

## Sunnyside Cogeneration Associates

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

*Doc  
Adams/Keith*

July 15, 2002

**RECEIVED**

JUL 17 2002

**DIVISION OF  
WATER QUALITY**

STATE OF UTAH  
Department of Environmental Quality  
Division of Water Quality  
288 North 1460 West  
P.O. Box 144870  
Salt Lake City, Utah 84114-4870

Attention: Mr. Don Ostler

Subject: Sunnyside Cogeneration Associates  
January, February, March,  
April, May, June-2002  
Semi-Annual Monitoring Reports  
Ground Water Permit No. UGW070002

Dear Mr. Ostler:

Please find attached the sampling report for the January, February, March, April, May, June-2002, semi-annual monitoring period. The monitoring of Ground Water discharge Permit sampling locations was performed on June 6, 2002, in accordance with the Revised Ground Water Quality Sampling Plan for Ground Water Discharge Permit Number UGW070002.

Included is the monitoring data for monitoring well MW-7. The Utah Division of Water Quality calculated, and set, protection limits for MW-7 on September 20, 2000.

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

*RL* Document Date 7/17/2002

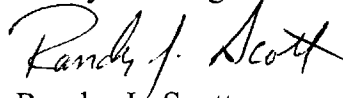


DWQ-2002-001181

Don Ostler  
Page Two

Sincerely,

Agent for  
Sunnyside Cogeneration Associates



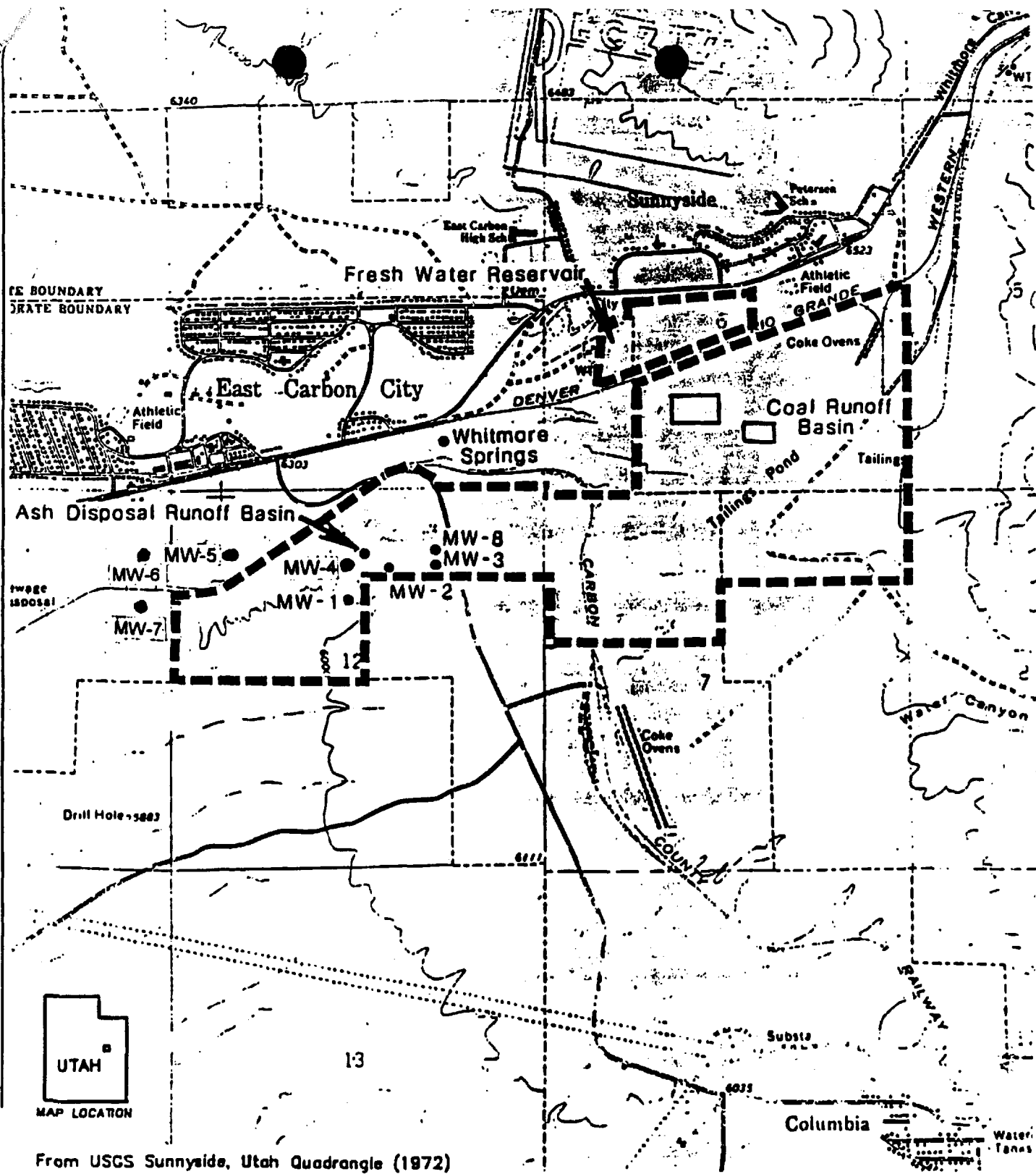
Randy J. Scott  
Plant Manager

Enclosures:

<u>Figure 1:</u>	Ground Water Permit Sampling Location
<u>Table 1:</u>	Ground Water Analysis for the 1 <sup>st</sup> Half of 2002
<u>Table 2:</u>	Monitoring Well MW-7
<u>Attachment A:</u>	Field Data Sheets
<u>Attachment B:</u>	Analytical Reports

cc. Rusty Netz COSI  
SCA Plant File

# Figure 1



## GROUNDWATER PERMIT SAMPLING LOCATIONS

**Huntingdon**

Engineering and Environmental, Inc.



Approximate Scale (Ft)

0 2000

**Sunnyside Cogeneration Facility  
Sunnyside, Utah**

Job: 5-137.2-91

Figure 1

# Table 1

TABLE 1

**Sunnyside Cogeneration Associates Facility  
Sunnyside, Utah**

Groundwater Permit # UGW070002 Compliance Sampling

First half 2002  
Sampling Date: June 6, 2002

Sample Location	Field Parameters			Metals(mg/l)									
	Temp. (C)	pH (S.U.)	SC (umhos)	Arsenic	Barium	Cadmium	Chromium	Copper	Lead	Mercury	Selenium	Silver	Zinc
Permit Background Values	N.A.	N.A.	N.A.	<0.002	0.019	0.002	0.025	0.266	<0.001	<0.0001	<0.002	<0.001	0.063
Permit Protection Levels	N.A.	N.A.	N.A.	0.012	0.25	0.003	0.02	0.25	0.012	0.0005	0.002	0.012	1.25
Whitmore Springs	12.3	8.43	1455	<0.002	<0.2	0.002	NA	<0.1	<0.001	NA	<0.002	<0.005	<0.01
Freshwater Reservoir	NW	NW	NW	NW	NW	NW	NA	NW	NW	NA	NW	NW	NW
Coal Runoff Basin	NW	NW	NW	NW	NW	NW	NA	NW	NW	NA	NW	NW	NW
Ash Disposal Runoff Basin	NW	NW	NW	NW	NW	NW	NA	NW	NW	NA	NW	NW	NW
Well MW-1	13.5	7.45	2715	0.003	<0.20	<0.002	NA	<0.1	<0.001	NA	<0.002	<0.005	<0.01
Well MW-2	14.5	7.65	1712	<0.002	<0.20	0.002	NA	<0.1	<0.001	NA	<0.003	<0.005	0.01
Well MW-3	12.3	7.78	1443	<0.002	<0.2	<0.002	NA	<0.1	<0.001	NA	<0.002	<0.005	<0.01
Well MW-4	15.4	7.49	2124	0.002	<0.2	<0.002	NA	<0.1	<0.001	NA	<0.002	<0.005	<0.1

Sample Locations	Inorganics		Cations(mg/l)					Anions(mg/l)				Alkalinity	Laboratory Number	
	TDS (mg/l)	pH (S.U.)	Calcium	Hardness CaCO3	Sodium	Potassium	Magnesium	Chloride	Sulfate	Bicarbonate HCO3	Carbonate CO3			
Permit Background Values	1677	8.25	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Permit Protection Levels	2096	6.5-8.5	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Whitmore Springs	1029	8.44	71	511	172	3	81	20	367	598	<5	490	59-24085	
Freshwater Reservoir	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	
Coal Runoff Basin	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	
Ash Disposal Runoff Basin	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	
Well MW-1	2275	7.38	197	1213	305	7	175	97	1132	656	<5	538	59-24080	
Well MW-2	1237	7.54	92	625	224	6	96	35	471	666	<5	546	59-24081	
Well MW-3	1004	7.71	71	486	193	5	75	30	316	628	<5	515	59-24082	
Well MW-4	1551	7.45	162	936	276	11	129	75	676	638	<5	523	59-24083	

A "<" sign indicates the value reported was the practical quantitation limit for this sample using the method described. Concentrations of analyte, if present, below this limit were not quantifiable. These results should be considered non-detect.

NW= No water present in basin.

NA= Non-Applicable

BA=BI-Annually

NS=No Sample Taken

## **Table 2**

TABLE 2

**Sunnyside Cogeneration Associates Facility  
Sunnyside, Utah**

Groundwater Permit # UGW070002 Compliance Sampling

**MW-7**

First half 2002

Sampling Date: June 6, 2002

Sample Location	Field Parameters			Metals(mg/l)									
	Temp. (C)	pH (S.U.)	SC (umhos)	Arsenic	Barium	Cadmium	Chromium	Copper	Lead	Mercury	Selenium	Silver	Zinc
Permit Background Values	N.A.	N.A.	N.A.	0.006	0.19	0.003	NA	0.018	0.042	NA	0.167	0.0011	0.037
Permit Protection Levels	N.A.	N.A.	N.A.	0.025	0.25	0.003	NA	0.65	0.012	NA	0.21	0.05	2.5
MW-7	13.1	7.68	5485	0.002	<0.2	<0.002	NA	<0.1	<0.001	NA	0.013	<0.005	<0.01

Sample Locations	Inorganics		Cations(mg/l)					Anions(mg/l)				Alkalinity	Laboratory Number	
	TDS (mg/l)	pH (S.U.)	Calcium	Hardness CaCO3	Sodium	Potassium	Magnesium	Chloride	Sulfate	Bicarbonate HCO3	Carbonate CO3			
Permit Background Values	4289.8	7.979	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Permit Protection Levels	5362.3	6.5-8.5	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
MW-7	4090	7.91	43	231	1370	6	30	326	1900	1072	<5	879	59-24084	

A "<" sign indicates the value reported was the practical quantitation limit for this sample using the method described. Concentrations of analyte, if present, below this limit were not quantifiable. These results should be considered non-detect.

NW= No water present in basin.

NA= Non-Applicable

BA=BI-Annually



# **Attachment A**

**Sunnyside Cogeneration Associates Facility**

Sunnyside, Utah

First Half 2002

Groundwater Permit # UGW070002 Compliance Sampling

Date: June 6, 2002

GROUND WATER WELLS:

Casing Diameter (inches) 2

Casing Type: PVC

LOCATIONS	Time	Personal	Weather	Static Water Level (ft.)	Total Well Depth (ft.)	Calculated Purge Volume (gals.)	Purge Method	Purge Volume (gals.)	Field Parameters			Remarks (Sample method/time, water color, etc.)
									Temp. (C)	pH (su)	SC (um)	
WELL-1	1000	R. Netz	Warm	18.4	29.7	5.4	SSB	5	13.5	7.45	2715	Clear in color
WELL-2	1030	R. Netz	Warm	25.3	37.5	5.8	SSB	5	14.5	7.65	1712	Clear in color
WELL-3	1100	R. Netz	Warm	16.3	22.6	3	SSB	3	12.3	7.78	1443	Clear in color
Well-4	1145	R. Netz	Warm	21.3	39	8.4	SSB	8	15.4	7.49	2124	Clear in color
Well-7	900	R. Netz	Warm	16.3	43.6	13	SSB	10	13.1	7.68	5485	Clear in color
Well-5	915	R. Netz	Warm	NW	30	NW	SSB	NW	NW	NW	NW	DRY WELL
Well-6	920	R. Netz	Warm	NW	30	NW	SSB	NW	NW	NW	NW	DRY WELL

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

\* Well #10 is a field duplicate from location well #1

NS=No Sample Taken

**Sunnyside Cogeneration Associates Facility**  
 Sunnyside, Utah  
 First Half 2002  
 Groundwater Permit # UGW070002 Compliance Sampling

Monitoring Location: SURFACE WATER

Date: June 6, 2002

Locations	Time	Personal	Weather	Discharge Present (yes/no)	Field Parameters						Sample Taken (yes/no)	Remarks (Sample method/time, water color, etc.)
					Flow (gpm)	Water Level (gals)	Temp. (C)	pH (su)	SC (um)	DO (mg/l)		
Whitmore Springs	1205	R. Netz	Warm	Yes	B	NA	12.3	8.43	1455	N.A.	YES	
Fresh Water Reservoir	1300	R. Netz	Warm	NO	NA	empty	empty	empty	empty	empty	NO	
Coal Runoff Basin	1300	R. Netz	Warm	NO	NW	NW	NW	NW	NW	N.A.	NO	
Ash Disposal Basin	1330	R. Netz	Warm	NO	NW	NW	NW	NW	NW	N.A.	NO	

NW--NO WATER PRESENT

# **Attachment B**



# COMMERCIAL TESTING & ENGINEERING CO.

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P.O. BOX 1020  
HUNTINGTON, UT 84528  
TEL: (435) 653-2311  
FAX: (435) 653-2436  
www.comteco.com

July 2, 2002

Sunnyside Cogeneration Assoc.  
P.O. Box 10  
East Carbon Utah 84520

Sample identification by  
Sunnyside Cogeneration Assoc.

ID:WS

Kind of sample Water  
reported to us

RECEIVED 1200  
SAMPLED 1000  
FIELD MEASUREMENTS

Sample taken at Sunnyside Cogeneration

Sample taken by RUSTY NET

Date sampled June 6, 2002

NOTES:  
DIS.METALS  
FILTERED @ LAB

Date received June 7, 2002

Page 1 of 1

Analysis report no. 59-24085

Parameter	Result	MRL	Units	Method	Analyzed		
					Date/Time/Analyst		
Alkalinity, Bicarbonate	598	5	mg/l as HCO <sub>3</sub>	EPA 310.1	06-12-2002 0900	BP	
Alkalinity, Carbonate	<5	5	mg/l as CO <sub>3</sub>	EPA 310.1	06-12-2002 0900	BP	
Alkalinity, Total	490	5	mg/l as CaCO <sub>3</sub>	EPA 310.1	06-12-2002 0900	BP	
Arsenic, Dissolved	<0.002	0.002	mg/l	EPA 206.2	06-18-2002 0839	MK	
Barium, Dissolved	<0.20	0.20	mg/l	EPA 208.1	06-13-2002 0834	MK	
Cadmium, Dissolved	<0.002	0.002	mg/l	EPA 213.1	06-12-2002 0926	MK	
Calcium, Total	71	1	mg/l	EPA 215.1	06-13-2002 0949	MK	
Conductivity	1534		umhos/cm	SM 2510-B	06-10-2002 1035	SC	
Chloride	20	1	mg/l	EPA 300.0	06-14-2002 1128	SC	
Copper, Dissolved	<0.1	0.1	mg/l	EPA 220.1	06-12-2002 0854	MK	
Hardness, Total	511	----	mg/l as CaCO <sub>3</sub>	SM2340-B	06-18-2002 1220	SC	
Lead, Dissolved	<0.001	0.001	mg/l	EPA 239.1	06-12-2002 0903	MK	
Magnesium, Total	81	5	mg/l	EPA 242.1	06-13-2002 1025	MK	
pH	8.44	----	pH units	EPA 150.1	06-07-2002 1445	DI	
Potassium, Total	3	1	mg/l	EPA 258.1	06-12-2002 1148	MK	
Selenium, Dissolved	<0.002	0.002	mg/l	EPA 270.2	06-17-2002 0829	MK	
Sodium, Total	172	5	mg/l	EPA 273.1	06-12-2002 1308	MK	
Solids, Total Dissolved	1029	10	mg/l	EPA 160.1	06-10-2002 1100	DI	
Silver	<0.005	.005	mg/l	EPA 200.7	06-24-2002 1257	SK	
Sulfate	367	5	mg/l	EPA 300.0	06-14-2002 1128	SC	
Zinc, Dissolved	<0.01	0.01	mg/l	EPA 289.1	06-12-2002 0936	MK	

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

Huntington Laboratory





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HUNTINGTON, UT 84528  
TEL: (435) 653-2311  
FAX: (435) 653-2436  
www.comteco.com

July 2, 2002

Sunnyside Cogeneration Assoc.  
P.O. Box 10  
East Carbon Utah 84520

Sample identification by  
Sunnyside Cogeneration Assoc.

ID:MW-1

Kind of sample Water  
reported to us

RECEIVED 1200  
SAMPLED 0840  
FIELD MEASUREMENTS

Sample taken at Sunnyside Cogeneration

Sample taken by RUSTY NET

Date sampled June 6, 2002

NOTES:  
DIS.METALS  
FILTERED @ LAB

Date received June 7, 2002

Page 1 of 1

Analysis report no. 59-24080

Parameter	Result	MRL	Units	Method	Analyzed		
					Date/Time/Analyst		
Alkalinity, Bicarbonate	656	5	mg/l as HCO <sub>3</sub>	EPA 310.1	06-12-2002 0900	BP	
Alkalinity, Carbonate	<5	5	mg/l as CO <sub>3</sub>	EPA 310.1	06-12-2002 0900	BP	
Alkalinity, Total	538	5	mg/l as CaCO <sub>3</sub>	EPA 310.1	06-12-2002 0900	BP	
Arsenic, Dissolved	0.003	0.002	mg/l	EPA 206.2	06-18-2002 0839	MK	
Barium, Dissolved	<0.20	0.20	mg/l	EPA 208.1	06-13-2002 0834	MK	
Cadmium, Dissolved	<0.002	0.002	mg/l	EPA 213.1	06-12-2002 0926	MK	
Calcium, Total	197	1	mg/l	EPA 215.1	06-13-2002 0949	MK	
Conductivity	2840		umhos/cm	SM 2510-B	06-10-2002 1035	SC	
Chloride	97	1	mg/l	EPA 300.0	06-12-2002 0957	SC	
Copper, Dissolved	<0.1	0.1	mg/l	EPA 220.1	06-12-2002 0854	MK	
Hardness, Total	1213	----	mg/l as CaCO <sub>3</sub>	SM2340-B	06-18-2002 1220	SC	
Lead, Dissolved	<0.001	0.001	mg/l	EPA 239.1	06-12-2002 0903	MK	
Magnesium, Total	175	5	mg/l	EPA 242.1	06-13-2002 1025	MK	
pH	7.38	----	pH units	EPA 150.1	06-07-2002 1445	DI	
Potassium, Total	7	1	mg/l	EPA 258.1	06-12-2002 1148	MK	
Selenium, Dissolved	<0.002	0.002	mg/l	EPA 270.2	06-17-2002 0829	MK	
Sodium, Total	305	5	mg/l	EPA 273.1	06-12-2002 1308	MK	
Solids, Total Dissolved	2275	10	mg/l	EPA 160.1	06-10-2002 1100	DI	
Silver	<0.005	.005	mg/l	EPA 200.7	06-24-2002 1247	SK	
Sulfate	1132	5	mg/l	EPA 300.0	06-14-2002 1128	SC	
Zinc, Dissolved	<0.01	0.01	mg/l	EPA 289.1	06-12-2002 0936	MK	

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

Huntington Laboratory





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www.comteco.com

July 2, 2002

Sunnyside Cogeneration Assoc.  
P.O. Box 10  
East Carbon Utah 84520

Sample identification by  
Sunnyside Cogeneration Assoc.

ID:MW-2

Kind of sample Water  
reported to us

RECEIVED 1200  
SAMPLED 0920  
FIELD MEASUREMENTS

Sample taken at Sunnyside Cogeneration

Sample taken by RUSTY NET

Date sampled June 6, 2002

NOTES:  
DIS.METALS  
FILTERED @ LAB

Date received June 7, 2002

Page 1 of 1

Analysis report no. 59-24081

Parameter	Result	MRL	Units	Method	Analyzed	
					Date/Time/Analyst	
Alkalinity, Bicarbonate	666	5	mg/l as HCO <sub>3</sub>	EPA 310.1	06-12-2002 0900	BP
Alkalinity, Carbonate	<5	5	mg/l as CO <sub>3</sub>	EPA 310.1	06-12-2002 0900	BP
Alkalinity, Total	546	5	mg/l as CaCO <sub>3</sub>	EPA 310.1	06-12-2002 0900	BP
Arsenic, Dissolved	<0.002	0.002	mg/l	EPA 206.2	06-18-2002 0839	MK
Barium, Dissolved	<0.20	0.20	mg/l	EPA 208.1	06-13-2002 0834	MK
Cadmium, Dissolved	<0.002	0.002	mg/l	EPA 213.1	06-12-2002 0926	MK
Calcium, Total	92	1	mg/l	EPA 215.1	06-13-2002 0949	MK
Conductivity	1831		umhos/cm	SM 2510-B	06-10-2002 1035	SC
Chloride	35	1	mg/l	EPA 300.0	06-12-2002 0957	SC
Copper, Dissolved	<0.1	0.1	mg/l	EPA 220.1	06-12-2002 0854	MK
Hardness, Total	625	----	mg/l as CaCO <sub>3</sub>	SM2340-B	06-18-2002 1220	SC
Lead, Dissolved	<0.001	0.001	mg/l	EPA 239.1	06-12-2002 0903	MK
Magnesium, Total	96	5	mg/l	EPA 242.1	06-13-2002 1025	MK
pH	7.54	----	pH units	EPA 150.1	06-07-2002 1445	DI
Potassium, Total	6	1	mg/l	EPA 258.1	06-12-2002 1148	MK
Selenium, Dissolved	0.003	0.002	mg/l	EPA 270.2	06-17-2002 0829	MK
Sodium, Total	224	5	mg/l	EPA 273.1	06-12-2002 1308	MK
Solids, Total Dissolved	1237	10	mg/l	EPA 160.1	06-10-2002 1100	DI
Silver	<0.005	.005	mg/l	EPA 200.7	06-24-2002 1249	SK
Sulfate	471	5	mg/l	EPA 300.0	06-14-2002 1128	SC
Zinc, Dissolved	0.01	0.01	mg/l	EPA 289.1	06-12-2002 0936	MK

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

Huntington Laboratory





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July 2, 2002

Sunnyside Cogeneration Assoc.  
P.O. Box 10  
East Carbon Utah 84520

Sample identification by  
Sunnyside Cogeneration Assoc.

ID:MW-3

Kind of sample reported to us Water

RECEIVED 1200  
SAMPLED 0945  
FIELD MEASUREMENTS

Sample taken at Sunnyside Cogeneration

Sample taken by RUSTY NET

Date sampled June 6, 2002

NOTES:  
DIS.METALS  
FILTERED @ LAB

Date received June 7, 2002

Page 1 of 1

Analysis report no. 59-24082

Parameter	Result	MRL	Units	Method	Analyzed	
					Date/Time/Analyst	
Alkalinity, Bicarbonate	628	5	mg/l as HCO <sub>3</sub>	EPA 310.1	06-12-2002 0900	BP
Alkalinity, Carbonate	<5	5	mg/l as CO <sub>3</sub>	EPA 310.1	06-12-2002 0900	BP
Alkalinity, Total	515	5	mg/l as CaCO <sub>3</sub>	EPA 310.1	06-12-2002 0900	BP
Arsenic, Dissolved	<0.002	0.002	mg/l	EPA 206.2	06-18-2002 0839	MK
Barium, Dissolved	<0.20	0.20	mg/l	EPA 208.1	06-13-2002 0834	MK
Cadmium, Dissolved	<0.002	0.002	mg/l	EPA 213.1	06-12-2002 0926	MK
Calcium, Total	71	1	mg/l	EPA 215.1	06-13-2002 0949	MK
Conductivity	1513		umhos/cm	SM 2510-B	06-10-2002 1035	SC
Chloride	30	1	mg/l	EPA 300.0	06-12-2002 0957	SC
Copper, Dissolved	<0.1	0.1	mg/l	EPA 220.1	06-12-2002 0854	MK
Hardness, Total	486	----	mg/l as CaCO <sub>3</sub>	SM2340-B	06-18-2002 1220	SC
Lead, Dissolved	<0.001	0.001	mg/l	EPA 239.1	06-12-2002 0903	MK
Magnesium, Total	75	5	mg/l	EPA 242.1	06-13-2002 1025	MK
pH	7.71	----	pH units	EPA 150.1	06-07-2002 1445	DI
Potassium, Total	5	1	mg/l	EPA 258.1	06-12-2002 1148	MK
Selenium, Dissolved	<0.002	0.002	mg/l	EPA 270.2	06-17-2002 0829	MK
Sodium, Total	193	5	mg/l	EPA 273.1	06-12-2002 1308	MK
Solids, Total Dissolved	1004	10	mg/l	EPA 160.1	06-10-2002 1100	DI
Silver	<0.005	.005	mg/l	EPA 200.7	06-24-2002 1251	SK
Sulfate	316	5	mg/l	EPA 300.0	06-14-2002 1128	SC
Zinc, Dissolved	<0.01	0.01	mg/l	EPA 289.1	06-12-2002 0936	MK

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

Huntington Laboratory







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TEL: (435) 653-2311  
FAX: (435) 653-2436  
www.comteco.com

July 2, 2002

Sunnyside Cogeneration Assoc.  
P.O. Box 10  
East Carbon Utah 84520

Sample identification by  
Sunnyside Cogeneration Assoc.

ID: MW-4

Kind of sample Water  
reported to us

RECEIVED 1200  
SAMPLED 0900  
FIELD MEASUREMENTS

Sample taken at Sunnyside Cogeneration

Sample taken by RUSTY NET

Date sampled June 6, 2002

NOTES:  
DIS.METALS  
FILTERED @ LAB

Date received June 7, 2002

Page 1 of 1

Analysis report no. 59-24083

Parameter	Result	MRL	Units	Method	Analyzed		
					Date/Time/Analyst		
Alkalinity, Bicarbonate	638	5	mg/l as HCO <sub>3</sub>	EPA 310.1	06-12-2002 0900	BP	
Alkalinity, Carbonate	<5	5	mg/l as CO <sub>3</sub>	EPA 310.1	06-12-2002 0900	BP	
Alkalinity, Total	523	5	mg/l as CaCO <sub>3</sub>	EPA 310.1	06-12-2002 0900	BP	
Arsenic, Dissolved	0.002	0.002	mg/l	EPA 206.2	06-18-2002 0839	MK	
Barium, Dissolved	<0.20	0.20	mg/l	EPA 208.1	06-13-2002 0834	MK	
Cadmium, Dissolved	<0.002	0.002	mg/l	EPA 213.1	06-12-2002 0926	MK	
Calcium, Total	162	1	mg/l	EPA 215.1	06-13-2002 0949	MK	
Conductivity	2200		umhos/cm	SM 2510-B	06-10-2002 1035	SC	
Chloride	75	1	mg/l	EPA 300.0	06-12-2002 0957	SC	
Copper, Dissolved	<0.1	0.1	mg/l	EPA 220.1	06-12-2002 0854	MK	
Hardness, Total	936	----	mg/l as CaCO <sub>3</sub>	SM2340-B	06-18-2002 1220	SC	
Lead, Dissolved	<0.001	0.001	mg/l	EPA 239.1	06-12-2002 0903	MK	
Magnesium, Total	129	5	mg/l	EPA 242.1	06-13-2002 1025	MK	
pH	7.45	----	pH units	EPA 150.1	06-07-2002 1445	DI	
Potassium, Total	11	1	mg/l	EPA 258.1	06-12-2002 1148	MK	
Selenium, Dissolved	<0.002	0.002	mg/l	EPA 270.2	06-17-2002 0829	MK	
Sodium, Total	276	5	mg/l	EPA 273.1	06-12-2002 1308	MK	
Solids, Total Dissolved	1551	10	mg/l	EPA 160.1	06-10-2002 1100	DI	
Silver	<0.005	.005	mg/l	EPA 200.7	06-24-2002 1253	SK	
Sulfate	676	5	mg/l	EPA 300.0	06-14-2002 1128	SC	
Zinc, Dissolved	<0.01	0.01	mg/l	EPA 289.1	06-12-2002 0936	MK	

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

Huntington Laboratory





# COMMERCIAL TESTING & ENGINEERING CO.

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July 2, 2002

Sunnyside Cogeneration Assoc.  
P.O. Box 10  
East Carbon Utah 84520

Sample identification by  
Sunnyside Cogeneration Assoc.

ID:MW-7

Kind of sample Water  
reported to us

RECEIVED 1200  
SAMPLED 0820  
FIELD MEASUREMENTS

Sample taken at Sunnyside Cogeneration

Sample taken by RUSTY NET

Date sampled June 6, 2002

NOTES:  
DIS.METALS  
FILTERED @ LAB

Date received June 7, 2002

Page 1 of 1

Analysis report no. 59-24084

Parameter	Result	MRL	Units	Method	Analyzed		
					Date/Time/Analyst		
Alkalinity, Bicarbonate	1072	5	mg/l as HCO <sub>3</sub>	EPA 310.1	06-12-2002	0900	BP
Alkalinity, Carbonate	<5	5	mg/l as CO <sub>3</sub>	EPA 310.1	06-12-2002	0900	BP
Alkalinity, Total	879	5	mg/l as CaCO <sub>3</sub>	EPA 310.1	06-12-2002	0900	BP
Arsenic, Dissolved	0.002	0.002	mg/l	EPA 206.2	06-18-2002	0839	MK
Barium, Dissolved	<0.20	0.20	mg/l	EPA 208.1	06-13-2002	0834	MK
Cadmium, Dissolved	<0.002	0.002	mg/l	EPA 213.1	06-12-2002	0926	MK
Calcium, Total	43	1	mg/l	EPA 215.1	06-13-2002	0949	MK
Conductivity	5760		umhos/cm	SM 2510-B	06-10-2002	1035	SC
Chloride	326	1	mg/l	EPA 300.0	06-14-2002	1128	SC
Copper, Dissolved	<0.1	0.1	mg/l	EPA 220.1	06-12-2002	0854	MK
Hardness, Total	231	----	mg/l as CaCO <sub>3</sub>	SM2340-B	06-18-2002	1220	SC
Lead, Dissolved	<0.001	0.001	mg/l	EPA 239.1	06-12-2002	0903	MK
Magnesium, Total	30	5	mg/l	EPA 242.1	06-13-2002	1025	MK
pH	7.91	----	pH units	EPA 150.1	06-07-2002	1445	DI
Potassium, Total	6	1	mg/l	EPA 258.1	06-12-2002	1148	MK
Selenium, Dissolved	0.013	0.002	mg/l	EPA 270.2	06-17-2002	0829	MK
Sodium, Total	1370	5	mg/l	EPA 273.1	06-12-2002	1308	MK
Solids, Total Dissolved	4090	10	mg/l	EPA 160.1	06-10-2002	1100	DI
Silver	<0.005	.005	mg/l	EPA 200.7	06-24-2002	1255	SK
Sulfate	1900	5	mg/l	EPA 300.0	06-14-2002	1128	SC
Zinc, Dissolved	<0.01	0.01	mg/l	EPA 289.1	06-12-2002	0936	MK

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

Huntington Laboratory

