

# Lascar Pit

*February 2023*

111 Permit Application

Colorado Division of Reclamation, Mining, and  
Safety

Siete Inc.

## **Introduction**

The Lascar Pit is located approximately 13 miles north of Walsenburg, CO in Huerfano County at an elevation of 6503 feet. The Lascar Pit will be used as sand and gravel source for Colorado Project No. FBR 025A-045 and Federal Highway Administration Project 6982AF23C000001; therefore, this application is for a Special Operations 111 reclamation permit. The permit boundary is shown on the Existing Conditions Map. Prior to mining, the site was used for rangeland and cattle grazing and will be reclaimed as such. The depth of excavation will be approximately 20 feet. Topsoil is expected to range from 3-4 inches.

The site is bordered by rangeland to the north, south, west, and east. The General Location Map in Exhibit A details the location of the Lascar Pit. The surface and mineral rights are owned by the Colorado State Land Board. A lease to mine and sell the gravel is attached for review. The permit area will include 30.0 acres.

### **6.3.1 EXHIBIT A**

#### **LEGAL DESCRIPTION AND LOCATION MAP**

The site is approximately 13 miles north of Walsenburg, CO. The property is surrounded by dry rangeland in each direction. County Road 650 borders the south end of the site and Interstate 25 is to the east of the property. The main site access is located at the southwest corner of the site with access from County Road 650 and is shown on the General Location.

The total permit area is 30.0 acres.

#### **1. Legal Description**

A tract of land located within the west half of Section 36, Township 25 South, Range 67 West of the 6<sup>th</sup> Principal Meridian of Huerfano County in the State of Colorado.

The pit can also be described as located at with a mine entry location of:

Latitude 37.821735°

Longitude -104.847967°

## **6.3.2 EXHIBIT B SITE DESCRIPTION**

### **1. Location and General Land Use Information**

The site is located along Huerfano County Road 650 and Interstate 25 and is composed of dry rangeland. The parcel is currently leased for agricultural operations by the Colorado State Land Board.

### **2. Site Geology**

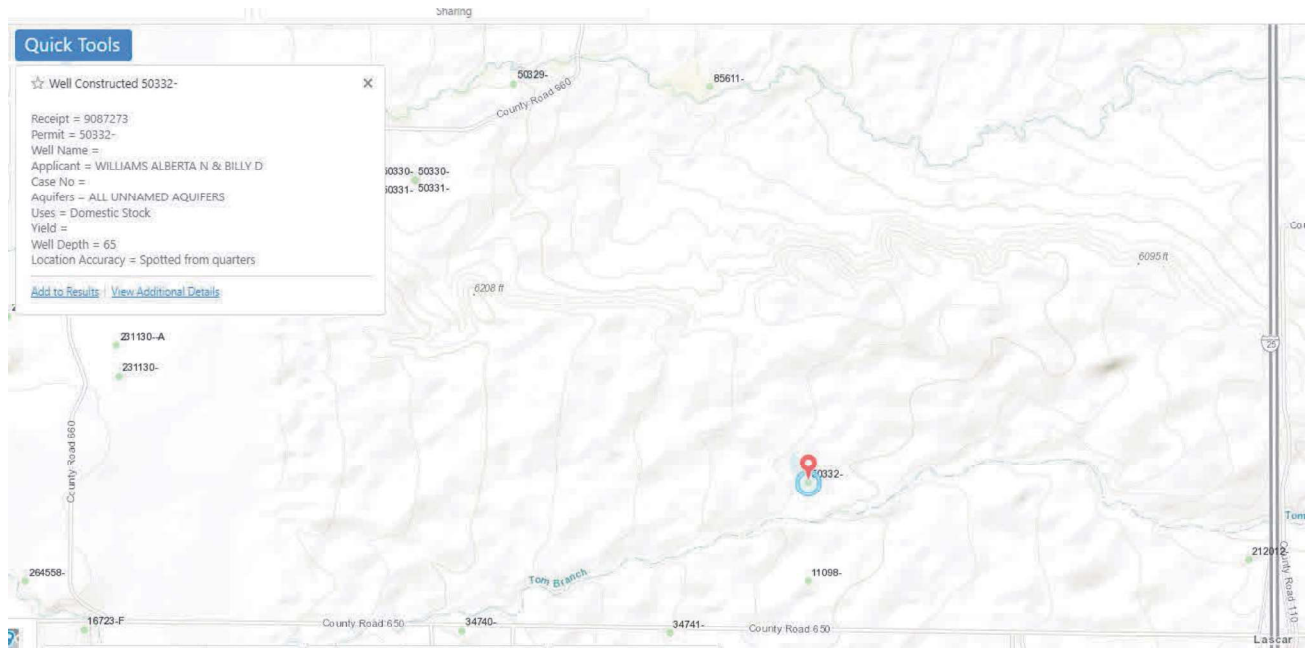
Site geology consists of 3-4 inches of topsoil. Mining will occur to a depth of approximately 20 feet. There are no hazardous or acid forming materials expected to be encountered during excavation. See the enclosed Natural Resources Conservation Service (NRCS) soil report for more details on surface composition. A majority of the site is composed of Baca Silt Loam. This material is well drained with slow to medium runoff and moderately slow permeability. These soils are used for both rangeland and for irrigated cropland. Native vegetation is blue grama, buffalograss, western wheatgrass, broom snakeweed and cactus. Samsil-chicosa complex is also on the property and is found in rangeland. The main native vegetation and includes little bluestem, western wheatgrass, sideoats grama, blue grama, green needlegrass, sedges and forbs. It is well drained and has a medium to high surface runoff. Permeability is slow.

### **3. Surface Hydrology**

Pre-mining topography is shown on the Existing Conditions Map. All runoff on the undisturbed site runs to the south. Stormwater will be kept from leaving the site by using topsoil and overburden stockpiles which will surround the site following the perimeter. The stockpiles will be first developed on the western edge of the site and will encircle the full area over the mine's life. This perimeter topsoil berm is shown on the Mining Map. Stormwater that occurs on site will remain on site; however, the soils should allow for stormwater to infiltrate the site and pit floor within 72 hours.

Based on data from the Division of Water Resources Well Permit Search map, groundwater is not anticipated to be encountered during any phase of mining. A structure depicted on the map

below shows the well depth at 65 feet. Mining is not anticipated deeper than 20 feet. If groundwater is encountered, excavation will be stopped. The area will then be backfilled with at least two feet of material and no mining will occur beyond that depth.



## 1. Vegetation

Vegetation at this site is typical rangeland grasses for this area and covers approximately 30-60% of the site.

## 2. Wildlife

Environmental conditions, such as food and cover availability, is limited due to the climate. Small animals (rabbits, coyotes, etc.) are found in the surrounding environment. The site may also see white tail deer, antelope, prairie dog, various snakes and lizards. Impacts to wildlife will be mitigated through a weed management plan and reseeding all mined areas with a native rangeland seed mix.

## 3. Structures

There is a fence, stock tank, water line and County Road 650 that all lie within 200' of the permit boundary.

#### **4. Soils**

The NRCS soil map is included. The site contains two main soil types:

- Baca Silt Loam – 61.9%, Well-drained with slow to medium runoff
- Samsil-Chicosa Complex – 16.3%, Well-drained with medium to high runoff

## **6.3.3 EXHIBIT C MINING PLAN**

### **1. General Mining Plan**

The Existing Conditions Map shows the current conditions of the Lascar Pit. The pit will provide aggregate for road construction work on Colorado Project No. FBR 025A-045 and Federal Highway Administration Project 6982AF23C000001. Mining will disturb up to 30 acres as shown on the Mining Map.

Mine access is via County Road 650 with access from Interstate 25. Mining of the gravel deposit will progress from the west side of the permit boundary and move to the east of the site. Stockpile and processing areas will be in the southwest corner of the site. The pit will be sloped to a 3H:1V or shallower to restore the site's previous drainage pattern.

A portable asphalt hot plant or concrete plant may be located at the site and will be located inside of the processing area as shown on the Mining Map. This area, as well as the stockpile and processing areas, will be prepped by removing and stockpiling topsoil for later reclamation. Mined and processed aggregate will be stored surrounding the portable processing plant(s). Topsoil and overburden berms will be stored around the perimeter of the permit boundary for later use in reclamation.

### **2. Mining Timetable**

The construction project is anticipated to February 2023, depending on weather. Mining is planned to finish by Fall 2023.

### **3. Mine Facilities and Operation**

Toxic or acid-producing materials will not be encountered during the mining operation. No blasting or explosives will occur/be used during mining nor on site. Bulk storage of fuel and small amounts of lubricants may be stored on site and will be either double walled or housed within an earthen berm that will have a capacity of at least 110% of the volume of the tanks to be kept onsite. No permanent structures will be built within the permit area as part of this operation. Water will be used to control dust on site. Water for this operation will be purchased from an offsite source in Colorado City and trucked to the site. It is estimated that the operation

will consume up to 10,000 gallons of water per day for dust suppression. Portable plants will be used onsite for rock crushing. Spray bars will be used in the crushing and screening plant to minimize dust.

Aggregate processing equipment is portable. The processing equipment may move and follow active mining throughout the site. Portable mining equipment such as loaders, dozers, trucks, and excavators will be serviced onsite as needed. Upon reclamation, all portable equipment will be removed from the site.

On-site roads are temporary and will change as mining progresses to the east. Support equipment will come to the site on an as-needed basis. Night mining activity may occur in the operation and portable lighting may be used within the pit from time to time. Portable toilets will be used for employees.

Stormwater drainage on the disturbed areas will be directed by berms that border all disturbed areas of the site. The operation will create a depressed area. No stormwater or process water will leave the site and will be directed toward the center of the disturbed area where it will infiltrate within 72 hours. Except for the highwall, slopes will be maintained at 3H:1V or shallower. As no stormwater will leave or is anticipated to leave the site, a CDPHE Storm Water Discharge permit is not required.

#### **4. Topsoil and Overburden Handling**

Topsoil will be salvaged from the disturbed areas and placed in temporary perimeter berms surrounding the disturbed area. Piles are shown at the perimeter of the permit boundary on the Mining Map. Topsoil is expected to be approximately 3-4 inches and overburden is expected to be approximately 18-30 inches. The topsoil and overburden berms will be used for reclamation to construct 3H:1V slopes or shallower. The deposit is approximately 20 feet in depth. There are no significant disturbances onsite pre-mining. The haul road will be approximately 30 feet wide and will be constructed as with any gravel road, by removing the topsoil to a width of 30 feet.



## **5. Schedule of Operations**

Mining, screening, and processing will be conducted with portable equipment between February and September 2023. Mining operations will be dictated by the project schedule. Mining may take place 6 days per week for the duration of the project.

## **6. Huerfano County Impacts and Environmental Impacts**

The impacts to Huerfano County will be limited. Minimal dust is expected from the operation as the pit and roads are watered as needed. Water used is purchased and brought on site and applied on an as-needed basis to control dust on haul roads and within the mine area.

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## **6.3.4 EXHIBIT D RECLAMATION PLAN**

### **1. General Reclamation Plan**

The maximum disturbed area to be reclaimed under this permit is ~30.0 acres. Post-mining land use will return the site back to dry rangeland with native grasses. All areas of the site including will be reclaimed to 3H:1V or shallower. As described in the mining plan, reclamation will occur concurrently with mining. No interior haul roads will remain following reclamation. All reclaimed areas will be sloped, topsoil replaced and seeded with the approved seed mix.

### **2. Topsoil Replacement**

Topsoil onsite is anticipated to range from 3-4 inches thick. During mining, all topsoil will be stored in the site perimeter berm of the site and are shown on the Reclamation Map.

### **3. Haul Roads and Access**

One entrance road will connect the site to County Road 650. Onsite haul roads will move as mining moves throughout the site. No interior haul roads will remain following reclamation.

### **4. Reclamation Timetable**

Reclamation will occur concurrently with mining. Topsoiling and seeding will occur between the Fall 2023 and Spring 2024.

### **5. Revegetation Plan**

For reclamation, seed will be drilled. Heavy furrows may be left to help concentrate moisture and provide shade for vegetation establishment. An NRCS approved seed mix will be used. It is anticipated that the following mix would be adequate for reclamation purposes.

## **Native Grass Seed Mix**

<b>SPECIES</b>	<b>APPLICATION RATE (drilled)</b>
Western Wheatgrass	16 pounds of pure live seed per acre
Blue Grama	1.2 pounds of pure live seed per acre
Galleta	1.6 pounds of pure live seed per acre
Sand Dropseed	0.1 pounds of pure live seed per acre
Winter Fat	0.1 pounds of pure live seed per acre

### **6. Post-Reclamation Site Drainage**

Final reclamation surfaces will be graded so that waters flow in a similar path to the original pre-mining path. Any onsite water will infiltrate within 72 hours.

### **7. Monitoring Reclamation Success**

The local NRCS office may assist in any reclamation issues or to help control erosion. Weed mitigation will occur through mechanical removal. If there are issues that arise regarding noxious weed control, Siete Inc. will contact the Huerfano County Noxious Weed Coordinator for guidance.

### **8. Reclamation Bond**

The bond for the site will be based upon \$2,500 per acre. The site will have 30.0 acres of disturbance. Since a fraction of an acre is counted a whole acre by the Division, the bond will be  $30.0 \text{ acres} \times \$2,500.00 \text{ per acre} = \$75,000.00$ .

Reclamation cost estimates were calculated on a per acre basis and applied to maximum active mining area of 30 acres.

<b>Direct Tasks</b>	<b>Unit</b>	<b>Quantity</b>	<b>Cost</b>	<b>Total Cost</b>
Placing Topsoil/Fines				
Bull Dozer	Hours	0.33	\$145.00	\$47.85
Loader	Hours	0.33	\$145.00	\$47.85
Seeding				
Broadcasting	Hours	0.33	\$300.00	\$99.00
Seed Mix	Acre	1	\$350.00	\$350.00
Mulch	Acre	1	\$187.50	\$187.50
Tracking seed/mulch				
Dozer	Hours	0.33	\$154.00	\$50.82
Area Reclaimed	Acre	30		\$23,490.60
Mobilization Fee	Hours	5	\$100	\$500.00
<b>Indirect Tasks</b>				
Liability Insurance			0.0155	\$364.00
Performance Bond			0.015	\$352.00
Profit			0.1	\$2,349.00
Job Superintendent	Hours	20	\$88.00	\$1,760.00
Miscellaneous Indirect			0.0925	\$2,172.00
<b>Total Bond</b>				\$30,987.60

### **6.3.5 EXHIBIT E MAPS**

Existing Conditions Map

Mining Map

Reclamation Map

### **6.3.6 EXHIBIT F**

#### **LIST OF OTHER PERMITS AND LICENSES REQUIRED**

The following permits are necessary for the full operation of the Lascar Pit:

1. APEN – A fugitive air emissions permit is needed from the Colorado Department of Public Health and Environment. Air emissions permits will be in place for all equipment and portable plants utilized on site which require a permit.
2. Huerfano County Special Use Permit.

**6.3.7 EXHIBIT G**  
**SOURCE OF RIGHT-TO-ENTER**

The surface and mineral owner of the property which will be mined is the Colorado State Land Board. The Operator is Siete Inc. Attached is the lease between the two entities.

**6.3.8 EXHIBIT H**  
**MUNICIPALITIES WITHIN TWO MILES**

There are no municipalities within two miles of the site.