

Inspection Photos

08/21/2018

Operator: GRAND MESA OPERATING CO - 35080

Location ID: 453036

Inspection Doc. Number: 682503765

Lincoln County, CO

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COGCC

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Photo 1: Photo taken from the south end of the location, facing east. Photos 1-4 provide an overview of the location from east, northeast, northwest to west.

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Photo 2:

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Photo 3:

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Photo 4:



Photo 5: Photo taken from the south end of the location, facing south. Photo shows two (2) porta-johns on location.



Photo 6: Continued from photo 5. Photo shows porta-johns have been secured down with stakes.



Photo 7: Photo taken from the southwest corner of the location, facing north. Photo shows surface roughening (ripping) has been used in conjunction with a ditch and berm. It is noted that the ditch and berm appear to have been constructed with topsoil from the location. This should be avoided to mitigate potential compaction concerns and sediment loss in the topsoil.

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Photo 8: Photo taken from the southwest corner of the location, facing east. See comments under photo 7.



Photo 9: Photo taken from the west end of the location, facing north. Photo shows a shallow pond associated with a drainage to the west of the location. See photo 43



Photo 10: Photo taken from the northwest corner of the location, facing east. Photo shows perimeter controls do not continue on the northern perimeter of the location.



Photo 11: Photo taken from the northwest corner of the location, facing south. See comments under photo 7.

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Photo 12: Photo taken from the north end of the location, facing south photo shows various fluids/chemicals from drilling operations ponding on then north end of the pad. Photo also shows the beginning of a drainage to the north of the location (see photo 43). COA in 2A doc. #401333215 states "Location lies within proximity to a tributary of the Lickdab Creek and 275 feet from Lickdab Creek. Operator shall use engineering controls and best management practices to mitigate potential contaminant, including sediment, migration into the nearby surface waters". Photo shows no stormwater or erosion controls have been installed on the north end of the location.



Photo 13: Continued from photo 12. Photo shows drainage. It is noted that the drainage is approximately 3-5 feet from the pad. Photo shows not stormwater or erosion controls have been installed on the north end of the location.



Photo 14: Continued from photo 12. Photo shows drainage to the north of the location.



Photo 15: Photo taken from the north end of the location, facing south. Photo shows various fluids/chemicals from drilling operations ponding on then north end of the pad. Fluids appear to be traveling north from the drill rig, equipment and the intended production pit (arrow)



Photo 16: Photo taken from the north end of the location, facing southwest. Photo shows equipment and fluids/chemicals on the pad. See comments under photo 15.



Photo 17: Photo taken from the north end of the location, facing west. Photo shows equipment and fluids/chemicals on the pad. See comments under photo 15.

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Photo 18: Photo taken from the north end of the location, facing southwest. Photo shows equipment and fluids/chemicals on the pad. See comments under photo 15. Photo also shows area where the pad ends and the beginning of the drainage to the north. Photo shows to stormwater or erosion control BMPs have been installed on the north end of the location.



Photo 19: Photo taken from the north end of the location. Photo shows erosion degradation and sediment transport off location from stormwater discharge. Photo also shows water movement patterns from the location.



Photo 20: Photo taken from the southeast corner of the location, facing north. Photo shows surface roughening (ripping) has been used in conjunction with a ditch and berm on the east end of the location. . It is noted that the ditch and berm appear to have been constructed with topsoil from the location. This should be avoided to mitigate potential compaction concerns in the topsoil.



Photo 21: Photo taken from the northeast corner of the location, facing west. Photo shows drill rig, production pit. Photo also shows nor stormwater and erosion control BMPs have been installed on the north end of the location.



Photo 22: Photo taken from the northeast corner of the location, facing southwest.
Photo of production pit and drill rig.



Photo 23: Photo taken from the east end of the location, facing north. Photo of topsoil stock pile.



Photo 24: Photo taken from the southeast corner of the pad, facing west. Photo shows stormwater and erosion controls have only been partially installed on the south end of the location.



Photo 25: Photo taken from the southeast corner of the location, facing south. Photo of equipment being stored off the constructed pad.



Photo 26: Photo taken from the south end of the location, facing northeast. Photo of topsoil stockpile.



Photo 27: Photo taken from the south end of the location, facing north. Photo shows liner within pit is not in proper functioning condition.

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Photo 28: Photo taken from the south end of the location, facing north. Photo shows equipment being stored off the constructed pad. Photo also shows an open barrel laying on its side upon the soil surface. This is improper storage of material and material management. Barrel needs to be placed in secondary containment or removed and properly stored or disposed. Any contaminated soils will need to be cleaned/remediated or removed and properly disposed.



Photo 29: Photo taken from the south end of the location, on the south end of the blue metal container. Photo also shows a barrel laying with the top placed upon the surface of the soil. See comments under photo 28.



Photo 30: Continued from photo 29. Photo shows barrel was placed open on the soil surface. Photo shows contaminants on soil surface.



Photo 31: Photo taken from the south end of the location, facing southeast. Photos show two additional barrels. Barrels are being improperly stored off of the location. See comments under photo 28



Photo 32: Photo taken from the south end of the location, facing south. Photo shows equipment being stored off of the location. Any additional disturbance will require reclamation.



Photo 33: Photo taken from the west end of the location adjacent to the trailers on site. Photo shows gas cans improperly stored on location. See comments under photo 28.



Photo 34: Photo taken from the west end of the location, on the west side of the office trailers on location, facing northeast. Photo shows what appears to be sewage discharge from the southern trailer.



Photo 35: Continued from photo 35



Photo 36: Photo taken from the west end of the location, on the west side of the office trailers on location, facing southeast. Photo shows what appears to be sewage discharge from the northern trailer.



Photo 37: Continued from photo 36



Photo 38: Photo taken from the northwest corner of the pad, facing southwest. Photo shows packaged materials appear to have been ripped, with various materials being spilt onto the location.



Photo 39: Photo taken from the northwest corner of the pad, facing west. Photo shows packaged materials appear to have been ripped, with various materials being spilt onto the location.



Photo 40: Photo taken from the northwest corner of the pad, facing south. Photo shows packaged materials appear to have been ripped, with various materials being spilt onto the location.



Photo 41: Photo taken from the northwest corner of the pad, facing east. Photo shows packaged materials appear to have been ripped, with various materials being spilt onto the location.



Photo 42: Photo taken from the access road, south of the location, facing south. Photo shows areas of the access road where rutting as occurred. Photo also shows evidence of vehicular travel off of the access road. Maintenance should be conducted and BMPs implemented to allow for travel along access road and minimize off-location/road disturbances in accordance to 1002.e(4)

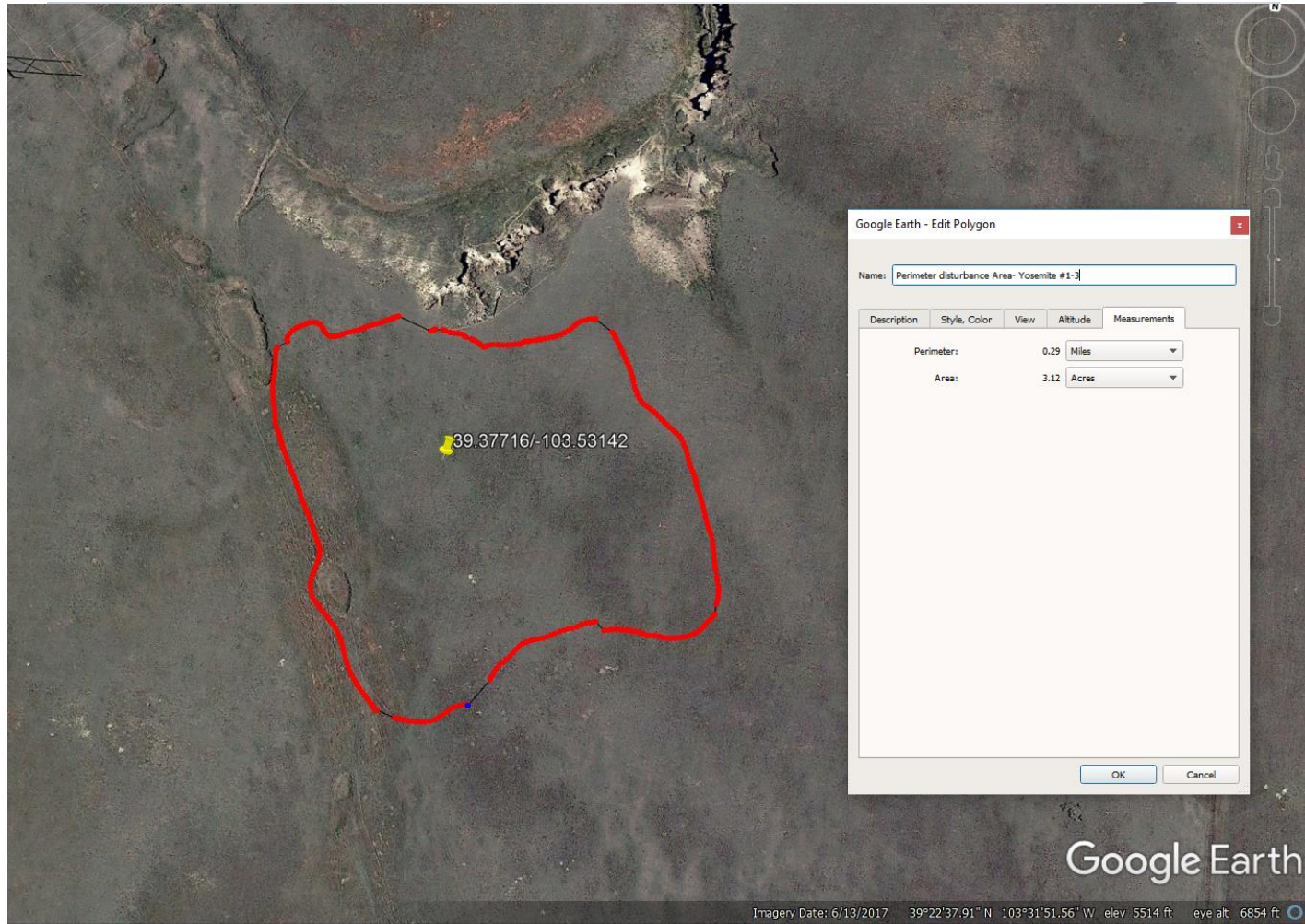


Photo 43: 2017 Google earth aerial imagery. 2A doc. #453036 states size of disturbance area during construction will be 2 acres in size. GPS measurements were conducted indicating that the disturbance area, not including the fenceline, is 3.12 acres in size.