

IMPOUNDMENT INSPECTION AND CERTIFIED REPORT			
Permit Number	C/007/005	Report Date	January 30, 2018
Mine Name	Skyline Mine		
Company Name	Canyon Fuel Company		
Impoundment Identification	Impoundment Name	Mine Site Sediment Pond	
	Impoundment Number	001	
	UPDES Permit Number	UT0023540	
	MSHA ID Number	NA	
IMPOUNDMENT INSPECTION			
Inspection Date	December 30, 2017		
Inspected By	Craig Brown		
Reason for Inspection (Annual, Quarterly or Other Periodic Inspection, Critical Installation, or Completion of Construction)	Quarterly		
<p>1. Describe any appearance of any instability, structural weakness, or any other hazardous condition.</p> <p>No signs of instability were observed. No hazardous conditions were observed during the inspection of the pond. The pond was at capacity with water, but not discharging. The pond is incised, with all the banks appearing stable, with vegetation typically along a many of the banks. Particular attention was paid to the pond banks looking for signs of instability or structural weakness, drainage from the road located just west of the scales will continue to be monitored.</p>			
Required for an impoundment which functions as a SEDIMENTATION POND.	<p>2. Sediment storage capacity, including elevation of 60% and 100% sediment storage volumes, and, estimated average elevation of existing sediment.</p> <p>Remaining Sediment Storage Capacity: 79,397ft³ 60% Elevation: 8571.75feet ASL 100% Elevation: 8573.75 feet ASL</p> <p>Removal of sediment was conducted in 2017. The sediment storage capacity is calculated using a total-station survey report conducted during the 4th Quarter. Original sediment-loading calculations estimated a 3-year sediment load from the site at 74,490 cu-ft. The elevation of the bottom of the pond is 8568.4 with a 100% sediment capacity elevation of 8573.75.</p>		
	<p>3. Principle and emergency spillway elevations.</p> <p>Principal and Emergency Spillway Elevations: 8579.6 feet ASL (The outlet structure for Pond 001 serves as both the Principal and Emergency Spillways) Storage volumes listed below are based on the 3rd quarter 2017 survey.</p> <p>Total volume of pond at Spillway: 242,407 ft³ Required runoff storage: 163,010 ft³ 100% Sediment storage: 106,662 ft³ 60% Sediment storage: 63,997 ft³ Current Sediment storage: 83,643 ft³ (78%) Current sediment storage remaining: 79,397 ft³</p>		
<p>4. Field Information. Provide current water elevation, whether pond is discharging, type and number of samples taken, monitoring/instrumentation information, inlet/outlet conditions, or other related activities associated with the pond including but not limited to sediment cleanout, pond decanting, embankment erosion/repairs, monitoring information, vegetation on outsoles of embankments, etc.</p>			

IMPOUNDMENT INSPECTION AND CERTIFIED REPORT		
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The water level in the pond was level with the discharge, but not discharging. The pond was covered with snow and ice during the inspection. The sediment pond discharged periodically during the quarter following removal of sediment. A sample of the mine discharge water, (normally) including this pond's discharge, is taken on weekly basis throughout the quarter as required by the Mine's UPDES permit. On a biweekly basis the water sample is analyzed for total iron. Weekly samples include oil and grease, total dissolved solids, total suspended solids, pH and conductivity. Flow is recorded by in-line flow meters.

Surface water is collected from the upper mine pad and discharged to the pond through a culvert located on the west end of the pond. The culvert is functioning as designed. The outlet structure was working as designed and appears to be in good working condition. The pond is an incised structure.

A series of turbidity curtains are installed in the pond to help contain the suspended load within the west section of the pond. The turbidity curtains were replaced following cleaning of the pond in the 2nd quarter. The curtains adequately contain sediment in the upper reaches of the pond. The spillway was clear of debris and was functioning as designed.

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.

The overall geometry or footprint of the pond has not changed. Spill kits were labeled and full of supplies. No signs of instability are apparent in the functionality of the pond.

Qualification Statement	<p>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.</p> <p>Signature: _____ Date: February 5, 2018</p>
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CERTIFIED REPORT

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

COMMENTS AND OTHER INFORMATION

The pond was cleaned during the 3rd quarter of 2016.

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]

By:
Craig W. Brown, Professional Engineer

Signature: *Craig Brown* Date: February 5, 2018

P.E. Number & State:



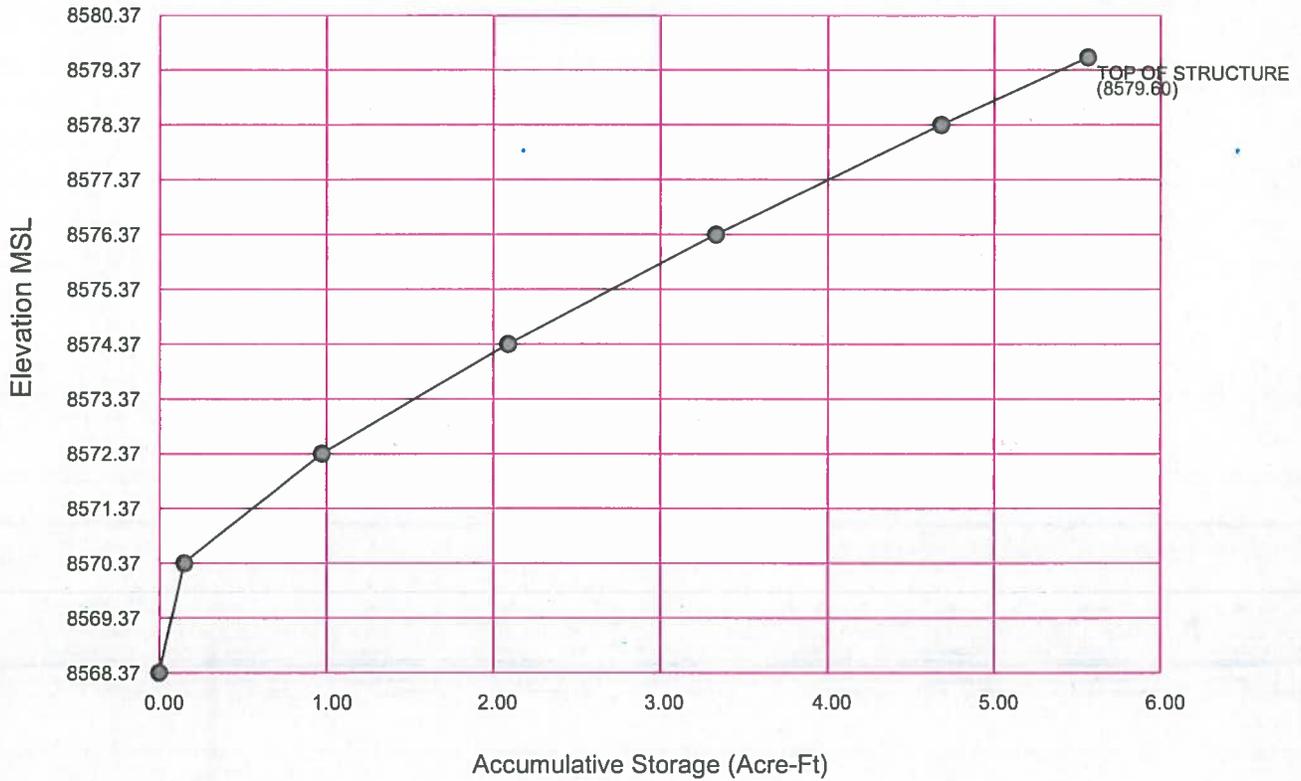


AP.

Stage Storage Curve

Sediment Control Structure No. 1

0.0



Storage volume computations

Sediment Control Structure No. 1

ELEV. (ft)	Width (ft)	LENGTH (ft)	AREA (ac)	AVG. AREA (ac)	INTERVAL (ft)	STORAGE (ac-ft)	ACC. STORAGE (ac-ft)	STAGE INTERVAL (ft)
8568.37	N/A	N/A	0.0006					
8570.37	N/A	N/A	0.2722	0.1364	2.00	0.1510	0.1510	2.00
8572.37	N/A	N/A	0.5260	0.3991	2.00	0.8210	0.9719	4.00
8574.37	N/A	N/A	0.6002	0.5631	2.00	1.1175	2.0894	6.00
8576.37	N/A	N/A	0.6547	0.6274	2.00	1.2477	3.3371	8.00
8578.37	N/A	N/A	0.7035	0.6791	2.00	1.3482	4.6853	10.00
8579.60	N/A	N/A	0.7360	0.7198	1.23	0.8796	5.5649	11.23

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IMPOUNDMENT INSPECTION AND CERTIFIED REPORT			
Permit Number	C/007/005	Report Date	January 30, 2018
Mine Name	Skyline Mines		
Company Name	Canyon Fuel Company		
Impoundment Identification	Impoundment Name	Rail Loadout Sediment Pond	
	Impoundment Number	002	
	UPDES Permit Number	UT0023540	
	MSHA ID Number	NA	
IMPOUNDMENT INSPECTION			
Inspection Date	December 30, 2017		
Inspected By	Craig Brown		
Reason for Inspection (Annual, Quarterly or Other Periodic Inspection, Critical Installation, or Completion of Construction)	Quarterly		
<p>1. Describe any appearance of any instability, structural weakness, or any other hazardous condition.</p> <p>No instability of the embankment or hazardous conditions was noted during the inspection.</p>			
<p>Required for an impoundment which functions as a SEDIMENTATION POND.</p>	<p>2. Sediment storage capacity, including elevation of 60% and 100% sediment storage volumes, and, estimated average elevation of existing sediment.</p> <p>Remaining Sediment Storage Capacity: 17,982 ft³ 60% Elevation: 7915.37 feet ASL (above sea level) 100% Elevation: 7916.08 ASL</p> <p>The sediment level in the pond was measured using a Total Station survey of the entire pond during the 3rd Quarter 2017 following removal of sediment. Approximately 17,982 cu-ft of sediment storage capacity are available. The original sediment-loading calculations estimate a 3-year sediment load from the site at 9,148 cu-ft. This 3-year estimate was done prior to the construction of the sediment trap installed in 2015 which considerably reduces the amount of sediment reporting to the pond. In the 2017 survey, the bottom of the pond was measured with the total capacity to be approximately 57,186 cu-ft.</p>		
	<p>3. Principle and emergency spillway elevations.</p> <p>Principle Spillway Elevation: 7919.7 feet ASL Emergency Spillway Elevation: 7922 feet ASL Total volume of pond at Spillway (based on 2017 survey): 57,186 ft³ Required runoff storage: 39,204 ft³ 100% Sediment Storage: 17,982 ft³ 60% Sediment Storage: 10,789 ft³</p>		

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

The water level was 2.67-feet below the discharge point during the inspection. The pond surface was covered with snow and ice during the inspection. The pond embankment appears stable and without noticeable erosion. Both the inlet and outlet are functioning as designed. The footprint of the pond remains unchanged.

A new sediment trap was constructed upstream of the main entrance to the pond during the 3rd quarter 2015. This sediment trap should significantly reduce the amount of sediment reporting to the pond.

Three (3) turbidity curtains contain a majority of material in the upper, southeast side and south sides (inlets) of the pond where sediment can be periodically removed. It was hard to determine whether all three (3) turbidity curtains appeared to be functioning as designed (covered with snow and ice) during the inspection. The discharge pipe or outlet is in good condition and functioning as designed.

The pond had sediment removed during was 3rd the quarter 2016 to increase storage volume. The amount of sediment storage capacity was reported in 4th quarter 2017 based on a licensed survey conducted the same year.

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.

The geometry of the pond remains consistent. The average depth of the water ranged from approximately 3.0 feet to 1.5 feet below the spillway during the quarter. The amount of sediment storage in the pond was based on a total-station survey conducted after the pond was cleaned. Assuming a 3-year sediment accumulation of approximately 9,000 cu-ft, the pond should be scheduled for cleaning in 2019, but is surveyed on an annual basis to monitor actual accumulation of sediment..

The pond is routinely inspected on a weekly basis during weekly water monitoring.

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:** February 5, 2018

CERTIFIED REPORT

IMPOUNDMENT EVALUATION (If NO, explain under Comments)

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

COMMENTS AND OTHER INFORMATION

The pond sediment level was surveyed using a Total Station in 3rd quarter 2016. The pond is surveyed annually to monitor the sediment level.

Certification Statement:

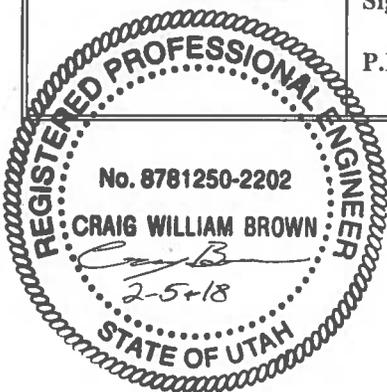
I hereby certify that; I am experienced in the construction of impoundments; I am qualified and authorized in the State of Utah to inspect and certify the condition and appearance of impoundments in accordance with the certified and approved designs for this structure; that the impoundment has been maintained 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]

By:
Craig W. Brown

Signature: *Craig Brown* Date: February 5, 2018

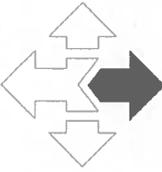
P.E. Number & State:







SCALE: 1" = 20'



NET VOLUME
 2118 CUBIC YARDS OR
 427,781 US GALLONS OR
 1,328 1/2 ACRE-FOOT



1 of 1	VOLUMETRIC SURVEY	PROJECT NO: 17518
		DRAWN BY: DMP
		CHECKED BY: DMP
		DATE: 12/4/20017

RAIL LOADOUT TAILINGS PONDS

**SKYLINE MINE
 SCOFIELD, UTAH**

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IMPOUNDMENT INSPECTION AND CERTIFIED REPORT			
Permit Number	C/007/005	Report Date	January 30, 2018
Mine Name	Skyline Mines		
Company Name	Canyon Fuel Company		
Impoundment Identification	Impoundment Name	Waste Rock Site Sediment Pond	
	Impoundment Number	003	
	UPDES Permit Number	UT0023540	
	MSHA ID Number	NA	
IMPOUNDMENT INSPECTION			
Inspection Date	December 19, 2017		
Inspected By	Craig Brown / Gregg Galecki		
Reason for Inspection (Annual, Quarterly or Other Periodic Inspection, Critical Installation, or Completion of Construction)	Quarterly		
<p>1. Describe any appearance of any instability, structural weakness, or any other hazardous condition.</p> <p>No instability, structural weakness or other hazardous condition was noted at the site during the quarterly pond site inspection. The banks of the pond are normally well-vegetated – both on the inside and outside of the bank. The pond was dry and slightly snow-covered during the inspection.</p>			
Required for an impoundment which functions as a SEDIMENTATION POND.	<p>2. Sediment storage capacity, including elevation of 60% and 100% sediment storage volumes, and, estimated average elevation of existing sediment.</p> <p>Sediment Storage Capacity: 10,330 ft³ (calculated 1-yr sediment storage volume) 60% Elevation: 7857.2 feet ASL (above sea level) 100% Elevation: 7858.1 ASL Current Sediment Level Elevation: The pond was cleaned in 3rd quarter 2016. A bedrock shelf exists in the bottom of the pond, enabling portions of the pond to be deeper in areas where the shelf does not exist. The volume remaining based on a 2017 survey is 70,502 cu-ft. The available sediment storage was calculated using a total-station survey.</p>		
	<p>3. Principle and emergency spillway elevations.</p> <p>Principal and Emergency Spillways Elevation: 7864.0 feet ASL (The outlet of Pond 003 serves as both the principal and emergency spillway). A manual decant pipe in the pond marks the sediment cleanout elevation of 7858.1 feet. Total volume of pond at Spillway: 70,502 ft³ Required runoff storage: 35,036 ft³ 100% Sediment storage: 13,802 ft³ 60% Sediment storage: 8,281 ft³</p>		

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

This pond did not discharge during the 4th quarter 2017, therefore no water samples were obtained. The bottom of the pond was approximately 4.75 feet below the decant pipe. The out slopes of the pond embankment do not appear to present any type of hazardous conditions. The pond was dry. No instability was noted in the pond embankment.

The current sediment storage capacity is based on a survey conducted during the 3rd quarter 2017 and visual inspections. The perimeter footprint of the pond did not change during the cleaning project, only the depth of the pond was modified.

The pond is routinely inspected during weekly water monitoring.

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

No changes or modifications have been noted in the geometry of the pond since the last inspection. The pond was dry and no signs of appreciable deposition were apparent. The pond may have retained water periodically during the 4th quarter. The bottom of the pond was approximately 4.75 feet below the discharge pipe based on the survey. Based on the current sediment level measured during the 2017 total-station survey, the accumulated sediment is approximately 0 percent of the 13,802 cu-ft sediment capacity. Since the pond collects water only periodically, and a rock outcrop exists in the middle of the pond, sediment does not fill the pond uniformly and typically tends to accumulate at the inlet. Minor run off was encountered during the quarter, with the pond functioning as designed. The sediment accumulation is surveyed annually.

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:** February 5, 2018

CERTIFIED REPORT

IMPOUNDMENT EVALUATION (If NO, explain under Comments)

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

COMMENTS AND OTHER INFORMATION

The pond did not discharge in 2016. The pond was cleaned in 2016 and is surveyed annually to monitor sediment accumulation.

Certification Statement:

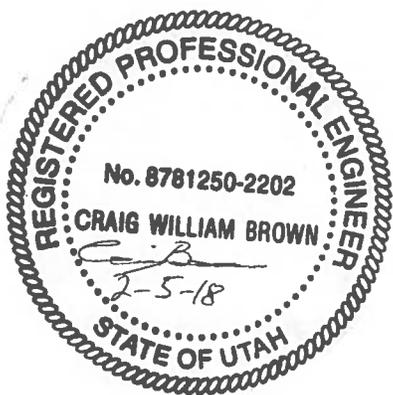
I hereby certify that; I am experienced in the construction of impoundments; I am qualified and authorized in the State of Utah to inspect and certify the condition and appearance of impoundments in accordance with the certified and approved designs for this structure; that the impoundment has been maintained 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]

By:
Craig W. Brown, Professional Engineer

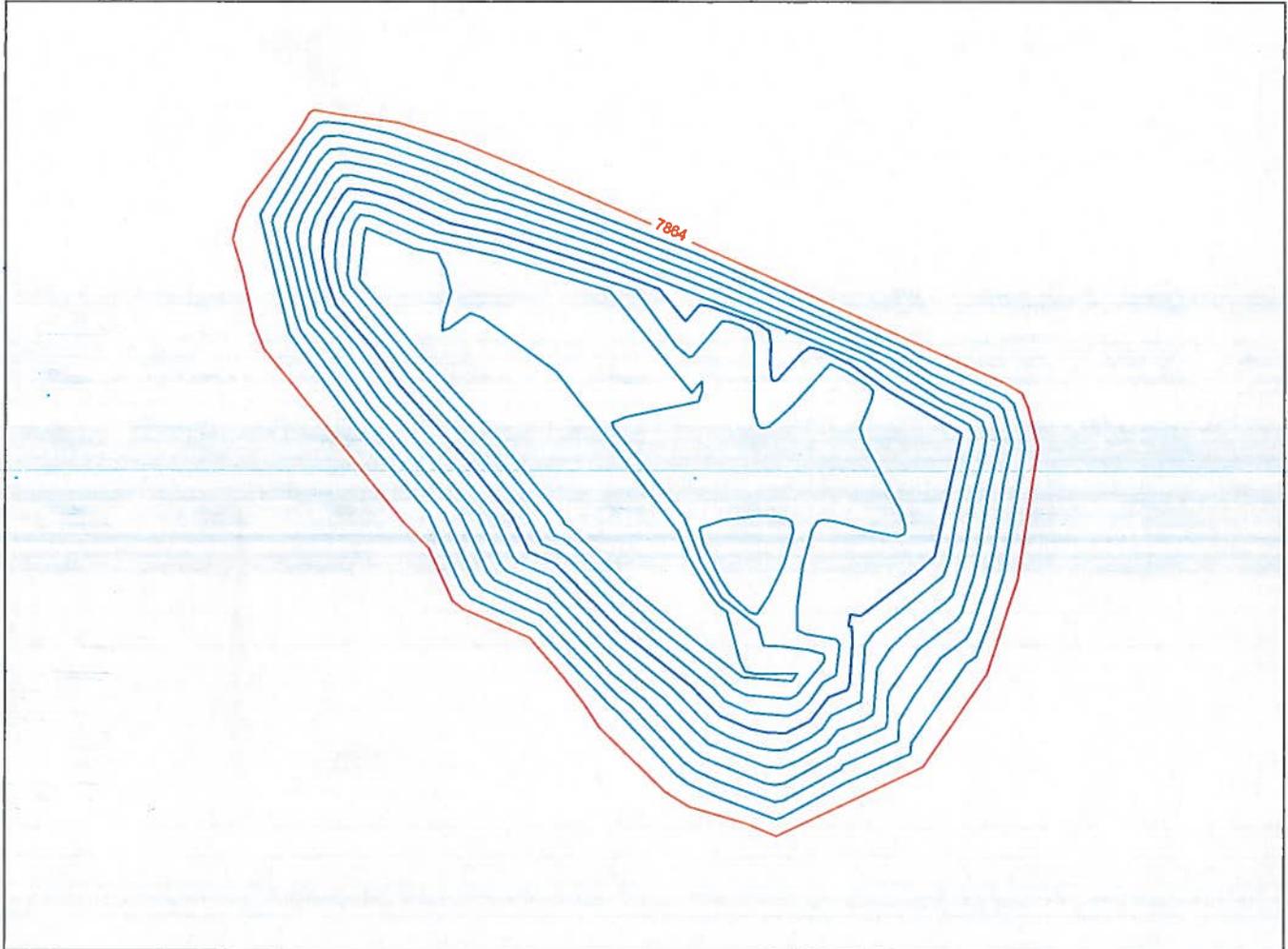
Signature: Craig Brown Date: February 5, 2018

P.E. Number & State:





Maximum Spillway Containment Volume



Volume Report

Wed Nov 8 11:10:31 2017

Comparing Grid: Y:\Survey\Sediment Ponds\003- Waste Rock\171020 Waste Rock Sed Pond\171020 Waste Rock Pond Base.grd
and Grid: Y:\Survey\Sediment Ponds\003- Waste Rock\171020 Waste Rock Sed Pond\171020 Waste Rock Pond Max.grd

Grid corner locations: 2097936.42,505197.73 to 2098189.26,505384.94

Grid resolution X: 200, Y: 200 Grid cell size X: 1.26, Y: 0.94

Area in Cut : 0.0 S.F., 0.00 Acres

Area in Fill: 13,226.1 S.F., 0.30 Acres

Total inclusion area: 13,226.1 S.F., 0.30 Acres

Cut to Fill ratio: 0.00

Average Fill Depth: 5.33

Max Fill Depth: 9.00

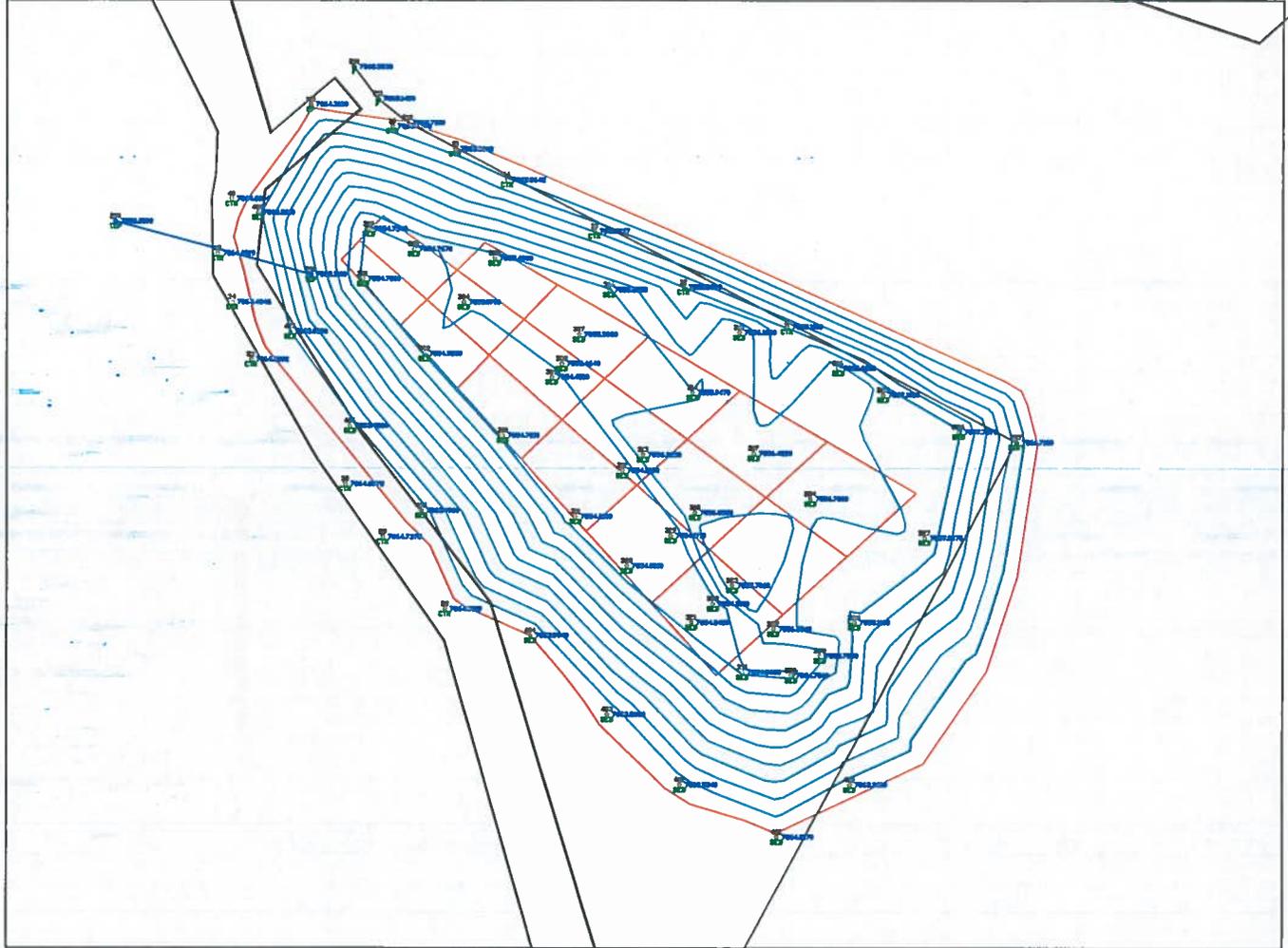
Cut (C.Y.) / Area (acres): 0.00

Fill (C.Y.) / Area (acres): 8599.87

Cut volume: 0.0 C.F., 0.00 C.Y.

Fill volume: 70,501.8 C.F., 2,611.18 C.Y.

Original Coordinates



IMPOUNDMENT INSPECTION AND CERTIFIED REPORT			
Permit Number	C/007/005	Report Date	January 30, 2018
Mine Name	Skyline Mines		
Company Name	Canyon Fuel Company		
Impoundment Identification	Impoundment Name	Winter Quarters Ventilation Facility Sediment Pond	
	Impoundment Number	004	
	UPDES Permit Number	UT0023540	
	MSHA ID Number	NA	
IMPOUNDMENT INSPECTION			
Inspection Date	December 30, 2017		
Inspected By	Craig Brown		
Reason for Inspection (Annual, Quarterly or Other Periodic Inspection, Critical Installation, or Completion of Construction)	Quarterly		
<p>1. Describe any appearance of any instability, structural weakness, or any other hazardous condition.</p> <p>No instability, structural weakness or other hazardous condition was noted at the site during the quarterly pond site inspection.</p>			
<p>Required for an impoundment which functions as a SEDIMENTATION POND.</p>	<p>2. Sediment storage capacity, including elevation of 60% and 100% sediment storage volumes, and, estimated average elevation of existing sediment.</p> <p>Sediment Storage Capacity: 740 ft³ 60% Elevation: 8072.15 feet ASL (above sea level) per as-built survey 100% Elevation: 8072.6 ASL per as-built survey Current Sediment Level Elevation: Only minimal delta of sediment was apparently forming at the inlet (covered in snow). The pond was surveyed during 3rdquarter 2017 with a Total Station to calculate sediment storage capacity. The survey indicates approximately 735 cu-ft of sediment are available.</p>		
	<p>3. Principle and emergency spillway elevations.</p> <p>Principal Spillways Elevation: 8076.32 feet ASL (per C. Ware survey) Emergency Spillway Elevation: 8076.73 feet ASL (per C. Ware survey) Total Volume of pond at Spillway: 4917 cu-ft (per 2017 survey) Required runoff storage: 4,182 cu-ft 100% Sediment Storage: 834 cu-ft 60% Sediment Storage: 500 cu-ft</p>		

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

This pond did not discharge during the 4th quarter of 2017, therefore no water samples were obtained. The pond was dry and snow-covered during the inspection. The pond received runoff from storms during the quarter, with the ditches functioning as designed. The out slopes of the pond embankment do not appear to present any type of hazardous conditions. Both the inlet and outlet are clear and appear to be ready to function as designed. No instability was noted in the pond embankment.

The 2017 survey determined the sediment storage for the pond is approximately 735 cu-ft.

The pond is routinely inspected during weekly water monitoring (often inspected using a camera posted at the site).

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

No changes or modifications have been noted in the geometry or perimeter footprint of the pond since construction in 2011. The pond was functioning, and received minor runoff periodically during the 4th quarter 2017. The pond was dry during the inspection. Minimal run off was encountered during the quarter, with the pond functioning as designed.

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:** February 2, 2018

CERTIFIED REPORT

IMPOUNDMENT EVALUATION (If NO, explain under Comments)

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

COMMENTS AND OTHER INFORMATION

The pond has not discharge in 2016. Sediment removal from the pond occurred during the quarter. The available capacity will be reported in 4th quarter 2016. The available sediment storage capacity is surveyed on an annual basis.

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.

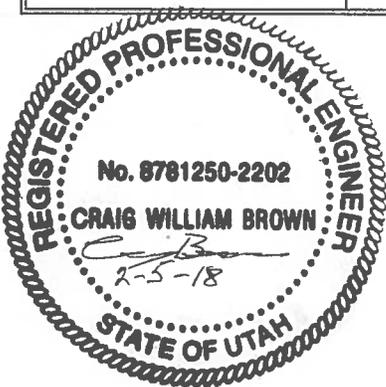
[PE Cert. Stamp]

By:

Craig W. Brown, Professional Engineer

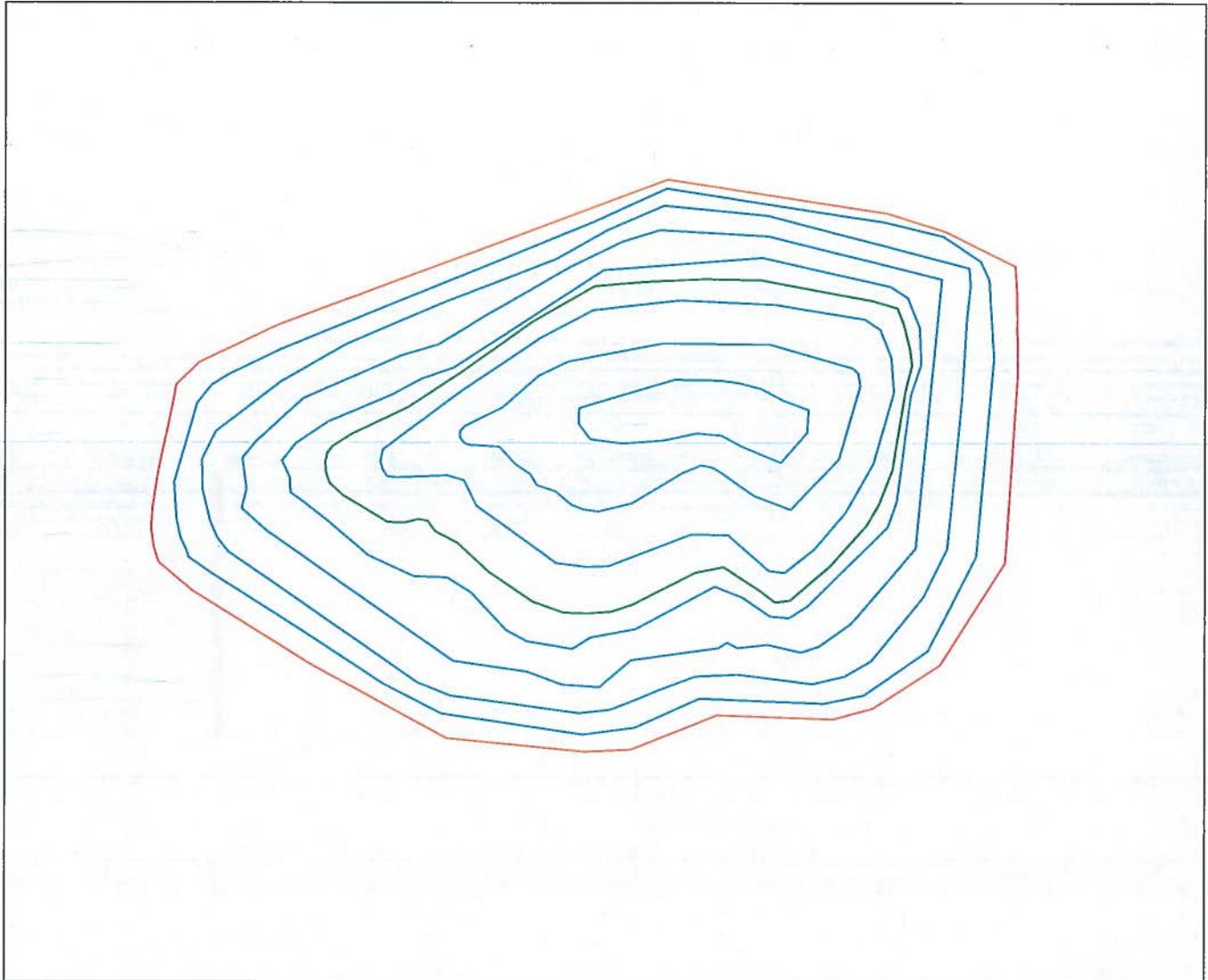
Signature: Craig Brown Date: February 2, 2018

P.E. Number & State:





Maximum Spillway Containment Volume



Volume Report Thu Nov 9 08:57:51 2017
Comparing Grid: Y:\Survey\Sediment Ponds\004- WQ\171020 WQ Sed Pond\WQ Sed Pond Base.grd
and Grid: Y:\Survey\Sediment Ponds\004- WQ\171020 WQ Sed Pond\WQ Sed Pond Max.grd
Grid corner locations: 2084445.98,505302.85 to 2084526.04,505368.03
Grid resolution X: 200, Y: 200 Grid cell size X: 0.40, Y: 0.33
Area in Cut : 0.0 S.F., 0.00 Acres
Area in Fill: 1,680.7 S.F., 0.04 Acres
Total inclusion area: 1,680.7 S.F., 0.04 Acres
Cut to Fill ratio: 0.00
Average Fill Depth: 2.93
Max Fill Depth: 6.27
Cut (C.Y.) / Area (acres): 0.00
Fill (C.Y.) / Area (acres): 4719.94
Cut volume: 0.0 C.F., 0.00 C.Y.
Fill volume: 4,917.0 C.F., 182.11 C.Y.

08-08-2015 Sediment Level

