

CASTLE GATE MINE C/007/004

2004 ANNUAL REPORT

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GENERAL INFORMATION

Permitte Name	Castle Gate Holding Company
Mine Name	Castle Gate Mine
Operator Name (If other than permittee)	
Permit Expiration Date	December 24, 2009
Permit Number	C/007/004
Authorized Representative Title	Dennis Ware, Controller and Administrative Manager
Phone Number	(435) 472-4737
Fax Number	(435) 472-4782
E-mail Address	dware@foundationcoal.com
Mailing Address	P.O. Box 30, Helper, Utah 84526
Designated Representative	Dennis Ware
Resident Agent	C.T. Corporation
Resident Agent Mailing Address	50 West Broadway, Salt Lake City, Utah 84101
Number of Binders Submitted	Two

IDENTIFICATION OF OTHER PERMITS

Identify other permits that are required in conjunction with mining and reclamation activities.

Permit Type	ID Number	Description	Expiration Date
MSHA Mine ID(s)	42-00165	Legal Identity	
	42-01202		
MSHA Impoundment(s)			
NPDES/UPDES Permit(s)			
PSD Permit(s) (Air)			
Other			

CERTIFIED REPORTS

List the certified inspection reports as required by the rules and under the approved plan that must be periodically submitted to the Division. Specify whether the information is included as Appendix A to this report or currently on file with the Division.

Certified Reports:	Required		Included or on file with DOGM		Comments
	Yes	No	Included	On File	
Excess Spoil Piles	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Refuse Piles	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Impoundments	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

REPORTING OF OTHER TECHNICAL DATA

List other technical data and information as required under the approved plan, which must be periodically submitted to the Division. Specify whether the information is included as Appendix B to this report or currently on file with the Division.

Technical Data:	Required		Included or on file with DOGM		Comments
	Yes	No	Included	On file	
Climatological	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Subsidence Monitoring	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Vegetation Monitoring	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Year 9 of 10 in Sowbelly Canyon
Raptor Survey	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Soils Monitoring	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Water Monitoring	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
First quarter	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Second quarter	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Third quarter	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Fourth quarter	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Geological / Geophysical	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Engineering	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Non Coal Waste / Abandoned Underground Equipment*	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Other Data	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

*Reminder: If equipment has been abandoned during 2004, an amendment must be submitted that includes a map showing its location, a description of what was abandoned, whether there were any hazardous or toxic materials and any revision to the PHC as necessary.

APPENDIX A

Certified Reports

Excess Spoil Piles
Refuse Piles
Impoundments

As required under R645-301-514

CONTENTS

NONE

APPENDIX B

Reporting of Technical Data

Including monitoring data, reports, maps, and other information
As required under the approved plan or as required by the Division

In accordance with the requirement of R645-310-130 and R645-301-140

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YEAR-NINE VEGETATION MONITORING FOR SOWBELLY CANYON

**VEGETATION MONITORING
FOR PHASE III BOND RELEASE
IN SOWBELLY CANYON**

**YEAR ONE
2004**

**FOR
PLATEAU MINING CORPORATION**



Prepared by

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by

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for

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March 2005

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**VEGETATION MONITORING
FOR PHASE III BOND RELEASE
IN SOWBELLY CANYON**

**YEAR ONE
2004**

INTRODUCTION

Sowbelly Canyon (also known as Sowbelly Gulch) is an area that was once mined for coal. The disturbances to the land surface from the mining activities have been reclaimed and reseeded to an approximate “natural” condition with the goal to blend in with the native plant communities in the surrounding areas. In order for the mining company to receive final bond release on the mined property, the State of Utah, Division of Oil, Gas and Mining (DOG M) requires at least 10 years of time to pass following revegetation activities. This time period usually allows enough time for the plants in the reclaimed areas to become established and hopefully provide a vegetative cover that is “diverse, effective and permanent.” During the final two years of this *responsibility period*, the vegetation of the reclaimed land can be monitored to determine whether or not the area has met pre-determined standards for revegetation success. This document was prepared to address vegetation sampling results for **Year 1** of the two years required for final monitoring.

Brief History

Sowbelly Canyon is located within the Wasatch Plateau approximately 4 miles west-northwest of the city of Helper, Utah. This canyon has been the site of mining activities for nearly 100 years. Spring Canyon Coal Company was one of the first mining companies in the canyon, conducting their operations between 1890 and 1970. Subsequently, McCulloch Oil purchased the site followed by Franklin Real Estate, Price River Coal and Castle Gate Coal Company. Plateau Mining Corporation currently owns the property. In recent years the disturbed areas of Sowbelly Canyon have been reclaimed with the final seeding accomplished in Fall 1995. Preliminary vegetation sampling has been conducted since that time to monitor the early establishment of the revegetated plant communities.

General Site Description

The average elevation of the Reclaimed and Reference Areas of Sowbelly Canyon is approximately 7,000 ft above sea level. The canyon sides are dominated by pinyon-juniper and Gambel's oak/grass plant communities. Most of the Reclaimed Areas are located near the canyon bottoms that, prior to disturbance, were probably once dominated by Gambel's oak, sagebrush and grass communities. During reclamation activities, a drainage channel was re-created at the canyon bottoms. The Reclaimed Areas were seeded with native plant species. In addition, containerized plant species such as serviceberry (*Amelanchier utahensis*), chokecherry (*Prunus virginiana*), willows (*Salix* spp.), and Wood's rose (*Rosa woodsii*) have been transplanted along

the channel in the valley bottom.

Reference Area

A general Reference Area to be used as a standard for final revegetation success was chosen at a much earlier date. The Mining and Reclamation Plan (MRP) stated that "*the AML Reference Areas shown on Exhibit 9-6 will be used to evaluate previously mined areas*". Because the AML (Abandoned Mined Lands) areas were relatively extensive, at least for use as one Reference Area, biologists from DOGM along with representatives from Plateau Mining Corp., chose a smaller portion of the AML areas as a Reference Area for Sowbelly Canyon. This Reference Area was located down-canyon (or south) and very close to the Reclaimed Areas.

METHODS

Quantitative and qualitative data were taken from the vegetation of the Reclaimed and Reference Areas in Sowbelly Canyon. Sampling was conducted in mid-August, 2004. Methodologies used for sampling were performed in accordance with the guidelines provided by DOGM.

Transect and Quadrat Placement

Random/regular placement of sample quadrats were designed as an attempt to provide unbiased accuracy of the data compiled. This was accomplished by establishing several long transect lines along the entire length of the Reclaimed Areas. These lines were placed in the lowest portion of the reclaimed drainage system. At regular intervals along the drainage transect lines, random numbers were generated and used to measure distances at right angles from the drainage and to determine sample locations. Whether these random numbers were odd or even determined which side of the drainage (east or west) a given quadrat was placed. The random numbers selected could be high enough to place quadrats to the lateral limits of the Reclaimed Areas and all areas in-between. This insured that the sample quadrats were placed randomly over the entire study area in an attempt to adequately represent the site as a whole. The sample points that were placed randomly in the drainage bottom (or potential riparian area) were marked on the raw data sheets so they could be studied separately if desired.

Cover, Frequency and Composition

Cover estimates were made using ocular methods with meter square quadrats. Species composition and relative frequencies were also assessed from the quadrats. Additional information recorded on the raw data sheets were: estimated precipitation, slope, exposure, grazing use, animal disturbance and other appropriate notes. Plant nomenclature follows "A Utah Flora" (Welsh et al. 2003).

Sample Size & Adequacy

Sampling adequacy was calculated using formula given below.

$$nMIN = \frac{t^2 s^2}{(dx)^2}$$

where,

- $nMIN$ = minimum adequate sample
- t = appropriate confidence t-value
- s = standard deviation
- x = sample mean
- d = desired change from mean

The values used for “t” and “d” insured that sample adequacy was met with 90% confidence within a 10% deviation from the true mean.

Diversity & Similarity Indices

There are several well-documented methods to assess diversity and similarities in plant communities. The “Motyka Index” is a modified form of the “Sorenson Index”, both similarity indices. This index was used on the data and the equation is shown below:

$$IS_{MO} = \left(\frac{2MW}{MA+MB} \right) \times 100$$

where,

- $MW = \sum$ of the smaller quantitative values of species of two communities,
- $MA = \sum$ of the quantitative values of all species in one community,
- $MB = \sum$ of the quantitative values of all species in another community.

A diversity index has been reported in this document for the Reclaimed and Reference Areas. MacArthur's Diversity Index is an effective diversity measurement and is computed using the following equation:

$$1/\sum p_i^2$$

where,

p_i is the proportion of sum frequency contributed by the i th species in the sample area of concern.

The proportional contribution of each species is then squared and the values for all species in the sample areas are summed. This index integrates the number of species and the degree to which frequency of occurrence was equitably distributed among those species.

Photographs

Color photographs of the sample areas were taken at the time of sampling and submitted with this report.

Raw Data

The raw data for total cover, cover by species, frequency and composition were also submitted in the Appendix of this report which should facilitate future scrutiny of the data and further statistical testing if desired.

RESULTS

Reclaimed Area

The total living cover for the combined data of the Reclaimed Areas in Sowbelly Canyon was 54.00% (Table 1-A). Grasses were the dominant lifeform in these areas comprising 61.30% of the total living understory cover, followed next by shrubs at 20.53% and forbs at 18.16% (Table 1-B).

The dominant plant species in the reclaimed areas were rubber rabbitbrush (*Chrysothamnus nauseosus*), thickspike wheatgrass (*Elymus lanceolatus*), blueleaf aster (*Aster glaucodes*) and Western wheatgrass (*Elymus smithii*). For a list of all plant species present in the sample quadrats along with their cover and frequency values, refer to Table 2.

Reference Area

The Reference Area, or area chosen as revegetation success standards, had a total living cover of 45.50% (Table 3-A). Like the reclaimed areas, grasses were the dominant lifeform and comprised 63.53% of the total living cover. Shrubs and grasses were nearly identical in their proportion of the total living cover (Table 3-B).

The plant species that dominated the Reference Area were thickspike wheatgrass, Western

wheatgrass, rubber rabbitbrush and cheatgrass (*Bromus tectorum*). For cover and frequency values by species refer to Table 4.

Data Set Comparisons

Comparisons were made between the data of the Reclaimed and Reference Areas. First, statistical tests were implemented comparing the total living plant cover of the two areas. A “Student’s t-test” analysis suggested the Reclaimed Areas were significantly higher for total living cover when compared to the Reference Area (Fig. 1).

FIG. 1. STUDENT’S T TEST - A Total Living Cover Comparison Between the Reclaimed and Reference Areas at Sowbelly Canyon (2004).

Reclaimed Area: \bar{x} =54.00; s=11.74; n=80

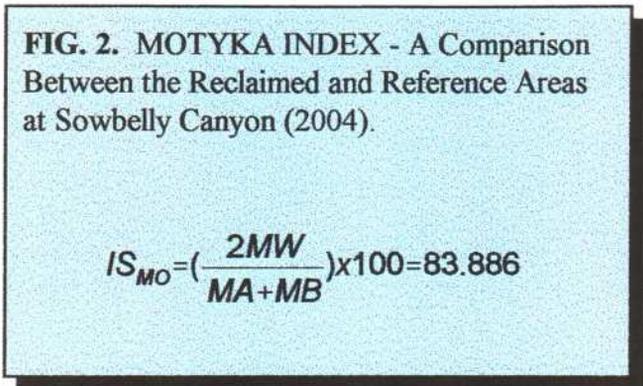
Reference Area: \bar{x} =49.50; s=12.46; n=50

t = 2.077; df = 128, SL= p<.05

Next, similarity and diversity indices were computed and the areas were compared. The Motyka Index was recommended to be used to compare species diversity in the Mining and Reclamation Plan (MRP). Although this index is more of a ‘similarity index’ than a ‘diversity index’, it has been employed to compare the data sets. The MRP assigned the following categories to be used for comparisons in the Motyka Index:

Non-Weedy Shrub Cover,
Weedy Shrub Cover,
Native Perennial Grass Cover,
Introduced Perennial Grass Cover,
Non-Weedy Forb & Grass Cover,
Weedy Forb & Grass Cover.

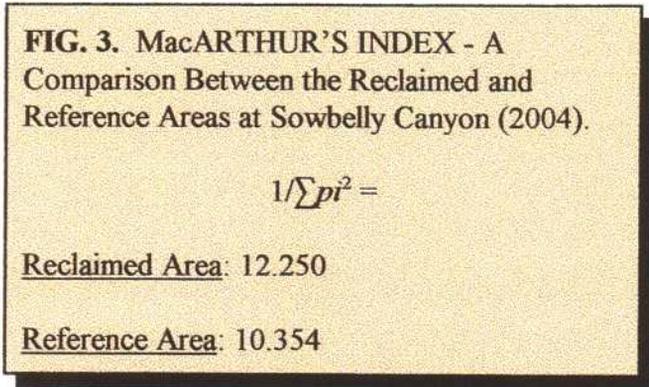
When using the above categories and employing the Motyka Index, the similarity value for the two communities was 83.89% (Fig. 2).



MacArthur's Diversity Index was also employed to the data sets of the Reclaimed and Reference Areas. This comparison suggests that the total diversity of the Reclaimed Area was greater than that of the Reference Area (Fig. 3).

DISCUSSION

Plateau Mining Corporation (PMC) and State of Utah, Division of Oil, Gas and Mining (DOG M)



worked together formulating revegetation success standards for the Mining and Reclamation Plan in Sowbelly Canyon. Because the area was disturbed by mining operations prior to the current revegetation regulations and requirements, standards for revegetation success were modified. State

regulation R645-301-356.250 states that: *“for areas previously disturbed by mining that were not reclaimed to the requirements of R645-200 through R645-203 and R645-301 through R645-302 and that are remined or otherwise redisturbed by coal mining and reclamation operations, at a minimum, the vegetative ground cover will be not less than the ground cover existing before*

redisturbance and will be adequate to control erosion”.

The Sowbelly Canyon area was continuously mined since the time it was first disturbed by mining activities. Because of this there was no vegetative cover data “existing before redisturbance” as mentioned above in the state regulation. Therefore, DOGM and PMC agreed that upon final reclamation the standards for revegetation success would be determined using a specific Reference Area – but success parameters would be dictated more from the species present, diversity and similarity indices rather than strictly by cover, productivity and woody species density as the more recent regulations would dictate. Erosion control (as stated in the regulation above) should also be considered for a successful revegetation standard.

With the above considerations, sampling quantitatively for cover would still be necessary in the Reclaimed and Disturbed Areas to adequately address the success standards. That said, and even though such a comparison was not necessary here, the total living cover was significantly greater statistically when compared to the Reference Area. Moreover, the plant species present in the quadrats were comprised almost exclusively of “desirable” rather than “weedy” species. Not only does this suggest successful revegetation from a cover perspective, but it also suggests that erosion control is probably better in the Reclaimed Area when compared to the Reference Area.

In addition, as shown in the RESULTS section above, diversity and similarity indices revealed favorable results for the Reclaimed Areas in Sowbelly Canyon when compared to the Reference Area. In other words, the Reclaimed Areas were more diverse than the Reference Area, but the

two areas were still quite similar.

The vegetation monitoring data show that if bond release were based on this sample period (the first of a two-year vegetation monitoring plan), Phase III Bond Release may be warranted.

However, final bond release is to be based on two consecutive sample years. Therefore, the area should be re-sampled in 2005 to determine whether or not the same results apply.

TABLE 1: Total cover and composition summary for the Reclaimed Areas in Sowbelly Canyon (2004).

A. TOTAL COVER	% MEAN COVER	STANDARD DEVIATION	SAMPLE SIZE
Overstory Living	0.31	2.78	80
Understory Living	53.69	12.03	80
Litter	15.13	9.91	80
Bareground	15.46	11.54	80
Rock	15.73	10.55	80
Total Living Cover	54.00	11.74	80
B. COMPOSITION			
Shrubs	20.53	28.37	80
Forbs	18.16	23.97	80
Grasses	61.30	31.66	80

TABLE 2: Species cover and frequency summary for the Reclaimed Areas in Sowbelly Canyon (2004).

SPECIES	% MEAN COVER	STANDARD DEVIATION	SAMPLE SIZE	RELATIVE FREQUENCY
OVERSTORY				
<i>Acer grandidentatum</i>	0.31	2.78	80	1.25
TREES & SHRUBS				
<i>Amelanchier utahensis</i>	0.06	0.56	80	1.25
<i>Artemisia tridentata</i>	0.81	3.30	80	8.75
<i>Atriplex canescens</i>	1.63	6.26	80	7.50
<i>Ceratoides lanata</i>	0.94	4.41	80	5.00
<i>Chrysothamnus nauseosus</i>	7.66	16.38	80	27.50
<i>Gutierrezia sarothrae</i>	0.13	0.78	80	2.50
<i>Symphoricarpos oreophilus</i>	0.69	6.11	80	1.25
FORBS				
<i>Achillea millefolium</i>	0.04	0.33	80	1.25
<i>Artemisia drucunculus</i>	0.38	1.73	80	5.00
<i>Aster glaucodes</i>	6.38	12.25	80	36.25
<i>Grindelia squarrosa</i>	0.46	1.75	80	10.00
<i>Hedysarum boreale</i>	0.06	0.56	80	1.25
<i>Iva axillaris</i>	0.50	4.44	80	1.25
<i>Linum lewisii</i>	0.61	2.66	80	7.50
<i>Machaeranthera canescens</i>	0.44	1.62	80	7.50
<i>Melilotus officinalis</i>	0.31	1.99	80	2.50
<i>Salsola pestifer</i>	0.13	1.11	80	1.25
GRASSES				
<i>Agropyron cristatum</i>	1.13	5.24	80	7.50
<i>Bromus tectorum</i>	0.50	1.87	80	7.50
<i>Dactylis glomerata</i>	0.06	0.56	80	1.25
<i>Elymus cinereus</i>	4.81	11.22	80	25.00
<i>Elymus hispidus</i>	0.38	2.06	80	3.75
<i>Elymus junceus</i>	0.19	1.24	80	2.50
<i>Elymus lanceolatus</i>	7.56	10.90	80	48.75
<i>Elymus salinus</i>	1.56	6.96	80	6.25
<i>Elymus smithii</i>	6.16	9.56	80	43.75
<i>Elymus spicatus</i>	4.69	13.13	80	13.75
<i>Elymus trachycaulus</i>	0.56	4.03	80	2.50
<i>Poa pratensis</i>	0.44	2.52	80	3.75
<i>Poa secunda</i>	4.13	11.67	80	17.50
<i>Stipa hymenoides</i>	0.31	2.28	80	2.50

TABLE 3: Total cover and composition summary for the Reference Area in Sowbelly Canyon (2004).

A. TOTAL COVER	% MEAN COVER	STANDARD DEVIATION	SAMPLE SIZE
Total Living	45.50	12.46	50
Litter	18.60	14.39	50
Bareground	11.80	8.76	50
Rock	24.10	17.51	50

B. COMPOSITION

Shrubs	18.44	23.61	50
Forbs	18.04	20.59	50
Grasses	63.53	26.25	50

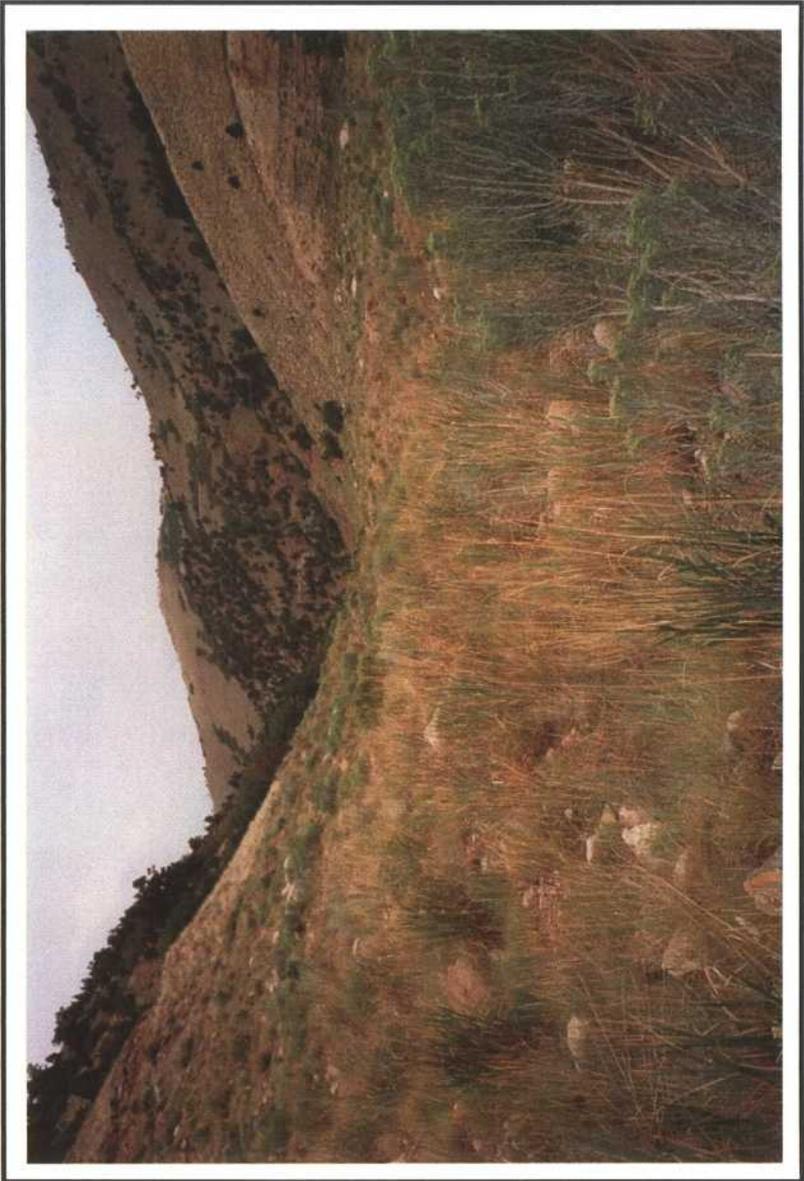
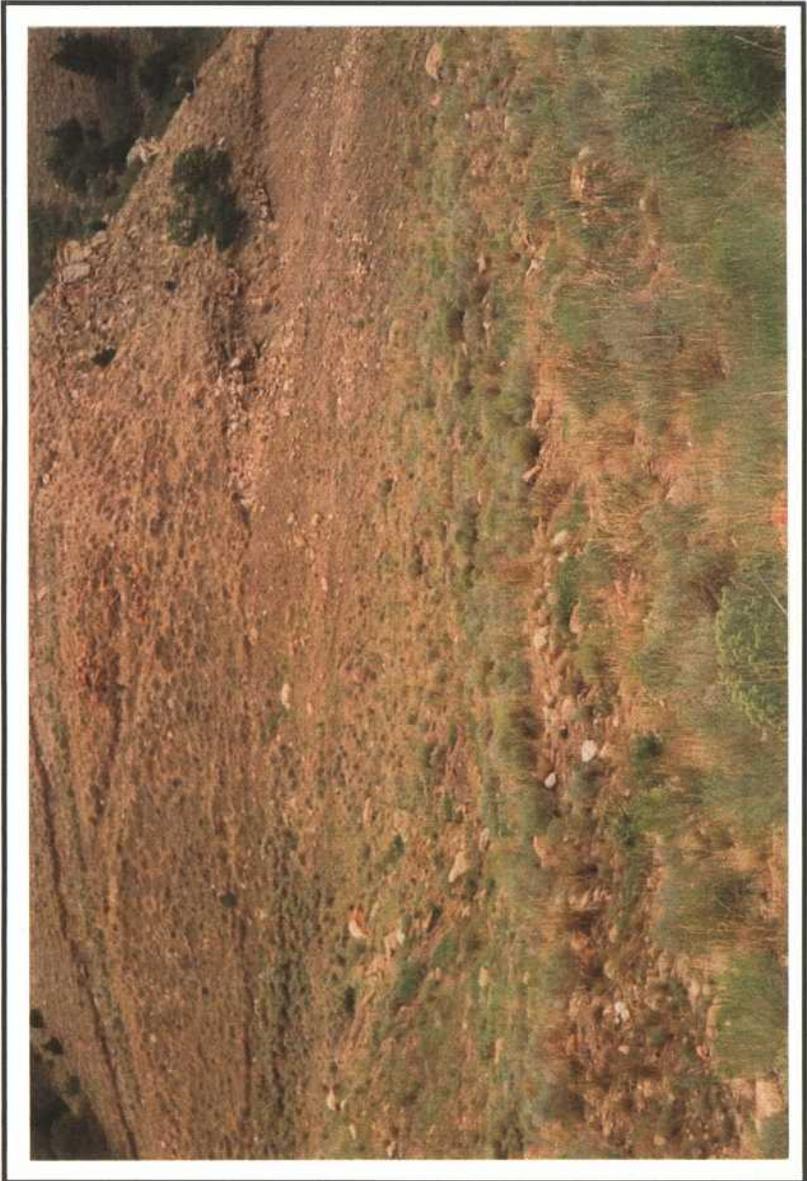
TABLE 4: Species cover and frequency summary for the Reference Area in Sowbelly Canyon (2004).

SPECIES	% MEAN COVER	STANDARD DEVIATION	SAMPLE SIZE	RELATIVE FREQUENCY
TREES & SHRUBS				
<i>Artemisia tridentata</i>	0.50	3.50	50	2.00
<i>Atriplex canescens</i>	3.24	7.81	50	20.00
<i>Chrysothamnus nauseosus</i>	4.60	7.93	50	36.00
<i>Gutierrezia sarothrae</i>	0.40	1.69	50	6.00
FORBS				
<i>Artemisia ludoviciana</i>	1.96	3.44	50	34.00
<i>Aster glaucodes</i>	3.70	8.30	50	32.00
<i>Chenopodium sp.</i>	0.10	0.70	50	2.00
<i>Grindelia squarrosa</i>	0.26	1.05	50	6.00
<i>Machaeranthera grindelioides</i>	1.04	2.72	50	16.00
<i>Melilotus officinalis</i>	0.10	0.70	50	2.00
<i>Penstemon palmeri</i>	0.90	4.32	50	8.00
GRASSES				
<i>Bromus inermis</i>	2.30	7.63	50	20.00
<i>Bromus tectorum</i>	4.70	9.61	50	30.00
<i>Dactylis glomerata</i>	0.20	1.40	50	2.00
<i>Elymus lanceolatus</i>	10.30	12.47	50	62.00
<i>Elymus salinus</i>	0.20	1.40	50	2.00
<i>Elymus smithii</i>	9.10	13.18	50	42.00
<i>Poa secunda</i>	0.20	0.98	50	4.00
<i>Stipa hymenoides</i>	1.70	3.55	50	22.00

COLOR PHOTOGRAPHS

Reclaimed Areas
(Walking North to South)







Reference Area



APPENDIX

Raw Data

PLATEAU MINING

Sowbelly

Reclaimed Area

R = Riparian

Exposure: Variable

Slope: Variable

R

Sample Date: 17 Aug 2004

1.00 2.00 3.00 4.00 5.00 6.00 7.00

OVERSTORY

Acer grandidentatum 0.00 0.00 0.00 0.00 0.00 0.00 0.00

TREES & SHRUBS

Amelanchier utahensis 0.00 0.00 0.00 0.00 0.00 0.00 0.00

Artemisia tridentata 0.00 0.00 5.00 0.00 0.00 0.00 0.00

Atriplex canescens 0.00 0.00 0.00 0.00 0.00 0.00 0.00

Ceratoides lanata 0.00 0.00 0.00 0.00 0.00 0.00 0.00

Chrysothamnus nauseosus 0.00 0.00 0.00 0.00 0.00 0.00 15.00

Gutierrezia sarothrae 0.00 5.00 0.00 0.00 0.00 0.00 0.00

Symphoricarpos oreophilus 0.00 0.00 0.00 0.00 0.00 0.00 0.00

FORBS

Achillea millefolium 0.00 0.00 0.00 0.00 0.00 0.00 0.00

Artemisia drucunculus 0.00 0.00 0.00 0.00 0.00 0.00 0.00

Aster glaucodes 0.00 0.00 0.00 8.00 4.00 10.00 3.00

Grindelia squarrosa 0.00 0.00 2.00 0.00 0.00 1.00 0.00

Hedysarum boreale 0.00 0.00 0.00 0.00 0.00 0.00 0.00

Iva axillaris 0.00 0.00 0.00 0.00 0.00 0.00 0.00

Linum lewisii 0.00 0.00 0.00 7.00 1.00 4.00 2.00

Machaeranthera canescens 0.00 0.00 0.00 0.00 0.00 0.00 0.00

Melilotus officinalis 0.00 0.00 0.00 0.00 0.00 0.00 0.00

Salsola pestifer 0.00 0.00 0.00 0.00 0.00 0.00 0.00

GRASSES

Agropyron cristatum 0.00 0.00 0.00 10.00 30.00 0.00 35.00

Bromus tectorum 0.00 5.00 0.00 0.00 0.00 0.00 0.00

Dactylis glomerata 0.00 0.00 0.00 0.00 0.00 0.00 0.00

Elymus cinereus 0.00 0.00 0.00 0.00 0.00 0.00 0.00

Elymus hispidus 0.00 0.00 0.00 0.00 0.00 0.00 0.00

Elymus junceus 0.00 0.00 0.00 0.00 0.00 10.00 0.00

Elymus lanceolatus 25.00 25.00 10.00 0.00 0.00 40.00 0.00

Elymus salinus 0.00 0.00 0.00 0.00 0.00 0.00 0.00

Elymus smithii 20.00 5.00 18.00 0.00 10.00 0.00 10.00

Elymus spicatus 0.00 0.00 0.00 0.00 0.00 0.00 0.00

Elymus trachycaulus 0.00 0.00 0.00 10.00 0.00 0.00 0.00

Poa pratensis 0.00 5.00 0.00 0.00 0.00 0.00 0.00

Poa secunda 0.00 0.00 0.00 0.00 0.00 0.00 0.00

Stipa hymenoides 0.00 0.00 0.00 5.00 0.00 0.00 0.00

COVER

Overstory 0.00 0.00 0.00 0.00 0.00 0.00 0.00

Total Living Cover 45.00 45.00 35.00 40.00 45.00 65.00 65.00

Litter 30.00 20.00 5.00 15.00 30.00 25.00 20.00

Bareground 15.00 5.00 35.00 30.00 15.00 5.00 10.00

Rock 10.00 30.00 25.00 15.00 10.00 5.00 5.00

% COMPOSITION

Shrubs 0.00 11.11 14.29 0.00 0.00 0.00 23.08

Forbs 0.00 0.00 5.71 37.50 11.11 23.08 7.69

Grasses 100.00 88.89 80.00 62.50 88.89 76.92 69.23

Overstory + Understory 45.00 45.00 35.00 40.00 45.00 65.00 65.00

	R		R				R	R	
8.00	9.00	10.00	11.00	12.00	13.00	14.00	15.00	16.00	17.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
45.00	0.00	40.00	0.00	5.00	5.00	13.00	0.00	0.00	5.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	3.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	25.00	2.00	0.00	0.00	5.00
0.00	0.00	0.00	2.00	0.00	0.00	0.00	10.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.00	0.00	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	10.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	15.00	0.00	0.00	45.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	10.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	5.00	0.00	0.00	0.00	0.00	0.00
10.00	0.00	20.00	20.00	10.00	5.00	0.00	10.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	45.00	0.00	0.00	0.00
0.00	0.00	0.00	5.00	0.00	0.00	0.00	0.00	0.00	20.00
0.00	35.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	35.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60.00	50.00	65.00	40.00	65.00	45.00	60.00	40.00	35.00	35.00
30.00	15.00	10.00	10.00	20.00	35.00	10.00	20.00	10.00	15.00
5.00	20.00	5.00	10.00	10.00	10.00	20.00	5.00	10.00	15.00
5.00	15.00	20.00	40.00	5.00	10.00	10.00	35.00	45.00	35.00
75.00	0.00	61.54	0.00	7.69	11.11	21.67	0.00	0.00	14.29
0.00	0.00	0.00	12.50	0.00	55.56	3.33	25.00	0.00	28.57
25.00	100.00	38.46	87.50	92.31	33.33	75.00	75.00	100.00	57.14
60.00	50.00	65.00	40.00	65.00	45.00	60.00	40.00	35.00	35.00

PLATEAU MINING
 Sowbelly
 Reclaimed Area
 Exposure: Variable
 Slope: Variable
 Sample Date: 17 Aug 2004

78.00	79.00	80.00	Mean	SDev	Freq	
<hr/>						OVERSTORY
0.00	0.00	0.00	0.31	2.78	1.25	<i>Acer grandidentatum</i>
<hr/>						TREES & SHRUBS
0.00	0.00	0.00	0.06	0.56	1.25	<i>Amelanchier utahensis</i>
0.00	0.00	0.00	0.81	3.30	8.75	<i>Artemisia tridentata</i>
0.00	0.00	0.00	1.63	6.26	7.50	<i>Atriplex canescens</i>
0.00	0.00	0.00	0.94	4.41	5.00	<i>Ceratoides lanata</i>
0.00	0.00	0.00	7.66	16.38	27.50	<i>Chrysothamnus nauseosus</i>
0.00	0.00	0.00	0.13	0.78	2.50	<i>Gutierrezia sarothrae</i>
0.00	0.00	0.00	0.69	6.11	1.25	<i>Symphoricarpos oreophilus</i>
<hr/>						FORBS
0.00	0.00	0.00	0.04	0.33	1.25	<i>Achillea millefolium</i>
0.00	0.00	0.00	0.38	1.73	5.00	<i>Artemisia drucunculus</i>
0.00	0.00	0.00	6.38	12.25	36.25	<i>Aster glaucodes</i>
0.00	0.00	0.00	0.46	1.75	10.00	<i>Grindelia squarrosa</i>
0.00	0.00	0.00	0.06	0.56	1.25	<i>Hedysarum boreale</i>
0.00	0.00	0.00	0.50	4.44	1.25	<i>Iva axillaris</i>
0.00	0.00	20.00	0.61	2.66	7.50	<i>Linum lewisii</i>
0.00	0.00	0.00	0.44	1.62	7.50	<i>Machaeranthera canescens</i>
0.00	0.00	0.00	0.31	1.99	2.50	<i>Melilotus officinalis</i>
0.00	0.00	0.00	0.13	1.11	1.25	<i>Salsola pestifer</i>
<hr/>						GRASSES
0.00	0.00	0.00	1.13	5.24	7.50	<i>Agropyron cristatum</i>
0.00	0.00	5.00	0.50	1.87	7.50	<i>Bromus tectorum</i>
0.00	0.00	0.00	0.06	0.56	1.25	<i>Dactylis glomerata</i>
5.00	0.00	0.00	4.81	11.22	25.00	<i>Elymus cinereus</i>
0.00	0.00	0.00	0.38	2.06	3.75	<i>Elymus hispidus</i>
0.00	0.00	0.00	0.19	1.24	2.50	<i>Elymus junceus</i>
0.00	0.00	5.00	7.56	10.90	48.75	<i>Elymus lanceolatus</i>
0.00	0.00	0.00	1.56	6.96	6.25	<i>Elymus salinus</i>
0.00	0.00	10.00	6.16	9.56	43.75	<i>Elymus smithii</i>
50.00	0.00	0.00	4.69	13.31	13.75	<i>Elymus spicatus</i>
0.00	0.00	0.00	0.56	4.03	2.50	<i>Elymus trachycaulus</i>
0.00	0.00	0.00	0.44	2.52	3.75	<i>Poa pratensis</i>
10.00	40.00	5.00	4.13	11.67	17.50	<i>Poa secunda</i>
0.00	0.00	0.00	0.31	2.28	2.50	<i>Stipa hymenoides</i>
<hr/>						COVER
0.00	0.00	0.00	0.31	2.78		Overstory
65.00	40.00	45.00	53.69	12.03		Total Living Cover
20.00	20.00	10.00	15.13	9.91		Litter
10.00	10.00	30.00	15.46	11.54		Bareground
5.00	30.00	15.00	15.73	10.55		Rock
<hr/>						% COMPOSITION
0.00	0.00	0.00	20.53	28.37		Shrubs
0.00	0.00	44.44	18.16	23.97		Forbs
100.00	100.00	55.56	61.30	31.66		Grasses
<hr/>						Overstory + Understory
65.00	40.00	45.00	54.00	11.74		

PLATEAU MINING
 Sowbelly Reference Area
 Exposure: Variable
 Slope: Variable
 Sample Date: 18 Aug 2004

	1.00	2.00	3.00	4.00	5.00	6.00	7.00
OVERSTORY							
TREES & SHRUBS							
<i>Artemisia tridentata</i>	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<i>Atriplex canescens</i>	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<i>Chrysothamnus nauseosus</i>	30.00	15.00	5.00	5.00	0.00	0.00	0.00
<i>Gutierrezia sarothrae</i>	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FORBS							
<i>Artemisia ludoviciana</i>	0.00	5.00	0.00	0.00	0.00	5.00	0.00
<i>Aster glaucodes</i>	5.00	10.00	0.00	50.00	5.00	0.00	5.00
<i>Chenopodium sp.</i>	0.00	0.00	0.00	0.00	0.00	5.00	0.00
<i>Grindelia squarrosa</i>	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<i>Machaeranthera grindelioides</i>	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<i>Mellilotus officinalis</i>	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<i>Penstemon palmeri</i>	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GRASSES							
<i>Bromus tectorum</i>	0.00	0.00	0.00	0.00	0.00	10.00	5.00
<i>Dactylis glomerata</i>	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<i>Bromus inermis</i>	5.00	10.00	0.00	5.00	0.00	0.00	0.00
<i>Elymus lanceolatus</i>	15.00	5.00	30.00	5.00	5.00	5.00	0.00
<i>Elymus salinus</i>	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<i>Elymus smithii</i>	0.00	0.00	30.00	0.00	35.00	5.00	5.00
<i>Poa secunda</i>	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<i>Stipa hymenoides</i>	0.00	0.00	0.00	0.00	5.00	0.00	10.00
COVER							
Overstory	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Living Cover	55.00	45.00	65.00	65.00	50.00	30.00	25.00
Litter	15.00	35.00	20.00	25.00	35.00	50.00	20.00
Bareground	15.00	10.00	10.00	5.00	5.00	10.00	10.00
Rock	15.00	10.00	5.00	5.00	10.00	10.00	45.00
% COMPOSITION							
Shrubs	54.55	33.33	7.69	7.69	0.00	0.00	0.00
Forbs	9.09	33.33	0.00	76.92	10.00	33.33	20.00
Grasses	36.36	33.33	92.31	15.38	90.00	66.67	80.00
Overstory + Understory	55.00	45.00	65.00	65.00	50.00	30.00	25.00

8.00	9.00	10.00	11.00	12.00	13.00	14.00	15.00	16.00	17.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.00
0.00	0.00	35.00	25.00	0.00	0.00	20.00	0.00	0.00	0.00
10.00	0.00	15.00	5.00	5.00	5.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.00
5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.00	0.00
5.00	0.00	0.00	0.00	10.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20.00	0.00	0.00	0.00	10.00	0.00	0.00	0.00	0.00	5.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	5.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	5.00	5.00	5.00	30.00	10.00	10.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.00	25.00	15.00	35.00	5.00	25.00	0.00	0.00	30.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
45.00	25.00	65.00	65.00	35.00	40.00	25.00	30.00	50.00	50.00
35.00	5.00	15.00	20.00	15.00	10.00	65.00	60.00	10.00	45.00
5.00	5.00	5.00	5.00	5.00	10.00	5.00	5.00	5.00	15.00
15.00	65.00	15.00	10.00	45.00	40.00	5.00	5.00	35.00	-10.00
22.22	0.00	76.92	46.15	14.29	12.50	80.00	0.00	0.00	70.00
22.22	0.00	0.00	0.00	28.57	0.00	0.00	0.00	20.00	0.00
55.56	100.00	23.08	53.85	57.14	87.50	20.00	100.00	80.00	30.00
45.00	25.00	65.00	65.00	35.00	40.00	25.00	30.00	50.00	50.00

28.00	29.00	30.00	31.00	32.00	33.00	34.00	35.00	36.00	37.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	5.00	0.00	0.00	25.00	10.00	0.00	7.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.00	5.00	0.00	5.00	5.00	0.00	0.00	5.00	3.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	5.00	5.00	0.00	0.00	5.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.00
0.00	5.00	0.00	0.00	0.00	0.00	5.00	30.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	5.00	15.00	0.00	0.00	5.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40.00	20.00	20.00	0.00	35.00	10.00	0.00	0.00	15.00	15.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	25.00	35.00	0.00	0.00	0.00	0.00	20.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
45.00	35.00	55.00	45.00	40.00	40.00	35.00	35.00	45.00	30.00
10.00	10.00	5.00	15.00	15.00	10.00	10.00	5.00	10.00	10.00
35.00	10.00	35.00	15.00	10.00	15.00	10.00	5.00	40.00	10.00
10.00	45.00	5.00	25.00	35.00	35.00	45.00	55.00	5.00	50.00

0.00	0.00	9.09	0.00	0.00	62.50	28.57	0.00	15.56	0.00
11.11	28.57	9.09	22.22	12.50	0.00	28.57	100.00	6.67	16.67
88.89	71.43	81.82	77.78	87.50	37.50	42.86	0.00	77.78	83.33

45.00	35.00	55.00	45.00	40.00	40.00	35.00	35.00	45.00	30.00
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38.00	39.00	40.00	41.00	42.00	43.00	44.00	45.00	46.00	47.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	5.00	0.00	20.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	20.00	0.00	5.00	15.00	5.00	5.00
0.00	0.00	0.00	5.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	5.00	0.00	5.00	0.00	5.00	0.00
20.00	0.00	0.00	0.00	0.00	0.00	5.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.00	0.00
0.00	0.00	0.00	0.00	5.00	0.00	0.00	15.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	5.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	5.00	0.00	0.00	0.00	5.00	0.00	30.00	35.00	40.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.00	0.00	15.00	10.00	5.00	15.00	30.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	35.00	20.00	0.00	5.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	5.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	10.00	5.00	5.00	0.00	5.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
35.00	45.00	35.00	40.00	40.00	35.00	50.00	65.00	50.00	50.00
10.00	15.00	10.00	15.00	10.00	15.00	35.00	5.00	35.00	35.00
25.00	15.00	20.00	10.00	30.00	10.00	5.00	20.00	5.00	10.00
30.00	25.00	35.00	35.00	20.00	40.00	10.00	10.00	10.00	5.00

0.00	11.11	0.00	62.50	50.00	0.00	10.00	23.08	10.00	10.00
57.14	0.00	0.00	12.50	25.00	0.00	20.00	23.08	20.00	0.00
42.86	88.89	100.00	25.00	25.00	100.00	70.00	53.85	70.00	90.00

35.00	45.00	35.00	40.00	40.00	35.00	50.00	65.00	50.00	50.00
-------	-------	-------	-------	-------	-------	-------	-------	-------	-------

PLATEAU MINING
 Sowbelly Reference Area
 Exposure: Variable
 Slope: Variable
 Sample Date: 18 Aug 2004

48.00	49.00	50.00	Mean	SDev	Freq	
<hr/>						
OVERSTORY						
TREES & SHRUBS						
0.00	0.00	0.00	0.50	3.50	2.00	<i>Artemisia tridentata</i>
0.00	0.00	0.00	3.24	7.81	20.00	<i>Atriplex canescens</i>
20.00	30.00	0.00	4.60	7.93	36.00	<i>Chrysothamnus nauseosus</i>
0.00	0.00	0.00	0.40	1.69	6.00	<i>Gutierrezia sarothrae</i>
FORBS						
0.00	0.00	20.00	1.96	3.44	34.00	<i>Artemisia ludoviciana</i>
0.00	0.00	0.00	3.70	8.30	32.00	<i>Aster glaucodes</i>
0.00	0.00	0.00	0.10	0.70	2.00	<i>Chenopodium sp.</i>
0.00	5.00	0.00	0.26	1.05	6.00	<i>Grindelia squarrosa</i>
0.00	0.00	0.00	1.04	2.72	16.00	<i>Macharathera grindelioides</i>
0.00	0.00	0.00	0.10	0.70	2.00	<i>Melilotus officinalis</i>
0.00	0.00	0.00	0.90	4.32	8.00	<i>Penstemon palmeri</i>
GRASSES						
20.00	0.00	25.00	4.70	9.61	30.00	<i>Bromus tectorum</i>
0.00	0.00	0.00	0.20	1.40	2.00	<i>Dactylis glomerata</i>
5.00	0.00	0.00	2.30	7.63	20.00	<i>Bromus inermis</i>
5.00	0.00	0.00	10.30	12.47	62.00	<i>Elymus lanceolatus</i>
0.00	0.00	0.00	0.20	1.40	2.00	<i>Elymus salinus</i>
0.00	0.00	0.00	9.10	13.18	42.00	<i>Elymus smithii</i>
0.00	0.00	0.00	0.20	0.98	4.00	<i>Poa secunda</i>
0.00	15.00	10.00	1.70	3.55	22.00	<i>Stipa hymenoides</i>
COVER						
0.00	0.00	0.00	0.00	0.00		Overstory
50.00	50.00	55.00	45.50	12.46		Total Living Cover
25.00	10.00	35.00	18.60	14.39		Litter
10.00	10.00	5.00	11.80	8.76		Bareground
15.00	30.00	5.00	24.10	17.51		Rock
<hr/>						
% COMPOSITION						
40.00	60.00	0.00	18.44	23.61		Shrubs
0.00	10.00	36.36	18.04	20.59		Forbs
60.00	30.00	63.64	63.53	26.25		Grasses
<hr/>						
50.00	50.00	55.00	45.50	12.46		Overstory + Understory

APPENDIX C

Legal Financial, Compliance and Related Information

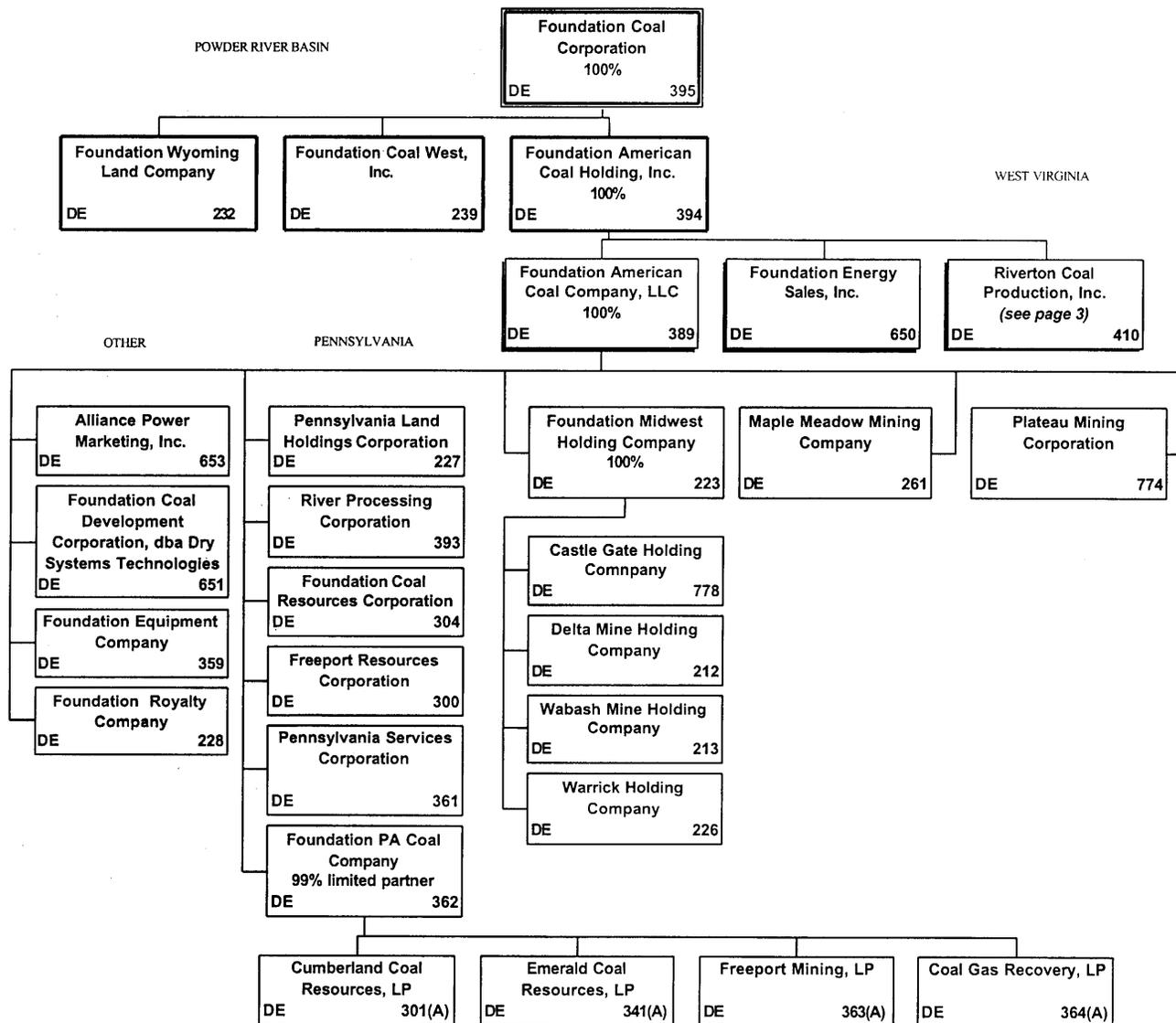
Annual Report of Officers
As submitted to the Utah Department of Commerce

Other change in ownership and control information
As required under R645-301-110

CONTENTS

OFFICERS AND DIRECTORS

FOUNDATION COAL CORPORATION - Summary of Organization
 Foundation American Coal Company, LLC



FOUNDATION COAL CORPORATION

(Incorporated as American Coal Holding Corp.; name changed to American Coal Acquisition Corp. 4/30/04;
name changed to Foundation Coal Corporation 6/24/04)

Principal Operating Office: 999 Corporate Blvd.
Linthicum Heights, MD 21090

Telephone: 410/689-7500

Incorporation:

State Delaware
Corporation Service Company, 2711 Centerville Road, Suite 400, Wilmington, DE 19808

Date April 23, 2004
Existence Perpetual

Qualified to Do Business In: Colorado, Maryland

Ownership – Percentage: FC 2 Corp. – 100%
999 Corporate Boulevard, Linthicum Heights, MD 21090

IRS Identification Number: 26-0085077

Officers:

<u>Title</u>	<u>Name</u>	<u>Social Security #</u>	<u>Date Assumed Office</u>
President and Chief Executive Officer	James F. Roberts	187-40-9345	July 30, 2004
Senior Vice President and Chief Financial Officer	Frank J. Wood	230-74-0342	July 30, 2004
Senior Vice President, Planning and Engineering	Klaus-Dieter Beck	German	July 30, 2004
Senior Vice President, Eastern Operations	James J. Bryja	202-46-8954	July 30, 2004
Senior Vice President, Western Operations	Thomas J. Lien	474-46-3032	July 30, 2004
Senior Vice President, Development and Information Technology	James A. Olsen	030-36-0783	July 30, 2004
Senior Vice President, Safety and Human Resources	M. R. Peelish	235-72-2473	July 30, 2004
Senior Vice President, Sales and Marketing	John R. Tellmann	315-54-6211	July 30, 2004
Senior Vice President, General Counsel and Secretary	Greg A. Walker	262-82-8649	July 30, 2004
Corporate Controller	James L. Anderson, Jr.	197-48-0926	November 23, 2004
Treasurer	Gary G. Pearson	512-36-0698	July 27, 2004
Assistant Secretary	Edythe C. Katz	436-35-4902	September 23, 2004

Directors:

James L. Anderson, Jr.	197-48-0926	November 30, 2004
James F. Roberts	187-40-9345	July 30, 2004
Frank J. Wood	230-74-0342	July 30, 2004

FOUNDATION COAL CORPORATION

Resignations since July 30, 2004:

<u>Title</u>	<u>Name</u>	<u>Social Security No.</u>	<u>Date Resigned</u>
President and Director	Thomas R. Denison	521-08-9397	July 30, 2004
Secretary and Director	David I. Foley	withheld	July 30, 2004
Vice President	Alex T. Krueger	withheld	July 30, 2004

August 12, 2004

FOUNDATION AMERICAN COAL HOLDING, INC.

(Formerly Ruhrkohle-Stinnes Corporation; name change to Ruhr-American Coal Corporation 10/1/75;
name change to RAG American Coal Corporation 12/22/98; name change to RAG American Coal Holding, Inc. 6/18/99;
name change to Foundation Coal Holding, Inc. 7/30/04; stock acquired by Foundation Coal Corporation 7/30/04;
name change to Foundation American Coal Holding, Inc. 8/9/04)

Principal Operating Office: 999 Corporate Blvd.
Linthicum Heights, MD 21090

Telephone: 410/689-7500

Incorporation:
State Delaware
The Corporation Trust Company, 1209 Orange Street, Wilmington, DE 19801

Date October 31, 1974
Existence Perpetual

Qualified to Do Business In: West Virginia, Colorado and Maryland

Ownership – Percentage: Foundation Coal Corporation – 100%
999 Corporate Boulevard, Linthicum Heights, MD 21090

IRS Identification Number: 13-2793319

Officers:

<u>Title</u>	<u>Name</u>	<u>Social Security #</u>	<u>Date Assumed Office</u>
President and Chief Executive Officer	James F. Roberts	187-40-9345	March 1, 1999
Senior Vice President and Chief Financial Officer	Frank J. Wood	230-74-0342	March 2, 2004
Senior Vice President, Planning and Engineering	Klaus-Dieter Beck	German	September 14, 2001
Senior Vice President, Eastern Operations	James J. Bryja	202-46-8954	February 24, 2003
Senior Vice President, Western Operations	Thomas J. Lien	474-46-3032	September 14, 2001
Senior Vice President, Development and Information Technology	James A. Olsen	030-36-0783	September 14, 2001
Senior Vice President, Safety and Human Resources	M. R. Peelish	235-72-2473	September 14, 2001
Senior Vice President, Sales and Marketing	John R. Tellmann	315-54-6211	February 21, 2002
Senior Vice President, General Counsel and Secretary	Greg A. Walker	262-82-8649	August 24, 1999
Treasurer	Gary G. Pearson	512-36-0698	March 27, 2001

Directors:

James F. Roberts	187-40-9345	March 1, 1999
Frank J. Wood	230-74-0342	July 30, 2004

FOUNDATION AMERICAN COAL HOLDING, INC.

Resignations since June 30, 1999:

<u>Title</u>	<u>Name</u>	<u>Social Security No.</u>	<u>Date Resigned</u>
Secretary and Treasurer	Roy West	235-88-5799	August 24, 1999
Vice President, Finance and Treasurer	J. Alan Link	232-92-6300	April 1, 2000
Director	Rainer Benning	German	September 30, 2000
Vice President, Development	James A. Olsen	030-36-0783	March 27, 2001
Vice President, Human Resources	Michael R. Peelish	235-72-2473	March 27, 2001
Treasurer	Frank J. Wood	230-74-0342	March 27, 2001
Assistant Treasurer	Gary G. Pearson	512-36-0698	March 27, 2001
Executive Vice President	John M. DeMichiei	208-40-1828	September 13, 2001
Vice President, West Virginia Operations	Randy Hansford	232-92-7183	September 14, 2001
Vice President, Planning and Engineering	Klaus-Dieter Beck	German	September 14, 2001
Vice President, Development and Information Technology	James A. Olsen	030-36-0783	September 14, 2001
Vice President, Safety and Human Resources	Michael R. Peelish	235-72-2473	September 14, 2001
Vice President	Frank J. Wood	230-74-0342	September 14, 2001
Senior Vice President	John R. Tellmann	315-54-6211	February 21, 2002
Senior Vice President, Eastern Operations	Randy L. McMillion	235-90-8345	May 1, 2002
Director	Joel Richards III	534-44-7083	December 19, 2003
Senior Vice President, Finance and Controller	Frank J. Wood	230-74-0342	March 2, 2004
Director and Chairman	Jürgen W. Stadelhofer	German	July 30, 2004
	Christoph Danzer-Vanotti	German	July 30, 2004
	Karl F. Jakob	German	July 30, 2004
	Heribert Protzek	German	July 30, 2004
	Manfred Warda	German	July 30, 2004
	Anthony Williams	Withheld	July 30, 2004
	Fritz Ziegler	German	July 30, 2004

August 12, 2004

FOUNDATION AMERICAN COAL COMPANY, LLC
(Converted to a limited liability company 3/10/04; formerly RAG American Coal Company LLC;
name changed to Foundation American Coal Company, LLC 7/30/04)

Principal Operating Office: 999 Corporate Blvd.
Linthicum Heights, MD 21090

Telephone: 410/689-7500

Formation:
State The Corporation Trust Company, 1209 Orange Street, Wilmington, DE 19801
Date June 18, 1999
Existence Perpetual

Qualified to Do Business In: Maryland

Ownership - Percentage: Foundation American Coal Holding, Inc. - 100%
999 Corporate Blvd., Linthicum Heights, MD 21090

IRS Identification Number: 54-1947356

OFFICERS:

<u>Title</u>	<u>Name</u>	<u>Social Security #</u>	<u>Date Assumed Office</u>
President and Chief Executive Officer	James F. Roberts	187-40-9345	June 24, 1999
Senior Vice President, General Counsel and Secretary	Greg A. Walker	262-82-8649	June 30, 1999
Vice President	James A. Olsen	030-36-0783	September 18, 2000
Vice President and Controller	Darrell H. Roland	233-86-6633	March 1, 2000
Vice President	Frank J. Wood	230-74-0342	June 30, 1999
Vice President, Safety and Human Resources	Michael R. Peelish	235-72-2473	March 27, 2001
Treasurer	Gary G. Pearson	512-36-0698	March 27, 2001

DIRECTORS:	James F. Roberts	187-40-9345	June 18, 1999
	Frank J. Wood	230-74-0342	July 30, 2004

FOUNDATION AMERICAN COAL COMPANY, LLC
 (converted to a limited liability company 3/10/04; formerly RAG American Coal Company LLC;
 name changed to Foundation American Coal Company, LLC 7/30/04)

Resignations (since incorporation):

<u>Title</u>	<u>Name</u>	<u>Social Security No.</u>	<u>Date Resigned</u>
Assistant Secretary	J. Alan Link	232-92-6300	June 30, 1999
Secretary, Treasurer	Roy West	235-88-5799	June 30, 1999
Senior Vice President, Sales and Marketing	Nicholas P. Moros	042-40-2347	August 11, 1999
Assistant Secretary	Susan E. Chetlin	210-46-8811	December 31, 1999
Controller	Frank J. Wood	230-74-0342	March 1, 2000
Senior Vice President, Development	Richard D. Mills	306-44-2951	March 31, 2000
Director, Vice President and Treasurer	J. Alan Link	232-92-6300	April 1, 2000
Senior Vice President, Western Operations	George E. Vajda	303-46-6591	May 16, 2000
Vice President, Process Management	Randall J. Scott	522-82-2279	June 30, 2000
Director	Rainer Benning	German	September 30, 2000
Treasurer	Frank J. Wood	230-74-0342	March 27, 2001
Vice President, Planning	Klaus-Dieter Beck	German	March 27, 2001
Vice President, Human Resources	Michael R. Peelish	235-72-2473	March 27, 2001
Assistant Treasurer	Gary G. Pearson	512-36-0698	March 27, 2001
Executive Vice President, Chief Operating Officer	John M. DeMichiei	208-40-1828	September 13, 2001
Director	Karl F. Jakob	German	July 30, 2004
Director	Jurgen W. Stadelhofer	German	July 30, 2004

September 10, 2004

FOUNDATION MIDWEST HOLDING COMPANY

(Formerly Cyprus Amax Midwest Holding Company, name changed to RAG Midwest Holding Company 6/30/99;
name changed to Foundation Midwest Holding Company 7/30/04)

Principal Operating Offices: 999 Corporate Blvd.
Linthicum Heights, MD 21090

Telephone: 410/689-7500

Incorporation:
State Delaware, The Corporation Trust Company, 1209 Orange Street, Wilmington, DE 19801
Date April 2, 1998
Existence Perpetual

Qualified to Do Business In:

Ownership – Percentage: Foundation American Coal Company, LLC – 100%
999 Corporate Blvd., Linthicum Heights, MD 21090

IRS Identification Number: 84-1456626

OFFICERS:

<u>Title</u>	<u>Name</u>	<u>Social Security #</u>	<u>Date Assumed Office</u>
President	James A. Olsen	030-36-0783	December 13, 2002
Senior Vice President, General Counsel and Secretary	Greg A. Walker	262-82-8649	June 30, 1999
Vice President and Controller	Darrell H. Roland	233-86-6633	March 1, 2000
Vice President	Frank J. Wood	230-74-0342	April 2, 1998
Treasurer	Gary G. Pearson	512-36-0698	March 27, 2001
Assistant Secretary	Sharon J. Fetherhuff	503-50-3540	January 1, 2000
Assistant Secretary	William M. Hartzler	313-50-6744	January 1, 2000

DIRECTORS

James F. Roberts	187-40-9345	June 30, 1999
Frank J. Wood	230-74-0342	June 30, 1999

FOUNDATION MIDWEST HOLDING COMPANY

Resignations since Incorporation:

<u>Title</u>	<u>Name</u>	<u>Social Security #</u>	<u>Date Resigned</u>
Assistant Secretary	Morris W. Kegley	306-52-2454	July 15, 1998
President	Randall J. Scott	522-82-2279	October 8, 1998
Director	Garold R. Spindler	233-74-2870	June, 30, 1999
Director	Gerald J. Malys	165-36-0198	June, 30, 1999
Director	Philip C. Wolf	317-50-5623	June, 30, 1999
Senior Vice President	Gerald J. Malys	165-36-0198	June, 30, 1999
Senior Vice President, General Counsel and Secretary	Philip C. Wolf	317-50-5623	June 30, 1999
Vice President	Patrick J. Panzarino	134-38-7821	June 30, 1999
Vice President and Treasurer	Farokh S. Hakimi	093-42-6402	June 30, 1999
Assistant Treasurer	J. M. Coyner	227-60-6113	June 30, 1999
Director of Tax	J. David Flemming	301-48-5865	June 30, 1999
Assistant Secretary	Sharon J. Fetherhuff	503-50-3540	June 30, 1999
Assistant Secretary	Greg A. Walker	262-82-8649	June 30, 1999
Assistant Secretary	Dale E. Huffman	557-86-5790	June, 30, 1999
Senior Vice President, Sales and Marketing	Nicholas P. Moros	042-40-2347	August 11, 1999
Assistant Secretary	Susan E. Chetlin	210-46-8811	December 31, 1999
Controller	Frank J. Wood	230-74-0342	March 1, 2000
Vice President and Treasurer	J. Alan Link	232-92-6300	April 1, 2000
Treasurer	Frank J. Wood	230-74-0342	March 27, 2001
Assistant Treasurer	Gary G. Pearson	512-36-0698	March 27, 2001
President and Director	John M. DeMichiei	208-40-1828	September 13, 2001
President	Randy L. McMillion	235-90-8345	May 1, 2002
Assistant Secretary	C. Corwin Bromley	267-11-1226	September 10, 2004

September 10, 2004

CASTLE GATE HOLDING COMPANY

Principal Operating Offices:

999 Corporate Blvd.
Linthicum Heights, MD 21090

Telephone:

410/689-7500

Incorporation:

State

Delaware, The Corporation Trust Company, 1209 Orange Street, Wilmington, DE 19801

Date

April 2, 1998

Existence

Perpetual

Qualified to Do Business In:

Utah

Ownership - Percentage:

Foundation Midwest Holding Company - 100%
999 Corporate Blvd., Linthicum Heights, MD 21090

IRS Identification Number:

84-1456620

OFFICERS:

<u>Title</u>	<u>Name</u>	<u>Social Security #</u>	<u>Date Assumed Office</u>
President	Thomas J. Lien	474-46-3032	September 14, 2001
Senior Vice President, General Counsel and Secretary	Greg A. Walker	262-82-8649	June 30, 1999
Vice President and Controller	Darrell H. Roland	233-86-6633	March 1, 2000
Vice President	Frank J. Wood	230-74-0342	April 2, 1998
Treasurer	Gary G. Pearson	512-36-0698	March 27, 2001
Assistant Secretary	Sharon J. Fetherhuff	503-50-3540	January 1, 2000
Assistant Secretary	William M. Hartzler	313-50-6744	January 1, 2000

DIRECTORS:

James F. Roberts	187-40-9345	June 30, 1999
Frank J. Wood	230-74-0342	June 30, 1999

CASTLE GATE HOLDING COMPANY

Resignations since Incorporation:

Assistant Secretary	Morris W. Kegley	306-52-2454	July 15, 1998
President	Randall J. Scott	522-82-2279	October 8, 1998
Director	Garold R. Spindler	233-74-2870	June 30, 1999
Director	Gerald J. Malys	165-36-0198	June 30, 1999
Director	Philip C. Wolf	317-50-5623	June 30, 1999
Senior Vice President	Gerald J. Malys	165-36-0198	June 30, 1999
Senior Vice President, General Counsel and Secretary	Philip C. Wolf	317-50-5623	June 30, 1999
Vice President	Patrick J. Panzarino	134-38-7821	June 30, 1999
Vice President and Treasurer	Farokh S. Hakimi	093-42-6402	June 30, 1999
Assistant Treasurer	J. M. Coyner	227-60-6113	June 30, 1999
Director of Tax	J. David Flemming	301-48-5865	June 30, 1999
Assistant Secretary	Sharon J. Fetherhuff	503-50-3540	June 30, 1999
Assistant Secretary	Greg A. Walker	262-82-8649	June 30, 1999
Assistant Secretary	Dale E. Huffman	557-86-5790	June 30, 1999
Senior Vice President, Sales and Marketing	Nicholas P. Moros	042-40-2347	August 11, 1999
Assistant Secretary	Susan E. Chetlin	210-46-8811	December 31, 1999
Controller	Frank J. Wood	230-74-0342	March 1, 2000
Vice President and Treasurer	J. Alan Link	232-92-6300	April 1, 2000
Treasurer	Frank J. Wood	230-74-0342	March 27, 2001
Assistant Treasurer	Gary G. Pearson	512-36-0698	March 27, 2001
President and Director	John M. DeMichiei	208-40-1828	September 13, 2001
Assistant Secretary	C. Corwin Bromley	267-11-1226	September 10, 2004

APPENDIX D

Mine Maps

As required under R645-302-525-270

CONTENTS

NONE

APPENDIX E

Other Information

In accordance with the requirements of R645-301 and R645-302

CONTENTS

OVERVIEW OF RECLAMATION AND PHASED BOND RELEASE ACTIVITY

CASTLE GATE MINE

SMCRA

Permit Number C/007/004

The Castle Gate Mine permit area is located approximately 10 miles north of Price, Utah and in the Wasatch Plateau coal fields in Carbon County. The complex consists of various separate areas including: the Hardscrabble Canyon No. 3 and 4 Mine facilities with 39.0 acres (Exhibit 3.3-23); the Sowbelly Gulch No. 5 Mine facilities with 21.0 acres (Exhibit 3.2-13); and the Price Canyon Adit No. 1 Mine with 3.0 acres (Exhibit 3.5-3A). The disturbed (bonded) area for the entire Castle Gate Mine complex is 63.0 acres. The permit area is 7,619 acres, more or less. The performance bond for the Castle Gate Mine is \$680,154. The permit was renewed on December 24, 2004 and expires on December 24, 2009.

This area has a history of various mining operations producing coal since the turn of the 1880's, when Teacum Pratt opened the first operation for house coal. Mining activities were consolidated in 1971 under the Braztah Corporation, which in turn became the Price River Coal Company in 1979, then Castle Gate Coal Company in 1986, Amax Coal Company in 1991, Amax Coal Holding Company in 1996, and Castle Gate Holding Company in 1998.

Hardscrabble Canyon

Hardscrabble reclamation began in 1984 with reclamation of the Goose Island refuse pile followed by reclamation of the No. 3 and 4 Mine areas during the years of 1993 through 1999 and 2002. The road through the disturbed area was altered but left in place for the postmining land use. In 1997, AMAX Coal Company, Castle Gate Holding Company's predecessor, received an Earth Day Award from the Board of Oil, Gas and Mining for "outstanding final reclamation and site restoration". The company was commended for enhancing the postmining land use by restoring the canyon to a more natural configuration and paying particular attention to wildlife habitat while providing better downstream water quality. Phase I bond release was approved on February 14, 2001 for 37.1 acres. Phase II bond release of 37.1 acres was approved on June 5, 2003.

Reclamation work on about 0.72 acres associated with the substation was completed in the fall of 2002.

In 2003, the Hardscrabble Canyon site was nominated by the Division of Oil, Gas and Mining for an "Excellence in Surface Coal Mining Reclamation Award" and was selected by the Department of Interior's Office of Surface Mining as one of the "National Award" winners.

In 2004 a Phase I bond release application was submitted for the substation area in Hardscrabble Canyon.

Sowbelly Gulch/Canyon

Sowbelly Gulch reclamation began in 1992 with all but the substation area being reclaimed by the end of 1995. Phase I bond release of 18.2 acres was approved on January 31, 1997 (excluding the substation). Phase II bond release of the 18.2 acres was approved on June 5, 2003. During 2004 vegetation monitoring was conducted. In 2005 vegetation monitoring will again be conducted to demonstrate vegetation success and sustainability in preparation for Phase III bond release of 18.2 acres in 2006.

Reclamation work on 1.84 acres associated with the substation was completed in the fall of 2002.

In 2004 a Phase I bond release application was submitted for the substation area in Sowbelly Canyon.

Adit No. 1

Adit No. 1 reclamation was performed on about 2.0 acres of disturbance during the fall of 2002.

In 2004 the Adit No. 1 aerial survey was completed and in 2005 a Phase I bond release application will be submitted.