

# Appendix A. Photographic Logs of Construction Progress in 2010 and 2011

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**USFS – Blue Ledge Mine Removal Project:**  
*Photograph A-1 - View of the completed Repository*



**USFS – Blue Ledge Mine Removal Project:**  
*Photograph A-2 - View of Repository subgrade excavation*



**USFS – Blue Ledge Mine Removal Project:**

*Photograph A-3* - View of the 60 mil HDPE liner being installed on Repository subgrade slopes



**USFS – Blue Ledge Mine Removal Project:**

*Photograph A-4* - View of buried double contained leachate collection sump at the south end of the Repository



**USFS – Blue Ledge Mine Removal Project:**  
*Photograph A-5 - View of the Repository subgrade with 60 mil HDPE liner installed*



**USFS – Blue Ledge Mine Removal Project:**  
*Photograph A-6 - View of excavator spreading pea gravel to form the drainage layer on the Repository liner*



**USFS – Blue Ledge Mine Removal Project:**  
*Photograph A-7 - View of geotextile layer on top of pea gravel drainage layer*



**USFS – Blue Ledge Mine Removal Project:**  
*Photograph A-8 - View of deposited waste rock material on Repository floor and 1-foot cushion layer on Repository slopes*



**USFS – Blue Ledge Mine Removal Project:**  
*Photograph A-9 - View of waste rock placement in Repository*



**USFS – Blue Ledge Mine Removal Project:**  
*Photograph A-10 -Aerial view of waste rock placement and grading in the Repository*



**USFS – Blue Ledge Mine Removal Project:**  
*Photograph A-11 - View of the anchor trench along the east side of the Repository*



**USFS – Blue Ledge Mine Removal Project:**  
*Photograph A-12 - View of the cushion layer placement over waste rock on the top deck of the Repository.*



**USFS – Blue Ledge Mine Removal Project:**  
*Photograph A-13 - View of cushion layer compaction*



**USFS – Blue Ledge Mine Removal Project:**  
*Photograph A-14 - View of the 60 mil LLDPE cover being installed over the cushion layer*



**USFS – Blue Ledge Mine Removal Project:**

*Photograph A-15* - View of the perforated collection pipe and pea gravel installed in the anchor trench along the west side of the Repository



**USFS – Blue Ledge Mine Removal Project:**

*Photograph A-16* - View of the geocomposite drainage layer placed on the top deck of the Repository



**USFS – Blue Ledge Mine Removal Project:**

*Photograph A-17* - View of the pea gravel placement along the slopes of the west side of the Repository



**USFS – Blue Ledge Mine Removal Project:**

*Photograph A-18* - Aerial view of the pea gravel placement on the slopes of the Repository. Also shown are the installed geocomposite drainage material and 60 mil LLDPE cover.



**USFS – Blue Ledge Mine Removal Project:**  
*Photograph A-19 - View of cover soil layered over geotextile and pea gravel*



**USFS – Blue Ledge Mine Removal Project:**  
*Photograph A-20 - View of the Repository service road and storm water ditch*



**USFS – Blue Ledge Mine Removal Project:**

*Photograph A-21 - View of the Repository reclamation features and capped sump tank riser*



**USFS – Blue Ledge Mine Removal Project:**

*Photograph A-22 - View of the Repository reclamation features*



**USFS – Blue Ledge Mine Removal Project:**  
*Photograph A-23 - Original view of WRP-1*



**USFS – Blue Ledge Mine Removal Project:**  
*Photograph A-24 - View of completed removal efforts on WRP-1*



**USFS – Blue Ledge Mine Removal Project:**  
*Photograph A-25 - Original view of WRP-1*



**USFS – Blue Ledge Mine Removal Project:**  
*Photograph A-26 - View of completed removal efforts on WRP-1*



**USFS – Blue Ledge Mine Removal Project:**

*Photograph A-27 - View of waste rock removal and hand cleaning of WRP-1 during 2010 work season.*



**USFS – Blue Ledge Mine Removal Project:**

*Photograph A-28 - View of hand cleaning waste rock on WRP-1 during 2010 work season.*



**USFS – Blue Ledge Mine Removal Project:**

*Photograph A-29 - View of spider excavator removing waste rock near vertical shaft on WRP-1 during 2010 work season.*



**USFS – Blue Ledge Mine Removal Project:**

*Photograph A-30 - View of WRP-1 from haul road 3 prior to 2011 removal activities*



**USFS – Blue Ledge Mine Removal Project:**  
*Photograph A-31 - View of WRP-1 load out during 2011 removal activities*



**USFS – Blue Ledge Mine Removal Project:**  
*Photograph A-32 - View of WRP-1 load out during 2011 removal activities*



**USFS – Blue Ledge Mine Removal Project:**

*Photograph A-33* - View of WRP-1 from haul road 3 with completed reclamation features installed



**USFS – Blue Ledge Mine Removal Project:**

*Photograph A-34* - View of un-named tributary of Joe Creek at WRP-1 boundary where excavation was not performed



**USFS – Blue Ledge Mine Removal Project:**

*Photograph A-35 - View of WRP-1 creek channel from haul road 3 prior to rip rap placement*



**USFS – Blue Ledge Mine Removal Project:**

*Photograph A-36 - View of spider excavator placing rip rap material along WRP-1 creek channel*



**USFS – Blue Ledge Mine Removal Project:**  
*Photograph A-37 - View of rock armored channel and reclamation features on WRP-1*



**USFS – Blue Ledge Mine Removal Project:**  
*Photograph A-38 - View of typical Sediment/pH Treatment Basin construction on WRP-1*



**USFS – Blue Ledge Mine Removal Project:**  
*Photograph A-39 - View of completed Sediment/pH Treatment Basin 1A on WRP-1*



**USFS – Blue Ledge Mine Removal Project:**  
*Photograph A-40 - View of completed Sediment/pH Treatment Basin 1B on WRP-1*



**USFS – Blue Ledge Mine Removal Project:**  
*Photograph A-41 - View of completed Sediment/pH Treatment Basin 1C on WRP-1*



**USFS – Blue Ledge Mine Removal Project:**  
*Photograph A-42 - View of completed Sediment/pH Treatment Basin 1D on WRP-1*



**USFS – Blue Ledge Mine Removal Project:**

*Photograph A-43 - View of completed Sediment/pH Basin 1E on WRP-1*



**USFS – Blue Ledge Mine Removal Project:**

*Photograph A-44 - View of completed Sediment/pH Treatment Basin 1F on WRP-1*



**USFS – Blue Ledge Mine Removal Project:**

*Photograph A-45* -- View of WRP-1 area where large boulders (background) with underlying waste rock unsafe to remove



**USFS – Blue Ledge Mine Removal Project:**

*Photograph A-46* - View of geotextile and riprap placement on the bank of the creek channel at the base of WRP-1 and WRP-4. Excavation within the creek channel was limited to prevent undermining the channel slopes



**USFS – Blue Ledge Mine Removal Project:**  
*Photograph A-47 - Original view of WRP-2*



**USFS – Blue Ledge Mine Removal Project:**  
*Photograph A-48 - View of completed removal efforts on WRP-2*



**USFS – Blue Ledge Mine Removal Project:**

*Photograph A-49* - View of upper WRP-2 area below adits A2 and A2S where safety concerns due to boulders prevented further hand excavation of residual waste rock



**USFS – Blue Ledge Mine Removal Project:**

*Photograph A-50* - View of completed Sediment/pH Treatment Basin 2A on WRP-2



**USFS – Blue Ledge Mine Removal Project:**

*Photograph A-51 - View of completed Sediment/pH Treatment Basin 2B on WRP-2*



**USFS – Blue Ledge Mine Removal Project:**

*Photograph A-52 - View of reclamation features being installed above Sediment/pH Treatment Basin 2A on WRP-2*



**USFS – Blue Ledge Mine Removal Project:**

*Photograph A-53 - View of plants installed above Sediment/pH Treatment Basin 2A on WRP-2*



**USFS – Blue Ledge Mine Removal Project:**

*Photograph A-54 -View of WRP-3 prior to 2011 removal operations*



**USFS – Blue Ledge Mine Removal Project:**

*Photograph A-55 - View of completed removal efforts and reclamation features on WRP-3*



**USFS – Blue Ledge Mine Removal Project:**

*Photograph A-56 - View of waste rock removal and load-out from WRP-3*



**USFS – Blue Ledge Mine Removal Project:**  
*Photograph A-57 - View of spider excavators on WRP-3*



**USFS – Blue Ledge Mine Removal Project:**  
*Photograph A-58 - View of log wattle installation on WRP-3*



**USFS – Blue Ledge Mine Removal Project:**  
*Photograph A-59 - View of trees and shrubs planted on WRP-3*



**USFS – Blue Ledge Mine Removal Project:**  
*Photograph A-60 - View of completed Sediment/pH Treatment Basin 3 on WRP-3*



**USFS – Blue Ledge Mine Removal Project:**  
*Photograph A-61 - Original view of WRP- 4*



**USFS – Blue Ledge Mine Removal Project:**  
*Photograph A-62 - View of completed removal activities on WRP- 4*



**USFS – Blue Ledge Mine Removal Project:**  
*Photograph A-63 - View of the base of WRP-4*



**USFS – Blue Ledge Mine Removal Project:**  
*Photograph A-64 - View of reinforced erosion control fabric at bottom of WRP-4*



**USFS – Blue Ledge Mine Removal Project:**  
*Photograph A-65 - View of completed reclamation features on WRP-4*



**USFS – Blue Ledge Mine Removal Project:**  
*Photograph A-66 - View of trees and shrubs planted on WRP-4*



**USFS – Blue Ledge Mine Removal Project:**  
*Photograph A-67 - View of adit A1S on the top of WRP-1 prior to adit gate installation*



**USFS – Blue Ledge Mine Removal Project:**  
*Photograph A-68 - View of adit A1S on the top of WRP-1 with typical adit gate installed*



**USFS – Blue Ledge Mine Removal Project:**  
*Photograph A-69 - View of steel adit gate anchor pin drilling operations at adit A1S3*



**USFS – Blue Ledge Mine Removal Project:**  
*Photograph A-70 - View of steel adit gate welding operations at adit A6*



**USFS – Blue Ledge Mine Removal Project:**  
*Photograph A-71 - View of vertical shaft on WRP-1 prior to PUF application*



**USFS – Blue Ledge Mine Removal Project:**  
*Photograph A-72 - View of vertical shaft on WRP-1 with PUF application*



**USFS – Blue Ledge Mine Removal Project:**  
*Photograph A-73 - View of the log deck at the Rock Stockpile area*



**USFS – Blue Ledge Mine Removal Project:**  
*Photograph A-74 - View of Rock Stockpile area with reclamation features installed*



**USFS – Blue Ledge Mine Removal Project:**  
*Photograph A-75 - View of HR-1 creek crossing during removal activities*



**USFS – Blue Ledge Mine Removal Project:**  
*Photograph A-76 - View of HR-1 creek crossing with completed winterization features*



**USFS – Blue Ledge Mine Removal Project:**  
*Photograph A-77 - Original view of HR-1*



**USFS – Blue Ledge Mine Removal Project:**  
*Photograph A-78 - View of winterized HR-1*



**USFS – Blue Ledge Mine Removal Project:**  
*Photograph A-79 - View of water bar on winterized HR-1*



**USFS – Blue Ledge Mine Removal Project:**  
*Photograph A-80 – View of winterized HR-3*



**USFS – Blue Ledge Mine Removal Project:**  
*Photograph A-81* -- View of HR-3 creek crossing with completed winterization features



**USFS – Blue Ledge Mine Removal Project:**  
*Photograph A-82* - View of winterized miner's trail parking area



**USFS – Blue Ledge Mine Removal Project:**  
*Photograph A-83 - View of HR-4 during removal efforts*



**USFS – Blue Ledge Mine Removal Project:**  
*Photograph A-84 - View of winterized HR-4 and reclamation features installed above Sediment/pH Treatment Basin 2B*



**USFS – Blue Ledge Mine Removal Project:**

*Photograph A-85* - Aerial view of North Storage area with excavated material from the repository



**USFS – Blue Ledge Mine Removal Project:**

*Photograph A-86* - View of North Storage area with reclamation features installed



**USFS – Blue Ledge Mine Removal Project:**  
*Photograph A-87 - View of reclamation features installed at the South Storage area*



**USFS – Blue Ledge Mine Removal Project:**  
*Photograph A-88 - View of the Repository South Stockpile area with reclamation features installed*



**USFS – Blue Ledge Mine Removal Project:**  
*Photograph A-89 - View of winterized Joe Creek crossing at start of HR-1*



**USFS – Blue Ledge Mine Removal Project:**  
*Photograph A-90 - View of HR-1 road closure from Forest Service Road 1060*