO CONTROL RUNOFF	YES
	STREAM DIVERSION	NO
	PUMP PIT	YES
	SEDIMENT BASINS	YES
	CHEMICAL TREATMENT OF DRAINAGE	NO
	RESTORE CONTOUR	YES
	MAX PERCENT SLOPE ON BOX CUT SPOILS	20
	MAX PERCENT SLOPE ON OTHER SPOILS	20
	REDUCE LAST-CUT HIGHWALL	YES
	MAX HEIGHT OF LAST-CUT HIGHWALL	125
	MAX SLOPE ON REDUCED HIGHWALL	33
	GRADING EQUIPMENT	DOZER

MINE NAME		
BIG SKY	TERRACE SPOIL	YES
	MECHANICAL SPOIL MANIPULATION	YES
	TOPSOIL	YES
	TOPSOIL AND SUBSOIL SEGREGATED	NO
	STOCKPILE TOPSOILING MATERIAL	IF NECESSARY
	EROSION CONTROL ON STOCKPILES	IF NECESSARY
	TOPSOILING EQUIPMENT	SCRAPER
	DEPTH REPLACED (INCHES)	12
	BORROW TOPSOIL	NO
	SEEDING METHOD	DRILL
	PLANT TYPES USED FOR REVEGETATION	GRASSES-LEGUMES-TREES
	PRIMARILY NATIVE GRASSES FOR RANGE	YES
	SOIL AMENDMENTS	NO
	MULCH	NO
	IRRIGATION	IF FEASIBLE
	NO OF IRRIGATED GROWING SEASONS	1
	DEDICATED RECLAMATION EQUIPMENT	YES
	SEGRATION OF PROBLEM STRATA	YES

MINE NAME		
BIG SKY	STUDIES UNDERTAKEN AT MINE	REVEGETATION-HYDROLOGY
	SIGNIFICANT ENVIRONMENTAL PROBLEMS	IMPERMEABLE MATERIAL
		IMPERMEABLE MATERIAL
		WIND EROSION

MINE NAME	PIT NAME		
BIG SKY	MAIN	PIT ORIENTATION	STRIKELINE
		PERCENT OF MINE TONNAGE FROM PIT	100
		MINING METHOD	AREA
		NUMBER OF SEAMS	2
		NUMBER OF OVERBURDEN LIFTS	1
		STRIPPING SUBSYSTEM	SINGLE
		STRIPPING EQUIPMENT	DRAGLINE
		AVERAGE OVERBURDEN DEPTH	57
		AVG DEPTH OF UNCONSOLIDATED MATERIAL	0
		AVERAGE INTERBURDEN DEPTH	18
		POSITION WHEN STRIPPING INTERBURDEN	SPOIL
		LGTHX	5300
		PIT WIDTH	125
		DO INCLINES DROP SHARPLY INTO PIT	YES
		DISTANCE BETWEEN INCLINES (FEET)	2500

MINE NAME	PIT NAME	EQUIPMENT TYPE	MODEL	NO OF UNITS	CAPACITY (CU YD)
BIG SKY	MAIN	DRAGLINE	M7800	1	30

MINE NAME		
COLSTRIP	STATE	MONTANA
	COUNTY	ROSEBUD
	COMPANY	W ENERGY
	1975 SURFACE COAL TONNAGE	6432344
	1975 ACRES DISTURBED BY MINING	175
	PROJECTED MAXIMUM ANNUAL TONNAGE	19100000
	FIRST YEAR AT MAXIMUM TONNAGE	1980
	NUMBER OF PITS	2
	MINE OPENING YEAR	1968
	REMAINING MINE LIFE	35
	1975 MINE EMPLOYMENT	285
	STRIP RATIO(CU YD PER TON)	3.0
	SURFACE RIGHTS OWNER(S)	PRIVATE-FEDERAL
	MINERAL RIGHTS OWNER(S)	PRIVATE-FEDERAL
	AVERAGE ANNUAL PRECIPITATION	16
	TOPOGRAPHY	ROLLING
	ALTIDUDE	3400
	PREMINING LANDUSE(S)	CATTLE GRAZING-MINING
	PRODUCTIVITY(ACRES PER AUM)	4.42
	POSTMINING LANDUSE(S)	CATTLE GRAZING

MINE NAME		
COLSTRIP	SEAM NAME	ROSEBUD
	AVERAGE THICKNESS	25
	SEAM NAME	N
	AVERAGE THICKNESS	0
	TYPE OF COAL	SUBBITUMINOUS
	BTU	8700
	PERCENT SULFUR	0.7
	PERCENT ASH	8.9
	MARKET	ELECTRIC UTILITY
	TOTAL NUMBER OF SEAMS SURFACE MINED	1
	THICKNESS OF ALL SEAMS SURFACE MINED	25

UNDERGROUND MINING OF THE SAME SEAMS	NO
BLEND COAL TC MEET CONTRACT SPECS.	NO
MINE MOUTH POWER PLANT	YES
ASH DISPOSAL CN MINE SITE	NO
PERCENT DIP CF COAL	2

MINE NAME		
COLSTRIP	AQUIFER IN OVERBURDEN OR COAL	YES
	TYPE OF AQUIFER	CONFINED
	STRATA CONTAINING AQUIFER	UNCONSCLIDATED OVERBURDEN-COAL
	FUNCTION OF AQUIFEP STRATA	DISCHARGE
	DEPTH TO WATER IN NEARBY WELLS	ABOVE IN AND BELOW THE COAL
	PREMINING WELL YEILD (GAL PER MIN)	7
	USE OF NEARBY WELLS	DOMESTIC-LIVESTOCK
	DIVERSION DITCHES TO CONTROL RUNOFF	YES
	STREAM DIVERSION	NO
	PUMP PIT	YES
	SEDIMENT BASINS	YES
	CHEMICAL TREATMENT OF DRAINAGE	NO
	RESTORE CONTOUR	YES
	MAX PERCENT SLOPE ON BOX CUT SPOILS	20
	MAX PERCENT SLOPE ON OTHER SPOILS	20
	REDUCE LAST-CUT HIGHWALL	YES
	MAX HEIGHT OF LAST-CUT HIGHWALL	200
	MAX SLOPE ON REDUCED HIGHWALL	33
	GRADING EQUIPMENT	DOZER

MINE NAME		
COLSTRIP	TERRACE SPOIL	NO
	MECHANICAL SPOIL MANIPULATION	NO
	TOPSOIL	YES
	TOPSOIL AND SUBSOIL SEGREGATED	NO
	STOCKPILE TOPSOILING MATERIAL	IF NECESSARY
	EROSION CONTROL ON STOCKPILES	IF NECESSARY
	TOPSOILING EQUIPMENT	SCRAPER-DOZER
	DEPTH REPLACED (INCHES)	40
	BORROW TOPSOIL	NO
	SEEDING METHOD	DRILL
	PLANT TYPES USED FOR REVEGETATION	GRASSES-LEGUMES-TREES-SHRUBS
	PRIMARILY NATIVE GRASSES FOR RANGE	YES
	SOIL AMENDMENTS	FERTILIZER
	MULCH	IF NECESSARY
	IRRIGATION	NO
	NO OF IRRIGATED GROWING SEASONS	0
	DEDICATED RECLAMATION EQUIPMENT	NO
	SEGRATION OF PROBLEM STRATA	YES

MINE NAME		
COLSTRIP	STUDIES UNDERTAKEN AT MINE	REVEGETATION-HYDROLOGY-MINING
	SIGNIFICANT ENVIRONMENTAL PROBLEMS	IMPERMEABLE MATERIAL IN OVERBURDEN WIND EROSION

MINE NAME	PIT NAME		
COLSTRIP	PIT 1	PIT ORIENTATION	STRIKELINE
		PERCENT OF MINE TONNAGE FROM PIT	60
		MINING METHOD	AREA
		NUMBER OF SEAMS	1
		NUMBER OF OVERBURDEN LIFTS	3
		STRIPPING SUBSYSTEM	DUAL
		STRIPPING EQUIPMENT	STRIP SHOVEL-SCRAPER
		AVERAGE OVERBURDEN DEPTH	100
		AVG DEPTH OF UNCONSOLIDATED MATERIAL	0
		AVERAGE INTERBURDEN DEPTH	0
		POSITION WHEN STRIPPING INTERBURDEN	NOT APPLICABLE
		PIT LENGTH	0
		PIT WIDTH	135
		DO INCLINES DROP SHARPLY INTO PIT	YES
		DISTANCE BETWEEN INCLINES (FEET)	2500

MINE NAME	PIT NAME		
COLSTRIP	PIT 2	PIT ORIENTATION	STRIKELINE
		PERCENT OF MINE TONNAGE FROM PIT	40
		MINING METHOD	AREA
		NUMBER OF SEAMS	1
		NUMBER OF OVERBURDEN LIFTS	1
		STRIPPING SUBSYSTEM	SINGLE
		STRIPPING EQUIPMENT	DRAGLINE
		AVERAGE OVERBURDEN DEPTH	75
		AVG DEPTH OF UNCONSOLIDATED MATERIAL	0
		AVERAGE INTERBURDEN DEPTH	0
		POSITION WHEN STRIPPING INTERBURDEN	NOT APPLICABLE
		PIT LENGTH	8500
		PIT WIDTH	225
		DO INCLINES DROP SHARPLY INTO PIT	YES
		DISTANCE BETWEEN INCLINES (FEET)	2500

MINE NAME	PIT NAME	EQUIPMENT TYPE	MODEL	NO OF UNITS	CAPACITY (CU YD)	BOOM LENGTH (FEET)
COLSTRIP	PIT 1	LOADING SHOVEL	M1050	1	25	150
		DOZER	FAHD41	0	0	0
		SCRAPER	CAT631	0	0	0
	PIT 2	DRAGLINE	M8050	1	60	310

MINE NAME		
DECKER	STATE	MONTANA
	COUNTY	BIG HORN
	COMPANY	DECKER
	1975 SURFACE COAL TONNAGE	9208752
	1975 ACRES DISTURBED BY MINING	100
	PROJECTED MAXIMUM ANNUAL TONNAGE	16000000
	FIRST YEAR AT MAXIMUM TONNAGE	1978
	NUMBER OF PITS	1
	MINE OPENING YEAR	1972
	REMAINING MINE LIFE	30
	1975 MINE EMPLOYMENT	248
	STRIP RATIO(CU YD PER TON)	1.8
	SURFACE RIGHTS OWNER(S)	PRIVATE-STATE
	MINERAL RIGHTS OWNER(S)	FEDERAL-STATE
	AVERAGE ANNUAL PRECIPITATION	12
	TOPOGRAPHY	ROLLING
	ALTIDUDE	3750
	PREMINING LANDUSE(S)	CATTLE GRAZING
	PRODUCTIVITY(ACRES PER AUM)	2.92
	POSTMINING LANDUSE(S)	CATTLE GRAZING

MINE NAME		
DECKER	SEAM NAME	DIETZ1
	AVERAGE THICKNESS	52
	SEAM NAME	N
	AVERAGE THICKNESS	0
	TYPE OF COAL	SUBBITUMINOUS
	BTU	9600
	PERCENT SULFUR	.4
	PERCENT ASH	3.7

MARKET	ELECTRIC UTILITY
TOTAL NUMBER OF SEAMS SURFACE MINED	1
THICKNESS OF ALL SEAMS SURFACE MINED	52
UNDERGROUND MINING OF THE SAME SEAMS	NO
BLEND COAL TO MEET CONTRACT SPECS.	NO
MINE MOUTH POWER PLANT	NO
ASH DISPOSAL ON MINE SITE	NO
PERCENT DIP OF COAL	0

MINE NAME		
DECKER	AQUIFER IN OVERBURDEN OR COAL	YES
	TYPE OF AQUIFER	CONFINED
	STRATA CONTAINING AQUIFER	UNCONSOLIDATED OVERBURDEN-COAL
	FUNCTION OF AQUIFER STRATA	DISCHARGE
	DEPTH TO WATER IN NEARBY WELLS	ABOVE IN AND BELOW THE COAL
	PREMINING WELL YEILD (GAL PER MIN)	24
	USE OF NEARBY WELLS	MINE-DOMESTIC-LIVESTOCK-COMMERCIAL
	DIVERSION DITCHES TO CONTROL RUNOFF	YES
	STREAM DIVERSION	NO
	PUMP PIT	YES
	SEDIMENT BASINS	YES
	CHEMICAL TREATMENT OF DRAINAGE	IF NECESSARY
	RESTORE CONTOUR	YES
	MAX PERCENT SLOPE ON BOX CUT SPOILS	4
	MAX PERCENT SLOPE ON OTHER SPOILS	4
	REDUCE LAST-CUT HIGHWALL	YES
	MAX HEIGHT OF LAST-CUT HIGHWALL	215
	MAX SLOPE ON REDUCED HIGHWALL	33
	GRADING EQUIPMENT	DOZER

MINE NAME		
DECKER	TERRACE SPOIL	NO
	MECHANICAL SPOIL MANIPULATION	YES
	TOPSOIL	YES
	TOPSOIL AND SUBSOIL SEGREGATED	NO
	STOCKPILE TOPSOILING MATERIAL	IF NECESSARY
	EROSION CONTROL ON STOCKPILES	IF NECESSARY
	TOPSOILING EQUIPMENT	SCRAPER
	DEPTH REPLACED (INCHES)	20
	BORROW TOPSOIL	NO
	SEEDING METHOD	DRILL
	PLANT TYPES USED FOR REVEGETATION	GRASSES-LEGUMES-TREES-SHRUBS
	PRIMARILY NATIVE GRASSES FOR RANGE	YES
	SOIL AMENDMENTS	FERTILIZER
	MULCH	YES
	IRRIGATION	NO
	NO OF IRRIGATED GROWING SEASONS	0
	DEDICATED RECLAMATION EQUIPMENT	NO
	SEGRATION OF PROBLEM STRATA	YES

MINE NAME		
DECKER	STUDIES UNDERTAKEN AT MINE	REVEGETATION-HYDROLOGY
	SIGNIFICANT ENVIRONMENTAL PROBLEMS	HIGH SAR AND CLAYEY INTERBURDEN

MINE NAME	PIT NAME		
DECKER	MAIN	PIT ORIENTATION	STRIKELINE
		PERCENT OF MINE TONNAGE FROM PIT	100
		MINING METHOD	AREA
		NUMBER OF SEAMS	1
		NUMBER OF OVERBURDEN LIFTS	3
		STRIPPING SUBSYSTEM	DUAL
		STRIPPING EQUIPMENT	DRAGLINE-SCRAPER
		AVERAGE OVERBURDEN DEPTH	98
		AVG DEPTH OF UNCONSOLIDATED MATERIAL	58
		AVERAGE INTERBURDEN DEPTH	0
		POSITION WHEN STRIPPING INTERBURDEN	NOT APPLICABLE
		LGTHX	14750
		PIT WIDTH	125
		DO INCLINES DROP SHARPLY INTO PIT	NO
		DISTANCE BETWEEN INCLINES (FEET)	2500

MINE NAME	PIT NAME	EQUIPMENT TYPE	MODEL	NO OF UNITS	CAPACITY (CU YD)	BOOM LENGTH (FEET)
DECKER	MAIN	DRAGLINE	BE1300	1	41	285
		SCRAPER	CAT637	3	22	0

MINE NAME		
SARPY CREEK	STATE	MONTANA
	COUNTY	BIG HORN
	COMPANY	WESTMORELAND
	1975 SURFACE COAL TONNAGE	4048082
	1975 ACRES DISTURBED BY MINING	46
	PROJECTED MAXIMUM ANNUAL TONNAGE	6500000
	FIRST YEAR AT MAXIMUM TONNAGE	1980
	NUMBER OF PITS	1
	MINE OPENING YEAR	1974
	REMAINING MINE LIFE	100
	1975 MINE EMPLOYMENT	110
	STRIP RATIO(CU YD PER TON)	2.2
	SURFACE RIGHTS OWNER(S)	PRIVATE-FEDERAL-STATE
	MINERAL RIGHTS OWNER(S)	INDIAN-FEDERAL-STATE
	AVERAGE ANNUAL PRECIPITATION	16
	TOPOGRAPHY	ROLLING
	ALTIDUDE	3500
	PREMINING LANDUSE(S)	CATTLE GRAZING
	PRODUCTIVITY(ACRES PER AUM)	3.33
	POSTMINING LANDUSE(S)	CATTLE GRAZING

MINE NAME		
SARPY CREEK	SEAM NAME	ROSEBUD
	AVERAGE THICKNESS	30
	SEAM NAME	ROBINSON
	AVERAGE THICKNESS	20
	TYPE OF COAL	SUBBITUMINOUS
	BTU	8450
	PERCENT SULFUR	.7
	PERCENT ASH	11.0

MARKET	ELECTRIC UTILITY
TOTAL NUMBER OF SEAMS SURFACE MINED	4
THICKNESS OF ALL SEAMS SURFACE MINED	58
UNDERGROUND MINING OF THE SAME SEAMS	NO
BLEND COAL TO MEET CONTRACT SPECS.	YES
MINE MOUTH POWER PLANT	NO
ASH DISPOSAL ON MINE SITE	NO
PERCENT DIP OF COAL	0

MINE NAME		
SARPY CREEK	AQUIFER IN OVERBURDEN OR COAL	YES
	TYPE OF AQUIFER	CONFINED
	STRATA CONTAINING AQUIFER	CONSOLIDATED OVERBURDEN-COAL
	FUNCTION OF AQUIFER STRATA	DISCHARGE
	DEPTH TO WATER IN NEARBY WELLS	BELOW THE COAL
	PREMINING WELL YEILD (GAL PER MIN)	0
	USE OF NEARBY WELLS	DOMESTIC-LIVESTOCK
	DIVERSION DITCHES TO CONTROL RUNOFF	YES
	STREAM DIVERSION	NO
	PUMP PIT	YES
	SEDIMENT BASINS	YES
	CHEMICAL TREATMENT OF DRAINAGE	NO
	RESTORE CONTOUR	YES
	MAX PERCENT SLOPE ON BOX CUT SPOILS	20
	MAX PERCENT SLOPE ON OTHER SPOILS	20
	REDUCE LAST-CUT HIGHWALL	YES
	MAX HEIGHT OF LAST-CUT HIGHWALL	200
	MAX SLOPE ON REDUCED HIGHWALL	33
	GRADING EQUIPMENT	DOZER

MINE NAME		
SARPY CREEK	TERRACE SPOIL	NO
	MECHANICAL SPOIL MANIPULATION	YES
	TOPSOIL	YES
	TOPSOIL AND SUBSOIL SEGREGATED	NO
	STOCKPILE TOPSOILING MATERIAL	IF NECESSARY
	EROSION CONTROL ON STOCKPILES	IF NECESSARY
	TOPSOILING EQUIPMENT	SCRAPER-DOZER
	DEPTH REPLACED (INCHES)	30
	BORROW TOPSOIL	NO
	SEEDING METHOD	DRILL-BROADCAST
	PLANT TYPES USED FOR REVEGETATION	GRASSES-LEGUMES-TREES-SHRUBS
	PRIMARILY NATIVE GRASSES FOR RANGE	YES
	SOIL AMENDMENTS	FERTILIZER
	MULCH	NO
	IRRIGATION	NO
	NO OF IRRIGATED GROWING SEASONS	0
	DEDICATED RECLAMATION EQUIPMENT	YES
	SEGRATION OF PROBLEM STRATA	YES

MINE NAME		
SARPY CREEK	STUDIES UNDERTAKEN AT MINE	HYDROLOGY-OVERBURDEN CHARACTERISTICS
	SIGNIFICANT ENVIRONMENTAL PROBLEMS	HIGH SAR AND CLAYEY INTERBURDEN TOXIC METALS IN OVERBURDEN

MINE NAME	PIT NAME		
SARPY CREEK	MAIN	PIT ORIENTATION	STRIKELINE
		PERCENT OF MINE TONNAGE FROM PIT	100
		MINING METHOD	AREA
		NUMBER OF SEAMS	4
		NUMBER OF OVERBURDEN LIFTS	1
		STRIPPING SUBSYSTEM	SINGLE
		STRIPPING EQUIPMENT	DRAGLINE
		AVERAGE OVERBURDEN DEPTH	40
		AVG DEPTH OF UNCONSOLIDATED MATERIAL	0
		AVERAGE INTERBURDEN DEPTH	60
		POSITION WHEN STRIPPING INTERBURDEN	SPOIL
		LGTHX	1000
		PIT WIDTH	220
		DO INCLINES DROP SHARPLY INTO PIT	YES
		DISTANCE BETWEEN INCLINES (FEET)	2500

MINE NAME	PIT NAME	EQUIPMENT TYPE	MODEL	NO OF UNITS	CAPACITY (CU YD)	BOOM LENGTH (FEET)
SARPY CREEK	MAIN	DRAGLINE	M82CC	1	75	325

MINE NAME		
SAVAGE	STATE	MONTANA
	COUNTY	RICHLAND
	COMPANY	KNIFE RIVER
	1975 SURFACE COAL TONNAGE	298324
	1975 ACRES DISTURBED BY MINING	16
	PROJECTED MAXIMUM ANNUAL TONNAGE	300000
	FIRST YEAR AT MAXIMUM TONNAGE	1975
	NUMBER OF PITS	1
	MINE OPENING YEAR	1950
	REMAINING MINE LIFE	20
	1975 MINE EMPLOYMENT	28
	STRIP RATIO(CU YD PER TON)	3.8
	SURFACE RIGHTS OWNER(S)	PRIVATE
	MINERAL RIGHTS OWNER(S)	PRIVATE-FEDERAL-STATE
	AVERAGE ANNUAL PRECIPITATION	13
	TOPOGRAPHY	ROLLING
	ALTIDUDE	2150
	PREMINING LANDUSE(S)	CROPLAND-CATTLE GRAZING
	PRODUCTIVITY(ACRES PER AUM)	4.58
	POSTMINING LANDUSE(S)	CATTLE GRAZING-WILDLIFE

MINE NAME		
SAVAGE	SEAM NAME	PUST
	AVERAGE THICKNESS	17
	SEAM NAME	N
	AVERAGE THICKNESS	0
	TYPE OF COAL	LIGNITE
	BTU	6500
	PERCENT SULFUR	.5
	PERCENT ASH	7.4

MARKET	ELECTRIC UTILITY
TOTAL NUMBER OF SEAMS SURFACE MINED	1
THICKNESS OF ALL SEAMS SURFACE MINED	17
UNDERGROUND MINING OF THE SAME SEAMS	NO
BLEND COAL TO MEET CONTRACT SPECS.	NO
MINE MOUTH POWER PLANT	NO
ASH DISPOSAL ON MINE SITE	NO
PERCENT DIP OF COAL	0

MINE NAME		
SAVAGE	AQUIFER IN OVERBURDEN OR COAL	YES
	TYPE OF AQUIFER	CONFINED
	STRATA CONTAINING AQUIFER	COAL
	FUNCTION OF AQUIFER STRATA	RECHARGE
	DEPTH TO WATER IN NEARBY WELLS	IN THE COAL
	PREMINING WELL YEILD (GAL PER MIN)	3
	USE OF NEARBY WELLS	DOMESTIC-LIVESTOCK
	DIVERSION DITCHES TO CONTROL RUNOFF	NO
	STREAM DIVERSION	NO
	PUMP PIT	YES
	SEDIMENT BASINS	YES
	CHEMICAL TREATMENT OF DRAINAGE	NO
	RESTORE CONTOUR	YES
	MAX PERCENT SLOPE ON BOX CUT SPOILS	20
	MAX PERCENT SLOPE ON OTHER SPOILS	20
	REDUCE LAST-CUT HIGHWALL	YES
	MAX HEIGHT OF LAST-CUT HIGHWALL	100
	MAX SLOPE ON REDUCED HIGHWALL	33
	GRADING EQUIPMENT	DOZER

MINE NAME		
SAVAGE	TERRACE SPOIL	NO
	MECHANICAL SPOIL MANIPULATION	NO
	TOPSOIL	YES
	TOPSOIL AND SUBSOIL SEGREGATED	NO
	STOCKPILE TOPSOILING MATERIAL	IF NECESSARY
	EROSION CONTROL ON STOCKPILES	IF NECESSARY
	TOPSOILING EQUIPMENT	SCRAPER
	DEPTH REPLACED (INCHES)	36
	BORROW TOPSOIL	NO
	SEEDING METHOD	DRILL
	PLANT TYPES USED FOR REVEGETATION	GRASSES-LEGUMES-TREES-SHRUBS
	PRIMARILY NATIVE GRASSES FOR RANGE	YES
	SOIL AMENDMENTS	FERTILIZER
	MULCH	YES
	IRRIGATION	NO
	NO OF IRRIGATED GROWING SEASONS	0
	DEDICATED RECLAMATION EQUIPMENT	NO
	SEGRATION OF PROBLEM STRATA	NO

MINE NAME		
SAVAGE	STUDIES UNDERTAKEN AT MINE	REVEGETATION-GRADING METHODS
	SIGNIFICANT ENVIRONMENTAL PROBLEMS	WIND EROSION

MINE NAME	PIT NAME		
SAVAGE	MAIN	PIT ORIENTATION	STRIKELINE
		PERCENT OF MINE TONNAGE FROM PIT	100
		MINING METHOD	AREA
		NUMBER OF SEAMS	1
		NUMBER OF OVERBURDEN LIFTS	2
		STRIPPING SUBSYSTEM	DUAL
		STRIPPING EQUIPMENT	DRAGLINE-DOZER
		AVERAGE OVERBURDEN DEPTH	70
		AVG DEPTH OF UNCONSOLIDATED MATERIAL	66
		AVERAGE INTERBURDEN DEPTH	0
		POSITION WHEN STRIPPING INTERBURDEN	NOT APPLICABLE
		LGTHX	1900
		PIT WIDTH	130
		DO INCLINES DROP SHARPLY INTO PIT	NO
		DISTANCE BETWEEN INCLINES (FEET)	2500

MINE NAME	PIT NAME	EQUIPMENT TYPE	MODEL	NO OF UNITS	CAPACITY (CU YD)	BOOM LENGTH (FEET)
SAVAGE	MAIN	DRAGLINE	BE7W	1	7	165
		DOZER	CATD8	1	0	0
		DOZER	IHTD25	1	0	0

NEW MEXICO

- MCKINLEY
- NAVAJO
- SAN JUAN
- YORK CANYON

MINE NAME		
MCKINLEY	STATE	NEW MEXICO
	COUNTY	MCKINLEY
	COMPANY	P&M
	1975 SURFACE COAL TONNAGE	468000
	1975 ACRES DISTURBED BY MINING	80
	PROJECTED MAXIMUM ANNUAL TONNAGE	5000000
	FIRST YEAR AT MAXIMUM TONNAGE	1980
	NUMBER OF PITS	2
	MINE OPENING YEAR	1962
	REMAINING MINE LIFE	30
	1975 MINE EMPLOYMENT	90
	STRIP RATIO(CU YD PER TON)	7.0
	SURFACE RIGHTS OWNER(S)	INDIAN-PRIVATE-FEDERAL-STATE
	MINERAL RIGHTS OWNER(S)	INDIAN-PRIVATE-FEDERAL-STATE
	AVERAGE ANNUAL PRECIPITATION	12
	TOPOGRAPHY	ROLLING
	ALTIDUDE	7000
	PREMINING LANDUSE(S)	SHEEP GRAZING
	PRODUCTIVITY(ACRES PER AUM)	8.92
	POSTMINING LANDUSE(S)	SHEEP GRAZING

MINE NAME		
MCKINLEY	SEAM NAME	FUCHSIA
	AVERAGE THICKNESS	10
	SEAM NAME	BLUE
	AVERAGE THICKNESS	5
	TYPE OF COAL	BITUMINOUS
	BTU	10500
	PERCENT SULFUR	.7
	PERCENT ASH	15.0

MARKET	ELECTRIC UTILITY
TOTAL NUMBER OF SEAMS SURFACE MINED	4
THICKNESS OF ALL SEAMS SURFACE MINED	20
UNDERGROUND MINING OF THE SAME SEAMS	NO
BLEND COAL TO MEET CONTRACT SPECS.	NO
MINE MOUTH POWER PLANT	NO
ASH DISPOSAL ON MINE SITE	NO
PERCENT DIP OF COAL	5

MINE NAME		
MCKINLEY	AQUIFER IN OVERBURDEN OR COAL	NO
	TYPE OF AQUIFER	NOT APPLICABLE
	STRATA CONTAINING AQUIFER	NOT APPLICABLE
	FUNCTION OF AQUIFER STRATA	NOT APPLICABLE
	DEPTH TO WATER IN NEARBY WELLS	BELOW THE COAL
	PREMINING WELL YEILD (GAL PER MIN)	0
	USE OF NEARBY WELLS	DOMESTIC-LIVESTOCK
	DIVERSION DITCHES TO CONTROL RUNOFF	YES
	STREAM DIVERSION	NO
	PUMP PIT	NO
	SEDIMENT BASINS	YES
	CHEMICAL TREATMENT OF DRAINAGE	NO
	RESTORE CONTOUR	YES
	MAX PERCENT SLOPE ON BOX CUT SPOILS	33
	MAX PERCENT SLOPE ON OTHER SPOILS	33
	REDUCE LAST-CUT HIGHWALL	NO
	MAX HEIGHT OF LAST-CUT HIGHWALL	120
	MAX SLOPE ON REDUCED HIGHWALL	NOT REDUCED
	GRADING EQUIPMENT	DOZER

MINE NAME		
MCKINLEY	TERRACE SPOIL	IF NECESSARY
	MECHANICAL SPOIL MANIPULATION	YES
	TOPSOIL	YES
	TOPSOIL AND SUBSOIL SEGREGATED	NO
	STOCKPILE TOPSOILING MATERIAL	IF NECESSARY
	EROSION CONTROL ON STOCKPILES	NO
	TOPSOILING EQUIPMENT	SCRAPER
	DEPTH REPLACED (INCHES)	6
	BORROW TOPSOIL	NO
	SEEDING METHOD	DRILL-BROADCAST
	PLANT TYPES USED FOR REVEGETATION	GRASSES-LEGUMES-TREES-SHRUBS
	PRIMARILY NATIVE GRASSES FOR RANGE	YES
	SOIL AMENDMENTS	FERTILIZER
	MULCH	YES
	IRRIGATION	NO
	NO OF IRRIGATED GROWING SEASONS	0
	DEDICATED RECLAMATION EQUIPMENT	YES
	SEGRATION OF PROBLEM STRATA	NO

MINE NAME		
MCKINLEY	STUDIES UNDERTAKEN AT MINE	REVEGETATION
	SIGNIFICANT ENVIRONMENTAL PROBLEMS	NONE

MINE NAME	PIT NAME		
MCKINLEY	9508	PIT ORIENTATION	STRIKELINE
		PERCENT OF MINE TONNAGE FROM PIT	38
		MINING METHOD	AREA
		NUMBER OF SEAMS	2
		NUMBER OF OVERBURDEN LIFTS	1
		STRIPPING SUBSYSTEM	DUAL
		STRIPPING EQUIPMENT	SHOVEL-DRAGLINE
		AVERAGE OVERBURDEN DEPTH	60
		AVG DEPTH OF UNCONSOLIDATED MATERIAL	0
		AVERAGE INTERBURDEN DEPTH	15
		POSITION WHEN STRIPPING INTERBURDEN	SPOIL
		PIT LENGTH	0
		PIT WIDTH	70
		DO INCLINES DROP SHARPLY INTO PIT	NOT APPLICABLE
		DISTANCE BETWEEN INCLINES (FEET)	0

MINE NAME	PIT NAME		
MCKINLEY	1370	PIT ORIENTATION	STRIKELINE
		PERCENT OF MINE TONNAGE FROM PIT	62
		MINING METHOD	AREA
		NUMBER OF SEAMS	4
		NUMBER OF OVERBURDEN LIFTS	1
		STRIPPING SUBSYSTEM	SINGLE
		STRIPPING EQUIPMENT	DRAGLINE
		AVERAGE OVERBURDEN DEPTH	120
		AVG DEPTH OF UNCONSOLIDATED MATERIAL	0
		AVERAGE INTERBURDEN DEPTH	15
		POSITION WHEN STRIPPING INTERBURDEN	NOT APPLICABLE
		PIT LENGTH	0
		PIT WIDTH	100
		DO INCLINES DROP SHARPLY INTO PIT	NOT APPLICABLE
		DISTANCE BETWEEN INCLINES (FEET)	0

MINE NAME	PIT NAME	EQUIPMENT TYPE	MODEL	NO OF UNITS	CAPACITY (CU YD)	BOOM LENGTH (FEET)
MCKINLEY	1370	DRAGLINE	BE1370	1	55	320
	950B	LOADING SHOVEL	BE950B	1	33	0
		DRAGLINE	BE7W	1	7	220

MINE NAME		
NAVAJO	STATE	NEW MEXICO
	COUNTY	SAN JUAN
	COMPANY	UTAH
	1975 SURFACE COAL TONNAGE	6073000
	1975 ACRES DISTURBED BY MINING	400
	PROJECTED MAXIMUM ANNUAL TONNAGE	7000000
	FIRST YEAR AT MAXIMUM TONNAGE	1976
	NUMBER OF PITS	5
	MINE OPENING YEAR	1963
	REMAINING MINE LIFE	20
	1975 MINE EMPLOYMENT	430
	STRIP RATIO(CU YD PER TON)	5.0
	SURFACE RIGHTS OWNER(S)	INDIAN
	MINERAL RIGHTS OWNER(S)	INDIAN
	AVERAGE ANNUAL PRECIPITATION	6
	TOPOGRAPHY	ROLLING
	ALTITUDE	5000
	PREMINING LANDUSE(S)	SHEEP GRAZING
	PRODUCTIVITY(ACRES PER AUM)	9.08
	POSTMINING LANDUSE(S)	SHEEP GRAZING

MINE NAME		
NAVAJO	SEAM NAME	NO.8
	AVERAGE THICKNESS	15
	SEAM NAME	NO.6
	AVERAGE THICKNESS	8
	TYPE OF COAL	SUBBITUMINOUS
	BTU	9200
	PERCENT SULFUR	.7
	PERCENT ASH	23.0

MARKET	ELECTRIC UTILITY
TOTAL NUMBER OF SEAMS SURFACE MINED	3
THICKNESS OF ALL SEAMS SURFACE MINED	28
UNDERGROUND MINING OF THE SAME SEAMS	NO
BLEND COAL TO MEET CONTRACT SPECS.	YES
MINE MOUTH POWER PLANT	YES
ASH DISPOSAL ON MINE SITE	MINED OUT PITS
PERCENT DIP OF COAL	4

MINE NAME		
NAVAJO	AQUIFER IN OVERBURDEN OR COAL	YES
	TYPE OF AQUIFER	CONFINED
	STRATA CONTAINING AQUIFER	CONSOLIDATED OVERBURDEN
	FUNCTION OF AQUIFER STRATA	RECHARGE
	DEPTH TO WATER IN NEARBY WELLS	ABOVE THE COAL
	PREMINING WELL YEILD (GAL PER MIN)	0
	USE OF NEARBY WELLS	DOMESTIC-LIVESTOCK
	DIVERSION DITCHES TO CONTROL RUNOFF	YES
	STREAM DIVERSION	NO
	PUMP PIT	YES
	SEDIMENT BASINS	YES
	CHEMICAL TREATMENT OF DRAINAGE	NO
	RESTORE CONTOUR	YES
	MAX PERCENT SLOPE ON BOX CUT SPOILS	33
	MAX PERCENT SLOPE ON OTHER SPOILS	15
	REDUCE LAST-CUT HIGHWALL	NO
	MAX HEIGHT OF LAST-CUT HIGHWALL	200
	MAX SLOPE ON REDUCED HIGHWALL	NOT REDUCED
	GRADING EQUIPMENT	DOZER-RAY GO GIANT

MINE NAME		
NAVAJO	TERRACE SPOIL	YES
	MECHANICAL SPOIL MANIPULATION	NO
	TOPSOIL	YES
	TOPSOIL AND SUBSOIL SEGREGATED	NO
	STOCKPILE TOPSOILING MATERIAL	IF NECESSARY
	EROSION CONTROL ON STOCKPILES	NO
	TOPSOILING EQUIPMENT	SCRAPER
	DEPTH REPLACED (INCHES)	6
	BORROW TOPSOIL	IF NECESSARY
	SEEDING METHOD	DRILL-BROADCAST
	PLANT TYPES USED FOR REVEGETATION	GRASSES-SHRUBS
	PRIMARILY NATIVE GRASSES FOR RANGE	YES
	SOIL AMENDMENTS	FERTILIZER-GYPSUM
	MULCH	YES
	IRRIGATION	YES
	NO OF IRRIGATED GROWING SEASONS	2
	DEDICATED RECLAMATION EQUIPMENT	YES
	SEGRATION OF PROBLEM STRATA	NO

MINE NAME		
NAVAJO	STUDIES UNDERTAKEN AT MINE	REVEGETATION
	SIGNIFICANT ENVIRONMENTAL PROBLEMS	HIGH SAR AND CLAYEY OVERBURDEN
		SALINE SOILS
		WIND EROSION

MINE NAME	PIT NAME		
NAVAJO	BE1350	PIT ORIENTATION	STRIKELINE
		PERCENT OF MINE TONNAGE FROM PIT	35
		MINING METHOD	AREA
		NUMBER OF SEAMS	3
		NUMBER OF OVERBURDEN LIFTS	1
		STRIPPING SUBSYSTEM	SINGLE
		STRIPPING EQUIPMENT	DRAGLINE
		AVERAGE OVERBURDEN DEPTH	90
		AVG DEPTH OF UNCONSOLIDATED MATERIAL	0
		AVERAGE INTERBURDEN DEPTH	20
		POSITION WHEN STRIPPING INTERBURDEN	SPOIL
		LGTHX	0
		PIT WIDTH	140
		DO INCLINES DROP SHARPLY INTO PIT	NO
		DISTANCE BETWEEN INCLINES (FEET)	2500

MINE NAME	PIT NAME		
NAVAJO	M7900	PIT ORIENTATION	STRIKELINE
		PERCENT OF MINE TONNAGE FROM PIT	30
		MINING METHOD	AREA
		NUMBER OF SEAMS	3
		NUMBER OF OVERBURDEN LIFTS	1
		STRIPPING SUBSYSTEM	SINGLE
		STRIPPING EQUIPMENT	DRAGLINE
		AVERAGE OVERBURDEN DEPTH	90
		AVG DEPTH OF UNCONSOLIDATED MATERIAL	0
		AVERAGE INTERBURDEN DEPTH	20
		POSITION WHEN STRIPPING INTERBURDEN	SPOIL
		LGTHX	0
		PIT WIDTH	140
		DO INCLINES DROP SHARPLY INTO PIT	NO
		DISTANCE BETWEEN INCLINES (FEET)	2500

MINE NAME	PIT NAME		
NAVAJO	M7920	PIT ORIENTATION	STRIKELINE
		PERCENT OF MINE TONNAGE FROM PIT	35
		MINING METHOD	AREA
		NUMBER OF SEAMS	3
		NUMBER OF OVERBURDEN LIFTS	1
		STRIPPING SUBSYSTEM	SINGLE
		STRIPPING EQUIPMENT	DRAGLINE
		AVERAGE OVERBURDEN DEPTH	90
		AVG DEPTH OF UNCONSOLIDATED MATERIAL	0
		AVERAGE INTERBURDEN DEPTH	20
		POSITION WHEN STRIPPING INTERBURDEN	SPOIL
		LGTHX	0
		PIT WIDTH	140
		DO INCLINES DROP SHARPLY INTO PIT	NO
		DISTANCE BETWEEN INCLINES (FEET)	2500

MINE NAME	PIT NAME	EQUIPMENT TYPE	MODEL	NO OF UNITS	CAPACITY (CU YD)	BOOM LENGTH (FEET)
NAVAJO	BE1350	DRAGLINE	BE1350	1	50	285
	M7900	DRAGLINE	M7900	1	45	250
	M7920	DRAGLINE	M7920	1	50	300

MINE NAME		
SAN JUAN	STATE	NEW MEXICO
	COUNTY	SAN JUAN
	COMPANY	WESTERN COAL
	1975 SURFACE COAL TONNAGE	1246000
	1975 ACRES DISTURBED BY MINING	50
	PROJECTED MAXIMUM ANNUAL TONNAGE	5800000
	FIRST YEAR AT MAXIMUM TONNAGE	1980
	NUMBER OF PITS	1
	MINE OPENING YEAR	1973
	REMAINING MINE LIFE	35
	1975 MINE EMPLOYMENT	65
	STRIP RATIO(CU YD PER TON)	7.0
	SURFACE RIGHTS OWNER(S)	PRIVATE-FEDERAL-STATE
	MINERAL RIGHTS OWNER(S)	PRIVATE-FEDERAL-STATE
	AVERAGE ANNUAL PRECIPITATION	7
	TOPOGRAPHY	ROLLING
	ALTIDUDE	5400
	PREMINING LANDUSE(S)	SHEEP GRAZING
	PRODUCTIVITY(ACRES PER AUM)	9.67
	POSTMINING LANDUSE(S)	SHEEP GRAZING

MINE NAME		
SAN JUAN	SEAM NAME	.NO.8
	AVERAGE THICKNESS	15
	SEAM NAME	N
	AVERAGE THICKNESS	0
	TYPE OF COAL	SUBBITJMINOUS
	BTU	9700
	PERCENT SULFUR	.6
	PERCENT ASH	18.0

MARKET	ELECTRIC UTILITY
TOTAL NUMBER OF SEAMS SURFACE MINED	1
THICKNESS OF ALL SEAMS SURFACE MINED	15
UNDERGROUND MINING OF THE SAME SEAMS	NO
BLEND COAL TO MEET CONTRACT SPECS.	NO
MINE MOUTH POWER PLANT	YES
ASH DISPOSAL ON MINE SITE	MINED OUT PITS
PERCENT DIP OF COAL	5

MINE NAME		
SAN JUAN	AQUIFER IN OVERBURDEN OR COAL	YES
	TYPE OF AQUIFER.	CONFINED
	STRATA CONTAINING AQUIFER	COAL
	FUNCTION OF AQUIFER STRATA	DISCHARGE
	DEPTH TO WATER IN NEARBY WELLS	ABOVE THE COAL
	PREMINING WELL YEILD (GAL PER MIN)	0
	USE OF NEARBY WELLS	DOMESTIC-LIVESTOCK
	DIVERSION DITCHES TO CONTROL RUNOFF	YES
	STREAM DIVERSION	YES
	PUMP PIT	YES
	SEDIMENT BASINS	YES
	CHEMICAL TREATMENT OF DRAINAGE	NO
	RESTORE CONTOUR	YES
	MAX PERCENT SLOPE ON BOX CUT SPOILS	33
	MAX PERCENT SLOPE ON OTHER SPOILS	15
	REDUCE LAST-CUT HIGHWALL	NO
	MAX HEIGHT OF LAST-CUT HIGHWALL	120
	MAX SLOPE ON REDUCED HIGHWALL	NOT REDUCED
	GRADING EQUIPMENT	DOZER

MINE NAME		
SAN JUAN	TERRACE SPOIL	NO
	MECHANICAL SPOIL MANIPULATION	NO
	TOPSOIL	YES
	TOPSOIL AND SUBSOIL SEGREGATED	NO
	STOCKPILE TOPSOILING MATERIAL	IF NECESSARY
	EROSION CONTROL ON STOCKPILES	NO
	TOPSOILING EQUIPMENT	SCRAPER
	DEPTH REPLACED (INCHES)	8
	BORROW TOPSOIL	NO
	SEEDING METHOD	DRILL
	PLANT TYPES USED FOR REVEGETATION	GRASSES-SHRUBS
	PRIMARILY NATIVE GRASSES FOR RANGE	YES
	SOIL AMENDMENTS	FERTILIZER
	MULCH	YES
	IRRIGATION	YES
	NO OF IRRIGATED GROWING SEASONS	1
	DEDICATED RECLAMATION EQUIPMENT	YES
	SEGRATION OF PROBLEM STRATA	NO

MINE NAME		
SAN JUAN	STUDIES UNDERTAKEN AT MINE	REVEGETATION
	SIGNIFICANT ENVIRONMENTAL PROBLEMS	HIGH SAR AND CLAYEY OVERBURDEN
		SALINE SOILS
		WIND EROSION

MINE NAME	PIT NAME		
SAN JUAN	MAIN	PIT ORIENTATION	STRIKELINE
		PERCENT OF MINE TONNAGE FROM PIT	100
		MINING METHOD	AREA
		NUMBER OF SEAMS	1
		NUMBER OF OVERBURDEN LIFTS	2
		STRIPPING SUBSYSTEM	DUAL
		STRIPPING EQUIPMENT	DRAGLINE-SCRAPER
		AVERAGE OVERBURDEN DEPTH	60
		AVG DEPTH OF UNCONSOLIDATED MATERIAL	10
		AVERAGE INTERBURDEN DEPTH	0
		POSITION WHEN STRIPPING INTERBURDEN	NOT APPLICABLE
		LGTHX	4000
		PIT WIDTH	90
		DO INCLINES DROP SHARPLY INTO PIT	NO
		DISTANCE BETWEEN INCLINES (FEET)	0

MINE NAME	PIT NAME	EQUIPMENT TYPE	MODEL	NO OF UNITS	CAPACITY (CU YD)	BOOM LENGTH (FEET)
SAN JUAN	MAIN	DRAGLINE	M183	1	10	120
		SCRAPER	CAT641	2	30	0
		SCRAPER	CAT657	1	45	0
		SCRAPER	W333	3	30	0

MINE NAME		
YORK CANYON	STATE	NEW MEXICO
	COUNTY	COLFAX
	COMPANY	KAISER
	1975 SURFACE COAL TONNAGE	252000
	1975 ACRES DISTURBED BY MINING	75
	PROJECTED MAXIMUM ANNUAL TONNAGE	500000
	FIRST YEAR AT MAXIMUM TONNAGE	1977
	NUMBER OF PITS	3
	MINE OPENING YEAR	1972
	REMAINING MINE LIFE	15
	1975 MINE EMPLOYMENT	67
	STRIP RATIO(CU YD PER TON)	5.0
	SURFACE RIGHTS OWNER(S)	PRIVATE
	MINERAL RIGHTS OWNER(S)	PRIVATE
	AVERAGE ANNUAL PRECIPITATION	14
	TOPOGRAPHY	HILLY
	ALTIDUDE	7400
	PREMINING LANDUSE(S)	CATTLE GRAZING
	PRODUCTIVITY(ACRES PER AUM)	10.0
	POSTMINING LANDUSE(S)	CATTLE GRAZING

MINE NAME		
YORK CANYON	SEAM NAME	YORK CANYON
	AVERAGE THICKNESS	8
	SEAM NAME	N
	AVERAGE THICKNESS	0
	TYPE OF COAL	BITUMINOUS
	BTU	14340
	PERCENT SULFUR	.6
	PERCENT ASH	8.8

MARKET	METALURGICAL
TOTAL NUMBER OF SEAMS SURFACE MINED	1
THICKNESS OF ALL SEAMS SURFACE MINED	8
UNDERGROUND MINING OF THE SAME SEAMS	YES
BLEND COAL TO MEET CONTRACT SPECS.	NO
MINE MOUTH POWER PLANT	NO
ASH DISPOSAL ON MINE SITE	NO
PERCENT DIP OF COAL	3

MINE NAME		
YORK CANYON	AQUIFER IN OVERBURDEN OR COAL	NO
	TYPE OF AQUIFER	NOT APPLICABLE
	STRATA CONTAINING AQUIFER	NOT APPLICABLE
	FUNCTION OF AQUIFER STRATA	NOT APPLICABLE
	DEPTH TO WATER IN NEARBY WELLS	BELOW THE COAL
	PREMINING WELL YEILD (GAL PER MIN)	0
	USE OF NEARBY WELLS	LIVESTOCK
	DIVERSION DITCHES TO CONTROL RUNOFF	YES
	STREAM DIVERSION	YES
	PUMP PIT	NO
	SEDIMENT BASINS	YES
	CHEMICAL TREATMENT OF DRAINAGE	NO
	RESTORE CONTOUR	YES
	MAX PERCENT SLOPE ON BOX CUT SPOILS	33
	MAX PERCENT SLOPE ON OTHER SPOILS	33
	REDUCE LAST-CUT HIGHWALL	NO
	MAX HEIGHT OF LAST-CUT HIGHWALL	120
	MAX SLOPE ON REDUCED HIGHWALL	NOT REDUCED
	GRADING EQUIPMENT	DOZER

MINE NAME		
YORK CANYON	TERRACE SPOIL	IF NECESSARY
	MECHANICAL SPOIL MANIPULATION	YES
	TOPSOIL	YES
	TOPSOIL AND SUBSOIL SEGREGATED	NO
	STOCKPILE TOPSOILING MATERIAL	IF NECESSARY
	EROSION CONTROL ON STOCKPILES	NO
	TOPSOILING EQUIPMENT	DOZER-LOADER-TRUCK
	DEPTH REPLACED (INCHES)	6
	BORROW TOPSOIL	NO
	SEEDING METHOD	DRILL-HYDROSEED
	PLANT TYPES USED FOR REVEGETATION	GRASSES-LEGUMES-SHRUBS
	PRIMARILY NATIVE GRASSES FOR RANGE	YES
	SOIL AMENDMENTS	FERTILIZER
	MULCH	YES
	IRRIGATION	YES
	NO OF IRRIGATED GROWING SEASONS	1
	DEDICATED RECLAMATION EQUIPMENT	NO
	SEGRATION OF PROBLEM STRATA	NO

MINE NAME		
YORK CANYON	STUDIES UNDERTAKEN AT MINE	REVEGETATION
	SIGNIFICANT ENVIRONMENTAL PROBLEMS	EROSION AND SEDIMENTATION

MINE NAME	PIT NAME		
YORK CANYON	ALL	PIT ORIENTATION	STRIKELINE
		PERCENT OF MINE TONNAGE FROM PIT	100
		MINING METHOD	AREA
		NUMBER OF SEAMS	1
		NUMBER OF OVERBURDEN LIFTS	1
		STRIPPING SUBSYSTEM	DUAL
		STRIPPING EQUIPMENT	DOZER-LOADER
		AVERAGE OVERBURDEN DEPTH	60
		AVG DEPTH OF UNCONSOLIDATED MATERIAL	5
		AVERAGE INTERBURDEN DEPTH	0
		POSITION WHEN STRIPPING INTERBURDEN	NOT APPLICABLE
		LGTHX	1500
		PIT WIDTH	200
		DO INCLINES DROP SHARPLY INTO PIT	YES
		DISTANCE BETWEEN INCLINES (FEET)	1500

MINE NAME	PIT NAME	EQUIPMENT TYPE	MODEL	NO OF UNITS	CAPACITY (CU YD)	BOOM LENGTH (FEET)
YORK CANYON	ALL	DOZER	HD41	3	0	0
		DOZER	CATD9	1	0	0
		DOZER	CATD8	2	0	0
		DOZER	CATD7	1	0	0
		LOADER	D60C	1	15	0
		LOADER	CAT992	1	12	0

NORTH DAKOTA

- BEULAH
- CENTER
- GASCOYNE
- GLENHAROLD
- HUSKY
- INDIAN HEAD
- LARSON
- VELVA

MINE NAME		
BEULAH	STATE	NORTH DAKOTA
	COUNTY	MERCER
	COMPANY	KNIFE RIVER
	1975 SURFACE COAL TONNAGE	1316625
	1975 ACRES DISTURBED BY MINING	20
	PROJECTED MAXIMUM ANNUAL TONNAGE	4300000
	FIRST YEAR AT MAXIMUM TONNAGE	1981
	NUMBER OF PITS	7
	MINE OPENING YEAR	1963
	REMAINING MINE LIFE	30
	1975 MINE EMPLOYMENT	69
	STRIP RATIO(CU YD PER TON)	5.0
	SURFACE RIGHTS OWNER(S)	PRIVATE-FEDERAL
	MINERAL RIGHTS OWNER(S)	PRIVATE-FEDERAL
	AVERAGE ANNUAL PRECIPITATION	16
	TOPOGRAPHY	ROLLING
	ALTIDUDE	2025
	PREMINING LANDUSE(S)	CROP AND HAYLAND-CATTLE
	PRODUCTIVITY(ACRES PER AUM)	2.83
	POSTMINING LANDUSE(S)	CROP AND HAYLAND-CATTLE

MINE NAME		
BEULAH	SEAM NAME	NO 1
	AVERAGE THICKNESS	12
	SEAM NAME	NO 2
	AVERAGE THICKNESS	6
	TYPE OF COAL	LIGNITE
	BTU	6800
	PERCENT SULFUR	0.6
	PERCENT ASH	8.0
	MARKET	ELECTRIC UTILITY
	TOTAL NUMBER OF SEAMS SURFACE MINED	2
	THICKNESS OF ALL SEAMS SURFACE MINED	18

UNDERGROUND MINING OF THE SAME SEAMS	YES
BLEND COAL TO MEET CONTRACT SPECS.	YES
MINE MOUTH POWER PLANT	NO
ASH DISPOSAL ON MINE SITE	NO
PERCENT DIP OF COAL	0

MINE NAME		
BEULAH	AQUIFER IN OVERBURDEN OR COAL	NO
	TYPE OF AQUIFER	NOT APPLICABLE
	STRATA CONTAINING AQUIFER	NOT APPLICABLE
	FUNCTION OF AQUIFER STRATA	NOT APPLICABLE
	DEPTH TO WATER IN NEARBY WELLS	BELOW THE COAL
	PREMINING WELL YEILD (GAL PER MIN)	0
	USE OF NEARBY WELLS	DOMESTIC-LIVESTOCK
	DIVERSION DITCHES TO CONTROL RUNOFF	YES
	STREAM DIVERSION	NO
	PUMP PIT	YES
	SEDIMENT BASINS	YES
	CHEMICAL TREATMENT OF DRAINAGE	NO
	RESTORE CONTOUR	YES
	MAX PERCENT SLOPE ON BOX CUT SPOILS	APPROXIMATE ORIGINAL
	MAX PERCENT SLOPE ON OTHER SPOILS	APPROXIMATE ORIGINAL
	REDUCE LAST-CUT HIGHWALL	YES
	MAX HEIGHT OF LAST-CUT HIGHWALL	80
	MAX SLOPE ON REDUCED HIGHWALL	35
	GRADING EQUIPMENT	DOZER

MINE NAME		
BEULAH	TERRACE SPOIL	NO
	MECHANICAL SPOIL MANIPULATION	NO
	TOPSOIL	YES
	TOPSOIL AND SUBSOIL SEGREGATED	YES
	STOCKPILE TOPSOILING MATERIAL	IF NECESSARY
	EROSION CONTROL ON STOCKPILES	COVERCROP
	TOPSOILING EQUIPMENT	SCRAPER
	DEPTH REPLACED (INCHES)	24
	BORROW TOPSOIL	NO
	SEEDING METHOD	DRILL
	PLANT TYPES USED FOR REVEGETATION	GRASSES-LEGUMES-TREES
	PRIMARILY NATIVE GRASSES FOR RANGE	YES
	SOIL AMENDMENTS	FERTILIZER
	MULCH	NO
	IRRIGATION	NO
	NO OF IRRIGATED GROWING SEASONS	0
	DEDICATED RECLAMATION EQUIPMENT	NO
	SEGRATION OF PROBLEM STRATA	NO

MINE NAME		
BEULAH	STUDIES UNDERTAKEN AT MINE	REVEGETATION-OVERBURDEN
	SIGNIFICANT ENVIRONMENTAL PROBLEMS	HIGH SAR AND CLAYEY
		HIGH SAR AND CLAYEY
		SINK HOLES

MINE NAME	PIT NAME		
BEULAH	ALL	PIT ORIENTATION	STRIKELINE
		PERCENT OF MINE TONNAGE FROM PIT	100
		MINING METHOD	AREA
		NUMBER OF SEAMS	2
		NUMBER OF OVERBURDEN LIFTS	1
		STRIPPING SUBSYSTEM	SINGLE
		STRIPPING EQUIPMENT	DRAGLINE
		AVERAGE OVERBURDEN DEPTH	50
		AVG DEPTH OF UNCONSOLIDATED MATERIAL	50
		AVERAGE INTERBURDEN DEPTH	8
		POSITION WHEN STRIPPING INTERBURDEN	N/A
		PIT LENGTH	6600
		PIT WIDTH	120
		DO INCLINES DROP SHARPLY INTO PIT	NO
		DISTANCE BETWEEN INCLINES (FEET)	1500

MINE NAME	PIT NAME	EQUIPMENT TYPE	MODEL	NO OF UNITS	CAPACITY (CU YD)
BEULAH	ALL	DRAGLINE	BE500	1	12
		DRAGLINE	BE40W	1	17

MINE NAME		
CENTER	STATE	NORTH DAKOTA
	COUNTY	OLIVER
	COMPANY	BAUKOLNOONAN
	1975 SURFACE COAL TONNAGE	1549974
	1975 ACRES DISTURBED BY MINING	50
	PROJECTED MAXIMUM ANNUAL TONNAGE	4400000
	FIRST YEAR AT MAXIMUM TONNAGE	1978
	NUMBER OF PITS	5
	MINE OPENING YEAR	1970
	REMAINING MINE LIFE	50
	1975 MINE EMPLOYMENT	35
	STRIP RATIO(CU YD PER TON)	6.5
	SURFACE RIGHTS OWNER(S)	PRIVATE
	MINERAL RIGHTS OWNER(S)	PRIVATE
	AVERAGE ANNUAL PRECIPITATION	16
	TOPOGRAPHY	ROLLING
	ALTIDUDE	2100
	PREMINING LANDUSE(S)	CROPLAND-CATTLE GRAZING
	PRODUCTIVITY(ACRES PER AUM)	2.50
	POSTMINING LANDUSE(S)	CROPLAND-CATTLE GRAZING

MINE NAME		
CENTER	SEAM NAME	HAGEL1
	AVERAGE THICKNESS	6
	SEAM NAME	HAGEL2
	AVERAGE THICKNESS	12
	TYPE OF COAL	LIGNITE
	BTU	6650
	PERCENT SULFUR	.6
	PERCENT ASH	6.2
	MARKET	ELECTRIC UTILITY
	TOTAL NUMBER OF SEAMS SURFACE MINED	2
	THICKNESS OF ALL SEAMS SURFACE MINED	18
	UNDERGROUND MINING OF THE SAME SEAMS	NO

	BLEND COAL TO MEET CONTRACT SPECS.	YES
	MINE MOUTH POWER PLANT	YES
	ASH DISPOSAL ON MINE SITE	MINED OUT PITS
	PERCENT DIP OF COAL	0

MINE NAME		
CENTER	AQUIFER IN OVERBURDEN OR COAL	NO
	TYPE OF AQUIFER	NOT APPLICABLE
	STRATA CONTAINING AQUIFER	NOT APPLICABLE
	FUNCTION OF AQUIFER STRATA	NOT APPLICABLE
	DEPTH TO WATER IN NEARBY WELLS	BELOW THE COAL
	PREMINING WELL YEILD (GAL PER MIN)	0
	USE OF NEARBY WELLS	DOMESTIC-LIVESTOCK
	DIVERSION DITCHES TO CONTROL RUNOFF	NO
	STREAM DIVERSION	NO
	PUMP PIT	YES
	SEDIMENT BASINS	YES
	CHEMICAL TREATMENT OF DRAINAGE	NO
	RESTORE CONTOUR	YES
	MAX PERCENT SLOPE ON BOX CUT SPOILS	APPROXIMATE ORIGINAL CONTOUR
	MAX PERCENT SLOPE ON OTHER SPOILS	APPROXIMATE ORIGINAL CONTOUR
	REDUCE LAST-CUT HIGHWALL	YES
	MAX HEIGHT OF LAST-CUT HIGHWALL	135
	MAX SLOPE ON REDUCED HIGHWALL	35
	GRADING EQUIPMENT	DOZER

MINE NAME		
CENTER	TERRACE SPOIL	NO
	MECHANICAL SPOIL MANIPULATION	NO
	TOPSOIL	YES
	TOPSOIL AND SUBSOIL SEGREGATED	YES
	STOCKPILE TOPSOILING MATERIAL	YES
	EROSION CONTROL ON STOCKPILES	NO
	TOPSOILING EQUIPMENT	SCRAPER
	DEPTH REPLACED (INCHES)	30

BORROW TOPSOIL	NO
SEEDING METHOD	DRILL
PLANT TYPES USED FOR REVEGETATION	GRASSES-LEGUMES-TREES-SHRUBS
PRIMARILY NATIVE GRASSES FOR RANGE	NOT APPLICABLE
SOIL AMENDMENTS	FERTILIZER
MULCH	NO
IRRIGATION	NO
NO OF IRRIGATED GROWING SEASONS	0
DEDICATED RECLAMATION EQUIPMENT	NO
SEGRATION OF PROBLEM STRATA	NO

MINE NAME		
CENTER	STUDIES UNDERTAKEN AT MINE	REVEGETATION
	SIGNIFICANT ENVIRONMENTAL PROBLEMS	SINK HOLES

MINE NAME	PIT NAME		
CENTER	MAIN	PIT ORIENTATION	STRIKELINE
		PERCENT OF MINE TONNAGE FROM PIT	100
		MINING METHOD	AREA
		NUMBER OF SEAMS	2
		NUMBER OF OVERBURDEN LIFTS	1
		STRIPPING SUBSYSTEM	SINGLE
		STRIPPING EQUIPMENT	DRAGLINE
		AVERAGE OVERBURDEN DEPTH	90
		AVG DEPTH OF UNCONSOLIDATED MATERIAL	90
		AVERAGE INTERBURDEN DEPTH	36
		POSITION WHEN STRIPPING INTERBURDEN	SPOIL
		LGTHX	4000
		PIT WIDTH	100
		DO INCLINES DROP SHARPLY INTO PIT	NO
		DISTANCE BETWEEN INCLINES (FEET)	1500

MINE NAME	PIT NAME	EQUIPMENT TYPE	MODEL	NO OF UNITS	CAPACITY (CU YD)	BOOM LENGTH (FEET)
CENTER	MAIN	DRAGLINE	PAGE	1	21	160

MINE NAME		
GASCOYNE	STATE	NORTH DAKOTA
	COUNTY	BOWMAN
	COMPANY	KNIFE RIVER
	1975 SURFACE COAL TONNAGE	1794018
	1975 ACRES DISTURBED BY MINING	43
	PROJECTED MAXIMUM ANNUAL TONNAGE	2500000
	FIRST YEAR AT MAXIMUM TONNAGE	1976
	NUMBER OF PITS	5
	MINE OPENING YEAR	1950
	REMAINING MINE LIFE	30
	1975 MINE EMPLOYMENT	63
	STRIP RATIO(CU YD PER TON)	2.0
	SURFACE RIGHTS OWNER(S)	PRIVATE
	MINERAL RIGHTS OWNER(S)	PRIVATE-FEDERAL
	AVERAGE ANNUAL PRECIPITATION	15
	TOPOGRAPHY	FLAT
	ALTITUDE	2800
	PREMINING LANDUSE(S)	CROP AND HAYLAND
	PRODUCTIVITY(ACRES PER AUM)	2.25
	POSTMINING LANDUSE(S)	CROP AND HAYLAND

MINE NAME		
GASCOYNE	SEAM NAME	LIGNITE 1
	AVERAGE THICKNESS	8
	SEAM NAME	
	AVERAGE THICKNESS	8
	TYPE OF COAL	LIGNITE
	BTU	6100
	PERCENT SULFUR	1.3
	PERCENT ASH	8.0

MARKET	ELECTRIC UTILITY
TOTAL NUMBER OF SEAMS SURFACE MINED	2
THICKNESS OF ALL SEAMS SURFACE MINED	16
UNDERGROUND MINING OF THE SAME SEAMS	NO
BLEND COAL TO MEET CONTRACT SPECS.	YES
MINE MOUTH POWER PLANT	NO
ASH DISPOSAL ON MINE SITE	NO
PERCENT DIP OF COAL	0

MINE NAME		
GASCOYNE	AQUIFER IN OVERBURDEN OR COAL	YES
	TYPE OF AQUIFER	CONFINED
	STRATA CONTAINING AQUIFER	COAL
	FUNCTION OF AQUIFER STRATA	RECHARGE
	DEPTH TO WATER IN NEARBY WELLS	BELOW THE COAL
	PREMINING WELL YEILD (GAL PER MIN)	0
	USE OF NEARBY WELLS	DOMESTIC-LIVESTOCK
	DIVERSION DITCHES TO CONTROL RUNOFF	NO
	STREAM DIVERSION	NO
	PUMP PIT	YES
	SEDIMENT BASINS	YES
	CHEMICAL TREATMENT OF DRAINAGE	FLOCULATION-EXPERIMENTAL
	RESTORE CONTOUR	YES
	MAX PERCENT SLOPE ON BOX CUT SPOILS	APPROXIMATE ORIGINAL CONTOUR
	MAX PERCENT SLOPE ON OTHER SPOILS	APPROXIMATE ORIGINAL CONTOUR
	REDUCE LAST-CUT HIGHWALL	YES
	MAX HEIGHT OF LAST-CUT HIGHWALL	50
	MAX SLOPE ON REDUCED HIGHWALL	35
	GRADING EQUIPMENT	DOZER

MINE NAME		
GASCOYNE	TERRACE SPOIL	NO
	MECHANICAL SPOIL MANIPULATION	NO
	TOPSOIL	YES
	TOPSOIL AND SUBSOIL SEGREGATED	YES
	STOCKPILE TOPSOILING MATERIAL	YES
	EROSION CONTROL ON STOCKPILES	COVERCROP
	TOPSOILING EQUIPMENT	SCRAPER
	DEPTH REPLACED (INCHES)	9
	BORROW TOPSOIL	NO
	SEEDING METHOD	DRILL
	PLANT TYPES USED FOR REVEGETATION	GRASSES-LEGUMES-TREES-SHRUBS
	PRIMARILY NATIVE GRASSES FOR RANGE	NOT APPLICABLE
	SOIL AMENDMENTS	FERTILIZER
	MULCH	NO
	IRRIGATION	NO
	NO OF IRRIGATED GROWING SEASONS	0
	DEDICATED RECLAMATION EQUIPMENT	NO
	SEGRATION OF PROBLEM STRATA	NO

MINE NAME		
GASCOYNE	STUDIES UNDERTAKEN AT MINE	REVEGETATION-HYDROLOGY-OVERBURDEN
	SIGNIFICANT ENVIRONMENTAL PROBLEMS	SALINE SOILS
		SHALLOW SOILS

MINE NAME	PIT NAME		
GASCOYNE	MAIN	PIT ORIENTATION	STRIKELINE
		PERCENT OF MINE TONNAGE FROM PIT	100
		MINING METHOD	AREA
		NUMBER OF SEAMS	2
		NUMBER OF OVERBURDEN LIFTS	2
		STRIPPING SUBSYSTEM	SINGLE
		STRIPPING EQUIPMENT	DRAGLINE
		AVERAGE OVERBURDEN DEPTH	45
		AVG DEPTH OF UNCONSOLIDATED MATERIAL	45
		AVERAGE INTERBURDEN DEPTH	15
		POSITION WHEN STRIPPING INTERBURDEN	NOT APPLICABLE
		LGTHX	5000
		PIT WIDTH	120
		DO INCLINES DROP SHARPLY INTO PIT	NO
		DISTANCE BETWEEN INCLINES (FEET)	1500

MINE NAME	PIT NAME	EQUIPMENT TYPE	MODEL	NO OF UNITS	CAPACITY (CU YD)	BOOM LENGTH (FEET)
GASCOYNE	MAIN	DRAGLINE	M7620	1	33	235

MINE NAME		
GLENHAROLD	STATE	NORTH DAKOTA
	COUNTY	MERCER
	COMPANY	CONSOL
	1975 SURFACE COAL TONNAGE	1983872
	1975 ACRES DISTURBED BY MINING	253
	PROJECTED MAXIMUM ANNUAL TONNAGE	3800000
	FIRST YEAR AT MAXIMUM TONNAGE	1976
	NUMBER OF PITS	2
	MINE OPENING YEAR	1965
	REMAINING MINE LIFE	30
	1975 MINE EMPLOYMENT	138
	STRIP RATIO(CU YD PER TON)	7.3
	SURFACE RIGHTS OWNER(S)	PRIVATE
	MINERAL RIGHTS OWNER(S)	PRIVATE
	AVERAGE ANNUAL PRECIPITATION	16
	TOPOGRAPHY	HILLY
	ALTIDUDE	1900
	PREMINING LANDUSE(S)	CROPLAND-CATTLE GRAZING
	PRODUCTIVITY(ACRES PER AUM)	1.08
	POSTMINING LANDUSE(S)	CROPLAND-CATTLE GRAZING

MINE NAME		
GLENHAROLD	SEAM NAME	NO 3-2
	AVERAGE THICKNESS	4
	SEAM NAME	NO 2
	AVERAGE THICKNESS	10
	TYPE OF COAL	LIGNITE
	BTU	6780
	PERCENT SULFUR	.6
	PERCENT ASH	6.2

MARKET	ELECTRIC UTILITY
TOTAL NUMBER OF SEAMS SURFACE MINED	3
THICKNESS OF ALL SEAMS SURFACE MINED	16
UNDERGROUND MINING OF THE SAME SEAMS	NO
BLEND COAL TO MEET CONTRACT SPECS.	YES
MINE MOUTH POWER PLANT	YES
ASH DISPOSAL ON MINE SITE	NO
PERCENT DIP OF COAL	0

MINE NAME		
GLENHAROLD	AQUIFER IN OVERBURDEN OR COAL	NO
	TYPE OF AQUIFER	NOT APPLICABLE
	STRATA CONTAINING AQUIFER	NOT APPLICABLE
	FUNCTION OF AQUIFER STRATA	NOT APPLICABLE
	DEPTH TO WATER IN NEARBY WELLS	BELOW THE COAL
	PREMINING WELL YEILD (GAL PER MIN)	8
	USE OF NEARBY WELLS	DOMESTIC-LIVESTOCK
	DIVERSION DITCHES TO CONTROL RUNOFF	YES
	STREAM DIVERSION	NO
	PUMP PIT	YES
	SEDIMENT BASINS	YES
	CHEMICAL TREATMENT OF DRAINAGE	NO
	RESTORE CONTOUR	YES
	MAX PERCENT SLOPE ON BOX CUT SPOILS	35
	MAX PERCENT SLOPE ON OTHER SPOILS	35
	REDUCE LAST-CUT HIGHWALL	YES
	MAX HEIGHT OF LAST-CUT HIGHWALL	120
	MAX SLOPE ON REDUCED HIGHWALL	35
	GRADING EQUIPMENT	DOZER

MINE NAME		
GLENHAROLD	TERRACE SPOIL	NO
	MECHANICAL SPOIL MANIPULATION	NO
	TOPSOIL	YES
	TOPSOIL AND SUBSOIL SEGREGATED	YES
	STOCKPILE TOPSOILING MATERIAL	YES
	EROSION CONTROL ON STOCKPILES	COVERCROP
	TOPSOILING EQUIPMENT	SCRAPER
	DEPTH REPLACED (INCHES)	40
	BORROW TOPSOIL	NO
	SEEDING METHOD	DRILL-BROADCAST
	PLANT TYPES USED FOR REVEGETATION	GRASSES-LEGUMES-TREES-SHRUBS
	PRIMARILY NATIVE GRASSES FOR RANGE	YES
	SOIL AMENDMENTS	FERTILIZER
	MULCH	NO
	IRRIGATION	NO
	NO OF IRRIGATED GROWING SEASONS	0
	DEDICATED RECLAMATION EQUIPMENT	YES
	SEGRATION OF PROBLEM STRATA	NO

MINE NAME		
GLENHAROLD	STUDIES UNDERTAKEN AT MINE	REVEGETATION
	SIGNIFICANT ENVIRONMENTAL PROBLEMS	HIGH SAR AND CLAYEY OVERBURDEN
		HIGH SAR AND CLAYEY INTERBURDEN
		SINK HOLES

MINE NAME	PIT NAME		
GLENHAROLD	PIT 1	PIT ORIENTATION	STRIKELINE
		PERCENT OF MINE TONNAGE FROM PIT	66
		MINING METHOD	AREA
		NUMBER OF SEAMS	3
		NUMBER OF OVERBURDEN LIFTS	1
		STRIPPING SUBSYSTEM	SINGLE
		STRIPPING EQUIPMENT	DRAGLINE
		AVERAGE OVERBURDEN DEPTH	88
		AVG DEPTH OF UNCONSOLIDATED MATERIAL	88
		AVERAGE INTERBURDEN DEPTH	30
		POSITION WHEN STRIPPING INTERBURDEN	SPOIL
		LGTHX	6000
		PIT WIDTH	140
		DO INCLINES DROP SHARPLY INTO PIT	NO
		DISTANCE BETWEEN INCLINES (FEET)	1500

MINE NAME	PIT NAME		
GLENHAROLD	PIT 2	PIT ORIENTATION	STRIKELINE
		PERCENT OF MINE TONNAGE FROM PIT	34
		MINING METHOD	AREA
		NUMBER OF SEAMS	3
		NUMBER OF OVERBURDEN LIFTS	1
		STRIPPING SUBSYSTEM	SINGLE
		STRIPPING EQUIPMENT	DRAGLINE
		AVERAGE OVERBURDEN DEPTH	90
		AVG DEPTH OF UNCONSOLIDATED MATERIAL	90
		AVERAGE INTERBURDEN DEPTH	30
		POSITION WHEN STRIPPING INTERBURDEN	SPOIL
		LGTHX	4000
		PIT WIDTH	125
		DO INCLINES DROP SHARPLY INTO PIT	NO
		DISTANCE BETWEEN INCLINES (FEET)	1500

MINE NAME	PIT NAME	EQUIPMENT TYPE	MODEL	NO OF UNITS	CAPACITY (CU YD)	BOOM LENGTH (FEET)
GLENHAROLD	PIT 1	DRAGLINE	P762	1	60	310
	PIT 2	DRAGLINE	BE1250	1	35	250

MINE NAME		
HUSKY	STATE	NORTH DAKOTA
	COUNTY	STARK
	COMPANY	HUSKY IND
	1975 SURFACE COAL TONNAGE	141810
	1975 ACRES DISTURBED BY MINING	15
	PROJECTED MAXIMUM ANNUAL TONNAGE	200000
	FIRST YEAR AT MAXIMUM TONNAGE	1976
	NUMBER OF PITS	2
	MINE OPENING YEAR	1929
	REMAINING MINE LIFE	30
	1975 MINE EMPLOYMENT	11
	STRIP RATIO(CU YD PER TON)	10.3
	SURFACE RIGHTS OWNER(S)	PRIVATE-STATE
	MINERAL RIGHTS OWNER(S)	PRIVATE-STATE
	AVERAGE ANNUAL PRECIPITATION	14
	TOPOGRAPHY	ROLLING
	ALTIDUDE	2450
	PREMINING LANDUSE(S)	CROPLAND-CATTLE GRAZING
	PRODUCTIVITY(ACRES PER AUM)	4.00
	POSTMINING LANDUSE(S)	CROPLAND-CATTLE GRAZING

MINE NAME		
HUSKY	SEAM NAME	NO 1
	AVERAGE THICKNESS	3
	SEAM NAME	NO 2
	AVERAGE THICKNESS	9
	TYPE OF COAL	LIGNITE
	BTU	6200
	PERCENT SULFUR	.5
	PERCENT ASH	6.2

MARKET	CHARCOAL
TOTAL NUMBER OF SEAMS SURFACE MINED	2
THICKNESS OF ALL SEAMS SURFACE MINED	12
UNDERGROUND MINING OF THE SAME SEAMS	NO
BLEND COAL TO MEET CONTRACT SPECS.	NO
MINE MOUTH POWER PLANT	NO
ASH DISPOSAL ON MINE SITE	NO
PERCENT DIP OF COAL	0

MINE NAME		
HUSKY	AQUIFER IN OVERBURDEN OR COAL	NO
	TYPE OF AQUIFER	NOT APPLICABLE
	STRATA CONTAINING AQUIFER	NOT APPLICABLE
	FUNCTION OF AQUIFER STRATA	NOT APPLICABLE
	DEPTH TO WATER IN NEARBY WELLS	BELOW THE COAL
	PREMINING WELL YEILD (GAL PER MIN)	0
	USE OF NEARBY WELLS	DOMESTIC-LIVESTOCK
	DIVERSION DITCHES TO CONTROL RUNOFF	NO
	STREAM DIVERSION	NO
	PUMP PIT	YES
	SEDIMENT BASINS	YES
	CHEMICAL TREATMENT OF DRAINAGE	NO
	RESTORE CONTOUR	YES
	MAX PERCENT SLOPE ON BOX CUT SPOILS	APPROXIMATE ORIGINAL CONTOUR
	MAX PERCENT SLOPE ON OTHER SPOILS	APPROXIMATE ORIGINAL CONTOUR
	REDUCE LAST-CUT HIGHWALL	YES
	MAX HEIGHT OF LAST-CUT HIGHWALL	110
	MAX SLOPE ON REDUCED HIGHWALL	35
	GRADING EQUIPMENT	DOZER

MINE NAME		
HUSKY	TERRACE SPOIL	NO
	MECHANICAL SPOIL MANIPULATION	NO
	TOPSOIL	YES
	TOPSOIL AND SUBSOIL SEGREGATED	YES
	STOCKPILE TOPSOILING MATERIAL	YES
	EROSION CONTROL ON STOCKPILES	NO
	TOPSOILING EQUIPMENT	SCRAPER
	DEPTH REPLACED (INCHES)	49
	BORROW TOPSOIL	NO
	SEEDING METHOD	DRILL
	PLANT TYPES USED FOR REVEGETATION	GRASSES-LEGUMES-TREES-SHRUBS
	PRIMARILY NATIVE GRASSES FOR RANGE	NOT APPLICABLE
	SOIL AMENDMENTS	FERTILIZER
	MULCH	NO
	IRRIGATION	NO
	NO OF IRRIGATED GROWING SEASONS	0
	DEDICATED RECLAMATION EQUIPMENT	NO
	SEGRATION OF PROBLEM STRATA	NO

MINE NAME		
HUSKY	STUDIES UNDERTAKEN AT MINE	NONE
	SIGNIFICANT ENVIRONMENTAL PROBLEMS	NONE

MINE NAME	PIT NAME		
HUSKY	MAIN	PIT ORIENTATION	STRIKELINE
		PERCENT OF MINE TONNAGE FROM PIT	100
		MINING METHOD	AREA
		NUMBER OF SEAMS	2
		NUMBER OF OVERBURDEN LIFTS	1
		STRIPPING SUBSYSTEM	SINGLE
		STRIPPING EQUIPMENT	SCRAPER
		AVERAGE OVERBURDEN DEPTH	50
		AVG DEPTH OF UNCONSOLIDATED MATERIAL	50
		AVERAGE INTERBURDEN DEPTH	50
		POSITION WHEN STRIPPING INTERBURDEN	NOT APPLICABLE
		LGTHX	2500
		PIT WIDTH	120
		DO INCLINES DROP SHARPLY INTO PIT	NO
		DISTANCE BETWEEN INCLINES (FEET)	1000

MINE NAME	PIT NAME	EQUIPMENT TYPE	MODEL	NO OF UNITS	CAPACITY (CU YD)	BOOM LENGTH (FEET)
HUSKY	MAIN	SCRAPER	CAT637	2	30	0
		SCRAPER	CAT627	2	20	0

MINE NAME		
INDIAN HEAD	STATE	NORTH DAKOTA
	COUNTY	MERCER
	COMPANY	N AMERICAN
	1975 SURFACE COAL TONNAGE	827680
	1975 ACRES DISTURBED BY MINING	53
	PROJECTED MAXIMUM ANNUAL TONNAGE	1300000
	FIRST YEAR AT MAXIMUM TONNAGE	1976
	NUMBER OF PITS	5
	MINE OPENING YEAR	1925
	REMAINING MINE LIFE	100
	1975 MINE EMPLOYMENT	70
	STRIP RATIO(CU YD PER TON)	6.2
	SURFACE RIGHTS OWNER(S)	PRIVATE-STATE
	MINERAL RIGHTS OWNER(S)	PRIVATE-STATE
	AVERAGE ANNUAL PRECIPITATION	16
	TOPOGRAPHY	ROLLING
	ALTIDUDE	1950
	PREMINING LANDUSE(S)	CROPLAND-CATTLE GRAZING
	PRODUCTIVITY(ACRES PER AUM)	3.33
	POSTMINING LANDUSE(S)	CROPLAND-CATTLE GRAZING-WILDLIFE

MINE NAME		
INDIAN HEAD	SEAM NAME	ZAP
	AVERAGE THICKNESS	9
	SEAM NAME	N
	AVERAGE THICKNESS	0
	TYPE OF COAL	LIGNITE
	BTU	7080
	PERCENT SULFUR	.7
	PERCENT ASH	6.6

	MARKET	ELECTRIC UTILITY
	TOTAL NUMBER OF SEAMS SURFACE MINED	1
	THICKNESS OF ALL SEAMS SURFACE MINED	9
	UNDERGROUND MINING OF THE SAME SEAMS	NO
	BLEND COAL TO MEET CONTRACT SPECS.	NO
	MINE MOUTH POWER PLANT	NO
	ASH DISPOSAL ON MINE SITE	NO
	PERCENT DIP OF COAL	0
MINE NAME		
INDIAN HEAD	AQUIFER IN OVERBURDEN OR COAL	YES
	TYPE OF AQUIFER	CONFINED
	STRATA CONTAINING AQUIFER	UNCONSOLIDATED OVERBURDEN-COAL
	FUNCTION OF AQUIFER STRATA	NO DATA
	DEPTH TO WATER IN NEARBY WELLS	ABOVE AND IN THE COAL
	PREMINING WELL YEILD (GAL PER MIN)	2
	USE OF NEARBY WELLS	DOMESTIC-LIVESTOCK
	DIVERSION DITCHES TO CONTROL RUNOFF	YES
	STREAM DIVERSION	NO
	PUMP PIT	YES
	SEDIMENT BASINS	YES
	CHEMICAL TREATMENT OF DRAINAGE	NO
	RESTORE CONTOUR	YES
	MAX PERCENT SLOPE ON BOX CUT SPOILS	APPROXIMATE ORIGINAL CONTOUR
	MAX PERCENT SLOPE ON OTHER SPOILS	APPROXIMATE ORIGINAL CONTOUR
	REDUCE LAST-CUT HIGHWALL	YES
	MAX HEIGHT OF LAST-CUT HIGHWALL	200
	MAX SLOPE ON REDUCED HIGHWALL	35
	GRADING EQUIPMENT	DOZER

MINE NAME		
INDIAN HEAD	TERRACE SPOIL	NO
	MECHANICAL SPOIL MANIPULATION	NO
	TOPSOIL	YES
	TOPSOIL AND SUBSOIL SEGREGATED	YES
	STOCKPILE TOPSOILING MATERIAL	YES
	EROSION CONTROL ON STOCKPILES	COVERCROP
	TOPSOILING EQUIPMENT	SCRAPER
	DEPTH REPLACED (INCHES)	25
	BORROW TOPSOIL	NO
	SEEDING METHOD	DRILL
	PLANT TYPES USED FOR REVEGETATION	GRASSES-LEGUMES-TREES-SHRUBS
	PRIMARILY NATIVE GRASSES FOR RANGE	YES
	SOIL AMENDMENTS	FERTILIZER
	MULCH	NO
	IRRIGATION	NO
	NO OF IRRIGATED GROWING SEASONS	0
	DEDICATED RECLAMATION EQUIPMENT	NO
	SEGRATION OF PROBLEM STRATA	NO

MINE NAME		
INDIAN HEAD	STUDIES UNDERTAKEN AT MINE	REVEGETATION-HYDROLOGY
	SIGNIFICANT ENVIRONMENTAL PROBLEMS	HIGH SAR AND CLAYEY OVERBURDEN

MINE NAME	PIT NAME		
INDIAN HEAD	MAIN	PIT ORIENTATION	STRIKELINE
		PERCENT OF MINE TONNAGE FROM PIT	100
		MINING METHOD	AREA
		NUMBER OF SEAMS	1
		NUMBER OF OVERBURDEN LIFTS	1
		STRIPPING SUBSYSTEM	SINGLE
		STRIPPING EQUIPMENT	DRAGLINE
		AVERAGE OVERBURDEN DEPTH	60
		AVG DEPTH OF UNCONSOLIDATED MATERIAL	60
		AVERAGE INTERBURDEN DEPTH	0
		POSITION WHEN STRIPPING INTERBURDEN	NOT APPLICABLE
		LGTHX	4000
		PIT WIDTH	100
		DO INCLINES DROP SHARPLY INTO PIT	NO
		DISTANCE BETWEEN INCLINES (FEET)	1500

MINE NAME	PIT NAME	EQUIPMENT TYPE	MODEL	NO OF UNITS	CAPACITY (CU YD)	BOOM LENGTH (FEET)
INDIAN HEAD	MAIN	DRAGLINE	BE8COW	1	28	195

MINE NAME		
LARSON	STATE	NORTH DAKOTA
	COUNTY	BURKE
	COMPANY	BAUKOLNOONAN
	1975 SURFACE COAL TONNAGE	406108
	1975 ACRES DISTURBED BY MINING	39
	PROJECTED MAXIMUM ANNUAL TONNAGE	406108
	FIRST YEAR AT MAXIMUM TONNAGE	1975
	NUMBER OF PITS	3
	MINE OPENING YEAR	1925
	REMAINING MINE LIFE	15
	1975 MINE EMPLOYMENT	23
	STRIP RATIO(CU YD PER TON)	5.4
	SURFACE RIGHTS OWNER(S)	PRIVATE
	MINERAL RIGHTS OWNER(S)	PRIVATE
	AVERAGE ANNUAL PRECIPITATION	15
	TOPOGRAPHY	FLAT
	ALTIDUDE	1920
	PREMINING LANDUSE(S)	CROPLAND-CATTLE GRAZING
	PRODUCTIVITY(ACRES PER AUM)	3.67
	POSTMINING LANDUSE(S)	CROPLAND-CATTLE GRAZING

MINE NAME		
LARSON	SEAM NAME	NOONAN
	AVERAGE THICKNESS	6
	SEAM NAME	N
	AVERAGE THICKNESS	12
	TYPE OF COAL	LIGNITE
	BTU	6800
	PERCENT SULFUR	.5
	PERCENT ASH	6.2

MARKET	INDUSTRIAL
TOTAL NUMBER OF SEAMS SURFACE MINED	1
THICKNESS OF ALL SEAMS SURFACE MINED	12
UNDERGROUND MINING OF THE SAME SEAMS	NO
BLEND COAL TO MEET CONTRACT SPECS.	NO
MINE MOUTH POWER PLANT	NO
ASH DISPOSAL ON MINE SITE	NO
PERCENT DIP OF COAL	0

MINE NAME		
LARSON	AQUIFER IN OVERBURDEN OR COAL	NO
	TYPE OF AQUIFER	NOT APPLICABLE
	STRATA CONTAINING AQUIFER	NOT APPLICABLE
	FUNCTION OF AQUIFER STRATA	NOT APPLICABLE
	DEPTH TO WATER IN NEARBY WELLS	BELOW THE COAL
	PREMINING WELL YEILD (GAL PER MIN)	0
	USE OF NEARBY WELLS	DOMESTIC-LIVESTOCK
	DIVERSION DITCHES TO CONTROL RUNOFF	YES
	STREAM DIVERSION	NO
	PUMP PIT	YES
	SEDIMENT BASINS	YES
	CHEMICAL TREATMENT OF DRAINAGE	NO
	RESTORE CONTOUR	YES
	MAX PERCENT SLOPE ON BOX CUT SPOILS	APPROXIMATE ORIGINAL CONTOUR
	MAX PERCENT SLOPE ON OTHER SPOILS	APPROXIMATE ORIGINAL CONTOUR
	REDUCE LAST-CUT HIGHWALL	YES
	MAX HEIGHT OF LAST-CUT HIGHWALL	50
	MAX SLOPE ON REDUCED HIGHWALL	35
	GRADING EQUIPMENT	DOZER

MINE NAME		
LARSON	TERRACE SPOIL	NO
	MECHANICAL SPOIL MANIPULATION	NO
	TOPSOIL	YES
	TOPSOIL AND SUBSOIL SEGREGATED	YES
	STOCKPILE TOPSOILING MATERIAL	YES
	EROSION CONTROL ON STOCKPILES	NO
	TOPSOILING EQUIPMENT	DRAGLINE-SCRAPER
	DEPTH REPLACED (INCHES)	18
	BORROW TOPSOIL	NO
	SEEDING METHOD	DRILL
	PLANT TYPES USED FOR REVEGETATION	GRASSES-LEGUMES-TREES-SHRUBS
	PRIMARILY NATIVE GRASSES FOR RANGE	NOT APPLICABLE
	SOIL AMENDMENTS	FERTILIZER
	MULCH	NO
	IRRIGATION	NO
	NO OF IRRIGATED GROWING SEASONS	0
	DEDICATED RECLAMATION EQUIPMENT	NO
	SEGRATION OF PROBLEM STRATA	NO

MINE NAME		
LARSON	STUDIES UNDERTAKEN AT MINE	NONE
	SIGNIFICANT ENVIRONMENTAL PROBLEMS	HIGH SAR AND CLAYEY OVERBURDEN

MINE NAME	PIT NAME		
LARSON	MAIN	PIT ORIENTATION	STRIKELINE
		PERCENT OF MINE TONNAGE FROM PIT	100
		MINING METHCD	AREA
		NUMBER OF SEAMS	1
		NUMBER OF CVERBURDEN LIFTS	1
		STRIPPING SUBSYSTEM	SINGLE
		STRIPPING EQUIPMENT	DRAGLINE
		AVERAGE OVERBURDEN DEPTH	35
		AVG DEPTH OF UNCONSOLICATED MATERIAL	35
		AVERAGE INTERBURDEN DEPTH	0
		POSITION WHEN STRIPPING INTERBURDEN	NCT APPLICABLE
		LGTHX	2500
		PIT WIDTH	90
		DO INCLINES DROP SHARPLY INTO PIT	NO
		DISTANCE BETWEEN INCLINES (FEET)	1500

MINE NAME	PIT NAME	EQUIPMENT TYPE	MODEL	NO OF UNITS	CAPACITY (CU YD)	BOOM LENGTH (FEET)
LARSON	MAIN	DRAGLINE	N	1	11	140

MINE NAME		
VELVA	STATE	NORTH DAKOTA
	COUNTY	WARD
	COMPANY	CONSOL
	1975 SURFACE COAL TONNAGE	323866
	1975 ACRES DISTURBED BY MINING	30
	PROJECTED MAXIMUM ANNUAL TONNAGE	600000
	FIRST YEAR AT MAXIMUM TONNAGE	1976
	NUMBER OF PITS	1
	MINE OPENING YEAR	1928
	REMAINING MINE LIFE	20
	1975 MINE EMPLOYMENT	37
	STRIP RATIO(CU YD PER TON)	4.4
	SURFACE RIGHTS OWNER(S)	PRIVATE
	MINERAL RIGHTS OWNER(S)	PRIVATE
	AVERAGE ANNUAL PRECIPITATION	16
	TOPOGRAPHY	ROLLING
	ALTITUDE	1950
	PREMINING LANDUSE(S)	CROPLAND-CATTLE GRAZING
	PRODUCTIVITY(ACRES PER AUM)	2.42
	POSTMINING LANDUSE(S)	CROPLAND-CATTLE GRAZING

MINE NAME		
VELVA	SEAM NAME	COTEAU
	AVERAGE THICKNESS	14
	SEAM NAME	N
	AVERAGE THICKNESS	0
	TYPE OF COAL	LIGNITE
	BTU	6600
	PERCENT SULFUR	.4
	PERCENT ASH	6.2

MARKET	ELECTRIC UTILITY
TOTAL NUMBER OF SEAMS SURFACE MINED	1
THICKNESS OF ALL SEAMS SURFACE MINED	14
UNDERGROUND MINING OF THE SAME SEAMS	NO
BLEND COAL TO MEET CONTRACT SPECS.	NO
MINE MOUTH POWER PLANT	YES
ASH DISPOSAL ON MINE SITE	NO
PERCENT DIP OF COAL	0

MINE NAME		
VELVA	AQUIFER IN OVERBURDEN OR COAL	YES
	TYPE OF AQUIFER	CONFINED
	STRATA CONTAINING AQUIFER	COAL
	FUNCTION OF AQUIFER STRATA	DISCHARGE
	DEPTH TO WATER IN NEARBY WELLS	ABOVE AND BELOW THE COAL
	PREMINING WELL YEILD (GAL PER MIN)	0
	USE OF NEARBY WELLS	DOMESTIC-LIVESTOCK
	DIVERSION DITCHES TO CONTROL RUNOFF	YES
	STREAM DIVERSION	NO
	PUMP PIT	YES
	SEDIMENT BASINS	YES
	CHEMICAL TREATMENT OF DRAINAGE	NO
	RESTORE CONTOUR	YES
	MAX PERCENT SLOPE ON BOX CUT SPOILS	APPROXIMATE ORIGINAL CONTOUR
	MAX PERCENT SLOPE ON OTHER SPOILS	APPROXIMATE ORIGINAL CONTOUR
	REDUCE LAST-CUT HIGHWALL	YES
	MAX HEIGHT OF LAST-CUT HIGHWALL	80
	MAX SLOPE ON REDUCED HIGHWALL	35
	GRADING EQUIPMENT	DOZER

MINE NAME		
VELVA	TERRACE SPOIL	NO
	MECHANICAL SPOIL MANIPULATION	NO
	TOPSOIL	YES
	TOPSOIL AND SUBSOIL SEGREGATED	YES
	STOCKPILE TOPSOILING MATERIAL	YES
	EROSION CONTROL ON STOCKPILES	COVERCROP
	TOPSOILING EQUIPMENT	SCRAPER
	DEPTH REPLACED (INCHES)	44
	BORROW TOPSOIL	NO
	SEEDING METHOD	DRILL
	PLANT TYPES USED FOR REVEGETATION	GRASSES-LEGUMES-TREES-SHRUBS
	PRIMARILY NATIVE GRASSES FOR RANGE	YES
	SOIL AMENDMENTS	FERTILIZER
	MULCH	NO
	IRRIGATION	NO
	NO OF IRRIGATED GROWING SEASONS	0
	DEDICATED RECLAMATION EQUIPMENT	NO
	SEGRATION OF PROBLEM STRATA	NO

MINE NAME		
VELVA	STUDIES UNDERTAKEN AT MINE	NONE
	SIGNIFICANT ENVIRONMENTAL PROBLEMS	HIGH SAR AND CLAYEY OVERBURDEN

MINE NAME	PIT NAME		
VELVA	MAIN	PIT ORIENTATION	STRIKELINE
		PERCENT OF MINE TONNAGE FROM PIT	100
		MINING METHOD	AREA
		NUMBER OF SEAMS	1
		NUMBER OF OVERBURDEN LIFTS	1
		STRIPPING SUBSYSTEM	SINGLE
		STRIPPING EQUIPMENT	DRAGLINE
		AVERAGE OVERBURDEN DEPTH	70
		AVG DEPTH OF UNCONSOLIDATED MATERIAL	70
		AVERAGE INTERBURDEN DEPTH	0
		POSITION WHEN STRIPPING INTERBURDEN	NOT APPLICABLE
		LGTHX	1300
		PIT WIDTH	90
		DO INCLINES DROP SHARPLY INTO PIT	NO
		DISTANCE BETWEEN INCLINES (FEET)	1500

MINE NAME	PIT NAME	EQUIPMENT TYPE	MODEL	NO OF UNITS	CAPACITY (CU YD)	BOOM LENGTH (FEET)
VELVA	MAIN	DRAGLINE	M7400	1	13	175

WYOMING

- BELLE AYR SOUTH
- BIG HORN NO 1
- CORDERO
- DAVE JOHNSTON
- FMC MINE
- JACOBS RANCH
- JIM BRIDGER
- KEMMERER
- MEDICINE BOW
- NORTH RAWHIDE
- RIMROCK
- ROSEBUD
- SEMINOE NO 1
- SEMINOE NO 2
- THUNDER
- WYODAK MINE

BELLE AYR S.

STATE	WYOMING
COUNTY	CAMPBELL
COMPANY	AMAX
1975 SURFACE COAL TONNAGE	3288000
1975 ACRES DISTURBED BY MINING	28
PROJECTED MAXIMUM ANNUAL TONNAGE	15000000
FIRST YEAR AT MAXIMUM TONNAGE	1977
NUMBER OF PITS	1
MINE OPENING YEAR	1972
REMAINING MINE LIFE	21
1975 MINE EMPLOYMENT	75
STRIP RATIO(CU YD PER TON)	1.0
SURFACE RIGHTS OWNER(S)	PRIVATE
MINERAL RIGHTS OWNER(S)	PRIVATE-FEDERAL
AVERAGE ANNUAL PRECIPITATION	14
TOPOGRAPHY	ROLLING
ALTIDUDE	4500
PREMINING LANDUSE(S)	CROPLAND-CATTLE GRAZING
PRODUCTIVITY(ACRES PER AUM)	2.50
POSTMINING LANDUSE(S)	CROPLAND-CATTLE GRAZING
SEAM NAME	WYODAK
AVERAGE THICKNESS	70
SEAM NAME	N
AVERAGE THICKNESS	0
TYPE OF COAL	SUBBITUMINOUS
BTU	8800
PERCENT SULFUR	0.6
PERCENT ASH	5.3
MARKET	ELECTRIC UTILITY
TOTAL NUMBER OF SEAMS SURFACE MINED	1
THICKNESS OF ALL SEAMS SURFACE MINED	70
UNDERGROUND MINING OF THE SAME SEAMS	NO
BLEND COAL TO MEET CONTRACT SPECS.	NO
MINE MOUTH POWER PLANT	NO
ASH DISPOSAL ON MINE SITE	NO
PERCENT DIP OF COAL	1

BELLE AYR S. (Continued)

AQUIFER IN OVERBURDEN OR COAL	YES
TYPE OF AQUIFER	UNCONFINED
STRATA CONTAINING AQUIFER	UNCONSOLIDATED OVERBURDEN
FUNCTION OF AQUIFER STRATA	STREAMBANK STORAGE
DEPTH TO WATER IN NEARBY WELLS	ABOVE AND BELOW THE COAL
PREMINING WELL YEILD (GAL PER MIN)	0
USE OF NEARBY WELLS	DOMESTIC-LIVESTOCK
DIVERSION DITCHES TO CONTROL RUNOFF	YES
STREAM DIVERSION	YES
PUMP PIT	YES
SEDIMENT BASINS	YES
CHEMICAL TREATMENT OF DRAINAGE	NO
RESTORE CONTOUR	YES
MAX PERCENT SLOPE ON BOX CUT SPOILS	APPROXIMATE ORIGINAL CONTOUR
MAX PERCENT SLOPE ON OTHER SPOILS	APPROXIMATE ORIGINAL CONTOUR
REDUCE LAST-CUT HIGHWALL	YES
MAX HEIGHT OF LAST-CUT HIGHWALL	200
MAX SLOPE ON REDUCED HIGHWALL	APPROXIMATE ORIGINAL CONTOUR
GRADING EQUIPMENT	DOZER
TERRACE SPOIL	NO
MECHANICAL SPOIL MANIPULATION	YES
TOPSOIL	YES
TOPSOIL AND SUBSOIL SEGREGATED	YES
STOCKPILE TOPSOILING MATERIAL	IF NECESSARY
EROSION CONTROL ON STOCKPILES	COVER CROP
TOPSOILING EQUIPMENT	SCRAPER
DEPTH REPLACED (INCHES)	6
BORROW TOPSOIL	NO
SEEDING METHOD	DRILL
PLANT TYPES USED FOR REVEGETATION	GRASSES-LEGUMES-TREES-SHRUBS
PRIMARILY NATIVE GRASSES FOR RANGE	YES
SOIL AMENDMENTS	NO
MULCH	NO
IRRIGATION	NO
NO OF IRRIGATED GROWING SEASONS	0
DEDICATED RECLAMATION EQUIPMENT	YES
SEGRATION OF PROBLEM STRATA	YES

BELLE AYR S. (Continued)

STUDIES UNDERTAKEN AT MINE	REVEGETATION-HYDROLOGY
SIGNIFICANT ENVIRONMENTAL PROBLEMS	IMPERMEABLE MATERIAL IN OVERBURDEN

PIT NAME		
MAIN	PIT ORIENTATION	STRIKELINE
	PERCENT OF MINE TONNAGE FROM PIT	100
	MINING METHOD	MODIFIED OPEN PIT
	NUMBER OF SEAMS	1
	NUMBER OF OVERBURDEN LIFTS	2
	STRIPPING SUBSYSTEM	DUAL
	STRIPPING EQUIPMENT	SHOVEL-TRUCK-SCRAPER
	AVERAGE OVERBURDEN DEPTH	70
	AVG DEPTH OF UNCONSOLIDATED MATERIAL	70
	AVERAGE INTERBURDEN DEPTH	0
	POSITION WHEN STRIPPING INTERBURDEN	NOT APPLICABLE
	LGTHX	3650
	PIT WIDTH	300
	DO INCLINES DROP SHARPLY INTO PIT	NOT APPLICABLE
	DISTANCE BETWEEN INCLINES (FEET)	0

PIT NAME	EQUIPMENT TYPE	MODEL	NO OF UNITS	CAPACITY (CU YD)	BOOM LENGTH (FEET)
MAIN	LOADING SHOVEL	PE	2	21	0
	TRUCK	N	5	120	0
	SCRAPER	N	2	15	0

MINE NAME		
BIG HORN NO1	STATE	WYOMING
	COUNTY	SHERIDAN
	COMPANY	BIG HORN
	1975 SURFACE COAL TONNAGE	787123
	1975 ACRES DISTURBED BY MINING	10
	PROJECTED MAXIMUM ANNUAL TONNAGE	1500000
	FIRST YEAR AT MAXIMUM TONNAGE	1980
	NUMBER OF PITS	2
	MINE OPENING YEAR	1944
	REMAINING MINE LIFE	15
	1975 MINE EMPLOYMENT	80
	STRIP RATIO(CU YD PER TON)	2.3
	SURFACE RIGHTS OWNER(S)	PRIVATE-STATE
	MINERAL RIGHTS OWNER(S)	FEDERAL-STATE
	AVERAGE ANNUAL PRECIPITATION	15
	TOPOGRAPHY	HILLY
	ALTIDUDE	3500
	PREMINING LANDUSE(S)	IRRIGATED CROPLAND-CATTLE
	PRODUCTIVITY(ACRES PER AUM)	1.67
	POSTMINING LANDUSE(S)	IRRIGATED CROPLAND-CATTLE

MINE NAME		
BIG HORN NO1	SEAM NAME	DIFTZ2
	AVERAGE THICKNESS	10
	SEAM NAME	D3-MONARCH
	AVERAGE THICKNESS	40
	TYPE OF COAL	SUBBITUMINOUS
	BTU	9300
	PERCENT SULFUR	0.7
	PERCENT ASH	5.8
	MARKET	ELECTRIC UTILITY-DOMESTIC
	TOTAL NUMBER OF SEAMS SURFACE MINED	2
	THICKNESS OF ALL SEAMS SURFACE MINED	50
	UNDERGROUND MINING OF THE SAME SEAMS	YES

BLEND COAL TO MEET CONTRACT SPECS.	NO
MINE MOUTH POWER PLANT	NO
ASH DISPOSAL ON MINE SITE	NO
PERCENT DIP OF COAL	9

MINE NAME		
BIG HORN NO1	AQUIFER IN OVERBURDEN OR COAL	YES
	TYPE OF AQUIFER	UNCONFINED
	STRATA CONTAINING AQUIFER	UNCONSOLIDATED OVERBURDEN
	FUNCTION OF AQUIFER STRATA	STREAMBANK STORAGE
	DEPTH TO WATER IN NEARBY WELLS	ABOVE AND BELOW
	PREMINING WELL YEILD (GAL PER MIN)	0
	USE OF NEARBY WELLS	DOMESTIC-LIVESTOCK
	DIVERSION DITCHES TO CONTROL RUNOFF	YES
	STREAM DIVERSION	YES
	PUMP PIT	YES
	SEDIMENT BASINS	YES
	CHEMICAL TREATMENT OF DRAINAGE	NO
	RESTORE CONTOUR	YES
	MAX PERCENT SLOPE ON BOX CUT SPOILS	40
	MAX PERCENT SLOPE ON OTHER SPOILS	40
	REDUCE LAST-CUT HIGHWALL	IMPOUNDMENT
	MAX HEIGHT OF LAST-CUT HIGHWALL	200
	MAX SLOPE ON REDUCED HIGHWALL	APPROXIMATE ORIGINAL
	GRADING EQUIPMENT	DOZER

MINE NAME		
BIG HORN NO1	TERRACE SPOIL	NO
	MECHANICAL SPOIL MANIPULATION	YES
	TOPSOIL	YES
	TOPSOIL AND SUBSOIL SEGREGATED	YES
	STOCKPILE TOPSOILING MATERIAL	IF NECESSARY
	EROSION CONTROL ON STOCKPILES	NO
	TOPSOILING EQUIPMENT	SCRAPER
	DEPTH REPLACED (INCHES)	6
	BORROW TOPSOIL	NO
	SEEDING METHOD	DRILL
	PLANT TYPES USED FOR REVEGETATION	GRASSES-TREES
	PRIMARILY NATIVE GRASSES FOR RANGE	YES
	SOIL AMENDMENTS	FERTILIZER
	MULCH	YES
	IRRIGATION	NO
	NO OF IRRIGATED GROWING SEASONS	0
	DEDICATED RECLAMATION EQUIPMENT	NO
	SEGRATION OF PROBLEM STRATA	YES

MINE NAME		
BIG HORN NO1	STUDIES UNDERTAKEN AT MINE	NONE
	SIGNIFICANT ENVIRONMENTAL PROBLEMS	HIGH SAR AND CLAYEY

MINE NAME	PIT NAME		
BIG HORN NO1	MAIN	PIT ORIENTATION	STRIKELINE
		PERCENT OF MINE TONNAGE FROM PIT	-100
		MINING METHOD	AREA
		NUMBER OF SEAMS	2
		NUMBER OF OVERBURDEN LIFTS	4
		STRIPPING SUBSYSTEM	DUAL
		STRIPPING EQUIPMENT	SCRAPER-DOZER
		AVERAGE OVERBURDEN DEPTH	125
		AVG DEPTH OF UNCONSOLIDATED MATERIAL	0
		AVERAGE INTERBURDEN DEPTH	10
		POSITION WHEN STRIPPING INTERBURDEN	N/A
		LGTHX	1320
		PIT WIDTH	300
		DO INCLINES DROP SHARPLY INTO PIT	NO
		DISTANCE BETWEEN INCLINES (FEET)	0

MINE NAME	PIT NAME	EQUIPMENT TYPE	MODEL	NO OF UNITS	CAPACITY (CU YD)
BIG HORN NO1	MAIN	SCRAPER	N	0	0
		DOZER	N	0	0

MINE NAME		
CORDERO	STATE	WYOMING
	COUNTY	CAMPBELL
	COMPANY	SUN OIL
	1975 SURFACE COAL TONNAGE	0
	1975 ACRES DISTURBED BY MINING	0
	PROJECTED MAXIMUM ANNUAL TONNAGE	12000000
	FIRST YEAR AT MAXIMUM TONNAGE	1981
	NUMBER OF PITS	1
	MINE OPENING YEAR	1976
	REMAINING MINE LIFE	30
	1975 MINE EMPLOYMENT	0
	STRIP RATIO(CU YD PER TON)	2.2
	SURFACE RIGHTS OWNER(S)	PRIVATE-FEDERAL
	MINERAL RIGHTS OWNER(S)	FEDERAL
	AVERAGE ANNUAL PRECIPITATION	14
	TOPOGRAPHY	ROLLING
	ALTIDUDE	4600
	PREMINING LANDUSE(S)	CATTLE GRAZING
	PRODUCTIVITY(ACRES PER AUM)	4.33
	POSTMINING LANDUSE(S)	CATTLE GRAZING

MINE NAME		
CORDERO	SEAM NAME	WYODAK
	AVERAGE THICKNESS	54
	SEAM NAME	N
	AVERAGE THICKNESS	0
	TYPE OF COAL	SUBBITUMINOUS
	BTU	8185
	PERCENT SULFUR	.3
	PERCENT ASH	6.0

MARKET	ELECTRIC UTILITY
TOTAL NUMBER OF SEAMS SURFACE MINED	1
THICKNESS OF ALL SEAMS SURFACE MINED	54
UNDERGROUND MINING OF THE SAME SEAMS	NO
BLEND COAL TO MEET CONTRACT SPECS.	NO
MINE MOUTH POWER PLANT	NO
ASH DISPOSAL ON MINE SITE	NO
PERCENT DIP OF COAL	3

MINE NAME		
CORDERO	AQUIFER IN OVERBURDEN OR COAL	YES
	TYPE OF AQUIFER	CONFINED-UNCONFINED
	STRATA CONTAINING AQUIFER	CONSOLIDATED AND UNCONSOLIDATED
	FUNCTION OF AQUIFER STRATA	DISCHARGE
	DEPTH TO WATER IN NEARBY WELLS	IN THE COAL
	PREMINING WELL YEILD (GAL PER MIN)	3
	USE OF NEARBY WELLS	DOMESTIC-LIVESTOCK
	DIVERSION DITCHES TO CONTROL RUNOFF	YES
	STREAM DIVERSION	YES
	PUMP PIT	YES
	SEDIMENT BASINS	YES
	CHEMICAL TREATMENT OF DRAINAGE	NO
	RESTORE CONTOUR	YES
	MAX PERCENT SLOPE ON BOX CUT SPOILS	20
	MAX PERCENT SLOPE ON OTHER SPOILS	20
	REDUCE LAST-CUT HIGHWALL	YES
	MAX HEIGHT OF LAST-CUT HIGHWALL	20C
	MAX SLOPE ON REDUCED HIGHWALL	33
	GRADING EQUIPMENT	DOZER

MINE NAME		
CORDERO	TERRACE SPOIL	IF NECESSARY
	MECHANICAL SPOIL MANIPULATION	IF NECESSARY
	TOPSOIL	YES
	TOPSOIL AND SUBSOIL SEGREGATED	YES
	STOCKPILE TOPSOILING MATERIAL	IF NECESSARY
	EROSION CONTROL ON STOCKPILES	IF NECESSARY
	TOPSOILING EQUIPMENT	SCRAPER
	DEPTH REPLACED (INCHES)	8
	BORROW TOPSOIL	NO
	SEEDING METHOD	DRILL-HYDROSEED
	PLANT TYPES USED FOR REVEGETATION	GRASSES-SHRUBS
	PRIMARILY NATIVE GRASSES FOR RANGE	YES
	SOIL AMENDMENTS	IF NECESSARY
	MULCH	YES WHEN HYDROSEEDING
	IRRIGATION	NO
	NO OF IRRIGATED GROWING SEASONS	0
	DEDICATED RECLAMATION EQUIPMENT	YES
	SEGRATION OF PROBLEM STRATA	IF NECESSARY

MINE NAME		
CORDERO	STUDIES UNDERTAKEN AT MINE	REVEGETATION-HYDROLOGY-OVERBURDEN
	SIGNIFICANT ENVIRONMENTAL PROBLEMS	NONE

MINE NAME	PIT NAME		
CORDERO	MAIN	PIT ORIENTATION	STRIKELINE
		PERCENT OF MINE TONNAGE FROM PIT	100
		MINING METHOD	MODIFIED OPEN PIT
		NUMBER OF SEAMS	1
		NUMBER OF OVERBURDEN LIFTS	3
		STRIPPING SUBSYSTEM	DUAL
		STRIPPING EQUIPMENT	SHOVEL-TRUCK
		AVERAGE OVERBURDEN DEPTH	130
		AVG DEPTH OF UNCONSOLIDATED MATERIAL	0
		AVERAGE INTERBURDEN DEPTH	0
		POSITION WHEN STRIPPING INTERBURDEN	NOT APPLICABLE
		LGTHX	2000
		PIT WIDTH	200
		DO INCLINES DROP SHARPLY INTO PIT	YES
		DISTANCE BETWEEN INCLINES (FEET)	1500

MINE NAME	PIT NAME	EQUIPMENT TYPE	MODEL	NO OF UNITS	CAPACITY (CU YD)	BOOM LENGTH (FEET)
CORDERO	MAIN	LOADING SHOVEL	N	2	20	0
		TRUCK	N	6	120	0

MINE NAME		
D. JOHNSTON	STATE	WYOMING
	COUNTY	CONVERSE
	COMPANY	PP AND L
	1975 SURFACE COAL TONNAGE	3231649
	1975 ACRES DISTURBED BY MINING	60
	PROJECTED MAXIMUM ANNUAL TONNAGE	3230000
	FIRST YEAR AT MAXIMUM TONNAGE	1975
	NUMBER OF PITS	2
	MINE OPENING YEAR	1962
	REMAINING MINE LIFE	35
	1975 MINE EMPLOYMENT	119
	STRIP RATIO(CU YD PER TON)	3.3
	SURFACE RIGHTS OWNER(S)	PRIVATE
	MINERAL RIGHTS OWNER(S)	FEDERAL
	AVERAGE ANNUAL PRECIPITATION	11
	TOPOGRAPHY	ROLLING
	ALTITUDE	5800
	PREMINING LANDUSE(S)	CATTLE AND SHEEP GRAZING
	PRODUCTIVITY(ACRES PER AUM)	3.33
	POSTMINING LANDUSE(S)	CATTLE AND SHEEP GRAZING

MINE NAME		
D. JOHNSTON	SEAM NAME	BADGER
	AVERAGE THICKNESS	16
	SEAM NAME	SCHOOL
	AVERAGE THICKNESS	35
	TYPE OF COAL	SUBBITUMINOUS
	BTU	7500
	PERCENT SULFUR	.5
	PERCENT ASH	12.0

MARKET	ELECTRIC UTILITY
TOTAL NUMBER OF SEAMS SURFACE MINED	2
THICKNESS OF ALL SEAMS SURFACE MINED	51
UNDERGROUND MINING OF THE SAME SEAMS	NO
BLEND COAL TO MEET CONTRACT SPECS.	NO
MINE MOUTH POWER PLANT	YES
ASH DISPOSAL ON MINE SITE	NO
PERCENT DIP OF COAL	7

MINE NAME		
D.JOHNSTON	AQUIFER IN OVERBURDEN OR COAL	NO
	TYPE OF AQUIFER	NOT APPLICABLE
	STRATA CONTAINING AQUIFER	NOT APPLICABLE
	FUNCTION OF AQUIFER STRATA	NOT APPLICABLE
	DEPTH TO WATER IN NEARBY WELLS	BELOW THE COAL
	PREMINING WELL YEILD (GAL PER MIN)	0
	USE OF NEARBY WELLS	DOMESTIC-LIVESTOCK
	DIVERSION DITCHES TO CONTROL RUNOFF	YES
	STREAM DIVERSION	NO
	PUMP PIT	YES
	SEDIMENT BASINS	YES
	CHEMICAL TREATMENT OF DRAINAGE	NO
	RESTORE CONTOUR	YES
	MAX PERCENT SLOPE ON BOX CUT SPOILS	33
	MAX PERCENT SLOPE ON OTHER SPOILS	33
	REDUCE LAST-CUT HIGHWALL	YES
	MAX HEIGHT OF LAST-CUT HIGHWALL	14.0
	MAX SLOPE ON REDUCED HIGHWALL	APPROXIMATE ORIGINAL CONTOUR
	GRADING EQUIPMENT	DOZER-DRAGLINE

MINE NAME		
D.JOHNSTON	TERRACE SPOIL	NO
	MECHANICAL SPOIL MANIPULATION	NO
	TOPSOIL	YES
	TOPSOIL AND SUBSOIL SEGREGATED	NO
	STOCKPILE TOPSOILING MATERIAL	IF NECESSARY
	EROSION CONTROL ON STOCKPILES	NO
	TOPSOILING EQUIPMENT	SCRAPER
	DEPTH REPLACED (INCHES)	6
	BORROW TOPSOIL	YES
	SEEDING METHOD	DRILL
	PLANT TYPES USED FOR REVEGETATION	GRASSES
	PRIMARILY NATIVE GRASSES FOR RANGE	NO
	SOIL AMENDMENTS	NO
	MULCH	YES
	IRRIGATION	NO
	NO OF IRRIGATED GROWING SEASONS	0
	DEDICATED RECLAMATION EQUIPMENT	YES
	SEGRATION OF PROBLEM STRATA	NO

MINE NAME		
D.JOHNSTON	STUDIES UNDERTAKEN AT MINE	REVEGETATION-GRADING METHODS
	SIGNIFICANT ENVIRONMENTAL PROBLEMS	NONE

MINE NAME	PIT NAME		
D.JOHNSTON	BADGER	PIT ORIENTATION	STRIKELINE
		PERCENT OF MINE TONNAGE FROM PIT	30
		MINING METHOD	AREA
		NUMBER OF SEAMS	1
		NUMBER OF OVERBURDEN LIFTS	1
		STRIPPING SUBSYSTEM	SINGLE
		STRIPPING EQUIPMENT	DRAGLINE
		AVERAGE OVERBURDEN DEPTH	60
		AVG DEPTH OF UNCONSOLIDATED MATERIAL	5
		AVERAGE INTERBURDEN DEPTH	0
		POSITION WHEN STRIPPING INTERBURDEN	NOT APPLICABLE
		LGTHX	10000
		PIT WIDTH	140
		DO INCLINES DROP SHARPLY INTO PIT	NO
		DISTANCE BETWEEN INCLINES (FEET)	3400

MINE NAME	PIT NAME		
D.JOHNSTON	SCHOOL	PIT ORIENTATION	STRIKELINE
		PERCENT OF MINE TONNAGE FROM PIT	70
		MINING METHOD	AREA
		NUMBER OF SEAMS	1
		NUMBER OF OVERBURDEN LIFTS	1
		STRIPPING SUBSYSTEM	SINGLE
		STRIPPING EQUIPMENT	DRAGLINE
		AVERAGE OVERBURDEN DEPTH	120
		AVG DEPTH OF UNCONSOLIDATED MATERIAL	5
		AVERAGE INTERBURDEN DEPTH	0
		POSITION WHEN STRIPPING INTERBURDEN	NOT APPLICABLE
		LGTHX	25000
		PIT WIDTH	140
		DO INCLINES DROP SHARPLY INTO PIT	NO
		DISTANCE BETWEEN INCLINES (FEET)	3400

MINE NAME	PIT NAME	EQUIPMENT TYPE	MODEL	NO OF UNITS	CAPACITY (CU YD)	BOOM LENGTH (FEET)
D.JOHNSTON	BADGER	DRAGLINE	P752	1	39	261
	SCHOOL	DRAGLINE	P752	1	39	261

MINE NAME		
FMC MINE	STATE	WYOMING
	COUNTY	LINCOLN
	COMPANY	FMC CORP
	1975 SURFACE COAL TONNAGE	0
	1975 ACRES DISTURBED BY MINING	0
	PROJECTED MAXIMUM ANNUAL TONNAGE	1800000
	FIRST YEAR AT MAXIMUM TONNAGE	1980
	NUMBER OF PITS	1
	MINE OPENING YEAR	1976
	REMAINING MINE LIFE	20
	1975 MINE EMPLOYMENT	0
	STRIP RATIO(CU YD PER TON)	3.3
	SURFACE RIGHTS OWNER(S)	PRIVATE
	MINERAL RIGHTS OWNER(S)	PRIVATE
	AVERAGE ANNUAL PRECIPITATION	10
	TOPOGRAPHY	HILLY
	ALTITUDE	6850
	PREMINING LANDUSE(S)	SHEEP GRAZING-WILDLIFE
	PRODUCTIVITY(ACRES PER AUM)	5.92
	POSTMINING LANDUSE(S)	SHEEP GRAZING-WILDLIFE

MINE NAME		
FMC MINE	SEAM NAME	NO.1
	AVERAGE THICKNESS	50
	SEAM NAME	N
	AVERAGE THICKNESS	0
	TYPE OF COAL	SUBBITUMINOUS
	BTU	9500
	PERCENT SULFUR	0.6
	PERCENT ASH	4.8

MARKET	CHEMICAL COKE
TOTAL NUMBER OF SEAMS SURFACE MINED	1
THICKNESS OF ALL SEAMS SURFACE MINED	50
UNDERGROUND MINING OF THE SAME SEAMS	NO
BLEND COAL TO MEET CONTRACT SPECS.	NO
MINE MOUTH POWER PLANT	NO
ASH DISPOSAL ON MINE SITE	NO
PERCENT DIP OF COAL	36

MINE NAME		
FMC MINE	AQUIFER IN OVERBURDEN OR COAL	YES
	TYPE OF AQUIFER	CONFINED
	STRATA CONTAINING AQUIFER	COAL
	FUNCTION OF AQUIFER STRATA	RECHARGE
	DEPTH TO WATER IN NEARBY WELLS	NO WELLS
	PREMINING WELL YEILD (GAL PER MIN)	0
	USE OF NEARBY WELLS	
	DIVERSION DITCHES TO CONTROL RUNOFF	YES
	STREAM DIVERSION	YES
	PUMP PIT	YES
	SEDIMENT BASINS	YES
	CHEMICAL TREATMENT OF DRAINAGE	NO
	RESTORE CONTOUR	NO
	MAX PERCENT SLOPE ON BOX CUT SPOILS	APPROXIMATE ORIGINAL CONTOUR
	MAX PERCENT SLOPE ON OTHER SPOILS	APPROXIMATE ORIGINAL CONTOUR
	REDUCE LAST-CUT HIGHWALL	PARTIAL BACKFILL
	MAX HEIGHT OF LAST-CUT HIGHWALL	450
	MAX SLOPE ON REDUCED HIGHWALL	NO DATA
	GRADING EQUIPMENT	DOZER

MINE NAME		
FMC MINE	TERRACE SPOIL	NO
	MECHANICAL SPOIL MANIPULATION	YES
	TOPSOIL	YES
	TOPSOIL AND SUBSOIL SEGREGATED	NO
	STOCKPILE TOPSOILING MATERIAL	YES
	EROSION CONTROL ON STOCKPILES	COVER CROP
	TOPSOILING EQUIPMENT	SCRAPER
	DEPTH REPLACED (INCHES)	6
	BORROW TOPSOIL	NO
	SEEDING METHOD	DRILL-BROADCAST
	PLANT TYPES USED FOR REVEGETATION	GRASSES-SHRUBS
	PRIMARILY NATIVE GRASSES FOR RANGE	YES
	SOIL AMENDMENTS	IF NECESSARY
	MULCH	IF NECESSARY
	IRRIGATION	IF FEASIBLE
	NO OF IRRIGATED GROWING SEASONS	0
	DEDICATED RECLAMATION EQUIPMENT	NO
	SEGRATION OF PROBLEM STRATA	NO

MINE NAME		
FMC MINE	STUDIES UNDERTAKEN AT MINE	NONE
	SIGNIFICANT ENVIRONMENTAL PROBLEMS	NONE

MINE NAME	PIT NAME		
FMC MINE	MAIN	PIT ORIENTATION	STRIKELINE
		PERCENT OF MINE TONNAGE FROM PIT	100
		MINING METHOD	OPEN PIT
		NUMBER OF SEAMS	1
		NUMBER OF OVERBURDEN LIFTS	5
		STRIPPING SUBSYSTEM	DUAL
		STRIPPING EQUIPMENT	SHOVEL-TRUCK-SCRAPER
		AVERAGE OVERBURDEN DEPTH	180
		AVG DEPTH OF UNCONSOLIDATED MATERIAL	0
		AVERAGE INTERBURDEN DEPTH	0
		POSITION WHEN STRIPPING INTERBURDEN	NOT APPLICABLE
		LGTHX	1400
		PIT WIDTH	120
		DO INCLINES DROP SHARPLY INTO PIT	NOT APPLICABLE
		DISTANCE BETWEEN INCLINES (FEET)	0

MINE NAME	PIT NAME	EQUIPMENT TYPE	MODEL	NO OF UNITS	CAPACITY (CU YD)	BOOM LENGTH (FEET)
FMC MINE	MAIN	LOADING SHOVEL	N	0	0	0
		TRUCK	N	0	0	0
		SCRAPER	N	0	0	0

MINE NAME		
JACOBS RANCH	STATE	WYOMING
	COUNTY	CAMPBELL
	COMPANY	KERR MCGEE
	1975 SURFACE COAL TONNAGE	0
	1975 ACRES DISTURBED BY MINING	0
	PROJECTED MAXIMUM ANNUAL TONNAGE	14000000
	FIRST YEAR AT MAXIMUM TONNAGE	1983
	NUMBER OF PITS	1
	MINE OPENING YEAR	1977
	REMAINING MINE LIFE	22
	1975 MINE EMPLOYMENT	0
	STRIP RATIO(CU YD PER TON)	2.1
	SURFACE RIGHTS OWNER(S)	PRIVATE-FEDERAL
	MINERAL RIGHTS OWNER(S)	PRIVATE-FEDERAL
	AVERAGE ANNUAL PRECIPITATION	14
	TOPOGRAPHY	ROLLING
	ALTIDUDE	4770
	PREMINING LANDUSE(S)	CATTLE GRAZING
	PRODUCTIVITY(ACRES PER AUM)	4.00
	POSTMINING LANDUSE(S)	CATTLE GRAZING

MINE NAME		
JACOBS RANCH	SEAM NAME	U.WYODAK
	AVERAGE THICKNESS	8
	SEAM NAME	L.WYODAK1
	AVERAGE THICKNESS	43
	TYPE OF COAL	SUBBITUMINOUS
	BTU	8525
	PERCENT SULFUR	.5
	PERCENT ASH	5.8

	MARKET	ELECTRIC UTILITY
	TOTAL NUMBER OF SEAMS SURFACE MINED	3
	THICKNESS OF ALL SEAMS SURFACE MINED	57
	UNDERGROUND MINING OF THE SAME SEAMS	NO
	BLEND COAL TO MEET CONTRACT SPECS.	YES
	MINE MOUTH POWER PLANT	NO
	ASH DISPOSAL ON MINE SITE	NO
	PERCENT DIP OF COAL	3
MINE NAME		
JACOBS RANCH	AQUIFER IN OVERBURDEN OR COAL	YES
	TYPE OF AQUIFER	CONFINED
	STRATA CONTAINING AQUIFER	COAL
	FUNCTION OF AQUIFER STRATA	DISCHARGE
	DEPTH TO WATER IN NEARBY WELLS	NO DATA
	PREMINING WELL YEILD (GAL PER MIN)	0
	USE OF NEARBY WELLS	LIVESTOCK
	DIVERSION DITCHES TO CONTROL RUNOFF	YES
	STREAM DIVERSION	YES
	PUMP PIT	YES
	SEDIMENT BASINS	YES
	CHEMICAL TREATMENT OF DRAINAGE	NO
	RESTORE CONTOUR	YES
	MAX PERCENT SLOPE ON BOX CUT SPOILS	33
	MAX PERCENT SLOPE ON OTHER SPOILS	33
	REDUCE LAST-CUT HIGHWALL	YES
	MAX HEIGHT OF LAST-CUT HIGHWALL	170
	MAX SLOPE ON REDUCED HIGHWALL	APPROXIMATE ORIGINAL CONTOUR
	GRADING EQUIPMENT	DOZER

MINE NAME		
JACOBS RANCH	TERRACE SPOIL	IF NECESSARY
	MECHANICAL SPOIL MANIPULATION	IF NECESSARY
	TOPSOIL	YES
	TOPSOIL AND SUBSOIL SEGREGATED	YES
	STOCKPILE TOPSOILING MATERIAL	IF NECESSARY
	EROSION CONTROL ON STOCKPILES	IF NECESSARY
	TOPSOILING EQUIPMENT	SCRAPER
	DEPTH REPLACED (INCHES)	6
	BORROW TOPSOIL	NO
	SEEDING METHOD	DRILL
	PLANT TYPES USED FOR REVEGETATION	GRASSES
	PRIMARILY NATIVE GRASSES FOR RANGE	YES
	SOIL AMENDMENTS	IF NECESSARY
	MULCH	IF NECESSARY
	IRRIGATION	NO
	NO OF IRRIGATED GROWING SEASONS	0
	DEDICATED RECLAMATION EQUIPMENT	YES
	SEGRATION OF PROBLEM STRATA	IF NECESSARY

MINE NAME		
JACOBS RANCH	STUDIES UNDERTAKEN AT MINE	REVEGETATION-HYDROLOGY-OVERBURDEN
	SIGNIFICANT ENVIRONMENTAL PROBLEMS	SALINE SOILS
		CLAYEY SOILS

MINE NAME	PIT NAME		
JACOBS RANCH	MAIN	PIT ORIENTATION	STRIKELINE
		PERCENT OF MINE TONNAGE FROM PIT	100
		MINING METHOD	MODIFIED OPEN PIT
		NUMBER OF SEAMS	3
		NUMBER OF OVERBURDEN LIFTS	3
		STRIPPING SUBSYSTEM	DUAL
		STRIPPING EQUIPMENT	SHOVEL-TRUCK
		AVERAGE OVERBURDEN DEPTH	110
		AVG DEPTH OF UNCONSOLIDATED MATERIAL	10
		AVERAGE INTERBURDEN DEPTH	20
		POSITION WHEN STRIPPING INTERBURDEN	NOT APPLICABLE
		LGTHX	1200
		PIT WIDTH	300
		DO INCLINES DROP SHARPLY INTO PIT	NOT APPLICABLE
		DISTANCE BETWEEN INCLINES (FEET)	0

MINE NAME	PIT NAME	EQUIPMENT TYPE	MODEL	NO OF UNITS	CAPACITY (CU YD)	BOOM LENGTH (FEET)
JACOBS RANCH	MAIN	LOADING SHOVEL	N	0	21	0
		TRUCK	N	0	170	0

MINE NAME		
JIM BRIDGER	STATE	WYOMING
	COUNTY	SWEETWATER
	COMPANY	BRIDGER COAL
	1975 SURFACE COAL TONNAGE	1862125
	1975 ACRES DISTURBED BY MINING	113
	PROJECTED MAXIMUM ANNUAL TONNAGE	7500000
	FIRST YEAR AT MAXIMUM TONNAGE	1980
	NUMBER OF PITS	1
	MINE OPENING YEAR	1974
	REMAINING MINE LIFE	30
	1975 MINE EMPLOYMENT	22
	STRIP RATIO(CU YD PER TON)	4.9
	SURFACE RIGHTS OWNER(S)	PRIVATE-FEDERAL-STATE
	MINERAL RIGHTS OWNER(S)	PRIVATE-FEDERAL-STATE
	AVERAGE ANNUAL PRECIPITATION	8
	TOPOGRAPHY	ROLLING
	ALTIDUDE	6300
	PREMINING LANDUSE(S)	SHEEP GRAZING
	PRODUCTIVITY(ACRES PER AUM)	8.00
	POSTMINING LANDUSE(S)	SHEEP GRAZING

MINE NAME		
JIM BRIDGER	SEAM NAME	DEADMAN
	AVERAGE THICKNESS	28
	SEAM NAME	N
	AVERAGE THICKNESS	0
	TYPE OF COAL	SUBBITUMINOUS
	BTU	9350
	PERCENT SULFUR	.5
	PERCENT ASH	10.0

MARKET	ELECTRIC UTILITY
TOTAL NUMBER OF SEAMS SURFACE MINED	1
THICKNESS OF ALL SEAMS SURFACE MINED	28
UNDERGROUND MINING OF THE SAME SEAMS	NO
BLEND COAL TO MEET CONTRACT SPECS.	NO
MINE MOUTH POWER PLANT	YES
ASH DISPOSAL ON MINE SITE	MINED OUT PITS
PERCENT DIP OF COAL	4

MINE NAME		
JIM BRIDGER	AQUIFER IN OVERBURDEN OR COAL	YES
	TYPE OF AQUIFER	CONFINED
	STRATA CONTAINING AQUIFER	COAL
	FUNCTION OF AQUIFER STRATA	RECHARGE
	DEPTH TO WATER IN NEARBY WELLS	NO WELLS
	PREMINING WELL YEILD (GAL PER MIN)	0
	USE OF NEARBY WELLS	
	DIVERSION DITCHES TO CONTROL RUNOFF	NO
	STREAM DIVERSION	NO
	PUMP PIT	YES
	SEDIMENT BASINS	YES
	CHEMICAL TREATMENT OF DRAINAGE	NO
	RESTORE CONTOUR	YES
	MAX PERCENT SLOPE ON BOX CUT SPOILS	33
	MAX PERCENT SLOPE ON OTHER SPOILS	33
	REDUCE LAST-CUT HIGHWALL	YES
	MAX HEIGHT OF LAST-CUT HIGHWALL	200
	MAX SLOPE ON REDUCED HIGHWALL	33
	GRADING EQUIPMENT	DOZER-DRAGLINE

MINE NAME		
JIM BRIDGER	TERRACE SPOIL	NO
	MECHANICAL SPOIL MANIPULATION	YES
	TOPSOIL	YES
	TOPSOIL AND SUBSOIL SEGREGATED	NO
	STOCKPILE TOPSOILING MATERIAL	IF NECESSARY
	EROSION CONTROL ON STOCKPILES	NO
	TOPSOILING EQUIPMENT	SCRAPER
	DEPTH REPLACED (INCHES)	6
	BORROW TOPSOIL	NO
	SEEDING METHOD	DRILL
	PLANT TYPES USED FOR REVEGETATION	GRASSES
	PRIMARILY NATIVE GRASSES FOR RANGE	YES
	SOIL AMENDMENTS	NO
	MULCH	YES
	IRRIGATION	NO
	NO OF IRRIGATED GROWING SEASONS	0
	DEDICATED RECLAMATION EQUIPMENT	NO
	SEGRATION OF PROBLEM STRATA	NO

MINE NAME		
JIM BRIDGER	STUDIES UNDERTAKEN AT MINE	REVEGETATION
	SIGNIFICANT ENVIRONMENTAL PROBLEMS	SHALLOW SOILS
		SALINE SOILS

MINE NAME	PIT NAME		
JIM BRIDGER	MAIN	PIT ORIENTATION	STRIKELINE
		PERCENT OF MINE TONNAGE FROM PIT	100
		MINING METHOD	AREA
		NUMBER OF SEAMS	1
		NUMBER OF OVERBURDEN LIFTS	1
		STRIPPING SUBSYSTEM	SINGLE
		STRIPPING EQUIPMENT	DRAGLINE
		AVERAGE OVERBURDEN DEPTH	100
		AVG DEPTH OF UNCONSOLIDATED MATERIAL	0
		AVERAGE INTERBURDEN DEPTH	0
		POSITION WHEN STRIPPING INTERBURDEN	NOT APPLICABLE
		LGTHX	25000
		PIT WIDTH	200
		DO INCLINES DROP SHARPLY INTO PIT	NO
		DISTANCE BETWEEN INCLINES (FEET)	0

MINE NAME	PIT NAME	EQUIPMENT TYPE	MODEL	NO OF UNITS	CAPACITY (CU YD)	BOOM LENGTH (FEET)
JIM BRIDGER	MAIN	DRAGLINE	M82CO	1	70	325
		DRAGLINE	F732	1	18	196

MINE NAME		
KEMMERER	STATE	WYOMING
	COUNTY	LINCOLN
	COMPANY	KEMMERER
	1975 SURFACE COAL TONNAGE	2733091
	1975 ACRES DISTURBED BY MINING	115
	PROJECTED MAXIMUM ANNUAL TONNAGE	4500000
	FIRST YEAR AT MAXIMUM TONNAGE	1980
	NUMBER OF PITS	2
	MINE OPENING YEAR	1950
	REMAINING MINE LIFE	55
	1975 MINE EMPLOYMENT	390
	STRIP RATIO(CU YD PER TON)	4.0
	SURFACE RIGHTS OWNER(S)	PRIVATE-FEDERAL-STATE
	MINERAL RIGHTS OWNER(S)	PRIVATE-FEDERAL-STATE
	AVERAGE ANNUAL PRECIPITATION	10
	TOPOGRAPHY	HILLY
	ALTIDUDE	7200
	PREMINING LANDUSE(S)	CATTLE AND SHEEP GRAZING-MINING
	PRODUCTIVITY(ACRES PER AUM)	5.92
	POSTMINING LANDUSE(S)	CATTLE AND SHEEP GRAZING

MINE NAME		
KEMMERER	SEAM NAME	NO.1
	AVERAGE THICKNESS	93
	SEAM NAME	NO.2
	AVERAGE THICKNESS	30
	TYPE OF COAL	SUBBITUMINOUS
	BTU	8500
	PERCENT SULFUR	.5
	PERCENT ASH	6.0

MARKET	ELECTRIC UTILITY
TOTAL NUMBER OF SEAMS SURFACE MINED	30
THICKNESS OF ALL SEAMS SURFACE MINED	300
UNDERGROUND MINING OF THE SAME SEAMS	YES
BLEND COAL TO MEET CONTRACT SPECS.	YES
MINE MOUTH POWER PLANT	YES
ASH DISPOSAL ON MINE SITE	NO
PERCENT DIP OF COAL	33

MINE NAME		
KEMMERER	AQUIFER IN OVERBURDEN OR COAL	NO
	TYPE OF AQUIFER	NOT APPLICABLE
	STRATA CONTAINING AQUIFER	NOT APPLICABLE
	FUNCTION OF AQUIFER STRATA	NOT APPLICABLE
	DEPTH TO WATER IN NEARBY WELLS	NO WELLS
	PREMINING WELL YEILD (GAL PER MIN)	0
	USE OF NEARBY WELLS	
	DIVERSION DITCHES TO CONTROL RUNOFF	YES
	STREAM DIVERSION	NO
	PUMP PIT	YES
	SEDIMENT BASINS	YES
	CHEMICAL TREATMENT OF DRAINAGE	NO
	RESTORE CONTOUR	NO
	MAX PERCENT SLOPE ON BOX CUT SPOILS	33
	MAX PERCENT SLOPE ON OTHER SPOILS	33
	REDUCE LAST-CUT HIGHWALL	NO
	MAX HEIGHT OF LAST-CUT HIGHWALL	1005
	MAX SLOPE ON REDUCED HIGHWALL	200
	GRADING EQUIPMENT	DOZER

MINE NAME		
KEMMERER	TERRACE SPOIL	NO
	MECHANICAL SPOIL MANIPULATION	NO
	TOPSOIL	YES
	TOPSOIL AND SUBSOIL SEGREGATED	NO
	STOCKPILE TOPSOILING MATERIAL	YES
	EROSION CONTROL ON STOCKPILES	NO
	TOPSOILING EQUIPMENT	SCRAPER
	DEPTH REPLACED (INCHES)	4
	BORROW TOPSOIL	NO
	SEEDING METHOD	BROADCAST
	PLANT TYPES USED FOR REVEGETATION	GRASSES-SHRUBS
	PRIMARILY NATIVE GRASSES FOR RANGE	YES
	SOIL AMENDMENTS	NO
	MULCH	YES
	IRRIGATION	YES
	NO OF IRRIGATED GROWING SEASONS	AS NECESSARY
	DEDICATED RECLAMATION EQUIPMENT	NO
	SEGRATION OF PROBLEM STRATA	NO

MINE NAME		
KEMMERER	STUDIES UNDERTAKEN AT MINE	REVEGETATION
	SIGNIFICANT ENVIRONMENTAL PROBLEMS	SHALLOW SOILS

MINE NAME	PIT NAME		
KEMMERER	ELKOL	PIT ORIENTATION	STRIKELINE
		PERCENT OF MINE TONNAGE FROM PIT	37
		MINING METHOD	AREA
		NUMBER OF SEAMS	1
		NUMBER OF OVERBURDEN LIFTS	1
		STRIPPING SUBSYSTEM	SINGLE
		STRIPPING EQUIPMENT	DRAGLINE
		AVERAGE OVERBURDEN DEPTH	100
		AVG DEPTH OF UNCONSOLIDATED MATERIAL	0
		AVERAGE INTERBURDEN DEPTH	0
		POSITION WHEN STRIPPING INTERBURDEN	NOT APPLICABLE
		LGTHX	4000
		PIT WIDTH	125
		DO INCLINES DROP SHARPLY INTO PIT	NOT APPLICABLE
		DISTANCE BETWEEN INCLINES (FEET)	0

MINE NAME	PIT NAME		
KEMMERER	SORENSON	PIT ORIENTATION	STRIKELINE
		PERCENT OF MINE TONNAGE FROM PIT	63
		MINING METHOD	OPEN PIT
		NUMBER OF SEAMS	10
		NUMBER OF OVERBURDEN LIFTS	1
		STRIPPING SUBSYSTEM	DUAL
		STRIPPING EQUIPMENT	SCRAPER-LOADER-SHOVEL
		AVERAGE OVERBURDEN DEPTH	95
		AVG DEPTH OF UNCONSOLIDATED MATERIAL	0
		AVERAGE INTERBURDEN DEPTH	125
		POSITION WHEN STRIPPING INTERBURDEN	NOT APPLICABLE
		LGTHX	4500
		PIT WIDTH	345
		DO INCLINES DROP SHARPLY INTO PIT	NOT APPLICABLE
		DISTANCE BETWEEN INCLINES (FEET)	0

MINE NAME	PIT NAME	EQUIPMENT TYPE	MODEL	NO OF UNITS	CAPACITY (CU YD)	BOOM LENGTH (FEET)
KEMMERER	ELKOL	DRAGLINE	BE480	1	16	180
	SORENSON	LOADING SHOVEL	N	0	16	0
		TRUCK	WABCC	0	85	0
		SCRAPER	CAT621	0	15	0
		LOADER	CAT992	0	12	0

MINE NAME		
MEDICINE BOW	STATE	WYOMING
	COUNTY	CARBON
	COMPANY	MEDICINE BOW
	1975 SURFACE COAL TONNAGE	2506379
	1975 ACRES DISTURBED BY MINING	150
	PROJECTED MAXIMUM ANNUAL TONNAGE	3600000
	FIRST YEAR AT MAXIMUM TONNAGE	1980
	NUMBER OF PITS	1
	MINE OPENING YEAR	1975
	REMAINING MINE LIFE	15
	1975 MINE EMPLOYMENT	132
	STRIP RATIO(CU YD PER TON)	6.7
	SURFACE RIGHTS OWNER(S)	PRIVATE-FEDERAL
	MINERAL RIGHTS OWNER(S)	PRIVATE-FEDERAL
	AVERAGE ANNUAL PRECIPITATION	12
	TOPOGRAPHY	ROLLING
	ALTITUDE	6450
	PREMINING LANDUSE(S)	CATTLE AND SHEEP GRAZING
	PRODUCTIVITY(ACRES PER AUM)	6.00
	POSTMINING LANDUSE(S)	CATTLE AND SHEEP GRAZING

MINE NAME		
MEDICINE BOW	SEAM NAME	BED#65
	AVERAGE THICKNESS	7
	SEAM NAME	BED#64
	AVERAGE THICKNESS	20
	TYPE OF COAL	SUBBITUMINOUS
	BTU	10200
	PERCENT SULFUR	0.5
	PERCENT ASH	7.5

MARKET	ELECTRIC UTILITY
TOTAL NUMBER OF SEAMS SURFACE MINED	2
THICKNESS OF ALL SEAMS SURFACE MINED	27
UNDERGROUND MINING OF THE SAME SEAMS	YES
BLEND COAL TO MEET CONTRACT SPECS.	YES
MINE MOUTH POWER PLANT	NO
ASH DISPOSAL ON MINE SITE	NO
PERCENT DIP OF COAL	15

MINE NAME		
MEDICINE BOW	AQUIFER IN OVERBURDEN OR COAL	YES
	TYPE OF AQUIFER	CONFINED
	STRATA CONTAINING AQUIFER	COAL
	FUNCTION OF AQUIFER STRATA	RECHARGE
	DEPTH TO WATER IN NEARBY WELLS	BELOW THE COAL
	PREMINING WELL YEILD (GAL PER MIN)	15
	USE OF NEARBY WELLS	MINE
	DIVERSION DITCHES TO CONTROL RUNOFF	YES
	STREAM DIVERSION	NO
	PUMP PIT	YES
	SEDIMENT BASINS	YES
	CHEMICAL TREATMENT OF DRAINAGE	NO
	RESTORE CONTOUR	YES
	MAX PERCENT SLOPE ON BOX CUT SPOILS	33
	MAX PERCENT SLOPE ON OTHER SPOILS	33
	REDUCE LAST-CUT HIGHWALL	YES
	MAX HEIGHT OF LAST-CUT HIGHWALL	200
	MAX SLOPE ON REDUCED HIGHWALL	33
	GRADING EQUIPMENT	DOZER

MINE NAME		
MEDICINE BOW	TERRACE SPOIL	YES
	MECHANICAL SPOIL MANIPULATION	YES
	TOPSOIL	YES
	TOPSOIL AND SUBSOIL SEGREGATED	NO
	STOCKPILE TOPSOILING MATERIAL	YES
	EROSION CONTROL ON STOCKPILES	IF NECESSARY
	TOPSOILING EQUIPMENT	SCRAPER
	DEPTH REPLACED (INCHES)	6
	BORROW TOPSOIL	NO
	SEEDING METHOD	DRILL-BROADCAST
	PLANT TYPES USED FOR REVEGETATION	GRASSES-LEGUMES
	PRIMARILY NATIVE GRASSES FOR RANGE	YES
	SOIL AMENDMENTS	NO
	MULCH	NO
	IRRIGATION	NO
	NO OF IRRIGATED GROWING SEASONS	0
	DEDICATED RECLAMATION EQUIPMENT	YES
	SEGRATION OF PROBLEM STRATA	YES

MINE NAME		
MEDICINE BOW	STUDIES UNDERTAKEN AT MINE	REVEGETATION
	SIGNIFICANT ENVIRONMENTAL PROBLEMS	SALINE SOILS
		PARTING

MINE NAME	PIT NAME		
MEDICINE BOW	MAIN	PIT ORIENTATION	STRIKELINE
		PERCENT OF MINE TONNAGE FROM PIT	100
		MINING METHOD	AREA
		NUMBER OF SEAMS	2
		NUMBER OF OVERBURDEN LIFTS	1
		STRIPPING SUBSYSTEM	SINGLE
		STRIPPING EQUIPMENT	DRAGLINE
		AVERAGE OVERBURDEN DEPTH	150
		AVG DEPTH OF UNCONSOLIDATED MATERIAL	3
		AVERAGE INTERBURDEN DEPTH	10
		POSITION WHEN STRIPPING INTERBURDEN	EXTENDED BENCH
		LGTHX	3000
		PIT WIDTH	200
		DO INCLINES DROP SHARPLY INTO PIT	NO
		DISTANCE BETWEEN INCLINES (FEET)	0

MINE NAME	PIT NAME	EQUIPMENT TYPE	MODEL	NO OF UNITS	CAPACITY (CU YD)	BOOM LENGTH (FEET)
MEDICINE BOW	MAIN	DRAGLINE	BE1570	1	78	310

MINE NAME		
N RAWHIDE	STATE	WYOMING
	COUNTY	CAMPBELL
	COMPANY	CARTER OIL
	1975 SURFACE COAL TONNAGE	0
	1975 ACRES DISTURBED BY MINING	0
	PROJECTED MAXIMUM ANNUAL TONNAGE	8500000
	FIRST YEAR AT MAXIMUM TONNAGE	1980
	NUMBER OF PITS	1
	MINE OPENING YEAR	1976
	REMAINING MINE LIFE	30
	1975 MINE EMPLOYMENT	0
	STRIP RATIO(CU YD PER TON)	1.0
	SURFACE RIGHTS OWNER(S)	PRIVATE-FEDERAL
	MINERAL RIGHTS OWNER(S)	PRIVATE-FEDERAL
	AVERAGE ANNUAL PRECIPITATION	14
	TOPOGRAPHY	ROLLING
	ALTIDUDE	4250
	PREMINING LANDUSE(S)	CROPLAND-CATTLE GRAZING
	PRODUCTIVITY(ACRES PER AUM)	4.00
	POSTMINING LANDUSE(S)	CATTLE GRAZING

MINE NAME		
N RAWHIDE	SEAM NAME	WYODAK UB
	AVERAGE THICKNESS	26
	SEAM NAME	WYODAK LB
	AVERAGE THICKNESS	82
	TYPE OF COAL	SUBBITUMINOUS
	BTU	8050
	PERCENT SULFUR	.4
	PERCENT ASH	6.0

MARKET	ELECTRIC UTILITY
TOTAL NUMBER OF SEAMS SURFACE MINED	2
THICKNESS OF ALL SEAMS SURFACE MINED	108
UNDERGROUND MINING OF THE SAME SEAMS	NO
BLEND COAL TO MEET CONTRACT SPECS.	YES
MINE MOUTH POWER PLANT	NO
ASH DISPOSAL ON MINE SITE	NO
PERCENT DIP OF COAL	3

MINE NAME		
N RAWHIDE	AQUIFER IN OVERBURDEN OR COAL	YES
	TYPE OF AQUIFER	CONFINED
	STRATA CONTAINING AQUIFER	COAL
	FUNCTION OF AQUIFER STRATA	RECHARGE-DISCHARGE
	DEPTH TO WATER IN NEARBY WELLS	NO DATA
	PREMINING WELL YEILD (GAL PER MIN)	0
	USE OF NEARBY WELLS	LIVESTOCK
	DIVERSION DITCHES TO CONTROL RUNOFF	YES
	STREAM DIVERSION	YES
	PUMP PIT	YES
	SEDIMENT BASINS	YES
	CHEMICAL TREATMENT OF DRAINAGE	NO
	RESTORE CONTOUR	YES
	MAX PERCENT SLOPE ON BOX CUT SPOILS	35
	MAX PERCENT SLOPE ON OTHER SPOILS	35
	REDUCE LAST-CUT HIGHWALL	YES
	MAX HEIGHT OF LAST-CUT HIGHWALL	240
	MAX SLOPE ON REDUCED HIGHWALL	33
	GRADING EQUIPMENT	DOZER

MINE NAME		
N RAWHIDE	TERRACE SPOIL	IF NECESSARY
	MECHANICAL SPOIL MANIPULATION	IF NECESSARY
	TOPSOIL	YES
	TOPSOIL AND SUBSOIL SEGREGATED	YES
	STOCKPILE TOPSOILING MATERIAL	IF NECESSARY
	EROSION CONTROL ON STOCKPILES	IF NECESSARY
	TOPSOILING EQUIPMENT	SCRAPER
	DEPTH REPLACED (INCHES)	9
	BORROW TOPSOIL	NO
	SEEDING METHOD	DRILL
	PLANT TYPES USED FOR REVEGETATION	GRASSES
	PRIMARILY NATIVE GRASSES FOR RANGE	NO
	SOIL AMENDMENTS	IF NECESSARY
	MULCH	IF NECESSARY
	IRRIGATION	NO
	NO OF IRRIGATED GROWING SEASONS	0
	DEDICATED RECLAMATION EQUIPMENT	YES
	SEGRATION OF PROBLEM STRATA	YES

MINE NAME		
N RAWHIDE	STUDIES UNDERTAKEN AT MINE	REVEGETATION-HYDROLOGY-OVERBURDEN
	SIGNIFICANT ENVIRONMENTAL PROBLEMS	CLAYEY SOILS
		SALINE SOILS
		PARTING

MINE NAME	PIT NAME		
N RAWHIDE	MAIN	PIT ORIENTATION	STRIKELINE
		PERCENT OF MINE TONNAGE FROM PIT	100
		MINING METHOD	MODIFIED OPEN PIT
		NUMBER OF SEAMS	2
		NUMBER OF OVERBURDEN LIFTS	3
		STRIPPING SUBSYSTEM	DUAL
		STRIPPING EQUIPMENT	SHOVEL-TRUCK-DRAGLINE
		AVERAGE OVERBURDEN DEPTH	118
		AVG DEPTH OF UNCONSOLIDATED MATERIAL	118
		AVERAGE INTERBURDEN DEPTH	6
		POSITION WHEN STRIPPING INTERBURDEN	COAL
		LGTHX	3000
		PIT WIDTH	200
		DO INCLINES DROP SHARPLY INTO PIT	NO
		DISTANCE BETWEEN INCLINES (FEET)	3000

MINE NAME	PIT NAME	EQUIPMENT TYPE	MODEL	NO OF UNITS	CAPACITY (CU YD)	BOOM LENGTH (FEET)
N RAWHIDE	MAIN	LOADING SHOVEL	N	0	20	0
		TRUCK	N	0	175	0
		DRAGLINE	M195M	1	15	150

MINE NAME		
RIMROCK	STATE	WYOMING
	COUNTY	CARBON
	COMPANY	RESOURCE EXPLORATION
	1975 SURFACE COAL TONNAGE	669400
	1975 ACRES DISTURBED BY MINING	75
	PROJECTED MAXIMUM ANNUAL TONNAGE	670000
	FIRST YEAR AT MAXIMUM TONNAGE	1975
	NUMBER OF PITS	3
	MINE OPENING YEAR	1971
	REMAINING MINE LIFE	3
	1975 MINE EMPLOYMENT	77
	STRIP RATIO(CU YD PER TON)	8.0
	SURFACE RIGHTS OWNER(S)	PRIVATE-FEDERAL
	MINERAL RIGHTS OWNER(S)	PRIVATE-FEDERAL
	AVERAGE ANNUAL PRECIPITATION	9
	TOPOGRAPHY	ROLLING
	ALTIDUDE	6800
	PREMINING LANDUSE(S)	SHEEP GRAZING
	PRODUCTIVITY(ACRES PER AUM)	6.67
	POSTMINING LANDUSE(S)	SHEEP GRAZING

MINE NAME		
RIMROCK.	SEAM NAME	BROOKS
	AVERAGE THICKNESS	8
	SEAM NAME	N
	AVERAGE THICKNESS	7
	TYPE OF COAL	SUBBITUMINOUS
	BTU	10300
	PERCENT SULFUR	.6
	PERCENT ASH	7.0

MARKET	ELECTRIC UTILITY
TOTAL NUMBER OF SEAMS SURFACE MINED	1
THICKNESS OF ALL SEAMS SURFACE MINED	7
UNDERGROUND MINING OF THE SAME SEAMS	NO
BLEND COAL TO MEET CONTRACT SPECS.	NO
MINE MOUTH POWER PLANT	NO
ASH DISPOSAL ON MINE SITE	NO
PERCENT DIP OF COAL	11

MINE NAME		
RIMROCK	AQUIFER IN OVERBURDEN OR COAL	YES
	TYPE OF AQUIFER	CONFINED
	STRATA CONTAINING AQUIFER	COAL
	FUNCTION OF AQUIFER STRATA	RECHARGE
	DEPTH TO WATER IN NEARBY WELLS	IN THE COAL
	PREMINING WELL YEILD (GAL PER MIN)	0
	USE OF NEARBY WELLS	LIVESTOCK
	DIVERSION DITCHES TO CONTROL RUNOFF	YES
	STREAM DIVERSION	NO
	PUMP PIT	NO
	SEDIMENT BASINS	YES
	CHEMICAL TREATMENT OF DRAINAGE	NO
	RESTORE CONTOUR	YES
	MAX PERCENT SLOPE ON BOX CUT SPOILS	APPROXIMATE ORIGINAL CONTOUR
	MAX PERCENT SLOPE ON OTHER SPOILS	APPROXIMATE ORIGINAL CONTOUR
	REDUCE LAST-CUT HIGHWALL	YES
	MAX HEIGHT OF LAST-CUT HIGHWALL	70
	MAX SLOPE ON REDUCED HIGHWALL	APPROXIMATE ORIGINAL CONTOUR
	GRADING EQUIPMENT	DOZER

MINE NAME		
RIMROCK	TERRACE SPOIL	NO
	MECHANICAL SPOIL MANIPULATION	NO
	TOPSOIL	YES
	TOPSOIL AND SUBSOIL SEGREGATED	NO
	STOCKPILE TOPSOILING MATERIAL	IF NECESSARY
	EROSION CONTROL ON STOCKPILES	NO
	TOPSOILING EQUIPMENT	SCRAPER
	DEPTH REPLACED (INCHES)	6
	BORROW TOPSOIL	NO
	SEEDING METHOD	DRILL
	PLANT TYPES USED FOR REVEGETATION	GRASSES
	PRIMARILY NATIVE GRASSES FOR RANGE	YES
	SOIL AMENDMENTS	NO
	MULCH	NO
	IRRIGATION	NO
	NO OF IRRIGATED GROWING SEASONS	0
	DEDICATED RECLAMATION EQUIPMENT	NO
	SEGRATION OF PROBLEM STRATA	NO

MINE NAME		
RIMROCK	STUDIES UNDERTAKEN AT MINE	NONE
	SIGNIFICANT ENVIRONMENTAL PROBLEMS	NONE

MINE NAME	PIT NAME		
RIMROCK	PIT 2	PIT ORIENTATION	STRIKELINE
		PERCENT OF MINE TONNAGE FROM PIT	35
		MINING METHOD	AREA
		NUMBER OF SEAMS	1
		NUMBER OF OVERBURDEN LIFTS	1
		STRIPPING SUBSYSTEM	SINGLE
		STRIPPING EQUIPMENT	DRAGLINE
		AVERAGE OVERBURDEN DEPTH	60
		AVG DEPTH OF UNCONSOLIDATED MATERIAL	0
		AVERAGE INTERBURDEN DEPTH	0
		POSITION WHEN STRIPPING INTERBURDEN	NOT APPLICABLE
		LGTHX	1300
		PIT WIDTH	70
		DO INCLINES DROP SHARPLY INTO PIT	NO
		DISTANCE BETWEEN INCLINES (FEET)	0

MINE NAME	PIT NAME		
RIMROCK	PIT 3	PIT ORIENTATION	STRIKELINE
		PERCENT OF MINE TONNAGE FROM PIT	35
		MINING METHOD	AREA
		NUMBER OF SEAMS	1
		NUMBER OF OVERBURDEN LIFTS	1
		STRIPPING SUBSYSTEM	SINGLE
		STRIPPING EQUIPMENT	DRAGLINE
		AVERAGE OVERBURDEN DEPTH	60
		AVG DEPTH OF UNCONSOLIDATED MATERIAL	0
		AVERAGE INTERBURDEN DEPTH	0
		POSITION WHEN STRIPPING INTERBURDEN	NOT APPLICABLE
		LGTHX	1300
		PIT WIDTH	70
		DO INCLINES DROP SHARPLY INTO PIT	NO
		DISTANCE BETWEEN INCLINES (FEET)	0

MINE NAME	PIT NAME		
RIMROCK	SCRAPER	PIT ORIENTATION	STRIKELINE
		PERCENT OF MINE TONNAGE FROM PIT	30
		MINING METHOD	AREA
		NUMBER OF SEAMS	1
		NUMBER OF OVERBURDEN LIFTS	1
		STRIPPING SUBSYSTEM	DUAL
		STRIPPING EQUIPMENT	SCRAPER-DOZER
		AVERAGE OVERBURDEN DEPTH	30
		AVG DEPTH OF UNCONSOLIDATED MATERIAL	30
		AVERAGE INTERBURDEN DEPTH	0
		POSITION WHEN STRIPPING INTERBURDEN	NOT APPLICABLE
		LGTHX	1000
		PIT WIDTH	400
		DO INCLINES DROP SHARPLY INTO PIT	NO
		DISTANCE BETWEEN INCLINES (FEET)	0

MINE NAME	PIT NAME	EQUIPMENT TYPE	MODEL	NO OF UNITS	CAPACITY (CU YD)	BOOM LENGTH (FEET)
RIMROCK	PIT 2	DRAGLINE	M4600	1	8	150
	PIT 3	DRAGLINE	M4600	1	8	150
	SCRAPER	SCRAPER	CAT637	6	30	0
		DOZER	CATD9	4	0	0
		SCRAPER	CAT631	4	0	100

MINE NAME		
ROSEBUD	STATE	WYOMING
	COUNTY	CARBON
	COMPANY	ROSEBUD COAL
	1975 SURFACE COAL TONNAGE	1763431
	1975 ACRES DISTURBED BY MINING	200
	PROJECTED MAXIMUM ANNUAL TONNAGE	1700000
	FIRST YEAR AT MAXIMUM TONNAGE	1975
	NUMBER OF PITS	2
	MINE OPENING YEAR	1961
	REMAINING MINE LIFE	15
	1975 MINE EMPLOYMENT	120
	STRIP RATIO(CU YD PER TON)	7.0
	SURFACE RIGHTS OWNER(S)	PRIVATE-FEDERAL
	MINERAL RIGHTS OWNER(S)	PRIVATE-FEDERAL
	AVERAGE ANNUAL PRECIPITATION	10
	TOPOGRAPHY	HILLY
	ALTIDUDE	7100
	PREMINING LANDUSE(S)	SHEEP GRAZING
	PRODUCTIVITY(ACRES PER AUM)	6.67
	POSTMINING LANDUSE(S)	SHEEP GRAZING

MINE NAME		
ROSEBUD	SEAM NAME	BED#82
	AVERAGE THICKNESS	10
	SEAM NAME	BED#80
	AVERAGE THICKNESS	20
	TYPE OF COAL	SUBBITUMINOUS
	BTU	10300
	PERCENT SULFUR	1.0
	PERCENT ASH	6.7

MARKET	ELECTRIC UTILITY
TOTAL NUMBER OF SEAMS SURFACE MINED	3
THICKNESS OF ALL SEAMS SURFACE MINED	35
UNDERGROUND MINING OF THE SAME SEAMS	NO
BLEND COAL TO MEET CONTRACT SPECS.	YES
MINE MOUTH POWER PLANT	NO
ASH DISPOSAL ON MINE SITE	NO
PERCENT DIP OF COAL	12

MINE NAME		
ROSEBUD	AQUIFER IN OVERBURDEN OR COAL	YES
	TYPE OF AQUIFER	CONFINED
	STRATA CONTAINING AQUIFER	COAL
	FUNCTION OF AQUIFER STRATA	RECHARGE
	DEPTH TO WATER IN NEARBY WELLS	IN THE COAL
	PREMINING WELL YEILD (GAL PER MIN)	0
	USE OF NEARBY WELLS	LIVESTOCK
	DIVERSION DITCHES TO CONTROL RUNOFF	NO
	STREAM DIVERSION	NO
	PUMP PIT	YES
	SEDIMENT BASINS	NO
	CHEMICAL TREATMENT OF DRAINAGE	NO
	RESTORE CONTOUR	YES
	MAX PERCENT SLOPE ON BOX CUT SPOILS	20
	MAX PERCENT SLOPE ON OTHER SPOILS	20
	REDUCE LAST-CUT HIGHWALL	YES
	MAX HEIGHT OF LAST-CUT HIGHWALL	200
	MAX SLOPE ON REDUCED HIGHWALL	APPROXIMATE ORIGINAL CONTOUR
	GRADING EQUIPMENT	DOZER

MINE NAME		
ROSEBUD	TERRACE SPOIL	NO
	MECHANICAL SPOIL MANIPULATION	NO
	TOPSOIL	YES
	TOPSOIL AND SUBSOIL SEGREGATED	NO
	STOCKPILE TOPSOILING MATERIAL	IF NECESSARY
	EROSION CONTROL ON STOCKPILES	NO
	TOPSOILING EQUIPMENT	SCRAPER
	DEPTH REPLACED (INCHES)	4
	BORROW TOPSOIL	NO
	SEEDING METHOD	DRILL
	PLANT TYPES USED FOR REVEGETATION	GRASSES
	PRIMARILY NATIVE GRASSES FOR RANGE	YES
	SOIL AMENDMENTS	FERTILIZER
	MULCH	NO
	IRRIGATION	YES
	NO OF IRRIGATED GROWING SEASONS	3
	DEDICATED RECLAMATION EQUIPMENT	YES
	SEGRATION OF PROBLEM STRATA	NO

MINE NAME		
ROSEBUD	STUDIES UNDERTAKEN AT MINE	NONE
	SIGNIFICANT ENVIRONMENTAL PROBLEMS	SALINE SOILS
		SHALLOW SOILS

MINE NAME	PIT NAME		
ROSEBUD	PIT 4	PIT ORIENTATION	STRIKELINE
		PERCENT OF MINE TONNAGE FROM PIT	60
		MINING METHOD	AREA
		NUMBER OF SEAMS	1
		NUMBER OF OVERBURDEN LIFTS	1
		STRIPPING SUBSYSTEM	SINGLE
		STRIPPING EQUIPMENT	DRAGLINE
		AVERAGE OVERBURDEN DEPTH	140
		AVG DEPTH OF UNCONSOLIDATED MATERIAL	0
		AVERAGE INTERBURDEN DEPTH	0
		POSITION WHEN STRIPPING INTERBURDEN	NOT APPLICABLE
		LGTHX	15000
		PIT WIDTH	125
		DO INCLINES DROP SHARPLY INTO PIT	NO
		DISTANCE BETWEEN INCLINES (FEET)	0

MINE NAME	PIT NAME		
ROSEBUD	PIT 5	PIT ORIENTATION	STRIKELINE
		PERCENT OF MINE TONNAGE FROM PIT	40
		MINING METHOD	AREA
		NUMBER OF SEAMS	1
		NUMBER OF OVERBURDEN LIFTS	1
		STRIPPING SUBSYSTEM	SINGLE
		STRIPPING EQUIPMENT	DRAGLINE
		AVERAGE OVERBURDEN DEPTH	140
		AVG DEPTH OF UNCONSOLIDATED MATERIAL	0
		AVERAGE INTERBURDEN DEPTH	0
		POSITION WHEN STRIPPING INTERBURDEN	NOT APPLICABLE
		LGTHX	4000
		PIT WIDTH	125
		DO INCLINES DROP SHARPLY INTO PIT	NO
		DISTANCE BETWEEN INCLINES (FEET)	0

MINE NAME	PIT NAME	EQUIPMENT TYPE	MODEL	NO OF UNITS	CAPACITY (CU YD)	BOOM LENGTH (FEET)
ROSEBUD	PIT 4	DRAGLINE	BE1300	1	45	265
	PIT 5	DRAGLINE	M7400	1	12	200

MINE NAME		
SEMINOE NO1	STATE	WYOMING
	COUNTY	CARBON
	COMPANY	ARCH MINERAL
	1975 SURFACE COAL TONNAGE	2759168
	1975 ACRES DISTURBED BY MINING	450
	PROJECTED MAXIMUM ANNUAL TONNAGE	3000000
	FIRST YEAR AT MAXIMUM TONNAGE	1975
	NUMBER OF PITS	1
	MINE OPENING YEAR	1972
	REMAINING MINE LIFE	10
	1975 MINE EMPLOYMENT	120
	STRIP RATIO(CU YD PER TON)	6.3
	SURFACE RIGHTS OWNER(S)	PRIVATE-FEDERAL
	MINERAL RIGHTS OWNER(S)	PRIVATE-FEDERAL
	AVERAGE ANNUAL PRECIPITATION	11
	TOPOGRAPHY	ROLLING
	ALTIDUDE	6600
	PREMINING LANDUSE(S)	SHEEP GRAZING
	PRODUCTIVITY(ACRES PER AUM)	6.67
	POSTMINING LANDUSE(S)	SHEEP GRAZING

MINE NAME		
SEMINOE NO1	SEAM NAME	BED#24
	AVERAGE THICKNESS	20
	SEAM NAME	BED#25
	AVERAGE THICKNESS	22
	TYPE OF COAL	SUBBITUMINOUS
	BTU	10000
	PERCENT SULFUR	.5
	PERCENT ASH	7.0

MARKET	ELECTRIC UTILITY
TOTAL NUMBER OF SEAMS SURFACE MINED	2
THICKNESS OF ALL SEAMS SURFACE MINED	44
UNDERGROUND MINING OF THE SAME SEAMS	NO
BLEND COAL TO MEET CONTRACT SPECS.	YES
MINE MOUTH POWER PLANT	NO
ASH DISPOSAL ON MINE SITE	NO
PERCENT DIP OF COAL	36

MINE NAME

SEMINOE NO1	AQUIFER IN OVERBURDEN OR COAL	NO
	TYPE OF AQUIFER	NOT APPLICABLE
	STRATA CONTAINING AQUIFER	NOT APPLICABLE
	FUNCTION OF AQUIFER STRATA	NOT APPLICABLE
	DEPTH TO WATER IN NEARBY WELLS	BELOW THE COAL
	PREMINING WELL YEILD (GAL PER MIN)	0
	USE OF NEARBY WELLS	MINE
	DIVERSION DITCHES TO CONTROL RUNOFF	IF NECESSARY
	STREAM DIVERSION	NO
	PUMP PIT	YES
	SEDIMENT BASINS	NO
	CHEMICAL TREATMENT OF DRAINAGE	NO
	RESTORE CONTOUR	YES
	MAX PERCENT SLOPE ON BOX CUT SPOILS	33
	MAX PERCENT SLOPE ON OTHER SPOILS	33
	REDUCE LAST-CUT HIGHWALL	YES
	MAX HEIGHT OF LAST-CUT HIGHWALL	140
	MAX SLOPE ON REDUCED HIGHWALL	33
	GRADING EQUIPMENT	DOZER

MINE NAME		
SEMINOE NO1	TERRACE SPOIL	YES
	MECHANICAL SPOIL MANIPULATION	YES
	TOPSOIL	YES
	TOPSOIL AND SUBSOIL SEGREGATED	NO
	STOCKPILE TOPSOILING MATERIAL	YES
	EROSION CONTROL ON STOCKPILES	IF NECESSARY
	TOPSOILING EQUIPMENT	SCRAPER
	DEPTH REPLACED (INCHES)	6
	BORROW TOPSOIL	NO
	SEEDING METHOD	DRILL-BROADCAST
	PLANT TYPES USED FOR REVEGETATION	GRASSES-LEGUMES-SHRUBS
	PRIMARILY NATIVE GRASSES FOR RANGE	YES
	SOIL AMENDMENTS	NO
	MULCH	NO
	IRRIGATION	NO
	NO OF IRRIGATED GROWING SEASONS	0
	DEDICATED RECLAMATION EQUIPMENT	YES
	SEGRATION OF PROBLEM STRATA	YES

MINE NAME		
SEMINOE NO1	STUDIES UNDERTAKEN AT MINE	REVEGETATION
	SIGNIFICANT ENVIRONMENTAL PROBLEMS	SALINE SOILS
		PARTING
		SHALLOW SOILS

MINE NAME	PIT NAME		
SEMINOE NO1	MAIN	PIT ORIENTATION	STRIKELINE
		PERCENT OF MINE TONNAGE FROM PIT	100
		MINING METHOD	AREA
		NUMBER OF SEAMS	2
		NUMBER OF OVERBURDEN LIFTS	1
		STRIPPING SUBSYSTEM	SINGLE
		STRIPPING EQUIPMENT	DRAGLINE
		AVERAGE OVERBURDEN DEPTH	150
		AVG DEPTH OF UNCONSOLIDATED MATERIAL	3
		AVERAGE INTERBURDEN DEPTH	30
		POSITION WHEN STRIPPING INTERBURDEN	NOT APPLICABLE
		LGTHX	5000
		PIT WIDTH	200
		DO INCLINES DROP SHARPLY INTO PIT	NO
		DISTANCE BETWEEN INCLINES (FEET)	1650

MINE NAME	PIT NAME	EQUIPMENT TYPE	MODEL	NO OF UNITS	CAPACITY (CU YD)	BOOM LENGTH (FEET)
SEMINOE NO1	MAIN	DRAGLINE	MARION	1	62	330
		LOADING SHOVEL	M182M	1	0	0
		TRUCK	EUCR85	2	0	0

MINE NAME		
SEMINOE NO2	STATE	WYOMING
	COUNTY	CARBON
	COMPANY	ARCH MINERAL
	1975 SURFACE COAL TONNAGE	2941432
	1975 ACRES DISTURBED BY MINING	175
	PROJECTED MAXIMUM ANNUAL TONNAGE	3000000
	FIRST YEAR AT MAXIMUM TONNAGE	1975
	NUMBER OF PITS	1
	MINE OPENING YEAR	1973
	REMAINING MINE LIFE	10
	1975 MINE EMPLOYMENT	85
	STRIP RATIO(CU YD PER TON)	4.6
	SURFACE RIGHTS OWNER(S)	PRIVATE-FEDERAL
	MINERAL RIGHTS OWNER(S)	PRIVATE-FEDERAL
	AVERAGE ANNUAL PRECIPITATION	11
	TOPOGRAPHY	ROLLING
	ALTITUDE	7250
	PREMINING LANDUSE(S)	SHEEP GRAZING
	PRODUCTIVITY(ACRES PER AUM)	6.67
	POSTMINING LANDUSE(S)	SHEEP GRAZING

MINE NAME		
SEMINOE NO2	SEAM NAME	HANNA#2
	AVERAGE THICKNESS	33
	SEAM NAME	BED#76
	AVERAGE THICKNESS	11
	TYPE OF COAL	SUBBITUMINOUS
	BTU	11350
	PERCENT SULFUR	.4
	PERCENT ASH	6.0

	MARKET	ELECTRIC UTILITY
	TOTAL NUMBER OF SEAMS SURFACE MINED	3
	THICKNESS OF ALL SEAMS SURFACE MINED	50
	UNDERGROUND MINING OF THE SAME SEAMS	NO
	BLEND COAL TO MEET CONTRACT SPECS.	NO
	MINE MOUTH POWER PLANT	NO
	ASH DISPOSAL ON MINE SITE	NO
	PERCENT DIP OF COAL	36
MINE NAME		
SEMINOE NO2	AQUIFER IN OVERBURDEN OR COAL	NO
	TYPE OF AQUIFER	NOT APPLICABLE
	STRATA CONTAINING AQUIFER	NOT APPLICABLE
	FUNCTION OF AQUIFER STRATA	NOT APPLICABLE
	DEPTH TO WATER IN NEARBY WELLS	BELOW THE COAL
	PREMINING WELL YEILD (GAL PER MIN)	0
	USE OF NEARBY WELLS	MINE-INDUSTRIAL-LIVESTOCK
	DIVERSION DITCHES TO CONTROL RUNOFF	IF NECESSARY
	STREAM DIVERSION	NO
	PUMP PIT	YES
	SEDIMENT BASINS	NO
	CHEMICAL TREATMENT OF DRAINAGE	NO
	RESTORE CONTOUR	YES
	MAX PERCENT SLOPE ON BOX CUT SPOILS	33
	MAX PERCENT SLOPE ON OTHER SPOILS	33
	REDUCE LAST-CUT HIGHWALL	YES
	MAX HEIGHT OF LAST-CUT HIGHWALL	200
	MAX SLOPE ON REDUCED HIGHWALL	33
	GRADING EQUIPMENT	DOZER-RUBBER TIRE DOZER

MINE NAME		
SEMINOE NO2	TERRACE SPOIL	YES
	MECHANICAL SPOIL MANIPULATION	YES
	TOPSOIL	YES
	TOPSOIL AND SUBSOIL SEGREGATED	NO
	STOCKPILE TOPSOILING MATERIAL	YES
	EROSION CONTROL ON STOCKPILES	IF NECESSARY
	TOPSOILING EQUIPMENT	SCRAPER
	DEPTH REPLACED (INCHES)	6
	BORROW TOPSOIL	NO
	SEEDING METHOD	DRILL-BROADCAST
	PLANT TYPES USED FOR REVEGETATION	GRASSES-LEGUMES-SHRUBS
	PRIMARILY NATIVE GRASSES FOR RANGE	YES
	SOIL AMENDMENTS	NO
	MULCH	NO
	IRRIGATION	NO
	NO OF IRRIGATED GROWING SEASONS	0
	DEDICATED RECLAMATION EQUIPMENT	YES
	SEGRATION OF PROBLEM STRATA	YES

MINE NAME		
SEMINOE NO2	STUDIES UNDERTAKEN AT MINE	NONE
	SIGNIFICANT ENVIRONMENTAL PROBLEMS	SALINE SOILS
		PARTING
		WIND EROSION

MINE NAME	PIT NAME		
SEMINOE NO2	MAIN	PIT ORIENTATION	STRIKELINE
		PERCENT OF MINE TONNAGE FROM PIT	100
		MINING METHOD	AREA
		NUMBER OF SEAMS	2
		NUMBER OF OVERBURDEN LIFTS	1
		STRIPPING SUBSYSTEM	SINGLE
		STRIPPING EQUIPMENT	DRAGLINE
		AVERAGE OVERBURDEN DEPTH	150
		AVG DEPTH OF UNCONSOLIDATED MATERIAL	3
		AVERAGE INTERBURDEN DEPTH	45
		POSITION WHEN STRIPPING INTERBURDEN	NOT APPLICABLE
		LGTHX	10000
		PIT WIDTH	200
		DO INCLINES DROP SHARPLY INTO PIT	NO
		DISTANCE BETWEEN INCLINES (FEET)	2500

MINE NAME	PIT NAME	EQUIPMENT TYPE	MODEL	NO OF UNITS	CAPACITY (CU YD)	BOOM LENGTH (FEET)
SEMINOE NO2	MAIN	DRAGLINE	M7820	1	36	310
		SCRAPER	CAT	0	0	0

MINE NAME		
THUNDER	STATE	WYOMING
	COUNTY	CAMPBELL
	COMPANY	ARCO
	1975 SURFACE COAL TONNAGE	0
	1975 ACRES DISTURBED BY MINING	0
	PROJECTED MAXIMUM ANNUAL TONNAGE	10000000
	FIRST YEAR AT MAXIMUM TONNAGE	1980
	NUMBER OF PITS	1
	MINE OPENING YEAR	1977
	REMAINING MINE LIFE	40
	1975 MINE EMPLOYMENT	225
	STRIP RATIO(CU YD PER TON)	1.8
	SURFACE RIGHTS OWNER(S)	PRIVATE-FEDERAL-STATE
	MINERAL RIGHTS OWNER(S)	FEDERAL-STATE
	AVERAGE ANNUAL PRECIPITATION	13
	TOPOGRAPHY	ROLLING
	ALTIDUDE	4700
	PREMINING LANDUSE(S)	CATTLE GRAZING
	PRODUCTIVITY(ACRES PER AUM)	4.00
	POSTMINING LANDUSE(S)	CATTLE GRAZING

MINE NAME		
THUNDER	SEAM NAME	WYODAK
	AVERAGE THICKNESS	70
	SEAM NAME	N
	AVERAGE THICKNESS	0
	TYPE OF COAL	SUBBITUMINOUS
	BTU	8600
	PERCENT SULFUR	.3
	PERCENT ASH	5.0

MARKET	ELECTRIC UTILITY
TOTAL NUMBER OF SEAMS SURFACE MINED	1
THICKNESS OF ALL SEAMS SURFACE MINED	70
UNDERGROUND MINING OF THE SAME SEAMS	NO
BLEND COAL TO MEET CONTRACT SPECS.	NO
MINE MOUTH POWER PLANT	NO
ASH DISPOSAL ON MINE SITE	NO
PERCENT DIP OF COAL	2

MINE NAME		
THUNDER	AQUIFER IN OVERBURDEN OR COAL	YES
	TYPE OF AQUIFER	UNCONFINED
	STRATA CONTAINING AQUIFER	UNCONSOLIDATED OVERBURDEN
	FUNCTION OF AQUIFER STRATA	DISCHARGE
	DEPTH TO WATER IN NEARBY WELLS	ABOVE THE COAL
	PREMINING WELL YEILD (GAL PER MIN)	0
	USE OF NEARBY WELLS	LIVESTOCK
	DIVERSION DITCHES TO CONTROL RUNOFF	YES
	STREAM DIVERSION	YES
	PUMP PIT	YES
	SEDIMENT BASINS	YES
	CHEMICAL TREATMENT OF DRAINAGE	NO
	RESTORE CONTOUR	YES
	MAX PERCENT SLOPE ON BOX CUT SPOILS	APPROXIMATE ORIGINAL CONTOUR
	MAX PERCENT SLOPE ON OTHER SPOILS	APPROXIMATE ORIGINAL CONTOUR
	REDUCE LAST-CUT HIGHWALL	YES
	MAX HEIGHT OF LAST-CUT HIGHWALL	240
	MAX SLOPE ON REDUCED HIGHWALL	25
	GRADING EQUIPMENT	DOZER

MINE NAME		
THUNDER	TERRACE SPOIL	IF NECESSARY
	MECHANICAL SPOIL MANIPULATION	IF NECESSARY
	TOPSOIL	YES
	TOPSOIL AND SUBSOIL SEGREGATED	YES
	STOCKPILE TOPSOILING MATERIAL	IF NECESSARY
	EROSION CONTROL ON STOCKPILES	IF NECESSARY
	TOPSOILING EQUIPMENT	SCRAPER
	DEPTH REPLACED (INCHES)	6
	BORROW TOPSOIL	NO
	SEEDING METHOD	DRILL
	PLANT TYPES USED FOR REVEGETATION	GRASSES
	PRIMARILY NATIVE GRASSES FOR RANGE	YES
	SOIL AMENDMENTS	IF NECESSARY
	MULCH	IF NECESSARY
	IRRIGATION	IF NECESSARY
	NO OF IRRIGATED GROWING SEASONS	AS NECESSARY
	DEDICATED RECLAMATION EQUIPMENT	YES
	SEGRATION OF PROBLEM STRATA	YES

MINE NAME		
THUNDER	STUDIES UNDERTAKEN AT MINE	REVEGETATION-HYDROLOGY
	SIGNIFICANT ENVIRONMENTAL PROBLEMS	TOXIC METALS IN OVERBURDEN
		IMPERMEABLE MATERIAL IN OVERBURDEN

MINE NAME	PIT NAME		
THUNDER	MAIN	PIT ORIENTATION	STRIKELINE
		PERCENT OF MINE TONNAGE FROM PIT	100
		MINING METHOD	MODIFIED OPEN PIT
		NUMBER OF SEAMS	1
		NUMBER OF OVERBURDEN LIFTS	3
		STRIPPING SUBSYSTEM	DUAL
		STRIPPING EQUIPMENT	SHOVEL-TRUCK
		AVERAGE OVERBURDEN DEPTH	135
		AVG DEPTH OF UNCONSOLIDATED MATERIAL	25
		AVERAGE INTERBURDEN DEPTH	0
		POSITION WHEN STRIPPING INTERBURDEN	NOT APPLICABLE
		LGTHX	2000
		PIT WIDTH	125
		DO INCLINES DROP SHARPLY INTO PIT	NOT APPLICABLE
		DISTANCE BETWEEN INCLINES (FEET)	0

MINE NAME	PIT NAME	EQUIPMENT TYPE	MODEL	NO OF UNITS	CAPACITY (CU YD)	BOOM LENGTH (FEET)
THUNDER	MAIN	LOADING SHOVEL	N	0	25	0
		TRUCK	N	0	140	0

MINE NAME		
WYODAK MINE	STATE	WYOMING
	COUNTY	CAMPBELL
	COMPANY	WYODAK
	1975 SURFACE COAL TONNAGE	786672
	1975 ACRES DISTURBED BY MINING	6
	PROJECTED MAXIMUM ANNUAL TONNAGE	2200000
	FIRST YEAR AT MAXIMUM TONNAGE	1980
	NUMBER OF PITS	1
	MINE OPENING YEAR	1925
	REMAINING MINE LIFE	30
	1975 MINE EMPLOYMENT	35
	STRIP RATIO(CU YD PER TON)	.3
	SURFACE RIGHTS OWNER(S)	PRIVATE
	MINERAL RIGHTS OWNER(S)	PRIVATE-FEDERAL
	AVERAGE ANNUAL PRECIPITATION	14
	TOPOGRAPHY	ROLLING
	ALTIDUDE	4450
	PREMINING LANDUSE(S)	CATTLE GRAZING
	PRODUCTIVITY(ACRES PER AUM)	2.50
	POSTMINING LANDUSE(S)	CATTLE GRAZING

MINE NAME		
WYODAK MINE	SEAM NAME	WYODAK
	AVERAGE THICKNESS	85
	SEAM NAME	N
	AVERAGE THICKNESS	0
	TYPE OF COAL	SUBBITUMINOUS
	BTU	8250
	PERCENT SULFUR	.5
	PERCENT ASH	6.0

MARKET	ELECTRIC UTILITY-DOMESTIC
TOTAL NUMBER OF SEAMS SURFACE MINED	1
THICKNESS OF ALL SEAMS SURFACE MINED	85
UNDERGROUND MINING OF THE SAME SEAMS	NO
BLEND COAL TO MEET CONTRACT SPECS.	NO
MINE MOUTH POWER PLANT	YES
ASH DISPOSAL ON MINE SITE	MINED OUT PITS
PERCENT DIP OF COAL	3

MINE NAME		
WYODAK MINE	AQUIFER IN OVERBURDEN OR COAL	YES
	TYPE OF AQUIFER	UNCONFINED
	STRATA CONTAINING AQUIFER	UNCONSOLIDATED OVERBURDEN
	FUNCTION OF AQUIFER STRATA	STREAMBANK STORAGE
	DEPTH TO WATER IN NEARBY WELLS	IN THE COAL
	PREMINING WELL YEILD (GAL PER MIN)	10
	USE OF NEARBY WELLS	DOMESTIC-LIVESTOCK
	DIVERSION DITCHES TO CONTROL RUNOFF	YES
	STREAM DIVERSION	YES
	PUMP PIT	YES
	SEDIMENT BASINS	YES
	CHEMICAL TREATMENT OF DRAINAGE	NO
	RESTORE CONTOUR	YES
	MAX PERCENT SLOPE ON BOX CUT SPOILS	APPROXIMATE ORIGINAL CONTOUR
	MAX PERCENT SLOPE ON OTHER SPOILS	APPROXIMATE ORIGINAL CONTOUR
	REDUCE LAST-CUT HIGHWALL	YES
	MAX HEIGHT OF LAST-CUT HIGHWALL	110
	MAX SLOPE ON REDUCED HIGHWALL	APPROXIMATE ORIGINAL CONTOUR
	GRADING EQUIPMENT	DOZER

MINE NAME		
WYODAK MINE	TERRACE SPOIL	NO
	MECHANICAL SPOIL MANIPULATION	NO
	TOPSOIL	YES
	TOPSOIL AND SUBSOIL SEGREGATED	YES
	STOCKPILE TOPSOILING MATERIAL	IF NECESSARY
	EROSION CONTROL ON STOCKPILES	IF NECESSARY
	TOPSOILING EQUIPMENT	SCRAPER
	DEPTH REPLACED (INCHES)	18
	BORROW TOPSOIL	NO
	SEEDING METHOD	DRILL
	PLANT TYPES USED FOR REVEGETATION	GRASSES-LEGUMES
	PRIMARILY NATIVE GRASSES FOR RANGE	NO
	SOIL AMENDMENTS	NO
	MULCH	NO
	IRRIGATION	NO
	NO OF IRRIGATED GROWING SEASONS	0
	DEDICATED RECLAMATION EQUIPMENT	NO
	SEGRATION OF PROBLEM STRATA	YES

MINE NAME		
WYODAK MINE	STUDIES UNDERTAKEN AT MINE	REVEGETATION
	SIGNIFICANT ENVIRONMENTAL PROBLEMS	CLAYEY SOILS
		PARTING

MINE NAME	PIT NAME		
WYODAK MINE	SOUTH	PIT ORIENTATION	STRIKELINE
		PERCENT OF MINE TONNAGE FROM PIT	100
		MINING METHOD	MODIFIED OPEN PIT
		NUMBER OF SEAMS	1
		NUMBER OF OVERBURDEN LIFTS	1
		STRIPPING SUBSYSTEM	DUAL
		STRIPPING EQUIPMENT	SCRAPER-DOZER
		AVERAGE OVERBURDEN DEPTH	30
		AVG DEPTH OF UNCONSOLIDATED MATERIAL	30
		AVERAGE INTERBURDEN DEPTH	0
		POSITION WHEN STRIPPING INTERBURDEN	NOT APPLICABLE
		LGTHX	1700
		PIT WIDTH	200
		DO INCLINES DROP SHARPLY INTO PIT	YES
		DISTANCE BETWEEN INCLINES (FEET)	1700

MINE NAME	PIT NAME	EQUIPMENT TYPE	MODEL	NO OF UNITS	CAPACITY (CU YD)	BOOM LENGTH (FEET)
WYODAK MINE	SOUTH	SCRAPER	CAT621	2	15	0
		DOZER	CAT D8	2	0	0
		DOZER	CAT D7	1	0	0

APPENDIX A

METRIC CONVERSION TABLE

1 inch	=	2.540 centimeters
1 foot	=	0.305 meters
1 ton	=	907.185 kilograms
1 acre	=	0.405 hectare
1 gallon	=	3.785 liters

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15. SUPPLEMENTARY NOTES

16. ABSTRACT

This report is a companion volume to the report entitled, "Evaluation of the Environmental Effects of Western Surface Coal Mining." It contains a tabular Summary of general information, and is specifically designed to evaluate the surface mining methods presently employed in the mining of western coal in arid and semi-arid regions, and to evaluate the effects these methods have on the environment. The information was used in classifying western mining situations into categories within which physical and technological factors were fairly homogeneous, in identifying the potential extent and severity of the effects of those mining operations on the environment, and in determining the frequency of use of alternative reclamation practices.

17. KEY WORDS AND DOCUMENT ANALYSIS

a. DESCRIPTORS	b. IDENTIFIERS/OPEN ENDED TERMS	c. COSATI Field/Group
Coal Mining Subject Indexing	Western Coal Mining Alternative Reclamation Practices	13/B

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