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OK


# Sunnyside Cogeneration Associates

P.O. Box 10, East Carbon, Utah 84520 • (435) 888-4476 • Fax (435) 888-2538


July 28, 2006

Incoming
C/007/0035

Pam Grubaugh-Littig
Utah Division of Oil, Gas & Mining
1594 W. North Temple, Suite 1210
Salt Lake City, Utah 84114

RE: Second Quarter 2006 Inspection Report
Sunnyside Refuse Pile C/007/035

Dear Pam:

Please find enclosed a copy of the Second Quarter 2006 Inspection Report for Sunnyside Cogeneration Associates' impoundments, refuse pile and excess spoil areas. The inspection was performed by a qualified SCA employee and certified by a professional engineer from Twin Peaks Engineering.

Should you have any questions, please contact Rusty Netz or myself at (435)888-4476.

Thank You,

M. Blakey

Michael J. Blakey
Agent For
Sunnyside Cogeneration Associates

Enclosure

c.c. Robert Escalante
Rusty Netz
Plant File


RECEIVED
AUG 01 2006
DIV. OF OIL, GAS & MINING

| IMPOUNDMENT INSPECTION AND CERTIFIED REPORT | | Clear Water Pond | |
|---|---|---|---|
| **Permit Number** | ACT/007/035 | **Report Date** 7/25/06 | |
| **Mine Name** | SUNNYSIDE REFUSE AND SLURRY | | |
| **Company Name** | SUNNYSIDE COGENERATION ASSOCIATES | | |
| **Impoundment Identification** | **Impoundment Name** | Clear Water Pond | |
| | **Impoundment Number** | 004 | |
| | **UPDES Permit Number** | UT 024759 | |
| | **MSHA ID Number** | N/A | |

## IMPOUNDMENT INSPECTION

| | |
|---|---|
| **Inspection Date** | June 15, 2006 |
| **Inspected By** | Rusty Netz |
| **Reason for Inspection** (Annual, Quarterly or Other Periodic Inspection, Critical Installation, or Completion of Construction) | Second Quarter Inspection 2006 |

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

NONE

**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.**

Storage Capacity = 4.9 acre-feet
Maximum Sediment Depth Elevation = 6527
Existing Sediment Elevation = 6523+-

**3. Principle and emergency spillway elevations.**

Spillway Elevation = 6530.1

| IMPOUNDMENT INSPECTION AND CERTIFIED REPORT | Clear Water Pond | |
|---|---|---|

**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.

No discharge, inlet/outlet conditions are good

No structural or hazardous conditions exist.

**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.

Pond was essentially empty.

No structure or stability problems observed.

In accordance with the approved plan to construct the Excess Spoil Disposal area #2, the Slurry Ponds #1 and #2 no longer receive storm runoff. These storm flows are now routed either directly to the East Slurry Cell or to the Clear Water Pond. With the reclamation activities at Sunnyside Coal, both of these ponds have ample capacity to handle the storm flows without the Slurry Ponds in series.

**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:** Rusty Roty **Date:** 7/25/06

| IMPOUNDMENT INSPECTION AND CERTIFIED REPORT | Clear Water Pond | |
|---|---|---|

**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**

None

**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:** S. Scott Carlson / Senior Project Manager
(Full Name and Title)

**Signature:** S. Scott Carlson **Date:** 7/2/06

**P.E. Number & State:** 187727 UT

REGISTERED PROFESSIONAL ENGINEER # 187727 S. SCOTT CARLSON STATE OF UTAH

| IMPOUNDMENT INSPECTION AND CERTIFIED REPORT | | Railcut Pond | |
|---|---|---|---|
| **Permit Number** | ACT/007/035 | **Report Date** 7/25/06 | |
| **Mine Name** | SUNNYSIDE REFUSE AND SLURRY | | |
| **Company Name** | SUNNYSIDE COGENERATION ASSOCIATES | | |
| **Impoundment Identification** | **Impoundment Name** | Railcut Sediment Pond | |
| | **Impoundment Number** | 007 | |
| | **UPDES Permit Number** | UT 024759 | |
| | **MSHA ID Number** | N/A | |

## IMPOUNDMENT INSPECTION

| | |
|---|---|
| **Inspection Date** | June 15, 2006 |
| **Inspected By** | Rusty Netz |
| **Reason for Inspection** (Annual, Quarterly or Other Periodic Inspection, Critical Installation, or Completion of Construction) | Second Quarter Inspection 2006 |

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

NONE

**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.**

Storage Capacity = 4.8 acre-feet
Maximum Sediment Depth Elevation = 6209
Estimated Existing Sediment Elevation = 6207+-

**3. Principle and emergency spillway elevations.**

Spillway Elevation = 6212.34
Primary Drain Elevation = 6209.07
Maximum Sediment Depth Elevation = 6209.07

| IMPOUNDMENT INSPECTION AND CERTIFIED REPORT | Railcut Pond | |
|---|---|---|

**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**

**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:** S. Scott Carlson, P.E. Senior Project Manager

**Signature:** S Scott Carlson Date: 11/15/06

**P.E. Number & State:** 187727 - UT

REGISTERED PROFESSIONAL ENGINEER
187727
S. SCOTT CARLSON
STATE OF UTAH

| IMPOUNDMENT INSPECTION AND CERTIFIED REPORT | OCRR Pond | |
|---|---|---|

**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.

No discharge, Pond was essentially empty. inlet/outlet conditions are good, No structural or hazardous conditions exist.

**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, no structure or stability problems observed.

**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:** Rusty Nedy **Date:** 7/25/06

| IMPOUNDMENT INSPECTION AND CERTIFIED REPORT | OCRR Pond | |
|---|---|---|

## 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**

None

**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:** S. Scott Carlson, P.E. Senior Project Manager

**Signature:** S. Scott Carlson **Date:** 7/5/06

**P.E. Number & State:** 187727 - UT

REGISTERED PROFESSIONAL ENGINEER # 187727 S. SCOTT CARLSON STATE OF UTAH

| IMPOUNDMENT INSPECTION AND CERTIFIED REPORT | | Pasture Pond | |
|---|---|---|---|
| **Permit Number** | ACT/007/035 | **Report Date** 7/25/06 | |
| **Mine Name** | SUNNYSIDE REFUSE AND SLURRY | | |
| **Company Name** | SUNNYSIDE COGENERATION ASSOCIATES | | |
| **Impoundment Identification** | **Impoundment Name** | Pasture Sediment Pond | |
| | **Impoundment Number** | 009 | |
| | **UPDES Permit Number** | UT 024759 | |
| | **MSHA ID Number** | N/A | |

## IMPOUNDMENT INSPECTION

| | |
|---|---|
| **Inspection Date** | June 15, 2006 |
| **Inspected By** | Rusty Netz |
| **Reason for Inspection** (Annual, Quarterly or Other Periodic Inspection, Critical Installation, or Completion of Construction) | Second Quarter Inspection 2006 |

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

NONE

| | |
|---|---|
| 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.**<br><br>Storage Capacity = 1.0 acre-feet<br>Maximum Sediment Depth Elevation = 6485.5<br>Estimated Existing Sediment Elevation = 6484+- |
| | **3. Principle and emergency spillway elevations.**<br><br>Spillway Elevation = 6490.6<br>Primary Drain Elevation = 6486.6 |

| IMPOUNDMENT INSPECTION AND CERTIFIED REPORT | Pasture Pond | |
|---|---|---|

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

Pond had some water in the bottom.
No discharge, inlet/outlet conditions are good,
No structural or hazardous conditions exist.

**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. No structure or stability problems observed.

**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:** Rusty Roty **Date:** 7/25/06

| IMPOUNDMENT INSPECTION AND CERTIFIED REPORT | Pasture Pond | |
|---|---|---|

## 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**

**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:** S. Scott Carlson - Senior Project Manager

**Signature:** S Scott Carlson **Date:** 7/25/06

**P.E. Number & State:** 187727 - UT

REGISTERED PROFESSIONAL ENGINEER # 187727 S. SCOTT CARLSON STATE OF UTAH

| IMPOUNDMENT INSPECTION AND CERTIFIED REPORT | | CRT Pond | |
|---|---|---|---|
| **Permit Number** | ACT/007/035 | **Report Date** 7/25/06 | |
| **Mine Name** | SUNNYSIDE REFUSE AND SLURRY | | |
| **Company Name** | SUNNYSIDE COGENERATION ASSOCIATES | | |
| **Impoundment Identification** | **Impoundment Name** | New Coarse Refuse Toe Sediment Pond | |
| | **Impoundment Number** | 012 | |
| | **UPDES Permit Number** | UT 024759 | |
| | **MSHA ID Number** | N/A | |

## IMPOUNDMENT INSPECTION

| | |
|---|---|
| **Inspection Date** | June 15, 2006 |
| **Inspected By** | Rusty Netz |
| **Reason for Inspection** (Annual, Quarterly or Other Periodic Inspection, Critical Installation, or Completion of Construction) | Second Quarter Inspection 2006 |

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

NONE

| | |
|---|---|
| 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.**<br><br>Storage Capacity = 1.6 acre-feet<br>Maximum Sediment Depth Elevation = 6177.0<br>Estimated Existing Sediment Elevation = 6176+- |
| | 3. **Principle and emergency spillway elevations.**<br><br>Spillway Elevation = 6183.63<br>Primary Drain Elevation = 6178.2 |

| IMPOUNDMENT INSPECTION AND CERTIFIED REPORT | CRT Pond | |
|---|---|---|

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

Pond was essentially empty.
No discharge, inlet/outlet conditions are good,
No structural or hazardous conditions exist.

**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. No structure or stability problems observed.

**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:** Rusty Roty **Date:** 7/25/06

| IMPOUNDMENT INSPECTION AND CERTIFIED REPORT | CRT Pond | |
|---|---|---|

## 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**

**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:** S. Scott Carlson - Senior Project Manager

**Signature:** S Scott Carlson

**P.E. Number & State:** 187727 - UT

REGISTERED PROFESSIONAL ENGINEER #187727 S. SCOTT CARLSON STATE OF UTAH

| IMPOUNDMENT INSPECTION AND CERTIFIED REPORT | | COAL RUNOFF POND | |
|---|---|---|---|
| **Permit Number** | ACT/007/035 | **Report Date** 7/25/06 | |
| **Mine Name** | SUNNYSIDE REFUSE AND SLURRY | | |
| **Company Name** | SUNNYSIDE COGENERATION ASSOCIATES | | |
| **Impoundment Identification** | **Impoundment Name** | Coal Runoff Sediment Pond | |
| | **Impoundment Number** | 014 | |
| | **UPDES Permit Number** | UT 024759 | |
| | **MSHA ID Number** | N/A | |

## IMPOUNDMENT INSPECTION

| | |
|---|---|
| **Inspection Date** | June 15, 2006 |
| **Inspected By** | Rusty Netz |
| **Reason for Inspection** (Annual, Quarterly or Other Periodic Inspection, Critical Installation, or Completion of Construction) | Second Quarter Inspection 2006 |

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

NONE

| | |
|---|---|
| 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.**<br><br>Storage Capacity = 1.5 acre feet<br>Maximum Sediment Depth Elevation = 6476.0<br>Estimated Existing Sediment Elevation = 6475± |
| | 3. **Principle and emergency spillway elevations.**<br><br>Spillway Elevation = 6477.9<br>Emergency Spillway Elevation = 6479.0 |

| IMPOUNDMENT INSPECTION AND CERTIFIED REPORT | COAL RUNOFF POND | |
|---|---|---|

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

Pond was essentially empty.
No discharge, inlet and outlet conditions are good.
No structural or hazardous conditions exist.

**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.
No structure or stability problems observed.

**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:** Rusty Netz **Date:** 7/25/06

| IMPOUNDMENT INSPECTION AND CERTIFIED REPORT | COAL RUNOFF POND | |
|---|---|---|

**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**

None

**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:** S. Scott Carlson - Senior Project Manager
(Full Name and Title)

**Signature:** S. Scott Carlson **Date:** 12/25/06

**P.E. Number & State:** 187727 - UT

REGISTERED PROFESSIONAL ENGINEER #187727 S. SCOTT CARLSON STATE OF UTAH

| IMPOUNDMENT INSPECTION AND CERTIFIED REPORT | | Borrow Area Pond | |
|---|---|---|---|
| **Permit Number** | ACT/007/035 | **Report Date** 7/25/06 | |
| **Mine Name** | SUNNYSIDE REFUSE AND SLURRY | | |
| **Company Name** | SUNNYSIDE COGENERATION ASSOCIATES | | |
| **Impoundment Identification** | **Impoundment Name** | Borrow Area Pond | |
| | **Impoundment Number** | 016 | |
| | **UPDES Permit Number** | UT 024759 | |
| | **MSHA ID Number** | N/A | |

## IMPOUNDMENT INSPECTION

| | |
|---|---|
| **Inspection Date** | June 15, 2006 |
| **Inspected By** | Rusty Netz |
| **Reason for Inspection** (Annual, Quarterly or Other Periodic Inspection, Critical Installation, or Completion of Construction) | Second Quarter Inspection 2006 |

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

NONE

| | |
|---|---|
| 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.**<br><br>Storage Capacity = 8.3 acre-feet<br>Maximum Sediment Depth Elevation = 6513.3<br>Estimated Existing Sediment Elevation = 6511+- |
| | **3. Principle and emergency spillway elevations.**<br><br>Spillway Elevation = 6517.03<br>Primary Drain Elevation = 6514.3 |

| IMPOUNDMENT INSPECTION AND CERTIFIED REPORT | Borrow Area Pond | |
|---|---|---|

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

Pond was essentially empty.
No discharge, inlet/outlet conditions are good,
No structural or hazardous conditions exist.

**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.
No structure or stability problems observed.

**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:** Rusty Nelly **Date:** 7/25/06

| IMPOUNDMENT INSPECTION AND CERTIFIED REPORT | Borrow Area Pond | |
|---|---|---|

## 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**

none

**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:** S. Scott Carlson, P.E. Senior Project Manager

**Signature:** S. Scott Carlson 7/1/16

**P.E. Number & State:** 187727 Utah

REGISTERED PROFESSIONAL ENGINEER # 187727 S. SCOTT CARLSON STATE OF UTAH

| IMPOUNDMENT INSPECTION AND CERTIFIED REPORT | East Slurry Cell | |
|---|---|---|
| **Permit Number** | ACT/007/035 | **Report Date** 7/25/06 |
| **Mine Name** | SUNNYSIDE REFUSE AND SLURRY | |
| **Company Name** | SUNNYSIDE COGENERATION ASSOCIATES | |
| **Impoundment Identification** | **Impoundment Name** | East Slurry Cell |
| | **Impoundment Number** | N/A |
| | **UPDES Permit Number** | N/A |
| | **MSHA ID Number** | 1211-UT-09-02093-02 |

## IMPOUNDMENT INSPECTION

| | |
|---|---|
| **Inspection Date** | June 15, 2006 |
| **Inspected By** | Rusty Netz |
| **Reason for Inspection** (Annual, Quarterly or Other Periodic Inspection, Critical Installation, or Completion of Construction) | Second Quarter Inspection 2006 |

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

NONE

| | |
|---|---|
| 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.**<br><br>Storage Capacity = 27+- acre-feet<br>Maximum Sediment Depth Elevation = N/A<br>Estimated Existing Sediment Elevation = N/A |
| | **3. Principle and emergency spillway elevations.**<br><br>N/A |

| IMPOUNDMENT INSPECTION AND CERTIFIED REPORT | East Slurry Cell | |
|---|---|---|

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

Pond was essentially empty.
No structural or hazardous conditions exist.

**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.

Slurry Cell is not receiving slurry from any source, currently functioning as a sediment pond and coal fine storage. No structural or stability problems observed.

In accordance with the approved plan to construct the Excess Spoil Disposal area #2, the Slurry Ponds #1 and #2 no longer receive storm runoff. These storm flows are now routed either directly to the East Slurry Cell or to the Clear Water Pond. With the reclamation activities at Sunnyside Coal, both of these ponds have ample capacity to handle the storm flows without the Slurry Ponds in series.

**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:** Rusty Netz **Date:** 7/25/06

| IMPOUNDMENT INSPECTION AND CERTIFIED REPORT | East Slurry Cell | |
|---|---|---|

## 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**

**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:** S. Scott Carlson - Senior Project Manager
(Full Name and Title)

**Signature:** S Scott Carlson 4/5/2010

**P.E. Number & State:** 187727 - UT

REGISTERED PROFESSIONAL ENGINEER # 187727 S. SCOTT CARLSON STATE OF UTAH

| INSPECTION AND CERTIFIED REPORT ON EXCESS SPOIL PILE OR REFUSE PILE | | Coarse Refuse Pile |
|---|---|---|
| **Permit Number** | ACT/007/035 | **Report Date 7/25/06** |
| **Mine Name** | SUNNYSIDE REFUSE AND SLURRY | |
| **Company Name** | SUNNYSIDE COGENERATION ASSOCIATES | |
| **Excess Spoil Pile or Refuse Pile Identification** | **Pile Name:** | Coarse Refuse Pile |
| | **Pile Number** | N/A |
| | **MSHA ID Number** | 1211-UT-09-02093-01 |
| **Inspection Date** | June 15, 2006 | |
| **Inspected By** | Rusty Netz | |
| **Reason for Inspection** (Annual, Quarterly or Other Periodic Inspection, Critical Installation, or Completion of Construction) | | Second Quarter Inspection 2006 |
| | | **Attachments to Report?** X **No** ☐ **Yes** |

## Field Evaluation

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

   N/A

2. **Placement of underdrains and protective filter systems.**

   N/A

3. **Installation of final surface drainage systems.**

   N/A

4. **Placement and compaction of fill materials.**

   N/A

   Removal of Coarse and fine Refuse Material Only

| INSPECTION AND CERTIFIED REPORT ON EXCESS SPOIL PILE OR REFUSE PILE | Coarse Refuse Pile |
|---|---|

**5. Final grading and revegetation of fill.**

N/A

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

No smokers visible

**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 abatement 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.**

Waste Coal Removal

**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 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:** S. Scott Carlson - Senior Project Manager
(Full Name and Title)

**Signature:** S Scott Carlson **Date:** 7/26/06

**P.E. Number & State:** 187727 - UT

REGISTERED PROFESSIONAL ENGINEER # 187727 S. SCOTT CARLSON STATE OF UTAH

| INSPECTION AND CERTIFIED REPORT ON EXCESS SPOIL PILE OR REFUSE PILE | | Excess Spoil Pile #1 | |
|---|---|---|---|
| **Permit Number** | ACT/007/035 | **Report Date 7/25/06** | |
| **Mine Name** | SUNNYSIDE REFUSE AND SLURRY | | |
| **Company Name** | SUNNYSIDE COGENERATION ASSOCIATES | | |
| **Excess Spoil Pile or Refuse Pile Identification** | **Pile Name:** | Excess Spoil Disposal Area #1 | |
| | **Pile Number** | N/A | |
| | **MSHA ID Number** | 1211-UT-09-02093-04 | |
| **Inspection Date** | June 15, 2006 | | |
| **Inspected By** | Rusty Netz | | |
| **Reason for Inspection** (Annual, Quarterly or Other Periodic Inspection, Critical Installation, or Completion of Construction) | | Second Quarter Inspection 2006 | |
| | | **Attachments to Report?** ☒ **No** ☐ **Yes** | |

## Field Evaluation

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

N/A

**2. Placement of underdrains and protective filter systems.**

N/A

**3. Installation of final surface drainage systems.**

N/A

**4. Placement and compaction of fill materials.**

Placement and compaction of fill material occurred throughout this quarter. Material consists generally of coarse refuse rejects and is being placed in general conformance with the approved plan.

Approximately 14,000 tons of material were placed during the Quarter.

| INSPECTION AND CERTIFIED REPORT ON EXCESS SPOIL PILE OR REFUSE PILE | Excess Spoil Pile #1 | |
|---|---|---|

**5. Final grading and revegetation of fill.**

N/A

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

None

**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 abatement 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.**

Construction has been proceeding in shallow lifts in general conformance with the approved plan.

No evidence exists of fires in the pile.

**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 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:** S. Scott Carlson - Senior Project Manager
(Full Name and Title)

**Signature:** S. Scott Carlson **Date:** 7/15/06

**P.E. Number & State:** 187727 - UT

REGISTERED PROFESSIONAL ENGINEER 187727 S. SCOTT CARLSON STATE OF UTAH

| INSPECTION AND CERTIFIED REPORT ON EXCESS SPOIL PILE OR REFUSE PILE | | Excess Spoil Pile #2 |
|---|---|---|
| **Permit Number** | ACT/007/035 | **Report Date 7/25/06** |
| **Mine Name** | SUNNYSIDE REFUSE AND SLURRY | |
| **Company Name** | SUNNYSIDE COGENERATION ASSOCIATES | |
| **Excess Spoil Pile or Refuse Pile Identification** | **Pile Name:** | Excess Spoil Disposal Area #2 |
| | **Pile Number** | N/A |
| | **MSHA ID Number** | 1211-UT-09-02093-05 |
| **Inspection Date** | June 15, 2006 | |
| **Inspected By** | Rusty Netz | |
| **Reason for Inspection** (Annual, Quarterly or Other Periodic Inspection, Critical Installation, or Completion of Construction) | | Second Quarter Inspection 2006 |
| | | **Attachments to Report?** ☐ No ☒ Yes |

## Field Evaluation

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

Existing disturbed site. No topsoil removal is required by approved plan.

2. **Placement of underdrains and protective filter systems.**

Under-drains and filters are not required by approved plan. The Slurry Ponds #1 and #2 no longer receive inflows of any storm waters. The inlet culverts have been removed and storm water rerouted to other impoundments.

3. **Installation of final surface drainage systems.**

N/A

4. **Placement and compaction of fill materials.**

No additional material was placed in this disposal area during the quarter.

Four samples were gathered of material placed in recent quarters. Analytical results of these samples is attached.

| INSPECTION AND CERTIFIED REPORT ON EXCESS SPOIL PILE OR REFUSE PILE | Excess Spoil Pile #2 | |
|---|---|---|

**5. Final grading and revegetation of fill.**

N/A

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

None

**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 abatement 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.**

Both Slurry Pond #1 and Slurry Pond #2 were approved for and have been filled with coal mine waste and excess spoil in connection with construction of the Excess Spoil Disposal Area # 2. A pile is being constructed on top of the filled ponds with gentle slopes in accordance with the currently approved plan. See attached photos.

The Clearwater Pond is also part of this disposal area but will continue to function as a sediment pond until such time as it is needed as a disposal site.

**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 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:** S. Scott Carlson - Senior Project Manager
(Full Name and Title)

**Signature:** S. Scott Carlson **Date:** 1/25/06

**P.E. Number & State:** 187727 - UT

REGISTERED PROFESSIONAL ENGINEER # 187727 S. SCOTT CARLSON STATE OF UTAH

# INORGANIC ANALYSIS REPORT

AMERICAN WEST ANALYTICAL LABORATORIES

463 West 3600 South
Salt Lake City, Utah
84115

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Toll Free (888) 263-8686
Fax (801) 263-8687
e-mail: awal@awal-labs.com

Kyle F. Gross
Laboratory Director

Peggy McNicol
QA Officer

Client: Sunnyside Cogeneration
Project ID: D06M

Contact: Rusty Metz

Lab Sample ID: L72289-01B
Field Sample ID: **North**
Collected: 1/19/2006 10:00:00 AM
Received: 6/9/2006

**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Analytical Results |
|---|---|---|---|---|---|
| Boron | mg/kg-dry | 6/16/2006 11:03:14 AM | 6010B | 50 | < 50 |
| Calcium | mg/kg-dry | 6/16/2006 11:03:14 AM | 6010B | 100 | **5200** |
| Magnesium | mg/kg-dry | 6/16/2006 11:03:14 AM | 6010B | 100 | **2000** |
| Selenium | mg/kg-dry | 6/20/2006 9:53:36 PM | 6020 | 0.50 | **4.0** |
| Sodium | mg/kg-dry | 6/16/2006 11:03:14 AM | 6010B | 100 | **470** |



All analysis applicable to the CWA, SDWA and RCRA are performed in accordance to NELAC protocols. Pertinent sampling information is located on the attached Chain-of-Custody. This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on contact. This company accepts no responsibility except for the due performance of inspection and/or analysis in good faith and according to the rules of the trade and of science.

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Kyle F. Gross
Laboratory Director

Peggy McNicol
QA Officer

Client: Sunnyside Cogeneration
Project ID: D06M

Contact: Rusty Metz

Lab Sample ID: L72289-02B
Field Sample ID: **South**
Collected: 1/19/2006 10:05:00 AM
Received: 6/9/2006

**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Analytical Results |
|---|---|---|---|---|---|
| Boron | mg/kg-dry | 6/16/2006 11:07:10 AM | 60 0B | 50 | < 50 |
| Calcium | mg/kg-dry | 6/16/2006 11:07:10 AM | 6010B | 100 | **1300** |
| Magnesium | mg/kg-dry | 6/16/2006 11:07:10 AM | 6010B | 100 | **660** |
| Selenium | mg/kg-dry | 6/20/2006 9:59:00 PM | 6020 | 0.50 | **6.7** |
| Sodium | mg/kg-dry | 6/16/2006 11:07:10 AM | 6010B | 100 | **580** |



All analysis applicable to the CWA, SDWA and RCRA are performed in accordance to NELAC protocols. Pertinent sampling information is located on the attached Chain-of-Custody. This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on contact. This company accepts no responsibility except for the due performance of inspection and/or analysis in good faith and according to the rules of the trade and of science.

# INORGANIC ANALYSIS REPORT

Client: Sunnyside Cogeneration
Project ID: D06M

Contact: Rusty Metz

Lab Sample ID: L72289-03B
Field Sample ID: East
Collected: 1/19/2006 10:10:00 AM
Received: 6/9/2006

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Kyle F. Gross
Laboratory Director

Peggy McNicol
QA Officer

**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Analytical Results |
|---|---|---|---|---|---|
| Boron | mg/kg-dry | 6/16/2006 11:19:08 AM | 6010B | 52 | < 52 |
| Calcium | mg/kg-dry | 6/16/2006 11:19:08 AM | 6010B | 100 | **3100** |
| Magnesium | mg/kg-dry | 6/16/2006 11:19:08 AM | 6010B | 100 | **1100** |
| Selenium | mg/kg-dry | 6/20/2006 10:20:16 PM | 6020 | 0.52 | **4.2** |
| Sodium | mg/kg-dry | 6/16/2006 11:19:08 AM | 6010B | 100 | **600** |



All analysis applicable to the CWA, SDWA and RCRA are performed in accordance to NELAC protocols. Pertinent sampling information is located on the attached Chain-of-Custody. This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on contact. This company accepts no responsibility except for the due performance of inspection and/or analysis in good faith and according to the rules of the trade and of science.

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Kyle F. Gross
Laboratory Director

Peggy McNicol
QA Officer

Client: Sunnyside Cogeneration
Project ID: D06M

Contact: Rusty Metz

Lab Sample ID: L72289-04B
Field Sample ID: **West**
Collected: 1/19/2006 10:20:00 AM
Received: 6/9/2006

**TOTAL METALS**

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Analytical Results |
|---|---|---|---|---|---|
| Boron | mg/kg-dry | 6/16/2006 11:23:05 AM | 6010B | 50 | < 50 |
| Calcium | mg/kg-dry | 6/16/2006 11:23:05 AM | 6010B | 100 | **4400** |
| Magnesium | mg/kg-dry | 6/16/2006 11:23:05 AM | 6010B | 100 | **970** |
| Selenium | mg/kg-dry | 6/20/2006 10:25:41 PM | 6020 | 0.50 | **7.3** |
| Sodium | mg/kg-dry | 6/16/2006 11:23:05 AM | 6010B | 100 | **610** |



All analysis applicable to the CWA, SDWA and RCRA are performed in accordance to NELAC protocols. Pertinent sampling information is located on the attached Chain-of-Custody. This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on contact. This company accepts no responsibility except for the due performance of inspection and/or analysis in good faith and according to the rules of the trade and of science.

# ANALYTICAL REPORT

Client: Sunnyside Cogeneration
Project ID:: D06M

Contact: Rusty Metz

Lab Sample ID: L72289-01A
Field Sample ID: **North**
Collected: 1/19/2006 10:00:00 AM
Received: 6/9/2006

Analyzed: 6/15/2006

Analysis Requested: USC

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Kyle F. Gross
Laboratory Director

Peggy McNicol
QA Officer

| **Result** | | **USC** |
|---|---|---|
| | | **% Moisture: 1.3** |
| Uniform Soil Classification | Insufficient fines for grading | **H** |

*H - Sample had expired upon receipt.*



All analysis applicable to the CWA, SDWA and RCRA are performed in accordance to NELAC protocols. Pertinent sampling information is located on the attached Chain-of-Custody. This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on contact. This company accepts no responsibility except for the due performance of inspection and/or analysis in good faith and according to the rules of the trade and of science.

# ANALYTICAL REPORT

Client: Sunnyside Cogeneration
Project ID:: D06M

Contact: Rusty Metz

Lab Sample ID: L72289-02A
Field Sample ID: **South**
Collected: 1/19/2006 10:05:00 AM
Received: 6/9/2006

Analyzed: 6/15/2006

Analysis Requested: USC

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Kyle F. Gross
Laboratory Director

Peggy McNicol
QA Officer

| **Result** | | **USC** |
|---|---|---|
| | | **% Moisture: 1.2** |
| Uniform Soil Classification | Insufficient fines for grading | **H** |

*H - Sample had expired upon receipt.*



All analysis applicable to the CWA, SDWA and RCRA are performed in accordance to NELAC protocols. Pertinent sampling information is located on the attached Chain-of-Custody. This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on contact. This company accepts no responsibility except for the due performance of inspection and/or analysis in good faith and according to the rules of the trade and of science.

# ANALYTICAL REPORT

Client: Sunnyside Cogeneration
Project ID:: D06M

Contact: Rusty Metz

Lab Sample ID: L72289-03A
Field Sample ID: **East**
Collected: 1/19/2006 10:10:00 AM
Received: 6/9/2006

Analyzed: 6/15/2006

Analysis Requested: USC

**AMERICAN WEST ANALYTICAL LABORATORIES**

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Kyle F. Gross
Laboratory Director

Peggy McNicol
QA Officer

| **Result** | | **USC** |
|---|---|---|
| | **% Moisture:** | **1.4** |
| Uniform Soil Classification | GP-GC Poorly graded gravel w/ clay | **H** |

*H - Sample had expired upon receipt.*



All analysis applicable to the CWA, SDWA and RCRA are performed in accordance to NELAC protocols. Pertinent sampling information is located on the attached Chain-of-Custody. This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on contact. This company accepts no responsibility except for the due performance of inspection and/or analysis in good faith and according to the rules of the trade and of science.

# ANALYTICAL REPORT

Client: Sunnyside Cogeneration
Project ID:: D06M

Contact: Rusty Metz

Lab Sample ID: L72289-04A
Field Sample ID: **West**
Collected: 1/19/2006 10:20:00 AM
Received: 6/9/2006

Analyzed: 6/15/2006

Analysis Requested: USC

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| **Result** | | **USC** |
|---|---|---|
| | **% Moisture:** | **0.8** |
| Uniform Soil Classification | GP - Poorly graded gravel w/sand | H |

Kyle F. Gross
Laboratory Director

Peggy McNicol
QA Officer

*H - Sample had expired upon receipt.*



All analysis applicable to the CWA, SDWA and RCRA are performed in accordance to NELAC protocols. Pertinent sampling information is located on the attached Chain-of-Custody. This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on contact. This company accepts no responsibility except for the due performance of inspection and/or analysis in good faith and according to the rules of the trade and of science.

# INORGANIC ANALYSIS REPORT

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Kyle F. Gross
Laboratory Director

Peggy McNicol
QA Officer

Client: Sunnyside Cogeneration
Project ID: D06M

Contact: Rusty Metz

Lab Sample ID: L72289-01
Field Sample ID: **North**
Collected: 1/19/2006 10:00:00 AM
Received: 6/9/2006

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Analytical Result | |
|---|---|---|---|---|---|---|
| Conductivity | µmhos/cm | 6/12/2006 5:40:00 AM | 9050A | 10 | **920** | H* |
| Nitrate (as N) | mg/kg-dry | 6/13/2006 2:12:00 PM | 353.2 | 0.010 | **0.12** | H |
| Nitrate/Nitrite (as N) | mg/kg-dry | 6/13/2006 2:12:00 PM | 353.2 | 0.010 | **0.14** | H |
| pH @ 25° C | pH Units | 6/9/2006 2:00:00 PM | 9045C | 0 | **8.19** | H |
| SAR | mg/L | 6/22/2006 | | 0.010 | **0.74** | |
| TKN (as N) | mg/kg-dry | 6/19/2006 9:46:00 AM | 351.2 | 51 | **970** | [2] H |
| Total Nitrogen (as N) | mg/kg-dry | 6/23/2006 | | 51 | **980** | H |
| Total Volatile Solids | % | 6/13/2006 6:30:00 PM | 160.4 | 0.010 | **15** | H |

*H - Sample was received outside of holding time.*
**Analysis is performed on a 1:1 DI water extract for soils.*
*[2] Analyte concentration is too high for accurate spike recovery.*



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# INORGANIC ANALYSIS REPORT

AMERICAN WEST ANALYTICAL LABORATORIES

463 West 3600 South
Salt Lake City, Utah
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Toll Free (888) 263-8686
Fax (801) 263-8687
e-mail: awal@awal-labs.com

Kyle F. Gross
Laboratory Director

Peggy McNicol
QA Officer

Client: Sunnyside Cogeneration
Project ID: D06M

Contact: Rusty Metz

Lab Sample ID: L72289-02
Field Sample ID: **South**
Collected: 1/19/2006 10:05:00 AM
Received: 6/9/2006

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Analytical Result | |
|---|---|---|---|---|---|---|
| Conductivity | µmhos/cm | 6/12/2006 5:40:00 AM | 9050A | 10 | **110** | H* |
| Nitrate (as N) | mg/kg-dry | 6/13/2006 2:12:00 PM | 353.2 | 0.010 | **0.027** | H |
| Nitrate/Nitrite (as N) | mg/kg-dry | 6/13/2006 2:12:00 PM | 353.2 | 0.010 | **0.048** | H |
| pH @ 25° C | pH Units | 6/9/2006 2:00:00 PM | 9045C | 0 | **7.62** | H |
| SAR | mg/L | 6/22/2006 | | 0.010 | **2.6** | |
| TKN (as N) | mg/kg-dry | 6/19/2006 9:46:00 AM | 351.2 | 51 | **950** | H |
| Total Nitrogen (as N) | mg/kg-dry | 6/23/2006 | | 51 | **960** | H |
| Total Volatile Solids | % | 6/13/2006 6:30:00 PM | 160.4 | 0.010 | **8.8** | H |

*H - Sample was received outside of holding time.*
**Analysis is performed on a 1:1 DI water extract for soils.*



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Client: Sunnyside Cogeneration
Project ID: D06M

Contact: Rusty Metz

Lab Sample ID: L72289-02
Field Sample ID: **South**
Collected: 1/19/2006 10:05:00 AM
Received: 6/9/2006

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Analytical Result | |
|---|---|---|---|---|---|---|
| Conductivity | µmhos/cm | 6/12/2006 5:40:00 AM | 9050A | 10 | **110** | H* |
| Nitrate (as N) | mg/kg-dry | 6/13/2006 2:12:00 PM | 353.2 | 0.010 | **0.027** | H |
| Nitrate/Nitrite (as N) | mg/kg-dry | 6/13/2006 2:12:00 PM | 353.2 | 0.010 | **0.048** | H |
| pH @ 25° C | pH Units | 6/9/2006 2:00:00 PM | 9045C | 0 | **7.62** | H |
| SAR | mg/L | 6/22/2006 | | 0.010 | **2.6** | |
| TKN (as N) | mg/kg-dry | 6/19/2006 9:46:00 AM | 351.2 | 51 | **950** | H |
| Total Nitrogen (as N) | mg/kg-dry | 6/23/2006 | | 51 | **960** | H |
| Total Volatile Solids | % | 6/13/2006 6:30:00 PM | 160.4 | 0.010 | **8.8** | H |

*H - Sample was received outside of holding time.*
**Analysis is performed on a 1:1 DI water extract for soils.*



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Kyle F. Gross
Laboratory Director

Peggy McNicol
QA Officer

Client: Sunnyside Cogeneration
Project ID: D06M

Contact: Rusty Metz

Lab Sample ID: L72289-02
Field Sample ID: **South**
Collected: 1/19/2006 10:05:00 AM
Received: 6/9/2006

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Analytical Result | |
|---|---|---|---|---|---|---|
| Conductivity | µmhos/cm | 6/12/2006 5:40:00 AM | 9050A | 10 | **110** | H* |
| Nitrate (as N) | mg/kg-dry | 6/13/2006 2:12:00 PM | 353.2 | 0.010 | **0.027** | H |
| Nitrate/Nitrite (as N) | mg/kg-dry | 6/13/2006 2:12:00 PM | 353.2 | 0.010 | **0.048** | H |
| pH @ 25° C | pH Units | 6/9/2006 2:00:00 PM | 9045C | 0 | **7.62** | H |
| SAR | mg/L | 6/22/2006 | | 0.010 | **2.6** | |
| TKN (as N) | mg/kg-dry | 6/19/2006 9:46:00 AM | 351.2 | 51 | **950** | H |
| Total Nitrogen (as N) | mg/kg-dry | 6/23/2006 | | 51 | **960** | H |
| Total Volatile Solids | % | 6/13/2006 6:30:00 PM | 160.4 | 0.010 | **8.8** | H |

*H - Sample was received outside of holding time.*
**Analysis is performed on a 1:1 DI water extract for soils.*



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Client: Sunnyside Cogeneration
Project ID: D06M

Contact: Rusty Metz

Lab Sample ID: L72289-03
Field Sample ID: **East**
Collected: 1/19/2006 10:10:00 AM
Received: 6/9/2006

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Analytical Result | |
|---|---|---|---|---|---|---|
| Conductivity | µmhos/cm | 6/12/2006 5:40:00 AM | 9050A | 10 | **420** | H* |
| Nitrate (as N) | mg/kg-dry | 6/13/2006 2:12:00 PM | 353.2 | 0.010 | **0.12** | H |
| Nitrate/Nitrite (as N) | mg/kg-dry | 6/13/2006 2:12:00 PM | 353.2 | 0.010 | **0.13** | H |
| pH @ 25° C | pH Units | 6/9/2006 2:00:00 PM | 9045C | 0 | **8.58** | H |
| SAR | mg/L | 6/22/2006 | | 0.010 | **0.78** | |
| TKN (as N) | mg/kg-dry | 6/19/2006 9:46:00 AM | 351.2 | 51 | **1600** | H |
| Total Nitrogen (as N) | mg/kg-dry | 6/23/2006 | | 51 | **1700** | H |
| Total Volatile Solids | % | 6/13/2006 6:30:00 PM | 160.4 | 0.010 | **21** | H |

*H - Sample was received outside of holding time.*
**Analysis is performed on a 1:1 DI water extract for soils.*

Kyle F. Gross
Laboratory Director

Peggy McNicol
QA Officer



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Kyle F. Gross
Laboratory Director

Peggy McNicol
QA Officer

Client: Sunnyside Cogeneration
Project ID: D06M

Contact: Rusty Metz

Lab Sample ID: L72289-04
Field Sample ID: West
Collected: 1/19/2006 10:20:00 AM
Received: 6/9/2006

| Analytical Results | Units | Date Analyzed | Method Used | Reporting Limit | Analytical Result | |
|---|---|---|---|---|---|---|
| Conductivity | µmhos/cm | 6/12/2006 5:40:00 AM | 9050A | 10 | 590 | H* |
| Nitrate (as N) | mg/kg-dry | 6/13/2006 2:12:00 PM | 353.2 | 0.010 | 0.050 | H |
| Nitrate/Nitrite (as N) | mg/kg-dry | 6/13/2006 2:12:00 PM | 353.2 | 0.010 | 0.056 | H |
| pH @ 25° C | pH Units | 6/9/2006 2:00:00 PM | 9045C | 0 | 7.58 | H |
| SAR | mg/L | 6/22/2006 | | 0.010 | 0.55 | |
| TKN (as N) | mg/kg-dry | 6/19/2006 9:46:00 AM | 351.2 | 50 | 570 | H |
| Total Nitrogen (as N) | mg/kg-dry | 6/23/2006 | | 51 | 580 | H |
| Total Volatile Solids | % | 6/13/2006 6:30:00 PM | 160.4 | 0.010 | 18 | H |

*H - Sample was received outside of holding time.*
**Analysis is performed on a 1:1 DI water extract for soils.*



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Kyle F. Gross
Laboratory Director

Peggy McNicol
QA Officer

Client: Sunnyside Cogeneration Contact: Rusty Metz

Collected: January 19, 2006

Received: June 9, 2006

Analysis Method: Sobeck et al

Lab Sample Set ID: L72289

Calculated: June 27, 2006

Units = tons of CaCO3 equivalents / 1000 tons of material

**Analytical Results**

| Lab Sample ID | Client Sample ID | Acid Generation Potential | Acid Neutralization Potential | Acid Base Account |
|---|---|---|---|---|
| L72289-01 | North | 11 | 200.0 | -189 |
| L72289-02 | South | 19 | 14 | 5 |
| L72289-03 | East | 17 | 65 | -48 |
| L72289-04 | West | 15 | 82 | -67 |

The laboratory is not approved by NELAC for this method.



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