

Stormwater Inspection

August 8, 2017

Operator: EXTRACTION OIL & GAS LLC- #10459

Location ID: 427157

Weld County, CO

NENE Section 4 T5N R67W

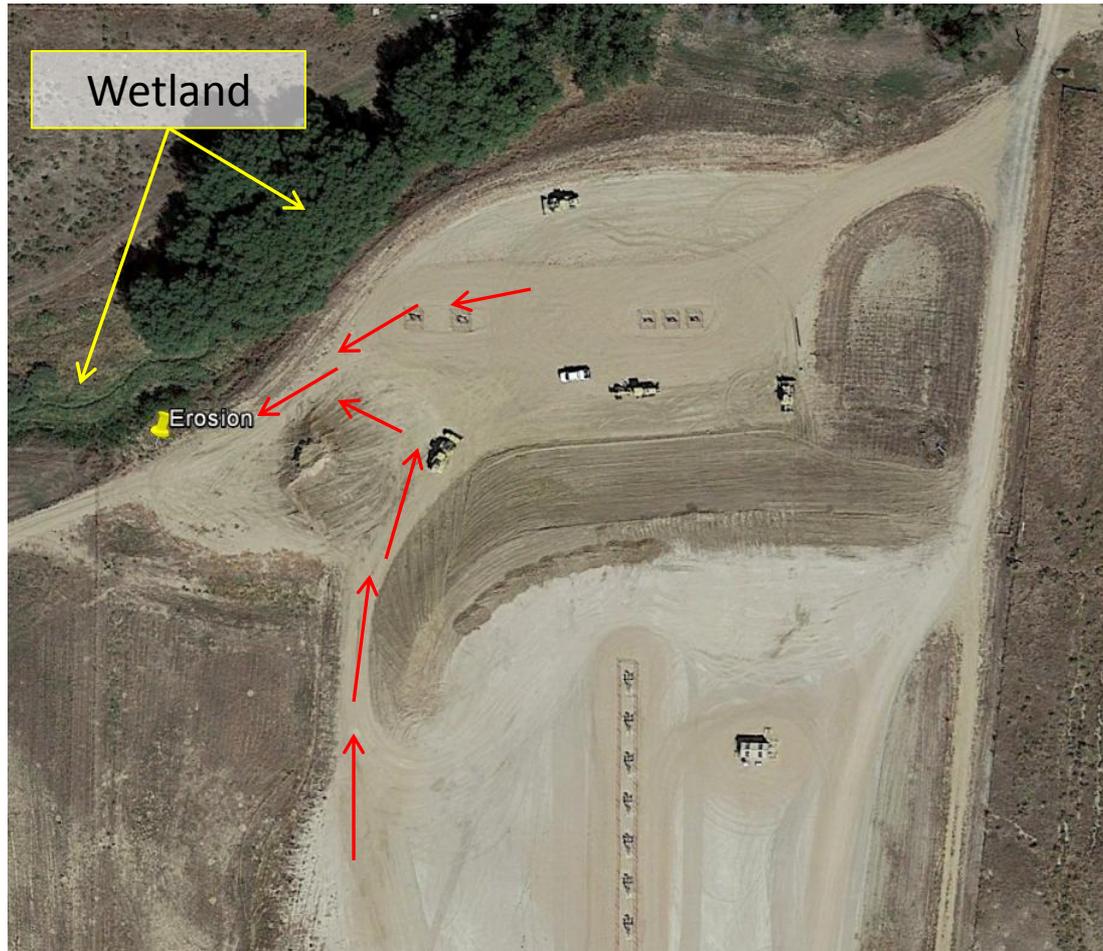
Chris Binschus
Reclamation Specialist, COGCC



COLORADO
Oil & Gas Conservation
Commission

Department of Natural Resources

Inspection Photos
Location Name: Rancho Water Valley Pad /41-4
Location ID: 427157



Google Earth aerial imagery taken 9/7/2016 illustrating the Rancho Water Valley Pad in relation to the erosion issue. Red arrows illustrate the direction of stormwater flows from the Rancho Water Valley Pad location that has caused erosion off location into a wetland. See following image of designated wetland.

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COGCC GISOnline image illustrating Freshwater Emergent Wetland and Freshwater Forested/Shrub Wetland.

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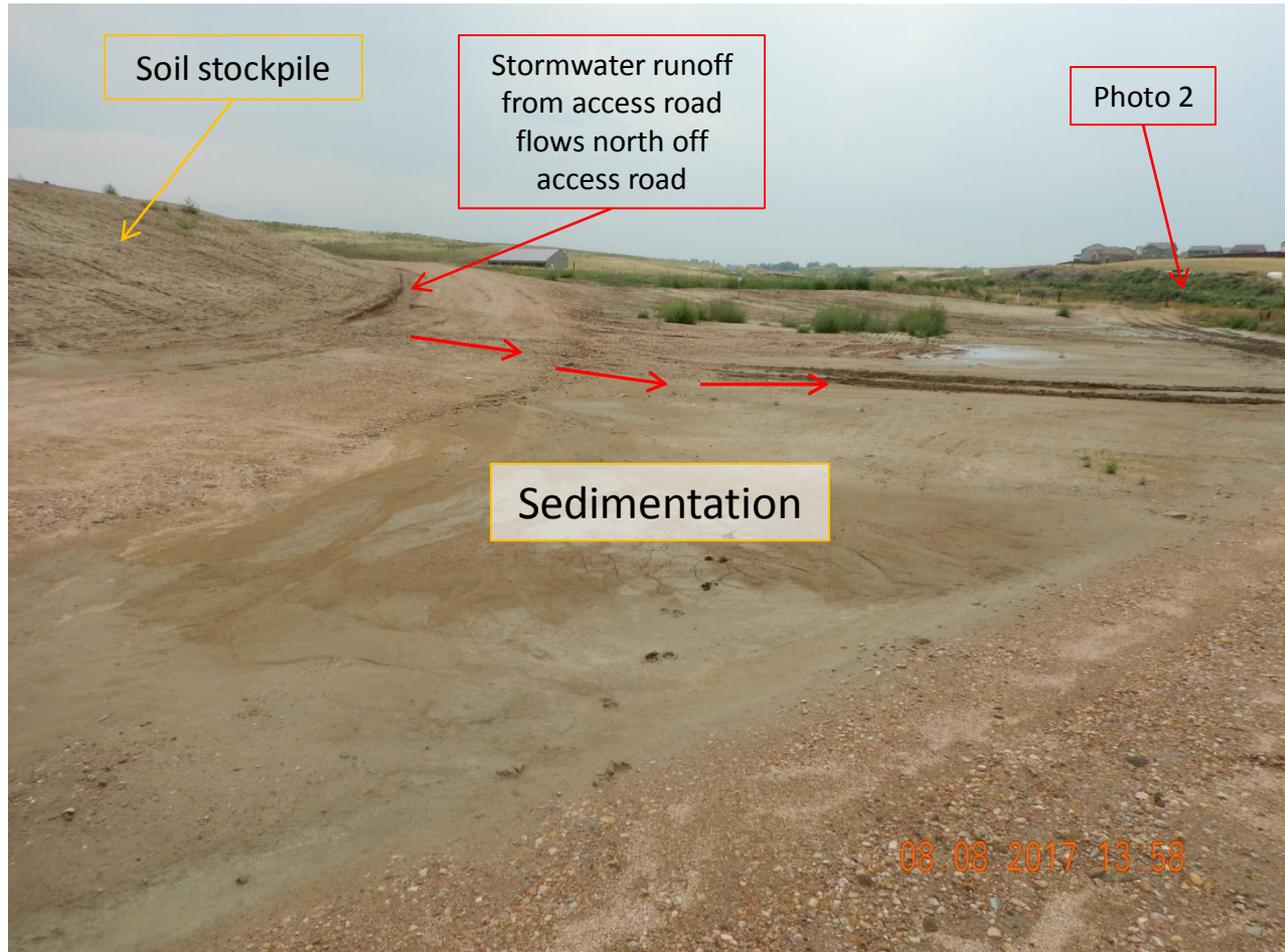


Photo 1. Photo taken from the northern Rancho Pad, facing West. Sediment is being depositing and settling out (sedimentation) from rill erosion occurring on a soil stockpile. Stormwater runoff is coming from the access road and the northern location which then travels west and causing erosion off location into a wetland.

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Northern location- stormwater runoff coming from the northern location traveling west

Photo 1

Photo 2. Photo taken from the area of erosion, facing East. This photo illustrates stormwater runoff coming from the northern location that is traveling west and causing erosion off location into a wetland.

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Photo 3. Photo taken from the area of erosion, facing North. Photo illustrates stormwater runoff that has caused wattle BMPs to dislodge and cause gully erosion. Operator claims these wattle BMPs are not theirs because it is off location and that the wattle BMPs are DCPs.

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Photo 4. Photo taken from the area of erosion, facing North. Photo illustrates gully erosion, approximately 3' in depth, into a wetland.

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Photo 5. Photo taken from the northern location, facing South. This is the previously mentioned soil stockpile where rill erosion occurring and causing sedimentation at the toe of the soil stockpile. Soil stockpile needs to be stabilized to prevent rill erosion.



Photo 6. Photo taken from a portion of the access road, facing Southwest. This is the previously mentioned access road where stormwater runoff is traveling along the access road along the toe of the soil stockpile. Soil stockpile needs to be stabilized to prevent rill erosion.

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Photo 7. Photo taken from an eastern portion of the DCP pipeline area, facing West. Photo illustrates stormwater runoff coming from the access road of the Rancho Pad off location.

Photo 8. Photo taken from an eastern portion of a DCP pipeline area, facing West. Photo illustrates stormwater runoff coming from the access road of the Rancho Pad off location.

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Photo 9. Photo taken from the western Rancho Pad, facing North. Photo illustrates stormwater erosion coming from the Rancho Pad and causing erosion off location.



Photo 10. Photo taken from the western Rancho Pad, facing South. Photo illustrates stormwater erosion coming from the Rancho Pad and causing erosion off location.

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Photo 11. Photo taken from the eastern perimeter, facing Northeast. Stormwater BMPs for inlet protection are in need of maintenance.

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Photo 12. Photo taken from the Rancho Pad, facing South. Photo illustrates rill erosion occurring along the fill slopes of the production area.



Photo 13. Photo taken from the eastern Rancho Pad, facing East. Photo illustrates rill erosion occurring along the cut slopes.