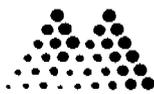


EXHIBIT A-5(c)

EWP ANALYTICAL DATA AND
CHAIN OF CUSTODY DOCUMENTATION



Mountain States Analytical

The Quality Solution

Eckhoff, Watson & Preator Engineering
1121 East 3900 South
Suite C100
Salt Lake City, UT 84124

Attn: Mr. Scott Carlson
Project: Sunnyside

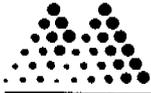
Sample ID: CRB
Matrix: Waste Water

MSAI Sample: 23534
MSAI Group: 5810
Date Reported: 09/09/94

Discard Date: 10/09/94
Date Submitted: 08/29/94
Date Sampled: 08/25/94
Collected by: JC
Purchase Order:
Project No.:

Test Analysis	Results as Received	Units	Limit of Quantitation
0248A Boron by ICP Method: SW-846 6010A	0.91	mg/l	0.10
7243 Aluminum by ICP Method: SW-846 6010A	ND	mg/l	0.20
.50 Calcium by ICP Method: SW-846 6010A	464	mg/l	1.0
7253 Copper by ICP Method: SW-846 6010A	ND	mg/l	0.02
7254 Iron by ICP Method: SW-846 6010A	ND	mg/l	0.10
7257 Magnesium by ICP Method: SW-846 6010A	313	mg/l	1.0
7258 Manganese by ICP Method: SW-846 6010A	ND	mg/l	0.02
7261 Nickel by ICP Method: SW-846 6010A	ND	mg/l	0.040
7262 Potassium by ICP Method: SW-846 6010A	28.9	mg/l	1.0
7267 Sodium by ICP Method: SW-846 6010A	448	mg/l	1.0
0201 Alkalinity as CaCO ₃ (pH 4.5) Method: EPA 310.1 Bicarbonate	314	mg/l	1





Mountain States Analytical

Eckhoff, Watson & Preator Engineering *The Quality Solution*

Sample ID: CRB

MSAI Sample: 23534
MSAI Group: 5810

Test	Analysis	Results as Received	Units	Limit of Quantitation
0201	Alkalinity as CaCO ₃ (pH 4.5) Method: EPA 310.1			
	Carbonate	ND	mg/l	1
	Hydroxide	ND	mg/l	1
0206	Solids, Total Suspended (TSS) Method: EPA 160.2	ND	mg/l	4
0212	Solids, Total Dissolved Method: EPA 160.1	5,120	mg/l	10
0216	Hardness as CaCO ₃ - Titrimetric Method: EPA 130.2	2,730	mg/l	5
0221	Nitrogen, Ammonia by distillation Method: EPA 350.2	ND	mg/l	0.5
0475	Acidity (to pH 3.7 and 8.3) Method: EPA 305.1	20.0	mg/l	1.0
1125	Sulfate, Turbidimetric Method: EPA 375.4	3,560	mg/l	2

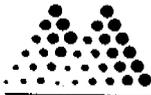
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Respectfully Submitted,
Reviewed and Approved by:

Rolf E. Larsen
Project Manager



Analytical Report



Mountain States Analytical

The Quality Solution

Eckhoff, Watson & Preator Engineering
1121 East 3900 South
Suite C100
Salt Lake City, UT 84124

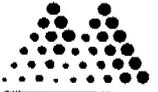
Attn: Mr. Scott Carlson
Project: Sunnyside

Sample ID: CRS Dissolved
Matrix: Waste Water

MSAI Sample: 23535
MSAI Group: 5810
Date Reported: 09/09/94
Discard Date: 10/09/94
Date Submitted: 08/29/94
Date Sampled: 08/25/94
Collected by: JC
Purchase Order:
Project No.:

Test Analysis	Results as Received	Units	Limit of Quantitation
0243D Aluminum by ICP, Dissolved, w/ww Method: SW-846 6010A	ND	mg/l	0.2
0248D Boron by ICP, Dissolved Method: SW-846 6010A	1.06	mg/l	0.10
0250D Calcium by ICP, Dissolved Method: SW-846 6010A	474	mg/L	1.0
0253F Copper by ICP, Dissolved Method: SW-846 6010A	ND	mg/l	0.02
0254F Iron by ICP, Dissolved Method: SW-846 6010A	0.55	mg/l	0.10
0257D Magnesium by ICP, Dissolved Method: SW-846 6010A	304	mg/L	1.0
0258F Manganese by ICP, Dissolved Method: SW-846 6010A	1.33	mg/l	0.02
0261F Nickel by ICP, Dissolved Method: SW-846 6010A	ND	mg/l	0.04
0262D Potassium by ICP, Dissolved Method: SW-846 6010A	34.5	mg/L	1.0
0267F Sodium by ICP, Dissolved Method: SW-846 6010A	435	mg/l	1





Mountain States Analytical

Eckhoff, Watson & Preator The Quality Solution
Engineering

Sample ID: CRS Dissolved

Page 2

MSAI Sample: 23535
MSAI Group: 5810

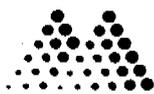
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Respectfully Submitted,
Reviewed and Approved by:

Rolf E. Larsen
Project Manager



Analytical Report



Mountain States Analytical

The Quality Solution

Eckhoff, Watson & Preator Engineering
1121 East 3900 South
Suite C100
Salt Lake City, UT 84124

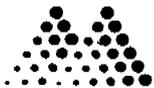
Attn: Mr. Scott Carlson
Project: Sunnyside

Sample ID: CRC Dissolved
Matrix: Waste Water

MSAI Sample: 23536
MSAI Group: 5810
Date Reported: 09/09/94
Discard Date: 10/09/94
Date Submitted: 08/29/94
Date Sampled: 08/25/94
Collected by: JC
Purchase Order:
Project No.:

Test	Analysis	Results as Received	Units	Limit of Quantitation
0243D	Aluminum by ICP, Dissolved, w/ww Method: SW-846 6010A	ND	mg/l	0.2
0248D	Boron by ICP, Dissolved Method: SW-846 6010A	1.13	mg/l	0.10
0250D	Calcium by ICP, Dissolved Method: SW-846 6010A	487	mg/L	1.0
0253F	Copper by ICP, Dissolved Method: SW-846 6010A	ND	mg/l	0.02
0254F	Iron by ICP, Dissolved Method: SW-846 6010A	0.29	mg/l	0.10
0257D	Magnesium by ICP, Dissolved Method: SW-846 6010A	344	mg/L	1.0
0258F	Manganese by ICP, Dissolved Method: SW-846 6010A	0.56	mg/l	0.02
0261F	Nickel by ICP, Dissolved Method: SW-846 6010A	ND	mg/l	0.04
0262D	Potassium by ICP, Dissolved Method: SW-846 6010A	37.6	mg/L	1.0
0267F	Sodium by ICP, Dissolved Method: SW-846 6010A	487	mg/l	1





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Eckhoff, Watson & Preator Engineering *The Quality Solution*

Sample ID: CRC Dissolved

Page 2

MSAI Sample: 23536
MSAI Group: 5810

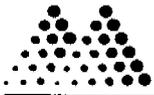
ND - Not detected at the limit of quantitation

Respectfully Submitted,
Reviewed and Approved by:

Rolf E. Larsen
Project Manager



Analytical Report



Mountain States Analytical

The Quality Solution

Eckhoff, Watson & Preator Engineering
1121 East 3900 South
Suite C100
Salt Lake City, UT 84124

Attn: Mr. Scott Carlson
Project: Sunnyside

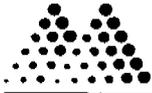
Sample ID: CRB Dissolved
Matrix: Waste Water

MSAI Sample: 23537
MSAI Group: 5810
Date Reported: 09/09/94

Discard Date: 10/09/94
Date Submitted: 08/29/94
Date Sampled: 08/25/94
Collected by: JC
Purchase Order:
Project No.:

Test Analysis	Results as Received	Units	Limit of Quantitation
0243D Aluminum by ICP, Dissolved, w/ww Method: SW-846 6010A	ND	mg/l	0.2
0248D Boron by ICP, Dissolved Method: SW-846 6010A	0.95	mg/l	0.10
0250D Calcium by ICP, Dissolved Method: SW-846 6010A	483	mg/L	1.0
0253F Copper by ICP, Dissolved Method: SW-846 6010A	ND	mg/l	0.02
0254F Iron by ICP, Dissolved Method: SW-846 6010A	ND	mg/l	0.10
0257D Magnesium by ICP, Dissolved Method: SW-846 6010A	327	mg/L	1.0
0258F Manganese by ICP, Dissolved Method: SW-846 6010A	ND	mg/l	0.02
0261F Nickel by ICP, Dissolved Method: SW-846 6010A	ND	mg/l	0.04
0262D Potassium by ICP, Dissolved Method: SW-846 6010A	30.2	mg/L	1.0
0267F Sodium by ICP, Dissolved Method: SW-846 6010A	465	mg/l	1





Mountain States Analytical

Eckhoff, Watson & Preator Engineering The Quality Solution

Sample ID: CRB Dissolved

Page 2

MSAI Sample: 23537
MSAI Group: 5810

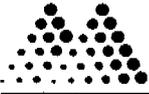
ND - Not detected at the limit of quantitation

Respectfully Submitted,
Reviewed and Approved by:

Rolf E. Larsen
Project Manager



Analytical Report



Mountain States Analytical

The Quality Solution

Eckhoff, Watson & Preator Engineering
1121 East 3900 South
Suite C100
Salt Lake City, UT 84124

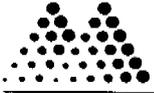
Attn: Mr. Scott Carlson
Project: Sunnyside

Sample ID: CRS - Source
Matrix: Waste Water

MSAI Sample: 24548
MSAI Group: 6059
Date Reported: 10/05/94
Discard Date: 11/04/94
Date Submitted: 09/22/94
Date Sampled: 09/20/94
Collected by: JAM
Purchase Order:
Project No.: EC450593

Test	Analysis	Results as Received	Units	Limit of Quantitation
0248A	Boron by ICP Method: SW-846 6010A	1.01	mg/l	0.10
7243	Aluminum by ICP Method: SW-846 6010A	ND	mg/l	0.20
7250	Calcium by ICP Method: SW-846 6010A	471	mg/l	1.0
7253	Copper by ICP Method: SW-846 6010A	ND	mg/l	0.02
7254	Iron by ICP Method: SW-846 6010A	8.78	mg/l	0.10
7257	Magnesium by ICP Method: SW-846 6010A	297	mg/l	1.0
7258	Manganese by ICP Method: SW-846 6010A	1.43	mg/l	0.02
7261	Nickel by ICP Method: SW-846 6010A	ND	mg/l	0.040
7262	Potassium by ICP Method: SW-846 6010A	35.7	mg/l	1.0
7267	Sodium by ICP Method: SW-846 6010A	437	mg/l	5
7201	Alkalinity as CaCO ₃ (pH 4.5) Method: EPA 310.1 Bicarbonate	470	mg/l	1





Mountain States Analytical

Page 2

Eckhoff, Watson & Preator Engineering *The Quality Solution*

MSAI Sample: 24548
MSAI Group: 6059

Sample ID: CRS - Source

Test	Analysis	Results as Received	Units	Limit of Quantitation
0201	Alkalinity as CaCO ₃ (pH 4.5) Method: EPA 310.1			
	Carbonate	ND	mg/l	1
	Hydroxide	ND	mg/l	1
0206	Solids, Total Suspended (TSS) Method: EPA 160.2	67	mg/l	4
0212	Solids, Total Dissolved Method: EPA 160.1	5,490	mg/l	10
0216	Hardness as CaCO ₃ - Titrimetric Method: EPA 130.2	2,650	mg/l	5
0221	Nitrogen, Ammonia by distillation Method: EPA 350.2	1.7	mg/l	0.5
0475	Acidity (to pH 3.7 and 8.3) Method: EPA 305.1	72	mg/l	
1125	Sulfate, Turbidimetric Method: EPA 375.4	3,260	mg/l	2

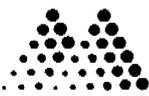
ND - Not detected at the limit of quantitation

Respectfully Submitted,
Reviewed and Approved by:


Rolf E. Larsen
Project Manager



Analytical Report



Mountain States Analytical

The Quality Solution

Eckhoff, Watson & Preator Engineering
1121 East 3900 South
Suite C100
Salt Lake City, UT 84124

Attn: Mr. Scott Carlson
Project: Sunnyside

Sample ID: CRC - Culvert
Matrix: Waste Water

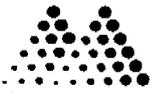
MSAI Sample: 24549
MSAI Group: 6059
Date Reported: 10/05/94
Discard Date: 11/04/94
Date Submitted: 09/22/94
Date Sampled: 09/20/94
Collected by: JAM
Purchase Order:
Project No.: EC450593

Test	Analysis	Results as Received	Units	Limit of Quantitation
0248A	Boron by ICP Method: SW-846 6010A	1.04	mg/l	0.10
7243	Aluminum by ICP Method: SW-846 6010A	ND	mg/l	0.20
7250	Calcium by ICP Method: SW-846 6010A	445	mg/l	1.0
7253	Copper by ICP Method: SW-846 6010A	ND	mg/l	0.02
7254	Iron by ICP Method: SW-846 6010A	15.6	mg/l	0.10
7257	Magnesium by ICP Method: SW-846 6010A	309	mg/l	1.0
7258	Manganese by ICP Method: SW-846 6010A	1.41	mg/l	0.02
7261	Nickel by ICP Method: SW-846 6010A	ND	mg/l	0.040
7262	Potassium by ICP Method: SW-846 6010A	36.5	mg/l	1.0
7267	Sodium by ICP Method: SW-846 6010A	441	mg/l	5
7301	Alkalinity as CaCO ₃ (pH 4.5) Method: EPA 310.1 Bicarbonate	386	mg/l	1



Analytical Report

Page 2



Mountain States Analytical

Eckhoff, Watson & Preator The Quality Solution Engineering

MSAI Sample: 24549
MSAI Group: 6059

Sample ID: CRC - Culvert

Test	Analysis	Results as Received	Units	Limit of Quantitation
0201	Alkalinity as CaCO ₃ (pH 4.5) Method: EPA 310.1 Carbonate Hydroxide	ND ND	mg/l mg/l	1 1
0206	Solids, Total Suspended (TSS) Method: EPA 160.2	14	mg/l	4
0212	Solids, Total Dissolved Method: EPA 160.1	5,680	mg/l	10
0216	Hardness as CaCO ₃ - Titrimetric Method: EPA 130.2	2,950	mg/l	5
0221	Nitrogen, Ammonia by distillation Method: EPA 350.2	ND	mg/l	0.5
0475	Acidity (to pH 3.7 and 8.3) Method: EPA 305.1	22	mg/l	
1125	Sulfate, Turbidimetric Method: EPA 375.4	3,820	mg/l	2

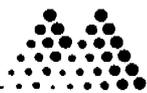
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Respectfully Submitted,
Reviewed and Approved by:

Rolf E. Larsen
Project Manager



Analytical Report



Mountain States Analytical

The Quality Solution

Eckhoff, Watson & Preator Engineering
1121 East 3900 South
Suite C100
Salt Lake City, UT 84124

Attn: Mr. Scott Carlson
Project: Sunnyside

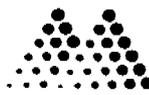
Sample ID: CRB - Boundary
Matrix: Waste Water

MSAI Sample: 24550
MSAI Group: 6059
Date Reported: 10/05/94
Discard Date: 11/04/94
Date Submitted: 09/22/94
Date Sampled: 09/20/94
Collected by: JAM
Purchase Order:
Project No.: EC450593

Test Analysis	Results as Received	Units	Limit of Quantitation
0248A Boron by ICP Method: SW-846 6010A	0.82	mg/l	0.10
7243 Aluminum by ICP Method: SW-846 6010A	ND	mg/l	0.20
7250 Calcium by ICP Method: SW-846 6010A	441	mg/l	1.0
7253 Copper by ICP Method: SW-846 6010A	ND	mg/l	0.02
7254 Iron by ICP Method: SW-846 6010A	ND	mg/l	0.10
7257 Magnesium by ICP Method: SW-846 6010A	295	mg/l	1.0
7258 Manganese by ICP Method: SW-846 6010A	0.07	mg/l	0.02
7261 Nickel by ICP Method: SW-846 6010A	ND	mg/l	0.040
7262 Potassium by ICP Method: SW-846 6010A	28.2	mg/l	1.0
7267 Sodium by ICP Method: SW-846 6010A	426	mg/l	5
7201 Alkalinity as CaCO ₃ (pH 4.5) Method: EPA 310.1 Bicarbonate	322	mg/l	1



Analytical Report



Mountain States Analytical

The Quality Solution

Eckhoff, Watson & Preator Engineering

Page 2

Sample ID: CRB - Boundary

MSAI Sample: 24550
MSAI Group: 6059

Test	Analysis	Results as Received	Units	Limit of Quantitation
0201	Alkalinity as CaCO ₃ (pH 4.5) Method: EPA 310.1 Carbonate Hydroxide	ND ND	mg/l mg/l	1 1
0206	Solids, Total Suspended (TSS) Method: EPA 160.2	ND	mg/l	4
0212	Solids, Total Dissolved Method: EPA 160.1	5,240	mg/l	10
0216	Hardness as CaCO ₃ - Titrimetric Method: EPA 130.2	2,550	mg/l	5
0221	Nitrogen, Ammonia by distillation Method: EPA 350.2	ND	mg/l	0.5
0475	Acidity (to pH 3.7 and 8.3) Method: EPA 305.1	12	mg/l	
1125	Sulfate, Turbidimetric Method: EPA 375.4	3,070	mg/l	2

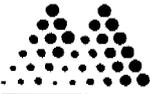
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Respectfully Submitted,
Reviewed and Approved by:

Rolf E. Larsen
Project Manager



Analytical Report



Mountain States Analytical

The Quality Solution

Eckhoff, Watson & Preator Engineering
1121 East 3900 South
Suite C100
Salt Lake City, UT 84124

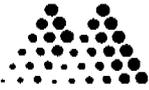
Attn: Mr. Scott Carlson
Project: Sunnyside

Sample ID: CRS - Source Dissolved TOTAL
Matrix: Waste Water

MSAI Sample: 24551
MSAI Group: 6059
Date Reported: 10/05/94
Discard Date: 11/04/94
Date Submitted: 09/22/94
Date Sampled: 09/20/94
Collected by:
Purchase Order:
Project No.: EC450593

Test Analysis	Results as Received	Units	Limit of Quantitation
0243D Aluminum by ICP, Dissolved, w/ww Method: SW-846 6010A	ND	mg/l	0.2
0248D Boron by ICP, Dissolved Method: SW-846 6010A	1.03	mg/l	0.10
0250D Calcium by ICP, Dissolved Method: SW-846 6010A	476	mg/L	1.0
0253F Copper by ICP, Dissolved Method: SW-846 6010A	ND	mg/l	0.02
0254F Iron by ICP, Dissolved Method: SW-846 6010A	8.84	mg/l	0.10
0257D Magnesium by ICP, Dissolved Method: SW-846 6010A	303	mg/L	1.0
0258F Manganese by ICP, Dissolved Method: SW-846 6010A	1.45	mg/l	0.02
0261F Nickel by ICP, Dissolved Method: SW-846 6010A	ND	mg/l	0.04
0262D Potassium by ICP, Dissolved Method: SW-846 6010A	36.3	mg/L	1.0
0267F Sodium by ICP, Dissolved Method: SW-846 6010A	440	mg/l	1





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Eckhoff, Watson & Preator The Quality Solution
Engineering

Sample ID: CRS - Source ~~Dissolved~~

Page 2

MSAI Sample: 24551
MSAI Group: 6059

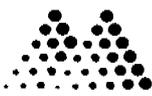
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Respectfully Submitted,
Reviewed and Approved by:

Rolf E. Larsen
Project Manager



Analytical Report



Mountain States Analytical

The Quality Solution

Eckhoff, Watson & Preator Engineering
1121 East 3900 South
Suite C100
Salt Lake City, UT 84124

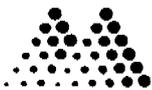
Attn: Mr. Scott Carlson
Project: Sunnyside

Sample ID: CRC - Culvert Dissolved **TOTAL**
Matrix: Waste Water

MSAI Sample: 24552
MSAI Group: 6059
Date Reported: 10/05/94
Discard Date: 11/04/94
Date Submitted: 09/22/94
Date Sampled: 09/20/94
Collected by:
Purchase Order:
Project No.: EC450593

Test Analysis	Results as Received	Units	Limit of Quantitation
0243D Aluminum by ICP, Dissolved, w/ww Method: SW-846 6010A	ND	mg/l	0.2
0248D Boron by ICP, Dissolved Method: SW-846 6010A	1.08	mg/l	0.10
0250D Calcium by ICP, Dissolved Method: SW-846 6010A	453	mg/L	1.0
0253F Copper by ICP, Dissolved Method: SW-846 6010A	ND	mg/l	0.02
0254F Iron by ICP, Dissolved Method: SW-846 6010A	3.90	mg/l	0.10
0257D Magnesium by ICP, Dissolved Method: SW-846 6010A	320	mg/L	1.0
0258F Manganese by ICP, Dissolved Method: SW-846 6010A	1.13	mg/l	0.02
0261F Nickel by ICP, Dissolved Method: SW-846 6010A	ND	mg/l	0.04
0262D Potassium by ICP, Dissolved Method: SW-846 6010A	38.2	mg/L	1.0
0267F Sodium by ICP, Dissolved Method: SW-846 6010A	461	mg/l	1





Mountain States Analytical

The Quality Solution

Eckhoff, Watson & Preator Engineering

Sample ID: CRC - Culvert ~~Dissolved~~

Page 2

MSAI Sample: 24552

MSAI Group: 6059

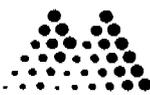
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Respectfully Submitted,
Reviewed and Approved by:

Rolf E. Larsen
Project Manager



Analytical Report



Mountain States Analytical

The Quality Solution

Eckhoff, Watson & Preator Engineering
1121 East 3900 South
Suite C100
Salt Lake City, UT 84124

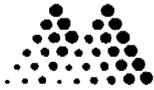
Attn: Mr. Scott Carlson
Project: Sunnyside

Sample ID: CRB - Boundary Dissolved TOTAL
Matrix: Waste Water

MSAI Sample: 24553
MSAI Group: 6059
Date Reported: 10/05/94
Discard Date: 11/04/94
Date Submitted: 09/22/94
Date Sampled: 09/20/94
Collected by:
Purchase Order:
Project No.: EC450593

Test Analysis	Results as Received	Units	Limit of Quantitation
0243D Aluminum by ICP, Dissolved, w/ww Method: SW-846 6010A	ND	mg/l	0.2
0248D Boron by ICP, Dissolved Method: SW-846 6010A	0.79	mg/l	0.10
0250D Calcium by ICP, Dissolved Method: SW-846 6010A	432	mg/L	1.0
0253F Copper by ICP, Dissolved Method: SW-846 6010A	ND	mg/l	0.02
0254F Iron by ICP, Dissolved Method: SW-846 6010A	ND	mg/l	0.10
0257D Magnesium by ICP, Dissolved Method: SW-846 6010A	287	mg/L	1.0
0258F Manganese by ICP, Dissolved Method: SW-846 6010A	0.07	mg/l	0.02
0261F Nickel by ICP, Dissolved Method: SW-846 6010A	ND	mg/l	0.04
0262D Potassium by ICP, Dissolved Method: SW-846 6010A	27.0	mg/L	1.0
0267F Sodium by ICP, Dissolved Method: SW-846 6010A	406	mg/l	1





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The Quality Solution

Eckhoff, Watson & Preator Engineering

Sample ID: CRB - Boundary ~~Dissolved~~ TOTAL

Page 2

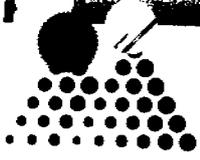
MSAI Sample: 24553
MSAI Group: 6059

ND - Not detected at the limit of quantitation

Respectfully Submitted,
Reviewed and Approved by:

Rolf E. Larsen
Project Manager

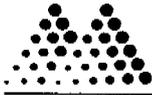




Mountain States Analytical

Sample Chain of Custody

Client Name: <u>EWP Engineering</u> P.O. # _____				Analysis Required											
Phone #: <u>801-261-0090</u> Fax #: <u>801-266-1671</u>															
Project Name/ #: <u>Sunnyside - EC 450593</u>															
Sampler: <u>John A. Martin</u>															
Sample Identification	Date Collected	Time Collected	Grab	Composite	Soil	Water	Other	Total of Containers	Analysis Required				Rush?	Remarks	Temp. of Samples Upon Receipt
<u>CRS - Source</u>	<u>9/20/94</u>	<u>1435</u>				X		<u>4</u>	Analysis Required As per previous sampling events (Diagonal lines through this area)					<u>70°C</u>	
<u>CRC - Culvert</u>	<u>9/20/94</u>	<u>1530</u>				X		<u>4</u>							
<u>CRB - Boundary</u>	<u>9/20/94</u>	<u>1630</u>				X		<u>4</u>							
Name of Shipper		Airbill No.		Date	Time	Sample relinquished by:			Date	Time	Sample received by:		Date	Time	
<u>VPS</u>		<u>317345585</u>		<u>9/21/94</u>	<u>1400</u>	<u>John A. Martin</u>			<u>9/21/94</u>	<u>1030</u>					
Received By (Lab)		Date	Time	Seals Intact?											
<u>Ray K. A.</u>		<u>09/22/94</u>	<u>1415</u>	<u>yes</u>											
Turnaround Time Requested (please circle): <u>Normal</u> Rush															
<small>(Rush TAT is subject to MSAI approval and surcharge)</small>															
Report Results By: (Date) _____															
Rush results requested by (please circle): _____ Phone _____ Fax _____															
Report Results to: <u>Scott Carlson</u>															
<u>EWP Engineering 1121 E. 3900 South C-100</u>															
<u>Salt Lake City UT 84124</u>															
Type of Disposal:										Authorized for Disposal by:					
Date/Time of Disposal:										Disposed of by:					



Mountain States Analytical

The Quality Solution

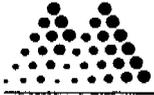
Eckhoff, Watson & Preator Engineering
1121 East 3900 South
Suite C100
Salt Lake City, UT 84124

Attn: Mr. Scott Carlson
Project: Sunnyside

Sample ID: CRS-Dissolved
Matrix: Waste Water

MSAI Sample: 25448
MSAI Group: 6260
Date Reported: 10/25/94
Discard Date: 11/24/94
Date Submitted: 10/13/94
Date Sampled: 10/12/94
Collected by: JC
Purchase Order:
Project No.: EC450593

Test Analysis	Results as Received	Units	Limit of Quantitation
0243D Aluminum by ICP, Dissolved Method: SW-846 6010A	ND	mg/l	0.2
0248D Boron by ICP, Dissolved Method: SW-846 6010A	1.13	mg/l	0.10
0250D Calcium by ICP, Dissolved Method: SW-846 6010A	503	mg/L	1.0
0253F Copper by ICP, Dissolved Method: SW-846 6010A	ND	mg/l	0.02
0254F Iron by ICP, Dissolved Method: SW-846 6010A	ND	mg/l	0.10
0257D Magnesium by ICP, Dissolved Method: SW-846 6010A	318	mg/L	1.0
0258F Manganese by ICP, Dissolved Method: SW-846 6010A	1.47	mg/l	0.02
0261F Nickel by ICP, Dissolved Method: SW-846 6010A	ND	mg/l	0.04
0262D Potassium by ICP, Dissolved Method: SW-846 6010A	37.5	mg/L	1.0
0267F Sodium by ICP, Dissolved Method: SW-846 6010A	466	mg/l	1



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Sample ID: CRS-Dissolved

Page 2

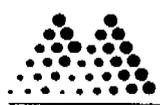
MSAI Sample: 25448

MSAI Group: 6260

ND - Not detected at the limit of quantitation

Respectfully Submitted,
Reviewed and Approved by:

Rolf E. Larsen
Project Manager *R*



Mountain States Analytical

The Quality Solution

Eckhoff, Watson & Preator Engineering
1121 East 3900 South
Suite C100
Salt Lake City, UT 84124

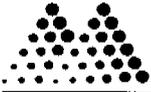
Attn: Mr. Scott Carlson
Project: Sunnyside

Sample ID: CRC-Dissolved
Matrix: Waste Water

MSAI Sample: 25449
MSAI Group: 6260
Date Reported: 10/25/94

Discard Date: 11/24/94
Date Submitted: 10/13/94
Date Sampled: 10/12/94
Collected by: JC
Purchase Order:
Project No.: EC450593

Test Analysis	Results as Received	Units	Limit of Quantitation
0243D Aluminum by ICP, Dissolved 6010A Method: SW-846 6010A	ND	mg/l	0.2
0248D Boron by ICP, Dissolved Method: SW-846 6010A	1.14	mg/l	0.10
0250D Calcium by ICP, Dissolved Method: SW-846 6010A	483	mg/L	1.0
0253F Copper by ICP, Dissolved Method: SW-846 6010A	ND	mg/l	0.02
0254F Iron by ICP, Dissolved Method: SW-846 6010A	ND	mg/l	0.10
0257D Magnesium by ICP, Dissolved Method: SW-846 6010A	338	mg/L	1.0
0258F Manganese by ICP, Dissolved Method: SW-846 6010A	1.30	mg/l	0.02
0261F Nickel by ICP, Dissolved Method: SW-846 6010A	ND	mg/l	0.04
0262D Potassium by ICP, Dissolved Method: SW-846 6010A	39.2	mg/L	1.0
0267F Sodium by ICP, Dissolved Method: SW-846 6010A	491	mg/l	1



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Eckhoff, Watson & Preator Engineering

Sample ID: CRC-Dissolved

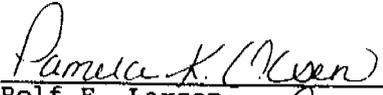
Page 2

MSAI Sample: 25449

MSAI Group: 6260

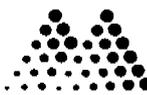
ND - Not detected at the limit of quantitation

Respectfully Submitted,
Reviewed and Approved by:



Rolf E. Larsen *for*
Project Manager

Analytical Report



Mountain States Analytical

The Quality Solution

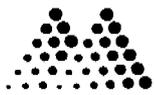
Eckhoff, Watson & Preator Engineering
1121 East 3900 South
Suite C100
Salt Lake City, UT 84124

Attn: Mr. Scott Carlson
Project: Sunnyside

Sample ID: CRB-Dissolved
Matrix: Waste Water

MSAI Sample: 25450
MSAI Group: 6260
Date Reported: 10/25/94
Discard Date: 11/24/94
Date Submitted: 10/13/94
Date Sampled: 10/12/94
Collected by: JC
Purchase Order:
Project No.: EC450593

Test Analysis	Results as Received	Units	Limit of Quantitation
0243D Aluminum by ICP, Dissolved Method: SW-846 6010A	ND	mg/l	0.2
0248D Boron by ICP, Dissolved Method: SW-846 6010A	0.86	mg/l	0.10
0250D Calcium by ICP, Dissolved Method: SW-846 6010A	470	mg/L	1.0
0253F Copper by ICP, Dissolved Method: SW-846 6010A	ND	mg/l	0.02
0254F Iron by ICP, Dissolved Method: SW-846 6010A	ND	mg/l	0.10
0257D Magnesium by ICP, Dissolved Method: SW-846 6010A	313	mg/L	1.0
0258F Manganese by ICP, Dissolved Method: SW-846 6010A	0.19	mg/l	0.02
0261F Nickel by ICP, Dissolved Method: SW-846 6010A	ND	mg/l	0.04
0262D Potassium by ICP, Dissolved Method: SW-846 6010A	29.2	mg/L	1.0
0267F Sodium by ICP, Dissolved Method: SW-846 6010A	453	mg/l	1



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Eckhoff, Watson & Preator *The Quality Solution*
Engineering

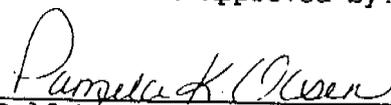
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Page 2

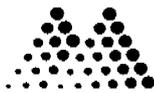
MSAI Sample: 25450
MSAI Group: 6260

ND - Not detected at the limit of quantitation

Respectfully Submitted,
Reviewed and Approved by:


Rolf E. Larsen
Project Manager

Analytical Report



Mountain States Analytical

The Quality Solution

Eckhoff, Watson & Preator Engineering
1121 East 3900 South
Suite C100
Salt Lake City, UT 84124

Attn: Mr. Scott Carlson
Project: Sunnyside

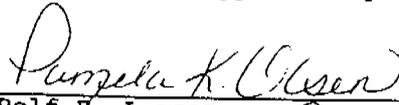
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Matrix: Waste Water

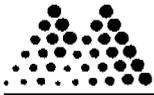
MSAI Sample: 25451
MSAI Group: 6260
Date Reported: 10/25/94

Discard Date: 11/24/94
Date Submitted: 10/13/94
Date Sampled: 10/12/94
Collected by: JC
Purchase Order:
Project No.: EC450593

Test	Analysis	Results as Received	Units	Limit of Quantitation
7254	Iron by ICP Method: SW-846 6010A	8.99	mg/l	0.10
0206	Solids, Total Suspended (TSS) Method: EPA 160.2	21	mg/l	4

Respectfully Submitted,
Reviewed and Approved by:


Rolf E. Larsen
Project Manager



Mountain States Analytical

The Quality Solution

Eckhoff, Watson & Preator Engineering
1121 East 3900 South
Suite C100
Salt Lake City, UT 84124

Attn: Mr. Scott Carlson
Project: Sunnyside

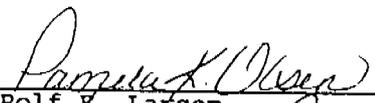
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Matrix: Waste Water

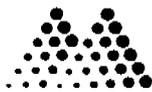
MSAI Sample: 25452
MSAI Group: 6260
Date Reported: 10/25/94

Discard Date: 11/24/94
Date Submitted: 10/13/94
Date Sampled: 10/12/94
Collected by: JC
Purchase Order:
Project No.: EC450593

Test	Analysis	Results as Received	Units	Limit of Quantitation
7254	Iron by ICP Method: SW-846 6010A	3.50	mg/l	0.10
0206	Solids, Total Suspended (TSS) Method: EPA 160.2	9	mg/l	4

Respectfully Submitted,
Reviewed and Approved by:


Rolf E. Larsen
Project Manager



Mountain States Analytical

The Quality Solution

Eckhoff, Watson & Preator Engineering
1121 East 3900 South
Suite C100
Salt Lake City, UT 84124

Attn: Mr. Scott Carlson
Project: Sunnyside

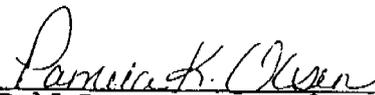
Sample ID: CRB
Matrix: Waste Water

MSAI Sample: 25453
MSAI Group: 6260
Date Reported: 10/25/94
Discard Date: 11/24/94
Date Submitted: 10/13/94
Date Sampled: 10/12/94
Collected by: JC
Purchase Order:
Project No.: EC450593

Test	Analysis	Results as Received	Units	Limit of Quantitation
7254	Iron by ICP Method: SW-846 6010A	0.14	mg/l	0.10
0206	Solids, Total Suspended (TSS) Method: EPA 160.2	ND	mg/l	4

ND - Not detected at the limit of quantitation

Respectfully Submitted,
Reviewed and Approved by:


Rolf E. Larsen
Project Manager



Mountain States Analytical

November 9, 1994

Mr. Scott Carlson
Eckhoff, Watson & Preator Engineering
1121 East 3900 South
Suite C100
Salt Lake City, UT 84124

RECEIVED

NOV 14 1994

ECKHOFF, WATSON & PREATOR
ENGINEERING

Reference:

Project: Sunnyside
Project No.: EC450593
MSAI Group: 6408

Dear Mr. Carlson:

Enclosed are the analytical results for your project referenced above. The following samples are included in the report.

CRS	CRC	CRB
CRS Dissolved	CRC Dissolved	CRB Dissolved

All holding times were met for the tests performed on these samples.

If the report is acceptable, please approve the enclosed invoice and forward it for payment.

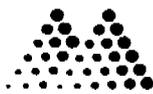
Thank you for selecting Mountain States Analytical, Inc. to serve as your analytical laboratory on this project. If you have any questions concerning these results, please feel free to contact me at any time.

We look forward to working with you on future projects.

With Regards,

Rolf E. Larsen
Project Manager

Analytical Report



Mountain States Analytical

The Quality Solution

Eckhoff, Watson & Preator Engineering
1121 East 3900 South
Suite C100
Salt Lake City, UT 84124

Attn: Mr. Scott Carlson
Project: Sunnyside

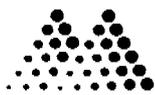
Sample ID: CRS
Matrix: Waste Water

MSAI Sample: 26143
MSAI Group: 6408
Date Reported: 11/09/94

Discard Date: 12/09/94
Date Submitted: 10/28/94
Date Sampled: 10/27/94
Collected by: JC
Purchase Order:
Project No.: EC450593

Test Analysis	Results as Received	Units	Limit of Quantitation
0248A Boron by ICP Method: SW-846 6010A	1.10	mg/l	0.10
7243 Aluminum by ICP Method: SW-846 6010A	ND	mg/l	0.20
7250 Calcium by ICP Method: SW-846 6010A	500	mg/l	1.0
7253 Copper by ICP Method: SW-846 6010A	ND	mg/l	0.02
7254 Iron by ICP Method: SW-846 6010A	8.73	mg/l	0.10
7257 Magnesium by ICP Method: SW-846 6010A	316	mg/l	1.0
7258 Manganese by ICP Method: SW-846 6010A	1.45	mg/l	0.02
7261 Nickel by ICP Method: SW-846 6010A	ND	mg/l	0.040
7262 Potassium by ICP Method: SW-846 6010A	37.0	mg/l	1.0
7267 Sodium by ICP Method: SW-846 6010A	455	mg/l	10
0201 Alkalinity as CaCO ₃ (pH 4.5) Method: EPA 310.1 Bicarbonate	486	mg/l	1

Analytical Report



Mountain States Analytical

The Quality Solution

Eckhoff, Watson & Preator Engineering

Sample ID: CRS

Page 2

MSAI Sample: 26143

MSAI Group: 6408

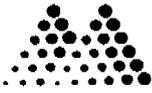
Test	Analysis	Results as Received	Units	Limit of Quantitation
0201	Alkalinity as CaCO ₃ (pH 4.5) Method: EPA 310.1 Carbonate Hydroxide	ND ND	mg/l mg/l	1 1
0206	Solids, Total Suspended (TSS) Method: EPA 160.2	20	mg/l	4
0212	Solids, Total Dissolved Method: EPA 160.1	5,450	mg/l	10
0216	Hardness as CaCO ₃ - Titrimetric Method: EPA 130.2	2,850	mg/l	5
0221	Nitrogen, Ammonia by distillation Method: EPA 350.2	1.7	mg/l	0.5
0475	Acidity (to pH 3.7 and 8.3) Method: EPA 305.1	59	mg/l	
1125	Sulfate, Turbidimetric Method: EPA 375.4	4,220	mg/l	2

ND - Not detected at the limit of quantitation

Respectfully Submitted,
Reviewed and Approved by:

Rolf E. Larsen
Project Manager

Analytical Report



Mountain States Analytical

The Quality Solution

Eckhoff, Watson & Preator Engineering
1121 East 3900 South
Suite C100
Salt Lake City, UT 84124

Attn: Mr. Scott Carlson
Project: Sunnyside

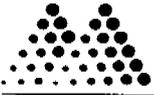
Sample ID: CRC
Matrix: Waste Water

MSAI Sample: 26144
MSAI Group: 6408
Date Reported: 11/09/94

Discard Date: 12/09/94
Date Submitted: 10/28/94
Date Sampled: 10/27/94
Collected by: JC
Purchase Order:
Project No.: EC450593

Test	Analysis	Results as Received	Units	Limit of Quantitation
0248A	Boron by ICP Method: SW-846 6010A	1.08	mg/l	0.10
7243	Aluminum by ICP Method: SW-846 6010A	ND	mg/l	0.20
7250	Calcium by ICP Method: SW-846 6010A	493	mg/l	1.0
7253	Copper by ICP Method: SW-846 6010A	ND	mg/l	0.02
7254	Iron by ICP Method: SW-846 6010A	4.48	mg/l	0.10
7257	Magnesium by ICP Method: SW-846 6010A	344	mg/l	1.0
7258	Manganese by ICP Method: SW-846 6010A	1.14	mg/l	0.02
7261	Nickel by ICP Method: SW-846 6010A	ND	mg/l	0.040
7262	Potassium by ICP Method: SW-846 6010A	36.6	mg/l	1.0
7267	Sodium by ICP Method: SW-846 6010A	486	mg/l	10
0201	Alkalinity as CaCO ₃ (pH 4.5) Method: EPA 310.1 Bicarbonate	424	mg/l	1

Analytical Report



Mountain States Analytical

The Quality Solution

Eckhoff, Watson & Preator Engineering

Sample ID: CRC

Page 2

MSAI Sample: 26144

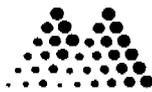
MSAI Group: 6408

Test	Analysis	Results as Received	Units	Limit of Quantitation
0201	Alkalinity as CaCO ₃ (pH 4.5) Method: EPA 310.1 Carbonate Hydroxide	ND ND	mg/l mg/l	1 1
0206	Solids, Total Suspended (TSS) Method: EPA 160.2	29	mg/l	4
0212	Solids, Total Dissolved Method: EPA 160.1	5,520	mg/l	10
0216	Hardness as CaCO ₃ - Titrimetric Method: EPA 130.2	2,860	mg/l	5
0021	Nitrogen, Ammonia by distillation Method: EPA 350.2	ND	mg/l	0.5
0475	Acidity (to pH 3.7 and 8.3) Method: EPA 305.1	31	mg/l	
1125	Sulfate, Turbidimetric Method: EPA 375.4	2,650	mg/l	2

ND - Not detected at the limit of quantitation

Respectfully Submitted,
Reviewed and Approved by:

Rolf E. Larsen
Project Manager



Mountain States Analytical

The Quality Solution

Eckhoff, Watson & Preator Engineering
1121 East 3900 South
Suite C100
Salt Lake City, UT 84124

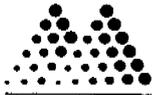
Attn: Mr. Scott Carlson
Project: Sunnyside

Sample ID: CRB
Matrix: Waste Water

MSAI Sample: 26145
MSAI Group: 6408
Date Reported: 11/09/94
Discard Date: 12/09/94
Date Submitted: 10/28/94
Date Sampled: 10/27/94
Collected by: JC
Purchase Order:
Project No.: EC450593

Test Analysis	Results as Received	Units	Limit of Quantitation
0248A Boron by ICP Method: SW-846 6010A	0.85	mg/l	0.10
7243 Aluminum by ICP Method: SW-846 6010A	ND	mg/l	0.20
7250 Calcium by ICP Method: SW-846 6010A	454	mg/l	1.0
7253 Copper by ICP Method: SW-846 6010A	ND	mg/l	0.02
7254 Iron by ICP Method: SW-846 6010A	0.12	mg/l	0.10
7257 Magnesium by ICP Method: SW-846 6010A	303	mg/l	1.0
7258 Manganese by ICP Method: SW-846 6010A	0.21	mg/l	0.02
7261 Nickel by ICP Method: SW-846 6010A	ND	mg/l	0.040
7262 Potassium by ICP Method: SW-846 6010A	27.8	mg/l	1.0
7267 Sodium by ICP Method: SW-846 6010A	428	mg/l	10
0201 Alkalinity as CaCO ₃ (pH 4.5) Method: EPA 310.1 Bicarbonate	348	mg/l	1

Analytical Report



Mountain States Analytical

The Quality Solution

Eckhoff, Watson & Preator Engineering

Page 2

Sample ID: CRB

MSAI Sample: 26145
MSAI Group: 6408

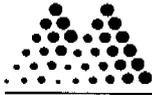
Test	Analysis	Results as Received	Units	Limit of Quantitation
0201	Alkalinity as CaCO ₃ (pH 4.5) Method: EPA 310.1 Carbonate Hydroxide	ND ND	mg/l mg/l	1 1
0206	Solids, Total Suspended (TSS) Method: EPA 160.2	ND	mg/l	4
0212	Solids, Total Dissolved Method: EPA 160.1	5,190	mg/l	10
0216	Hardness as CaCO ₃ - Titrimetric Method: EPA 130.2	2,740	mg/l	5
0221	Nitrogen, Ammonia by distillation Method: EPA 350.2	ND	mg/l	0.5
0475	Acidity (to pH 3.7 and 8.3) Method: EPA 305.1	2	mg/l	
1125	Sulfate, Turbidimetric Method: EPA 375.4	2,590	mg/l	2

ND - Not detected at the limit of quantitation

Respectfully Submitted,
Reviewed and Approved by:


Rolf E. Larsen
Project Manager

Analytical Report



Mountain States Analytical

The Quality Solution

Eckhoff, Watson & Preator Engineering
1121 East 3900 South
Suite C100
Salt Lake City, UT 84124

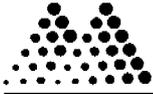
Attn: Mr. Scott Carlson
Project: Sunnyside

Sample ID: CRS Dissolved
Matrix: Waste Water

MSAI Sample: 26146
MSAI Group: 6408
Date Reported: 11/09/94

Discard Date: 12/09/94
Date Submitted: 10/28/94
Date Sampled: 10/27/94
Collected by: JC
Purchase Order:
Project No.: EC450593

Test Analysis	Results as Received	Units	Limit of Quantitation
0243D Aluminum by ICP, Dissolved Method: SW-846 6010A	ND	mg/l	0.2
0248D Boron by ICP, Dissolved Method: SW-846 6010A	0.96	mg/l	0.10
0250D Calcium by ICP, Dissolved Method: SW-846 6010A	432	mg/L	1.0
0253F Copper by ICP, Dissolved Method: SW-846 6010A	ND	mg/l	0.02
0254F Iron by ICP, Dissolved Method: SW-846 6010A	0.18	mg/l	0.10
0257D Magnesium by ICP, Dissolved Method: SW-846 6010A	274	mg/L	1.0
0258F Manganese by ICP, Dissolved Method: SW-846 6010A	1.26	mg/l	0.02
0261F Nickel by ICP, Dissolved Method: SW-846 6010A	ND	mg/l	0.04
0262D Potassium by ICP, Dissolved Method: SW-846 6010A	32.0	mg/L	1.0
0267F Sodium by ICP, Dissolved Method: SW-846 6010A	395	mg/l	1



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Page 2

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MSAI Sample: 26146

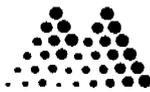
MSAI Group: 6408

Sample ID: CRS Dissolved

ND - Not detected at the limit of quantitation

Respectfully Submitted,
Reviewed and Approved by:

Rolf E. Larsen
Project Manager



Mountain States Analytical

The Quality Solution

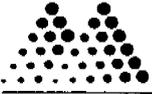
Eckhoff, Watson & Preator Engineering
1121 East 3900 South
Suite C100
Salt Lake City, UT 84124

Attn: Mr. Scott Carlson
Project: Sunnyside

Sample ID: CRC Dissolved
Matrix: Waste Water

MSAI Sample: 26148
MSAI Group: 6408
Date Reported: 11/09/94
Discard Date: 12/09/94
Date Submitted: 10/28/94
Date Sampled: 10/27/94
Collected by: JC
Purchase Order:
Project No.: EC450593

Test Analysis	Results as Received	Units	Limit of Quantitation
0243D Aluminum by ICP, Dissolved Method: SW-846 6010A	ND	mg/l	0.2
0248D Boron by ICP, Dissolved Method: SW-846 6010A	1.13	mg/l	0.10
0250D Calcium by ICP, Dissolved Method: SW-846 6010A	473	mg/L	1.0
0253F Copper by ICP, Dissolved Method: SW-846 6010A	ND	mg/l	0.02
0254F Iron by ICP, Dissolved Method: SW-846 6010A	ND	mg/l	0.10
0257D Magnesium by ICP, Dissolved Method: SW-846 6010A	340	mg/L	1.0
0258F Manganese by ICP, Dissolved Method: SW-846 6010A	1.32	mg/l	0.02
0261F Nickel by ICP, Dissolved Method: SW-846 6010A	ND	mg/l	0.04
0262D Potassium by ICP, Dissolved Method: SW-846 6010A	38.1	mg/L	1.0
0267F Sodium by ICP, Dissolved Method: SW-846 6010A	485	mg/l	1



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Engineering

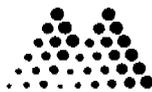
Sample ID: CRC Dissolved

MSAI Sample: 26148
MSAI Group: 6408

ND - Not detected at the limit of quantitation

Respectfully Submitted,
Reviewed and Approved by:

Rolf E. Larsen
Project Manager



Mountain States Analytical

The Quality Solution

Eckhoff, Watson & Preator Engineering
1121 East 3900 South
Suite C100
Salt Lake City, UT 84124

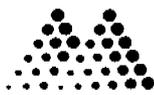
Attn: Mr. Scott Carlson
Project: Sunnyside

Sample ID: CRB Dissolved
Matrix: Waste Water

MSAI Sample: 26149
MSAI Group: 6408
Date Reported: 11/09/94

Discard Date: 12/09/94
Date Submitted: 10/28/94
Date Sampled: 10/27/94
Collected by: JC
Purchase Order:
Project No.: EC450593

Test Analysis	Results as Received	Units	Limit of Quantitation
0243D Aluminum by ICP, Dissolved Method: SW-846 6010A	ND	mg/l	0.2
0248D Boron by ICP, Dissolved Method: SW-846 6010A	0.88	mg/l	0.10
0250D Calcium by ICP, Dissolved Method: SW-846 6010A	469	mg/L	1.0
0253F Copper by ICP, Dissolved Method: SW-846 6010A	ND	mg/l	0.02
0254F Iron by ICP, Dissolved Method: SW-846 6010A	ND	mg/l	0.10
0257D Magnesium by ICP, Dissolved Method: SW-846 6010A	316	mg/L	1.0
0258F Manganese by ICP, Dissolved Method: SW-846 6010A	0.22	mg/l	0.02
0261F Nickel by ICP, Dissolved Method: SW-846 6010A	ND	mg/l	0.04
0262D Potassium by ICP, Dissolved Method: SW-846 6010A	29.0	mg/L	1.0
0267F Sodium by ICP, Dissolved Method: SW-846 6010A	448	mg/l	1



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Sample ID: CRB Dissolved

Page 2

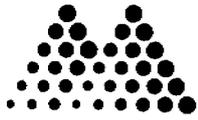
MSAI Sample: 26149

MSAI Group: 6408

ND - Not detected at the limit of quantitation

Respectfully Submitted,
Reviewed and Approved by:

Rolf E. Larsen
Project Manager



Mountain States Analytical

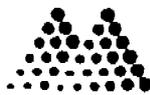
No 4155

Sample Chain of Custody

Client Name: <u>E.W.P. ENGINEERING</u> P.O. # _____				Total of Containers	Analysis Required										Temp. of Samples Upon Receipt
Phone #: <u>261-0090</u>		Fax #: _____			<div style="text-align: center; border: 1px solid black; padding: 5px;"> COARSE REFUSE SEEP </div>										
Project Name/ #: <u>SUNNYSIDE EC450593</u>															
Sampler: <u>J. Comas</u>															
CONTACT AT E.W.P. OFFICE - SCOTT CARLSON				Grab	Composite	Soil	Water	Other	Total of Containers	Rush?	Remarks	Temp. of Samples Upon Receipt			
Sample Identification		Date Collected	Time Collected												
<u>CRS</u>		<u>10-27-94</u>	<u>1430</u>												
<u>CRC</u>		<u>10-27-94</u>	<u>1445</u>												
<u>CRB</u>		<u>10-27-94</u>	<u>1530</u>												
Name of Shipper		Airbill No.		Date	Time	Sample relinquished by:		Date	Time	Sample received by:		Date	Time		
						<u>[Signature]</u>		<u>10-28-94</u>	<u>1535</u>						
Received By (Lab)		Date	Time	Seals Intact?											
<u>[Signature]</u>		<u>10/28/94</u>	<u>1535</u>	<u>✓</u>											
Turnaround Time Requested (please circle): Normal Rush															
(Rush TAT is subject to MSAI approval and surcharge)															
Report Results By: (Date) _____															
Rush results requested by (please circle): Phone Fax															
Report Results to: _____															
Type of Disposal:						Authorized for Disposal by:									
Date/Time of Disposal:						Disposed of by:									

1645 West 2200 South, Salt Lake City, Utah 84119 (801) 973-0050 FAX (801) 972-6278

White Copy - Original Retain by Lab Yellow Cop to Customer Pink Copy - Retain by Sampler

Analytical Report**Mountain States Analytical***The Quality Solution*

Eckhoff, Watson & Preator Engineering
 1121 East 3900 South
 Suite C100
 Salt Lake City, UT 84124

Attn: Mr. Scott Carlson
 Project: EC 45 05 93

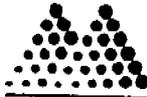
Sample ID: CRS
 Matrix: Waste Water

MSAI Sample: 27424
 MSAI Group: 6692
 Date Reported: 12/09/94

Discard Date: 01/08/95
 Date Submitted: 11/23/94
 Date Sampled: 11/22/94
 Collected by: JC
 Purchase Order:
 Project No.:

Test Analysis	Results as Received	Units	Limit of Quantitation
0248A Boron by ICP Method: SW-846 6010A	1.1	mg/l	0.3
7254 Iron by ICP Method: SW-846 6010A	7.19	mg/l	0.10
7258 Manganese by ICP Method: SW-846 6010A	1.46	mg/l	0.02
0201 Alkalinity as CaCO ₃ (pH 4.5) Method: EPA 310.1			
Bicarbonate	460	mg/l	1
Carbonate	ND	mg/l	1
Hydroxide	ND	mg/l	1
0206 Solids, Total Suspended (TSS) Method: EPA 160.2	16	mg/l	4
0212 Solids, Total Dissolved Method: EPA 160.1	5,430	mg/l	10
0216 Hardness as CaCO ₃ - Titrimetric Method: EPA 130.2	2,730	mg/l	5
0221 Nitrogen, Ammonia by distillation Method: EPA 350.2	1.5	mg/l	0.5
0475 Acidity (to pH 3.7 and 8.3) Method: EPA 305.1	101	mg/l	1.0
1125 Sulfate, Turbidimetric Method: EPA 375.4	620	mg/l	2

Analytical Report



Mountain States Analytical

The Quality Solution

Eckhoff, Watson & Preator Engineering

Sample ID: CRS

Page 2

MSAI Sample: 27424
MSAI Group: 6692

ND - Not detected at the limit of quantitation

Respectfully Submitted,
Reviewed and Approved by:

Rolf E. Larsen
Project Manager

Analytical Report



Eckhoff, Watson & Preator Engineering
 1121 East 3900 South
 Suite C100
 Salt Lake City, UT 84124

Attn: Mr. Scott Carlson
 Project: EC 45 05 93

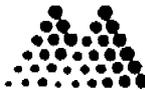
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 Matrix: Waste Water

MSAI Sample: 27425
 MSAI Group: 6692
 Date Reported: 12/09/94

Discard Date: 01/08/95
 Date Submitted: 11/23/94
 Date Sampled: 11/22/94
 Collected by: JC
 Purchase Order:
 Project No.:

Test Analysis	Results as Received	Units	Limit of Quantitation
0248A Boron by ICP Method: SW-846 6010A	1.1	mg/l	0.3
7254 Iron by ICP Method: SW-846 6010A	7.49	mg/l	0.10
258 Manganese by ICP Method: SW-846 6010A	1.24	mg/l	0.02
0201 Alkalinity as CaCO ₃ (pH 4.5) Method: EPA 310.1			
Bicarbonate	420	mg/l	1
Carbonate	ND	mg/l	1
Hydroxide	ND	mg/l	1
0206 Solids, Total Suspended (TSS) Method: EPA 160.2	18	mg/l	4
0212 Solids, Total Dissolved Method: EPA 160.1	5,660	mg/l	10
0216 Hardness as CaCO ₃ - Titrimetric Method: EPA 130.2	2,710	mg/l	5
0221 Nitrogen, Ammonia by distillation Method: EPA 350.2	0.6	mg/l	0.5
0475 Acidity (to pH 3.7 and 8.3) Method: EPA 305.1	49.4	mg/l	1.0
125 Sulfate, Turbidimetric Method: EPA 375.4	652	mg/l	2

Analytical Report



Mountain States Analytical

The Quality Solution

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Sample ID: CRC

Page 2

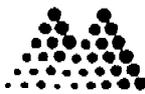
MSAI Sample: 27425

MSAI Group: 6692

ND - Not detected at the limit of quantitation

Respectfully Submitted,
Reviewed and Approved by:

Rolf E. Larsen
Project Manager

Analytical Report**Mountain States Analytical***The Quality Solution*

Eckhoff, Watson & Preator Engineering
1121 East 3900 South
Suite C100
Salt Lake City, UT 84124

Attn: Mr. Scott Carlson
Project: EC 45 05 93

Sample ID: CRB
Matrix: Waste Water

MSAI Sample: 27426
MSAI Group: 6692
Date Reported: 12/09/94

Discard Date: 01/08/95
Date Submitted: 11/23/94
Date Sampled: 11/22/94
Collected by: JC
Purchase Order:
Project No.:

Test Analysis	Results as Received	Units	Limit of Quantitation
0248A Boron by ICP Method: SW-846 6010A	0.8	mg/l	0.3
7254 Iron by ICP Method: SW-846 6010A	ND	mg/l	0.10
7258 Manganese by ICP Method: SW-846 6010A	0.24	mg/l	0.02
0201 Alkalinity as CaCO ₃ (pH 4.5) Method: EPA 310.1			
Bicarbonate	342	mg/l	1
Carbonate	ND	mg/l	1
Hydroxide	ND	mg/l	1
0206 Solids, Total Suspended (TSS) Method: EPA 160.2	ND	mg/l	4
0212 Solids, Total Dissolved Method: EPA 160.1	5,200	mg/l	10
0216 Hardness as CaCO ₃ - Titrimetric Method: EPA 130.2	2,560	mg/l	5
0221 Nitrogen, Ammonia by distillation Method: EPA 350.2	ND	mg/l	0.5
0475 Acidity (to pH 3.7 and 8.3) Method: EPA 305.1	12.2	mg/l	1.0
1125 Sulfate, Turbidimetric Method: EPA 375.4	643	mg/l	2

Analytical Report



Mountain States Analytical

The Quality Solution

Eckhoff, Watson & Preator Engineering

Sample ID: CRB

Page 2

MSAI Sample: 27426
MSAI Group: 6692

ND - Not detected at the limit of quantitation

Respectfully Submitted,
Reviewed and Approved by:

Rolf E. Larsen
Project Manager

Analytical Report



Eckhoff, Watson & Preator Engineering
 1121 East 3900 South
 Suite C100
 Salt Lake City, UT 84124

Attn: Mr. Scott Carlson
 Project: EC 45 05 93

Sample ID: CRS Dissolved
 Matrix: Waste Water

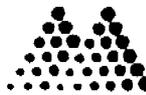
MSAI Sample: 27427
 MSAI Group: 6692
 Date Reported: 12/09/94

Discard Date: 01/08/95
 Date Submitted: 11/23/94
 Date Sampled: 11/22/94
 Collected by: JC
 Purchase Order:
 Project No.:

Test Analysis	Results as Received	Units	Limit of Quantitation
0248D Boron by ICP, Dissolved Method: SW-846 6010A	1.2	mg/l	0.3
0250D Calcium by ICP, Dissolved Method: SW-846 6010A	542	mg/L	1.0
0254F Iron by ICP, Dissolved Method: SW-846 6010A	1.36	mg/l	0.10
0257D Magnesium by ICP, Dissolved Method: SW-846 6010A	345	mg/L	1.0
0258F Manganese by ICP, Dissolved Method: SW-846 6010A	1.60	mg/l	0.02
0262D Potassium by ICP, Dissolved Method: SW-846 6010A	40.3	mg/L	1.0
0267F Sodium by ICP, Dissolved Method: SW-846 6010A	526	mg/l	5

Respectfully Submitted,
 Reviewed and Approved by:

Rolf E. Larsen
 Rolf E. Larsen
 Project Manager

Analytical Report**Mountain States Analytical***The Quality Solution*

Eckhoff, Watson & Preator Engineering
 1121 East 3900 South
 Suite C100
 Salt Lake City, UT 84124

Attn: Mr. Scott Carlson
 Project: EC 45 05 93

Sample ID: CRB Dissolved
 Matrix: Waste Water

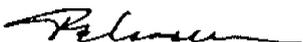
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 MSAI Group: 6692
 Date Reported: 12/09/94

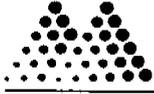
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 Date Submitted: 11/23/94
 Date Sampled: 11/22/94
 Collected by: JC
 Purchase Order:
 Project No.:

Test Analysis	Results as Received	Units	Limit of Quantitation
0248D Boron by ICP, Dissolved Method: SW-846 6010A	0.8	mg/l	0.3
0250D Calcium by ICP, Dissolved Method: SW-846 6010A	476	mg/L	1.0
0254F Iron by ICP, Dissolved Method: SW-846 6010A	ND	mg/l	0.10
0257D Magnesium by ICP, Dissolved Method: SW-846 6010A	311	mg/L	1.0
0258F Manganese by ICP, Dissolved Method: SW-846 6010A	0.25	mg/l	0.02
0262D Potassium by ICP, Dissolved Method: SW-846 6010A	27.2	mg/L	1.0
0267F Sodium by ICP, Dissolved Method: SW-846 6010A	475	mg/l	5

ND - Not detected at the limit of quantitation

Respectfully Submitted,
 Reviewed and Approved by:


 Rolf E. Larsen
 Project Manager



Mountain States Analytical

The Quality Solution

Eckhoff, Watson & Preator Engineering
1121 East 3900 South
Suite C100
Salt Lake City, UT 84124

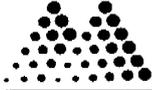
Attn: Mr. Scott Carlson
Project: EC 45 05 93

Sample ID: CRS
Matrix: Waste Water

MSAI Sample: 27424
MSAI Group: 6692
Date Reported: 12/09/94

Discard Date: 01/08/95
Date Submitted: 11/23/94
Date Sampled: 11/22/94
Collected by: JC
Purchase Order:
Project No.:

Test	Analysis	Results as Received	Units	Limit of Quantitation
0248A	Boron by ICP Method: SW-846 6010A	1.1	mg/l	0.3
7254	Iron by ICP Method: SW-846 6010A	7.19	mg/l	0.10
7258	Manganese by ICP Method: SW-846 6010A	1.46	mg/l	0.02
0201	Alkalinity as CaCO ₃ (pH 4.5) Method: EPA 310.1			
	Bicarbonate	460	mg/l	1
	Carbonate	ND	mg/l	1
	Hydroxide	ND	mg/l	1
0206	Solids, Total Suspended (TSS) Method: EPA 160.2	16	mg/l	4
0212	Solids, Total Dissolved Method: EPA 160.1	5,430	mg/l	10
0216	Hardness as CaCO ₃ - Titrimetric Method: EPA 130.2	2,730	mg/l	5
0221	Nitrogen, Ammonia by distillation Method: EPA 350.2	1.5	mg/l	0.5
0475	Acidity (to pH 3.7 and 8.3) Method: EPA 305.1	101	mg/l	1.0
0475	Sulfate, Turbidimetric Method: EPA 375.4	629	mg/l	2



Mountain States Analytical

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Eckhoff, Watson & Preator Engineering

Sample ID: CRS

Page 2

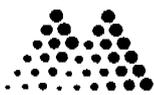
MSAI Sample: 27424

MSAI Group: 6692

ND - Not detected at the limit of quantitation

Respectfully Submitted,
Reviewed and Approved by:

Rolf E. Larsen
Project Manager



Mountain States Analytical

The Quality Solution

Eckhoff, Watson & Preator Engineering
1121 East 3900 South
Suite C100
Salt Lake City, UT 84124

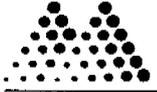
Attn: Mr. Scott Carlson
Project: EC 45 05 93

Sample ID: CRC
Matrix: Waste Water

MSAI Sample: 27425
MSAI Group: 6692
Date Reported: 12/09/94

Discard Date: 01/08/95
Date Submitted: 11/23/94
Date Sampled: 11/22/94
Collected by: JC
Purchase Order:
Project No.:

Test Analysis	Results as Received	Units	Limit of Quantitation
0248A Boron by ICP Method: SW-846 6010A	1.1	mg/l	0.3
7254 Iron by ICP Method: SW-846 6010A	7.49	mg/l	0.10
.258 Manganese by ICP Method: SW-846 6010A	1.24	mg/l	0.02
0201 Alkalinity as CaCO ₃ (pH 4.5) Method: EPA 310.1			
Bicarbonate	420	mg/l	1
Carbonate	ND	mg/l	1
Hydroxide	ND	mg/l	1
0206 Solids, Total Suspended (TSS) Method: EPA 160.2	18	mg/l	4
0212 Solids, Total Dissolved Method: EPA 160.1	5,660	mg/l	10
0216 Hardness as CaCO ₃ - Titrimetric Method: EPA 130.2	2,710	mg/l	5
0221 Nitrogen, Ammonia by distillation Method: EPA 350.2	0.6	mg/l	0.5
0475 Acidity (to pH 3.7 and 8.3) Method: EPA 305.1	49.4	mg/l	1.0
5 Sulfate, Turbidimetric Method: EPA 375.4	652	mg/l	2



Mountain States Analytical

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Eckhoff, Watson & Preator Engineering

Sample ID: CRC

Page 2

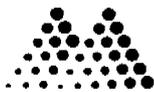
MSAI Sample: 27425

MSAI Group: 6692

ND - Not detected at the limit of quantitation

Respectfully Submitted,
Reviewed and Approved by:

Rolf E. Larsen
Project Manager



Mountain States Analytical

The Quality Solution

Eckhoff, Watson & Preator Engineering
1121 East 3900 South
Suite C100
Salt Lake City, UT 84124

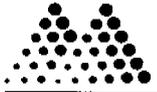
Attn: Mr. Scott Carlson
Project: EC 45 05 93

Sample ID: CRB
Matrix: Waste Water

MSAI Sample: 27426
MSAI Group: 6692
Date Reported: 12/09/94

Discard Date: 01/08/95
Date Submitted: 11/23/94
Date Sampled: 11/22/94
Collected by: JC
Purchase Order:
Project No.:

Test Analysis	Results as Received	Units	Limit of Quantitation
0248A Boron by ICP Method: SW-846 6010A	0.8	mg/l	0.3
7254 Iron by ICP Method: SW-846 6010A	ND	mg/l	0.10
7258 Manganese by ICP Method: SW-846 6010A	0.24	mg/l	0.02
0201 Alkalinity as CaCO ₃ (pH 4.5) Method: EPA 310.1			
Bicarbonate	342	mg/l	1
Carbonate	ND	mg/l	1
Hydroxide	ND	mg/l	1
0206 Solids, Total Suspended (TSS) Method: EPA 160.2	ND	mg/l	4
0212 Solids, Total Dissolved Method: EPA 160.1	5,200	mg/l	10
0216 Hardness as CaCO ₃ - Titrimetric Method: EPA 130.2	2,560	mg/l	5
0221 Nitrogen, Ammonia by distillation Method: EPA 350.2	ND	mg/l	0.5
0475 Acidity (to pH 3.7 and 8.3) Method: EPA 305.1	12.2	mg/l	1.0
05 Sulfate, Turbidimetric Method: EPA 375.4	643	mg/l	2



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The Quality Solution

Eckhoff, Watson & Preator Engineering

Sample ID: CRB

Page 2

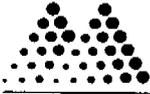
MSAI Sample: 27426

MSAI Group: 6692

ND - Not detected at the limit of quantitation

Respectfully Submitted,
Reviewed and Approved by:

Rolf E. Larsen
Project Manager



Mountain States Analytical

The Quality Solution

Eckhoff, Watson & Preator Engineering
1121 East 3900 South
Suite C100
Salt Lake City, UT 84124

Attn: Mr. Scott Carlson
Project: EC 45 05 93

Sample ID: CRS Dissolved
Matrix: Waste Water

MSAI Sample: 27427
MSAI Group: 6692
Date Reported: 12/09/94

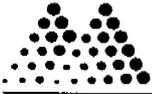
Discard Date: 01/08/95
Date Submitted: 11/23/94
Date Sampled: 11/22/94
Collected by: JC
Purchase Order:
Project No.:

Test Analysis	Results as Received	Units	Limit of Quantitation
0248D Boron by ICP, Dissolved Method: SW-846 6010A	1.2	mg/l	0.3
0250D Calcium by ICP, Dissolved Method: SW-846 6010A	542	mg/L	1.0
0254F Iron by ICP, Dissolved Method: SW-846 6010A	1.36	mg/l	0.10
0257D Magnesium by ICP, Dissolved Method: SW-846 6010A	345	mg/L	1.0
0258F Manganese by ICP, Dissolved Method: SW-846 6010A	1.60	mg/l	0.02
0262D Potassium by ICP, Dissolved Method: SW-846 6010A	40.3	mg/L	1.0
0267F Sodium by ICP, Dissolved Method: SW-846 6010A	526	mg/l	5

Respectfully Submitted,
Reviewed and Approved by:


Rolf E. Larsen
Project Manager

Analytical Report



Mountain States Analytical

The Quality Solution

Eckhoff, Watson & Preator Engineering
1121 East 3900 South
Suite C100
Salt Lake City, UT 84124

Attn: Mr. Scott Carlson
Project: EC 45 05 93

Sample ID: CRC Dissolved
Matrix: Waste Water

MSAI Sample: 27428
MSAI Group: 6692
Date Reported: 12/09/94

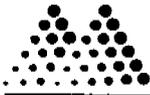
Discard Date: 01/08/95
Date Submitted: 11/23/94
Date Sampled: 11/22/94
Collected by: JC
Purchase Order:
Project No.:

Test Analysis	Results as Received	Units	Limit of Quantitation
0248D Boron by ICP, Dissolved Method: SW-846 6010A	1.1	mg/l	0.3
0250D Calcium by ICP, Dissolved Method: SW-846 6010A	486	mg/L	1.0
0254F Iron by ICP, Dissolved Method: SW-846 6010A	0.59	mg/l	0.10
0257D Magnesium by ICP, Dissolved Method: SW-846 6010A	349	mg/L	1.0
0258F Manganese by ICP, Dissolved Method: SW-846 6010A	1.34	mg/l	0.02
0262D Potassium by ICP, Dissolved Method: SW-846 6010A	36.5	mg/L	1.0
0267F Sodium by ICP, Dissolved Method: SW-846 6010A	527	mg/l	5

Respectfully Submitted,
Reviewed and Approved by:


Rolf E. Larsen
Project Manager

Analytical Report



Mountain States Analytical

The Quality Solution

Eckhoff, Watson & Preator Engineering
1121 East 3900 South
Suite C100
Salt Lake City, UT 84124

Attn: Mr. Scott Carlson
Project: EC 45 05 93

Sample ID: CRB Dissolved
Matrix: Waste Water

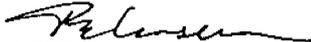
MSAI Sample: 27429
MSAI Group: 6692
Date Reported: 12/09/94

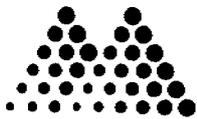
Discard Date: 01/08/95
Date Submitted: 11/23/94
Date Sampled: 11/22/94
Collected by: JC
Purchase Order:
Project No.:

Test Analysis	Results as Received	Units	Limit of Quantitation
0248D Boron by ICP, Dissolved Method: SW-846 6010A	0.8	mg/l	0.3
0250D Calcium by ICP, Dissolved Method: SW-846 6010A	476	mg/L	1.0
0254F Iron by ICP, Dissolved Method: SW-846 6010A	ND	mg/l	0.10
0257D Magnesium by ICP, Dissolved Method: SW-846 6010A	311	mg/L	1.0
0258F Manganese by ICP, Dissolved Method: SW-846 6010A	0.25	mg/l	0.02
0262D Potassium by ICP, Dissolved Method: SW-846 6010A	27.2	mg/L	1.0
0267F Sodium by ICP, Dissolved Method: SW-846 6010A	475	mg/l	5

ND - Not detected at the limit of quantitation

Respectfully Submitted,
Reviewed and Approved by:


Rolf E. Larsen
Project Manager



Mountain States Analytical

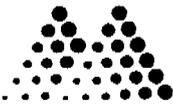
No 4239

Sample Chain of Custody

Client Name: <u>E.W.P. ENGINEERING Co</u> P.O. # _____				<div style="border: 1px solid black; padding: 5px; display: inline-block;"> Analysis Required <div style="border: 1px solid black; padding: 10px; margin: 5px 0;"> COARSE REFINISH SEEP </div> </div>																	
Phone #: <u>801-241-0090</u> Fax #: _____																					
Project Name/#: <u>EC 45 05 93</u>																					
Sampler: <u>Jim Comas</u>																					
Sample Identification	Date Collected	Time Collected	Grab	Composite	Soil	Water	Other	Total of Containers	Analysis Required												Temp. of Samples Upon Receipt
CRS	11/22/94	1445	✓			✓		4	<div style="border: 1px solid black; padding: 10px; display: inline-block;"> COARSE REFINISH SEEP </div>												
CRC	11/22/94	1500	✓			✓		4													
CRB	11/22/94	1530	✓			✓		4													
Name of Shipper		Airbill No.		Date	Time	Sample relinquished by:		Date	Time	Sample received by:		Date	Time								
						<i>Jim Comas</i>		11/23/94	1700	<i>Jeff Clouse</i>		11/23/94	1700								
Received By (Lab)		Date	Time	Seals Intact?																	
Turnaround Time Requested (please circle): Normal Rush																					
<small>(Rush TAT is subject to MSAI approval and surcharge)</small>																					
Report Results By: (Date) _____																					
Rush results requested by (please circle): Phone Fax																					
Report Results to: _____																					
				Type of Disposal:				Authorized for Disposal by:													
				Date/Time of Disposal:				Disposed of by:													

1645 West 2200 South, Salt Lake City, Utah 84119 (801) 973-0050 FAX (801) 972-6278

White Copy - Original Retain by Lab Yellow Copy - Retain by Customer Pink Copy - Retain by Sampler



Mountain States Analytical

The Quality Solution

February 1, 1995

Mr. Scott Carlson
Eckhoff, Watson & Preator Engineering
1121 East 3900 South
Suite C100
Salt Lake City, UT 84124

Reference:

Project: Sunnyside
MSAI Group: 7077

Dear Mr. Carlson:

Enclosed are the analytical results for your project referenced above. The following samples are included in the report.

CRS	CRC
CRB	CRS Dissolved
CRC Dissolved	CRB Dissolved

All holding times were met for the tests performed on these samples.

If the report is acceptable, please approve the enclosed invoice and forward it for payment.

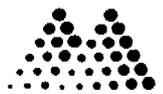
Thank you for selecting Mountain States Analytical, Inc. to serve as your analytical laboratory on this project. If you have any questions concerning these results, please feel free to contact me at any time.

We look forward to working with you on future projects.

With Regards,

Rolf E. Larsen
Project Manager

Analytical Report



Mountain States Analytical

The Quality Solution

Eckhoff, Watson & Preator Engineering
1121 East 3900 South
Suite C100
Salt Lake City, UT 84124

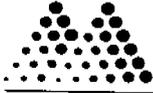
Attn: Mr. Scott Carlson
Project: Sunnyside

Sample ID: CRS
Matrix: Waste Water

MSAI Sample: 29021
MSAI Group: 7077
Date Reported: 02/01/95

Discard Date: 03/03/95
Date Submitted: 01/23/95
Date Sampled: 01/21/95
Collected by: JG
Purchase Order:
Project No.:

Test Analysis	Results as Received	Units	Limit of Quantitation
0248A Boron by ICP Method: SW-846 6010A	1.0	mg/l	0.3
7254 Iron by ICP Method: SW-846 6010A	6.15	mg/l	0.10
7258 Manganese by ICP Method: SW-846 6010A	1.37	mg/l	0.02
0201 Alkalinity as CaCO ₃ (pH 4.5) Method: EPA 310.1			
Bicarbonate	478	mg/l	1
Carbonate	ND	mg/l	1
Hydroxide	ND	mg/l	1
0206 Solids, Total Suspended (TSS) Method: EPA 160.2	6	mg/l	4
0212 Solids, Total Dissolved Method: EPA 160.1	5,480	mg/l	10
0216 Hardness as CaCO ₃ - Titrimetric Method: EPA 130.2	2,820	mg/l	5
0221 Nitrogen, Ammonia by distillation Method: EPA 350.2	1.7	mg/l	0.5
0475 Acidity (to pH 3.7 and 8.3) Method: EPA 305.1	107	mg/l	
1125 Sulfate, Turbidimetric Method: EPA 375.4	3,340	mg/l	2



Mountain States Analytical

The Quality Solution

Eckhoff, Watson & Preator Engineering

Sample ID: CRS

Page 2

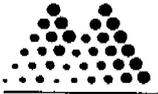
MSAI Sample: 29021

MSAI Group: 7077

ND - Not detected at the limit of quantitation

Respectfully Submitted,
Reviewed and Approved by:

Rolf E. Larsen
Project Manager



Mountain States Analytical

The Quality Solution

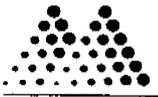
Eckhoff, Watson & Preator Engineering
 1121 East 3900 South
 Suite C100
 Salt Lake City, UT 84124

Attn: Mr. Scott Carlson
 Project: Sunnyside

Sample ID: CRC
 Matrix: Waste Water

MSAI Sample: 29022
 MSAI Group: 7077
 Date Reported: 02/01/95
 Discard Date: 03/03/95
 Date Submitted: 01/23/95
 Date Sampled: 01/21/95
 Collected by: JG
 Purchase Order:
 Project No.:

Test Analysis	Results as Received	Units	Limit of Quantitation
0248A Boron by ICP Method: SW-846 6010A	0.9	mg/l	0.3
7254 Iron by ICP Method: SW-846 6010A	3.60	mg/l	0.10
7258 Manganese by ICP Method: SW-846 6010A	0.82	mg/l	0.02
0201 Alkalinity as CaCO3 (pH 4.5) Method: EPA 310.1			
Bicarbonate	392	mg/l	1
Carbonate	ND	mg/l	1
Hydroxide	ND	mg/l	1
0206 Solids, Total Suspended (TSS) Method: EPA 160.2	8	mg/l	4
0212 Solids, Total Dissolved Method: EPA 160.1	5,340	mg/l	10
0216 Hardness as CaCO3 - Titrimetric Method: EPA 130.2	2,800	mg/l	5
0221 Nitrogen, Ammonia by distillation Method: EPA 350.2	ND	mg/l	0.5
0475 Acidity (to pH 3.7 and 8.3) Method: EPA 305.1	49	mg/l	
1125 Sulfate, Turbidimetric Method: EPA 375.4	3,480	mg/l	2



Mountain States Analytical

The Quality Solution

Eckhoff, Watson & Preator Engineering

Sample ID: CRC

Page 2

MSAI Sample: 29022

MSAI Group: 7077

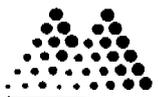
ND - Not detected at the limit of quantitation

Respectfully Submitted,
Reviewed and Approved by:

Rolf E. Larsen
Project Manager

Analytical Report

FEB - 7 1995



Mountain States Analytical

The Quality Solution

Eckhoff, Watson & Preator Engineering
1121 East 3900 South
Suite C100
Salt Lake City, UT 84124

Attn: Mr. Scott Carlson
Project: Sunnyside

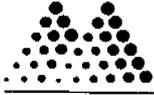
Sample ID: CRB
Matrix: Waste Water

**ECKHOFF, WATSON & PREATOR
ENGINEERING**

MSAI Sample: 29023
MSAI Group: 7077
Date Reported: 02/01/95

Discard Date: 03/03/95
Date Submitted: 01/23/95
Date Sampled: 01/21/95
Collected by: JG
Purchase Order:
Project No.:

Test Analysis	Results as Received	Units	Limit of Quantitation
0248A Boron by ICP Method: SW-846 6010A	0.7	mg/l	0.3
7254 Iron by ICP Method: SW-846 6010A	0.12	mg/l	0.10
7258 Manganese by ICP Method: SW-846 6010A	0.17	mg/l	0.02
0201 Alkalinity as CaCO ₃ (pH 4.5) Method: EPA 310.1			
Bicarbonate	346	mg/l	1
Carbonate	ND	mg/l	1
Hydroxide	ND	mg/l	1
0206 Solids, Total Suspended (TSS) Method: EPA 160.2	ND	mg/l	4
0212 Solids, Total Dissolved Method: EPA 160.1	5,030	mg/l	10
0216 Hardness as CaCO ₃ - Titrimetric Method: EPA 130.2	2,650	mg/l	5
0221 Nitrogen, Ammonia by distillation Method: EPA 350.2	ND	mg/l	0.5
0475 Acidity (to pH 3.7 and 8.3) Method: EPA 305.1	6	mg/l	
1125 Sulfate, Turbidimetric Method: EPA 375.4	3,070	mg/l	2



Mountain States Analytical

The Quality Solution

Page 2

Eckhoff, Watson & Preator Engineering

MSAI Sample: 29023

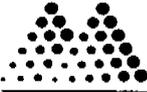
Sample ID: CRB

MSAI Group: 7077

ND - Not detected at the limit of quantitation

Respectfully Submitted,
Reviewed and Approved by:

Rolf E. Larsen
Project Manager



Mountain States Analytical

The Quality Solution

Eckhoff, Watson & Preator Engineering
1121 East 3900 South
Suite C100
Salt Lake City, UT 84124

Attn: Mr. Scott Carlson
Project: Sunnyside

Sample ID: CRS Dissolved
Matrix: Waste Water

MSAI Sample: 29024
MSAI Group: 7077
Date Reported: 02/01/95

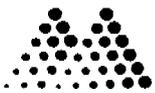
Discard Date: 03/03/95
Date Submitted: 01/23/95
Date Sampled: 01/21/95
Collected by: JG
Purchase Order:
Project No.:

Test Analysis	Results as Received	Units	Limit of Quantitation
0248D Boron by ICP, Dissolved Method: SW-846 6010A	1.0	mg/l	0.3
0250D Calcium by ICP, Dissolved Method: SW-846 6010A	468	mg/L	1.0
0254F Iron by ICP, Dissolved Method: SW-846 6010A	2.04	mg/l	0.10
0257D Magnesium by ICP, Dissolved Method: SW-846 6010A	293	mg/L	1.0
0258F Manganese by ICP, Dissolved Method: SW-846 6010A	1.37	mg/l	0.02
0262D Potassium by ICP, Dissolved Method: SW-846 6010A	32.6	mg/L	1.0
0267F Sodium by ICP, Dissolved Method: SW-846 6010A	423	mg/l	2

Respectfully Submitted,
Reviewed and Approved by:

Rolf E. Larsen
Project Manager

Analytical Report



Mountain States Analytical

The Quality Solution

Eckhoff, Watson & Preator Engineering
1121 East 3900 South
Suite C100
Salt Lake City, UT 84124

Attn: Mr. Scott Carlson
Project: Sunnyside

Sample ID: CRC Dissolved
Matrix: Waste Water

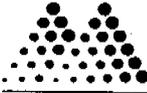
MSAI Sample: 29025
MSAI Group: 7077
Date Reported: 02/01/95
Discard Date: 03/03/95
Date Submitted: 01/23/95
Date Sampled: 01/21/95
Collected by: JG
Purchase Order:
Project No.:

Test Analysis	Results as Received	Units	Limit of Quantitation
0248D Boron by ICP, Dissolved Method: SW-846 6010A	0.8	mg/l	0.3
0250D Calcium by ICP, Dissolved Method: SW-846 6010A	428	mg/L	1.0
0254F Iron by ICP, Dissolved Method: SW-846 6010A	0.45	mg/l	0.10
0257D Magnesium by ICP, Dissolved Method: SW-846 6010A	297	mg/L	1.0
0258F Manganese by ICP, Dissolved Method: SW-846 6010A	0.81	mg/l	0.02
0262D Potassium by ICP, Dissolved Method: SW-846 6010A	27.2	mg/L	1.0
0267F Sodium by ICP, Dissolved Method: SW-846 6010A	396	mg/l	2

Respectfully Submitted,
Reviewed and Approved by:

Rolf E. Larsen
Project Manager

Analytical Report



Mountain States Analytical

The Quality Solution

Eckhoff, Watson & Preator Engineering
1121 East 3900 South
Suite C100
Salt Lake City, UT 84124

Attn: Mr. Scott Carlson
Project: Sunnyside

Sample ID: CRB Dissolved
Matrix: Waste Water

MSAI Sample: 29026
MSAI Group: 7077
Date Reported: 02/01/95

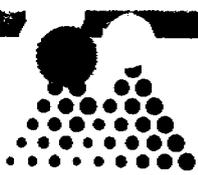
Discard Date: 03/03/95
Date Submitted: 01/23/95
Date Sampled: 01/21/95
Collected by: JG
Purchase Order:
Project No.:

Test Analysis	Results as Received	Units	Limit of Quantitation
0248D Boron by ICP, Dissolved Method: SW-846 6010A	0.7	mg/l	0.3
0250D Calcium by ICP, Dissolved Method: SW-846 6010A	428	mg/L	1.0
0254F Iron by ICP, Dissolved Method: SW-846 6010A	ND	mg/l	0.10
0257D Magnesium by ICP, Dissolved Method: SW-846 6010A	280	mg/L	1.0
0258F Manganese by ICP, Dissolved Method: SW-846 6010A	0.17	mg/l	0.02
0262D Potassium by ICP, Dissolved Method: SW-846 6010A	23.3	mg/L	1.0
0267F Sodium by ICP, Dissolved Method: SW-846 6010A	377	mg/l	2

ND - Not detected at the limit of quantitation

Respectfully Submitted,
Reviewed and Approved by:

Rolf E. Larsen
Project Manager



Mountain States Analytical

The Quality Solution

5254

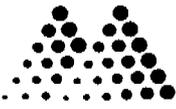
Sample Chain of Custody

Client Name: <u>E.W.P. ENGINEERING</u>		P.O. # _____		Analysis Required <div style="border: 1px solid black; padding: 5px; display: inline-block; transform: rotate(-45deg); font-weight: bold;">COARSE REFUSE "SEEP"</div>																
Phone #: <u>801-261-0090</u>		Fax #: <u>801-266-1671</u>																		
Project Name/ #: <u>SUNNYSIDE</u>																				
Sampler: <u>J. GOMAS</u>																				
Sample Identification	Date Collected	Time Collected	Grab	Composite	Soil	Water	Other	Total of Containers	Rush?										Remarks	Temp. of Samples Upon Receipt
<u>CRS</u>	<u>1-21-95</u>	<u>1430</u>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		<u>4</u>												<u>3.6</u>
<u>CRC</u>	<u>1-21-95</u>	<u>1445</u>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		<u>4</u>												
<u>CRB</u>	<u>1-21-95</u>	<u>1500</u>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		<u>4</u>												
Name of Shipper		Airbill No.		Date	Time	Sample relinquished by:		Date	Time	Sample received by:		Date	Time							
						<u>J. Gomas</u>		<u>1-22-95</u>	<u>1145</u>	<u>David Friig</u>		<u>1-22-95</u>	<u>11:45</u>							
Received By (Lab)		Date	Time	Seals Intact?		Signature		Date	Time	Signature		Date	Time							
<u>Refuse</u>		<u>1/23/95</u>	<u>9:20am</u>	<u>none</u>		<u>David Friig</u>		<u>1-23-95</u>	<u>9:00 am</u>	<u>Scott Carlson</u>		<u>1-23-95</u>	<u>9:00 am</u>							
Turnaround Time Requested (please circle):				Normal		Rush		(Rush TAT is subject to MSAI approval and surcharge)												
Report Results By: (Date) _____																				
Rush results requested by (please circle): Phone Fax _____																				
Report Results to: _____								Type of Disposal:				Authorized for Disposal by: _____								
_____								Date/Time of Disposal:				Disposed of by: _____								

1645 West 2200 South, Salt Lake City, Utah 84119 (801) 973-0050 FAX (801) 972-6278

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1021



Mountain States Analytical

The Quality Solution

March 9, 1995

Mr. Scott Carlson
Eckhoff, Watson & Preator Engineering
1121 East 3900 South
Suite C100
Salt Lake City, UT 84124

RECEIVED

MAR 13 1995

ECKHOFF, WATSON & PREATOR
ENGINEERING

Reference:

Project: Sunnyside
MSAI Group: 7492

Dear Mr. Carlson:

Enclosed are the analytical results for your project referenced above. The following samples are included in the report.

CRS
CRS Dissolved

CRC
CRC Dissolved

CRB
CRB Dissolved

All holding times were met for the tests performed on these samples.

If the report is acceptable, please approve the enclosed invoice and forward it for payment.

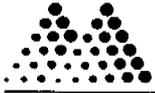
Thank you for selecting Mountain States Analytical, Inc. to serve as your analytical laboratory on this project. If you have any questions concerning these results, please feel free to contact me at any time.

We look forward to working with you on future projects.

With Regards,

Rolf E. Larsen
Project Manager

Analytical Report



Mountain States Analytical

The Quality Solution

Eckhoff, Watson & Preator Engineering
1121 East 3900 South
Suite C100
Salt Lake City, UT 84124

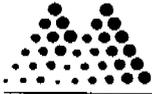
Attn: Mr. Scott Carlson
Project: Sunnyside

Sample ID: CRS
Matrix: Waste Water

MSAI Sample: 30444
MSAI Group: 7492
Date Reported: 03/09/95

Discard Date: 04/08/95
Date Submitted: 03/02/95
Date Sampled: 02/28/95
Collected by: JC
Purchase Order:
Project No.:

Test Analysis	Results as Received	Units	Limit of Quantitation
0248A Boron by ICP Method: SW-846 6010A	1.3	mg/l	0.3
7254 Iron by ICP Method: SW-846 6010A	8.26	mg/l	0.10
7258 Manganese by ICP Method: SW-846 6010A	1.64	mg/l	0.02
0201 Alkalinity as CaCO ₃ (pH 4.5) Method: EPA 310.1			
Bicarbonate	484	mg/l	1
Carbonate	ND	mg/l	1
Hydroxide	ND	mg/l	1
0206 Solids, Total Suspended (TSS) Method: EPA 160.2	12	mg/l	4
0212 Solids, Total Dissolved Method: EPA 160.1	4,950	mg/l	10
0216 Hardness as CaCO ₃ - Titrimetric Method: EPA 130.2	2,960	mg/l	5
0221 Nitrogen, Ammonia by distillation Method: EPA 350.2	1.7	mg/l	0.5
0475 Acidity (to pH 3.7 and 8.3) Method: EPA 305.1	63.0	mg/l	1.0
1125 Sulfate, Turbidimetric Method: EPA 375.4	3,270	mg/l	2



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Sample ID: CRS

Page 2

MSAI Sample: 30444

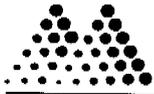
MSAI Group: 7492

ND - Not detected at the limit of quantitation

Respectfully Submitted,
Reviewed and Approved by:

Rolf E. Larsen
Project Manager

Analytical Report



Mountain States Analytical

The Quality Solution

Eckhoff, Watson & Preator Engineering
1121 East 3900 South
Suite C100
Salt Lake City, UT 84124

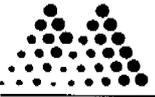
Attn: Mr. Scott Carlson
Project: Sunnyside

Sample ID: CRC
Matrix: Waste Water

MSAI Sample: 30445
MSAI Group: 7492
Date Reported: 03/09/95

Discard Date: 04/08/95
Date Submitted: 03/02/95
Date Sampled: 02/28/95
Collected by: JC
Purchase Order:
Project No.:

Test Analysis	Results as Received	Units	Limit of Quantitation
0248A Boron by ICP Method: SW-846 6010A	1.0	mg/l	0.3
7254 Iron by ICP Method: SW-846 6010A	4.19	mg/l	0.10
7258 Manganese by ICP Method: SW-846 6010A	0.78	mg/l	0.02
0201 Alkalinity as CaCO ₃ (pH 4.5) Method: EPA 310.1			
Bicarbonate	404	mg/l	1
Carbonate	ND	mg/l	1
Hydroxide	ND	mg/l	1
0206 Solids, Total Suspended (TSS) Method: EPA 160.2	16	mg/l	4
0212 Solids, Total Dissolved Method: EPA 160.1	5,070	mg/l	10
0216 Hardness as CaCO ₃ - Titrimetric Method: EPA 130.2	2,760	mg/l	5
0221 Nitrogen, Ammonia by distillation Method: EPA 350.2	ND	mg/l	0.5
0475 Acidity (to pH 3.7 and 8.3) Method: EPA 305.1	35.8	mg/l	1.0
1125 Sulfate, Turbidimetric Method: EPA 375.4	3,220	mg/l	2



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The Quality Solution

Eckhoff, Watson & Preator Engineering

Sample ID: CRC

Page 2

MSAI Sample: 30445

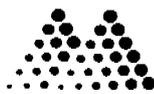
MSAI Group: 7492

ND - Not detected at the limit of quantitation

Respectfully Submitted,
Reviewed and Approved by:

Rolf E. Larsen
Project Manager

Analytical Report



Mountain States Analytical

The Quality Solution

Eckhoff, Watson & Preator Engineering
1121 East 3900 South
Suite C100
Salt Lake City, UT 84124

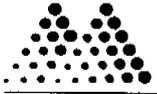
Attn: Mr. Scott Carlson
Project: Sunnyside

Sample ID: CRB
Matrix: Waste Water

MSAI Sample: 30446
MSAI Group: 7492
Date Reported: 03/09/95

Discard Date: 04/08/95
Date Submitted: 03/02/95
Date Sampled: 02/28/95
Collected by: JC
Purchase Order:
Project No.:

Test Analysis	Results as Received	Units	Limit of Quantitation
0248A Boron by ICP Method: SW-846 6010A	0.9	mg/l	0.3
7254 Iron by ICP Method: SW-846 6010A	ND	mg/l	0.10
7258 Manganese by ICP Method: SW-846 6010A	0.11	mg/l	0.02
0201 Alkalinity as CaCO ₃ (pH 4.5) Method: EPA 310.1			
Bicarbonate	330	mg/l	1
Carbonate	ND	mg/l	1
Hydroxide	ND	mg/l	1
0206 Solids, Total Suspended (TSS) Method: EPA 160.2	ND	mg/l	4
0212 Solids, Total Dissolved Method: EPA 160.1	4,780	mg/l	10
0216 Hardness as CaCO ₃ - Titrimetric Method: EPA 130.2	2,580	mg/l	5
0221 Nitrogen, Ammonia by distillation Method: EPA 350.2	ND	mg/l	0.5
0475 Acidity (to pH 3.7 and 8.3) Method: EPA 305.1	5.0	mg/l	1.0
1125 Sulfate, Turbidimetric Method: EPA 375.4	2,940	mg/l	2



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Eckhoff, Watson & Preator Engineering

Sample ID: CRB

Page 2

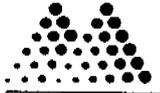
MSAI Sample: 30446
MSAI Group: 7492

ND - Not detected at the limit of quantitation

Respectfully Submitted,
Reviewed and Approved by:

Rolf E. Larsen
Project Manager

Analytical Report



Mountain States Analytical

The Quality Solution

Eckhoff, Watson & Preator Engineering
1121 East 3900 South
Suite C100
Salt Lake City, UT 84124

Attn: Mr. Scott Carlson
Project: Sunnyside

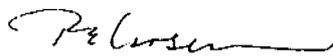
Sample ID: CRS Dissolved
Matrix: Waste Water

MSAI Sample: 30447
MSAI Group: 7492
Date Reported: 03/09/95

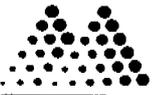
Discard Date: 04/08/95
Date Submitted: 03/02/95
Date Sampled: 02/28/95
Collected by: JC
Purchase Order:
Project No.:

Test Analysis	Results as Received	Units	Limit of Quantitation
0248D Boron by ICP, Dissolved Method: SW-846 6010A	1.4	mg/l	0.3
0250D Calcium by ICP, Dissolved Method: SW-846 6010A	545	mg/L	1.0
0254F Iron by ICP, Dissolved Method: SW-846 6010A	2.43	mg/l	0.10
0257D Magnesium by ICP, Dissolved Method: SW-846 6010A	350	mg/L	1.0
0258F Manganese by ICP, Dissolved Method: SW-846 6010A	1.62	mg/l	0.02
0262D Potassium by ICP, Dissolved Method: SW-846 6010A	41.2	mg/L	1.0
0267F Sodium by ICP, Dissolved Method: SW-846 6010A	482	mg/l	4

Respectfully Submitted,
Reviewed and Approved by:


Rolf E. Larsen
Project Manager

Analytical Report



Mountain States Analytical

The Quality Solution

Eckhoff, Watson & Preator Engineering
1121 East 3900 South
Suite C100
Salt Lake City, UT 84124

Attn: Mr. Scott Carlson
Project: Sunnyside

Sample ID: CRC Dissolved
Matrix: Waste Water

MSAI Sample: 30448
MSAI Group: 7492
Date Reported: 03/09/95

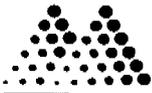
Discard Date: 04/08/95
Date Submitted: 03/02/95
Date Sampled: 02/28/95
Collected by: JC
Purchase Order:
Project No.:

Test Analysis	Results as Received	Units	Limit of Quantitation
0248D Boron by ICP, Dissolved Method: SW-846 6010A	1.1	mg/l	0.3
0250D Calcium by ICP, Dissolved Method: SW-846 6010A	487	mg/L	1.0
0254F Iron by ICP, Dissolved Method: SW-846 6010A	0.27	mg/l	0.10
0257D Magnesium by ICP, Dissolved Method: SW-846 6010A	341	mg/L	1.0
0258F Manganese by ICP, Dissolved Method: SW-846 6010A	0.97	mg/l	0.02
0262D Potassium by ICP, Dissolved Method: SW-846 6010A	33.0	mg/L	1.0
0267F Sodium by ICP, Dissolved Method: SW-846 6010A	447	mg/l	4

Respectfully Submitted,
Reviewed and Approved by:

Rolf E. Larsen
Project Manager

Analytical Report



Mountain States Analytical

The Quality Solution

Eckhoff, Watson & Preator Engineering
1121 East 3900 South
Suite C100
Salt Lake City, UT 84124

Attn: Mr. Scott Carlson
Project: Sunnyside

Sample ID: CRB Dissolved
Matrix: Waste Water

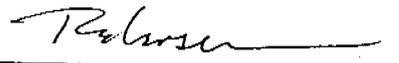
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MSAI Group: 7492
Date Reported: 03/09/95

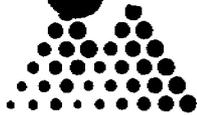
Discard Date: 04/08/95
Date Submitted: 03/02/95
Date Sampled: 02/28/95
Collected by: JC
Purchase Order:
Project No.:

Test Analysis	Results as Received	Units	Limit of Quantitation
0248D Boron by ICP, Dissolved Method: SW-846 6010A	0.9	mg/l	0.3
0250D Calcium by ICP, Dissolved Method: SW-846 6010A	511	mg/L	1.0
0254F Iron by ICP, Dissolved Method: SW-846 6010A	ND	mg/l	0.10
0257D Magnesium by ICP, Dissolved Method: SW-846 6010A	342	mg/L	1.0
0258F Manganese by ICP, Dissolved Method: SW-846 6010A	0.11	mg/l	0.02
0262D Potassium by ICP, Dissolved Method: SW-846 6010A	29.5	mg/L	1.0
0267F Sodium by ICP, Dissolved Method: SW-846 6010A	427	mg/l	4

ND - Not detected at the limit of quantitation

Respectfully Submitted,
Reviewed and Approved by:


Rolf E. Larsen
Project Manager



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The Quality Solution

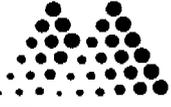
4998

Sample Chain of Custody

Client Name: <u>E.W.P. ENGINEERING LLC</u> P.O. # _____		Phone #: <u>261-0090</u> Fax #: <u>266-1671</u>		Project Name/ #: <u>SUNNYSIDE</u>		Sampler: <u>J.C.</u>		Total of Containers	Analysis Required										Temp. of Samples Upon Receipt		
									COARSE REFUSE SEEP												
Sample Identification		Date Collected	Time Collected	Grab	Composite	Soil	Water		Other	Rush?										Remarks	
<u>CRS</u>		<u>2/28/95</u>	<u>1100</u>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>												<u>filter</u>		
<u>CRC</u>		<u>2/28/95</u>	<u>1130</u>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>												<u>filter</u>		
<u>CRB</u>		<u>2/28/95</u>	<u>1155</u>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>												<u>filter</u>		
Name of Shipper		Airbill No.	Date	Time	Sample relinquished by:			Date	Time	Sample received by:			Date	Time							
<u>Fed ex</u>		<u>4268 75 7964</u>	<u>3/2/95</u>	<u>0835</u>	<u>[Signature]</u>			<u>2/28/95</u>													
Received By (Lab)		Date	Time	Seals Intact?																	
<u>[Signature]</u>		<u>3/2/95</u>	<u>0835</u>	<u>NA</u>																	
Turnaround Time Requested (please circle):																					
<input checked="" type="radio"/> Normal <input type="radio"/> Rush																					
(Rush TAT is subject to MSAI approval and surcharge)																					
Report Results By: (Date)																					
Rush results requested by (please circle): Phone Fax																					
Report Results to: <u>SCOTT CARLSON</u>		Type of Disposal:				Authorized for Disposal by:															
		Date/Time of Disposal:				Disposed of by:															

1645 West 2200 South, Salt Lake City, Utah 84119 (801) 973-0050 FAX (801) 972-6278

White Copy - Original Retain by Lab Yellow Copy - Return to Customer Pink Copy - Retain by Sampler



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The Quality Solution

April 5, 1995

Mr. Scott Carlson
Eckhoff, Watson & Preator Engineering
1121 East 3900 South
Suite C100
Salt Lake City, UT 84124

RECEIVED

APR - 6 1995

ECKHOFF, WATSON & PREATOR
ENGINEERING

Reference:

Project: Sunnyside
MSAI Group: 7762

Dear Mr. Carlson:

Enclosed are the analytical results for your project referenced above. The following samples are included in the report.

CRS	CRC	CRB
CRS Dissolved	CRC Dissolved	CRB Dissolved

All holding times were met for the tests performed on these samples.

If the report is acceptable, please approve the enclosed invoice and forward it for payment.

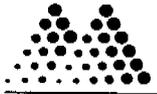
Thank you for selecting Mountain States Analytical, Inc. to serve as your analytical laboratory on this project. If you have any questions concerning these results, please feel free to contact me at any time.

We look forward to working with you on future projects.

With Regards,

Rolf E. Larsen
Project Manager

Analytical Report



Mountain States Analytical

The Quality Solution

Eckhoff, Watson & Preator Engineering
1121 East 3900 South
Suite C100
Salt Lake City, UT 84124

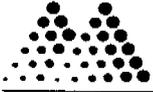
Attn: Mr. Scott Carlson
Project: Sunnyside

Sample ID: CRS
Matrix: Waste Water

MSAI Sample: 31634
MSAI Group: 7762
Date Reported: 04/05/95

Discard Date: 05/05/95
Date Submitted: 03/23/95
Date Sampled: 03/22/95
Collected by: JC
Purchase Order:
Project No.:

Test Analysis	Results as Received	Units	Limit of Quantitation
0248A Boron by ICP Method: SW-846 6010A	1.1	mg/l	0.1
7254 Iron by ICP Method: SW-846 6010A	6.78	mg/l	0.25
7258 Manganese by ICP Method: SW-846 6010A	1.38	mg/l	0.015
0201 Alkalinity as CaCO ₃ (pH 4.5) Method: EPA 310.1			
Bicarbonate	470	mg/l	1
Carbonate	ND	mg/l	1
Hydroxide	ND	mg/l	1
0206 Solids, Total Suspended (TSS) Method: EPA 160.2	16	mg/l	4
0212 Solids, Total Dissolved Method: EPA 160.1	5,250	mg/l	10
0216 Hardness as CaCO ₃ - Titrimetric Method: EPA 130.2	2,760	mg/l	5
0221 Nitrogen, Ammonia by distillation Method: EPA 350.2	1.7	mg/l	0.5
0475 Acidity (to pH 3.7 and 8.3) Method: EPA 305.1	78	mg/l	1
1125 Sulfate, Turbidimetric Method: EPA 375.4	3,200	mg/l	2



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Eckhoff, Watson & Preator Engineering

Sample ID: CRS

Page 2

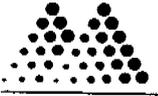
MSAI Sample: 31634
MSAI Group: 7762

ND - Not detected at the limit of quantitation

Respectfully Submitted,
Reviewed and Approved by:

Rolf E. Larsen
Project Manager

Analytical Report



Mountain States Analytical

The Quality Solution

Eckhoff, Watson & Preator Engineering
1121 East 3900 South
Suite C100
Salt Lake City, UT 84124

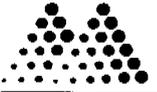
Attn: Mr. Scott Carlson
Project: Sunnyside

Sample ID: CRC
Matrix: Waste Water

MSAI Sample: 31635
MSAI Group: 7762
Date Reported: 04/05/95

Discard Date: 05/05/95
Date Submitted: 03/23/95
Date Sampled: 03/22/95
Collected by: JC
Purchase Order:
Project No.:

Test Analysis	Results as Received	Units	Limit of Quantitation
0248A Boron by ICP Method: SW-846 6010A	0.9	mg/l	0.1
7254 Iron by ICP Method: SW-846 6010A	5.85	mg/l	0.25
7258 Manganese by ICP Method: SW-846 6010A	0.955	mg/l	0.015
0201 Alkalinity as CaCO ₃ (pH 4.5) Method: EPA 310.1			
Bicarbonate	408	mg/l	1
Carbonate	ND	mg/l	1
Hydroxide	ND	mg/l	1
0206 Solids, Total Suspended (TSS) Method: EPA 160.2	9	mg/l	4
0212 Solids, Total Dissolved Method: EPA 160.1	5,090	mg/l	10
0216 Hardness as CaCO ₃ - Titrimetric Method: EPA 130.2	2,710	mg/l	5
0221 Nitrogen, Ammonia by distillation Method: EPA 350.2	0.6	mg/l	0.5
0475 Acidity (to pH 3.7 and 8.3) Method: EPA 305.1	52	mg/l	1
1125 Sulfate, Turbidimetric Method: EPA 375.4	3,220	mg/l	2



Mountain States Analytical

Eckhoff, Watson & Preator Engineering *The Quality Solution*

Sample ID: CRC

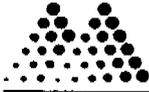
Page 2

MSAI Sample: 31635
MSAI Group: 7762

ND - Not detected at the limit of quantitation

Respectfully Submitted,
Reviewed and Approved by:

Rolf E. Larsen
Project Manager



Mountain States Analytical

The Quality Solution

Eckhoff, Watson & Preator Engineering
1121 East 3900 South
Suite C100
Salt Lake City, UT 84124

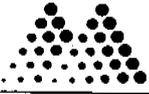
Attn: Mr. Scott Carlson
Project: Sunnyside

Sample ID: CRB
Matrix: Waste Water

MSAI Sample: 31636
MSAI Group: 7762
Date Reported: 04/05/95

Discard Date: 05/05/95
Date Submitted: 03/23/95
Date Sampled: 03/22/95
Collected by: JC
Purchase Order:
Project No.:

Test Analysis	Results as Received	Units	Limit of Quantitation
0248A Boron by ICP Method: SW-846 6010A	0.7	mg/l	0.1
7254 Iron by ICP Method: SW-846 6010A	ND	mg/l	0.25
7258 Manganese by ICP Method: SW-846 6010A	0.071	mg/l	0.015
0201 Alkalinity as CaCO ₃ (pH 4.5) Method: EPA 310.1			
Bicarbonate	314	mg/l	1
Carbonate	ND	mg/l	1
Hydroxide	ND	mg/l	1
0206 Solids, Total Suspended (TSS) Method: EPA 160.2	ND	mg/l	4
0212 Solids, Total Dissolved Method: EPA 160.1	4,770	mg/l	10
0216 Hardness as CaCO ₃ - Titrimetric Method: EPA 130.2	2,620	mg/l	5
0221 Nitrogen, Ammonia by distillation Method: EPA 350.2	ND	mg/l	0.5
0475 Acidity (to pH 3.7 and 8.3) Method: EPA 305.1	12	mg/l	1
1125 Sulfate, Turbidimetric Method: EPA 375.4	2,910	mg/l	2



Mountain States Analytical

Eckhoff, Watson & Preator The Quality Solution
Engineering

Sample ID: CRB

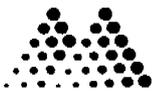
Page 2

MSAI Sample: 31636
MSAI Group: 7762

ND - Not detected at the limit of quantitation

Respectfully Submitted,
Reviewed and Approved by:

Rolf E. Larsen
Project Manager



Mountain States Analytical

The Quality Solution

Eckhoff, Watson & Preator Engineering
1121 East 3900 South
Suite C100
Salt Lake City, UT 84124

Attn: Mr. Scott Carlson
Project: Sunnyside

Sample ID: CRS Dissolved
Matrix: Waste Water

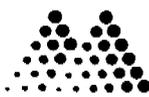
MSAI Sample: 31637
MSAI Group: 7762
Date Reported: 04/05/95

Discard Date: 05/05/95
Date Submitted: 03/23/95
Date Sampled: 03/22/95
Collected by: JC
Purchase Order:
Project No.:

Test Analysis	Results as Received	Units	Limit of Quantitation
0248D Boron by ICP, Dissolved Method: SW-846 6010A	1.2	mg/l	0.1
0250D Calcium by ICP, Dissolved Method: SW-846 6010A	490	mg/L	0.8
0254F Iron by ICP, Dissolved Method: SW-846 6010A	1.10	mg/l	0.25
0257D Magnesium by ICP, Dissolved Method: SW-846 6010A	310	mg/L	0.2
0258F Manganese by ICP, Dissolved Method: SW-846 6010A	1.48	mg/l	0.02
0262D Potassium by ICP, Dissolved Method: SW-846 6010A	36.1	mg/L	0.8
0267F Sodium by ICP, Dissolved Method: SW-846 6010A	437	mg/l	1

Respectfully Submitted,
Reviewed and Approved by:

Rolf E. Larsen
Project Manager



Mountain States Analytical

The Quality Solution

Eckhoff, Watson & Preator Engineering
1121 East 3900 South
Suite C100
Salt Lake City, UT 84124

Attn: Mr. Scott Carlson
Project: Sunnyside

Sample ID: CRC Dissolved
Matrix: Waste Water

MSAI Sample: 31638
MSAI Group: 7762
Date Reported: 04/05/95

Discard Date: 05/05/95
Date Submitted: 03/23/95
Date Sampled: 03/22/95
Collected by: JC
Purchase Order:
Project No.:

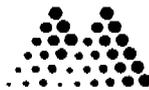
Test Analysis	Results as Received	Units	Limit of Quantitation
0248D Boron by ICP, Dissolved Method: SW-846 6010A	1.0	mg/l	0.1
0250D Calcium by ICP, Dissolved Method: SW-846 6010A	457	mg/L	0.8
0254F Iron by ICP, Dissolved Method: SW-846 6010A	ND	mg/l	0.25
0257D Magnesium by ICP, Dissolved Method: SW-846 6010A	317	mg/L	0.2
0258F Manganese by ICP, Dissolved Method: SW-846 6010A	0.93	mg/l	0.02
0262D Potassium by ICP, Dissolved Method: SW-846 6010A	31.8	mg/L	0.8
0267F Sodium by ICP, Dissolved Method: SW-846 6010A	439	mg/l	1

ND - Not detected at the limit of quantitation

Respectfully Submitted,
Reviewed and Approved by:

Rolf E. Larsen
Project Manager

Analytical Report



Mountain States Analytical

The Quality Solution

Eckhoff, Watson & Preator Engineering
1121 East 3900 South
Suite C100
Salt Lake City, UT 84124

Attn: Mr. Scott Carlson
Project: Sunnyside

Sample ID: CRB Dissolved
Matrix: Waste Water

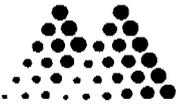
MSAI Sample: 31639
MSAI Group: 7762
Date Reported: 04/05/95
Discard Date: 05/05/95
Date Submitted: 03/23/95
Date Sampled: 03/22/95
Collected by: JC
Purchase Order:
Project No.:

Test Analysis	Results as Received	Units	Limit of Quantitation
0248D Boron by ICP, Dissolved Method: SW-846 6010A	0.7	mg/l	0.1
0250D Calcium by ICP, Dissolved Method: SW-846 6010A	408	mg/L	0.8
0254F Iron by ICP, Dissolved Method: SW-846 6010A	ND	mg/l	0.25
0257D Magnesium by ICP, Dissolved Method: SW-846 6010A	265	mg/L	0.2
0258F Manganese by ICP, Dissolved Method: SW-846 6010A	0.07	mg/l	0.02
0262D Potassium by ICP, Dissolved Method: SW-846 6010A	23.1	mg/L	0.8
0267F Sodium by ICP, Dissolved Method: SW-846 6010A	366	mg/l	1

ND - Not detected at the limit of quantitation

Respectfully Submitted,
Reviewed and Approved by:

Rolf E. Larsen
Project Manager



Mountain States Analytical

May 11, 1995 *The Quality Solution*

Mr. Scott Carlson
Eckhoff, Watson & Preator Engineering
1121 East 3900 South
Suite C100
Salt Lake City, UT 84124

RECEIVED

MAY 13 1995

ECKHOFF, WATSON & PREATOR
ENGINEERING

Reference:

Project: Sunnyside
MSAI Group: 8110

Dear Mr. Carlson:

Enclosed are the analytical results for your project referenced above. The following samples are included in the report.

CRS	CRC	CRB
CRS Dissolved	CRC Dissolved	CRB Dissolved

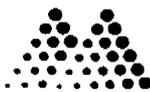
All holding times were met for the tests performed on these samples.

Thank you for selecting Mountain States Analytical, Inc. to serve as your analytical laboratory on this project. If you have any questions concerning these results, please feel free to contact me at any time.

We look forward to working with you on future projects.

With Regards,

Rolf E. Larsen
Project Manager



Mountain States Analytical

The Quality Solution

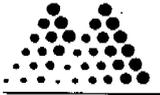
Eckhoff, Watson & Preator Engineering
 1121 East 3900 South
 Suite C100
 Salt Lake City, UT 84124

Attn: Mr. Scott Carlson
 Project: Sunnyside

Sample ID: CRS
 Matrix: Waste Water

MSAI Sample: 32868
 MSAI Group: 8110
 Date Reported: 05/11/95
 Discard Date: 06/10/95
 Date Submitted: 04/28/95
 Date Sampled: 04/27/95
 Collected by: JC
 Purchase Order:
 Project No.:

Test	Analysis	Results as Received	Units	Limit of Quantitation
0248A	Boron by ICP Method: SW-846 6010A	1.2	mg/l	0.1
7254	Iron by ICP Method: SW-846 6010A	7.67	mg/l	0.25
7258	Manganese by ICP Method: SW-846 6010A	1.52	mg/l	0.015
0201	Alkalinity as CaCO ₃ (pH 4.5) Method: EPA 310.1			
	Bicarbonate	468	mg/l	1
	Carbonate	ND	mg/l	1
	Hydroxide	ND	mg/l	1
0206	Solids, Total Suspended (TSS) Method: EPA 160.2	20	mg/l	4
0212	Solids, Total Dissolved (TDS) Method: EPA 160.1	5,440	mg/l	10
0216	Hardness as CaCO ₃ - Titrimetric Method: EPA 130.2	2,760	mg/l	5
0221	Nitrogen, Ammonia by distillation Method: EPA 350.2	1.6	mg/l	0.5
0475	Acidity, (to pH 3.7 and 8.3) Method: EPA 305.1	93.1	mg/l	1.0
1125	Sulfate, Turbidimetric Method: EPA 375.4	3,420	mg/l	2



Mountain States Analytical

Eckhoff, Watson & Preator Engineering *The Quality Solution*

Sample ID: CRS

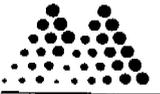
Page 2

MSAI Sample: 32868
MSAI Group: 8110

ND - Not detected at the limit of quantitation

Respectfully Submitted,
Reviewed and Approved by:

Rolf E. Larsen
Project Manager



Mountain States Analytical

The Quality Solution

Eckhoff, Watson & Preator Engineering
 1121 East 3900 South
 Suite C100
 Salt Lake City, UT 84124

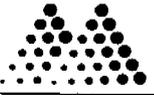
Attn: Mr. Scott Carlson
 Project: Sunnyside

Sample ID: CRC
 Matrix: Waste Water

MSAI Sample: 32869
 MSAI Group: 8110
 Date Reported: 05/11/95

Discard Date: 06/10/95
 Date Submitted: 04/28/95
 Date Sampled: 04/27/95
 Collected by: JC
 Purchase Order:
 Project No.:

Test Analysis	Results as Received	Units	Limit of Quantitation
0248A Boron by ICP Method: SW-846 6010A	1.1	mg/l	0.1
7254 Iron by ICP Method: SW-846 6010A	6.44	mg/l	0.25
7258 Manganese by ICP Method: SW-846 6010A	1.18	mg/l	0.015
0201 Alkalinity as CaCO ₃ (pH 4.5) Method: EPA 310.1			
Bicarbonate	422	mg/l	1
Carbonate	ND	mg/l	1
Hydroxide	ND	mg/l	1
0206 Solids, Total Suspended (TSS) Method: EPA 160.2	19	mg/l	4
0212 Solids, Total Dissolved (TDS) Method: EPA 160.1	5,520	mg/l	10
0216 Hardness as CaCO ₃ - Titrimetric Method: EPA 130.2	2,780	mg/l	5
0221 Nitrogen, Ammonia by distillation Method: EPA 350.2	ND	mg/l	0.5
0475 Acidity, (to pH 3.7 and 8.3) Method: EPA 305.1	48.2	mg/l	1.0
0125 Sulfate, Turbidimetric Method: EPA 375.4	3,250	mg/l	2



Mountain States Analytical

Eckhoff, Watson & Preator Engineering The Quality Solution

Sample ID: CRC

Page 2

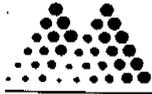
MSAI Sample: 32869

MSAI Group: 8110

ND - Not detected at the limit of quantitation

Respectfully Submitted,
Reviewed and Approved by:

Rolf E. Larsen
Project Manager



Mountain States Analytical

The Quality Solution

Eckhoff, Watson & Preator Engineering
1121 East 3900 South
Suite C100
Salt Lake City, UT 84124

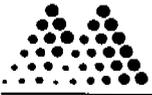
Attn: Mr. Scott Carlson
Project: Sunnyside

Sample ID: CRB
Matrix: Waste Water

MSAI Sample: 32870
MSAI Group: 8110
Date Reported: 05/11/95

Discard Date: 06/10/95
Date Submitted: 04/28/95
Date Sampled: 04/27/95
Collected by: JC
Purchase Order:
Project No.:

Test	Analysis	Results as Received	Units	Limit of Quantitation
0248A	Boron by ICP Method: SW-846 6010A	0.8	mg/l	0.1
7254	Iron by ICP Method: SW-846 6010A	ND	mg/l	0.25
7258	Manganese by ICP Method: SW-846 6010A	0.042	mg/l	0.015
0201	Alkalinity as CaCO ₃ (pH 4.5) Method: EPA 310.1			
	Bicarbonate	312	mg/l	1
	Carbonate	ND	mg/l	1
	Hydroxide	ND	mg/l	1
0206	Solids, Total Suspended (TSS) Method: EPA 160.2	ND	mg/l	4
0212	Solids, Total Dissolved (TDS) Method: EPA 160.1	5,120	mg/l	10
0216	Hardness as CaCO ₃ - Titrimetric Method: EPA 130.2	2,540	mg/l	5
0221	Nitrogen, Ammonia by distillation Method: EPA 350.2	ND	mg/l	0.5
0475	Acidity, (to pH 3.7 and 8.3) Method: EPA 305.1	10.2	mg/l	1.0
1125	Sulfate, Turbidimetric Method: EPA 375.4	2,820	mg/l	2



Mountain States Analytical

Eckhoff, Watson & Preator Engineers, Inc. *The Quality Solution*

Sample ID: CRB

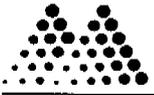
MSAI Sample: 32870

MSAI Group: 8110

D - Not detected at the limit of quantitation

Respectfully Submitted,
Reviewed and Approved by:

Rolf E. Larsen
Project Manager



Mountain States Analytical

The Quality Solution

Eckhoff, Watson & Preator Engineering
1121 East 3900 South
Suite C100
Salt Lake City, UT 84124

Attn: Mr. Scott Carlson
Project: Sunnyside

Sample ID: CRS Dissolved
Matrix: Waste Water

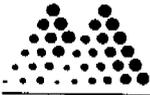
MSAI Sample: 32871
MSAI Group: 8110
Date Reported: 05/11/95

Discard Date: 06/10/95
Date Submitted: 04/28/95
Date Sampled: 04/27/95
Collected by: JC
Purchase Order:
Project No.:

Test Analysis	Results as Received	Units	Limit of Quantitation
0248D Boron by ICP, Dissolved Method: SW-846 6010A	1.1	mg/l	0.1
0250D Calcium by ICP, Dissolved Method: SW-846 6010A	488	mg/L	0.8
0254F Iron by ICP, Dissolved Method: SW-846 6010A	1.16	mg/l	0.25
0257D Magnesium by ICP, Dissolved Method: SW-846 6010A	330	mg/L	0.2
0258F Manganese by ICP, Dissolved Method: SW-846 6010A	1.47	mg/l	0.02
0262D Potassium by ICP, Dissolved Method: SW-846 6010A	33.9	mg/L	0.8
0267F Sodium by ICP, Dissolved Method: SW-846 6010A	449	mg/l	4

Respectfully Submitted,
Reviewed and Approved by:

Rolf E. Larsen
Project Manager



Mountain States Analytical

The Quality Solution

Eckhoff, Watson & Preator Engineering
1121 East 3900 South
Suite C100
Salt Lake City, UT 84124

Attn: Mr. Scott Carlson
Project: Sunnyside

Sample ID: CRC Dissolved
Matrix: Waste Water

MSAI Sample: 32872
MSAI Group: 8110
Date Reported: 05/11/95

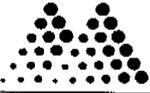
Discard Date: 06/10/95
Date Submitted: 04/28/95
Date Sampled: 04/27/95
Collected by: JC
Purchase Order:
Project No.:

Test Analysis	Results as Received	Units	Limit of Quantitation
0248D Boron by ICP, Dissolved Method: SW-846 6010A	1.1	mg/l	0.1
0250D Calcium by ICP, Dissolved Method: SW-846 6010A	460	mg/L	0.8
0257D Iron by ICP, Dissolved Method: SW-846 6010A	ND	mg/l	0.25
0257D Magnesium by ICP, Dissolved Method: SW-846 6010A	337	mg/L	0.2
0258F Manganese by ICP, Dissolved Method: SW-846 6010A	1.12	mg/l	0.02
0262D Potassium by ICP, Dissolved Method: SW-846 6010A	33.1	mg/L	0.8
0267F Sodium by ICP, Dissolved Method: SW-846 6010A	440	mg/l	4

ND - Not detected at the limit of quantitation

Respectfully Submitted,
Reviewed and Approved by:


Rolf E. Larsen
Project Manager



Mountain States Analytical

The Quality Solution

Eckhoff, Watson & Preator Engineering
1121 East 3900 South
Suite C100
Salt Lake City, UT 84124

Attn: Mr. Scott Carlson
Project: Sunnyside

Sample ID: CRB Dissolved
Matrix: Waste Water

MSAI Sample: 32873
MSAI Group: 8110
Date Reported: 05/11/95

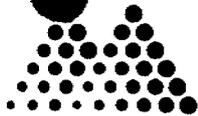
Discard Date: 06/10/95
Date Submitted: 04/28/95
Date Sampled: 04/27/95
Collected by: JC
Purchase Order:
Project No.:

Test Analysis	Results as Received	Units	Limit of Quantitation
0248D Boron by ICP, Dissolved Method: SW-846 6010A	0.8	mg/l	0.1
0250D Calcium by ICP, Dissolved Method: SW-846 6010A	455	mg/L	0.8
0254F Iron by ICP, Dissolved Method: SW-846 6010A	ND	mg/l	0.25
0257D Magnesium by ICP, Dissolved Method: SW-846 6010A	305	mg/L	0.2
0258F Manganese by ICP, Dissolved Method: SW-846 6010A	0.04	mg/l	0.02
0262D Potassium by ICP, Dissolved Method: SW-846 6010A	23.1	mg/L	0.8
0267F Sodium by ICP, Dissolved Method: SW-846 6010A	403	mg/l	4

ND - Not detected at the limit of quantitation

Respectfully Submitted,
Reviewed and Approved by:


Rolf E. Larsen
Project Manager



Mountain States Analytical

The Quality Solution

5482

Sample Chain of Custody

Client Name: <u>E.W.P. ENGINEERING</u> P.O. # _____				Analysis Required				Temp. of Samples Upon Receipt						
Phone #: <u>801-261-0090</u> Fax #: <u>801-266-1671</u>				"COARSE REFUSE SEEP"										
Project Name/#: <u>SUNNYSIDE</u>														
Sampler: <u>J.C.</u>														
Sample Identification	Date Collected	Time Collected	Grab	Composite	Soil	Water	Other	Total of Containers	Rush?	Remarks				
CRS	4-27-95	1100	✓			✓		4		PHL2				
CRC	4-27-95	1120	✓			✓		4		↓				
CRB	4-27-95	1145	✓			✓		4						
Name of Shipper			Airbill No.		Date	Time	Sample relinquished by:		Date	Time	Sample received by:		Date	Time
							<i>[Signature]</i>		4-27-95	1300				
Received By (Lab)		Date	Time	Seals Intact?										
<i>[Signature]</i>		04/28/95	0915	YES										
Turnaround Time Requested (please circle)				Normal		Rush								
(Rush TAT is subject to MSAI approval and surcharge)														
Report Results By: (Date)														
Rush results requested by (please circle):				Phone		Fax								
Report Results to: <u>SCOTT CARLSON</u>				Type of Disposal:				Authorized for Disposal by:						
				Date/Time of Disposal:				Disposed of by:						

EXHIBIT A-5(d)

EWP FIELD DATA SHEETS

SUNNYSIDE COGENERATION ASSOCIATES

Carbon County, UT

EWP ENGINEERING

Salt Lake City, UT

COARSE REFUSE SEEP MONITORING

V-NOTCH WEIR AT SOURCE (CRS)

Date	Time	Personel	Weather	Flow		Temp C	pH	SC <small>mS</small> (µmhos)	DO (mg/l)
				(feet)	(gpm)				
5/19/94	1600	J.C.	PTLY CLDY 65°	0.14	8.5	25.5	6.8	5.5	4.2
5/27/94	1315	J.C.	PTLY CLDY 70°	0.16	12.0	25.8	6.6	5.6	3.6
6/8/94	1050	J.C.	CLEAR 60°	0.14	8.5	24.4	6.6	5.5	4.0
6/16/94	1338	J.C.	CLEAR 75°	0.13	7.1	26.97	6.6	5.48	3.8
6/23/94	1615	J.C.	CLEAR 80°	0.13	7.1	27.92	6.6	5.5	2.6
6/30/94	0855	J.C.	CLEAR 70°	0.13	7.1	24.32	6.7	5.5	1.1
7/8/94	1115	J.C.	CLEAR 78°	0.13	7.1	25.61	6.8	5.5	1.2
7/14/94	1250	J.C.	CLEAR 85°	0.13	7.1	26.01	6.6	5.5	1.9
7/21/94	1415	J.C.	CLEAR 90°	0.13	7.1	26.6	6.8	5.5	1.5
7/29/94	0945	J.C.	CLEAR 80°	0.13	7.1	25.27	6.9	5.36	1.0
8/4/94	1005	J.C.	CLEAR 80°	0.14	8.5	25.52	6.9	5.5	1.1
8/11/94	1035	J.C.	CLEAR 80°	0.13	7.1	25.18	6.9	5.5	1.4
8/19/94	1005	J.C.	CLOUDY 70°	0.13	7.1	24.6	6.9	5.5	2.0
8/26/94	0915	J.C.	CLEAR 75°	0.13	7.1	23.9	6.9	5.5	1.5
8/31/94	1130	J.C.	CLEAR 80°	0.12	5.8	25.6	6.9	5.5	1.2
9/9/94	1035	J.C.	CLEAR 70°	0.12	5.8	24.9	7.0	5.5	1.5
9/16/94	1030	J.C.	CLEAR 70°	0.12	5.8	23.3	7.2	5.5	1.6
9/20/94	1435	J. Martin	Cloudy/rain 65°	0.14	8.5	23.94	7.12	5.48	1.57
9/28/94	1010	J.C.	CLOUDY/RAIN 65°	0.13	7.1	24.3	7.2	5.5	1.4
10/6/94	1240	J.C.	PTLY CLDY 55°	0.14	8.5	22.8	7.2	5.5	1.4
10/13/94	1030	J.C.	CLEAR 50°	0.13	7.1	22.7	7.3	5.5	1.6
10/21/94	1300	J.C.	CLEAR 50°	0.13	7.1	23.1	7.3	5.5	1.5
10/28/94	1020	J.C.	CLEAR 50°	0.11	4.7	22.1	7.4	5.0	1.6
11/4/94	1000	J.C.	CLDY 45°	0.11	4.7	22.3	7.3	5.4	1.5
11/9/94	1445	J.C.	CLEAR 50°	0.11	4.7	22.4	7.4	5.5	1.6
11/17/94	1430	J.C.	CLDY 40°	0.11	4.7	22.4	7.4	5.4	1.8

SUNNYSIDE COGENERATION ASSOCIATES

Carbon County, UT

EWP ENGINEERING

Salt Lake City, UT

COARSE REFUSE SEEP MONITORING

V-NOTCH WEIR @ CULVERT (CRC)

Date	Time	Personel	Weather	Flow		Temp C	pH	SC ^{mS} (umhos)	DO (mg/l)
				(feet)	(gpm)				
5/19/94	1630	J.C.	PTLY CLDY 65°	.23	29	15.92	7.60	5.62	6.15
5/27/94	1330	J.C.	PTLY CLDY 70°	.25	36	17.79	7.2	5.6	6.04
6/8/94	1100	J.C.	CLEAR 60°	.26	40	16.97	7.3	5.6	7.00
6/11/94	1323	J.C.	CLEAR 75°	.23	29	19.06	7.3	5.62	6.33
6/23/94	1630	J.C.	CLEAR 80°	.23	29	20.37	7.3	5.6	5.5
6/23/94 6/23/94	0910	J.C.	CLEAR 70°	.24	32	18.10	7.3	5.66	5.6
7/8/94	1125	J.C.	CLEAR 78°	.24	32	18.8	7.4	5.67	5.7
7/14/94	1300	J.C.	CLEAR 85°	.24	32	20.3	7.4	5.68	5.7
7/21/94	1445	J.C.	CLEAR 90°	.23	29	21.2	7.5	5.7	5.0
7/29/94	1000	J.C.	CLEAR 90°	.24	32	19.8	7.5	5.7	5.3
8/4/94	1020	J.C.	CLEAR 90°	.24	32	20.6	7.5	5.8	5.2
8/11/94	1050	J.C.	CLEAR 80°	.24	32	19.7	7.6	5.7	5.1
8/19/94	1020	J.C.	CLOUDY 70°	.24	32	19.4	7.6	5.7	5.8
8/26/94	0930	J.C.	CLEAR 75°	.24	32	19.5	7.6	5.7	5.3
8/31/94	1145	J.C.	CLEAR 80°	.24	32	20.7	7.6	5.8	5.2
* 9/9/94	1050	J.C.	CLEAR 70°	.28	48	20.1	7.5	5.2	4.9
* 9/16/94	1045	J.C.	CLEAR 70°	.28	48	18.0	7.8	5.6	6.0
* 9/20/94	1530	J. Martin	Cloudy/Rain 65°	.27	52	18.80	7.98	5.51	6.10
9/29/94	1030	J.C.	CLOUDY/RAIN 65°	.24	32	18.7	7.8	5.7	5.3
10/6/94	1300	J.C.	PTLY CLDY 55°	.24	32	16.7	7.9	5.7	5.5
10/13/94	1045	J.C.	CLEAR 50°	.24	32	17.8	7.9	5.7	5.4
10/21/94	1320	J.C.	CLEAR 50°	.24	32	14.9	8.3	5.7	7.0
10/28/94	1035	J.C.	CLEAR 50°	.23	29	15.2	7.9	5.7	5.8
11/4/94	1015	J.C.	CLOY 45°	.23	29	14.7	7.9	5.7	5.9
11/9/94	1500	J.C.	CLEAR 50°	.23	29	14.4	7.9	5.7	5.8
11/17/94	1445	J.C.	CLOY 40°	.22	26	14.0	7.9	5.6	5.9

* NOTE: AREA IN FRONT OF WEIR HAS BEEN FILLED IN WITH SEDIMENT RESULTING FROM STORM THAT TOOK PLACE ON 9-2-94 1" OF RAIN IN ONE HOUR WAS RECORDED AT SUNNYSIDE WEATHER STA. FLOW IS NOT ACCURATE AT TIME OF MONITORING. POOL

SUNNYSIDE COGENERATION ASSOCIATES

Carbon County, UT

EWP ENGINEERING

Salt Lake City, UT

COARSE REFUSE SEEP MONITORING

V-NOTCH WEIR @ BOUNDARY (CRB)

Date	Time	Personel	Weather	Flow		Temp C	pH	SC (umhos)	DO (mg/l)
				(feet)	(gpm)				
5/19/94	1650	J.C.	PTLY CLOUDY 65°	.28	48	15.55	8.1	5.18	7.64
5/27/94	1400	J.C.	PTLY CLOUDY 70°	.29	52	16.77	7.8	5.07	6.87
6/5/94	1120	J.C.	CLEAR 60°	.28	48	15.50	7.8	5.30	8.0
6/16/94	1307	J.C.	CLEAR 75°	.26	40	19.62	7.8	5.28	7.61
6/23/94	1645	J.C.	CLEAR 80°	.25	36	22.75	7.8	5.29	6.4
6/30/94	0930	J.C.	CLEAR 70°	.26	40	15.90	7.9	5.4	7.3
7/8/94	1140	J.C.	CLEAR 78°	.26	40	17.6	8.06	5.4	7.4
7/14/94	1320	J.C.	CLEAR 95°	.24	32	19.75	7.98	5.4	7.02
7/21/94	1520	J.C.	CLEAR 90°	.22	26	22.6	7.9	5.4	6.4
7/29/94	1020	J.C.	CLEAR 80°	.28	48	17.5	8.1	5.5	7.3
8/4/94	1040	J.C.	CLEAR 80°	.25	36	18.3	8.2	5.5	6.6
8/11/94	1110	J.C.	CLEAR 80°	.28	48	18.5	8.2	5.6	6.8
8/19/94	1035	J.C.	CLOUDY 70°	.25	36	17.2	8.2	5.6	6.9
8/26/94	0945	J.C.	CLEAR 75°	.23	29	16.1	8.2	5.6	6.9
8/31/94	1700	J.C.	CLEAR 80°	.22	26	20.3	8.2	5.6	7.4
9/9/94	1115	J.C.	CLEAR 75°	.28	48	17.6	8.3	5.5	7.2
9/16/94	1100	J.C.	CLEAR 70°	.26	40	14.2	8.4	5.5	7.8
9/20/94	1630	J. Martin	PTLY CLOUDY 65°	.26	40	15.95	8.34	5.47	7.60
9/29/94	1045	J.C.	CLOUDY/RAIN 65°	.26	40	15.00	8.4	5.5	7.5
10/6/94	1315	J.C.	PTLY CLOUDY 55°	.26	40	12.7	8.5	5.5	8.5
10/13/94	1110	J.C.	CLEAR 50°	.25	36	13.0	8.5	5.5	7.7
10/21/94	1340	J.C.	CLEAR 50°	.26	40	12.6	8.6	5.4	8.3
10/28/94	1050	J.C.	CLEAR 20°	.26	40	9.9	8.6	5.5	8.4
11/4/94	1030	J.C.	CLOUDY 45°	.26	40	9.1	8.5	5.4	8.1
11/9/94	1515	J.C.	CLEAR 50°	.26	40	9.0	8.7	5.5	8.6
11/17/94	1500	J.C.	CLOUDY 40°	.24	32	9.1	8.6	5.6	8.1

SUNNYSIDE COGENERATION ASSOCIATES

Carbon County, UT

EWP ENGINEERING

Salt Lake City, UT

COARSE REFUSE SEEP MONITORING

V-NOTCH WEIR AT SOURCE (CRS)

Date	Time	Personel	Weather	Flow		Temp C	pH	SC (umhos)	DO (mg/l)
				(feet)	(gpm)				
11/24/94	1445	J.C.	CLEAR 37°±	0.11	4.7	18.10	7.5	5.5	2.3
12/1/94	1400	J.C.	CLEAR 25°±	2.08	2.1	17.9	7.7	5.5	2.7
12/15/94	1315	J.C.	PTLY CLDY 25°±	0.09	2.8	17.3	7.7	3.0	2.8
12/22/94	1400	J.C.	PTLY CLDY 35°±	0.09	2.8	18.1	7.6	5.5	2.8
1/6/95	1020	J.C.	CLEAR 25°±	0.08	2.1	17.3	7.8	5.4	2.7
1/24/95	1245	J.C.	PTLY CLDY 30°±	0.08	2.1	17.5	7.8	5.5	2.6
1-21-95	1420	J.C.	CLOUDY 35°±	.08	2.1	17.6	7.8	5.4	2.0
1-27-95	1400	J.C.	CLOUDY 32°±	.08	2.1	17.3	7.8	5.5	2.4
2-1-95	1300	J.C.	CLEAR 40°±	.08	2.1	18.1	7.8	2.6	2.0
2-9-95	1100	J.C.	CLEAR 55°±	.08	2.1	17.1	7.5	4.9	2.7
2-23-95	1310	J.C.	PTLY CLDY 40°±	.08	2.1	18.0	7.9	5.1	2.5
2-28-95	1100	J.C.	PTLY CLDY 45°±	.08	2.1	19.8	8.06	5.6	2.1
3-1-95	1400	J.C.	PTLY CLDY 45°±	.08	2.1	19.2	8.1	5.4	2.6
3-9-95	1330	J.C.	PTLY CLDY 40°±	.09	2.8	18.5	7.8	5.0	2.7
3-22-95	1130	J.C.	PTLY CLDY 50°±	.08	2.1	18.8	8.1	5.4	2.2
3-24-95	1310	J.C.	PTLY CLDY 50°±	.08	2.1	18.2	8.6	5.0	2.7
4-5-95	1030	J.C.	CLEAR 45°±	.07	1.5	18.1	8.4	5.1	2.1
4-13-95	1400	J.C.	CLEAR 50°±	.07	1.5	18.0	7.8	4.8	2.5
4-20-95	1120	J.C.	RAIN 40°±	.06	1.0	18.6	8.0	5.1	2.1
4-27-95	1100	J.C.	OVERCAST 50°±	.06	1.0	19.1	8.2	5.4	2.2
5-1-95	1030	J.C.	CLOUDY 60°±	.06	1.0	18.5	7.7	5.6	2.7
5-11-95	1300	J.C.	CLEAR 62°±	.06	1.0	18.2	7.5	5.7	2.5
5-19-95	1410	J.C.	WINDY 65°±	.06	1.0	18.1	7.8	5.4	2.2
5-25-95	1020	J.C.	CLOUDY 60°±	.06	1.0	17.9	7.9	5.0	2.3
6-2-95	1500	J.C.	PTLY CLDY 70°±	.06	1.0	18.2	7.5	5.6	2.4

SUNNYSIDE COGENERATION ASSOCIATES

Carbon County, UT

EWP ENGINEERING

Salt Lake City, UT

COARSE REFUSE SEEP MONITORING

V-NOTCH WEIR @ CULVERT (CRC)

Date	Time	Personel	Weather	Flow		Temp C	pH	SC (umhos)	DO (mg/l)
				(feet)	(gpm)				
11/22/94	1500	J.C.	CLEAR 32°±	.21	23	11.0	8.04	5.1	6.5
12/1/94	1420	J.C.	CLEAR 25°±	.20	21	11.3	8.1	5.6	5.4
12/15/94	1330	J.C.	PTLY CLOUDY 25°±	.22	26	12.2	8.1	5.5	4.9
12/22/94	1430	J.C.	PTLY CLOUDY 35°±	.20	21	13.4	8.0	4.5	5.6
1/6/95	1040	J.C.	CLEAR 25°±	.20	21	11.2	8.0	5.6	5.6
1/12/95	1230	J.C.	PTLY CLOUDY 30°±	.20	21	11.1	8.1	5.4	5.0
1-24-95	1445	J.C.	CLOUDY 35°±	.20	21	11.3	8.2	5.5	4.5
1-27-95	1445	J.C.	CLOUDY 32°±	.22	26	11.2	8.1	5.5	4.4
2-1-95	1315	J.C.	CLEAR 40°±	.24	32	11.7	8.3	4.8	4.4
2-4-95	1320	J.C.	CLEAR 40°±	.25	36	11.8	8.1	5.1	4.5
2-23-95	1345	J.C.	PTLY CLOUDY 40°±	.25	36	11.2	8.0	5.5	4.8
2-28-95	1120	J.C.	PTLY CLOUDY 45°±	.24	32	11.9	8.3	5.2	5.1
3-1-95	1430	J.C.	PTLY CLOUDY 45°±	.24	32	11.3	8.0	5.6	4.9
3-9-95	1345	J.C.	PTLY CLOUDY 40°±	.24	32	11.8	8.1	5.5	5.6
3-22-95	1145	J.C.	PTLY CLOUDY 50°±	.20	21	12.1	8.5	4.8	5.0
3-30-95	1330	J.C.	PTLY CLOUDY 50°±	.22	26	11.8	8.1	4.9	4.5
4-5-95	1045	J.C.	CLEAR 45°±	.22	26	11.7	8.0	5.4	4.9
4-13-95	1420	J.C.	CLEAR 50°±	.22	26	11.9	8.1	5.2	4.7
4-20-95	1140	J.C.	RAIN 40°±	.23	29	12.1	8.5	4.8	5.0
4-27-95	1120	J.C.	WINDY 30°±	.24	32	13.0	8.6	5.0	4.7
5-4-95	1100	J.C.	CLOUDY 60°±	.24	32	12.8	8.4	5.1	4.9
5-11-95	1330	J.C.	CLEAR 60°±	.23	29	13.0	8.1	4.9	4.7
5-19-95	1430	J.C.	WINDY 65°±	.22	26	12.7	8.0	5.4	4.9
5-25-95	1045	J.C.	CLOUDY 60°±	.22	26	13.1	8.2	5.2	4.5
6-2-95	1520	J.C.	PTLY CLOUDY 70°±	.23	29	12.9	8.3	4.8	5.2

SUNNYSIDE COGENERATION ASSOCIATES

Carbon County, UT

EWP ENGINEERING

Salt Lake City, UT

COARSE REFUSE SEEP MONITORING

V-NOTCH WEIR @ BOUNDARY (CRB)

Date	Time	Personel	Weather	Flow		Temp C	pH	SC (umhos)	DO (mg/l)
				(feet)	(gpm)				
11-22-94	1545	J.C.	CLEAR 32°	.23	29	7.0	8.8	5.2	7.3
12-19-94	1445	J.C.	CLEAR 25°	.24	32	5.4	8.8	5.4	7.7
1-15-95	1345	J.C.	PTLY CLOUDY 25°	.26	40	5.9	8.9	5.4	7.5
1-22-95	1445	J.C.	PTLY CLOUDY 35°	.26	40	7.0	8.9	5.3	7.6
1-16-95	1100	J.C.	CLEAR 25°	.26 .22	40	3.7	9.1	5.3	9.0
1-12-95	1300	J.C.	PTLY CLOUDY 30°	.26	40	5.2	8.9	5.4	8.0
1-21-95	1515	J.C.	CLOUDY 35°	.26	40	6.0	9.1	5.3	8.3
1-27-95	1445	J.C.	CLOUDY 32°	.26	40	5.8	9.0	5.4	8.0
2-1-95	1345	J.C.	CLEAR 40°	.26	40	5.2	9.1	5.2	7.1
2-9-95	1345	J.C.	CLEAR 40°	.27	43	5.7	8.9	5.4	7.2
2-23-95	1410	J.C.	PTLY CLOUDY 40°	.26	40	5.8	9.0	5.4	8.0
2-28-95	1145	J.C.	PTLY CLOUDY 45°	.26	40	5.4	8.8	5.1	7.8
3-1-95	1500	J.C.	PTLY CLOUDY 45°	.26	40	5.9	8.7	5.3	8.1
3-9-95	1400	J.C.	PTLY CLOUDY 40°	.26	40	6.0	8.8	5.2	7.8
3-22-95	1210	J.C.	PTLY CLOUDY 50°	.23	29	7.1	8.9	5.0	8.0
3-30-95	1210	J.C.	PTLY CLOUDY 50°	.23	29	7.8	8.2	5.3	8.1
4-5-95	1110	J.C.	CLEAR 45°	.23	29	7.9	8.6	5.1	7.6
4-13-95	1445	J.C.	CLEAR 50°	.23	29	8.4	8.6	5.4	7.7
4-20-95	1200	J.C.	RAIN 40°	.24	32	8.1	8.5	5.2	7.5
4-27-95	1145	J.C.	OVERCAST 50°	.24	32	8.5	8.7	5.3	7.8
5-4-95	1130	J.C.	CLOUDY 60°	.24	32	8.1	8.3	5.0	7.2
5-11-95	1350	J.C.	CLEAR 65°	.24	32	7.4	8.5	5.4	7.6
5-19-95	1500	J.C.	WINDY 65°	.23	29	7.6	8.7	5.1	7.7
5-25-95	1110	J.C.	CLOUDY 60°	.23	29	7.5	8.5	5.2	7.2
6-2-95	1550	J.C.	PTLY CLOUDY 70°	.23	29	7.9	8.6	5.6	7.5

APPENDIX B

1995 UPDES, OPERATIONAL WATER
QUALITY MONITORING DATA SUMMARY

EXHIBIT B-1

WATER QUALITY SAMPLING RESULTS

Sunnyside Cogeneration Facility, Sunnyside, Utah
 Quarterly Compliance Sampling Results
 DOGM Permit Boundary Water Quality Monitoring Plan
 Sampling Date: October 10, 1995

SAMPLE LOCATION	Analytical Parameters															
	Metals (mg/l)												Inorganics (mg/l)			
	Aluminum Dissolved	Arsenic Dissolved	Boron Dissolved	Cadmium Dissolved	Copper Dissolved	Iron Dissolved	Iron Total	Lead Dissolved	Manganese Dissolved	Manganese Total	Molybdenum Dissolved	Selenium Dissolved	Zinc Dissolved	Electrical Conductivity	Oil & Grease	Sulfide as S
ICE-1	ND	ND	ND	ND	ND	<0.04	0.16	ND	<0.01	<0.01	ND	ND	ND	2356	<5	ND
F-2	ND	ND	ND	ND	ND	<0.04	0.17	ND	<0.01	0.04	ND	ND	ND	2298	<5	ND
CRS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CRB	ND	ND	ND	ND	ND	0.18	0.14	ND	0.1	0.18	ND	ND	ND	5280	<5	ND
WELL	ND	ND	ND	ND	ND	<0.01	0.96	ND	<0.01	<0.01	ND	ND	ND	722	<5	ND

SAMPLE LOCATION	Analytical Parameters															
	Inorganics (mg/l)			Anions (mg/l)					Cations (mg/l)				Nutrients (mg/l)			
	Settleable Solids	Dissolved Solids	Suspended Solids	Bicarbonate Alkalinity	Carbonate Alkalinity	Total Alkalinity	Chloride as Cl	Sulfate as SO4	Calcium as Ca	Hardness as CaCO3	Magnesium as Mg	Sodium as Na	Ammonia as N	Nitrite as N	Nitrate as N	Phosphorous Total
ICE-1	<0.2	1,160	3	599	ND	ND	40	475	57	500	76.7	208	ND	ND	ND	ND
F-2	<0.2	1,160	<2.5	630	ND	ND	37	436	77.6	520	69.8	192	ND	ND	ND	ND
CRS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CRB	<0.2	5,170	5,170	342	ND	ND	250	3,040	547	2,570	314	462	ND	ND	ND	ND
WELL	NA	1,050	1,050	479	ND	ND	25	389	70.3	450	59	175	ND	ND	ND	ND

DOGM Permit Boundary Water Quality Monitoring Plan
 Sampling Date: November 21, 1995

SAMPLE LOCATION	Analytical Parameters															
	Metals (mg/l)												Inorganics (mg/l)			
	Aluminum Dissolved	Arsenic Dissolved	Boron Dissolved	Cadmium Dissolved	Copper Dissolved	Iron Dissolved	Iron Total	Lead Dissolved	Manganese Dissolved	Manganese Total	Molybdenum Dissolved	Selenium Dissolved	Zinc Dissolved	Electrical Conductivity	Oil & Grease	Sulfide as S
ICE-1	ND	ND	ND	ND	ND	<0.04	0.12	ND	<0.01	0.01	ND	ND	ND	2280	<5	ND
F-2	ND	ND	ND	ND	ND	<0.04	0.2	ND	<0.01	0.04	ND	ND	ND	2300	<5	ND
CRS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CRB	ND	ND	ND	ND	ND	<0.08	<0.08	ND	<0.03	0.1	ND	ND	ND	5291	<5	ND
WELL	ND	ND	ND	ND	ND	<0.04	0.07	ND	<0.01	<0.01	ND	ND	ND	790	<5	ND

SAMPLE LOCATION	Analytical Parameters															
	Inorganics (mg/l)			Anions (mg/l)					Cations (mg/l)				Nutrients (mg/l)			
	Settleable Solids	Dissolved Solids	Suspended Solids	Bicarbonate Alkalinity	Carbonate Alkalinity	Total Alkalinity	Chloride as Cl	Sulfate as SO4	Calcium as Ca	Hardness as CaCO3	Magnesium as Mg	Sodium as Na	Ammonia as N	Nitrite as N	Nitrate as N	Phosphorous Total
ICE-1	<0.02	1,150	11	563	8	474	42	494	60.4	509	90.6	247	ND	ND	ND	ND
F-2	<0.02	1,080	3	608	3	503	37	425	68.8	505	83.4	226	ND	ND	ND	ND
CRS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CRB	<0.02	4,870	15	423	<1	347	250	2,980	521	2,460	349	523	ND	ND	ND	ND
WELL	<0.02	NA	NA	584	<1	479	33	470	89.6	517	79.9	235	ND	ND	ND	ND

Note:
 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 were not quantifiable.
 * - Higher detection limit reported due to the interferences present in the sample.
 na - not applicable
 nd - no discharge

Sunnyside Cogeneration Facility
 DOGM Permit Boundry Water Quality Monitoring Plan
 Field Parameter Data
 Quarterly Monitoring Operational Data from June 1995 through December 1995

QUARTER 3		June, July, August, 1995				
		Field Parameters				
Monitoring Location	Location I.D.	Temp. (C)	pH (s.u.)	SC (umhos)	Dissolved Oxygen (mg/l)	Flow Rate (gpm)
Icelandier Creek	ICE - 1	10.2	8.61	2356	8.8	50
Columbia Dugway Spring	F - 2	12.9	8.41	2288	6.8	15
Coarse Refuse Seep Source	CRS	ND	ND	ND	ND	ND
Coarse Refuse Seep Boundary	CRB	8.2	8.15	5280	3.6	30
Drægerton Well	Well - 1	11.4	7.77	722	8	600
Coal Runoff Pond	Outfall 004	ND	ND	ND	ND	ND
Rail Cut Pond	Outfall 007	ND	ND	ND	ND	ND
Old Coarse Refuse Road Pond	Outfall 008	ND	ND	ND	ND	ND
Pasture Sediment Pond	Outfall 009	ND	ND	ND	ND	ND
Coarse Refuse Toe Pond	Outfall 012	ND	ND	ND	ND	ND
Borrow Area Pond	Outfall 016	ND	ND	ND	ND	ND

QUARTER 4		Oct/19/94 September, October, November, December, 1995				
		Field Parameters				
Monitoring Location	Location I.D.	Temp. (C)	pH (s.u.)	SC (umhos)	Dissolved Oxygen (ug/l)	Flow Rate (gpm)
Icelandier Creek	ICE - 1	7.2	8.49	2280	7.0	50
Columbia Dugway Spring	F - 2	9.7	8.34	2300	5.8	15
Coarse Refuse Seep Source	CRS	ND	ND	ND	ND	ND
Coarse Refuse Seep Boundary	CRB	8.5	8.06	5291	6.2	25
Drægerton Well	Well - 1	11.2	7.43	790	5.2	600
Coal Runoff Pond	Outfall 004	ND	ND	ND	ND	ND
Rail Cut Pond	Outfall 007	ND	ND	ND	ND	ND
Old Coarse Refuse Road Pond	Outfall 008	ND	ND	ND	ND	ND
Pasture Sediment Pond	Outfall 009	ND	ND	ND	ND	ND
Coarse Refuse Toe Pond	Outfall 012	ND	ND	ND	ND	ND
Coal Pile Sediment Pond	Outfall 014	ND	ND	ND	ND	ND
Borrow Area Pond	Outfall 016	ND	ND	ND	ND	ND

Note:

NA indicates that data is not available due to lack of discharge.

NS indicates that data is not available due to lack of sampling port.

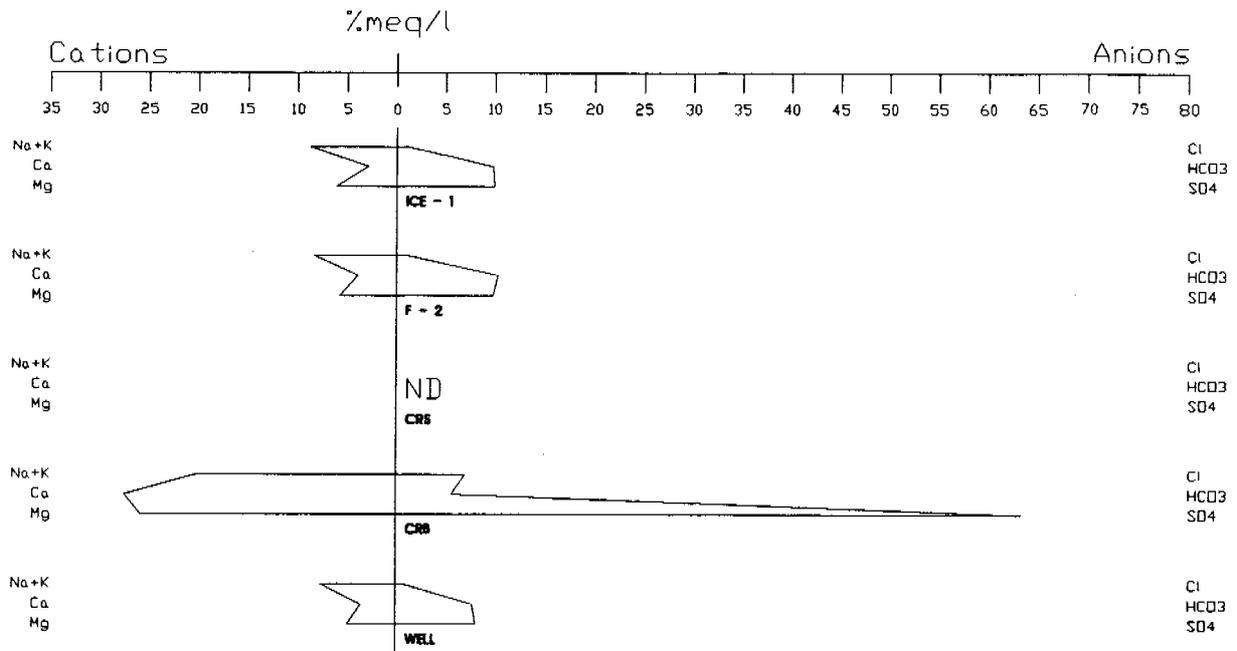
Flow rates were measured as follows:

- * The flow rates were estimated due to a lack of an appropriate measuring location.
- ^ The flow rates were measured using a weir.
- * The flow rates were measured using a calibrated container and a stopwatch.
- * The flow rates were measured using the floating debris method.

EXHIBIT B-2

QUARTERLY WATER QUALITY STIFF DIAGRAMS

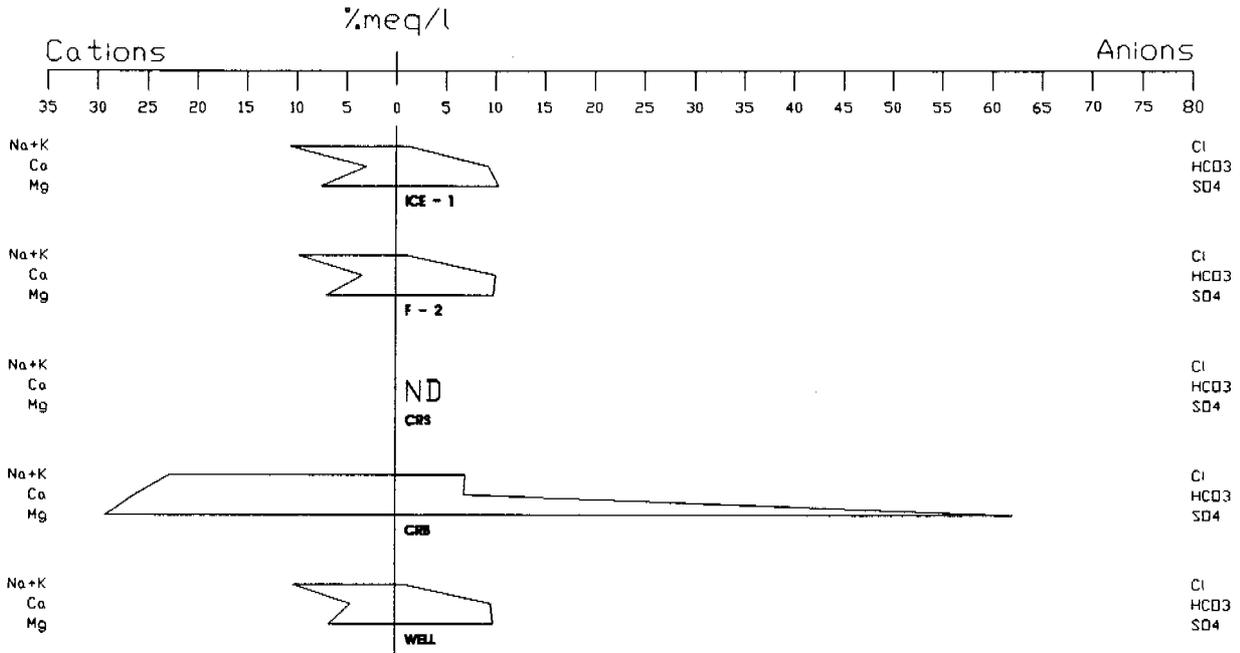
Quarter 3 (10/10/95)



ECKHOFF WATSON AND PREATOR ENGINEERING
 ENGINEERS PLANNERS SURVEYORS

SUNNYSIDE COGENERATION ASSOCIATES
 Surface & Ground Water Monitoring Sites
 Operational Water Quality Analysis 1995

Quarter 4 (11/21/95)



ECKHOFF WATSON AND PREATOR ENGINEERING
 ENGINEERS PLANNERS SURVEYORS

SUNNYSIDE COGENERATION ASSOCIATES
 Surface & Ground Water Monitoring Sites
 Operational Water Quality Analysis 1995

EXHIBIT B-3

ANALYTICAL DATA

To: Sunnyside Cogeneration
 P.O. Box 10
 East Carbon, UT 84520

Date: 11/7/95

Group #: 4845
 Lab #: 95-U035584
 Sample Desc: ICE-1
 Date Sampled: 10/20/95
 Date Submitted: 10/21/95

CERTIFICATE OF ANALYSIS

PARAMETER	RESULT	MDL	DATE ANALYZED	METHOD	ANALYST
INORGANIC PARAMETERS					
Bicarbonate as HCO ₃ , mg/L	599	1	10/30/95 12:00	SM 2320B	TM
Carbonate as CO ₃ , mg/L	3	1	10/30/95 12:00	SM 2320B	TM
Alkalinity, Total, mg/L	496	1	10/30/95 12:00	SM 2320B	TM
Chloride, mg/L	40	3	10/26/95 13:20	EPA 325.3	TM
Hardness, EDTA Titration mg/L	500	25	10/24/95 13:30	EPA 130.2	TM
Settleable Solids, mL/L/hr	< 0.2	0.2	10/21/95 12:00	EPA 160.5	MA
Sulfate, mg/L	475	10	10/26/95 12:30	EPA 375.4	TM
Total Dissolved Solids, mg/L	1,160	10	10/25/95 12:00	EPA 160.1	MA
Total Suspended Solids, mg/L	3.0	2.5	10/25/95 17:00	EPA 160.2	MA
Calcium (T), as Ca, mg/L	57.0	0.2	10/30/95 10:03	EPA 200.7	LH
Iron (T), as Fe, mg/L	0.16	0.04	10/30/95 10:02	EPA 200.7	LH
Iron (D), as Fe, mg/L	< 0.04	0.04	11/ 1/95 16:31	EPA 200.7	LE
Magnesium (D), as Mg, mg/L	76.7	0.1	11/ 1/95 16:31	EPA 200.7	LE
Manganese (T), as Mn, mg/L	< 0.01	0.01	10/30/95 10:03	EPA 200.7	LH
Manganese (D), as Mn, mg/L	< 0.01	0.01	11/ 1/95 16:31	EPA 200.7	LE
Potassium (D), as K, mg/L	3.3	0.1	11/ 1/95 16:31	EPA 200.7	LE
Sodium (D), as Na, mg/L	208	0.2	11/ 1/95 16:31	EPA 200.7	LE
Oil & Grease, mg/L	< 5	5	10/31/95 11:55	EPA 413.1	RH
Cation, meq/L	18.79				
Anion, meq/L	20.94				
† Difference, †	6.70				

Approved By: *R. J. [Signature]*

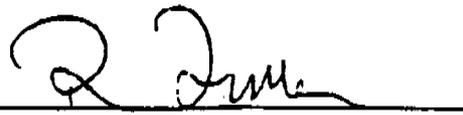
Date: 11/7/95

To: Sunnyside Cogeneration
P.O. Box 10
East Carbon, UT 84520

Group #: 4845
Lab #: 95-U035583
Sample Desc: CRB
Date Sampled: 10/20/95
Date Submitted: 10/21/95

CERTIFICATE OF ANALYSIS

PARAMETER	RESULT	MDL	DATE ANALYZED	METHOD	ANALYST
INORGANIC PARAMETERS					
Bicarbonate as HCO ₃ , mg/L	417	1	10/30/95 12:00	SM 2320B	TM
Carbonate as CO ₃ , mg/L	< 1	1	10/30/95 12:00	SM 2320B	TM
Alkalinity, Total, mg/L	342	1	10/30/95 12:00	SM 2320B	TM
Chloride, mg/L	250	6	10/26/95 13:20	EPA 325.3	TM
Hardness, EDTA Titration, mg/L	2,570	100	10/24/95 13:30	EPA 130.2	TM
Settleable Solids, mL/L/hr	< 0.2	0.2	10/21/95 12:00	EPA 160.2	NA
Sulfate, mg/L	3,040	15	10/26/95 12:30	EPA 375.4	TM
Total Dissolved Solids, mg/L	5,170	10	10/25/95 12:00	EPA 160.1	MA
Total Suspended Solids, mg/L	< 2.5	2.5	10/25/95 17:00	EPA 160.2	MA
Calcium (T), as Ca, mg/L	547	0.2	10/30/95 10:01	EPA 200.7	LH
Iron (T), as Fe, mg/L	0.14	0.04	10/30/95 10:01	EPA 200.7	LH
Iron (D), as Fe, mg/L	0.05	0.04	11/ 1/95 16:29	EPA 200.7	LH
Magnesium (D), as Mg, mg/L	314	0.1	11/ 1/95 16:29	EPA 200.7	LH
Manganese (T), as Mn, mg/L	0.18	0.01	10/30/95 10:01	EPA 200.7	LH
Manganese (D), as Mn, mg/L	0.10	0.01	11/ 1/95 16:29	EPA 200.7	LH
Potassium (D), as K, mg/L	24.7	0.1	11/ 1/95 16:29	EPA 200.7	LH
Sodium (D), as Na, mg/L	462	0.2	11/ 1/95 16:29	EPA 200.7	LH
Oil & Grease, mg/L	< 5	5	10/31/95 11:55	EPA 413.1	RH
Cation, meq/L	73.87				
Anion, meq/L	77.18				
% Difference, †	2.20				

Approved By: 

{uennrc:pt}

To: Sunnyside Cogeneration
 P.O. Box 10
 East Carbon, UT 84520

Date: 11/7/95

Group #: 4845
 Lab #: 95-U035586
 Sample Desc: Drag Well
 Date Sampled: 10/20/95
 Date Submitted: 10/21/95

CERTIFICATE OF ANALYSIS

PARAMETER	RESULT	MDL	DATE ANALYZED	METHOD	ANALYST
INORGANIC PARAMETERS					
Bicarbonate as HCO ₃ , mg/L	584	1	10/30/95 12:00	SM 2320B	TM
Carbonate as CO ₃ , mg/L	< 1	1	10/30/95 12:00	SM 2320B	TM
Alkalinity, Total, mg/L	479	1	10/30/95 12:00	SM 2320B	TM
Chloride, mg/L	25	1	10/26/95 13:20	EPA 325.3	TM
Hardness, EDTA Titration, mg/L	450	25	10/24/95 13:20	EPA 130.2	TM
Sulfate, mg/L	389	10	10/26/95 12:20	EPA 375.4	TM
Total Dissolved Solids, mg/L	1,050	10	10/25/95 12:00	EPA 160.1	MA
Calcium (T), as Ca, mg/L	70.3	0.2	10/30/95 10:07	EPA 200.7	LH
Iron (T), as Fe, mg/L	0.96	0.04	10/30/95 10:07	EPA 200.7	LH
Iron (D), as Fe, mg/L	< 0.04	0.04	11/ 1/95 16:35	EPA 200.7	LH
Magnesium (D), as Mg, mg/L	59.0	0.1	11/ 1/95 16:35	EPA 200.7	LH
Manganese (T), as Mn, mg/L	< 0.01	0.01	10/30/95 10:07	EPA 200.7	LH
Manganese (D), as Mn, mg/L	< 0.01	0.01	11/ 1/95 16:35	EPA 200.7	LH
Potassium (D), as K, mg/L	2.7	0.1	11/ 1/95 16:35	EPA 200.7	LH
Sodium (D), as Na, mg/L	175	0.2	11/ 1/95 16:35	EPA 200.7	LH
Oil & Grease, mg/L	< 5	5	10/31/95 11:55	EPA 413.1	RH
Cation, meq/L	16.04				
Anion, meq/L	18.38				
† Difference, †	6.80				

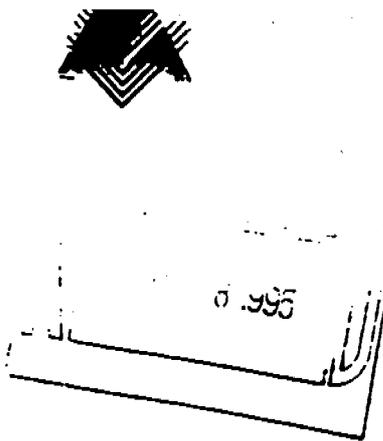
NOTE: Oil and Grease was collected in Root Beer bottles.
 There is a rootbeer odor present.

Approved By: *R. J. Miller*

(generic rpt)

To: Sunnyside Cogeneration
P.O. Box 10
East Carbon, UT 84520

Date: 12/13/95



Group #: 5484
Lab #: 95-U037917
Sample Desc: ICE-1

Date Sampled:
Date Submitted: 11/22/95

Time Sampled:
Time Received: 14:06

CERTIFICATE OF ANALYSIS

PARAMETER	RESULT	MDL	DATE ANALYZED	METHOD	ANALYST
INORGANIC PARAMETERS					
Bicarbonate as HCO ₃ , mg/L	563	1	11/30/95 12:30	SM 2320B	TM
Carbonate as CO ₃ , mg/L	8	1	11/30/95 12:30	SM 2320B	TM
Alkalinity, Total, mg/L	474	1	11/30/95 12:30	SM 2320B	TM
Chloride, mg/L	42	1	12/ 5/95 11:00	EPA 325.3	TM
Hardness, EDTA Titration, mg/L	509	10	12/ 8/95 8:30	EPA 130.2	TM
Settleable Solids, mL/L/hr	< 0.2	0.2	11/22/95	EPA 160.5	RG
Sulfate, mg/L	494	7	12/ 4/95 11:00	EPA 375.4	TM
Total Dissolved Solids, mg/L	1,150	5	11/30/95 14:00	EPA 160.1	MA
Total Suspended Solids, mg/L	11.0	2.5	11/30/95 17:00	EPA 160.2	MA
Calcium (D), as Ca, mg/L	60.4	0.2	12/ 4/95 1:06	EPA 200.7	LH
Iron (T), as Fe, mg/L	0.12	0.04	12/ 4/95 1:04	EPA 200.7	LH
Iron (D), as Fe, mg/L	< 0.04	0.04	12/ 4/95 1:06	EPA 200.7	LH
Magnesium (D), as Mg, mg/L	90.6	0.1	12/ 4/95 1:06	EPA 200.7	LH
Manganese (T), as Mn, mg/L	0.01	0.01	12/ 4/95 1:04	EPA 200.7	LH
Manganese (D), as Mn, mg/L	< 0.01	0.01	12/ 4/95 1:06	EPA 200.7	LH
Potassium (D), as K, mg/L	4.6	0.1	12/ 4/95 1:06	EPA 200.7	LH
Sodium (D), as Na, mg/L	247	0.2	12/ 4/95 1:06	EPA 200.7	LH
Oil & Grease, mg/L	< 5	5	12/ 4/95 16:00	EPA 413.1	EG
Cation,	21.33				
Anion,	20.96				
% Difference,	0.90				

Approved By: 

(generic.rpt)



Date: 12/13/95

To: Sunnyside Cogeneration
P.O. Box 10
East Carbon, UT 84520



Group #: 5484
Lab #: 95-U037916
Sample Desc: F-2

Date Sampled:
Date Submitted: 11/22/95

Time Sampled:
Time Received: 14:06

CERTIFICATE OF ANALYSIS

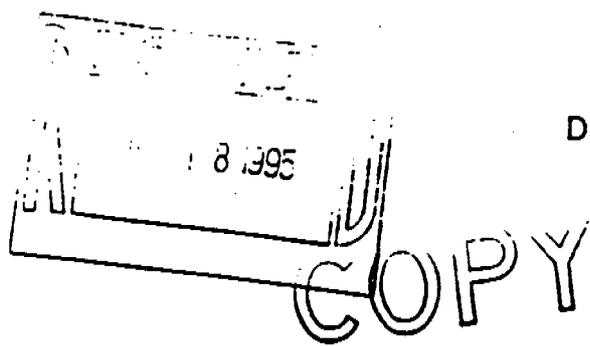
PARAMETER	RESULT	MDL	DATE ANALYZED	METHOD	ANALYST
INORGANIC PARAMETERS					
Bicarbonate as HCO ₃ , mg/L	608	1	11/30/95 12:30	SM 2320B	TM
Carbonate as CO ₃ , mg/L	3	1	11/30/95 12:30	SM 2320B	TM
Alkalinity, Total, mg/L	503	1	11/30/95 12:30	SM 2320B	TM
Chloride, mg/L	37	1	12/ 5/95 11:00	EPA 325.3	TM
Hardness, EDTA Titration, mg/L	505	10	12/ 8/95 8:30	EPA 130.2	TM
Settleable Solids, mL/L/hr	< 0.2	0.2	11/22/95	EPA 160.5	RG
Sulfate, mg/L	425	7	12/ 4/95 11:00	EPA 375.4	TM
Total Dissolved Solids, mg/L	1,080	5	11/30/95 14:00	EPA 160.1	MA
Total Suspended Solids, mg/L	3.0	2.5	11/30/95 17:00	EPA 160.2	MA
Calcium (D), as Ca,	68.8	0.2	12/ 4/95 1:02	EPA 200.7	LH
Iron (T), as Fe, mg/L	0.20	0.04	12/ 4/95 1:00	EPA 200.7	LH
Iron (D), as Fe, mg/L	< 0.04	0.04	12/ 4/95 1:02	EPA 200.7	LH
Magnesium (D), as Mg, mg/L	83.4	0.1	12/ 4/95 1:02	EPA 200.7	LH
Manganese (T), as Mn, mg/L	0.04	0.01	12/ 4/95 1:00	EPA 200.7	LH
Manganese (D), as Mn, mg/L	0.01	0.01	12/ 4/95 1:02	EPA 200.7	LH
Potassium (D), as K, mg/L	3.7	0.1	12/ 4/95 1:02	EPA 200.7	LH
Sodium (D), as Na, mg/L	226	0.2	12/ 4/95 1:02	EPA 200.7	LH
Oil & Grease, mg/L	< 5	5	11/30/95 16:00	EPA 413.1	EG
Cation,	20.22				
Anion,	19.96				
% Difference,	0.70				

Approved By: _____



To: Sunnyside Cogeneration
 P.O. Box 10
 East Carbon, UT 84520

Date: 12/15/95



Group #: 5484
 Lab #: 95-U037915
 Sample Desc: CRB

Date Sampled:
 Date Submitted: 11/22/95

Time Sampled:
 Time Received: 14:06

CERTIFICATE OF ANALYSIS

PARAMETER	RESULT	MDL	DATE ANALYZED	METHOD	ANALYST
INORGANIC PARAMETERS					
Bicarbonate as HCO ₃ , mg/L	423	1	11/30/95 12:30	SM 2320B	TM
Carbonate as CO ₃ , mg/L	< 1	1	11/30/95 12:30	SM 2320B	TM
Alkalinity, Total, mg/L	347	1	11/30/95 12:30	SM 2320B	TM
Chloride, mg/L	250	1	12/ 5/95 11:00	EPA 325.3	TM
Hardness, EDTA Titration, mg/L	2,460	25	12/ 8/95 8:30	EPA 130.2	TM
Settleable Solids, ml/L/hr	< 0.2	0.2	11/22/95	EPA 160.5	RG
Sulfate, mg/L	2,980	14	12/ 4/95 11:00	EPA 375.4	TM
Total Dissolved Solids, mg/L	4,870	5	11/30/95 14:00	EPA 160.1	MA
Total Suspended Solids, mg/L	15.0	2.5	11/30/95 17:00	EPA 160.2	MA
Calcium (D), as Ca,	521	0.2	12/ 4/95 0:57	EPA 200.7	LH
Iron (T), as Fe, mg/L	< 0.08	0.08	12/ 4/95 0:55	EPA 200.7	LH
Iron (D), as Fe, mg/L	< 0.08	0.08	12/ 4/95 0:57	EPA 200.7	LH
Magnesium (D), as Mg, mg/L	349	0.2	12/ 4/95 0:57	EPA 200.7	LH
Manganese (T), as Mn, mg/L	0.10	0.02	12/ 4/95 0:55	EPA 200.7	LH
Manganese (D), as Mn, mg/L	0.03	0.02	12/ 4/95 0:57	EPA 200.7	LH
Potassium (D), as K, mg/L	27.9	0.2	12/ 4/95 0:57	EPA 200.7	LH
Sodium (D), as Na, mg/L	523	0.4	12/ 4/95 0:57	EPA 200.7	LH
Oil & Grease, mg/L	< 5	5	11/30/95 16:00	EPA 413.1	EG
Cation,	78.18				
Anion,	76.03				
† Difference,	1.40				

Approved By: R. J. Miller



Date: 12/13/95

To: Sunnyside Cogeneration
P.O. Box 10
East Carbon, UT 84520

Group #: 5484
Lab #: 95-U037918
Sample Desc: WELL

Date Sampled:
Date Submitted: 11/22/95

Time Sampled:
Time Received: 14:06

CERTIFICATE OF ANALYSIS

PARAMETER	RESULT	MDL	DATE ANALYZED	METHOD	ANALYST
INORGANIC PARAMETERS					
Bicarbonate as HCO ₃ , mg/L	584	1	11/30/95 12:30	SM 2320B	TM
Carbonate as CO ₃ , mg/L	< 1	1	11/30/95 12:30	SM 2320B	TM
Alkalinity, Total, mg/L	479	1	11/30/95 12:30	SM 2320B	TM
Chloride, mg/L	33	1	12/ 5/95 11:00	EPA 325.3	TM
Hardness, EDTA Titration, mg/L	517	10	12/ 8/95 8:30	EPA 130.2	TM
Settleable Solids, mL/L/hr	< 0.2	0.2	11/22/95	EPA 160.5	RG
Sulfate, mg/L	470	6	12/ 4/95 11:00	EPA 375.4	TM
Calcium (D), as Ca, mg/L	89.6	0.2	12/ 4/95 1:10	EPA 200.7	LH
Iron (T), as Fe, mg/L	0.07	0.04	12/ 4/95 1:08	EPA 200.7	LH
Iron (D), as Fe, mg/L	< 0.04	0.04	12/ 4/95 1:10	EPA 200.7	LH
Magnesium (T), as Mg, mg/L	79.9	0.1	12/ 4/95 1:08	EPA 200.7	LH
Manganese (T), as Mn, mg/L	< 0.01	0.01	12/ 4/95 1:08	EPA 200.7	LH
Manganese (D), as Mn, mg/L	< 0.01	0.01	12/ 4/95 1:10	EPA 200.7	LH
Potassium (D), as K, mg/L	3.9	0.1	12/ 4/95 1:10	EPA 200.7	LH
Sodium (D), as Na, mg/L	235	0.2	12/ 4/95 1:10	EPA 200.7	LH
Oil & Grease, mg/L	< 5	5	12/ 4/95 16:00	EPA 413.1	EG
Cation,	14.79				
Anion,	20.29				
‡ Difference,	15.70				

Approved By: *R. D. Little*

EXHIBIT B-4

UPDES FIELD DATA

APPENDIX C

PRECIPITATION AND CLIMATOLOGICAL
DATA FOR 1995

**SUNNYSIDE WEATHER STATION
1995 CLIMATOLOGICAL REPORT**

* = equipment failure
acc. dep. = accumulated depth (snow, hail)
temperature in F

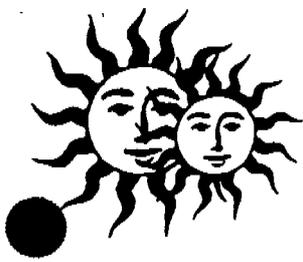
DAY	JAN		JAN		FEB		FEB		MARCH		MARCH		APRIL		APRIL		MAY		MAY		JUNE		JUNE	
	max temp	min temp	precip	acc. dep.	max temp	min temp	precip	acc. dep.	max temp	min temp	precip	acc. dep.	max temp	min temp	precip	acc. dep.	max temp	min temp	precip	acc. dep.	max temp	min temp	precip	acc. dep.
1	27	6			50	28			42	28	0.10		51	27			58	32			74	44		
2	30	11			52	29			42	30	0.09		55	34			58	35	0.51		74	46	0.15	
3	32	10			51	25			44	30	tr		61	31			58	28			60	47		
4	28	15	tr		49	28			42	24	0.10		63	32			62	33			62	46	0.05	
5	32	19	0.45	5.00	51	30			39	29	0.06		64	37			61	45			74	40	0.05	
6	38	17			58	29			40	20	0.02		67	38			48	33			70	30		
7	34	13	0.08	2.00	53	28			41	13			67	34			46	28			60	35		
8	32	22			48	30			46	21			64	34			57	30	0.15		55	32	0.75	
9	36	28	0.06		42	19	0.08		53	25			47	25	tr		64	31			56	29	0.13	
10	38	30	0.33	1.00	49	22			58	32			44	16			62	42	0.10		65	34		
11	39	28			41	26			54	38	0.17		54	19			56	47	0.11		73	41		
12	40	18			40	23	0.07	1.00	38	31	0.09		61	30			51	30	0.73		82	49		
13	39	21			42	28			52	31			60	37			51	28			86	52		
14	32	30			43	28	0.13		58	31			60	27	0.03		61	41			86	51		
15	33	29			38.5	8			55	35			45	28			69	42			84	58		
16	34	11	0.12	1.00	43	16			62	34			51	22	0.06		65	42			75	57		
17	34	9			45	16			59	33	0.35		35	29	0.16		64	37	0.15		65	40	0.06	
18	34	7			50	26			52	34			42	25	0.10		66	36			72	37	0.05	
19	37	13			51	28			50	34	0.15		38	27	0.58	5.00	67	36	0.07		76	42		
20	38	16			58	31			55	27			43	23			66	46			78	43		
21	36	17			58	31			57	44			45	25	0.52	7.00	71	45			77	42		
22	34	12			61	32			57	24	tr		45	28			70	48	tr		72	39		
23	31	11			61	31			54	25			48	27			67	38	tr		77	46		
24	30	15	0.03		59	32			53	23			54	25			56	34	0.66		75	46		
25	36	23	0.06	1.00	57	33			37	23			61	30			53	32	0.75		80	53		
26	38	29	0.22	2.00	56	31			41	22			61	27			55	37	0.15		84	53		
27	38	16	0.21	2.50	56	31			46	19			68	33			*	*			86	54		
28	38	15			54	32			46	22			67	38			*	*			81	49		
29	37	14							42	19	tr		54	35	0.06		*	*	0.01		78	48		
30	36	15							46	17			54	37	0.50		64	30	tr		72	46	0.22	
31	42	19							52	22							71	37						
total	1083.00	539.00	1.56	14.50	1763.00	752.00	0.28	1.00	1513.00	840.00	1.13	0.00	1629.00	878.00	2.01	12.00	1899.00	1023.00	3.41	0.00	2135.00	1329.00	1.46	0.00
average	34.94	17.39			56.77	25.07			48.81	30.00			54.30	29.27			60.68	36.54			73.63	44.30		
avg daily	26.16				41.92				39.40				41.78				48.61				58.97			

APPENDIX D

QUARTERLY AMBIENT AIR MONITORING REPORT

EXHIBIT D-1

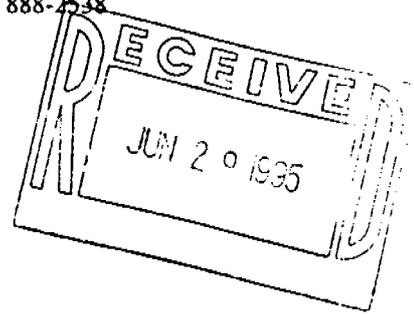
FIRST QUARTER AMBIENT AIR MONITORING



Sunnyside Cogeneration Associates

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

June 28, 1995



Mr. Rolf Doebbeling
Quality Assurance Coordinator
Utah Department of Environmental Quality
Air Quality Division
150 North 1950 West
Salt Lake City, Utah 84119

SUBJECT: Quarterly Monitoring Report
Monitoring Period: January, February, March, 1995
Ambient Air Monitoring Program
Sunnyside Cogeneration Associates Power Plant

Dear Mr. Doebbeling:

This quarterly report presents the meteorological data collected by Huntingdon Engineering & Environmental, Inc., at the Sunnyside Cogeneration Associates Power Plant, Sunnyside, Utah, for the January, February, and March, 1995, monitoring period. This ambient-air monitoring report for the Sunnyside Cogeneration Associates Power Plant is in compliance with the Utah Division of Air Quality (UDAQ) Modified Approval Order No. DAQE-0077-94.

The meteorological data have been compiled in DOS ASCII format and also spreadsheet form, as required by the UDAQ. A computer disk containing the meteorological data is also included with this report.

The next quarterly report will be submitted by the end of September, 1995, as per UDAQ requirements. Please contact me at (801) 888-4476, if you have any questions or comments concerning this report. I will then place you in contact with the scientists who conducted this work.

Sincerely,

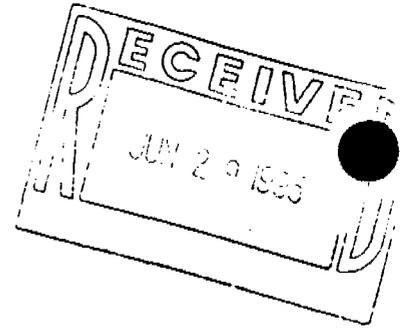
Danny Mattingly
General Manager

DM/lis

Huntingdon

Prepared For:

SUNNYSIDE COGENERATION ASSOCIATES
POST OFFICE BOX 10
EAST CARBON, UTAH 84520



REPORT OF QUARTERLY AMBIENT
AIR MONITORING RESULTS
SUNNYSIDE COGENERATION ASSOCIATES
POWER PLANT
SUNNYSIDE, UTAH
JANUARY - MARCH, 1995

Prepared By:

HUNTINGDON ENGINEERING & ENVIRONMENTAL, INC.
1127 WEST 2320 SOUTH, SUITE B
SALT LAKE CITY, UTAH 84119

Huntingdon Project No. 51-104-93

June 30, 1995

June 30, 1995

Sunnyside Cogeneration Associates
P.O. Box 10
East Carbon, Utah 84520

Attention: Danny Mattingly, General Manager

Subject: Quarterly Monitoring Report
Monitoring Period: January, February, March 1995
Ambient Air Monitoring Program
Sunnyside Cogeneration Associates Power Plant
Huntingdon Project No. 51-104-93

Dear Mr. Mattingly:

This quarterly monitoring report presents the meteorological data collected by Huntingdon Engineering & Environmental, Inc. at the Sunnyside Cogeneration Associates Power Plant for the January, February, and March 1995 monitoring period. The ambient-air monitoring report is required as part of the Utah Division of Air Quality (UDAQ) Modified Approval Order No. DAQE-0077-94. The meteorological data have been compiled in DOS ASCII format and also spreadsheet form, as required by UDAQ.

The next quarterly report will be submitted by the end of September 1995 as per UDAQ requirements. Please contact myself or Rich Giraud of Huntingdon at (801) 972-4787 if you have any questions or comments concerning this report.

Sincerely,

Huntingdon Engineering & Environmental, Inc.



Ron Gossard
Staff Engineer

Enclosure:

Quarterly Ambient Air Monitoring Report
Computer disk with AIRS Datastring file

cc: Mr. Doug Burnham, Babcock & Wilcox
Mr. Bob Evans, NRG Energy Inc.
Mr. Richard Giraud, Huntingdon Engineering & Environmental, Inc.

N:\Gossard\SCWM\QRT0695\QRT0695.R01

1.0 INTRODUCTION

This report presents the meteorological data collected during January, February, and March 1995 by Huntingdon Engineering & Environmental, Inc. (Huntingdon) at the Sunnyside Cogeneration Associates (SCA) Power Plant, Sunnyside, Utah in accordance with the Utah Division of Air Quality (UDAQ) Modified Approval Order No. DAQE-0077-94. As per UDAQ Modified Approval Order requirements, a meteorological station was constructed on SCA property to monitor wind speed, wind direction, and air temperature. The station was installed on September 19 and 20, 1994. The location of the monitoring station is shown in Figure 1.

2.0 METEOROLOGICAL DATA

Meteorological data were continuously collected from January to March 1995 and continue to be collected until the UDAQ minimum data recovery requirements are achieved. The following sections detail the data-recovery procedures, the data values, the data-recovery percentage for each parameter, and data-recovery problems that occurred during this quarterly monitoring period.

2.1 DATA-RECOVERY PROCEDURES

Data from the meteorological station were retrieved in the field throughout the monitoring period using a laptop personnel computer. Meteorological data were then downloaded from the laptop computer to the Huntingdon computer network for data reduction. The data were compiled in LOTUS spreadsheets so that hourly and daily values for each month could be reviewed and analyzed. The data were also compiled in DOS compatible ASCII format. The hourly meteorological values for each month are shown in Tables 1 through 12; The ASCII format data are presented in Appendix A. The ASCII format data are also included on a computer disk that is enclosed with this report.

2.2 DATA RESULTS

2.2.1 January Data Results

The January 1995 temperature data met the UDAQ data-screening criteria (Post-Construction Ambient Air Monitoring Plan, SCA, Huntingdon, 1994) throughout most of the month. The temperature data collected on January 26 at 1200 to 1400 hours should be considered invalid due to temperature calibration activities. None of the temperature values exceeded the record high or low, and the hourly temperature values changed greater than 0.9 degrees in 12 consecutive hours.

The wind direction and wind speed data met the data-screening criteria for most of January. The wind direction data on January 3 at 0100 to 0300 hours should be considered invalid because the wind direction values did not vary greater than 1.0 degree in 3 consecutive hours. The wind speed data on January 11 at 2100 to 2300 hours and January 17 at 0500 to 0700 hours should be considered invalid because the hourly values did not change greater than 0.22 miles per hour

(mph) in 3 consecutive hours. The wind speed and wind direction data collected on January 26 at 1200 to 1400 hours should be considered invalid because of calibration activities.

The meteorological data collected from January 17 at 0800 hours to January 24 at 1700 hours should be considered invalid because consecutive 0 values were recorded for temperature, wind direction, wind speed, and sigma theta. Power loss to the Campbell CR10 data logger was the reason that consecutive 0 values were recorded from January 17 to January 24. Tables 1 through 4 show the meteorological data for January 1995.

2.2.2 February Data Results

The February 1995 temperature data met the data-screening criteria throughout the entire month. The wind direction data should be considered invalid on February 3 at 2100 to 2300 hours, February 4 at 0100 to 0300 hours, February 5 at 0000 to 0600 hours, February 6 at 2000 to 2300 hours, February 15 at 0300 to 0500 hours and 0700 to 0900 hours, February 24 at 2000 to 2300 hours, February 25 at 0200 to 0400 hours, and February 26 and 27 at 2200 to 0000 hours because the wind direction did not change greater than 1.0 degree in 3 consecutive hours was observed. The wind speed data should be considered invalid on February 5 and 6 at 2300 to 0200 hours, February 16 at 1500 to 1700 hours, February 21 at 1500 to 1700 hours, and February 24 and 25 at 2200 to 0000 hours because the hourly values did not change greater than 0.22 mph in 3 consecutive hours.

The meteorological data collected on February 9 at 0000 to 0900 hours should be considered invalid because consecutive 0 values were recorded for temperature, wind direction, wind speed, and sigma theta. Tables 5 through 8 show the meteorological data for February 1995.

2.2.3 March Data Results

The March 1995 temperature data met the data-screening criteria throughout the entire month. The wind direction data should be considered invalid on March 7 at 0200 to 0400 hours, March 8 at 0400 to 0600 hours, March 16 at 0100 to 0300 hours, and March 31 at 0300 to 0600 hours because no wind direction change greater than 1.0 degree in 3 consecutive hours was observed. The wind speed data should be considered invalid on March 7 at 0400 to 0600 hours, March 8 and 9 at 2200 to 0000 hours because the hourly wind speed values did not change greater than 0.22 mph in 3 consecutive hours.

The meteorological data collected on March 6 at 0400 to 0800 hours, March 9 at 1500 to March 10 at 0700 hours, March 11 at 1600 hours to March 15 at 1700 hours, and March 23 at 1800 to March 28 at 1100 hours should be considered invalid because consecutive 0 values were recorded for temperature, wind direction, wind speed, and sigma theta. With the exception of the data on March 6, power loss to the Campbell CR10 data logger was the reason that consecutive 0 values were recorded for the above mentioned dates. Tables 9 through 12 show the meteorological data for March 1995.

2.3 MONTHLY AND QUARTERLY PERCENT DATA RECOVERY

The percent data-recovery for each parameter in the month of January met the UDAQ requirement of fifty percent. The wind speed and temperature data were seventy-four and seventy-six percent recovered, respectively. The wind direction and sigma theta data were both seventy-five percent recovered.

The percent data recovery for each parameter in the month of February met the UDAQ requirement of fifty percent. The wind speed and temperature data were ninety-seven and one-hundred percent recovered, respectively. The wind direction and sigma theta data were ninety-four and ninety-nine percent recovered, respectively.

The percent data recovery for each parameter in the month of March met the UDAQ requirement of fifty percent. The wind speed and temperature data were sixty-eight and seventy percent recovered, respectively. The wind direction and sigma theta data were sixty-seven and sixty-nine percent recovered, respectively. The monthly percent data recoveries for each parameter are shown in Table 13.

The quarterly percent data recoveries for each parameter met the UDAQ minimum requirement of seventy-five percent. The percent data recovery for wind speed was seventy-nine percent and eighty-one percent of the temperature data were recovered. The wind direction data were seventy-eight percent recovered and sigma theta data were eighty percent recovered for the quarter. The quarterly percent data recoveries for each parameter are shown in Table 13.

3.0 QUALITY ASSURANCE AND QUALITY CONTROL

Quality assurance and quality control (QA/QC) procedures were followed to ensure that valid data was collected. QA/QC procedures included proper documentation of instrument calibrations and field activities, and quality control checks.

3.1 INDEPENDENT AUDIT RESULTS

No audits were performed during this monitoring period. The semi-annual performance audit of the meteorological station, as required by UDAQ, was performed in May 1995 and will be discussed in the April-June quarterly monitoring report.

As discussed in "Sunnyside Cogeneration Facility Meteorological Station, Performance Audit, November 1, 1994" (SECOR, 1994) and "Report of Quarterly Ambient Air Monitoring Results at the Sunnyside Cogeneration Facility, Sunnyside, Utah, October-December 1994" (Huntingdon, 1995) the temperature audit performed in November 1994 indicated that the temperature sensor was not within the recommended tolerance set by UDAQ. The UDAQ acceptable limit for temperature is 0.5 Degrees Celsius. The temperature sensor average audit error was 1.5 Degrees Celsius. Based on the November audit information, the decision was made to replace the temperature sensor. A new temperature probe was installed on January 26, 1995 by MET ONE Instruments and Huntingdon personnel. The new probe was calibrated on-site by MET ONE

Instruments. Documentation concerning the sensor initial equipment calibration, replacement procedures, and re-calibration on-site are included in Appendix B.

To determine the validity of the temperature sensor data, the data were reviewed using the data screening criteria in the Post-Construction Ambient Air Monitoring Plan. None of the temperature values exceeded the record high or low, none of the values changed greater than 9.0 degrees from the previous hour, and the hourly values changed greater than 0.9 degrees in 12 consecutive hours. Based on the data review, the temperature data for January appears to be valid. Due to power loss to the data logger from January 17 to January 24, the temperature data collected during that time should be considered invalid because consecutive 0 values were recorded. The temperature data are shown in Tables 3, 7, and 11 of this report.

The temperature data did not indicate any drastic fluctuations in values which might indicate sensor malfunction. Mr. Rolf Doebbeling, UDAQ, was contacted in regard to the temperature sensor data and stated that the temperature data validity will be evaluated after the second audit.

3.2 CALIBRATION OF METEOROLOGICAL INSTRUMENTS

A calibration test of the new temperature sensor was performed on-site by MET ONE personnel on January 26, 1995. After installation, the temperature sensor and data logger were checked by MET ONE personnel to determine if they were responding to changes in ambient temperature. The temperature sensor appeared to be collecting reliable meteorological data. The documentation verifying the sensor calibration is presented in Appendix B.

3.3 QUALITY CONTROL CHECKS

Documentation of all field activities was written in a hard-bound log book. As discussed previously, replacement and calibration of the new temperature sensor was implemented in January 1995. To prevent malfunctioning of the station and to avoid future power loss problems with the station, Huntingdon implemented a weekly station check where SCA personnel would inspect the station for sensor, wiring, solar panel, and data logger operation. The field log book documentation is included in Appendix C.

4.0 CONCLUSIONS

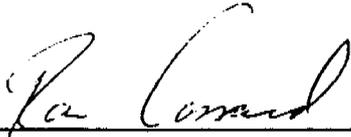
The following conclusions were drawn from the January to March 1995 ambient air monitoring period:

- ♦ The meteorological data collected for the monitoring period meets the UDAQ monthly percent data recovery requirements.
- ♦ The meteorological data collected for the monitoring period meets the UDAQ quarterly percent data recovery requirements.

The quarterly monitoring report for April, May, June, 1995 will be submitted in September, 1995. Please contact myself or Rich Giraud if there are questions or comments concerning this monitoring report.

Respectively submitted,

HUNTINGDON ENGINEERING & ENVIRONMENTAL, INC.



Ron Gossard
Staff Engineer



Terrence Chatwin
Senior Project Manager

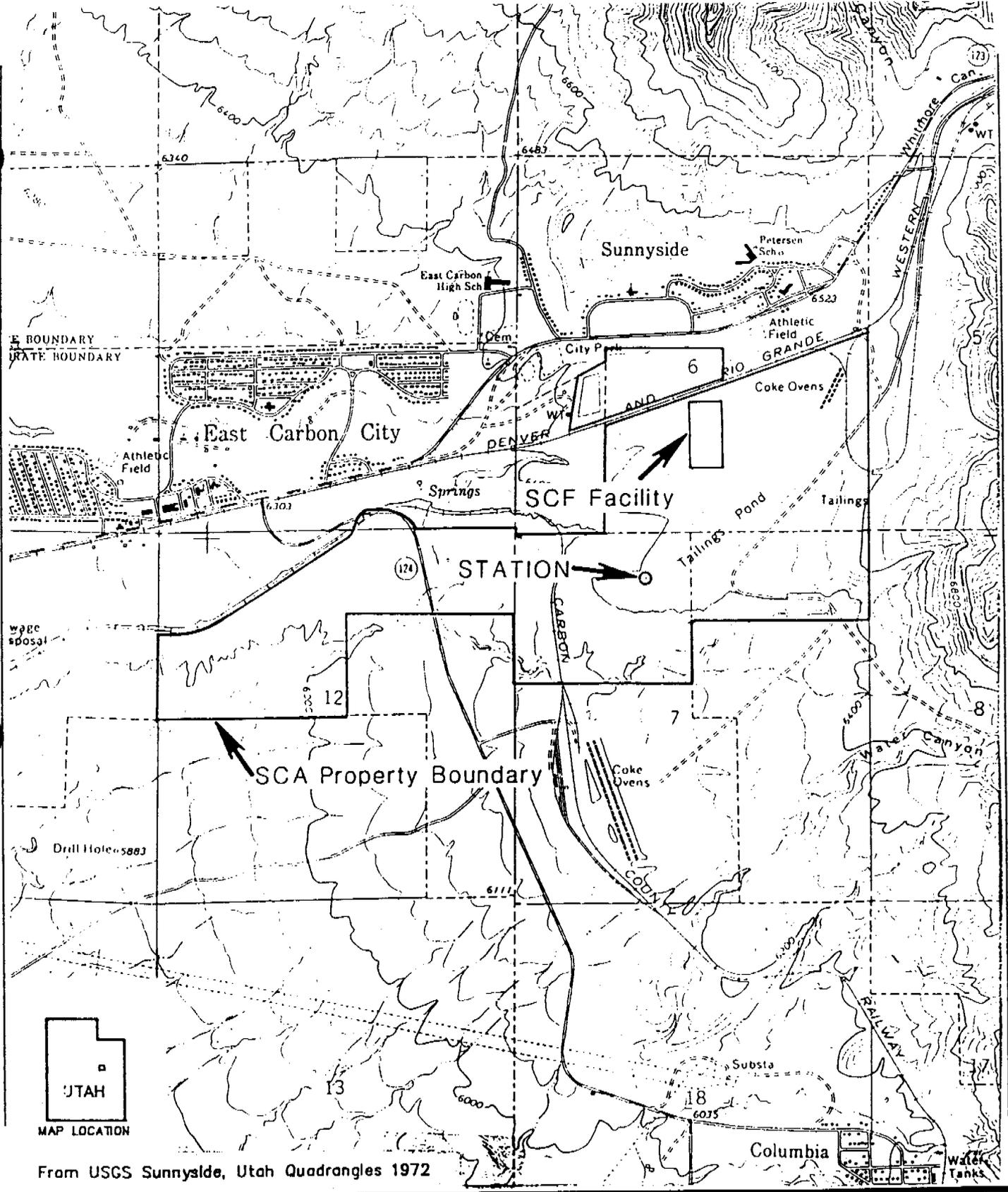
5.0 REFERENCES

Huntingdon Engineering & Environmental, Inc., Post-Construction Ambient Air Monitoring Plan, Sunnyside Cogeneration Associates, Sunnyside Cogeneration Facility, Sunnyside, Utah, July, 1994.

Science & Engineering Analysis Corporation (SECOR), Sunnyside Cogeneration Facility Meteorological Station, Performance Audit, November 1, 1994.

Huntingdon Engineering & Environmental, Inc., Report of Quarterly Ambient Air Monitoring Results at the Sunnyside Cogeneration Facility, Sunnyside, Utah, October-December 1994, March, 1995.

FIGURE

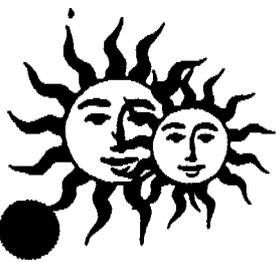


METEOROLOGICAL MONITORING STATION LOCATION MAP

<p>Huntingdon Engineering and Environmental, Inc.</p>	<p style="text-align: center;">  N Approximate Scale (Ft)  0 2000 </p>	<p style="text-align: center;"> Sunnyside Cogeneration Facility Sunnyside, Utah </p> <p style="text-align: right;"> Job: 51-104-93 Figure 1 </p>
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EXHIBIT D-2

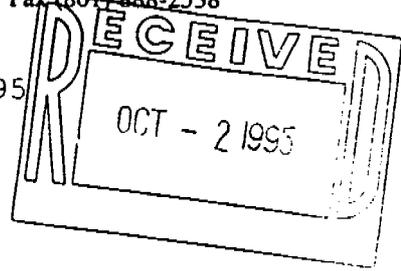
SECOND QUARTER AMBIENT AIR MONITORING



Sunnyside Cogeneration Associates

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

September 29, 1995



Mr. Rolf Doebbeling
Quality Assurance Coordinator
Utah Department of Environmental Quality
Air Quality Division
150 North 1950 West
Salt Lake City, Utah 84119

SUBJECT: Quarterly Monitoring Report
Monitoring Period: April, May, June 1995
Ambient Air Monitoring Program
Sunnyside Cogeneration Associates Power Plant

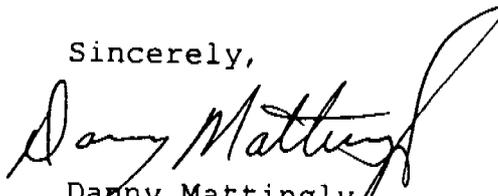
Dear Mr. Doebbeling:

This quarterly report presents the meteorological data collected by Maxim Technologies, Inc., at the Sunnyside Cogeneration Associates Power Plant, Sunnyside, Utah, for the April, May, and June, 1995, monitoring period. This ambient-air monitoring report for the Sunnyside Cogeneration Associates Power plant is in compliance with the Utah Division of Air Quality (UDAQ) Modified Approval Order No. DAEQ-0077-94.

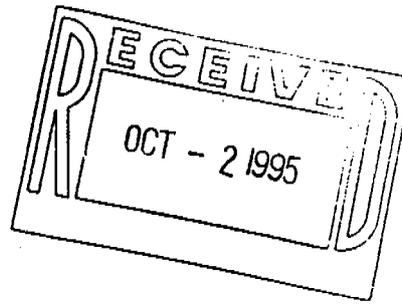
The meteorological data has been compiled in DOS ASCII and spreadsheet formats, as required by the UDAQ. A computer disk containing the meteorological data is also included with this report.

The next quarterly report will be submitted by the end of December 1995 as per UDAQ requirements. Please contact me at (801) 888-4476, if you have any questions or comments concerning this report.

Sincerely,


Danny Mattingly
General Manager

DM/11s



September 29, 1995

Sunnyside Cogeneration Associates
P.O. Box 10
East Carbon, Utah 84520

Attention: Danny Mattingly, General Manager

Subject: Quarterly Monitoring Report
Monitoring Period: April, May, June 1995
Ambient Air Monitoring Program
Sunnyside Cogeneration Associates Power Plant
Maxim Project No.: 5209500253

Dear Mr. Mattingly:

This quarterly monitoring report presents the meteorological data collected by Maxim Technologies, Inc. at the Sunnyside Cogeneration Associates Power Plant for the April, May, and June 1995 monitoring period. The ambient-air monitoring report is required as part of the Utah Division of Air Quality (UDAQ) Modified Approval Order No. DAQE-0077-94. The meteorological data have been compiled in DOS ASCII and spreadsheet formats, as required by UDAQ.

The next quarterly report will be submitted by the end of December 1995 as per UDAQ requirements. Please contact myself or Rich Giraud of Maxim at (801) 972-4787 if you have any questions or comments concerning this report.

Sincerely,

Maxim Technologies, Inc.

A handwritten signature in cursive script that reads "Ron Gossard".

Ron Gossard
Staff Engineer

Enclosure:

Quarterly Ambient Air Monitoring Report
Computer disk with AIRS Datastring file

cc: Mr. Doug Burnham, Babcock & Wilcox
Mr. Bob Evans, NRG Energy Inc.
Mr. Richard Giraud, Maxim Technologies, Inc.

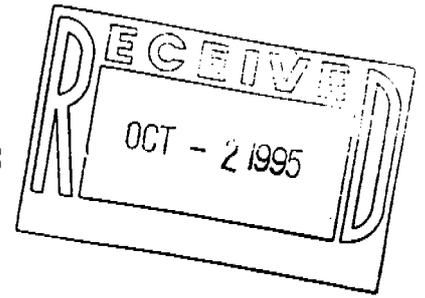
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Prepared For:

SUNNYSIDE COGENERATION ASSOCIATES
POST OFFICE BOX 10
EAST CARBON, UTAH 84520



**REPORT OF QUARTERLY AMBIENT
AIR MONITORING RESULTS
SUNNYSIDE COGENERATION ASSOCIATES
POWER PLANT
SUNNYSIDE, UTAH
APRIL - JUNE, 1995**

Prepared By:

**MAXIM TECHNOLOGIES, INC.
1127 WEST 2320 SOUTH, SUITE B
SALT LAKE CITY, UTAH 84119**

Maxim Project No. 5209500253

September 29, 1995



1.0 INTRODUCTION

This report presents the meteorological data collected during April, May, and June 1995 by Maxim Technologies, Inc. (Maxim) at the Sunnyside Cogeneration Associates (SCA) Power Plant, Sunnyside, Utah in accordance with the Utah Division of Air Quality (UDAQ) Modified Approval Order No. DAQE-0077-94. As per UDAQ Modified Approval Order requirements, a meteorological station was constructed on SCA property to monitor wind speed, wind direction, and air temperature. The station was installed on September 19 and 20, 1994. The location of the monitoring station is shown in Figure 1.

2.0 METEOROLOGICAL DATA

Meteorological data were continuously collected from April to June 1995 and continue to be collected to meet UDAQ minimum data recovery requirements. The following sections present the data-recovery procedures, the data values, and the data-recovery percentage for each measured parameter during this quarterly monitoring period.

2.1 DATA-RECOVERY PROCEDURES

Data from the meteorological station were retrieved in the field throughout the monitoring period using a laptop computer. Meteorological data were then downloaded from the laptop computer to the Maxim computer network for data reduction. The data were compiled in spreadsheets so that hourly and daily values for each month and the quarter could be reviewed and analyzed. The data were also compiled in DOS compatible ASCII format. The hourly meteorological values for each month are shown in Tables 1 through 12. The ASCII format data are presented in Appendix A. The ASCII format data are also included on a computer disk that is enclosed with this report.

2.2 DATA RESULTS

2.2.1 April Data Results

The April 1995 temperature data met the UDAQ data-screening criteria (Post-Construction Ambient Air Monitoring Plan, SCA, Huntingdon, 1994) throughout most of the month. The temperature data collected on April 5 at 1000 to 1400 hours should be considered invalid due to temperature calibration activities. None of the temperature values exceeded the record high or low, and the hourly temperature values changed greater than 0.9 degrees in 12 consecutive hours.

The wind-direction and wind-speed data met the data-screening criteria for most of April. The wind-direction data on April 1 at 0300 to 0700 hours, April 6 and 7 at 2300 to 0100 hours, April 20 and 21 at 2000 to 0900 hours, April 24 at 0300 to 0800 hours, April 24 and 25 at 2300 to 0200 hours, and April 27 at 0000 to 0300 hours should be considered invalid because they did not vary greater than 1.0 degree in 3 consecutive hours. The wind speed data on April 3 at 1200 to 1400 hours, April 10 at 1400 to 1600 hours, and April 20 and 21 at 2000 to 0900 hours should be considered invalid because the hourly values did not change greater than 0.22

miles per hour (mph) in 3 consecutive hours. The wind direction, wind speed, and sigma theta values collected on April 5 at 1000 to 1400 hours should be considered invalid because of calibration activities. Tables 1 through 4 show the meteorological data for April 1995.

2.2.2 May Data Results

The May 1995 temperature data met the data-screening criteria throughout most of the month. The wind-direction data should be considered invalid on May 11 at 0200 to 0400 hours, May 16 at 0000 to 0500 hours, May 18 at 0100 to 0300 hours, May 19 at 0100 to 0400 hours, May 21 at 0000 to 0500 hours, and May 23 at 0000 to 0200 hours because the wind direction did not change greater than 1.0 degree in 3 consecutive hours. The temperature, wind-speed, wind direction, and sigma theta data should be considered invalid on May 3 at 1100 to 1400 hours because of sensor audit activities. Tables 5 through 8 show the meteorological data for May 1995.

2.2.3 June Data Results

The June 1995 temperature data met the data-screening criteria throughout the entire month. The wind-direction data should be considered invalid on June 2 at 2100 to 2300 hours, June 12 at 0200 to 0700 hours, and June 13 at 0100 to 0500 hours because no wind direction change greater than 1.0 degree in 3 consecutive hours was observed. The wind-speed data should be considered invalid on June 5 at 0300 to 0500 hours, June 12 at 0200 to 0600 hours, and June 17 at 0800 to 1000 hours because the hourly wind speed values did not change greater than 0.22 mph in 3 consecutive hours. Tables 9 through 12 show the meteorological data for June 1995.

2.3 MONTHLY AND QUARTERLY PERCENT DATA RECOVERY

The percent data-recovery for each parameter in the month of April met the UDAQ requirement of fifty percent. The wind-direction and temperature data were ninety-four and ninety-nine percent recovered, respectively. The wind-speed and sigma theta data were both ninety-seven percent recovered.

The percent data recovery for each parameter in the month of May met the UDAQ requirement of fifty percent. The wind-direction data were ninety-six percent recovered. The wind-speed, temperature, and sigma theta data were all ninety-nine percent recovered.

The percent data recovery for each parameter in the month of June met the UDAQ requirement of fifty percent. The wind-speed and wind-direction data were both ninety-eight percent recovered, respectively. The temperature and sigma theta data were both one-hundred percent recovered, respectively. The monthly percent data recoveries for each parameter are shown in Table 13.

The quarterly percent data recoveries for each parameter met the UDAQ minimum requirement of seventy-five percent. The quarterly percent data recovery for wind-speed was ninety-eight percent and ninety-nine percent of the temperature data were recovered. The wind-direction data were ninety-six percent recovered and sigma theta data were ninety-nine percent recovered for the quarter. The quarterly percent data recoveries for each parameter are shown in Table 13.

3.0 QUALITY ASSURANCE AND QUALITY CONTROL

Quality assurance and quality control (QA/QC) procedures were followed to ensure that valid data was collected. QA/QC procedures for this monitoring period included a semi-annual performance audit, an internal audit, quality-control checks, and proper documentation of instrument calibrations and field activities.

3.1 INDEPENDENT AUDIT RESULTS

A semi-annual performance audit was performed on May 3, 1995 by SECOR Environmental. The audit report entitled "Sunnyside Cogeneration Facility Meteorological Station, Performance Audit, May 3, 1995" was submitted to the UDAQ on June 15, 1995. The performance audit found that the wind speed, wind direction, and temperature were within the acceptable limits established by the UDAQ.

In reference to Section 4.0 of the audit report, SECOR recommended replacing the wind direction sensor bearings because the torque tolerance limit, which was calculated to be 4.5 gram-cm, which is within the acceptable UDAQ limit of 6.48 gram-cm, had increased since the previous audit. Maxim personnel immediately contacted the manufacturer of the sensor, Met One Instruments, regarding the wind direction sensor bearings. According to Met One, if the sensor bearings are bad, several angles or points within the sensor rotation would have high torque readings. The sensor torque readings were low, between 0.1 and 0.5 gram-cm, except for the torque reading of 4.5 gram-cm at the angle where the sensor potentiometer is located. According to Met One, this torque reading is typical for the sensor potentiometer. To ensure that the wind direction torque does not exceed the acceptable UDAQ limit in the future, a torque gauge was used in bi-monthly sensor calibrations to monitor the torque in the sensor. Documentation concerning the data collected during the audit is included in Appendix B.

3.2 INTERNAL AUDIT OF METEOROLOGICAL INSTRUMENTS

A sensor and system internal audit was performed on-site by Maxim personnel on April 4, 1995 to ensure that the sensors are within UDAQ and the manufacturer's acceptable limits. The temperature internal audit consisted of using a Met One 045B calibrator to test the sensor output and a water bath to test the sensitivity of the temperature sensor. The 045B calibrator generated known temperature values and data logger readings were recorded and compared to the known calibrator values. The 045B calibrator results indicated that the comparison between the calibrator and data-logger readings were within the recommended UDAQ tolerance level. The water bath consisted of inserting the sensor in the bath and, after stabilization, a data-logger reading was taken and compared with the mercury thermometer reading from the bath. The water-bath results also indicated that the sensor temperature and the mercury thermometer readings were within the recommended UDAQ tolerance level.

The wind-speed internal audit consisted of using a Met One 045B calibrator to test the sensor output and a Met One 049-1 synchronous motor to test the sensitivity of the sensor. The 045B calibrator generated known wind-speed values and data-logger readings were taken and compared to the known values. The synchronous motor was connected to the anemometer shaft, which turned the shaft at a known rate. This known rate was then compared to the data logger

reading. The results of the wind-speed internal audit indicated that the measurements were within UDAQ acceptable limits.

The wind-direction internal audit consisted of using a Met One 045B calibrator to test the sensor output and a Met One 040 calibrator to test the linearity of the sensor. The 045B calibrator generated known wind-direction values and data-logger readings were taken and compared to the known values. The 040 calibrator was connected to the sensor shaft and set to known directions and compared to data logger readings. The results of the wind direction calibration indicated that the measurements were within the UDAQ acceptable limit. Documentation concerning the sensor and system calibration are included in Appendix C.

3.3 QUALITY CONTROL CHECKS

Documentation of all field activities was recorded in a hard-bound log book. To prevent malfunctioning of the station and to avoid future power loss problems with the station, SCA implemented a weekly station check where SCA personnel would inspect the station for sensor, wiring, solar panel, and data-logger operation. Maxim personnel also performed bi-weekly preventative maintenance checks on the station. The field log book documentation is included in Appendix D.

4.0 CONCLUSIONS

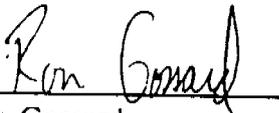
The following conclusions were drawn from the April to June 1995 ambient air monitoring period:

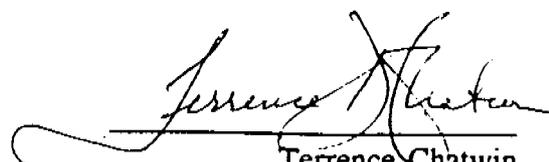
- ♦ The meteorological data collected for the monitoring period meets the UDAQ monthly percent data-recovery requirements.
- ♦ The meteorological data collected for the monitoring period meets the UDAQ quarterly percent data-recovery requirements.

The quarterly monitoring report for July, August, September 1995 will be submitted in December, 1995. Please contact myself or Rich Giraud if there are questions or comments concerning this monitoring report.

Respectively submitted,

Maxim Technologies, Inc.


Ron Gossard
Staff Engineer


Terrence Chatwin
Senior Project Manager

5.0 REFERENCES

Met One Instruments, Model 045 Calibrator, Operation Manual, 1991.

Huntingdon Engineering & Environmental, Inc., Post-Construction Ambient Air Monitoring Plan, Sunnyside Cogeneration Associates, Sunnyside Cogeneration Facility, Sunnyside, Utah, July, 1994.

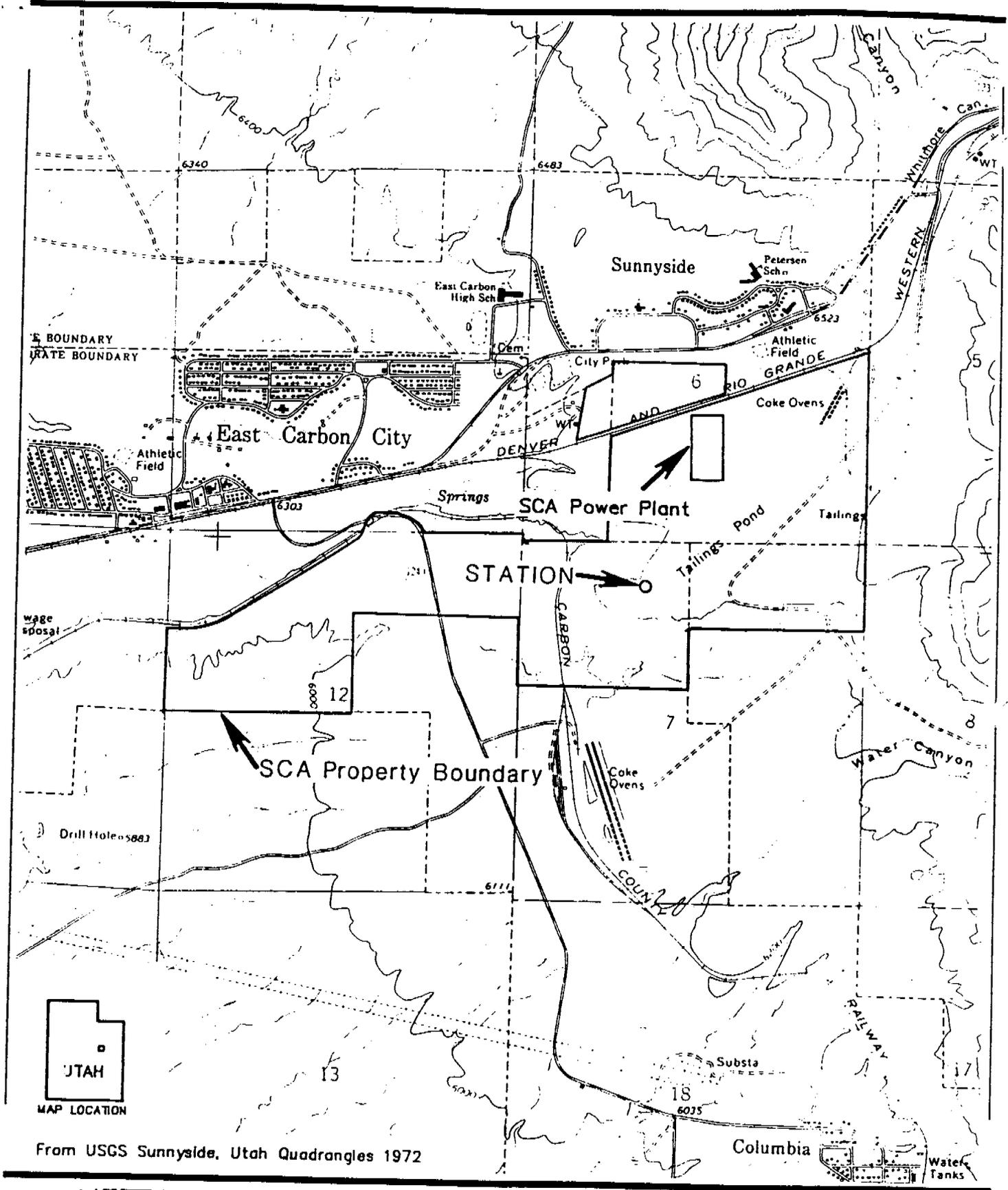
Science & Engineering Analysis Corporation (SECOR), Sunnyside Cogeneration Facility Meteorological Station, Performance Audit, November 1, 1994.

Science & Engineering Analysis Corporation (SECOR), Sunnyside Cogeneration Facility Meteorological Station, Performance Audit, May 3, 1995.

Huntingdon Engineering & Environmental, Inc., Report of Quarterly Ambient Air Monitoring Results at the Sunnyside Cogeneration Facility, Sunnyside, Utah, October-December 1994, March, 1995.

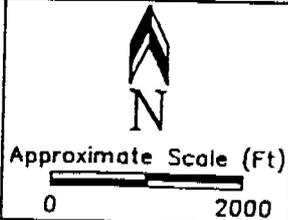
Huntingdon Engineering & Environmental, Inc., Report of Quarterly Ambient Air Monitoring Results at the Sunnyside Cogeneration Facility, Sunnyside, Utah, January-March 1995, June, 1995.

FIGURE



METEOROLOGICAL MONITORING STATION LOCATION MAP

MAXIM
TECHNOLOGIES INC



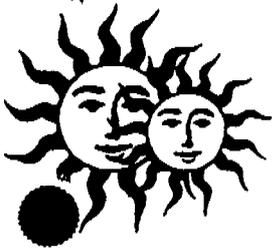
Sunnyside Cogeneration Associates
Power Plant
Sunnyside, Utah

Job: 5209500253

Figure 1

EXHIBIT D-3

THIRD QUARTER AMBIENT AIR MONITORING



Sunnyside Cogeneration Associates

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

December 27, 1995

Mr. Rolf Doebbeling
Quality Assurance Coordinator
Utah Department of Environmental Quality
Air Quality Division
150 North 1950 West
Salt Lake City, Utah 84119

SUBJECT: Quarterly Monitoring Report
Monitoring Period: July, August, September, 1995
Ambient Air Monitoring Program
Sunnyside Cogeneration Associates Power Plant

Dear Mr. Doebbeling:

This quarterly report presents the meteorological data collected by Maxim Technologies, Inc., at the Sunnyside Cogeneration Associates Power Plant, Sunnyside, Utah, for the July, August, and September, 1995, monitoring period. This ambient-air monitoring report for the Sunnyside Cogeneration Associates Power Plant is in compliance with the Utah Division of Air Quality (UDAQ) Modified Approval Order No. DAQE-0077-94.

The meteorological data has been compiled in DOS ASCII and spreadsheet formats, as required by the UDAQ. A computer disk containing the meteorological data is also included with this report.

The next quarterly report will be submitted by the end of March, 1996 as per UDAQ requirements. Please contact me at (801) 888-4476, if you have any questions or comments concerning this report.

Sincerely,

Danny Mattingly
Danny Mattingly *byls*
General Manager

DM/ils

c.c. Rich Giraud, Maxim Technologies, Inc.

MAXIM

TECHNOLOGIES INC

December 8, 1995

Sunnyside Cogeneration Associates
P.O. Box 10
East Carbon, Utah 84520

Attention: Danny Mattingly, General Manager

Subject: Quarterly Monitoring Report
Monitoring Period: July, August, September, 1995
Ambient Air Monitoring Program
Sunnyside Cogeneration Associates Power Plant
Maxim Project No.: 5209500253

Dear Mr. Mattingly:

This quarterly monitoring report presents the meteorological data collected by Maxim Technologies, Inc. at the Sunnyside Cogeneration Associates Power Plant for the July, August, and September, 1995 monitoring period. The ambient-air monitoring report is required as part of the Utah Division of Air Quality (UDAQ) Modified Approval Order No. DAQE-0077-94. The meteorological data have been compiled in DOS ASCII and spreadsheet formats, as required by UDAQ.

The next quarterly report will be submitted in March, 1996 as per UDAQ requirements. The data collected for the entire monitoring period will be submitted in the annual report once UDAQ has approved the data collected during the second half of 1995. Upon UDAQ approval, the annual report will be submitted prior to March, 1996. Please contact myself or Rich Giraud of Maxim at (801) 972-4787, if you have any questions or comments concerning this report.

Sincerely,

MAXIM TECHNOLOGIES, INC.



Ron Gossard
Staff Engineer

Enclosure:

Quarterly Ambient Air Monitoring Report
Computer disk with AIRS Datastring file

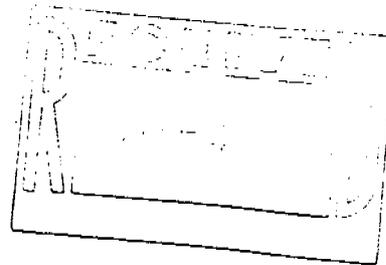
cc: Mr. Doug Burnham, Babcock & Wilcox
Mr. Bob Evans, NRG Energy Inc.
Mr. Richard Giraud, Maxim Technologies, Inc.

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Asteco • Austin Research Engineers • Chen-Northern • Empire Soils Investigations • Huntingdon • Kansas City Testing
Maxim Engineers • Nebraska Testing • Patzig Testing • Southwestern Laboratories • Thomas-Hartig • Twin City Testing





Prepared For:

**SUNNYSIDE COGENERATION ASSOCIATES
POST OFFICE BOX 10
EAST CARBON, UTAH 84520**

**REPORT OF QUARTERLY AMBIENT
AIR MONITORING RESULTS
SUNNYSIDE COGENERATION ASSOCIATES
POWER PLANT
SUNNYSIDE, UTAH
JULY - SEPTEMBER, 1995**

Prepared By:

**MAXIM TECHNOLOGIES, INC.
1127 WEST 2320 SOUTH, SUITE B
SALT LAKE CITY, UTAH 84119**

Maxim Project No. 5209500253

December, 1995

Asteco • Austin Research Engineers • Chen-Northern • Empire Soils Investigations • Huntingdon • Kansas City Testing
Maxim Engineers • Nebraska Testing • Patzig Testing • Southwestern Laboratories • Thomas-Hartig • Twin City Testing



1.0 INTRODUCTION

This report presents the meteorological data collected during July, August, and September 1995 by Maxim Technologies, Inc. (Maxim) at the Sunnyside Cogeneration Associates (SCA) Power Plant, Sunnyside, Utah in accordance with the Utah Division of Air Quality (UDAQ) Modified Approval Order No. DAQE-0077-94. As per UDAQ Modified Approval Order requirements, a meteorological station was constructed on SCA property to monitor wind speed, wind direction, and air temperature. The station was installed on September 19 and 20, 1994. The location of the monitoring station is shown in Figure 1.

2.0 METEOROLOGICAL DATA

Meteorological data were continuously collected from July to September, 1995 and continue to be collected to meet UDAQ minimum data recovery requirements. The following sections present the data-recovery procedures, the data values, and the data-recovery percentage for each measured parameter during this quarterly monitoring period.

2.1 DATA-RECOVERY PROCEDURES

Data from the meteorological station were retrieved in the field throughout the monitoring period using a laptop computer. Meteorological data were then downloaded from the laptop computer to the Maxim computer network for data reduction. The data were compiled in spreadsheets so that hourly and daily values for each month and the quarter could be reviewed and analyzed. The data were also compiled in DOS compatible ASCII format. The hourly meteorological values for each month are shown in Tables 1 through 12. The ASCII format data are presented in Appendix A. The ASCII format data are also included on a computer disk that is enclosed with this report.

2.2 DATA RESULTS

2.2.1 July Data Results

The July, 1995 temperature data met the UDAQ data-screening criteria (Post-Construction Ambient Air Monitoring Plan, SCA, Huntington, 1994) throughout most of the month. Temperature data collected on July 12 at 1600 to 1700 hours and July 22 at 1600 to 1700 hours should be considered invalid because the hourly values changed greater than 9 degrees from the previous hour. None of the temperature values exceeded the record high or low, and the hourly temperature values changed greater than 0.9 degrees in 12 consecutive hours.

The wind-direction and wind-speed data met the data-screening criteria for most of July. The wind-direction data on July 4 and 5 at 2300 to 0100 hours, July 7 at 0200 to 0400 hours and 1400 to 1600 hours, July 8 at 0600 to 0800 hours, July 15 at 2000 to 2200 hours, July 19 at 0200 to 0400 hours, July 21 at 1100 to 1300 hours, and July 22 at 0300 to 0500 hours should

be considered invalid because the hourly values did not vary greater than 1.0 degree in 3 consecutive hours.

The temperature, wind-direction, wind-speed, and sigma theta values collected on July 5 at 1100 to 1300 hours should be considered invalid because of internal audit activities. The temperature, wind-direction, wind-speed, and sigma-theta values collected on July 23 at 0100 hours to July 31 at 2300 hours should be considered invalid because no parameter input values were recorded due to power loss in the Campbell CR10 data-logger. Tables 1 through 4 show the meteorological data for July, 1995.

2.2.2 August Data Results

The August 1995 temperature data met the data-screening criteria throughout most of the month. Temperature data collected on August 10 at 1400 hours should be considered invalid because the hourly values changed greater than 9 degrees from the previous hour. The wind-direction data should be considered invalid on August 14 at 0000 to 0200 hours, August 20 at 2100 to 2300 hours, August 24 at 2100 to 2300 hours, August 25 at 2000 to 2300 hours, August 27 at 0000 to 0200 hours, and August 30 at 0000 to 0300 hours because the hourly values did not change greater than 1.0 degree in three consecutive hours. The wind-speed data collected on August 19 at 0100 to 0600 hours should be considered invalid because the hourly wind-speed values did not change greater than 0.22 mph in three consecutive hours.

The temperature, wind-speed, wind-direction, and sigma-theta data should be considered invalid on August 1 at 0000 hours to August 7 at 1700 hours because no parameter input values were recorded due to power loss in the Campbell CR10 data-logger. Tables 5 through 8 show the meteorological data for August 1995.

2.2.3 September Data Results

The September, 1995 temperature data met the data-screening criteria throughout most of the month. The wind-direction data should be considered invalid on September 1 at 0000 to 0200 hours, September 2 at 2200 to 0000 hours, September 10 at 0500 to 0700 hours, September 14 at 0000 to 0200 hours, September 15 at 0400 to 0700 hours, September 17 at 0500 to 0700 hours, September 20 at 0400 to 0600 hours, September 25 at 0400 to 0600 hours, September 26 and 27 at 2300 to 0500 hours, and September 28 at 0300 to 0600 hours, because no wind direction change greater than 1.0 degree in three consecutive hours was observed. The temperature, wind-direction, wind-speed, and sigma-theta data should be considered invalid on September 12 at 1000 to 1200 hours because of internal audit activities. Tables 9 through 12 show the meteorological data for September, 1995.

2.3 MONTHLY AND QUARTERLY PERCENT DATA-RECOVERY

The percent data-recovery for each parameter in the month of July met the UDAQ requirement of fifty percent. The temperature and wind-direction data were seventy and sixty-seven percent

recovered, respectively. The wind-speed and sigma-theta data were both seventy-one percent recovered.

The percent data-recovery for each parameter in the month of August met the UDAQ requirement of 50 percent. The wind-direction data were 76 percent recovered. The wind-speed, temperature, and sigma-theta data were all 78 percent recovered.

The percent data-recovery for each parameter in the month of September met the UDAQ requirement of 50 percent. The wind-direction data were 96 percent recovered. The wind-speed, temperature, and sigma-theta, data were all 99 percent recovered. The monthly percent data recoveries for each parameter are shown in Table 13.

The quarterly percent data recoveries for each parameter met the UDAQ minimum requirement of 75 percent. The quarterly percent data-recovery for wind-speed was 80 percent recovered. The wind-direction, temperature, and sigma theta data were all 83 percent recovered for the quarter. The quarterly percent data recoveries for each parameter are shown in Table 13.

3.0 QUALITY ASSURANCE AND QUALITY CONTROL

Quality assurance and quality control (QA/QC) procedures were followed to ensure that valid data was collected. QA/QC procedures for this monitoring period included two internal audits, quality-control checks, and proper documentation of field activities.

3.1 INTERNAL AUDIT OF METEOROLOGICAL INSTRUMENTS

A sensor and system internal audit was performed on-site by Maxim personnel on July 5 and September 12, 1995 to ensure the sensors are within UDAQ and the manufacturer's acceptable limits. The temperature internal audits consisted of using a Met One 045B calibrator to test the sensor output and a water bath to test the sensitivity of the temperature sensor. The 045B calibrator generated known temperature values and data-logger readings were recorded and compared to the known calibrator values. The 045B calibrator results for both audits indicated that the comparison between the calibrator and data-logger readings were within the recommended UDAQ tolerance level. The water-bath test consisted of inserting the sensor in the bath, and after stabilization, a data-logger reading was taken and compared with the mercury thermometer reading from the bath. The water-bath results for both audits also indicated that the sensor temperature and the mercury thermometer readings were within the recommended UDAQ tolerance level.

The wind-speed internal audits consisted of using a Met One 045B calibrator to test the sensor output and a Met One 049-1 synchronous motor to test the sensitivity of the sensor. The 045B calibrator generated known wind-speed values and data-logger readings were taken and compared to the known values. The synchronous motor was connected to the anemometer shaft, which turned the shaft at a known rate. This known rate was then compared to the data-logger

reading. The results of the wind-speed internal audits indicated that the measurements were within UDAQ acceptable limits.

The wind-direction internal audits consisted of using a Met One 045B calibrator to test the sensor output and a Met One 040 calibrator to test the linearity of the sensor. The 045B calibrator generated known wind-direction values and data-logger readings were taken and compared to the known values. The 040 calibrator was connected to the sensor shaft and set to known directions and compared to data-logger readings. The wind-direction results for both audits indicated the measurements were within the UDAQ acceptable limit. Documentation concerning the sensor and system audits is included in Appendix B.

3.2 QUALITY CONTROL CHECKS

Documentation of all field activities was recorded in a hard-bound log book. To reduce the effect of station malfunctioning or future power loss problems, SCA implemented a weekly station check where SCA personnel would inspect the station for sensor, wiring, solar panel, and data-logger operation. Maxim personnel also performed bi-weekly preventative maintenance checks on the station. The field log book documentation is included in Appendix C.

4.0 CONCLUSIONS

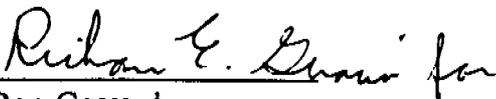
The following conclusions were drawn from the July to September 1995 ambient air monitoring period:

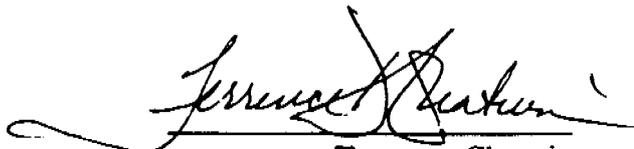
- ◆ The meteorological data collected for the monitoring period meets the UDAQ monthly percent data-recovery requirements.
- ◆ The meteorological data collected for the monitoring period meets the UDAQ quarterly percent data-recovery requirements.

The quarterly monitoring report for October, November, December 1995 will be submitted in March, 1996. Please contact myself or Rich Giraud if there are questions or comments concerning this monitoring report.

Respectively submitted,

MAXIM TECHNOLOGIES, INC.


Ron Gossard
Staff Engineer


Terrence Chatwin
Senior Project Manager

5.0 REFERENCES

Met One Instruments, Model 045 Calibrator, Operation Manual, 1991.

Huntingdon Engineering & Environmental, Inc., Post-Construction Ambient Air Monitoring Plan, Sunnyside Cogeneration Associates, Sunnyside Cogeneration Facility, Sunnyside, Utah, July, 1994.

Science & Engineering Analysis Corporation (SECOR), Sunnyside Cogeneration Facility Meteorological Station, Performance Audit, November 1, 1994.

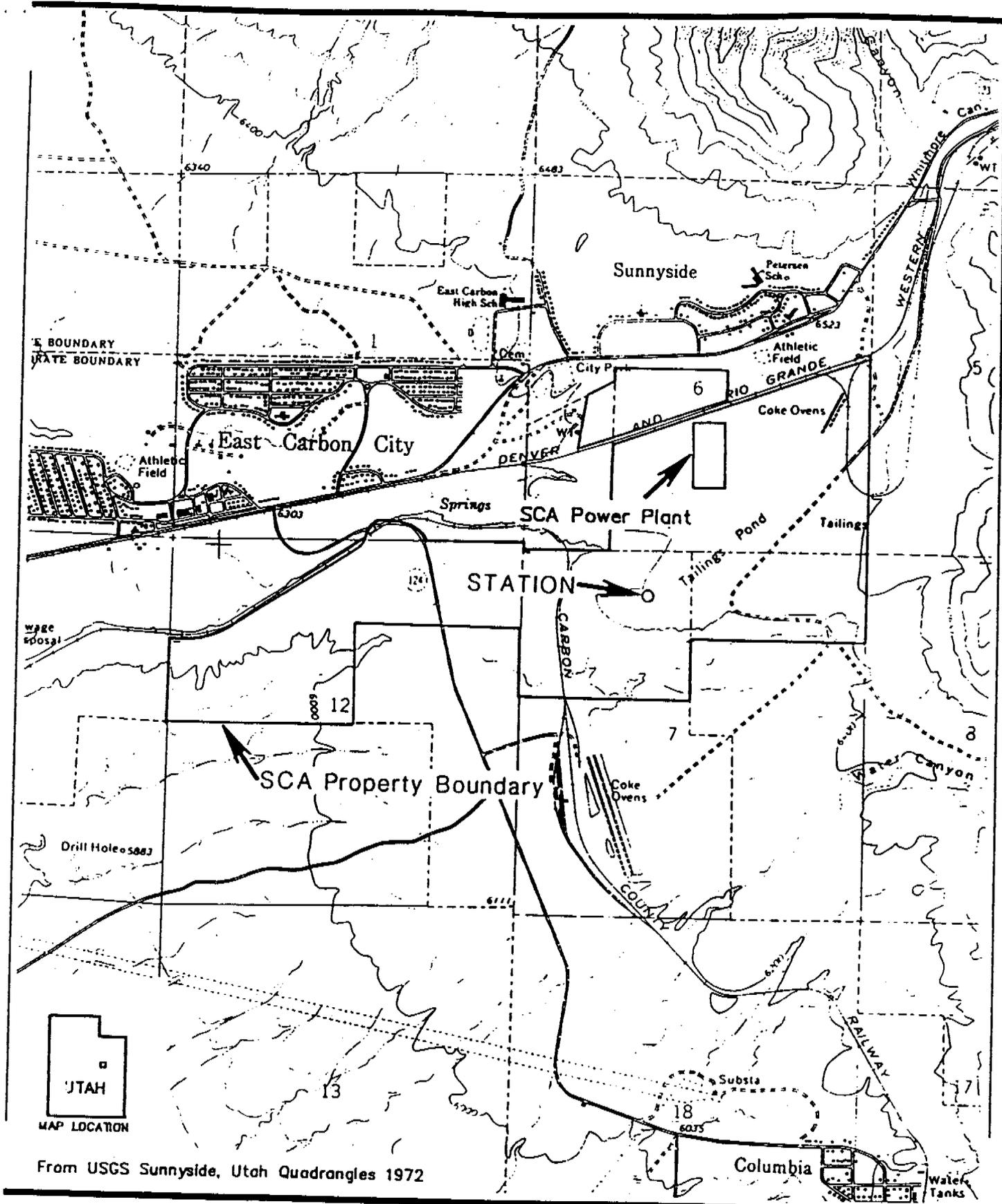
Science & Engineering Analysis Corporation (SECOR), Sunnyside Cogeneration Facility Meteorological Station, Performance Audit, May 3, 1995.

Huntingdon Engineering & Environmental, Inc., Report of Quarterly Ambient Air Monitoring Results at the Sunnyside Cogeneration Facility, Sunnyside, Utah, October-December 1994, March, 1995.

Huntingdon Engineering & Environmental, Inc., Report of Quarterly Ambient Air Monitoring Results at the Sunnyside Cogeneration Facility, Sunnyside, Utah, January-March 1995, June, 1995.

Maxim Technologies, Inc., Report of Quarterly Ambient Air Monitoring Results at the Sunnyside Cogeneration Power Plant, Sunnyside, Utah, April-June 1995, September, 1995.

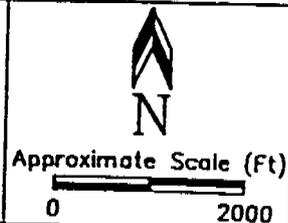
FIGURE



From USGS Sunnyside, Utah Quadrangles 1972

METEOROLOGICAL MONITORING STATION LOCATION MAP

MAXIM
TECHNOLOGIES INC



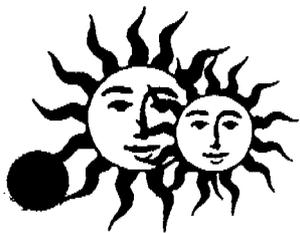
Sunnyside Cogeneration Associates
Power Plant
Sunnyside, Utah

Job: 5209500253

Figure 1

EXHIBIT D-4

FOURTH QUARTER AMBIENT AIR MONITORING



Sunnyside Cogeneration Associates

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

February 23, 1996

Mr. Rolf Doebbeling
Quality Assurance Coordinator
Utah Department of Environmental Quality
Air Quality Division
150 North 1950 West
Salt Lake City, Utah 84119

SUBJECT: Quarterly Monitoring Report
Monitoring Period: October, November, December 1995
Ambient Air Monitoring Program
Sunnyside Cogeneration Facility

Dear Mr. Doebbeling:

This quarterly report presents the meteorological data collected by Maxim Technologies, Inc., at the Sunnyside Cogeneration Facility, Sunnyside, Utah, for the October, November and December, 1995, monitoring period. This ambient-air monitoring report for the Sunnyside Cogeneration Facility is in compliance with the Utah Division of Air Quality (UDAQ) Modified Approval Order No. DAQE-0077-94.

The meteorological data has been compiled in DOE ASCII and spreadsheet formats, as required by the UDAQ. A computer disk containing the meteorological data is also included with this report.

Please contact me at (801) 888-4476, if you have any questions or comments concerning this report.

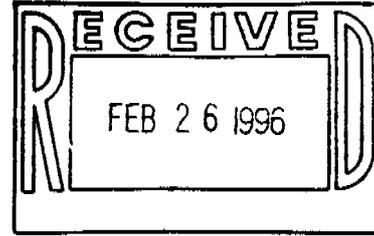
Sincerely,

Danny Mattingly
General Manager

DM/lls

Attachments

February 21, 1996



Sunnyside Cogeneration Associates
P.O. Box 10
East Carbon, Utah 84520

Attention: Danny Mattingly, General Manager

Subject: Quarterly Monitoring Report
Monitoring Period: October, November, December 1995
Ambient Air Monitoring Program
Sunnyside Cogeneration Associates Power Plant
Maxim Project No.: 5209500253

Dear Mr. Mattingly:

This quarterly monitoring report presents the meteorological data collected by Maxim Technologies, Inc. at the Sunnyside Cogeneration Associates Power Plant for the October, November, and December 1995 monitoring period. The ambient-air monitoring report is required as part of the Utah Division of Air Quality (UDAQ) Modified Approval Order No. DAQE-0077-94. The meteorological data have been compiled in DOS ASCII and spreadsheet formats, as required by UDAQ.

Please contact Rich Giraud of Maxim at (801) 972-4787 if you have any questions or comments concerning this report.

Sincerely,

Maxim Technologies, Inc.

A handwritten signature in cursive script that reads "Rich Gossard".

Ron Gossard
Staff Engineer

Enclosures:

Quarterly Ambient Air Monitoring Report
Computer disk with AIRS Datastring file

cc: Mr. Doug Burnham, Babcock & Wilcox
Mr. Bob Evans, NRG Energy Inc.
Mr. Richard Giraud, Maxim Technologies, Inc.



Prepared For:

SUNNYSIDE COGENERATION ASSOCIATES
POST OFFICE BOX 10
EAST CARBON, UTAH 84520

REPORT OF QUARTERLY AMBIENT
AIR MONITORING RESULTS
SUNNYSIDE COGENERATION
ASSOCIATES POWER PLANT
SUNNYSIDE, UTAH
OCTOBER - DECEMBER, 1995

Prepared By:

MAXIM TECHNOLOGIES, INC.
1127 WEST 2320 SOUTH, SUITE B
SALT LAKE CITY, UTAH 84119

Maxim Project No. 5209500253

February 1996



1.0 INTRODUCTION

This report presents the meteorological data collected during October, November, and December 1995 by Maxim Technologies, Inc. (Maxim) at the Sunnyside Cogeneration Associates (SCA) Power Plant, Sunnyside, Utah in accordance with the Utah Division of Air Quality (UDAQ) Modified Approval Order No. DAQE-0077-94. As per UDAQ Modified Approval Order requirements, a meteorological station was constructed on SCA property to monitor wind speed, wind direction, and air temperature. The station was installed on September 19 and 20, 1994. The location of the monitoring station is shown in Figure 1.

2.0 METEOROLOGICAL DATA

Meteorological data were continuously collected from October to December 1995 and continue to be collected to meet UDAQ minimum data recovery requirements. The following sections present the data-recovery procedures, the data values, and the data-recovery percentage for each measured parameter during this quarterly monitoring period.

2.1 DATA-RECOVERY PROCEDURES

Data from the meteorological station were retrieved in the field throughout the monitoring period using a lap-top computer. Meteorological data were then downloaded from the lap-top computer to the Maxim computer network for data reduction. The data were compiled in spreadsheets so that hourly and daily values for each month and the quarter could be reviewed and analyzed. The data were also compiled in DOS compatible ASCII format. The hourly meteorological values for each month are shown in Tables 1 through 12. The ASCII format data are presented in Appendix A. The ASCII format data are also included on a computer disk that is enclosed with this report.

2.2 DATA RESULTS

2.2.1 October Data Results

The October 1995 temperature data met the UDAQ data-screening criteria (Post-Construction Ambient Air Monitoring Plan, SCA, Huntingdon, 1994) throughout most of the month. Temperature data collected on October 18 at 1400 hours should be considered invalid because the hourly value changed greater than nine degrees from the previous hour. None of the temperature values exceeded the record high or low, and the hourly temperature values changed greater than 0.9 degrees in 12 consecutive hours.

The wind-direction and wind-speed data met the data-screening criteria for most of October. The wind-direction data on October 1 at 0400 to 0600 hours, October 5 and 6 at 2300 to 0200 hours, October 7 at 0300 to 0500 hours, October 8 and 9 at 2200 to 0500 hours, October 9 and 10 at 2200 to 0300 hours, October 10 at 0500 to 0700 hours, and October 10 and 11 at 2300

to 0400 hours should be considered invalid because the hourly values did not vary greater than 1.0 degree in three consecutive hours.

The temperature, wind-direction, wind-speed, and sigma theta values collected on October 15 and 16 at 1000 to 1100 hours, October 21 at 1100 hours through October 23 at 1200 hours, and October 26 at 1200 hours through October 31 at 1000 hours should be considered invalid because no parameter input values were recorded due to power loss in the Campbell CR10 data-logger. The temperature, wind-direction, wind-speed, and sigma theta values collected from October 16 at 1300 hours to October 18 at 1200 hours should be considered invalid because of annual sensor maintenance activities. Tables 1 through 4 show the meteorological data for October 1995.

2.2.2 November Data Results

The November 1995 temperature data met the data-screening criteria throughout most of the month. The wind-direction data should be considered invalid on November 17 at 0200 to 0400 hours, November 18 at 0000 to 0500 hours, November 19 at 0500 to 0700 hours, November 21 at 0000 to 0200 hours, and November 24 at 0100 to 0200 hours because the hourly values did not change greater than 1.0 degree in three consecutive hours. The wind-speed data met the data-screening criteria throughout most of the month.

The temperature, wind-speed, wind-direction, and sigma theta data should be considered invalid from November 4 at 1400 hours to November 8 at 1400 hours because no parameter input values were recorded due to power loss in the Campbell CR10 data-logger. The temperature, wind-speed, wind-direction, and sigma theta data should be also be considered invalid on November 21 at 1100 to 1300 hours because of internal audit activities. Tables 5 through 8 show the meteorological data for November 1995.

2.2.3 December Data Results

The December 1995 temperature data met the data-screening criteria throughout most of the month. The wind-direction data should be considered invalid on December 2 at 0000 to 0200 hours, December 22 at 2000 to 2200 hours, and December 23 at 0200 to 0400 hours because no wind direction change greater than 1.0 degree in three consecutive hours was observed. The temperature data collected on December 18 at 1400 should be considered invalid because the hourly value changed greater than nine degrees from the previous hour. The temperature, wind-direction, wind-speed, and sigma theta data should be considered invalid on December 18 at 1200 to 1500 hours because of independent audit activities. Tables 9 through 12 show the meteorological data for December 1995.

2.3 MONTHLY AND QUARTERLY PERCENT DATA-RECOVERY

The percent data recovery for each parameter in the month of October met the UDAQ requirement of 50 percent. The temperature and wind-direction data were 74 and 63 percent recovered, respectively. The wind-speed and sigma theta data were both 67 percent recovered.

The percent data recovery for each parameter in the month of November met the UDAQ requirement of 50 percent. The wind-direction data were 83 percent recovered. The wind-speed, temperature, and sigma theta data were all 86 percent recovered.

The percent data recovery for each parameter in the month of December met the UDAQ requirement of 50 percent. The wind-direction data were 98 percent recovered. The wind-speed, temperature, and sigma theta data were all 99 percent recovered. The monthly percent data recoveries for each parameter are shown in Table 13.

The quarterly percent data recoveries for each parameter met the UDAQ minimum requirement of 75 percent. The quarterly percent data-recovery for wind-direction and temperature were 81 and 86 percent recovered, respectively. The wind-speed and sigma theta data were both 84 percent recovered for the quarter. The quarterly percent data recoveries for each parameter are shown in Table 13.

3.0 QUALITY ASSURANCE AND QUALITY CONTROL

Quality assurance and quality control (QA/QC) procedures were followed to ensure that valid data was collected. QA/QC procedures for this monitoring period included an annual Met One Instruments maintenance service of the wind-speed and wind-direction sensors, one internal audit, an independent audit, and quality-control checks which included proper documentation of all field activities.

3.1 ANNUAL SERVICING OF SENSORS

The wind-speed and wind-direction sensors were removed from the meteorological station by Maxim personnel on October 16, 1995, and sent to Met One Instruments for annual servicing. Mr. Rolf Doebbeling with the UDAQ was notified prior to servicing the sensors. Met One recommends servicing the meteorological sensors annually. The temperature sensor was not serviced because of time in service, a new temperature sensor was installed January 26, 1995.

Met One tested the wind-speed and wind-direction sensor operation upon receipt. Both sensors were within manufactures and UDAQ specifications. The sensors were then serviced, calibrated and certified. The Met One sensor service and certification documentation are included in Appendix B.

The sensors were reinstalled by Maxim personnel on October 18, 1995. Following sensor installation, Maxim personnel verified sensor operation. The wind-direction sensor was checked for torque and wind-direction linearity. The wind-direction sensor was within UDAQ and manufacturer specifications. The wind-speed sensor was checked for torque. The wind-speed sensor was within UDAQ and manufacture specifications.

3.2 INTERNAL AUDIT OF METEOROLOGICAL INSTRUMENTS

A sensor and system internal audit was performed on-site by Maxim personnel on November 21, 1995 to ensure the sensors are within UDAQ and the manufacturer's acceptable limits. The temperature internal audit consisted of using a Met One 045B calibrator to test the sensor output and a water-bath to test the sensitivity of the temperature sensor. The 045B calibrator generated known temperature values and data-logger readings were recorded and compared to the known calibrator values. The 045B calibrator results for the audit indicated that the comparison between the calibrator and data-logger readings were within the recommended UDAQ tolerance level. The water-bath measurement consisted of inserting the sensor in the water-bath, allowing for temperature stabilization, followed by recording a data-logger reading and a mercury thermometer reading. The data-logger and mercury thermometer readings were compared. The water-bath measurements indicate the sensor is within the recommended UDAQ tolerance level.

The wind-speed internal audit consisted of using a Met One 045B calibrator to test the sensor output and a Met One 049-1 synchronous motor to test the sensitivity of the sensor. The 045B calibrator generated known wind-speed values and data-logger readings were taken and compared to the known values. The synchronous motor was connected to the anemometer shaft, which rotated the shaft at a constant rate. The constant rate was compared to the data-logger reading. The wind-speed audit results indicate the measurements are within UDAQ acceptable limits.

The wind-direction internal audit consisted of using a Met One 045B calibrator to test the sensor output and a Met One 040 calibrator to test the sensor linearity. The 045B calibrator generated known wind-direction values; data-logger readings were taken and compared to the known values. The 040 calibrator was connected to the sensor shaft and set to known directions and compared to data-logger readings. The wind-direction audit results indicate the measurements are within the UDAQ acceptable limit. Documentation concerning the internal sensor and system audit are included in Appendix C.

3.3 INDEPENDENT AUDIT RESULTS

An annual performance audit was performed on December 18, 1995 by TRC North American Weather Consultants. The performance audit entitled "Performance Audit Report, Meteorological Monitoring Instruments, Sunnyside Cogeneration Facility Meteorological Station, December 1995" was submitted to the UDAQ on January 12, 1996. The audit found that the wind-speed and temperature sensors were operating normally and sensor measurements met the manufacturer's tolerances and EPA-approved quality assurance guidelines for meteorological measurements. The wind-direction sensor linearity and shaft rotational torque were within

tolerance limits; however, a sensor orientation error of 6.8 degrees (high) from True North was discovered. The 6.8 degree error is outside the +/- 5 degree UDAQ tolerance limit. The independent performance audit is included as Appendix D.

3.4 QUALITY CONTROL CHECKS

Documentation of all field activities was recorded in a hard-bound log book. SCA personnel inspected the station for sensor, wiring, solar panel, and data-logger operation on a weekly basis. Maxim personnel also performed bi-weekly preventative maintenance checks on the station. The field log book documentation is included in Appendix D.

4.0 CONCLUSIONS

The following conclusions were drawn from the October to November 1995 ambient air monitoring period:

- ◆ The meteorological data collected for the monitoring period meets the UDAQ monthly percent data-recovery requirements.
- ◆ The meteorological data collected for the monitoring period meets the UDAQ quarterly percent data-recovery requirements.
- ◆ The independent performance audit indicates a wind direction sensor orientation error of 6.8 degrees (high) from True North. The 6.8 degree error is outside the +/- 5 degree UDAQ tolerance limit.

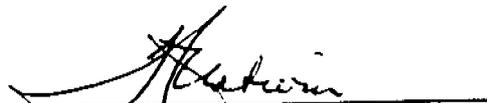
Please contact Rich Giraud if there are questions or comments concerning this monitoring report.

Respectively submitted,

Maxim Technologies, Inc.



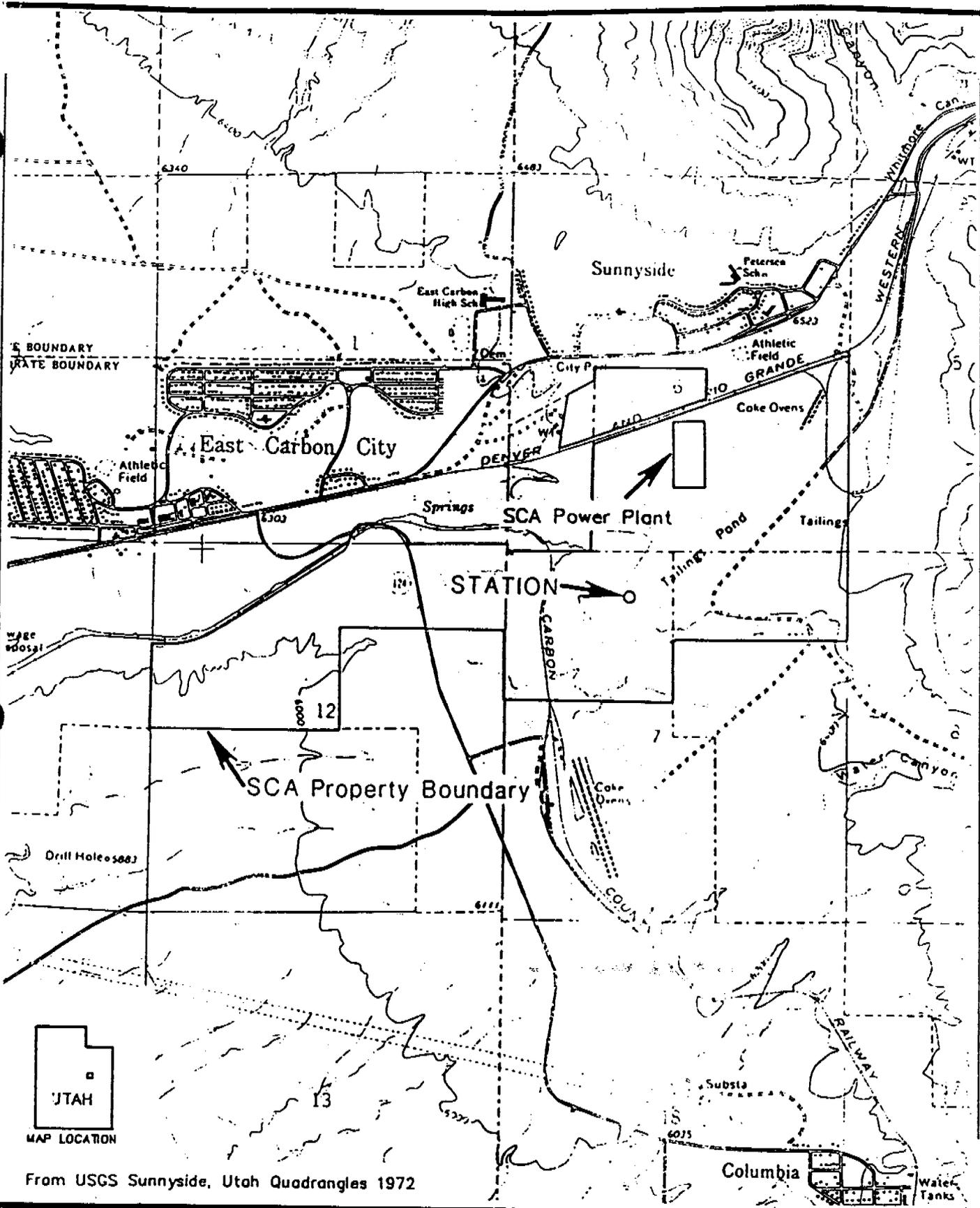
Ron Gossard
Staff Engineer


Terrence Chatwin
Senior Project Manager

5.0 REFERENCES

- Met One Instruments, Model 045 Calibrator, Operation Manual, 1991.
- Huntingdon Engineering & Environmental, Inc., Post-Construction Ambient Air Monitoring Plan, Sunnyside Cogeneration Associates, Sunnyside Cogeneration Facility, Sunnyside, Utah, July 1994.
- Science & Engineering Analysis Corporation (SECOR), Sunnyside Cogeneration Facility Meteorological Station, Performance Audit, November 1, 1994.
- Science & Engineering Analysis Corporation (SECOR), Sunnyside Cogeneration Facility Meteorological Station, Performance Audit, May 3, 1995.
- Huntingdon Engineering & Environmental, Inc., Report of Quarterly Ambient Air Monitoring Results at the Sunnyside Cogeneration Facility, Sunnyside, Utah, October-December 1994, March 1995.
- Huntingdon Engineering & Environmental, Inc., Report of Quarterly Ambient Air Monitoring Results at the Sunnyside Cogeneration Facility, Sunnyside, Utah, January-March 1995, June 1995.
- Maxim Technologies, Inc., Report of Quarterly Ambient Air Monitoring Results at the Sunnyside Cogeneration Power Plant, Sunnyside, Utah, April-June 1995, September 1995.
- Maxim Technologies, Inc., Report of Quarterly Ambient Air Monitoring Results, Sunnyside Cogeneration Power Plant, Sunnyside, Utah, July-September, 1995, December 1995.
- TRC North American Weather Consultants, Performance Audit Report, Meteorological Monitoring Instruments, Sunnyside Cogeneration Facility Meteorological Station, December, 1995, January 1996.

FIGURE



From USGS Sunnyside, Utah Quadrangles 1972

METEOROLOGICAL MONITORING STATION LOCATION MAP

	<p>Approximate Scale (Ft) 0 2000</p>	<p>Sunnyside Cogeneration Associates Power Plant Sunnyside, Utah</p> <table border="1"> <tr> <td data-bbox="1013 2005 1260 2047">Job: 5209500253</td> <td data-bbox="1260 2005 1492 2047">Figure 1</td> </tr> </table>	Job: 5209500253	Figure 1
Job: 5209500253	Figure 1			

APPENDIX E

REVEGETATION AND RECLAMATION DATA

EXHIBIT E-1

PHOTOGRAPHS OF THE REVEGETATION AREAS

Exhibit 1. Reseeding and Revegetation of Sunnyside Cogeneration Facility

1.A. East Bank of the East Slurry Cell, North View of Site (The steam is from the cooling tower of power plant.)



Exhibit 1. Reseeding and Revegetation of Sunnyside Cogeneration Facility

1.B. East Bank of the East Slurry Cell, Southwest View of Site (Interim reclamation of bare areas for erosion control.)



Exhibit 1. Reseeding and Revegetation of Sunnyside Cogeneration Facility

1.C. South Embankment of the East Slurry Cell



Exhibit 1. Reseeding and Revegetation of Sunnyside Cogeneration Facility
1.D. South Embankment of the East Slurry Cell (Interim reclamation for erosion control.)



Exhibit 1. Reseeding and Revegetation of Sunnyside Cogeneration Facility

1. E. Final Reclamation of the Old Coarse Refuse Road (Note erosion mats in photos on left.)



Exhibit 1. Reseeding and Revegetation of Sunnyside Cogeneration Facility

1. F. Third and Fourth Lifts of the Coarse Refuse Pile-250 ft length down slope (Note the inerim status of the seeded areas.)



Exhibit 1. Reseeding and Revegetation of Sunnyside Cogeneration Facility

1. G. Excess Spoils Disposal Area, Outer Slopes



EXHIBIT E-2

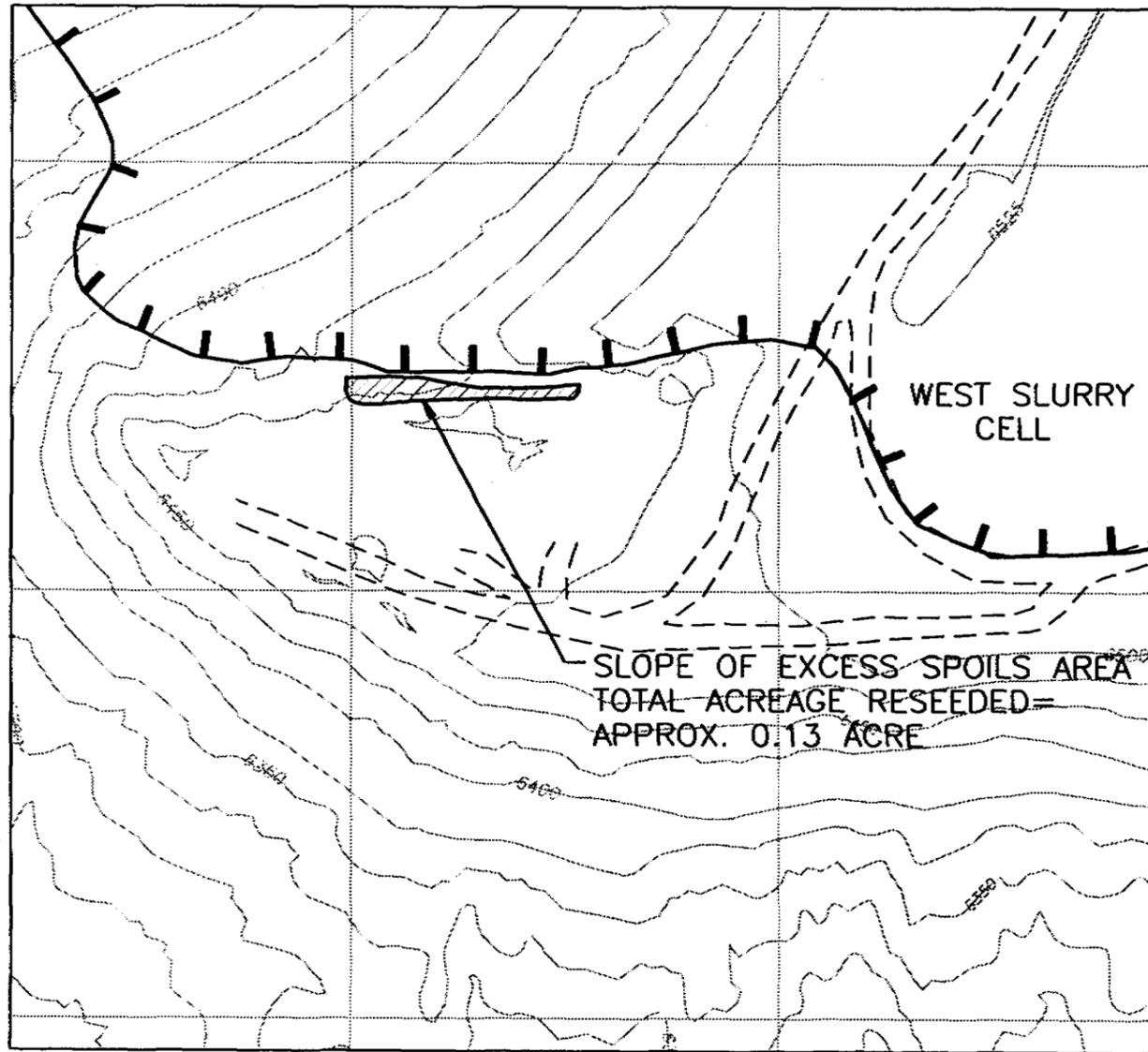
SEED MIXTURES USED IN THE REVEGETATION

INTERIM SEED SCHEDULE

SPECIES	SEEDS/POUND	BROADCAST RATE #PLS/Acre
Agropyron trichophorum pubescent wheatgrass	<u>90,000</u>	<u>3.6</u>
Agropyron trachycalum slender wheatgrass	<u>135,000</u>	<u>4.8</u>
Agropyron dasystachum thickspike wheatgrass	<u>186,000</u>	<u>1.8</u>
Elymus cinereus great basin wildrye	<u>130,000</u>	<u>3.77</u>
Saniguisorba minor small burnett	<u>55,000</u>	<u>3.0</u>
Achillea lanulosa western yarrow	<u>4,123,635</u>	<u>0.1</u>
Medicago Sativa alfalfa	<u>16,000</u>	<u>2.0</u>
TOTAL #PLS		<u>19.07</u>

EXHIBIT E-3

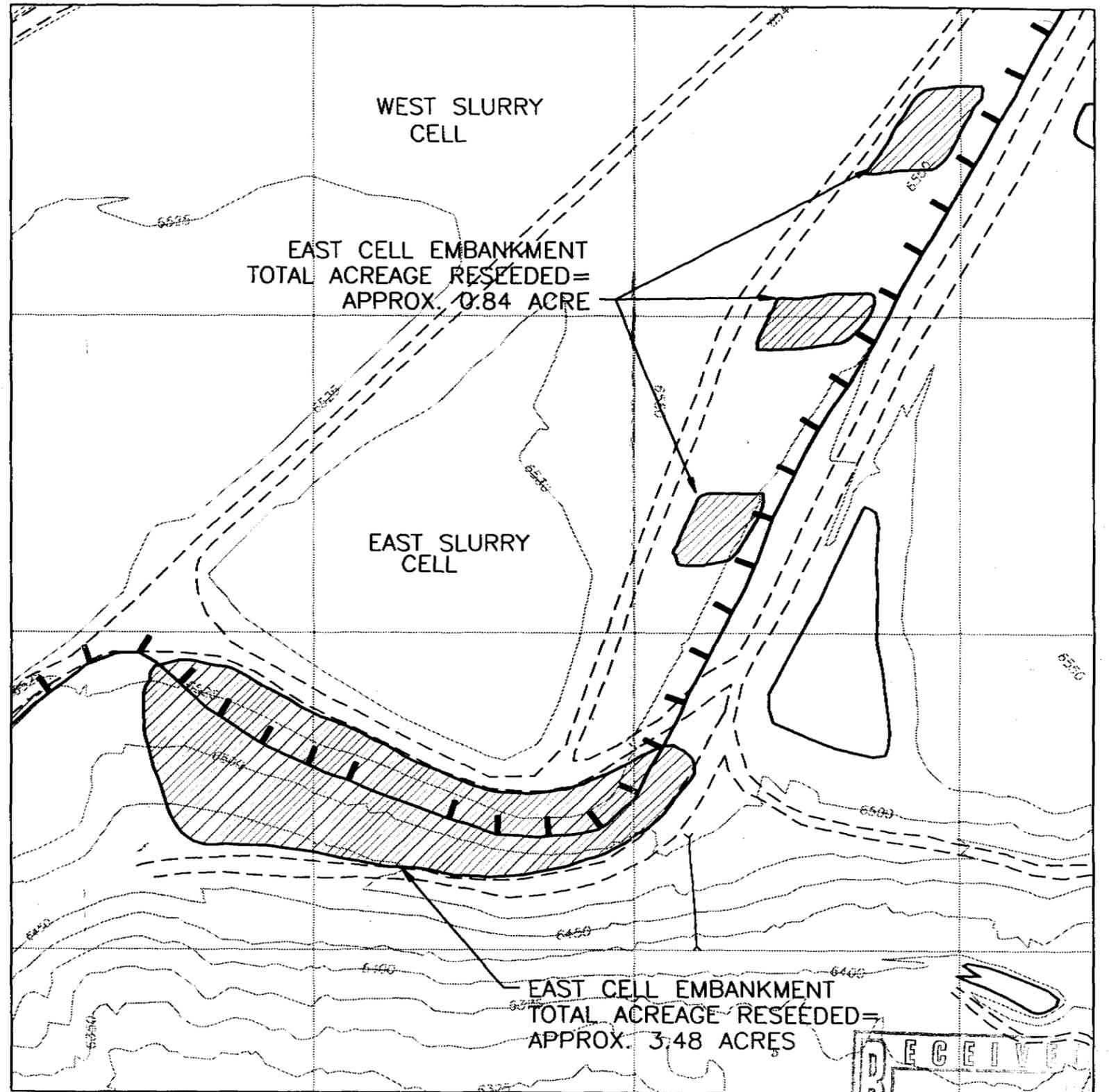
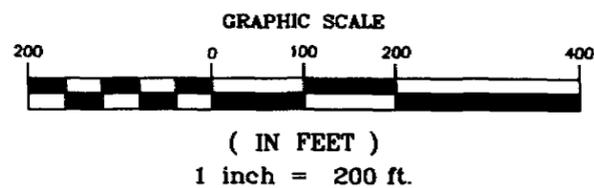
DRAWING OF THE INTERIM RESEEDING AREAS



SLOPE OF EXCESS SPOILS AREA
 TOTAL ACREAGE RESEDED=
 APPROX. 0.13 ACRE

VIEW A - INTERIM RESEEDING OF EXCESS SPOILS AREAS

-  FINAL RESEEDING
-  INTERIM RESEEDING



WEST SLURRY CELL

EAST CELL EMBANKMENT
 TOTAL ACREAGE RESEDED=
 APPROX. 0.84 ACRE

EAST SLURRY CELL

EAST CELL EMBANKMENT
 TOTAL ACREAGE RESEDED=
 APPROX. 3.48 ACRES

VIEW B - INTERIM RESEEDING OF EAST CELL EMBANKMENT

RECEIVED
 APR 2 1996
 DIV OF OIL, GAS & MINING



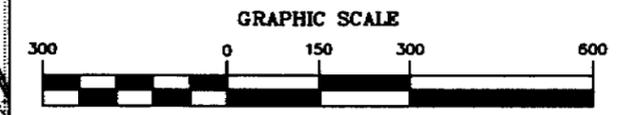
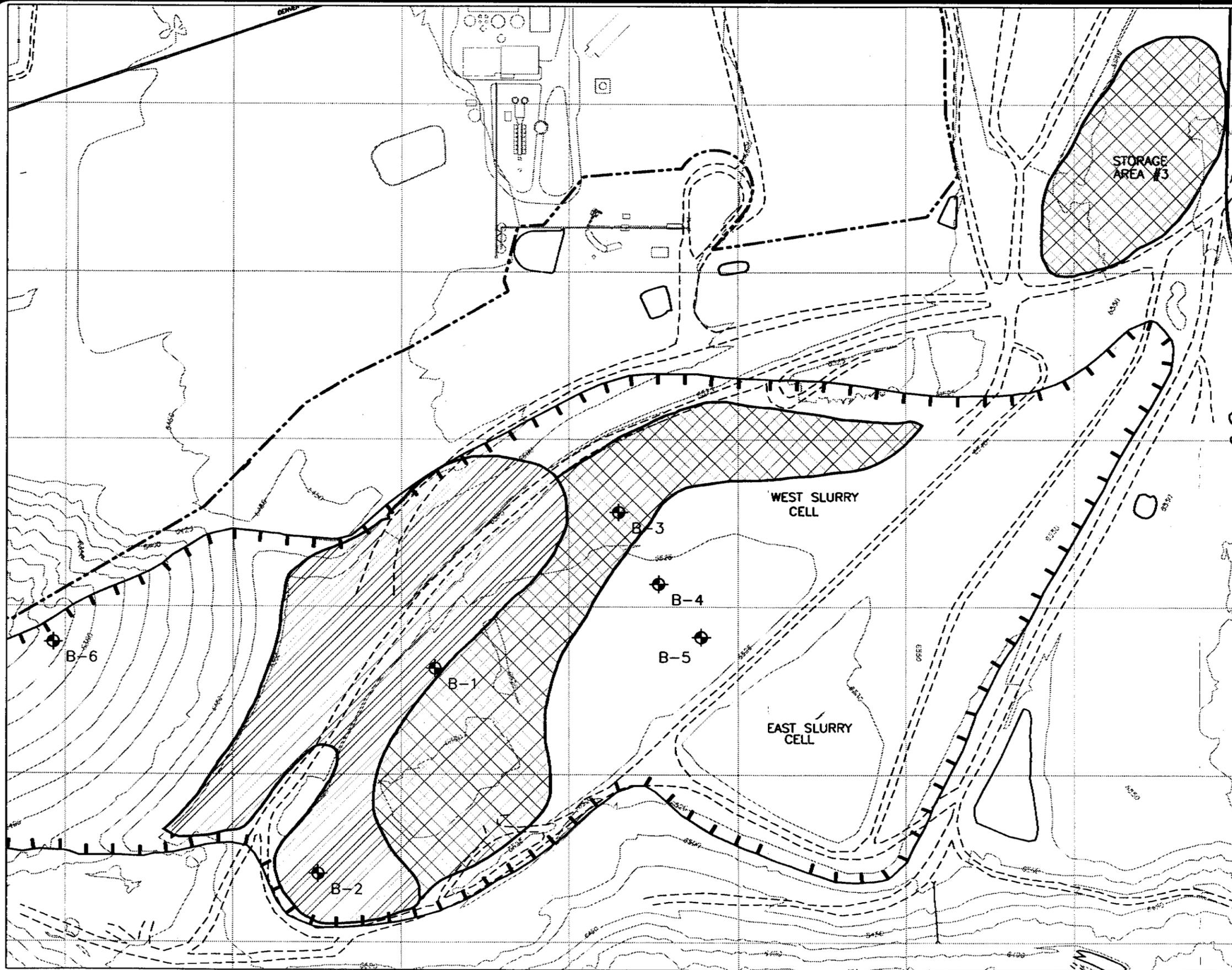
ECKHOFF WATSON AND PREATOR ENGINEERING
 ENGINEERS PLANNERS SURVEYORS SALT LAKE CITY

SUNNYSIDE COGENERATION ASSOCIATES
 SUNNYSIDE COGENERATION FACILITY, CARBON COUNTY, UTAH
 AREAS RESEDED DURING 1995

APPENDIX NO.
 E-3

EXHIBIT E-4

MINE SEQUENCE MAP FOR 1995



(IN FEET)
 1 inch = 300ft.

RECEIVED
 APR - 2 1996
 DEPT. OF OIL, GAS & MINING

MINE SEQUENCE LEGEND

-  FINES
-  COARSE REFUSE
-  EXPLORATORY BORE HOLES

EXHIBIT E-5

REPORT OF THE SACCO FLATS
RECLAMATION TEST PLOTS



MT NEBO SCIENTIFIC, INC.
research & consulting

November 9, 1995

Russ Miller
Sunnyside Operations Associates L.P.
P.O. Box 159
Sunnyside, Utah 84539

Dear Russ:

Enclosed please find the report concerning the Sacco Flats Reclamation Test Plots. The report was prepared by performing the following steps: 1) an on-site visit to the test plots and discussions about them with you, 2) reviewing as-built designs of the plots, 3) reviewing previous vegetation data from monitoring the plots, 4) reviewing comments made by the Division of Oil, Gas & Mining (DOG M), and 5) outlining options that I felt were appropriate for the future of the plots.

As you will notice the report was written in a format for information to be used by Sunnyside Operations, not in a format for a direct insertion for the DOGM comments in the Technical Analysis (TA). First, I feel your company should review the options outlined in the report. When the decision is made on which option you wish to proceed, comments from the report can then be used in your response to the TA.

Please let me know if you have questions or need me for additional consultation for the test plots or TA.

Sincerely,

Patrick D. Collins, Ph.D.
Biologist/Environmental Consultant

**PRELIMINARY EVALUATION
OF THE SACCO FLATS
RECLAMATION TEST PLOTS
AT THE SUNNYSIDE COGENERATION PLANT**

1995



Prepared by

MT. NEBO SCIENTIFIC, INC.
330 East 400 South, Suite 6
P.O. Box 337
Springville, Utah 84663
(801) 489-6937

Patrick D. Collins, Ph.D.

for

SUNNYSIDE OPERATIONS ASSOCIATES L.P.
P.O. Box 159
Sunnyside, Utah 84539

November 1995

**PRELIMINARY EVALUATION
OF THE SACCO FLATS
RECLAMATION TEST PLOTS
AT THE SUNNYSIDE COGENERATION PLANT**

1995

INTRODUCTION

The Sacco Flats Reclamation Test Plots were designed by the Sunnyside Coal Mine to determine how 81 acres of coarse refuse material could be reclaimed in the future. The test plots were constructed in 1985. The plots compared different depths of borrow material and topsoil cover with no material for cover on coarse refuse. Lime was also applied to half of the plots.

More recently, the operators of the Sunnyside Cogeneration Plant have been concerned about revegetation of the same area and whether or not the test plots can offer meaningful data for their reclamation plan. A state biologist from Division of Oil, Gas & Mining (DOG M) has examined the data of the plots that have been submitted and responded in a technical analysis (TA).

In October 1995 Patrick Collins (*Mt. Nebo Scientific, Inc.*) and Russ Miller (*Sunnyside Operations Associates L.P.*) revisited the test plots to initiate an investigation of the options and appropriateness of the test plots for current operations and reclamation at the Sunnyside plant. The objective of this report is to explore these options.

PREVIOUS TEST PLOT DATA

The most recent data recorded at the Sacco Flats Test Plots was from the 1992 monitoring report. Quantitative and qualitative data were recorded at that time as routine annual monitoring. The study was done by *Mt. Nebo Scientific Inc.* with the objective to assess the current condition of the vegetation on the test plots. Results of this study were probably reported to DOGM by Sunnyside Coal Mine in their 1992 annual report.

The data from the 1992 study suggested that as the borrow material cover depths increased, vegetation cover and woody species density also increased. The 12" cover of topsoil also had favorable results. Monitoring results indicated that much of the living cover was from annual, exotic or "weedy" plant species. Perennial forbs and shrub species were not separated from the cover results.

CURRENT OPERATIONS AND RECLAMATION

The Sacco Flats Test Plots were evidently initiated to explore revegetation potential on the coarse refuse material from previous coal cleaning activities. In the current operations the refuse is being used as a fuel source for the power plant. Ultimately most of the coarse refuse material should be used for these operations. In this case results from the test plot data may be less meaningful. The data results could, however, be used to suggest revegetation potential of: 1) the borrow material (which could be used in the future) at different depths, 2) 12" of topsoil over refuse, and 3) lime treatments on each. In addition, perhaps the material remaining on the ground after the useable refuse has been removed, will be similar to the chemical and physical nature of the existing refuse. If toxicity problems were found the borrow material would have been adequately tested for revegetation potential (this may also be done by chemical testing). In that case the data from the plots may still be valuable.

RECLAMATION BOND

Although the cogeneration plant may utilize most of the refuse as fuel, the plant probably had to bond for "worst case scenario". This means if the plant were to default, reclamation would be the responsibility the State of Utah. Therefore, the reclamation bond amount may have been set with the assumption that the property could be reclaimed in its current condition – with the coarse refuse in place. In this case monitoring results of the Sacco Flat plots would continue to be relevant because the amount of borrow material or topsoil would influence the current bond amount.

FUTURE STUDY

As indicated by the previous statements, validity of the Sacco Flat Test Plots may be dependent on several factors. Reclamation plans of the cogeneration plant have somewhat changed from those of the coal mine. Yet bond amounts may be based on reclaiming the waste material in the present location, similar to those plans outlined by the coal mine. Because the mine did not show it could be reclaimed on less borrow cover, the bond is probably based on covering the material with at least 48" of substitute topsoil. Therefore, showing reclaimability of an amount less than 48" could save the current operator substantially by decreasing liability and consequently, the bond amount.

Therefore, the current operator has two options for the future of the test plots. First, the test plots could be abandoned and the operator accepts the current reclamation bond and the idea that the coarse refuse will be used in its entirety. In this case the operator could also assume that the material remaining after the refuse is removed will be nontoxic, nonacid-forming and otherwise acceptable for final growth media.

The second scenario is that the operator may want to explore further monitoring

of the test plot to decrease the current reclamation bond or to use for data to enhance final revegetation success of the cogeneration power plant. In this case the first step would be to further scrutinize existing data from the test plots. For example, what would be the results if one subtracted the exotic plant species from the data set? A cursory review of the 1992 data shows that if these species were removed, and only woody species, perennial forbs and grasses are totalled, the percent living cover would be 33.55% (on 48" depth of borrow material). This living cover is very close to the standard set by the reclamation reference areas. Perhaps results from less borrow material may also be favorable.

If standards were not met by additional data analyses, the next step would be to sample the plots in 1996. The last recorded data set was from 1992. At that time the report suggested that the previous seven years were drought years. In 1992 a significant number of sagebrush species germinated. These seedlings did not significantly contribute to the living cover at that time, but by 1996 they probably would. Again, results may suggest borrow material less than 48" may be used. Additionally, since 1992 the test plot has been fenced to preclude some herbivores including rabbits. This could greatly influence success of some species.

If standards are still not met when compared to the reference area, reseeding the test plot may be appropriate. The most expensive part when constructing these test plots was undoubtedly the earthmoving and "layering" the different depths of borrow material and topsoil. Theoretically, these layers would remain unchanged over time (or at least be consistent with the changes in other waste material). Therefore, reseeding the plot and subsequent monitoring may be a viable and economically feasible option that may ultimately decrease bond amount and/or provide important data for reclamation of the power plant.

APPENDIX F

CERTIFIED MAINTENANCE INSPECTION REPORTS
FOR IMPOUNDMENTS

SUNNYSIDE COGENERATION ASSOCIATES

ACT/007/035

QUARTERLY INSPECTION OF IMPOUNDMENTS AND REFUSE PILE

Quarter First (Inspected Mar. 30)

Year 1995

Weather Condition Partly cloudy

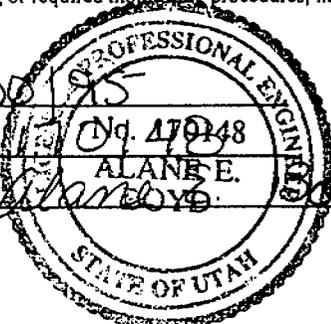
IMPOUNDMENT	INSTABILITY (YES/NO)	STRUCTURAL WEAKNESS (YES/NO)	HAZARDOUS CONDITIONS (YES/NO)	WATER DEPTH (FEET)	WATER ELEVATION (FEET)	STORAGE CAPACITY (ACRE-FEET)	*OTHER	COMMENTS
Clear Water Pond (004)	No	No	No	0'	0'	4.9	---	In Active
Railcut Sediment Pond (007)	No	No	No	Dry	0'	4.8	---	None
Old Coarse Refuse Road Sediment Pond (008)	No	No	No	Dry	0'	0.9	---	None
Pasture Sediment Pond (009)	No	No	No	Dry	0'	1.0	---	None
New Coarse Refuse Toe Sediment Pond (012)	No	No	No	---	6176.8	1.6	No Discharge	None
Borrow Area Pond (016)	No	No	No	Dry	---	8.3	---	None
Slurry Pond #1	No	No	No	---	NA	16.4	---	In Active
Slurry Pond #2	No	No	No	---	NA	15.3	---	In Active
East Slurry Cell	No	No	No	---	NA	NA	---	In Active
West Slurry Cell	No	No	No	---	NA	NA	---	Refuse Removal
Coal Runoff Sediment Pond (014)	No	No	No	Dry	0'	1.5	---	Has Been Cleaned Out
REFUSE PILE	INSTABILITY (YES/NO)	STRUCTURAL WEAKNESS (YES/NO)	HAZARDOUS CONDITIONS (YES/NO)	*OTHER			COMMENTS	
Coarse Refuse Pile	No	No	No	Full to capacity; no smoke visible.			In Active	
Excess Spoil Area	No	No	No	---			Drainage Ditch In Place	

*Other = Any existing or required monitoring procedures, instrumentation, or reports of the structure affecting stability.

Date 3/30/95

State of Utah No. 17948

Professional Engineer Alane E. [Signature]



C:\WP\W\SHERRY\COMAS\IMPOUND1.95

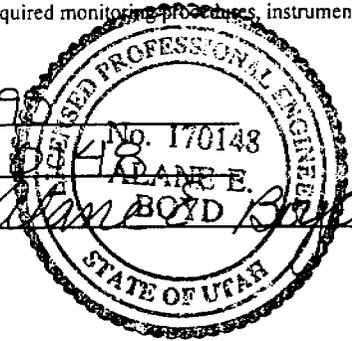
SUNNYSIDE COGENERATION ASSOCIATES
ACT/007/035
QUARTERLY INSPECTION OF IMPOUNDMENTS AND REFUSE PILE

Quarter Second (Inspected June 29)
 Year 1995
 Weather Condition Cloudy

IMPOUNDMENT	INSTABILITY (YES/NO)	STRUCTURAL WEAKNESS (YES/NO)	HAZARDOUS CONDITIONS (YES/NO)	WATER DEPTH (FEET)	WATER ELEVATION (FEET)	STORAGE CAPACITY (ACRE-FEET)	*OTHER	COMMENTS
Clear Water Pond (004)	No	No	No	Less 1'	---	4.9	---	In Active
Railcut Sediment Pond (007)	No	No	No	Dry	---	4.8	---	None
Old Coarse Refuse Road Sediment Pond (008)	No	No	No	Less 1'	---	0.9	---	None
Pasture Sediment Pond (009)	No	No	No	1'	6485.0	1.0	---	No Discharge
New Coarse Refuse Toe Sediment Pond (012)	No	No	No	1'	6177.0	1.6	---	No Discharge
Borrow Area Pond (016)	No	No	No	Dry	---	8.3	---	None
Slurry Pond #1	No	No	No	Dry	---	16.4	---	In Active
Slurry Pond #2	No	No	No	1'	NA	15.3	---	In Active
East Slurry Cell	No	No	No	---	NA	NA	---	In Active
West Slurry Cell	No	No	No	---	NA	NA	---	Refuse Removal
Coal Runoff Sediment Pond (014)	No	No	No	1'	6474.0	1.5	---	No Discharge
REFUSE PILE	INSTABILITY (YES/NO)	STRUCTURAL WEAKNESS (YES/NO)	HAZARDOUS CONDITIONS (YES/NO)	*OTHER			COMMENTS	
Coarse Refuse Pile	No	No	No	No smoke visible.			Refuse Removal - In Active.	
Excess Spoil Area	No	No	No	---			Samples taken on material placed.	

*Other = Any existing or required monitoring procedures, instrumentation, or reports of the structure affecting stability.

Date 6/29/95
 State of Utah No. 170148
 Professional Engineer James E. Boyd



SUNNYSIDE COGENERATION ASSOCIATES

ACT/007/035

QUARTERLY INSPECTION OF IMPOUNDMENTS AND REFUSE PILE

Quarter Third (Inspected Sept 28)

Year 1995

Weather Condition Partly Cloudy

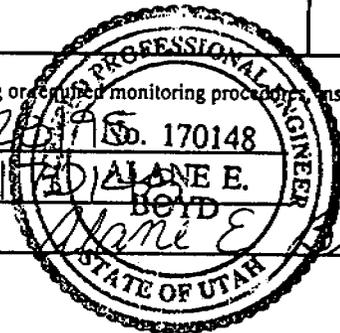
IMPOUNDMENT	INSTABILITY (YES/NO)	STRUCTURAL WEAKNESS (YES/NO)	HAZARDOUS CONDITIONS (YES/NO)	WATER DEPTH (FEET)	WATER ELEVATION (FEET)	STORAGE CAPACITY (ACRE-FEET)	*OTHER	COMMENTS
Clear Water Pond (004)	No	No	No	< 1'	---	4.9	---	In Active
Railcut Sediment Pond (007)	No	No	No	Dry	---	4.8	---	None
Old Coarse Refuse Road Sediment Pond (008)	No	No	No	< 1'	---	0.9	---	None
Pasture Sediment Pond (009)	No	No	No	1'±	6485.0	1.0	---	No Discharge
New Coarse Refuse Toe Sediment Pond (012)	No	No	No	1'±	6177.0	1.6	---	No Discharge
Borrow Area Pond (016)	No	No	No	Dry	---	8.3	---	Dry
Slurry Pond #1	No	No	No	NA	Dry	16.4	---	In Active
Slurry Pond #2	No	No	No	1'±	NA	15.3	Received Surface Drainage Only	In Active
East Slurry Cell	No	No	No	1'±	NA	NA	Received Surface Drainage Only	In Active
West Slurry Cell	No	No	No	None	---	NA	---	Refuse Removal
Coal Runoff Sediment Pond (014)	No	No	No	1'±	6474.0	1.5	---	No Discharge
REFUSE PILE	INSTABILITY (YES/NO)	STRUCTURAL WEAKNESS (YES/NO)	HAZARDOUS CONDITIONS (YES/NO)	*OTHER			COMMENTS	
Coarse Refuse Pile	No	No	No	Smoker was extinguished.			Waste Coal Removal	
Excess Spoil Area	No	No	No	---			Has not received any additional material since last inspection.	

*Other = Any existing or proposed monitoring procedures, instrumentation, or reports of the structure affecting stability.

Date 9/28/95 No. 170148

State of Utah No. 1170148

Professional Engineer Alane E. Boyd



SUNNYSIDE COGENERATION ASSOCIATES
ACT/007/035
QUARTERLY INSPECTION OF IMPOUNDMENTS AND REFUSE PILE

Quarter Fourth (Inspected Dec 22)
 Year 1995
 Weather Condition Partly Cloudy

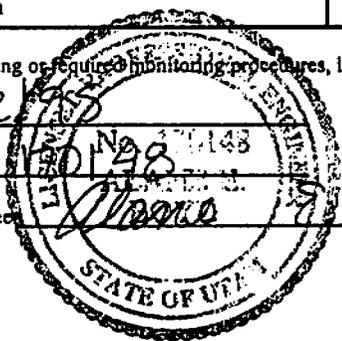
IMPOUNDMENT	INSTABILITY (YES/NO)	STRUCTURAL WEAKNESS (YES/NO)	HAZARDOUS CONDITIONS (YES/NO)	WATER DEPTH (FEET)	WATER ELEVATION (FEET)	STORAGE CAPACITY (ACRE-FEET)	*OTHER	COMMENTS
Clear Water Pond (004)	No	No	No	< 1'	--	4.9	--	Inactive
Railcut Sediment Pond (007)	No	No	No	Dry	--	4.8	Inlet has been cleaned	None
Old Coarse Refuse Road Sediment Pond (008)	No	No	No	< 1'	--	0.9	--	No Discharge
Pasture Sediment Pond (009)	No	No	No	< 1'	--	1.0	--	No Discharge
New Coarse Refuse Toe Sediment Pond (012)	No	No	No	1 1/2	6177.0	1.6	--	No Discharge
Borrow Area Pond (016)	No	No	No	Dry	--	8.3	--	No Change
Slurry Pond #1	No	No	No	NA	Dry	16.4	--	Inactive
Slurry Pond #2	No	No	No	< 1'	--	15.3	Received Surface Drainage Only	Inactive
East Slurry Cell	No	No	No	1 1/2	--	NA	Received Surface Drainage Only	Inactive
West Slurry Cell	No	No	No	Dry	--	NA	--	Refuse Removal
Coal Runoff Sediment Pond (014)	No	No	No	1 1/2	--	1.5	--	No Discharge
REFUSE PILE	INSTABILITY (YES/NO)	STRUCTURAL WEAKNESS (YES/NO)	HAZARDOUS CONDITIONS (YES/NO)	*OTHER			COMMENTS	
Coarse Refuse Pile	No	No	No	--			Waste Coal Removal	
Excess Spoil Area	No	No	No	--			Has not received any Excess Spoil material.	

*Other = Any existing or required monitoring procedures, instrumentation, or reports of the structure affecting stability.

Date 12/22/95

State of Utah No. 190148

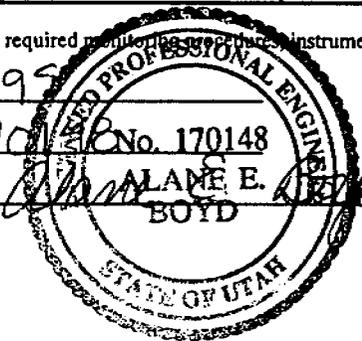
Professional Engineer Boyer



SUNNYSIDE COGENERATION ASSOCIATES ACT/007/035 ANNUAL INSPECTION OF IMPOUNDMENTS AND REFUSE PILE							Quarter <u>Annual (inspected Dec 22)</u> Year <u>1995</u> Weather Condition <u>Partly Cloudy</u>	
IMPOUNDMENT	INSTABILITY (YES/NO)	STRUCTURAL WEAKNESS (YES/NO)	HAZARDOUS CONDITIONS (YES/NO)	WATER DEPTH (FEET)	WATER ELEVATION (FEET)	STORAGE CAPACITY (ACRE-FEET)	*OTHER	COMMENTS
Clear Water Pond (004)	No	No	No	< 1'	---	4.9	---	Inactive
Railcut Sediment Pond (007)	No	No	No	Dry	---	4.8	Inlet has been cleaned	None
Old Coarse Refuse Road Sediment Pond (008)	No	No	No	< 1'	---	0.9	---	No Discharge
Pasture Sediment Pond (009)	No	No	No	< 1'	---	1.0	---	No Discharge
New Coarse Refuse Toe Sediment Pond (012)	No	No	No	1'±	6177.0	1.6	---	No Discharge
Borrow Area Pond (016)	No	No	No	Dry	---	8.3	---	No Change
Slurry Pond #1	No	No	No	NA	Dry	16.4	---	Inactive
Slurry Pond #2	No	No	No	< 1'	---	15.3	Received Surface Drainage Only	Inactive
East Slurry Cell	No	No	No	1'±	---	NA	Received Surface Drainage Only	Inactive
West Slurry Cell	No	No	No	Dry	---	NA	---	Refuse Removal
Coal Runoff Sediment Pond (014)	No	No	No	1'±	---	1.5	---	No Discharge
REFUSE PILE	INSTABILITY (YES/NO)	STRUCTURAL WEAKNESS (YES/NO)	HAZARDOUS CONDITIONS (YES/NO)	*OTHER			COMMENTS	
Coarse Refuse Pile	No	No	No	---			Waste Coal Removal	
Excess Spoil Area	No	No	No	---			Received Excess Spoil material during 2nd quarter.	

*Other = Any existing or required monitoring, instrumentation, or reports of the structure affecting stability.

Date 12/22/95
 State of Utah No. 170148
 Professional Engineer ALAN E. BOYD



APPENDIX G

MONTHLY QUANTITIES MINED AND
ANALYTICAL RESULTS OF REFUSE MATERIAL

Coal Analysis Tables
Sunnyside Cogeneration Associates
January through December 1995

Date	Moisture	Ash	Sulfur	B/LB	HVF
January	8.43	54.27	0.81	5,006	13,483
February	7.99	54.96	0.89	4,823	13,091
March	7.72	55.92	0.92	4,777	13,088
April	8.3	53.21	1.05	5,153	13,395
May	0.00	0.00	0.00	0.00	0.00
June	8.11	46.61	0.84	6,237	13,704
July	8.15	46.89	0.87	6,144	13,907
August	7.62	50.34	0.87	5,878	13,869
September	8.36	50.14	0.88	5,766	13,855
October	9.3	50.33	0.85	5,502	13,628
November	8.24	49.7	1.02	5,691	13,541
December	9.35	47.06	0.93	5,949	13,676
Yearly Average	8.32	50.86	0.9	5,539	13,567

1995 Mined Tonnages

Date	Coarse	Silt	Total	Quarter Sum
January	36,334	6,997	43,331	First
February	30,041	6,664	36,705	126,854
March	39,841	6,977	46,818	
April	21,736	9,405	31,141	Second
May	0.00	0.00	0.00	45,321
June	11,322	2,858	14,180	
July	21,933	16,391	38,324	Third
August	24,395	16,119	40,514	118,975
September	29,116	11,021	40,137	
October	25,795	12,563	38,358	Fourth
November	27,350	15,513	42,863	122,078
December	25,706	15,151	40,857	
Total	293,327	119,659	413,228	413,228

APPENDIX H

EXCESS SPOILS DISPOSAL AREAS DATA

EXHIBIT H-1

ANALYSIS OF EXCESS SPOIL SAMPLES

EXCESS SPOIL AREA SAMPLES #1-#6
March/April 1995
Overburden Evaluation for Vegetative Root Zone*

Parameters	Sample Number					
	1	2	3	4	5	6
pH	Good	Good	Good	Good	Good	Good
Ec mmhos/cm 25°C	Fair	Fair	Fair	Fair	Fair	Fair
Saturation %	Good	Good	Good	Good	Good	Good
Texture	Good	Good	Good	Good	Good	Good
SAR	Good	Good	Good	Good	Good	Good
Selenium	Good	Good	Good	Good	Good	Good
Boron	Good	Good	Good	Good	Good	Good
Acid/Base Potential	Good	Good	Good	Good	Good	Good

WHERE

Parameters	Good	Fair	Poor	Unacceptable
pH	6.1 to 8.2	5.1 to 6.1 8.2 to 8.4	4.5 to 5.0 8.5 to 9.0	< 4.5 > 9.0
Ec mmhos/cm 25°C	0 to 2	2 to 8	8 to 15	> 15
Saturation %	25% to 85%		< 25% > 80%	
Texture	sl, l, sil, scl, vsl, fsl	c, sicl, sc ls, lfs	sic, s, sc, c, cos, fs, vfs	g, vcos
SAR	0 to 4	5 to 10	10 to 12 fine texture 10 to 15 coarse texture	12 fine texture 15 coarse texture
Selenium	< 0.1 mg/Kg			> 0.1 mg/Kg
Boron	< 5.0 mg/Kg			> 5.0 mg/Kg
Acid/Base Potential	> -5 tons CaCO ₃ 1,000 tons material			< -5 tons CaCO ₃ 1,000 tons material

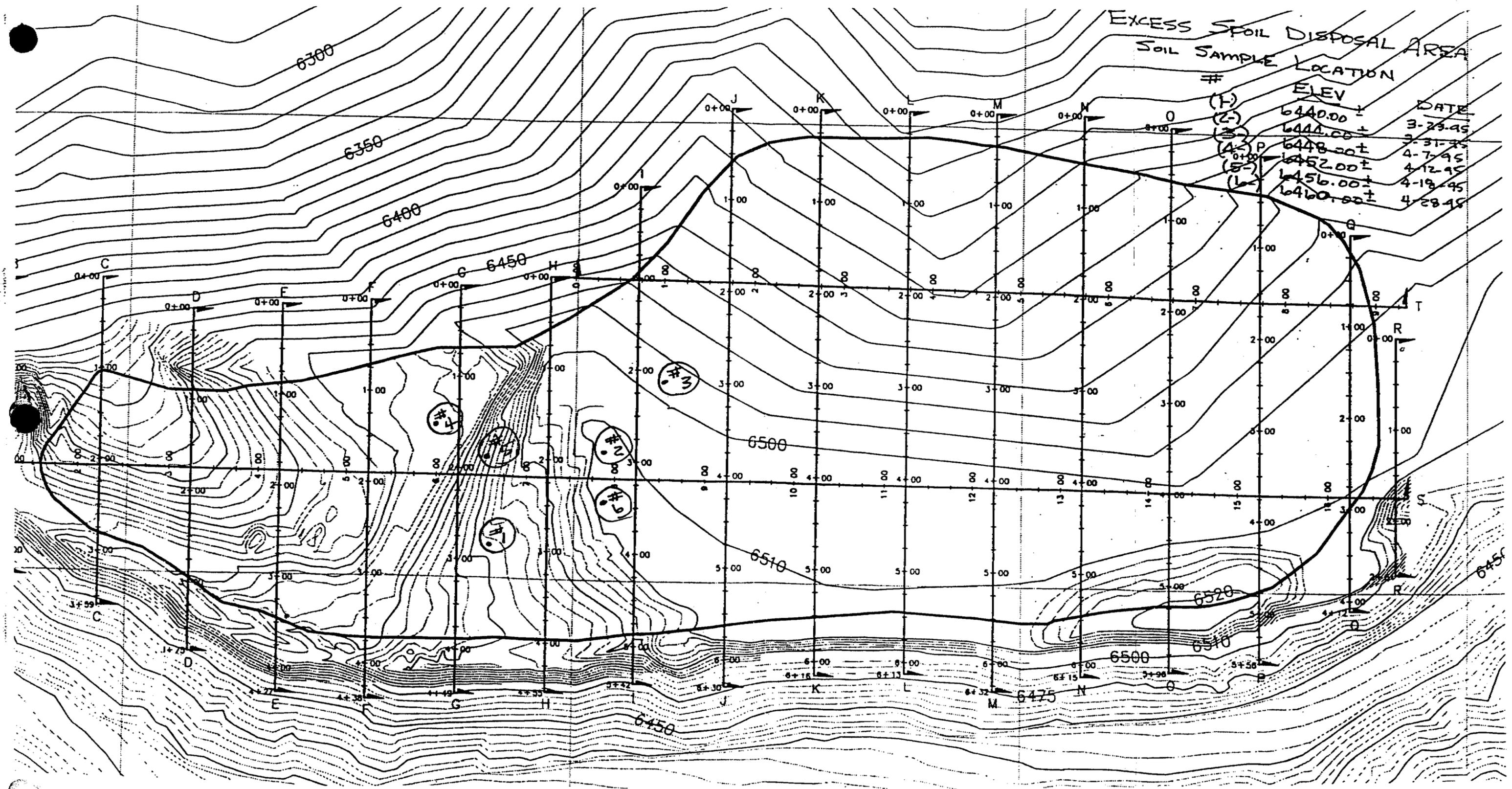
*Many native species have their roots in soils that are determined unsuitable by these values. Occasionally soil materials rated good by these standards have poor vegetation success. Therefore plant growth trails may be required where reestablishment of native species is desirable.

EXHIBIT H-2

LOCATION MAP OF SOIL SAMPLES

EXCESS SOIL DISPOSAL AREA

SOIL SAMPLE #	LOCATION	ELEV	DATE
(1)		6440.00 ±	3-25-95
(2)		6444.00 ±	3-31-95
(3)		6448.00 ±	4-7-95
(4)	P	6452.00 ±	4-12-95
(5)		6456.00 ±	4-18-95
(6)		6460.00 ±	4-28-95



* TOTAL = APPROXIMATELY 43,000 yds

EXHIBIT H-3
ANALYTICAL DATA



Analytical Results

ACZ Laboratories, Inc.
30400 Downhill Drive
Steamboat Springs, CO 80487
(800) 334-5493

Lab Sample ID: **L6061-01**
Client Sample ID: **1-032395-6440**
Client Project ID: **SOA-396-0889**
ACZ Report ID: **RG10973**

Sunnyside Operations Associates, L.P.
One Power Plant Road
Sunnyside, UT 84539
Danny Mattingly
cc: Scott Carlson

Date Sampled: **3/23/95 00:00**
Date Received: **6/14/95**
Date Reported: **7/21/95**

Sample Matrix: **Soil**

Metals Analysis

Parameter	EPA Method	Result	Qual	Units	MDL	PQL	Date	Analyst
Boron, soluble	M6010 ICP	0.65		mg/Kg	0.05	0.3	7/13/95	rd
Calcium, soluble	M6010 ICP	19.80		meq/L	0.01	0.05	6/28/95	fp
Cation Exchange Capacity (CEC)	USDA No. 60 (19)	1.33		meq/100g	0.03	0.2	7/18/95	rd
Exchangeable Sodium Percent (ESP)	USDA No. 60 (20B) (calc)	25.7		%	0.1	0.5	7/18/95	rd
Magnesium, soluble	M6010 ICP	24.20		meq/L	0.02	0.08	6/28/95	fp
Selenium, soluble	SM3500-Se.C	0.005	B	mg/kg	0.005	0.03	6/27/95	jaw
Sodium Adsorption Ratio	Calculation	1.89			0.03	0.15	7/21/95	calc
Sodium, soluble	M6010 ICP	8.87		meq/L	0.01	0.04	6/28/95	fp

Soil Analysis

Parameter	EPA Method	Result	Qual	Units	MDL	PQL	Date	Analyst
Acid Neutralization Potential	Calc. M600/2-78-054	126		tons/KT	1	5	6/21/95	as
Acid-Base Potential (calc)	M600/2-78-054 1.	126		tons/KT	1	5	6/21/95	as
Carbon, total organic (TOC)	M9060A - Combustion	30700		mg/kg	20	100	6/19/95	as
Coarse Fragment >2mm	ASA No. 9, 15-4.2.2	43.1		%			6/17/95	as
Conductivity @25C	M120.1 - Meter, w/ Saturated Paste Prep	3.860		mmhos/cm	0.001	0.01	6/20/95	as
Neutralization Potential as CaCO3	M600 2-78-054 3.	12.6		%	0.1	0.5	6/20/95	as
pH, Saturated Paste	USDA No. 60 (21A)	7.8		units	0.1	0.1	6/20/95	as
Saturation Percent	USDA No. 60 (2)	31.90		%	0.01	0.1	6/20/95	as
Solids, Percent	CLPSOW390, PART F, D-98	91.2		%	0.1	0.5	6/15/95	as
Sulfur, total	ASTM D-4239-B5C, LECO Furnace		U	%	0.01	0.1	6/20/95	jb
Texture by Hydrometer	ASTM D 422 Hydrometer							
Clay		18		%	1	5	6/19/95	jb
Sand		70		%	1	5	6/19/95	jb
Silt		13		%	1	5	6/19/95	jb
Texture Classification		SL					6/19/95	as

Soil Preparation

Parameter	EPA Method	Result	Qual	Units	MDL	PQL	Date	Analyst
Dry at Room Temperature	USDA No. 1, 1972						6/15/95	jb
Hot Water Extraction	M80-3, ASA No. 9						6/19/95	as
Saturated Paste Extraction	M2, USDA Handbook 66						6/19/95	as
Sieve-2000 um (2.0mm)	ASA No.9 15-4.2.2						6/17/95	as
Water Extraction	ASA No. 9 10-2.3.2						6/19/95	as

Inorganic Qualifiers (based on EPA CLP 3.90)

U = Analyte was analyzed for but not detected
B = Analyte concentration detected at a value between MDL and PQL
PQL = Practical Quantitation Limit

Ralph V. Poulsen

Vice President of Operations: Ralph Poulsen



Analytical Results

ACZ Laboratories, Inc.
 30400 Downhill Drive
 Steamboat Springs, CO 80487
 (800) 334-5493

Lab Sample ID: L6061-01
 Client Sample ID: 1-032395-6440
 Client Project ID: SOA-396-0889
 ACZ Report ID: RG10973

Sunnyside Operations Associates, L.P.
 One Power Plant Road
 Sunnyside, UT 84539
 Danny Mattingly
 cc: Scott Carlson

Date Sampled: 3/23/95 00:00
 Date Received: 6/14/95
 Date Reported: 7/21/95

Sample Matrix: Soil

Wet Chemistry

Parameter	Test Method	Result	Qual	Units	MDL	PQL	Date	Analyst
Nitrate as N, soluble	M353.2 - Automated		U	mg/Kg	0.5	5	6/21/95	ss
Nitrogen, total Kjeldahl	M351.2 - TKN by Block Digester	0.04	B	%	0.01	0.1	6/23/95	kh

Inorganic Qualifiers (based on EPA 821-P-90)
 U - Analyte was analyzed for but not detected
 B - Analyte concentration detected at a value between MDL and PQL
 PQL - Practical Quantization Limit

RJP

Vice President of Operations: Ralph Poulsen



Analytical Results

ACZ Laboratories, Inc.
30400 Downhill Drive
Steamboat Springs, CO 80487
(800) 334-5093

Lab Sample ID: **L6061-02**
Client Sample ID: **2-033195-6444**
Client Project ID: **SOA-396-0889**
ACZ Report ID: **RG10974**

Sunnyside Operations Associates, L.P.
One Power Plant Road
Sunnyside, UT 84539
Danny Mattingly
cc: Scott Carlson

Date Sampled: **3/31/95 00:00**
Date Received: **6/14/95**
Date Reported: **7/21/95**

Sample Matrix: **Soil**

Metals Analysis

Parameter	I.P.A. Method	Result	Qual	Units	MDL	PQL	Date	Analyst
Boron, soluble	M6010 ICP	0.48		mg/Kg	0.05	0.3	7/13/95	rd
Calcium, soluble	M6010 ICP	21.70		meq/L	0.01	0.05	6/28/95	fp
Cation Exchange Capacity (CEC)	USDA No. 60 (19)	3.26		meq/100g	0.03	0.2	7/18/95	rd
Exchangeable Sodium Percent (ESP)	USDA No. 60 (20B) (calc)	12.6		%	0.1	0.5	7/18/95	rd
Magnesium, soluble	M6010 ICP	32.60		meq/L	0.02	0.08	6/28/95	fp
Selenium, soluble	SM3500-Se.C	0.025		mg/kg	0.005	0.03	6/27/95	jaw
Sodium Adsorption Ratio	Calculation	1.96			0.03	0.15	7/21/95	calc
Sodium, soluble	M6010 ICP	10.20		meq/L	0.01	0.04	6/28/95	fp

Soil Analysis

Parameter	I.P.A. Method	Result	Qual	Units	MDL	PQL	Date	Analyst
Acid Neutralization Potential	Calc. M6002-78-054	102		tons/KT	1	5	6/21/95	as
Acid-Base Potential (calc)	M6002-78-054 1.	76		tons/KT	1	5	6/21/95	as
Carbon, total organic (TOC)	M9060A - Combustion	44300		mg/kg	20	100	6/19/95	as
Coarse Fragment >2mm	ASA No. 9, 15-4.2.2	48.2		%			6/17/95	as
Conductivity @25C	M120.1 - Meter, w/ Saturated Paste Prep	4.750		mmhos/cm	0.001	0.01	6/20/95	as
Neutralization Potential as CaCO3	M600 2-78-054 3.	10.2		%	0.1	0.5	6/20/95	as
pH, Saturated Paste	USDA No. 60 (21A)	7.6		units	0.1	0.1	6/20/95	as
Saturation Percent	USDA No. 60 (2)	33.10		%	0.01	0.1	6/20/95	as
Solids, Percent	CLPSOW390, PART F, D-98	89.1		%	0.1	0.5	6/15/95	as
Sulfur, total	ASTM D-4239-85C, LECO Furnace	0.82		%	0.01	0.1	6/20/95	jb
Texture by Hydrometer	ASTM D 422 Hydrometer							
Clay		16		%	1	5	6/19/95	jb
Sand		75		%	1	5	6/19/95	jb
Silt		9		%	1	5	6/19/95	jb
Texture Classification		SL					6/19/95	as

Soil Preparation

Parameter	I.P.A. Method	Result	Qual	Units	MDL	PQL	Date	Analyst
Dry at Room Temperature	USDA No. 1, 1972						6/15/95	jb
Hot Water Extraction	M80-3, ASA No. 9						6/19/95	as
Saturated Paste Extraction	M2, USDA Handbook 66						6/19/95	as
Sieve-2000 um (2.0mm)	ASA No.9 15-4.2.2						6/17/95	as
Water Extraction	ASA No. 9 10-2.3.2						6/19/95	as

Inorganic Qualifiers (based on EPA CIP 390)

U - Analyte was analyzed for but not detected
B - Analyte concentration detected at a value between MDL and PQL
PQL = Practical Quantitation Limit

Vice President of Operations: Ralph Poulson



Analytical Results

ACZ Laboratories, Inc.
 36400 Downhill Drive
 Steamboat Springs, CO 80487
 (800) 334-5193

Lab Sample ID: L6061-02
 Client Sample ID: 2-033195-6444
 Client Project ID: SOA-396-0889
 ACZ Report ID: RG10974

Sunnyside Operations Associates, L.P.
 One Power Plant Road
 Sunnyside, UT 84539
 Danny Mattingly
 cc: Scott Carlson

Date Sampled: 3/31/95 00:00
 Date Received: 6/14/95
 Date Reported: 7/21/95
 Sample Matrix: Soil

Wet Chemistry

Parameter	EPA Method	Result	Qual	Units	MDL	PQL	Date	Analyst
Nitrate as N, soluble	M353.2 - Automated		U	mg/Kg	0.5	5	6/21/95	ss
Nitrogen, total Kjeldahl	M351.2 - TKN by Block Digester	0.10		%	0.01	0.1	6/23/95	kh

Inorganic Qualifiers (based on EPA CIP 3-90)
 U - Analyte was analyzed for but not detected
 B - Analyte concentration detected at a value between MDL and PQL
 PQL - Practical Quantitation Limit

RVP

Vice President of Operations: Ralph Poulson



Analytical Results

ACZ Laboratories, Inc.
30400 Downhill Drive
Steamboat Springs, CO 80487
(800) 334-5493

Lab Sample ID: L6061-03
Client Sample ID: 3-040795-6448
Client Project ID: SOA-396-0889
ACZ Report ID: RG10975

Sunnyside Operations Associates, L.P.
One Power Plant Road
Sunnyside, UT 84539
Danny Mattingly
cc: Scott Carlson

Date Sampled: 4/7/95 00:00
Date Received: 6/14/95
Date Reported: 7/21/95

Sample Matrix: Soil

Metals Analysis

Parameter	EPA Method	Result	Qual	Units	MDL	PQL	Date	Analyst
Boron, soluble	M6010 ICP	0.59		mg/Kg	0.05	0.3	7/13/95	rd
Calcium, soluble	M6010 ICP	24.10		meq/L	0.01	0.05	6/28/95	fp
Cation Exchange Capacity (CEC)	USDA No. 60 (19)	2.64		meq/100g	0.03	0.2	7/18/95	rd
Exchangeable Sodium Percent (ESP)	USDA No. 60 (20B) (calc)	4.8		%	0.1	0.5	7/18/95	rd
Magnesium, soluble	M6010 ICP	19.60		meq/L	0.02	0.08	6/28/95	fp
Selenium, soluble	SM3500-Sc.C	0.014	B	mg/kg	0.005	0.03	6/27/95	jaw
Sodium Adsorption Ratio	Calculation	0.46			0.03	0.15	7/21/95	calc
Sodium, soluble	M6010 ICP	2.15		meq/L	0.01	0.04	6/28/95	fp

Soil Analysis

Parameter	EPA Method	Result	Qual	Units	MDL	PQL	Date	Analyst
Acid Neutralization Potential	Calc. M6002-78-054	180		tons/KT	1	5	6/21/95	as
Acid-Base Potential (calc)	M6002-78-054 1.	179		tons/KT	1	5	6/21/95	as
Carbon, total organic (TOC)	M9060A - Combustion	62200		mg/kg	20	100	6/19/95	as
Coarse Fragment >2mm	ASA No. 9, 15-4-2.2	37.2		%			6/17/95	as
Conductivity @25C	M120.1 - Meter, w/ Saturated Paste Prep	3.190		mmhos/cm	0.001	0.01	6/20/95	as
Neutralization Potential as CaCO3	M600 2-78-054 3.	18.0		%	0.1	0.5	6/20/95	as
pH, Saturated Paste	USDA No. 60 (21A)	7.7		units	0.1	0.1	6/20/95	as
Saturation Percent	USDA No. 60 (2)	33.90		%	0.01	0.1	6/20/95	as
Solids, Percent	CLPSOW390, PART F, D-98	87.8		%	0.1	0.5	6/15/95	as
Sulfur, total	ASTM D-4239-85C, LECO Furnace	0.02	B	%	0.01	0.1	6/20/95	jb
Texture by Hydrometer	ASTM D 422 Hydrometer							
Clay		15		%	1	5	6/19/95	jb
Sand		74		%	1	5	6/19/95	jb
Silt		11		%	1	5	6/19/95	jb
Texture Classification		SL					6/19/95	as

Soil Preparation

Parameter	EPA Method	Result	Qual	Units	MDL	PQL	Date	Analyst
Dry at Room Temperature	USDA No. 1, 1972						6/15/95	jb
Hot Water Extraction	M80-3, ASA No. 9						6/19/95	as
Saturated Paste Extraction	M2, USDA Handbook 66						6/19/95	as
Sieve-2000 um (2.0mm)	ASA No.9 15-4-2.2						6/17/95	as
Water Extraction	ASA No. 9 10-2.3.2						6/19/95	as

Inorganic Qualifier (based on EPA CIP 3.90)

U = Analyte was analyzed for but not detected
B = Analyte concentration detected at a value between MDL and PQL
PQL = Practical Quantitation Limit

Vice President of Operations: Ralph Poulsen



Analytical Results

ACZ Laboratories, Inc.
 30400 Downhill Drive
 Steamboat Springs, CO 80487
 (800) 334-5493

Lab Sample ID: **L6061-03**
 Client Sample ID: **3-040795-6448**
 Client Project ID: **SOA-396-0889**
 ACZ Report ID: **RG10975**

Sunnyside Operations Associates, L.P.
 One Power Plant Road
 Sunnyside, UT 84539
 Danny Mattingly
 cc: Scott Carlson

Date Sampled: **4/7/95 00:00**
 Date Received: **6/14/95**
 Date Reported: **7/21/95**

Sample Matrix: **Soil**

Wet Chemistry

Parameter	EPA Method	Result	Qual	Units	MDL	PQL	Date	Analyst
Nitrate as N, soluble	M353.2 - Automated	3.6	B	mg/Kg	0.5	5	6/21/95	ss
Nitrogen, total Kjeldahl	M351.2 - TKN by Block Digester	0.18		%	0.01	0.1	6/23/95	kh

Inorganic Qualifiers (based on EPA CIP 3-90)
 U = Analyte was analyzed for but not detected
 B = Analyte concentration detected at a value between MDL and PQL
 PQL = Practical Quantitation Limit

RVP
 Vice President of Operations: Ralph Poulsen



Analytical Results

ACZ Laboratories, Inc.
30400 Downhill Drive
Steamboat Springs, CO 80487
(800) 334-5493

Lab Sample ID: L6061-04
Client Sample ID: 4-041295-6452
Client Project ID: SOA-396-0889
ACZ Report ID: RG10976

Sunnyside Operations Associates, L.P.
One Power Plant Road
Sunnyside, UT 84539
Danny Mattingly
cc: Scott Carlson

Date Sampled: 4/12/95 00:00
Date Received: 6/14/95
Date Reported: 7/21/95

Sample Matrix: Soil

Metals Analysis

Parameter	EPA Method	Result	Qual	Units	MDL	PQL	Date	Analyst
Boron, soluble	M6010 ICP	0.39		mg/Kg	0.05	0.3	7/13/95	rd
Calcium, soluble	M6010 ICP	22.70		meq/L	0.01	0.05	6/28/95	fp
Cation Exchange Capacity (CEC)	USDA No. 60 (19)	2.51		meq/100g	0.03	0.2	7/18/95	rd
Exchangeable Sodium Percent (ESP)	USDA No. 60 (20B) (calc)	12.9		%	0.1	0.5	7/18/95	rd
Magnesium, soluble	M6010 ICP	30.40		meq/L	0.02	0.08	6/28/95	fp
Selenium, soluble	SM3500-Se.C	0.019	B	mg/kg	0.005	0.03	6/27/95	jaw
Sodium Adsorption Ratio	Calculation	1.59			0.03	0.15	7/21/95	calc
Sodium, soluble	M6010 ICP	8.17		meq/L	0.01	0.04	6/28/95	fp

Soil Analysis

Parameter	EPA Method	Result	Qual	Units	MDL	PQL	Date	Analyst
Acid Neutralization Potential	Calc. M600/2-78-054	101		tons/KT	1	5	6/21/95	as
Acid-Base Potential (calc)	M600/2-78-054.1.	74		tons/KT	1	5	6/21/95	as
Carbon, total organic (TOC)	M9060A - Combustion	40500		mg/kg	20	100	6/19/95	as
Coarse Fragment >2mm	ASA No. 9, 15-4.2.2	51.2		%			6/17/95	as
Conductivity @25C	M120.1 - Meter, w/ Saturated Paste Prep	4.330		mmhos/cm	0.001	0.01	6/20/95	us
Neutralization Potential as CaCO3	M600 2-78-054.3	10.1		%	0.1	0.5	6/20/95	as
pH, Saturated Paste	USDA No. 60 (21A)	7.6		units	0.1	0.1	6/20/95	as
Saturation Percent	USDA No. 60 (2)	30.90		%	0.01	0.1	6/20/95	as
Solids, Percent	CLPSOW390, PART F, D-98	91.4		%	0.1	0.5	6/15/95	as
Sulfur, total	ASTM D-4239-85C, LECO Furnace	0.85		%	0.01	0.1	6/20/95	jb
Texture by Hydrometer	ASTM D 422 Hydrometer							
Clay		15		%	1	5	6/19/95	jb
Sand		74		%	1	5	6/19/95	jb
Silt		11		%	1	5	6/19/95	jb
Texture Classification		SL					6/19/95	as

Soil Preparation

Parameter	EPA Method	Result	Qual	Units	MDL	PQL	Date	Analyst
Dry at Room Temperature	USDA No. 1, 1972						6/15/95	jb
Hot Water Extraction	M80-3, ASA No. 9						6/19/95	as
Saturated Paste Extraction	M2, USDA Handbook 66						6/19/95	as
Sieve-2000 um (2.0mm)	ASA No.9 15-4.2.2						6/17/95	as
Water Extraction	ASA No. 9 10-2.3.2						6/19/95	as

Inorganic Qualifiers (based on EPA CLP 390)

U = Analyte was analyzed for but not detected
B = Analyte concentration detected at a value between MDL and PQL
PQL = Practical Quantitation Limit

Ralph J. Poulsen

Vice President of Operations: Ralph Poulsen



Analytical Results

ACZ Laboratories, Inc.
 30400 Downhill Drive
 Steamboat Springs, CO 80487
 (800) 334-5493

Lab Sample ID: L6061-04
 Client Sample ID: 4-041295-6452
 Client Project ID: SOA-396-0889
 ACZ Report ID: RG10976

Sunnyside Operations Associates, L.P.
 One Power Plant Road
 Sunnyside, UT 84539
 Danny Mattingly
 cc: Scott Carlson

Date Sampled: 4/12/95 00:00
 Date Received: 6/14/95
 Date Reported: 7/21/95

Sample Matrix: Soil

Wet Chemistry

Parameter	EPA Method	Result	Qual	Units	MDL	PQL	Date	Analyst
Nitrate as N, soluble	M353.2 - Automated	17.9		mg/Kg	0.5	5	6/21/95	ss
Nitrogen, total Kjeldahl	M351.2 - TKN by Block Digester	0.09	B	%	0.01	0.1	6/23/95	kh

Inorganic Qualifiers (based on EPA 813.20)
 U - Analyte was analyzed for but not detected
 B - Analyte concentration detected at a value between MDL and PQL
 PQL - Practical Quantitation Limit

Vice President of Operations: Ralph Poulson



Analytical Results

ACZ Laboratories, Inc.
 30400 Downhill Drive
 Steamboat Springs, CO 80487
 (800) 334-5493

Lab Sample ID: **L6061-05**
 Client Sample ID: **5-041895-6456**
 Client Project ID: **SOA-396-0889**
 ACZ Report ID: **RG10977**

Sunnyside Operations Associates, L.P.
 One Power Plant Road
 Sunnyside, UT 84539
 Scott Carlson

Date Sampled: **4/18/95**
 Date Received: **6/14/95**
 Date Reported: **7/19/95**

Sample Matrix: **Soil**

Metals Analysis

Parameter	EPA Method	Result	Qual	Units	MDL	PQL	Date	Analyst
Boron, soluble	M6010 ICP	0.65		mg/Kg	0.05	0.3	7/13/95	rd
Calcium, soluble	M6010 ICP	20.60		meq/L	0.01	0.05	6/28/95	fp
Cation Exchange Capacity (CEC)	USDA No. 60 (19)	2.23		meq/100g	0.03	0.2	7/18/95	rd
Exchangeable Sodium Percent (ESP)	USDA No. 60 (200) (calc)	21.2		%	0.1	0.5	7/18/95	rd
Magnesium, soluble	M6010 ICP	34.00		meq/l.	0.02	0.08	6/28/95	fp
Selenium, soluble	SM3500-Sc.C		U	mg/kg	0.005	0.03	6/27/95	jaw
Sodium Adsorption Ratio	Calculation	3.02			0.03	0.15	7/19/95	calc
Sodium, soluble	M6010 ICP	15.80		meq/L	0.01	0.04	6/28/95	fp

Soil Analysis

Parameter	EPA Method	Result	Qual	Units	MDL	PQL	Date	Analyst
Acid Neutralization Potential	Calc M6002-78-054	125		tons/KT	1	5	6/21/95	as
Acid-Basic Potential (calc)	M6002-78-054 1.	125		tons/KT	1	5	6/21/95	as
Carbon, total organic (TOC)	M9060A - Combustion	19600		mg/kg	20	100	6/19/95	as
Coarse Fragment >2mm	ASA No. 9. 15-4.2.2	48.4		%			6/17/95	as
Conductivity @25C	M120.1 - Meter, w/ Saturated Paste Prep	4.990		mmhos/cm	0.001	0.01	6/20/95	as
Neutralization Potential as CaCO3	M600 2-78-054 1.	12.5		%	0.1	0.5	6/20/95	as
pH, Saturated Paste	USDA No. 60 (21A)	8.0		units	0.1	0.1	6/20/95	as
Saturation Percent	USDA No. 60 (2)	33.30		%	0.01	0.1	6/20/95	as
Solids, Percent	CLPSOW390. PART F, 1D-98	89.5		%	0.1	0.5	6/15/95	as
Sulfur, total	ASTM D-4239-85C, I.ECO Furnacc		U	%	0.01	0.1	6/20/95	jb
Texture by Hydrometer	ASTM D 422 Hydrometer							
Clay		18		%	1	5	6/19/95	jb
Sand		69		%	1	5	6/19/95	jb
Silt		14		%	1	5	6/19/95	jb
Texture Classification		SL					6/19/95	as

Soil Preparation

Parameter	EPA Method	Result	Qual	Units	MDL	PQL	Date	Analyst
Dry at Room Temperature	USDA No. 1, 1972						6/15/95	jb
Hot Water Extraction	M80-3, ASA No. 9						6/19/95	as
Saturated Paste Extraction	M2, USDA Handbook 66						6/19/95	as
Sieve-2000 um (2.0mm)	ASA No.9 15-4.2.2						6/17/95	as
Water Extraction	ASA No. 9 10-2.3.2						6/19/95	as

Inorganic Qualifiers (based on EPA 411P-90)

U = Analyte was analyzed for but not detected
 B = Analyte concentration detected at a value between MDL and PQL
 PQL = Practical Quantitation Limit

Ralph V. Poulsen

Vice President of Operations: Ralph Poulsen



Analytical Results

30400 Downhill Drive
 Steamboat Springs, CO 80487
 (800) 334-5493

Lab Sample ID: **L6061-05**
 Client Sample ID: **5-041895-6456**
 Client Project ID: **SUSA-396-0889**
 ACZ Report ID: **RG10977**

Sunnyside Operations Associates, L.P.
 One Power Plant Road
 Sunnyside, UT 84539
 Scott Carlson

Date Sampled: **4/18/95**
 Date Received: **6/14/95**
 Date Reported: **7/19/95**

Sample Matrix: **Soil**

Wet Chemistry

Parameter	EPA Method	Result	Qual	Units	MDL	PQL	Date	Analyst
Nitrate as N, soluble	M353.2 - Automated	2.6	D	mg/Kg	0.5	5	6/21/95	ss
Nitrogen, total Kjeldahl	M351.2 - TKN by Block Digester	0.03	D	%	0.01	0.1	6/23/95	kh

Inorganic Qualifiers (based on EPA CIP 390)

U = Analyte was analyzed for but not detected

H = Analyte concentration detected at a value between MDL and PQL

PQL = Practical Quantitation Limit

RVP

Vice President of Operations: Ralph Poulsen

ACZ**Analytical Results**

ACZ Laboratories, Inc.
30400 Downhill Drive
Steamboat Springs, CO 80487
(800) 334-5493

Lab Sample ID: **L6061-06**
Client Sample ID: **6-042895-6460**
Client Project ID: **SOA-396-0889**
ACZ Report ID: **RG10978**

Sunnyside Operations Associates, L.P.
One Power Plant Road
Sunnyside, UT 84539
Scott Carlson

Date Sampled: **4/28/95**
Date Received: **6/14/95**
Date Reported: **7/19/95**

Sample Matrix: *Soil*

Metals Analysis

Parameter	EPA Method	Result	Qual	Units	MDL	PQL	Date	Analyst
Barium, soluble	M6010 ICP	0.64		mg/Kg	0.05	0.3	7/13/95	rd
Calcium, soluble	M6010 ICP	13.60		meq/L	0.01	0.05	6/28/95	fp
Cation Exchange Capacity (CEC)	USDA No. 60 (19)	1.13		meq/100g	0.03	0.2	7/18/95	rd
Exchangeable Sodium Percent (ESP)	USDA No. 60 (20B) (calc)	38.3		%	0.1	0.5	7/18/95	rd
Magnesium, soluble	M6010 ICP	20.90		meq/L	0.02	0.08	6/28/95	fp
Selenium, soluble	SM3500-Se.C		U	mg/kg	0.005	0.03	6/27/95	jaw
Sodium Adsorption Ratio	Calculation	2.02			0.03	0.15	7/19/95	calc
Sodium, soluble	M6010 ICP	8.39		meq/L	0.01	0.04	6/28/95	fp

Soil Analysis

Parameter	EPA Method	Result	Qual	Units	MDL	PQL	Date	Analyst
Acid Neutralization Potential	Calc. M600/2-78-054	144		tons/KT	1	5	6/21/95	as
Acid-Base Potential (calc)	M600/2-78-054.1.	144		tons/KT	1	5	6/21/95	as
Carbon, total organic (TOC)	M9060A - Combustion	10700		mg/kg	20	100	6/19/95	as
Coarse Fragment >2mm	ASA No. 9. 15-4.2.2	40.7		%			6/17/95	as
Conductivity @25C	M120.1 - Meter, w/ Saturated Paste Prep	3.190		mmhos/cm	0.001	0.01	6/20/95	as
Neutralization Potential as CaCO3	M600 2-78-054.3.	14.4		%	0.1	0.5	6/20/95	as
pH, Saturated Paste	USDA No. 60 (21A)	8.0		units	0.1	0.1	6/20/95	as
Saturation Percent	USDA No. 60 (2)	25.90		%	0.01	0.1	6/20/95	as
Solids, Percent	CLPSOW390, PART F, D-98	84.2		%	0.1	0.5	6/15/95	as
Sulfur, total	ASTM D-4239-B5C, LECO Furnace		U	%	0.01	0.1	6/20/95	jb
Texture by Hydrometer	ASTM D 422 Hydrometer							
Clay		16		%	1	5	6/19/95	jb
Sand		73		%	1	5	6/19/95	jb
Silt		11		%	1	5	6/19/95	jb
Texture Classification		SL					6/19/95	as

Soil Preparation

Parameter	EPA Method	Result	Qual	Units	MDL	PQL	Date	Analyst
Dry at Room Temperature	USDA No. 1, 1972						6/15/95	jb
Hot Water Extraction	M80-3, ASA No. 9						6/19/95	as
Saturated Paste Extraction	M2, USDA Handbook 66						6/19/95	as
Sieve-2000 um (2.0mm)	ASA No.9 15-4.2.2						6/17/95	as
Water Extraction	ASA No. 9 10-2.3.2						6/19/95	as

Inorganic Qualifiers (based on EPA CIP 3-90)

U = Analyte was analyzed for but not detected

B = Analyte concentration detected at a value between MDL and PQL.

PQL = Practical Quantitation Limit

Ralph v. Poulsen

Vice President of Operations: Ralph Poulsen



Analytical Results

ACZ Laboratories, Inc.
 30400 Downhill Drive
 Steamboat Springs, CO 80487
 (800) 334-5493

Lab Sample ID: L6061-06
 Client Sample ID: 6-042895-6460
 Client Project ID: SOA-396-0889
 ACZ Report ID: RG10978

Sunnyside Operations Associates, L.P.
 One Power Plant Road
 Sunnyside, UT 84539
 Scott Carlson

Date Sampled: 4/28/95
 Date Received: 6/14/95
 Date Reported: 7/19/95

Sample Matrix: Soil

Wet Chemistry

Parameter	EPA Method	Result	Qual	Units	MDL	PQL	Date	Analyst
Nitrate as N, soluble	M353.2 - Automated	2.3	B	mg/Kg	0.5	5	6/21/95	ss
Nitrogen, total Kjeldahl	M351.2 - TKN by Block Digester	0.02	B	%	0.01	0.1	6/23/95	kh

Inorganic Qualifiers (based on EPA C1 P 3/90)

(U) = Analyte was analyzed for but not detected
 (B) = Analyte concentration detected at a value between MDL and PQL
 PQL = Practical Quantitation Limit

RVP

Vice President of Operations: Ralph Poulsen

ECKHOFF WATSON AND PREATOR ENGINEERING

1121 East 3900 South Suite C-100 • Salt Lake City Utah 84124 • ph (801) 261-0090 • fax: (801) 266-1671

L6001

CHAIN OF CUSTODY RECORD & ANALYSIS REQUEST

PROJECT NO		PROJECT NAME/SITE						ANALYSIS REQUESTED										P.O.#		
EC450493		SUNNYSIDE COGEN - Spoils Area						PH (8015) BTEX(N) (602/8020) TOC (413.1) TPH (418.1) HALOCARBONS (601/8010) VOLATILES (624/8240) SEM-VOLATILES (625/8270) USC-SIEVE										SOA-396-0889		
SAMPLER		(PRINT) / (SIGN)																NO. CONTAINERS	SAMPLE TYPE	REMARKS
Jim Comas																				
SAMPLE IDENTIFICATION		DATE	TIME	COMP	GRAB	PRES USED	ICED													
01 1-032395-6440		3/23/95			✓			1	Soil	SEE										
02 2-033195-6444		3/31/95			✓			1	Soil	ATTACHED										
03 3-040795-6448		4/7/95			✓			1	Soil	QUOTATION										
04 4-041295-6452		4/12/95			✓			1	Soil	FOR										
05 5-041895-6456		4/18/95			✓			1	Soil	SPECIFIC										
06 6-042895-6460		4/28/95			✓			1	Soil	ANALYSIS										
													Condition of Samples Upon Receipt							
													By ACZ Laboratories, Inc:							
													Temperature of Contents: 19 °C							
													Sample Containers: Intact							
													Custody Seals: N/A							
RELINQUISHED BY:		DATE	TIME	RECEIVED BY:		LABORATORY:		PLEASE SEND RESULTS TO:												
Jim Comas		5/26/95	10:00 AM	BRUCE ELOFF		ACZ Labs.		Eckhoff, Watson & Preator Engineering 1121 East 3900 South Suite C-100 Salt Lake City, Utah 84124 ph: (801) 261-0090 fax: (801) 266-1671												
RELINQUISHED BY:		DATE	TIME	RECEIVED BY:		REQUESTED TURNAROUND TIME:														
BRUCE ELOFF		5/30/95	9:00 AM	SCOTT CARLSON		STANDARD														
RELINQUISHED BY:		DATE	TIME	COMMENTS		SITE MANAGER:		PROJECT MANAGER:												
SCOTT CARLSON		6/9/95	11:30 AM	SHIP VIA UPS																
RECEIVED BY LAB		DATE	TIME	RECEIPT CONDITION:																

APPENDIX I

ANNUAL REPORTS OF OFFICERS
(DEPARTMENT OF COMMERCE)

Babcock & Wilcox Investment Company
 a McDermott company
 P. O. Box 61038
 New Orleans, LA 70161-1038

CODE	INVOICE NO	DATE	GROSS	DISCOUNT	NET
*0	11198-01	11/09/95	15.00	.00	15.00
		TOTALS	15.00	.00	15.00

Brendy

BANK ID NO 043301601
 ACCOUNT NO 1762541 401
 CHECK NO 4010000302
 CHECK DATE 11/09/95
 VENDOR NO 11198

IF INQUIRY IS NECESSARY PLEASE REFER TO THE ISSUING COMPANY NAME, BANK ID NO., ACCOUNT NO., AND CHECK NO. IF YOU HAVE ANY QUESTIONS REGARDING ANY INVOICE, PLEASE CONTACT THE LOCATION TO WHICH THE ORIGINAL INVOICE WAS BILLED.

modcap03

Babcock & Wilcox Investment Company a McDermott company P. O. Box 61038 New Orleans, LA 70161-1038	Mellon Bank, N.A. Three Mellon Bank Center Pittsburgh, PA 15258	60-160 433 NO. 4010000302 11/09/95 \$*****15.00
PAY FIFTEEN and 00/100 DOLLARS		
TO THE ORDER OF STATE OF UTAH DEPT OF COMMERCE		
<i>RE Dawson</i>		

⑈ 4010000302 ⑈ ⑆043301601⑆ ⑆76⑈254⑈⑈

SEE REVERSE SIDE FOR OPENING INSTRUCTIONS

Babcock & Wilcox Investment Company
 a McDermott company
 P. O. Box 61038
 New Orleans, LA 70161-1038

STATE OF UTAH
 DEPT OF COMMERCE
 PO BOX 30750
 SALT LAKE CITY UT 84189-0001

STATE OF UTAH
DEPARTMENT OF COMMERCE
DIVISION OF CORPORATIONS AND COMMERCIAL CODE



PROFIT CORPORATION ANNUAL REPORT

THIS FORM MUST BE COMPLETED IN FULL. All profit corporations must file their annual reports and corrections within the month of their anniversary date. Failure to do so will result in Delinquency, Suspension, then Revocation or Involuntary Dissolution of the corporate charter.

CORPORATION FILE # 171277 INCORPORATED OR QUALIFIED DATE 12 / 94

1. CORPORATE NAME NRG Sunnyside Inc.

2. REGISTERED AGENT C T Corporation System

3. REGISTERED OFFICE ADDRESS 50 W Broadway

4. CITY, STATE & ZIP Salt Lake City UTAH 84101-2006

WHEN CHANGING THE REGISTERED AGENT THE NEW AGENT MUST SIGN.

5. INCORPORATED IN THE STATE AND UNDER THE LAWS OF: Delaware

6. ADDRESS OF THE PRINCIPAL OFFICE IN THE HOME STATE: 1221 Nicollet Mall, Suite 700
Minneapolis, MN 55403

7. BUSINESS PURPOSE:

DOMESTIC, PROFIT CORPORATIONS ARE REQUIRED TO LIST A CORPORATE OFFICER.

OFFICERS

8. Chairman - David H. Peterson
PRESIDENT Ronald J. Will

9. VICE PRESIDENT LouAnn Bohu

10. SECRETARY James J. Bender

11. TREASURER Lee R. Carlson

DIRECTORS

12. DIRECTOR David H. Peterson

13. DIRECTOR Leonard A. Bluhm

14. DIRECTOR Ronald J. Will

Under penalties of perjury and as an authorized officer, I declare that this annual report and, if applicable, the statement change of registered office and/or agent, has been examined by me and is, to the best of my knowledge and belief, true, correct, and complete.

15. BY James J. Bender

16. James J. Bender

17. April 1 19 96

IF THERE ARE NO CHANGES FROM THE PREVIOUS YEAR, AND YOU HAVE ALL CORPORATE REQUIREMENTS FILLED PERTAINING TO OFFICER, AND DIRECTOR INFORMATION YOU MAY COMPLETE THE COUPON BELOW, DETACH IT FROM THIS FORM, AND RETURN IT TO OUR OFFICE WITH YOUR PAYMENT.

APPENDIX J

3.5 " DISK:
WATER MONITORING DATA AND
CLIMATOLOGICAL DATA