



Sunnyside Operations Associates L.P.

P.O. Box 10, East Carbon, Utah 84520 • (801) 888-4476 • Fax (801) 888-2538

January 6, 2020

Allan Moore
Solid Waste Program Manager
195 North 1950 West
Salt Lake City, Utah 84116

RE: Sunnyside Cogeneration Associates (SCA)
SCA #2 Ash Landfill
CCR Annual Ground Water Report

Dear Mr. Moore:

Please find attached SCA's CCR Annual Ground Water Report. Monitoring wells MW-8, MW-9, MW-10 and MW-11, were sampled on June 6, 2019 and December 12, 2019, in accordance with Federal regulations under 40CFR 257 and State regulations under R315-319.

Water samples were collected at MW-8 only, since MW-9, MW-10 and MW-11 were dry wells. MW-8 sampling results were well within permit protection limits.

Enclosures:

<u>Table 1:</u>	CCR Ground Water Analysis for year 2019
<u>Table 2:</u>	CCR Monitoring Well Parameters for year 2019

SCA #2 Ash Landfill
CCR Annual Ground Water Report

Page 2:

If you have any questions regarding the sampling activities or this report, please contact Rusty Netz or myself at (435) 888-4476.

Thank You,

A handwritten signature in black ink, appearing to read "Gerald Hascall". The signature is fluid and cursive, with a prominent initial "G" and a long, sweeping tail.

Gerald Hascall
Agent for
Sunnyside Cogeneration Associates

Cc: Rusty Netz
Scott Carlson
Plant File

CCR Monitoring Wells

Legend
Wells

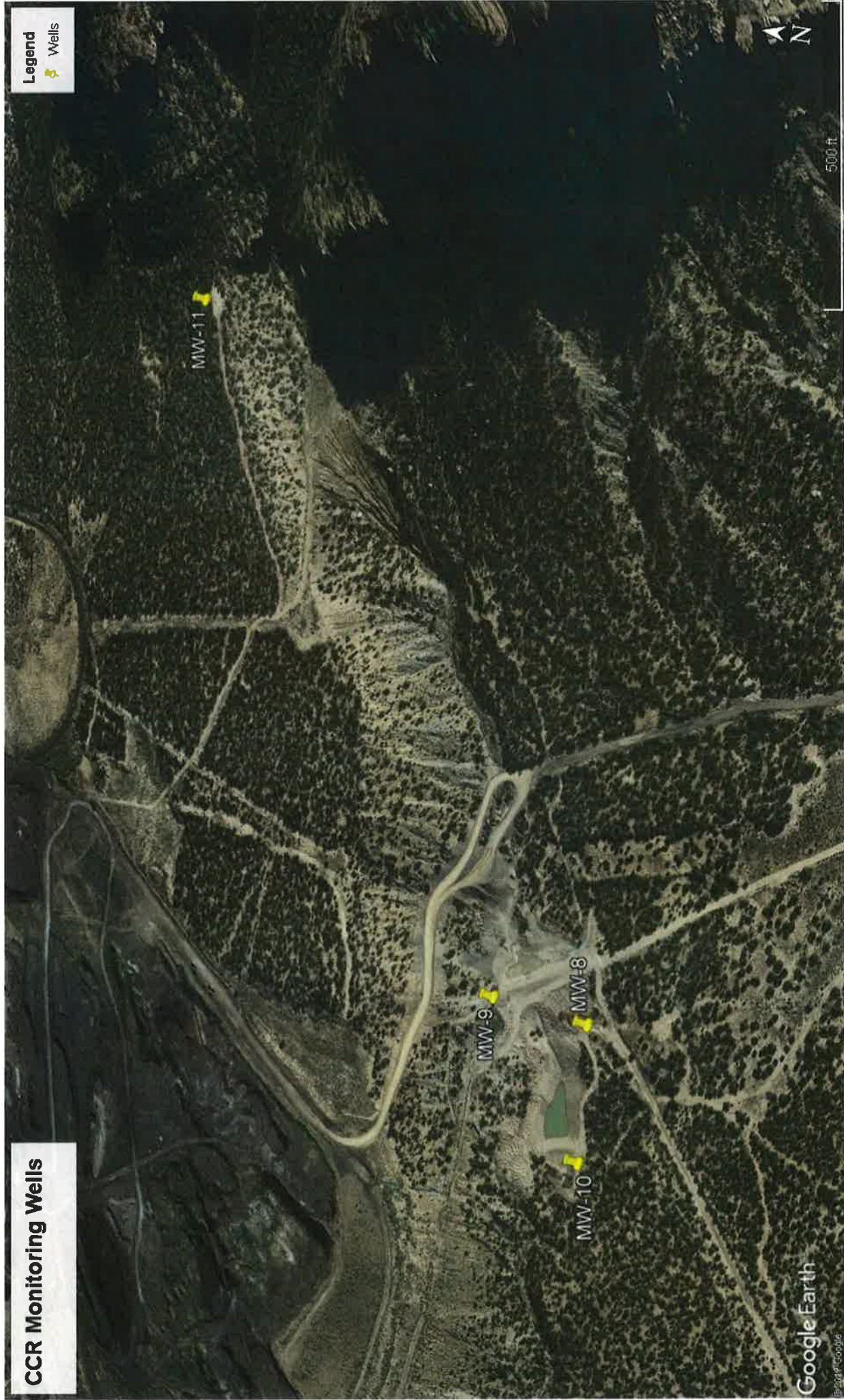


TABLE 1

Sunnyside Cogeneration Associates Facility SCA #2 CCR Ash Landfill Groundwater Compliance Sampling

First half of 2019
Sampling Date: 6/6/19

Sample Location	Field Parameters				Metals(mg/l)					
	Temp. (C)	pH (S.U.)	SC (umhos)	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS
Permit Background Values	N.A.	N.A.	N.A.	0.35	422	251	0.6	7.2	6743	11013
Permit Protection Levels	N.A.	N.A.	N.A.	0.46	510.70	394.2	1.42	7.98	7988	12659
MW-8	13.2	7.39	8716	0.19	246	267	0.5	7.1	6400	9560
MW-9	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW
MW-10	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW
MW-11	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW

NW= No water present in well
NA= Non-Applicable
ND=Non-Detect

TABLE 1

Sunnyside Cogeneration Associates Facility SCA #2 CCR Ash Landfill Groundwater Compliance Sampling

Second half of 2019
Sampling Date: 12/12/19

Sample Location	Field Parameters				Metals(mg/l)						
	Temp. (C)	pH (S.U.)	SC (umhos)		Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS
Permit Background Values	N.A.	N.A.	N.A.		0.35	422	251	0.6	7.2	6743	11013
Permit Protection Levels	N.A.	N.A.	N.A.		0.46	510.70	394.2	1.42	7.98	7988	12659
MW-8	12.7	6.65	8115		0.28	287	258	0.6	7.1	6320	8410
MW-9	NW	NW	NW		NW	NW	NW	NW	NW	NW	NW
MW-10	NW	NW	NW		NW	NW	NW	NW	NW	NW	NW
MW-11	NW	NW	NW		NW	NW	NW	NW	NW	NW	NW

NW= No water present in well
NA= Non-Applicable
ND=NoN-Detect

TABLE 2

Sunnyside Cogeneration Associates Facility SCA #2 CCR Ash Landfill Groundwater Compliance Sampling First Half 2019

Date: June 6, 2019

GROUND WATER WELLS:

Casing Diameter (inches) 2

Casing Type: PVC

LOCATION	Monitoring Well	Personnel	Weather	Static Water Level (ft.)	Total Well Depth (ft.)	Calculated Purge Volume (gals.)	Purge Method	Purge Volume (gals.)	Field Parameters		
									Temp. (C)	pH (su)	SC (um)
SCA #2 Ash Landfill	MW-8	R. Netz	Clear	16.8	50.0	15.9	PUMP	16.0	13.2	7.39	8,716
SCA #2 Ash Landfill	MW-9	R. Netz	Clear	NW	50.0	NW	NW	NW	NW	NW	NW
SCA #2 Ash Landfill	MW-10	R. Netz	Clear	NW	50.0	NW	NW	NW	NW	NW	NW
SCA #2 Ash Landfill	MW-11	R. Netz	Clear	NW	65.0	NW	NW	NW	NW	NW	NW

Purge volume (gallons) = ((well depth-static water level)/25) x (casing dia.)² x 3

NW- NO Water Present in well

NS=No Sample Taken

TABLE 2

Sunnyside Cogeneration Associates Facility SCA #2 CCR Ash Landfill Groundwater Compliance Sampling Second Half 2019

Date: December 12, 2019
 GROUND WATER WELLS:
 Casing Diameter (inches) 2
 Casing Type: PVC

LOCATION	Monitoring Well	Personnel	Weather	Static Water Level (ft.)	Total Well Depth (ft.)	Calculated Purge Volume (gals.)	Purge Method	Purge Volume (gals.)	Field Parameters		
									Temp. (C)	pH (su)	SC (um)
SCA #2 Ash Landfill	MW-8	R. Netz	Clear/Cold	17.3	50.0	15.69	PUMP	15.0	12.7	6.65	8,115
SCA #2 Ash Landfill	MW-9	R. Netz	Clear/Cold	NW	50.0	NW	NW	NW	NW	NW	NW
SCA #2 Ash Landfill	MW-10	R. Netz	Clear/Cold	NW	50.0	NW	NW	NW	NW	NW	NW
SCA #2 Ash Landfill	MW-11	R. Netz	Clear/Cold	NW	65.0	NW	NW	NW	NW	NW	NW

Purge volume (gallons) = ((well depth-static water level)/25) x (casing dia.)² x3
 NW- NO Water Present in well
 NS=No Sample Taken



Certificate of Analysis

**Sunnyside Cogeneration
Rusty Netz
P.O. Box 10
East Carbon, UT 84520**

PO#: _____
Receipt: **6/7/19 9:20 @ 17.1 °C**
Date Reported: 6/17/2019
Project Name: **[none]**

Sample ID: **MW-8**

Matrix: **Wastewater**

Lab ID: **19F0432-01**

Date Sampled: **6/6/19 9:10**

Sampled By: **Client**

	<u>Result</u>	<u>Units</u>	<u>Minimum Reporting Limit</u>	<u>Method</u>	<u>Preparation Date/Time</u>	<u>Analysis Date/Time</u>	<u>Flag(s)</u>
Inorganic							
Chloride	267	mg/L	5	EPA 300.0	6/12/19	6/12/19	
Fluoride	0.5	mg/L	0.2	EPA 300.0	6/12/19	6/12/19	
pH	7.1	pH Units	0.1	SM 4500 H-B	6/7/19 16:50	6/7/19 17:00	SPH
Sulfate	6400	mg/L	100	EPA 300.0	6/12/19	6/12/19	
Total Dissolved Solids (TDS)	9560	mg/L	100	SM 2540 C	6/11/19	6/11/19	
Metals							
Boron, Total	0.19	mg/L	0.05	EPA 200.7	6/10/19	6/10/19	
Calcium, Total	246	mg/L	0.2	EPA 200.7	6/10/19	6/10/19	



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Rusty Netz
P.O. Box 10
East Carbon, UT 84520**

PO#:
Receipt: **6/7/19 9:20 @ 17.1 °C**
Date Reported: 6/17/2019
Project Name: **[none]**

Report Footnotes

Abbreviations

ND = Not detected at the corresponding Minimum Reporting Limit (MRL).
1 mg/L = one milligram per liter or 1 mg/kg = one milligram per kilogram = 1 part per million.
1 ug/L = one microgram per liter or 1 ug/kg = one microgram per kilogram = 1 part per billion.
1 ng/L = one nanogram per liter or 1 ng/kg = one nanogram per kilogram = 1 part per trillion.

Flag Descriptions

SPH = Sample submitted past method specified holding time.

DRINKING WATER SAMPLES ONLY

CHEMTECH - FORD ANALYTICAL LABORATORY

CHAIN OF CUSTODY

COMPANY: SCA
 ADDRESS: _____
 CITY/STATE/ZIP: _____
 PHONE #: _____ FAX: _____
 CONTACT: Rusty Note PROJECT: CCR landfill #2
 EMAIL: _____
* Expedited turnaround subject to additional charge

BILLING ADDRESS: _____
 BILLING CITY/STATE/ZIP: _____
 PURCHASE ORDER: _____
 TURNAROUND TIME REQUIRED: _____
* Expedited turnaround subject to additional charge



State System Number

Send to State	
Yes	No

TESTS REQUESTED												Bacteria			
												Total Coliform + E. coli (Present/Absent)	Total Coliform + E. coli (Enumerated)	HPC (Plate Count)	R = Routine
															I = Investigative
															TR = Trigger Source
															RP = Repeat
															REPEAT
															OR = Original Location
															UP = Upstream
															DN = Downstream

Lab Use Only	CLIENT SAMPLE INFORMATION					
	LOCATION	DATE	TIME	FACILITY ID (source code)	POINT CODE (DBP)	Field: Residual Chlorine
F0432 -01	mlw-8	6/6/19	9:10			
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						

Sampled by: [print] _____ Sampled by: [signature] _____

Special Instructions:

Requisitioned by: [signature] _____ Date/Time: 6/6/19 11:30

Received by: [signature] *Annette Mills* Date/Time: 6/7/19 9:20

Requisitioned by: [signature] _____ Date/Time: _____

Received by: [signature] _____ Date/Time: _____

Requisitioned by: [signature] _____ Date/Time: _____

Received by: [signature] _____ Date/Time: _____

ON ICE NOT ON ICE Temp (C°): 17.1

Warning: Samples received outside the EPA recommended temperature range of 0-8 C° may be rejected.

CHEMTECH-FORD
 9632 South 500 West
 Sandy, UT 84070

801.262.7299 PHONE
 866.792.0093 FAX
www.ChemtechFord.com

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 Client agrees to pay c... and attorney's fees.

TRK# 0201 **7754 0677 5298**



Certificate of Analysis

**Sunnyside Cogeneration
Rusty Netz
P.O. Box 10
East Carbon, UT 84520**

PO#: _____
Receipt: **12/13/19 9:10 @ 6.5 °C**
Date Reported: 12/23/2019
Project Name: **CCR Sample**

Sample ID: **MW-8**

Matrix: **Water**

Lab ID: **19L0811-01**

Date Sampled: **12/12/19 9:15**

Sampled By: **Client**

	<u>Result</u>	<u>Units</u>	<u>Minimum Reporting Limit</u>	<u>Method</u>	<u>Preparation Date/Time</u>	<u>Analysis Date/Time</u>	<u>Flag(s)</u>
Inorganic							
Chloride	258	mg/L	5	EPA 300.0	12/13/19	12/13/19	
Fluoride	0.6	mg/L	0.5	EPA 300.0	12/13/19	12/13/19	
pH	7.1	pH Units	0.1	SM 4500 H-B	12/13/19 16:19	12/13/19 16:35	SPH
Sulfate	6320	mg/L	100	EPA 300.0	12/13/19	12/13/19	
Total Dissolved Solids (TDS)	8410	mg/L	50	SM 2540 C	12/18/19	12/18/19	
Metals							
Boron, Total	0.28	mg/L	0.05	EPA 200.7	12/16/19	12/16/19	
Calcium, Total	287	mg/L	0.2	EPA 200.7	12/16/19	12/16/19	



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**Sunnyside Cogeneration
Rusty Netz
P.O. Box 10
East Carbon, UT 84520**

PO#:
Receipt: **12/13/19 9:10 @ 6.5 °C**
Date Reported: 12/23/2019
Project Name: **CCR Sample**

Report Footnotes

Abbreviations

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Flag Descriptions

SPH = Sample submitted past method specified holding time.

DRINKING WATER SAMPLES ONLY

CHEMTECH - FORD ANALYTICAL LABORATORY

CHAIN OF CUSTODY

COMPANY: SCA
 ADDRESS: _____
 CITY/STATE/ZIP: _____
 PHONE #: _____ FAX: _____
 CONTACT: Rusty nrtz PROJECT: CCR Sample
 EMAIL: _____

BILLING ADDRESS: _____
 BILLING CITY/STATE/ZIP: _____
 PURCHASE ORDER: _____



TURNAROUND TIME REQUIRED: _____
 * Expedited turnaround subject to additional charge

State System Number

Send to State	
Yes	No

TESTS REQUESTED										Bacteria			
CCR Sample										Total Coliform + E. coli (Present/Absent)	Total Coliform + E. coli (Enumerated)	HPC (Plate Count)	R = Routine
													I = Investigative
													TR = Trigger Source
													RP = Repeat
										REPEAT			
										OR = Original Location			
										UP = Upstream			
										DN = Downstream			

Lab Use Only	CLIENT SAMPLE INFORMATION						
LOB11 -01	LOCATION	DATE	TIME	FACILITY ID (source code)	POINT CODE (DBP)	Field: Residual Chlorine	
	1. MW-8	12/12	9:15				
	2.						
	3.						
	4.						
	5.						
	6.						
	7.						
	8.						
	9.						
	10.						

Sampled by: [print]	Sampled by: [signature]	ON ICE	NOT ON ICE	Temp (C°): 6.5
Special Instructions:		Samples received outside the EPA recommended temperature range of 0-6 C° may be rejected.		
Relinquished by: [signature]	Date/Time	Received by: [signature]	Date/Time	
<u>Rusty nrtz</u>	12/12/19	<u>Janette Mills</u>	12/13/19 9:10	
Relinquished by: [signature]	Date/Time	Received by: [signature]	Date/Time	

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Payment Terms are net 30 days OAC. 1.5% interest charge per month (18% per annum).
 Client agrees to pay collection costs and attorney's fees.

7772 2851 1753 Fed Ex

