



STATE OF
COLORADO

Cazier - DNR, Tim <tim.cazier@state.co.us>

Revised map and exhibits

Ken Klco <azurite@wildblue.net>

Fri, Jul 19, 2013 at 9:31 AM

To: tim.cazier@state.co.us

Cc: Randy <rdiluzio@tezakheavyequipment.com>, "Carter, Stephanie S" <sscarter@blm.gov>

Tim,

Please find attached map and exhibits that have been revised to reflect recent conversations you and Randy have had regarding bonding estimates and statements made in the mine plan narrative that best reflect the specifications and final reclamation configurations of the highwall benches. If you have any questions regarding these revisions, please do not hesitate to contact me. I will deliver hard copies of these revisions to the Fremont County Clerk and Records office in Canon City.

Regards,

KSKlco

Azurite, Inc.

3 attachments



Revised DRMS Mining Plan071813.doc

37K



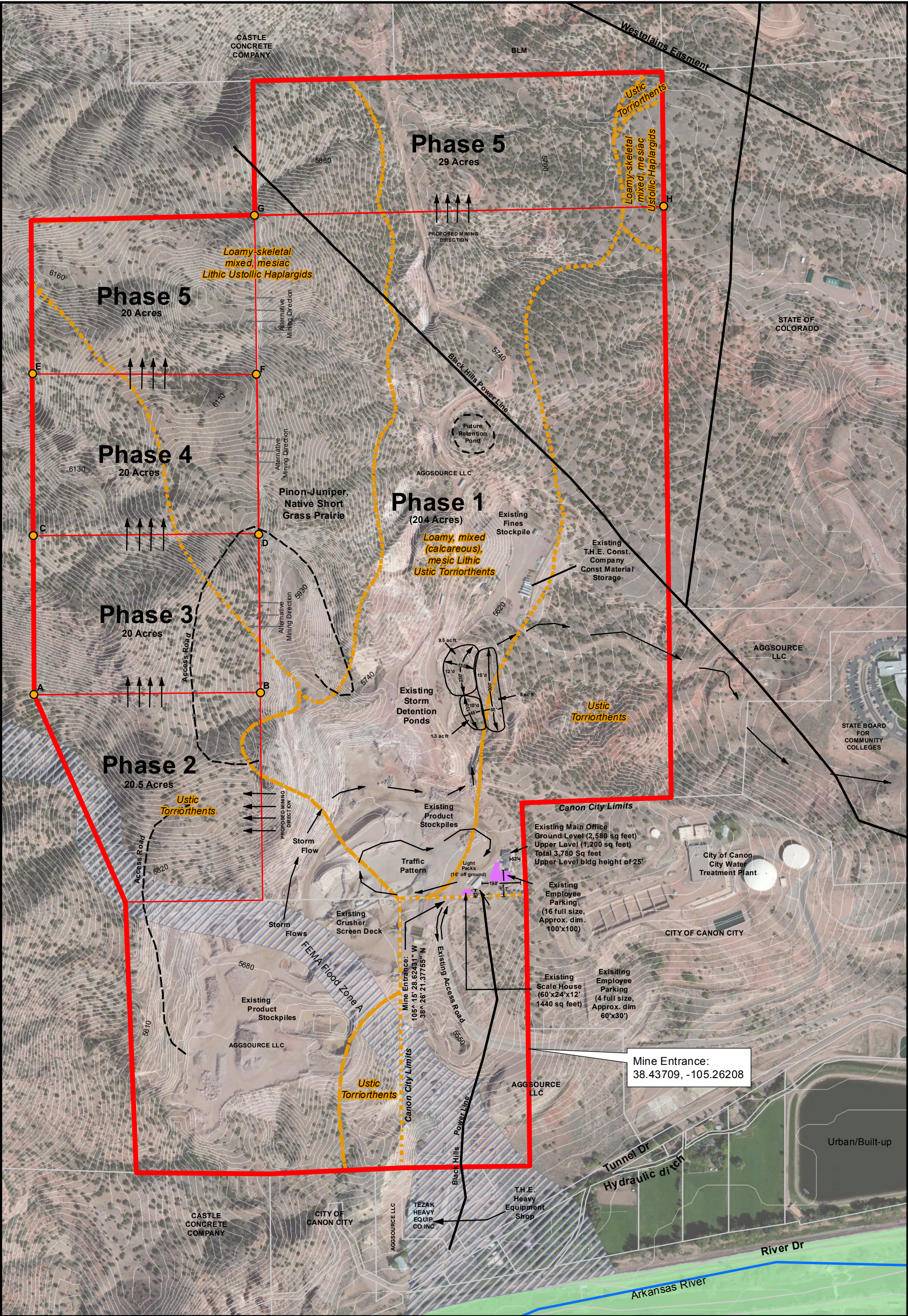
THE Exhibit L 71813.pdf

338K



DMRSExhibitC7-18-13.pdf

12519K



Legend

- Lighting Packs
- Permit Boundary
- FEMA Flood Zone A
- FEMA Flood Zone AE
- Fremont Parcels
- Soils

CONTOUR = 10 FT.

PHASE CORNERS

A	38.44183, -105.27047
B	38.441853, -105.26662
C	38.443962, -105.27048
D	38.44397, -105.26664
E	38.446125, -105.27048
F	38.44611, -105.26667
G	38.448238, -105.26669
H	38.448341, -105.25974

DRMS Permit M-77-193 Amendment 05
Exhibit C
Pre-Mining & Mining Plan Map
for T.H.E. Aggregate Source
Tunnel Drive
Granite Products Mine

Azurite Inc. _____
Prepared July 18, 2013

0 250 500
Feet

N

Azurite, Inc.
10001 CR 12 P.O. Box 338
Cotopaxi, Colorado 81223
719-942-4178

July 15, 2013

Randy DiLuzio, General Manager
Tezak Heavy Equipment Co., Inc.
205 Tunnel Drive
Canon City, CO 81212

RE: MINE PLAN REVISIONS FOR USBLM MINERAL SALES LANDS, PERMIT
#M77-193

Mining will commence in 2013 from the southeastern corner of the USBLM lease area with surface leveling and bench development work from the top of existing highwall at boundary line 660' west and up to 1060' north of the southeast corner of the lease area. Leveling for mine benches will proceed from the highwall contact working west towards the west boundary of the lease area. The ten acre area of leveling and bench development will likely take place in two or more stages over the next 1-3 years. Total Phase 2 area of 20.5 acres will be excavated to result in final mine benches along the west boundary of the BLM mineral sales parcel over the next 8-10 years, depending upon production demand. Phases 3, 4, and 5 similar acreages and production potential, will be mined in successive likewise time frames with each phase preceded by a bond review prior to disturbance of the un-mined phase area. The southeastern corner of the lease area will be accessed from two roadways developed from Tezak mine property. One roadway along the central portion of the active mining zone north of largest highwall face currently exposed along the western boundary of THE property with USBLM lands(lease land in question). The second roadway would be developed northward through the furthest most southwestern corner of the USBLM land that borders Tezak mine property. Bulldozers and excavators will be used to build access roads and level terrain for production drilling. Conventional hardrock surface mining techniques will be employed using percussion drilling equipment to drill 6" holes for bench development of 40' high and 30' wide for final highwall benches. During the active phase of highwall mining, bench heights of 40' and bench width of 20' will be used while grading mine benches to drain laterally and with a typical 5% backslope across the 20' bench width to the highwall toe. The larger bench widths for final highwall configuration have been suggested to improve machine access if ever necessary to clean excessive rock fall and maintain storm desired drainage patterns along the toe of the mine benches.

Tezak Heavy Equipment typically schedules a few large production blasts rather than many small production rounds. Tonnage of typical production blasts are 80,000 - 150,000 tons of granitic material, per shot, meaning that production blasting normally occurs three to eight times per year, depending on market demands. The current blasting schedule and specific state of the art non-electric sequentially delayed blasting initiation system will be continued. Blasting patterns of 15'x15' burden and spacing are typically used and loading factors normally run from .25 - .55# explosive per ton rock blasted. There have

been no complaints or concerns regarding blasting controls at this site over the past number of years. It is a priority for THE Aggregate Source to maintain and continue the good operating history regarding blasting noise and vibration control during blasting operations. Each round is planned, loaded, and shot by a licensed blaster. All production rounds are recorded for noise and ground vibration levels and documented for blast layout and loading pattern.

Once a sufficient area on top has been leveled, drilling operations will commence from the existing highwall face west to a location suitable for shot size and face development. After blasting, rock will be pushed over the highwall face with a bulldozer or carried and dumped over the face utilizing a front-end loader. Rock is then picked up at the large muckpile developed along the base of the highwall and fed via front end loader into the crushing and screening system located at the current pit floor elevation of 5660'. Material will be conveyed to various sized aggregate material stockpiles located at the pit floor/truck loadout area.

Mining will continue concurrent with all other Phases on Phase 1 areas (AggSource owned lands currently under permit and bonding, excepting the 29 acres in the extreme north end of the permit area, titled Phase 5). Mining faces on AggSource property will include granite mining as well as sandstone and dolomite mining for aggregate production. Phase 1 areas also include product storage areas and stormwater control structures such as sediment ponds and armored storm flow channels.

Mine Bench Details

As mentioned earlier, final mine bench dimensions will be 40' high and 30' wide, with a "grade to drain" along lateral bench reaches to nearest side drainage. The 40' high rock bench face will be left at 0.25:1, H:V. Final bench configurations will be graded to have a typical 5% backslope across the 30' width to the highwall toe. No rock berms are planned for placement on the bench, although lateral drainage will be maintained along the near horizontal bench tops to allow surface flow from storm events to drain towards the outer portions of the bench system in proximity to main storm flow drainage channels. Maintenance activities along the bench may involve removal of any material that may accumulate over time along the back of the bench top or small slabs of rock that may become dislodged from the rock face. This work will likely be accomplished using a small track hoe or crane with ample reach to remove loose material while maintaining a safe distance from the bench edge.

The first twenty acres (Phase 2) of highwall mining in the mineral sale area will result in an east facing highwall along the west boundary of the lease area and a south facing active highwall that will continue to move northwards in time as mining continues north along the 3000' length of the lease area. At final build out, there will be at least two locations where highwall intersect at 90 degrees. These areas may be left armored with rock talus to promote controlled storm related water flow with the least potential for highwall de-stabilization due to short term but potentially high volume surface water flow. Rock placement may be utilized in other locations where storm related surface flow potentials or unstable bedrock zones may be encountered.

Process and Loadout Operations

Rock crushing, screening, sizing, and stockpiling circuits will not change to any significant degree over time from its present configuration, although the plant may be moved to closer proximity to the toe of the highwall system as well as re-located at a lower final elevation, projected to be app. 5550' to lowest pit elevation. This plant will continue to be fed for the most part by Front End Loader muck and carry from the muckpile created along the toe of the highwall by blasting and push off, or, alternatively, trucks may be loaded at the muckpile for direct dumping into the crusher feeder. Mining operations including drilling, blasting, crushing, and truck loading is normally scheduled for 5AM to 9PM five days per week. A continuance of this schedule for Saturday operation may be possible should business conditions warrant.

Stormwater Controls

As part of the 1997 amendment conditions, the site was re-configured to direct storm related surface run-off areas above and west of the mine site from its former south flow path towards Tunnel Drive and Arkansas River. The re-configured flow path conveys the surface flows across the pit floor area along the base of the highwall north and east towards a series of storm detention ponds constructed along the eastern portions of the permit boundary. These storm control structures have been in place since late 1997 and have successfully operated to keep surface run-off directed away from residential areas along Tunnel Drive as well as the Canon City Hydraulic Ditch paralleling the UP railroad tracks running along the north bank of the Arkansas River. The detention ponds will be maintained as is to handle storm flows that may enter the pit floor area as well as surface water delivered from undisturbed terrain west and above the mining site. Drainage patterns along the base of highwall system and product stockpile area must be maintained to allow storm derived surface flows to cross the pit floor unimpeded towards the storm flow channel excavated at the northeast corner of the mine site which feeds the detention ponds. These structures will be maintained and kept operational through the life of mine. This amended acreage and increased life of mine will not necessitate change to the stormwater control system as it currently operates at this site.

Timetable for Mining and Reclamation Activities

2013—Approval of Amended acreage and initiation of development work at upper elevation of newly permitted area, southern 10 acres of newly leased land.

2013-2017---Highwall mining focused on 10 acre (m/l) area at SE corner of the lease area, 660'x660' on side. Mining will progress east to west to western border of lease area.

2017-2023---Highwall mining to progress south to north to northern end of Phase 2 area. Final highwall bench configuration in place along west boundary of mineral sales area.

2023-2033---Mining granite bedrock to result in final 40'high(@.25:1) x 30'deep mine benches along west boundary of Phase 3 area. Mining time frames are subject to adjustment depending upon production demand. Final floor elevations attained along toe of mining benches, process fines applied minimum 18"depth for planting medium. Floor areas along base of mine bench on Phase 2 and 3 areas re-vegetated.

2033-2043---Mining granite bedrock to result in bench configuration described above along west boundary of Phase 4 area. Phase 3 pit floor area re-vegetated.

2043-2063---Mining of Phase 5 areas and reclamation of pit floor areas via planting medium placement and planting of native grasses, forbs, and shrub species.

Equipment Used on Tunnel Drive Mine Site (general type and number)

Front End Loaders	10 yard to 3 yard	4
Bulldozers	500-700 HP	3
Excavators	1-4 yard	2
Percussion Drill	500 HP	1
Water Truck	4000 gal	1
Jaw Crusher w/ feeder		1

Cone Crusher	3
Screen Decks	4
Conveyor Systems	20
Pick-up trucks	6
Service Trucks	2

Explosives Used on site:

Primarily ANFO initiated by AN activated cast boosters or gels and non-electric delay systems. Estimated annual explosive consumption will range from 50 to 150 tons depending on business demand.

EXHIBIT L Reclamation Costs

(1) All information necessary to calculate the costs of reclamation must be submitted and broken down into the various major phases of reclamation. The information provided by the Operator/Applicant must be sufficient to calculate the cost of reclamation that would be incurred by the state.

The reclamation costs for the site include cost estimates separate for the high wall areas, the final pit floors, roadways, and ditches, and the storm water management area to the north of the mining area. Also, costs of materials, structures, and mining equipment removal are listed below.

Area	Activity & Acreage	Cost per Acre	Total Cost
Sitewide	Reclamation equipment mobilization		\$1000
Sitewide	Demolition, burial of concrete waste, removal of scrap and mining equipment		\$3000
Highwalls	Highwall bench final configuration and ditch construction approx 65 acres. Note: 10 acres already under final reclamation along southwestern aspects of site.	\$1700	\$110,500
Main pit areas	Haul topsoil, grading, seeding, fertilization, mulching, maintenance, roadway removal, approx 92 acres	\$2400	\$220,800
Stormwater management plan area	Grading, seeding, fertilization, mulching, maintenance approx 30 acres		\$37,500
Road easement	Removal of pavement from road easement, City of Canon City property, scarifying roadway and revegetation of road easement area (1.5 acres)		\$4,200
Demolish and remove office building and scale house	Reclaim area on site with structures currently on it.		\$7,830
Total Reclamation Cost			\$384,830
15% overhead and contractor margin			\$57,725
Total Closure Estimate, 314 acres			\$442,555

(2) The Office may request the Operator/Applicant to provide additional, reasonable data to substantiate said Operator/Applicant's estimate of the cost of reclamation for all Affected Lands.