

Reclamation and Stormwater Inspection

July 11, 2017

Operator: NOBLE ENERGY INC- #100322

Location ID: 433936

Weld County, CO

SWSE Section 11 T9N R59W

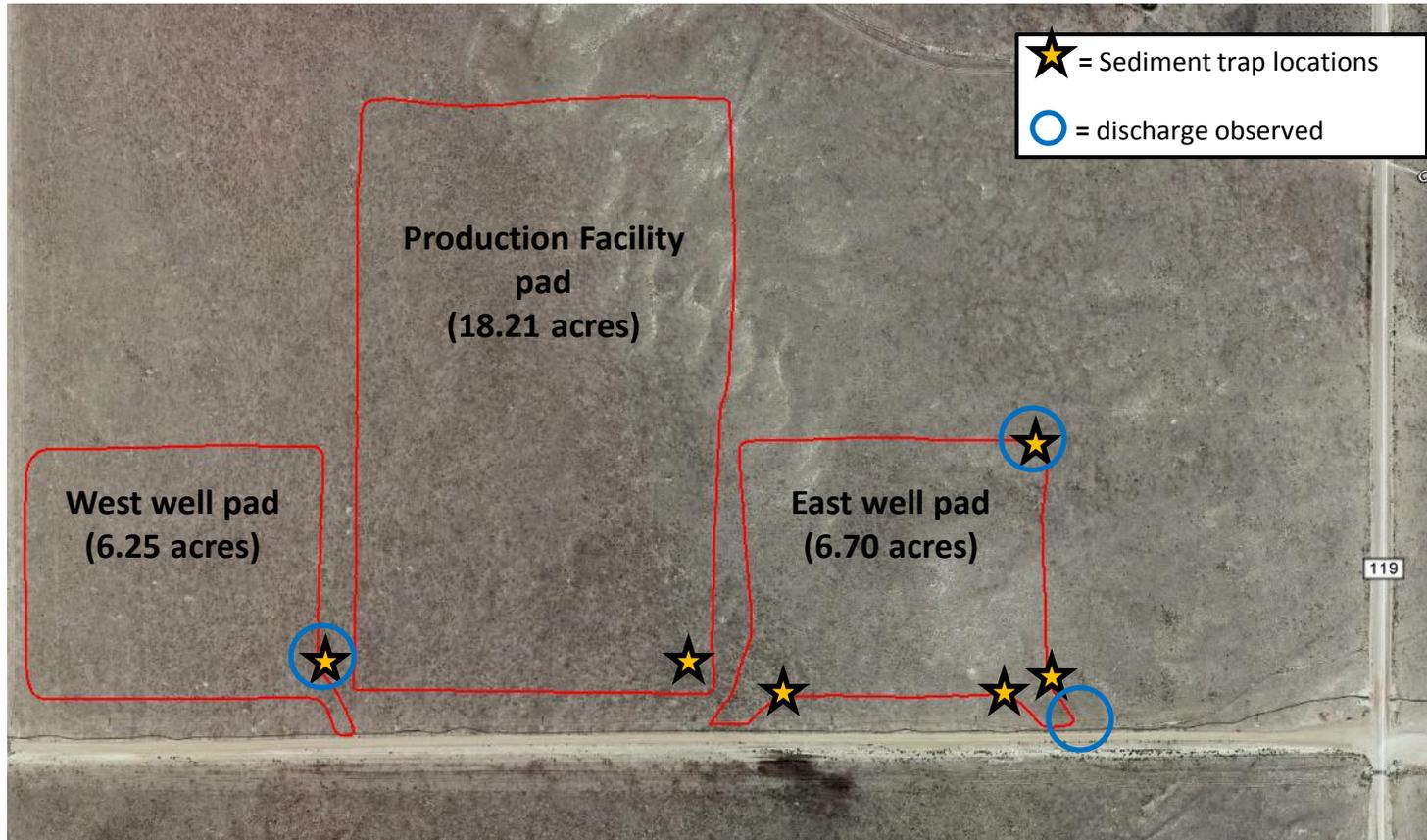
Chris Binschus
Reclamation Specialist, COGCC



COLORADO
Oil & Gas Conservation
Commission

Department of Natural Resources

Inspection Photos
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Overview of Location ID 433936 and the associated well pads and production facility. Total area of each pad was mapped using a Trimble Juno 3B handheld device on November 23, 2016. The star indicates the approximate sediment trap locations. Perimeter of each location was mapped and highlighted in red. Blue circles indicate a discharge was observed.

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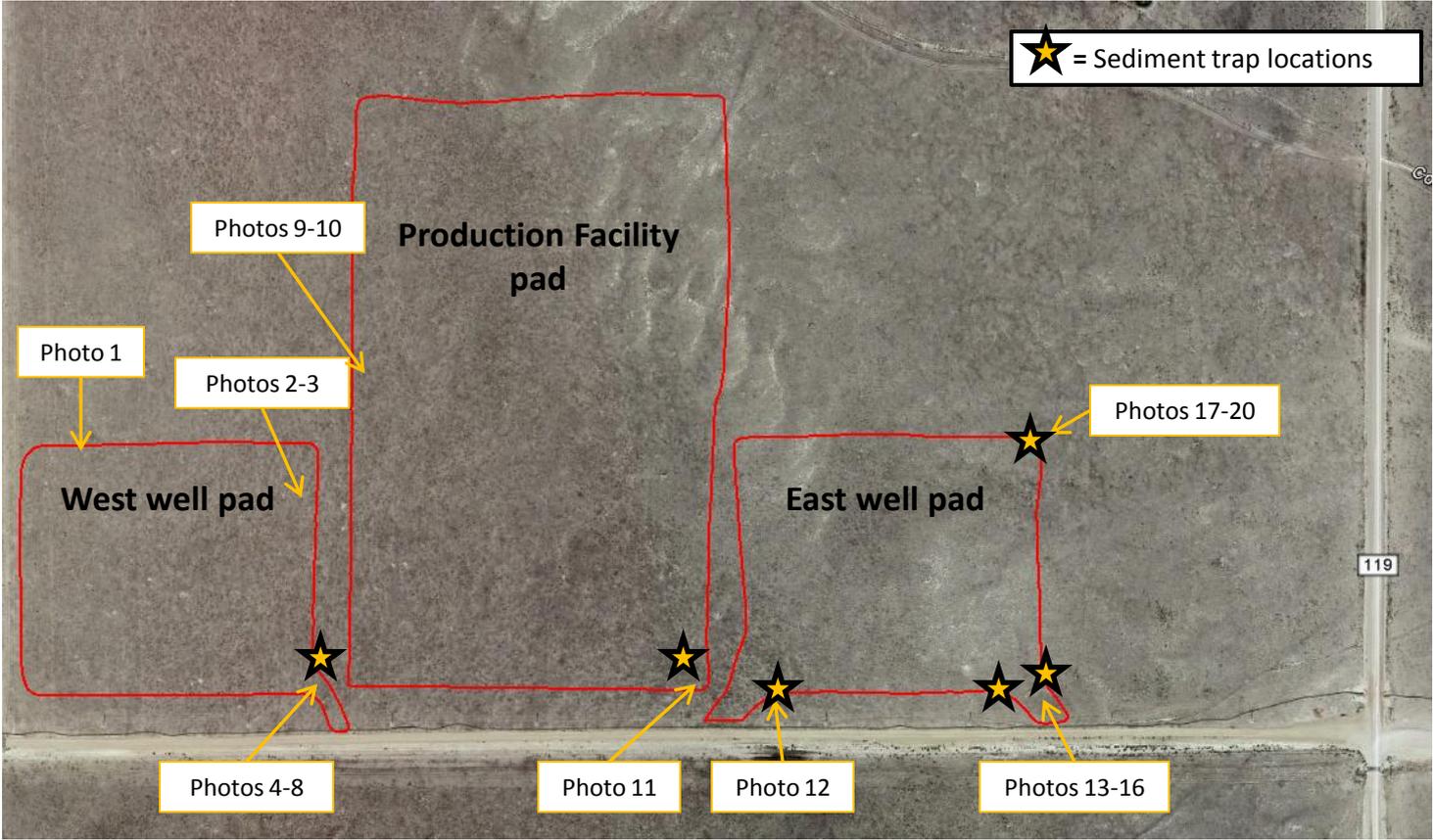


Photo reference points to help illustrate approximate locations of the subject photo.

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Photo 1. Photo taken from the northern west well pad on top of the topsoil stockpile, facing East. Topsoil stockpiles have predominately Russian thistle growth and Kochia growth which is not in compliance with Rule 1002.c. and Rule 1003. Hydromulch application was observed on the topsoil stockpile but is only a temporary BMP.



Photo 2. Photo taken from the eastern west well pad, facing Southeast. A berm ~18" has been constructed along the west, east and south pad perimeter, but does not appear to be properly compacted. Russian thistle growth was observed along the east-facing fill slope.

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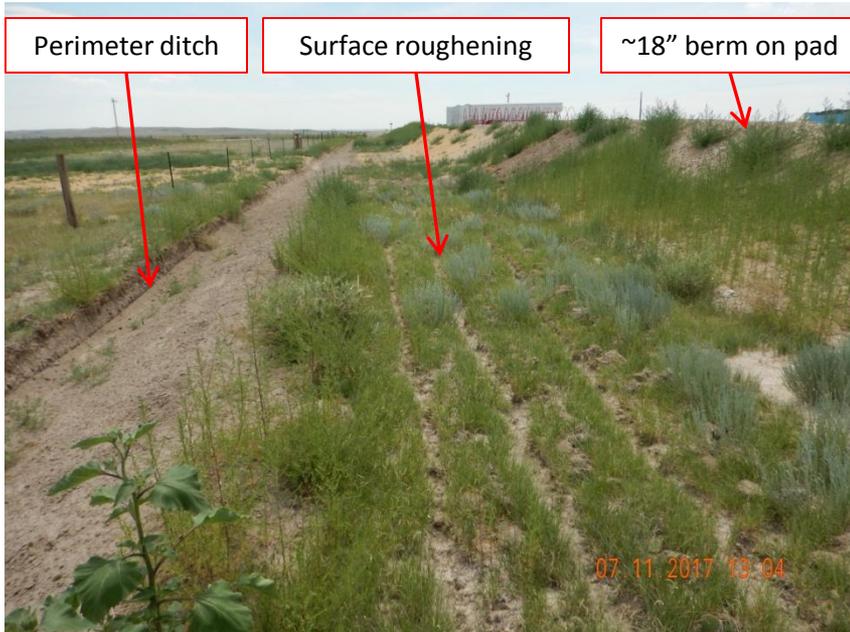


Photo 3. Photo taken along the outer eastern west well pad perimeter, facing South. Hydromulch application was observed along fill slopes but is only a temporary BMP. Russian thistle growth observed throughout most disturbance areas. Vegetative buffer area with surface roughening and a perimeter ditch outside of the ~18" berm constructed on the pad.

Photo 4. Photo taken from the west well pad, east entrance, facing West. Operator has installed a stabilized outlet at the end of the perimeter ditch but no sediment trap. Filtrexx wattle was installed beyond the outlet area to control runoff from the entrance of the access road but was not included because it was difficult to observe with the high density of Russian thistle. Refer to the next photo taken from the same area but on 4/3/2017.

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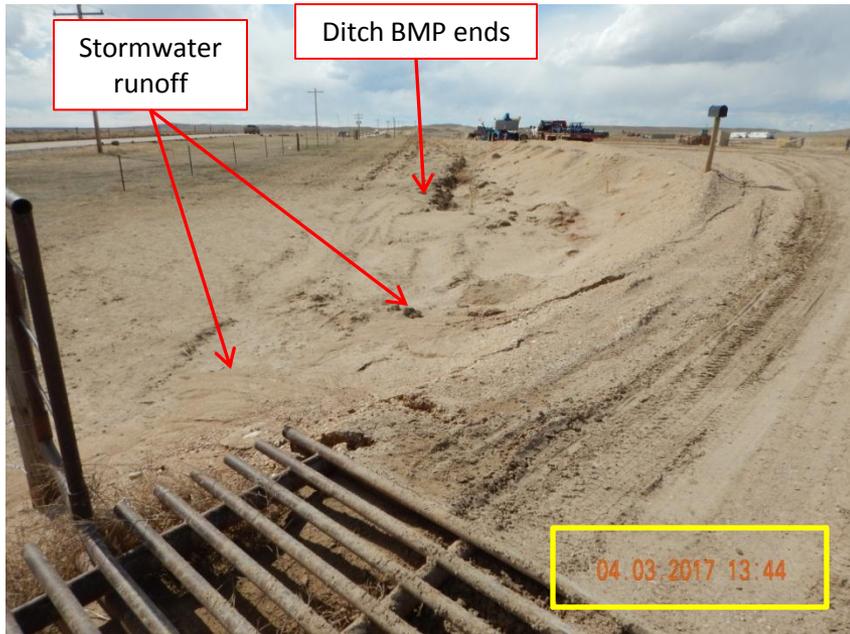


Photo 5. Photo taken 4/3/2017 from the west well pad, east entrance, facing West. Wind and stormwater runoff erosion evident along portions of the location perimeter. Fill slopes have not been stabilized along the location perimeter to prevent wind erosion.



Photo 6. Photo taken from the west well pad, east entrance, facing South. Sediment trap does not appear to be sufficient as sediment is discharging from the eastern side. Sediment trap size was measured at ~5'x6'x1' (width x length x depth= 30ft³) with a stabilized outlet. Sediment discharge is also occurring from the entrance of the access road, south of the sediment trap. Refer to photos 7 & 8.

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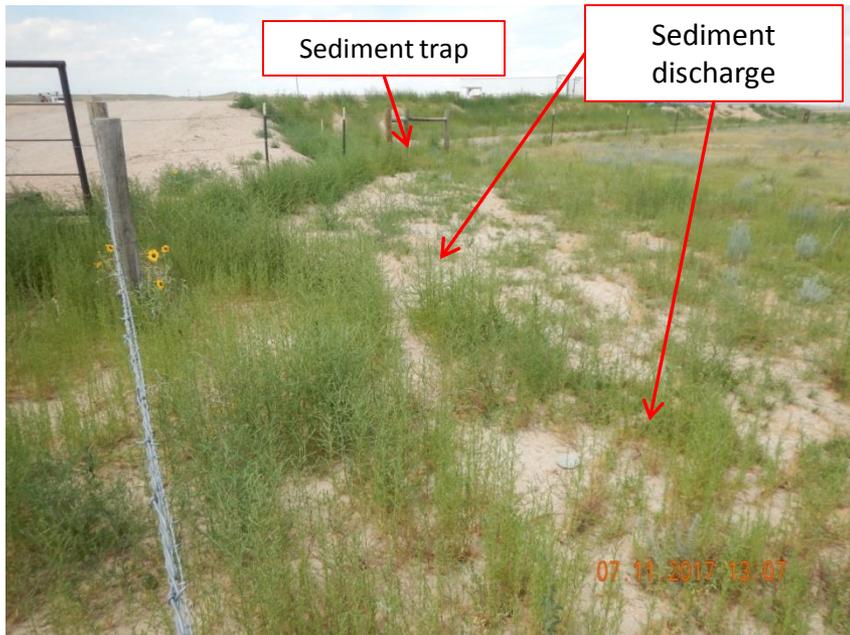


Photo 7. Photo taken from the west well pad, east entrance, facing Northwest. Sediment discharge and sediment build up beyond the sediment trap area were observed. Portions of this sediment discharge coming from the entrance of the access road.

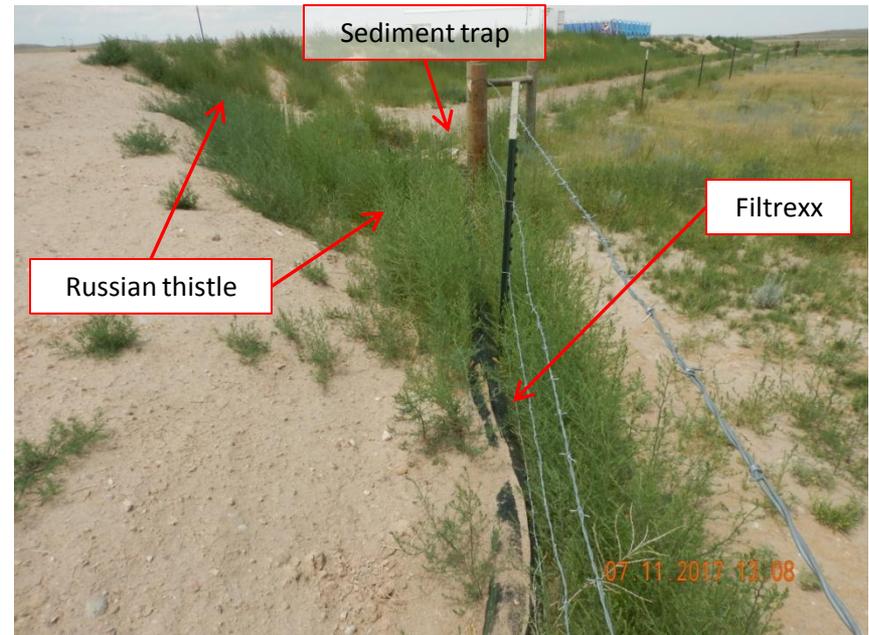


Photo 8. Photo taken from the west well pad, east entrance, facing Northwest. Appears stormwater runoff from the entrance access road is causing sediment discharge and the filtrex BMP does not appear to be a sufficient BMP.

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Photo 9. Photo taken from the western production facility pad on top of the topsoil stockpile, facing South. Topsoil stockpile has predominately Russian thistle growth and Kochia growth which is not in compliance with Rule 1002.c. and Rule 1003. Hydromulch application was observed on the topsoil stockpile but is only a temporary BMP..

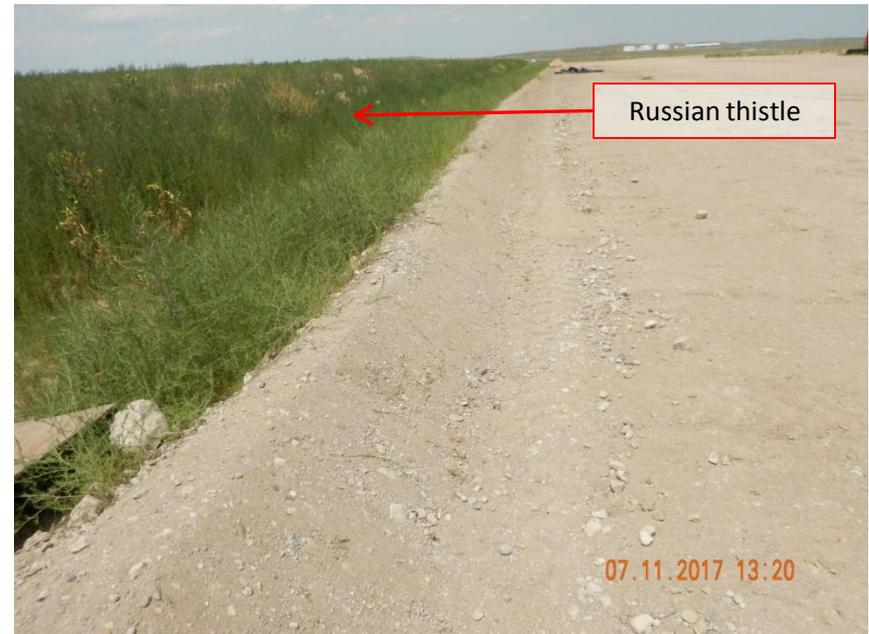


Photo 10. Photo taken from the western production facility pad, facing North. A berm ~18" has been constructed along the west and south pad perimeter, but does not appear to be properly compacted. Russian thistle growth was observed throughout the topsoil and perimeter areas.

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Photo 11. Photo taken from the southeast production facility pad, facing North. Sediment trap size was measured at $\sim 5.5' \times 4' \times 1.5'$ (width x length x depth= 33ft³) with a stabilized outlet.



Photo 12. Photo taken from the southwest east well pad, facing East. Sediment trap size was measured at $\sim 5' \times 4.5' \times 2'$ (width x length x depth= 45ft³) with a stabilized outlet. Surface roughening outside of the perimeter ditch.

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Photo 13. Photo taken from the east well pad, east entrance along the west side, facing West. Sediment trap size was measured at ~5'x4.5'x1.5' (width x length x depth= 33.75ft³) with a stabilized outlet.



Photo 14. Photo taken from the east well pad, east entrance along the west side, facing East. Filtrexx wattle was installed beyond the outlet area to control runoff from the entrance of the access road which appears to be properly functioning.

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Photo 15. Photo taken from the east well pad, east entrance along the east side, facing Northwest. Sediment trap size was measured at ~6.5'x5'x1' (width x length x depth= 32.5ft³) with a stabilized outlet. Fence line has been moved to facilitate maintenance for the sediment trap.



Photo 16. Photo taken from the east well pad, east entrance along the east side, facing Northwest. Appears stormwater runoff from the entrance access road is causing sediment discharge and the filterxx BMP does not appear to be a sufficient BMP.

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Photo 17. Photo taken from the northeast east well pad on top of the topsoil stockpile, facing West. Topsoil stockpile has predominately Russian thistle growth and Kochia growth which is not in compliance with Rule 1002.c. and Rule 1003. Hydromulch application was observed on the topsoil stockpile but is only a temporary BMP.

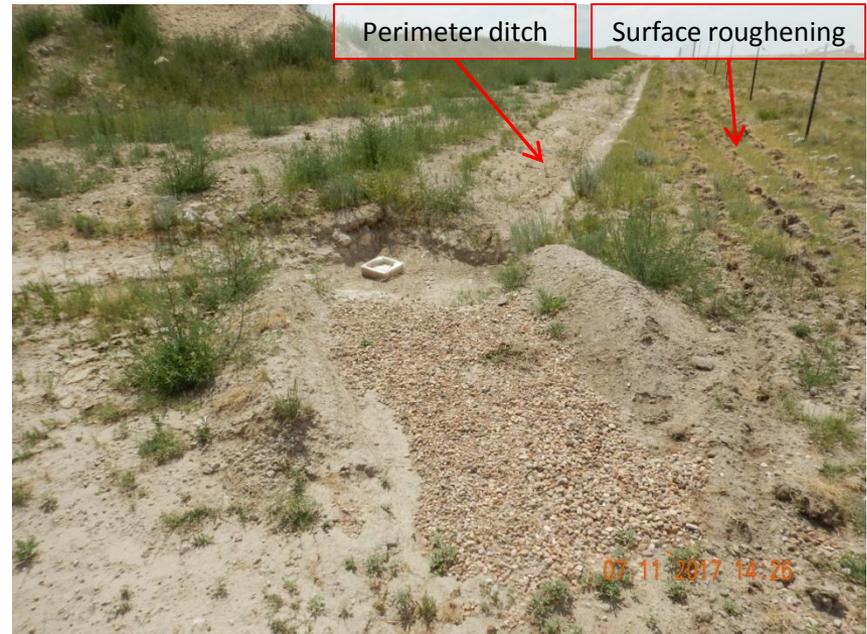


Photo 18. Photo taken from the northeast east well pad, facing West. Sediment trap does not appear to be sufficient or properly constructed. Sediment trap does not have a stabilized outlet installed. Sediment trap size was measured at ~6'x5'x1.5' (width x length x depth= 45ft³). Sediment discharge is evident. Refer to photos 19 & 20.

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Photo 19. Photo taken just beyond the sediment trap, facing Northeast. Photo illustrates the surface roughening BMP is no longer in proper functioning condition, as it appears sediment discharge has filled in the BMP.

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Photo 20. Close up photo taken just beyond the sediment trap, illustrating stormwater runoff appears to be washing hydromulch material off location.