

RET/015/018 #2  
Copy Ken & Tom  
FRAM

October 20, 1992

Ms. Pamela Grubaugh-Littig  
Permit Sueprvisor  
DIVISION OF OIL, GAS AND MINING  
355 West North Temple  
3 Triad Center, Suite 350  
Salt Lake City, UT 84180-1203

**RECEIVED**

**OCT 22 1992**

**DIVISION OF  
OIL GAS & MINING**

**RE: DOGM REVIEW COMMENTS: COTTONWOOD CREEK DRILLING PLAN FOR  
1992, HOLES CCCW1 THROUGH CCCW4**

Dear Ms. Grubaugh-Littig:

During discussions on October 15 with Ken Wyatt and October 16 with Tom Munson concerns were raised on the project depth of drilling and type of hydrologic testing which would be conducted upon completion of the above-captioned wells. Similar comments were submitted to the permitting lead agency, Bureau of Land Management (BLM), on August 5, 1992. It was indicated during the discussions that DOGM would not approve the Cottonwood Canyon Drilling Plan until its concerns were satisfied, even though approval of the drilling plan is a function of the lead agency, in this case the BLM. Mr. Munson indicated that the Cottonwood Exploration Plan will have to be altered to reflect the concerns raised by DOGM. The Cottonwood Canyon Exploration Plan was reviewed and approved by the BLM and advertised for public comment as required. Altering this document would require additional public comment and delay project completion.

As discussed with both Ken and Tom, the Cottonwood wells will be drilled in response to concerns raised by DOGM during review of the Deer Creek PHC. As part of the PHC (refer to Hydrologic Section - Volume 9, Appendix E) PacifiCorp committed to drilling a series of holes to define baseline hydrologic characteristics north of the Roans Canyon Fault. At each of the three proposed sites (one alternate site was chosen should difficulties arise during the permitting process) two single completion wells will be installed, one in the colluvial/alluvial deposits and one in the Spring Canyon Member of the Starpoint Sandstone. The depth of the colluvial/alluvial wells, based on the data from the UGMS-3 (see Figure 2b, Cottonwood Canyon Exploration Plan), will be approximately 80 to 100 feet. Each colluvial/alluvial well will penetrate at least ten feet of bedrock prior to completion. In the PHC commitments and in the drilling plan submitted to the BLM, wells to be completed in the Starpoint Sandstone will be drilled fifty feet into the uppermost tongue, Spring Canyon Member. As stated in the PHC, Appendix E, if conditions which indicate the hydrologic conditions are different from projected are intercepted during drilling, well

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completion will be altered to derive a comprehensive hydrologic understanding. PacifiCorp selected the depth based on the following lithologic and hydrologic characteristics of the Starpoint Sandstone member.

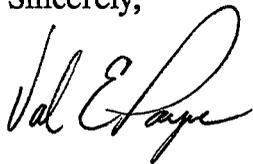
- 1) The coarsest portion of the individual members is in the foreshore environment (upper fifty feet).
- 2) Porosity and permeability decrease with depth.
- 3) Water quality could be affected if the well penetrates Mancos interfingers between the individual Starpoint members.

To satisfy Ken's and Tom's concern PacifiCorp commits to completing the wells in the Starpoint Sandstone through the uppermost tongue, Spring Canyon Member, or to the first saturated zone below the lowest mineable coal seam (Hiawatha).

Additional comments were raised concerning what type of hydrologic tests were going to be conducted on the completed wells. PacifiCorp will conduct a slug test on each of the completed wells and will collect estimated yields during each well development. Once completed the wells will become part of PacifiCorp's hydrologic monitoring program, with depth to water measured on a monthly basis and water quality collected and analyzed quarterly.

Hopefully, this information clarifies PacifiCorp's commitment to understanding the hydrologic regime of the East Mountain property. If you have any questions or comments, please contact Chuck Semborski.

Sincerely,



Val E. Payne  
Senior Environmental Engineer

CAS/sh/1721

cc: R. Fry  
T. Rasmussem (BLM-Price Office)