

Final Reclamation and Stormwater Inspection

Date: 02/02/2023

Operator: ST CROIX OPERATING INC - 81490

Location ID: 482780

Inspection Document #: 696105712

Washington County, CO

NENE Section 27 T3S R49W

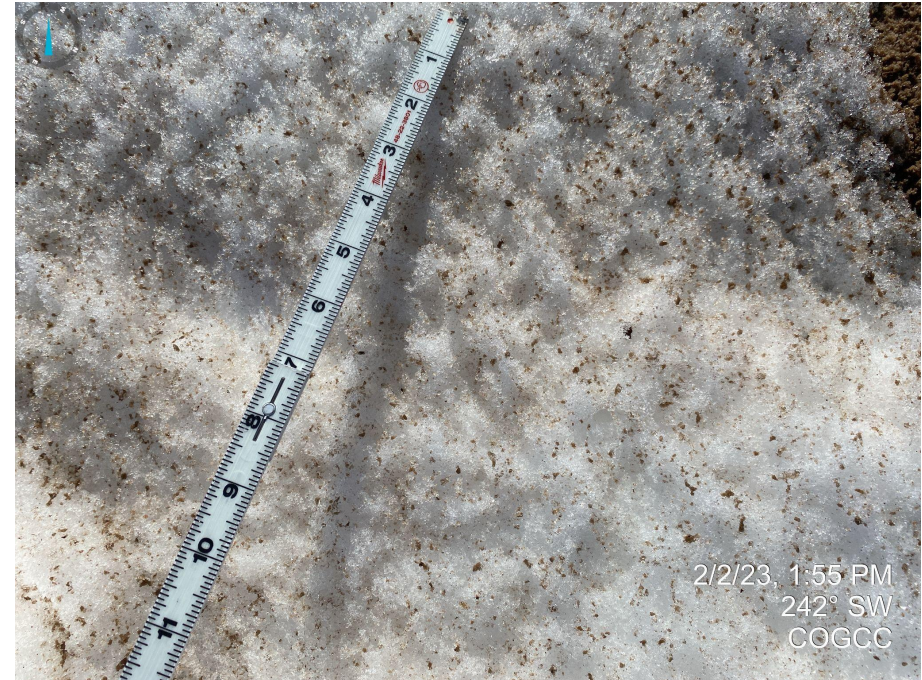
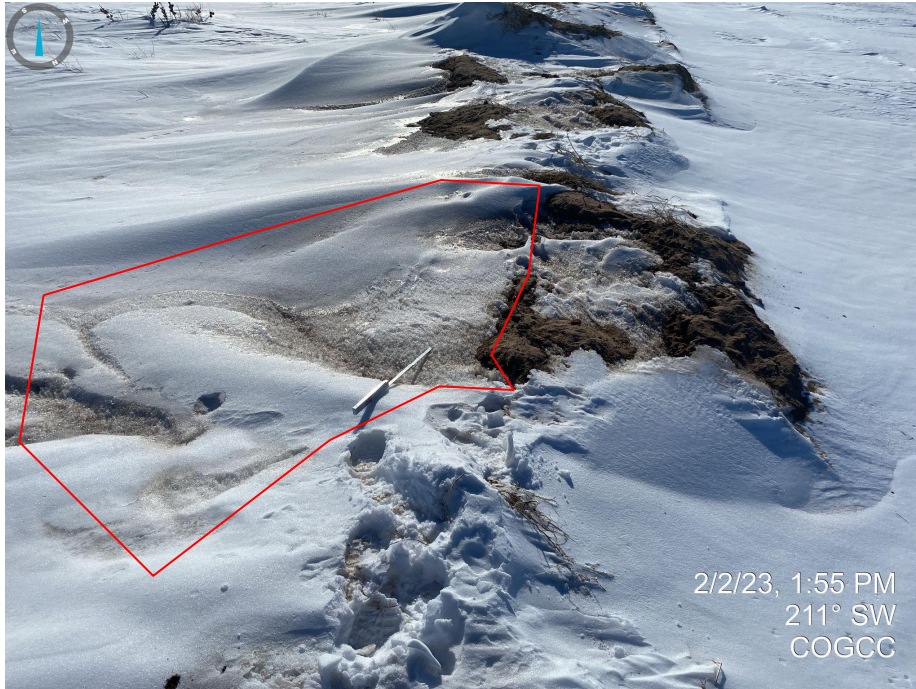
Dylan Edwardson
Reclamation Specialist, COGCC



COLORADO
**Oil & Gas Conservation
Commission**

Department of Natural Resources

Inspection Photos
Location Name: Horseshoe 1
Location ID: 482780



Photos 1 & 2. Facing southwest near the location's entrance. Photos illustrate that topsoil stockpiles stored along the access road are comprised of unconsolidated material and not properly stabilized against wind erosion. Evidence of soil/dust on snow.

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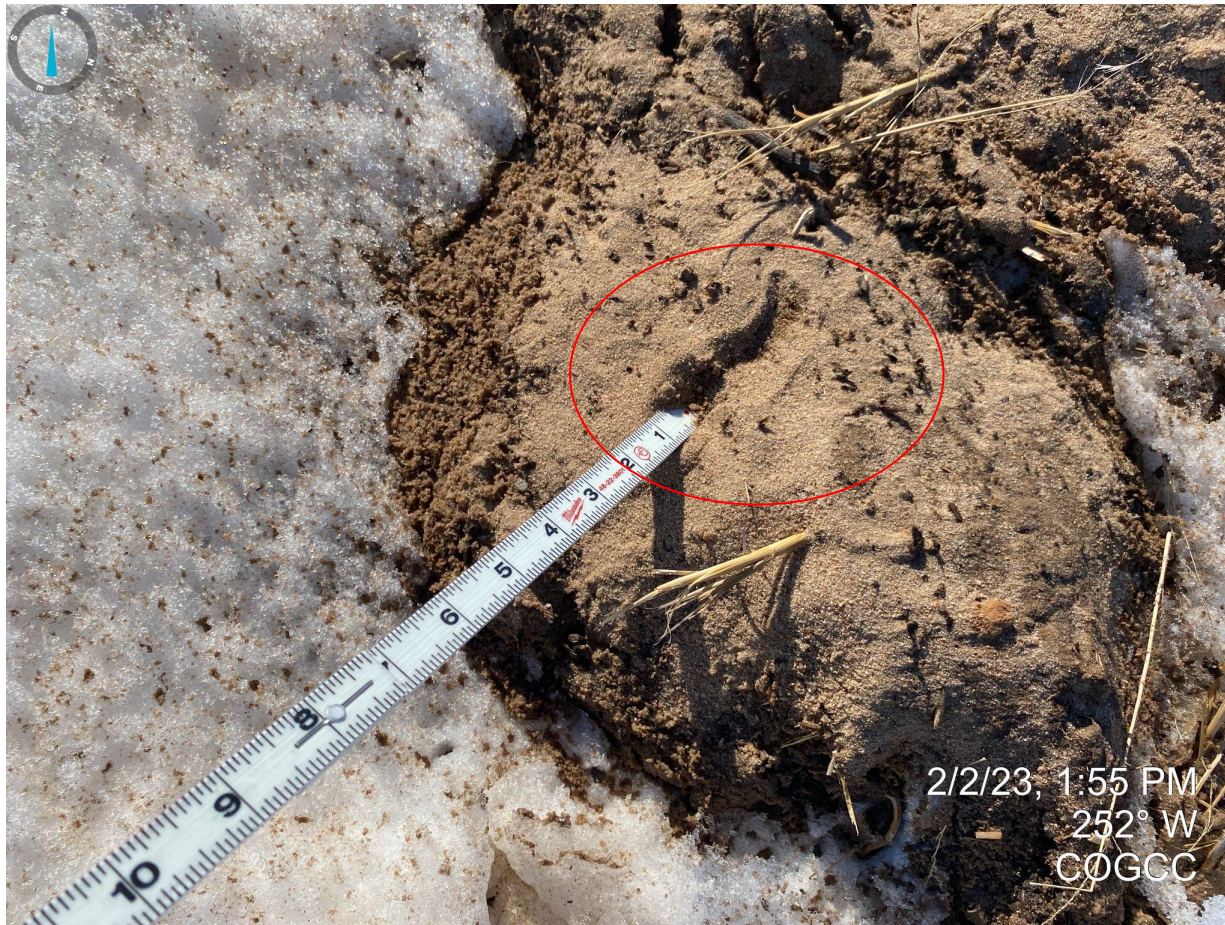


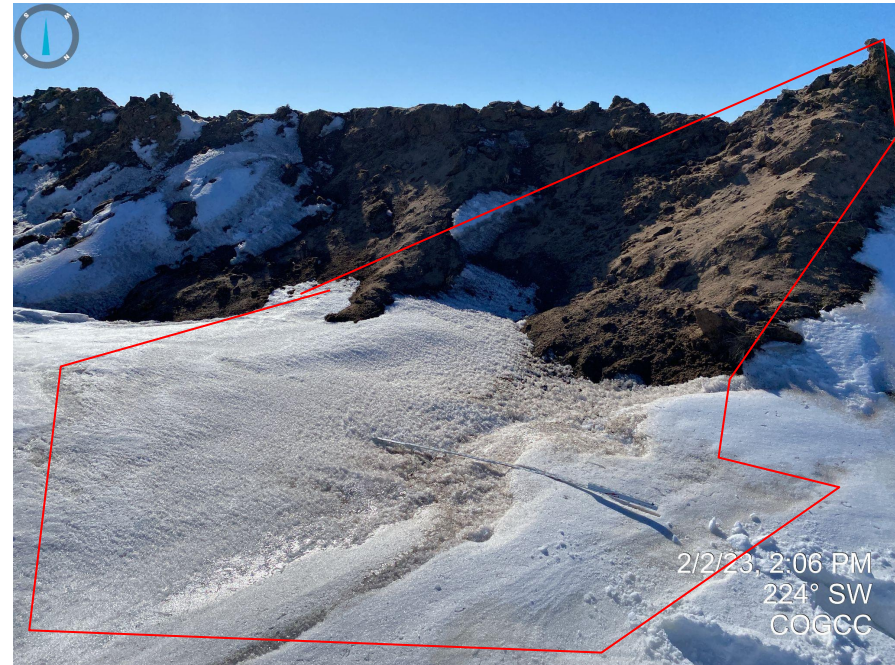
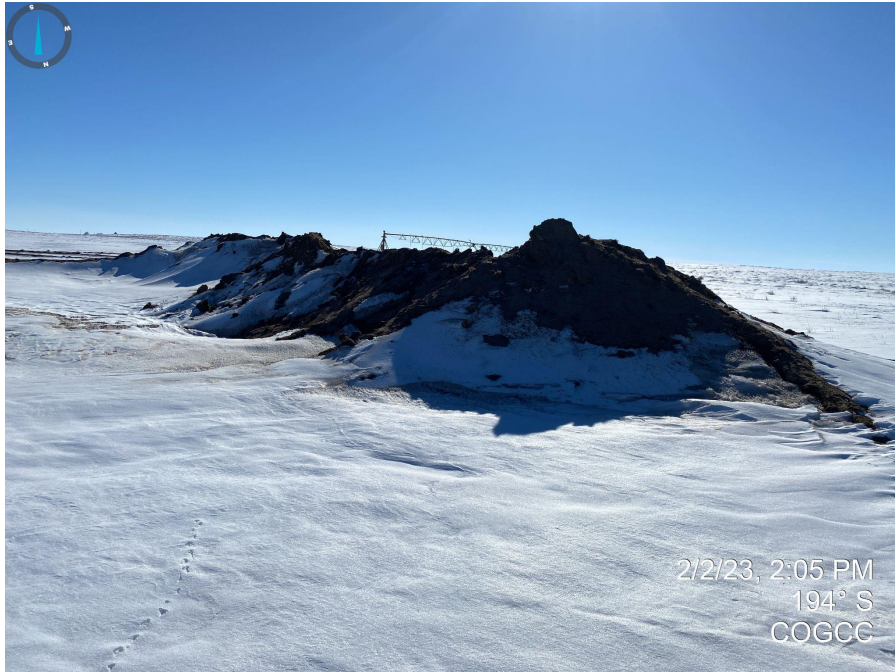
Photo 3. Close up photo from topsoil stockpiles near the location's access road. Photo illustrates that soils are not frozen and thus not properly protected from wind erosion.

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Photo 4. Facing north from the location's access road. See comments in Photos 1-3.

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Photos 5 & 6. Facing south and southwest at the location. Photos illustrate that topsoil stockpiles are not properly stabilized and are unconsolidated with evidence of wind erosion (e.g. soil/dust blown onto snow).

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Photo 7. Facing northwest at one of the topsoil stockpiles. See comments in Photos 5 & 6.

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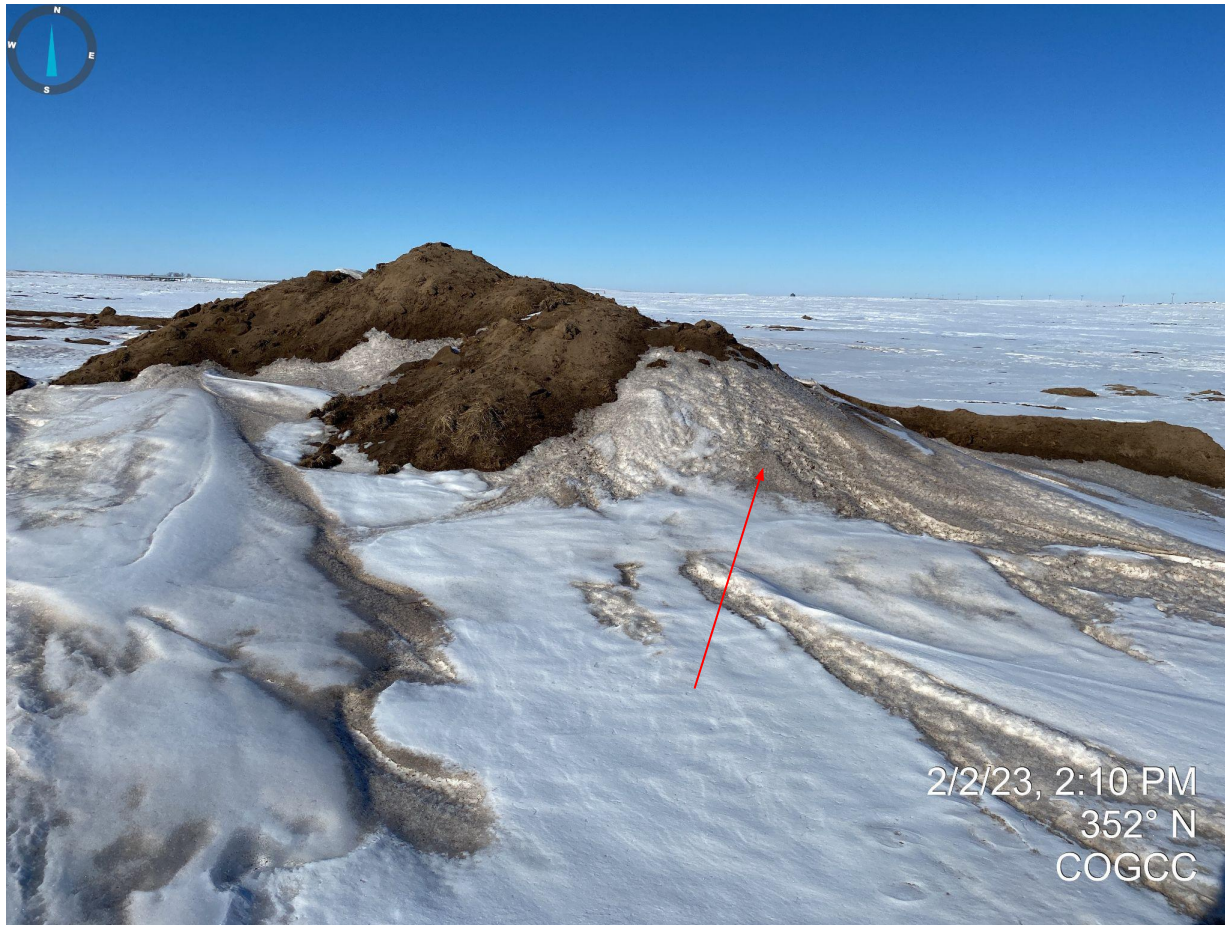


Photo 8. Facing north from the center portion of the location. See comments in Photos 5 & 6.

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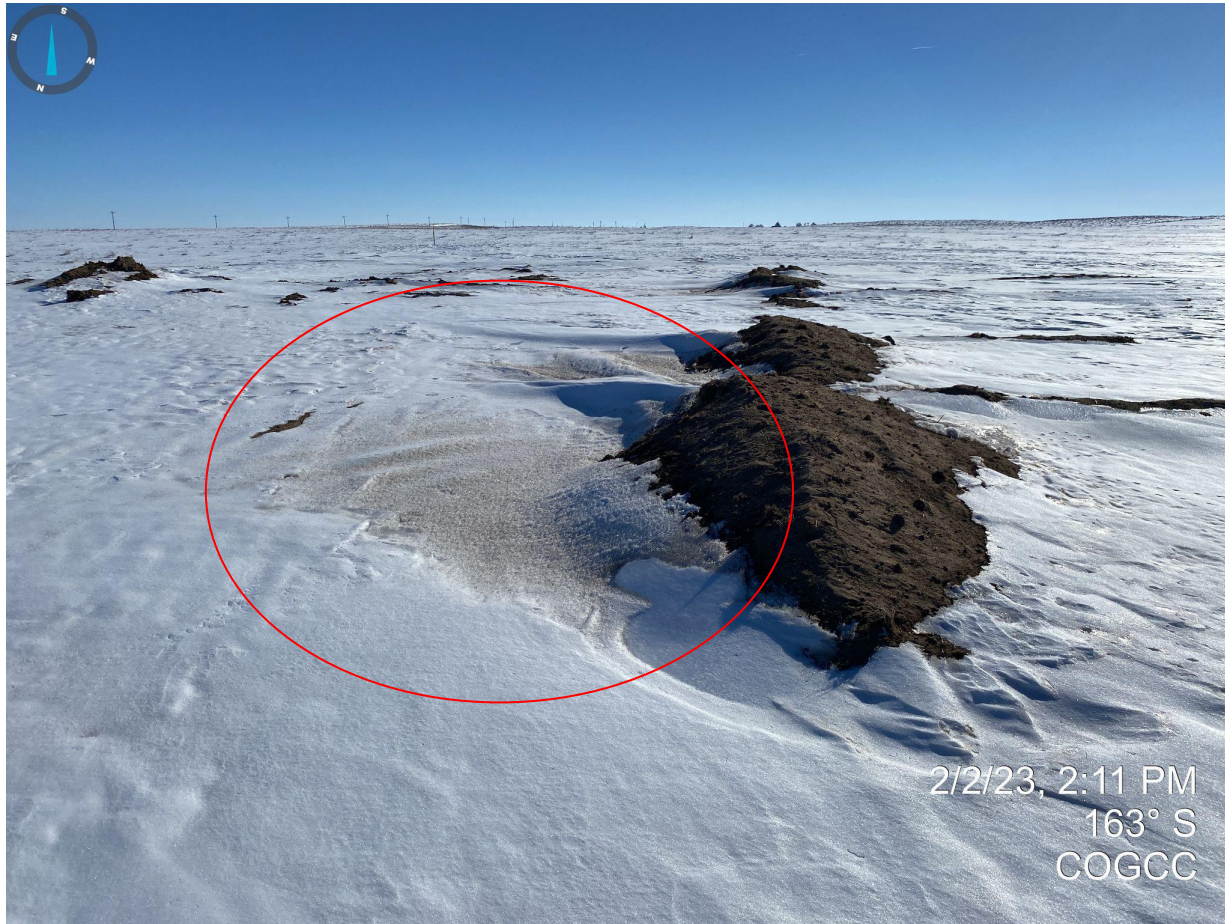


Photo 9. Facing south from the eastern portion of the location. See comments in Photos 5 & 6.

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Photo 10. Facing south from the eastern boundary of the location. No stormwater BMPs were observed along this eastern boundary that would prevent sediment laden storm water from exiting off location. Surface roughening alone is not an adequate BMP; photo illustrates a rough grade or till that is not contiguous throughout the eastern boundary.

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Photo 11. Facing south at the northeast corner of the disturbance area. See comments in Photo 10. Red line is drawn from t-post at southeast corner to the northeast corner, or the eastern boundary of the disturbance area.

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Area Name

Horseshoe 1

Total Area

3.61 acres

Total Perimeter

528.7 yd

Topsoil salvage				
Acres	Ft2	Depth in feet (eg .5=6inches)	Cubic feet	Cubic yards
3.6	156,780.00	1	156,780.00	5,801

Acres	Ft2	CY known	Depth of spread in feet	Depth in inches
2.1	90,000.00	1667	0.50	6.00

Photos 12 & 13. Photo 12 (left) illustrates field collected disturbance area (in blue line) obtained from OnX mapping and an approximate area (red line/box) used for topsoil calculation to a depth of 12" (A and AC horizons). North/south lines were averaged in feet (~390') as were east/west lines (~402') for an approximate disturbance area of 3.6 acres. Red outline in Photo 13 (right) illustrates how much topsoil should have been salvaged during the construction phase of this location; blue box indicates how much topsoil Operator states was salvaged (1,667 cubic yard) based on a 300'x300' pad to a depth of 6" (see FIRR Doc #403302335).