



Lila Canyon Project
P. O. Box 910
East Carbon, Utah 84520
Phone: (435) 888-4000
(435) 650-3157
Fax: (435) 888-4002

Utah Division of Oil, Gas & Mining
Utah Coal Program
1594 West North Temple, Suite 1210
P.O. Box 145801
Salt Lake City, UT 84114-5801

March 11, 2020

Attn: Steve Christensen
Permit Supervisor

Re: Lila Canyon Mine, UtahAmerican Energy, Inc. C/007/013
Annual Report

Dear Mr. Christensen

Attached you will find all of the information needed to complete the annual report for 2019 for the Lila Canyon Mine.

If you have any questions, or need any additional information regarding this submittal, please contact me directly at 435-888-4000.

Sincerely,

A handwritten signature in black ink, appearing to read 'Karin Madsen', written over a horizontal line.

Karin Madsen
Environmental Permitting Engineer
UtahAmerican Energy, Inc.

APPLICATION FOR PERMIT PROCESSING

<input type="checkbox"/> Permit Change	<input type="checkbox"/> New Permit	<input type="checkbox"/> Renewal	<input type="checkbox"/> Transfer	<input type="checkbox"/> Exploration	<input type="checkbox"/> Bond Release	Permit Number: ACT/007/013
L20-003 2019 Annual Report						Mine: Lila Canyon
						Permittee: UtahAmerican Energy, Inc.

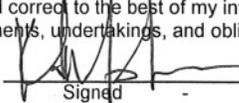
Description, include reason for application and timing required to implement:

Instructions: If you answer yes to any of the first 8 questions (gray), submit the application to the Salt Lake Office. Otherwise, you may submit it to your reclamation

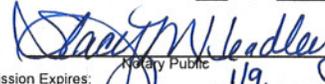
<input type="checkbox"/> Yes	<input type="checkbox"/> No	1. Change in the size of the Permit Area? _____ acres Disturbed Area? _____ acres X increase <input type="checkbox"/> decrease.
<input type="checkbox"/> Yes	<input type="checkbox"/> No	2. Is the application submitted as a result of a Division Order? DO # _____
<input type="checkbox"/> Yes	<input type="checkbox"/> No	3. Does application include operations outside a previously identified Cumulative Hydrologic Impact Area?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	4. Does application include operations in hydrologic basins other than as currently approved?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	5. Does application result from cancellation, reduction or increase of insurance or reclamation bond?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	6. Does the application require or include public notice/publication?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	7. Does the application require or include ownership, control, right-of-entry, or compliance information?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	8. Is proposed activity within 100 feet of a public road or cemetery or 300 feet of an occupied dwelling?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	9. Is the application submitted as a result of a Violation?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	10. Is the application submitted as a result of other laws or regulations or policies? Explain: Annual Report
<input type="checkbox"/> Yes	<input type="checkbox"/> No	11. Does the application affect the surface landowner or change the post mining land use?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	12. Does the application require or include underground design or mine sequence and timing? (Modification of R2P2?)
<input type="checkbox"/> Yes	<input type="checkbox"/> No	13. Does the application require or include collection and reporting of any baseline information?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	14. Could the application have any effect on wildlife or vegetation outside the current disturbed area?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	15. Does application require or include soil removal, storage or placement?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	16. Does the application require or include vegetation monitoring, removal or revegetation activities?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	17. Does the application require or include construction, modification, or removal of surface facilities?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	18. Does the application require or include water monitoring, sediment or drainage control measures?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	19. Does the application require or include certified designs, maps, or calculations?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	20. Does the application require or include subsidence control or monitoring?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	21. Have reclamation costs for bonding been provided for?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	22. Does application involve a perennial stream, a stream buffer zone or discharges to a stream?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	23. Does the application affect permits issued by other agencies or permits issued to other entities?

X Attach complete copies of the application.

I hereby certify that I am a responsible official of the applicant and that the information contained in this application is true and correct to the best of my information and belief in all respects with the laws of Utah in reference to commitments, undertakings, and obligations, herein.


Karin Madsen / Enviro Permitting Eng /
3-11-2020
 Signed _____ Name _____ Position _____ Date _____

Subscribed and sworn to before me this 11 day of March, 2020.


 My Commission Expires: 1/9, 2023
 Attest: STATE OF Utah
 COUNTY OF Carbon



Received by Oil, Gas & Mining
ASSIGNED TRACKING NUMBER

Application for Permit Processing Detailed Schedule of Changes to the MRP

L20-003 2019 Annual Report	Permit Number: ACT/007/013
	Mine: Lila Canyon
	Permittee: UtahAmerican Energy, Inc.

Provide a detailed listing of all changes to the mining and reclamation plan which will be required as a result of this proposed permit application. Individually list all maps and drawings which are to be added, replaced, or removed from the plan. Include changes of the table of contents, section of the plan, pages, or other information as needed to specifically locate, identify and revise the existing mining and reclamation plan. **Include page, section and drawing numbers as part of the description.**

			DESCRIPTION OF MAP, TEXT, OR MATERIALS TO BE CHANGED
<input type="checkbox"/> ADD	<input type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	2019 Annual Report
<input type="checkbox"/> ADD	<input type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	
<input type="checkbox"/> ADD	<input type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	
<input type="checkbox"/> ADD	<input type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	
<input type="checkbox"/> ADD	<input type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	
<input type="checkbox"/> ADD	<input type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	
<input type="checkbox"/> ADD	<input type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	
<input type="checkbox"/> ADD	<input type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	
<input type="checkbox"/> ADD	<input type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	
<input type="checkbox"/> ADD	<input type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	

Any other specific or special instructions required for insertion of this proposal into the Mining and Reclamation Plan?

2019 ANNUAL REPORT

Submit the completed document and any additional information identified to the Division by March 31, 2020.

GENERAL INFORMATION

Company Name	UtahAmerican Energy	Mine Name	Horse Canyon Mine
Permit Number	C/007/0013	Permit Expiration Date	5-6-2021
Operator Name	UtahAmerican Energy, Inc.	Phone Number	+1 (435) 888-4000
Mailing Address	PO Box 910	Email	kmadsen@coalsource.com
City	East Carbon		
State	UT	Zip Code	84520

DOGM File Location or Annual Report Location

Excess Spoil Piles	<input type="checkbox"/> Required <input checked="" type="checkbox"/> Not Required	Not Required
Refuse Piles	<input type="checkbox"/> Required <input checked="" type="checkbox"/> Not Required	Not Required
Impoundments	<input checked="" type="checkbox"/> Required <input type="checkbox"/> Not Required	Annual Pond Certifications Included for ponds 1&2
Other:		

OPERATOR COMMENTS

REVIEWER COMMENTS

Met Requirements Did Not Meet Requirements

COMMITMENTS AND CONDITIONS

The Permittee is responsible for ensuring annual technical commitments in the Mining and Reclamation Plan and conditions accepted with the permit are completed throughout the year. The Division has identified these commitments below and has provided space for you to report what you have done during the past year for each commitment. If additional written response is required, it should be filed as an attachment to this report.

Title: RAPTOR SURVEY & PROTECTION

Objective: Identify and monitor all raptors and nests. For possible subsidence impacts to raptor nests, develop a mitigation plan that must be submitted and approved. Apply for 'take permit' through USFWS 2 years prior to subsidence of the nests. Maintain escarpment barrier of at least 200' to prevent cliff habitat loss. **The text of Chapter 3, pg. 13, sect 332 (1) needs to be revised or clarified to demonstrate how the 200' barrier will be measured**

Frequency: Annually

Status: Ongoing since 2005. The map must clearly show raptor nests in relation to mining and subsidence.

Reports: Annual Reports

Citation: MRP, Part B, Section 322.220, page 10, Section 330, page 20, Section 358.100 page 38, Sec. 332 P.13.

OPERATOR COMMENTS

The 2019 raptor surveys were completed by EIS and the report is included in the Confidential folder. The required text change to Chapter 3 as requested above and in previous annual reports was made during the 2017 annual report and approved in the MRP in 1-25-2018.

REVIEWER COMMENTS

Met Requirements

Did Not Meet Requirements

Title: COLORADO RIVER ENDANGERED FISH RECOVERY PROGRAM

Objective: Report water depletion for the CO River Endangered Fish Recovery Program

Frequency: Annually

Status: Ongoing

Reports: Annual

Citation: MRP, Section 322.220, page 11

OPERATOR COMMENTS

The Water Depletion Calculations for the Colorado River Endangered Fish Recovery Program is included.

REVIEWER COMMENTS

Met Requirements

Did Not Meet Requirements

Title: GENEVA MINE/ LILA CANYON FAN PORTAL BARRICADES

Objective: Inspect the Geneva Mine fan portal Barricades annually and report findings to Division and BLM.

Frequency: Annually

Status: Ongoing

Reports: Annual Report.

Citation: MRP, Part B, Chapter 5, Section 529, page 54 and 55

OPERATOR COMMENTS

This inspection was done by EIS and the report is included.

REVIEWER COMMENTS

Met Requirements

Did Not Meet Requirements

Title: SUBSIDENCE MONITORING

Objective: Aerial subsidence monitoring will be done annual while the significant subsidence is taking place. The subsidence monitoring will be initiated in an area prior to any 2nd mining being done within that area. Initial 12-16 control points, once per year a follow up aerial will be performed to determine the extent and degree of active subsidence for a minimum of 5 years. If any of the 3 prior years measures more than 10% of highest annual subsidence, monitoring will continue until 3 consecutive years less than 10%. A ground survey of the mine permit area where secondary extraction has occurred over the last year will be conducted in conjunction with the quarterly water monitoring program. Survey's will identify items listed within MRP Chapter 5 Section 525.440

Frequency: Annual/Quarterly

Status: Ongoing during 2nd mining or longwall mining

Reports: Annual Report

Citation: MRP Chapter 5 page 43

OPERATOR COMMENTS

Subsidence surveys were completed by Ware Surveying, however he has not released the report yet. Will provide when available.

REVIEWER COMMENTS

Met Requirements

Did Not Meet Requirements

FUTURE COMMITMENTS AND CONDITIONS

The following commitments are not required for the current annual report year, but will be required by the permittee in the future as indicated by the "status" field. These commitments are included for information only, and do not currently require action. If you feel that the commitment is no longer relevant or needs to be revised, please contact the Division.

Title: WILDLIFE

Objective: Adhere to wildlife exclusionary periods: raptors (Feb 1 - July 1), bighorn sheep lambing, (May 1 - June 15), and pronghorn (May 15 - June 20).

Frequency: Prior to construction of any new facility projects, structures, and roads; and prior to reclamation.

Citation: MRP, Part B, Sec. 330, p. 20.

Title: LILA CANYON MINE SALVAGE OF CRYPTOGRAMS ON TOPSOIL PILE PRIOR TO RECLAMATION.

Objective: Salvaged cryptograms will be added to the wood fiber mulch and hydrosprayed on the surface of the reclaimed site.

Frequency: Immediately after seeding of the reclaimed site.

Status: During reclamation of the Lila Canyon Mine.

Reports: Success of cryptogamic establishment will be evaluated (by Division and Permittee) prior to collection from topsoil stockpile.

Citation: MRP, Part B, Section 232.100, and Section 234.230

Title: VEGETATION MONITORING

Objective: Submit color infrared photography. Submit and implement a mitigation plan, if results indicate impact from mining operations.

Frequency: Prior to any mining, and every 5 years after.

Status: Ongoing. Baseline submitted in 2011. Next round of photos are due in 2016. A comparison between 2016 and 2011 photos will be required in 2016.

Reports: Annual Report

Citation: MRP, Part B, Section 332, page 14

REPORTING OF OTHER TECHNICAL DATA

Please list other technical data or information that was not included in the form above, but is required under the approved plan, which must be periodically submitted to the Division.

Please list attachments:

Annual Opacity Survey was completed by Barr Engineering and the report is included.
Annual Rainfall analysis was completed by HydroPlot Engineering and the report is included.

REVIEWER COMMENTS

Met Requirements

Did Not Meet Requirements

MAPS

Copies of mine maps, current and up-to-date, are to be provided to the Division as an attachment to this report in accordance with the requirements of R645-301-525.240. The map copies shall be made in accordance with 30 CFR 75.1200 as required by MSHA. Mine maps are not considered confidential.

Map Name	Map Number	Included		Confidential	
		Yes	No	Yes	No
Annual Subsidence Map		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Mine Map		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Raptor Map	Confidential	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

REVIEWER COMMENTS Met Requirements Did Not Meet Requirements

In-Mine Use Requiring Water Right

Lila Canyon Mine

2019

COAL PRODUCTION

Water added to produce coal

4.50%	Inherent Moisture
7.75%	ROM Moisture
3.25%	moisture added to coal by the cutting operation

Projected yearly Tonnage

3,663,970	tons coal produced per year
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Tons of Water/Year

119,079	tons of water produced per year
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Lbs of Water/year

238,158,076	lbs of water/year
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Gallons of Water/Year

28,521,925	gal of water /year
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Acre_Feet of Water/Year

87.53	ac-ft of water/year - Consumptive Use
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In Mine Dust Suppression

18	Trucks per day	2,000	per truck
		36,000	gal/day
		357	days /year
		12,852,000	gal/year
		39.44	ac-ft of water/year - Consumptive Use

Typical Surface Uses Requiring a Water Right

- Bath House/Office/Shop
- Exterior Roads Dust Suppression
- Equipment Washing
- Coal Washing
- Ponds - Storage/Evaporation

Other does Not Require a Water right Currently

- In-Mine Ventilation/ Evaporation
- Dewatering with no associated use

TOTAL CONSUMPTIVE USE

126.97	ac-ft of water/year - Consumptive Use
0.356	ac-ft of water/day
0.179628	cfs

Total Consumptive Use in cfs = 0.18 cfs

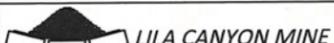
Gallon / Ton = 11.29

COLOR LEGEND

JANUARY 2021	2022
FEBRUARY 2020 / 2021	2023
MARCH 2020 / 2021	2024
APRIL 2020 / 2021	2025
MAY 2020 / 2021	
JUNE 2020 / 2021	
JULY 2020 / 2021	
AUGUST 2020 / 2021	
SEPTEMBER 2020 / 2021	
OCTOBER 2020 / 2021	
NOVEMBER 2020 / 2021	
DECEMBER 2020 / 2021	



2019 ANNUAL REPORT MAP



23415 North Lila Canyon Road
Green River, Utah 84525
MSHA MINE ID # 42-02241

UtahAmerican Energy, Inc.



794 NORTH "C" CANYON ROAD, EAST CARBON, UTAH 84520
P.O. BOX 910, EAST CARBON, UTAH 84520
PHONE: (435) 888-4000 FAX: (435) 888-4002

DRAWN BY	PJ	SCALE	1" = 2000'
APPROVED BY	KM	DATE	12 FEB. 2020
MODEL	2020 Budget Model Working		

IMPOUNDMENT INSPECTION AND CERTIFIED REPORT		Page 1 of	
Permit Number	ACT/007/013	Report Date	12-26-19
Mine Name	Lila Canyon		
Company Name	UtahAmerican Energy, Inc.		
Impoundment Identification	Impoundment Name	Sediment Pond #1 Large	
	Impoundment Number	Pond #1	
	UPDES Permit Number	UTG 040024	
	MSHA ID Number	NA	
IMPOUNDMENT INSPECTION			
Inspection Date	12-18-19		
Inspected By	Karin Madsen		
Reason for Inspection (Annual, Quarterly or Other Periodic Inspection, Critical Installation, or Completion of Construction)	4th Quarter		
<p>1. Describe any appearance of any instability, structural weakness, or any other hazardous condition.</p> <p>No appearance of instability, structural weakness, or any other hazardous condition was observed at the time of inspection.</p>			
Required for an impoundment which functions as a SEDIMENTATION POND.	<p>2. Sediment storage capacity, including elevation of 60% and 100% sediment storage volumes, and, estimated average elevation of existing sediment.</p> <p>Sediment Elevations:</p> <p style="text-align: center;">60% 5843.6'</p> <p style="text-align: center;">100% 5847.7'</p>		
	<p>3. Principle and emergency spillway elevations.</p> <p style="text-align: center;">Principle 5853.0'</p> <p style="text-align: center;">Emergency 5854.0'</p>		

4. **Field Information.** Provide current water elevation, whether pond is discharging, type and number of samples taken, monitoring/instrumentation information, inlet/outlet conditions, or other related activities associated with the pond including but not limited to sediment cleanout, pond decanting, embankment erosion/repairs, monitoring information, vegetation on outslopes of embankments, etc.

There is currently no water in the pond, and will not discharge in the near future. Inlet and outlet both in good shape and decant valve was tested and opened as designed. Slopes are in good condition and are well vegetated.

5. **Field Evaluation.** Describe any changes in the geometry of the impounding structure, average and maximum depths and elevations of impounded water, estimated sediment or slurry volume and remaining storage capacity, estimated volume of water impounded, and any other aspect of the impounding structure affecting its stability or function which has occurred during the reporting period.

No Changes. Pond is dry. Sediment marker is visible.

Ware Surveying recently surveyed the ponds, but has not reported his data yet.

Qualification Statement

I hereby certify that; I am experienced in the construction of impoundments; I am qualified and authorized under the direction of a Registered Professional Engineer to inspect the condition and appearance of impoundments in accordance with the certified and approved designs for this structure; that the impoundment has been maintained in accordance with approved design and meet or exceed the minimum design requirements under all applicable federal, state and local regulations; and, that inspections and inspection reports are made by myself and include any appearances of instability, structural weakness or other hazardous conditions of the structure affecting stability.

Signature:  Date: 12-26-11

CERTIFIED REPORT

IMPOUNDMENT EVALUATION (If NO, explain under Comments)	YES	NO
1. Is impoundment designed and constructed in accordance with the approved plan?	XXXXXX	

2. Is impoundment free of instability, structural weakness, or any other hazardous condition?	XXXXX	
3. Has the impoundment met all applicable performance standards and effluent limitations from the previous date of inspection?	XXXXX	

COMMENTS AND OTHER INFORMATION

NONE



Certification Statement: [PE Cert. Stamp]	<p>I hereby certify that; I am experienced in the construction of impoundments; I am qualified and authorized in the State of Utah to inspect and certify the condition and appearance of impoundments in accordance with the certified and approved designs for this structure; that the impoundment has been maintained in accordance with approved design and meet or exceed the minimum design requirements under all applicable federal, state and local regulations; and, that inspections and inspection reports are made by myself or under my direction and include any appearances of instability, structural weakness or other hazardous conditions of the structure affecting stability in accordance with the Utah R645 Coal Mining Rules.</p> <p>By: <u><i>Richard B. White, Consulting Civil Engineer</i></u> <small>(Full Name and Title)</small></p> <p>Signature: <u><i>Richard B. White</i></u> Date: <u><i>7 Jan 2020</i></u></p> <p>P.E. Number & State: <u><i>168246 Utah</i></u></p>
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IMPOUNDMENT INSPECTION AND CERTIFIED REPORT		Page 1 of					
Permit Number	CT/007/013	Report Date	12-26-19				
Mine Name	Lila Canyon						
Company Name	UtahAmerican Energy, Inc.						
Impoundment Identification	Impoundment Name	Sediment Pond #2 Small					
	Impoundment Number	Pond #2					
	UPDES Permit Number	NA					
	MSHA ID Number	NA					
IMPOUNDMENT INSPECTION							
Inspection Date	12-18-19						
Inspected By	Karin Madsen						
Reason for Inspection (Annual, Quarterly or Other Periodic Inspection, Critical Installation, or Completion of Construction)	4 th Quarter						
<p>1. Describe any appearance of any instability, structural weakness, or any other hazardous condition.</p> <p>No appearance of instability, structural weakness, or any other hazardous condition was observed at the time of inspection. Pond has some standing water, but it has frozen and the pond is snow covered. No discharge has occurred.</p> <p>Sediment levels are nearing clean-out levels and cleaning will continue when pond dries out. Improvements to drainage onsite will be completed soon.</p>							
Required for an impoundment which functions as a SEDIMENTATION POND.	<p>2. Sediment storage capacity, including elevation of 60% and 100% sediment storage volumes, and, estimated average elevation of existing sediment.</p> <p>Sediment Elevations:</p> <table style="margin-left: 40px;"> <tr> <td>60%</td> <td>5847.0'</td> </tr> <tr> <td>100%</td> <td>5848.1'</td> </tr> </table> <p>Pond has been partially cleaned. Sediment elevation in cleaned section is ~5838'. Due to large amount of water in the pond, a sediment level is currently not visible.</p>			60%	5847.0'	100%	5848.1'
	60%	5847.0'					
100%	5848.1'						
	<p>3. Principle and emergency spillway elevations.</p> <p>Principle 5849.61'</p> <p>Emergency 5851.25'</p>						

4. **Field Information.** Provide current water elevation, whether pond is discharging, type and number of samples taken, monitoring/instrumentation information, inlet/outlet conditions, or other related activities associated with the pond including but not limited to sediment cleanout, pond decanting, embankment erosion/repairs, monitoring information, vegetation on outslopes of embankments, etc.

Pond has approximately 3' of water in lower portion that is icing over. When pond dries out, it will be cleaned the rest of the way. The pond has not discharged.

5. **Field Evaluation.** Describe any changes in the geometry of the impounding structure, average and maximum depths and elevations of impounded water, estimated sediment or slurry volume and remaining storage capacity, estimated volume of water impounded, and any other aspect of the impounding structure affecting its stability or function which has occurred during the reporting period.

No changes. Sediment marker is visible.

Qualification Statement

I hereby certify that; I am experienced in the construction of impoundments; I am qualified and authorized under the direction of a Registered Professional Engineer to inspect the condition and appearance of impoundments in accordance with the certified and approved designs for this structure; that the impoundment has been maintained in accordance with approved design and meet or exceed the minimum design requirements under all applicable federal, state and local regulations; and, that inspections and inspection reports are made by myself and include any appearances of instability, structural weakness or other hazardous conditions of the structure affecting stability.

Signature:  Date: 12-26-19

CERTIFIED REPORT

IMPOUNDMENT EVALUATION (If NO, explain under Comments)

YES

NO

1. Is impoundment designed and constructed in accordance with the approved plan?	XXXXXX	
2. Is impoundment free of instability, structural weakness, or any other hazardous condition?	XXXXXX	
3. Has the impoundment met all applicable performance standards and effluent limitations from the previous date of inspection?	XXXXXX	

COMMENTS AND OTHER INFORMATION

NONE



<p>Certification Statement:</p> <p>[PE Cert. Stamp]</p>	<p>I hereby certify that; I am experienced in the construction of impoundments; I am qualified and authorized in the State of Utah to inspect and certify the condition and appearance of impoundments in accordance with the certified and approved designs for this structure; that the impoundment has been maintained in accordance with approved design and meet or exceed the minimum design requirements under all applicable federal, state and local regulations; and, that inspections and inspection reports are made by myself or under my direction and include any appearances of instability, structural weakness or other hazardous conditions of the structure affecting stability in accordance with the Utah R645 Coal Mining Rules.</p> <p>By: <u>Richard B. White, Consulting Civil Engineer</u> <small>(Full Name and Title)</small></p> <p>Signature: <u>Richard B. White</u> Date: <u>7 Jan 2020</u></p> <p>P.E. Number & State: <u>168246 Utah</u></p>
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Lila Canyon Mine
East Carbon, UTAH

2010 Rain Gauge Data Evaluation

Prepared For:

UtahAmerica Energy Inc.
794 C Canyon Road
East Carbon, UT 84520
435.888.4007 Tel

Prepared by:



HydroPlot
10969 Topview Rd
South Jordan, Utah 84009
801.608.2414 Tel

November 2019

INTRODUCTION:

The purpose of this study was to aid in addressing DOGM baseline data requirements and to specifically:

- o Describe the rain gauge data collection for the upper and lower areas within the Lila Canyon Mine Permit Area.
- o Evaluate data and recommend future sampling activities.

UEI installed the rain gauges to document precipitation on Little Park Wash and near the Lila Mine facilities.

RAIN GAUGES

As reported in the 2008 - 2018 reports, in accordance with DOGM stipulations, two rain gauges were installed within the Lila Canyon Mine Permit area. The lower elevation gauge is located to the south of the mine facilities area and the upper elevation gauge is located on top of the Book Cliffs in the Little Park Wash drainage area (near the IPA #2 well site). The locations of the rain gauges were determined by a Delorme Earthmate PN-20 GPS unit and are shown on Plate 1 and the coordinates and elevations are presented in Table 1.

METHODS: These rain gauges are tipping bucket type rain gauges with a data logger. The data are collected in 0.01" increments with a resolution of 0.01 inches per second. Readings are taken only when precipitation is recorded. The data are stored in the data logger memory until the data are downloaded. There is sufficient memory in the data loggers to store more than a year of data before a download is required.

Attempts are made to download the data regularly; however, due to difficulties in scheduling and winter weather conditions, it is sometimes hard to access the upper sites. This means that there are periods that are sometimes longer than desired between data downloads. The summary tables adjust these data to the various years as appropriate.

RESULTS: The available rainfall data are reported for the 1st, 2nd, and 3rd quarters of 2019 at the lower rain gauge and for the 4th quarter of 2018 and three quarters of 2018 at the upper rain gauge. Due to access issues in the fall of 2018, the upper gauge data was not downloaded. Thus, these data are reported in this annual report.

EVALUATION: Table 2 presents the lower gauge data and Table 3 presents to upper gauge data. The breakdown of the rainfall for each of the quarters for the last sampling period for the various gauges is:

Station ID	2018 4th	2019 1st	2019 2nd	2019 3rd	Annual
Lower	PR*	4.57"	4.24"	0.15"	8.96"
Upper	3.52"	4.27"	4.83"	0.53	13.15"

* Previously Reported

CONCLUSIONS AND RECOMMENDATIONS:

The 2017-18 data, plus the data from the 2008 - 2017 reports, demonstrate the types of rainfall that are common in the mine permit area. There are three types of precipitation events recorded: short duration small isolated storms, short duration, high intensity storms, and longer frontal type storms.

The rainfall types occurring in the area were described as a combination of short duration, high intensity thunderstorms and gentle frontal storms. These are the same types of storms that were recorded in the data collected. The only difference was the additional identification of short duration small isolated storms. These storms were generally less than 0.1 inches in depth and less than 60 minutes in duration. Therefore, the precipitation regime occurring in the mine permit area is now fully documented and matches that described in the PAP.

The data presented in the 2008 - 2019 summaries demonstrate the typical rainfall conditions for the mine permit area. The conditions described by these data are consistent with the descriptions presented in the PAP for the Lila Canyon Mine.

It is recommended that precipitation monitoring be continued to assist in understanding the precipitation events that occur in the mine area. This will identify those events that are greater than design events.

ATTACHMENT A

Annual Data Summary for Upper and Lower Rain Gauges

Lower Gauge Data

Upper Gauge Data

TOPSOIL MOVEMENT & CONSTRUCTION RECORD

UTAHAMERICAN ENERGY

LILA CANYON MINE

December 2008-February 2020

Report Updated February 2020

Prepared by

J. T. Paluso, P. E.

EIS ENVIRONMENTAL & ENGINEERING CONSULTING
31 North Main, Helper, Utah 84526

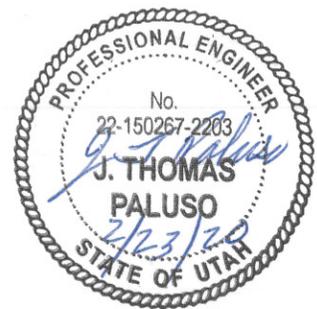


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Scope of Work

EIS Environmental & Engineering Consulting (EIS) was hired by UtahAmerican Energy, Inc (UEI) to monitor the removal of topsoil from the Lila Canyon Mine for Phase I construction activities.

Phase I consisted of the following activities:

- Construct stormwater detention ponds. These ponds are needed to contain all runoff coming from disturbed areas.
- Construct portal access road. Due to the length of time required to construct the underground rock slopes, it was necessary to construct the portal access road during Phase I of the construction activities.
- Remove topsoil from the west portion of the coal stockpile area. This area was needed to provide storage space for material generated during the construction of the underground rock slopes.
- Remove topsoil from the warehouse pad area. This area was also needed to provide storage space for material generated from the rock slope construction work.
- Construct employee parking and temporary bathhouse area. This area was needed to provide parking space and bathhouse facilities for the crews developing the rock slopes.

During Phase I activities the follow amounts of topsoil were generated from the various locations:

LOCATION	LOADS	VOLUME (Cu-Yd)
Employee Parking	378	12,110
Portal Road	238	7,622
Storm Water Detention Pond	154	4,943
Small Detention Pond	61	1,940
Coal Stockpile	269	8,601
Warehouse Pad	137	4,385
Topsoil Area	Push with Dozer	646
TOTAL		40,247 Cu-Yd

**LILA CANYON MINE
TOPSOIL & CONSTRUCTION ACTIVITY RECORD**

December 24, 2008 (Mel Coonrod & Matt Serfustini)

The following activities were observed during this visit:

1. Fill material was being removed from the stormwater detention pond. Some topsoil still remains to be removed from the pond area.
2. Work on portal access road was proceeding.
3. Topsoil was being removed from employee parking area.
4. Topsoil had been removed from west end of coal pile area.

PHOTOGRAPHS



LOOKING SOUTH TOWARDS TOPSOIL STORAGE AREA



MATERIAL REMOVED FROM TOPSOIL STORAGE SITE



**PORTAL ACCESS ROAD TOPSOIL NORTH OF COAL STOCKPILE, PHOTO
TAKEN LOOKING EAST**



**SOIL PROFILE ON PORTAL ACCESS ROAD LOOKING NORTH, TAKEN
ADJACENT TO PRIOR PHOTOGRAPH**



**TOPSOIL REMOVAL SOUTH END OF EMPLOYEE PARKING LOT
LOOKING SOUTH EAST**



SOUTH OF LOADOUT STATION LOOKING NORTH



SOUTH OF LOADOUT STATION LOOKING SOUTH



SOIL PROFILE AT THE SAME LOCATION AS THE TWO PREVIOUS PHOTOGRAPHS



BOULDER REMOVAL SOUTH OF LOADOUT STATION LOOKING NORTH



EMPLOYEE PARKING AREA LOOKING SOUTH

December 30, 2008 (Tom Paluso)

The following activities were observed during my site visit:

1. Fill material was being removed from portal access road. Contractor was working on side slopes on the portal access road.
2. Topsoil was being removed from employee parking area and delivered to the topsoil storage area.
3. Contractor was breaking large rocks on west end of coal storage pile. The large rocks were being reduced to make it easier to obtain necessary compaction with fill material being deposited in this area.

PHOTOGRAPHS



TOPSOIL REMOVAL FROM EMPLOYEE PARKING AREA



LOOKING SOUTHWEST OVER PROJECT AREA

January 7, 2009 (Tom Paluso)

The following activities were observed during site visit:

1. Contractor was transporting topsoil from office area to topsoil site.
2. Portal access road grade was being lowered northeast of employee's parking area.
3. Hydraulic hoes were working on portal area.

The stormwater detention pond still has approximately 15 percent of the topsoil to be removed. This material is located in the southeast corner of the pond. According to Shane Campbell this material was intentionally left to provide work during bad weather conditions. Shane also mentioned that topsoil removal at the warehouse site should probably start on January 15 or 16.

PHOTOGRAPHS



TOPSOIL REMOVAL FROM OFFICE AREA



BOULDERS BEING SEPARATED FROM TOPSOIL MATERIAL



LOWER PORTAL ACCESS ROAD GRADE



FILL MATERIAL BEING REMOVED FROM PORTAL ACCESS ROAD



HYDRAULIC BACKHOES WORKING ON PORTAL AREA

January 15, 2009 (Tom Paluso)

The following activities were observed during site visit:

1. Large boulders are being crushed to make gravel for this project.
2. Boulders are being stockpiled at future coal stockpile site. These boulders will be crushed into gravel.
3. Work on the portal area is still in progress.

PHOTOGRAPHS



BOULDERS BEING CRUSHED INTO GRAVEL



CRUSHED GRAVEL PILE



BOULDERS BEING STOCKPILED FOR CRUSHING

January 28, 2009 (Tom Paluso)

- The following activities were observed during site visit:
1. Removing material from north end of parking lot.
 2. Removing topsoil from stacking tube area.
 3. Employee parking lot grading.

PHOTOGRAPHS



PARKING LOT MATERIAL REMOVAL



FINAL GRADING WEST END OF EMPLOYEE PARKING AREA



EMPLOYEE PARKING LOOKING NORTH WITH CRUSHED GRAVEL PILE



BOULDER REMOVAL FROM STACKING TUBE AREA LOOKING EAST



TOPSOIL REMOVAL FROM STACKING TUBE AREA LOOKING NORTH



STACKING TUBE AREA LOOKING EAST TOWARDS PORTALS



EAST OF STACKING TUBE LOOKING WEST

January 29, 2009 (Tom Paluso)

The following activities were observed during site visit:

- 1 Removing material from north end of parking lot.
- 2 Removing topsoil from stacking tube area.
- 3 Employee parking lot grading.

0PHOTOGRAPHS



TOPSOIL PROFILE BY STACKING TUBE AREA



CLOSE-UP OF TOPSOIL PROFILE

February 6, 2009 (Tom Paluso)

The following activities were observed during site visit:

1. Removing topsoil from shop-warehouse area.
2. Completing work around silo area.

PHOTOGRAPHS



LOOKING SOUTHEAST FROM SILO AREA, TOPSOIL IS BEING COLLECTED



COLLECTING BOULDERS AND VEGETATION



LOOKING NORTHEAST FROM SILO AREA, TOPSOIL HAS BEEN REMOVED

February 18, 2009 (Tom Paluso)

The following activities were observed during site visit:

1. Removing topsoil from small Stormwater Detention Pond.
2. Removing remaining topsoil from large Stormwater Detention Pond.
3. Working on final grade for Portal Access Road

PHOTOGRAPHS



**SIGN LOCATED BY CONSTRUCTION OFFICE & NEAR SMALL
STORMWATER DETENTION POND**



**COLLECTING TOPSOIL AT SMALL STORMWATER RETENTION POND
(SRP)**



COLLECTING TOPSOIL AT SMALL SRP



REMOVING BOULDER FROM SMALL SRP



NORTHEAST SOIL PROFILE



SOUTHEAST SOIL PROFILE



**REMOVE REMAINING MATERIAL FROM LARGE STORMWATER
RETENTION POND SRP**



WEST END LARGE SRP



FINAL WORK ON PORTAL ROAD



TOPSOIL PILE LOOKING NORTHEAST



TOPSOIL PILE LOOKING SOUTH EAST

FOR TOPSOIL TRACKING PURPOSES, PHASE I OPERATIONS ENDS HERE

September 30, 2009 (Tom Paluso)

Lila Canyon Mine is in the process of installing a temporary coal conveyor belt that will be used to remove coal from the mine while the permanent conveyor belt is installed. According to Jay Marshall, this temporary conveyor belt may be used for up to five years while the permanent system is completed.

The construction of this temporary conveyor belt will require concrete supports for bent installations. Topsoil removal at this point is necessary to provide access for equipment required for bent construction. During this phase of topsoil removal 9,324 cubic yards of topsoil was salvaged.



REMOVAL OF TOPSOIL NEAR PORTAL



SOIL PROFILE



TOPSOIL BEING DELIVERED TO TOPSOIL PILE

April 28, 2010 (Tom Paluso)

Scamp Excavation was removing topsoil from the warehouse pad and temporary coal pad. During this section of topsoil removal, 3,772 cubic yards of topsoil was salvaged.



TOPSOIL REMOVAL NEAR PORTAL ROAD



CLOSEUP VIEW OF TOPSOIL MATERIAL



DISTRIBUTION OF TOPSOIL AT TOPSOIL STORAGE AREA

May 26, 2010 (Tom Paluso)

Nielson Construction is removing topsoil from the substation pad area. Approximately 2,100 cubic yards of topsoil was salvaged from this area.



TOPSOIL PROFILE



SUBSTATION PAD LOOKING TOWARDS PORTAL



TOPSOIL PILE AT SUBSTATION SITE



VEGETATION REMOVED FROM TOPSOIL AT SUBSTATION SITE

July 15, 2010 (Tom Paluso)

Scamp Excavation salvaging topsoil at stockpile pad and warehouse pad. Both of these pads are being enlarged to accommodate next phase of construction activities. A total of 6,930 cubic yards of topsoil was salvaged during this section of topsoil removal.



WAREHOUSE PAD BELOW PORTALS



VEGETATION SEPARATION AT SITE



TOPSOIL PLACED AT TOPSOIL PILE



TOPSOIL AT TOPSOIL PILE

June 23, 2014 (Tom Paluso)

Scamp Excavation removed topsoil from the Portal Borrow Area. This area is adjacent to portal road. The area on which the topsoil was removed was approximately 120' x 100'. A total of 333 cubic yards were removed and placed in the topsoil pile. Refer to the pictures below.



TOPSOIL REMOVAL PORTAL BORROW AREA (JULY 23, 2014)



LOOKING TOWARDS LILA CANYON



SOIL PROFILE AT TOP OF CUT

August 20, 2014 (Tom Paluso)

Scamp Excavation from August 20 through August 22, 2014, removed topsoil from the south end of the Upper Pad Area and the Middle Pad Area. A total of 1040 cubic yards were removed from these two areas. The pH of the soil was 7.1. The Upper Pad Area is approximately 500' long.

On August 25- 26, topsoil removal was moved to the Truck Loop Area. The Truck Loop Area is north and adjacent to the Access Road going to the portals. A total of 720 cubic yards were removed and sent to the topsoil pile.



UPPER PAD AREA LOOKING SOUTH WEST



UPPER PAD AREA LOOKING SOUTHEAST



TRUCK LOOP AREA LOOKING TOWARDS PORTAL



TRUCK LOOP AREA CLOSER TO PORTALS

March 30, 2015 (Tom Paluso)

Topsoil removal on the Future Parking Lot and Material Storage area was started on March 30, 2015. This area is located between the material storage yard and the west sediment pond. Removal of the large boulders and stockpiling of the topsoil was handled by foreman Mike Allred. This work continued until April 23, 2015, when Scamp Excavation hauled the topsoil and placed it into the topsoil storage area. A total of 1280 cubic yards of topsoil was moved to the topsoil storage area.

An access road leading to the west sediment pond, previously had topsoil removed. This road provided access to the west sediment pond from the material storage yard. This road was inside of this topsoil removal project.



LOOKING EAST AT STORAGE AREA FROM WEST SEDIMENT POND



LOOKING WEST FROM STORAGE YARD



LOOKING NORTH



ROCK PILE



LOOKING NORTH WEST OF MATERIAL STORAGE YARD



LOOKING WEST AFTER TOPSOIL HAS BEEN REMOVED

April 23, 2018 Storage Pad (Mel Coonrod)

Topsoil removal for a new equipment Storage Pad was started on April 23, 2018, and was completed on May 5, 2018. This newly stripped area is located south of the Substation and Substation grounding Field. Please refer to the photographs shown below. Scamp Excavation was the contractor that removed and hauled the topsoil to the topsoil storage area. Scamp also removed the large boulders from this area and placed them in the rock storage area. A total of 247 truckloads or 5,434 cubic yards of topsoil were stripped and moved to the topsoil storage area. Refer to Total Topsoil Removal Table located near the end of the report.



TOPSOIL VARIED FROM 8" TO 30" (AVERAGED 20")



LOADING TOPSOIL WITH 36" BUCKET



MOVING ROCKS



PLACING TOPSOIL ON TOPSOIL PILE



CLEARED AREA

May 30, 2019 (Mel Coonrod)

Topsoil removal for the New Shop Pad was started on May 30, 2019, and the first day of topsoil removal was supervised by Mel Coonrod. The second day of topsoil removal was supervised by Leland Sasser and the remaining days were supervised by Tom Paluso. Removal of topsoil was completed on June 6, 2019. Scamp Excavation was the contractor that removed and hauled the topsoil to the topsoil storage area. Scamp also removed the large boulders from this area and placed them in the rock storage area. A total of 235 truckloads or 7,520 cubic yards of topsoil were stripped and moved to the topsoil storage area. The pH of the topsoil ranged from 7.8 to 8.7. Refer to Total Topsoil Removal Table located near the end of the report.



STRIPPING NEAR TOPSOIL PILE



STRIPPING SOUTHEAST OF NEW SHOP PAD



LOADING TRUCKS



LOADED TRUCK GOING TO TOPSOIL PILE



TRUCK DUMPING AT TOPSOIL PILE



CLOSEUP OF MATERIAL BE PLACED AT THE TOPSOIL PILE

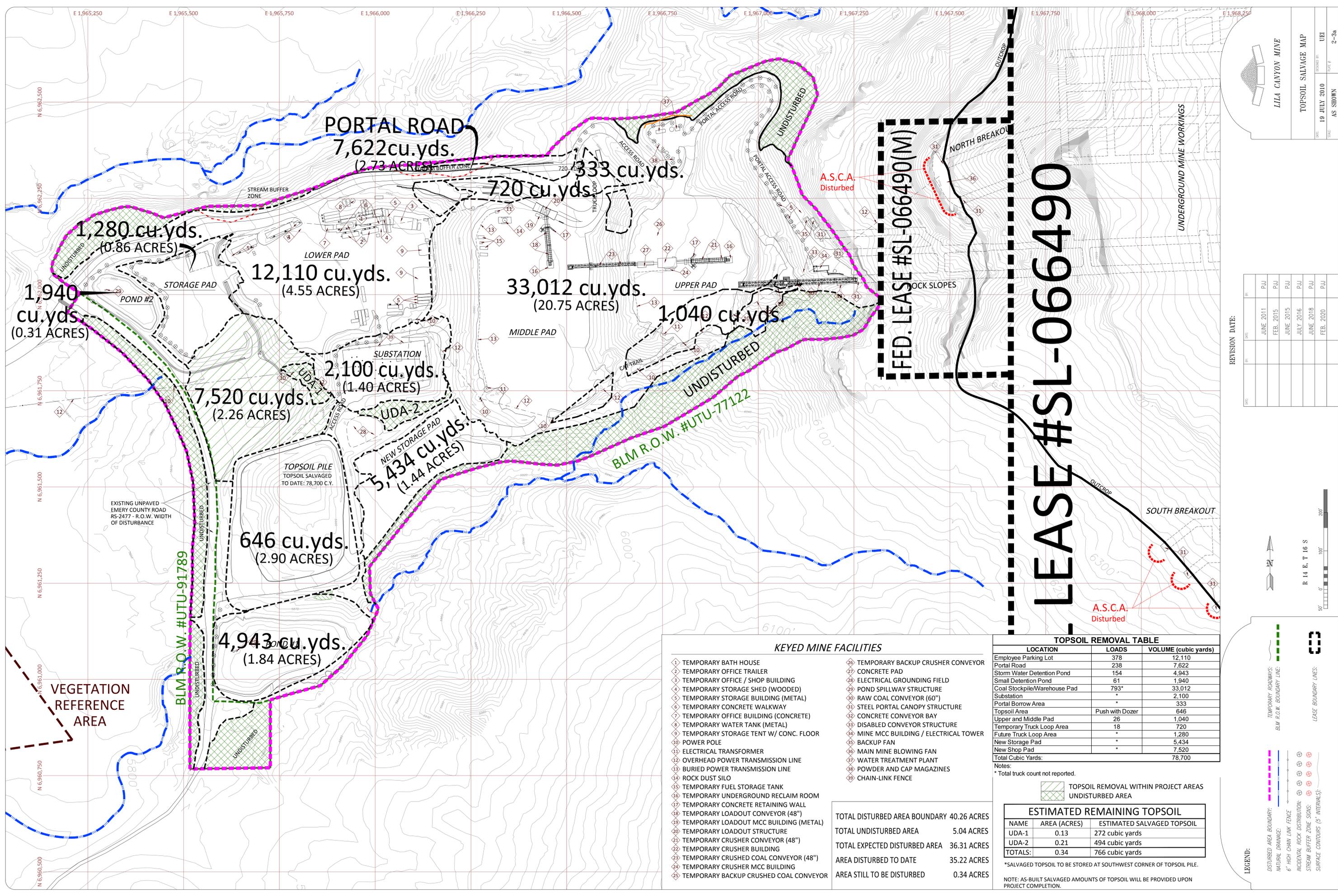
TOTAL TOPSOIL REMOVAL TABLE AS OF MAY 2018

LOCATION	LOADS	VOLUME (Cu-Yd)
Employee Parking Lot	378	12,110
Portal Road	238	7,622
Storm Water Detention Pond	154	4,943
Small Detention Pond	61	1,940
Coal Stockpile/Warehouse pads	793*	33,012
Topsoil Area	Push with Dozer	646
Substation Area	*	2,100
Portal Borrow Area	*	333
Upper & Middle Pod	26	1,040
Truck Loop Area	18	720
Future Truck Loop/Storage Yd.	32	1,280
Storage Pad	247	5,434
Shop Pad	235	7,520
TOTAL		78,700 Cu-Yd

*** Total Truck Count Not Reported**

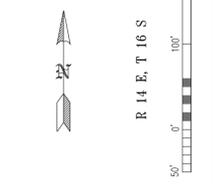
The above topsoil removal quantities were based upon recommendations from the earth removal contractor. Prior to final reclamation it is recommended that the topsoil pile be surveyed to determine the exact amount of topsoil available for reclamation.

APPENDIX 1
TOPSOIL REMOVAL MAP



REVISION DATE:

DATE	BY	DESCRIPTION
JUNE 2011	PAJ	
FEB. 2015	PAJ	
JUNE 2015	PAJ	
JULY 2016	PAJ	
JUNE 2018	PAJ	
FEB. 2020	PAJ	



LEGEND:

- DISTURBED AREA BOUNDARY: Dashed black line
- NATURAL DRAINAGE: Blue line with arrows
- 6" HIGH CHAIN LINK FENCE: Dashed green line
- INCIDENTAL ROCK DISTRIBUTION: Red circles with 'X'
- STREAM BUFFER ZONE SIGNS: Red circles with 'S'
- SURFACE CONTOURS (5' INTERVALS): Thin grey lines
- TEMPORARY ROADWAYS: Dashed red line
- BLM R.O.W. BOUNDARY LINE: Dashed green line
- LEASE BOUNDARY LINES: Dashed black line
- TOPSOIL REMOVAL WITHIN PROJECT AREAS: Green hatched area
- UNDISTURBED AREA: White area

FED. LEASE #SL-066490(M)

LEASE #SL-066490

KEYED MINE FACILITIES

- | | |
|--|--|
| ① TEMPORARY BATH HOUSE | ②③ TEMPORARY BACKUP CRUSHER CONVEYOR |
| ② TEMPORARY OFFICE TRAILER | ④ CONCRETE PAD |
| ③ TEMPORARY OFFICE / SHOP BUILDING | ⑤ ELECTRICAL GROUNDING FIELD |
| ④ TEMPORARY STORAGE SHED (WOODED) | ⑥ POND SPILLWAY STRUCTURE |
| ⑤ TEMPORARY STORAGE BUILDING (METAL) | ⑦ RAW COAL CONVEYOR (60") |
| ⑥ TEMPORARY CONCRETE WALKWAY | ⑧ STEEL PORTAL CANOPY STRUCTURE |
| ⑦ TEMPORARY OFFICE BUILDING (CONCRETE) | ⑨ CONCRETE CONVEYOR BAY |
| ⑧ TEMPORARY WATER TANK (METAL) | ⑩ DISABLED CONVEYOR STRUCTURE |
| ⑨ TEMPORARY STORAGE TENT W/ CONC. FLOOR | ⑪ MINE MCC BUILDING / ELECTRICAL TOWER |
| ⑩ POWER POLE | ⑫ BACKUP FAN |
| ⑪ ELECTRICAL TRANSFORMER | ⑬ MAIN MINE BLOWING FAN |
| ⑫ OVERHEAD POWER TRANSMISSION LINE | ⑭ WATER TREATMENT PLANT |
| ⑬ BURIED POWER TRANSMISSION LINE | ⑮ POWDER AND CAP MAGAZINES |
| ⑭ ROCK DUST SILO | ⑯ CHAIN-LINK FENCE |
| ⑮ TEMPORARY FUEL STORAGE TANK | |
| ⑯ TEMPORARY UNDERGROUND RECLAIM ROOM | |
| ⑰ TEMPORARY CONCRETE RETAINING WALL | |
| ⑱ TEMPORARY LOADOUT CONVEYOR (48") | |
| ⑲ TEMPORARY LOADOUT MCC BUILDING (METAL) | |
| ⑳ TEMPORARY LOADOUT STRUCTURE | |
| ㉑ TEMPORARY CRUSHER CONVEYOR (48") | |
| ㉒ TEMPORARY CRUSHER BUILDING | |
| ㉓ TEMPORARY CRUSHED COAL CONVEYOR (48") | |
| ㉔ TEMPORARY CRUSHER MCC BUILDING | |
| ㉕ TEMPORARY BACKUP CRUSHED COAL CONVEYOR | |

TOTAL DISTURBED AREA BOUNDARY	40.26 ACRES
TOTAL UNDISTURBED AREA	5.04 ACRES
TOTAL EXPECTED DISTURBED AREA	36.31 ACRES
AREA DISTURBED TO DATE	35.22 ACRES
AREA STILL TO BE DISTURBED	0.34 ACRES

TOPSOIL REMOVAL TABLE

LOCATION	LOADS	VOLUME (cubic yards)
Employee Parking Lot	378	12,110
Portal Road	238	7,622
Storm Water Detention Pond	154	4,943
Small Detention Pond	61	1,940
Coal Stockpile/Warehouse Pad	793*	33,012
Substation	*	2,100
Portal Borrow Area	*	333
Topsoil Area	Push with Dozer	646
Upper and Middle Pad	26	1,040
Temporary Truck Loop Area	18	720
Future Truck Loop Area	*	1,280
New Storage Pad	*	5,434
New Shop Pad	*	7,520
Total Cubic Yards:		78,700

Notes:
 * Total truck count not reported.

TOPSOIL REMOVAL WITHIN PROJECT AREAS
 UNDISTURBED AREA

ESTIMATED REMAINING TOPSOIL

NAME	AREA (ACRES)	ESTIMATED SALVAGED TOPSOIL
UDA-1	0.13	272 cubic yards
UDA-2	0.21	494 cubic yards
TOTALS:	0.34	766 cubic yards

*SALVAGED TOPSOIL TO BE STORED AT SOUTHWEST CORNER OF TOPSOIL PILE.
 NOTE: AS-BUILT SALVAGED AMOUNTS OF TOPSOIL WILL BE PROVIDED UPON PROJECT COMPLETION.

October 30, 2019

Karin Madsen
Utah American Energy
794 North "C" Canyon Road
P.O. Box 910
East Carbon, UT 84520-0910

Re: Opacity Monitoring at the Lila Canyon Mine

Dear Karin:

This letter presents the results of opacity monitoring performed at the Lila Canyon coal mine located in Emery County, Utah. The mine is operated by Utah American Energy, Inc. who contracted with Barr Engineering Co. (Barr) to perform the monitoring in compliance with the minor source Approval Order (AO) issued by the Utah Division of Air Quality (UDAQ). Joelle Dickson, an EPA Method 9 Certified Visible Emissions Reader, performed opacity readings at the Lila Canyon Mine on September 26, 2019.

The Clean Air Act amendments of 1970 directed the Environmental Protection Agency to develop New Source Performance Standards (NSPS) for new and modified stationary sources of air pollutants. These Standards of Performance for New Stationary Sources (40 CFR Part 60) have been adopted by the UDAQ, and all AOs issued by the agency include emissions limitations as well as requirements for monitoring, testing, reporting, and recordkeeping for the applicable standard. The Lila Canyon mine is subject to Subpart Y of the NSPS. The monitoring requirements are described below.

Lila Canyon Mine Emissions Testing Standards and Procedures

The Lila Canyon mine is subject to Section 60.255(b)(2) of Subpart Y of the NSPS which applies to facilities that commenced construction, reconstruction or modification after April 28, 2008. This Section requires that an initial performance test as well as repeat performance tests be conducted throughout the period of mine operation to demonstrate compliance with the applicable emissions standard stated in the AO. The AO for the Lila Canyon Mine was modified to include additional equipment and was approved on May 10, 2013. This AO also lowered the emissions limits for the existing temporary and planned permanent emissions sources at the mine. An initial performance test was performed on these sources in compliance with Section II.B of the AO in 2013. Opacity limits from emission points at the mine, as stated in the 2013 modification to the 2008 AO, are included in Table 1, below.

Method 9 visible emissions observations were performed according to the test methods and procedures outlined in the NSPS Subpart Y, Section 60.257(a)(1)-(3) and the 2013 AO. For sources subject to the NSPS, these procedures require one-hour observations of each source (ten 6-minute averages) unless all of the 6-minute averages are equal to or less than half the applicable opacity limit, then the observation time may be reduced to 30 minutes. As stated in Section II.B.1.b.2 of the AO, visible emissions observations for mobile equipment in operational areas use procedures similar to Method 9 but the requirement for observations at 15 second intervals over a 6-minute period does not apply. For run of

mine (ROM) coal transport and haul road emissions, observations were made at six points along the route of travel and averaged. For truck loadout, observations were made over one 5-minute and one 6-minute period using a modified Method 9 procedure, as the loadout process stopped after the initial 5-minute period. A tabulation of either the 6-minute or 6-point average visible emissions for each observed source is included in Attachment 1 and the opacity observation field sheets are included in Attachment 2. The observer's Method 9 certificate is included as Attachment 3.

Lila Canyon Mine Emissions Observation Results

The Lila Canyon Mine is permitted to produce 4.5 million tons of coal annually. Construction of the mine facilities is incomplete so it is currently operating below its full capacity. The temporary facilities include a 48" conveyor that delivers ROM coal to a storage pile which is then pushed by heavy equipment to an under-pile port which feeds a 42" conveyor that delivers the ROM coal to an enclosed screen and crusher building. The crushed coal is fed onto a 42" conveyor inside the building and dropped to a storage pile. Heavy equipment then pushes the coal to an under-pile port that feeds a conveyor belt to a loadout bin and chute system into haul trucks.

Barr performed opacity readings at six emissions sources at the mine. All 6-minute averages were less than half of the applicable opacity limit, so observations of sources subject to the NSPS were reduced to 30 minutes. Although the haul road has been paved, this source was observed to document emissions from particulates that accumulate on the paved surface. The opacity limits and highest average observed opacity for each observed source are included in Table 1.

Table 1 – Lila Canyon Mine Opacity Limits and Highest Average Observed Opacity

Emission Sources	Opacity Limits per 5/10/13 AO (%)	Observed Opacity, Highest Average (%)	Notes
Conveyor drop points	10	1.25 ¹	ROM conveyor
	10	0.42 ¹	Crushed coal conveyor
	10	0 ¹	Truck loadout
Enclosed screen/crusher	10	0 ¹	
All other points	20	0 ²	Heavy equipment (crushed coal transport)
	20	0 ²	Haul road

¹ 6-minute average

² 6-point average

Conclusions and Recommendations

Observed visible emissions from the viewed sources were less than half of the applicable limits and the Lila Canyon Mine is in compliance with the AO. According to Section 60.255(b)(2) of Subpart Y, the timing of repeat performance tests is dependent on the following conditions:

- i) If any 6-minute average opacity reading in the most recent performance test exceeds half the applicable opacity limit, a new performance test must be conducted within 90 operating days of the date that the previous performance test was required to be completed.
- ii) If all 6-minute average opacity readings in the most recent performance test are equal to or less than half the applicable opacity limit, a new performance test must be conducted within 12 calendar months of the date that the previous performance test was required to be completed.

Based on the above requirements for 6-minute observations, the next performance test would be required within 12 calendar months of the date of this performance test. However, if the AO is modified by the State due to changes at the mine including the addition of new equipment, the timing of the next performance test may change which would be specified in the approval conditions.

Barr has performed its work in a manner consistent with the care and skill ordinarily exercised by members of the environmental profession in accordance with the agreed upon scope of services. Within this context, Barr assumes responsibility for its own observations, along with its interpretation of the information gathered. No other warranty is made or intended.

Sincerely,

Barr Engineering



Joelle Dickson

Senior Environmental Specialist

Attachment 1: Tabulation of visible emissions averages

Attachment 2: Opacity observation field sheets

Attachment 3: Method 9 Certification

Utah American Energy					
Visible Emissions Averages					
Facility	Source	Date	Minutes	Average Opacity (%)	Notes
Lila Cyn Mine	ROM Coal Conveyor Drop Point	9/26/19	1-6	0.625	Observations stopped after 30 mins because all 6-minute averages are equal to or less than half of opacity limit.
			7-12	0.42	
			13-18	0.21	
			19-24	1.25	
			25-30	0	
	Enclosed Crusher & Screen	9/26/19	1-6	0	Observations stopped after 30 mins because all 6-minute averages are equal to or less than half of opacity limit.
			7-12	0	
			13-18	0	
			19-24	0	
			25-30	0	
	Crushed Coal Conveyor Drop Point	9/26/19	1-6	0	Observations stopped after 30 mins because all 6-minute averages are equal to or less than half of opacity limit.
			7-12	0	
			13-18	0	
			19-24	0	
			25-30	0.42	
	Truck Loadout	9/26/19	1-5	0	Observed 3 trucks loadouts during 11 minutes (process stopped during minute six)
			7-12	0	
Pass #					
	Heavy Equipment (ROM transport)	9/26/19	1	0	Observation at 6 pts for six passes of bulldozer
			2	2.5	
			3	0	
			4	0.83	
			5	0.83	
			6	2.5	
	Haul Road	9/26/19	1	3.33	Observed 4 trucks on the haul road. Observations 1-3 are downhill from the loadout and observation 4 is uphill from the mine base.
			2	0.83	
			3	2.5	
			4	0.83	

Bold indicates 6-minute average or 6-point average is greater than half of the allowable opacity limit for each source



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 www.barr.com

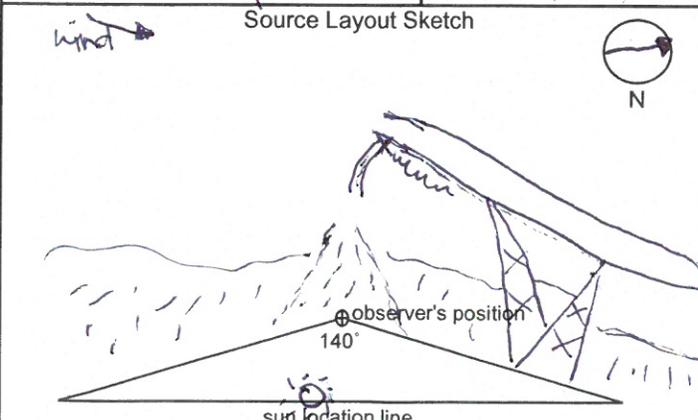
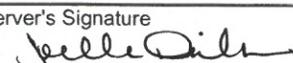
1-Hour Visible Emissions Observation Form

Source Name <i>Utah American Energy - Lila Canyon Mine</i>		Observation Date <i>9/26/19</i>		Start Time <i>1328</i>		Stop Time <i>1357</i>					
Address/Location <i>23415 N. Lila Canyon Rd.</i>		min/sec	0	15	30	45	min/sec	0	15	30	45
City <i>Green River</i>	State <i>UT</i>	1	0	0	0	0	31				
Source ID Number:		2	0	0	5	0	32				
Process Equipment <i>Rom Conveyor</i>		Operating Mode <i>11,901 T/day</i>		3	5	5	0	0	33		
Control Equipment <i>Water Sprayers</i>		Operating Mode <i>Continuous</i>		4	0	0	0	0	34		
Emission Point <i>conveyor drop point</i>		5	0	0	0	0	35				
Distance from Observer <i>75'</i>		Direction from Observer <i>N (350°)</i>		6	0	0	0	0	36		
Height Above Ground <i>60'</i>		Height Relative to Observer <i>50'</i>		7	0	0	0	5	37		
Plume Color <i>black</i>		Plume Type: continuous <input type="checkbox"/>		8	0	0	5	0	38		
		fugitive <input type="checkbox"/> intermittent <input checked="" type="checkbox"/>		9	0	0	0	0	39		
Point in the Plume at Which Opacity was Determined (from source):		10	0	0	0	0	40				
Horizontal Distance: <i>3'</i>		Vertical Distance: <i>-3'</i>		11	0	0	0	0	41		
Water Droplets Present no <input type="checkbox"/> yes <input checked="" type="checkbox"/>		Water Droplet Plume is attached <input type="checkbox"/> detached <input checked="" type="checkbox"/>		12	0	0	0	0	42		
Background Description (Color) <i>blue sky</i>		13	0	0	0	0	43				
Sky Conditions <i>25-30% clouds</i>		Ambient Temperature <i>75°F</i>		14	0	0	0	0	44		
Wind Speed <i>5-15 mph, 20 gusts</i>		Wind Direction <i>SW (220°)</i>		15	0	0	0	0	45		
Source Layout Sketch		16	0	0	0	0	46				
<p>Wind direction: <i>SW</i></p> <p>Sun location line: <i>140°</i></p> <p>Observer's position: <i>140°</i></p> <p>Legend: * sun → wind X emission point S plume</p>		17	0	0	0	0	47				
		18	0	0	5	0	48				
		19	0	0	0	0	49				
		20	5	5	0	0	50				
		21	0	0	0	0	51				
		22	0	0	0	0	52				
		23	0	0	0	0	53				
		24	10	0	5	5	54				
		25	0	0	0	0	55				
		26	0	0	0	0	56				
Avg. Opacity for Highest Period <i>1.25%</i>		# of Readings Above 10% were <i>0</i>		27	0	0	0	0	57		
Range of Opacity Readings		Minimum: <i>0</i>		Maximum: <i>10</i>		28	0	0	0	0	58
Observer's Name: <i>Joelle Dickson</i>		Observer's Signature <i>Joelle Dickson</i>		Date <i>9/26/19</i>		29	0	0	0	0	59
Organization: <i>Barr Engineering Co</i>		Certified by: <i>Opacitek</i>		Date <i>9/19/19</i>		30	0	0	0	0	60

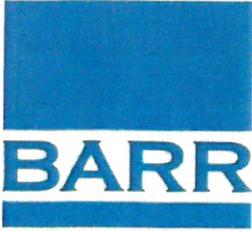


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1-Hour Visible Emissions Observation Form

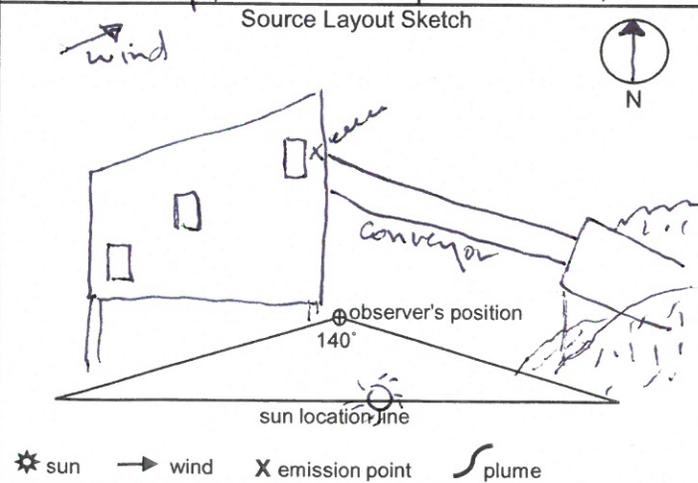
Source Name Utah American Energy - Lila Canyon Mine		Observation Date 9/26/19				Start Time 10:47		Stop Time 11:17			
Address/Location 23415 N. Lila Canyon Road		min/sec	0	15	30	45	min/sec	0	15	30	45
City Green River	State UT	1	0	0	0	0	31				
Source ID Number:		2	0	0	0	0	32				
Process Equipment crushed coal conveyor		Operating Mode 11,901 T/day		3	0	0	0	0	33		
Control Equipment water sprayers		Operating Mode continuous		4	0	0	0	0	34		
Emission Point Conveyor drop point		5	0	0	0	0	35				
Distance from Observer 90'		Direction from Observer NW (300°)		6	0	0	0	0	36		
Height Above Ground 60'		Height Relative to Observer 0'		7	0	0	0	0	37		
Plume Color Black		Plume Type: continuous <input type="checkbox"/>		8	0	0	0	0	38		
		fugitive <input type="checkbox"/> intermittent <input checked="" type="checkbox"/>		9	0	0	0	0	39		
Point in the Plume at Which Opacity was Determined (from source):		10	0	0	0	0	40				
Horizontal Distance: 4'		Vertical Distance: -3'		11	0	0	0	0	41		
Water Droplets Present no <input type="checkbox"/> yes <input checked="" type="checkbox"/>		Water Droplet Plume is attached <input type="checkbox"/> detached <input checked="" type="checkbox"/>		12	0	0	0	0	42		
Background Description (Color) tan cliffs		13	0	0	0	0	43				
Sky Conditions 15-25% clouds		Ambient Temperature 65°F		14	0	0	0	0	44		
Wind Speed 0-10 mph.		Wind Direction SSW (190°)		15	0	0	0	0	45		
Source Layout Sketch 		16	0	0	0	0	46				
		17	0	0	0	0	47				
		18	0	0	0	0	48				
		19	0	0	0	0	49				
		20	0	0	0	0	50				
		21	0	0	0	0	51				
		22	0	0	0	0	52				
		23	0	0	0	0	53				
		24	0	0	0	0	54				
		25	0	5	5	0	55				
		26	0	0	0	0	56				
		27	0	0	0	0	57				
		28	0	0	0	0	58				
		29	0	0	0	0	59				
		30	0	0	0	0	60				
Avg. Opacity for Highest Period 0.42%							# of Readings Above 10% were 0				
Range of Opacity Readings											
Minimum: 0			Maximum: 5								
Observer's Name: Joelle Dickson											
Observer's Signature 								Date 9/26/19			
Organization: Barr Engineering Co											
Certified by: Opacitek								Date 9/19/19			

* sun → wind X emission point S plume

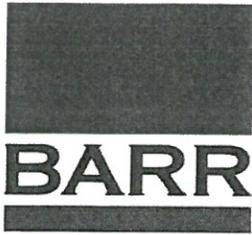


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1-Hour Visible Emissions Observation Form

Source Name <i>Utah American Energy - Lila Canyon Mine</i>		Observation Date <i>9/26/19</i>				Start Time <i>11:28</i>		Stop Time <i>12:03</i>			
Address/Location <i>23415 N. Lila Canyon Rd.</i>		min/sec	0	15	30	45	min/sec	0	15	30	45
City <i>Green River</i>	State <i>UT</i>	1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	31				
Source ID Number:		2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	32				
Process Equipment <i>Enclosed crusher/screen</i>		Operating Mode <i>11,901 T/day</i>		3	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	33		
Control Equipment <i>water sprayers</i>		Operating Mode <i>continuous</i>		4	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	34		
Emission Point <i>screen/crusher transfer</i>		5	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	35				
Distance from Observer <i>100'</i>		Direction from Observer <i>N (0°)</i>		6	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	36		
Height Above Ground <i>30'</i>		Height Relative to Observer <i>30'</i>		7	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	37		
Plume Color <i>N/A</i>		Plume Type: continuous <input type="checkbox"/>		8	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	38		
		fugitive <input type="checkbox"/> intermittent <input type="checkbox"/>		9	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	39		
Point in the Plume at Which Opacity was Determined (from source):		10	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	40				
Horizontal Distance: <i>3'</i>		Vertical Distance: <i>3'</i>		11	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	41		
Water Droplets Present no <input checked="" type="checkbox"/> yes <input type="checkbox"/>		Water Droplet Plume is attached <input type="checkbox"/> detached <input type="checkbox"/>		12	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	42		
Background Description (Color) <i>tan cliffs</i>		13	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	43				
Sky Conditions <i>15-25% clouds.</i>		Ambient Temperature <i>70°F</i>		14	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	44		
Wind Speed <i>0-10 mph.</i>		Wind Direction <i>SW (220°)</i>		15	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	45		
Source Layout Sketch 		16	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	46				
		17	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	47				
		18	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	48				
		19	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	49				
		20	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	50				
		21	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	51				
		22	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	52				
		23	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	53				
		24	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	54				
		25	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	55				
		26	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	56				
		27	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	57				
		28	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	58				
		29	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	59				
		30	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	60				
Avg. Opacity for Highest Period							# of Readings Above 10% were				
0							0				
Range of Opacity Readings											
Minimum: 0						Maximum: 0					
Observer's Name: <i>Joelle Dickson</i>											
Observer's Signature <i>Joelle Dickson</i>								Date <i>9/26/19</i>			
Organization: <i>Barr Engineering Co</i>											
Certified by: <i>Opacitek</i>								Date <i>9/9/19</i>			

stop
1150
start
1155

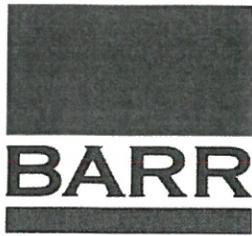


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Visible Emissions Observation Form

Source Name <i>Utah American Energy - Lila Canyon Mine</i>		Observation Date <i>9/26/19</i>		Start Time <i>1448</i>	Stop Time <i>1453</i>
Address/Location <i>23415 N. Lila Canyon Rd.</i>		<input checked="" type="checkbox"/> On-site reading		<input type="checkbox"/> Site Boundary Reading	
City <i>Green River</i>		State <i>UT</i>		min/sec	0
Activity <i>Coal load-out</i>		Operating Mode <i>intermittent</i>		15	30
Source Equipment <i>Truck loadout</i>		Operating Mode		45	
Control Method <i>None</i>		Operating Mode		1	0
Emission Point <i>Drop chute.</i>		<input checked="" type="checkbox"/> On-site reading		2	0
Distance from Observer <i>35'</i>		<input type="checkbox"/> Site Boundary Reading		3	0
Direction from Observer <i>E (90°)</i>		Start Time		4	0
Height Above Ground <i>15'</i>		Stop Time		5	0
Height Relative to Observer <i>15'</i>		min/sec		6	0
Plume Color <i>N/A</i>		Plume Type: continuous <input type="checkbox"/>		7	0
Background Description (Color) <i>gray soil</i>		fugitive <input type="checkbox"/> intermittent <input type="checkbox"/>		8	0
Sky Conditions <i>35-40% clouds</i>		Avg. Opacity for Highest Period <i>0</i>		9	0
Ambient Temperature <i>78° F</i>		# of Readings Above 10% were <i>0</i>		10	0
Wind Speed <i>5-10 mph.</i>		Range of Opacity Readings		11	0
Wind Direction <i>SW (220°)</i>		Minimum: <i>0</i> Maximum: <i>0</i>		12	0
Source Layout Sketch <i>wind</i>		Observer's Name: <i>Joelle Dickson</i>			
		Observer's Signature <i>Joelle Dickson</i>		Date <i>9/26/19</i>	
		Organization: <i>Barr Engineering</i>		Date <i>9/9/19</i>	
		Certified by: <i>Opacitek</i>			
		Comments: <i>Observed 3 truck loadouts, gaps between trucks indicated with process stop and start times above.</i>			

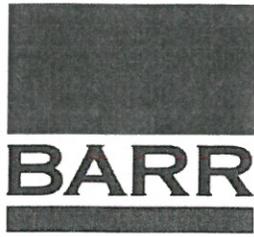
process stop
 stop 1501
 start 1502



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Visible Emissions Observation Form

Source Name <i>Utah American Energy-Lila Canyon Mine</i>		Observation Date <i>9/26/19</i>		Start Time <i>1537</i>	Stop Time <i>1543</i>
Address/Location <i>23415 N. Lila Canyon Rd.</i>		<input type="checkbox"/> On-site reading		<input type="checkbox"/> Site Boundary Reading	
City <i>Green River</i>		State <i>UT</i>			
Activity <i>Coal storage management</i>		min/sec			
Source Equipment <i>Bulldozer</i>		Operating Mode <i>intermittent</i>			
Control Method <i>None</i>		Operating Mode			
Emission Point <i>Dozer tracks</i>		min/sec			
Distance from Observer <i>60'</i>		Direction from Observer <i>E-SE (100-130°)</i>			
Height Above Ground <i>8-25'</i>		Height Relative to Observer <i>5-22'</i>			
Plume Color <i>tan</i>		Plume Type: continuous <input type="checkbox"/>			
		fugitive <input checked="" type="checkbox"/> intermittent <input type="checkbox"/>			
Background Description (Color) <i>Black coal piles</i>		Avg. Opacity for Highest Pass <i>2.5%</i>		# of Readings Above 20% were <i>0</i>	
Sky Conditions <i>25-35% clouds</i>		Ambient Temperature <i>80°F</i>		Range of Opacity Readings	
Wind Speed <i>5-10 mph, gust to 15</i>		Wind Direction <i>SW (220°)</i>		Minimum: <i>0</i> Maximum: <i>5</i>	
Observer's Name: <i>Joelle Dickson</i>		Observer's Signature <i>Joelle Dickson</i>		Date <i>9/26/19</i>	
Organization: <i>Barr Engineering</i>		Certified by: <i>Opacitek</i>		Date <i>9/9/19</i>	
		Comments: <i>Observed 6 passes of bulldozer at 6 points along travel path. Read down columns 1-6.</i>			



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Visible Emissions Observation Form

Source Name <i>Utah American Energy - Lila Canyon Mine</i>		Observation Date <i>9/26/19</i>		Start Time <i>1503</i>	Stop Time <i>1513</i>
Address/Location <i>23415 N. Lila Canyon Rd.</i>		<input checked="" type="checkbox"/> On-site reading		<input type="checkbox"/> Site Boundary Reading	
City <i>Green River</i>	State <i>UT</i>	min/sec	<i>1</i>	<i>2</i>	<i>3</i>
Activity <i>Haul Road</i>		1	<i>5</i>	<i>5</i>	<i>10</i>
Source Equipment <i>Haul truck tires</i>		2	<i>0</i>	<i>0</i>	<i>0</i>
Operating Mode <i>intermittent</i>		3	<i>0</i>	<i>0</i>	<i>0</i>
Control Method <i>Paved.</i>		4	<i>5</i>	<i>0</i>	<i>0</i>
Operating Mode <i>permanent</i>		5	<i>5</i>	<i>0</i>	<i>0</i>
Emission Point <i>Truck tires</i>		6	<i>5</i>	<i>0</i>	<i>5</i>
Distance from Observer <i>30-120'</i>		<input type="checkbox"/> On-site reading		Start Time	Stop Time
Direction from Observer <i>W-NE (270-70°)</i>		<input type="checkbox"/> Site Boundary Reading			
Height Above Ground <i>8'</i>		min/sec	<i>0</i>	<i>15</i>	<i>30</i>
Height Relative to Observer <i>8'</i>		1			<i>45</i>
Plume Color <i>tan</i>		2			
Plume Type: continuous <input type="checkbox"/>		3			
fugitive <input checked="" type="checkbox"/> intermittent <input type="checkbox"/>		4			
Background Description (Color) <i>brown road / tan cliffs / green trees</i>		5			
Sky Conditions <i>35-40% clouds</i>		6			
Ambient Temperature <i>78°F</i>		Avg. Opacity for Highest Pass <i>3.33%</i>		# of Readings Above 20% were <i>0</i>	
Wind Speed <i>5-10 mph</i>		Range of Opacity Readings			
Wind Direction <i>SW (210°)</i>		Minimum: <i>0</i>		Maximum: <i>10</i>	
Source Layout Sketch		Observer's Name: <i>Joelle Dickson</i>			
<p>Observer's Signature: <i>Joelle Dickson</i> Date: <i>9/26/19</i></p> <p>Organization: <i>Barr Engineering</i></p> <p>Certified by: <i>Opacitek</i> Date: <i>9/9/19</i></p> <p>Comments: <i>Observed 4 trucks. Observations 1-3 are downhill from loadout + 4 is uphill from mine offices.</i></p>					

OPACITEK

0201

Environmental Services

Awards this Certificate to

JOELLE DICKSON

For successfully completing the Federal EPA Method 9
Visible Emissions Evaluation Course and having met the
requirements necessary to evaluate visible emissions.



Manager

SOUTH JORDAN, UT

Location

SEPTEMBER 11, 2019

Valid Thru

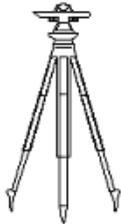
UtahAmerican Energy
Lila Canyon
 Subsidence Survey

9/29/2019

STATION	U.S. State Plane 1983 Utah Central (4302)		2015	2016	2017	2018	2019	Difference 2018-2019	POINT DESCRIPTION
	NORTHING	EASTING	ELEVATION	ELEVATION	ELEVATION	ELEVATION	ELEVATION		
3038	6963059.31	1970354.30	7136.95	7136.87	7136.80	7136.77	7136.80	-0.03	Panel 1, Boulder
3039	6962366.57	1970260.70	7094.84	7094.77	7094.10	7094.61	7094.62	-0.01	Panel 1, Boulder
3040	6961183.95	1970973.83	7036.94	7037.02	7037.04	7037.17	7037.10	0.07	Panel 1, Rebar
3521	6957129.21	1975742.38			6841.08	6840.81	6835.65	5.16	Panel 7, Rebar
3524	6956311.45	1975096.11			6797.62	6793.26	6792.76	0.50	Panel 5, Rebar
Camp	6956954.55	1975215.55			6820.30	6816.20	6815.10	1.10	Panel 6, Roof bolt

All coordinates are U.S. Survey Feet

C.A.F. at Control Point "Portal" = 1.0003657322



WARE SURVEYING, L.L.C.



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 UT 84501
 Office: 435-820-4335