

## Sunnyside Cogeneration Associates

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

RECEIVED

JUL 20 2004

DIVISION OF  
WATER QUALITY

July 13, 2004

*Mike H.*

*WBS*

STATE OF UTAH  
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-2004  
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-2004, semi-annual monitoring period. The monitoring of Ground Water discharge Permit sampling locations was performed on June 10, 2004, in accordance with the Revised Ground Water Quality Sampling Plan for Ground Water Discharge Permit Number UGW070002.

Lead concentration was slightly elevated, in MW-3, during the June 10, 2004, sampling event. SCA attributes the slightly higher concentration to the extended drought years and natural background conditions.

In conclusion, SCA believes that the elevated concentration is being affected by the on going drought and by naturally occurring background conditions. At this time we do not believe that re-sampling would be beneficial. SCA would like to proceed, if the UDWQ agrees, with our normal sampling schedule.

Document Date 7/20/2004

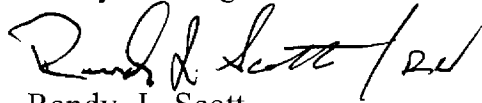


DWQ-2004-001261

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

Sincerely,

Agent for  
Sunnyside Cogeneration Associates



Randy J. Scott  
Plant Manager

Enclosures:

<u>Table 1:</u>	Ground Water Analysis for the 1 <sup>st</sup> Half of 2004
<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

**TABLE 1**

**Sunnyside Cogeneration Associates Facility  
Sunnyside, Utah**

Groundwater Permit # UGW070002 Compliance Sampling

First half 2004  
Sampling Date: June 10, 2004

Sample Location	Field Parameters			Metals(mg/l)									
	Temp. (C)	pH (S.U.)	SC (umhos)	Arsenic	Barium	Cadmium		Copper	Lead		Selenium	Silver	Zinc
Permit Background Values	N.A.	N.A.	N.A.	<0.002	0.019	0.002		0.265	<0.001		<0.002	<0.001	0.063
Permit Protection Levels	N.A.	N.A.	N.A.	0.0125	0.50	0.0039		0.325	0.012		0.0125	0.025	1.25
Whitmore Springs	11	8.07	1850	0.0011	0.03	<0.005		<0.005	<0.001		0.0038	<0.0005	<0.01
Freshwater Reservoir	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
Ash Disposal Runoff Basin	NW	NW	NW	NW	NW	NW		NW	NW		NW	NW	NW
Well MW-1	12.8	7.15	2760	0.0021	0.026	<0.005		0.009	0.001		0.0092	<0.0005	0.01
Well MW-2	12.2	7.34	2100	0.0008	0.023	<0.005		0.006	<0.001		0.012	<0.0005	<0.01
Well MW-3	11.6	7.33	2000	0.0023	0.22	0.0006		0.011	0.014		0.0065	<0.0005	0.06
Well MW-4	14	7.25	2180	0.0017	0.05	<0.005		0.008	0.003		0.0038	<0.0005	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	1577	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	3018	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	1330	8.1	95	690	180	4	110	40	580	620	<1	510	04-U005782	
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	2170	7.2	140	1000	280	5.2	160	120	1000	630	<1	520	04-U005784	
Well MW-2	1490	7.4	94	730	230	5.8	120	43	630	730	<1	600	04-U005785	
Well MW-3	1450	7.3	160	930	210	7	130	41	600	700	<2	570	04-U005786	
Well MW-4	1610	7.2	110	730	240	6.9	110	63	720	610	<2	500	04-U005787	

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

## Sunnyside Cogeneration Associates Facility Sunnyside, Utah

Groundwater Permit # UGW070002 Compliance Sampling

MW-7

First half 2004

Sampling Date: June 10, 2004

Sample Location	Field Parameters			Metals(mg/l)							
	Temp. (C)	pH (S.U.)	SC (umhos)	Arsenic	Barium	Cadmium	Copper	Lead	Selenium	Silver	Zinc
Permit Background Values	N.A.	N.A.	N.A.	0.006	0.19	0.003	0.018	0.042	0.167	0.0011	0.037
Permit Protection Levels	N.A.	N.A.	N.A.	0.025	1.00	0.0025	0.65	0.012	0.025	0.05	2.5
MW-7	13	7.41	6590	0.0035	0.029	<.0005	0.033	<.001	0.013	<.0005	<.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.
Permit Protection Levels	6435	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.
MW-7	5430	7.5	92	590	1500	7.9	87	240	3100	830	<1	680	04-U005783

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

ND=NoN-Detect

# ATTACHMENT A

Sunnyside Cogeneration Associates Facility  
 Sunnyside, Utah  
 First Half 2004  
 Groundwater Permit # UGW070002 Compliance Sampling

Monitoring Location: SURFACE WATER

Date: June 10, 2004

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	0:00	R. Netz	Warm	Yes	2	NA	11	8.07	1850	N.A.	YES	
Fresh Water Reservoir	NW	NW	Warm	NO	NW	NW	NW	NW	NW	NW	NO	
Coal Runoff Basin	1130	R. Netz	Warm	NO	NW	NW	NW	NW	NW	N.A.	NO	
Ash Disposal Basin	1100	R. Netz	Warm	NO	NW	NW	NW	NW	NW	N.A.	NO	

NW--NO WATER PRESENT

**ATTACHMENT A**  
**Sunnyside Cogeneration Associates Facility**  
**Sunnyside, Utah**  
 First Half 2004  
 Groundwater Permit # UGW070002 Compliance Sampling

Date: June 10, 2004  
 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		
									Temp. (C)	pH (su)	SC (um)
WELL-1	1000	R. Netz	Hot	18.7	29.7	5.28	SSB	5	12.8	7.15	2760
WELL-2	1100	R. Netz	Hot	25.4	37.5	5.8	SSB	5	12.2	7.34	2100
WELL-3	1130	R. Netz	Hot	17.7	22.6	2.35	SSB	2	11.6	7.33	2000
Well-4	1030	R. Netz	Hot	22.4	39	8	SSB	7	14	7.25	2180
Well-7	930	R. Netz	Hot	15.6	43.6	13.4	SSB	13	13	7.41	6590
Well-5	830	R. Netz	Hot	NW	30	NW	SSB	NW	NW	NW	NW
Well-6	845	R. Netz	Hot	NW	30	NW	SSB	NW	NW	NW	NW

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



Lab No: 04-U005782  
Report Date: 6/24/04

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

### CERTIFICATE OF ANALYSIS

Sample Description: Whitmore Springs  
Sample Matrix: GROUND WATER  
Lab Group No: 65743  
Date/Time Sampled: 6/10/04 , 11:45  
Date/Time Received: 6/11/04 , 10:10  
Sample Note(s):

Sample received on ice.

PARAMETER / UNITS	RESULT	MRL	DATE ANALYZED	METHOD	ANALYST
<i>INORGANIC PARAMETERS</i>					
Alkalinity, as Bicarbonate, mg/L	620	1	6/22/04 15:00	SM 2320B	PNM
Alkalinity, as Carbonate, mg/L	< 1	1	6/22/04 15:00	SM 2320B	PNM
Alkalinity, Total (CaCO <sub>3</sub> ), mg/L	510	1	6/22/04 15:00	SM 2320B	PNM
Chloride (IC), mg/L	40	5	6/11/04 13:00	EPA 300.0	TSM
Hardness, (calc), mg CaCO <sub>3</sub> /L	690	0.2	6/24/04	SM 2340B	LD
Hardness Index: Very Hard Water					
pH, units	8.1	0.1	6/11/04 15:00	EPA 150.1	AK
Sulfate (IC), mg/L	580	5	6/11/04 13:00	EPA 300.0	TSM
Total Dissolved Solids, mg/L	1,330	10	6/16/04 9:45	EPA 160.1	JEG
Barium (T), as Ba, mg/L	0.030	0.005	6/15/04 12:14	EPA 200.7	MJB
Calcium (T), as Ca, mg/L	95	0.2	6/15/04 12:14	EPA 200.7	MJB
Magnesium (T), as Mg, mg/L	110	0.2	6/15/04 12:14	EPA 200.7	MJB
Potassium (T), as K, mg/L	4.0	0.2	6/15/04 12:14	EPA 200.7	MJB
Sodium (T), as Na, mg/L	180	0.2	6/15/04 12:14	EPA 200.7	MJB
Zinc (T), as Zn, mg/L	< 0.01	0.01	6/15/04 12:14	EPA 200.7	MJB
Arsenic (T), as As, mg/L	0.0011	0.0005	6/16/04 13:58	EPA 200.8	MJB
Cadmium (T), as Cd, mg/L	< 0.0005	0.0005	6/16/04 13:58	EPA 200.8	MJB
Copper (T), as Cu, mg/L	< 0.005	0.005	6/16/04 13:58	EPA 200.8	MJB
Lead (T), as Pb, mg/L	< 0.001	0.001	6/16/04 13:58	EPA 200.8	MJB
Selenium (T), as Se, mg/L	0.0038	0.0005	6/16/04 13:58	EPA 200.8	MJB
Silver (T), as Ag, mg/L	< 0.0005	0.0005	6/16/04 13:58	EPA 200.8	MJB
Temperature, Receiving, C	6.0		6/11/04 10:10	SM 2550B Mod	SPS

MRL = Minimum Reporting Limit



Lab No: 04-U005784  
Report Date: 6/24/04

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

### CERTIFICATE OF ANALYSIS

Sample Description: Well MW-1  
Sample Matrix: GROUND WATER  
Lab Group No: 65743  
Date/Time Sampled: 6/10/04 , 10:00  
Date/Time Received: 6/11/04 , 10:10  
Sample Note(s):

Sample received on ice.

PARAMETER / UNITS	RESULT	MRL	DATE ANALYZED	METHOD	ANALYST
<i>INORGANIC PARAMETERS</i>					
Alkalinity, as Bicarbonate, mg/L	630	1	6/22/04 15:00	SM 2320B	PNM
Alkalinity, as Carbonate, mg/L	< 1	1	6/22/04 15:00	SM 2320B	PNM
Alkalinity, Total (CaCO <sub>3</sub> ), mg/L	520	1	6/22/04 15:00	SM 2320B	PNM
Chloride (IC), mg/L	120	5	6/11/04 13:00	EPA 300.0	TSM
Hardness, (calc), mg CaCO <sub>3</sub> /L	1,000	0.2	6/24/04	SM 2340B	LD
Hardness Index: Very Hard Water					
pH, units	7.2	0.1	6/11/04 15:00	EPA 150.1	AK
Sulfate (IC), mg/L	1,000	5	6/11/04 13:00	EPA 300.0	TSM
Total Dissolved Solids, mg/L	2,170	10	6/16/04 9:45	EPA 160.1	JEG
Barium (T), as Ba, mg/L	0.026	0.005	6/15/04 12:14	EPA 200.7	MJB
Calcium (T), as Ca, mg/L	140	0.2	6/15/04 12:14	EPA 200.7	MJB
Magnesium (T), as Mg, mg/L	160	0.2	6/15/04 12:14	EPA 200.7	MJB
Potassium (T), as K, mg/L	5.2	0.2	6/15/04 12:14	EPA 200.7	MJB
Sodium (T), as Na, mg/L	280	0.2	6/15/04 12:14	EPA 200.7	MJB
Zinc (T), as Zn, mg/L	0.01	0.01	6/15/04 12:14	EPA 200.7	MJB
Arsenic (T), as As, mg/L	0.0021	0.0005	6/16/04 13:58	EPA 200.8	MJB
Cadmium (T), as Cd, mg/L	< 0.0005	0.0005	6/16/04 13:58	EPA 200.8	MJB
Copper (T), as Cu, mg/L	0.009	0.005	6/18/04 12:14	EPA 200.8	MJB
Lead (T), as Pb, mg/L	0.001	0.001	6/16/04 13:58	EPA 200.8	MJB
Selenium (T), as Se, mg/L	0.0092	0.0005	6/16/04 13:58	EPA 200.8	MJB
Silver (T), as Ag, mg/L	< 0.0005	0.0005	6/16/04 13:58	EPA 200.8	MJB
Temperature, Receiving, C	6.0		6/11/04 10:10	SM 2550B Mod	SPS

MRL = Minimum Reporting Limit





Lab No: 04-U005785  
Report Date: 6/24/04

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

### CERTIFICATE OF ANALYSIS

Sample Description: Well MW-2  
Sample Matrix: GROUND WATER  
Lab Group No: 65743  
Date/Time Sampled: 6/10/04 , 11:00  
Date/Time Received: 6/11/04 , 10:10  
Sample Note(s):

Sample received on ice.

PARAMETER / UNITS	RESULT	MRL	DATE ANALYZED	METHOD	ANALYST
<i>INORGANIC PARAMETERS</i>					
Alkalinity, as Bicarbonate, mg/L	730	1	6/22/04 15:00	SM 2320B	PNM
Alkalinity, as Carbonate, mg/L	< 1	1	6/22/04 15:00	SM 2320B	PNM
Alkalinity, Total (CaCO <sub>3</sub> ), mg/L	600	1	6/22/04 15:00	SM 2320B	PNM
Chloride (IC), mg/L	43	5	6/11/04 13:00	EPA 300.0	TSM
Hardness, (calc), mg CaCO <sub>3</sub> /L	730	0.2	6/24/04	SM 2340B	LD
Hardness Index: Very Hard Water					
pH, units	7.4	0.1	6/11/04 15:00	EPA 150.1	AK
Sulfate (IC), mg/L	630	5	6/11/04 13:00	EPA 300.0	TSM
Total Dissolved Solids, mg/L	1,490	10	6/16/04 9:45	EPA 160.1	JEG
Barium (T), as Ba, mg/L	0.023	0.005	6/15/04 12:14	EPA 200.7	MJB
Calcium (T), as Ca, mg/L	94	0.2	6/15/04 12:14	EPA 200.7	MJB
Magnesium (T), as Mg, mg/L	120	0.2	6/15/04 12:14	EPA 200.7	MJB
Potassium (T), as K, mg/L	5.8	0.2	6/15/04 12:14	EPA 200.7	MJB
Sodium (T), as Na, mg/L	230	0.2	6/15/04 12:14	EPA 200.7	MJB
Zinc (T), as Zn, mg/L	< 0.01	0.01	6/15/04 12:14	EPA 200.7	MJB
Arsenic (T), as As, mg/L	0.0008	0.0005	6/16/04 13:58	EPA 200.8	MJB
Cadmium (T), as Cd, mg/L	< 0.0005	0.0005	6/16/04 13:58	EPA 200.8	MJB
Copper (T), as Cu, mg/L	0.006	0.005	6/18/04 12:14	EPA 200.8	MJB
Lead (T), as Pb, mg/L	< 0.001	0.001	6/16/04 13:58	EPA 200.8	MJB
Selenium (T), as Se, mg/L	0.012	0.0005	6/16/04 13:58	EPA 200.8	MJB
Silver (T), as Ag, mg/L	< 0.0005	0.0005	6/16/04 13:58	EPA 200.8	MJB
Temperature, Receiving, C	8.0		6/11/04 10:10	SM 2550B Mod	SPS



Lab No: 04-U005786  
Report Date: 6/24/04

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

### CERTIFICATE OF ANALYSIS

**Sample Description:** Well MW-3  
**Sample Matrix:** GROUND WATER  
**Lab Group No:** 65743  
**Date/Time Sampled:** 6/10/04 , 11:30  
**Date/Time Received:** 6/11/04 , 10:10  
**Sample Note(s):**

Sample received on ice.

PARAMETER / UNITS	RESULT	MRL	DATE ANALYZED	METHOD	ANALYST
<i>INORGANIC PARAMETERS</i>					
Alkalinity, as Bicarbonate, mg/L	700	1	6/22/04 15:00	SM 2320B	PNM
Alkalinity, as Carbonate, mg/L	< 2	2	6/22/04 15:00	SM 2320B	PNM
Alkalinity, Total (CaCO <sub>3</sub> ), mg/L	570	1	6/22/04 15:00	SM 2320B	PNM
Chloride (IC), mg/L	41	5	6/11/04 13:00	EPA 300.0	TSM
Hardness, (calc), mg CaCO <sub>3</sub> /L	930	0.2	6/24/04	SM 2340B	LD
Hardness Index: Very Hard Water					
pH, units	7.3	0.1	6/11/04 15:00	EPA 150.1	AK
Sulfate (IC), mg/L	600	5	6/11/04 13:00	EPA 300.0	TSM
Total Dissolved Solids, mg/L	1,450	10	6/16/04 9:45	EPA 160.1	JEG
Barium (T), as Ba, mg/L	0.22	0.005	6/15/04 12:14	EPA 200.7	MJB
Calcium (T), as Ca, mg/L	160	0.2	6/15/04 12:14	EPA 200.7	MJB
Magnesium (T), as Mg, mg/L	130	0.2	6/15/04 12:14	EPA 200.7	MJB
Potassium (T), as K, mg/L	7.0	0.2	6/15/04 12:14	EPA 200.7	MJB
Sodium (T), as Na, mg/L	210	0.2	6/15/04 12:14	EPA 200.7	MJB
Zinc (T), as Zn, mg/L	0.06	0.01	6/15/04 12:14	EPA 200.7	MJB
Arsenic (T), as As, mg/L	0.0023	0.0005	6/16/04 13:58	EPA 200.8	MJB
Cadmium (T), as Cd, mg/L	0.0006	0.0005	6/16/04 13:58	EPA 200.8	MJB
Copper (T), as Cu, mg/L	0.011	0.005	6/18/04 12:14	EPA 200.8	MJB
Lead (T), as Pb, mg/L	0.014	0.001	6/16/04 13:58	EPA 200.8	MJB
Selenium (T), as Se, mg/L	0.0065	0.0005	6/16/04 13:58	EPA 200.8	MJB
Silver (T), as Ag, mg/L	< 0.0005	0.0005	6/16/04 13:58	EPA 200.8	MJB
Temperature, Receiving, C	5.0		6/11/04 10:10	SM 2550B Mod	SPS



Lab No: 04-U005787  
Report Date: 6/24/04

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

### CERTIFICATE OF ANALYSIS

Sample Description: Well MW-4  
Sample Matrix: GROUND WATER  
Lab Group No: 65743  
Date/Time Sampled: 6/10/04 , 10:30  
Date/Time Received: 6/11/04 , 10:10  
Sample Note(s):

Sample received on ice.

PARAMETER / UNITS	RESULT	MRL	DATE ANALYZED	METHOD	ANALYST
<i>INORGANIC PARAMETERS</i>					
Alkalinity, as Bicarbonate, mg/L	610	1	6/22/04 15:00	SM 2320B	PNM
Alkalinity, as Carbonate, mg/L	< 2	2	6/22/04 15:00	SM 2320B	PNM
Alkalinity, Total (CaCO <sub>3</sub> ), mg/L	500	1	6/22/04 15:00	SM 2320B	PNM
Chloride (IC), mg/L	63	5	6/11/04 13:00	EPA 300.0	TSM
Hardness, (calc), mg CaCO <sub>3</sub> /L	730	0.2	6/24/04	SM 2340B	LD
Hardness Index: Very Hard Water					
pH, units	7.2	0.1	6/11/04 15:00	EPA 150.1	AK
Sulfate (IC), mg/L	720	5	6/11/04 13:00	EPA 300.0	TSM
Total Dissolved Solids, mg/L	1,610	10	6/16/04 9:45	EPA 160.1	JEG
Barium (T), as Ba, mg/L	0.050	0.005	6/15/04 12:14	EPA 200.7	MJB
Calcium (T), as Ca, mg/L	110	0.2	6/15/04 12:14	EPA 200.7	MJB
Magnesium (T), as Mg, mg/L	110	0.2	6/15/04 12:14	EPA 200.7	MJB
Potassium (T), as K, mg/L	6.9	0.2	6/15/04 12:14	EPA 200.7	MJB
Sodium (T), as Na, mg/L	240	0.2	6/15/04 12:14	EPA 200.7	MJB
Zinc (T), as Zn, mg/L	0.01	0.01	6/15/04 12:14	EPA 200.7	MJB
Arsenic (T), as As, mg/L	0.0017	0.0005	6/16/04 13:58	EPA 200.8	MJB
Cadmium (T), as Cd, mg/L	< 0.0005	0.0005	6/16/04 13:58	EPA 200.8	MJB
Copper (T), as Cu, mg/L	0.008	0.005	6/18/04 12:14	EPA 200.8	MJB
Lead (T), as Pb, mg/L	0.003	0.001	6/16/04 13:58	EPA 200.8	MJB
Selenium (T), as Se, mg/L	0.0038	0.0005	6/16/04 13:58	EPA 200.8	MJB
Silver (T), as Ag, mg/L	< 0.0005	0.0005	6/16/04 13:58	EPA 200.8	MJB
Temperature, Receiving, C	8.0		6/11/04 10:10	SM 2550B Mod	SPS

MRL = Minimum Reporting Limit

Page 7

6100 SOUTH STRATLER  
SALT LAKE CITY UTAH 84107 6905  
801 262 7299 PHONE  
801 262 7378 FAX



Lab No: 04-U005783  
Report Date: 6/24/04

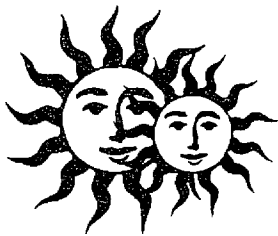
Sunnyside Cogeneration  
attn: Rusty Netz  
P.O. Box 10  
East Carbon, UT 84520

### CERTIFICATE OF ANALYSIS

**Sample Description:** MW-7 Freswater Res.  
**Sample Matrix:** GROUND WATER  
**Lab Group No:** 65743  
**Date/Time Sampled:** 6/10/04 , 9:30  
**Date/Time Received:** 6/11/04 , 10:10  
**Sample Note(s):**

Sample received on ice.

PARAMETER / UNITS	RESULT	MRL	DATE ANALYZED	METHOD	ANALYST
<i>INORGANIC PARAMETERS</i>					
Alkalinity, as Bicarbonate, mg/L	830	1	6/22/04 15:00	SM 2320B	PNM
Alkalinity, as Carbonate, mg/L	< 1	1	6/22/04 15:00	SM 2320B	PNM
Alkalinity, Total (CaCO <sub>3</sub> ), mg/L	680	1	6/22/04 15:00	SM 2320B	PNM
Chloride (IC), mg/L	240	10	6/11/04 13:00	EPA 300.0	TSM
Hardness, (calc), mg CaCO <sub>3</sub> /L	590	0.2	6/24/04	SM 2340B	LD
Hardness Index: Very Hard Water					
pH, units	7.5	0.1	6/11/04 15:00	EPA 150.1	AK
Sulfate (IC), mg/L	3,100	20	6/15/04 9:00	EPA 300.0	TSM
Total Dissolved Solids, mg/L	5,430	10	6/16/04 9:45	EPA 160.1	JEG
Barium (T), as Ba, mg/L	0.029	0.005	6/15/04 12:14	EPA 200.7	MJB
Calcium (T), as Ca, mg/L	92	0.2	6/15/04 12:14	EPA 200.7	MJB
Magnesium (T), as Mg, mg/L	87	0.2	6/15/04 12:14	EPA 200.7	MJB
Potassium (T), as K, mg/L	7.9	0.2	6/15/04 12:14	EPA 200.7	MJB
Sodium (T), as Na, mg/L	1,500	4	6/17/04 12:22	EPA 200.7	MJB
Zinc (T), as Zn, mg/L	< 0.01	0.01	6/15/04 12:14	EPA 200.7	MJB
Arsenic (T), as As, mg/L	0.0035	0.0005	6/16/04 13:58	EPA 200.8	MJB
Cadmium (T), as Cd, mg/L	< 0.0005	0.0005	6/16/04 13:58	EPA 200.8	MJB
Copper (T), as Cu, mg/L	0.033	0.005	6/18/04 12:14	EPA 200.8	MJB
Lead (T), as Pb, mg/L	< 0.001	0.001	6/16/04 13:58	EPA 200.8	MJB
Selenium (T), as Se, mg/L	0.013	0.0005	6/16/04 13:58	EPA 200.8	MJB
Silver (T), as Ag, mg/L	< 0.0005	0.0005	6/16/04 13:58	EPA 200.8	MJB
Temperature, Receiving, C	8.0		6/11/04 10:10	SM 2550B Mod	SPS



## Sunnyside Cogeneration Associates

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

*Rob - Carl  
these directed to  
you - WWT*

January 14, 2005

RECEIVED

JAN 19 2005

DIVISION OF  
WATER QUALITY

STATE OF UTAH  
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  
July, August, September, October, November, December-2004  
Semi-Annual Monitoring Reports  
Ground Water Permit No. UGW070002

Dear Mr. Ostler:

Please find attached the sampling report for the July, August, September, October, November, December-2004, semi-annual monitoring period. The monitoring of Ground Water discharge Permit sampling locations was performed on June 10, 2004, in accordance with the Revised Ground Water Quality Sampling Plan for Ground Water Discharge Permit Number UGW070002.

Lead concentration and Total Dissolved Solids were slightly elevated, in MW-2, during the December 14, 2004, sampling event. SCA attributes the slightly higher concentration of TDS to the elevated precipitation events during the later part of 2004, which have possibly caused increased leaching from the native materials.

SCA believes the elevated lead concentrations are a result of an analytical error or the sample was contaminated during the December 14<sup>th</sup>, sampling event. We are currently having our laboratory ( ChemThec Ford) re-analyze the holding sample, for MW-2, for lead and TDS. Any resulting change will be reported to the UDWQ.

If no analytical error is found, SCA will resample MW-2 to determine if sample contamination was the cause of the elevated lead concentrations. Those results will be reported as soon as they are completed.

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

Sincerely,

Agent for  
Sunnyside Cogeneration Associates

*Randy J. Scott / r.n.*

Randy J. Scott  
Plant Manager

Enclosures:

<u>Table 1:</u>	Ground Water Analysis for the 2 <sup>nd</sup> Half of 2004
<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

**TABLE 1**

**Sunnyside Cogeneration Associates Facility  
Sunnyside, Utah**

Groundwater Permit # UGW070002 Compliance Sampling

Second half 2004  
Sampling Date: December 14, 2004

Sample Location	Field Parameters			Metals(mg/l)								
	Temp. (C)	pH (S.U.)	SC (umhos)	Arsenic	Barium	Cadmium	Copper	Lead	Selenium	Silver	Zinc	
Permit Background Values	N.A.	N.A.	N.A.	<0.002	0.019	0.002	0.266	<0.001	<0.002	<0.001	0.063	
Permit Protection Levels	N.A.	N.A.	N.A.	0.0125	0.50	0.0039	0.325	0.012	0.0125	0.025	1.25	
Whitmore Springs	3.3	8.2	2160	0.0013	0.026	<.0005	0.01	<0.001	0.0051	<0.0005	<0.01	
Freshwater Reservoir	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	
Ash Disposal Runoff Basin	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	
Well MW-1	12.7	7.21	2530	0.0007	0.027	<.0005	0.009	0.001	0.0042	<0.0005	<.01	
Well MW-2	12.5	6.88	3420	0.0008	0.065	<.0005	0.013	0.027	0.0024	<0.0005	0.04	
Well MW-3	11.7	7.17	2060	0.0023	0.22	0.0006	0.011	0.014	0.0065	<0.0005	0.06	
Well MW-4	13.3	7.25	2230	0.0025	0.14	<.0005	0.012	0.011	0.0019	<0.0005	0.05	

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	3018	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	1730	7.9	130	510	250	3.5	140	47	790	620	<2	510	04-U014684	
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	1940	7	130	520	310	5.4	150	83	870	630	<2	520	04-U014680	
Well MW-2	3090	6.8	290	630	370	8.8	170	18	1600	770	<2	630	04-U014682	
Well MW-3	1500	7	190	640	230	7.8	150	39	560	770	<2	640	04-U014683	
Well MW-4	1760	7	140	510	270	9.2	120	67	700	630	<2	510	04-U014681	

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

## Sunnyside Cogeneration Associates Facility Sunnyside, Utah

Groundwater Permit # UGW070002 Compliance Sampling

**MW-7**

Second half 2004

Sampling Date: December 14, 2004

Sample Location	Field Parameters			Metals(mg/l)							
	Temp. (C)	pH (S.U.)	SC (umhos)	Arsenic	Barium	Cadmium	Copper	Lead	Selenium	Silver	Zinc
Permit Background Values	N.A.	N.A.	N.A.	0.006	0.19	0.003	0.018	0.042	0.167	0.0011	0.037
Permit Protection Levels	N.A.	N.A.	N.A.	0.025	1.00	0.0025	0.65	0.012	0.025	0.05	2.5
MW-7	12.2	7.66	6340	0.0025	0.025	<.0005	0.044	<.001	0.0074	<.0005	<.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	6435	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	5140	7.6	52	760	1700	6.4	45	280	2700	930	<2	760	04-U014679	

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

ND=NoN-Detect



**ATTACHMENT A**  
**Sunnyside Cogeneration Associates Facility**  
 Sunnyside, Utah  
 Second Half 2004  
 Groundwater Permit # UGW070002 Compliance Sampling

Date: December 14, 2004

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		
									Temp. (C)	pH (su)	SC (um)
WELL-1	9:05	R. Netz	cold	18.9	29.7	5.1	SSB	5	12.7	7.21	2760
WELL-2	9:55	R. Netz	cold	26.5	37.5	5.28	SSB	5	12.5	6.88	3420
WELL-3	10:15	R. Netz	cold	17.8	22.6	2.3	SSB	2	11.7	7.17	2060
Well-4	9:30	R. Netz	cold	22.8	39	7.76	SSB	8	13.3	7.25	2230
Well-7	8:45	R. Netz	cold	15	43.6	13.72	SSB	10	12.2	7.66	6340
Well-5	8:30	R. Netz	cold	NW	30	NW	SSB	NW	NW	NW	NW
Well-6	8:00	R. Netz		NW	30	NW	SSB	NW	NW	NW	NW

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





Lab No: 04-U014684  
Report Date: 12/22/04

Sunnyside Cogeneration Assoc. Fac.  
Attn. Rusty Netz  
#1 Power Plant Road  
Sunnyside, UT 84539

### CERTIFICATE OF ANALYSIS

Sample Description: WS  
Sample Matrix: GROUND WATER  
Lab Group No: 69311  
Date/Time Sampled: 12/14/04 , 11:00  
Date/Time Received: 12/15/04 , 10:25  
Sample Note(s):

Sample received on ice.

PARAMETER / UNITS	RESULT	MRL	DATE ANALYZED	METHOD	ANALYST
<i>INORGANIC PARAMETERS</i>					
Alkalinity, as Bicarbonate, mg/L	620	1	12/18/04 17:00	SM 2320B	TSM
Alkalinity, as Carbonate, mg/L	< 2	2	12/18/04 17:00	SM 2320B	TSM
Alkalinity, Total (CaCO <sub>3</sub> ), mg/L	510	1	12/18/04 17:00	SM 2320B	TSM
Chloride (IC), mg/L	47	5	12/15/04 16:00	EPA 300.0	TSM
pH, units	7.9	0.1	12/15/04 17:30	EPA 150.1	JMC
Sulfate (IC), mg/L	790	5	12/15/04 16:00	EPA 300.0	TSM
Total Dissolved Solids, mg/L	1,730	10	12/16/04 8:30	EPA 160.1	JEG
Barium (T), as Ba, mg/L	0.026	0.005	12/16/04 13:42	EPA 200.7	MJB
Calcium (T), as Ca, mg/L	130	0.2	12/16/04 13:42	EPA 200.7	MJB
Magnesium (T), as Mg, mg/L	140	0.2	12/16/04 13:42	EPA 200.7	MJB
Potassium (T), as K, mg/L	3.5	0.2	12/16/04 13:42	EPA 200.7	MJB
Sodium (T), as Na, mg/L	250	0.2	12/16/04 13:42	EPA 200.7	MJB
Zinc (T), as Zn, mg/L	< 0.01	0.01	12/16/04 13:42	EPA 200.7	MJB
Arsenic (T), as As, mg/L	0.0013	0.0005	12/16/04 13:48	EPA 200.8	MJB
Cadmium (T), as Cd, mg/L	< 0.0005	0.0005	12/16/04 13:48	EPA 200.8	MJB
Copper (T), as Cu, mg/L	0.010	0.005	12/16/04 13:48	EPA 200.8	MJB
Lead (T), as Pb, mg/L	< 0.001	0.001	12/16/04 13:48	EPA 200.8	MJB
Selenium (T), as Se, mg/L	0.0051	0.0005	12/16/04 13:48	EPA 200.8	MJB
Silver (T), as Ag, mg/L	< 0.0005	0.0005	12/16/04 13:48	EPA 200.8	MJB
Temperature, Receiving, C	5.0		12/15/04 10:25	SM 2550B Mod	SPS

MRL = Minimum Reporting Limit



Lab No: 04-U014680  
Report Date: 12/22/04

Sunnyside Cogeneration Assoc. Fac.  
Attn. Rusty Netz  
#1 Power Plant Road  
Sunnyside, UT 84539

### CERTIFICATE OF ANALYSIS

Sample Description: MW-1  
Sample Matrix: GROUND WATER  
Lab Group No: 69311  
Date/Time Sampled: 12/14/04 , 9:05  
Date/Time Received: 12/15/04 , 10:25  
Sample Note(s):

Sample received on ice.

PARAMETER / UNITS	RESULT	MRL	DATE ANALYZED	METHOD	ANALYST
<i>INORGANIC PARAMETERS</i>					
Alkalinity, as Bicarbonate, mg/L	630	1	12/18/04 17:00	SM 2320B	TSM
Alkalinity, as Carbonate, mg/L	< 2	2	12/18/04 17:00	SM 2320B	TSM
Alkalinity, Total (CaCO <sub>3</sub> ), mg/L	520	1	12/18/04 17:00	SM 2320B	TSM
Chloride (IC), mg/L	83	10	12/15/04 16:00	EPA 300.0	TSM
pH, units	7.0	0.1	12/15/04 17:30	EPA 150.1	JMC
Sulfate (IC), mg/L	870	10	12/15/04 16:00	EPA 300.0	TSM
Total Dissolved Solids, mg/L	1,940	10	12/16/04 8:30	EPA 160.1	JEG
Barium (T), as Ba, mg/L	0.027	0.005	12/16/04 13:42	EPA 200.7	MJB
Calcium (T), as Ca, mg/L	130	0.2	12/16/04 13:42	EPA 200.7	MJB
Magnesium (T), as Mg, mg/L	150	0.2	12/16/04 13:42	EPA 200.7	MJB
Potassium (T), as K, mg/L	5.4	0.2	12/16/04 13:42	EPA 200.7	MJB
Sodium (T), as Na, mg/L	310	0.2	12/16/04 13:42	EPA 200.7	MJB
Zinc (T), as Zn, mg/L	< 0.01	0.01	12/16/04 13:42	EPA 200.7	MJB
Arsenic (T), as As, mg/L	0.0007	0.0005	12/21/04 15:08	EPA 200.8	MJB
Cadmium (T), as Cd, mg/L	< 0.0005	0.0005	12/21/04 15:08	EPA 200.8	MJB
Copper (T), as Cu, mg/L	0.009	0.005	12/21/04 15:08	EPA 200.8	MJB
Lead (T), as Pb, mg/L	0.001	0.001	12/21/04 15:08	EPA 200.8	MJB
Selenium (T), as Se, mg/L	0.0042	0.0005	12/21/04 15:08	EPA 200.8	MJB
Silver (T), as Ag, mg/L	< 0.0005	0.0005	12/21/04 15:08	EPA 200.8	MJB
Temperature, Receiving, C	5.0		12/15/04 10:25	SM 2550B Mod	SPS

MRL = Minimum Reporting Limit



Lab No: 04-U014682  
Report Date: 12/22/04

Sunnyside Cogeneration Assoc. Fac.  
Attn. Rusty Netz  
#1 Power Plant Road  
Sunnyside, UT 84539

### CERTIFICATE OF ANALYSIS

Sample Description: MW-2  
Sample Matrix: GROUND WATER  
Lab Group No: 69311  
Date/Time Sampled: 12/14/04 , 9:55  
Date/Time Received: 12/15/04 , 10:25  
Sample Note(s):

Sample received on ice.

PARAMETER / UNITS	RESULT	MRL	DATE ANALYZED	METHOD	ANALYST
<i>INORGANIC PARAMETERS</i>					
Alkalinity, as Bicarbonate, mg/L	770	1	12/18/04 17:00	SM 2320B	TSM
Alkalinity, as Carbonate, mg/L	< 2	2	12/18/04 17:00	SM 2320B	TSM
Alkalinity, Total (CaCO <sub>3</sub> ), mg/L	630	1	12/18/04 17:00	SM 2320B	TSM
Chloride (IC), mg/L	18	5	12/15/04 16:00	EPA 300.0	TSM
pH, units	6.8	0.1	12/15/04 17:30	EPA 150.1	JMC
Sulfate (IC), mg/L	1,600	10	12/17/04 6:30	EPA 300.0	TSM
Total Dissolved Solids, mg/L	3,090	10	12/16/04 8:30	EPA 160.1	JEG
Barium (T), as Ba, mg/L	0.065	0.005	12/16/04 13:42	EPA 200.7	MJB
Calcium (T), as Ca, mg/L	290	0.2	12/16/04 13:42	EPA 200.7	MJB
Magnesium (T), as Mg, mg/L	170	0.2	12/16/04 13:42	EPA 200.7	MJB
Potassium (T), as K, mg/L	8.8	0.2	12/16/04 13:42	EPA 200.7	MJB
Sodium (T), as Na, mg/L	370	0.2	12/16/04 13:42	EPA 200.7	MJB
Zinc (T), as Zn, mg/L	0.04	0.01	12/16/04 13:42	EPA 200.7	MJB
Arsenic (T), as As, mg/L	0.0008	0.0005	12/21/04 15:08	EPA 200.8	MJB
Cadmium (T), as Cd, mg/L	< 0.0005	0.0005	12/21/04 15:08	EPA 200.8	MJB
Copper (T), as Cu, mg/L	0.013	0.005	12/21/04 15:08	EPA 200.8	MJB
Lead (T), as Pb, mg/L	0.027	0.001	12/21/04 15:08	EPA 200.8	MJB
Selenium (T), as Se, mg/L	0.0024	0.0005	12/21/04 15:08	EPA 200.8	MJB
Silver (T), as Ag, mg/L	< 0.0005	0.0005	12/21/04 15:08	EPA 200.8	MJB
Temperature, Receiving, C	5.0		12/15/04 10:25	SM 2550B Mod	SPS

MRL = Minimum Reporting Limit



Lab No: 04-U014683  
Report Date: 12/22/04

Sunnyside Cogeneration Assoc. Fac.  
Attn. Rusty Netz  
#1 Power Plant Road  
Sunnyside, UT 84539

### CERTIFICATE OF ANALYSIS

Sample Description: MW-3  
Sample Matrix: GROUND WATER  
Lab Group No: 69311  
Date/Time Sampled: 12/14/04 , 10:15  
Date/Time Received: 12/15/04 , 10:25  
Sample Note(s):

Sample received on ice.  
Soil sediment present in the acidified metals  
sample bottle has biased the metals results high  
in this sample.

PARAMETER / UNITS	RESULT	MRL	DATE ANALYZED	METHOD	ANALYST
<i>INORGANIC PARAMETERS</i>					
Alkalinity, as Bicarbonate, mg/L	770	1	12/18/04 17:00	SM 2320B	TSM
Alkalinity, as Carbonate, mg/L	< 2	2	12/18/04 17:00	SM 2320B	TSM
Alkalinity, Total (CaCO <sub>3</sub> ), mg/L	640	1	12/18/04 17:00	SM 2320B	TSM
Chloride (IC), mg/L	39	5	12/15/04 16:00	EPA 300.0	TSM
pH, units	7.0	0.1	12/15/04 17:30	EPA 150.1	JMC
Sulfate (IC), mg/L	560	5	12/15/04 16:00	EPA 300.0	TSM
Total Dissolved Solids, mg/L	1,500	10	12/16/04 8:30	EPA 160.1	JEG
Barium (T), as Ba, mg/L	0.17	0.005	12/16/04 13:42	EPA 200.7	MJB
Calcium (T), as Ca, mg/L	190	0.2	12/16/04 13:42	EPA 200.7	MJB
Magnesium (T), as Mg, mg/L	150	0.2	12/16/04 13:42	EPA 200.7	MJB
Potassium (T), as K, mg/L	7.8	0.2	12/16/04 13:42	EPA 200.7	MJB
Sodium (T), as Na, mg/L	230	0.2	12/16/04 13:42	EPA 200.7	MJB
Zinc (T), as Zn, mg/L	0.04	0.01	12/16/04 13:42	EPA 200.7	MJB
Arsenic (T), as As, mg/L	0.0019	0.0005	12/21/04 15:08	EPA 200.8	MJB
Cadmium (T), as Cd, mg/L	< 0.0005	0.0005	12/21/04 15:08	EPA 200.8	MJB
Copper (T), as Cu, mg/L	0.008	0.005	12/21/04 15:08	EPA 200.8	MJB
Lead (T), as Pb, mg/L	0.012	0.001	12/21/04 15:08	EPA 200.8	MJB
Selenium (T), as Se, mg/L	0.0060	0.0005	12/21/04 15:08	EPA 200.8	MJB
Silver (T), as Ag, mg/L	< 0.0005	0.0005	12/21/04 15:08	EPA 200.8	MJB
Temperature, Receiving, C	6.0		12/15/04 10:25	SM 2550B Mod	SPS

MRL = Minimum Reporting Limit



Lab No: 04-U014681  
Report Date: 12/22/04

Sunnyside Cogeneration Assoc. Fac.  
Attn. Rusty Netz  
#1 Power Plant Road  
Sunnyside, UT 84539

### CERTIFICATE OF ANALYSIS

Sample Description: MW-4  
Sample Matrix: GROUND WATER  
Lab Group No: 69311  
Date/Time Sampled: 12/14/04 , 9:30  
Date/Time Received: 12/15/04 , 10:25  
Sample Note(s):

Sample received on ice.

PARAMETER / UNITS	RESULT	MRL	DATE ANALYZED	METHOD	ANALYST
<b>INORGANIC PARAMETERS</b>					
Alkalinity, as Bicarbonate, mg/L	630	1	12/18/04 17:00	SM 2320B	TSM
Alkalinity, as Carbonate, mg/L	< 2	2	12/18/04 17:00	SM 2320B	TSM
Alkalinity, Total (CaCO <sub>3</sub> ), mg/L	510	1	12/18/04 17:00	SM 2320B	TSM
Chloride (IC), mg/L	67	5	12/15/04 16:00	EPA 300.0	TSM
pH, units	7.0	0.1	12/15/04 17:30	EPA 150.1	JMC
Sulfate (IC), mg/L	700	5	12/15/04 16:00	EPA 300.0	TSM
Total Dissolved Solids, mg/L	1,760	10	12/16/04 8:30	EPA 160.1	JEG
Barium (T), as Ba, mg/L	0.14	0.005	12/16/04 13:42	EPA 200.7	MJB
Calcium (T), as Ca, mg/L	140	0.2	12/16/04 13:42	EPA 200.7	MJB
Magnesium (T), as Mg, mg/L	120	0.2	12/16/04 13:42	EPA 200.7	MJB
Potassium (T), as K, mg/L	9.2	0.2	12/16/04 13:42	EPA 200.7	MJB
Sodium (T), as Na, mg/L	270	0.2	12/16/04 13:42	EPA 200.7	MJB
Zinc (T), as Zn, mg/L	0.05	0.01	12/16/04 13:42	EPA 200.7	MJB
Arsenic (T), as As, mg/L	0.0025	0.0005	12/21/04 15:08	EPA 200.8	MJB
Cadmium (T), as Cd, mg/L	< 0.0005	0.0005	12/21/04 15:08	EPA 200.8	MJB
Copper (T), as Cu, mg/L	0.012	0.005	12/21/04 15:08	EPA 200.8	MJB
Lead (T), as Pb, mg/L	0.011	0.001	12/21/04 15:08	EPA 200.8	MJB
Selenium (T), as Se, mg/L	0.0019	0.0005	12/21/04 15:08	EPA 200.8	MJB
Silver (T), as Ag, mg/L	< 0.0005	0.0005	12/21/04 15:08	EPA 200.8	MJB
Temperature, Receiving, C	7.0		12/15/04 10:25	SM 2550B Mod	SPS

MRL = Minimum Reporting Limit

