Canyon Fuel Company, LLC
A Subsidiary of Bowie Resource Holdings, LLC

Dugout Canyon Mine
P.O. Box 1029
Wellington, Utah 84542
(435) 637-6360
Fax (435) 636-2897

March 23, 2015

Utah Coal Regulatory Program
Utah Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
Salt Lake City, UT 84114-5801

RE: 2014 Annual Report for Dugout Canyon Mine

To Whom It May Concern:

Please find attached to this e-mail a copy of the Annual Report for 2014 for Dugout Canyon Mine with relevant appendices.

If you have any questions or require further information, please contact me at (435) 636-2898 or Dave Spillman at (435) 636-2872.

Sincerely,

Bill King
Mining Engineer

Attachments

cc. Chris Hansen
Dave Spillman

Print Form | Submit by Email | Reset Form

Annual Report

This Annual Report shows information the Division has for your mine. Submit the completed document and any additional information identified in the Appendices to the Division by the date specified in the cover letter**.** During a complete inspection an inspector will check and verify the information.

GENERAL INFORMATION

Company Name	Canyon Fuel Company, LLC	Mine Name	Dugout Mine
Permit Number	C/007/0039	Permit expiration Date	March 17, 2018
Operator Name	Same	Phone Number	+1 (435) 637-6360
Mailing Address	PO Box 1029	Email	dspillman@bowieresources.com
City	Wellington		
State	Utah	Zip Code	84542

		DOGM File Location or Annual Report Location
Excess Spoil Piles	☐ Required ☒ Not Required	
Refuse Piles	☒ Required ☐ Not Required	Attached
Impoundments	☒ Required ☐ Not Required	Attached
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: ANNUAL RAPTOR SURVEYS
Objective: To obtain baseline data prior to mining disturbances including subsidence of cliff habitat and any surface disturbances (construction, reclamation, or exploration). Conduct follow-up surveys within one year if nests were observed during the baseline surveys and if the nest or raptors could be impacted from mining (subsidence or proximity to surface facilities).
Frequency: Annually
Status: Ongoing
Reports: Annual
Citation: MRP, Volume 2, Chapter 3, Section 322, Page 3-13

Operator Comments

See Appendix D -Confidential

Reviewer Comments ☐ Met Requirements ☐ Did Not Meet Requirements

Title: SUBSIDENCE MONITORING VISUAL INSPECTIONS
Objective: To check for surface subsidence features.
Frequency: Annually
Status: Ongoing
Reports: Annual
Citation: MRP, Volume 3, Chapter 5, Section 525.100, page 5-29

Operator Comments

See appendix C

Reviewer Comments ☐ Met Requirements ☐ Did Not Meet Requirements

Title: WASTE ROCK SAMPLING
Objective: To protect ground and surface water and potentially substantiate lesser cover at the waste rock site.
Frequency: One sample per 5,000 cubic yards taken to the waste rock site. Acid/toxic material to be buried within 30 days and should be compacted, and isolated from water infiltration.
Status: Ongoing. **Please indicate the volumes or tonnage placed during the year into the refuse pile and the remaining capacity in the pile.**
Reports: Annual report, and to be included in RA attachment 5-4.
Citation: MRP, Chapter 5, Section 513.400, Section 528.300, Section 536 and Refuse Pile Amendment Volume, Section 536.200

Operator Comments

See Appendix C

Reviewer Comments ☐ Met Requirements ☐ Did Not Meet Requirements

Title: SEALING OF WELLS
Objective: Permanent casing and sealing of wells when no longer in use.
Frequency: Once upon termination of use.
Status: N/A
Reports: Report on status of wells
Citation: Chp. 6, Section 631, Chp. 7, Section 765

Operator Comments

Degas Wells G-2 through G-7, G-9 through G-14, G-16, G-18, G-19, G-22, G-25, G-26, G-30, G-31 are sealed.

Reviewer Comments ☐ Did Not Meet Requirements ☐ Met 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: OVERBURDEN SAMPLING AND ANALYSIS
Objective: Generate quality substitute topsoil
Frequency: At Final Reclamation
Status: long term
Reports: at final reclamation
Citation: MRP, Chapter 2, Section 224, Section 233.100, .300, and .400.

Title: NUTRIENTS AND AMENDMENTS
Objective: Establishment of vegetation
Frequency: At final reclamation
Status: Long term
Reports: At final reclamation
Citation: MRP, Chapter 2, Section 243; Refuse Pile Amendment Volume, Section 243.

OPERATOR COMMENTS (OPTIONAL)

REVIEWER COMMENTS

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:

N/A

Reviewer Comments

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	Appendix C	☒	☐	☐	☒
Mine Map - Gilson Seam	Appendix B	☒	☐	☐	☒
Mine Map - Rock Canyon Seam	Appendix B	☒	☐	☐	☒
		☐	☐	☐	☐
		☐	☐	☐	☐

Reviewer Comments ☐ Met Requirements ☐ Did Not Meet Requirements

Please note that mine maps are not considered confidential as specified by R645-300-124.300.

APPENDIX A

Certified Reports

Excess Spoil Piles

Refuse Piles

Impoundments

As required under R645-301-514

CONTENTS

Refuse Pile Inspections

Impoundment Inspections

*To enter text, click in the box and type your response. If a box already contains an entry select the entry and type the replacement. You can use the **tab** key to move from one field to the next. To select a check box, click in the box or type an x.*

GENERAL INFORMATION

Report Date	January 8, 2014
Permit Number	C/007/039
Company Name	Canyon Fuel Company, LLC - Dugout Canyon Mine

EXCESS SPOIL PILE OR REFUSE PILE IDENTIFICATION

Pile Name	Dugout Canyon Mine Refuse Pile
Pile Number	1211-UT-09-01890-01
MSHA ID Number	42-01890

Inspection Date	January 3, 2014
Inspected By	David G. Spillman
Reason for Inspection	Quarterly Inspection & Certification

Attachment to Report? Yes ☐ No ☒

Field Evaluation

1. Foundation preparation, including the removal of all organic material and topsoil.

The foundation preparation was found to be in accordance with the approved plan.

2. Placement of underdrains and protective filter systems.

N/A

3. Installation of final surface drainage systems

All necessary drainage systems were constructed, functional and well established at the time of the inspection.

4. Placement and compaction of fill materials

Placement and compaction of this refuse appears to have been completed in accordance with the approved plan.

5. Final grading and revegetation of fill.

N/A

6. Appearances of instability, structural weakness, and other hazardous conditions

There was no appearance of instability, structural weakness or other hazardous conditions observed during this inspection.

7. Other comments. Describe any changes in the geometry of the Excess Spoil/Refuse Pile structure, instrumentation, average and maximum lifts of materials placed in the pile, elevations of active benches, total and remaining storage capacity of the structure, evidence of fires in the pile and abatment of such fires, volumes of materials placed in the structure during the year, and any other aspect of the structure affecting its stability or function which has occurred during the reporting period

The site was not active at the time of the inspection.

CERTIFICATION STATEMENT

I hereby certify that; I am experienced in the construction of earth and rock fills; I am qualified and authorized in the State of Utah to inspect and certify the condition and appearance of earth and rock fills in accordance with the certified and approved designs for this structure; that the fill structure has been maintained in accordance with the 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.

By David G. Spillman, Technical Services Manager
Full Name and Title

Signature David G. Spillman Date 1/8/14

P.E. Number and State No. 151610, State of Utah

[Cert. Stamp]

LICENSED PROFESSIONAL ENGINEER
No. 151610
DAVID G.
SPILLMAN
STATE OF UTAH

*To enter text, click in the box and type your response. If a box already contains an entry select the entry and type the replacement. You can use the **tab** key to move from one field to the next. To select a check box, click in the box or type an x.*

GENERAL INFORMATION

Report Date	April 17, 2014
Permit Number	C/007/039
Company Name	Canyon Fuel Company, LLC - Dugout Canyon Mine

EXCESS SPOIL PILE OR REFUSE PILE IDENTIFICATION

Pile Name	Dugout Canyon Mine Refuse Pile
Pile Number	1211-UT-09-01890-01
MSHA ID Number	42-01890

Inspection Date	April 16, 2014
Inspected By	David G. Spillman
Reason for Inspection	Quarterly Inspection & Certification

Attachment to Report? Yes ☐ No ☒

Field Evaluation

1. Foundation preparation, including the removal of all organic material and topsoil.

The foundation preparation was found to be in accordance with the approved plan.

2. Placement of underdrains and protective filter systems.

N/A

3. Installation of final surface drainage systems

All necessary drainage systems were constructed, functional and well established at the time of the inspection.

4. Placement and compaction of fill materials

Placement and compaction of this refuse appears to have been completed in accordance with the approved plan.

5. Final grading and revegetation of fill.

N/A

6. Appearances of instability, structural weakness, and other hazardous conditions

There was no appearance of instability, structural weakness or other hazardous conditions observed during this inspection.

7. Other comments. Describe any changes in the geometry of the Excess Spoil/Refuse Pile structure, instrumentation, average and maximum lifts of materials placed in the pile, elevations of active benches, total and remaining storage capacity of the structure, evidence of fires in the pile and abatment of such fires, volumes of materials placed in the structure during the year, and any other aspect of the structure affecting its stability or function which has occurred during the reporting period

The site was not active at the time of the inspection.

CERTIFICATION STATEMENT

I hereby certify that; I am experienced in the construction of earth and rock fills; I am qualified and authorized in the State of Utah to inspect and certify the condition and appearance of earth and rock fills in accordance with the certified and approved designs for this structure; that the fill structure has been maintained in accordance with the 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.

By David G. Spillman, Technical Services Manager
Full Name and Title

Signature David G. Spillman Date 4/17/14

P.E. Number and State No. 151610, State of Utah

[Cert. Stamp]

LICENSED PROFESSIONAL ENGINEER
No. 151610
DAVID G. SPILLMAN
STATE OF UTAH

*To enter text, click in the box and type your response. If a box already contains an entry select the entry and type the replacement. You can use the **tab** key to move from one field to the next. To select a check box, click in the box or type an x.*

GENERAL INFORMATION

Report Date	September 9, 2014
Permit Number	C/007/039
Company Name	Canyon Fuel Company, LLC - Dugout Canyon Mine

EXCESS SPOIL PILE OR REFUSE PILE IDENTIFICATION

Pile Name	Dugout Canyon Mine Refuse Pile
Pile Number	1211-UT-09-01890-01
MSHA ID Number	42-01890

Inspection Date	September 8, 2014
Inspected By	David G. Spillman
Reason for Inspection	Quarterly Inspection & Certification

Attachment to Report? Yes ☐ No ☒

Field Evaluation

1. Foundation preparation, including the removal of all organic material and topsoil.

The foundation preparation was found to be in accordance with the approved plan.

2. Placement of underdrains and protective filter systems.

N/A

3. Installation of final surface drainage systems

All necessary drainage systems were constructed, functional and well established at the time of the inspection.

4. Placement and compaction of fill materials

Placement and compaction of this refuse appears to have been completed in accordance with the approved plan.

5. Final grading and revegetation of fill.

N/A

6. Appearances of instability, structural weakness, and other hazardous conditions

There was no appearance of instability, structural weakness or other hazardous conditions observed during this inspection.

7. Other comments. Describe any changes in the geometry of the Excess Spoil/Refuse Pile structure, instrumentation, average and maximum lifts of materials placed in the pile, elevations of active benches, total and remaining storage capacity of the structure, evidence of fires in the pile and abatment of such fires, volumes of materials placed in the structure during the year, and any other aspect of the structure affecting its stability or function which has occurred during the reporting period

The site was not active at the time of the inspection, however, it was observed that refuse had been recently delivered to the site. There was also equipment on site for placement of this refuse. A check of the records indicated that the last refuse sample analysis was completed from a sample taken on November 21, 2013. Since that date, an additional 3,583 tons have been deposited on site. This equates to 2,413 yd3 at 110 lbs/lb. Since the approved permit requires one sample per every 5,000 yd3, no additional sampling is required at this point in time.

CERTIFICATION STATEMENT

I hereby certify that; I am experienced in the construction of earth and rock fills; I am qualified and authorized in the State of Utah to inspect and certify the condition and appearance of earth and rock fills in accordance with the certified and approved designs for this structure; that the fill structure has been maintained in accordance with the 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.

By David G. Spillman, Technical Services Manager
Full Name and Title

Signature David G. Spillman Date 9/9/14

P.E. Number and State No. 151610, State of Utah

[Cert. Stamp]

LICENSED PROFESSIONAL ENGINEER
No. 151610
DAVID G. SPILLMAN
STATE OF UTAH

*To enter text, click in the box and type your response. If a box already contains an entry select the entry and type the replacement. You can use the **tab** key to move from one field to the next. To select a check box, click in the box or type an x.*

GENERAL INFORMATION

Report Date	January 5, 2015
Permit Number	C/007/039
Company Name	Canyon Fuel Company, LLC - Dugout Canyon Mine

EXCESS SPOIL PILE OR REFUSE PILE IDENTIFICATION

Pile Name	Dugout Canyon Mine Refuse Pile
Pile Number	1211-UT-09-01890-01
MSHA ID Number	42-01890

Inspection Date	November 11, 2014
Inspected By	David G. Spillman
Reason for Inspection	Quarterly Inspection & Certification

Attachment to Report? Yes ☐ No ☒

Field Evaluation

1. Foundation preparation, including the removal of all organic material and topsoil.

The foundation preparation was found to be in accordance with the approved plan.

2. Placement of underdrains and protective filter systems.

N/A

3. Installation of final surface drainage systems

All necessary drainage systems were constructed, functional and well established at the time of the inspection.

4. Placement and compaction of fill materials

Placement and compaction of this refuse appears to have been completed in accordance with the approved plan.

5. Final grading and revegetation of fill.

N/A

6. Appearances of instability, structural weakness, and other hazardous conditions

There was no appearance of instability, structural weakness or other hazardous conditions observed during this inspection.

7. Other comments. Describe any changes in the geometry of the Excess Spoil/Refuse Pile structure, instrumentation, average and maximum lifts of materials placed in the pile, elevations of active benches, total and remaining storage capacity of the structure, evidence of fires in the pile and abatment of such fires, volumes of materials placed in the structure during the year, and any other aspect of the structure affecting its stability or function which has occurred during the reporting period

The site was active at the time of the inspection. It was observed that refuse had been recently delivered to the site and equipment was placing the refuse according to plan. A check of the records indicated that 23,075.90 tons (15,539.33 yd3 at 110 lbs/ft3) had been placed at this facility YTD. Also, the most recent sample of refuse taken for analysis was obtained on 11/4/14.

CERTIFICATION STATEMENT

I hereby certify that; I am experienced in the construction of earth and rock fills; I am qualified and authorized in the State of Utah to inspect and certify the condition and appearance of earth and rock fills in accordance with the certified and approved designs for this structure; that the fill structure has been maintained in accordance with the 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.

By David G. Spillman, Technical Services Manager
Full Name and Title

Signature David G. Spillman Date 1/5/15

P.E. Number and State No. 151610, State of Utah

[Cert. Stamp]

LICENSED PROFESSIONAL ENGINEER
No. 151610
DAVID G. SPILLMAN
STATE OF UTAH

IMPOUNDMENT INSPECTION AND CERTIFIED REPORT			Page 1 of 2
Permit Number	*ACT/007/039*	**Report Date**	*01/08/14*
Mine Name	*Dugout Canyon Mine*		
Company Name	*Canyon Fuel Company, LLC*		
Impoundment Identification	**Impoundment Name**	*Refuse Pile Sedimentation Pond*	
	Impoundment Number	*None*	
	UPDES Permit Number	*UT0025593*	
	MSHA ID Number	*Impoundment –None (Refuse Pile 1211-UT-09-01890-01)*	

IMPOUNDMENT INSPECTION

Inspection Date	*01/03/14*
Inspected By	*Dave Spillman*
Reason for Inspection (Annual, Quarterly or Other Periodic Inspection, Critical Installation, or Completion of Construction)	*Quarterly Inspection / Certification*

1. Describe any appearance of any instability, structural weakness, or any other hazardous condition.

Construction of the Refuse Pile Sedimentation Pond has been completed in accordance with the approved plan. There were no signs instability, structural weakness or other hazardous conditions observed during this inspection.

Required for an impoundment which functions as a SEDIMENTATION POND.

2. Sediment storage capacity, including elevation of 60% and 100% sediment storage volumes, and, estimated average elevation of existing sediment.

Sediment Storage Capacity (as designed) - 100% = 0.78 acre-feet @ an elevation of 5,895.9 feet

- 60% = 0.47 acre-feet @ an elevation of 5,894.7 feet

3. Principle and emergency spillway elevations.

Emergency Spillway Elevation (as designed) - 5,902 feet

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.

The pond contained no impounded water at the time of the inspection. There was a thin layer of snow, approximately two inches, covering portions of the pond.

This pond has never 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.

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:** _____

CERTIFIED REPORT

IMPOUNDMENT EVALUATION (If NO, explain under Comments)	YES	NO
1. Is impoundment designed and constructed in accordance with the approved plan?	*X*	
2. Is impoundment free of instability, structural weakness, or any other hazardous condition?	*X*	
3. Has the impoundment met all applicable performance standards and effluent limitations from the previous date of inspection?	*X*	

COMMENTS AND OTHER INFORMATION

Certification Statement:

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.

[PE Seal]
LICENSED PROFESSIONAL ENGINEER
No. 151610
DAVID G. SPILLMAN
STATE OF UTAH

By: *David G. Spillman, Technical Services Manager*
(Full Name and Title)

Signature: *David G. Spillman* **Date:** *01/08/14*

P.E. Number & State: *No. 151610, State of Utah*

IMPOUNDMENT INSPECTION AND CERTIFIED REPORT			Page 1 of 2
Permit Number	*ACT/007/039*	**Report Date**	*04/17/14*
Mine Name	*Dugout Canyon Mine*		
Company Name	*Canyon Fuel Company, LLC*		
Impoundment Identification	**Impoundment Name**	*Refuse Pile Sedimentation Pond*	
	Impoundment Number	*None*	
	UPDES Permit Number	*UT0025593*	
	MSHA ID Number	*Impoundment –None (Refuse Pile 1211-UT-09-01890-01)*	

IMPOUNDMENT INSPECTION

Inspection Date	*04/16/14*
Inspected By	*Dave Spillman*
Reason for Inspection (Annual, Quarterly or Other Periodic Inspection, Critical Installation, or Completion of Construction)	*Quarterly Inspection / Certification*

1. Describe any appearance of any instability, structural weakness, or any other hazardous condition.

Construction of the Refuse Pile Sedimentation Pond has been completed in accordance with the approved plan. There were no signs instability, structural weakness or other hazardous conditions observed during this inspection.

Required for an impoundment which functions as a SEDIMENTATION POND.

2. Sediment storage capacity, including elevation of 60% and 100% sediment storage volumes, and, estimated average elevation of existing sediment.

Sediment Storage Capacity (as designed) - 100% = 0.78 acre-feet @ an elevation of 5,895.9 feet

- 60% = 0.47 acre-feet @ an elevation of 5,894.7 feet

3. Principle and emergency spillway elevations.

Emergency Spillway Elevation (as designed) - 5,902 feet

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.

The pond contained no impounded water at the time of the inspection.

This pond has never 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.

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:** _____

CERTIFIED REPORT

IMPOUNDMENT EVALUATION (If NO, explain under Comments)	YES	NO
1. Is impoundment designed and constructed in accordance with the approved plan?	*X*	
2. Is impoundment free of instability, structural weakness, or any other hazardous condition?	*X*	
3. Has the impoundment met all applicable performance standards and effluent limitations from the previous date of inspection?	*X*	

COMMENTS AND OTHER INFORMATION

Certification Statement:

[PE Seal Stamp]
LICENSED PROFESSIONAL ENGINEER
No. 151610
DAVID G. SPILLMAN
STATE OF UTAH

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.

By: *David G. Spillman, Technical Services Manager*
(Full Name and Title)

Signature: David G. Spillman **Date:** *04/17/14*

P.E. Number & State: *No. 151610, State of Utah*

IMPOUNDMENT INSPECTION AND CERTIFIED REPORT			Page 1 of 2
Permit Number	*ACT/007/039*	**Report Date**	*09/09/14*
Mine Name	*Dugout Canyon Mine*		
Company Name	*Canyon Fuel Company, LLC*		
Impoundment Identification	**Impoundment Name**	*Refuse Pile Sedimentation Pond*	
	Impoundment Number	*None*	
	UPDES Permit Number	*UT0025593*	
	MSHA ID Number	*Impoundment –None (Refuse Pile 1211-UT-09-01890-01)*	

IMPOUNDMENT INSPECTION

Inspection Date	*09/08/14*
Inspected By	*Dave Spillman*
Reason for Inspection (Annual, Quarterly or Other Periodic Inspection, Critical Installation, or Completion of Construction)	*Quarterly Inspection / Certification*

1. Describe any appearance of any instability, structural weakness, or any other hazardous condition.

Construction of the Refuse Pile Sedimentation Pond has been completed in accordance with the approved plan. There were no signs instability, structural weakness or other hazardous conditions observed during this inspection.

Required for an impoundment which functions as a SEDIMENTATION POND.

2. Sediment storage capacity, including elevation of 60% and 100% sediment storage volumes, and, estimated average elevation of existing sediment.

Sediment Storage Capacity (as designed) - 100% = 0.78 acre-feet @ an elevation of 5,895.9 feet

- 60% = 0.47 acre-feet @ an elevation of 5,894.7 feet

3. Principle and emergency spillway elevations.

Emergency Spillway Elevation (as designed) - 5,902 feet

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.

The pond contained approximately 6 inches of impounded water at the time of the inspection.

Sediment levels were observed as being below the established 60% levels.

This pond has never 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.

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.

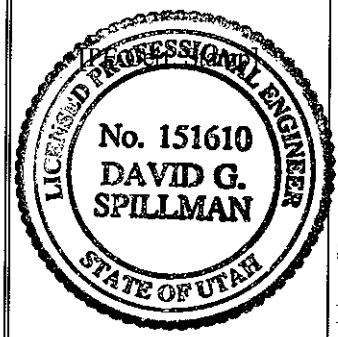
Signature: _____ **Date:** _____

CERTIFIED REPORT

IMPOUNDMENT EVALUATION (If NO, explain under Comments)	YES	NO
1. Is impoundment designed and constructed in accordance with the approved plan?	X	
2. Is impoundment free of instability, structural weakness, or any other hazardous condition?	X	
3. Has the impoundment met all applicable performance standards and effluent limitations from the previous date of inspection?	X	

COMMENTS AND OTHER INFORMATION

Certification Statement:



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.

By: *David G. Spillman, Technical Services Manager*
(Full Name and ~~Title~~)

Signature: _____ **Date:** *09/09/14*

P.E. Number & State: *No. 151610, State of Utah*

IMPOUNDMENT INSPECTION AND CERTIFIED REPORT			Page 1 of 2
Permit Number	*ACT/007/039*	**Report Date**	*11/12/14*
Mine Name	*Dugout Canyon Mine*		
Company Name	*Canyon Fuel Company, LLC*		
Impoundment Identification	**Impoundment Name**	*Refuse Pile Sedimentation Pond*	
	Impoundment Number	*None*	
	UPDES Permit Number	*UT0025593*	
	MSHA ID Number	*Impoundment –None (Refuse Pile 1211-UT-09-01890-01)*	

IMPOUNDMENT INSPECTION

Inspection Date	*11/11/14*
Inspected By	*Dave Spillman*
Reason for Inspection (Annual, Quarterly or Other Periodic Inspection, Critical Installation, or Completion of Construction)	*Quarterly Inspection / Certification*

1. Describe any appearance of any instability, structural weakness, or any other hazardous condition.

Construction of the Refuse Pile Sedimentation Pond has been completed in accordance with the approved plan. There were no signs instability, structural weakness or other hazardous conditions observed during this inspection.

Required for an impoundment which functions as a SEDIMENTATION POND.

2. Sediment storage capacity, including elevation of 60% and 100% sediment storage volumes, and, estimated average elevation of existing sediment.

Sediment Storage Capacity (as designed) - 100% = 0.78 acre-feet @ an elevation of 5,895.9 feet

- 60% = 0.47 acre-feet @ an elevation of 5,894.7 feet

3. Principle and emergency spillway elevations.

Emergency Spillway Elevation (as designed) - 5,902 feet

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.

The pond contained approximately 6 inches of impounded water at the time of the inspection.

Sediment levels were observed as being below the established 60% levels.

This pond has never 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.

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:** _____

CERTIFIED REPORT

IMPOUNDMENT EVALUATION (If NO, explain under Comments)	YES	NO
1. Is impoundment designed and constructed in accordance with the approved plan?	*X*	
2. Is impoundment free of instability, structural weakness, or any other hazardous condition?	*X*	
3. Has the impoundment met all applicable performance standards and effluent limitations from the previous date of inspection?	*X*	

COMMENTS AND OTHER INFORMATION

Certification Statement: [PE Certification]	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. **By:** *David G. Spillman, Technical Services Manager* (Full Name and Title) **Signature:** *David G. Spillman* **Date:** *11/12/14* **P.E. Number & State:** *No. 151610, State of Utah*

LICENSED PROFESSIONAL ENGINEER
No. 151610
DAVID G. SPILLMAN
STATE OF UTAH

Pace Cyn.Sediment Basin	Date	Time	Inspector(s) Signature	Quarterly Inspection Form
	3/10/2014	9:57 AM	JH/JKS	

Site: 006 / Permit # UT0025593	Action Required			Person Notified	Date Corrected	Comments/Remarks
	Yes/No	OK	N/A			
Stability of Pond						
Basin stability/weakness		X				
Erosion/Stability of banks		X				
Vegetation problem around basin	NO					See Note Below
Hazardous Condition						
Any visible contaminants	NO					
Hazardous condition observed	NO					
Inlet Conditions						
Inlet functioning		X				
Culvert(s)/ditches		X				
Principle & Emergency Spillways						
Water Discharging (rate)			X			
Pond water level			X			
Spillway is clear of debris			X			
Oil skimmer		X				
Emergency spillway			X			
Primary spillway		X				

Other Useful Information	Value	Comments/Remarks	Sediment Storage Capacity/ Elevation	Value	Comments/Remarks
Last cleaning date for basin	July/Aug 2011		100% sediment storage capacity (acre/ft)	0.4	Elev. 6954.4
Primary Spillway elevation (ft)	6964		60% sediment storage capacity (acre/ft)	0.24	Elev. 6952.2
Emergency Spillway elevation (ft)	6964.5		Current sediment Volume (est.)		
			Remaining storage capacity (est.)		

Other Observations: No sign of recent discharge. Willows growing in bottom of sediment trap and embakement covered with vegetation.

Pace Cyn.Sediment Basin	Date	Time	Inspector(s) Signature	Quarterly Inspection Form
	6/4/2014	10:14 AM	JH/JKS	

Site: 006	Action Required			Person Notified	Date Corrected	Comments/Remarks
Permit # UT0025593	Yes/No	OK	N/A			
Stability of Pond						
Basin stability/weakness		X				
Erosion/Stability of banks		X				
Vegetation problem around basin	NO					See Note Below
Hazardous Condition						
Any visible contaminants	NO					
Hazardous condition observed	NO					
Inlet Conditions						
Inlet functioning		X				
Culvert(s)/ditches		X				
Principle & Emergency Spillways						
Water Discharging (rate)			X			
Pond water level			X			
Spillway is clear of debris			X			
Oil skimmer		X				
Emergency spillway			X			
Primary spillway		X				

Other Useful Information	Value	Comments/Remarks	Sediment Storage Capacity/ Elevation	Value	Comments/Remarks
Last cleaning date for basin	NA		100% sediment storage capacity (acre/ft)	NA	
Primary Spillway elevation (ft)	NA		60% sediment storage capacity (acre/ft)	NA	
Emergency Spillway elevation (ft)	NA		Current sediment Volume (est.)	20%	
			Remaining storage capacity (est.)	80%	

Other Observations: No sign of recent discharge. Willows growing in bottom sediment trap and embankment covered with vegetation.

Pace Cyn.Sediment Basin	Date	Time	Inspector(s) Signature	Quarterly Inspection Form
	7/9/2014	10:08 AM	JH/JKS	

Site: 006	Action Required			Person Notified	Date Corrected	Comments/Remarks
Permit # UT0025593	Yes/No	OK	N/A			
Stability of Pond						
Basin stability/weakness		X				
Erosion/Stability of banks		X				
Vegetation problem around basin	NO					See Note Below
Hazardous Condition						
Any visible contaminants	NO					
Hazardous condition observed	NO					
Inlet Conditions						
Inlet functioning		X				
Culvert(s)/ditches		X				
Principle & Emergency Spillways						
Water Discharging (rate)			X			
Pond water level			X			
Spillway is clear of debris			X			
Oil skimmer		X				
Emergency spillway		X				
Primary spillway		X				

Other Useful Information	Value	Comments/Remarks	Sediment Storage Capacity/ Elevation	Value	Comments/Remarks
Last cleaning date for basin	NA		100% sediment storage capacity (acre/ft)	NA	
Primary Spillway elevation (ft)	NA		60% sediment storage capacity (acre/ft)	NA	
Emergency Spillway elevation (ft)	NA		Current sediment Volume (est.)	20%	
			Remaining storage capacity (est.)	80%	

Other Observations: No sign of recent discharge. Willows growing in bottom sediment trap and embankment covered with vegetation.

Pace Cyn.Sediment Trap	Date	Time	Inspector(s) Signature	Quarterly Inspection Form
	11/25/2014			

Site: 006	Action Required			Person Notified	Date Corrected	Comments/Remarks
Permit # UT0025593	Yes/No	OK	N/A			
Stability of Pond						
Basin stability/weakness		X				
Erosion/Stability of banks		X				
Vegetation problem around basin	NO					See Note Below
Hazardous Condition						
Any visible contaminants	NO					
Hazardous condition observed	NO					
Inlet Conditions						
Inlet functioning		X				
Culvert(s)/ditches		X				
Principle & Emergency Spillways						
Water Discharging (rate)			X			
Pond water level			X			
Spillway is clear of debris			X			
Oil skimmer		X				
Emergency spillway		X				
Primary spillway		X				

Other Useful Information	Value	Comments/Remarks	Sediment Storage Capacity/ Elevation	Value	Comments/Remarks
Last cleaning date for basin	NA		100% sediment storage capacity (ft^3)	5,714.5	0.1312 acre-ft.
Primary Spillway elevation (ft.)	6,991		50% sediment storage capacity (ft^3), Cleaning is recommended at this elev.	2,175.2	0.3 ft. below Primary Spillway (6,990.7 ft.)
Emergency Spillway elevation (ft.)	6,993		Current sediment Volume ft^3 (est.)	430	6,987.5 ft.
			Remaining storage capacity ft^3 (est.)	1,745.2	Capacity from 50%,
			Percent sediment volume	8%	

Other Observations: No sign of recent discharge, dry winter conditions. Willows growing in bottom of sediment trap and embankment covered with vegetation.

IMPOUNDMENT INSPECTION AND CERTIFIED REPORT			Page 1 of 2
Permit Number	*ACT/007/039*	**Report Date**	*01/08/14*
Mine Name	*Dugout Canyon Mine*		
Company Name	*Canyon Fuel Company, LLC*		
Impoundment Identification	**Impoundment Name**	*Surface Facility Sedimentation Pond*	
	Impoundment Number	*None*	
	UPDES Permit Number	*UT0025593*	
	MSHA ID Number	*Impoundment –None (Mine - 42-01890)*	

IMPOUNDMENT INSPECTION

Inspection Date	*01/07/14*
Inspected By	*Dave Spillman*
Reason for Inspection (Annual, Quarterly or Other Periodic Inspection, Critical Installation, or Completion of Construction)	*Routine Quarterly Inspection and Annual Certification*

1. Describe any appearance of any instability, structural weakness, or any other hazardous condition.

There were no signs of instability, structural weakness or other hazardous conditions observed during this inspection.

Required for an impoundment which functions as a SEDIMENTATION POND.

2. Sediment storage capacity, including elevation of 60% and 100% sediment storage volumes, and, estimated average elevation of existing sediment.

Sediment Storage Capacity - 100% = 0.34 acre-feet @ an elevation of 6,953.56 feet

- 60% = 0.20 acre-feet @ an elevation of 6,951.66 feet

.

3. Principle and emergency spillway elevations.

Principal Spillway Elevation - 6,964.44 feet

Emergency Spillway Elevation - 6,964.5 feet

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.

At the time of the inspection, the sediment pond was ice & snow covered. The level of the impounded water was approximately 3 feet below the bottom of the skimmer at the principal spillway riser. The sediment cleanout marker was not visible, however, Nielson Construction was contracted to clean the sediment accumulation out in June 2013. The pond was not discharging and there were no signs of any issues regarding stability of the embankment.

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.

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:** _____

CERTIFIED REPORT

IMPOUNDMENT EVALUATION (If NO, explain under Comments)	YES	NO
1. Is impoundment designed and constructed in accordance with the approved plan?	*X*	
2. Is impoundment free of instability, structural weakness, or any other hazardous condition?	*X*	
3. Has the impoundment met all applicable performance standards and effluent limitations from the previous date of inspection?	*X*	

COMMENTS AND OTHER INFORMATION

Certification Statement:

[PE Cert. Stamp]

LICENSED PROFESSIONAL ENGINEER
No. 151610
DAVID G. SPILLMAN
STATE OF UTAH

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.

By: *David G. Spillman, Technical Service Manager*
(Full Name and Title)

Signature: David G. Spillman **Date:** *01/08/14*

P.E. Number & State: *No. 151610, State of Utah*

IMPOUNDMENT INSPECTION AND CERTIFIED REPORT			Page 1 of 3
Permit Number	*ACT/007/039*	**Report Date**	*06/25/14*
Mine Name	*Dugout Canyon Mine*		
Company Name	*Canyon Fuel Company, LLC*		
Impoundment Identification	**Impoundment Name**	*Surface Facility Sedimentation Pond*	
	Impoundment Number	*None*	
	UPDES Permit Number	*UT0025593*	
	MSHA ID Number	*Impoundment –None (Mine - 42-01890)*	

IMPOUNDMENT INSPECTION

Inspection Date	*06/25/14*
Inspected By	*Dave Spillman*
Reason for Inspection (Annual, Quarterly or Other Periodic Inspection, Critical Installation, or Completion of Construction)	*Routine Quarterly Inspection and Annual Certification*

1. Describe any appearance of any instability, structural weakness, or any other hazardous condition.

There were no signs of instability, structural weakness or other hazardous conditions observed during this inspection.

Required for an impoundment which functions as a SEDIMENTATION POND.

2. Sediment storage capacity, including elevation of 60% and 100% sediment storage volumes, and, estimated average elevation of existing sediment.

Sediment Storage Capacity - 100% = 0.34 acre-feet @ an elevation of 6,953.56 feet

- 60% = 0.20 acre-feet @ an elevation of 6,951.66 feet

3. Principle and emergency spillway elevations.

Principal Spillway Elevation - 6,964.44 feet

Emergency Spillway Elevation - 6,964.5 feet

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.

Nielson Construction was contracted to clean the sediment accumulation out of the Dugout Canyon Mine sedimentation pond. Cleanout operations were completed on June 25th. Nielson Construction also cleaned the pond in 2003, 2004, 2006, 2007, 2008, 2009, 2010, 2011 and 2013. Following the 2003 cleanout, Johansen and Tuttle Engineering, Inc., was contracted to survey the as-built details of the sedimentation pond. The as-built details of the pond were subsequently submitted to DOGM in September 2003 and were approved by DOGM in October 2003.

During the 2003 cleanout, it was observed that the original pond was excavated to a point where the bottom was solid and substantial. This bottom is easily recognizable during cleaning operations. Given the fact that the pond volume was surveyed and well documented in 2003, no additional surveying was recommended following the subsequent cleanouts. During the 2014 cleanout, it was observed that Nielson Construction cleaned sediment down to the same solid bottom.

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.

At the time of inspection, the cleanout operations were being finalized. With the exception of one small pile along the northwestern edge of the impoundment, it appeared that the total sediment cleanout had been completed. This small pile was just beyond the safe reach of the long reach track-hoe and removal of this minimal volume did not warrant additional risk.

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:** _____

CERTIFIED REPORT

IMPOUNDMENT EVALUATION (If NO, explain under Comments)	YES	NO
1. Is impoundment designed and constructed in accordance with the approved plan?	*X*	
2. Is impoundment free of instability, structural weakness, or any other hazardous condition?	*X*	
3. Has the impoundment met all applicable performance standards and effluent limitations from the previous date of inspection?	*X*	

COMMENTS AND OTHER INFORMATION

Certification Statement: [PE Certification Stamp] LICENSED PROFESSIONAL ENGINEER No. 151610 DAVID G. SPILLMAN STATE OF UTAH	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. *David G. Spillman, Technical Services Manager* (Full Name and Title) **Signature:** *David G. Spillman* **Date:** *06/25/14* **P.E. Number & State:** *No. 151610, State of Utah*

IMPOUNDMENT INSPECTION AND CERTIFIED REPORT			Page 1 of 2
Permit Number	*ACT/007/039*	**Report Date**	*10/01/14*
Mine Name	*Dugout Canyon Mine*		
Company Name	*Canyon Fuel Company, LLC*		
Impoundment Identification	**Impoundment Name**	*Surface Facility Sedimentation Pond*	
	Impoundment Number	*None*	
	UPDES Permit Number	*UT0025593*	
	MSHA ID Number	*Impoundment –None (Mine - 42-01890)*	

IMPOUNDMENT INSPECTION

Inspection Date	*09/16/14*
Inspected By	*Dave Spillman & Bill King*
Reason for Inspection (Annual, Quarterly or Other Periodic Inspection, Critical Installation, or Completion of Construction)	*Routine Quarterly Inspection and Annual Certification*

1. Describe any appearance of any instability, structural weakness, or any other hazardous condition.

There were no signs of instability, structural weakness or other hazardous conditions observed during this inspection.

Required for an impoundment which functions as a SEDIMENTATION POND.

2. Sediment storage capacity, including elevation of 60% and 100% sediment storage volumes, and, estimated average elevation of existing sediment.

Sediment Storage Capacity - 100% = 0.34 acre-feet @ an elevation of 6,953.56 feet

- 60% = 0.20 acre-feet @ an elevation of 6,951.66 feet

3. Principle and emergency spillway elevations.

Principal Spillway Elevation - 6,964.44 feet

Emergency Spillway Elevation - 6,964.5 feet

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.

At the time of the inspection, the level of the impounded water was approximately 3 feet below the bottom of the skimmer at the principal spillway riser. The sediment cleanout marker was not visible, however, Nielson Construction had recently completed a full clean-out of the accumulated sediment on June 25th. The pond was being discharged at the time of the inspection. This discharge was planned and intended to provide additional runoff volume capacity for future storm events. There were no signs of any issues regarding stability of the embankment.

IMPOUNDMENT INSPECTION AND CERTIFIED REPORT		Page 2 of 2

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.

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: Bill King Bill King **Date:** 10/1/14

CERTIFIED REPORT

IMPOUNDMENT EVALUATION (If NO, explain under Comments)	YES	NO
1. Is impoundment designed and constructed in accordance with the approved plan?	X	
2. Is impoundment free of instability, structural weakness, or any other hazardous condition?	X	
3. Has the impoundment met all applicable performance standards and effluent limitations from the previous date of inspection?	X	

COMMENTS AND OTHER INFORMATION

Bill King accompanied me on this inspection. Bill was instructed on inspecting this impoundment for condition, appearance and for signs of instability. Bill is now authorized to conduct routine inspections at this impoundment.

Certification Statement:

[PE Seal or Stamp]

LICENSED PROFESSIONAL ENGINEER
No. 151610
DAVID G. SPILLMAN
STATE OF UTAH

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.

By: *David G. Spillman, Technical Service Manager*
(Full Name and Title)

Signature: David G. Spillman **Date:** *10/01/14*

P.E. Number & State: *No. 151610, State of Utah*

IMPOUNDMENT INSPECTION AND CERTIFIED REPORT			Page 1 of 2
Permit Number	*ACT/007/039*	**Report Date**	*12/24/14*
Mine Name	*Dugout Canyon Mine*		
Company Name	*Canyon Fuel Company, LLC*		
Impoundment Identification	**Impoundment Name**	*Surface Facility Sedimentation Pond*	
	Impoundment Number	*None*	
	UPDES Permit Number	*UT0025593*	
	MSHA ID Number	*Impoundment –None (Mine - 42-01890)*	

IMPOUNDMENT INSPECTION

Inspection Date	*11/25/14*
Inspected By	*Bill King*
Reason for Inspection (Annual, Quarterly or Other Periodic Inspection, Critical Installation, or Completion of Construction)	*Routine Quarterly Inspection and Annual Certification*

1. Describe any appearance of any instability, structural weakness, or any other hazardous condition.

There were no signs of instability, structural weakness or other hazardous conditions observed during this inspection.

Required for an impoundment which functions as a SEDIMENTATION POND.

2. Sediment storage capacity, including elevation of 60% and 100% sediment storage volumes, and, estimated average elevation of existing sediment.

Sediment Storage Capacity - 100% = 0.34 acre-feet @ an elevation of 6,953.56 feet

- 60% = 0.20 acre-feet @ an elevation of 6,951.66 feet

At the time of the inspection, a conservative estimate on sediment volume is 20%, which would correspond to an elevation of 6,949.3 feet. The 2014 pond cleaning was completed on June 25th and it is recommended that the annual cleaning of this pond be continued in 2015.

3. Principle and emergency spillway elevations.

Principal Spillway Elevation - 6,964.44 feet

Emergency Spillway Elevation - 6,964.5 feet

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 out slopes of embankments, etc.

At the time of the inspection, the level of the impounded water was approximately 5 feet below the bottom of the skimmer at the principal spillway riser. The sediment cleanout marker was not visible, however, Nielson Construction had recently completed a full clean-out of the accumulated sediment on June 25th. The pond was not discharging at the time of the inspection and was covered with ice. There were no signs of any issues regarding stability of the embankment.

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.

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: [signature] **Date:** 12/24/14

CERTIFIED REPORT

IMPOUNDMENT EVALUATION (If NO, explain under Comments)	YES	NO
1. Is impoundment designed and constructed in accordance with the approved plan?	X	
2. Is impoundment free of instability, structural weakness, or any other hazardous condition?	X	
3. Has the impoundment met all applicable performance standards and effluent limitations from the previous date of inspection?	X	

COMMENTS AND OTHER INFORMATION

Certification Statement:

PE Cert. Stamp

LICENSED PROFESSIONAL ENGINEER
No. 151610
DAVID G. SPILLMAN
STATE OF UTAH

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.

By: David G. Spillman, Technical Service Manager
(Full Name and Title)

Signature: David G. Spillman **Date:** 1/12/15

P.E. Number & State: No. 151610, State of Utah

IMPOUNDMENT INSPECTION AND CERTIFIED REPORT			Page 1 of 2
Permit Number	*C/007/039*	**Report Date**	*03/17/14*
Mine Name	*Dugout Canyon Mine*		
Company Name	*Canyon Fuel Company, LLC*		
Impoundment Identification	**Impoundment Name**	*Surface Facility Wastewater Disposal System (Leach Field)*	
	Impoundment Number	*None*	
	UPDES Permit Number	*None*	
	MSHA ID Number	*None (Mine - 42-01890)*	

IMPOUNDMENT INSPECTION

Inspection Date	*03/15/14*
Inspected By	*Dave Spillman*
Reason for Inspection (Annual, Quarterly or Other Periodic Inspection, Critical Installation, or Completion of Construction)	*Routine Quarterly Inspection and Annual Certification*

1. Describe any appearance of any instability, structural weakness, or any other hazardous condition.

There were no signs of instability, structural weakness or other hazardous conditions observed during this inspection.

Required for an impoundment which functions as a SEDIMENTATION POND.	**2. Sediment storage capacity, including elevation of 60% and 100% sediment storage volumes, and, estimated average elevation of existing sediment.**
	3. Principle and emergency spillway elevations.

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.

At the time of the inspection, the leach field site appeared to be functioning as designed. There was no evidence to suggest that any effluent was improperly flowing to the surface at the septic tank, at the distribution line clean-outs / air vent or down hill from the leach field.

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.

It was observed that some vegetation control, to be implemented in 2014, would be appropriate maintenance for this site.

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:** _____

CERTIFIED REPORT

IMPOUNDMENT EVALUATION (If NO, explain under Comments)	YES	NO
1. Is impoundment designed and constructed in accordance with the approved plan?	*X*	
2. Is impoundment free of instability, structural weakness, or any other hazardous condition?	*X*	
3. Has the impoundment met all applicable performance standards and effluent limitations from the previous date of inspection?	*X*	

COMMENTS AND OTHER INFORMATION

The Dugout Canyon Mine wastewater disposal system was approved for operation on October 30, 2001. The Utah Department of Environmental Quality, Southeast Utah District, granted this approval.

Certification Statement:

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.

[PE Cert. Stamp]

LICENSED PROFESSIONAL ENGINEER
No. 151610
DAVID G. SPILLMAN
STATE OF UTAH

By: *David G. Spillman, Technical Services Manager*
(Full Name and Title)

Signature: *David G. Spillman* **Date:** *03/17/14*

P.E. Number & State: *No. 151610, State of Utah*

IMPOUNDMENT INSPECTION AND CERTIFIED REPORT			Page 1 of 2
Permit Number	*C/007/039*	**Report Date**	*04/11/14*
Mine Name	*Dugout Canyon Mine*		
Company Name	*Canyon Fuel Company, LLC*		
Impoundment Identification	**Impoundment Name**	*Surface Facility Wastewater Disposal System (Leach Field)*	
	Impoundment Number	*None*	
	UPDES Permit Number	*None*	
	MSHA ID Number	*None (Mine - 42-01890)*	

IMPOUNDMENT INSPECTION

Inspection Date	*04/11/14*
Inspected By	*John Hannert*
Reason for Inspection (Annual, Quarterly or Other Periodic Inspection, Critical Installation, or Completion of Construction)	*Routine Quarterly Inspection*

1. Describe any appearance of any instability, structural weakness, or any other hazardous condition.

There were no signs of instability, structural weakness or other hazardous conditions observed during this inspection.

Required for an impoundment which functions as a SEDIMENTATION POND.	**2. Sediment storage capacity, including elevation of 60% and 100% sediment storage volumes, and, estimated average elevation of existing sediment.**
	3. Principle and emergency spillway elevations.

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.

At the time of the inspection, the leach field site appeared to be functioning as designed. There was no evidence to suggest that any effluent was improperly flowing to the surface at the septic tank, at the distribution line clean-outs / air vent or down hill from the leach field.

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.

It was observed that some vegetation control, to be implemented in 2014, would be appropriate maintenance for this site.

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:** Joel Hamm **Date:** 04/11/2014

CERTIFIED REPORT

IMPOUNDMENT EVALUATION (If NO, explain under Comments)	YES	NO
1. Is impoundment designed and constructed in accordance with the approved plan?	*X*	
2. Is impoundment free of instability, structural weakness, or any other hazardous condition?	*X*	
3. Has the impoundment met all applicable performance standards and effluent limitations from the previous date of inspection?	*X*	

COMMENTS AND OTHER INFORMATION

The Dugout Canyon Mine wastewater disposal system was approved for operation on October 30, 2001. The Utah Department of Environmental Quality, Southeast Utah District, granted this approval.

Certification Statement: [PE Cert. Stamp]	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. **By:** *David G. Spillman, Technical Services Manager* (Full Name and Title) **Signature:** _____ **Date:** _____ **P.E. Number & State:** *No. 151610, State of Utah*

IMPOUNDMENT INSPECTION AND CERTIFIED REPORT			Page 1 of 2
Permit Number	*C/007/039*	**Report Date**	*10/01/14*
Mine Name	*Dugout Canyon Mine*		
Company Name	*Canyon Fuel Company, LLC*		
Impoundment Identification	**Impoundment Name**	*Surface Facility Wastewater Disposal System (Leach Field)*	
	Impoundment Number	*None*	
	UPDES Permit Number	*None*	
	MSHA ID Number	*None (Mine - 42-01890)*	

IMPOUNDMENT INSPECTION

Inspection Date	*09/16/14*
Inspected By	*Dave Spillman & Bill King*
Reason for Inspection (Annual, Quarterly or Other Periodic Inspection, Critical Installation, or Completion of Construction)	*Routine Quarterly Inspection and Annual Certification*

1. Describe any appearance of any instability, structural weakness, or any other hazardous condition.

There were no signs of instability, structural weakness or other hazardous conditions observed during this inspection.

Required for an impoundment which functions as a SEDIMENTATION POND.	**2. Sediment storage capacity, including elevation of 60% and 100% sediment storage volumes, and, estimated average elevation of existing sediment.**
	3. Principle and emergency spillway elevations.

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.

At the time of the inspection, the leach field site appeared to be functioning as designed. There was no evidence to suggest that any effluent was improperly flowing to the surface at the septic tank, at the distribution line clean-outs / air vent or down hill from the leach field.

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.

In past inspections, it was observed that some vegetation control would be appropriate for maintenance of this facility. During the past summer, select spraying of the rubber rabbitbrush was completed. This work was intended to eliminate the rubber rabbitbrush, thus minimizing the root impact to the facilities subsurface laterals. During this inspection, it was observed that the select spraying was mostly effective. Some additional select spraying may be appropriate for 2015 as well.

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: Bill King B.T. King **Date:** 10/1/14

CERTIFIED REPORT

IMPOUNDMENT EVALUATION (If NO, explain under Comments)	YES	NO
1. Is impoundment designed and constructed in accordance with the approved plan?	X	
2. Is impoundment free of instability, structural weakness, or any other hazardous condition?	X	
3. Has the impoundment met all applicable performance standards and effluent limitations from the previous date of inspection?	X	

COMMENTS AND OTHER INFORMATION

The Dugout Canyon Mine wastewater disposal system was approved for operation on October 30, 2001. The Utah Department of Environmental Quality, Southeast Utah District, granted this approval.

Bill King accompanied me on this inspection. Bill was instructed on inspecting this facility for condition, appearance and for signs of potential concerns. Bill is now authorized to conduct routine inspections at this facility.

Certification Statement:

[PE Cert. Stamp]

PROFESSIONAL ENGINEER
LICENSED
No. 151610
DAVID G. SPILLMAN
STATE OF UTAH

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.

By: *David G. Spillman, Technical Services Manager*
(Full Name and Title)

Signature: David G. Spillman **Date:** *10/01/14*

P.E. Number & State: *No. 151610, State of Utah*

IMPOUNDMENT INSPECTION AND CERTIFIED REPORT			Page 1 of 2
Permit Number	*C/007/039*	**Report Date**	*11/12/14*
Mine Name	*Dugout Canyon Mine*		
Company Name	*Canyon Fuel Company, LLC*		
Impoundment Identification	**Impoundment Name**	*Surface Facility Wastewater Disposal System (Leach Field)*	
	Impoundment Number	*None*	
	UPDES Permit Number	*None*	
	MSHA ID Number	*None (Mine - 42-01890)*	

IMPOUNDMENT INSPECTION

Inspection Date	*11/11/14*
Inspected By	*Dave Spillman*
Reason for Inspection (Annual, Quarterly or Other Periodic Inspection, Critical Installation, or Completion of Construction)	*Routine Quarterly Inspection and Annual Certification*

1. Describe any appearance of any instability, structural weakness, or any other hazardous condition.

There were no signs of instability, structural weakness or other hazardous conditions observed during this inspection.

Required for an impoundment which functions as a SEDIMENTATION POND.	**2. Sediment storage capacity, including elevation of 60% and 100% sediment storage volumes, and, estimated average elevation of existing sediment.**
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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.

In past inspections, it was observed that some vegetation control would be appropriate for maintenance of this facility. During the past summer, select spraying of the rubber rabbitbrush was completed. This work was intended to eliminate the rubber rabbitbrush, thus minimizing the root impact to the facilities subsurface laterals. During this inspection, it was observed that the select spraying was mostly effective. Some additional select spraying may be appropriate for 2015 as well.

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:** _____

CERTIFIED REPORT

IMPOUNDMENT EVALUATION (If NO, explain under Comments)	YES	NO
1. Is impoundment designed and constructed in accordance with the approved plan?	*X*	
2. Is impoundment free of instability, structural weakness, or any other hazardous condition?	*X*	
3. Has the impoundment met all applicable performance standards and effluent limitations from the previous date of inspection?	*X*	

COMMENTS AND OTHER INFORMATION

The Dugout Canyon Mine wastewater disposal system was approved for operation on October 30, 2001. The Utah Department of Environmental Quality, Southeast Utah District, granted this approval.

Certification Statement: [PE Certification Stamp] LICENSED PROFESSIONAL ENGINEER No. 151610 DAVID G. SPILLMAN STATE OF UTAH	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. **By:** *David G. Spillman, Technical Services Manager* (Full Name and Title) **Signature:** David G. Spillman **Date:** *11/12/14* **P.E. Number & State:** *No. 151610, State of Utah*

APPENDIX B

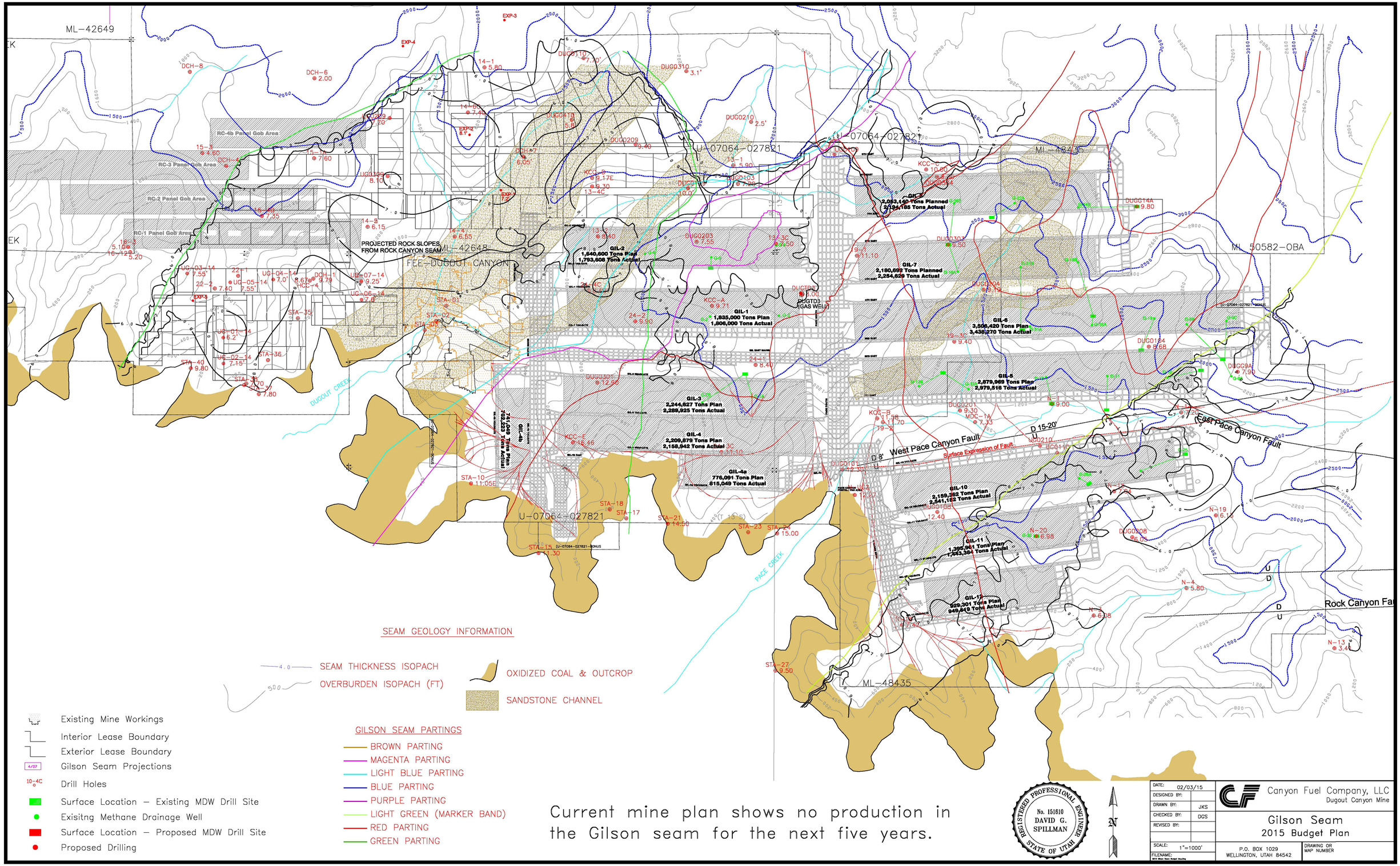
Certified Mine Maps

As required under R645-310-512 and R645-301-521

CONTENTS

Mine Map – Gilson Seam

Mine Map – Rock Canyon Seam



SEAM GEOLOGY INFORMATION

- SEAM THICKNESS ISOPACH
- OVERBURDEN ISOPACH (FT)
- OXIDIZED COAL & OUTCROP
- SANDSTONE CHANNEL

- Existing Mine Workings
- Interior Lease Boundary
- Exterior Lease Boundary
- Gilson Seam Projections
- Drill Holes
- Surface Location – Existing MDW Drill Site
- Exisitng Methane Drainage Well
- Surface Location – Proposed MDW Drill Site
- Proposed Drilling

GILSON SEAM PARTINGS

- BROWN PARTING
- MAGENTA PARTING
- LIGHT BLUE PARTING
- BLUE PARTING
- PURPLE PARTING
- LIGHT GREEN (MARKER BAND)
- RED PARTING
- GREEN PARTING

Current mine plan shows no production in the Gilson seam for the next five years.

REGISTERED PROFESSIONAL ENGINEER
No. 151610
DAVID G. SPILLMAN
STATE OF UTAH

DATE:	02/03/15
DESIGNED BY:	
DRAWN BY:	JKS
CHECKED BY:	DGS
REVISED BY:	
SCALE:	1"=1000'
FILENAME:	

Canyon Fuel Company, LLC
Dugout Canyon Mine

Gilson Seam
2015 Budget Plan

P.O. BOX 1029
WELLINGTON, UTAH 84542

DRAWING OR MAP NUMBER

ML-42649

ML-42648

FEE - FISH CREEK

FEE-DUGOUT CANYON

(U-07064-027821

U-07064-027821

ML-48435

RC-4A

RC-4B

RC-3

RC-2

RC-1

GIL-1 Panel Gob Area

GIL-2 Panel Gob Area

GIL-3 Panel Gob Area

GIL-4 Panel Gob Area

GIL-4a Panel Gob Area

GIL-4b Panel Gob Area

GIL-5 Panel Gob Area

GIL-6 Panel Gob Area

GIL-7 Panel Gob Area

GIL-8 Panel Gob Area

GIL-10 Panel Gob Area

GIL-11 Panel Gob Area

GIL-12 Panel Gob Area

ROCK SLOPED TO GILSON SEAM

Previous Mining
Remaining 2014
1st Quarter 2015
2nd Quarter 2015
3rd Quarter 2015
4th Quarter 2015
2016
2017
2018
2019

SEAM GEOLOGY INFORMATION

SEAM THICKNESS ISOPACH

OVERBURDEN ISOPACH (FT)

OXIDIZED COAL & OUTCROP

Existing Mine Workings
Interior Lease Boundary
Exterior Lease Boundary
Rock Canyon Seam Projections
Drill Holes
Surface Location – Existing MDW Drill Site
Exisitng Methane Drainage Well
Surface Location – Proposed MDW Drill Site
Proposed Drilling

REGISTERED PROFESSIONAL ENGINEER
No. 151610
DAVID G. SPILLMAN
STATE OF UTAH

DATE: 12/09/14	Canyon Fuel Company, LLC
DESIGNED BY:	Dugout Canyon Mine
DRAWN BY: JKS	Rock Canyon Seam
CHECKED BY: DGS	2015 Budget Map
REVISED BY:	1.5 CM Case 12/09/14
SCALE: 1"=1000'	P.O. BOX 1029 WELLINGTON, UTAH 84542
FILENAME:	DRAWING OR MAP NUMBER

APPENDIX C

Other Information

As required under R645-300, R645-301, & R645-302

CONTENTS

Refuse Pile Assessment

Subsidence Report & Map

Waste Rock Sampling

Dugout Canyon Mine Refuse Pile
2014 Annual Assessment

The following information has been determined for the 2014 activities conducted at the Dugout Canyon Mine Refuse Pile:

- 2014 Total Delivered Tonnage – 29,375 Tons
- Average Density of the Placed and Compacted Refuse – 106 lbs/ft^3
- Estimated 2014 Placed Refuse Volume – 554,245 ft^3 (20,528 yd^3)
- Permitted Capacity Remaining at Year's End – 2,025,724 ft^3 (111,415 Tons @ 110 lbs/ft^3)

David G. Spillman, P.E.
Technical Services Manager
P.E. No. 151610-2202, State of Utah

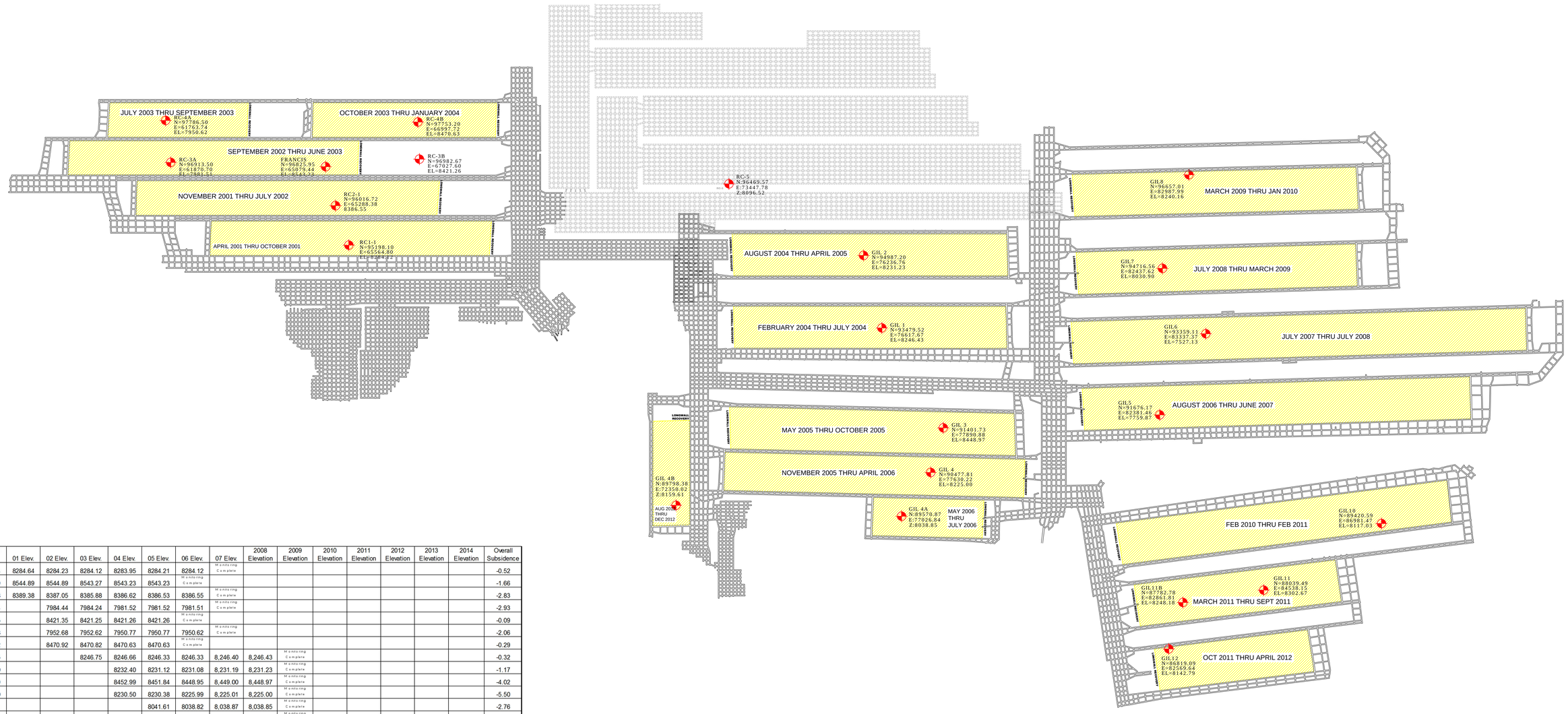
Dugout Canyon Mine – Visual Checks for Subsidence – 2014

Dugout Canyon Mine, M&RP, Chapter 5, Section 525 "Visual checks for subsidence will be made during all surface activities, especially during water monitoring activities. These visual surveys will be used to detect surface irregularities and surface cracks."

During 2014 water monitoring in March (no access to higher elevations), June, August, October and November "No surface irregularities or surface cracks were observed".

X _____ 3/18/15

Bill King
Mining Engineer



Station	Original Elev.	01 Elev.	02 Elev.	03 Elev.	04 Elev.	05 Elev.	06 Elev.	07 Elev.	2008 Elevation	2009 Elevation	2010 Elevation	2011 Elevation	2012 Elevation	2013 Elevation	2014 Elevation	Overall Subsidence
RC 1-1	8284.64	8284.64	8284.23	8284.12	8283.95	8284.21	8284.12	Monitoring Complete								-0.52
Francis	8544.89	8544.89	8544.89	8543.27	8543.23	8543.23	Monitoring Complete									-1.66
RC 2-1	8389.38	8389.38	8387.05	8385.88	8386.62	8386.53	8386.55	Monitoring Complete								-2.83
RC-3A	7984.44		7984.44	7984.24	7981.52	7981.52	7981.51	Monitoring Complete								-2.93
RC-3B	8421.35		8421.35	8421.25	8421.26	8421.26	Monitoring Complete									-0.09
RC-4A	7952.68		7952.68	7952.62	7950.77	7950.77	7950.62	Monitoring Complete								-2.06
RC-4B	8470.92		8470.92	8470.82	8470.63	8470.63	Monitoring Complete									-0.29
GIL 1	8246.75			8246.75	8246.66	8246.33	8246.33	8,246.40	8,246.43	Monitoring Complete						-0.32
GIL 2	8232.40				8232.40	8231.12	8231.08	8,231.19	8,231.23	Monitoring Complete						-1.17
GIL 3	8452.99				8452.99	8451.84	8448.95	8,449.00	8,448.97	Monitoring Complete						-4.02
GIL 4	8230.50				8230.50	8230.38	8225.99	8,225.01	8,225.00	Monitoring Complete						-5.50
GIL 4A	8041.61					8041.61	8038.82	8,038.87	8,038.85	Monitoring Complete						-2.76
GIL 5	7760.51						7760.51	7759.87	7759.87	Monitoring Complete						-0.64
GIL 6	7527.96							7527.96	7527.94	7527.14	7527.10	7527.13	Monitoring Complete			-0.83
GIL 7	8031.93								8031.93	8031.10	8031.03	8030.90	Monitoring Complete			-1.03
GIL 8	8240.53								8240.53	8240.53	8240.02	8240.16	Monitoring Complete			-0.37
GIL 10	8117.09									8117.09	8117.06	8117.03	Monitoring Complete			-0.06
GIL 11	8304.63										8304.63	8303.70	8303.02	8302.83	8302.67	-1.96
GIL 11B	8251.09										8251.09	8250.70	8248.83	8248.59	8248.18	-2.91
GIL 12	8143.52										8143.52	8142.94	8142.58	8142.56	8142.79	-0.73
GIL 4B	8162.67											8162.67	8162.53	8162.35	8159.61	-3.06
RC-5	8096.52											8096.52				

Note: Coordinates and elevations provided by:

Ware Surveying, L.L.C.
1344 North 1000 West
Price, UT 84501

Field work was completed September 03, 2014.

REGISTERED PROFESSIONAL ENGINEER
No. 151610
DAVID G. SPILLMAN
STATE OF UTAH

SUBSIDENCE REPORT 2014

Canyon Fuel Company, LLC.
Dugout Mine

P.O. BOX 1029 WELLINGTON, UTAH 84542 435-637-6360	Date: September 08, 2014	Checked By: D.G.S.	REVISION:
CAD File: Subsidence Report 2014.dwg	Scale: 1" = 1000'	Drawn By: J.H.	
		Updated By: JKS	

Inter-Mountain Labs
1673 Terra Avenue, Sheridan, Wyoming 82801 ph: (307) 672-8945

Your Environmental Monitoring Partner

Date: 11/25/2014

CLIENT: Canyon Fuel Company
Project: Dugout Canyon Mine
Lab Order: S1410054

CASE NARRATIVE

Report ID: S1410054001

Sample WR 2014-01 was received on October 2, 2014.

Samples were analyzed using the methods outlined in the following references:

U.S.E.P.A. 600/2-78-054 "Field and Laboratory Methods Applicable to Overburden and Mining Soils", 1978
American Society of Agronomy, Number 9, Part 2, 1982
USDA Handbook 60 "Diagnosis and Improvement of Saline and Alkali Soils", 1969
Wyoming Department of Environmental Quality, Land Quality Division, Guideline No. 1, 1984
New Mexico Overburden and Soils Inventory and Handling Guideline, March 1987
State of Utah, Division of Oil, Gas, and Mining: Guidelines for Management of Topsoil and Overburden for Underground and Surface Coal Mining, April 1988
Montana Department of State Lands, Reclamation Division: Soil, Overburden, and Regraded Spoil Guidelines, December 1994
State of Nevada Modified Sobek Procedure
Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition

All Quality Control parameters met the acceptance criteria defined by EPA and Inter-Mountain Laboratories except as indicated in this case narrative.

Reviewed by: Karen A Secor

Karen Secor, Soil Lab Supervisor

Inter-Mountain Labs
1673 Terra Avenue, Sheridan, Wyoming 82801 ph: (307) 672-8945

Your Environmental Monitoring Partner

Soil Analysis Report

Canyon Fuel Company

Dugout Canyon Mine
P.O. Box 1029
Wellington, UT 84542

Report ID: S1410054001

Project: Dugout Canyon Mine
Date Received: 10/2/2014

Date Reported: 11/25/2014
Work Order: S1410054

Lab ID	Sample ID	pH	Saturation	Electrical Conductivity	Field Capacity	Wilt Point	PE Calcium	PE Magnesium	PE Potassium	PE Sodium	SAR
		s.u.	%	dS/m	%	%	meq/L	meq/L	meq/L	meq/L	
S1410054-001	WR 2014-01	8.5	28.0	1.02	15.4	6.4	0.85	0.70	0.16	8.32	9.47

These results apply only to the samples tested.

Abbreviations for extractants: PE= Saturated Paste Extract, H20Sol= water soluble,AB-DTPA= Ammonium Bicarbonate-DTPA, AAO= Acid Ammonium Oxalate
Abbreviations used in acid base accounting: T.S.= Total Sulfur, AB= Acid Base, ABP= Acid Base Potential, PyrS= Pyritic Sulfur, Pyr+Org= Pyritic Sulfur + Organic Sulfur, Neutral. Pot.= Neutralization Potential
Miscellaneous Abbreviations: SAR= Sodium Adsorption Ratio, CEC= Cation Exchange Capacity, ESP= Exchangeable Sodium Percentage

Reviewed by: Karen A Secor

Karen Secor, Soil Lab Supervisor

Inter-Mountain Labs
1673 Terra Avenue, Sheridan, Wyoming 82801 ph: (307) 672-8945

Your Environmental Monitoring Partner

Soil Analysis Report

Canyon Fuel Company

Dugout Canyon Mine
P.O. Box 1029
Wellington, UT 84542

Report ID: S1410054001

Project: Dugout Canyon Mine
Date Received: 10/2/2014

Date Reported: 11/25/2014
Work Order: S1410054

Lab ID	Sample ID	Sand	Silt	Clay	Texture	Boron	Nitrate(as N)	Available Phosphorus	Selenium	TKN
		%	%	%		ppm	ppm	ppm	ppm	%
S1410054-001	WR 2014-01	60.0	25.0	15.0	Sandy Loam	1.02	0.1	4.1	<0.02	0.22

These results apply only to the samples tested.

Abbreviations for extractants: PE= Saturated Paste Extract, H20Sol= water soluble,AB-DTPA= Ammonium Bicarbonate-DTPA, AAO= Acid Ammonium Oxalate
Abbreviations used in acid base accounting: T.S.= Total Sulfur, AB= Acid Base, ABP= Acid Base Potential, PyrS= Pyritic Sulfur, Pyr+Org= Pyritic Sulfur + Organic Sulfur, Neutral. Pot.= Neutralization Potential
Miscellaneous Abbreviations: SAR= Sodium Adsorption Ratio, CEC= Cation Exchange Capacity, ESP= Exchangeable Sodium Percentage

Reviewed by: Karen A Secor

Karen Secor, Soil Lab Supervisor

Inter-Mountain Labs
1673 Terra Avenue, Sheridan, Wyoming 82801 ph: (307) 672-8945

Your Environmental Monitoring Partner

Soil Analysis Report

Canyon Fuel Company

Dugout Canyon Mine
P.O. Box 1029
Wellington, UT 84542

Report ID: S1410054001

Project: Dugout Canyon Mine
Date Received: 10/2/2014

Date Reported: 11/25/2014
Work Order: S1410054

Lab ID	Sample ID	Available Sodium	Exchangeable Sodium	Total Carbon	TOC
		meq/100g	meq/100g	%	%
S1410054-001	WR 2014-01	1.39	1.15	16.4	13.1

These results apply only to the samples tested.

Abbreviations for extractants: PE= Saturated Paste Extract, H20Sol= water soluble,AB-DTPA= Ammonium Bicarbonate-DTPA, AAO= Acid Ammonium Oxalate
Abbreviations used in acid base accounting: T.S.= Total Sulfur, AB= Acid Base, ABP= Acid Base Potential, PyrS= Pyritic Sulfur, Pyr+Org= Pyritic Sulfur + Organic Sulfur, Neutral. Pot.= Neutralization Potential
Miscellaneous Abbreviations: SAR= Sodium Adsorption Ratio, CEC= Cation Exchange Capacity, ESP= Exchangeable Sodium Percentage

Reviewed by: Karen A Secor

Karen Secor, Soil Lab Supervisor

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Your Environmental Monitoring Partner

Soil Analysis Report

Canyon Fuel Company

Dugout Canyon Mine
P.O. Box 1029
Wellington, UT 84542

Report ID: S1410054001

Project: Dugout Canyon Mine
Date Received: 10/2/2014

Date Reported: 11/25/2014
Work Order: S1410054

Lab ID	Sample ID	Total Sulfur %	T.S. AB t/1000t	Neutral. Potential t/1000t	T.S. ABP t/1000t	Sulfate Sulfur %	Pyritic Sulfur %	Organic Sulfur %	PyriticS AB t/1000t	PyriticS ABP t/1000t
S1410054-001	WR 2014-01	0.26	8.10	275	267	0.02	0.11	0.13	3.35	272

These results apply only to the samples tested.

Abbreviations for extractants: PE= Saturated Paste Extract, H20Sol= water soluble,AB-DTPA= Ammonium Bicarbonate-DTPA, AAO= Acid Ammonium Oxalate
Abbreviations used in acid base accounting: T.S.= Total Sulfur, AB= Acid Base, ABP= Acid Base Potential, PyrS= Pyritic Sulfur, Pyr+Org= Pyritic Sulfur + Organic Sulfur, Neutral. Pot.= Neutralization Potential
Miscellaneous Abbreviations: SAR= Sodium Adsorption Ratio, CEC= Cation Exchange Capacity, ESP= Exchangeable Sodium Percentage

Reviewed by: Karen A Secor

Karen Secor, Soil Lab Supervisor

Inter-Mountain Laboratories, Inc.
CHAIN OF CUSTODY
DUGOUT CANYON MINE

5141005-001

Sample Identification	WR 2014-01											
Sample Date	09/29/14											
Number of Samples	1											
Type of Soil	WR											
Laboratory Analyses												
Table 6, Topsoil & Overburden Parameters	X											
AND												
Texture	X											
pH	X											
Electrical Conductivity	X											
Total Carbon	X											
SAR	X											
Water Holding Capacity	X											
Plant Available Nitrogen	X											
Phosphorus	X											
Pyritic sulfur	X											
T.S. ABP	X											

WR (Waste Rock), SS (Sub-Soil), TS (Topsoil)

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
Bill King	9/29/2014	9:40 AM	Karen A Secor	10/2/14	

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Your Environmental Monitoring Partner

Date: 12/31/2014

CLIENT: Canyon Fuel Company
Project: Dugout Canyon Mine
Lab Order: S1411140

CASE NARRATIVE

Report ID: S1411140001

Sample WR 2014-01 was received on November 7, 2014.

Samples were analyzed using the methods outlined in the following references:

U.S.E.P.A. 600/2-78-054 "Field and Laboratory Methods Applicable to Overburden and Mining Soils", 1978
American Society of Agronomy, Number 9, Part 2, 1982
USDA Handbook 60 "Diagnosis and Improvement of Saline and Alkali Soils", 1969
Wyoming Department of Environmental Quality, Land Quality Division, Guideline No. 1, 1984
New Mexico Overburden and Soils Inventory and Handling Guideline, March 1987
State of Utah, Division of Oil, Gas, and Mining: Guidelines for Management of Topsoil and Overburden for Underground and Surface Coal Mining, April 1988
Montana Department of State Lands, Reclamation Division: Soil, Overburden, and Regraded Spoil Guidelines, December 1994
State of Nevada Modified Sobek Procedure
Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition

All Quality Control parameters met the acceptance criteria defined by EPA and Inter-Mountain Laboratories except as indicated in this case narrative.

Reviewed by: Karen A Secor

Karen Secor, Soil Lab Supervisor

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Your Environmental Monitoring Partner

Soil Analysis Report

Canyon Fuel Company

Dugout Canyon Mine
P.O. Box 1029
Wellington, UT 84542

Report ID: S1411140001

Project: Dugout Canyon Mine
Date Received: 11/7/2014

Date Reported: 12/31/2014
Work Order: S1411140

Lab ID	Sample ID	pH	Saturation	Electrical Conductivity	Field Capacity	Wilt Point	PE Calcium	PE Magnesium	PE Potassium	PE Sodium	SAR
		s.u.	%	dS/m	%	%	meq/L	meq/L	meq/L	meq/L	
S1411140-001	WR 2014-01	8.7	32.0	1.03	14.6	5.7	0.23	0.16	0.10	9.18	20.9

These results apply only to the samples tested.

Abbreviations for extractants: PE= Saturated Paste Extract, H20Sol= water soluble,AB-DTPA= Ammonium Bicarbonate-DTPA, AAO= Acid Ammonium Oxalate
Abbreviations used in acid base accounting: T.S.= Total Sulfur, AB= Acid Base, ABP= Acid Base Potential, PyrS= Pyritic Sulfur, Pyr+Org= Pyritic Sulfur + Organic Sulfur, Neutral. Pot.= Neutralization Potential
Miscellaneous Abbreviations: SAR= Sodium Adsorption Ratio, CEC= Cation Exchange Capacity, ESP= Exchangeable Sodium Percentage

Reviewed by: Karen A Secor

Karen Secor, Soil Lab Supervisor

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Soil Analysis Report

Canyon Fuel Company

Dugout Canyon Mine
P.O. Box 1029
Wellington, UT 84542

Report ID: S1411140001

Project: Dugout Canyon Mine
Date Received: 11/7/2014

Date Reported: 12/31/2014
Work Order: S1411140

Lab ID	Sample ID	Sand	Silt	Clay	Texture	Boron	Nitrate(as N)	Available Phosphorus	Selenium	TKN
		%	%	%		ppm	ppm	ppm	ppm	%
S1411140-001	WR 2014-01	47.0	25.0	28.0	Sandy Clay Loam	1.38	0.2	1.0	0.04	0.24

These results apply only to the samples tested.

Abbreviations for extractants: PE= Saturated Paste Extract, H20Sol= water soluble,AB-DTPA= Ammonium Bicarbonate-DTPA, AAO= Acid Ammonium Oxalate
Abbreviations used in acid base accounting: T.S.= Total Sulfur, AB= Acid Base, ABP= Acid Base Potential, PyrS= Pyritic Sulfur, Pyr+Org= Pyritic Sulfur + Organic Sulfur, Neutral. Pot.= Neutralization Potential
Miscellaneous Abbreviations: SAR= Sodium Adsorption Ratio, CEC= Cation Exchange Capacity, ESP= Exchangeable Sodium Percentage

Reviewed by: Karen A Secor

Karen Secor, Soil Lab Supervisor

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Your Environmental Monitoring Partner

Soil Analysis Report

Canyon Fuel Company

Dugout Canyon Mine
P.O. Box 1029
Wellington, UT 84542

Report ID: S1411140001

Project: Dugout Canyon Mine
Date Received: 11/7/2014

Date Reported: 12/31/2014
Work Order: S1411140

Lab ID	Sample ID	Available Sodium	Exchangeable Sodium	Total Carbon	TOC
		meq/100g	meq/100g	%	%
S1411140-001	WR 2014-01	2.44	2.15	9.7	5.6

These results apply only to the samples tested.

Abbreviations for extractants: PE= Saturated Paste Extract, H20Sol= water soluble,AB-DTPA= Ammonium Bicarbonate-DTPA, AAO= Acid Ammonium Oxalate
Abbreviations used in acid base accounting: T.S.= Total Sulfur, AB= Acid Base, ABP= Acid Base Potential, PyrS= Pyritic Sulfur, Pyr+Org= Pyritic Sulfur + Organic Sulfur, Neutral. Pot.= Neutralization Potential
Miscellaneous Abbreviations: SAR= Sodium Adsorption Ratio, CEC= Cation Exchange Capacity, ESP= Exchangeable Sodium Percentage

Reviewed by: Karen A Secor

Karen Secor, Soil Lab Supervisor

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Your Environmental Monitoring Partner

Soil Analysis Report

Canyon Fuel Company

Dugout Canyon Mine
P.O. Box 1029
Wellington, UT 84542

Report ID: S1411140001

Project: Dugout Canyon Mine
Date Received: 11/7/2014

Date Reported: 12/31/2014
Work Order: S1411140

Lab ID	Sample ID	Total Sulfur %	T.S. AB t/1000t	Neutral. Potential t/1000t	T.S. ABP t/1000t	Sulfate Sulfur %	Pyritic Sulfur %	Organic Sulfur %	PyriticS AB t/1000t	PyriticS ABP t/1000t
S1411140-001	WR 2014-01	0.09	2.86	344	341	<0.01	0.04	0.05	1.11	343

These results apply only to the samples tested.

Abbreviations for extractants: PE= Saturated Paste Extract, H20Sol= water soluble,AB-DTPA= Ammonium Bicarbonate-DTPA, AAO= Acid Ammonium Oxalate
Abbreviations used in acid base accounting: T.S.= Total Sulfur, AB= Acid Base, ABP= Acid Base Potential, PyrS= Pyritic Sulfur, Pyr+Org= Pyritic Sulfur + Organic Sulfur, Neutral. Pot.= Neutralization Potential
Miscellaneous Abbreviations: SAR= Sodium Adsorption Ratio, CEC= Cation Exchange Capacity, ESP= Exchangeable Sodium Percentage

Reviewed by: Karen A Secor

Karen Secor, Soil Lab Supervisor

Inter-Mountain Laboratories, Inc.
CHAIN OF CUSTODY
DUGOUT CANYON MINE

S1411140-001

Sample Identification	WR 2014-01												
Sample Date	11/04/14												
Number of Samples	1												
Type of Soil	WR												
Laboratory Analyses													
Table 6, Topsoil & Overburden Parameters	X												
AND													
Texture	X												
pH	X												
Electrical Conductivity	X												
Total Carbon	X												
SAR	X												
Water Holding Capacity	X												
Plant Available Nitrogen	X												
Phosphorus	X												
Pyritic sulfur	X												
T.S. ABP	X												

WR (Waste Rock), SS (Sub-Soil), TS (Topsoil)

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
Bill King	11/4/2014	2:39 PM	Kate Aleon	11/7/14	

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Your Environmental Monitoring Partner

Date: 12/31/2014

CLIENT: Canyon Fuel Company
Project: Dugout Canyon Mine
Lab Order: S1411403

CASE NARRATIVE

Report ID: S1411403001

Sample WR 2014-01 was received on November 25, 2014.

Samples were analyzed using the methods outlined in the following references:

U.S.E.P.A. 600/2-78-054 "Field and Laboratory Methods Applicable to Overburden and Mining Soils", 1978
American Society of Agronomy, Number 9, Part 2, 1982
USDA Handbook 60 "Diagnosis and Improvement of Saline and Alkali Soils", 1969
Wyoming Department of Environmental Quality, Land Quality Division, Guideline No. 1, 1984
New Mexico Overburden and Soils Inventory and Handling Guideline, March 1987
State of Utah, Division of Oil, Gas, and Mining: Guidelines for Management of Topsoil and Overburden for Underground and Surface Coal Mining, April 1988
Montana Department of State Lands, Reclamation Division: Soil, Overburden, and Regraded Spoil Guidelines, December 1994
State of Nevada Modified Sobek Procedure
Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition

All Quality Control parameters met the acceptance criteria defined by EPA and Inter-Mountain Laboratories except as indicated in this case narrative.

Reviewed by: Karen A Secor

Karen Secor, Soil Lab Supervisor

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Soil Analysis Report

Canyon Fuel Company

Dugout Canyon Mine
P.O. Box 1029
Wellington, UT 84542

Report ID: S1411403001

Project: Dugout Canyon Mine
Date Received: 11/25/2014

Date Reported: 12/31/2014
Work Order: S1411403

Lab ID	Sample ID	pH	Saturation	Electrical Conductivity	Field Capacity	Wilt Point	PE Calcium	PE Magnesium	PE Potassium	PE Sodium	SAR
		s.u.	%	dS/m	%	%	meq/L	meq/L	meq/L	meq/L	
S1411403-001	WR 2014-01	8.6	36.5	1.10	21.6	5.1	0.47	0.49	0.10	10.4	15.0
S1411403-002	WR 2014-01	8.4	32.9	0.94	20.2	4.4	0.69	0.76	0.14	7.54	8.84

These results apply only to the samples tested.

Abbreviations for extractants: PE= Saturated Paste Extract, H20Sol= water soluble,AB-DTPA= Ammonium Bicarbonate-DTPA, AAO= Acid Ammonium Oxalate
Abbreviations used in acid base accounting: T.S.= Total Sulfur, AB= Acid Base, ABP= Acid Base Potential, PyrS= Pyritic Sulfur, Pyr+Org= Pyritic Sulfur + Organic Sulfur, Neutral. Pot.= Neutralization Potential
Miscellaneous Abbreviations: SAR= Sodium Adsorption Ratio, CEC= Cation Exchange Capacity, ESP= Exchangeable Sodium Percentage

Reviewed by: Karen A Secor

Karen Secor, Soil Lab Supervisor

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Soil Analysis Report

Canyon Fuel Company

Dugout Canyon Mine
P.O. Box 1029
Wellington, UT 84542

Report ID: S1411403001

Project: Dugout Canyon Mine
Date Received: 11/25/2014

Date Reported: 12/31/2014
Work Order: S1411403

Lab ID	Sample ID	Sand	Silt	Clay	Texture	Boron	Nitrate(as N)	Available Phosphorus	Selenium	TKN
		%	%	%		ppm	ppm	ppm	ppm	%
S1411403-001	WR 2014-01	77.0	15.0	8.0	Sandy Loam	1.07	0.3	3.5	<0.02	0.27
S1411403-002	WR 2014-01	72.0	20.0	8.0	Sandy Loam	1.34	0.3	4.0	<0.02	0.18

These results apply only to the samples tested.

Abbreviations for extractants: PE= Saturated Paste Extract, H20Sol= water soluble,AB-DTPA= Ammonium Bicarbonate-DTPA, AAO= Acid Ammonium Oxalate
Abbreviations used in acid base accounting: T.S.= Total Sulfur, AB= Acid Base, ABP= Acid Base Potential, PyrS= Pyritic Sulfur, Pyr+Org= Pyritic Sulfur + Organic Sulfur, Neutral. Pot.= Neutralization Potential
Miscellaneous Abbreviations: SAR= Sodium Adsorption Ratio, CEC= Cation Exchange Capacity, ESP= Exchangeable Sodium Percentage

Reviewed by: Karen A Secor

Karen Secor, Soil Lab Supervisor

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Your Environmental Monitoring Partner

Soil Analysis Report

Canyon Fuel Company

Dugout Canyon Mine
P.O. Box 1029
Wellington, UT 84542

Report ID: S1411403001

Project: Dugout Canyon Mine
Date Received: 11/25/2014

Date Reported: 12/31/2014
Work Order: S1411403

Lab ID	Sample ID	Available Sodium meq/100g	Exchangeable Sodium meq/100g	Total Carbon %	TOC %
S1411403-001	WR 2014-01	2.35	1.97	21.8	17.6
S1411403-002	WR 2014-01	1.08	0.83	17.5	12.2

These results apply only to the samples tested.

Abbreviations for extractants: PE= Saturated Paste Extract, H20Sol= water soluble,AB-DTPA= Ammonium Bicarbonate-DTPA, AAO= Acid Ammonium Oxalate
Abbreviations used in acid base accounting: T.S.= Total Sulfur, AB= Acid Base, ABP= Acid Base Potential, PyrS= Pyritic Sulfur, Pyr+Org= Pyritic Sulfur + Organic Sulfur, Neutral. Pot.= Neutralization Potential
Miscellaneous Abbreviations: SAR= Sodium Adsorption Ratio, CEC= Cation Exchange Capacity, ESP= Exchangeable Sodium Percentage

Reviewed by: Karen A Secor

Karen Secor, Soil Lab Supervisor

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Soil Analysis Report

Canyon Fuel Company

Dugout Canyon Mine
P.O. Box 1029
Wellington, UT 84542

Report ID: S1411403001

Project: Dugout Canyon Mine
Date Received: 11/25/2014

Date Reported: 12/31/2014
Work Order: S1411403

Lab ID	Sample ID	Total Sulfur %	T.S. AB t/1000t	Neutral. Potential t/1000t	T.S. ABP t/1000t	Sulfate Sulfur %	Pyritic Sulfur %	Organic Sulfur %	PyriticS AB t/1000t	PyriticS ABP t/1000t
S1411403-001	WR 2014-01	0.17	5.36	345	339	<0.01	0.05	0.12	1.56	343
S1411403-002	WR 2014-01	0.09	2.80	442	439	<0.01	0.03	0.05	1.07	441

These results apply only to the samples tested.

Abbreviations for extractants: PE= Saturated Paste Extract, H20Sol= water soluble,AB-DTPA= Ammonium Bicarbonate-DTPA, AAO= Acid Ammonium Oxalate
Abbreviations used in acid base accounting: T.S.= Total Sulfur, AB= Acid Base, ABP= Acid Base Potential, PyrS= Pyritic Sulfur, Pyr+Org= Pyritic Sulfur + Organic Sulfur, Neutral. Pot.= Neutralization Potential
Miscellaneous Abbreviations: SAR= Sodium Adsorption Ratio, CEC= Cation Exchange Capacity, ESP= Exchangeable Sodium Percentage

Reviewed by: Karen A Secor

Karen Secor, Soil Lab Supervisor

Inter-Mountain Laboratories, Inc.
CHAIN OF CUSTODY
DUGOUT CANYON MINE

S1411403-001

Sample Identification	WR 2014-01												
Sample Date	11/04/14												
Number of Samples	1												
Type of Soil	WR												
Laboratory Analyses													
Table 6, Topsoil & Overburden Parameters	X												
AND													
Texture	X												
pH	X												
Electrical Conductivity	X												
Total Carbon	X												
SAR	X												
Water Holding Capacity	X												
Plant Available Nitrogen	X												
Phosphorus	X												
Pyritic sulfur	X												
T.S. ABP	X												

WR (Waste Rock), SS (Sub-Soil), TS (Topsoil)

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
Bill King	11/21/2014	12:16 PM	Kara Secor	11/25/14	

Inter-Mountain Laboratories, Inc.
CHAIN OF CUSTODY
DUGOUT CANYON MINE

S14 11403-002

Sample Identification	WR 2014-01												
Sample Date	11/21/14												
Number of Samples	1												
Type of Soil	WR												
Laboratory Analyses													
Table 6, Topsoil & Overburden Parameters	X												
AND													
Texture	X												
pH	X												
Electrical Conductivity	X												
Total Carbon	X												
SAR	X												
Water Holding Capacity	X												
Plant Available Nitrogen	X												
Phosphorus	X												
Pyritic sulfur	X												
T.S. ABP	X												

WR (Waste Rock), SS (Sub-Soil), TS (Topsoil)

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
Bill King	11/21/2014	12:16 PM	Kara Sean	11/25/14	

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Date: 1/7/2015

CLIENT: Canyon Fuel Company
Project: Dugout Canyon Mine
Lab Order: S1412104

CASE NARRATIVE

Report ID: S1412104001

Sample WR 2014-01 was received on December 5, 2014.

Samples were analyzed using the methods outlined in the following references:

U.S.E.P.A. 600/2-78-054 "Field and Laboratory Methods Applicable to Overburden and Mining Soils", 1978
American Society of Agronomy, Number 9, Part 2, 1982
USDA Handbook 60 "Diagnosis and Improvement of Saline and Alkali Soils", 1969
Wyoming Department of Environmental Quality, Land Quality Division, Guideline No. 1, 1984
New Mexico Overburden and Soils Inventory and Handling Guideline, March 1987
State of Utah, Division of Oil, Gas, and Mining: Guidelines for Management of Topsoil and Overburden for Underground and Surface Coal Mining, April 1988
Montana Department of State Lands, Reclamation Division: Soil, Overburden, and Regraded Spoil Guidelines, December 1994
State of Nevada Modified Sobek Procedure
Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition

All Quality Control parameters met the acceptance criteria defined by EPA and Inter-Mountain Laboratories except as indicated in this case narrative.

Reviewed by: Karen A Secor

Karen Secor, Soil Lab Supervisor

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Soil Analysis Report

Canyon Fuel Company

Dugout Canyon Mine
P.O. Box 1029
Wellington, UT 84542

Report ID: S1412104001

Project: Dugout Canyon Mine
Date Received: 12/5/2014

Date Reported: 1/7/2015
Work Order: S1412104

Lab ID	Sample ID	pH	Saturation	Electrical Conductivity	Field Capacity	Wilt Point	PE Calcium	PE Magnesium	PE Potassium	PE Sodium	SAR
		s.u.	%	dS/m	%	%	meq/L	meq/L	meq/L	meq/L	
S1412104-001	WR 2014-01	8.0	28.5	1.89	16.5	9.7	2.47	1.54	0.20	13.6	9.63

These results apply only to the samples tested.

Abbreviations for extractants: PE= Saturated Paste Extract, H20Sol= water soluble,AB-DTPA= Ammonium Bicarbonate-DTPA, AAO= Acid Ammonium Oxalate
Abbreviations used in acid base accounting: T.S.= Total Sulfur, AB= Acid Base, ABP= Acid Base Potential, PyrS= Pyritic Sulfur, Pyr+Org= Pyritic Sulfur + Organic Sulfur, Neutral. Pot.= Neutralization Potential
Miscellaneous Abbreviations: SAR= Sodium Adsorption Ratio, CEC= Cation Exchange Capacity, ESP= Exchangeable Sodium Percentage

Reviewed by: Karen A Secor

Karen Secor, Soil Lab Supervisor

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Soil Analysis Report

Canyon Fuel Company

Dugout Canyon Mine
P.O. Box 1029
Wellington, UT 84542

Report ID: S1412104001

Project: Dugout Canyon Mine
Date Received: 12/5/2014

Date Reported: 1/7/2015
Work Order: S1412104

Lab ID	Sample ID	Sand	Silt	Clay	Texture	Boron	Nitrate(as N)	Available Phosphorus	Selenium	TKN
		%	%	%		ppm	ppm	ppm	ppm	%
S1412104-001	WR 2014-01	44.0	30.0	26.0	Loam	2.31	0.5	2.1	0.08	0.16

These results apply only to the samples tested.

Abbreviations for extractants: PE= Saturated Paste Extract, H20Sol= water soluble,AB-DTPA= Ammonium Bicarbonate-DTPA, AAO= Acid Ammonium Oxalate
Abbreviations used in acid base accounting: T.S.= Total Sulfur, AB= Acid Base, ABP= Acid Base Potential, PyrS= Pyritic Sulfur, Pyr+Org= Pyritic Sulfur + Organic Sulfur, Neutral. Pot.= Neutralization Potential
Miscellaneous Abbreviations: SAR= Sodium Adsorption Ratio, CEC= Cation Exchange Capacity, ESP= Exchangeable Sodium Percentage

Reviewed by: Karen A Secor

Karen Secor, Soil Lab Supervisor

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Your Environmental Monitoring Partner

Soil Analysis Report

Canyon Fuel Company

Dugout Canyon Mine
P.O. Box 1029
Wellington, UT 84542

Report ID: S1412104001

Project: Dugout Canyon Mine
Date Received: 12/5/2014

Date Reported: 1/7/2015
Work Order: S1412104

Lab ID	Sample ID	Available Sodium meq/100g	Exchangeable Sodium meq/100g	Total Carbon %	TOC %
S1412104-001	WR 2014-01	2.32	1.93	13.8	8.2

These results apply only to the samples tested.

Abbreviations for extractants: PE= Saturated Paste Extract, H20Sol= water soluble,AB-DTPA= Ammonium Bicarbonate-DTPA, AAO= Acid Ammonium Oxalate
Abbreviations used in acid base accounting: T.S.= Total Sulfur, AB= Acid Base, ABP= Acid Base Potential, PyrS= Pyritic Sulfur, Pyr+Org= Pyritic Sulfur + Organic Sulfur, Neutral. Pot.= Neutralization Potential
Miscellaneous Abbreviations: SAR= Sodium Adsorption Ratio, CEC= Cation Exchange Capacity, ESP= Exchangeable Sodium Percentage

Reviewed by: Karen A Secor

Karen Secor, Soil Lab Supervisor

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Your Environmental Monitoring Partner

Soil Analysis Report

Canyon Fuel Company

Dugout Canyon Mine
P.O. Box 1029
Wellington, UT 84542

Report ID: S1412104001

Project: Dugout Canyon Mine
Date Received: 12/5/2014

Date Reported: 1/7/2015
Work Order: S1412104

Lab ID	Sample ID	Total Sulfur %	T.S. AB t/1000t	Neutral. Potential t/1000t	T.S. ABP t/1000t	Sulfate Sulfur %	Pyritic Sulfur %	Organic Sulfur %	PyriticS AB t/1000t	PyriticS ABP t/1000t
S1412104-001	WR 2014-01	0.25	7.76	465	458	<0.01	0.14	0.11	4.34	461

These results apply only to the samples tested.

Abbreviations for extractants: PE= Saturated Paste Extract, H20Sol= water soluble,AB-DTPA= Ammonium Bicarbonate-DTPA, AAO= Acid Ammonium Oxalate
Abbreviations used in acid base accounting: T.S.= Total Sulfur, AB= Acid Base, ABP= Acid Base Potential, PyrS= Pyritic Sulfur, Pyr+Org= Pyritic Sulfur + Organic Sulfur, Neutral. Pot.= Neutralization Potential
Miscellaneous Abbreviations: SAR= Sodium Adsorption Ratio, CEC= Cation Exchange Capacity, ESP= Exchangeable Sodium Percentage

Reviewed by: Karen A Secor

Karen Secor, Soil Lab Supervisor

Inter-Mountain Laboratories, Inc.
CHAIN OF CUSTODY
DUGOUT CANYON MINE

S1412104- 001

Sample Identification	WR 2014-01											
Sample Date	12/03/14											
Number of Samples	1											
Type of Soil	WR											
Laboratory Analyses												
Table 6, Topsoil & Overburden Parameters	X											
AND												
Texture	X											
pH	X											
Electrical Conductivity	X											
Total Carbon	X											
SAR	X											
Water Holding Capacity	X											
Plant Available Nitrogen	X											
Phosphorus	X											
Pyritic sulfur	X											
T.S. ABP	X											

WR (Waste Rock), SS (Sub-Soil), TS (Topsoil)

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
Bill King	12/3/2014	2:04 PM	Karen Alcon	12/5/14	