# PHOTOGRAPH LOG

| Project Name: | Site Location: | Project No. |
|---|---|---|
| Gold King Mine | Silverton, San Juan County, Colorado | 0001/1408-01 |

| Photo No. | Date: | |
|---|---|---|
| 1 | 08/04/2015 | |

**Direction Photo Taken:**

North

**Description:**
Beginning investigation into collapsed adit.

| Photo No. | Date: | |
|---|---|---|
| 2 | 08/04/2015 | |

**Direction Photo Taken:**

North

**Description:**
Excavated next to DRMS-installed culvert, water muddy from soil disturbance.

# PHOTOGRAPH LOG

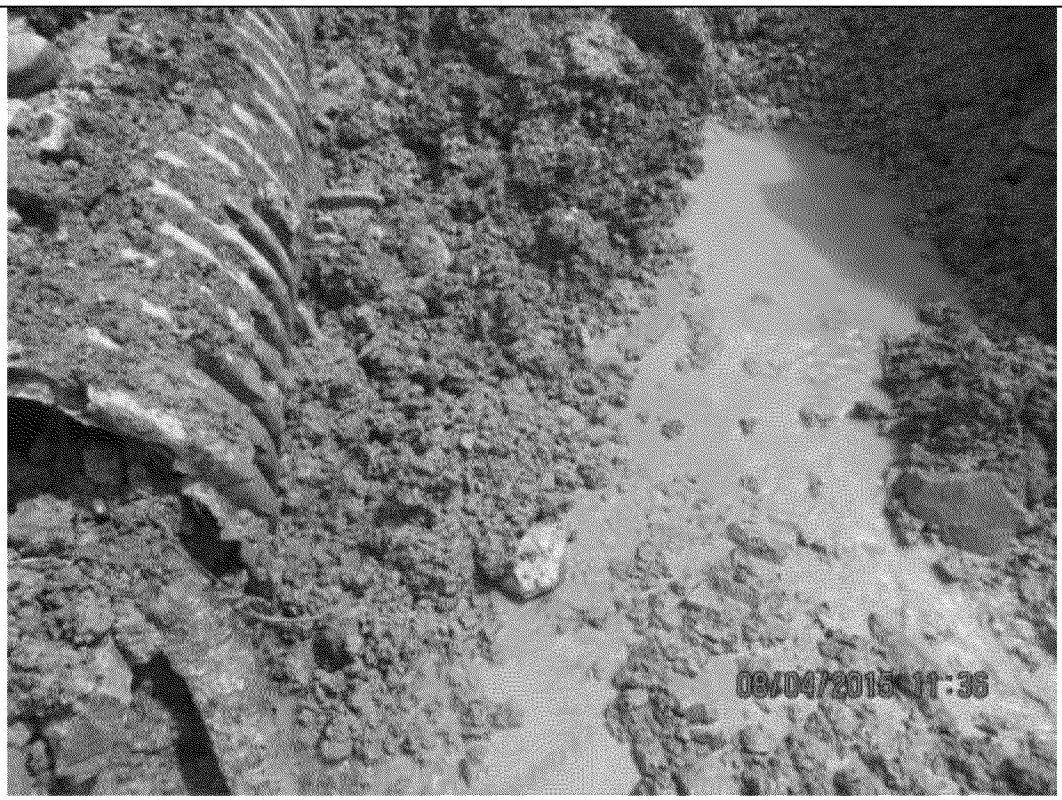
| Project Name: | Site Location: | Project No. |
|---|---|---|
| Gold King Mine | Silverton, San Juan County, Colorado | 0001/1408-01 |

| Photo No. | Date: |
|---|---|
| 3 | 08/04/2015 |

**Direction Photo Taken:**

Down

**Description:**
Seepage from soil next to piping.




| Photo No. | Date: |
|---|---|
| 4 | 08/04/2015 |

**Direction Photo Taken:**

Down

**Description:**
Seepage next to the pipe is clear until entering disturbed soil.

# PHOTOGRAPH LOG

| Project Name: | Site Location: | Project No. |
|---|---|---|
| Gold King Mine | Silverton, San Juan County, Colorado | 0001/1408-01 |

| Photo No. | Date: |
|---|---|
| 5 | 08/04/2015 |

**Direction Photo Taken:**

North

**Description:**

DRMS looking at adit excavation progress.

| Photo No. | Date: |
|---|---|
| 6 | 08/04/2015 |

**Direction Photo Taken:**

West

**Description:**

Water minimally murky from disturbed soil and water entering the North Fork from site.

# PHOTOGRAPH LOG

| Project Name: | Site Location: | Project No. |
|---|---|---|
| Gold King Mine | Silverton, San Juan County, Colorado | 0001/1408-01 |

| Photo No. | Date: |
|---|---|
| 7 | 08/04/2015 |

**Direction Photo Taken:**

South/Down

**Description:**
Hay bales installed as filter for sediment in North Fork.

| Photo No. | Date: |
|---|---|
| 8 | 08/04/2015 |

**Direction Photo Taken:**

Northwest

**Description:**
Continuing excavation at the collapsed adit, no solid bedrock found for tunnel support.

# PHOTOGRAPH LOG

| Project Name: | Site Location: | Project No. |
|---|---|---|
| Gold King Mine | Silverton, San Juan County, Colorado | 0001/1408-01 |

| Photo No. | Date: |
|---|---|
| 9 | 08/04/2015 |

**Direction Photo Taken:**

Northeast

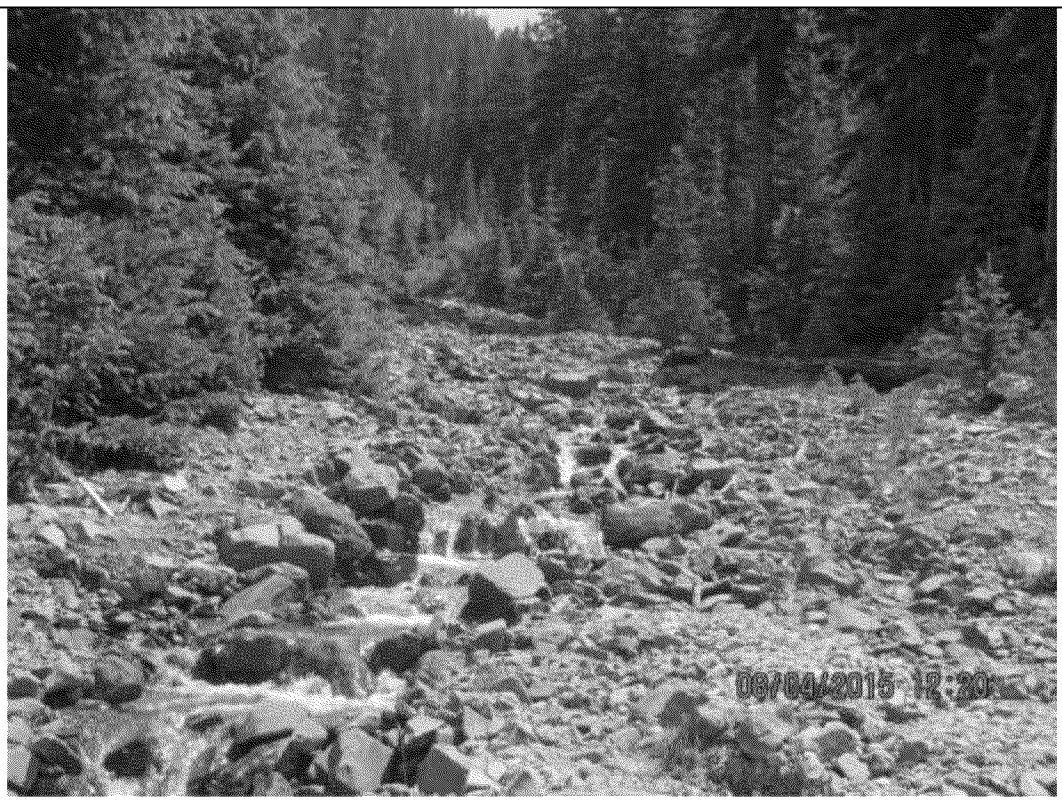
**Description:**
First signs of adit, support pillar with lagging.

| Photo No. | Date: |
|---|---|
| 10 | 08/04/2015 |

**Direction Photo Taken:**

East

**Description:**
Water of the North Fork just upstream of Cement Creek.



# PHOTOGRAPH LOG

| Project Name: | Site Location: | Project No. |
|---|---|---|
| Gold King Mine | Silverton, San Juan County, Colorado | 0001/1408-01 |

| Photo No. | Date: | |
|---|---|---|
| 11 | 08/04/2015 | |

**Direction Photo Taken:**

East

**Description:**
Water of the North Fork just upstream of Cement Creek.

| Photo No. | Date: | |
|---|---|---|
| 12 | 08/04/2015 | |

**Direction Photo Taken:**

North

**Description:**

Collapsed supports uncovered above anticipated adit, no sign of bedrock above the adit area.

# PHOTOGRAPH LOG

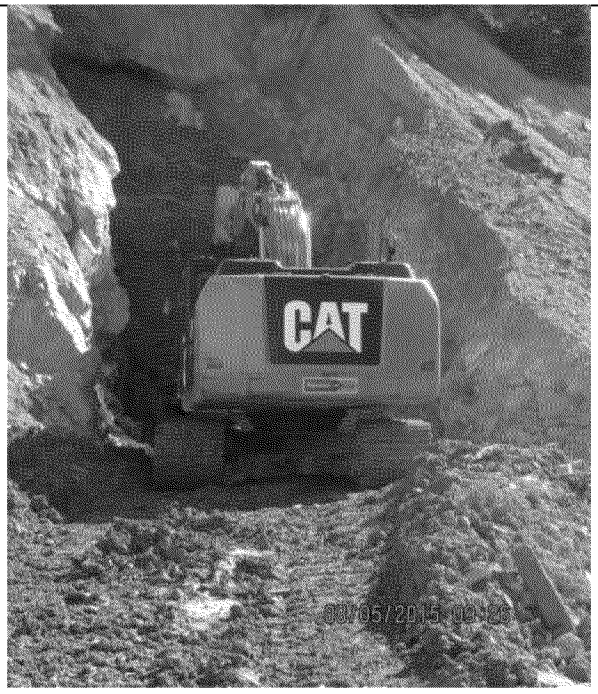
| Project Name: | Site Location: | Project No. |
|---|---|---|
| Gold King Mine | Silverton, San Juan County, Colorado | 0001/1408-01 |

| Photo No. | Date: | |
|---|---|---|
| 13 | 08/05/2015 | |

**Direction Photo Taken:**

North

**Description:**
Adit conditions the morning of 8/5.

| Photo No. | Date: | |
|---|---|---|
| 14 | 08/05/2015 |  |

**Direction Photo Taken:**

Northeast

**Description:**
Excavating material above the collapsed adit.

# PHOTOGRAPH LOG

| Project Name: | Site Location: | Project No. |
|---|---|---|
| Gold King Mine | Silverton, San Juan County, Colorado | 0001/1408-01 |

| Photo No. | Date: | |
|---|---|---|
| 15 | 08/05/2015 | |

**Direction Photo Taken:**

North

**Description:**
Bedrock found above the anticipated adit.

| Photo No. | Date: | |
|---|---|---|
| 16 | 08/05/2015 | |

**Direction Photo Taken:**

North

**Description:**
Cleaning out excavated material, small leak.

# PHOTOGRAPH LOG

| Project Name: | Site Location: | Project No. |
|---|---|---|
| Gold King Mine | Silverton, San Juan County, Colorado | 0001/1408-01 |

| Photo No. | Date: | |
|---|---|---|
| 17 | 08/05/2015 | |

**Direction Photo Taken:**

North

**Description:**
Small leak close up.

| Photo No. | Date: | |
|---|---|---|
| 18 | 08/05/2015 | |

**Direction Photo Taken:**

North

**Description:**
Hole starting to give way to flow.

# PHOTOGRAPH LOG

| Project Name: | Site Location: | Project No. |
|---|---|---|
| Gold King Mine | Silverton, San Juan County, Colorado | 0001/1408-01 |

| Photo No. | Date: | |
|---|---|---|
| 19 | 08/05/2015 | |

**Direction Photo Taken:**

Northeast

**Description:**

Adit flow increasing.

| Photo No. | Date: | |
|---|---|---|
| 20 | 08/05/2015 | |

**Direction Photo Taken:**

Northeast

**Description:**
Water flooding out at increased rate.

# PHOTOGRAPH LOG

| Project Name: | Site Location: | Project No. |
|---|---|---|
| Gold King Mine | Silverton, San Juan County, Colorado | 0001/1408-01 |

| Photo No. | Date: |
|---|---|
| 21 | 08/05/2015 |

**Direction Photo Taken:**

West

**Description:**
Water flowing along access road and across waste dump.

| Photo No. | Date: |
|---|---|
| 22 | 08/05/2015 |

**Direction Photo Taken:**

Southeast

**Description:**
Water flowing over the edge of the waste dump and collapsing the edge.

# PHOTOGRAPH LOG

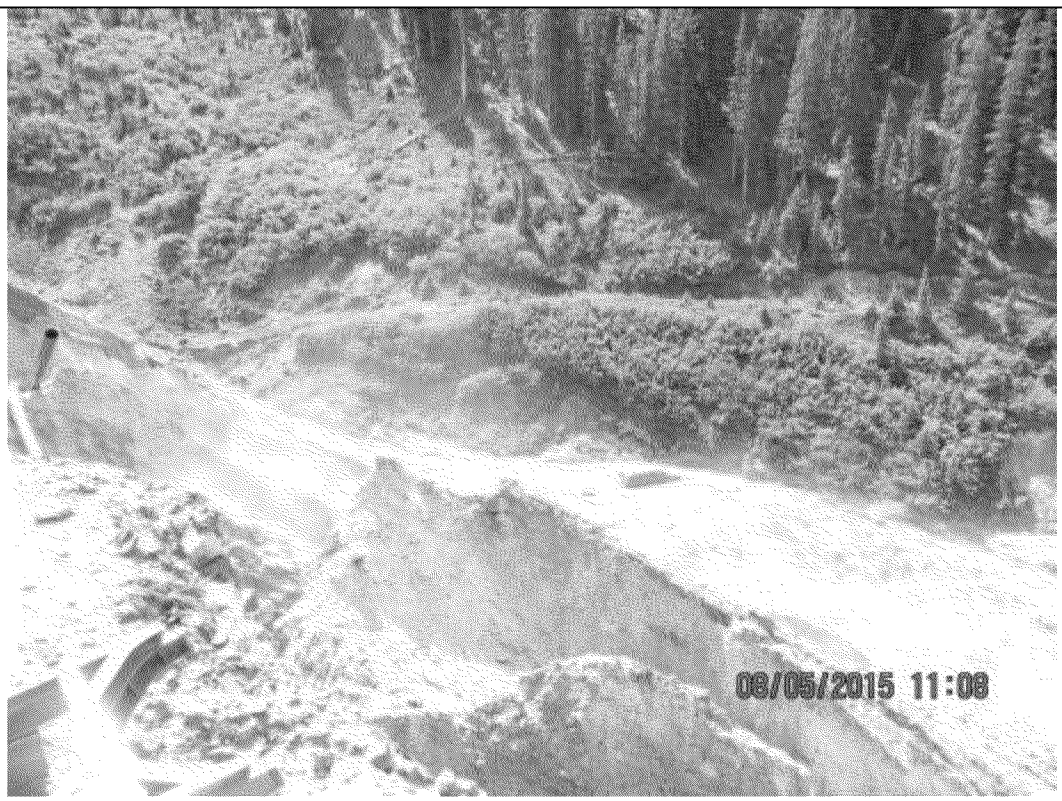
| Project Name: | Site Location: | Project No. |
|---|---|---|
| Gold King Mine | Silverton, San Juan County, Colorado | 0001/1408-01 |

| Photo No. | Date: | |
|---|---|---|
| 23 | 08/05/2015 | |

**Direction Photo Taken:**

Southwest

**Description:**
Exit route starting to collapse

| Photo No. | Date: | |
|---|---|---|
| 24 | 08/05/2015 |  |

**Direction Photo Taken:**

Southeast/Down

**Description:**
Edge of the tailings dump collapsed, suburban trapped and half submerged in center of photo.

# PHOTOGRAPH LOG

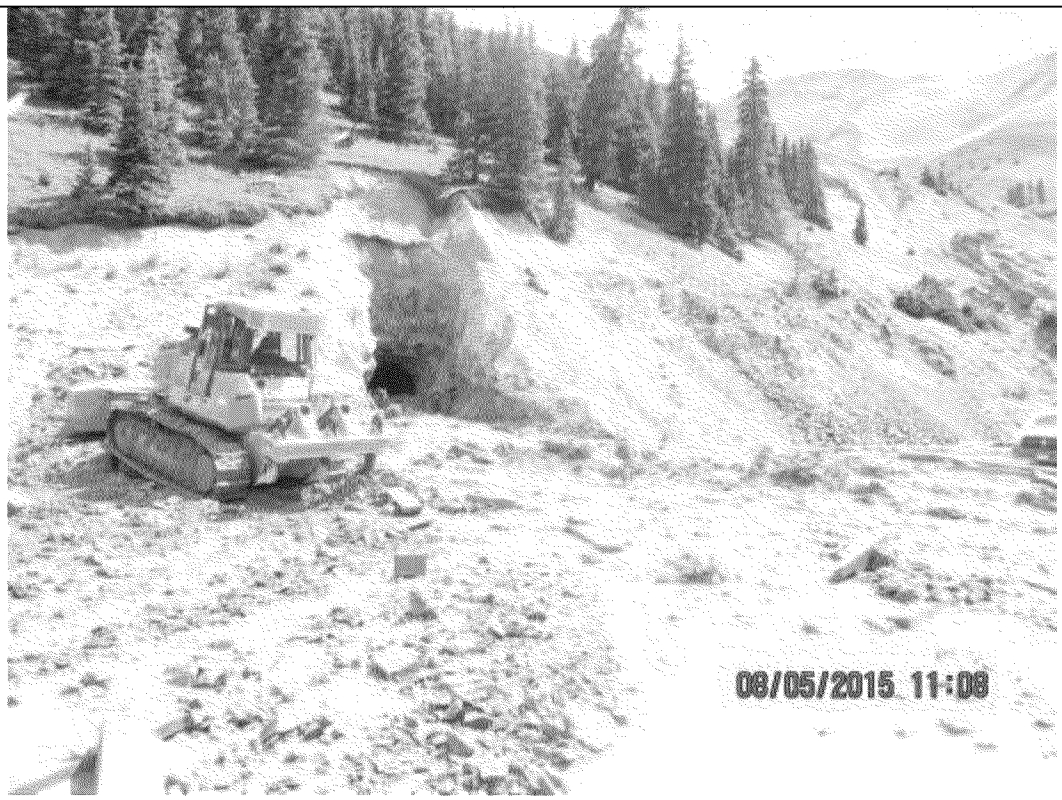
| Project Name: | Site Location: | Project No. |
|---|---|---|
| Gold King Mine | Silverton, San Juan County, Colorado | 0001/1408-01 |

| Photo No. | Date: |
|---|---|
| 25 | 08/05/2015 |

**Direction Photo Taken:**

Northeast

**Description:**
Gold King adit exposed.




| Photo No. | Date: |
|---|---|
| 26 | 08/05/2015 |

**Direction Photo Taken:**

Southeast

**Description:**

Water flow washing out the existing road. Note Suburban in left side of photo.

# PHOTOGRAPH LOG

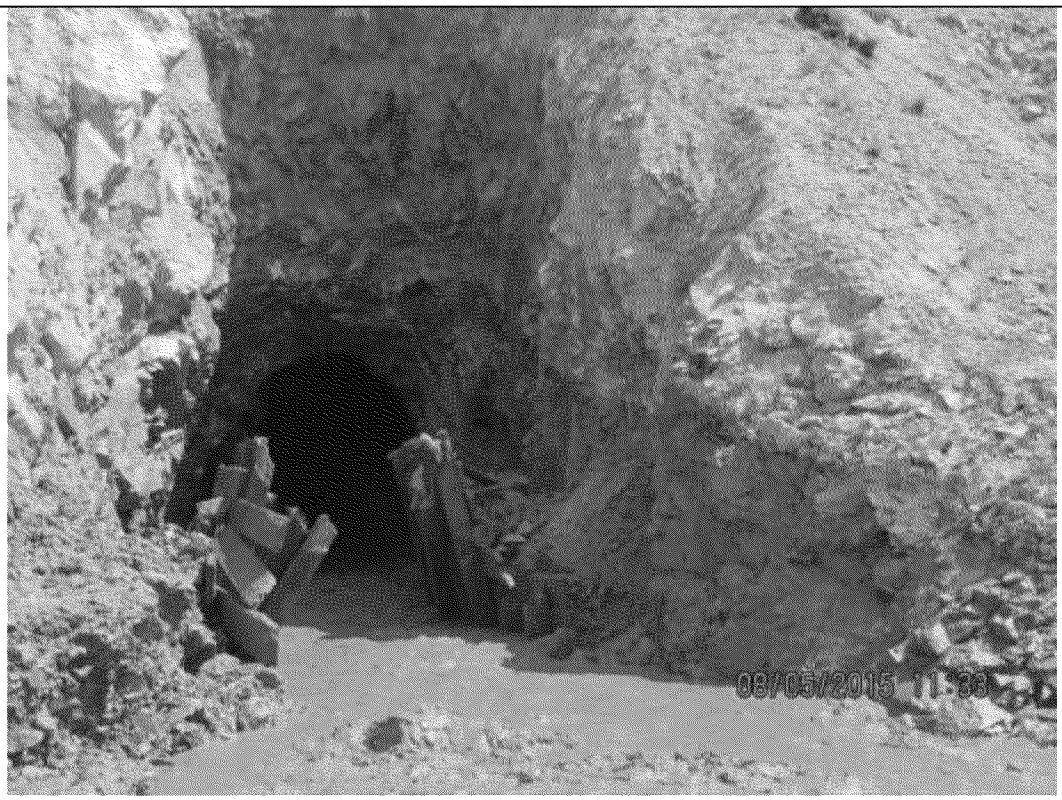
| Project Name: | Site Location: | Project No. |
|---|---|---|
| Gold King Mine | Silverton, San Juan County, Colorado | 0001/1408-01 |

| Photo No. | Date: |
|---|---|
| 27 | 08/05/2015 |

**Direction Photo Taken:**

North

**Description:**
Exposed adit, roughly 10 feet wide by 15 feet high.



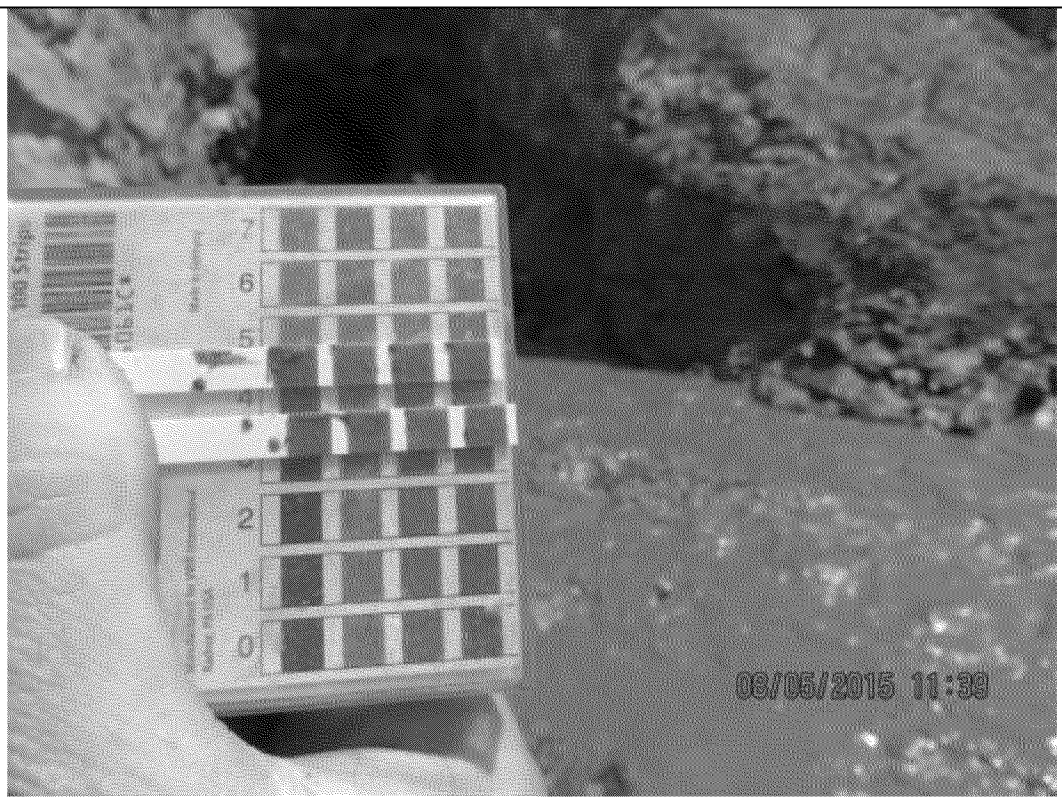

| Photo No. | Date: |
|---|---|
| 28 | 08/05/2015 |

**Direction Photo Taken:**

North

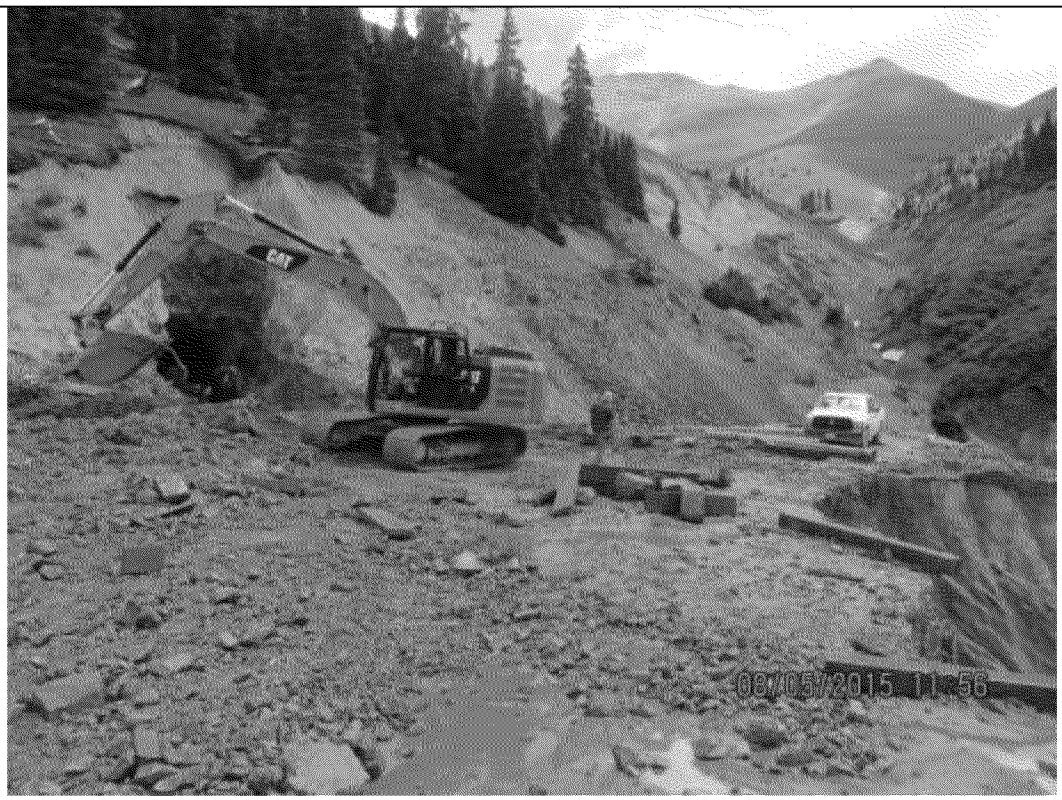
**Description:**

pH of discharge water is approximately 4 to 4.5.



# PHOTOGRAPH LOG

| Project Name: | Site Location: | Project No. |
|---|---|---|
| Gold King Mine | Silverton, San Juan County, Colorado | 0001/1408-01 |

| Photo No. | Date: | |
|---|---|---|
| 29 | 08/05/2015 |  |

**Direction Photo Taken:**

Northeast

**Description:**
Excavator redirecting water into existing half-pipe channel.

| Photo No. | Date: | |
|---|---|---|
| 30 | 08/05/2015 | |

**Direction Photo Taken:**

Southeast/Down

**Description:**
Collapsed portion of waste dump and road wash out.

# PHOTOGRAPH LOG

| Project Name: | Site Location: | Project No. |
|---|---|---|
| Gold King Mine | Silverton, San Juan County, Colorado | 0001/1408-01 |

| Photo No. | Date: |
|---|---|
| 31 | 08/05/2015 |

**Direction Photo Taken:**

Northeast

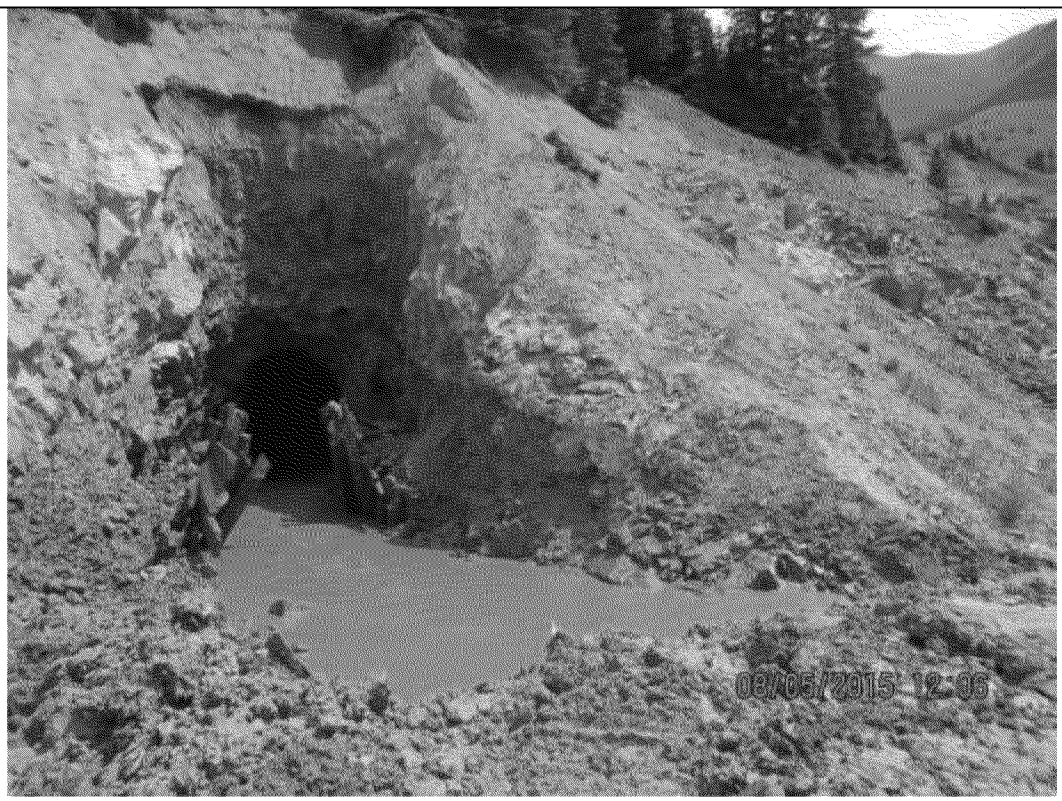
**Description:**
Adit area after regrading.

| Photo No. | Date: |
|---|---|
| 32 | 08/05/2015 |

**Direction Photo Taken:**

North

**Description:**
Exposed adit and redirected flow, flow is beginning to subside.



# PHOTOGRAPH LOG

| Project Name: | Site Location: | Project No. |
|---|---|---|
| Gold King Mine | Silverton, San Juan County, Colorado | 0001/1408-01 |

| Photo No. | Date: | |
|---|---|---|
| 33 | 08/05/2015 | |

**Direction Photo Taken:**

East

**Description:**
Redirected flow into existing half culvert channel.

| Photo No. | Date: | |
|---|---|---|
| 34 | 08/05/2015 | |

**Direction Photo Taken:**

North

**Description:**
Closeup of adit.

# PHOTOGRAPH LOG

| Project Name: | Site Location: | Project No. |
|---|---|---|
| Gold King Mine | Silverton, San Juan County, Colorado | 0001/1408-01 |

| Photo No. | Date: |
|---|---|
| 35 | 08/05/2015 |

**Direction Photo Taken:**

West

**Description:**
Excavator beginning work to secure safe exit route for equipment, vehicles, and personnel.

| Photo No. | Date: |
|---|---|
| 36 | 08/05/2015 |

**Direction Photo Taken:**

East

**Description:**

Existing flow channel at maximum capacity.

# PHOTOGRAPH LOG

| Project Name: | Site Location: | Project No. |
|---|---|---|
| Gold King Mine | Silverton, San Juan County, Colorado | 0001/1408-01 |

| Photo No. | Date: | |
|---|---|---|
| 37 | 08/05/2015 | |

**Direction Photo Taken:**

Southwest/Down

**Description:**
Excavator progress on fixing access road to create a safe exit route.

| Photo No. | Date: | |
|---|---|---|
| 38 | 08/05/2015 | |

**Direction Photo Taken:**

East

**Description:**
Existing culvert flows subsiding minimally.

# PHOTOGRAPH LOG

| Project Name: | Site Location: | Project No. |
|---|---|---|
| Gold King Mine | Silverton, San Juan County, Colorado | 0001/1408-01 |

| Photo No. | Date: |
|---|---|
| 39 | 08/05/2015 |

**Direction Photo Taken:**

North

**Description:**
No changes visible in adit structure or supports. Sloughing of materials inside the mine can be heard.

| Photo No. | Date: |
|---|---|
| 40 | 08/05/2015 |

**Direction Photo Taken:**

South/Down

**Description:**
Excavator progresses to washed out North Fork crossing.

# PHOTOGRAPH LOG

| Project Name: | Site Location: | Project No. |
|---|---|---|
| Gold King Mine | Silverton, San Juan County, Colorado | 0001/1408-01 |

| Photo No. | Date: | |
|---|---|---|
| 41 | 08/05/2015 | |

**Direction Photo Taken:**

Southwest/Down

**Description:**
Noted visitor to the site, unknown person, walked up to excavator at North Fork crossing and then back to vehicle.

| Photo No. | Date: | |
|---|---|---|
| 42 | 08/05/2015 | |

**Direction Photo Taken:**

Southwest/Down

**Description:**
Visitor leaving.

# PHOTOGRAPH LOG

| Project Name: | Site Location: | Project No. |
|---|---|---|
| Gold King Mine | Silverton, San Juan County, Colorado | 0001/1408-01 |

| Photo No. | Date: | |
|---|---|---|
| 43 | 08/05/2015 | |

**Direction Photo Taken:**

South/Down

**Description:**
Excavator continues to fix access road. Continued high flow is slowing progress.

| Photo No. | Date: | |
|---|---|---|
| 44 | 08/05/2015 | |

**Direction Photo Taken:**

East

**Description:**
Half culvert flow continues to subside.

# PHOTOGRAPH LOG

| Project Name: | Site Location: | Project No. |
|---|---|---|
| Gold King Mine | Silverton, San Juan County, Colorado | 0001/1408-01 |

| Photo No. | Date: |
|---|---|
| 45 | 08/05/2015 |

**Direction Photo Taken:**

North

**Description:**

Water levels lowering at adit entrance, no visible changes to structure.

| Photo No. | Date: |
|---|---|
| 46 | 08/05/2015 |

**Direction Photo Taken:**

West

**Description:**
Flight for life Helicopter coming up the valley to pick up a person who crashed a vehicle on Corkscrew Pass, not related to this event.

# PHOTOGRAPH LOG

| Project Name: | Site Location: | Project No. |
|---|---|---|
| Gold King Mine | Silverton, San Juan County, Colorado | 0001/1408-01 |

| Photo No. | Date: |
|---|---|
| 47 | 08/05/2015 |

**Direction Photo Taken:**

Southwest

**Description:**
Close up of Flight for Life.

| Photo No. | Date: |
|---|---|
| 48 | 08/05/2015 |

**Direction Photo Taken:**

Northeast

**Description:**
Flow path from adit, water flow appears to have stabilized around 1400.

# PHOTOGRAPH LOG

| Project Name: | Site Location: | Project No. |
|---|---|---|
| Gold King Mine | Silverton, San Juan County, Colorado | 0001/1408-01 |

| Photo No. | Date: | |
|---|---|---|
| 49 | 08/05/2015 | |

**Direction Photo Taken:**

North

**Description:**
pH measured at approximately 4.5.

| Photo No. | Date: | |
|---|---|---|
| 50 | 08/05/2015 | |

**Direction Photo Taken:**

Southwest/Down

**Description:**
DRMS arrives back on site, had visited the site around 0930 to check on progress of investigation, left approximately 1030, prior to blowout.

# PHOTOGRAPH LOG

| Project Name: | Site Location: | Project No. |
|---|---|---|
| Gold King Mine | Silverton, San Juan County, Colorado | 0001/1408-01 |

| Photo No. | Date: |
|---|---|
| 51 | 08/05/2015 |

**Direction Photo Taken:**

North

**Description:**
Looking up from the toe of the Gold King waste dump directly south of the adit.

| Photo No. | Date: |
|---|---|
| 52 | 08/05/2015 |

**Direction Photo Taken:**

Northeast

**Description:**
Gold King Mine tailings dump after water discharge.

# PHOTOGRAPH LOG

| Project Name: | Site Location: | Project No. |
|---|---|---|
| Gold King Mine | Silverton, San Juan County, Colorado | 0001/1408-01 |

| Photo No. | Date: |
|---|---|
| 53 | 08/05/2015 |

**Direction Photo Taken:**

East

**Description:**

Looking east across Cement Creek from County Road 10 to excavator fixing County Road 52 at North Fork crossing just south of Red and Bonita Mine.

| Photo No. | Date: |
|---|---|
| 54 | 08/05/2015 |

**Direction Photo Taken:**

East

**Description:**

Cement Creek crossing at Gladstone.

# PHOTOGRAPH LOG

| Project Name: | Site Location: | Project No. |
|---|---|---|
| Gold King Mine | Silverton, San Juan County, Colorado | 0001/1408-01 |