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Technical Analysis and Findings
Utah Coal Regulatory Program

PID: C0070005
TaskID: 4684
Mine Name: SKYLINE MINE
Title: ABANDONMENT OF WATER MONITORING WELLS

Operation Plan

Hydrologic Ground Water Monitoring

Analysis:

On September 18, 2014, the Division received a request from Skyline Mine to abandon three water monitoring wells. The wells that are proposed to be abandoned are W91-26-1, 91-35-1, and 79-35-1A. Well 91-26-1 is being abandoned to follow MSHA requirements that wells be properly abandoned prior to mining through them. Wells 91-35-1 and 79-35-1A are being abandoned because water levels can no longer be reached due to casing breaching.

Section 2.2.11 of the approved MRP outlines the plan for abandoning water monitoring wells. The wells will be plugged with cement, possibly in combination with bentonite, to the ground surface. The wellhead and casings will be removed to at least two feet below the ground surface and any surface disturbance will be reclaimed.

Once the wells are abandoned, copies of the completed Well Abandonment forms will be submitted to the Division once they have been filed with the Division of Water Rights.

Well W91-26-1 has been monitored since June of 2002 and has reported a depth to water of about 1300 feet from 2002 until late 2012 when the water level has been dropping quickly. The latest water level, taken in June of 2014 indicated a depth to water level as 1448 feet. This is a drop of almost 150 feet in two years, when the water levels only fluctuated about 15 feet over the previous ten years.

Well 91-35-1 was the closest monitoring well to W91-26-1 until it became blocked in 2012, but for about two years prior to becoming blocked, it was also seeing a water level drop.

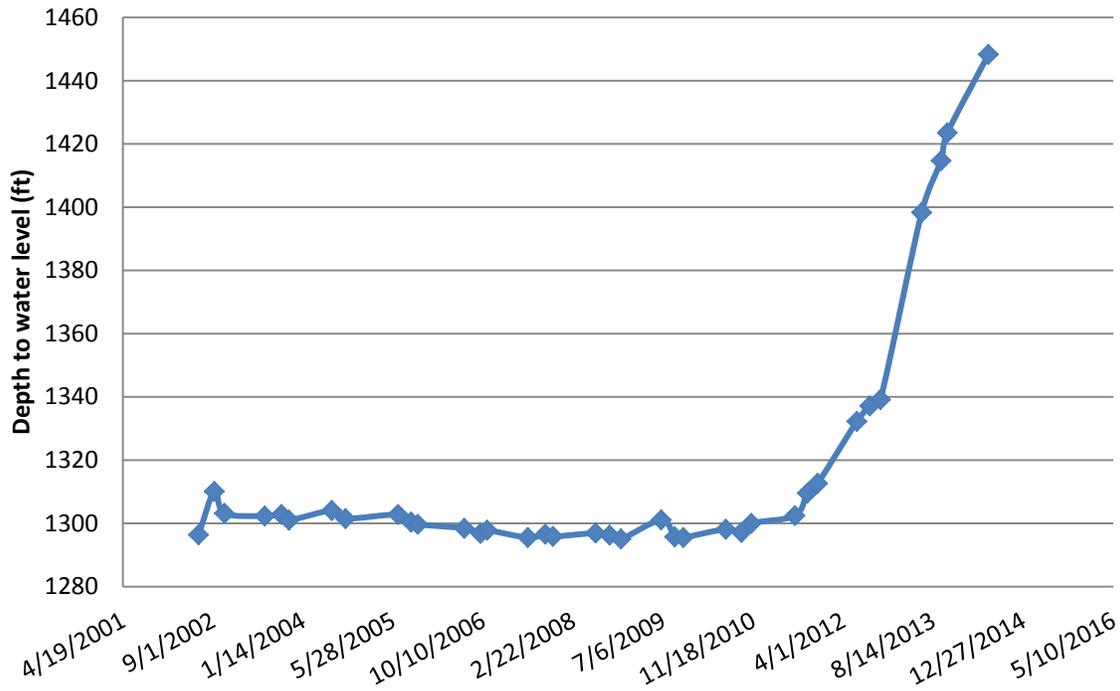
The Permittee should establish additional monitoring well/wells to observe water level trends in the north lease area. New wells should be drilled as close to previously monitored wells as possible, and screened in the same geologic formation.

Figures 1 and 2 attached to the permit amendment report display depth to water level fluctuations in wells 91-26-1 and 91-35-1.

Deficiencies Details:

R645-301-731.214 Water monitoring wells 91-26-1 and 91-35-1 are the only groundwater monitoring wells located within the North Lease. Well 91-26-1 provided ten years of consistent groundwater levels before the levels began dropping in 2012. The groundwater levels in this well appear to be still be dropping. Well 91-35-1 was the closest monitoring well to 91-26-1 prior to it becoming blocked. A new water monitoring well should be established to continue monitoring groundwater

Well 91-26-1



Well 91-35-1

