FILE IN: Expandable 09082006
Refer to Record No. 0030
in C0070022, 2006, Incoming
for additional information

3.2.5 Transportation Facilities

3.2.5.1 Roads

The location of access and coal haulage roads and parking areas are provided on Plate 3-2.

A proposed new primary access and haul road will be constructed from the office area road to the new settling pond site. This road will be approximately 415' long, gravel-surfaced and maintained at approximately 16 feet width. The road is shown on Plate 3-2 and detailed on Plate 3-4.

All roads on the site will be maintained throughout their life to meet the design standards. This will include, as necessary, regrading, resurfacing, cleaning of ditches and culverts, watering and/or sweeping for dust control.

If a road is damaged by a catastrophic event, it will be repaired as soon as practical after the damage has occurred.

All roads will be removed and regraded upon final reclamation of the site.

The following is a description of each of the primary roads on this site:

PR-1
Main entrance and coal haul road on west side. Road runs from west entrance to preparation plant. Approximately 1705' long with an average grade of 2.23%. Approximately 770' of road is paved, and the balance is gravel-surfaced. Road is approximately 24' wide.

PR-2
Haul road from SW entrance to intersection with PR-1. Approximately 1720' long with an average grade of 1.51%. Entire length of road is paved, and is 24' wide.

The design details for the proposed settling ponds are shown on Figure 3-13 and Plate 3-2. The ponds have a total capacity of 11.11 acre feet and therefore do not meet any of the criteria of 30 CFR 77.216(a).

The ponds will be constructed under the supervision of a registered professional engineer. The pond construction will be monitored and inspected by the P.E. during construction, and certified upon completion, to ensure compliance with performance standards. The ponds will be inspected by a qualified individual at least quarterly, and certified with other impoundments annually. The ponds will be checked and maintained on a regular basis to ensure they operate in a safe, efficient manner. Maintenance may include cleaning, drainage control and erosion control.

The proposed ponds will have a total storage capacity of 11.11 acre feet. Only 2 of the 4 ponds will be used at one time, reducing the active water storage capacity to 5.56 acre-feet. The ponds will be approximately 95% incised, with only a small portion of the dam above ground level. This would leave only 0.278 acre-feet of potential water release in the event of a failure of the ponds. This water would flow to the disturbed ditch CD-6 and into Ponds 1, 2, 3 and 6. The wash plant will contain a maximum of 23,500 gallons, or approximately 0.07 ac.ft. of water at any given time. In the event of a failure, at least 10,000 gallons of this water would remain in the plant in 2 below-floor sumps, with the balance of approximately 13,500 gallons, or 0.04 acre feet of water going to Ponds 1, 2, 3 and 6. This amount added to the maximum potential release from the ponds, will total 0.319 acre feet, or approximately 0.012 ac.ft. less than the excess pond capacity. Therefore, the ponds would safely contain a worst case discharge from both the settling ponds and plant along with the runoff and sediment from a 10-year, 24-hour precipitation event. The sedimentation ponds have previously been shown to present no significant risk of harm to the environment or public health; therefore, since the proposed settling ponds would flow to and be contained by, the sediment ponds, they also present no significant risk of harm to the environment or public health.

7.2.3.2 Undisturbed Runoff Diversions (continued)

Determination of Peak Discharges from Off-Site Area A

The OSM Storm Computer Program was used to determine the peak discharges from the undisturbed area A whose runoff is intercepted by the diversion shown on Figure 7-4 and Plate 7-2. Physical basin parameters were determined from topographic maps. The curve number of 87 was determined from the soil survey and vegetation characteristics. For the 10 year - 24 hour rainfall event, the highest peak discharge to be conveyed by the diversion was found to be 6.3 cfs.

Size of Diversion Channel

The diversion, shown on Figure 7-4, is intended to intercept and divert runoff from drainage A. It was excavated in the native soil, and is earth lined. Low velocities and regular maintenance serve to impede erosion. The channel is maintained with a minimum cross-sectional area of 4 ft^2. A typical diversion cross section is provided in Plate 7-3.

The length of the diversion is about 1650 ft., and the elevation change along it is about 29 ft. The average slope of the channel is therefore about 0.0176.

Manning's formula was used to determine the adequacy of the channel. Manning's N, the roughness coefficient, was assumed to be 0.05.

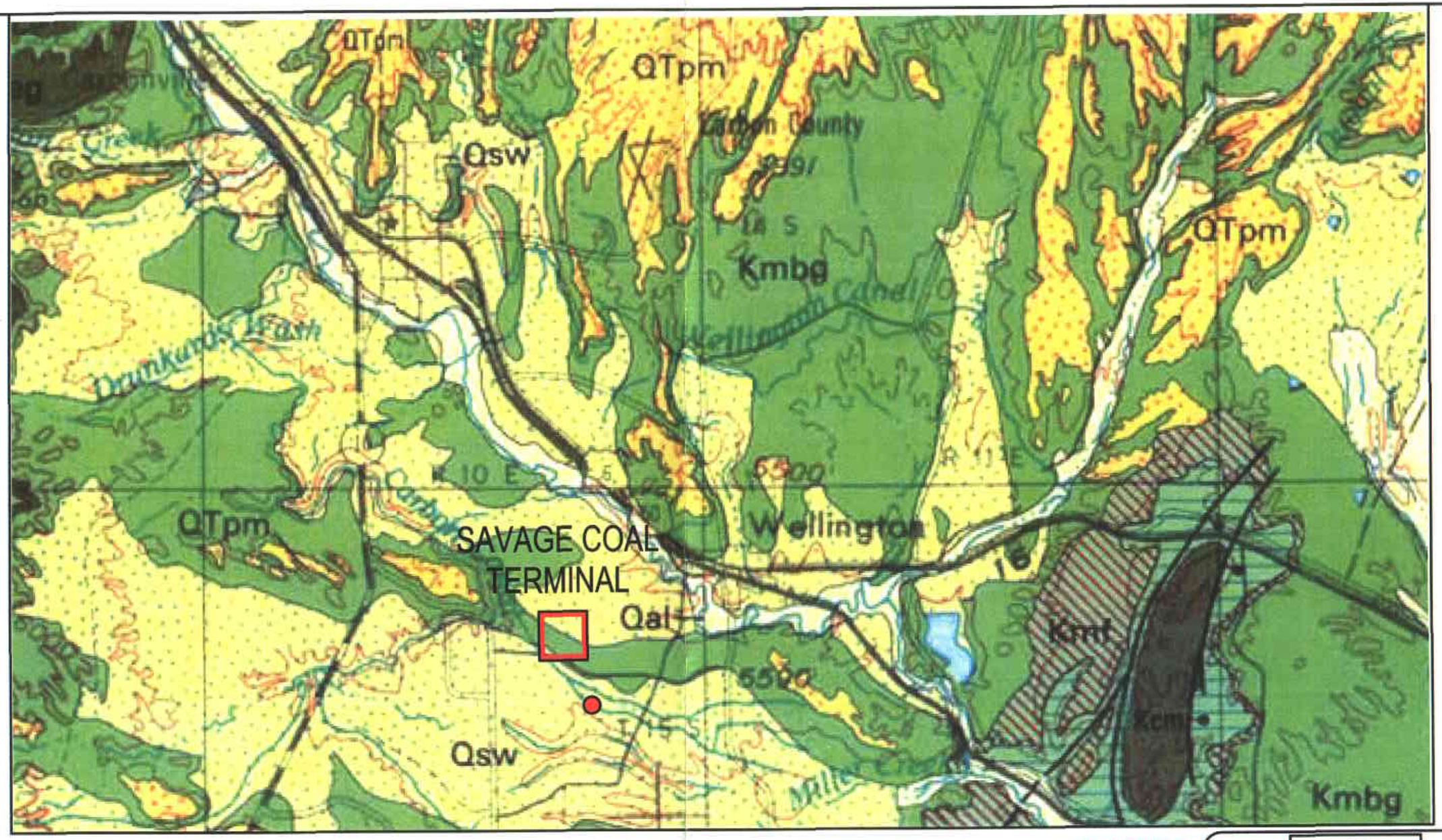
APPENDIX 8-1

TOPSOIL STOCKPILE
(AS-CONSTRUCTED)
August 2006

APPENDIX 8-1
TOPSOIL STOCKPILE
AS-CONSTRUCTED - AUGUST 2006

*Station	Area (sq.ft.)	Volume (cu.yds)	Acc. Volume (cu.yds)
0+00	0.00		
		1271.65	4709.80
1+00	2543.29		
		3169.26	11738.00
2+00	3795.23		
		4018.34	14882.72
3+00	4241.44		
		3293.62	12198.57
4+00	2345.79		
		1363.62	5050.44
5+00	381.45		
		190.73	706.39
6+00	0.00		
			49285.93

*Based on Aerial Survey and Cross Sections from Plate 8-2.



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LEGEND:

Qal = Quarternary Alluvium
QTpm = Quarternary Pediment Mantle
Qsw = Quarternary Slope Wash Deposits
Kmbg = Cretaceous Blue Gate Shale Member of Mancos Formation
Kmt = Cretaceous Tununk Shale Member of Mancos Formation
Kmf = Cretaceous Ferron Sandstone Member of Mancos Formation
Kcm = Cretaceous Cedar Mountain Formation
● = Holmes Magee Well #1

Savage

SAVAGE COAL TERMINAL
GEOLOGIC MAP

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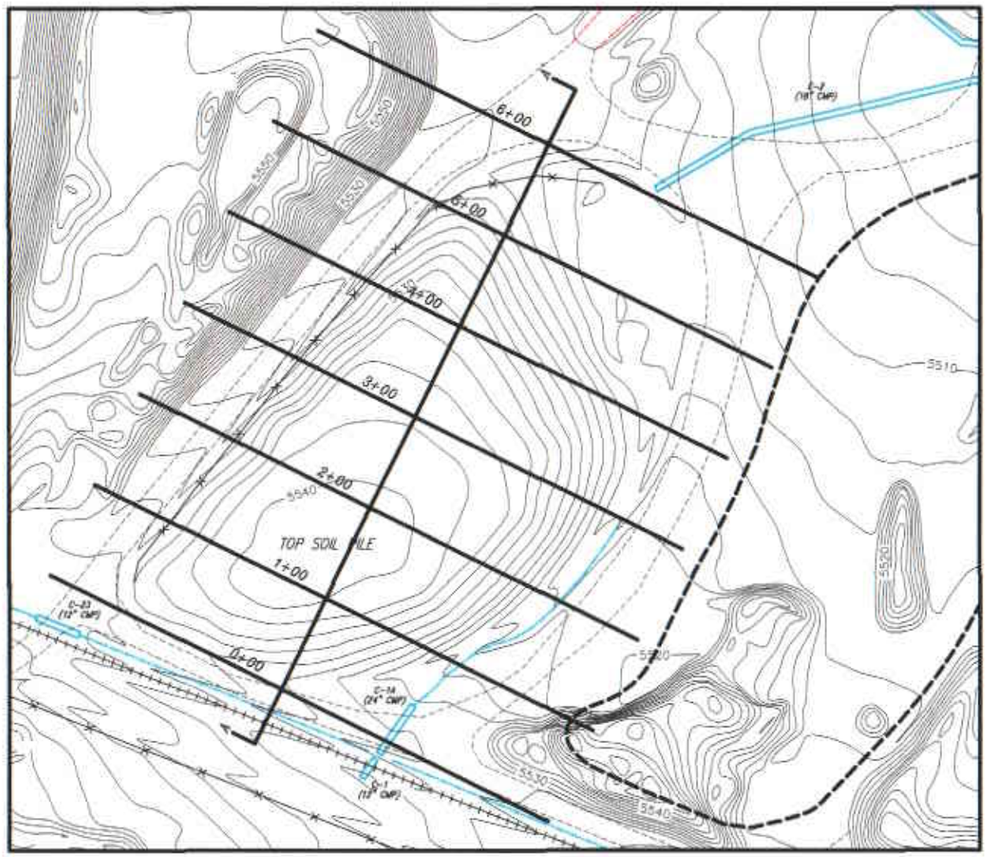
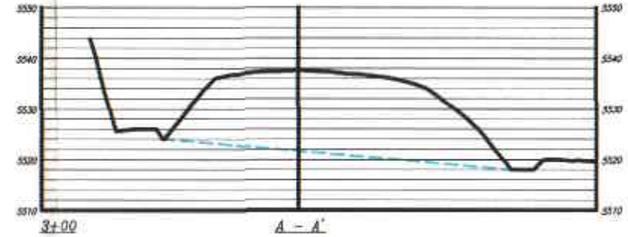
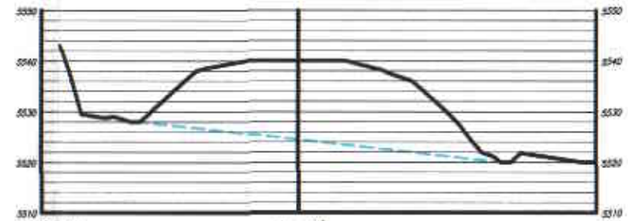
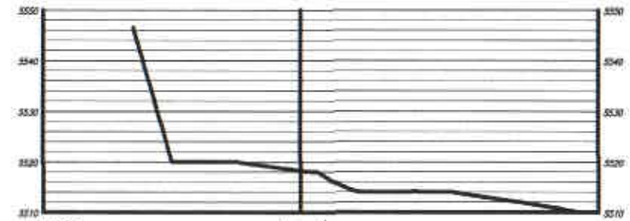
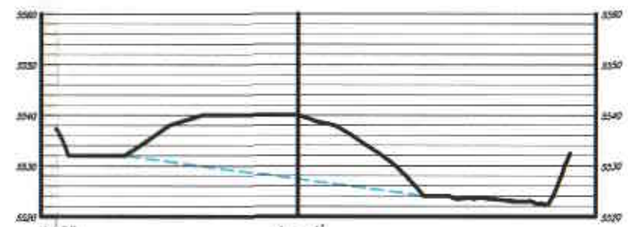
DATE: AUGUST 2006	PLATE NUMBER: 6-1

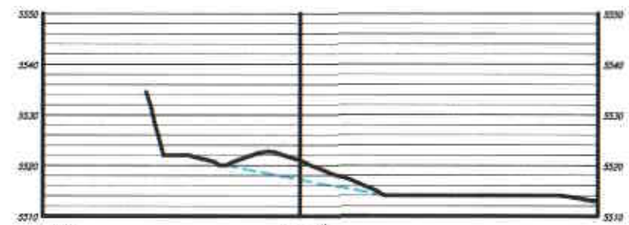


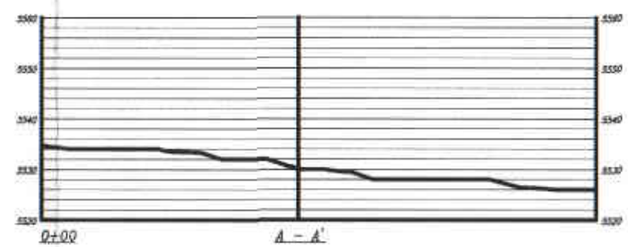


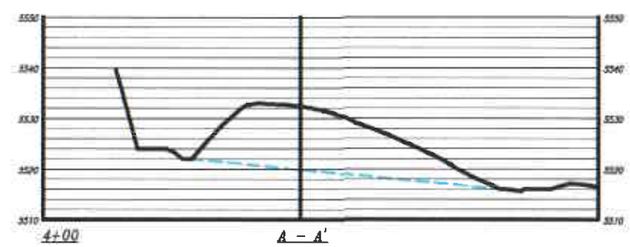












UTAH REGISTERED
#154168
DAN W. GUY
8/22/06
PROFESSIONAL ENGINEER

VERTICAL SCALE: 1:5
HORIZONTAL SCALE: 1:1

LEGEND:
EXISTING GROUND LINE:
CROSS-SECTION LINE:

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SAVAGE COAL TERMINAL
AS-BUILT TOPSOIL MAP

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DATE: AUGUST 2006	PLATE NUMBER: 8-2