



Thunder Basin Coal Company

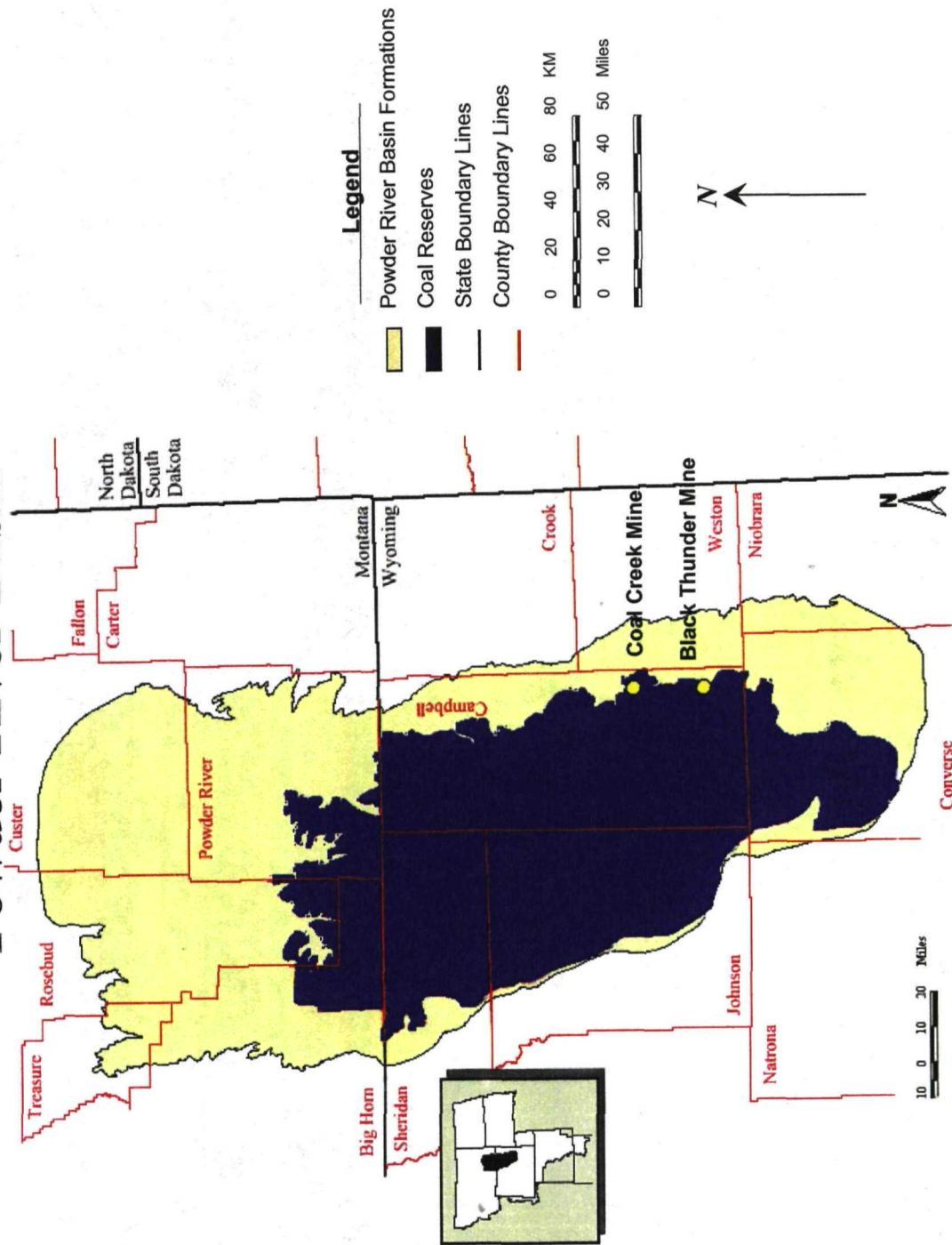
Operational Overview

Black Thunder Mine

Coal Creek Mine

May 16, 2006

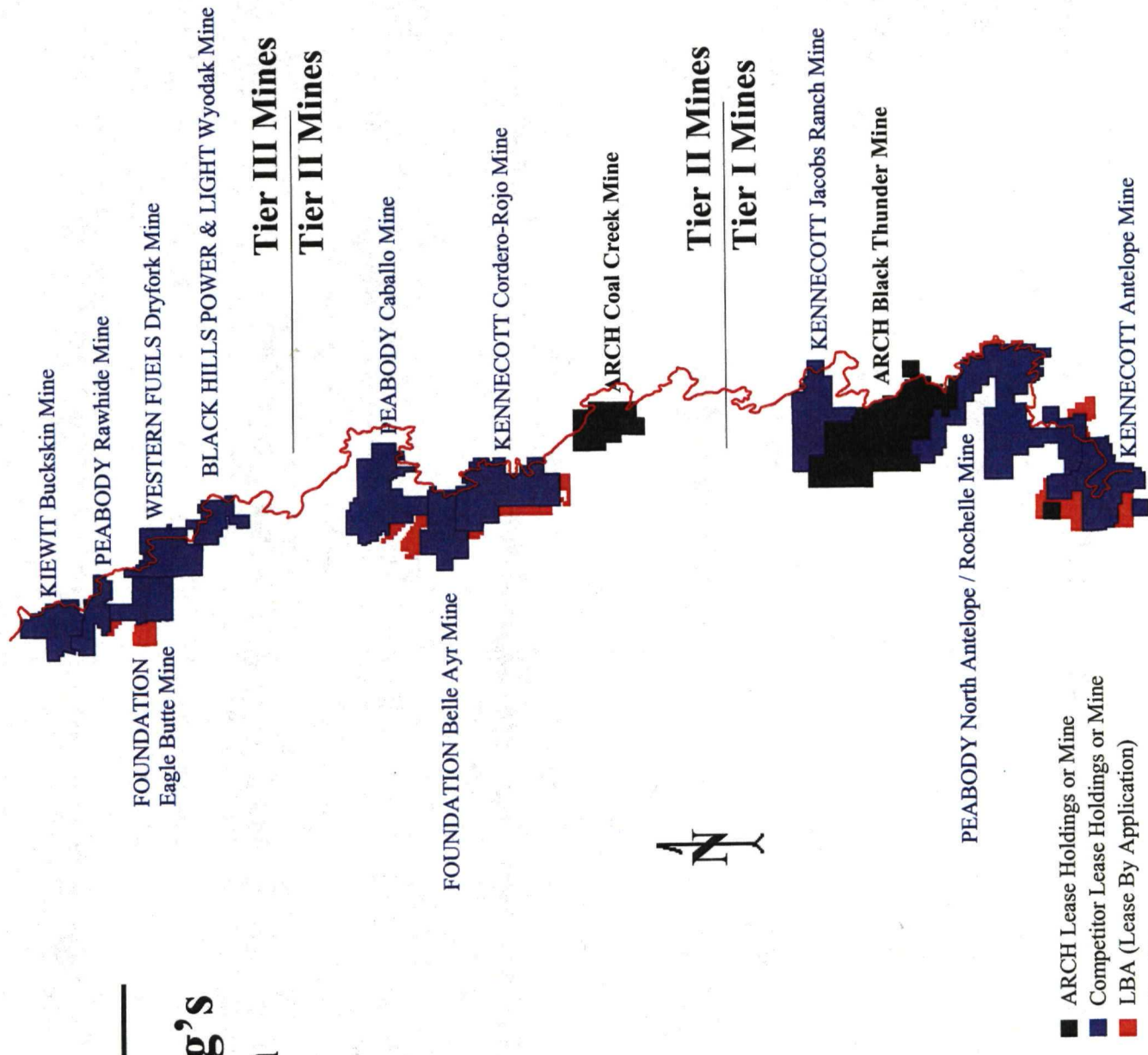
Powder River Basin





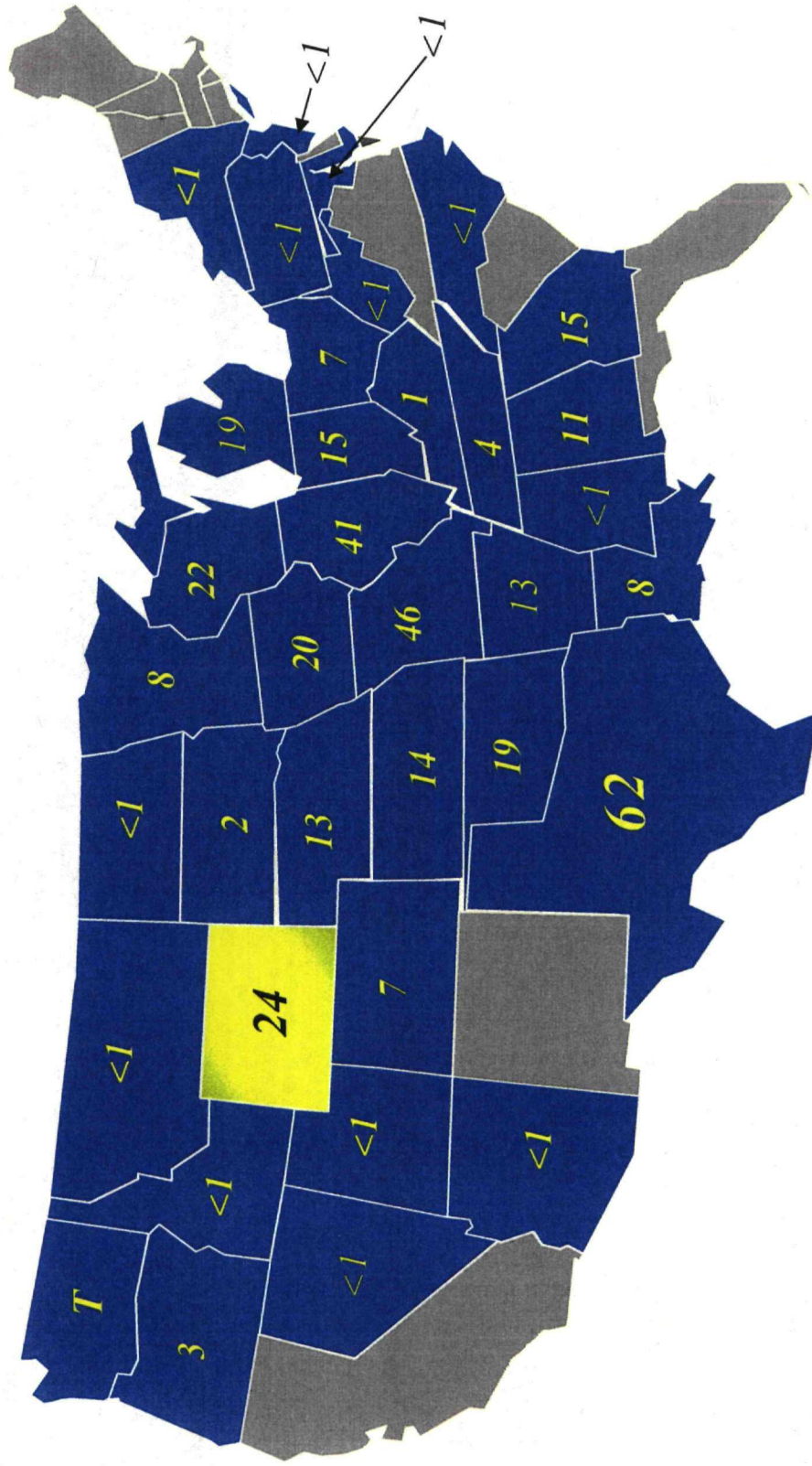
Producers in Wyoming's Powder River Basin

Mine	2005 Production	
	Mine	Tons (000)
Rawhide		12,400
Buckskin		19,600
Eagle Butte		24,100
Wyodak		4,700
Dry Fork		4,100
Subtotal - Tier III		64,900
Caballo		30,600
Cordero-Rojo		37,700
Belle Ayr		19,500
Coal Creek		-
Subtotal - Tier II		87,800
Jacobs Ranch		37,300
Black Thunder / North Rochelle		87,500
North Antelope-Rochelle		82,700
Antelope		30,000
Subtotal - Tier I		237,500
Total		390,200



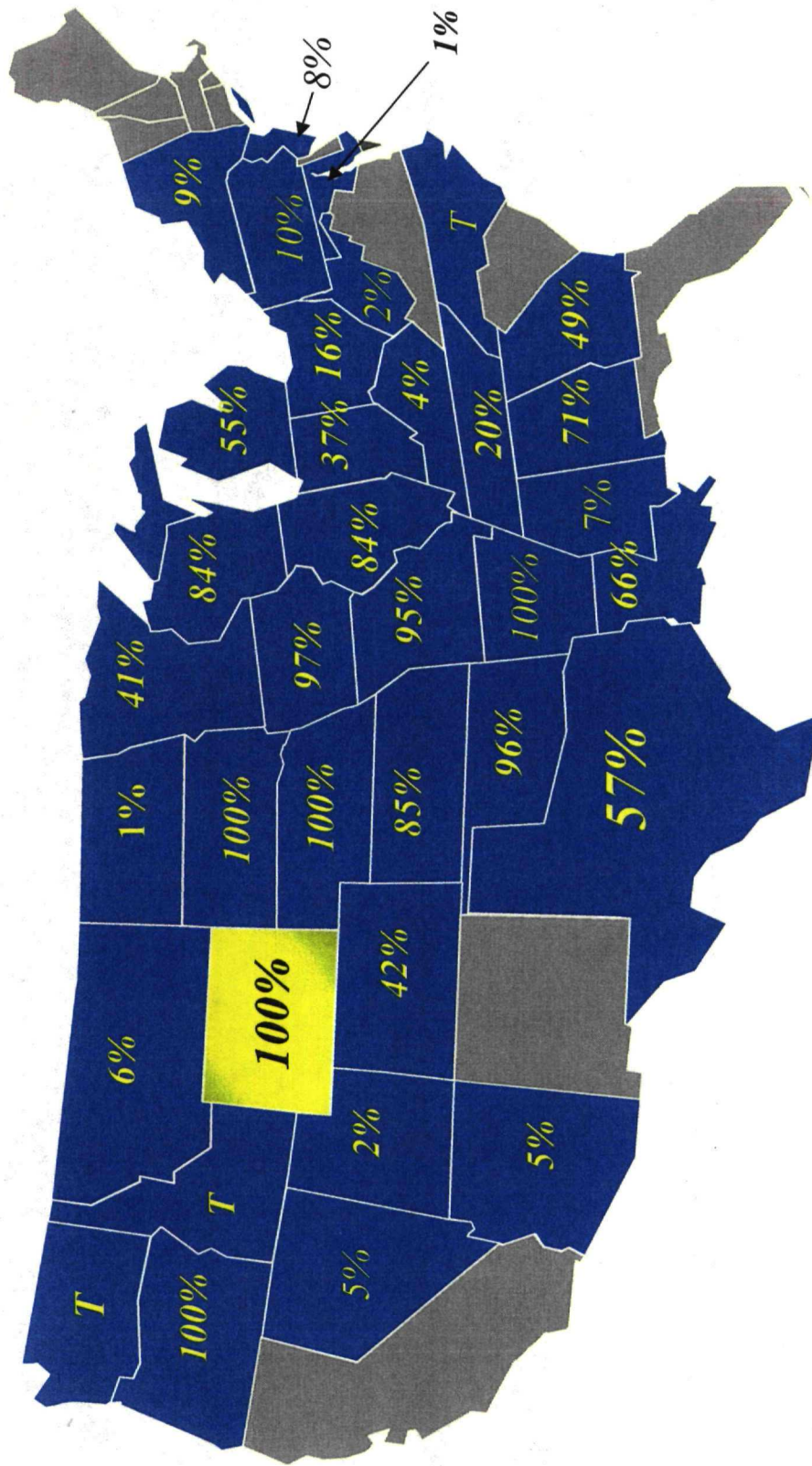
Tons of Wyoming Coal Consumed for Electric Generation

For year 2004, in millions



396 million tons consumed in 36 different states

Percentage Wyoming Coal Consumed for Electric Generation, *for year 2004*

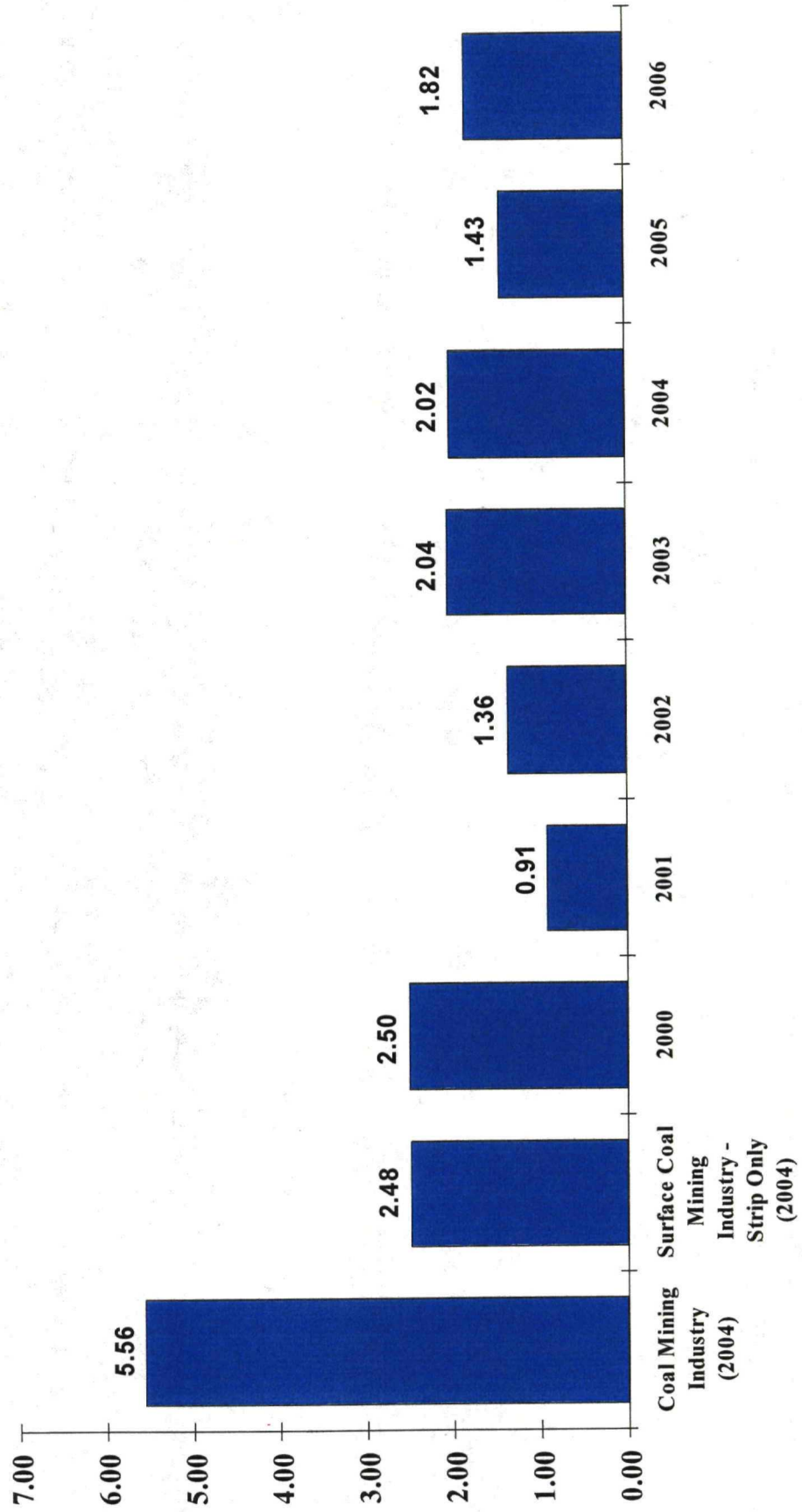


Black Thunder Mine - Background

• First Coal Shipped	December 1977
• Acquired by Arch Coal	June 1998
• Current Lease Area:	19,053 Acres 7,710 Hectares
• Permitted Maximum Shipping Capacity:	135.0 Million Ton/Year 122.5 Million Tonne/Year
• Cumulative Shipments (December 2004):	1,018 Million Tons 924 Million Tonnes
• Average Seam Thickness:	68 Feet 21 Meters
• Current Strip Ratio	3.14
• Recoverable Reserves (December 2004):	1,913 Million Tons 1,737 Million Tonnes

Black Thunder Mine

Safety Performance - Total Incident Rate



Black Thunder Mine - Reclamation Achievements

- 2005 Wyoming Game and Fish Department's Industry Reclamation and Wildlife Stewardship Award
- 2002 Arch Coal President's Environmental Achievement Award
- 2002 United States Forest Service Prairie Partner Award
- 1998 Excellence in Surface Mining for Wetlands Mitigation
- 1997 Wyoming Excellence in Surface Mining & Reclamation Award - Pronghorn Lake
- 1997 Wildlife Habitat Council's List of Earth Day Companies
- 1995 "Certified Wildlife Habitat" under the Wildlife Habitat Council
- Excellence in Mining Award 1987, 1988, 1989, 1991, 1992 and 1993
- 4,000 Acres Permanently Reclaimed
- Grazing Demonstration in 18th Year
- Special Wildlife Habitat Construction

Current Manning Schedule (04/30/06)

Black Thunder Manning:

Salaried	83
Hourly	859
Sub-Total	<u>942</u>

Coal Creek Manning:

Salaried	10
Hourly	55
Sub-Total	<u>65</u>

Support Staff:

Salaried	42
Hourly	13
Sub-Total	<u>55</u>

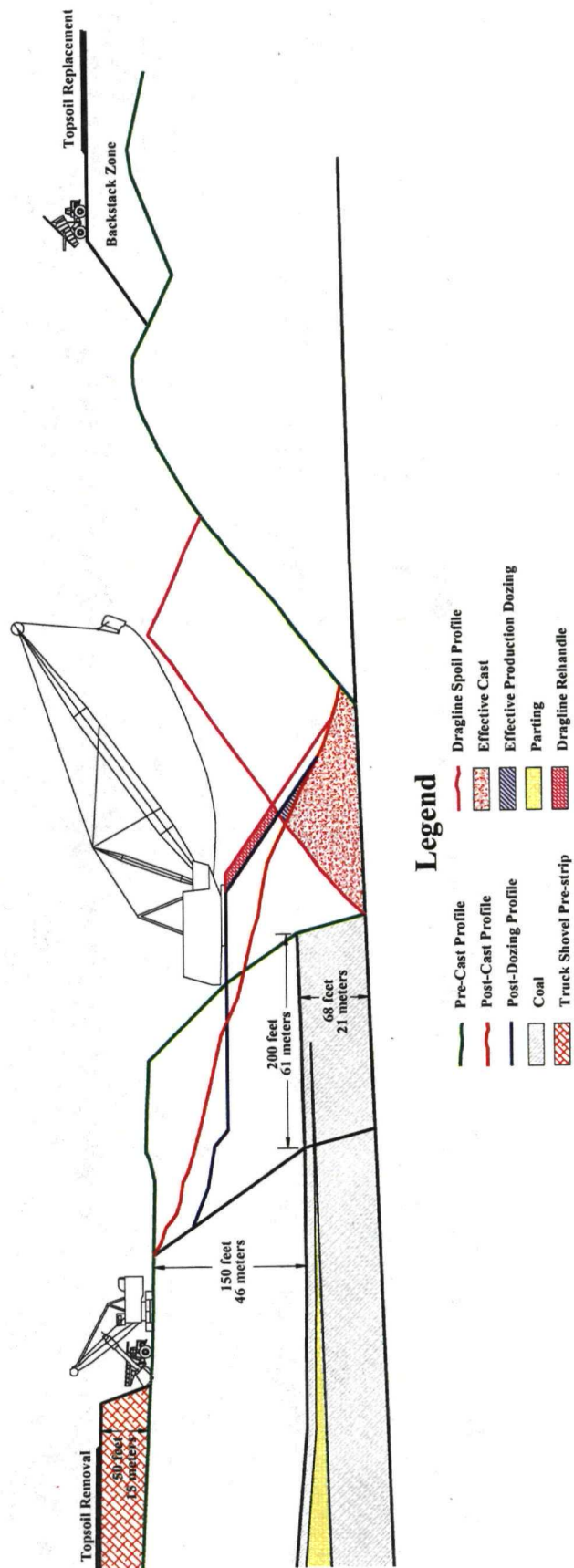
Total

1,062

Black Thunder Mine - Major Equipment

<u>No.</u>	<u>Make</u>	<u>Model</u>	<u>Bucket (Cubic Yard)</u>	<u>Bucket (Cubic Meters)</u>
1	Bucyrus-Erie	2570WS Dragline	164	126
1	Bucyrus-Erie	2570W Dragline	106	82
1	Bucyrus-Erie	1570W Dragline	78	60
1	Marion	8750 Dragline	130	100
1	Bucyrus-Erie	1300W Dragline	44	34
4	P&H	2800 Shovels (Coal)	65	50
2	P&H	2800 Shovels (Overburden)	36	28
1	Bucyrus-Erie	495HR Shovel (Overburden)	84	64
1	Bucyrus-Erie	495B Shovel (Overburden)	53	41
1	Bucyrus-Erie	495B Shovel (Coal)	84	64
1	P&H	4100XPB Shovel (Overburden)	68	52
1	P&H	4100 Shovel (Overburden)	53	41
1	Marion	351M Shovel (Coal)	84	64

Typical Mining Sequence



Black Thunder Mine - Coal Handling Facilities

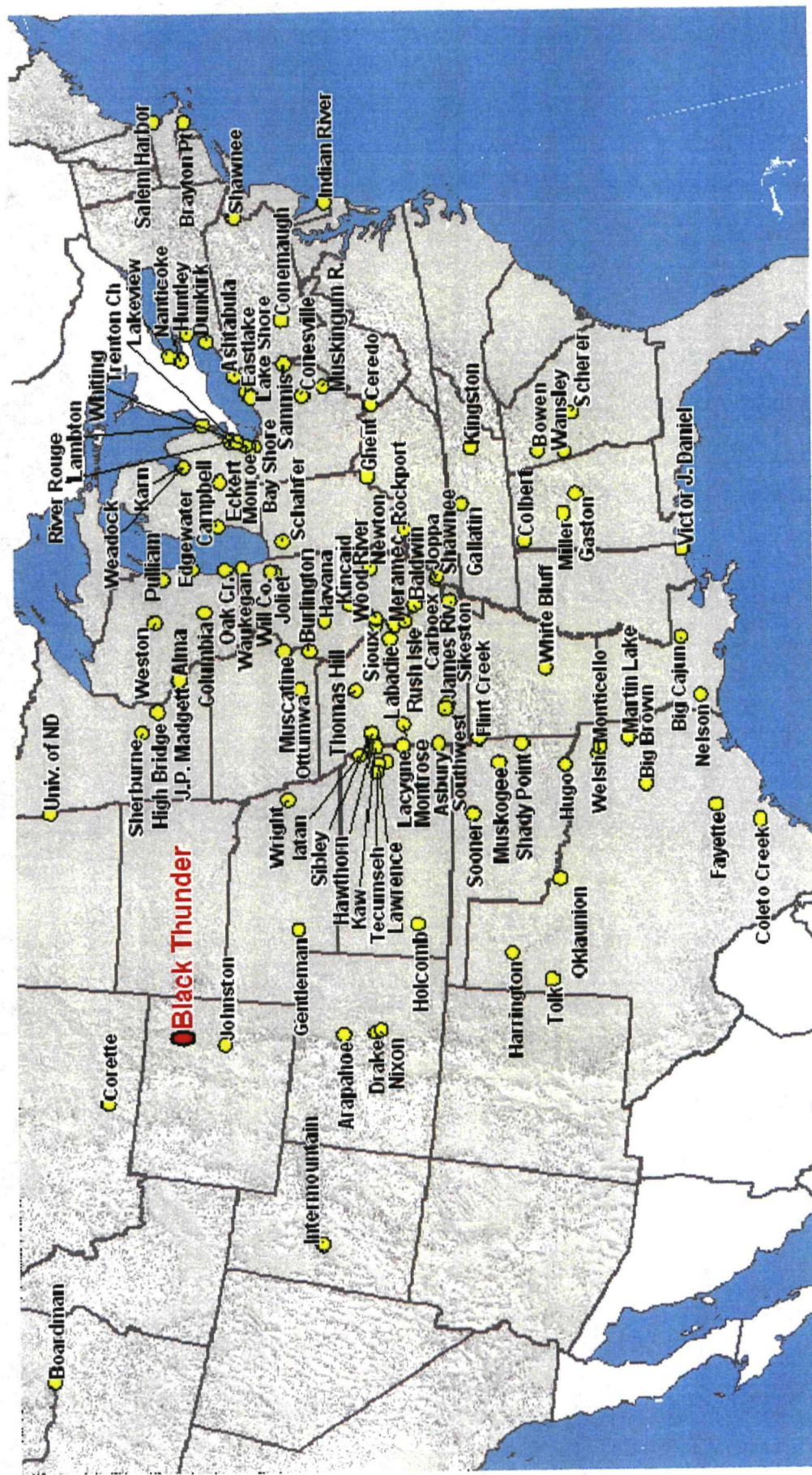
- Maximum Plant Storage Capacity
 - 2 - 12,500 ton (11,350 tonne) silos
 - 1 - 100,000 ton (90,000 tonne) slot
 - 1 - 50,000 ton (45,000 tonne) slot
- Loadouts
 - 1 - North Train Loadout (1.5 Hour Facility)
 - 1 - North Batch Loadout (3.5 Hour Facility)
 - 1 - South Batch Loadout (2.5 Hour Facility)
- Truck Dumps
 - 1 - Near Pit/Overland Conveyor (2 Truck Hoppers)
 - 1 - Primary System (2 Truck Hoppers)
 - 1 - Near-Pit/Overland Conveyor (1 Truck Hopper)
- Sampling System
 - 1 - Ramsey Cross Belt Swing Arm Sampler
 - 2 - Redding Stream Flow Surplus
 - 1 - Hebden, Schilbe & Smith (HS&S) Sampler - Batch Loadout
 - 1 - JB Long Cross-belt Sampler with Gamma Metrics (Overland Conveyor)
- Laboratory Analysis
 - On-Site Laboratory (ASTM Laboratory)
 - 24 Hours Per Day
 - 365 Days Per Year

Black Thunder Mine

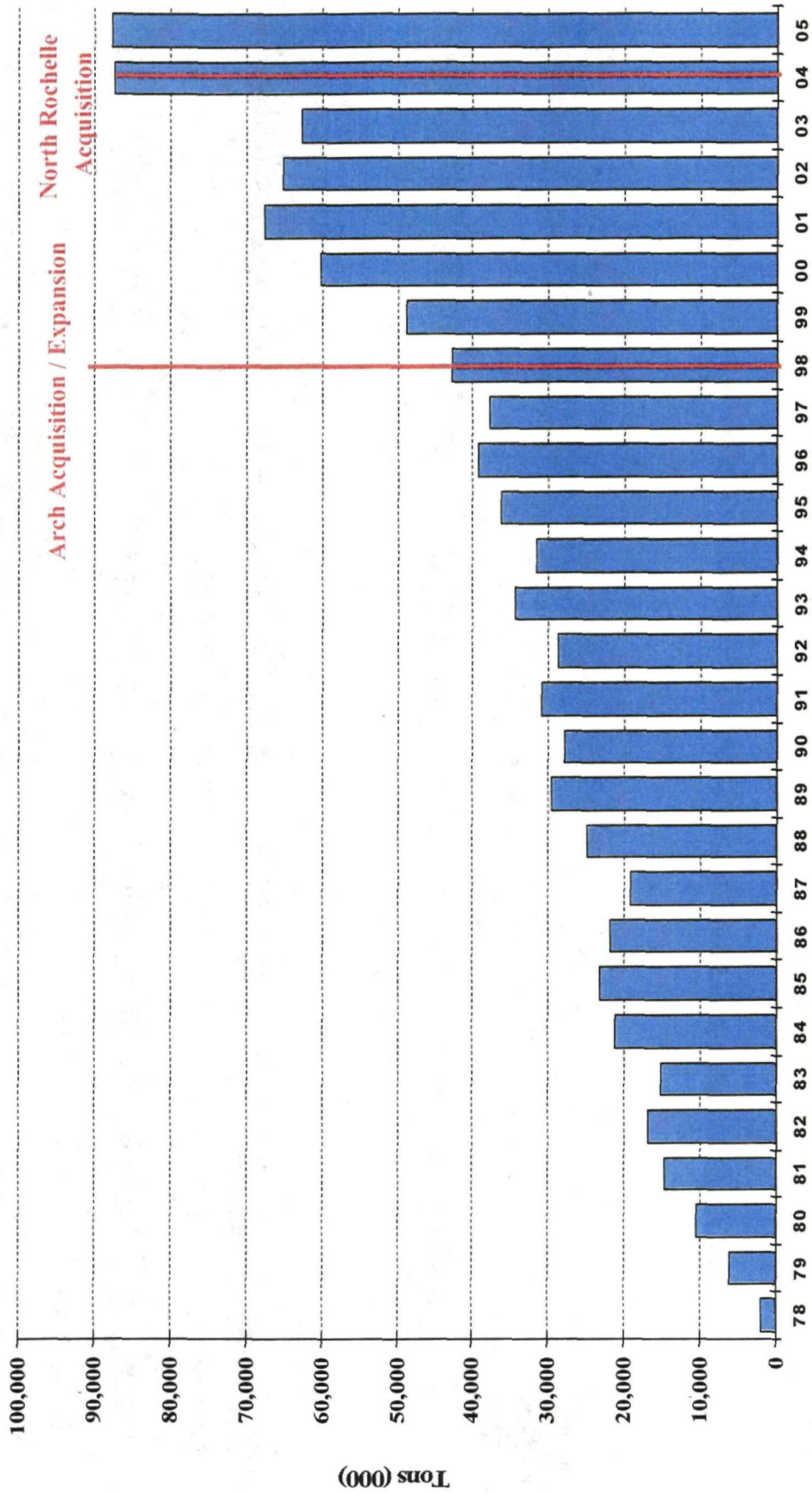
2006 Year-to-Date As-Shipped Coal Quality

<u>Parameter</u>	<u>North</u>	<u>South</u>
Moisture (%)	26.79	26.90
Ash (%)	5.36	5.14
Sulfur (%)	0.30	0.23
BTU/Lb	8,869	8,829
LbsSO ₂ /MMBTU	0.68	0.53

Major Power Plants Served by Black Thunder



Black Thunder - Historical Coal Shipments



Coal Creek Mine - Background

• Leases Acquisition Dates	1968
• Lease Area	6,720
• Construction Start	Spring 1979
• First Coal Shipped	May 1982
• Permitted Maximum Capacity	18 Million Ton/Year
• Cumulative Shipments (September 2001)	48.5 Million Tons
• Current Strip Ratio	2.26
• Average Seam Thickness:	
➤ Roland 1	21.20 Feet (6.46 Meters)
➤ Roland 2	9.90 Feet (3.02 Meters)
• Recoverable Reserves	239.6 Million Tons (217.5 Tonnes)

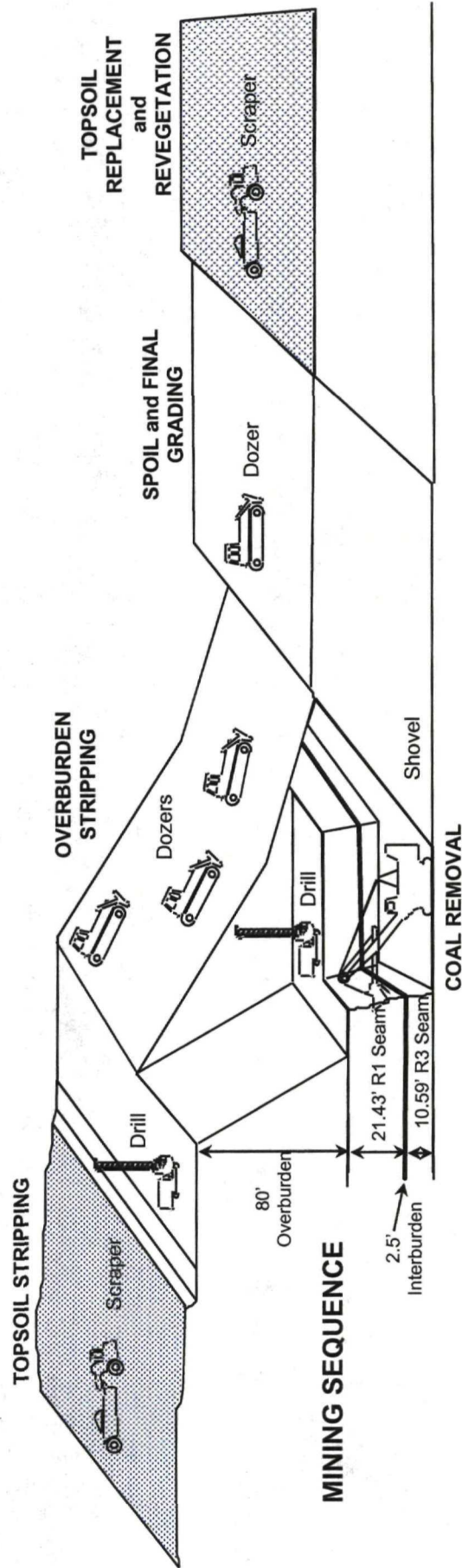
Coal Creek Mine - Major Pit Equipment - Coal

<u>No.</u>	<u>Make</u>	<u>Model</u>	<u>Capacity</u>
1	Bucyrus-Erie	195B Shovel	24 Cubic Yard
5	Wabco	85/150 Trucks	150 Tons
4	Unit Rig	BD180	180 Tons

Under Erection:

1	Bucyrus-Erie	295B Shovel	40 Cubic Yard
1	Bucyrus-Erie	1570W Dragline	82 Cubic Yard

Coal Creek Mine Typical Mining Sequence



MINING SEQUENCE

- Topsoil Stripping
- Overburden Stripping
- Coal Removal
- Spoil Grading
- Final Grading
- Topsoil Replacement
- Revegetation

5/15/2006

Coal Creek Mine - Coal Handling Facilities

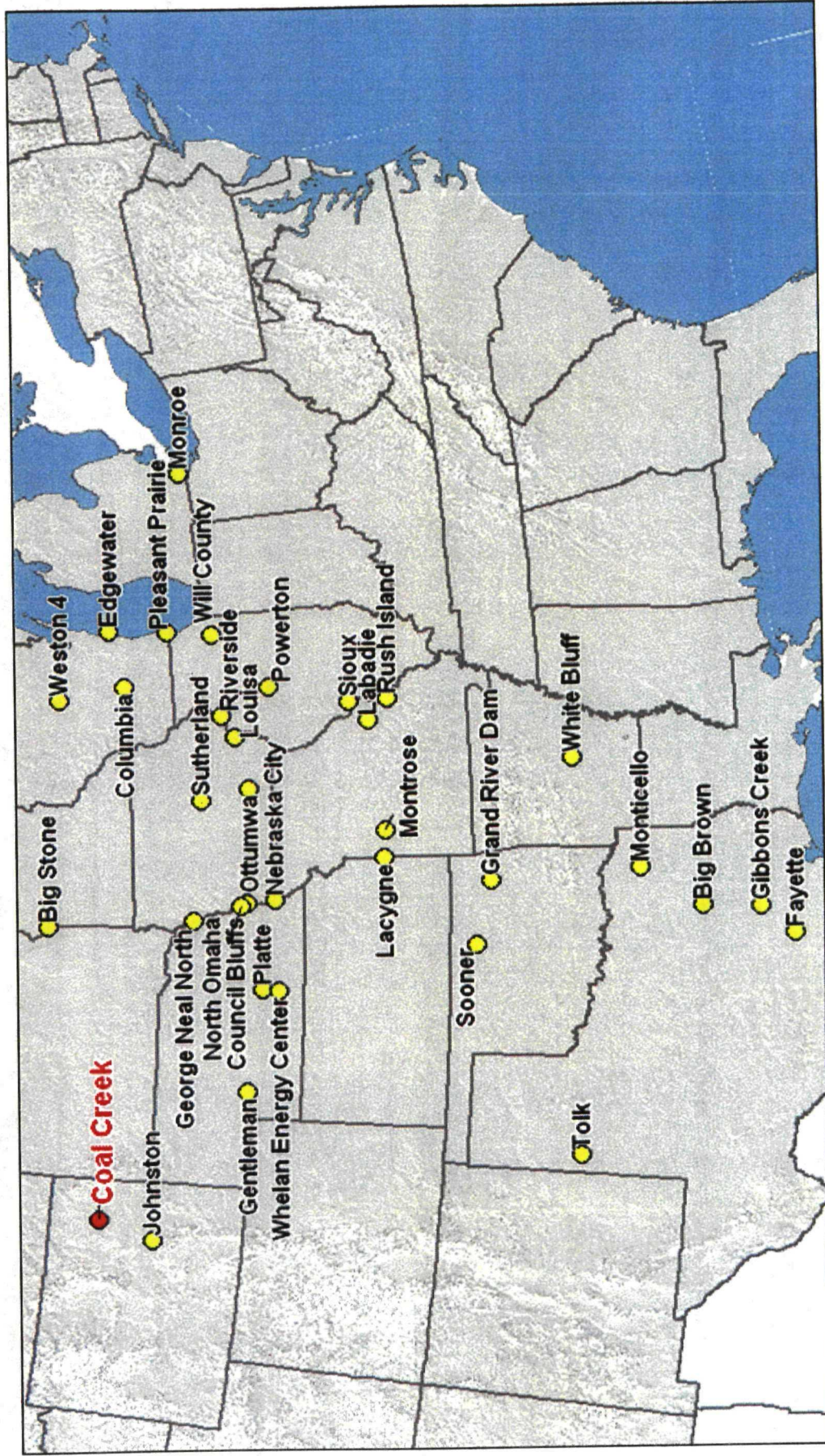
- Storage Capacity
 - 2 - 12,500 ton (11,350 tonne) silos
- Loadout
 - 1 - Train Loadout (2 Hour Facility)
- Truck Dumps
 - 1 - Primary System (Single Truck Belly Dump)
- Sampling System
 - Ramsey Primary Cutter
 - Birtley Secondary and Tertiary Cutters
- Laboratory Analysis
 - On-Site Laboratory (ASTM Laboratory)
 - 24 Hours Per Day
 - 365 Days Per Year

Coal Creek Mine

Life-to-Date Coal Quality

<u>Parameter</u>	<u>Value</u>
Moisture (%)	30.68
Ash (%)	5.60
Sulfur (%)	0.34
BTU/Lb	8,334
LbsSO ₂ /MMBTU	0.82

Major Power Plants Served by Coal Creek



Coal Creek - Coal Shipments

