

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

