

December 20, 2021

Mr. Shawn Thomas  
Subterranean Team Manager  
Bat Conservation International  
[stthomas@batcon.org](mailto:stthomas@batcon.org)

**Subject: Grants, NM Abandoned Mine Lands Closure Project**

Dear Mr. Thomas,

In accordance with the above-mentioned contract, Mountain States Restoration, LLC is pleased to provide you with one electronic copy of the report, for your review. The enclosed report includes the following submittals:

- Project Summary;
- Project Recommendations;
- Project Before and After Photos; and
- Daily Construction Activity Reports from November 29 thru December 10, 2021

All other project related photographs were previously submitted to you in electronic format and should be used to compliment this report.

This report is a summary of all work completed on the Grants AML project. If you have any questions or require any further information, please do not hesitate to contact me at [bsweet1197@gmail.com](mailto:bsweet1197@gmail.com) or 619.723.3696 with specific questions about the project.

Sincerely,



Brian Sweet  
President, Mountain States Restoration, LLC

# GRANTS AML CLOSURE PROJECT

## **GENERAL CONSTRUCTION NOTES**

Mountain States Restoration, LLC (MSR) completed the closure of 17 hazardous mine openings north/northwest of Grants, New Mexico for Bat Conservation International (BCI). MSR mobilized to the project site on November 28, 2021 and demobilized on December 11, 2021. During this period a total of 12 working days were required to successfully remediate all mine features. Specific details for each feature are discussed in the AML Project Summary section below. The following equipment and materials were used during the construction process:

### **Equipment**

- RAM 2500 field truck
- 16-foot flatbed trailer
- 10,000 KW Generator
- Miller 211 Welder
- Bosch Rock Drill
- Husqvarna 770 Demo Saw
- Grinder
- Miscellaneous small tools
- Case 580 backhoe

### **Materials**

- 3"x3"x1/4" tube steel
- 2"x2"x1/4" tube steel
- 5" x 1/4" flat bar
- Polyurethane foam
- 3/4" rebar pins
- 24" corrugated steel pipe
- 30" corrugated steel pipe
- 36" corrugated steel pipe
- 42" corrugated steel pipe
- 5.5 foot T-posts
- 2-7/8" galvanized corner posts
- 1-7/8" galvanized line posts
- Fence stays
- Quickcrete Concrete and Mortar
- McGard bolts (A pattern)

All closures were completed using previously approved methods, specifications, and protocol which included the installation of access doors as required, construction of all steel structures, installation of PUF, installation of corrugated steel pipe, and proper backfill operations. All debris consisting of excess construction materials was disposed of at an off-site location.

Prior to demobilization all disturbed areas adjacent to the features were cleaned and raked to remove work related disturbances.

## **AML PROJECT SUMMARY**

A summary of each closure is detailed in the text below. A total of seven work areas were included in the project and were identified as Francis, Flat Tops, Lone Pine, Malpais, Mesa Top, Beacon Hill, and Blue Peak.

### **Francis**

The five Francis mine features are located roughly 30 miles from Grants at GPS coordinates of 35.462839°/-108.024968°. Driving to the mines is through private property accessed off of NM19. All features were reached by lowering closure related materials and equipment from the mesa immediately above the mines. These five features were remediated as follows:

Francis 01 - A 4x6 adit that required a bat compatible closure with removable access door. A 3” sill plate and 3” vertical risers were installed into the mine feature to act as the framework. Horizontal 2” tube steel was then used to create the bat flyways. A total of nine rebar pins were drilled into the bedrock to secure the mine gate in place. A removable bar was secured to the gate using McGard bolts.

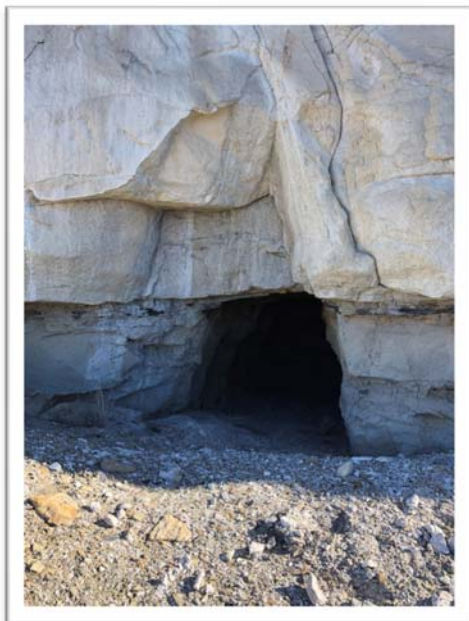


Francis 02 - A 4x10 adit that required a bat compatible closure with removable access door. This mine opening had failing roof supports and is used to access Francis. A 36” x 10’ corrugated steel pipe (CSP) was inserted into the opening between the wooden timbers. An octagon frame was continuously welded to the CSP followed by horizontal bat flyways and a removable access door. The removable bar was

secured to the CSP using McGard bolts. The CSP was then locked into the mine opening using 12 cubic yards (CY) of polyurethane foam (PUF). Once the PUF had cured, a concrete rock wall was constructed over the PUF and in line with the face of the CSP. A total of 600 pounds of concrete and mortar was used in construction of the rock wall.



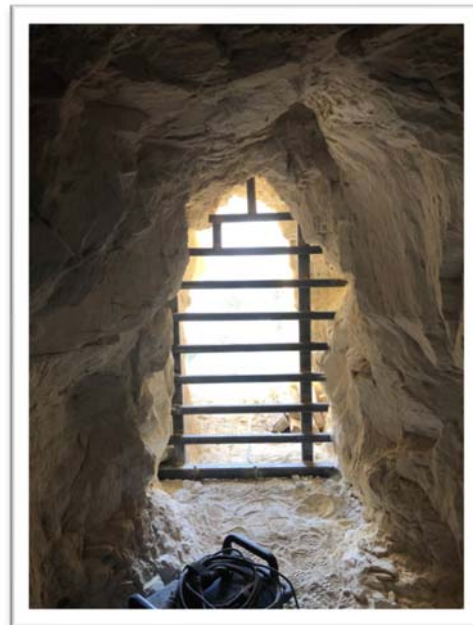
Francis 04 – A shallow 3x3 prospect adit with bat compatible closure. A 24” x 4’ CSP was inserted into the opening. A square frame was continuously welded to the CSP followed by horizontal bat flyways. The CSP was then secured into the mine opening using 1 CY of PUF. Once the PUF had cured, a concrete rock wall was constructed over the PUF and in line with the face of the CSP. A total of 120 pounds of concrete and mortar was used in construction of the rock wall.



Francis 05 – A 6x6 prospect adit with bat compatible closure. A 3” sill plate and 3” vertical risers were installed into the mine feature to act as the framework. Horizontal 2” tube steel was then used to create the bat flyways. A total of nine rebar pins were drilled into the bedrock to secure the mine gate in place.



Francis 06 – A 4x6 mine tunnel exit with bat compatible closure. The opening is located in the face of cliff with the only access through the Francis 02 mine opening. A 3” sill plate and 3” vertical risers were installed into the mine feature to act as the framework. Horizontal 2” tube steel was then used to create the bat flyways. A total of nine rebar pins were drilled into the bedrock to secure the mine gate in place. All materials were hauled through the mine working and the closure was constructed from the inside.



#### **Flat Top Vil Hyde 4**

A single mine feature is located and Flat Tops and is the result of a very large subsidence from a previously filled decline. The location of the subsidence is generally at the intersection of Haystack Road and NM605 with GPS coordinates of 35.321901° / -107.825253°. The site is located in a fenced off field near the old Barbara J mine. The feature was remediated as follows:

Flat Tops 48 – A roughly 30 x 30-foot subsidence measuring 20 feet deep. It appears this area is actively subsiding with a much larger shallow depression (1-3 feet) trending to the south. In order to make the area safe while allowing future monitoring of the subsidence, a three-strand barb wire fence was installed around the mine. The fence measured 650 feet in total length, was secured in place with corner posts set in concrete as well as line posts and T-posts set at 12 feet spacing. All fence was pulled tight using a fence stretcher followed by installing fence stays between every T-post.



### **Lone Pine 3**

The two Lone Pine mine features are located roughly 4 miles from Grants as the crow flies, however access is through private property off of NM605 at GPS coordinates of 35.200268°/-107.806276°. Access to the mines was achievable by truck to approximately 1 mile of the mines, however, extensive boulder falls and ditch wash outs were present on the switchback running to the actual openings. A Case 580 backhoe was used to improve the last mile of road. All equipment and materials were then brought to the mine openings in the backhoe. A vehicle was never able to reach the mines due to no turn around point. Once the closures were completed the road was destroyed and a large drainage ditch reconstructed across the road to prohibit any future vehicular or OHV traffic. The two mine features were remediated as follows:

Lone Pine 01 - A 8x8 adit that required a bat compatible closure with removable access door. A 3” sill plate and 3” vertical risers were installed into the mine feature to act as the framework. Horizontal 2” tube steel was then used to create the bat flyways. A total of thirteen rebar pins were drilled into the bedrock to secure the mine gate in place. A removable bar was secured to the gate using McGard bolts. This mine directly connects to Lone Pine 02.



Lone Pine 02 - A mostly collapsed adit with bat compatible closure. A 24" x 6' CSP was inserted into the opening following hand excavation of opening which was required to fit the CSP. A square frame was continuously welded to the CSP followed by horizontal bat flyways. The CSP was then secured into the mine opening using 1.67 CY of PUF. Once the PUF had cured, loose backfill was placed over the PUF to a depth of 2-3 feet.



## **Malpais**

The single Malpais mine feature is located roughly 18 miles from Grants and is accessed through private property off either NM605 or NM509 at GPS coordinates of 35.342784°/- 107.814533°. Access to the mine was driveable. The mine feature was remediated as follows:

Malpais 70 - An 8x8x10 foot shaft that required backfill. This mine shaft was previously closed by others but has since subsided. A Case 580 backhoe was used to fill the mine subsidence. Borrow materials were harvested from adjacent waste rock and dumped in to the subsidence until a 3 to 5 foot mound was achieved over the mine. A total of 35 CY was used to backfill the mine subsidence. All disturbances from backhoe use were then raked.



### **Mesa Top**

The four Mesa Top mine features are located roughly 18 miles from Grants and are accessed through private property off either NM605 or NM509 at GPS coordinates of 35.340379°/-107.817368°. Access to the mines were driveable and are located very close to the Maplais feature. The mine features were remediated as follows:

Mesa Top 62 – A 8” diameter borehole by unknown depth required sealing. A specially designed PUF borehole plug was used to seal this borehole. The borehole plug consisted of a known premade PUF quantity designed by the manufacturer for specifically plugging 8” boreholes. The PUF was mixed and lowered into the borehole to a depth of 8 feet where it reacted to cause 2.5-foot rise in PUF within the borehole. A second plug was lowered onto the completed first plug and allowed to react. Once completed this created a 5-foot plug in the 8-inch borehole from 3 to 8 feet below ground surface (bgs). A total of 160 pounds of concrete was then placed over the PUF followed by dirt to surface grade.



Mesa Top 65 - An 10x11x75 foot shaft that required backfill. A Case 580 backhoe was used to fill the mine shaft. Borrow materials were harvested from adjacent waste rock and dumped in to the shaft until a 3 to 5 foot mound was achieved over the mine. A total of 360 CY of backfill was dumped into the mine shaft. All disturbances from backhoe use were then raked.



Mesa Top (Road) – A 12” diameter borehole x 30 feet was identified during the preconstruction meeting and added to the project. Due to its shallow depth this borehole was hand backfilled.



Mesa Top 39a – This feature is an 8-foot tall by 36” diameter vent pipe or manway hatch that has been welded closed. However, many small holes near ground level are in the steel which are actively venting radon. In order to vent the air higher up, above the breathing zone, a 42” diameter CSP was used to sleeve the existing pipe. Once in place 1CY of PUF was installed at the ground surface to seal the contact point and the CSP was backfill to 5 feet above ground surface. An octagon frame was continuously welded to the CSP followed by 1-1/4” bar grating. Two coats of Natina were then applied to the exposed CSP to reduce visibility. All disturbances from backhoe use were then raked.



### **Beacon Hill 18 23 Sec 20**

The two Beacon Hill mine features are located roughly 18 miles from Grants and are accessed through private property off either NM605 or NM509 at GPS coordinates of 35.342131°/- 107.821274°. Access to the mines were driveable and are located very close to the Mesa Top features. The mine features were remediated as follows:

Beacon Hill 35c - A 8” diameter borehole by unknown depth required sealing. Closure of this borehole was exactly like Mesa Top 62.



Beacon Hill 35d - An 5x8x75 foot shaft that required backfill. This mine shaft was previously closed by others but has since subsided. A Case 580 backhoe was used to fill the mine subsidence. Borrow materials were harvested from adjacent waste rock and dumped in to the subsidence until a 3 to 5 foot mound was achieved over the mine. A total of 200 CY of backfill was dumped into the mine shaft. Due to limited materials for backfill the adjacent areas were harvested as needed, then graded out to achieve a positive drainage swale through the center of borrow area. All disturbances from backhoe use were then raked.



### **Blue Peak**

The two Blue Peak mine features are located roughly 20 miles from Grants and are accessed through private property off either NM605 or NM509 at GPS coordinates of 35.341430°/-107.842688°. Access to the mines were driveable to within 700 feet at which point all materials and supplies were hiked to the mines. The mine features were remediated as follows:

Blue Peak 05 - A 2x10 adit that required a bat compatible closure with removable access door. This mine opening had been slowly closing itself thru erosion and required significant hand excavation to achieve space for the CSP install. Due to having to hike over rugged terrain to the mine the 30" x 10' corrugated steel pipe (CSP) was cut into two five-foot sections. On one CSP section an octagon frame was continuously welded to the CSP followed by horizontal bat flyways and a removable access door. The removable bar was secured to the CSP using McGard bolts. These two sections were then transported to the mine, secured together with a steel band, and locked into the mine opening with 7 CY of PUF. Once the PUF had cured hand backfill was used to cover the PUF at a thickness of 2 to 3 feet.



Blue Peak 06 – A 6x6x8 foot deep prospect adit that required hand backfill. A total of 3 CY of PUF was installed in the adit followed by 2 to 3 feet of hand backfill cover the all PUF. This mine was immediately adjacent to Blue Peak 05.



## RECOMMENDATIONS

MSR recommends the following:

- Periodic inspection of the mine gates for vandalism.
- Periodic inspection of three machine backfills for additional subsidence
- Monitoring of Flat Tops 48 followed by a more secure closure
- Closure of two mine shafts adjacent to NM605 as indicated by the landowner, Robert Schmidt. Features had previously been fenced off with orange fencing which has failed. Features are near GPS location 35.338442°/-107.797339°.

## FINANCIAL SUMMARY

Francis 01	\$ 4,300.00
Francis 02	\$ 11,000.00
Francis 06	\$ 4,500.00
Francis 05	\$ 4,600.00
Francis 04	\$ 2,500.00
Blue Peak 06	\$ 3,000.00
Blue Peak 05	\$ 9,000.00
Lone Pine 01	\$ 9,900.00
Lone Pine 02	\$ 5,300.00
Malpais 70	\$ 2,100.00
Mesa Top 62	\$ 1,100.00
Mesa Top 65	\$ 5,200.00
Mesa Top 39a	\$ 4,800.00
Mesa Top (ROAD)	\$ 1,900.00
Beacon Hill 35d	\$ 3,300.00
Beacon Hill 35c	\$ 1,100.00
Flat Top 48	\$ 7,800.00

## DAILY CONSTRUCTION ACTIVITY REPORTS

See attached

## DAILY CONSTRUCTION ACTIVITIES REPORT

Project: Grants NM AML	Report No. 1
MSR Personnel: Brian Sweet	Date: 11/29/21
Subcontractors: None	Day of Week: Monday
Weather: Sunny	Hi Temp: 60
Time Depart Grants, NM: 0600	
Time Return Grants, NM: 1730	

### Project Equipment, Quantities, Materials:

- Work Truck
- Trailer
- Welder
- Generator
- Small Tools

### Activities and Remarks:

- Picked up all steel and culvert in Albuquerque
- Staged everything on the road to Mesa Top
- Prefab all CSP
  - 42" x 10' with bar grating
  - 24" x 4' with bat gate
  - 24" x 6' with bat gate
  - 36" x 10' with bat gate and removable bar
  - 30" x 10' with bat gate and removable bar

### Health & Safety, PPE:

- Welding safety. Level D

### Tomorrow's Planned Activity:

- Stage at Francis, Get PUF

### Technical Issues:

- None

## DAILY CONSTRUCTION ACTIVITIES REPORT

Project: Grants NM AML	Report No. 2
MSR Personnel: Brian Sweet, Gerrad Deal	Date: 11/30/21
Other Visitors: None	Day of Week: Tuesday
Weather: Sunny	Hi Temp: 60
Time Depart Grants, NM: 0630	
Time Return Grants, NM: 1700	

### Project Equipment, Quantities, Materials:

- Work Truck
- Trailer
- Welder
- Generator
- Small Tools

### Activities and Remarks:

- Picked up PUF in Albuquerque and staged in Grants.
- Staged all supplies at Francis features.
- Laid out all fence materials at Flat Top 48. No access point so took the green gate apart and drove into the site to bypass the locks. Reinstalled the gate upon departure.

### Health & Safety, PPE:

- Route to hospital, emergency contacts. Level D

### Tomorrow's Planned Activity:

- Francis construction

### Technical Issues:

- None

## DAILY CONSTRUCTION ACTIVITIES REPORT

Project: Grants NM AML	Report No. 3
MSR Personnel: Brian Sweet, Gerrad Deal	Date: 12/1/21
Other Visitors: Chris Teske	Day of Week: Wednesday
Weather: Sunny	Hi Temp: 60
Time Depart Grants, NM: 0615	
Time Return Grants, NM: 1700	

### Project Equipment, Quantities, Materials:

- Work Truck
- Welder
- Generator
- Small Tools

### Activities and Remarks:

- Installed bat gate in Francis 06. Accessed thru Francis 02 since the mine opening was on a vertical cliff face. Did not install a door on this feature
- Installed bat gate with an access door on Francis 01.
- Chris Teske delivered all McGard bolts to the site
- Rolled 36" x 10-foot CSP down to Francis 02. Set loose in the adit. Bat flyways and access door are already welded in place on the CSP
- Rolled 24" x 4-foot CSP to Francis 04. Set loose in the adit. Bat flyways are already welded in place. No door.
- Started work on Francis 05. Got the sill plate and uprights in place. Will install flyways tomorrow

### Health & Safety, PPE:

- Welding safety, cutting safety. Level D

### Tomorrow's Planned Activity:

- Francis construction

### Technical Issues:

- None

## DAILY CONSTRUCTION ACTIVITIES REPORT

Project: Grants NM AML	Report No. 4
MSR Personnel: Brian Sweet, Gerrad Deal	Date: 12/2/21
Other Visitors: None	Day of Week: Thursday
Weather: Sunny	Hi Temp: 60
Time Depart Grants, NM: 0615	
Time Return Grants, NM: 1815	

### Project Equipment, Quantities, Materials:

- Work Truck
- Welder
- Generator
- Small Tools

### Activities and Remarks:

- Completed bat gate on Francis 05. No access door as hole is only 15 feet deep.
- Installed 12 CY of PUF into Francis 02. A rock wall was built up over the face of the installed PUF. Rock held in place with 480 pounds of Redi mix and 120 pounds of mortar mix. Removable bar secured in place with McGard bolts.
- Used 1CY of PUF to secure Francis 04 CSP into place. CSP is 24" x 4 feet. Used 120 pounds of mortar mix and a series of stacked rocks to cover the PUF and complete the closure. No access door as hole is only 20 feet deep.

### Health & Safety, PPE:

- PUF safety, slips, trips, falls. Level D

### Tomorrow's Planned Activity:

- Flat Tops construction

### Technical Issues:

- None

## DAILY CONSTRUCTION ACTIVITIES REPORT

Project: Grants NM AML	Report No. 5
MSR Personnel: Brian Sweet, Gerrad Deal	Date: 12/3/21
Other Visitors: Chris Teske	Day of Week: Friday
Weather: Sunny	Hi Temp: 60
Time Depart Grants, NM: 0615	
Time Return Grants, NM: 1645	

### Project Equipment, Quantities, Materials:

- Work Truck
- T-post Driver
- Small Tools

### Activities and Remarks:

- Installed fence at Flat Tops 48. Four corner galvanized posts installed with two 45 degree angle braces on each. Set all braces in concrete. 500 pounds of fast set concrete used on the fence. Line posts installed in the center along each of the four runs. 650 feet of total fence run. 12 foot spacing between fence posts. Three strands installed around the feature. Fence stays placed between each T-post.
- Hand Backfilled Mesa Top (Road hole). This was a 12" borehole that was 40 feet deep.
- Chris Teske on site to inspect all work to date. Approved.

### Health & Safety, PPE:

- Level D

### Tomorrow's Planned Activity:

- Blue Peak

### Technical Issues:

- None

## DAILY CONSTRUCTION ACTIVITIES REPORT

Project: Grants NM AML	Report No. 6
MSR Personnel: Brian Sweet, Gerrad Deal	Date: 12/4/21
Other Visitors: None	Day of Week: Saturday
Weather: Sunny	Hi Temp: 65
Time Depart Grants, NM: 0615	
Time Return Grants, NM: 1715	

### Project Equipment, Quantities, Materials:

- Work Truck
- Small Tools

### Activities and Remarks:

- Dug out Blue Peak 05. Installed 30" x 10 foot CSP which was lowered in two sections and strapped together in the mine with a band. Bat flyways and removable bar already welded to the CSP. Installed 7CY of PUF to secure in place. Backfilled.

### Health & Safety, PPE:

- Hiking safety, Level D

### Tomorrow's Planned Activity:

- Blue Peak, Beacon Hill, Mesa Top

### Technical Issues:

- None

## DAILY CONSTRUCTION ACTIVITIES REPORT

Project: Grants NM AML	Report No. 7
MSR Personnel: Brian Sweet, Gerrad Deal	Date: 12/5/21
Other Visitors: None	Day of Week: Sunday
Weather: Sunny	Hi Temp: 60
Time Depart Grants, NM: 0615	
Time Return Grants, NM: 1630	

### Project Equipment, Quantities, Materials:

- Work Truck
- Small Tools

### Activities and Remarks:

- Installed 3 CY of PUF into Blue Peak 06. Hand backfilled remainder of the feature.
- Installed the borehole PUF bags into Mesa Top 62. Two bags used. Set at 8 foot depth. 2 sets of the bags rose in the borehole to minus 2 feet bgs. Installed 160 pounds of redicrete over the PUF to minus 1 foot bgs then backfilled to grade
- Installed two borehole PUF bags into Beacon Hill 35c. Same process as previously discussed
- Cut and staged steel for Lone Pine

### Health & Safety, PPE:

- Level D

### Tomorrow's Planned Activity:

- Lone Pine

### Technical Issues:

- None

## DAILY CONSTRUCTION ACTIVITIES REPORT

Project: Grants NM AML	Report No. 8
MSR Personnel: Brian Sweet, Gerrad Deal	Date: 12/6/21
Other Visitors: None	Day of Week: Monday
Weather: Sunny	Hi Temp: 55
Time Depart Grants, NM: 0615	
Time Return Grants, NM: 1715	

### Project Equipment, Quantities, Materials:

- Work Truck
- Case Backhoe
- Small Tools

### Activities and Remarks:

- Received delivery of backhoe and improved road up to Lone Pine features
- Installed 24" x 10 foot CSP into Lone Pine 02. Steel previously welded onto the CSP. Used 1.67 CY of PUF to secure in place. Backfilled

### Health & Safety, PPE:

- Heavy Machinery safety, Level D

### Tomorrow's Planned Activity:

- Lone Pine

### Technical Issues:

- None

## DAILY CONSTRUCTION ACTIVITIES REPORT

Project: Grants NM AML	Report No. 9
MSR Personnel: Brian Sweet, Gerrad Deal	Date: 12/7/21
Other Visitors: None	Day of Week: Tuesday
Weather: Cloudy	Hi Temp: 50
Time Depart Grants, NM: 0615	
Time Return Grants, NM: 1800	

### Project Equipment, Quantities, Materials:

- Work Truck
- Case Backhoe
- Generator
- Welder
- Small Tools

### Activities and Remarks:

- Completed bat gate at Lone Pine 1. Feature is 8x8. Used 13 pins. Removable bar installed.

### Health & Safety, PPE:

- Level D

### Tomorrow's Planned Activity:

- Mesa Top

### Technical Issues:

- Lost a tire on the backhoe. Had to go to Albuquerque.

## DAILY CONSTRUCTION ACTIVITIES REPORT

Project: Grants NM AML	Report No. 10
MSR Personnel: Brian Sweet, Gerrad Deal	Date: 12/8/21
Other Visitors: Chris Teske	Day of Week: Wednesday
Weather: M. Cloudy	Hi Temp: 50
Time Depart Grants, NM: 0615	
Time Return Grants, NM: 1700	

### Project Equipment, Quantities, Materials:

- Work Truck
- Case Backhoe
- Small Tools

### Activities and Remarks:

- Installed 42" x 10' CSP over the existing 36" x 8' vertical access pipe at Mesa Top 39a. Grating previously welded to the face. Installed 0.67 CY PUF around the bottom and backfilled 60%. Top 40% was painted with Natina by Chris Teske. Raked all tracks.
- Backfilled Malapis 70. Raked all tracks.
- Started backfill of Mesa Top 65. Big hole, going to take a while.
- Chris Teske approved all closures to date. Only 2 holes left (Mesa Top 65 and Beacon Hill 35d).

### Health & Safety, PPE:

- Respirators during backfill, Level D

### Tomorrow's Planned Activity:

- Mesa Top

### Technical Issues:

- None

## DAILY CONSTRUCTION ACTIVITIES REPORT

Project: Grants NM AML	Report No. 11
MSR Personnel: Brian Sweet, Gerrad Deal	Date: 12/9/21
Other Visitors: None	Day of Week: Thursday
Weather: M. Cloudy	Hi Temp: 50
Time Depart Grants, NM: 0615	
Time Return Grants, NM: 1730	

### Project Equipment, Quantities, Materials:

- Work Truck
- Case Backhoe
- Small Tools

### Activities and Remarks:

- Completed backfill of Mesa Top 65. Raked all tracks.
- Only 1 holes left Beacon Hill 35d.

### Health & Safety, PPE:

- Respirators during backfill, Level D

### Tomorrow's Planned Activity:

- Beacon Hill

### Technical Issues:

- None

## DAILY CONSTRUCTION ACTIVITIES REPORT

Project: Grants NM AML	Report No. 12
MSR Personnel: Brian Sweet	Date: 12/10/21
Other Visitors: None	Day of Week: Friday
Weather: Snow	Hi Temp: 35
Time Depart Grants, NM: 0615	
Time Return Grants, NM: 1400	

### Project Equipment, Quantities, Materials:

- Work Truck
- Case Backhoe
- Small Tools

### Activities and Remarks:

- Completed backfill of Beacon Hill 35d. 200CY estimated to backfill. Installed a low point swale in the borrow area to release any overland flow to the existing drainage below the site. Raked all tracks.
- Roaded backhoe to pick up point. Picked up at 1400 by Ahern Rentals
- Returned key to Robert (landowner)
- Job Completed, all 17 features have been closed per specifications

### Health & Safety, PPE:

- Level D

### Tomorrow's Planned Activity:

- Demobilize

### Technical Issues:

- None