



COLORADO

Division of Reclamation,  
Mining and Safety


Department of Natural Resources

## MINERALS PROGRAM INSPECTION REPORT

PHONE: (303) 866-3567

The Division of Reclamation, Mining and Safety has conducted an inspection of the mining operation noted below. This report documents observations concerning compliance with the terms of the permit and applicable rules and regulations of the Mined Land Reclamation Board.

<b>MINE NAME:</b> Apache 9	<b>MINE/PROSPECTING ID#:</b> M-1978-009	<b>MINERAL:</b> Clay (general) and sand and gravel	<b>COUNTY:</b> El Paso
<b>INSPECTION TYPE:</b> Monitoring	<b>INSPECTOR(S):</b> Timothy A. Cazier	<b>INSP. DATE:</b> May 9, 2018	<b>INSP. TIME:</b> 10:30
<b>OPERATOR:</b> General Shale Brick, Inc.	<b>OPERATOR REPRESENTATIVE:</b> Jason McGraw	<b>TYPE OF OPERATION:</b> 112c - Construction Regular Operation	

<b>REASON FOR INSPECTION:</b> Normal I&E Program	<b>BOND CALCULATION TYPE:</b> Complete Bond	<b>BOND AMOUNT:</b> \$181,161.00
<b>DATE OF COMPLAINT:</b> NA	<b>POST INSP. CONTACTS:</b> Colo. Land Board	<b>JOINT INSP. AGENCY:</b> None
<b>WEATHER:</b> Cloudy	<b>INSPECTOR'S SIGNATURE:</b> 	<b>SIGNATURE DATE:</b> November 7, 2018

**The following inspection topics were identified as having Problems or Possible Violations. OPERATORS SHOULD READ THE FOLLOWING PAGES CAREFULLY IN ORDER TO ASSURE COMPLIANCE WITH THE TERMS OF THE PERMIT AND APPLICABLE RULES AND REGULATIONS. If a Possible Violation is indicated, you will be notified under separate cover as to when the Mined Land Reclamation Board will consider possible enforcement action.**

**INSPECTION TOPIC:** Hydrologic Balance

**PROBLEM/POSSIBLE VIOLATION:** Problem: The Division has no evidence that the operator has a valid well permit, substitute water supply plan, or approved water augmentation plan for the exposed groundwater at the site. This is a problem related to 34-32.5-116(4)(h) of the Colorado Revised Statutes and 3.1.6(1)(a) of the Construction Materials Rules and Regulations governing injury to existing water rights.

**CORRECTIVE ACTIONS:** The operator shall demonstrate that the operation is in compliance with the Office of the State Engineer, show evidence that the operator is taking measures to bring the site into compliance with the SEO, or backfill the pits to at least two feet above the groundwater surface by the corrective action date specified.

**CORRECTIVE ACTION DUE DATE:** 1/07/19

## **OBSERVATIONS**

This inspection was conducted by Tim Cazier of the DRMS as part of the regular monitoring program. The Permittee (General Shale Brick, Inc.) was represented by Mr. Jason McGraw who was present for the inspection. The Apache 9 Pit north entrance is located approximately 3 miles southwest of Calhan, off Soapweed Rd, 1.5 miles south of Hwy 24. The south entrance is ½ mile south, also off Soapweed Rd. This is a 112c clay mine. It was not operating at the time of the inspection.

Availability of Records: Annual fees are paid through August 2018. The previous inspection was on February 12, 2014. The approved post-mine land use is rangeland. There are no open infractions. Exhibit L from the March 10, 2000 amendment 10 (AM-10) limited the maximum allowed disturbed area at one time to 85 acres.

Backfilling and Grading: Sufficient backfill material appeared to be available.

Excess Spoil and Dev. Waste: No overburden piles were observed, but some cap stone had been stockpiled for potential use on site as riprap.

Financial Warranty: The \$181,161 bond held by the Division is adequate for the estimated 53 acres of mine disturbance (see discussion under "Gen. Compliance with Mine Plan" below). However, this amount is not considered adequate for the full 85 acres of allowed disturbance permitted under AM-10. The Permittee should submit a bond update prior to expanding the disturbed area.

Fish and Wildlife: No impact to wildlife was observed. Pronghorn were observed on site.

Hydrologic Balance: Water was observed in all the sediment ponds (Stage 1A, Stage 2A and Stage 3). What is believed to be exposed groundwater was observed in the south pit of Stage 1A (see **Photo 1** and **Figure 2**). Mr. McGraw indicated General Shale Brick contacted the Division of Water Resources (DWR) about 10 years ago to inform them of the exposed groundwater, but never heard back from them. The DRMS has contacted Mr. Chris Grimes (DWR) with respect to the potential exposed groundwater. DWR has no record of an approval of a replacement plan to offset those evaporative losses, nor could they find a letter from General Shale Brick. **This exposed groundwater is cited as a problem on page 1 of this report.**

Gen. Compliance with Mine Plan: The operation appeared to be in compliance with the approved mine plan. **Figure 1** shows the five mine stages: 1A, 1B, 2A, 2B and 3. Only Stages 1A and 3 appear to have been mined to date. Google Earth was used to measure the cumulative disturbed area to date, which was estimated to be approximately 92 acres (see **Figures 2** and **3**), based on available imagery from 1999 to 2017. However, approximately 39 acres are releasable (see areas outlined in tan on **Figures 2** and **3**) based on field observations and Google Earth imagery. As such approximately 53 acres require various amounts of reclamation.

The two highwalls in the Stage 3 active area were estimated to be a consistent six (6) feet in height and appeared stable (see **Photo 2**). Two material stockpiles were observed in the Stage 3 area (see **Photo 3**). In the Stage 1A area the west highwall appeared to be close to 3H:1V and near 20 feet in height (see **Photo 4**) and the south highwall was near 1H:1V, varying between 10 and 20 feet in height (see **Photo 5**).

Off-site Damage: The operation appeared to be confined to the permit boundary, based on site observations and Google Earth review.

Processing Waste: No processing waste was observed.

Roads: Haul and access roads did not appear to be a source of sediment that could be tracked offsite.

Reclamation Success: As discussed above in "Gen. Compliance with Mine Plan", an estimated 39 acres have achieved satisfactory reclamation (see **Photo 6**).

Revegetation: As discussed above in "Gen. Compliance with Mine Plan", an estimated 39 acres have achieved satisfactory revegetation. No noxious weeds were observed.

Sediment Control: No significant erosion problems were observed and no BMPs were needed at the time of the inspection.

Signs and Markers: The permit sign was properly posted (see **Photo 7**) and boundary markers consisting mostly of fences were observed to delineate the permit boundary.

Permit Stipulations: Technical Revision TR-01 requested importation of scrap brick and block to be used as inert fill. There is a stipulation related to the approval of TR-01 requiring annual photo documentation of the imported material to verify it is not being stockpiled, which would require bonding. Mr. McGraw stated they had not yet imported any of this material. As such, no photo-documentation is required.

Storm Water MGT Plan: No oil or fuel spills observed. Representatives stated the stormwater management plan is kept in their main office in Denver. Stormwater drains to sediment ponds associated with each pit.

Topsoil: Topsoil stockpiles were observed and appeared stable (see Stage 3 topsoil pile in **Photo 8**). Locations are shown on **Figures 2** and **3**.

Structures: No structures were observed within 200 feet of the affected area.

Please contact Tim Cazier (303)866-3567 ext. 8169 or email at [tim.cazier@state.co.us](mailto:tim.cazier@state.co.us) if you have any questions regarding this report. Mr. Grimes (DWR) can be reached at (303)866-3581 ext. 8256 or at [chris.grimes@state.co.us](mailto:chris.grimes@state.co.us).

## **PHOTOGRAPHS**



Photo 1. Probable exposed groundwater observed in the south pit of Stage 1A (looking west).



Photo 2. Stage 3 six-foot highwalls (sediment pond in foreground, looking north).

**PHOTOGRAPHS (cont.)**



Photo 3. Stage 3 material stockpiles (looking east).



Photo 4. Stage 1A area west highwall (looking SW from NW corner of pit).

**PHOTOGRAPHS (cont.)**



Photo 5. Stage 1A area south highwall (looking SW from east end).



Photo 6. Typical reclaimed area (SW corner of Stage 3, looking north).

**PHOTOGRAPHS (cont.)**



Photo 7. Permit sign (at entrance).



Photo 9. Stage 3 area topsoil stockpile (looking NE).

### GENERAL INSPECTION TOPICS

The following list identifies the environmental and permit parameters inspected and gives a categorical evaluation of each

(AR) RECORDS----- <u>Y</u>	(FN) FINANCIAL WARRANTY----- <u>Y</u>	(RD) ROADS----- <u>Y</u>
(HB) HYDROLOGIC BALANCE----- <u>PB</u>	(BG) BACKFILL & GRADING----- <u>N</u>	(EX) EXPLOSIVES----- <u>NA</u>
(PW) PROCESSING WASTE/TAILING---- <u>NA</u>	(SF) PROCESSING FACILITIES----- <u>NA</u>	(TS) TOPSOIL----- <u>Y</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>Y</u>	(FW) FISH & WILDLIFE----- <u>Y</u>	(RV) REVEGETATION---- <u>Y</u>
(SM) SIGNS AND MARKERS----- <u>Y</u>	(SP) STORM WATER MGT PLAN---- <u>NA</u>	(RS) RECL PLAN/COMP-- <u>Y</u>
(ES) OVERBURDEN/DEV. WASTE----- <u>Y</u>	(SC) EROSION/SEDIMENTATION--- <u>Y</u>	(ST) STIPULATIONS----- <u>Y</u>
(AT) ACID OR TOXIC MATERIALS----- <u>NA</u>	(OD) OFF-SITE DAMAGE----- <u>Y</u>	

Y = Inspected and found in compliance / N = Not inspected / NA = Not applicable to this operation / **PB = Problem cited** / PV = Possible violation cited

#### Inspection Contact Address

Harold Stickler  
General Shale Brick, Inc.  
1845 W. Dartmouth Ave.  
Denver, CO 80110

Enclosures

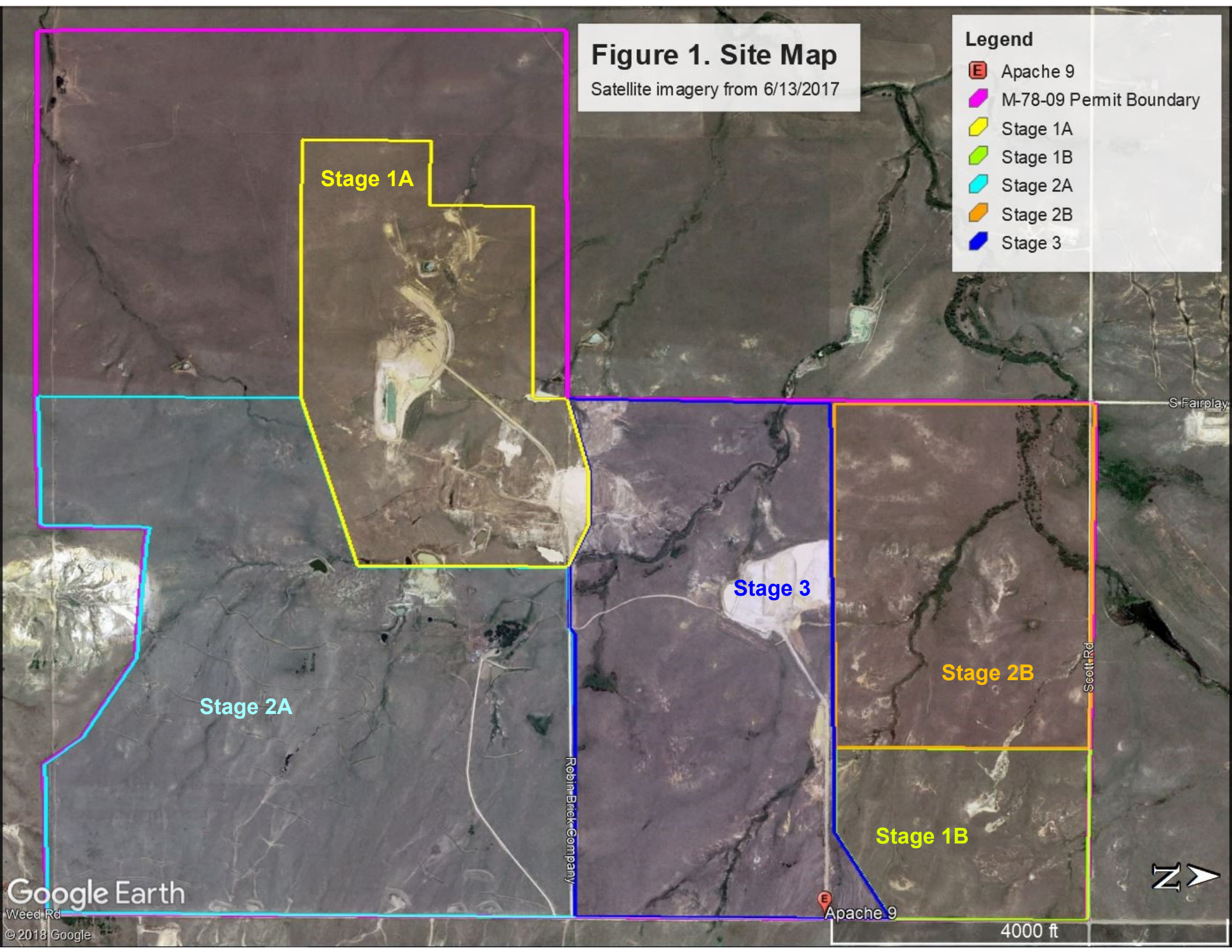
ec: DRMS file  
Jason McGraw P.E. General Shale Brick  
Chris Grimes, DWR

# Figure 1. Site Map

Satellite imagery from 6/13/2017

## Legend

- Apache 9
- M-78-09 Permit Boundary
- Stage 1A
- Stage 1B
- Stage 2A
- Stage 2B
- Stage 3

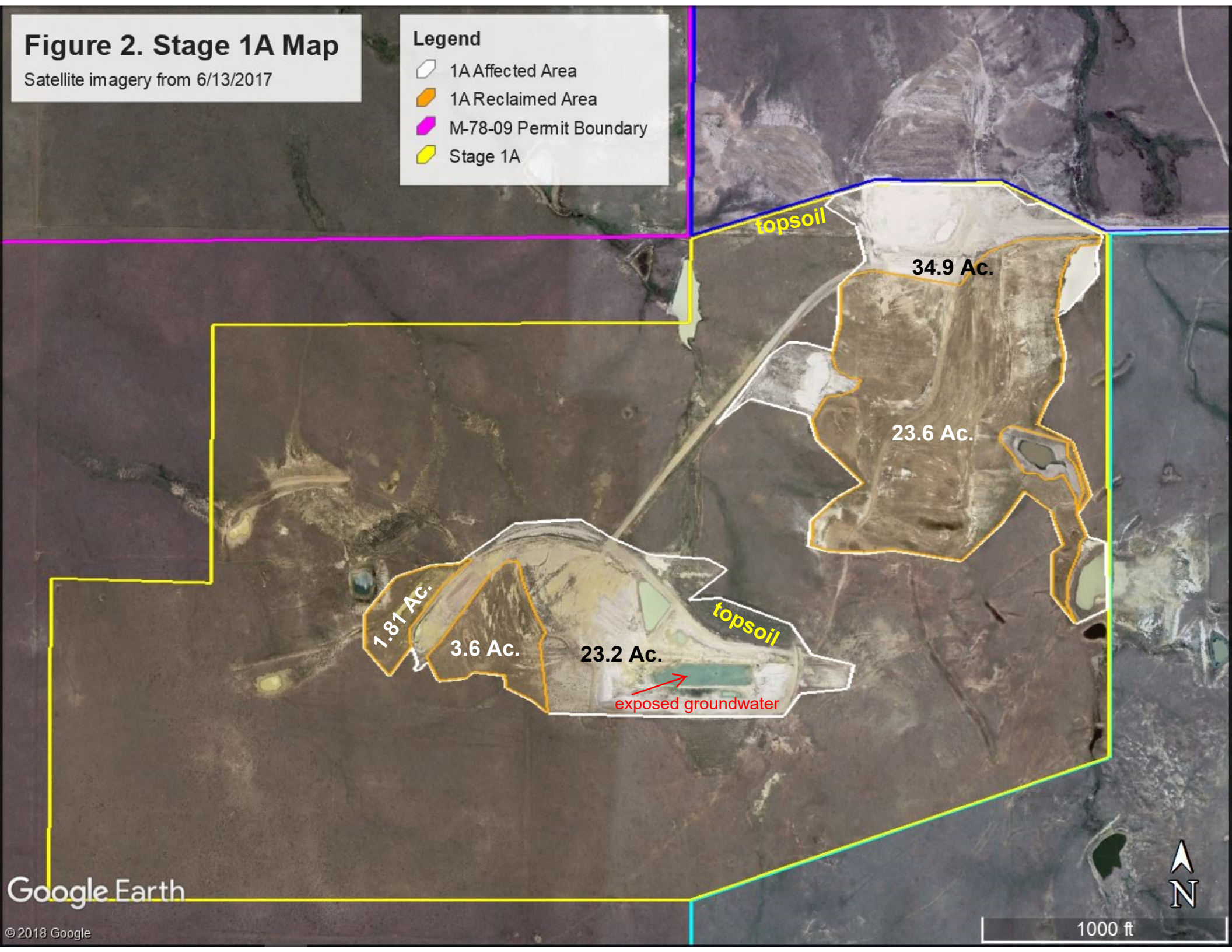


# Figure 2. Stage 1A Map

Satellite imagery from 6/13/2017

## Legend

- 1A Affected Area
- 1A Reclaimed Area
- M-78-09 Permit Boundary
- Stage 1A



# Figure 3. Stage 3 Map

Satellite imagery from 6/13/2017

## Legend

- 3 Affected Area
- 3 Reclaimed Area
- Apache 9
- M-78-09 Permit Boundary
- Stage 3

