
Phosphate Ore Release

Monitoring Plan



J.R. Simplot Company

Smoky Canyon Mine

October 27, 2023

Introduction

As a follow up to the October 2023 Phosphate Ore Slurry Release Report, this plan is provided to outline the actions of the J.R. Simplot Company to monitor continued movement and presence of phosphate ore in the Hornet Canyon tributary of Diamond Creek. Sampling of surface water and visual assessment of ore will be conducted Spring and Fall during 2024 and 2025.

Water Sampling

Water quality samples were initially taken on August 7 in Hornet Creek and Diamond Creek. The same sample locations will be used for all future sampling utilizing the same analyte list. The locations of the samples are shown on Figure 1.¹ Sample HCT3 was collected from a tributary, upstream from the confluence with Hornet Creek. Sample UDC1 was collected upstream of the Hornet Creek Diamond Creek confluence. Both HCT3 and UDC1 are upgradient from any deposited ore and were collected to represent background conditions.

Sediment (ore) Monitoring

Five larger deposits inaccessible by equipment without additional disturbance were identified with the Forest Service during a walk of the area on September 14th, 2023. These locations, depicted on Figure 2, will be utilized as monitoring points to assess ore moving or settling. Site one is the most downstream, and site five is the most upstream. A post was placed in the top of each of these deposits and the height of the deposit was marked with tape and measured from the top of the pole.

A photo point was flagged with GPS points recorded on the upstream and downstream from each pole. Each year through 2025, after run-off, the height of the piles will be measured, and new photos taken. While this method will not provide volume of material moved, it will provide a qualitative assessment of how much the material moves with each subsequent winter

¹ Figure 1 utilizes a USA topo map which may not accurately depict surface flow conditions, (i.e., ephemeral, intermittent, or perennial).

and following run-off period. Four other photo points were marked to monitor smaller deposits. Photos will be taken at these locations will be collected on the same schedule as the locations with posts. Photo sets of the monitoring points (MP) are provided below taken September 27th when the posts were placed.

Downstream Sediment Traps

Three sediment “traps” were constructed on the lower end of Hornet Canyon designed to prevent movement of ore to Diamond Creek. These structures are expected to accumulate ore in locations where future cleanup is accessible. Two sediment traps were constructed primarily with adjacent conifer trees. A third trap, constructed with staked wood-straw bales, was installed just downstream from the FS Road 395 culvert. Like the conifer tree traps, wood-straw bales allow for the passage of water while reducing flow velocity to settle suspended sediment. The condition of the traps, presence of retained sediment, and overall effectiveness will be evaluated with the USFS in the spring of 2024, when conditions allow. Simplot will coordinate with the USFS to evaluate any future removal of the retained sediment.

Reporting

Simplot will provide the water quality data to the Forest Service and Idaho Department of Environmental Quality (IDEQ) two weeks after receipt from the laboratory. The ore monitoring and photos sets will be reported within a month of when the ore measurements on the poles and the associated photos are taken after run-off.

Figure 1. Surface Water Sampling Locations

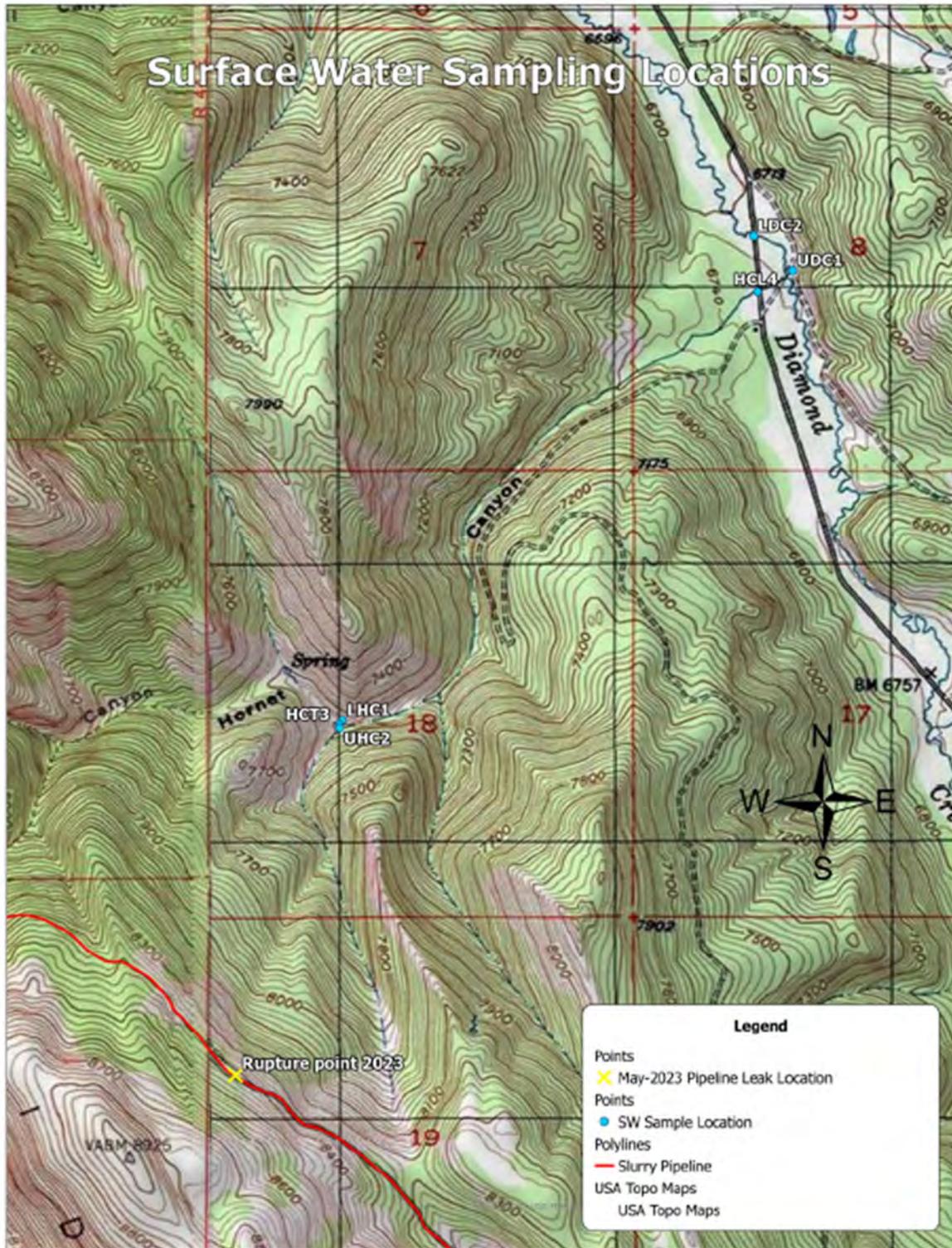


Figure 2. Sediment (ore) Monitoring Locations

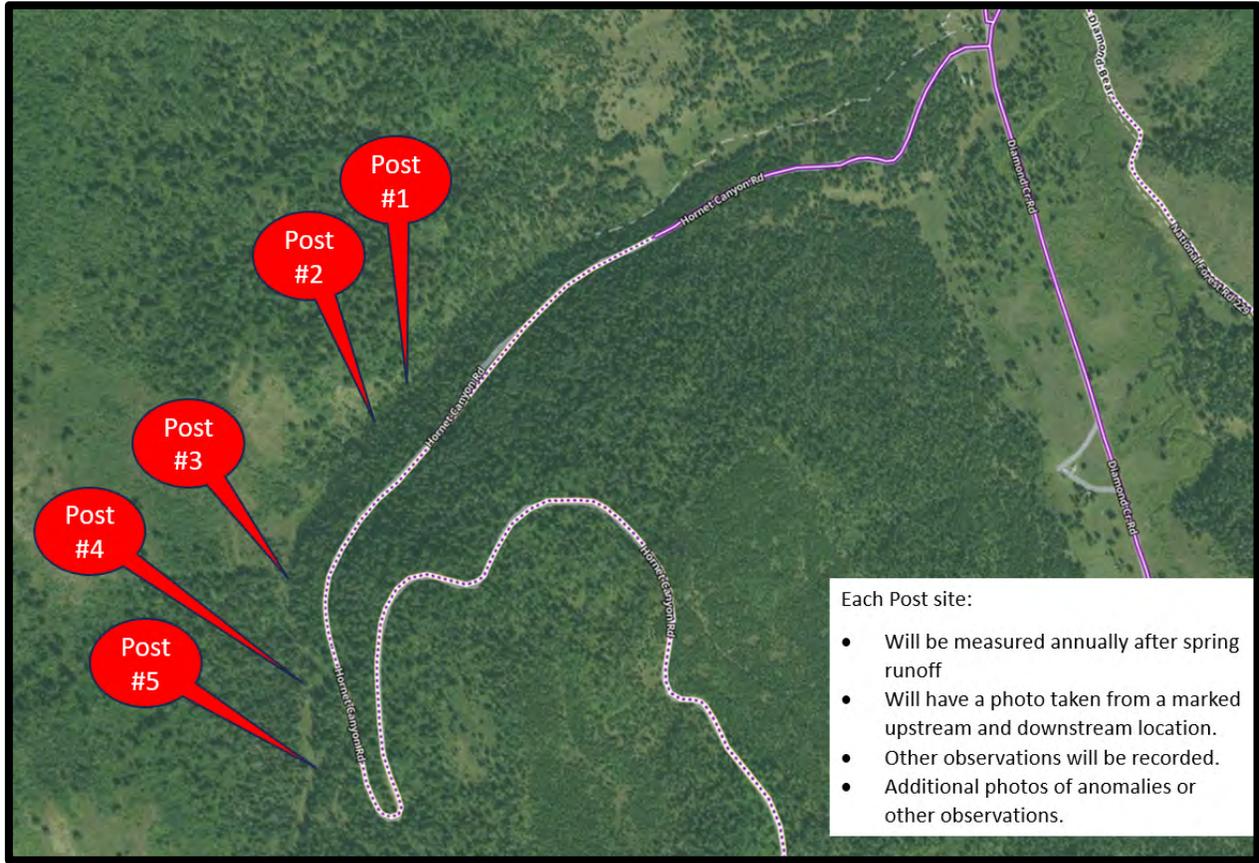


Photo 1. MP 1 21" from top of post.



Photo 2. MP 2 9.75" from top of post.



Photo 3. MP 3 6.75" from top of post.



Photo 4. MP 4 19.25" from top of post.



Photo 5. MP 5 22.75" from top of post.



Photo 6. Conifer Tree Sediment Trap (uppermost)



Photo 7. Conifer Tree Sediment Trap (Lowermost)



Photo 8. Wood Straw Sediment Trap

