

June 13, 2017

Colorado Division of Reclamation, Mining and Safety Attn: Mr. Timothy Cazier 1313 Sherman St, Rm. 215 Denver, CO 80203

RE: Responses to Hitch Rack Ranch, Notice of Intent to Prospect ID No. P-2017-008; Notice of Deficiencies.

Dear Mr. Cazier:

Listed below are responses to the Notice of Deficiencies that you sent regarding Notice of Intent to Prospect ID No. P-2017-008.

#### 1) Item 4, Estimated Acreage of Land Surface Affected

Transit Mix will disturb less than one acre of land as part of this exploration operation, but one acre of disturbance was used for the notice of intent to ensure that sufficient area is available for the operations to occur. Each well pad will be 50' by 20'. Boreholes LTC-GW-2, 3, 5, and 6 are along, or immediately adjacent to existing roads, and no additional road building (outside the drill pad area) is required to access these locations. The planned roads to boreholes LTC-GW-1 and 4 have planned widths of 12', and a width of 20' was used for disturbance calculations to consider cast material and cut slopes. The disturbances by road and pad are listed below:

			Road			Total
	Road	Road	Area	Drill	Drill Pad	Disturbance
Borehole	Length (ft)	Width (ft)	(ac)	Pad	Area (ac)	(ac)
LTC-GW-1	210	20	0.096	50'x20'	0.023	0.119
LTC-GW-2	0	0	0.000	50'x20'	0.023	0.023
LTC-GW-3	0	0	0.000	50'x20'	0.023	0.023
LTC-GW-4	710	20	0.326	50'x20'	0.023	0.349
LTC-GW-5	0	0	0.000	50'x20'	0.023	0.023
LTC-GW-6	0	0	0.000	50'x20'	0.023	0.023
Total			0.422		0.138	0.560

#### 2) Item 7, Type of Operation

Most of the borehole locations can be accessed using existing roads. Borehole LTC-GW-1 will be located on a terrace between Little Turkey Creek Road and Little Turkey Creek. This area is relatively flat, and constructing the access road only requires smoothing the surface. The road to the LTC-GW-4 location will follow a drainage similar to other roads on the property. The typical road geometry is shown on Exhibit B of NOI P-2017-008. Both planned road widths are 12', and widths of 20' were used for disturbance calculations to consider cast material and cut



slopes. Cut and fill volumes and depths are minimal for both roads, and the roads will be reclaimed by grading down to the original ground surface and placing the cutting along the cut slopes on either side of the road. Cuttings will be mostly topsoil material, and the area will be reclaimed using the seed mix listed below in the response to item 3.

### 3) Item 8, Reclamation Measures

# a. Permanent Abandonment for Each Hole

Transit Mix intends to leave boreholes LTC-GW-1 through 4 and 6 as permanent monitoring wells, and these wells will not be abandoned. Transit Mix is in the process of obtaining monitoring well permits from the Department of Water Resources (DWR) and commits to following all DWR rules and regulations for monitoring wells. Transit Mix will provide copy of the permit filings to CDRMS. If at any time these wells are no longer intended for use as monitoring wells, Transit Mix will permanently abandon them according to Rule 16 of the Colorado State Engineers Water Resources Division regulation. Specifically, Sections 16.4.1 and 16.1.3:

16.4.1 Abandonment of Dewatering Wells, Monitoring and Observation Holes, and Piezometer Holes - Dewatering wells, monitoring and observation holes, and piezometer holes must be plugged, sealed, and abandoned by removing all casing that was installed and by filling the hole(s) with clean native clays, cement, or high solid bentonite grout to within five (5) feet of the ground surface. If the casing cannot be removed, the top five (5) feet of the hole must be filled with materials that are not more permeable than the surrounding soils that are adequately compacted to prevent settling.

16.1.3 Materials used for backfilling must be clean, inert, and free from contaminants. The well casing may be cut off below land surface so that it will not interfere with the anticipated use of the land. If the casing is cut off below land surface, the uppermost five (5) feet of the remaining casing must be filled with grout or a watertight cover must be permanently attached to the remaining casing and the excavation filled with materials that are not more permeable than the surrounding soils and adequately compacted to prevent settling.

Borehole LTC-GW-5 will be instrumented with vibrating wire piezometers and then permanently abandoned with a bentonite-cement grout.

### b. Borehole Depths

Details on the drilling depths and methods are listed below:

- Use air-hammer to drill up to six locations shown in Figure 1 (map of drilling locations) to a maximum depth of about 100 ft below the saturated groundwater zone.
  - Locations 1, 2 and 6 drilling total depth approximately 100 ft.
  - Locations 3 and 4 drilling total depth approximately 200 ft.
  - Location 5 drilling total depth approximately 400 ft.



- Collect continuous HQ core from the surface to the adjacent Little Turkey Creek level within drill holes 3 and 4 for visual examination and laboratory geotechnical testing.
- All drill holes will have a minimum 5-inch diameter and will use minimal introduced drilling fluids. Holes will be blown-out with air to remove any introduced drilling fluids prior to installation of monitoring facilities.

## c. Reclamation Seed Mix

Transit Mix intends to reseed disturbed areas using a seed mix recommended by NRCS.

Species <sup>1</sup>	PLS <sup>2</sup> Ibs./ac
Sheep Fescue	0.8
Western Wheatgrass	1.2
Canada Bluegrass	0.6
Perennial Rye	1.0
Chewings Fescue	0.4
TOTAL	4.0

<sup>1</sup> Availability may dictate the need for variety substitution or species omission.

<sup>2</sup> Percent of mix calculated on a seeds-per square-foot basis.

### d. Topsoil Depth and Salvage

Transit Mix estimates the topsoil depth to be 6" based on previous work at the site. The cut and fill depths are limited, typically less than one-foot, and the topsoil will be placed on either side of the road immediately adjacent to the road. For reclamation, the topsoil will be spread across the disturbed areas and seeded.

### e. Seed bed preparation and seed application

Transit Mix intends to reclaim disturbed areas by grading the drill pad or road by utilizing a track dozer to bring the grade of the disturbed area at or near to the original ground surface including laying an approximate 6" of topsoil on top of the regraded area. The reclamation seed mix detailed in part c. of this section will be placed in the freshly graded area by drilling and/or broadcast seeding methods depending on the contours and accessibility of the regraded terrain.

### 4) Supplement Form

Transit Mix inadvertently submitted the BLM lands form. All exploration will occur on private lands. There are no federal minerals or surface associated with the operation.