

Stormwater Inspection Report

Operator:	Laramie Energy, LLC
Project:	Cascade Creek
Location:	Cascade Creek 604-41-32 Pad
Date:	Friday, May 7, 2021
Weather:	Mostly Sunny, Windy, 77°, Lo 41°



Type of Inspection Report	14-Day Routine	Monthly Routine	Post-Storm	Corrective Action	Winter Exclusion	Stabilization Complete	Site Review
				X			

Phase(s) of Construction Inspected	No Activity	Clear & Grade	Facility Installation	Drilling Operations	Reclamation	Acres of Disturbance Inspected
	X					0

Stormwater Compliance Questions		YES	NO	N/A
1	Any BMPs Fail or Require Maintenance?	X		
2	Any Issues Identified Requiring the Installation of Additional BMPs?	X		
3	Any Sediment or Other Pollutants Discharged Outside Project Boundaries?		X	
4	Any BMPs Repaired or Maintained?	X		
5	Any New BMPs Installed?	X		
6	Any Hazardous Materials Spilled or Leaked?		X	
7	Any Deviation from the Minimum Inspection Schedule?		X	

Comments / Descriptions / Explanations
<p>Both BMP crews worked on the Cascade Creek 604-41-32 pad and access road to address issues identified in COGCC Document #696202112. The pad was reclaimed earlier in the year as identified by COGCC. This effort addressed the vast majority of the issues called out in the report (Photos #1 thru #4, Photos #7 & #8, Photos #10 thru #13, and Photo #15). Debris pictured in Photo #5 was removed prior to the pad being reclaimed. Damaged silt fence around stockpiled soils identified in Photos #6, #9, and #14 was also removed prior to reclamation activities. Excelsior wattle was then installed around the perimeter of the reclaimed portions of the pad to provide protection below freshly disturbed soils.</p> <p>A BMP crew swept the pad today to locate and remove any construction debris or litter that remained present on the pad. The crew also inspected and maintained previously installed perimeter wattle as necessary. The fill slope concerns in the southeast corner of the location, identified in Photo #16 was seeded and excelsior wattle was installed at the toe of the cut slope for additional protection.</p> <p>15 pounds of temp mix seed (50% common oats & 50% Regreen) was applied to the cut slope to provide rapid stabilization. An additional 7 pounds of Upper Cascade Mix and 7 pounds of smooth brome was also broadcast to provide long term stabilization. 200 pounds of 12-12-12 granular fertilizer was also broadcast over the cut slope to provide existing and new vegetation time released nutrients. Due to the cut slope being comprised of very poor soils, a hydroseed mix was applied over the seeding to provide soil amenities, nutrients and to encourage seed germination. At this time, all identified issues in the above mentioned COGCC document have been addressed.</p>

Photo 1



Maintaining Perimeter Wattle on CC 604-41-32

Photo 2



New Sediment Trap Outlet Installed

Photo 3



Applying Hydroseed Mix over Cut Slope

Photo 4



Applying Hydroseed Mix over Cut Slope

Inspector Name and Title

Mark Carlson, Environmental Inspector

Mark Carlson

Inspector Signature

5/7/2021

Date of Signature

Part I.A.3.f. Compliance Signature Requirement

"I verify that, to the best of my knowledge and belief, all corrective action and maintenance items identified during the inspection are complete, and the site is currently in compliance with the permit."

Stormwater Manager Certification Signature

Stormwater Inspection Report

Operator:	Laramie Energy, LLC
Project:	Cascade Creek
Location:	CC 604-41-32 Pad
Date:	Friday, May 21, 2021
Weather:	Rain Showers, Light Wind, 73°, Lo 51°



Type of Inspection Report	14-Day Routine	Monthly Routine	Post-Storm	Corrective Action	Winter Exclusion	Stabilization Complete	Site Review
				X			

Phase(s) of Construction Inspected	No Activity	Clear & Grade	Facility Installation	Drilling Operations	Reclamation	Acres of Disturbance Inspected
	X					0

Stormwater Compliance Questions		YES	NO	N/A
1	Any BMPs Fail or Require Maintenance?		X	
2	Any Issues Identified Requiring the Installation of Additional BMPs?	X		
3	Any Sediment or Other Pollutants Discharged Outside Project Boundaries?		X	
4	Any BMPs Repaired or Maintained?		X	
5	Any New BMPs Installed?	X		
6	Any Hazardous Materials Spilled or Leaked?		X	
7	Any Deviation from the Minimum Inspection Schedule?		X	

Comments / Descriptions / Explanations
<p>BMP crews operated in the Cascade Creek Project Area to address issues on the CC 604-41-32 pad identified by COGCC in Document #696202681. The crews broadcast 300 pounds of granular 12-12-12 fertilizer over the entire location to enhance plant development. Areas with minor erosion were seeded and hand raked to remove rilling and incorporate seed into the soil. A total of 175 feet of excelsior wattle was installed below these locations to provide additional erosion protection as seedlings continue to develop. Additional temporary and permanent seed was applied to the fill slopes on the southern end of the location. Previous seedlings on the fill slopes should begin to germinate over the next 7 days. The location received a moderate amount of rain over the past 24 hours which will help seed germination and establishment. EI recommends to continue monitoring previous seedlings to determine if sufficient densities of desirable plants will develop. EI does not recommend deploying site wide BMPs, such as mulch or erosion control blankets, until densities are determined. Those applications may damage permanent vegetation that is currently establishing.</p>

Photo 1



Broadcasting Seed on the CC 604-41-32 Pad

Photo 2



Wattle Installed below Minor Erosion

Photo 3



Seed Germinating on the CC 604-41-32 Pad

Photo 4



Seed Germinating on the CC 604-41-32 Pad

Inspector Name and Title

Mark Carlson, Environmental Inspector

Mark Carlson

Inspector Signature

5/21/2021

Date of Signature

Part I.A.3.f. Compliance Signature Requirement

"I verify that, to the best of my knowledge and belief, all corrective action and maintenance items identified during the inspection are complete, and the site is currently in compliance with the permit."

Stormwater Manager Certification Signature

Stormwater Inspection Report

Operator:	Laramie Energy, LLC
Project:	Cascade Creek
Location:	CC604-41-32, CC697-03-07, CC629-2, Shell 797-03
Date:	Thursday, June 10, 2021
Weather:	Clear, Breezy, 93°, Lo 68°



Type of Inspection Report	14-Day Routine	Monthly Routine	Post-Storm	Corrective Action	Winter Exclusion	Stabilization Complete	Site Review
				X			

Phase(s) of Construction Inspected	No Activity	Clear & Grade	Facility Installation	Drilling Operations	Reclamation	Acres of Disturbance Inspected
	X					0

Stormwater Compliance Questions		YES	NO	N/A
1	Any BMPs Fail or Require Maintenance?		X	
2	Any Issues Identified Requiring the Installation of Additional BMPs?		X	
3	Any Sediment or Other Pollutants Discharged Outside Project Boundaries?		X	
4	Any BMPs Repaired or Maintained?		X	
5	Any New BMPs Installed?		X	
6	Any Hazardous Materials Spilled or Leaked?		X	
7	Any Deviation from the Minimum Inspection Schedule?		X	

Comments / Descriptions / Explanations	
<p>With continued high temperatures, both BMP crews irrigated recently seeded locations to prevent young plants from burning up prior to establishing. No amenities were applied, only fresh water. Four locations were irrigated today including the CC 604-41-32 fill slope, CC 697-03-07 access road cut slope, CC 629-2 cut slope, and the Shell 797-03B cut slope.</p>	

Photo 1



Seed Germinating on the CC 604-41-32 Pad

Photo 2



Irrigating the CC 629-2 Pad Cut Slope

Photo 3



Irrigating the CC 697-03-07 Access Road Cut Slope

Photo 4



Irrigating the Shell 797-03B Cut Slope

Inspector Name and Title

Mark Carlson, Environmental Inspector

Mark Carlson

Inspector Signature

6/10/2021

Date of Signature

Part I.A.3.f. Compliance Signature Requirement

"I verify that, to the best of my knowledge and belief, all corrective action and maintenance items identified during the inspection are complete, and the site is currently in compliance with the permit."

Stormwater Manager Certification Signature

Stormwater Inspection Report

Operator:	Laramie Energy, LLC
Project:	Cascade Creek
Location:	CC 604-41-32 & CC 604-12-13 Annex Locations
Date:	Tuesday, June 15, 2021
Weather:	Hazy, Light Wind, 103°, Lo 57°



Type of Inspection Report	14-Day Routine	Monthly Routine	Post-Storm	Corrective Action	Winter Exclusion	Stabilization Complete	Site Review
				X			

Phase(s) of Construction Inspected	No Activity	Clear & Grade	Facility Installation	Drilling Operations	Reclamation	Acres of Disturbance Inspected
	X					0

Stormwater Compliance Questions		YES	NO	N/A
1	Any BMPs Fail or Require Maintenance?	X		
2	Any Issues Identified Requiring the Installation of Additional BMPs?	X		
3	Any Sediment or Other Pollutants Discharged Outside Project Boundaries?		X	
4	Any BMPs Repaired or Maintained?	X		
5	Any New BMPs Installed?	X		
6	Any Hazardous Materials Spilled or Leaked?		X	
7	Any Deviation from the Minimum Inspection Schedule?		X	

Comments / Descriptions / Explanations
<p>Two BMP crews continued irrigating seedlings and installing and maintaining BMPs in the Cascade Creek Project Area. 1,000 gallons of fresh water was applied to the fill slope on the Cascade Creek 604-41-32 pad to help prevent young plants from drying out. The crews were also able to complete operations on the CC 604-12-13 Annex pad and access road. One 6-inch flex hose outlet was installed near the pad entrance to allow stormwater to flow safely down the fill slope. The containment berm was completed below the cut slope. The crews also maintained silt fence installed around pad perimeter.</p>

Photo 1



Applying Additional Water, Nutrients, and Soil Amenities on CC 604-41-32 Fill Slope

Photo 2



Installing Flex Hose Outlet on CC 604-12-13 Annex Pad

Photo 3



Mending Silt Fence Installed on CC 604-12-13 Annex Pad

Photo 4



Installing Containment Berm Below CC 604-12-13 Annex Cut Slope

Inspector Name and Title

Mark Carlson, Environmental Inspector

Mark Carlson

Inspector Signature

6/15/2021

Date of Signature

Part I.A.3.f. Compliance Signature Requirement

"I verify that, to the best of my knowledge and belief, all corrective action and maintenance items identified during the inspection are complete, and the site is currently in compliance with the permit."

Stormwater Manager Certification Signature

Stormwater Inspection Report

Operator:	Laramie Energy, LLC
Project:	Cascade Creek
Location:	CC 604-41-32, CC 603-23-32, CC 610-22-43 Pads
Date:	Thursday, August 12, 2021
Weather:	Mostly Sunny / Hazy, Light Wind, Hi 98°, Lo 56°



Type of Inspection Report	14-Day Routine	Monthly Routine	Post-Storm	Corrective Action	Winter Exclusion	Stabilization Complete	Site Review
				X			

Phase(s) of Construction Inspected	No Activity	Clear & Grade	Facility Installation	Drilling Operations	Reclamation	Acres of Disturbance Inspected
	X					0

Stormwater Compliance Questions		YES	NO	N/A
1	Any BMPs Fail or Require Maintenance?	X		
2	Any Issues Identified Requiring the Installation of Additional BMPs?		X	
3	Any Sediment or Other Pollutants Discharged Outside Project Boundaries?		X	
4	Any BMPs Repaired or Maintained?		X	
5	Any New BMPs Installed?		X	
6	Any Hazardous Materials Spilled or Leaked?		X	
7	Any Deviation from the Minimum Inspection Schedule?		X	

Comments / Descriptions / Explanations
<p>One BMP crew resumed activities in the Cascade Creek Project Area. The crews began preparing for mulching operations on the CC 604-41-32 pad in response to COGCC Document #696202681. Mulching operations were unable to be completed previously due to the lack of certified weed-free straw available for purchase. This season's crop has recently become available, allowing mulching operations to begin. Certified bales from this harvest season will be stockpiled over winter, to avoid bale availability issues next spring. Germination on the site has proceeded well overall. With plants already establishing, the mulch application will be kept on the lower end of tonnage scale to avoid choking out existing vegetation. The crews also maintained perimeter excelsior wattle on the CC 604-41-32 and swept the location for noxious weeds. The crews also maintained and replaced excelsior wattle on around the perimeter of the CC 603-23-32 and CC 610-22-43 pads. A total of 115 feet of new excelsior wattle was installed.</p>

Photo 1



Maintaining Wattle on the CC 603-23-32 Pad

Photo 2



Hand Removing Noxious Weeds on the CC 604-41-32 Pad

Photo 3



Replacing Section of Wattle on the CC 610-22-43 Pad

Photo 4



After Maintaining Wattle on the CC 610-22-43 Pad

Inspector Name and Title

Mark Carlson, Environmental Inspector

Mark Carlson

Inspector Signature

8/12/2021

Date of Signature

Part I.A.3.f. Compliance Signature Requirement

"I verify that, to the best of my knowledge and belief, all corrective action and maintenance items identified during the inspection are complete, and the site is currently in compliance with the permit."

Stormwater Manager Certification Signature

Stormwater Inspection Report

Operator:	Laramie Energy, LLC
Project:	Cascade Creek
Location:	Cascade Creek 604-41-32 Pad
Date:	Friday, August 13, 2021
Weather:	Partly Cloudy / Hazy, Light Wind, Hi 99°, Lo 60°



Type of Inspection Report	14-Day Routine	Monthly Routine	Post-Storm	Corrective Action	Winter Exclusion	Stabilization Complete	Site Review
				X			

Phase(s) of Construction Inspected	No Activity	Clear & Grade	Facility Installation	Drilling Operations	Reclamation	Acres of Disturbance Inspected
	X					0

Stormwater Compliance Questions		YES	NO	N/A
1	Any BMPs Fail or Require Maintenance?		X	
2	Any Issues Identified Requiring the Installation of Additional BMPs?	X		
3	Any Sediment or Other Pollutants Discharged Outside Project Boundaries?		X	
4	Any BMPs Repaired or Maintained?		X	
5	Any New BMPs Installed?	X		
6	Any Hazardous Materials Spilled or Leaked?		X	
7	Any Deviation from the Minimum Inspection Schedule?		X	

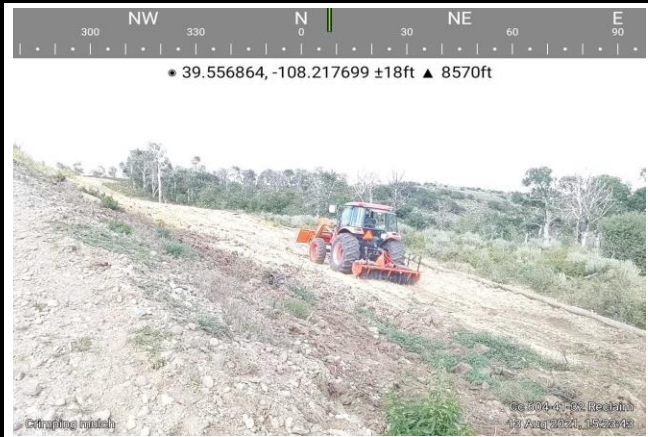
Comments / Descriptions / Explanations
<p>One BMP crew began mulching operations on the Cascade Creek 604-41-32 pad in response to issues identified in COGCC Document #696202681. Mulching operations were unable to be conducted sooner due to the lack of certified, weed-free straw bales available. This year's straw bales have just recently become available for purchase. The crew mobilized bales and equipment to the site and began mulching on the east side of the location.</p> <p>The crew used a mulch blower to apply 100 bales over the reclaimed portions of the CC 604-41-32 pad. Mulch was physically crimped with a tractor and crimping implement which binds straw into the soil. Mulching operations will resume and likely completed on Monday.</p>

Photo 1



Applying Straw Mulch to the CC 604-41-32 Pad

Photo 2



Crimping Straw Mulch on the CC 604-41-32 Pad

Photo 3



Applying Straw Mulch to the CC 604-41-32 Pad

Photo 4



Crimping Straw Mulch on the CC 604-41-32 Pad

Inspector Name and Title

Mark Carlson, Environmental Inspector

Mark Carlson

Inspector Signature

8/13/2021

Date of Signature

Part I.A.3.f. Compliance Signature Requirement

"I verify that, to the best of my knowledge and belief, all corrective action and maintenance items identified during the inspection are complete, and the site is currently in compliance with the permit."

Stormwater Manager Certification Signature

Stormwater Inspection Report

Operator:	Laramie Energy, LLC
Project:	Cascade Creek
Location:	CC 604-41-32 Pad
Date:	Monday, August 16, 2021
Weather:	Mostly Sunny / Smokey, Light Wind, Hi 92°, Lo 61°



Type of Inspection Report	14-Day Routine	Monthly Routine	Post-Storm	Corrective Action	Winter Exclusion	Stabilization Complete	Site Review
				X			

Phase(s) of Construction Inspected	No Activity	Clear & Grade	Facility Installation	Drilling Operations	Reclamation	Acres of Disturbance Inspected
	X					0

Stormwater Compliance Questions		YES	NO	N/A
1	Any BMPs Fail or Require Maintenance?		X	
2	Any Issues Identified Requiring the Installation of Additional BMPs?	X		
3	Any Sediment or Other Pollutants Discharged Outside Project Boundaries?		X	
4	Any BMPs Repaired or Maintained?		X	
5	Any New BMPs Installed?	X		
6	Any Hazardous Materials Spilled or Leaked?		X	
7	Any Deviation from the Minimum Inspection Schedule?		X	

Comments / Descriptions / Explanations	
<p>One BMP crew continued to apply straw mulch to the Cascade Creek 604-41-32 pad. A total of 264 additional bales were applied via a mulch blower today. Mulch was physically crimped with the use of a tractor and crimping implement.</p>	

t

Photo 1**South West Elevation**

• 39.55782, -108.218804 ±17ft ▲ 8576ft



Crimping mulch

Cc 604-41-32 pad
16 Aug 2021, 15:30:00*Crimping Straw Mulch on CC 604-41-32 Pad***Photo 2****South West Elevation**

• 39.557563, -108.219495 ±21ft ▲ 8595ft



Blowing mulch

Cc 604-41-32 pad
16 Aug 2021, 12:51:58*Blowing Straw Mulch on CC 604-41-32 Pad***Photo 3****East Elevation**

• 39.55714, -108.218878 ±33ft ▲ 8568ft



Crimping in mulch

Cc 604-41-32 pad
16 Aug 2021, 15:30:58*Crimping Straw Mulch on CC 604-41-32 Pad***Photo 4****West Elevation**

• 39.556842, -108.218366 ±16ft ▲ 8563ft



Blowing mulch

Cc 604-41-32 pad
16 Aug 2021, 16:00:38*Blowing Straw Mulch on CC 604-41-32 Pad***Inspector Name and Title**

Mark Carlson, Environmental Inspector

8/16/2021

Inspector Signature**Date of Signature****Part I.A.3.f. Compliance Signature Requirement**

"I verify that, to the best of my knowledge and belief, all corrective action and maintenance items identified during the inspection are complete, and the site is currently in compliance with the permit."

Stormwater Manager Certification Signature

Stormwater Inspection Report

Operator:	Laramie Energy, LLC
Project:	Cascade Creek
Location:	Cascade Creek 604-41-32 Pad
Date:	Wednesday, August 18, 2021
Weather:	Scattered T-Storms, Light Wind, Hi 82°, Lo 54°



Type of Inspection Report	14-Day Routine	Monthly Routine	Post-Storm	Corrective Action	Winter Exclusion	Stabilization Complete	Site Review
				X			

Phase(s) of Construction Inspected	No Activity	Clear & Grade	Facility Installation	Drilling Operations	Reclamation	Acres of Disturbance Inspected
	X					0

Stormwater Compliance Questions		YES	NO	N/A
1	Any BMPs Fail or Require Maintenance?	X		
2	Any Issues Identified Requiring the Installation of Additional BMPs?	X		
3	Any Sediment or Other Pollutants Discharged Outside Project Boundaries?		X	
4	Any BMPs Repaired or Maintained?	X		
5	Any New BMPs Installed?	X		
6	Any Hazardous Materials Spilled or Leaked?		X	
7	Any Deviation from the Minimum Inspection Schedule?		X	

Comments / Descriptions / Explanations	
<p>One BMP crew completed operations associated with issues called out by COGCC in Document #696202681. The crew completed the installation of straw mulch in areas unable to be reached by the straw blower and/or tractor with crimper implement. They also maintained perimeter wattle installations.</p>	

Photo 1



Photo 2



Photo 3



Photo 4



Inspector Name and Title

Mark Carlson, Environmental Inspector

Mark Carlson

8/18/2021

Inspector Signature

Date of Signature

Part I.A.3.f. Compliance Signature Requirement

"I verify that, to the best of my knowledge and belief, all corrective action and maintenance items identified during the inspection are complete, and the site is currently in compliance with the permit."

Stormwater Manager Certification Signature