



# State of Utah

DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

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August 31, 1988

Mr. Jack Blonquist  
Summit Coal Company  
Boyer Mine  
P.O. Box 646  
Coalville, Utah 84017

Dear Mr. Blonquist:

Re: Water Monitoring At the Boyer Mine, Summit Coal Company,  
ACT/043/008, Folders #2 & 8, Summit County, Utah

The hydrologic investigation of the Boyer Mine permit area conducted under the Small Operator's Assistance Program (SOAP) is near completion. All water monitoring samples have been collected that have been authorized under the grant. As a result, Summit Coal Company will be required to initiate and continue a water monitoring program at the Boyer Mine. Baseline water sampling is nearly complete for the permit area. However, due to access problems, a minor number of samples will need to be collected and analyzed using the complete baseline parameter list. An additional monitoring point should be added at the mine water discharge point. The water samples that should be collected until the end of this year (through December, 1988) are as follows:

<u>Date</u>	<u>Sample Site</u>	<u>Parameter List for Analysis</u>
Sept.	SS-5, SS-6	operational list and flow
	Old well	level and field list
	Boyer & Morbey wells	baseline list
	New well	baseline list and level
	Mine water	baseline list and flow

Oct.	New well	level and field
	Old well	level and field
	SS-5, SS-6	flow and field
	Mine water	baseline and flow
Nov.	same as October	
Dec.	New well	operational list and level
	SS-5, SS-6	operational list and level
	Mine water	baseline and flow

The baseline and operational lists should remain the same as proposed in the approved MR&P with the exception that boron should be added. Those lists are slightly different than the Division's standard lists outlined in the Water Monitoring Program Guidelines.

The approved Mining and Reclamation Plan contains a water monitoring program and commitment to initiate that program upon termination of the SOAP project. However, the Division feels that this program should be modified based upon the results of the SOAP investigation and the recent occurrence of water in the mine. Beginning in January of 1989, the proposed water monitoring schedule is as follows:

<u>Frequency</u>	<u>Sample Sites</u>	<u>Parameters</u>
Quarterly	New well	operational list and level
	SS-5, SS-6	operational list and flow
	Mine water	baseline list and flow
Biannual	Old well	operational list and level

	Boyer & Morbey	baseline
		Note: biannual samples should be taken in May and September
Monthly	New well	level and field
	Old well	level and field
	SS-4, SS-4a	operational list and flow

A flow or level measurement and field parameters should be collected for each quality sample. Results should be submitted to the Division within 30 days of the sample date for quality samples and a quarterly report submitted for well water levels. Copies of all samples and field notes should be kept on file at the mine site. Reports should indicate if no flow was observed in SS-4 and SS-4a.

All samples should be collected in accordance with standard sampling techniques, flows should be measured via a meter or flume (not estimated), and strict adherence to sample preservation techniques and holding times must be observed.

It should also be noted that due to the use of the monitoring well for water supply (i.e., well is pumped), water level data is not representative of the aquifer water level condition when the level is measured following pump operation. Therefore, water level samples should be taken after the well has been allowed to stabilize and the drawdown of the water level allowed to recover. Samples should be taken after allowing the water level to rise following a period of no pumping. Obviously, the longest period of nonpumping feasible is desirable. The Division recommends that water level samples be taken after at least 2-3 days of no pumping.

If this proposed revision to the existing monitoring plan is acceptable to Summit Coal Company, two copies of applicable revised replacement pages for the MR&P should be submitted for final approval. These should be submitted prior to September 15, 1988. The samples scheduled for September should be collected prior to final approval.

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Mr. Jack Blonquist  
September 6, 1988

Thank you for your time on this matter. If you have any questions or comments, please feel free to call.

Sincerely,

A handwritten signature in black ink, appearing to read "Rick P. Summers". The signature is fluid and cursive, with a large, sweeping flourish at the end.

Rick Summers  
Reclamation Hydrologist

cl  
cc: Sue Linner  
Mike DeWeese  
Harold Sandbeck  
WPOB62/1-4