

Photo 1

May 11, 2022

Reconnaissance in situ  
X-ray fluorescence  
(XRF) measurement  
collection at the Old  
Church Rock Mine  
(OCRM)



Photo 2

May 10, 2022

Reconnaissance  
medium-concentration  
sample collection at  
the Quivira Church  
Rock 1 Mine (CR-1)



Photo 3

May 12, 2022

Reconnaissance  
medium-concentration  
sample collection at  
Cove Transfer Station  
(CTS) 2



Photo 4

August 29, 2022

Backhoe excavation of  
a bulk sample from  
the CTS 2 mine waste  
stockpile for use  
during the field pilot  
study



Photo 5

August 29, 2022

High-concentration bulk sample from the CTS 2 mine waste stockpile for use during the field pilot study



Photo 6

August 30, 2022

Setup of the pilot study test area at CTS 2



Photo 7

August 31, 2022

Ablation study  
explanation during  
community  
demonstration day



Photo 8

August 30, 2022

Community  
presentation on the  
community  
demonstration day



Photo 9

August 30, 2022

Treatment system and community attendance on the demonstration day



Photo 10

August 24, 2022

High-pressure slurry ablation (HPSA) batch unit at OCRM



Photo 11

August 24, 2022

Bulk material added into the top of the HPSA batch unit at OCRM



Photo 12

August 22, 2022

Slurry pumps (gold color) and blue feed lines to collision chamber at top of the HPSA batch unit



Photo 13

August 23, 2022

Pre-cut sieving of  
passing 270-mesh  
bulk feed sample at  
OCRM



Photo 14

August 23, 2022

Pre-cut (retained on  
270 mesh) time zero  
samples staged for  
treatment at OCRM



Photo 15

August 24, 2022

Post-treatment sample buckets ready for shipment to the Disa Technologies, Inc. process laboratory for wet sieving and subsampling



Photo 16

August 27, 2022

Bulk sample collection from backhoe bucket into 5-gallon buckets at Quivira CR-1



Photo 17

August 28, 2022

Pre-cut soil samples (retained on 270 mesh) staged for treatment at Quivira CR-1



Photo 18

August 28, 2022

Collection of a treated slurry sample from the HPSA batch unit into 2-gallon buckets at Quivira CR-1



Photo 19

August 28, 2022

Return of excess treated soil slurry to open bulk sample excavation at the Quivira CR-1 high-concentration sample location



Photo 20

July 11, 2023

Overview of 5-ton-per-hour continuous-operation HPSA treatment system



Photo 21

July 11, 2023

Overview of 5-ton-per-hour continuous-operation HPSA treatment system

