SL-145-1

APPENDIX A

BABB CREEK MINE DRAINAGE ABATEMENT PROJECT

LOCATION DESCRIPTION OF SAMPLE SITES

*Denotes sites selected as 12 month water sampling and flow measuring stations.

- Mouth of Stony Fork Creek, 100+ ft. upstream from its confluence with *A1-1 Babb Creek. A1-2Roland Run, 500+ ft. upstream from its confluence with Stony Fork A1-3 a Stony Fork Creek, 50+ ft. upstream from mouth of Paint Run. A1-3 c Stony Fork Creek, 600+ ft. downstream from mouth of Paint Run. Stony Fork Creek, 75+ ft. upstream from mouth of Black Run. *A1-4 a A1-4cStony Fork Creek, 800+ ft. downstream from mouth of Black Run. A1-5 Stony Fork Creek, 800+ ft. downstream from confluence of East and West branches of Stony Fork Creek. Mouth of Paint Run, 200+ ft. upstream from confluence with Stony *A2-1 Fork Creek. *A2-2 Mine drainage discharge, 500+ ft. southwest of Rattler Deep Mine Main Entry. *A2-3 Mine drainage at drift 1200+ ft. west of Rattler Deep Mine Main Entry. *A2-4 Mine drainage at drift 1/2+ mile west of Rattler Deep Mine Main Entry (Refrigerator Drift). Intermittent strip mine discharge (seep) 1/4+ mile southwest of A2-4. A2 - 5*A2-6 Paint Run at entrance to culvert under Rattler Mine Road (Pa. L.R. 58012). Possible mine drainage from small Pre-Act Stripping along south side A2 - 7of Rattler Mine Road (Pa. L.R. 58012). Jamestown Drift of Anna S Deep Mine, 1/2+ mile south of Rattler Mine A2 - 8Road (Pa. L.R. 58012). No mine drainage observed during study year.
 - A2 9Possible mine drainage from Rattler Mine mixed with surface water
- flowing along old tramway from the Main Entry, 100+ ft. east of Rattler Mine Access Road.
- *A2-10 Possible deep mine drainage from Anna S Mine discharging at the eastern edge of reclaimed stripping, 1/4+ mile west of Plantation Road.
- A2-11 Small stream carrying mine drainage from A2-10, 50+ ft. upstream from its confluence with unnamed tributary of Paint Run.

- A2-12 Unnamed tributary of Paint Run, 75+ ft. downstream from influx of small stream carrying mine drainage from A2-10.
- *A2-13 Mouth of unnamed tributary of Paint Run, 300+ ft. upstream from its confluence with Paint Run.
- A2-14 Small pool of water in northern section of reclaimed Rattler stripping, 1/4+ mile north of station A2-4. (Possible air shaft or deep mine subsidence.)
- A2-15 Water pool in open stripping north of the Rattler Deep Mine.
- A3-1 Mouth of Black Run, 400+ ft. upstream from its confluence with Stony Fork Creek.
- A3-2 Black Run $25\pm$ ft. upstream from cascade at outlet to swampy area, $3/4\pm$ mile upstream from mouth of Black Run.
- A3-3 Mine drainage from deep mine subsidence at Rattler Mine "Annex", 500+ ft. south of Rattler Mine Road (Pa. L.R. 58012).
- A3-4 Mine drainage at drift of Rattler Mine "Annex", 150+ ft. southeast of station A3-3.
- A4-1 East Branch of Stony Fork Creek upstream from State Picnic Area.
- West Branch of Stony Fork Creek, 50+ ft. upstream from its confluence with the East Branch of Stony Fork Creek.
- *B1-1 Mouth of Wilson Creek at bridge for Pa. T.R. 287, 1/4+ mile upstream from its confluence with Babb Creek.
- B1-2 Mouth of Slide Hollow Creek, 300+ ft. north of Pa. T.R. 287.
- B1-3 Mouth of Rattler Run at entrance to culvert under Pa. T.R. 287.
- B1-4 a Wilson Creek, 50+ ft. upstream from mouth of Basswood Run.
- *B1-4 b Mouth of Basswood Run, 100+ ft. upstream from its confluence with Wilson Creek.
- B1-4 c Wilson Creek, 300+ ft. downstream from mouth of Basswood Run.
- *B1-5 Major discharge point for mine drainage from Anna S Mine (Hunter Drift), 400+ ft. north of Rattler Mine Road (Pa. L.R. 58012).
- B1-6 Basswood Run, 100+ ft. upstream from mine drainage influx from the "Hunter Drift" (B1-5).
- *B1-7 Mouth of Wilson Run, $1/4\pm$ mile downstream from Devil's Elbow, and $150\pm$ ft. upstream from its confluence with Wilson Creek.
- *B1-8 Mouth of Bridge Run, 25+ ft. east of Pa. T.R. 287.
- B1-9 Small, unnamed run at entrance to culvert under Delmar Township Road T-345, 1/4+ mile south of intersection with Pa. T.R. 287.
- B1-10 Small, unnamed run emptying into east side of Wilson Creek directly opposite the mouth of Basswood Run (B1-4B).
- B1-11 Walker Run, 50+ ft. upstream from its confluence with Wilson Creek, opposite mouth of Sand Run.
- B1-12a Wilson Creek, 150+ ft. upstream from mouth of Sand Run.

- *B1-12 $_{\rm C}$ Wilson Creek at bridge for the Anna S Road, 300 \pm ft. downstream from mouth of Sand Run.
- B1-13a Wilson Creek, 10+ ft. upstream from Anna S spoil pile.
- B1-13c Wilson Creek, 200+ ft. downstream from Anna S spoil pile.
- *B1-14 Major discharge point for mine drainage from the Antrim Mines at Antrim No. 1 Drift, 75+ ft. south of Pa. L.R. 58036.
- B1-15 North Fork of Bridge Run at entrance to culvert under Pa. L.R. 58036 in northwest section of Antrim Village.
- *B1-16 Mine drainage from "Backswitch" area of Antrim Mines at drift located 1/4+ mile northwest of Antrim Village.
- B1-17 Possible mine drainage from Anna S Main Entry at a point $25\pm$ ft. upstream from its influx into Wilson Creek.
- B1-19a Wilson Creek, 250+ ft. upstream from mouth of Boose Run.
- B1-19b Boose Run at entrance to culvert under Delmar Township Road T-522, 700+ ft. upstream from its confluence with Wilson Creek.
- B1-19c Wilson Creek, 200+ ft. downstream from mouth of Boose Run.
- *B1-20 Main Entry-Anna S Mine (major mine discharge), 1/4+ mile south of Delmar Township Road T-345.
- B1-21 South Fork of Walker Run at entrance to culvert under Delmar Township Road T-345. (May possibly carry mine drainage from Lundquist Mines.)
- *B1-22 Mine drainage from a drift at the Mitchell Mine, 1/4+ mile north of Anna S Main Entry and 300+ ft. west of Anna S Road.
- *B1-23 Small mine discharge from a Mitchell drift, 400± ft. north of B1-22 and 250± ft. west of Anna S Road.
- *B1-24 Small mine discharge from the Percy Cope Mine, 1+ mile south of Antrim and 0.3+ mile west of Duncan Township Road T-504.
- *B1-25 Surface water and possible mine drainage from a drift of the Percy Cope Mine after it passes through a mine spoil pile 300+ ft. east of station B1-24.
- B1-26 Very small mine discharge from a drift at the Percy Cope Mine 400+ ft. southeast of station B1-25.
- B1-27 Surface water and spring water before combining with drainage from B1-26 and passing through mine spoil pile.
- B1-28 Run-off from 4+ acre pond, $1 \frac{1}{4+}$ miles northeast of Antrim Village.
- B1-29 Drainage from water pool in open Pre-Act Stripping, 800± ft. south of Anna S Main Entry.
- B1-30 Drainage running through Pre-Act Stripping, 400± ft. east of Anna S Road and 300± ft. south of B1-29.
- *B1-31 Drainage from water pool in open Pre-Act Stripping, $500\pm$ ft. south of B1-30 and 1000+ ft. northeast of Hunter's Drift (B1- $\overline{5}$).
- B2-1 Mouth of Sand Run, $300\pm$ ft. upstream from its confluence with Wilson Creek.

- B2-2 Mouth of small stream emptying into east side of Sand Run, 1/4+ mile upstream from the mouth of Sand Run.
- B2-3 a Sand Run 50+ ft. upstream from East Fork tributary.
- B2-3 b East Fork tributary of Sand Run, $40\pm$ ft. upstream from its confluence with Sand Run.
- B2-3 c Sand Run, 125+ ft. downstream from East Fork influx.
- *C1-1 Mouth of Babb Creek, 1/4+ mile upstream from its confluence with Pine Creek.
- *C1-1 a Pine Creek, 500+ ft. upstream from mouth of Babb Creek.
- *C1-1 c Pine Creek, 1/2+ mile downstream from mouth of Babb Creek.
- C1-2 Mouth of Dixie Run at entrance to culvert under Pa. T.R. 414.
- C1-3 a Babb Creek at bridge from Pa. T.R. 414 to Stony Fork Road, 600+ ft. upstream from mouth of Stony Fork Creek.
- C1-3 c Babb Creek, 400+ ft. downstream from mouth of Stony Fork Creek.
- *C1-4 a Babb Creek below bridge on Pa. T.R. 287, 1/4+ mile upstream from the mouth of Wilson Creek.
- C1-4 c Babb Creek, 600+ ft. downstream from the mouth of Wilson Creek.
- C1-5 Babb Creek, $75\pm$ ft. upstream from mouth of Long Run, near Landrus Road Station No. 1060/2.
- C1-6 Outlet from a beaver dam that impounds the waters from two small unnamed streams on the north side of Babb Creek, 2.5+ miles northeast of Morris.
- *C1-7a Babb Creek, 700+ ft. upstream from the mouth of Rock Run.
- C1-7 c Babb Creek, 300+ ft. downstream from the mouth of Rock Run.
- C1-8a Babb Creek, 100+ ft. upstream from the mouth of Nickle Run.
- C1-8 c Babb Creek, 200+ ft. downstream from the mouth of Nickle Run.
- C1-9 Seasonal flow from a very small stream on south side of Landrus Road at entrance to culvert.
- C1-10 Small stream running south into Babb Creek at entrance to culvert under Landrus Road.
- C1-11 a Babb Creek, 200+ ft. upstream from the mouth of a small stream which flows from the Bear Run Mine region.
- C1-11b Mouth of small stream flowing from the Bear Run Mine region.
- C1-11 c Babb Creek, 400+ ft. downstream from the influx of small stream flowing from the Bear Run Mine region (C1-11B).
- C1-12 Hillside run-off possiblý mixed with Bear Run mine drainage.
- C1-13 Bear Run mine drainage, 200+ ft. upstream from its confluence with Babb Creek.
- *C1-14 Mine drainage from the Main Entry for the Bear Run Mine, 75+ ft. south of air seal. (Major discharge point for Bear Run Mine.)

- C1-14a Babb Creek, 200+ ft. upstream from the mine drainage influx from the Bear Run Mine (station C1-13).
- *C1-15 Mine discharge at drift opening with air seal, 250+ ft. southwest of Main Entry at Bear Run Mine. (Minor discharge.)
- *C1-16 Mine discharge from Drift No. 2 Bear Run Mine, 1/4+ mile northeast of Bear Run Main Entry (station B1-14).
- *C1-17 Mine discharge from Drift No. 4 Bear Run Mine (Brown's Drift), 3/4+ mile north of Bear Run Main Entry (station C1-14).
- *C1-18 Babb Creek, 200+ ft. upstream from the mouth of Rattlesnake Run.
- *C1-19 Rattlesnake Run, 35+ ft. upstream from its confluence with Babb Creek.
- *C1-20 Babb Creek below bridge on Pa. L.R. 58038.
- *C1-21a Babb Creek, 400+ ft. upstream from the mouth of Lick Creek.
- *C1-21c Babb Creek, 300+ ft. downstream from the mouth of Lick Creek.
- C1-22 Mouth of small unnamed stream, 700+ ft. south of the mouth of Sand Run.
- C1-23 Headwaters of Babb Creek at the bridge on Pa. L.R. 58038, 400± ft. north of intersection with Charleston Township Road T-415.
- C1-24 Mine drainage at entry to the Patt Mine, $1\pm$ mile south of Antrim Village.
- C1-25 Water running south across strip mine road into west fork of unnamed tributary, 1+ mile east of Antrim Village.
- C1-26 West Fork of Roland Run, 1/4+ mile east of reclaimed stripping 1+ mile east of Antrim Village.
- C1-27 Small, unnamed stream on north side of Babb Creek that flows into beaver pond monitored at station C1-6.
- C1-28 Mouth of Roland Run 700+ ft. upstream from its confluence with Babb Creek.
- C1-29 Mouth of McCloskey Run, 50+ ft. upstream from its confluence with Babb Creek.
- C1-30 Mouth of unnamed stream flowing from Tannery Hill, 1/2+ mile west of Hoytville and 75+ ft. upstream from its confluence with Babb Creek.
- C1-31 Water sample from deep mine in Antrim Complex, $1/4\pm$ mile west of the Rock Run and Bache Mines (station C13-2).
- C2-1 Mouth of Dixie Run, 100+ ft. upstream from its confluence with Babb Creek.
- C3-1 Mouth of Harrison Run at bridge on Pa. T.R. 287, 300+ ft. upstream from its confluence with Babb Creek.
- C5-1 Mouth of Long Run at bridge on Landrus Road, 100+ ft. upstream from its confluence with Babb Creek.
- C6-1 Mouth of Bear Run, south of Landrus and 200+ ft. upstream from its confluence with Babb Creek.

- *C7-1 Mouth of Lick Creek, 30+ ft. upstream from its confluence with Babb Creek.
- *C7-2 Mine drainage from the Main Entry for the Klondike (Maple Hill) Mine at air seal.
- C7-2a Lick Creek, $100\pm$ ft. upstream from the mine drainage influx from the Klondike Mine (C7-2).
- C7-2b Mine drainage, 150+ ft. upstream from its confluence with Lick Creek.
- C7-2c Lick Creek, 200+ ft. downstream from mine drainage influx from the Klondike Mine.
- C7-3 Mouth of Silver Run at entrance to concrete box culvert on south side of Landrus Road.
- C7-4 Small, unnamed stream flowing into south side of Lick Creek, 200+ ft. upstream from Lick Creek-Red Run confluence.
- *C8-1 Lick Creek, 800+ ft. downstream from the mouth of South Creek.
- C8-2 Swamp water on south side of Landrus Road, 3/4+ mile west of Arnot.
- C8-3 Headwaters of Lick Creek at the north side of the Landrus Road, 1/2+ mile west of Arnot.
- *C8-4 Mine drainage from the east drift of the Arnot No. 2 Mine, 300+ ft. east of Pa. L.R. 58038.
- *C8-5 Mine drainage from Arnot No. 2 Mine at drift opening north of Penn DOT Maintenance Yard and 600+ ft. west of Pa. L.R. 58038.
- C8-6 Very small mine drainage discharge from Arnot No. 2 Mine at drift opening 200+ ft. east of station C8-5.
- C8-7 Mine drainage from drift opening in northwest section of Arnot No. 1 Mine, 3/4+ mile west of Arnot.
- *C8-8 Mine drainage from the West Drift of the Arnot No. 2 Mine (Monkey Drift), 1/2+ mile west of station C8-5.
- *C8-9 Mine drainage from the Main Entry for the Arnot No. 1 Mine (South Drift) at Trout Hatchery in Arnot.
- *C9-1 Mouth of Red Run, 150+ ft. upstream from its confluence with Lick Creek.
- *C9-2 Mine drainage from the Davis Drift of the Klondike Mine (Maple Hill Mine) at air seal.
- *C10-1 Mouth of Sand Run (Bloss Township), 15+ ft. upstream of 40 ft. waterfall and 800+ ft. upstream from its confluence with Babb Creek.
- C10-2 Sand Run at bridge on Pa. L.R. 58038.
- C11-2 Dyke Creek at bridge on Pa. L.R. 58038.
- *C12-1 Mouth of Nickle Run, 100+ ft. upstream from its confluence with Babb Creek.
- *C13-1 Mouth of Rock Run, 500+ ft. upstream from its confluence with Babb Creek.

- *C13-2 Mine drainage from drift opening on the north section of the Young and VanOrder Mine.
- *C13-3 Mine drainage from the Birchstill Drift, $200\pm$ ft. west of Smallpox Creek and $800\pm$ ft. north of station C13-2.
- C13-4 Smallpox Creek, 0.4+ mile upstream from its confluence with Rock Run.