South Tahoe Public Utility District

"Basic Services For A Complex World"

168

General Manager
Robert G. Baer

Directors
Christopher H. Strohm
James R. Jones
Mary Lou Mosbacher
Duane Wallace
Pembroke Gochnauer

1275 Meadow Crest Drive • South Lake Tahoe • CA 96150
Phone 530 544-6474 • Fax 530 541-0614

April 19, 2001

Markleeville PUD
Post Office Box 222
Markleeville, CA 96120

RECEIVED
APR 23 2001
ALPINE COUNTY AUDITOR

Attention: Dave Peets

Customer#: **1004**

Sample Date: 4/3/01

Site	ID	Temp C	pH	TDS mg/L	Cl mg/L	Filtered BOD mg/L	TotalP mg/L	TKN mg/L	NO2 as N mg/L	NO3 as N mg/L	Total N mg/L
Markleeville Cr; Upstream	20010404-06	4.0	7.91	53	1.15		0.022 <	0.100 <	0.010 <	0.010	0.120
Markleeville PUD Pond	20010404-07	9.0	7.87	210	22.6	23.2					
Markleeville PUD Test Well	20010404-08	6.0	7.02	201	19.7		2.040	0.236 <	0.010 <	0.010	0.256
Markleeville Cr; Downstream	20010404-09	4.0	7.83	55	1.1		0.032	0.123 <	0.010 <	0.010	0.143

Methods:
pH, by EPA 150.1
TDS, by EPA 160.1
Chloride, by EPA 300.0
BOD, Standard Methods, 18th ed, Method 5210 B
Total Phosphorous, by EPA 365.1
Total Kjeldahl Nitrogen, by EPA 351.1
Nitrite, by EPA 300.0
Nitrate, by EPA 300.0
Total Nitrogen, by Calculation

Report Approved by:
ELAP ID#: 1569

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South Tahoe
Public Utility District

1275 Meadow Crest Drive • South Lake Tahoe • CA 96150
Phone 530 544-6474 • Fax 530 541-0614

July 16, 2001

Markleeville PUD
Post Office Box 222
Markleeville, CA 96120

RECEIVED
JUL 18 2001
ALPINE COUNTY AUDITOR

Attention: Dave Peets

Customer#: **1004**

Sample Date: 7/3/2001

Site	ID	Temp C	pH	TDS mg/L	Cl mg/L	Filtered BOD mg/L	TotalP mg/L	TKN mg/L	NO2 as N mg/L	NO3 as N mg/L	Total N mg/L
Markleeville Cr; Upstream	20010703-06	13.0	8.02	118	4.47		0.038	0.117	< 0.010	0.016	0.143
Markleeville PUD Pond	20010703-07	19.0	7.33	191	23.3						
Markleeville PUD Test Well	20010703-08	12.0	6.98	199	12.7		2.270	0.330	< 0.010	0.087	0.427
Markleeville Cr; Downstream	20010703-09	14.0	8.03	121	4.65		0.020 <	0.100	< 0.010	0.016	0.126
Markleeville PUD Pond	20010710-42	19.8	7.04			12.2					

Methods:
pH, by EPA 150.1
TDS, by EPA 160.1
Chloride, by EPA 300.0
BOD, Standard Methods, 18th ed, Method 5210 B
Total Phosphorous, by EPA 365.1
Total Kjeldahl Nitrogen, by EPA 351.1
Nitrite, by EPA 300.0
Nitrate, by EPA 300.0
Total Nitrogen, by Calculation

Report Approved by:
ELAP ID#: 1569

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South Tahoe
Public Utility District

1275 Meadow Crest Drive • South Lake Tahoe • CA 96150
Phone 530 544-6474 • Fax 530 541-0614

October 19, 2001

RECEIVED
OCT 23 2001
ALPINE COUNTY AUDITOR

Markleeville PUD
Post Office Box 222
Markleeville, CA 96120

Attention: Dave Peets

Customer#: **1004**

Sample Date: 10/8/2001

Site	ID	Temp C	pH	TDS mg/L	Cl mg/L	Filtered BOD mg/L	TotalP mg/L	TKN mg/L	NO2 as N mg/L	NO3 as N mg/L	Total N mg/L
Markleeville Cr; Upstream	20011009-06	12.0	8.76	196	15.1		0.034	0.169	< 0.010	0.032	0.211
Markleeville PUD Pond	20011009-07	12.0	7.44	207	23.6	17					
Markleeville PUD Test Well	20011009-08	10.0	6.97	279	23.9		0.449	0.398	< 0.010	0.013	0.421
Markleeville Cr; Downstream	20011009-09	12.0	8.76	188	14.2		0.016	0.161	< 0.010	< 0.010	0.181

Methods:
pH, by EPA 150.1
TDS, by EPA 160.1
Chloride, by EPA 300.0
BOD, Standard Methods, 18th ed, Method 5210 B
Total Phosphorous, by EPA 365.1
Total Kjeldahl Nitrogen, by EPA 351.1
Nitrite, by EPA 300.0
Nitrate, by EPA 300.0
Total Nitrogen, by Calculation

Report Approved by: Amy Powers
ELAP ID#: 1569

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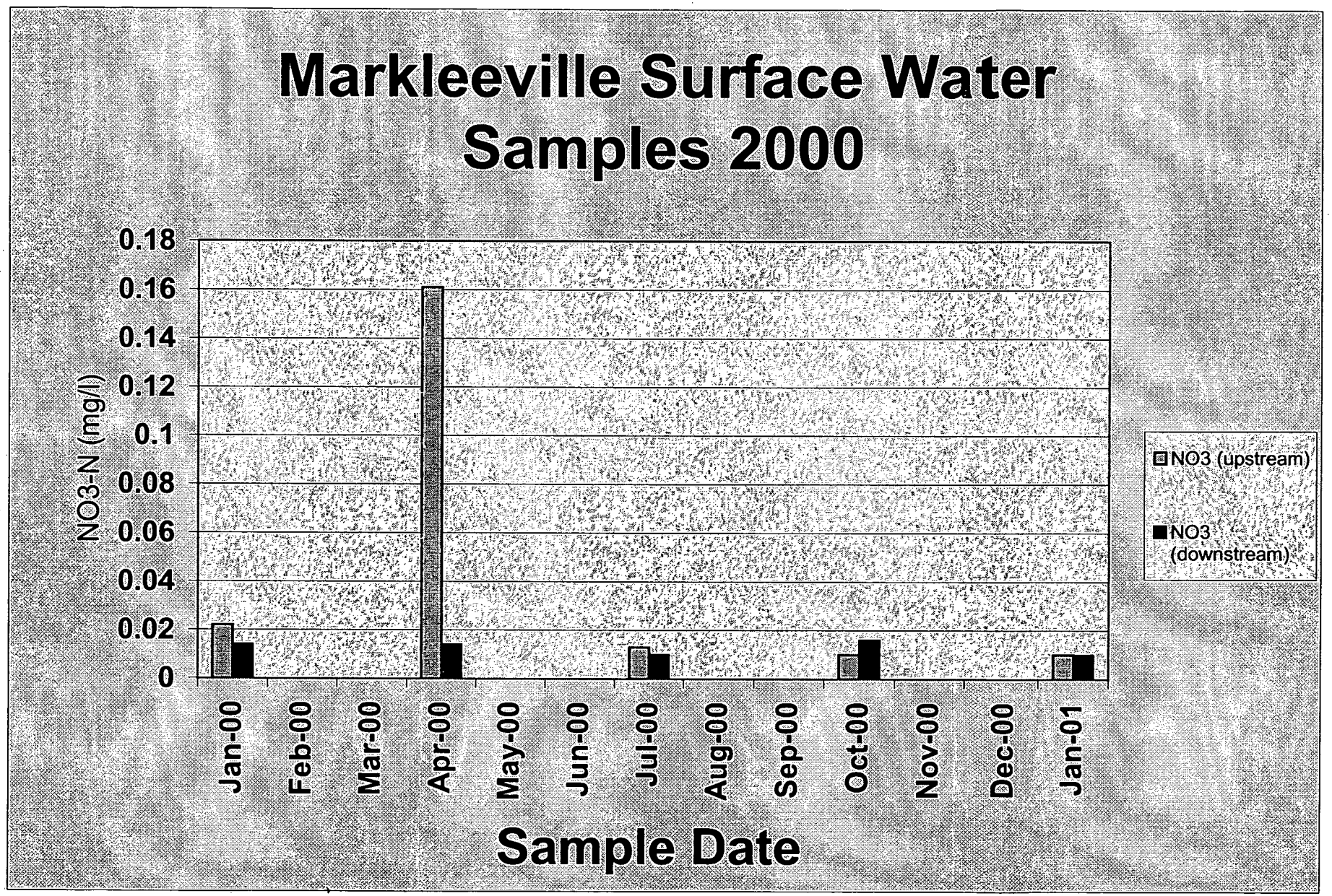
Markleeville Surface Water Samples 2000
NO3-N (mg/l)
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
Jan-00
Feb-00
Mar-00
Apr-00
May-00
Jun-00
Jul-00
Aug-00
Sep-00
Oct-00
Nov-00
Dec-00
Jan-01
Sample Date
NO3 (upstream)
NO3 (downstream)

5-22

T68

W39

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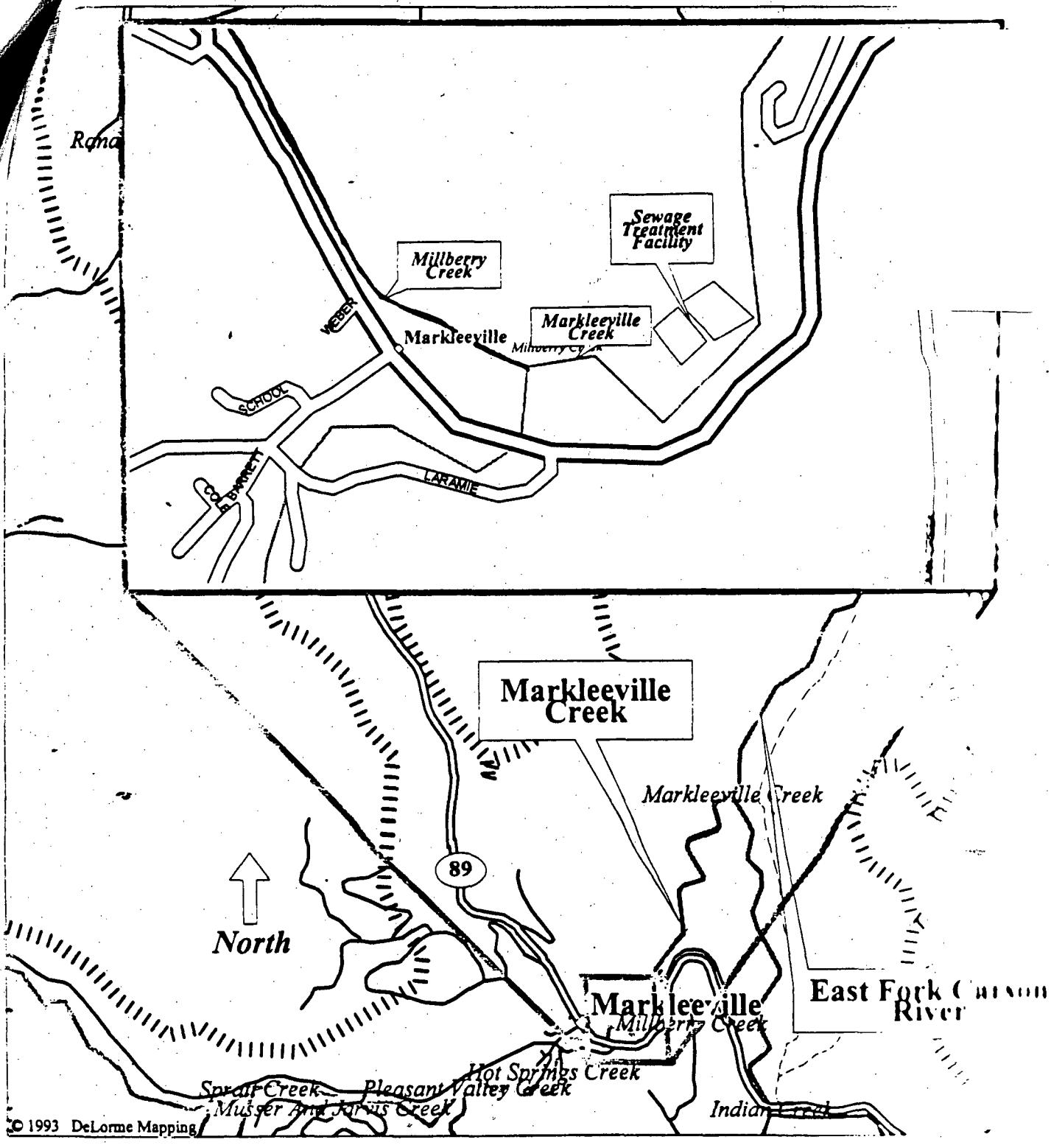
ion Map
rkleeville PUD
astewater Treatment System



Markleeville PUD Annual Compliance Report 2000

sample date 1/5/00	pH		TDS		Cl		BOD		Total P		TKN		NO2-N		NO3-N		TOTAL N		TEMP	
Site	limit	exceedence	limit	exceedence	limit	exceedence	limit	exceedence	limit	exceedence	limit	exceedence	limit	exceedence	limit	exceedence	limit	exceedence	limit	exceedence
Markleeville Cr; upstream	> 6.5 < 8.5		80	X	4.0		*		0.02	X	*		*		*		0.2		*	
Markleeville PUD Pond	< 6.0 > 9.0		*		*		30		*		*		*		*		*		*	
Markleeville PUD Test Well	> 6.5 < 8.5		500		250		*		*		*		1		10		*		*	
Markleeville CR; Downstream	> 6.5 < 8.5		80	X	4.0		*		0.02	X	*		*		*		0.2		*	

* = N/A
X = Exceedence

sample date 4/4/00	pH		TDS		Cl		BOD		Total P		TKN		NO2-N		NO3-N		TOTAL N		TEMP	
Site	limit	exceedence	limit	exceedence	limit	exceedence	limit	exceedence	limit	exceedence	limit	exceedence	limit	exceedence	limit	exceedence	limit	exceedence	limit	exceedence
Markleeville Cr; upstream	> 6.5 < 8.5		80		4.0		*		0.02	X	*		*		*		0.2	X	*	
Markleeville PUD Pond	< 6.0 > 9.0		*		*		30		*		*		*		*		*		*	
Markleeville PUD Test Well	> 6.5 < 8.5		500		250		*		*		*		1		10		*		*	
Markleeville CR; Downstream	> 6.5 < 8.5		80		4.0		*		0.02	X	*		*		*		0.2		*	

* = N/A
X = Exceedence

sample date 7/5/00	pH		TDS		Cl		BOD		Total P		TKN		NO2-N		NO3-N		TOTAL N		TEMP	
Site	limit	exceedence	limit	exceedence	limit	exceedence	limit	exceedence	limit	exceedence	limit	exceedence	limit	exceedence	limit	exceedence	limit	exceedence	limit	exceedence
Markleeville Cr; upstream	> 6.5 < 8.5		80	X	4.0		*		0.02	X	*		*		*		0.2	X	*	
Markleeville PUD Pond	< 6.0 > 9.0		*		*		30		*		*		*		*		*		*	
Markleeville PUD Test Well	> 6.5 < 8.5		500		250		*		*		*		1		10		*		*	
Markleeville CR; Downstream	> 6.5 < 8.5		80	X	4.0		*		0.02	X	*		*		*		0.2	X	*	

* = N/A
X = Exceedence

sample date 10/4/00	pH		TDS		Cl		BOD		Total P		TKN		NO2-N		NO3-N		TOTAL N		TEMP	
Site	limit	exceedence	limit	exceedence	limit	exceedence	limit	exceedence	limit	exceedence	limit	exceedence	limit	exceedence	limit	exceedence	limit	exceedence	limit	exceedence
Markleeville Cr; upstream	> 6.5 < 8.5		80	X	4.0		*		0.02	X	*		*		*		0.2	X	*	
Markleeville PUD Pond	< 6.0 > 9.0		*		*		30	X	*		*		*		*		*		*	
Markleeville PUD Test Well	> 6.5 < 8.5		500		250		*		*		*		1		10		*		*	
Markleeville CR; Downstream	> 6.5 < 8.5		80	X	4.0		*		0.02	X	*		*		*		0.2	X	*	

* = N/A
X = Exceedence

sample date 1/9/01	pH		TDS		Cl		BOD		Total P		TKN		NO2-N		NO3-N		TOTAL N		TEMP	
Site	limit	exceedence	limit	exceedence	limit	exceedence	limit	exceedence	limit	exceedence	limit	exceedence	limit	exceedence	limit	exceedence	limit	exceedence	limit	exceedence

Markleeville Cr; upstream	> 6.5 < 8.5		80	X	4.0	X	*		0.02	X	*		*		*		0.2		*	
Markleeville PUD Pond	< 6.0 > 9.0		*		*		30		*		*		*		*		*		*	
Markleeville PUD Test Well	> 6.5 < 8.5		500		250		*		*		*		1		10		*		*	
Markleeville CR; Downstream	> 6.5 < 8.5		80	X	4.0	X	*		0.02		*		*		*		0.2		*	

* = N/A

X = Exceedence

SOUTH TAHOE PUBLIC UTILITY DISTRICT

SEWER • 1950 • WATER A PUBLIC AGENCY

1275 Meadow Crest Drive • South Lake Tahoe, California 96150
Phone (916) 544-6474 • Fax (916) 541-0614

January 17, 2000

Markleeville PUD
Post Office Box 222
Markleeville, CA 96120

Attention: Dave Peets

Customer#: **1004**

Sample Date: 1/5/00

Site	ID	pH	TDS mg/L	Cl mg/L	BOD mg/L	TotalP mg/L	TKN mg/L	NO2-N mg/L	NO3-N mg/L	Total N mg/L	TEMP
Markleeville Cr; Upstream	20000106-06		148 <	.5		0.030 <	0.100 <	0.010	0.022	0.132	-1°C
Markleeville PUD Pond	20000106-07	7.47	212	24.9	24.8						
Markleeville PUD Test Well	20000106-08	7.04	214	22		0.720	0.169 <	0.010	0.019	0.198	
Markleeville Cr; Downstream	20000106-09		147	7.35		0.033	0.118 <	0.010	0.014	0.142	-1°C

Methods:
pH, by EPA 150.1
TDS, by EPA 160.1
Chloride, by EPA 325.2
BOD, Standard Methods, 18th ed, Method 5210 B
Total Phosphorous, by EPA 365.1
Total Kjeldahl Nitrogen, by EPA 351.1
Nitrite, by EPA 353.2
Nitrate, by EPA 353.2
Total Nitrogen, by Calculation

Report Approved by: A Power
ELAP ID#: 1569

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SOUTH TAHOE PUBLIC UTILITY DISTRICT

1950-2000 50 YEARS OF EXCELLENCE

1275 Meadow Crest Drive • South Lake Tahoe, California 96150
Phone (530) 544-6474 • Fax (530) 541-0614

April 10, 2000

Markleeville PUD
Post Office Box 222
Markleeville, CA 96120

Attention: Dave Peets

Customer#: **1004**

Sample Date: 4/4/00

Site	ID	pH	TDS mg/L	Cl mg/L	Filtered BOD mg/L	TotalP mg/L	TKN mg/L	NO2-N mg/L	NO3-N mg/L	Total N mg/L	TEMP
Markleeville Cr; Upstream	20000405-06	7.60	54	.88		0.086	< 0.100	< 0.010	0.161	0.271	7.0°
Markleeville PUD Pond	20000405-07	7.13	209	21.2	15.6						
Markleeville PUD Test Well	20000405-08	6.85	206	19.1		0.340	< 0.100	< 0.010	0.025	0.135	
Markleeville Cr; Downstream	20000405-09	7.67	56	.69		0.100	0.174	< 0.010	0.014	0.198	7.6°C

Methods:
pH, by EPA 150.1
TDS, by EPA 160.1
Chloride, by EPA 325.2
BOD, Standard Methods, 18th ed, Method 5210 B
Total Phosphorous, by EPA 365.1
Total Kjeldahl Nitrogen, by EPA 351.1
Nitrite, by EPA 353.2
Nitrate, by EPA 353.2
Total Nitrogen, by Calculation

Report Approved by: Terry Lowrie
ELAP ID#: 1569

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SOUTH TAHOE PUBLIC UTILITY DISTRICT

1950-2000 50 YEARS OF EXCELLENCE

1275 Meadow Crest Drive • South Lake Tahoe,California 96150
Phone (530) 544-6474 • Fax (530) 541-0614

July 12, 2000

Markleeville PUD
Post Office Box 222
Markleeville, CA 96120

Attention: Dave Peets

Customer#: **1004**

Sample Date: 7/5/00

Site	ID	pH	TDS mg/L	Cl mg/L	Filtered BOD mg/L	TotalP mg/L	TKN mg/L	NO2-N mg/L	NO3-N mg/L	Total N mg/L	TEM
Markleeville Cr; Upstream	20000706-06	8.10	91	1.72		0.024	0.258	< 0.010	0.013	0.281	16.0
Markleeville PUD Pond	20000706-07	7.36	233	28.1	28.1						
Markleeville PUD Test Well	20000706-08	7.33	167	5.73		0.990	0.333	< 0.010	< 0.010	0.353	
Markleeville Cr; Downstream	20000706-09	8.08	93	1.68		0.022	0.531	< 0.010	< 0.010	0.551	15.0

Methods:
- pH, by EPA 150.1
- TDS, by EPA 160.1
- Chloride, by EPA 325.2
- BOD, Standard Methods, 18th ed, Method 5210 B
- Total Phosphorous, by EPA 365.1
- Total Kjeldahl Nitrogen, by EPA 351.1
- Nitrite, by EPA 353.2
- Nitrate, by EPA 353.2
- Total Nitrogen, by Calculation

Report Approved by:
ELAP ID#: 1569

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South Tahoe Public Utility District

General Manager
Robert G. Baer

Directors
Christopher H. Strohm
James R. Jones
Mary Lou Mosbacher
Duane Wallace
Pembroke Gochnauer

1275 Meadow Crest Drive • South Lake Tahoe • CA 96150
Phone 530 544-6474 • Fax 530 541-0614

October 17, 2000

Markleeville PUD
Post Office Box 222
Markleeville, CA 96120

Attention: Dave Peets

Customer#: **1004**

Sample Date: 10/4/00

Site	ID	pH	TDS mg/L	Cl mg/L	Filtered BOD mg/L	TotalP mg/L	TKN mg/L	NO2-N mg/L	NO3-N mg/L	Total N mg/L	TEMP
Markleeville Cr; Upstream	20001005-06	8.14	144	3.6		0.032 <	0.100 <	0.010 <	0.010	0.120	13.0°C
Markleeville PUD Pond	20001005-07	7.22	258	31.8	40.3						
Markleeville Cr; Downstream	20001005-08	8.15	137	3.34		0.024 <	0.010 <	0.010	0.016	0.036	12°C

Methods:
pH, by EPA 150.1
TDS, by EPA 160.1
Chloride, by EPA 325.2
BOD, Standard Methods, 18th ed, Method 5210 B
Total Phosphorous, by EPA 365.1
Total Kjeldahl Nitrogen, by EPA 351.1
Nitrite, by EPA 353.2
Nitrate, by EPA 353.2
Total Nitrogen, by Calculation

TEST WELL
NO TIDW 10/4/00

Report Approved by: Daniel Agee
ELAP ID#: 1569

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South Tahoe
Public Utility District

1275 Meadow Crest Drive • South Lake Tahoe • CA 96150
Phone 530 544-6474 • Fax 530 541-0614

January 15, 2001

Markleeville PUD
Post Office Box 222
Markleeville, CA 96120

Attention: Dave Peets

Customer#: **1004**

Sample Date: 1/9/01

Site	ID	Temp C	pH	TDS mg/L	Cl mg/L	Filtered BOD mg/L	TotalP mg/L	TKN mg/L	NO2 as N mg/L	NO3 as N mg/L	Total N mg/L
Markleeville Cr; Upstream	20010110-06	1.0	8.04	146	7.85		0.022 <	0.100 <	0.010 <	0.010	0.120
Markleeville PUD Pond	20010110-07	0.0	7.48	215	24.5	13.1					
Markleeville PUD Test Well	20010110-08	3.0	6.72	242	28.2		0.292	0.284 <	0.010	0.010	0.304
Markleeville Cr; Downstream	20010110-09	1.0	8.00	145	7.89		0.020 <	0.100 <	0.010 <	0.010	0.120

Methods:
pH, by EPA 150.1
TDS, by EPA 160.1
Chloride, by EPA 325.2
BOD, Standard Methods, 18th ed, Method 5210 B
Total Phosphorous, by EPA 365.1
Total Kjeldahl Nitrogen, by EPA 351.1
Nitrite, by EPA 353.2
Nitrate, by EPA 353.2
Total Nitrogen, by Calculation

Report Approved by:
ELAP ID#: 1569

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CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION
MONITORING AND REPORTING PROGRAM NO. 94-108
FOR
MARKLEEVILLE PUBLIC UTILITY DISTRICT
WASTEWATER SYSTEM
ALPINE COUNTY
BOARD ORDER NO. 6-95-22
WDID NO. 6A020008000

	Markleeville PUD Oxidation Pond #1					Pond #2
Sample Date	Total Dissolved Solid, mg/L	Chlorides, mg/L	BOD, filtered, mg/L	Surfactants, mg/L	pH	BOD, filtered, mg/L
1/7/98	223	29		0.031	7.72	
1/13/98						7.08
4/6/98	189	23.3	16.4	0.054	7.98	
7/20/98	204	23.7	16.7	0.025	7.65	
10/6/98	224	27.1	17.7	0.038	6.98	
1/5/99	216	24.6	4.65	0.07	7.51	
4/14/99	179	18.2		0.025	8.33	21.8
8/3/99	183	21.7	20.5		7.52	
10/5/99	197	25.1	24.7		8.01	
Maximum	224	29	24.7	0.07	8.33	21.8
Average	201.88	24.09	16.78	0.04	7.71	14.44

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION
MONITORING AND REPORTING PROGRAM NO. 94-108
FOR
MARKLEEVILLE PUBLIC UTILITY DISTRICT
WASTEWATER SYSTEM
ALPINE COUNTY
BOARD ORDER NO. 6-95-22
WDID NO. 6A020008000

	Markleeville Creek Upstream						
Sample Date	**Total Dissolved Solid, mg/L**	**Chlorides, mg/L**	**Total Kjeldahl Nitrogen, mg/L**	**Nitrite, as N, mg/L**	**Nitrate, as N, mg/l**	**Total Nitrogen, mg/L**	**Total Phosphorus, mg/L**
1/7/98	136	6.9	0.327	0.01	0.01	0.347	0.022
1/13/98							
4/6/98	82	1.48	0.1	0.01	0.012	0.122	0.022
7/20/98	59	0.742	0.432	0.01	0.01	0.452	0.026
10/6/98	88	4.17	0.549	0.01	0.037	0.596	0.02
1/5/99	160	3.45	0.858	0.01	0.026	0.894	0.016
4/14/99	96	1.81	0.209	0.01	0.01	0.229	0.044
8/3/99	92	1.67	0.49	0.01	0.093	0.593	0.054
10/5/99	128	4.58	0.212	0.01	0.025	0.247	0.022
Maximum	160	6.9	0.858	0.01	0.093	0.894	0.054
Average	105.13	3.10	0.40	0.01	0.03	0.44	0.03

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION
MONITORING AND REPORTING PROGRAM NO. 94-108
FOR
MARKLEEVILLE PUBLIC UTILITY DISTRICT
WASTEWATER SYSTEM
ALPINE COUNTY
BOARD ORDER NO. 6-95-22
WDID NO. 6A020008000

	Markleeville Creek Downstream						
Sample Date	**Total Dissolved Solid, mg/L**	**Chlorides, mg/L**	**Total Kjeldahl Nitrogen, mg/L**	**Nitrite, as N, mg/L**	**Nitrate, as N, mg/l**	**Total Nitrogen, mg/L**	**Total Phosphorus, mg/L**
1/7/98	136	6.85	0.307	0.01	0.01	0.327	0.05
1/13/98							
4/6/98	81	1.46	0.125	0.01	0.036	0.171	0.022
7/20/98	54	0.715	0.261	0.01	0.016	0.287	0.03
10/6/98	125	3.73	0.33	0.01	0.038	0.378	0.018
1/5/99	108	3.42	0.192	0.01	0.013	0.215	0.01
4/14/99	96	1.75	0.182	0.01	0.01	0.202	0.05
8/3/99	97	1.97	0.376	0.01	0.019	0.405	0.04
10/5/99	128	4.15	0.238	0.01	0.017	0.265	0.032
Maximum	136	6.85	0.376	0.01	0.038	0.405	0.05
Average	103.13	3.01	0.25	0.01	0.02	0.28	0.03

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION
MONITORING AND REPORTING PROGRAM NO. 94-108
FOR
MARKLEEVILLE PUBLIC UTILITY DISTRICT
WASTEWATER SYSTEM
ALPINE COUNTY
BOARD ORDER NO. 6-95-22
WDID NO. 6A020008000

	Markleeville PUD Test Well						
Sample Date	Total Dissolved Solid, mg/L	Chlorides, mg/L	Total Kjeldahl Nitrogen, mg/L	Nitrite, as N, mg/L	Nitrate, as N, mg/l	Total Nitrogen, mg/L	Total Phosphorus, mg/L
1/7/98							
1/13/98							
4/6/98	199	19.3	0.258	0.023	1.5	1.781	0.27
7/20/98	176	8.59	0.367	0.01	0.01	0.387	0.648
10/6/98	204	13.3	0.736	0.01	0.048	0.794	0.891
1/5/99	200	22.5	1.111	0.01	0.023	1.144	0.675
4/14/99	199	18.5	0.318	0.01	0.01	0.338	0.422
8/3/99	159	5.19	0.404	0.01	0.01	0.424	1.18
10/5/99	196	14.4	0.321	0.01	0.019	0.35	0.74
Maximum	204	22.5	1.111	0.023	1.5	1.781	1.18
Average	190.43	14.54	0.50	0.01	0.23	0.75	0.69

SOUTH TAHOE PUBLIC UTILITY DISTRICT

"Basic Services for a Complex World"

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1275 Meadow Crest Drive • South Lake Tahoe, California 96150
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General Manager
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Directors
JAMES R. JONES
ROBERT MASON
MARY LOU MOSBACHER
CHRIS STROHM
DUANE WALLACE

January 19, 1998

Markleeville P.U.D.
Post Office Box 222
Markleeville, CA 96120

Attn: Marvin Steinman,

Site:	Markleeville PUD Oxidation Pond	Markleeville PUD Oxidation Pond	Markleeville Cr. Upstream	Markleeville Cr. Downstream
Date:	01/07/98	01/13/98	01/07/98	01/07/98
ID#:	980107-07	980113-18	980107-06	980107-08
Total Dissolved Solids, mg/L	223		136	136
Chlorides, mg/L:	29.0		6.90	6.85
Surfactants, mg/L:	0.031			
BOD, filtered, mg/L:		7.08		
pH	7.72			
Total Kjeldahl Nitrogen, mg/L			0.327	0.307
Nitrite, as N, mg/L			< 0.010	< 0.010
Nitrate, as N, mg/L			0.010	0.010
Total Nitrogen, mg/L			0.347	0.327
Total Phosphorus, mg/L			0.022	0.050

Report Approved by:
ELAP ID #: 1569

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April 27, 1998

Markleeville P.U.D.
Post Office Box 222
Markleeville, CA 96120

Attn: Marvin Steinman,

Site:	Markleeville PUD Oxidation Pond	Markleeville Cr. Upstream	Markleeville Cr. Downstream	Markleeville PUD Test Well
Date:	04/06/98	04/06/98	04/06/98	04/06/98
ID#:	980407-07	980407-06	980407-09	980406-08
Total Dissolved Solids, mg/L	169	82	81	199
Chlorides, mg/L:	23.3	1.48	1.46	19.3
Surfactants, mg/L:	0.054			
BOD, filtered, mg/L:	16.4			
pH	7.98			
Total Kjeldahl Nitrogen, mg/L		< 0.100	0.125	0.258
Nitrite, as N, mg/L		< 0.010	< 0.010	0.023
Nitrate, as N, mg/L		0.012	0.036	1.500
Total Nitrogen, mg/L		0.122	0.171	1.781
Total Phosphorus, mg/L		0.022	0.022	0.270

Report Approved by: _____
ELAP ID #: 1569

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SOUTH TAHOE
PUBLIC UTILITY DISTRICT

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Phone: (530) 544-6474 • Facsimile: (530) 541-0614

Robert G. Baer, General Manager
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Mary Lou Mosbacher
Duane Wallace
Pembroke Gochnauer

July 27, 1998

Markleeville P.U.D.
Post Office Box 222
Markleeville, CA 96120

Attn: Marvin Steinman,

Site:	Markleeville PUD Oxidation Pond	Markleeville Cr. Upstream	Markleeville Cr. Downstream	Markleeville PUD Test Well
Date:	07/20/98	07/20/98	07/20/98	07/20/98
ID#:	980721-26	980721-25	980721-28	980721-27
Total Dissolved Solids, mg/L	204	59	54	176
Chlorides, mg/L:	23.7	0.742	0.715	8.59
Surfactants, mg/L:	< 0.025			
BOD, filtered, mg/L:	16.7			
pH	7.65			
Total Kjeldahl Nitrogen, mg/L		0.432	0.261	0.367
Nitrite, as N, mg/L		< 0.010	< 0.010	< 0.010
Nitrate, as N, mg/L		< 0.010	0.016	< 0.010
Total Nitrogen, mg/L		0.452	0.287	0.387
Total Phosphorus, mg/L		0.026	0.030	0.648

Report Approved by: _____
ELAP ID #: 1569

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Duane Wallace
Pembroke Gochnauer

October 20, 1998

Markleeville P.U.D.
Post Office Box 222
Markleeville, CA 96120

TJM 10/22/98

Attn: Marvin Steinman,

Site:	Markleeville PUD Oxidation Pond	Markleeville Cr. Upstream	Markleeville Cr. Downstream	Markleeville PUD Test Well
Date:	10/06/98	10/06/98	10/06/98	10/06/98
ID#:	981006-08	981006-07	981006-09	981006-10
Total Dissolved Solids, mg/L	224	88	125	204
Chlorides, mg/L:	27.1	4.17	3.73	13.3
Surfactants, mg/L:	0.038			
BOD, filtered, mg/L:	17.7			
pH	6.98			
Total Kjeldahl Nitrogen, mg/L		0.549	0.330	0.736
Nitrite, as N, mg/L		< 0.010	< 0.010	< 0.010
Nitrate, as N, mg/L		0.037	0.038	0.048
Total Nitrogen, mg/L		0.596	0.378	0.794
Total Phosphorus, mg/L		0.020	0.018	0.891

Report Approved by: Terry Fowler
ELAP ID #: 1569

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SOUTH TAHOE PUBLIC UTILITY DISTRICT
Sewer . 1950 . Water A PUBLIC AGENCY
1275 Meadow Crest Drive • South Lake Tahoe, California 96150
Phone (916) 544-6474 • FAX (916) 541-0614

January 12, 1999

Markleeville P.U.D.
Post Office Box 222
Markleeville, CA 96120

Attn: Marvin Steinman,

Site:	Markleeville PUD Oxidation Pond	Markleeville Cr. Upstream	Markleeville Cr. Downstream	Markleeville PUD Test Well
Date:	01/05/99	01/05/99	01/05/99	01/05/99
ID#:	990106-06	990106-08	990106-09	990106-07
Total Dissolved Solids, mg/L	216	160	108	200
Chlorides, mg/L:	24.6	3.45	3.42	22.5
Surfactants, mg/L:	0.070			
BOD, filtered, mg/L:	4.65			
pH	7.51			
Total Kjeldahl Nitrogen, mg/L		0.858	0.192	1.111
Nitrite, as N, mg/L		< 0.010	< 0.010	< 0.010
Nitrate, as N, mg/L		0.026	0.013	0.023
Total Nitrogen, mg/L		0.894	0.215	1.144
Total Phosphorus, mg/L		0.016	0.010	0.675

Report Approved by: Peggy Loader
ELAP ID #: 1569

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SOUTH TAHOE PUBLIC UTILITY DISTRICT
Sewer • 1950 • Water A PUBLIC AGENCY
1275 Meadow Crest Drive • South Lake Tahoe, California 96150
Phone (916) 544-6474 • FAX (916) 541-0614

April 26, 1999

Markleeville P.U.D.
Post Office Box 222
Markleeville, CA 96120

Attn: Marvin Steinman,

Site:	Markleeville PUD Oxidation Pond	Markleeville PUD Oxidation Pond	Markleeville Cr. Upstream	Markleeville Cr. Downstream	Markleeville PUD Test Well
Date:	04/14/99	04/20/99	04/14/99	04/14/99	04/14/99
ID#:	990414-06	990420-15	990414-08	990414-09	990414-07
Total Dissolved Solids, mg/L	179		96	96	199
Chlorides, mg/L:	18.2		1.81	1.75	18.5
Surfactants, mg/L:	< 0.025				
BOD, filtered, mg/L:		21.8			
pH	8.33				
Total Kjeldahl Nitrogen, mg/L			0.209	0.182	0.318
Nitrite, as N, mg/L			< 0.010	< 0.010	< 0.010
Nitrate, as N, mg/L			0.010	< 0.010	< 0.010
Total Nitrogen, mg/L			0.229	0.202	0.338
Total Phosphorus, mg/L			0.044	0.050	0.422

To Jim 4/28/99

Report Approved by:
ELAP ID #: 1569

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SOUTH TAHOE
PUBLIC UTILITY DISTRICT

August 13, 1999

Markleeville P.U.D.
Post Office Box 222
Markleeville, CA 96120

Attn: Jim Fungi,

Site:	Markleeville PUD Oxidation Pond	Markleeville PUD Test Well	Markleeville Cr. Upstream	Markleeville Cr. Downstream
Date:	08/03/99	08/03/99	08/03/99	08/03/99
ID#:	990804-07	990804-08	990804-06	990804-09
Total Dissolved Solids, mg/L	183	159	92	97
Chlorides, mg/L:	21.7	5.16	1.67	1.97
BOD, filtered, mg/L:	20.5			
pH	7.52			
Total Kjeldahl Nitrogen, mg/L		0.404	0.490	0.376
Nitrite, as N, mg/L		< 0.010	< 0.010	< 0.010
Nitrate, as N, mg/L		< 0.010	0.093	0.019
Total Nitrogen, mg/L		0.424	0.593	0.405
Total Phosphorus, mg/L		1.180	0.054	0.040

Report Approved by:
ELAP ID #: 1569

(530) 544-6474
Fax (530) 541-0614

1275 Meadow Crest Drive
South Lake Tahoe, CA 96150

100% Recycled Fiber Content

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SOUTH TAHOE
PUBLIC UTILITY DISTRICT

October 15, 1999

Markleeville P.U.D.
Post Office Box 222
Markleeville, CA 96120

Attn: Jim Fungi,

Site:	Markleeville PUD Oxidation Pond	Markleeville PUD Test Well	Markleeville Cr. Upstream	Markleeville Cr. Downstream
Date:	08 10/05/99	10/05/99	10/05/99	10/05/99
ID#:	991006-07	991006-08	991006-06	991006-09
Total Dissolved Solids, mg/L	197	196	128	128
Chlorides, mg/L:	25.1	14.4	4.58	4.15
BOD, filtered, mg/L:	24.7			
pH	8.01			
Total Kjeldahl Nitrogen, mg/L		0.321	0.212	0.238
Nitrite, as N, mg/L		< 0.010	< 0.010	< 0.010
Nitrate, as N, mg/L		0.019	0.025	0.017
Total Nitrogen, mg/L		0.350	0.247	0.265
Total Phosphorus, mg/L		0.740	0.022	0.032

Report Approved by:
ELAP ID #: 1569

Robert G. Bear, General Manager
BOARD MEMBERS
James R. Jones, President
Christopher Strohm, Vice President
Pembroke Gastinaux, Director
Mary Lou Mosbacher, Director
Duane Wallace, Director

(530) 544-6474 • Fax (530) 541-0614
1275 Meadow Crest Drive • South Lake Tahoe, CA 96150

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SOUTH TAHOE
PUBLIC UTILITY DISTRICT
1275 Meadow Crest Drive • South Lake Tahoe, CA 96150
Phone: (530) 544-6474 • Facsimile: (530) 541-0614

Robert G. Baer, General Manager
BOARD MEMBERS
Christopher H. Strohm
James R. Jones
Mary Lou Mosbacher
Duane Wallace
Pembroke Gochnauer

July 27, 1998

Markleeville P.U.D.
Post Office Box 222
Markleeville, CA 96120

Attn: Marvin Steinman,

Site:	Markleeville PUD Oxidation Pond	Markleeville Cr. Upstream	Markleeville Cr. Downstream	Markleeville PUD Test Well
Date:	07/20/98	07/20/98	07/20/98	07/20/98
ID#:	980721-26	980721-25	980721-28	980721-27
Total Dissolved Solids, mg/L	204	59	54	176
Chlorides, mg/L:	23.7	0.742	0.715	8.59
Surfactants, mg/L:	< 0.025			
BOD, filtered, mg/L:	16.7			
pH	7.65			
Total Kjeldahl Nitrogen, mg/L		0.432	0.261	0.367
Nitrite, as N, mg/L		< 0.010	< 0.010	< 0.010
Nitrate, as N, mg/L		< 0.010	0.016	< 0.010
Total Nitrogen, mg/L		0.452	0.287	0.387
Total Phosphorus, mg/L		0.026	0.030	0.648

Report Approved by: _____
ELAP ID #: 1569

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April 27, 1998

Markleeville P.U.D.
Post Office Box 222
Markleeville, CA 96120

Attn: Marvin Steinman,

Site:	Markleeville PUD Oxidation Pond	Markleeville Cr. Upstream	Markleeville Cr. Downstream	Markleeville PUD Test Well
Date:	04/06/98	04/06/98	04/06/98	04/06/98
ID#:	980407-07	980407-06	980407-09	980406-08
Total Dissolved Solids, mg/L	189	82	81 OK	199
Chlorides, mg/L:	23.3	1.48	1.46	19.3
Surfactants, mg/L:	0.054 OK			
BOD, filtered, mg/L:	16.4 OK			
pH	7.98			
Total Kjeldahl Nitrogen, mg/L		< 0.100	0.125	0.258
Nitrite, as N, mg/L		< 0.010	< 0.010	0.023
Nitrate, as N, mg/L		0.012	0.036	1.500
Total Nitrogen, mg/L		0.122	0.171 OK	1.781
Total Phosphorus, mg/L		0.022	0.022 OK	0.270

Report Approved by: _____
ELAP ID #: 1569

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SOUTH TAHOE PUBLIC UTILITY DISTRICT

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MARY LOU MOSBACHER
CHRIS STROHM
DUANE WALLACE

January 19, 1998

Markleeville P.U.D.
Post Office Box 222
Markleeville, CA 96120

Attn: Marvin Steinman,

Site:	Markleeville PUD Oxidation Pond	Markleeville PUD Oxidation Pond	Markleeville Cr. Upstream	Markleeville Cr. Downstream
Date:	01/07/98	01/13/98	01/07/98	01/07/98
ID#:	980107-07	980113-18	980107-06	980107-08
Total Dissolved Solids, mg/L	223		136	136
Chlorides, mg/L:	29.0		6.90	6.85
Surfactants, mg/L:	0.031			
BOD, filtered, mg/L:		7.08		
pH	7.72			
Total Kjeldahl Nitrogen, mg/L			0.327	0.307
Nitrite, as N, mg/L			< 0.010	< 0.010
Nitrate, as N, mg/L			0.010	0.010
Total Nitrogen, mg/L			0.347	0.327
Total Phosphorus, mg/L			0.022	0.050

Report Approved by: Greg Lowden
ELAP ID #: 1569

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SOUTH TAHOE PUBLIC UTILITY DISTRICT

General Manager
ROBERT G. BAER

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Directors
JAMES R. JONES
ROBERT MASON
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CHRIS STROHM
DUANE WALLACE

October 10, 1997

Markleeville P.U.D.
Post Office Box 222
Markleeville, CA 96120

Attn: Marvin Steinman,

Site:	Markleeville PUD Oxidation Pond	Markleeville Cr. Upstream	Markleeville Cr. Downstream	Markleeville PUD Test Well
Date:	09-29-97	09-29-97	09-29-97	09-29-97
ID#:	970930-07	970930-06	970930-08	970930-09
Total Dissolved Solids, mg/L	219	144	135	200
Chlorides, mg/L:	29.0	9.86	9.85	23.9
Surfactants, mg/L:	0.021			
BOD, filtered, mg/L:	26.2			
pH	7.29	8.24	8.28	6.98
Total Kjeldahl Nitrogen, mg/L		0.359	0.100	0.251
Nitrite, as N, mg/L		< 0.010	< 0.010	< 0.010
Nitrate, as N, mg/L		0.010	0.015	0.014
Total Nitrogen, mg/L		0.379	0.125	0.275
Total Phosphorus, mg/L		0.036	0.046	0.392

Report Approved by: Terry Lowden
ELAP ID #: 1569

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General Manager
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DUANE WALLACE

October 10, 1997

Markleeville P.U.D.
Post Office Box 222
Markleeville, CA 96120

Attn: Marvin Steinman,

Site:	Markleeville PUD Oxidation Pond	Markleeville Cr. Upstream	Markleeville Cr. Downstream	Markleeville PUD Test Well
Date:	09-29-97	09-29-97	09-29-97	09-29-97
ID#:	970930-07	970930-06	970930-08	970930-09
Total Dissolved Solids, mg/L	219	144	135	200
Chlorides, mg/L:	29.0	9.86	9.85	23.9
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Nitrite, as N, mg/L		< 0.010	< 0.010	< 0.010
Nitrate, as N, mg/L		0.010	0.015	0.014
Total Nitrogen, mg/L		0.379	0.125	0.275
Total Phosphorus, mg/L		0.036	0.046	0.392

Report Approved by: Terry Lowden
ELAP ID #: 1569

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Phone (916) 544-6474 • Fax (916) 541-0614

General Manager
ROBERT G. BAER

Directors
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MARY LOU MOSBACHER
CHRIS STROHM
DUANE WALLACE

October 9, 1996

Markleeville P.U.D.
Post Office Box 222
Markleeville, CA 96120

Attn: Marvin Steinman,

Site:	Markleeville PUD Oxidation Pond	Markleeville Cr. Upstream	Markleeville Cr. Downstream
Date:	10-01-96	10-01-96	10-01-96
ID#:	961001-07	961001-06	961001-08
Total Dissolved Solids, mg/L:	203	139	131
Chlorides, mg/L:	26.4	5.00	4.96
Surfactants, mg/L:	0.04		
BOD, filtered, mg/L:	2.4		
pH	7.22		
Total Kjeldahl Nitrogen, mg/L		0.360	0.198
Nitrite, as N, mg/L		0.010	0.010
Nitrate, as N, mg/L		< 0.01	< 0.010
Total Nitrogen, mg/L		0.380	0.218
Total Phosphorus, mg/L		0.059	0.029

Report Approved by:
ELAP ID #: 1569

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General Manager
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ROBERT MASON
MARY LOU MOSBACHER
CHRIS STROHM
DUANE WALLACE

January 19, 1996

Markleeville P.U.D.
Post Office Box 222
Markleeville, CA 96120

Attn: Marvin Steinman,

Site:	Markleeville PUD Oxidation Pond	Markleeville Cr. Upstream	Markleeville Cr. Downstream
Date:	01-08-96	01-08-96	01-08-96
ID#:	960108-07	960108-08	960108-09
Total Dissolved Solids, mg/L:	234	104	103
Chlorides, mg/L:	27.2	3.5	3.6
Surfactants, mg/L:	0.05		
BOD, filtered, mg/L:	11.2		
pH	7.38		
Total Kjeldahl Nitrogen, mg/L		0.090	0.094
Nitrite, as N, mg/L		0.021	0.022
Nitrate, as N, mg/L		0.010	0.053
Total Nitrogen, mg/L		0.121	0.169
Total Phosphorus, mg/L		0.010	0.010

Report Approved by:
ELAP ID #: 1569

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SEWER • 1950 • WATER A PUBLIC AGENCY

1275 Meadow Crest Drive • South Lake Tahoe, California 96150
Phone (916) 544-6474 • Fax (916) 541-0614

General Manager
ROBERT G. BAER

Directors
JAMES R. JONES
ROBERT MASON
MARY LOU MOSBACHER
CHRIS STROHM
DUANE WALLACE

April 12, 1996

Markleeville P.U.D.
Post Office Box 222
Markleeville, CA 96120

Attn: Marvin Steinman,

Site:	Markleeville PUD Oxidation Pond	Markleeville Cr. Upstream	Markleeville Cr. Downstream
Date:	04-04-96	04-04-96	04-04-96
ID#:	960404-07	960404-06	960404-08
Total Dissolved Solids, mg/L:	191	71	62
Chlorides, mg/L:	22.7	1.2	1.2
Surfactants, mg/L:	0.15		
BOD, filtered, mg/L:	15.6		
pH	7.97		
Total Kjeldahl Nitrogen, mg/L		0.219	0.206
Nitrite, as N, mg/L		< 0.010	< 0.010
Nitrate, as N, mg/L		< 0.010	< 0.010
Total Nitrogen, mg/L		0.239	0.226
Total Phosphorus, mg/L		0.037	0.014

Report Approved by: Gary Lowers
ELAP ID #: 1569

This report is applicable only to the sample received by the laboratory. The liability of the laboratory is limited to the amount paid for this report. This report is for the exclusive use of the client to whom it is addressed and upon the condition that the client assumes all liability for the further distribution of the report or its contents.

SOUTH TAHOE PUBLIC UTILITY DISTRICT
"Basic Services for a Complex World"
SEWER • 1950 • WATER A PUBLIC AGENCY
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Phone (916) 544-6474 • Fax (916) 541-0614

General Manager
ROBERT G. BAER

Directors
JAMES R. JONES
ROBERT MASON
MARY LOU MOSBACHER
CHRIS STROHM
DUANE WALLACE

July 23, 1996

Markleeville P.U.D.
Post Office Box 222
Markleeville, CA 96120

Attn: Marvin Steinman,

Site:	Markleeville PUD Oxidation Pond	Markleeville Cr. Upstream	Markleeville Cr. Downstream
Date:	07-15-96	07-15-96	07-15-96
ID#:	960716-21	960716-20	960716-22
Total Dissolved Solids, mg/L:	172	88	63
Chlorides, mg/L:	24.5	1.78	1.62
Surfactants, mg/L:	0.251		
BOD, filtered, mg/L:	7.71		
pH	7.20		
Total Kjeldahl Nitrogen, mg/L		0.088	0.112
Nitrite, as N, mg/L		< 0.010	< 0.010
Nitrate, as N, mg/L		0.014	0.010
Total Nitrogen, mg/L		0.112	0.132
Total Phosphorus, mg/L		0.022	0.023

Report Approved by: Leroy Lockhart
ELAP ID #: 1569

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SOUTH TAHOE PUBLIC UTILITY DISTRICT
"Basic Services for a Complex World"
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Phone (916) 544-6474 • Fax (916) 541-0614

General Manager
ROBERT G. BAER

Directors
JAMES R. JONES
ROBERT MASON
MARY LOU MOSBACHER
CHRIS STROHM
DUANE WALLACE

October 3, 1994

Markleeville P.U.D.
Post Office Box 222
Markleeville, CA 96120

Attn: Marvin Steinman,

Site:	Markleeville PUD Oxidation Pond	Markleeville Cr. Upstream	Markleeville Cr. Downstream
Date:	09-27-94	09-27-94	09-27-94
ID#:	940928-08	940928-07	940928-09
Total Dissolved Solids, mg/L:		233	233
Chlorides, mg/L:	29.3	18.0	18.0
Surfactants, mg/L:	0.06	<0.02	<0.02
BOD, Total, mg/L:	55.4		
BOD, filtered, mg/L:	40.7		

Report Approved by: _____
ELAP ID #: 1569

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SOUTH TAHOE PUBLIC UTILITY DISTRICT
"Basic Services for a Complex World"
SEWER • 1950 • WATER A PUBLIC AGENCY

1275 Meadow Crest Drive • South Lake Tahoe, California 96150
Phone (916) 544-6474 • Fax (916) 541-0614

General Manager
ROBERT G. BAER

Directors
JAMES R. JONES
ROBERT MASON
MARY LOU MOSBACHER
CHRIS STROHM
DUANE WALLACE

July 19, 1995

Markleeville P.U.D.
Post Office Box 222
Markleeville, CA 96120

Attn: Marvin Steinman,

Site:	Markleeville PUD Oxidation Pond	Markleeville Cr. Upstream	Markleeville Cr. Downstream
Date:	07-10-95	07-10-95	07-10-95
ID#:	950710-24	950710-23	950710-25
Total Dissolved Solids, mg/L:	232	42	ok 46
Chlorides, mg/L:	25.8	0.4	0.4
Surfactants, mg/L:	ok 0.35		
BOD, filtered, mg/L:	ok 22.0		
pH	7.24		
Total Kjeldahl Nitrogen, mg/L		0.106	0.165
Nitrite, as N, mg/L		< 0.010	<0.010
Nitrate, as N, mg/L		0.082	0.026
Total Nitrogen, mg/L		0.198	✓ 0.201
Total Phosphorus, mg/L		0.072	0.075

Report Approved by: Leroy Powell
ELAP ID #: 1569

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SOUTH TAHOE PUBLIC UTILITY DISTRICT
"Basic Services for a Complex World"
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1275 Meadow Crest Drive • South Lake Tahoe, California 96150
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General Manager
ROBERT G. BAER

Directors
JAMES R. JONES
ROBERT MASON
MARY LOU MOSBACHER
CHRIS STROHM
DUANE WALLACE

May 1, 1995

Markleeville P.U.D.
Post Office Box 222
Markleeville, CA 96120

Attn: Marvin Steinman,

Site:	Markleeville PUD Oxidation Pond	Markleeville Cr. Upstream	Markleeville Cr. Downstream
Date:	04-23-95	04-23-95	04-23-95
ID#:	950424-07	950424-06	950424-08
Total Dissolved Solids, mg/L:	218	73	81
Chlorides, mg/L:	21.9	1.47	1.39
Surfactants, mg/L:	0.15		
BOD, filtered, mg/L:	6.50		
pH	7.47		
Total Kjeldahl Nitrogen, mg/L		0.151	0.173
Nitrite, as N, mg/L		< 0.010	< 0.010
Nitrate, as N, mg/L		0.022	0.027
Total Nitrogen, mg/L		0.183	0.210
Total Phosphorus, mg/L		0.029	0.025

April 95 #1 903.0
#2 1500.1

Report Approved by: Greg Lowden
ELAP ID #: 1569

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SOUTH TAHOE PUBLIC UTILITY DISTRICT
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General Manager
ROBERT G. BAER

Directors
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CHRIS STROHM
DUANE WALLACE

January 23, 1995

Markleeville P.U.D.
Post Office Box 222
Markleeville, CA 96120

Attn: Marvin Steinman,

Site:	Markleeville PUD Oxidation Pond		Markleeville Cr. Upstream	Markleeville Cr. Downstream
Date:	01-03-95	01-17-95	01-03-95	01-03-95
ID#:	950104-07	950117-24	950104-06	950104-08
Total Dissolved Solids, mg/L:	229		138	134
Chlorides, mg/L:	25.1		6.45	6.97
Surfactants, mg/L:	.06		< 0.02	< 0.02
BOD, Total, mg/L:		16.4		
BOD, filtered, mg/L:		2.4		

Jnuary 95 Left Rmp#1 754.9
Left Rmp#2 1097.0

Feb. 95 #1 0805.7
#2 1238.7

March 95 #1 853.0
#2 1380.6

Report Approved by: _____
ELAP ID #: 1569

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the Nation's #1 Wastewater Treatment Plant

SOUTH TAHOE PUBLIC UTILITY DISTRICT

"Basic Services for a Complex World"

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General Manager
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CHRIS STROHM
DUANE WALLACE

May 1, 1995

Markleeville P.U.D.
Post Office Box 222
Markleeville, CA 96120

5/2/95

Attn: Marvin Steinman,

Site:	Markleeville PUD Oxidation Pond	Markleeville Cr. Upstream	Markleeville Cr. Downstream
Date:	04-23-95	04-23-95	04-23-95
ID#:	950424-07	950424-06	950424-08
Total Dissolved Solids, mg/L:	218	73	81
Chlorides, mg/L:	21.9	1.47	1.39
Surfactants, mg/L:	0.15		
BOD, filtered, mg/L:	6.50		
pH	7.47		
Total Kjeldahl Nitrogen, mg/L		0.151	0.173
Nitrite, as N, mg/L		< 0.010	< 0.010
Nitrate, as N, mg/L		0.022	0.027
Total Nitrogen, mg/L		0.183	0.210
Total Phosphorus, mg/L		0.029	0.025

Sprl 95 #1 903.0
#2 1500.1

Report Approved by: Greg Lowden
ELAP ID #: 1569

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General Manager
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DUANE WALLACE

January 23, 1995

Markleeville P.U.D.
Post Office Box 222
Markleeville, CA 96120

Attn: Marvin Steinman,

Site:	Markleeville PUD Oxidation Pond		Markleeville Cr. Upstream	Markleeville Cr. Downstream
Date:	01-03-95	01-17-95	01-03-95	01-03-95
ID#:	950104-07	950117-24	950104-06	950104-08
Total Dissolved Solids, mg/L:	229		138	134
Chlorides, mg/L:	25.1		6.45	6.97
Surfactants, mg/L:	.06		< 0.02	< 0.02
BOD, Total, mg/L:		16.4		
BOD, filtered, mg/L:		2.4		

Jan. 95 Lift Pump #1 754.9
Lift Pump #2 1097.0

Feb. 95 #1 0805.7
#2 1238.7

March 95 #1 853.0
#2 1380.6 Report Approved by: [signature]
ELAP ID #: 1569

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SOUTH TAHOE PUBLIC UTILITY DISTRICT

Sewer . 1950 . Water A PUBLIC AGENCY

1275 Meadow Crest Drive • South Lake Tahoe, California 96150

Phone (916) 544-6474 • FAX (916) 541-0614

June 21, 1994

Markleeville P.U.D.
Post Office Box 222
Markleeville, CA 96120

Attn: Marvin Steinman,

Site:	Markleeville PUD Oxidation Pond	Markleeville Cr. Upstream	Markleeville Cr. Downstream
Date:	06-14-94	06-14-94	06-14-94
ID#:	940614-10	940614-09	940614-11
Total Dissolved Solids, mg/L:	229	78	77
Chlorides, mg/L:	26.4	1.7	1.5
Surfactants, mg/L:	0.04	< 0.02	< 0.02
BOD, Total, mg/L:	80		
BOD, filtered, mg/L:	8.7		

April 1994 Pump #1 472.8
Pump #2 597.0

Mailed 7/29/94

May Pump #1 497.5
Pump #2 621.2

June Pump #1 523.8
Pump #2 647.3

Data Certified by L Powers

Report Approved by L Powers

This report is applicable only to the sample received by the laboratory. The liability of the laboratory is limited to the amount paid for this report. This report is for the exclusive use of the client to whom it is addressed and upon the condition that the client assumes all liability for the further distribution of the report or its contents.

SOUTH TAHOE PUBLIC UTILITY DISTRICT

Sewer . 1950 . Water A PUBLIC AGENCY

1275 Meadow Crest Drive • South Lake Tahoe, California 96150
Phone (916) 544-6474 • FAX (916) 541-0614

May 9, 1994

Markleeville P.U.D.
Post Office Box 222
Markleeville, CA 96120

Attn: Marvin Steinman,

Site:	Markleeville PUD Oxidation Pond	Markleeville Cr. Upstream	Markleeville Cr. Downstream
Date:	04-28-94	04-28-94	04-28-94
ID#:	940429-07	940429-06	940429-08
Total Dissolved Solids, mg/L:	208	28	31
Chlorides, mg/L:	26.2	1.2	1.1
Surfactants, mg/L:	0.10	0.02	< 0.02
BOD, Total, mg/L:	33		
BOD, filtered, mg/L:	8.1		

January 1994	Lift Pump#1	430.1
	Lift Pump#2	559.3
February 1994	Lift Pump #1	453.0
	Lift Pump #2	577.3
March 1994	Lift Pump #1	472.8
	Lift Pump #2	597.0

Data Certified by _____

Report Approved by _____

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SOUTH TAHOE PUBLIC UTILITY DISTRICT

Sewer • 1950 • Water A PUBLIC AGENCY

1275 Meadow Crest Drive • South Lake Tahoe, California 96150
Phone (916) 544-6474 • FAX (916) 541-0614

June 21, 1994

Markleeville P.U.D.
Post Office Box 222
Markleeville, CA 96120

Attn: Marvin Steinman,

Site:	Markleeville PUD Oxidation Pond	Markleeville Cr. Upstream	Markleeville Cr. Downstream
Date:	06-14-94	06-14-94	06-14-94
ID#:	940614-10	940614-09	940614-11
Total Dissolved Solids, mg/L:	229	78	77
Chlorides, mg/L:	26.4	1.7	1.5
Surfactants, mg/L: MBAS	0.04	< 0.02	< 0.02
BOD, Total, mg/L:	80		
BOD, filtered, mg/L:	8.7		

April 1994 Pump #1 472.8
Pump #2 597.0

May Pump #1 497.5
Pump #2 621.2

June Pump #1 523.8
Pump #2 647.3

Data Certified by C. Powers

Report Approved by C. Powers

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SOUTH TAHOE PUBLIC UTILITY DISTRICT

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May 9, 1994

Markleeville P.U.D.
Post Office Box 222
Markleeville, CA 96120

Attn: Marvin Steinman,

Site:	Markleeville PUD Oxidation Pond	Markleeville Cr. Upstream	Markleeville Cr. Downstream
Date:	04-28-94	04-28-94	04-28-94
ID#:	940429-07	940429-06	940429-08
Total Dissolved Solids, mg/L:	208	28	31
Chlorides, mg/L:	26.2	1.2	1.1
Surfactants, mg/L:	0.10	0.02	< 0.02
BOD, Total, mg/L:	33		
BOD, filtered, mg/L:	8.1		

January 1994	Lift Pump#1	430.1	
	Lift Pump#2	559.3	
February 1994	Lift Pump #1	453.0	22.9 MG
	Lift Pump #2	577.3	22.0
March 1994	Lift Pump #1	472.8	22.8
	Lift Pump #2	597.0	19.7

Data Certified by _____

Report Approved by _____

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SOUTH TAHOE PUBLIC UTILITY DISTRICT

Sewer . 1950 . Water A PUBLIC AGENCY

1275 Meadow Crest Drive • South Lake Tahoe, California 96150

Phone (916) 544-6474 • FAX (916) 541-0614

FEB 4 1994 Received ALPINE COUNTY Auditor–Recorder

February 3, 1994

Markleeville P.U.D.
Post Office Box 222
Markleeville, CA 96120

Attn: Marvin Steinman,

Site:	Markleeville PUD Oxidation Pond	Markleeville Cr. Upstream	Markleeville Cr. Downstream
Date:	01-25-94	01-25-94	01-25-94
ID#:	940125-07	940125-06	940125-08
Total Dissolved Solids, mg/L:	211	147	149
Chlorides, mg/L:	22.4	8.4	8.3
Surfactants, mg/L:	0.25	0.02	< 0.02
BOD, Total, mg/L:	17		
BOD, filtered, mg/L:	7		

12/93 Lift Pump I 410.4
" " II 534.8

1/94 Lift Pump #1 430.1
" " #2 554.3

11/93 Lift Pump I 377.2
" " #2 501.9

Data Certified by Gregg Lowder

Report Approved by Gregg Lowder

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MRKLVPUD.DAT
02/03/94
8:36:17

MARKLEEVILLE PUD
WASTEWATER DATA

DATE	STPUD IDENTIFICATION # POND	MARKLEEVILLE CR UPSTREAM	MARKLEEVILLE CR DOWNSTREAM	TOTAL DISOLVED SOLIDS POND mg/L	TOTAL DISOLVED SOLIDS MARKLEEVILLE CR UPSTRM mg/L	TOTAL DISOLVED SOLIDS MARKLEEVILLE CR DOWNSTRM mg/L	CHLORIDES POND mg/L	CHLORIDES MARKLEEVILLE CR UPSTRM mg/L	CHLORIDES MARKLEEVILLE CR DOWNSTRM mg/L	SURFACTANTS (MBAS) POND mg/L	SURFACTANTS (MBAS) MARKLEEVILLE CR UPSTRM mg/L	SURFACTANTS (MBAS) MARKLEEVILLE CR DOWNSTRM mg/L	BOD POND UNFILT mg/L	BOD POND FILT mg/L
10-13-92	921014-09	921014-07	921014-08	253	162	153	29.3	13.5	11.0	.08	< .05	< .05	39	4.8
02-01-93	930201-07	930201-08	930201-09	226	135	137	29.8	7.4	7.1	.34	< .02	.02	25	8.6
04-22-93	930422-09	930422-07	930422-08	217	59	57	22.9	1.0	1.0	.03	.02	< .02	32	10.3
06-23-93	930623-08	930623-07	930623-09	224	49	44	24.9	.8	.6	.06	< .02	< .02	95	14.0
09-28-93	930928-09	930928-07	930928-08		132	122	32.4	4.6	4.3	.08	< .02	< .02	43	14.0
01-25-94	940125-07	940125-06	940125-08	211	147	149	22.4	8.4	8.3	.25	.02	< .02	17	7.0
MAXIMUM				253	162	153	32.4	13.5	11.0	.34	.05	.05	95	14.0
MINIMUM				211	49	44	22.4	.8	.6	.03	.02	.02	17	4.8
AVERAGE				226	114	110	27.0	6.0	5.4	.14	.03	.03	42	9.8
# TESTS				5	6	6	6	6	6	6	6	6	6	6

Note Filtered BOD: Gelman Type A/E

SOUTH TAHOE PUBLIC UTILITY DISTRICT

Sewer . 1950 . Water A PUBLIC AGENCY

1275 Meadow Crest Drive • South Lake Tahoe, California 96150
Phone (916) 544-6474 • FAX (916) 541-0614

FEB 4 1994 Received ALPINE COUNTY Auditor-Recorder

February 3, 1994

Markleeville P.U.D.
Post Office Box 222
Markleeville, CA 96120

Attn: Marvin Steinman,

Site:	Markleeville PUD Oxidation Pond	Markleeville Cr. Upstream	Markleeville Cr. Downstream
Date:	01-25-94	01-25-94	01-25-94
ID#:	940125-07	940125-06	940125-08
Total Dissolved Solids, mg/L:	211	147	149
Chlorides, mg/L:	22.4	8.4	8.3
Surfactants, mg/L:	0.25	0.02	< 0.02
BOD, Total, mg/L:	17		
BOD, filtered, mg/L:	7		

12/93 Lift Pump I 410.4
" " II 534.8

1/94 Lift Pump #1 430.1
" " #2 554.3

11/93 Lift Pump I 377.2
" " #2 501.9

Data Certified by Terry Lowden

Report Approved by Terry Lowden

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MRKLVPUD.DAT
02/03/94
8:36:17

MARKLEEVILLE PUD
WASTEWATER DATA

DATE	STPUD IDENTIFICATION # POND	MARKLEEVILLE CR UPSTREAM	MARKLEEVILLE CR DOWNSTREAM	TOTAL DISOLVED SOLIDS POND mg/L	TDS MARKLEEVILLE CR UPSTRM mg/L	TDS MARKLEEVILLE CR DOWNSTRM mg/L	CHLORIDES POND mg/L	CHLORIDES MARKLEEVILLE CR UPSTRM mg/L	CHLORIDES MARKLEEVILLE CR DOWNSTRM mg/L	SURFACTANTS (MBAS) POND mg/L	SURFACTANTS (MBAS) MARKLEEVILLE CR UPSTRM mg/L	SURFACTANTS (MBAS) MARKLEEVILLE CR DOWNSTRM mg/L	BOD POND UNFILT mg/L	BOD POND FILT mg/L
10-13-92	921014-09	921014-07	921014-08	253	162	153	29.3	13.5	11.0	.08	< .05	< .05	39	4.8
02-01-93	930201-07	930201-08	930201-09	226	135	137	29.8	7.4	7.1	.34	< .02	.02	25	8.6
04-22-93	930422-09	930422-07	930422-08	217	59	57	22.9	1.0	1.0	.03	.02	< .02	32	10.3
06-23-93	930623-08	930623-07	930623-09	224	49	44	24.9	.8	.6	.06	< .02	< .02	95	14.0
09-28-93	930928-09	930928-07	930928-08		132	122	32.4	4.6	4.3	.08	< .02	< .02	43	14.0
01-25-94	940125-07	940125-06	940125-08	211	147	149	22.4	8.4	8.3	.25	.02	< .02	17	7.0
MAXIMUM				253	162	153	32.4	13.5	11.0	.34	.05	.05	95	14.0
MINIMUM				211	49	44	22.4	.8	.6	.03	.02	.02	17	4.8
AVERAGE				226	114	110	27.0	6.0	5.4	.14	.03	.03	42	9.8
# TESTS				5	6	6	6	6	6	6	6	6	6	6

Note Filtered BOD: Gelman Type A/E

SOUTH TAHOE PUBLIC UTILITY DISTRICT

Sewer . 1950 . Water A PUBLIC AGENCY

1275 Meadow Crest Drive • South Lake Tahoe, California 96150
Phone (916) 544-6474 • FAX (916) 541-0614

October 8, 1993

Markleeville P.U.D.
Post Office Box 222
Markleeville, CA 96120

Attn: Marvin Steinman,

Site:	Markleeville PUD Oxidation Pond	Markleeville Cr. Upstream	Markleeville Cr. Downstream
Date:	09-28-93	09-28-93	09-28-93
ID#:	930928-09	930928-07	930928-08
Total Dissolved Solids, mg/L:		132	122 ✗
Chlorides, mg/L:	32.4	4.6	4.3 ✗
Surfactants, mg/L:	✗ 0.08	< 0.02	< 0.02
BOD, Total, mg/L:	43		
BOD, filtered, mg/L:	14		

7/93 Pump #1 hrs - 269.1
Pump #2 hrs - 396.6

9/93 Pump#1 = 321.4
Pump#2 = 447.2

8/93 Pump#1 = 294.4
Pump #2 = 421.1

Data Certified by J Powers

Report Approved by J Powers

This report is applicable only to the sample received by the laboratory. The liability of the laboratory is limited to the amount paid for this report. This report is for the exclusive use of the client to whom it is addressed and upon the condition that the client assumes all liability for the further distribution of the report or its contents.

SOUTH TAHOE PUBLIC UTILITY DISTRICT

Sewer 1950 Water A PUBLIC AGENCY

P.O. Box 19487 • South Lake Tahoe, California 96151-3487
1275 Meadow Crest Drive • Phone (916) 544-6474 • FAX (916) 541-0614

General Manager
ROBERT G. BAER

Directors
ROBERT MASON
MARY LOU MOSBACHER
STEVEN J. ONYSKO
LOU PIERINI
DUANE WALLACE

May 3, 1993

Markleeville P.U.D.
Post Office Box 222
Markleeville, CA 96120

Attn: Marvin Steinman,

Site:	Markleeville PUD Oxidation Pond	Markleeville Cr. Upstream	Markleeville Cr. Downstream
Date:	04-22-93	04-22-93	04-22-93
ID#:	930422-09	930422-07	930422-08
Total Dissolved Solids, mg/L:	217	59	57
Chlorides, mg/L:	22.9	1.0	1.0
Surfactants, mg/L:	OK 0.03	0.02	< 0.02
BOD, Total, mg/L:	32		
BOD, filtered, mg/L:	10.3		

2/93 Lift Pump I 137.7
2/93 Lift Pump II 271.8
3/93 Lift Pump I 164.2
Lift Pump II 297.9

Data Certified by G Powers

Report Approved by G Powers

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SOUTH TAHOE PUBLIC UTILITY DISTRICT

Sewer 1950 Water A PUBLIC AGENCY

P.O. Box 19487 • South Lake Tahoe, California 96151-3487
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General Manager
ROBERT G. BAER

Directors
ROBERT MASON
MARY LOU MOSBACHER
STEVEN J. ONYSKO
LOU PIERINI
DUANE WALLACE

February 16, 1993

Markleeville P.U.D.
Post Office Box 222
Markleeville, CA 96120

Attn: Marvin Steinman

Site:	Oxidation Pond	Markleeville Creek Upstream	Markleeville Creek Downstream
Date:	02-01-93	02-01-93	02-01-93
ID#:	930201-07	930201-08	930201-09
MBAS, mg/L	0.34	< 0.02	0.02
Chloride, mg/L	29.8	7.4	7.1
TDS, mg/L	226	135	137
BOD-5, mg/L	25		
Filtered BOD-5, mg/L	8.6		

Data Certified by _____

Report Approved by _____

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Sierra Environmental Monitoring Inc.
47 Glen Carran Circle
Sparks, NV 89431
(702)356-3868

Laboratory Analysis Report

Date : 11/19/91 Page: 1
Invoice #: 5374
Client # : MAR-478 PO#:
Name : Markleeville P.U.D.
Address : P.O. Box 222
City : Markleeville State: CA Zip: 96120
Taken by : Markleeville - Steinman

Sample	Collection Date	Collection Time	TOTAL DISSOL. MG/L	BOD-5 MG/L	CHLORIDE MG/L	MBAS MG/L
RIVER UPSTREAM	11/04/91	16:15	147		12	< 0.05
RIVER DOWNSTREAM	11/04/91	16:00	146		13	< 0.05
POND	11/04/91	15:53	194	6	22	0.11
POND-FILTERED	11/04/91	15:53		3		

Approved By:

This report is applicable only to the sample received by the laboratory. The liability of the laboratory is limited to the amount paid for this report. This report is for the exclusive use of the client to whom it is addressed and upon the condition that the client assumes all liability for the further distribution of the report or its contents.

Sierra Environmental Monitoring Inc.
47 Glen Carran Circle
Sparks, NV 89431
(702)356-3868

Laboratory Analysis Report

Date : 1/29/91 Page: 1
Invoice #: 4061
Client # : MAR-478 PO#:
Name : Markleeville P.U.D.
Address : P.O. Box 222
City : Markleeville State: CA Zip: 96120
Taken by : MPUD-Steinman

Sample	Collection Date	Collection Time	TOTAL DISSOL. MG/L	BOD-5 MG/L	CHLORIDE MG/L	MBAS MG/L
RIVER UPSTREAM	1/17/91	15:51	190		15	0.06
RIVER DOWNSTREAM	1/17/91	16:15	188		13	0.12
POND	1/17/91	15:43	215	13	16	0.09
POND-FILTERED	1/17/91	15:43		3		

Approved By: _____

Sierra Environmental Monitoring Inc.
47 Glen Carran Circle
Sparks, NV 89431
(702)356-3868

Laboratory Analysis Report

Date : 10/16/90 Page: 1
Invoice #: 3685
Client # : MAR-478 PO#:
Name : Markleeville P.U.D.
Address : P.O. Box 222
City : Markleeville State: CA Zip: 96120
Taken by : Markleeville-Steinman

Sample	Collection Date	Time	TOTAL DISSOL MG/L	BOD-5 MG/L	CHLORIDE MG/L	MBAS MG/L				
RIVER UPSTREAM	10/01/90	16:10	169		18	< 0.05				
RIVER DOWNSTREAM	10/01/90	16:30	175		16	< 0.05				
POND	10/01/90	16:00	205	12	22	< 0.05				
POND-FILTERED	10/01/90	16:00		5						

Approved By: _____

Sierra Environmental Monitoring Inc.
47 Glen Carran Circle
Sparks, NV 89431
(702)356-3868

Laboratory Analysis Report

: 8/14/90 Page: 1
Invoice #: 3349
Client # : MAR-478 PO#:
Name : Markleeville P.U.D.
Address : P.O. Box 222
City : Markleeville State: CA Zip: 96120
Taken by : Markleeville P.U.D.

Sample	Collection Date	Collection Time	TOTAL DISSOL. MG/L	BOD-5 MG/L	CHLORIDE MG/L	MBAS MG/L				
RIVER UPSTREAM	7/15/90	15:15	85		4	<0.05				
RIVER DOWNSTREAM	7/15/90	15:30	84		3	<0.05				
POND	7/15/90	15:00	530	6	19	0.09				
POND - FILTERED	7/15/90	15:00		6						

Approved By: John Lee

Sierra Environmental Monitoring Inc.
47 Glenn Carran Circle
Sparks, NV 89431
(702)356-3868

Laboratory Analysis Report

Date : 5/10/90 Page: 1
Invoice #: 3020
Client # : MAR-478 PO#:
Name : Markleeville P.U.D.
Address : P.O. Box 222
City : Markleeville State: CA Zip: 96120
Taken by : MPUD - Steinman

Sample	Collection Date	Collection Time	TOTAL DISSOL. MG/L	BOD-5 MG/L	CHLORIDE MG/L	MBAS MG/L			
RIVER UPSTREAM	4/26/90	16:10	59		<1	< 0.05			
RIVER DOWNSTREAM	4/26/90	16:37	57		<1	< 0.05			
POND	4/26/90	16:00	212	13	17	6.9			
POND-FILTERED	4/26/90	16:00		5					

Approved By: John Steinman

SIERRA ENVIRONMENTAL MONITORING

...LITY ANALYSIS RECORD

...ECT NAME Markleeville Public Utility District | **J.N.** MAR-478

P.O. Box 222 Markleeville, CA 96120

SAMPLE IDENTIFICATION			PARAMETER	PARAMETER	PARAMETER	PARAMETER	PARAMETER
Sample Collection Date	Time	Station ID.	Unfiltered BOD_5	Filtered BOD_5	Total Filter. Residue	MBAS	Chloride
MON DAY YR	0-2400		UNITS mg/l	UNITS mg/l	UNITS mg/l	UNITS mg/l	UNITS mg/l
1-18-90	16:10	River Upstream	---	---	93	<0.05	6
1-18-90	16:00	River Downstream	---	---	91	<0.05	6
1-18-90	16:20	Pond	10	3	162	0.81	20

SAMPLES BY: MPUD

ANALYSIS BY: SEM - S. Poole/A.M. Moos/M. Chubb **APPROVED BY:**

SIERRA ENVIRONMENTAL MONITORING

LITY ANALYSIS RECORD

CT NAME Markleeville Public Utility District | J.N. MAR-478

P.O. Box 222 Markleeville, CA 96120

SAMPLE IDENTIFICATION: Sample Collection Date	Time	Station ID.	PARAMETER Unfiltered BOD_5	PARAMETER Filtered BOD_5	PARAMETER Total Filterable Residue	PARAMETER MBAS	PARAMETER Chloride
MON DAY YR	0-2400		UNITS mg/l	UNITS mg/l	UNITS mg/l	UNITS mg/l	UNITS mg/l
9-29-89		River Upstream	---	---	2	0.05	11
9-29-89		River Downstream	---	---	2	0.05	11
9-29-89		Pond	35	6	79	0.11	30

SAMPLES BY: MPUD

ANALYSIS BY: SEM - S. Poole/A.M. Moos/M. Chubb

APPROVED BY: J. Von Seggern

Sierra Environmental Monitoring Inc.
47 Glen Carran Circle
Sparks, NV 89431
(702)356-3868

Laboratory Analysis Report

Date : 10/16/90 Page: 1
Invoice #: 3685
Client # : MAR-478 PO#:
Name : Markleeville P.U.D.
Address : P.O. Box 222
City : Markleeville State: CA Zip: 96120
Taken by : Markleeville-Steinman

Sample	Collection Date	Collection Time	TOTAL DISSOL. MG/L	BOD-5 MG/L	CHLORIDE MG/L	MBAS MG/L			
RIVER UPSTREAM	10/01/90	16:10	169		18	< 0.05			
RIVER DOWNSTREAM	10/01/90	16:30	175		16	< 0.05			
POND	10/01/90	16:00	205	12	22	< 0.05			
POND-FILTERED	10/01/90	16:00		5					

Approved By: _____

SIERRA ENVIRONMENTAL MONITORING

WATER QUALITY ANALYSIS RECORD

PROJECT NAME Markleeville Public Utility District | **J.N.** MAR-478

P.O. Box 222 Markleeville, CA 96120

SAMPLE IDENTIFICATION			PARAMETER	PARAMETER	PARAMETER	PARAMETER	PARAMETER
Sample Collection Date	Time	Station ID.	Unfiltered BOD_5	Filtered BOD_5	TotalFilterable Residue	MBAS	Chloride
MON DAY YR	0-2400		UNITS mg/l	UNITS mg/l	UNITS mg/l	UNITS mg/l	UNITS mg/l
9-29-89		River Upstream	---	---	2	0.05	11
9-29-89		River Downstream	---	---	2	0.05	11
9-29-89		Pond	35	6	79	0.11	30

SAMPLES BY: MPUD

ANALYSIS BY: SEM - S. Poole/A.M. Moos/M. Chubb **APPROVED BY:**

SF

MPUD
Markleeville

SIERRA ENVIRONMENTAL MONITORING

ATER QUALITY ANALYSIS RECORD

PROJECT NAME	J.N.
Markleeville Public Utility District	MAR-478
P.O. Box 222 Markleeville, CA 96120	

SAMPLE IDENTIFICATION			PARAMETER	PARAMETER	PARAMETER	PARAMETER	PARAMETER
Sample Collection Date	Time	Station ID.	Unfiltered BOD_5	Filtered BOD_5	Total Filter. Residue	MBAS	Chloride
ION DAY YR	0-2400		UNITS mg/l	UNITS mg/l	UNITS mg/l	UNITS mg/l	UNITS mg/l
3-7-89		River Upstream	---	---	66	< 0.05	3
3-7-89		River Downstream	---	---	90	< 0.05	2
3-7-89		Pond	7	3	156	0.12	15

MPLES BY: MPUD

ALYSIS BY: SEM - S.Poole/A.M.Moos/J.Mantravadi APPROVED BY: John Seller

SIERRA ENVIRONMENTAL MONITORING

WATER QUALITY ANALYSIS RECORD

PROJECT NAME Markleeville Public Utility District | **J.N.** MAR-478

P.O. Box 222 Markleeville, CA 96120

SAMPLE IDENTIFICATION			PARAMETER	PARAMETER	PARAMETER	PARAMETER	PARAMETER
Sample Collection Date	Time	Station ID.	Unfiltered BOD_5	Filtered BOD_5	Total Filter. Residue	MBAS	Chloride
MON DAY YR	0-2400		UNITS mg/l	UNITS mg/l	UNITS mg/l	UNITS mg/l	UNITS mg/l
6-21-89	15:50	River Upstream	---	---	68	< 0.05	2
6-21-89	16:02	River Downstream	---	---	62	< 0.05	3
6-21-89	15:40	Pond	19	6	188	0.5	19

SAMPLES BY: MPUD/Steinman

ANALYSIS BY: SEM - S. Poole/A.M. Moos/J. Mantravadi **APPROVED BY:**

SIERRA ENVIRONMENTAL MONITORING

WATER QUALITY ANALYSIS RECORD

PROJECT NAME Markleeville Public Utility District	**J.N.** MAR-478
P.O. Box 222 Markleeville, CA 96120	

SAMPLE IDENTIFICATION			**PARAMETER**	**PARAMETER**	**PARAMETER**	**PARAMETER**	**PARAMETER**
Sample Collection Date	**Time**	**Station ID.**	Unfiltered BOD_5	Filtered BOD_5	Total Filter Residue	MBAS	Chloride
MON DAY YR	**0-2400**		**UNITS** mg/l	**UNITS** mg/l	**UNITS** mg/l	**UNITS** mg/l	**UNITS** mg/l
10-6-88		Pond	28	5	280	*	27
10-6-88		River Upstream			256	*	29
10-6-88		River Downstream			243	*	28

* Insufficient sample volume for this analysis

Scott - this is it for 1988

Mantravadi **APPROVED BY:**

SIERRA ENVIRONMENTAL MONITORING

WATER QUALITY ANALYSIS RECORD

PROJECT NAME Markleeville Public Utilities District | **J.N.** MAR - 478

P. O. Box 222 Markleeville, CA 96120

SAMPLE IDENTIFICATION			PARAMETER	PARAMETER	PARAMETER	PARAMETER	PARAMETER
Sample Collection Date	Time	Station ID.	BOD_5 unfiltered	BOD_5 filtered	Total Filter Residue	MBAS	Chloride
MON DAY YR	0-2400		UNITS mg/l	UNITS mg/l	UNITS mg/l	UNITS mg/l	UNITS mg/l
6-29-88		Pond	12	3	202	*	35
6-29-88		River Upstream			95	*	5
6-29-88		River Downstream			107	*	5

* not sufficient sample volume for these analysis

SAMPLES BY: MPUD -

ANALYSIS BY: SEM - J. Seher

APPROVED BY: J. Seher

SIERRA ENVIRONMENTAL MONITORING

ATER QUALITY ANALYSIS RECORD

PROJECT NAME Markleeville Public Utility District **J.N.** MAR551

P.O. Box 222 Markleeville, CA 96120

SAMPLE IDENTIFICATION			PARAMETER	PARAMETER	PARAMETER	PARAMETER	PARAMETER
Sample Collection Date	Time	Station ID.	BOD_5 (unfiltered)	BOD_5 (filtered)	Total Filterable Residue	MBAS	Chloride
MON DAY YR	0-2400		UNITS mg/l	UNITS mg/l	UNITS mg/l	UNITS mg/l	UNITS mg/l
2-3-88	-	Influent	130				
2-3-88	-	Pond	9	3	180	0.50	23
2-3-88	-	upstream			143	0.06	8
2-3-88	-	downstream			144	0.04	10

SAMPLES BY: M. Steinman

ANALYSIS BY: SEM C. Oliveira **APPROVED BY:** Charles Oliveira

June. By special dispensation, this month, Alpine County groundwaters and Alpine County monitoring wells were not sampled. The West Fork, Carson River Water Quality Objectives and East Fork, Carson River limitations were exceeded as follows (a ✓ indicates objective exceeded):

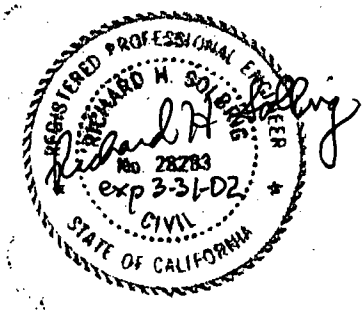
Site	Location	TDS		Cl		TKN		NO_3-N		Total N		Total P		SO_4		Boron		Exch Na %	
		Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence
SW-01	Carson River, Woodfords	55		1.0	✓	0.13	✓	0.02		0.15	✓	0.02	✓	2.0	✓	0.02		20	✓
SW-06	Carson River, Stateline	70		2.5		0.22	✓	0.03		0.25	✓	0.03	✓	2.0	✓	0.02	✓	20	✓
SW-02	Indian Creek, Upper	100		6.0						0.30		0.03		8.0		0.25		30	
SW-03	Indian Creek, Mid	100	✓	6.0						0.30	✓	0.03	✓	8.0		0.25		30	
SW-04	Indian Creek, Lower	100	✓	6.0						0.30	✓	0.03	✓	8.0		0.25		30	
SW-10	Indian Creek, Stateline	100		6.0						0.30		0.03		8.0		0.25		30	

Blue Green Algae test results will be sent as soon as the tests are completed.

Certification

I hereby certify that the enclosed monitoring report was prepared under my direct supervision and that I am a duly Registered Engineer under the laws of the State of California.

Sincerely,



Richard Solbrig,
Assistant Manager/Engineer

Enclosures:

1.

August Monthly Report	Pages
Wastewater Treatment plant	2
Permit Compliance Record	1
Export pipeline inspection	1
Sample site locations	2
Monitoring wells (ERB) and Heavenly Valley Creek (HVC) - Tahoe Basin	1
Alpine County Surfacewaters, Groundwaters, and HPR	4
Alpine County Soils	1
Alpine County Blue-green Algae, Feb, Mar,Apr,May,Jun,Jul	5
Total number of pages:	17

cc: Calif. Dept. of Health Services, ODW - Jess Morehouse
El Dorado Co. Dept. of Environmental Health - Virginia Huber
Nevada Division of Environmental Protection - Wendel McCurry
Alpine County Health Department - Dr. Richard Botto
Alpine County Health Department - Jim Goodloe
Alpine County Board of Supervisors
Desert Research Group (Alpine County Consultants) - Bill Albright
STPUD Board of Directors
STPUD General Manager / District Engineer - Robert G. Baer
STPUD Manager of Operations - Ross Johnson
STPUD Operations Chief Plant Operator - Jeff Lee
STPUD Laboratory Director - Terry Powers
STPUD Manager of Alpine County Operations - Hal Bird

File: \LAHONTAN\08-00 Report.WPD

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

AUGUST 2000

		FLOW MGD					PRECIP		D.O.	COD		BOD		SS	
			2-Hr Peak		Pond	Pond			mg/L	mg/L		mg/L		mg/L	
Date	Day	Inf	Inf	Eff	Return	Inf	Inch	Type	Fin	Raw	Fin	Raw	Fin	Raw	Fin
08/01/00	Tue	5.26	7.6	4.72					4.58	345					
08/02/00	Wed	5.20	7.6	4.77			0.02	Rain	4.22	410	36.8	172	4.7	170	2.7
08/03/00	Thu	5.58	7.8	4.52			1.24	Rain	4.84	412					
08/04/00	Fri	5.67	7.9	5.49			0.01	Rain	4.04	490					
08/05/00	Sat	6.03	8.5	5.80					3.62	474	49.9			186	4.3
08/06/00	Sun	5.76	8.6	5.33					3.05	409					
08/07/00	Mon	5.58	8.2	5.46					4.47	329					
08/08/00	Tue	5.55	8.0	5.21					4.71	352					
08/09/00	Wed	5.45	7.9	4.70					4.76		48.4		7.4		2.5
08/10/00	Thu	5.49	7.6	4.92					5.07	548					
08/11/00	Fri	5.62	7.8	5.48					4.52	656					
08/12/00	Sat	5.92	8.8	4.83					3.34	512	50.6	227	14.0	206	5.9
08/13/00	Sun	5.92	9.0	5.53					5.10	522					
08/14/00	Mon	5.61	8.3	4.80					4.95	418					
08/15/00	Tue	5.24	8.3	5.52					3.87	432					
08/16/00	Wed	5.23	7.2	4.65					3.88	426	48.4	172	9.9	156	3.1
08/17/00	Thu	5.35	7.5	4.72					4.96	405					
08/18/00	Fri	5.45	8.4	4.93					4.27	499					
08/19/00	Sat	5.84	8.6	5.53					4.22	415	53.6			164	6.4
08/20/00	Sun	5.55	9.7	5.33					4.38	469					
08/21/00	Mon	5.05	7.5	4.61					4.80	416					
08/22/00	Tue	5.06	7.6	4.62					4.95	396					
08/23/00	Wed	4.90	7.1	4.38					5.06	390	38.8	161	5.7	131	2.2
08/24/00	Thu	4.93	7.2	4.93					4.68	430					
08/25/00	Fri	5.13	7.6	4.55					4.95	402					
08/26/00	Sat	5.61	8.2	4.78					5.12	437	27.9			147	3.0
08/27/00	Sun	5.29	8.3	5.09					4.55	428					
08/28/00	Mon	5.05	7.5	4.55			0.03	Rain	5.04	349					
08/29/00	Tue	4.48	6.5	4.16			0.05	Rain	5.29	379	36.3			148	2.9
08/30/00	Wed	4.61	6.9	4.47					4.88	407					
08/31/00	Thu	4.57	6.3	4.08					5.28	375					
PERMIT MAX		7.7									300		45		60
PERMIT MIN															
PERMIT AVE											60		30		30
TOTAL		165.98	244.0	152.46			1.35		141.45	12932	390.7	732	41.6	1308	32.9
MAXIMUM		6.03	9.7	5.80			1.24		5.29	656	53.6	227	14.0	206	6.4
MINIMUM		4.48	6.3	4.08			0.01		3.05	329	27.9	161	4.7	131	2.2
AVERAGE		5.35	7.9	4.92			0.27		4.56	431	43.4	183	8.3	164	3.7
# Tests		31	31	31	0	0	5		31	30	9	4	5	8	9

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

AUGUST 2000

Date	Day	SETTLEABLE SOLIDS mL/L Raw		SETTLEABLE SOLIDS mL/L Fin	MBAS mg/L Raw	MBAS mg/L Fin	pH Units Raw	pH Units Fin	TURBIDITY NTU Fin	Cl2 mg/L Fin	FINAL COLIFORMS MPN/100 mL Total		FINAL COLIFORMS MPN/100 mL 7day- Median		TDS mg/L Raw	TDS mg/L Fin	ALKALINITY mg/L Raw	ALKALINITY mg/L Fin
08/01/00	Tue	11.0	<	0.1			7.41	7.38	1.70	4.26		2	<	2			161	147
08/02/00	Wed	12.0	<	0.1			7.51	7.65	1.50	3.38	<	2	<	2	254	236	162	152
08/03/00	Thu	13.0	<	0.1			7.63	7.71	3.50	3.82	<	2	<	2			163	149
08/04/00	Fri	11.0	<	0.1			7.38	7.28	4.60	3.71		2	<	2			155	145
08/05/00	Sat	11.0	<	0.1			7.77	7.42	3.60	1.96	<	2	<	2			158	148
08/06/00	Sun	14.0	<	0.1			7.36	7.33	4.10	4.15	<	2	<	2			160	146
08/07/00	Mon	14.5	<	0.1			7.53	7.46	4.50	7.86	<	2	<	2			156	140
08/08/00	Tue	14.5	<	0.1			7.52	7.48	4.10	3.28	<	2	<	2			155	144
08/09/00	Wed		<	0.1				7.48	3.50	4.80		2	<	2		240		144
08/10/00	Thu	20.0	<	0.1			7.69	7.60	4.20	3.60	<	2	<	2			171	151
08/11/00	Fri	20.0	<	0.1			7.46	7.44	4.80	3.38	<	2	<	2			160	154
08/12/00	Sat	18.0	<	0.1			7.41	7.79	5.00	3.06	<	2	<	2			165	155
08/13/00	Sun	16.0	<	0.1			7.32	7.37	3.10	3.17	<	2	<	2			165	152
08/14/00	Mon	13.0	<	0.1			7.43	7.46	3.90								162	157
08/15/00	Tue	13.5	<	0.1			7.63	7.62	3.40	3.82	<	2	<	2			162	152
08/16/00	Wed	11.0	<	0.1			7.44	7.56	3.30	3.17		2	<	2			161	150
08/17/00	Thu	12.5	<	0.1			7.54	7.54	7.10	2.18		2	<	2			157	153
08/18/00	Fri	14.5	<	0.1			7.39	7.55	6.20	5.02	<	2	<	2			155	146
08/19/00	Sat	14.5	<	0.1			7.44	7.58	5.20	5.24	<	2	<	2			162	145
08/20/00	Sun	14.0	<	0.1			7.46	7.49	4.70	4.70	<	2	<	2			163	146
08/21/00	Mon	13.0	<	0.1			7.40	7.52	3.60	5.02							158	144
08/22/00	Tue	11.0	<	0.1			7.58	7.59	2.70	3.93	<	2	<	2			154	143
08/23/00	Wed	12.0	<	0.1			7.63	7.78	2.00	3.93	<	2	<	2	261	232	154	146
08/24/00	Thu	12.5	<	0.1			7.42	7.40	2.60	2.95	<	2	<	2			156	142
08/25/00	Fri	13.0	<	0.1			7.33	7.32	2.10	3.60	<	2	<	2			155	150
08/26/00	Sat	13.0	<	0.1			7.37	7.64	1.90	3.60		2	<	2			157	154
08/27/00	Sun	14.0	<	0.1			7.31	7.30	2.20	4.69	<	2	<	2			157	147
08/28/00	Mon	10.0	<	0.1			7.38	7.24	2.30	4.91	<	2	<	2			148	140
08/29/00	Tue	10.0	<	0.1			7.48	7.48	2.20	4.04	<	2	<	2	268	236	149	136
08/30/00	Wed	14.0	<	0.1			7.46	7.42	2.30	5.35	<	2	<	2			149	138
08/31/00	Thu	10.5	<	0.1			7.34	7.38	2.40	3.93	<	2	<	2			146	138
PERMIT MAX				0.1		2.0		8.5	20			240		23				
PERMIT MIN								6.5										
PERMIT AVE						1.0			10									
TOTAL		401.0		3.1	0.00	0.000	224.02	232.26	108.30	120.51		58		58	783	944	4736	4554
MAXIMUM		20.0		0.1	ERR	ERR	7.77	7.79	7.10	7.86		2		2	268	240	171	157
MINIMUM		10.0		0.1	ERR	ERR	7.31	7.24	1.50	1.96		2		2	254	232	146	136
AVERAGE		13.4		0.1	ERR	ERR	7.47	7.49	3.49	4.02		2		2	261	236	158	147
# Tests		30		31	0	0	30	31	31	30		29		29	3	4	30	31

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT
COMPLIANCE RECORD

2000

Parameter	# Tests	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Compliance, %
Total Plant Inflow; 7.7 MGD; Dry Weather	244	0	0	0	0	0	0	0	0					0	100.0
2-Hour Peak Inflow; 18.5 MGD	243	0	0	0	0	0	0	0	0					0	100.0
COD, 30 Day Ave: 60 mg/L	8	0	0	0	0	0	0	0	0					0	100.0
COD, Max: 300 mg/L	67	0	0	0	0	0	0	0	0					0	100.0
BOD, 30 Day Ave: 30 mg/L	8	0	0	0	0	0	0	0	0					0	100.0
BOD, Max: 45 mg/L	60	0	0	0	0	0	0	0	0					0	100.0
SS, 30 Day Ave: 30 mg/L	8	0	0	0	0	0	0	0	0					0	100.0
SS, Max: 60 mg/L	69	0	0	0	0	0	0	0	0					0	100.0
Settleable Solids, Max: 0.1 mL/L	241	0	0	0	0	0	0	0	0					0	100.0
Turbidity, 30 Day Ave: 10 NTU	8	0	0	0	0	0	0	0	0					0	100.0
Turbidity, Max: 20 NTU	240	0	0	0	0	0	0	0	0					0	100.0
pH, 6.5 to 8.5	240	0	0	0	0	0	0	0	0					0	100.0
Total Coliforms, Max: 240 MPN/100 mL	236	0	0	0	0	0	0	0	0					0	100.0
Total Coliforms, 7-day Median: 23 MPN	236	0	0	0	0	0	0	0	0					0	100.0
MBAS, 30 Day Ave: 1.0 mg/L	6	0	0	0	0	0	0							0	100.0
MBAS, Max: 2.0 mg/L	6	0	0	0	0	0	0							0	100.0
Total	1,920	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0

SOUTH TAHOE
PUBLIC UTILITY DISTRICT
MEMORANDUM

Date: August 17, 2000

To: Bob Baer, Diane Noble

From: David Johnson

Topic: Export Line Check

****

On August 17 Greg Schrempp and I conducted our check of the District's export line from the treatment plant to station 564+06 near the Harvey Place reservoir..

Several wet spots were checked. However, nothing positive was found. No damage to the pipe was found.

CC Terry Powers

EXPRT800.MEM

SAMPLE LOCATIONS

TAHOE BASIN MONITORING WELLS

Site	Location
ERB	Emergency Retention Basin
CONTROL	North of Post Office
MW02-25, -50	Emergency Retention Basin, S side
MW03-25, -50	Emergency Retention Basin, S side
MW04-25, -50	Emergency Retention Basin, W side
MW07-25, -50	Emergency Retention Basin, N side
MW08-25, -50	Pond #1, SW corner
MW11	S.E. corner of wastewater treatment plant grounds
MW12	South of Emergency Pump Building, for buried sludge
MW13	Pond 2, along Heavenly Valley Creek, for buried sludge

HEAVENLY VALLEY CREEK

HVC-1	At Pioneer Trail
HVC-2	250 ft upstream of Pond #2
HVC-3	25 ft downstream of Johnson Blvd.
HVC-4	Effluent of drain pipe from Lower Shop area
HVC-5	Effluent of drainage pipe along Johnson Blvd, 10 feet upstream of Johnson Blvd.

ALPINE COUNTY MONITORING WELLS

Site	Location
ACMW-01AW	Below main dam at Harvey Place Reservoir
ACMW-01BE	Below auxiliary dam at Harvey Place Reservoir
ACMW-02, N&S	On dam access road at Diamond Valley Road
ACMW-03	Bruns ranch, east side of Highway 88
ACMW-04W	Gansberg ranch, west side of Highway 88
ACMW-05	Dressler ranch
ACMW-06, N&S	Celio ranch, on Diamond Valley Road

ALPINE SOILS

Site	Ranch
S2	Celio
S3	Hall
S4	Gansberg
S5	Gansberg
S6	Neddenriep
S7	Bruns
S8	Dressler

ALPINE GROUNDWATERS

Site	Homeowner
GW-01	Sagues
GW-03	Smith/Springmeyer
GW-04	Celio
GW-05	Neddenriep
GW-07	Gansberg, Jr.
GW-08	Arant
GW-11	Diamond Valley School
GW-14	Sierra Pines Store

ALPINE SURFACEWATERS

Site	Location
SW-01	Carson River, Woodfords
SW-02	Indian Creek, @ HWY 89
SW-03	Indian Creek, @ upper bridge
SW-04	Indian Creek, @ lower bridge
SW-05	Carson River, Paynesville
SW-06	Carson River, Stateline
SW-07	Fredericksberg Ditch, Stateline
SW-08	Irrigation Ditch along Carson River Road
SW-09	Carson River, Dressler Lane
SW-10	Indian Creek, @ Smith-Springmeyer Ranch

TAHOE BASIN MONITORING

09/06/00

Site	Date	ID	Location	Depth msl	Temp C	pH	EC umhos	Cl mg/L	COD mg/L	NO3-N mg/L	Comment
Buried Sludge Monitoring											
MW11	08/22/00	20000822-13	Sludge Pond	6267.3	8.2	6.23	75	0.8	< 5.0	0.071	
MW12	08/22/00	20000822-14	Sludge Pond	6265.5	8.2	5.94	145	1.8	< 5.0	0.162	
MW13	08/22/00	20000822-15	Sludge Pond	6256.2	8.2	6.78	772	3.5	15.8	3.050	
ERB Monitoring											
CONTROL	08/22/00	20000822-06	At Post Office	6282.6	9.6	6.53	174	7.4	< 5.0	2.210	
MW01.5	08/22/00	20000822-07	SW corner of ERB	6268.5	10.0	7.08	170	2.9	< 5.0	0.571	
MW02-50	08/22/00	20000822-08	Black Bart side of ERB	6268.2	11.3	6.73	392	37.6	< 5.0	7.610	
MW03-50	08/22/00	20000822-09	Black Bart side of ERB	6268.2	11.4	6.45	374	29.1	< 5.0	4.080	
MW04-50	08/22/00	20000822-10	Hank Monk side of ERB	6268.0	8.6	6.48	75	5.3	< 5.0	0.051	
MW07-50	08/22/00	20000822-11	North side of ERB	6278.8	8.5	6.38	261	24.3	< 5.0	0.601	
Heavenly Valley Creek					✓	✓	?				
HVC-1	08/09/00	20000809-06	Downstream of Pioneer		11.0	7.21	49	1.0	< 5.0	0.023	
HVC-2	08/09/00	20000809-07	250' upstream of Pond #2		11.5	6.42	60	1.0	7.0	< 0.010	
HVC-3	08/09/00	20000809-08	25' downstream of Johnson Blvd		12.0	7.04	69	1.1	5.6	< 0.010	
HVC-4	08/09/00	0000809-HVC4	Effluent of drain from Lower Shop								Muddy bottom
HVC-5	08/09/00	0000809-HVC5	Effluent of drainage pipe along Jo								Dry
Treatment Plant Monitoring											
MW08-25	08/22/00	20000822-12	SW side of Pond #1	6246.9	11.4	6.41	1002	51.0	82.2	0.016	

ALPINE COUNTY MONITORING

09/06/00

Site	Date	ID	Location	Temp C	pH	EC umhos	DO mg/L	Alk mg/L	TDS mg/L	SS mg/L	Turb NTU	Cl mg/L	SO4 mg/L
Reservoirs													
HPR	08/01/00	20000801-16	Harvey Place Reservoir	22.1	8.88	424	12.00	92	245	12.60	2.4	55.7	17.8
Surfacewaters: Carson R													
SW-01	08/01/00	20000801-08	Carson R Woodfords	15.6	6.78	69	9.20	33	55	4.36	.65	1.3	2.1
SW-05	08/01/00	20000801-12	Carson R Paynesville	16.7	7.81	80	7.60	37	59	5.48	1.2	1.2	2.3
SW-06	08/01/00	20000801-13	Carson R Stateline	20.3	7.27	84	8.00	38	66	5.01	1.2	1.6	2.5
SW-07	08/01/00	20000801-14	Fredericksburg Ditch	20.4	6.85	229	7.80	74	161	8.36	5	17.3	7.4
SW-08	08/01/00	20000801-15	Irrigation Ditch	21.9	7.15	125	6.20	55	99	25.50	4.5	1.6	4.6
Surfacewaters: Indian Cr													
SW-02	08/01/00	20000801-09	Indian Cr Upper	18.1	6.88	125	6.70	64	97	0.75	1.2	1.1	0.4
SW-03	08/01/00	20000801-10	Indian Cr Mid	16.3	7.72	232	8.70	112	164	6.03	5	6.0	3.2
SW-04	08/01/00	20000801-11	Indian Cr Lower	17.2	7.70	142	6.30	70	108	5.45	3.9	2.0	1.3

ALPINE COUNTY MONITORING

09/06/00

Site	Date	TotalP mg/L		PO4-P mg/L		TKN mg/L		NH3-N mg/L		NO2-N mg/L		NO3-N mg/L		Total N mg/L	MBAS mg/L
Reservoirs															
HPR	08/01/00	2.450		2.250		13.400		9.970		0.519		1.300		15.219	
Surfacewaters: Carson R															
SW-01	08/01/00	0.022	<	0.010		0.232	<	0.020	<	0.010	<	0.010		0.252	
SW-05	08/01/00	0.030	<	0.010		0.221	<	0.020	<	0.010	<	0.010		0.241	
SW-06	08/01/00	0.032	<	0.010		0.288	<	0.020	<	0.010	<	0.010		0.308	
SW-07	08/01/00	0.258		0.144		0.947		0.064		0.054		1.030		2.031	
SW-08	08/01/00	0.101		0.018		0.603		0.028	<	0.010		0.210		0.823	
Surfacewaters: Indian Cr															
SW-02	08/01/00	0.026		0.014		0.181		0.024	<	0.010	<	0.010		0.201	
SW-03	08/01/00	0.088		0.027		0.565	<	0.020	<	0.010	<	0.010		0.585	
SW-04	08/01/00	0.088		0.030		0.384	<	0.020	<	0.010	<	0.010		0.404	

ALPINE COUNTY MONITORING

Site	Date	COD mg/L	BOD mg/L	O & G mg/L	Boron mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	SAR	Exch Na %	Hardness mg/L	Water Level MSL or Ft
Reservoirs													
HPR	08/01/00	37	7		0.23	15.4	3.6	45.8	9.6	2.73	60.3		40.5
Surfacewaters: Carson R													
SW-01	08/01/00		0		0.02	6.9	1.8	3.3	1.4	0.29	21.4		
SW-05	08/01/00		0		0.02	7.5	2.1	4.3	1.7	0.35	24.0		
SW-06	08/01/00		1		0.03	7.2	2.3	4.6	1.8	0.38	25.3		
SW-07	08/01/00		1		0.06	17.2	4.3	19.5	4.9	1.09	38.8		
SW-08	08/01/00		1		0.03	11.5	2.6	9.1	2.6	0.63	31.7		
Surfacewaters: Indian Cr													
SW-02	08/01/00		0		0.02	13.5	3.1	7.2	1.7	0.46	24.4		
SW-03	08/01/00		1		0.05	22.5	6.6	14.5	2.8	0.69	26.6		
SW-04	08/01/00		0		0.03	14.6	4.2	6.9	1.8	0.41	21.2		

ALPINE COUNTY
BACTERIOLOGICAL MONITORING

Reservoirs

Site	Date		Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
HPR	08/01/00	>	1600	4	30

Surfacewaters: Carson R

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-01	08/01/00	<	30	<	30	
SW-05	08/01/00		390		230	
SW-06	08/01/00		11000		430	
SW-07	08/01/00		4600		4600	
SW-08	08/01/00		4600		4600	

Surfacewaters: Indian Cr

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-02	08/01/00	930	90	
SW-03	08/01/00	4600	2400	
SW-04	08/01/00	1500	230	

ALPINE COUNTY SOILS

Site	Date	Location	Type	pH	EC mmho	%Sat	TKN mg/Kg	NO3-N mg/L	Total P mg/Kg	Exch P mg/L
S3a	06/09/00	Hall	SMB	6.18	0.48	35.6	988	0.6	1,060	12.2
S5a	06/09/00	Gansberg	HRB	6.16	0.19	31.6	1,130	6.7	830	13.4
S6a	06/09/00	Neddenriep	DWB	6.06	0.23	49.4	2,010	2.5	890	57.8
S7a	06/09/00	Bruns	JaC	6.03	0.17	41.3	1,860	4.5	870	6.5
S8a	06/09/00	Dressler	SOD	6.44	0.10	16.5	263	0.8	330	12.1
S2a	06/13/00	Celio	KT	8.33	2.74	75.7	2,340	0.8	850	4.4
S4a	06/13/00	Gansberg	DI	7.25	2.84	40.5	1,790	7.0	580	23.6

Site	Date	Cl mg/L	SO4 mg/Kg	CEC meq/100g	Cu mg/Kg		Mo mg/Kg	Ca mg/L	Mg mg/L	Na mg/L	SAR		% Na
S3a	06/09/00		11	7.4	26.0	<	1.0	27.3	11.8	38.4	1.55	<	1.0
S5a	06/09/00		2	15.5	33.0		1.0	15.5	2.9	18.6	1.14	<	1.0
S6a	06/09/00		7	19.6	39.0	<	1.0	8.8	2.0	21.8	1.73		1.2
S7a	06/09/00		180	11.9	43.0	<	1.0	11.0	2.4	16.4	1.17	<	1.0
S8a	06/09/00		4	12.5	17.0	<	1.0						
S2a	06/13/00		71	16.9	17.0	<	1.0	81.7	49.9	328.0	7.05		8.2
S4a	06/13/00		17	16.3	51.0	<	1.0	133.0	40.8	178.0	3.46		3.6

ALPINE COUNTY
BLUE GREEN ALGAE

ID#	Site	Location	Date	Colonies #	Colony # Cells	Filaments #	Filaments # Cells	Filaments #	Filament Length	Single Cells, #
February, 2000										
20000201-14	SW-01	Carson R Woodfords	02/01/00	0	0	0	0	0	0	0
20000201-15	SW-05	Carson R Paynesville	02/01/00	0	0	0	0	0	0	0

ALPINE COUNTY
BLUE GREEN ALGAE

ID#	Site	Location	Date	Colonies #	Colony # Cells	Filaments #	Filaments # Cells	Filaments #	Filament Length	Single Cells, #
March, 2000										
20000301-14	SW-01	Carson R Woodfords	03/01/00	0	0	0	0	0	0	0
20000301-15	SW-02	Indian Cr Upper	03/01/00	0	0	0	0	0	0	0
20000301-16	SW-03	Indian Cr Mid	03/01/00	0	0	0	0	0	0	0
20000301-17	SW-04	Indian Cr Lower	03/01/00	0	0	0	0	0	0	0
20000301-18	SW-05	Carson R Paynesville	03/01/00	0	0	0	0	0	0	0
20000301-19	SW-06	Carson R Stateline	03/01/00	1	0	0	0	0	0	0
20000301-20	SW-08	Irrigation Ditch	03/01/00	0	0	0	0	0	0	0

ALPINE COUNTY
BLUE GREEN ALGAE

ID#	Site	Location	Date	Colonies #	Colony # Cells	Filaments #	Filaments # Cells	Filaments #	Filament Length	Single Cells, #
April, 2000										
20000404-07	SW-01	Carson R Woodfords	04/04/00	0	0	0	0	0	0	0
20000404-08	SW-02	Indian Cr Upper	04/04/00	0	0	0	0	0	0	0
20000404-09	SW-03	Indian Cr Mid	04/04/00	0	0	0	0	0	0	0
20000404-10	SW-04	Indian Cr Lower	04/04/00	0	0	0	0	0	0	0
20000404-11	SW-05	Carson R Paynesville	04/04/00	0	0	0	0	0	0	0
20000404-12	SW-06	Carson R Stateline	04/04/00	0	0	0	0	0	0	0
20000404-13	SW-07	Fredericksburg Ditch	04/04/00	0	0	0	0	0	0	0
20000404-14	SW-08	Irrigation Ditch	04/04/00	0	0	0	0	0	0	0

ALPINE COUNTY
BLUE GREEN ALGAE

ID#	Site	Location	Date	Colonies #	Colony # Cells	Filaments #	Filaments # Cells	Filaments #	Filament Length	Single Cells, #
May, 2000										
20000509-07	SW-01	Carson R Woodfords	05/09/00	0	0	0	0	0	0	0
20000509-08	SW-02	Indian Cr Upper	05/09/00	0	0	0	0	0	0	0
20000509-09	SW-03	Indian Cr Mid	05/09/00	0	0	0	0	0	0	0
20000509-10	SW-04	Indian Cr Lower	05/09/00	0	0	0	0	0	0	0
20000509-11	SW-05	Carson R Paynesville	05/09/00	0	0	0	0	0	0	0
20000509-12	SW-06	Carson R Stateline	05/09/00	0	0	0	0	0	0	0
20000509-13	SW-08	Irrigation Ditch	05/09/00	0	0	0	0	0	0	0
20000509-14	SW-09	Carson R Dressler Ln	05/09/00	0	0	0	0	0	0	0
20000509-15	SW-10	Indian Cr at Bruns	05/09/00	0	0	0	0	0	0	0

ALPINE COUNTY
BLUE GREEN ALGAE

ID#	Site	Location	Date	Colonies #	Colony # Cells	Filaments #	Filaments # Cells	Filaments #	Filament Length	Single Cells; #
June, 2000										
20000606-10	SW-01	Carson R Woodfords	06/06/00	0	0	0	0	0	0	0
20000606-11	SW-02	Indian Cr Upper	06/06/00	0	0	0	0	0	0	0
20000606-12	SW-03	Indian Cr Mid	06/06/00	0	0	0	0	0	0	0
20000606-13	SW-04	Indian Cr Lower	06/06/00	0	0	0	0	0	0	0
20000606-14	SW-05	Carson R Paynesville	06/06/00	0	0	0	0	0	0	0
20000606-15	SW-06	Carson R Stateline	06/06/00	0	0	0	0	0	0	0
20000606-16	SW-08	Irrigation Ditch	06/06/00	0	0	0	0	0	0	0

ALPINE COUNTY
BLUE GREEN ALGAE

ID#	Site	Location	Date	Colonies #	Colony # Cells	Filaments #	Filaments # Cells	Filaments #	Filament Length	Single Cells, #
July, 2000										
20000705-11	SW-01	Carson R Woodfords	07/05/00	0	0	0	0	0	0	0
20000705-12	SW-02	Indian Cr Upper	07/05/00	0	0	0	0	0	0	0
20000705-13	SW-03	Indian Cr Mid	07/05/00	0	0	0	0	0	0	0
20000705-14	SW-04	Indian Cr Lower	07/05/00	0	0	0	0	0	0	0
20000705-15	SW-05	Carson R Paynesville	07/05/00	0	0	0	0	0	0	0
20000705-16	SW-06	Carson R Stateline	07/05/00	0	0	0	0	0	0	0
20000705-17	SW-07	Fredericksburg Ditch	07/05/00	0	0	0	0	0	0	0
20000705-18	SW-08	Irrigation Ditch	07/05/00	0	0	0	0	0	0	0

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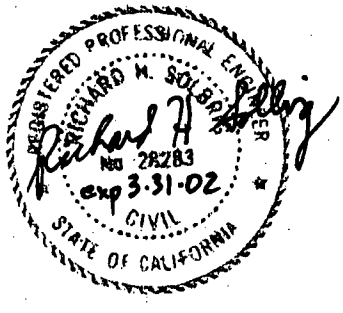
Site	Location	TDS		Cl		TKN		NO_3-N		Total N		Total P		SO_4		Boron		Exch Na %	
		Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence
SW-01	Carson River, Woodfords	55		1.0		0.13		0.02		0.15		0.02		2.0		0.02	✓	20	
SW-06	Carson River, Stateline	70	✓	2.5		0.22		0.03		0.25		0.03		2.0	✓	0.02		20	
SW-02	Indian Creek, Upper	100		6.0						0.30		0.03		8.0		0.25		30	
SW-03	Indian Creek, Mid	100	✓	6.0	✓					0.30		0.03		8.0		0.25		30	
SW-04	Indian Creek, Lower	100	✓	6.0						0.30		0.03	✓	8.0		0.25		30	
SW-10	Indian Creek, Stateline	100		6.0						0.30		0.03	✓	8.0		0.25		30	

Blue-green algae test results for September will be sent as soon as the tests are completed. The blue-green algae results for August are included in this report.

Certification

I hereby certify that the enclosed monitoring report was prepared under my direct supervision and that I am a duly Registered Engineer under the laws of the State of California.

Sincerely,



Richard Solbrig,
Assistant Manager/Engineer

Enclosures:

1.

September Monthly Report	Pages
Wastewater Treatment plant	2
Permit Compliance Record	1
Sample site locations	2
Monitoring wells (ERB) and Heavenly Valley Creek (HVC) - Tahoe Basin	1
Alpine County Surfacewaters, Groundwaters, and HPR	4
Alpine County Blue-green Algae August	1
Total number of pages:	11

cc: Calif. Dept. of Health Services, ODW - Jess Morehouse
El Dorado Co. Dept. of Environmental Health - Virginia Huber
Nevada Division of Environmental Protection - Wendel McCurry
Alpine County Health Department - Dr. Richard Botto
Alpine County Health Department - Jim Goodloe
Alpine County Board of Supervisors
Desert Research Group (Alpine County Consultants) - Bill Albright
STPUD Board of Directors
STPUD General Manager / District Engineer - Robert G. Baer
STPUD Manager of Operations - Ross Johnson
STPUD Operations Chief Plant Operator - Jeff Lee
STPUD Laboratory Director - Terry Powers
STPUD Manager of Alpine County Operations - Hal Bird

File: \LAHONTAN\09-00 Report.WPD

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

10/12/00
06:58:25

SEPTEMBER 2000

Date	Day	FLOW MGD Inf	2-Hr Peak Inf	Eff	Pond Return	Pond Inf	PRECIP Inch	Type	D.O. mg/L Fin	COD mg/L Raw	Fin	BOD mg/L Raw	Fin	SS mg/L Raw	Fin
09/01/00	Fri	4.96	7.2	5.40			0.21	Rain	4.98	402					
09/02/00	Sat	5.59	7.8	4.60			0.05	Rain	4.88	412	48.7	174	9.5	148	4.9
09/03/00	Sun	5.74	9.4	5.44					4.55	421					
09/04/00	Mon	5.29	9.0	4.94					4.92	338					
09/05/00	Tue	4.46	6.4	4.19					5.41	379					
09/06/00	Wed	4.40	6.1	4.09					5.53	361	46.4	148	7.3	138	6.0
09/07/00	Thu	4.47	7.2	4.26					5.37	361					
09/08/00	Fri	4.70	7.2	4.33					4.75	329					
09/09/00	Sat	4.78	7.2	4.46					4.93	374	48.9	126	10.3	126	5.4
09/10/00	Sun	4.89	8.0	4.51					4.44	398					
09/11/00	Mon	4.59	6.3	4.34					5.04	382					
09/12/00	Tue	4.49	6.6	4.27					4.65	398					
09/13/00	Wed	4.53	6.5	4.30					4.90	499	39.4	158	7.2	189	4.9
09/14/00	Thu	4.40	6.0	3.94					6.77	479					
09/15/00	Fri	4.64	6.4	4.51					4.78	479					
09/16/00	Sat	5.02	7.8	4.52					5.16	424	35.4	187	6.9	145	4.2
09/17/00	Sun	5.05	7.4	4.46					4.89	444					
09/18/00	Mon	4.29	6.0	4.09					5.89	375					
09/19/00	Tue	4.51	5.9	4.04					5.26	366					
09/20/00	Wed	4.41	6.6	4.13					5.46	378	32.8	155	4.8	162	3.7
09/21/00	Thu	4.55	6.8	4.54					5.41	356					
09/22/00	Fri	4.67	6.4	4.61					4.71	345					
09/23/00	Sat	4.84	8.0	4.23					5.39	391	49.2	175	8.7	153	7.4
09/24/00	Sun	4.92	8.0	4.71					4.96	419					
09/25/00	Mon	4.51	6.2	4.19					5.05	348	42.9	146	7.0	169	6.9
09/26/00	Tue	4.42	6.4	4.00					5.36	409					
09/27/00	Wed	4.42	5.9	4.03					5.37	389					
09/28/00	Thu	4.27	6.4	3.87					5.72	561					
09/29/00	Fri	4.28	6.5	4.27					5.76	444					
09/30/00	Sat	4.91	7.7	4.54					5.52	453	33.2	154	5.6	159	1.9
PERMIT MAX		7.7									300		45		60
PERMIT MIN															
PERMIT AVE											60		30		30
TOTAL		141.00	209.3	131.81			0.26		155.81	12114	376.9	1423	67.2	1389	45.2
MAXIMUM		5.74	9.4	5.44			0.21		6.77	561	49.2	187	10.3	189	7.4
MINIMUM		4.27	5.9	3.87			0.05		4.44	329	32.8	126	4.8	126	1.9
AVERAGE		4.70	7.0	4.39			0.13		5.19	404	41.9	158	7.5	154	5.0
# Tests		30	30	30	0	0	2		30	30	9	9	9	9	9

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

10/12/00
06:58:25

SEPTEMBER 2000

Date	Day	SETTLEABLE SOLIDS mL/L Raw		SETTLEABLE SOLIDS mL/L Fin	MBAS mg/L Raw	MBAS mg/L Fin	pH Units Raw	pH Units Fin	TURBIDITY NTU Fin	Cl2 mg/L Fin	FINAL COLIFORMS MPN/100 mL Total		FINAL COLIFORMS MPN/100 mL 7day-Median	TDS mg/L Raw	TDS mg/L Fin	ALKALINITY mg/L Raw	ALKALINITY mg/L Fin
09/01/00	Fri	10.0	<	0.1			7.53	7.39	2.52	4.37	< 2		< 2			147	140
09/02/00	Sat	12.5	<	0.1			7.45	7.58	3.20	5.46	< 2		< 2			156	145
09/03/00	Sun	13.0	<	0.1			7.47	7.33	3.80	6.77	< 2		< 2			164	150
09/04/00	Mon	12.5	<	0.1			7.64	7.46	3.70	7.32	< 2		< 2			162	150
09/05/00	Tue	11.0	<	0.1			7.51	7.42	3.20	5.35	< 2		< 2			149	144
09/06/00	Wed	10.0	<	0.1			7.52	7.46	3.40	2.07	4		< 2	251	234	144	139
09/07/00	Thu	11.5	<	0.1			7.57	7.62	3.70	4.37	< 2		< 2			144	140
09/08/00	Fri	12.0	<	0.1			7.49	7.37	4.40	4.04	< 2		< 2			146	136
09/09/00	Sat	11.5	<	0.1			7.49	7.52	4.40	4.80	< 2		< 2			151	138
09/10/00	Sun	12.0	<	0.1			7.38	7.38	4.90	4.15	< 2		< 2			151	141
09/11/00	Mon	11.0	<	0.1			7.54	7.50	4.30	4.80	< 2		< 2			142	136
09/12/00	Tue	11.0	<	0.1			7.45	7.52	3.30	4.48	< 2		< 2			142	132
09/13/00	Wed	16.0	<	0.1			7.49	7.65	2.90	4.37	< 2		< 2	262	244	141	130
09/14/00	Thu	12.0	<	0.1			7.42	7.48	3.30							143	134
09/15/00	Fri	13.0	<	0.1			7.65	7.30	2.80	4.59	< 2		< 2			164	132
09/16/00	Sat	13.0	<	0.1			7.42	7.54	2.70	3.60	< 2		< 2			161	138
09/17/00	Sun	13.0	<	0.1			7.45	7.42	2.90	3.28	< 2		< 2			160	141
09/18/00	Mon	11.0	<	0.1			7.42	7.36	2.50	5.79	< 2		< 2			149	136
09/19/00	Tue	10.0	<	0.1			7.58	7.74	2.20	4.59	< 2		< 2			146	133
09/20/00	Wed	12.0	<	0.1			7.43	7.53	2.20	4.37	< 2		< 2	244	226	149	133
09/21/00	Thu	10.0	<	0.1			7.60	7.64	3.40	3.60	< 2		< 2			147	136
09/22/00	Fri	11.0	<	0.1			7.51	7.40	3.60	4.26	< 2		< 2			146	133
09/23/00	Sat	12.0	<	0.1			7.44	7.62	3.80	3.02	< 2		< 2			155	140
09/24/00	Sun	12.0	<	0.1			7.47	7.42	4.30	3.34	< 2		< 2			155	140
09/25/00	Mon	10.5	<	0.1			7.56	7.53	3.50	4.79	< 2		< 2	238	234	145	131
09/26/00	Tue	10.0	<	0.1			7.52	7.58	2.80	4.69	< 2		< 2			161	130
09/27/00	Wed	12.0	<	0.1			7.52	7.55	2.40	3.86	< 2		< 2			160	128
09/28/00	Thu	20.0	<	0.1			7.32	7.54	2.00	4.59	< 2		< 2			167	128
09/29/00	Fri	11.5	<	0.1			7.50	7.64	1.80	4.79	< 2		< 2			149	129
09/30/00	Sat	14.5	<	0.1			7.48	7.67	2.00	4.59	< 2		< 2			152	132
PERMIT MAX				0.1		2.0		8.5	20		240		23				
PERMIT MIN								6.5									
PERMIT AVE						1.0			10								
TOTAL		361.5		3.0	0.00	0.000	224.82	225.16	95.92	130.10	60		58	995	938	4548	4095
MAXIMUM		20.0		0.1			7.65	7.74	4.90	7.32	4		2	262	244	167	150
MINIMUM		10.0		0.1			7.32	7.30	1.80	2.07	2		2	238	226	141	128
AVERAGE		12.1		0.1			7.49	7.51	3.20	4.49	2		2	249	235	152	137
# Tests		30		30	0	0	30	30	30	29	29		29	4	4	30	30

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT
COMPLIANCE RECORD

2000

Parameter	# Tests	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Compliance, %
Total Plant Inflow; 7.7 MGD; Dry Weather	274	0	0	0	0	0	0	0	0	0				0	100.0
2-Hour Peak Inflow; 18.5 MGD	273	0	0	0	0	0	0	0	0	0				0	100.0
COD, 30 Day Ave: 60 mg/L	9	0	0	0	0	0	0	0	0	0				0	100.0
COD, Max: 300 mg/L	76	0	0	0	0	0	0	0	0	0				0	100.0
BOD, 30 Day Ave: 30 mg/L	9	0	0	0	0	0	0	0	0	0				0	100.0
BOD, Max: 45 mg/L	69	0	0	0	0	0	0	0	0	0				0	100.0
SS, 30 Day Ave: 30 mg/L	9	0	0	0	0	0	0	0	0	0				0	100.0
SS, Max: 60 mg/L	78	0	0	0	0	0	0	0	0	0				0	100.0
Settleable Solids, Max: 0.1 mL/L	271	0	0	0	0	0	0	0	0	0				0	100.0
Turbidity, 30 Day Ave: 10 NTU	9	0	0	0	0	0	0	0	0	0				0	100.0
Turbidity, Max: 20 NTU	270	0	0	0	0	0	0	0	0	0				0	100.0
pH, 6.5 to 8.5	270	0	0	0	0	0	0	0	0	0				0	100.0
Total Coliforms, Max: 240 MPN/100 mL	265	0	0	0	0	0	0	0	0	0				0	100.0
Total Coliforms, 7-day Median: 23 MPN	265	0	0	0	0	0	0	0	0	0				0	100.0
MBAS, 30 Day Ave: 1.0 mg/L	6	0	0	0	0	0	0							0	100.0
MBAS, Max: 2.0 mg/L	6	0	0	0	0	0	0							0	100.0
Total	2,159	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0

SAMPLE LOCATIONS

TAHOE BASIN MONITORING WELLS

Site	Location
ERB	Emergency Retention Basin
CONTROL	North of Post Office
MW02-25, -50	Emergency Retention Basin, S side
MW03-25, -50	Emergency Retention Basin, S side
MW04-25, -50	Emergency Retention Basin, W side
MW07-25, -50	Emergency Retention Basin, N side
MW08-25, -50	Pond #1, SW corner
MW11	S.E. corner of wastewater treatment plant grounds
MW12	South of Emergency Pump Building, for buried sludge
MW13	Pond 2, along Heavenly Valley Creek, for buried sludge

HEAVENLY VALLEY CREEK

HVC-1	At Pioneer Trail
HVC-2	250 ft upstream of Pond #2
HVC-3	25 ft downstream of Johnson Blvd.
HVC-4	Effluent of drain pipe from Lower Shop area
HVC-5	Effluent of drainage pipe along Johnson Blvd, 10 feet upstream of Johnson Blvd.

ALPINE COUNTY MONITORING WELLS

Site	Location
ACMW-01AW	Below main dam at Harvey Place Reservoir
ACMW-01BE	Below auxiliary dam at Harvey Place Reservoir
ACMW-02, N&S	On dam access road at Diamond Valley Road
ACMW-03	Bruns ranch, east side of Highway 88
ACMW-04W	Gansberg ranch, west side of Highway 88
ACMW-05	Dressler ranch
ACMW-06, N&S	Celio ranch, on Diamond Valley Road

ALPINE SOILS

Site	Ranch
S2	Celio
S3	Hall
S4	Gansberg
S5	Gansberg
S6	Neddenriep
S7	Bruns
S8	Dressler

ALPINE GROUNDWATERS

Site	Homeowner
GW-01	Sagues
GW-03	Smith/Springmeyer
GW-04	Celio
GW-05	Neddenriep
GW-07	Gansberg, Jr.
GW-08	Arant
GW-11	Diamond Valley School
GW-14	Sierra Pines Store

ALPINE SURFACEWATERS

Site	Location
SW-01	Carson River, Woodfords
SW-02	Indian Creek, @ HWY 89
SW-03	Indian Creek, @ upper bridge
SW-04	Indian Creek, @ lower bridge
SW-05	Carson River, Paynesville
SW-06	Carson River, Stateline
SW-07	Fredericksberg Ditch, Stateline
SW-08	Irrigation Ditch along Carson River Road
SW-09	Carson River, Dressler Lane
SW-10	Indian Creek, @ Smith-Springmeyer Ranch

TAHOE BASIN MONITORING

Site	Date	ID	Location	Depth msl	Temp C	pH	EC umhos	Cl mg/L		COD mg/L	NO3-N mg/L	Comment
Buried Sludge Monitoring												
MW11	09/27/00	20000927-19	Sludge Pond	6266.9	9.5	6.82	82	0.8	<	5.0	0.064	
MW12	09/27/00	20000927-20	Sludge Pond	6265.0	10.6	6.29	139	1.8	<	5.0	0.216	
MW13	09/27/00	20000927-21	Sludge Pond	6255.8	9.7	6.89	764	4.0		13.4	3.310	
ERB Monitoring												
CONTROL	09/27/00	20000927-13	At Post Office	6282.3	10.3	6.73	169	7.4	<	5.0	2.410	
MW02-50	09/27/00	20000927-14	Black Bart side of ERB	6268.1	10.9	6.40	385	33.1	<	5.0	7.810	
MW03-50	09/27/00	20000927-15	Black Bart side of ERB	6268.1	11.3	6.29	389	31.1	<	5.0	6.200	
MW04-50	09/27/00	20000927-16	Hank Monk side of ERB	6267.7	8.6	6.27	75	5.5	<	5.0	0.068	
MW07-50	09/27/00	20000927-17	North side of ERB	6278.5	8.5	6.80	259	24.0	<	5.0	0.636	
Heavenly Valley Creek												
HVC-1	09/19/00	20000919-28	Downstream of Pioneer		12.1	7.81	55	0.7	<	5.0	0.037	
HVC-2	09/19/00	0000919-HVC2	250' upstream of Pond #2									Dry
HVC-3	09/19/00	0000919-HVC3	25' downstream of Johnson Blvd									Dry
HVC-4	09/19/00	0000919-HVC4	Effluent of drain from Lower Shop									Dry
HVC-5	09/19/00	0000919-HVC5	Effluent of drainage pipe along Jo									Dry
Treatment Plant Monitoring												
MW08-25	09/27/00	20000927-18	SW side of Pond #1	6246.4	11.4	6.35	996	50.5		83.1	< 0.010	

ALPINE COUNTY MONITORING

Site	Date	ID	Location	Temp C	pH	EC umhos	DO mg/L	Alk mg/L	TDS mg/L	SS mg/L	Turb NTU	Cl mg/L	SO4 mg/L
Alpine Monitoring Wells													
ACMW-01AW	09/12/00	20000912-10	Main Dam	13.5	6.56	102		44	80			3.2	1.7
ACMW-04W	09/12/00	20000912-11	Gansberg	12.3	6.25	185		49	135			14.3	8.7
ACMW-01BE	09/19/00	20000919-14	Secondary Dam	13.2	7.00	96		47	76			1.0	< 0.5
ACMW-02N	09/19/00	20000919-15	Access Gate	13.5	6.63	128		57	90			2.9	3.0
ACMW-02S	09/19/00	20000919-16	Access Gate	16.5	6.62	109		52	76			1.4	1.2
ACMW-03	09/19/00	20000919-17	HWY 88	16.0	6.22	326		50	188			52.5	8.0
ACMW-06N	09/19/00	20000919-18	Celio	12.5	6.71	706		255	434			56.6	22.5
ACMW-06S	09/19/00	20000919-19	Celio	12.3	6.74	761		250	447			68.8	31.3
Groundwaters													
GW-03	09/12/00	20000912-12	Smith/Springmeyer	17.3	7.57	307		130	227			1.6	26.6
GW-04	09/12/00	20000912-13	Celio	14.7	7.56	263		117	200			3.3	11.9
GW-05	09/12/00	20000912-14	Neddenriep	11.9	6.58	257		63	169			22.7	< 0.5
GW-07	09/12/00	20000912-15	Gansberg	11.7	6.38	124		53	101			1.7	2.5
GW-08	09/12/00	20000912-16	Arant	15.6	6.57	227		51	153			20.3	10.5
GW-11	09/12/00	20000912-17	Diamond Val. School	16.0	7.06	150		75	120			1.1	0.8
GW-14	09/12/00	20000912-18	Sierrra Pines	13.1	6.30	113		52	97			1.2	1.8
Reservoirs													
HPR	09/05/00	20000905-23	Harvey Place Reservoir	16.0	7.53	495	5.80	118	244	6.78	3.5	57.8	17.9
Surfacewaters: Carson R													
SW-01	09/05/00	20000905-16	Carson R Woodfords	12.0	6.65	7	9.20	35	54	2.22	.37	< 0.5	2.0
SW-05	09/05/00	20000905-20	Carson R Paynesville	10.9	7.29	89	9.80	42	68	1.54	.7	< 0.5	2.5
SW-06	09/05/00	20000905-21	Carson R Stateline	10.8	7.08	118	9.50	49	85	1.68	.52	< 0.5	4.4
SW-08	09/05/00	20000905-22	Irrigation Ditch	17.1	6.49	122	11.00	56	98	145.00	4.9	< 0.5	4.2
Surfacewaters: Indian Cr													
SW-02	09/05/00	20000905-17	Indian Cr Upper	10.0	6.97	124	7.30	62	90	1.26	1	< 0.5	< 0.5
SW-03	09/05/00	20000905-18	Indian Cr Mid	15.2	7.04	229	9.40	111	160	7.96	3.2	6.2	2.6
SW-04	09/05/00	20000905-19	Indian Cr Lower	7.9	7.18	140	9.70	69	104	3.84	3.2	< 0.5	1.4

ALPINE COUNTY MONITORING

10/11/00

Site	Date	TotalP mg/L	PO4-P mg/L	TKN mg/L	NH3-N mg/L	NO2-N mg/L	NO3-N mg/L	Total N mg/L	MBAS mg/L
Alpine Monitoring Wells									
ACMW-01AW	09/12/00	< 0.010		0.169	< 0.020	< 0.010	0.281	0.460	
ACMW-04W	09/12/00	< 0.010		0.122	< 0.020	< 0.010	2.440	2.572	
ACMW-01BE	09/19/00	0.012	< 0.100		0.033	< 0.010	0.123	0.233	
ACMW-02N	09/19/00	0.012	< 0.100		0.046	< 0.010	0.076	0.186	
ACMW-02S	09/19/00	< 0.010		0.125	< 0.020	< 0.010	< 0.010	0.145	
ACMW-03	09/19/00	0.071		0.305	< 0.020	< 0.010	2.950	3.265	
ACMW-06N	09/19/00	0.244		0.364	0.068	< 0.010	< 0.010	0.384	
ACMW-06S	09/19/00	0.036		0.248	0.052	0.024	0.012	0.284	
Groundwaters									
GW-03	09/12/00	0.012	< 0.100		< 0.020	< 0.010	0.737	0.847	
GW-04	09/12/00	0.030		0.111	< 0.020	< 0.010	0.864	0.985	
GW-05	09/12/00	0.010		0.409	< 0.020	< 0.010	3.180	3.599	
GW-07	09/12/00	0.080	< 0.100		< 0.020	< 0.010	1.260	1.370	
GW-08	09/12/00	0.014		0.112	< 0.020	< 0.010	4.220	4.342	
GW-11	09/12/00	0.016	< 0.100		< 0.020	< 0.010	0.440	0.550	
GW-14	09/12/00	0.022		0.156	< 0.020	< 0.010	0.482	0.648	
Reservoirs									
HPR	09/05/00	2.900	2.700	18.700	15.500	0.380	0.605	19.685	
Surfacewaters: Carson R									
SW-01	09/05/00	0.016	< 0.010	< 0.010	< 0.020	< 0.010	< 0.010	0.030	
SW-05	09/05/00	0.022	< 0.010	< 0.100	0.024	< 0.010	< 0.010	0.120	
SW-06	09/05/00	0.014	< 0.010	< 0.100	< 0.020	< 0.010	< 0.010	0.120	
SW-08	09/05/00	0.150	0.030	0.569	0.028	< 0.010	0.323	0.902	
Surfacewaters: Indian Cr									
SW-02	09/05/00	0.022	< 0.010	< 0.010	< 0.020	< 0.010	< 0.010	0.030	
SW-03	09/05/00	0.078	0.032	< 0.100	< 0.020	< 0.010	< 0.010	0.120	
SW-04	09/05/00	0.064	0.032	0.171	< 0.020	< 0.010	< 0.010	0.191	

ALPINE COUNTY MONITORING

Site	Date	COD mg/L	BOD mg/L	O & G mg/L	Boron mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	SAR	Exch Na %	Hardness mg/L	Water Level MSL or Ft
Alpine Monitoring Wells													
ACMW-01AW	09/12/00												5481.1
ACMW-04W	09/12/00												4905.8
ACMW-01BE	09/19/00												5488.3
ACMW-02N	09/19/00												5458.5
ACMW-02S	09/19/00												5459.3
ACMW-03	09/19/00												5039.7
ACMW-06N	09/19/00												5215.8
ACMW-06S	09/19/00												5204.7
Groundwaters													
GW-03	09/12/00												
GW-04	09/12/00												
GW-05	09/12/00												
GW-07	09/12/00												
GW-08	09/12/00												
GW-11	09/12/00												
GW-14	09/12/00												
Reservoirs													
HPR	09/05/00	27			0.23	10.2	4.0		10.6	0.00	0.0		27.0
Surfacewaters: Carson R													
SW-01	09/05/00				0.03	4.2	2.1		1.4	0.00	0.0		
SW-05	09/05/00				0.01	6.6	2.5		1.8	0.00	0.0		
SW-06	09/05/00				0.01	10.5	3.6		2.2	0.00	0.0		
SW-08	09/05/00				0.01	8.0	3.3		2.7	0.00	0.0		
Surfacewaters: Indian Cr													
SW-02	09/05/00				0.01	12.5	3.2		1.9	0.00	0.0		
SW-03	09/05/00				0.04	21.4	6.8		2.2	0.00	0.0		
SW-04	09/05/00				0.01	13.5	4.5		2.0	0.00	0.0		

ALPINE COUNTY
BACTERIOLOGICAL MONITORING

Alpine Monitoring Wells

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
ACMW-01AW	09/12/00		1.1	<	1.1	
ACMW-04W	09/12/00	<	1.1	<	1.1	
ACMW-01BE	09/19/00	<	1.1	<	1.1	
ACMW-02N	09/19/00	<	1.1	<	1.1	
ACMW-02S	09/19/00	<	1.1	<	1.1	
ACMW-03	09/19/00	>	23		1.1	
ACMW-06N	09/19/00	<	1.1	<	1.1	
ACMW-06S	09/19/00	<	1.1	<	1.1	

Groundwaters

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
GW-03	09/12/00	<	1.1	<	1.1	
GW-04	09/12/00	<	1.1	<	1.1	
GW-05	09/12/00	<	1.1	<	1.1	
GW-07	09/12/00	<	1.1	<	1.1	
GW-08	09/12/00	<	1.1	<	1.1	
GW-11	09/12/00	<	1.1	<	1.1	
GW-14	09/12/00	<	1.1	<	1.1	

Reservoirs

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
HPR	09/05/00		50	<	2	2

Surfacewaters: Carson R

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-01	09/05/00	<	30	<	30	
SW-05	09/05/00		430	<	30	
SW-06	09/05/00		150		90	
SW-08	09/05/00	>	24000		430	

Surfacewaters: Indian Cr

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-02	09/05/00		930		430	
SW-03	09/05/00		90		40	
SW-04	09/05/00		4600	<	30	

ALPINE COUNTY
BLUE GREEN ALGAE

ID#	Site	Location	Date	Colonies #	Colony # Cells	Filaments #	Filaments # Cells	Filaments #	Filament Length	Single Cells, #
August, 2000										
20000801-08	SW-01	Carson River, Woodfords	08/01/00	0	0	0	0	0	0	0
20000801-09	SW-02	Indian Creek, Upper	08/01/00	0	0	0	0	0	0	0
20000801-10	SW-03	Indian Creek, Mid	08/01/00	0	0	0	0	0	0	0
20000801-11	SW-04	Indian Creek, Lower	08/01/00	0	0	0	0	0	0	0
20000801-12	SW-05	Carson River, Paynesville	08/01/00	0	0	0	0	0	0	0
20000801-13	SW-06	Carson River, Stateline	08/01/00	0	0	0	0	0	0	0
20000801-14	SW-07	Fredricksburg Ditch	08/01/00	0	0	0	0	0	0	0
20000801-15	SW-08	Irrigation Ditch	08/01/00	0	0	0	0	0	0	0

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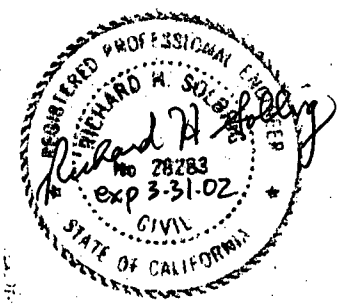
Site	Location	TDS		Cl⁻		TKN		NO_3-N		Total N		Total P		SO_4		Boron		Exch Na %	
		Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence
SW-01	Carson River, Woodfords	55		1.0	✓	0.13	✓	0.02		0.15	✓	0.02		2.0	✓	0.02		20	✓
SW-06	Carson River, Stateline	70	✓	2.5		0.22		0.03		0.25		0.03		2.0	✓	0.02		20	✓
SW-02	Indian Creek, Upper	100		6.0						0.30	✓	0.03	✓	8.0		0.25		30	✓
SW-03	Indian Creek, Mid	100		6.0						0.30		0.03		8.0		0.25		30	
SW-04	Indian Creek, Lower	100		6.0						0.30		0.03	✓	8.0		0.25		30	
SW-10	Indian Creek, Stateline	100		6.0						0.30	✓	0.03	✓	8.0		0.25		30	

The blue-green algae test results for October and November are included in this report.

Certification

I hereby certify that the enclosed monitoring report was prepared under my direct supervision and that I am a duly Registered Engineer under the laws of the State of California.

Sincerely,



Richard Solbrig,
Assistant Manager/Engineer

Enclosures:

1.

November Monthly Report	Pages
Wastewater Treatment plant	2
Permit Compliance Record	1
Export pipeline inspection	1
Sample site locations	2
Monitoring wells (ERB) and Heavenly Valley Creek (HVC) - Tahoe Basin	1
Alpine County Surfacewaters, Groundwaters, and HPR	4
Alpine County Blue-green Algae, October and November	2
Total number of pages:	13

cc: Calif. Dept. of Health Services, ODW - Jess Morehouse
El Dorado Co. Dept. of Environmental Health - Virginia Huber
Nevada Division of Environmental Protection - Wendel McCurry
Alpine County Health Department - Dr. Richard Botto
Alpine County Health Department - Jim Goodloe
Alpine County Board of Supervisors
Desert Research Group (Alpine County Consultants) - Bill Albright
STPUD Board of Directors
STPUD General Manager / District Engineer - Robert G. Baer
STPUD Manager of Operations - Ross Johnson
STPUD Operations Chief Plant Operator - Jeff Lee
STPUD Laboratory Director - Terry Powers
STPUD Manager of Alpine County Operations - Hal Bird

File: \LAHONTAN\11-00 Report.WPD

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

NOVEMBER 2000

Date	Day	FLOW MGD Inf	2-Hr Peak Inf	Eff	Pond Return	Pond Inf	PRECIP Inch	Type	D.O. mg/L Fin	COD mg/L Raw	COD mg/L Fin	BOD mg/L Raw	BOD mg/L Fin	SS mg/L Raw	SS mg/L Fin
11/01/00	Wed	3.95	5.5	3.49					6.34	416					
11/02/00	Thu	3.99	5.6	4.74					6.28	414					
11/03/00	Fri	3.99	5.6	3.94					6.67	402					
11/04/00	Sat	4.28	6.4	3.84					6.41	389	33.4	169	4.9	132	3.1
11/05/00	Sun	4.39	6.4	3.97					6.44	460					
11/06/00	Mon	3.91	5.3	3.78					5.82	402					
11/07/00	Tue	3.88	5.2	3.61					6.22	384					
11/08/00	Wed	3.99	5.4	3.90			0.06	Snow	6.38	477	33.9	182	4.6	192	2.7
11/09/00	Thu	3.93	5.8	3.91			0.07	Snow	5.43	373					
11/10/00	Fri	3.99	5.6	4.31					5.95	389					
11/11/00	Sat	4.28	6.5	4.22			0.05	Snow	5.73	556	32.2	231	5.3	256	2.0
11/12/00	Sun	4.33	6.4	4.28					6.48	492					
11/13/00	Mon	3.88	5.1	3.95			0.07	Snow	6.07	356					
11/14/00	Tue	3.79	5.2	3.63					5.91	361					
11/15/00	Wed	3.81	5.3	4.15					5.49	402	36.3	182	5.4	148	3.1
11/16/00	Thu	3.77	6.0	3.75					6.14	400					
11/17/00	Fri	3.92	5.0	4.13					6.65	426					
11/18/00	Sat	4.16	6.7	4.07					6.39	468	32.5	152	6.8	185	4.2
11/19/00	Sun	4.87	6.4	4.45					6.18	428					
11/20/00	Mon	3.85	5.4	4.03					5.35	409					
11/21/00	Tue	3.81	5.8	3.37					5.43	444					
11/22/00	Wed	4.28	6.2	4.49					5.02	494	27.8	185	5.7	147	3.4
11/23/00	Thu	4.90	7.2	4.94					4.88	488					
11/24/00	Fri	5.25	7.2	4.91					5.35	495					
11/25/00	Sat	5.64	8.5	5.76					4.54	473	44.0	202	13.0	162	6.6
11/26/00	Sun	4.53	7.4	4.25					5.68	435					
11/27/00	Mon	3.83	5.4	3.48					6.18	398					
11/28/00	Tue	4.03	5.6	4.01					5.35	396					
11/29/00	Wed	3.71	5.0	3.83			0.57	Snow	5.42	460	34.4	185	5.1	173	2.9
11/30/00	Thu	3.95	5.6	3.77					5.90	373					
PERMIT MAX		7.7									300		45		60
PERMIT MIN															
PERMIT AVE											60		30		30
TOTAL		124.89	178.7	122.96			0.82		176.08	12860	274.5	1488	50.7	1395	27.9
MAXIMUM		5.64	8.5	5.76			0.57		6.67	556	44.0	231	13.0	256	6.6
MINIMUM		3.71	5.0	3.37			0.05		4.54	356	27.8	152	4.6	132	2.0
AVERAGE		4.16	6.0	4.10			0.16		5.87	429	34.3	186	6.3	174	3.5
# Tests		30	30	30	0	0	5		30	30	8	8	8	8	8

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

NOVEMBER 2000

Date	Day	SETTLEABLE SOLIDS mL/L Raw		SETTLEABLE SOLIDS mL/L Fin	MBAS mg/L Raw	MBAS mg/L Fin	pH Units Raw	pH Units Fin	TURBIDITY NTU Fin	Cl2 mg/L Fin	FINAL COLIFORMS MPN/100 mL Total		FINAL COLIFORMS MPN/100 mL 7day-Median	TDS mg/L Raw	TDS mg/L Fin	ALKALINITY mg/L Raw	ALKALINITY mg/L Fin
11/01/00	Wed	10.0	<	0.1			7.28	7.42	2.40	4.79	<	2	< 2			132	108
11/02/00	Thu	11.5	<	0.1			7.48	7.43	2.30	5.42		2	< 2			131	110
11/03/00	Fri	11.0	<	0.1			7.37	7.47	1.78	4.59	<	2	< 2			136	116
11/04/00	Sat	10.0	<	0.1			7.48	7.64	2.10	4.27	<	2	< 2			143	118
11/05/00	Sun	10.0	<	0.1			7.28	7.42	2.10	4.48		2	< 2			143	122
11/06/00	Mon	10.0	<	0.1			7.42	7.38	2.50	5.32	<	2	< 2			135	118
11/07/00	Tue	13.0	<	0.1			7.53	7.66	2.00	4.79	<	2	< 2			144	118
11/08/00	Wed	11.5	<	0.1			7.50	7.46	2.20	4.06	<	2	< 2	265	228	130	118
11/09/00	Thu	9.5	<	0.1			7.51	7.24	1.70	4.69	<	2	< 2			136	118
11/10/00	Fri	10.0	<	0.1			7.57	7.38	1.60	4.69		4	< 2			138	116
11/11/00	Sat	13.0	<	0.1			7.41	7.56	1.60	4.48	<	2	< 2			143	121
11/12/00	Sun	14.0	<	0.1			7.43	7.44	2.00	3.86	<	2	< 2			158	124
11/13/00	Mon	7.5	<	0.1			7.46	7.42	1.60	5.73	<	2	< 2			138	116
11/14/00	Tue	11.0	<	0.1			7.59	7.40	1.60	4.90	<	2	< 2			142	116
11/15/00	Wed	10.0	<	0.1			7.64	7.38	2.30	4.79	<	2	< 2	270	226	136	118
11/16/00	Thu	10.5	<	0.1			7.77	7.41	2.30	3.23	<	2	< 2			140	119
11/17/00	Fri	10.0	<	0.1			7.39	7.22	2.00	4.17	<	2	< 2			136	118
11/18/00	Sat	12.0	<	0.1			7.50	7.56	2.60	3.86	<	2	< 2			145	126
11/19/00	Sun	11.0	<	0.1			7.57	7.50	2.60	4.69	<	2	< 2			142	124
11/20/00	Mon	12.0	<	0.1			7.45	7.30	2.00	5.52	<	2	< 2			139	118
11/21/00	Tue	10.0	<	0.1			7.46	7.40	1.90	4.59	<	2	< 2			142	118
11/22/00	Wed	10.5	<	0.1			7.46	7.50	2.20	4.59	<	2	< 2	271	228	141	120
11/23/00	Thu	11.5	<	0.1			7.41	7.47	2.90	3.96	<	2	< 2			145	126
11/24/00	Fri	14.0	<	0.1			7.66	7.58	3.00	3.65	<	2	< 2			168	138
11/25/00	Sat	13.0	<	0.1			7.52	7.72	3.90	3.02	<	2	< 2			163	145
11/26/00	Sun	11.0	<	0.1			7.36	7.34	4.00	5.21	<	2	< 2			150	132
11/27/00	Mon	10.0	<	0.1			7.42	7.44	2.90	7.50		2	< 2			140	122
11/28/00	Tue	10.0	<	0.1			7.42	7.29	1.90	4.17	<	2	< 2			138	122
11/29/00	Wed	10.5	<	0.1			7.57	7.56	1.80	4.69		2	< 2	250	228	139	120
11/30/00	Thu	10.0	<	0.1			7.48	7.58	1.80	4.27	<	2	< 2			133	120
PERMIT MAX				0.1		2.0		8.5	20			240	23				
PERMIT MIN								6.5									
PERMIT AVE						1.0			10								
TOTAL		328.0		3.0	0.00	0.000	224.39	223.57	67.58	137.98		62	60	1056	910	4246	3625
MAXIMUM		14.0		0.1	ERR	ERR	7.77	7.72	4.00	7.50		4	2	271	228	168	145
MINIMUM		7.5		0.1	ERR	ERR	7.28	7.22	1.60	3.02		2	2	250	226	130	108
AVERAGE		10.9		0.1	ERR	ERR	7.48	7.45	2.25	4.60		2	2	264	228	142	121
# Tests		30		30	0	0	30	30	30	30		30	30	4	4	30	30

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT
COMPLIANCE RECORD

2000

Parameter	# Tests	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Compliance, %
Total Plant Inflow; 7.7 MGD; Dry Weather	335	0	0	0	0	0	0	0	0	0	0	0		0	100.0
2-Hour Peak Inflow; 18.5 MGD	334	0	0	0	0	0	0	0	0	0	0	0		0	100.0
COD, 30 Day Ave: 60 mg/L	11	0	0	0	0	0	0	0	0	0	0	0		0	100.0
COD, Max: 300 mg/L	90	0	0	0	0	0	0	0	0	0	0	0		0	100.0
BOD, 30 Day Ave: 30 mg/L	11	0	0	0	0	0	0	0	0	0	0	0		0	100.0
BOD, Max: 45 mg/L	83	0	0	0	0	0	0	0	0	0	0	0		0	100.0
SS, 30 Day Ave: 30 mg/L	11	0	0	0	0	0	0	0	0	0	0	0		0	100.0
SS, Max: 60 mg/L	92	0	0	0	0	0	0	0	0	0	0	0		0	100.0
Settleable Solids, Max: 0.1 mL/L	329	0	0	0	0	0	0	0	0	0	0	0		0	100.0
Turbidity, 30 Day Ave: 10 NTU	11	0	0	0	0	0	0	0	0	0	0	0		0	100.0
Turbidity, Max: 20 NTU	322	0	0	0	0	0	0	0	0	0	0	0		0	100.0
pH, 6.5 to 8.5	322	0	0	0	0	0	0	0	0	0	0	0		0	100.0
Total Coliforms, Max: 240 MPN/100 mL	315	0	0	0	0	0	0	0	0	0	0	0		0	100.0
Total Coliforms, 7-day Median: 23 MPN	315	0	0	0	0	0	0	0	0	0	0	0		0	100.0
MBAS, 30 Day Ave: 1.0 mg/L	6	0	0	0	0	0	0							0	100.0
MBAS, Max: 2.0 mg/L	6	0	0	0	0	0	0							0	100.0
Total	2,593	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0

SOUTH TAHOE PUBLIC UTILITY DISTRICT
MEMORANDUM

Date:November 29, 2000

To: Bob Baer, Diane Noble, Terry Powers

From: Greg Schrempp

Topic: Export Line Inspection
****

On November 28 2000, Tim Rieger and I conducted our check of the District's export line from the treatment plant to where the "C" line daylights at Harvey Place at Station 564+04. Several wet spots were checked, however no leaks were found.

SAMPLE LOCATIONS

TAHOE BASIN MONITORING WELLS

Site	Location
ERB	Emergency Retention Basin
CONTROL	North of Post Office
MW02-25, -50	Emergency Retention Basin, S side
MW03-25, -50	Emergency Retention Basin, S side
MW04-25, -50	Emergency Retention Basin, W side
MW07-25, -50	Emergency Retention Basin, N side
MW08-25, -50	Pond #1, SW corner
MW11	S.E. corner of wastewater treatment plant grounds
MW12	South of Emergency Pump Building, for buried sludge
MW13	Pond 2, along Heavenly Valley Creek, for buried sludge

HEAVENLY VALLEY CREEK

HVC-1	At Pioneer Trail
HVC-2	250 ft upstream of Pond #2
HVC-3	25 ft downstream of Johnson Blvd.
HVC-4	Effluent of drain pipe from Lower Shop area
HVC-5	Effluent of drainage pipe along Johnson Blvd, 10 feet upstream of Johnson Blvd.

ALPINE COUNTY MONITORING WELLS

Site	Location
ACMW-01AW	Below main dam at Harvey Place Reservoir
ACMW-01BE	Below auxiliary dam at Harvey Place Reservoir
ACMW-02, N&S	On dam access road at Diamond Valley Road
ACMW-03	Bruns ranch, east side of Highway 88
ACMW-04W	Gansberg ranch, west side of Highway 88
ACMW-05	Dressler ranch
ACMW-06, N&S	Celio ranch, on Diamond Valley Road

ALPINE SOILS

Site	Ranch
S2	Celio
S3	Hall
S4	Gansberg
S5	Gansberg
S6	Neddenriep
S7	Bruns
S8	Dressler

ALPINE GROUNDWATERS

Site	Homeowner
GW-01	Sagues
GW-03	Smith/Springmeyer
GW-04	Celio
GW-05	Neddenriep
GW-07	Gansberg, Jr.
GW-08	Arant
GW-11	Diamond Valley School
GW-14	Sierra Pines Store

ALPINE SURFACEWATERS

Site	Location
SW-01	Carson River, Woodfords
SW-02	Indian Creek, @ HWY 89
SW-03	Indian Creek, @ upper bridge
SW-04	Indian Creek, @ lower bridge
SW-05	Carson River, Paynesville
SW-06	Carson River, Stateline
SW-07	Fredericksberg Ditch, Stateline
SW-08	Irrigation Ditch along Carson River Road
SW-09	Carson River, Dressler Lane
SW-10	Indian Creek, @ Smith-Springmeyer Ranch

TAHOE BASIN MONITORING

Site	Date	ID	Location	Depth msl	Temp C	pH	EC umhos	Cl mg/L		COD mg/L	NO3-N mg/L	Comment
Buried Sludge Monitoring												
MW11	11/20/00	20001120-43	Sludge Pond	6266.5	8.5	6.91	77	0.8	<	5.0	0.059	
MW12	11/20/00	20001120-44	Sludge Pond	6263.9	9.3	6.54	124	2.1		6.3	0.445	
MW13	11/20/00	20001120-45	Sludge Pond	6256.0	8.0	6.90	756	4.0		16.6	2.100	
ERB Monitoring												
CONTROL	11/20/00	20001120-37	At Post Office	6281.8	9.0	7.14	175	7.5	<	5.0	2.400	
MW02-50	11/20/00	20001120-38	Black Bart side of ERB	6268.3	9.5	6.66	392	34.4	<	5.0	7.960	
MW03-50	11/20/00	20001120-39	Black Bart side of ERB	6268.3	9.7	6.47	409	31.3		6.6	9.240	
MW04-50	11/20/00	20001120-40	Hank Monk side of ERB	6268.0	8.0	6.59	76	5.6	<	5.0	0.057	
MW07-50	11/20/00	20001120-41	North side of ERB	6278.5	7.5	6.69	259	23.7	<	5.0	0.620	
Heavenly Valley Creek												
HVC-1	11/07/00	20001107-06	Downstream of Pioneer		2.3	6.59	60	1.1	<	5.0	0.077	
HVC-2	11/07/00	0001107-HVC2	250' upstream of Pond #2									Standing water
HVC-3	11/07/00	0001107-HVC3	25' downstream of Johnson Blvd									Dry
HVC-4	11/07/00	20001107-07	Effluent of drain from Lower Shop		7.5	7.19	134	1.2		18.8	0.064	
HVC-5	11/07/00	0001107-HVC5	Effluent of drainage pipe along Jo									Standing water
Treatment Plant Monitoring												
MW08-25	11/20/00	20001120-42	SW side of Pond #1	6246.3	11.0	6.44	1026	50.5		95.9	0.011	

ALPINE COUNTY MONITORING

11/28/00

Site	Date	ID	Location	Temp C	pH	EC umhos	DO mg/L	Alk mg/L	TDS mg/L	SS mg/L	Turb NTU	Cl mg/L	SO4 mg/L
Alpine Monitoring Wells													
ACMW-01AW	11/07/00	20001107-09	Main Dam	12.8	6.30	151		46	104		.51	10.7	1.3
ACMW-01BE	11/07/00	20001107-10	Secondary Dam	11.8	6.65	94		46	76		4.8	1.1	1.3
ACMW-02N	11/07/00	20001107-11	Access Gate	11.1	6.82	125		58	90		.73	3.1	3.2
ACMW-02S	11/07/00	20001107-12	Access Gate	11.3	6.49	100		50	76		.47	1.6	1.2
ACMW-04W	11/07/00	20001107-13	Gansberg	12.0	6.09	186		51	134		2.5	14.4	8.5
ACMW-06N	11/07/00	20001107-14	Celio	11.2	6.58	690		256	432		4.7	57.1	22.7
ACMW-06S	11/07/00	20001107-15	Celio	10.5	6.67	784		282	483		.49	72.5	33.3
Groundwaters													
GW-03	11/03/00	20001103-14	Smith/Springmeyer	13.0	7.27	304		129	227		.4	1.5	27.4
GW-04	11/03/00	20001103-15	Celio	13.9	7.49	259		117	200		.54	3.4	11.8
GW-05	11/03/00	20001103-16	Neddenriep	11.2	6.88	256		62	170		.1	22.5	14.3
GW-07	11/03/00	20001103-17	Gansberg	8.8	6.88	123		53	97		.09	2.0	2.5
GW-08	11/03/00	20001103-18	Arant	12.2	6.94	229		51	147		.2	22.4	9.1
GW-11	11/03/00	20001103-19	Diamond Val. School	12.7	7.07	147		75	111		.38	0.7	0.8
GW-14	11/03/00	20001103-20	Sierrra Pines	10.0	6.89	118		52	95		.1	1.5	1.8
Reservoirs													
HPR	11/14/00	20001114-09	Harvey Place Reservoir	6.2	7.92	497	7.49	107	238	12.80	4	60.5	21.0
Surfacewaters: Carson R													
SW-01	11/01/00	20001101-06	Carson R Woodfords	1.6	7.58	74		34	55	0.50	.3	1.1	2.2
SW-05	11/01/00	20001101-10	Carson R Paynesville	4.1	7.27	93	8.20	44	77	0.44	.33	1.5	2.9
SW-06	11/01/00	20001101-11	Carson R Stateline	4.4	7.09	101	11.20	44	87	0.42	.49	2.5	3.4
SW-08	11/01/00	20001101-12	Irrigation Ditch	7.1	7.10	132	8.00	54	109	75.30	8.5	2.9	7.0
SW-09	11/01/00	20001101-13	Carson R Dressler Ln	5.6	6.84	136	7.90	53	105	1.08	.68	5.5	6.1
Surfacewaters: Indian Cr													
SW-02	11/01/00	20001101-07	Indian Cr Upper	6.0	6.90	109	7.90	56	91	0.44	1	2.3	< 0.5
SW-03	11/01/00	20001101-08	Indian Cr Mid	2.4	7.01	78		36	63	1.92	1.4	1.5	2.7
SW-04	11/01/00	20001101-09	Indian Cr Lower	3.2	7.13	90	9.20	42	76	5.24	1.7	2.1	2.6
SW-10	11/01/00	20001101-14	Indian Cr at Bruns	3.5	7.24	95	8.60	43	85	18.00	4.5	1.9	2.7

ALPINE COUNTY MONITORING

11/28/00

Site	Date	TotalP mg/L	PO4-P mg/L	TKN mg/L	NH3-N mg/L	NO2-N mg/L	NO3-N mg/L	Total N mg/L	MBAS mg/L
Alpine Monitoring Wells									
ACMW-01AW	11/07/00	0.118		0.390	< 0.020	< 0.010	2.960	3.360	
ACMW-01BE	11/07/00	0.112		< 0.100	0.031	< 0.010	0.177	0.287	
ACMW-02N	11/07/00	0.012		0.230	0.032	< 0.010	0.081	0.321	
ACMW-02S	11/07/00	0.012		0.185	0.059	< 0.010	< 0.010	0.205	
ACMW-04W	11/07/00	0.018		0.169	0.023	< 0.010	2.500	2.679	
ACMW-06N	11/07/00	0.249		0.280	0.055	< 0.010	< 0.010	0.300	
ACMW-06S	11/07/00	0.062		0.157	0.039	< 0.010	0.017	0.184	
Groundwaters									
GW-03	11/03/00	0.042		0.107	0.031	< 0.010	0.764	0.881	
GW-04	11/03/00	0.056		< 0.100	< 0.020	< 0.010	0.860	0.970	
GW-05	11/03/00	0.038		< 0.100	< 0.020	< 0.010	3.380	3.490	
GW-07	11/03/00	0.088		< 0.100	< 0.020	< 0.010	1.290	1.400	
GW-08	11/03/00	0.040		< 0.100	< 0.020	< 0.010	4.180	4.290	
GW-11	11/03/00	0.042		< 0.100	< 0.020	< 0.010	0.435	0.545	
GW-14	11/03/00	0.056		< 0.100	< 0.020	< 0.010	0.482	0.592	
Reservoirs									
HPR	11/14/00	2.170	2.010	20.400	17.000	0.251	0.895	21.546	
Surfacewaters: Carson R									
SW-01	11/01/00	0.012	< 0.010	0.210	0.024	< 0.010	< 0.010	0.230	
SW-05	11/01/00	0.017	< 0.010	0.110	0.024	< 0.010	< 0.010	0.130	
SW-06	11/01/00	0.014	< 0.010	0.148	0.023	< 0.010	0.016	0.174	
SW-08	11/01/00	0.174	0.022	0.743	0.028	< 0.010	0.381	1.134	
SW-09	11/01/00	0.022	< 0.010	0.389	< 0.020	< 0.010	0.013	0.412	
Surfacewaters: Indian Cr									
SW-02	11/01/00	0.400	< 0.010	0.357	0.023	< 0.010	< 0.010	0.377	
SW-03	11/01/00	0.026	< 0.010	0.230	0.021	< 0.010	< 0.010	0.250	
SW-04	11/01/00	0.042	0.010	0.188	< 0.020	< 0.010	< 0.010	0.208	
SW-10	11/01/00	0.094	< 0.010	0.352	< 0.020	< 0.010	< 0.010	0.372	

ALPINE COUNTY MONITORING

Site	Date		COD mg/L	BOD mg/L	O & G mg/L		Boron mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	SAR	Exch Na %	Hardness mg/L	Water Level MSL or Ft
Alpine Monitoring Wells															
ACMW-01AW	11/07/00	<	5											57.5	5482.4
ACMW-01BE	11/07/00	<	5											38.4	5490.0
ACMW-02N	11/07/00	<	5											45	5458.3
ACMW-02S	11/07/00	<	5											39.4	5459.0
ACMW-04W	11/07/00	<	5											46	4901.3
ACMW-06N	11/07/00	<	5											248	5215.8
ACMW-06S	11/07/00	<	5											338	5204.6
Groundwaters															
GW-03	11/03/00	<	5											81	
GW-04	11/03/00	<	5											98.3	
GW-05	11/03/00	<	5											82.2	
GW-07	11/03/00	<	5											47	
GW-08	11/03/00	<	5											48.4	
GW-11	11/03/00	<	5											56.9	
GW-14	11/03/00	<	5											42	
Reservoirs															
HPR	11/14/00		31	6			0.21	31.4	3.6	44.8	8.9	2.02	48.3		27.0
Surfacewaters: Carson R															
SW-01	11/01/00	<	5	2		<	0.01	7.0	2.0	4.1	1.5	0.36	24.8		
SW-05	11/01/00	<	5	1		<	0.01	8.2	2.4	5.5	1.8	0.43	26.8		
SW-06	11/01/00	<	5	1			0.01	8.8	2.7	5.8	2.0	0.44	26.3		
SW-08	11/01/00		28	2			0.01	11.2	3.2	10.3	2.6	0.70	33.5		
SW-09	11/01/00	<	5	2			0.02	10.8	3.5	8.9	2.3	0.60	30.4		
Surfacewaters: Indian Cr															
SW-02	11/01/00		7	2			0.02	10.0	2.8	9.3	2.0	0.67	34.3		
SW-03	11/01/00	<	5	2			0.02	7.2	2.1	4.6	1.5	0.39	25.9		
SW-04	11/01/00	<	5	2			0.01	8.2	2.6	5.4	1.8	0.42	26.0		
SW-10	11/01/00	<	5	2			0.02	8.4	2.8	5.6	1.9	0.43	25.9		

ALPINE COUNTY
BACTERIOLOGICAL MONITORING

Alpine Monitoring Wells

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
ACMW-01AW	11/07/00	< 1.1	< 1.1	
ACMW-01BE	11/07/00	< 1.1	< 1.1	
ACMW-02N	11/07/00	< 1.1	< 1.1	
ACMW-02S	11/07/00	< 1.1	< 1.1	
ACMW-04W	11/07/00	3.6	1.1	
ACMW-06N	11/07/00	< 1.1	< 1.1	
ACMW-06S	11/07/00	< 1.1	< 1.1	

Groundwaters

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
GW-03	11/03/00	< 1.1	< 1.1	
GW-04	11/03/00	< 1.1	< 1.1	
GW-05	11/03/00	< 1.1	< 1.1	
GW-07	11/03/00	< 1.1	< 1.1	
GW-08	11/03/00	< 1.1	< 1.1	
GW-11	11/03/00	< 1.1	< 1.1	
GW-14	11/03/00	< 1.1	< 1.1	

Reservoirs

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
HPR	11/14/00	110	2	17

Surfacewaters: Carson R

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-01	11/01/00	< 30	< 30	< 30
SW-05	11/01/00	390	40	30
SW-06	11/01/00	750	40	< 30
SW-08	11/01/00	2400	2400	230
SW-09	11/01/00	< 30	< 30	< 30

Surfacewaters: Indian Cr

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-02	11/01/00	1500	40	40
SW-03	11/01/00	930	430	150
SW-04	11/01/00	390	230	40
SW-10	11/01/00	750	750	40

ALPINE COUNTY
BLUE GREEN ALGAE

ID#	Site	Location	Date	Colonies #	Colony # Cells	Filaments #	Filaments # Cells	Filaments #	Filament Length	Single Cells, #
October, 2000										
20001003-07	SW-01	Carson River, Woodfords	10/03/00	0	0	0	0	0	0	0
20001003-08	SW-02	Indian Creek, Upper	10/03/00	0	0	0	0	0	0	0
20001003-09	SW-03	Indian Creek, Mid	10/03/00	0	0	0	0	0	0	0
20001003-10	SW-04	Indian Creek, Lower	10/03/00	0	0	0	0	0	0	0
20001003-11	SW-05	Carson River, Paynesville	10/03/00	0	0	0	0	0	0	0
20001003-12	SW-06	Carson River, Stateline	10/03/00	0	0	0	0	0	0	0
20001003-13	SW-08	Irrigation Ditch	10/03/00	0	0	0	0	0	0	0
20001003-14	HPR	Harvey Place Reservoir	10/03/00	0	0	0	0	0	0	0
20001005-10	ICR-1 Top	Indian Creek Reservoir	10/05/00	70	14,100	598	27,300	0	0	0
20001005-11	ICR-1 Mid	Indian Creek Reservoir	10/05/00	70	26,400	387	24,600	0	0	0
20001005-12	ICR-1 Bot	Indian Creek Reservoir	10/05/00	35	24,600	176	8,450	0	0	0

ALPINE COUNTY
BLUE GREEN ALGAE

ID#	Site	Location	Date	Colonies #	Colony # Cells	Filaments #	Filaments # Cells	Filaments #	Filament Length	Single Cells, #
November, 2000										
20001101-06	SW-01	Carson River, Woodfords	11/01/00	0	0	0	0	0	0	0
20001101-07	SW-02	Indian Creek, Upper	11/01/00	0	0	0	0	0	0	0
20001101-08	SW-03	Indian Creek, Mid	11/01/00	0	0	0	0	0	0	0
20001101-09	SW-04	Indian Creek, Lower	11/01/00	0	0	0	0	0	0	0
20001101-10	SW-05	Carson River, Paynesville	11/01/00	0	0	0	0	0	0	0
20001101-11	SW-06	Carson River, Stateline	11/01/00	0	0	0	0	0	0	0
20001101-12	SW-08	Irrigation Ditch	11/01/00	0	0	0	0	0	0	0
20001101-13	SW-09	Carson River, Dresselr La	11/01/00	0	0	0	0	0	0	0
20001101-14	SW-10	Indian Creek, Bruce Brun'	11/01/00	0	0	0	0	0	0	0
20001114-06	ICR-1 Top	Indian Creek Reservoir	11/14/00	0	0	0	0	0	0	0
20001114-07	ICR-1 Mid	Indian Creek Reservoir	11/14/00	0	0	0	0	0	0	0
20001114-08	ICR-1 Bot	Indian Creek Reservoir	11/14/00	0	0	0	0	0	0	0
20001114-09	HPR	Harvey Place Reservoir	11/14/00	0	0	0	0	0	0	0

Site	Location	TDS		Cl		TKN		NO_3-N		Total N		Total P		SO_4		Boron		Exch Na %	
		Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence
SW-01	Carson River, Woodfords	55	✓	1.0		0.13	✓	0.02		0.15	✓	0.02		2.0		0.02	✓	20	✓
SW-06	Carson River, Stateline	70	✓	2.5	✓	0.22		0.03	✓	0.25		0.03		2.0	✓	0.02		20	✓
SW-02	Indian Creek, Upper	100		6.0						0.30		0.03	✓	8.0		0.25		30	
SW-03	Indian Creek, Mid	100	✓	6.0						0.30		0.03	✓	8.0		0.25		30	
SW-04	Indian Creek, Lower	100	✓	6.0						0.30		0.03	✓	8.0		0.25		30	
SW-10	Indian Creek, Stateline	100		6.0						0.30		0.03		8.0		0.25		30	

Blue-green algae test results for October will be sent as soon as the tests are completed. The blue-green algae test and soils results for September are included in this report.

Certification

I hereby certify that the enclosed monitoring report was prepared under my direct supervision and that I am a duly Registered Engineer under the laws of the State of California.

Sincerely,

REGISTERED PROFESSIONAL ENGINEER
RICHARD H. SOLBRIG
No 28283
exp 3-31-02
CIVIL
STATE OF CALIFORNIA

Richard Solbrig,
Assistant Manager/Engineer

Enclosures:

1.

October Monthly Report	Pages
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Sample site locations	2
Monitoring wells (ERB) and Heavenly Valley Creek (HVC) - Tahoe Basin	1
Alpine County Surfacewaters, Groundwaters, and HPR	4
Alpine County Blue-green Algae, September	1
Alpine County Soils, September	1
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cc: Calif. Dept. of Health Services, ODW - Jess Morehouse
El Dorado Co. Dept. of Environmental Health - Virginia Huber
Nevada Division of Environmental Protection - Wendel McCurry
Alpine County Health Department - Dr. Richard Botto
Alpine County Health Department - Jim Goodloe
Alpine County Board of Supervisors
Desert Research Group (Alpine County Consultants) - Bill Albright
STPUD Board of Directors
STPUD General Manager / District Engineer - Robert G. Baer
STPUD Manager of Operations - Ross Johnson
STPUD Operations Chief Plant Operator - Jeff Lee
STPUD Laboratory Director - Terry Powers
STPUD Manager of Alpine County Operations - Hal Bird

File: \LAHONTAN\10-00 Report.WPD

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

11/05/00
16:23:29

OCTOBER 2000

Date	Day	FLOW MGD Inf	2-Hr Peak Inf	Eff	Pond Return	Pond Inf	PRECIP Inch	Type	D.O. mg/L Fin	COD mg/L Raw	Fin	BOD mg/L Raw	Fin	SS mg/L Raw	Fin
10/01/00	Sun	4.94	8.3	4.79					5.18	407					
10/02/00	Mon	4.15	6.5	3.76					5.82	437					
10/03/00	Tue	4.20	5.7	3.71					5.78	383	36.2	144	4.2	147	3.0
10/04/00	Wed	4.14	6.0	4.06					5.47	462					
10/05/00	Thu	4.19	5.6	4.06					5.36	421					
10/06/00	Fri	4.23	6.4	4.02					5.82	391					
10/07/00	Sat	4.77	7.4	4.43					5.39	408	31.5	170	5.3	160	2.4
10/08/00	Sun	4.82	7.1	4.71					5.35	421					
10/09/00	Mon	4.42	6.0			4.22	0.03	Rain		453					
10/10/00	Tue	4.09	6.4			4.15	0.02	Snow		319					
10/11/00	Wed	4.10	6.0			4.07				405					
10/12/00	Thu	4.10	6.6			4.10				419					
10/13/00	Fri	4.29	6.1			4.32				386					
10/14/00	Sat	4.54	6.2			4.61				426					
10/15/00	Sun	4.71	7.2			4.58				442					
10/16/00	Mon	4.00	6.4	5.18	1.25					384					
10/17/00	Tue	4.07	6.2	7.15	3.11				6.64	370					
10/18/00	Wed	3.84	6.2	8.00	4.10				4.40	534	44.0	203	6.2		5.5
10/19/00	Thu	4.00	5.5	4.45	0.60	0.80			4.74	359					
10/20/00	Fri	4.12	5.8			4.36	0.03	Rain		347					
10/21/00	Sat	4.51	7.0			4.35				412				140	
10/22/00	Sun	4.47	6.6	4.30		0.11				419					
10/23/00	Mon	3.94	6.0	7.17	3.30				5.70	398					
10/24/00	Tue	3.91	5.4	8.08	4.13				5.62	430					
10/25/00	Wed	3.94	6.2	8.13	4.10		0.10	Rain	5.82	450	34.8	177	6.7	176	8.6
10/26/00	Thu	3.84	5.9	6.46	3.04		0.28	Rain	5.65	338					
10/27/00	Fri	4.05	5.7	7.76	3.32				3.34	373					
10/28/00	Sat	4.44	6.0	8.68	4.27		0.62	Rain	6.02	383	56.2			132	13.6
10/29/00	Sun	4.21	6.3	6.43	2.09				5.27	373					
10/30/00	Mon	4.67	6.0	3.12	0.09				6.25	386	44.8			142	6.7
10/31/00	Tue	4.03	6.0	3.97					6.27	278					
PERMIT MAX		7.7									300		45		60
PERMIT MIN															
PERMIT AVE											60		30		30
TOTAL		131.73	194.7	122.42	33.40	39.67	1.08		109.89	12414	247.5	694	22.4	897	39.8
MAXIMUM		4.94	8.3	8.68	4.27	4.61	0.62		6.64	534	56.2	203	6.7	176	13.6
MINIMUM		3.84	5.4	3.12	0.09	0.11	0.02		3.34	278	31.5	144	4.2	132	2.4
AVERAGE		4.25	6.3	5.56	2.78	3.61	0.18		5.49	400	41.3	174	5.6	150	6.6
# Tests		31	31	22	12	11	6		20	31	6	4	4	6	6

OK OK OK OK

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

OCTOBER 2000

		SETTLEABLE SOLIDS mL/L			MBAS mg/L		pH Units		TURBIDITY NTU	CI2 mg/L	FINAL COLIFORMS MPN/100 mL			TDS mg/L		ALKALINITY mg/L	
Date	Day	Raw		Fin	Raw	Fin	Raw	Fin	Fin	Fin	Total	7day-	Median	Raw	Fin	Raw	Fin
10/01/00	Sun	12.0	<	0.1			7.41	7.42	2.30	4.48	< 2	<	2			151	131
10/02/00	Mon	11.0	<	0.1			7.43	7.58	2.40	7.19	< 2	<	2			144	127
10/03/00	Tue	10.0	<	0.1			7.45	7.58	2.50	4.59	< 2	<	2	250	228	141	128
10/04/00	Wed	12.0	<	0.1			7.44	7.46	1.90	4.17	< 2	<	2			141	126
10/05/00	Thu	12.5	<	0.1			7.47	7.41	2.10	4.38	< 2	<	2			143	124
10/06/00	Fri	10.0	<	0.1			7.43	7.47	1.90	5.00	< 2	<	2			144	119
10/07/00	Sat	12.0	<	0.1			7.39	7.66	1.90	3.44	2	<	2			152	126
10/08/00	Sun	13.0	<	0.1			7.47	7.48	2.90	4.69	2	<	2			156	132
10/09/00	Mon	13.0	<	0.1			7.45									144	
10/10/00	Tue	11.0	<	0.1			7.45									138	
10/11/00	Wed	10.0	<	0.1			7.43									137	
10/12/00	Thu	10.0	<	0.1			7.41									136	
10/13/00	Fri	10.0	<	0.1			7.43									143	
10/14/00	Sat	13.0	<	0.1			7.40									147	
10/15/00	Sun	12.0					7.46									153	
10/16/00	Mon	10.0	<	0.1			7.41	7.36	3.58							145	118
10/17/00	Tue	9.5	<	0.1			7.37	7.21	3.30	5.00	4	<	2			144	114
10/18/00	Wed	16.0	<	0.1			7.42	7.42	2.70	4.38	< 2	<	2	254	236	143	112
10/19/00	Thu	10.5	<	0.1			7.62	7.57	2.40	4.69	2	<	2			144	112
10/20/00	Fri	11.5					7.64									141	
10/21/00	Sat	11.5					7.52									146	
10/22/00	Sun	11.5	<	0.1			7.43	7.40	2.50							148	124
10/23/00	Mon	10.0	<	0.1			7.45	7.42	2.72	5.73	< 2	<	2			146	114
10/24/00	Tue	12.0	<	0.1			7.52	7.39	2.60	4.79	< 2	<	2			134	112
10/25/00	Wed	12.0	<	0.1			7.57	7.47	3.30	4.27	< 2	<	2	266	241	135	113
10/26/00	Thu	9.5	<	0.1			7.61	7.34	3.45	3.96	< 2	<	2			139	112
10/27/00	Fri	10.0	<	0.1			7.43	7.34	3.60	5.52	2	<	2			140	114
10/28/00	Sat	11.0	<	0.1			7.46	7.55	3.90	3.34	< 2	<	2			139	114
10/29/00	Sun	11.0	<	0.1			7.43	7.55	3.60	6.25	< 2	<	2			139	111
10/30/00	Mon	10.0	<	0.1			7.54	7.68	3.00	7.30	< 2	<	2			136	111
10/31/00	Tue	14.0	<	0.1			7.32	7.38	2.50	5.32	2	<	2			134	110
PERMIT MAX				0.1		2.0		8.5	20		240		23				
PERMIT MIN								6.5									
PERMIT AVE						1.0			10								
TOTAL		351.5		2.8	0.00	0.000	231.26	164.14	61.05	98.49	42		40	770	705	4423	2604
MAXIMUM		16.0		0.1	ERR	ERR	7.64	7.68	3.90	7.30	4		2	266	241	156	132
MINIMUM		9.5		0.1	ERR	ERR	7.32	7.21	1.90	3.34	2		2	250	228	134	110
AVERAGE		11.3		0.1	ERR	ERR	7.46	7.46	2.78	4.92	2		2	257	235	143	118
# Tests		31		28	0	0	31	22	22	20	20		20	3	3	31	22

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SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT
COMPLIANCE RECORD

2000

Parameter	# Tests	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Compliance, %
Total Plant Inflow; 7.7 MGD; Dry Weather	305	0	0	0	0	0	0	0	0	0	0			0	100.0
2-Hour Peak Inflow; 18.5 MGD	304	0	0	0	0	0	0	0	0	0	0			0	100.0
COD, 30 Day Ave: 60 mg/L	10	0	0	0	0	0	0	0	0	0	0			0	100.0
COD, Max: 300 mg/L	82	0	0	0	0	0	0	0	0	0	0			0	100.0
BOD, 30 Day Ave: 30 mg/L	10	0	0	0	0	0	0	0	0	0	0			0	100.0
BOD, Max: 45 mg/L	75	0	0	0	0	0	0	0	0	0	0			0	100.0
SS, 30 Day Ave: 30 mg/L	10	0	0	0	0	0	0	0	0	0	0			0	100.0
SS, Max: 60 mg/L	84	0	0	0	0	0	0	0	0	0	0			0	100.0
Settleable Solids, Max: 0.1 mL/L	299	0	0	0	0	0	0	0	0	0	0			0	100.0
Turbidity, 30 Day Ave: 10 NTU	10	0	0	0	0	0	0	0	0	0	0			0	100.0
Turbidity, Max: 20 NTU	292	0	0	0	0	0	0	0	0	0	0			0	100.0
pH, 6.5 to 8.5	292	0	0	0	0	0	0	0	0	0	0			0	100.0
Total Coliforms, Max: 240 MPN/100 mL	285	0	0	0	0	0	0	0	0	0	0			0	100.0
Total Coliforms, 7-day Median: 23 MPN	285	0	0	0	0	0	0	0	0	0	0			0	100.0
MBAS, 30 Day Ave: 1.0 mg/L	6	0	0	0	0	0	0							0	100.0
MBAS, Max: 2.0 mg/L	6	0	0	0	0	0	0							0	100.0
Total	2,355	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0

SOUTH TAHOE
PUBLIC UTILITY DISTRICT
MEMORANDUM

Date: October 25, 2000

To: Bob Baer, Diane Noble

From: Tim Rieger

Topic: Export Line Check

****

On October 18, 2000, David Johnson and I conducted our check of the District's export line from the treatment plant to station 564+06 near the Harvey Place reservoir. The Luther Pass surge line was also checked. No damage to the pipe was found.

CC Terry Powers

EXPRT1000.MEM

SAMPLE LOCATIONS

TAHOE BASIN MONITORING WELLS

Site	Location
ERB	Emergency Retention Basin
CONTROL	North of Post Office
MW02-25, -50	Emergency Retention Basin, S side
MW03-25, -50	Emergency Retention Basin, S side
MW04-25, -50	Emergency Retention Basin, W side
MW07-25, -50	Emergency Retention Basin, N side
MW08-25, -50	Pond #1, SW corner
MW11	S.E. corner of wastewater treatment plant grounds
MW12	South of Emergency Pump Building, for buried sludge
MW13	Pond 2, along Heavenly Valley Creek, for buried sludge

HEAVENLY VALLEY CREEK

HVC-1	At Pioneer Trail
HVC-2	250 ft upstream of Pond #2
HVC-3	25 ft downstream of Johnson Blvd.
HVC-4	Effluent of drain pipe from Lower Shop area
HVC-5	Effluent of drainage pipe along Johnson Blvd, 10 feet upstream of Johnson Blvd.

ALPINE COUNTY MONITORING WELLS

Site	Location
ACMW-01AW	Below main dam at Harvey Place Reservoir
ACMW-01BE	Below auxiliary dam at Harvey Place Reservoir
ACMW-02, N&S	On dam access road at Diamond Valley Road
ACMW-03	Bruns ranch, east side of Highway 88
ACMW-04W	Gansberg ranch, west side of Highway 88
ACMW-05	Dressler ranch
ACMW-06, N&S	Celio ranch, on Diamond Valley Road

ALPINE SOILS

Site	Ranch
S2	Celio
S3	Hall
S4	Gansberg
S5	Gansberg
S6	Neddenriep
S7	Bruns
S8	Dressler

ALPINE GROUNDWATERS

Site	Homeowner
GW-01	Sagues
GW-03	Smith/Springmeyer
GW-04	Celio
GW-05	Neddenriep
GW-07	Gansberg, Jr.
GW-08	Arant
GW-11	Diamond Valley School
GW-14	Sierra Pines Store

ALPINE SURFACEWATERS

Site	Location
SW-01	Carson River, Woodfords
SW-02	Indian Creek, @ HWY 89
SW-03	Indian Creek, @ upper bridge
SW-04	Indian Creek, @ lower bridge
SW-05	Carson River, Paynesville
SW-06	Carson River, Stateline
SW-07	Fredericksberg Ditch, Stateline
SW-08	Irrigation Ditch along Carson River Road
SW-09	Carson River, Dressler Lane
SW-10	Indian Creek, @ Smith-Springmeyer Ranch

TAHOE BASIN MONITORING

11/14/00

Site	Date	ID	Location	Depth msl	Temp C	pH	EC umhos	Cl mg/L		COD mg/L	NO3-N mg/L	Comment
Buried Sludge Monitoring												
MW11	10/17/00	20001017-17	Sludge Pond	6266.7	8.7	7.43	74	0.8	<	5.0	0.075	
MW12	10/17/00	20001017-18	Sludge Pond	6264.5	9.4	6.45	127	2.0	<	5.0	0.259	
MW13	10/17/00	20001017-19	Sludge Pond	6255.7	8.1	6.95	747	4.0		19.2	2.860	
ERB Monitoring												
CONTROL	10/17/00	20001017-11	At Post Office	6282.1	10.2	6.63	170	7.3	<	5.0	2.350	?
MW02-50	10/17/00	20001017-12	Black Bart side of ERB	6268.1	10.2	6.69	385	35.1	<	5.0	8.210	
MW03-50	10/17/00	20001017-13	Black Bart side of ERB	6268.1	10.2	6.47	385	30.5	<	5.0	5.540	
MW04-50	10/17/00	20001017-14	Hank Monk side of ERB	6267.8	8.0	6.77	75	5.3	<	5.0	0.051	
MW07-50	10/17/00	20001017-15	North side of ERB	6278.4	8.1	6.62	253	24.6	<	5.0	0.641	
Heavenly Valley Creek												
HVC-1	10/10/00	20001010-07	Downstream of Pioneer		6.9	7.83	59	1.0	<	5.0	0.045	
HVC-2	10/10/00	0001010-HVC2	250' upstream of Pond #2									
HVC-3	10/10/00	0001010-HVC3	25' downstream of Johnson Blvd									
HVC-4	10/10/00	20001010-08	Effluent of drain from Lower Shop		11.0	7.25	130	1.1		6.6	0.077	
HVC-5	10/10/00	0001010-HVC5	Effluent of drainage pipe along Jo									
Treatment Plant Monitoring												
MW08-25	10/17/00	20001017-16	SW side of Pond #1	6245.3	11.3	6.36	981	45.5		90.0	0.028	

ALPINE COUNTY MONITORING

10/31/00

Site	Date	ID	Location	Temp C	pH	EC umhos	DO mg/L	Alk mg/L	TDS mg/L	SS mg/L	Turb NTU	Cl mg/L	SO4 mg/L
Alpine Monitoring Wells													
ACMW-01AW	10/10/00	20001010-09	Main Dam	12.5	6.53	102		44	83			3.4	1.6
ACMW-01BE	10/10/00	20001010-10	Secondary Dam	11.0	6.49	93		45	85			1.1	1.3
ACMW-02N	10/10/00	20001010-11	Access Gate	12.0	6.54	125		58	97			3.1	3.2
ACMW-02S	10/10/00	20001010-12	Access Gate	13.1	6.36	104		50	82			1.8	1.2
ACMW-04W	10/10/00	20001010-13	Gansberg	10.9	6.07	186		49	130			14.6	8.6
ACMW-06N	10/10/00	20001010-14	Celio	9.2	6.97	704		253	429			56.9	22.5
ACMW-06S	10/10/00	20001010-15	Celio	10.5	6.90	791		274	482			72.2	32.8
Groundwaters					✓	✓		✓	✓			✓	
GW-03	10/10/00	20001010-17	Smith/Springmeyer	13.8	7.56	3		129	222			1.6	26.9
GW-04	10/10/00	20001010-18	Celio	13.1	7.41	259		117	192			3.3	11.8
GW-05	10/10/00	20001010-19	Neddenriep	11.6	6.33	257		62	172			22.1	14.1
GW-07	10/10/00	20001010-20	Gansberg	10.7	6.32	126		52	103			2.0	2.5
GW-08	10/10/00	20001010-21	Arant	13.7	6.52	227		51	145			21.7	9.4
GW-11	10/10/00	20001010-22	Diamond Val. School	12.8	6.99	148		76	118			0.9	0.9
GW-14	10/10/00	20001010-23	Sierrra Pines	11.7	6.72	108		52	104			1.2	18.2
Reservoirs													
HPR	10/03/00	20001003-14	Harvey Place Reservoir	16.2	7.81	511	7.60	119	243	22.80	6.3	57.0	17.5
Surfacewaters: Carson R				✓	✓	✓	✓	✓	✓	✓	✓	✓	
SW-01	10/03/00	20001003-07	Carson R Woodfords	9.2	7.22	79	13.00	35	61	0.33	.27	1.1	2.0
SW-05	10/03/00	20001003-11	Carson R Paynesville	11.4	7.79	89	8.65	37	53	15.70	.46	1.3	2.3
SW-06	10/03/00	20001003-12	Carson R Stateline	12.6	7.66	117	9.20	47	81	0.84	.43	3.9	3.7
SW-08	10/03/00	20001003-13	Irrigation Ditch	16.0	7.59	128	9.10	57	98	24.60	4.3	1.7	4.1
Surfacewaters: Indian Cr									✓			✓	✓
SW-02	10/03/00	20001003-08	Indian Cr Upper	11.4	6.96	125	6.80	62	92	0.51	2.1	1.0	< 0.5
SW-03	10/03/00	20001003-09	Indian Cr Mid	11.2	7.35	235	7.50	111	163	2.56	2.8	5.6	2.3
SW-04	10/03/00	20001003-10	Indian Cr Lower	10.8	7.47	154	8.00	73	118	4.79	3.9	2.6	1.3

≥ 7.0

Terry Powers x231

ALPINE COUNTY MONITORING

10/31/00

Site	Date	TotalP mg/L	PO4-P mg/L	TKN mg/L	NH3-N mg/L	NO2-N mg/L	NO3-N mg/L	Total N mg/L	MBAS mg/L
					✓	✓	✓	✓	
Alpine Monitoring Wells									
ACMW-01AW	10/10/00				0.023	< 0.010	0.522	0.532	
ACMW-01BE	10/10/00				< 0.020	< 0.010	0.139	0.149	
ACMW-02N	10/10/00				< 0.020	< 0.010	0.084	0.094	
ACMW-02S	10/10/00				< 0.020	< 0.010	0.057	0.067	
ACMW-04W	10/10/00				< 0.020	< 0.010	2.540	2.550	
ACMW-06N	10/10/00				0.049	< 0.010	< 0.010	0.020	
ACMW-06S	10/10/00				0.026	< 0.010	0.025	0.035	
					✓	✓	✓	✓	
Groundwaters									
GW-03	10/10/00				< 0.020	< 0.010	0.746	0.756	
GW-04	10/10/00				< 0.020	< 0.010	0.866	0.876	
GW-05	10/10/00				< 0.020	< 0.010	3.230	3.240	
GW-07	10/10/00				< 0.020	< 0.010	1.490	1.500	
GW-08	10/10/00				0.021	< 0.010	4.110	4.120	
GW-11	10/10/00				< 0.020	< 0.010	0.423	0.433	
GW-14	10/10/00				< 0.020	< 0.010	0.480	0.490	
Reservoirs									
HPR	10/03/00	2.550	2.120	20.400	17.000	0.703	0.575	21.678	
		.03		.22			.03	.25	
Surfacewaters: Carson R									
SW-01	10/03/00	0.014	< 0.010	< 0.199	< 0.020	< 0.010	< 0.010	0.219	
SW-05	10/03/00	0.020	< 0.010	< 0.010	0.022	< 0.010	< 0.010	0.030	
SW-06	10/03/00	0.016	< 0.010	0.128	< 0.020	< 0.010	0.072	0.210	
SW-08	10/03/00	0.154	0.024	0.417	< 0.020	< 0.010	0.308	0.735	
		.03							
Surfacewaters: Indian Cr									
SW-02	10/03/00	0.066	0.011	0.163	0.049	< 0.010	< 0.010	0.183	
SW-03	10/03/00	0.072	0.019	0.116	< 0.020	< 0.010	0.012	0.138	
SW-04	10/03/00	0.091	0.012	0.208	< 0.020	< 0.010	< 0.010	0.228	

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ALPINE COUNTY MONITORING

Site	Date	COD mg/L	BOD mg/L	O & G mg/L	Boron mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	SAR	Exch Na %	Hardness mg/L	Water Level MSL or Ft
Alpine Monitoring Wells													
ACMW-01AW	10/10/00												5480.8
ACMW-01BE	10/10/00												5488.8
ACMW-02N	10/10/00												5458.8
ACMW-02S	10/10/00												5459.6
ACMW-04W	10/10/00												4905.7
ACMW-06N	10/10/00												5215.3
ACMW-06S	10/10/00												5204.4
Groundwaters													
GW-03	10/10/00												
GW-04	10/10/00												
GW-05	10/10/00												
GW-07	10/10/00												
GW-08	10/10/00												
GW-11	10/10/00												
GW-14	10/10/00												
Reservoirs													
HPR	10/03/00	37	10		0.24	14.3	3.9	44.5	10.5	2.69	59.7		12.5
Surfacewaters: Carson R			✓		✓								
SW-01	10/03/00		1	<	0.01	2.0	2.1	3.9	1.7	0.45	34.6		
SW-05	10/03/00		0	<	0.01	4.9	2.4	6.1	1.8	0.57	35.6		
SW-06	10/03/00		0		0.01	9.6	3.4	6.0	2.3	0.42	24.0		
SW-08	10/03/00		1		0.01	9.1	2.9	9.4	2.4	0.69	35.1		
Surfacewaters: Indian Cr													
SW-02	10/03/00		1		0.01	10.2	3.2	7.3	1.8	0.51	27.8		
SW-03	10/03/00		1		0.03	22.0	7.0	14.6	2.2	0.69	26.8		
SW-04	10/03/00		1		0.01	14.1	4.8	7.8	2.3	0.46	22.8		

ALPINE COUNTY
BACTERIOLOGICAL MONITORING

Alpine Monitoring Wells

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
ACMW-01AW	10/10/00	<	1.1	<	1.1	
ACMW-01BE	10/10/00	<	1.1	<	1.1	
ACMW-02N	10/10/00	<	1.1	<	1.1	
ACMW-02S	10/10/00	<	1.1	<	1.1	
ACMW-04W	10/10/00		23		1.1	
ACMW-06N	10/10/00	<	1.1	<	1.1	
ACMW-06S	10/10/00	<	1.1	<	1.1	

Groundwaters

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
GW-03	10/10/00	<	1.1	<	1.1	
GW-04	10/10/00	<	1.1	<	1.1	
GW-05	10/10/00	<	1.1	<	1.1	
GW-07	10/10/00	<	1.1	<	1.1	
GW-08	10/10/00		1.1	<	1.1	
GW-11	10/10/00	<	1.1	<	1.1	
GW-14	10/10/00	<	1.1	<	1.1	

Reservoirs

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
HPR	10/03/00	50	30	75

Surfacewaters: Carson R

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-01	10/03/00	<	30	<	30	
SW-05	10/03/00		430		90	
SW-06	10/03/00		140		140	
SW-08	10/03/00		4600		4600	

Surfacewaters: Indian Cr

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-02	10/03/00	70	30	
SW-03	10/03/00	40	40	
SW-04	10/03/00	930	150	

?
Basin Plan
75/100
20/100
?

ALPINE COUNTY
BLUE GREEN ALGAE

ID#	Site	Location	Date	Colonies #	Colony # Cells	Filaments #	Filaments # Cells	Filaments #	Filament Length	Single Cells, #
September, 2000										
20000905-16	SW-01	Carson River, Woodfords	09/05/00	0	0	0	0	0	0	0
20000905-17	SW-02	Indian Creek, Upper	09/05/00	0	0	0	0	0	0	0
20000905-18	SW-03	Indian Creek, Mid	09/05/00	0	0	0	0	0	0	0
20000905-19	SW-04	Indian Creek, Lower	09/05/00	0	0	0	0	0	0	0
20000905-20	SW-05	Carson River, Paynesville	09/05/00	0	0	0	0	0	0	0
20000905-21	SW-06	Carson River, Stateline	09/05/00	0	0	0	0	0	0	0
20000905-22	SW-08	Irrigation Ditch	09/05/00	0	0	0	0	0	0	0

ALPINE COUNTY SOILS

Site	Date	Location	Type	pH	EC mmho	%Sat	TKN mg/Kg	NO3-N mg/L	Total P mg/Kg	Exch P mg/L
S3a	09/01/00	Hall	SMB	6.93	0.50	34.9	1,345	2.0	1,070	22.4
S4a	09/01/00	Gansberg	DI	7.18	0.83	37.7	1,630	2.2	540	15.0
S5a	09/01/00	Gansberg	HRB	6.17	0.36	32.7	1,200	6.7	720	10.9
S6a	09/01/00	Neddenriep	DWB	5.86	0.35	44.1	1,530	1.3	600	32.6
S7a	09/01/00	Bruns	JaC	6.83	0.17	40.6	1,840	3.5	840	5.3
S8a	09/01/00	Dressler	SOD	6.68	0.15	19.3	857	3.0	370	4.7
S2a	09/12/00	Celio	KT	8.11	0.85	78.3	2,800	8.5	990	14.0

Site	Date	Cl mg/L	SO4 mg/Kg	CEC meq/100g	Cu mg/Kg		Mo mg/Kg	Ca mg/L	Mg mg/L	Na mg/L	SAR		% Na
S3a	09/01/00		5	21.2	28.0		1.0	30.9	9.0	59.8	2.43		2.2
S4a	09/01/00		12	18.5	41.0	<	1.0	45.4	10.5	97.3	3.38		3.5
S5a	09/01/00		3	14.3	26.0		1.0	24.6	5.4	32.6	1.55	<	1.0
S6a	09/01/00		8	17.8	38.0	<	1.0	15.4	4.6	39.0	2.24		1.9
S7a	09/01/00		19	16.3	42.0	<	1.0	15.2	3.6	13.5	0.81	<	1.0
S8a	09/01/00		5	10.5	20.0		1.0	9.7	5.1	7.8	0.51	<	1.0
S2a	09/12/00		22	34.2	21.0	<	1.0	53.1	20.6	78.0	2.30		2.0

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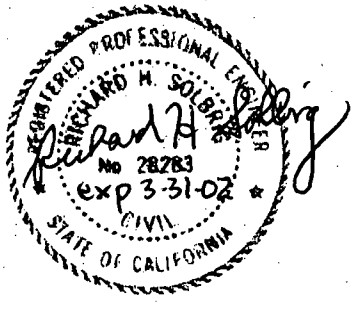
Site	Location	TDS		Cl		TKN		NO_3-N		Total N		Total P		SO_4		Boron		Exch Na %	
		Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence
SW-01	Carson River, Woodfords	55	✓	1.0	✓	0.13	✓	0.02		0.15	✓	0.02		2.0	✓	0.02		20	✓
SW-06	Carson River, Stateline	70		2.5		0.22		0.03		0.25		0.03		2.0		0.02		20	
SW-02	Indian Creek, Upper	100		6.0						0.30	✓	0.03		8.0		0.25		30	✓
SW-03	Indian Creek, Mid	100		6.0						0.30		0.03		8.0		0.25		30	
SW-04	Indian Creek, Lower	100		6.0						0.30		0.03		8.0		0.25		30	
SW-10	Indian Creek, Stateline	100		6.0						0.30		0.03		8.0		0.25		30	

Certification

I hereby certify that the enclosed monitoring report was prepared under my direct supervision and that I am a duly Registered Engineer under the laws of the State of California.

Sincerely,



Richard Solbrig,
Assistant Manager/Engineer

Enclosures:

1.

December Monthly Report	Pages
Wastewater Treatment plant	2
Permit Compliance Record	1
Export pipeline inspection	1
Sample site locations	2
Monitoring wells (ERB) and Heavenly Valley Creek (HVC) - Tahoe Basin	1
Alpine County Surfacewaters, Groundwaters, and HPR	4
Total number of pages:	11

cc: Calif. Dept. of Health Services, ODW - Jess Morehouse
El Dorado Co. Dept. of Environmental Health - Virginia Huber
Nevada Division of Environmental Protection - Wendel McCurry
Alpine County Health Department - Dr. Richard Botto
Alpine County Health Department - Jim Goodloe
Alpine County Board of Supervisors
Desert Research Group (Alpine County Consultants) - Bill Albright
STPUD Board of Directors
STPUD General Manager / District Engineer - Robert G. Baer
STPUD Manager of Operations - Ross Johnson
STPUD Operations Chief Plant Operator - Jeff Lee
STPUD Laboratory Director - Terry Powers
STPUD Manager of Alpine County Operations - Hal Bird

File: \LAHONTAN\12-00 Report.WPD

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

01/09/01
10:55:07

DECEMBER 2000

Date	Day	FLOW MGD Inf	2-Hr Peak Inf	Eff	Pond Return	Pond Inf	PRECIP Inch	Type	D.O. mg/L Fin	COD mg/L Raw	Fin	BOD mg/L Raw	Fin	SS mg/L Raw	Fin
12/01/00	Fri	3.90	5.0	4.06					5.23	393					
12/02/00	Sat	4.37	6.5	4.52					6.19	408	31.2	170	6.3	127	3.5
12/03/00	Sun	4.03	6.0	3.88					6.08	398					
12/04/00	Mon	4.28	5.2	3.97					5.52	402					
12/05/00	Tue	4.04	5.8	4.11					5.23	370					
12/06/00	Wed	4.24	5.8	4.21					5.52	404	26.6			164	2.4
12/07/00	Thu	4.23	5.6	4.09					5.17	398					
12/08/00	Fri	4.32	6.1	4.43					5.92	373					
12/09/00	Sat	4.76	6.8	4.84					5.00	358	31.6	164	7.4	119	3.3
12/10/00	Sun	4.53	6.5	4.39					5.42	391					
12/11/00	Mon	4.27	5.6	4.06			0.05	Snow	5.42	391					
12/12/00	Tue	4.11	5.2	3.99			0.05	Snow	5.38	366					
12/13/00	Wed	4.21	5.2	4.27			0.31	Snow	5.51	610	33.6	169	7.6	180	3.2
12/14/00	Thu	4.21	5.5	3.74			0.08	Snow	5.75	338					
12/15/00	Fri	4.35	5.2	4.51					5.40	382					
12/16/00	Sat	4.65	6.6	4.71					5.00	398	38.0	173	6.9	134	2.5
12/17/00	Sun	4.54	6.6	4.45					5.38	451					
12/18/00	Mon	4.53	5.9	4.38					5.53	391					
12/19/00	Tue	4.46	6.3	4.67					4.91	423					
12/20/00	Wed	4.03	5.8	4.16					5.64	508	40.4	214	7.7	182	4.1
12/21/00	Thu	4.25	5.5	3.95					5.07	386					
12/22/00	Fri	4.29	6.3	4.48					5.65	481					
12/23/00	Sat	4.73	6.8	4.65					5.52	486	38.5	196	6.5	184	2.9
12/24/00	Sun	5.07	8.9	5.09					5.26	426					
12/25/00	Mon	4.92	7.2	5.17					5.13	476					
12/26/00	Tue	5.00	8.0	4.98					5.19	472	(60 max)				
12/27/00	Wed	5.15	8.2	4.97					5.28	480	69.0	201	10.7	164	6.4
12/28/00	Thu	5.45	8.0	5.56					4.72	492					
12/29/00	Fri	5.60	7.4	5.69					4.16	525					
12/30/00	Sat	6.13	8.5	5.78					5.44	484	65.0	226	19.2	158	9.0
12/31/00	Sun	6.28	9.0	6.33					4.72	525					
PERMIT MAX		7.7									300		45		60
PERMIT MIN															
PERMIT AVE											60		30		30
TOTAL		142.93	201.0	142.09			0.49		165.34	13386	373.9	1513	72.2	1412	37.3
MAXIMUM		6.28	9.0	6.33			0.31		6.19	610	69.0	226	19.2	184	9.0
MINIMUM		3.90	5.0	3.74			0.05		4.16	338	26.6	164	6.3	119	2.4
AVERAGE		4.61	6.5	4.58			0.12		5.33	432	41.5	189	9.0	157	4.1
# Tests		31	31	31	0	0	4		31	31	9	8	8	9	9

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

DECEMBER 2000

Date	Day	SETTLEABLE SOLIDS mL/L Raw		SETTLEABLE SOLIDS mL/L Fin	MBAS mg/L Raw	MBAS mg/L Fin	pH Units Raw	pH Units Fin	TURBIDITY NTU Fin	Cl2 mg/L Fin	FINAL COLIFORMS MPN/100 mL Total		FINAL COLIFORMS MPN/100 mL 7day-Median		TDS mg/L Raw	TDS mg/L Fin	ALKALINITY mg/L Raw	ALKALINITY mg/L Fin
12/01/00	Fri	10.0	<	0.1			7.67	7.48	2.00	4.27	<	2	<	2			133	118
12/02/00	Sat	10.0	<	0.1			7.61	7.56	2.00	4.48	<	2	<	2			139	122
12/03/00	Sun	10.0	<	0.1			7.46	7.32	2.00	3.96	<	2	<	2			144	124
12/04/00	Mon	10.0	<	0.1			7.61	7.40	1.90	4.59	<	2	<	2			132	122
12/05/00	Tue	9.0	<	0.1			7.36	7.44	2.00	4.59	<	2	<	2			125	113
12/06/00	Wed	10.0	<	0.1			7.48	7.47	1.90	4.79	<	2	<	2	244	208	130	112
12/07/00	Thu	9.0	<	0.1			7.46	7.48	2.10	3.54	<	2	<	2			122	114
12/08/00	Fri	9.5	<	0.1			7.48	7.28	2.20	4.79	<	2	<	2			124	112
12/09/00	Sat	10.0	<	0.1			7.40	7.44	2.20	4.38	<	2	<	2			131	116
12/10/00	Sun	11.0	<	0.1			7.42	7.24	2.50	5.21	<	2	<	2			133	116
12/11/00	Mon	9.5	<	0.1			7.58	7.44	2.10	7.92	<	2	<	2			130	112
12/12/00	Tue	9.0	<	0.1			7.66	7.50	2.00	5.63	<	2	<	2			128	112
12/13/00	Wed	10.5	<	0.1			7.69	7.52	2.40	4.90	<	2	<	2			130	115
12/14/00	Thu	9.0	<	0.1			7.47	7.29	2.00	4.59	<	2	<	2	252	211	128	113
12/15/00	Fri	10.0	<	0.1			7.47	7.24	1.80	4.59	<	2	<	2			130	113
12/16/00	Sat	11.0	<	0.1			7.47	7.50	2.00	4.79	<	2	<	2			141	119
12/17/00	Sun	10.5	<	0.1			7.38	7.33	2.50	4.38	<	2	<	2			145	126
12/18/00	Mon	10.5	<	0.1			7.63	7.46	2.40	6.46	<	2	<	2			141	126
12/19/00	Tue	9.0	<	0.1			7.39	7.39	2.60	3.96	<	2	<	2			141	124
12/20/00	Wed	13.0	<	0.1			7.54	7.49	2.60	3.75	<	2	<	2	250	227	148	123
12/21/00	Thu	10.0	<	0.1			7.39	7.32	2.30	5.11	<	2	<	2			141	126
12/22/00	Fri	11.0	<	0.1			7.39	7.29	1.90	4.69	<	2	<	2			153	130
12/23/00	Sat	13.0	<	0.1			7.43	7.60	2.00	4.59	<	2	<	2			154	134
12/24/00	Sun	12.0	<	0.1			7.32	7.28	2.40	4.17	<	2	<	2			155	138
12/25/00	Mon	11.0	<	0.1			7.53	7.56	3.10	5.94	<	2	<	2			153	138
12/26/00	Tue	12.0	<	0.1			7.37	7.34	3.00	6.46	<	2	<	2			159	142
12/27/00	Wed	13.5	<	0.1			7.57	7.47	3.80	4.79	<	2	<	2	278	230	161	140
12/28/00	Thu	13.0	<	0.1			7.48	7.31	4.10	5.11	<	2	<	2			165	144
12/29/00	Fri	12.5	<	0.1			7.46	7.46	4.10	2.71		2	<	2			163	148
12/30/00	Sat	14.0	<	0.1			7.37	7.62	5.30	2.71	<	2	<	2			166	152
12/31/00	Sun	15.0	<	0.1			7.57	7.32	7.50	6.04	<	2	<	2			180	151
PERMIT MAX				0.1		2.0		8.5	20			240		23				
PERMIT MIN								6.5										
PERMIT AVE						1.0			10									
TOTAL		337.5		3.1	0.00	0.000	232.11	229.84	82.70	147.89		62		62	1024	876	4425	3895
MAXIMUM		15.0		0.1	ERR	ERR	7.69	7.62	7.50	7.92		2		2	278	230	180	152
MINIMUM		9.0		0.1	ERR	ERR	7.32	7.24	1.80	2.71		2		2	244	208	122	112
AVERAGE		10.9		0.1	ERR	ERR	7.49	7.41	2.67	4.77		2		2	256	219	143	126
# Tests		31		31	0	0	31	31	31	31		31		31	4	4	31	31

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT
COMPLIANCE RECORD

2000

Parameter	# Tests	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Compliance, %
Total Plant Inflow; 7.7 MGD; Dry Weather	366	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0
2-Hour Peak Inflow; 18.5 MGD	365	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0
COD, 30 Day Ave: 60 mg/L	12	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0
COD, Max: 300 mg/L	99	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0
BOD, 30 Day Ave: 30 mg/L	12	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0
BOD, Max: 45 mg/L	91	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0
SS, 30 Day Ave: 30 mg/L	12	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0
SS, Max: 60 mg/L	101	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0
Settleable Solids, Max: 0.1 mL/L	360	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0
Turbidity, 30 Day Ave: 10 NTU	12	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0
Turbidity, Max: 20 NTU	353	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0
pH, 6.5 to 8.5	353	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0
Total Coliforms, Max: 240 MPN/100 mL	346	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0
Total Coliforms, 7-day Median: 23 MPN	346	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0
MBAS, 30 Day Ave: 1.0 mg/L	6	0	0	0	0	0	0							0	100.0
MBAS, Max: 2.0 mg/L	6	0	0	0	0	0	0							0	100.0
Total	2,840	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0

SOUTH TAHOE
PUBLIC UTILITY DISTRICT
MEMORANDUM

Date: December 21, 2000

To: Bob Baer, Diane Noble

From: David Johnson

Topic: Export Line Check

****

On December 21, 2000 Greg Schrempp and I conducted our check of the District's export line from the treatment plant to station 564+06 near the Harvey Place reservoir. No damage to the pipe was found.

CC Terry Powers

SAMPLE LOCATIONS

TAHOE BASIN MONITORING WELLS

Site	Location
ERB	Emergency Retention Basin
CONTROL	North of Post Office
MW02-25, -50	Emergency Retention Basin, S side
MW03-25, -50	Emergency Retention Basin, S side
MW04-25, -50	Emergency Retention Basin, W side
MW07-25, -50	Emergency Retention Basin, N side
MW08-25, -50	Pond #1, SW corner
MW11	S.E. corner of wastewater treatment plant grounds
MW12	South of Emergency Pump Building, for buried sludge
MW13	Pond 2, along Heavenly Valley Creek, for buried sludge

HEAVENLY VALLEY CREEK

HVC-1	At Pioneer Trail
HVC-2	250 ft upstream of Pond #2
HVC-3	25 ft downstream of Johnson Blvd.
HVC-4	Effluent of drain pipe from Lower Shop area
HVC-5	Effluent of drainage pipe along Johnson Blvd, 10 feet upstream of Johnson Blvd.

ALPINE COUNTY MONITORING WELLS

Site	Location
ACMW-01AW	Below main dam at Harvey Place Reservoir
ACMW-01BE	Below auxiliary dam at Harvey Place Reservoir
ACMW-02, N&S	On dam access road at Diamond Valley Road
ACMW-03	Bruns ranch, east side of Highway 88
ACMW-04W	Gansberg ranch, west side of Highway 88
ACMW-05	Dressler ranch
ACMW-06, N&S	Celio ranch, on Diamond Valley Road

ALPINE SOILS

Site	Ranch
S2	Celio
S3	Hall
S4	Gansberg
S5	Gansberg
S6	Neddenriep
S7	Bruns
S8	Dressler

ALPINE GROUNDWATERS

Site	Homeowner
GW-01	Sagues
GW-03	Smith/Springmeyer
GW-04	Celio
GW-05	Neddenriep
GW-07	Gansberg, Jr.
GW-08	Arant
GW-11	Diamond Valley School
GW-14	Sierra Pines Store

ALPINE SURFACEWATERS

Site	Location
SW-01	Carson River, Woodfords
SW-02	Indian Creek, @ HWY 89
SW-03	Indian Creek, @ upper bridge
SW-04	Indian Creek, @ lower bridge
SW-05	Carson River, Paynesville
SW-06	Carson River, Stateline
SW-07	Fredericksberg Ditch, Stateline
SW-08	Irrigation Ditch along Carson River Road
SW-09	Carson River, Dressler Lane
SW-10	Indian Creek, @ Smith-Springmeyer Ranch

TAHOE BASIN MONITORING

Site	Date	ID	Location	Depth msl	Temp C	pH	EC umhos	Cl mg/L		COD mg/L	NO3-N mg/L	Comment
Buried Sludge Monitoring												
MW11	12/27/00	20001227-13	Sludge Pond	6266.1	8.2	6.60	75	0.8	<	5.0	0.066	
MW12	12/27/00	20001227-14	Sludge Pond	6263.8	8.8	6.41	131	1.9	<	5.0	0.482	
MW13	12/27/00	20001227-15	Sludge Pond	6255.9	6.5	6.70	713	4.0		11.7	2.760	
ERB Monitoring												
CONTROL	12/27/00	20001227-07	At Post Office	6281.6	8.2	6.72	171	7.6	<	5.0	2.410	
MW02-50	12/27/00	20001227-08	Black Bart side of ERB	6268.3	9.0	6.55	384	37.2	<	5.0	9.060	
MW03-50	12/27/00	20001227-09	Black Bart side of ERB	6268.3	9.5	6.22	414	32.2	<	5.0	10.000	
MW04-50	12/27/00	20001227-10	Hank Monk side of ERB	6268.0	7.8	6.26	75	5.6	<	5.0	0.060	
MW07-50	12/27/00	20001227-11	North side of ERB	6278.3	7.0	6.35	254	24.1	<	5.0	0.662	
Heavenly Valley Creek												
HVC-1	12/05/00	20001205-11	Downstream of Pioneer		2.1	7.82	50	1.4	<	5.0	0.081	
HVC-2	12/05/00	0001205-HVC2	250' upstream of Pond #2									No flow; ice and snow
HVC-3	12/05/00	0001205-HVC3	25' downstream of Johnson Blvd									No flow; ice and snow
HVC-4	12/05/00	20001205-12	Effluent of drain from Lower Shop		5.9	7.31	116	1.6		94.5	0.073	Very low flow
HVC-5	12/05/00	0001205-HVC5	Effluent of drainage pipe along Jo									No flow; ice and snow
Treatment Plant Monitoring												
MW08-25	12/27/00	20001227-12	SW side of Pond #1	6246.1	10.5	6.38	1027	52.4		90.8	0.011	

ALPINE COUNTY MONITORING

01/09/01

Site	Date	ID	Location	Temp C	pH	EC umhos	DO mg/L	Alk mg/L	TDS mg/L	SS mg/L	Turb NTU	Cl mg/L	SO4 mg/L
Alpine Monitoring Wells													
ACMW-01AW	12/19/00	20001219-20	Main Dam	11.3	6.49	91		40	75			2.5	2.1
ACMW-01BE	12/19/00	20001219-21	Secondary Dam	11.5	6.50	96		47	77			1.2	1.3
ACMW-02N	12/19/00	20001219-22	Access Gate	12.4	6.78	131		59	87			3.3	3.4
ACMW-02S	12/19/00	20001219-23	Access Gate	12.8	6.65	100		48	73			1.7	1.3
ACMW-04W	12/19/00	20001219-24	Gansberg	12.0	6.63	196		52	133			14.8	8.3
ACMW-06N	12/19/00	20001219-25	Celio	12.0	6.76	712		257	443			58.0	22.5
ACMW-06S	12/19/00	20001219-26	Celio	11.7	6.85	744		257	474			72.4	33.7
Groundwaters													
GW-03	12/05/00	20001205-17	Smith/Springmeyer	13.6	7.62	311		132	218			1.6	27.3
GW-04	12/05/00	20001205-18	Celio	13.0	7.64	267		118	193			3.4	12.0
GW-05	12/05/00	20001205-19	Neddenriep	9.9	6.41	265		63	169			22.3	14.2
GW-07	12/05/00	20001205-20	Gansberg	8.4	6.49	124		53	89			1.5	2.5
GW-08	12/05/00	20001205-21	Arant	9.8	6.49	240		53	153			23.2	9.2
GW-11	12/05/00	20001205-22	Diamond Val. School	10.4	7.02	153		77	116			1.1	0.8
GW-14	12/05/00	20001205-23	Sierrra Pines	7.6	6.36	111		52	90			1.2	1.8
Reservoirs													
HPR	12/06/00	20001206-15	Harvey Place Reservoir	5.1	7.89	494	7.05	113	236	2.30	2.1	58.1	19.9
Surfacewaters: Carson R													
SW-01	12/05/00	20001205-14	Carson R Woodfords	1.1	7.18	77	11.80	36	57	0.60	.33	1.1	2.3
SW-05	12/05/00	20001205-16	Carson R Paynesville	3.0	7.71	90	11.97	42	67	0.62	.51	1.4	3.0
Surfacewaters: Indian Cr													
SW-02	12/05/00	20001205-15	Indian Cr Upper	1.7	7.34	98	11.00	51	74	2.08	1.1	1.1	< 0.5

ALPINE COUNTY MONITORING

01/09/01

Site	Date	TotalP mg/L	PO4-P mg/L	TKN mg/L	NH3-N mg/L	NO2-N mg/L	NO3-N mg/L	Total N mg/L	MBAS mg/L
Alpine Monitoring Wells									
ACMW-01AW	12/19/00				< 0.020	< 0.010	0.222	0.232	
ACMW-01BE	12/19/00				< 0.020	< 0.010	0.200	0.210	
ACMW-02N	12/19/00				< 0.020	< 0.010	0.088	0.098	
ACMW-02S	12/19/00				< 0.020	< 0.010	< 0.010	0.020	
ACMW-04W	12/19/00				< 0.020	< 0.020	2.690	2.710	
ACMW-06N	12/19/00				0.043	< 0.020	< 0.020	0.040	
ACMW-06S	12/19/00				< 0.020	< 0.020	< 0.020	0.040	
Groundwaters									
GW-03	12/05/00				0.026	< 0.010	0.754	0.764	
GW-04	12/05/00				0.029	< 0.010	0.866	0.876	
GW-05	12/05/00				0.029	< 0.030	3.390	3.420	
GW-07	12/05/00				0.032	< 0.010	0.983	0.993	
GW-08	12/05/00				0.031	< 0.030	4.310	4.340	
GW-11	12/05/00				0.021	< 0.010	0.448	0.458	
GW-14	12/05/00				0.022	< 0.010	0.485	0.495	
Reservoirs									
HPR	12/06/00	2.100	1.970	0.000	20.300	0.173	0.705	0.878	
Surfacewaters: Carson R									
SW-01	12/05/00	< 0.010	< 0.010	0.192	0.023	< 0.010	0.010	0.212	
SW-05	12/05/00	< 0.010	< 0.010	0.177	0.025	< 0.010	0.010	0.197	
Surfacewaters: Indian Cr									
SW-02	12/05/00	< 0.010	< 0.010	0.287	0.029	< 0.010	< 0.010	0.307	

ALPINE COUNTY MONITORING

Site	Date	COD mg/L	BOD mg/L	O & G mg/L	Boron mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	SAR	Exch Na %	Hardness mg/L	Water Level MSL or Ft
Alpine Monitoring Wells													
ACMW-01AW	12/19/00												5482.5
ACMW-01BE	12/19/00												5488.8
ACMW-02N	12/19/00												5458.1
ACMW-02S	12/19/00												5458.7
ACMW-04W	12/19/00												4898.8
ACMW-06N	12/19/00												5216.2
ACMW-06S	12/19/00												5204.7
Groundwaters													
GW-03	12/05/00												
GW-04	12/05/00												
GW-05	12/05/00												
GW-07	12/05/00												
GW-08	12/05/00												
GW-11	12/05/00												
GW-14	12/05/00												
Reservoirs		✓	✓			✓	✓	✓		✓	✓		
HPR	12/06/00	24	4		0.27	15.6	3.4	45.6	9.1	2.73	60.6		35.0
											20.0		
Surfacewaters: Carson R			✓										
SW-01	12/05/00		2			7.4	1.9	4.2	1.5	0.35	24.3		
SW-05	12/05/00		1			8.4	2.2	5.5	1.8	0.44	27.1		
Surfacewaters: Indian Cr			✓										
SW-02	12/05/00		1			8.6	2.2	8.0	1.3	0.63	35.1		

ALPINE COUNTY
BACTERIOLOGICAL MONITORING

Alpine Monitoring Wells

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
ACMW-01AW	12/19/00	<	1.1	<	1.1	
ACMW-01BE	12/19/00	<	1.1	<	1.1	
ACMW-02N	12/19/00	<	1.1	<	1.1	
ACMW-02S	12/19/00	<	1.1	<	1.1	
ACMW-04W	12/19/00		3.6	<	1.1	
ACMW-06N	12/19/00	<	1.1	<	1.1	
ACMW-06S	12/19/00	<	1.1	<	1.1	

Groundwaters

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
GW-03	12/05/00	<	1.1	<	1.1	
GW-04	12/05/00	<	1.1	<	1.1	
GW-05	12/05/00	<	1.1	<	1.1	
GW-07	12/05/00		2.2	<	1.1	
GW-08	12/05/00	<	1.1	<	1.1	
GW-11	12/05/00	<	1.1	<	1.1	
GW-14	12/05/00	<	1.1	<	1.1	

Reservoirs

Site	Date	Total Coliform MPN/100mL		Fecal Coliform MPN/100mL		Fecal Streptococci MPN/100mLL
HPR	12/06/00	8	<	2	<	2

Surfacewaters: Carson R

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-01	12/05/00	<	3	<	3	
SW-05	12/05/00		23		4	

Surfacewaters: Indian Cr

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-02	12/05/00	93	43	

TAHOE BASIN MONITORING

p.02

Terry Powers 530-544-0818

Thursday, January 18, 2001 02:17 PM

Site	Date	ID	Location	Depth msl	Temp C	pH	EC umho	Cl mg/L	COD mg/L	TKN mg/L	NO3-N mg/L	Comment
Buried Sludge Monitoring												
MW11	12/27/00	20001227-13	Sludge Pond	6266.1	8.2	6.60	75	0.8 <	5.0		0.066	
MW12	12/27/00	20001227-14	Sludge Pond	6263.8	8.8	6.41	131	1.9 <	5.0		0.482	
MW13	12/27/00	20001227-15	Sludge Pond	6255.9	6.5	6.70	713	4.0	11.7		2.760	
ERB Monitoring												
CONTROL	12/27/00	20001227-07	At Post Office	6281.6	8.2	6.72	171	7.6 <	5.0		2.410	
MW02-50	12/27/00	20001227-08	Black Bart side of ERB	6268.3	9.0	6.55	384	37.2 <	5.0		9.060	
MW03-50	12/27/00	20001227-09	Black Bart side of ERB	6268.3	9.5	6.22	414	32.2 <	5.0		10.000	
MW04-50	12/27/00	20001227-10	Hank Monk side of ERB	6268.0	7.8	6.26	75	5.6 <	5.0		0.060	
MW07-50	12/27/00	20001227-11	North side of ERB	6278.3	7.0	6.35	254	24.1 <	5.0		0.662	
Heavenly Valley Creek												
HVC-1	12/05/00	20001205-11	Downstream of Pioneer		2.1	7.82	50	1.4 <	5.0	0.210	0.081	
HVC-2	12/05/00	0001205-HVC2	250' upstream of Pond #2									No flow; ice and snow
HVC-3	12/05/00	0001205-HVC3	25' downstream of Johnson Blvd									No flow; ice and snow
HVC-4	12/05/00	20001205-12	Effluent of drain from Lower Shop a		5.9	7.31	116	1.6	94.5	2.330	0.073	Very low flow
HVC-5	12/05/00	0001205-HVC5	Effluent of drainage pipe along John									No flow; ice and snow
Treatment Plant Monitoring												
MW08-25	12/27/00	20001227-12	SW side of Pond #1	6246.1	10.5	6.38	1027	52.4	90.8		0.011	

South Tahoe
Public Utility District

168

1275 Meadow Crest Drive • South Lake Tahoe • CA 96150
Phone 530 544-6474 • Fax 530 541-0614

February 6, 2001

Harold Singer
California Regional Water Quality
Control Board - Lahontan Region
2501 Lake Tahoe Boulevard
South Lake Tahoe, CA 96150

Subject: Monitoring Report - January 2001

Dear Mr. Singer,

Enclosed is the South Tahoe Public Utility District's self-monitoring report for January, 2001. The District is reporting as required by the Wastewater Reclamation Permit (Board Order 6-95-65, WDID No. 6A095900700).

Wastewater Reclamation Permit (Board Order 6-95-65).

The effluent met all the requirements set forth in the Board Order for the month of January

Emergency Retention Basin (ERB)

During the month of January, no wastewater was pumped to the ERB. There was no wastewater remaining in the ERB on January 31, 2001.

Export Pipeline

The District's Final effluent export pipeline route was visually inspected on January 10, 2001 from the treatment plant to station 564+06. The Luther Pass surge line was also checked. No damage to the pipe was found.

Wastewater Reclamation Permit Compliance

The District is monitoring under the revisions approved by the Regional Board (letter dated November 30, 1998). The revisions provide for: discontinued surfacewater monitoring, except SW-01, SW-02 and SW-05, during the months of December, January and February. The West Fork, Carson River Water Quality Objectives and East Fork, Carson River limitations were exceeded as follows (a ✓ indicates objective exceeded):

LRWQCB - Page 2

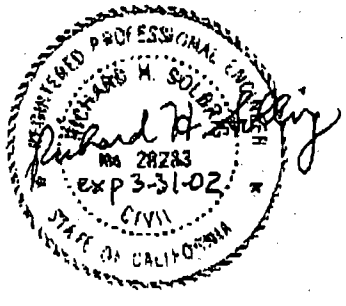
Site	Location	TDS		Cl		TKN		NO_3-N		Total N		Total P		SO_4		Boron		Exch Na %	
		Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence
SW-01	Carson River, Woodfords	55	✓	1.0	✓	0.13		0.02		0.15		0.02		2.0	✓	0.02		20	✓
SW-06	Carson River, Stateline	70		2.5		0.22		0.03		0.25		0.03		2.0		0.02		20	
SW-02	Indian Creek, Upper	100		6.0						0.30		0.03		8.0		0.25		30	✓
SW-03	Indian Creek, Mid	100		6.0						0.30		0.03		8.0		0.25		30	
SW-04	Indian Creek, Lower	100		6.0						0.30		0.03		8.0		0.25		30	
SW-10	Indian Creek, Stateline	100		6.0						0.30		0.03		8.0		0.25		30	

The results for HPR and ICR December blue green algae and HPR January blue green algae are included in this report.
Indian Creek Reservoir was not profiled during January due to ice build up along the shore.

Certification

I hereby certify that the enclosed monitoring report was prepared under my direct supervision and that I am a duly Registered Engineer under the laws of the State of California.

Sincerely,



Richard Solbrig,
Assistant Manager/Engineer

LRWQCB - Page 3

Enclosures:

1.

January Monthly Report	Pages
Wastewater Treatment plant	2
Permit Compliance Record	1
Export pipeline inspection	1
Sample site locations	2
Monitoring wells (ERB) and Heavenly Valley Creek (HVC) - Tahoe Basin	1
Alpine County Surfacewaters, Groundwaters, and HPR	4
Alpine County Blue green algae December 2000 and January 2001	1
Total number of pages:	12

cc: Calif. Dept. of Health Services, ODW - Jess Morehouse
El Dorado Co. Dept. of Environmental Health - Virginia Huber
Nevada Division of Environmental Protection - Wendel McCurry
Alpine County Health Department - Dr. Richard Botto
Alpine County Health Department - Jim Goodloe
Alpine County Board of Supervisors
Desert Research Group (Alpine County Consultants) - Bill Albright
STPUD Board of Directors
STPUD General Manager / District Engineer - Robert G. Baer
STPUD Manager of Operations - Ross Johnson
STPUD Operations Chief Plant Operator - Jeff Lee
STPUD Laboratory Director - Terry Powers
STPUD Manager of Alpine County Operations - Hal Bird

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SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

02/05/01
11:55:19

JANUARY 2001

Date	Day	FLOW MGD Inf	2-Hr Peak Inf	Eff	Pond Return	Pond Inf	PRECIP Inch	Type	D.O. mg/L Eln	COD mg/L Raw	Eln	BOD mg/L Raw	Eln	SS mg/L Raw	Eln
01/01/01	Mon	5.50	9.0	5.65					4.10	550	73.7	214	20.2	196	12.3
01/02/01	Tue	4.82	8.9	5.16					4.73	435					
01/03/01	Wed	4.64	7.0	4.37					5.34	460					
01/04/01	Thu	4.43	6.2	4.53					5.42	402					
01/05/01	Fri	4.40	6.0	4.33					5.43	423					
01/06/01	Sat	4.58	6.8	4.45					5.85	436	37.0	210	7.4	154	4.3
01/07/01	Sun	4.52	7.1	4.50					5.19	423					
01/08/01	Mon	4.10	6.0	4.16			0.05	Snow	5.39	475	41.6	202	6.4	158	3.3
01/09/01	Tue	3.94	5.3	4.11					5.35	435					
01/10/01	Wed	3.90	5.7	4.12			0.55	Snow	5.74	504					
01/11/01	Thu	3.84	6.0	3.37			0.14	Snow	5.83	391					
01/12/01	Fri	4.27	6.2	4.64					5.37	437					
01/13/01	Sat	5.10	7.2	4.87					5.84	483	54.0	203	10.1	148	4.6
01/14/01	Sun	5.20	8.9	5.19					3.76	485					
01/15/01	Mon	4.32	6.3	4.31					5.41	428	53.1	178	10.4	159	4.4
01/16/01	Tue	3.91	5.5	4.01					5.82	398					
01/17/01	Wed	3.96	5.6	4.15					6.99	508					
01/18/01	Thu	3.95	5.6	3.89			0.05	Snow	5.56	391					
01/19/01	Fri	4.40	6.0	4.39			0.02	Snow	5.18	426					
01/20/01	Sat	4.45	6.9	4.16					6.17	432	49.8	204	8.7	145	4.6
01/21/01	Sun	4.78	7.6	5.03					4.01	573					
01/22/01	Mon	4.08	6.2	4.11					5.18	389					
01/23/01	Tue	4.00	5.7	3.80			0.12	Snow	6.18	421					
01/24/01	Wed	3.95	5.9	4.07					6.02	428	61.8	200	11.9	142	4.6
01/25/01	Thu	4.00	6.0	4.17			0.01	Snow	5.45	679					
01/26/01	Fri	4.31	5.8	3.97			0.01	Snow	6.15	405					
01/27/01	Sat	5.05	7.2	4.89					4.43	1068	63.8	412	19.0	464	6.3
01/28/01	Sun	4.81	7.3	5.04					2.90	483					
01/29/01	Mon	4.21	6.3	4.44					4.61	422	67.1	183	15.4	122	3.2
01/30/01	Tue	3.77	5.5	3.92					6.07	432					
01/31/01	Wed	3.97	5.2	4.09					5.85	398					
PERMIT MAX		7.7									300		45		60
PERMIT MIN															
PERMIT AVE											60		30		30
TOTAL		135.16	198.9	135.89			0.95		165.32	14618	501.9	2006	109.5	1688	47.6
MAXIMUM		5.50	9.0	5.65			0.55		6.99	1068	73.7	412	20.2	464	12.3
MINIMUM		3.77	5.2	3.37			0.01		2.90	389	37.0	178	6.4	122	3.2
AVERAGE		4.36	6.4	4.38			0.12		5.33	472	55.8	223	12.2	188	5.3
# Tests		31	31	31	0	0	8		31	31	9	9	9	9	9

JUN-27-2001 15:47 STPUD 530 541 0614 P.05

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

JANUARY 2001

Date	Day	SETTLEABLE SOLIDS mL/L Raw		SETTLEABLE SOLIDS mL/L Fin	MBAS mg/L Raw	MBAS mg/L Fin	pH Units Raw	pH Units Fin	TURBIDITY NTU Fin	Cl2 mg/L Fin	FINAL COLIFORMS MPN/100 mL Total		7day- Median		TDS mg/L Raw	TDS mg/L Fin	ALKALINITY mg/L Raw	ALKALINITY mg/L Fin
01/01/01	Mon	13.0	<	0.1			7.25	7.42	7.45	9.17	<	2	<	2	252	236	164	150
01/02/01	Tue	11.0	<	0.1			7.34	7.36	6.30	5.11	<	2	<	2			150	133
01/03/01	Wed	11.5	<	0.1			7.38	7.34	4.50	5.21	<	2	<	2			144	124
01/04/01	Thu	11.0	<	0.1			7.45	7.32	3.50	5.21	<	2	<	2			144	125
01/05/01	Fri	11.0	<	0.1			7.41	7.44	2.80	3.75	<	2	<	2			148	130
01/06/01	Sat	12.5	<	0.1			7.56	7.63	2.40	4.79	<	2	<	2			147	132
01/07/01	Sun	11.0	<	0.1			7.29	7.38	2.50	4.48	<	2	<	2			145	132
01/08/01	Mon	11.0	<	0.1			7.51	7.56	1.90	5.11	<	2	<	2	287	231	131	123
01/09/01	Tue	10.0	<	0.1			7.62	7.38	1.90	5.00	<	2	<	2			143	121
01/10/01	Wed	11.0	<	0.1			7.60	7.42	2.80	4.06	<	2	<	2			140	125
01/11/01	Thu	10.5	<	0.1			7.68	7.47	3.30	5.11	<	2	<	2			137	124
01/12/01	Fri	10.0	<	0.1			7.63	7.57	2.60	5.21	<	2	<	2			144	128
01/13/01	Sat	11.5	<	0.1			7.68	7.66	3.30	4.59	<	2	<	2			158	140
01/14/01	Sun	12.0	<	0.1			7.61	7.43	3.90	4.17		2	<	2			158	145
01/15/01	Mon	10.0	<	0.1			7.73	7.64	3.25	4.48		2	<	2	279	235	158	140
01/16/01	Tue	11.0	<	0.1			7.59	7.40	3.10	4.90	<	2	<	2			136	124
01/17/01	Wed	11.0	<	0.1			7.55	7.62	2.70	5.94	<	2	<	2			142	120
01/18/01	Thu	8.5	<	0.1			7.60	7.50	2.80	3.86	<	2	<	2			140	126
01/19/01	Fri	10.0	<	0.1			7.68	7.42	2.50	3.23	<	2	<	2			146	128
01/20/01	Sat	12.0	<	0.1			7.50	7.56	2.70	3.02	<	2	<	2			158	138
01/21/01	Sun	17.0	<	0.1			7.31	7.33	3.80	2.92	<	2	<	2			159	140
01/22/01	Mon	11.0	<	0.1			7.36	7.26	4.90	4.59	<	2	<	2			145	136
01/23/01	Tue	10.0	<	0.1			7.47	7.40	4.40	3.65	<	2	<	2			148	132
01/24/01	Wed	11.0	<	0.1			7.44	7.42	4.00	3.86	<	2	<	2	260	239	148	134
01/25/01	Thu	19.0	<	0.1			7.61	7.50	4.20	3.75	<	2	<	2			149	134
01/26/01	Fri	10.0	<	0.1			7.61	7.38	4.10	4.17	<	2	<	2			147	132
01/27/01	Sat	30.0	<	0.1			7.37	7.47	5.80	4.06	<	2	<	2			173	141
01/28/01	Sun	12.0	<	0.1			7.46	7.25	8.00	5.21	<	2	<	2			159	142
01/29/01	Mon	10.5	<	0.1			7.74	7.52	5.30	4.59	<	2	<	2	254	240	146	131
01/30/01	Tue	10.5	<	0.1			7.68	7.38	4.70	6.88	<	2	<	2			138	127
01/31/01	Wed	13.5	<	0.1			7.70	7.47	3.90	5.00	<	2	<	2			134	124
PERMIT MAX				0.1		2.0		8.5	20			240		23				
PERMIT MIN								6.5										
PERMIT AVE						1.0			10									
TOTAL		374.0		3.1	0.00	0.000	233.41	230.90	119.30	145.08		62		62	1332	1181	4579	4081
MAXIMUM		30.0		0.1	ERR	ERR	7.74	7.66	8.00	9.17		2		2	287	240	173	150
MINIMUM		8.5		0.1	ERR	ERR	7.25	7.25	1.90	2.92		2		2	252	231	131	120
AVERAGE		12.1		0.1	ERR	ERR	7.53	7.45	3.85	4.68		2		2	266	236	148	132
# Tests		31		31	0	0	31	31	31	31		31		31	5	5	31	31

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SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT
COMPLIANCE RECORD

02/06/01
11:59:33

2001

Parameter	# Tests	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Compliance, %
Total Plant Inflow; 7.7 MGD; Dry Weather	31	0												0	100.0
2-Hour Peak Inflow; 18.5 MGD	31	0												0	100.0
COD, 30 Day Ave: 60 mg/L	1	0												0	100.0
COD, Max: 300 mg/L	9	0												0	100.0
BOD, 30 Day Ave: 30 mg/L	1	0												0	100.0
BOD, Max: 45 mg/L	9	0												0	100.0
SS, 30 Day Ave: 30 mg/L	1	0												0	100.0
SS, Max: 60 mg/L	9	0												0	100.0
Settleable Solids, Max: 0.1 mL/L	31	0												0	100.0
Turbidity, 30 Day Ave: 10 NTU	1	0												0	100.0
Turbidity, Max: 20 NTU	31	0												0	100.0
pH, 6.5 to 8.5	31	0												0	100.0
Total Coliforms, Max: 240 MPN/100 mL	31	0												0	100.0
Total Coliforms, 7-day Median: 23 MPN	31	0												0	100.0
Total	248	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0

JUN-27-2001 15:47 STPUD 530 541 0614 P.07

SOUTH TAHOE
PUBLIC UTILITY DISTRICT
MEMORANDUM

Date: January 11, 2001

To: Bob Baer, Diane Noble

From: Tim Rieger

Topic: Export Line Check

****

On January 10, 2001, David Johnson and I conducted our check of the District's export line from the treatment plant to station 564+06 near the Harvey Place reservoir. The Luther Pass surge line was also checked. No damage to the pipe was found.

CC Terry Powers

EXPRT101.MEM

SAMPLE LOCATIONS

TAHOE BASIN MONITORING WELLS

Site	Location
ERB	Emergency Retention Basin
CONTROL	North of Post Office
MW02-25, -50	Emergency Retention Basin, S side
MW03-25, -50	Emergency Retention Basin, S side
MW04-25, -50	Emergency Retention Basin, W side
MW07-25, -50	Emergency Retention Basin, N side
MW08-25, -50	Pond #1, SW corner
MW11	S.E. corner of wastewater treatment plant grounds
MW12	South of Emergency Pump Building, for buried sludge
MW13	Pond 2, along Heavenly Valley Creek, for buried sludge

HEAVENLY VALLEY CREEK

HVC-1	At Pioneer Trail
HVC-2	250 ft upstream of Pond #2
HVC-3	25 ft downstream of Johnson Blvd.
HVC-4	Effluent of drain pipe from Lower Shop area
HVC-5	Effluent of drainage pipe along Johnson Blvd, 10 feet upstream of Johnson Blvd.

ALPINE COUNTY MONITORING WELLS

Site	Location
ACMW-01AW	Below main dam at Harvey Place Reservoir
ACMW-01BE	Below auxiliary dam at Harvey Place Reservoir
ACMW-02, N&S	On dam access road at Diamond Valley Road
ACMW-03	Bruns ranch, east side of Highway 88
ACMW-04W	Gansberg ranch, west side of Highway 88
ACMW-05	Dressler ranch
ACMW-06, N&S	Celio ranch, on Diamond Valley Road

ALPINE SOILS

Site	Ranch
S2	Celio
S3	Hall
S4	Gansberg
S5	Gansberg
S6	Neddenriep
S7	Bruns
S8	Dressler

ALPINE GROUNDWATERS

Site	Homeowner
GW-01	Sagues
GW-03	Smith/Springmeyer
GW-04	Celio
GW-05	Neddenriep
GW-07	Gansberg, Jr.
GW-08	Arant
GW-11	Diamond Valley School
GW-14	Sierra Pines Store

ALPINE SURFACEWATERS

Site	Location
SW-01	Carson River, Woodfords
SW-02	Indian Creek, @ HWY 89
SW-03	Indian Creek, @ upper bridge
SW-04	Indian Creek, @ lower bridge
SW-05	Carson River, Paynesville
SW-06	Carson River, Stateline
SW-07	Fredericksberg Ditch, Stateline
SW-08	Irrigation Ditch along Carson River Road
SW-09	Carson River, Dressler Lane
SW-10	Indian Creek, @ Smith-Springmeyer Ranch

TAHOE BASIN MONITORING

02/05/01

Site	Date	ID	Location	Depth msl	Temp C	pH	EC umho	Cl mg/L		COD mg/L	TKN mg/L	NO3-N mg/L	Comment
Buried Sludge Monitoring													
MW11	01/23/01	20010123-14	Sludge Pond	6265.9	7.7	6.36	79	0.8	<	5.0		0.056	
MW12	01/23/01	20010123-15	Sludge Pond	6263.8	7.7	6.19	112	1.8	<	5.0		0.484	
MW13	01/23/01	20010123-16	Sludge Pond	6256.0	5.1	6.67	699	3.9		27.4		2.500	
ERB Monitoring													
CONTROL	01/23/01	20010123-08	At Post Office	6281.6	8.6	6.80	176	7.3	<	5.0		2.370	
MW02-50	01/23/01	20010123-09	Black Bart side of ERB	6268.4	9.1	6.25	394	35.2	<	5.0		8.190	
MW03-50	01/23/01	20010123-10	Black Bart side of ERB	6268.4	9.4	6.18	455	34.0	<	5.0		13.700	Broke ice @ 1200
MW04-50	01/23/01	20010123-11	Hank Monk side of ERB	6267.9	7.8	6.09	78	5.3	<	5.0		0.055	Broke ice @ 1130
MW07-50	01/23/01	20010123-12	North side of ERB	6278.3	7.0	6.35	257	23.6	<	5.0		0.622	
Heavenly Valley Creek													
HVC-1	01/09/01	20010109-06	Downstream of Pioneer		0.9	8.67	62	1.2	<	5.0	0.205	0.186	
HVC-2	01/09/01	20010109-07	250' upstream of Pond #2		1.0	7.21	64	1.6		5.3	0.364	0.010	Chipped trough ice
HVC-3	01/09/01	0010109-HVC3	25' downstream of Johnson Blvd										Frozen solid
HVC-4	01/09/01	20010109-08	Effluent of drain from Lower Shop a		1.6	6.96	116	1.0		24.3	0.469	0.103	
HVC-5	01/09/01	0010109-HVC5	Effluent of drainage pipe along John										Frozen
Treatment Plant Monitoring													
MW08-25	01/23/01	20010123-13	SW side of Pond #1	6246.1	9.2	6.37	1058	50.6		111.0		0.047	

530 541 0614 P.11
STPUD
JUN-27-2001 15:48

Site	Date	ID	Location	Temp C	pH	EC umhos	DO mg/L	Alk mg/L	TDS mg/L	SS mg/L	Turb NTU	Cl mg/L	SO4 mg/L
Alpine Monitoring Wells													
ACMW-01AW	01/17/01	20010117-15	Main Dam	9.1	7.10	67		31	65			1.4	2.3
ACMW-02N	01/17/01	20010117-16	Access Gate	11.1	6.73	129		59	90			3.3	3.5
ACMW-02S	01/17/01	20010117-17	Access Gate	10.9	6.75	95		45	54			2.0	1.3
ACMW-04W	01/17/01	20010117-18	Gansberg	10.0	6.08	190		52	135			14.6	8.3
ACMW-06N	01/17/01	20010117-19	Celio	10.7	6.85	697		261	435			58.1	23.0
ACMW-06S	01/17/01	20010117-20	Celio	11.0	6.75	761		260	475			74.4	33.9
Groundwaters													
GW-03	01/03/01	20010103-06	Smith/Springmeyer	11.0	7.49	311		128	196			1.7	
GW-04	01/03/01	20010103-07	Celio	13.1	7.55	267		116	199			3.7	
GW-05	01/03/01	20010103-08	Neddenriep	9.7	6.43	262		61	172			24.3	
GW-07	01/03/01	20010103-09	Gansberg	6.2	6.25	124		52	95			2.0	
GW-08	01/03/01	20010103-10	Arant	10.7	6.04	242		51	146			24.6	
GW-11	01/03/01	20010103-11	Diamond Val. School	9.3	7.28	162		75	116			0.9	
GW-14	01/03/01	20010103-12	Sierra Pines	7.1	6.71	124		52	92			1.5	
Reservoirs													
HPR	01/10/01	20010110-10	Harvey Place Reservoir	4.5	7.60	491	5.90	119	230	4.00	1.4	57.5	19.5
Surfacewaters: Carson R													
SW-01	01/03/01	20010103-13	Carson R Woodfords	0.7	7.32	77		35	65	0.42	.37	1.1	2.3
SW-05	01/03/01	20010103-15	Carson R Paynesville	1.2	7.89	92		43	78	1.32	.61	1.6	3.1
Surfacewaters: Indian Cr													
SW-02	01/03/01	20010103-14	Indian Cr Upper	1.9	7.48	97		50	85	3.70	1.8	1.0	0.4

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Site	Date	TotalP mg/L	PO4-P mg/L	TKN mg/L	NH3-N mg/L	NO2-N mg/L	NO3-N mg/L	Total N mg/L	MBAS mg/L
Alpine Monitoring Wells									
ACMW-01AW	01/17/01	0.035		0.234	0.047	< 0.010	0.053	0.297	
ACMW-02N	01/17/01	0.016		0.126	< 0.020	< 0.010	0.093	0.229	
ACMW-02S	01/17/01	0.014		0.110	0.021	< 0.010	< 0.010	0.130	
ACMW-04W	01/17/01	0.026		0.188	< 0.020	< 0.010	2.750	2.948	
ACMW-06N	01/17/01	0.396		0.328	0.033	< 0.010	< 0.010	0.348	
ACMW-06S	01/17/01	0.058		0.384	< 0.020	< 0.010	< 0.020	0.414	
Groundwaters									
GW-03	01/03/01	0.038		0.286	< 0.020	< 0.010	0.741	1.037	
GW-04	01/03/01	0.070		0.114	< 0.020	< 0.010	0.850	0.974	
GW-05	01/03/01	0.026		0.120	< 0.020	< 0.010	3.080	3.210	
GW-07	01/03/01	0.064		0.251	0.021	< 0.010	1.060	1.321	
GW-08	01/03/01	0.134		0.134	0.036	< 0.010	4.010	4.154	
GW-11	01/03/01	0.040		0.205	< 0.020	< 0.010	0.430	0.645	
GW-14	01/03/01	0.038		0.402	< 0.020	< 0.010	0.469	0.881	
Reservoirs									
HPR	01/10/01	2.100	2.100	20.300	18.800	0.147	0.598	21.045	
Surfacewaters: Carson R									
SW-01	01/03/01	< 0.010	< 0.010	< 0.100	0.025	< 0.010	0.015	0.125	
SW-05	01/03/01	< 0.010	< 0.010	0.340	< 0.020	< 0.010	0.052	0.402	
Surfacewaters: Indian Cr									
SW-02	01/03/01	0.016	< 0.010	0.200	< 0.020	< 0.010	< 0.010	0.220	

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ALPINE COUNTY MONITORING

Site	Date	COD mg/L	BOD mg/L	O & G mg/L	Boron mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	SAR	Exch Na %	Hardness mg/L	Water Level MSL or Ft
Alpine Monitoring Wells													
ACMW-01AW	01/17/01												5482.4
ACMW-02N	01/17/01												5457.8
ACMW-02S	01/17/01												5458.3
ACMW-04W	01/17/01												4897.1
ACMW-06N	01/17/01												5216.2
ACMW-06S	01/17/01												5204.7
Groundwaters													
GW-03	01/03/01												
GW-04	01/03/01												
GW-05	01/03/01												
GW-07	01/03/01												
GW-08	01/03/01												
GW-11	01/03/01												
GW-14	01/03/01												
Reservoirs													
HPR	01/10/01	31	3		0.22	14.4	3.3	44.4	9.1	2.75	61.3		
Surfacewaters: Carson R													
SW-01	01/03/01		2			7.0	2.1	4.4	1.5	0.37	25.5		
SW-05	01/03/01		1			8.1	2.4	5.8	1.8	0.46	28.2		
Surfacewaters: Indian Cr													
SW-02	01/03/01		2			8.4	2.4	7.8	1.3	0.61	34.5		

JUN-27-2001 15:48 STOUD 530 541 0614 P.14

BACTERIOLOGICAL MONITORING

Alpine Monitoring Wells

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
ACMW-01AW	01/17/01		1.1	<	1.1	
ACMW-02N	01/17/01	<	1.1	<	1.1	
ACMW-02S	01/17/01	<	1.1	<	1.1	
ACMW-04W	01/17/01		1.1	<	1.1	
ACMW-06N	01/17/01	<	1.1	<	1.1	
ACMW-06S	01/17/01	<	1.1	<	1.1	

Groundwaters

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
GW-03	01/03/01	<	1.1	<	1.1	
GW-04	01/03/01	<	1.1	<	1.1	
GW-05	01/03/01	<	1.1	<	1.1	
GW-07	01/03/01	<	1.1	<	1.1	
GW-08	01/03/01		1.1	<	1.1	
GW-11	01/03/01	<	1.1	<	1.1	
GW-14	01/03/01	<	1.1	<	1.1	

Reservoirs

Site	Date	Total Coliform MPN/100mL		Fecal Coliform MPN/100mL		Fecal Streptococci MPN/100mLL
HPR	01/10/01	23		2	<	2

Surfacewaters: Carson R

Site	Date	Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-01	01/03/01	93	<	3	
SW-05	01/03/01	4	<	3	

Surfacewaters: Indian Cr

Site	Date	Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-02	01/03/01	43	<	3	

ALPINE COUNTY

BLUE GREEN ALGAE

ID#	Site	Location	Date	Colonies #	Colony # Cells	Filaments #	Filaments # Cells	Filaments #	Filament Length	Single Cells, #
December, 2000										
20001206-09	ICR-1	Indian Creek Reservoir	12/06/00	0	0	0	0	0	0	0
20001206-10	ICR-1	Indian Creek Reservoir	12/06/00	0	0	0	0	0	0	0
20001206-11	ICR-1	Indian Creek Reservoir	12/06/00	0	0	0	0	0	0	0
20001206-15	HPR	Harvey Place Reservoir	12/06/00	0	0	0	0	0	0	0
January, 2001										
20010110-10	HPR	Harvey Place Reservoir	01/10/01	0	0	0	0	0	0	0

JUN-27-2001 15:48 SMUD 530 541 0614 P.16

South Tahoe Public Utility District
"Basic Services For A Complex World"

1275 Meadow Crest Drive • South Lake Tahoe • CA 96150
Phone 530 544-6474 • Fax 530 541-0614

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March 13, 2001

Harold Singer
California Regional Water Quality
Control Board - Lahontan Region
2501 Lake Tahoe Boulevard
South Lake Tahoe, CA 96150

Subject: Monitoring Report - February 2001

Dear Mr. Singer,

Enclosed is the South Tahoe Public Utility District's self-monitoring report for February, 2001. The District is reporting as required by the Wastewater Reclamation Permit (Board Order 6-95-65, WDID No. 6A095900700).

Wastewater Reclamation Permit (Board Order 6-95-65).

The effluent met all the requirements set forth in the Board Order for the month of February.

Emergency Retention Basin (ERB)

During the month of February, no wastewater was pumped to the ERB. There was no wastewater remaining in the ERB on February 28, 2001.

Export Pipeline

The District's Final effluent export pipeline route was visually inspected on February 28, 2001 from the treatment plant to station 564+06. No damage to the pipe was found.

Wastewater Reclamation Permit Compliance

The District is monitoring under the revisions approved by the Regional Board (letter dated November 30, 1998). The revisions provide for: discontinued surfacewater monitoring, except SW-01, SW-02 and SW-05, during the months of December, January and February. The West Fork, Carson River Water Quality Objectives and East Fork, Carson River limitations were exceeded as follows (a ✓ indicates objective exceeded):

LRWQCB - Page 2

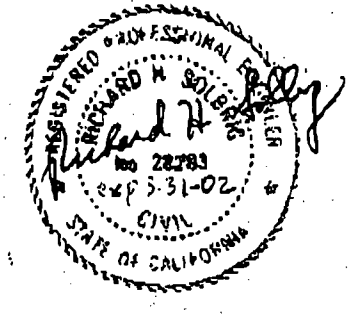
Site	Location	TDS		Cl		TKN		NO_3-N		Total N		Total P		SO_4		Boron		Exch Na %	
		Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence
SW-01	Carson River, Woodfords	55		1.0	✓	0.13		0.02		0.15	✓	0.02		2.0	✓	0.02		20	✓
SW-06	Carson River, Stateline	70		2.5		0.22		0.03		0.25		0.03		2.0		0.02		20	
SW-02	Indian Creek, Upper	100		6.0						0.30		0.03		8.0		0.25		30	✓
SW-03	Indian Creek, Mid	100		6.0						0.30		0.03		8.0		0.25		30	
SW-04	Indian Creek, Lower	100		6.0						0.30		0.03		8.0		0.25		30	
SW-10	Indian Creek, Stateline	100		6.0						0.30		0.03		8.0		0.25		30	

Indian Creek Reservoir was not profiled during February due to ice build up along the shore.

Certification

I hereby certify that the enclosed monitoring report was prepared under my direct supervision and that I am a duly Registered Engineer under the laws of the State of California.

Sincerely,



Richard Solbrig,
Assistant Manager/Engineer

LRWQCB - Page 3

Enclosures:

1.

February Monthly Report	Pages
Wastewater Treatment plant	2
Permit Compliance Record	1
Export pipeline inspection	1
Sample site locations	2
Monitoring wells (ERB) and Heavenly Valley Creek (HVC) - Tahoe Basin	1
Alpine County Surfacewaters, Groundwaters, and HPR	4
Alpine County Blue green algae: February 2001	1
Total number of pages:	12

cc: Calif. Dept. of Health Services, ODW - Jess Morehouse
El Dorado Co. Dept. of Environmental Health - Virginia Huber
Nevada Division of Environmental Protection - Wendel McCurry
Alpine County Health Department - Dr. Richard Botto
Alpine County Health Department - Jim Goodloe
Alpine County Board of Supervisors
Desert Research Group (Alpine County Consultants) - David McGraw
STPUD Board of Directors
STPUD General Manager / District Engineer - Robert G. Baer
STPUD Manager of Operations - Ross Johnson
STPUD Operations Chief Plant Operator - Jeff Lee
STPUD Laboratory Director - Terry Powers
STPUD Manager of Alpine County Operations - Hal Bird

File: \LAHONTAN\02-01 Report.WPD

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

FEBRUARY 2001

Date	Day	FLOW MGD Inf	2-Hr Peak Inf	Eff	Pond Return	Pond Inf	PRECIP Inch	Type	D.O. mg/L Fin	COD mg/L Raw	COD Fin	BOD mg/L Raw	BOD Fin	SS mg/L Raw	SS Fin
02/01/01	Thu	3.85	5.8	3.66					5.84	386					
02/02/01	Fri	4.32	6.0	4.40					4.84	393					
02/03/01	Sat	4.60	7.3	4.34					5.82	818	67.1	320	18.2	406	6.5
02/04/01	Sun	4.77	7.4	5.15					4.40	375					
02/05/01	Mon	4.16	6.0	3.87					4.31	359					
02/06/01	Tue	4.01	5.3	4.16			0.11	Snow	6.68	499	51.8	180	10.4	155	4.9
02/07/01	Wed	3.81	5.6	3.90					6.21	520					
02/08/01	Thu	3.94	5.3	3.76					5.88						
02/09/01	Fri	4.22	5.4	4.47			0.28	Snow	6.30	439					
02/10/01	Sat	4.44	7.1	4.50			0.07	Snow	5.97	546	40.6	236	8.1	218	3.7
02/11/01	Sun	4.65	6.2	4.94			0.10	Snow	3.32	483					
02/12/01	Mon	4.17	5.2	4.45					5.07	504	48.6	191	7.8	158	4.7
02/13/01	Tue	3.93	5.6	3.77					6.58	458					
02/14/01	Wed	4.01	5.7	4.00					5.86	576					
02/15/01	Thu	3.82	5.8	4.15					5.68	428					
02/16/01	Fri	4.70	5.8	4.92					3.82	430					
02/17/01	Sat	5.50	6.8	5.32					6.68	460	49.6	212	12.6	165	8.6
02/18/01	Sun	5.59	7.9	5.51			0.02	Snow	5.38	490					
02/19/01	Mon	4.96	7.5	4.88			0.18	Snow	5.19	454	54.3	205	11.4	148	6.8
02/20/01	Tue	4.33	6.1	4.46			0.05	Snow	6.07	396					
02/21/01	Wed	4.39	5.5	4.52			0.11	Snow	6.65	414					
02/22/01	Thu	4.12	5.7	4.48			0.28	Snow	5.40	391					
02/23/01	Fri	4.58	6.2	4.24					6.24	516					
02/24/01	Sat	5.20	6.7	5.49			0.22	Snow	5.00	434	59.2	188	17.6	195	9.3
02/25/01	Sun	4.98	7.6	4.90					5.35	366					
02/26/01	Mon	4.26	5.4	4.17					5.70	369	59.1	166	16.1	136	9.6
02/27/01	Tue	3.99	5.8	4.19					5.75	378					
02/28/01	Wed	4.05	5.6	4.07					5.98	449					
PERMIT MAX		7.7									300		45		60
PERMIT MIN															
PERMIT AVE											60		30		30
TOTAL		123.53	174.3	124.67			1.42		155.97	12335	430.3	1696	102.1	1581	54.1
MAXIMUM		5.59	8.8	5.51			0.28		6.68	818	67.1	320	18.2	406	9.6
MINIMUM		3.81	5.2	3.66			0.02		3.32	359	40.6	166	7.8	136	3.7
AVERAGE		4.41	6.2	4.45			0.14		5.57	457	53.8	212	12.8	198	6.8
# Tests		28	28	28	0	0	10		28	27	8	8	8	8	8

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SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

FEBRUARY 2001

Date	Day	SETTLEABLE SOLIDS mL/L Raw		SETTLEABLE SOLIDS mL/L Fin	MBAS mg/L Raw	MBAS mg/L Fin	pH Units Raw	pH Units Fin	TURBIDITY NTU Fin	Cl2 mg/L Fin	FINAL COLIFORMS MPN/100 mL Total		FINAL COLIFORMS MPN/100 mL 7day- Median		TDS mg/L Raw	TDS mg/L Fin	ALKALINITY mg/L Raw	ALKALINITY mg/L Fin
02/01/01	Thu	10.0	<	0.1			7.56	7.32	4.20	5.32	<	2	<	2			140	126
02/02/01	Fri	11.0	<	0.1			7.53	7.39	3.50	3.65	<	2	<	2			141	130
02/03/01	Sat	25.0	<	0.1			7.41	7.48	6.00	4.48	<	2	<	2			165	139
02/04/01	Sun	11.0	<	0.1			7.42	7.32	6.05	6.15	<	2	<	2			153	134
02/05/01	Mon	11.0	<	0.1			7.43	7.24	4.50	7.61	<	2	<	2			139	122
02/06/01	Tue	12.5	<	0.1			7.60	7.47	3.50	5.94	<	2	<	2	274	240	142	123
02/07/01	Wed	15.0	<	0.1			7.57	7.29	2.40	5.32	<	2	<	2			147	132
02/08/01	Thu		<	0.1				7.30	2.60	3.44	<	2	<	2				136
02/09/01	Fri	10.5	<	0.1			7.61	7.33	2.50	4.17	<	2	<	2			148	134
02/10/01	Sat	15.0	<	0.1			7.61	7.58	2.40	3.86	<	2	<	2			162	136
02/11/01	Sun	12.0	<	0.1			7.67	7.26	2.70	4.48	<	2	<	2			159	139
02/12/01	Mon	12.0	<	0.1			7.62	7.28	2.80	7.29		2	<	2	277	239	152	138
02/13/01	Tue	11.5	<	0.1			7.75	7.36	2.70	4.69	<	2	<	2			143	130
02/14/01	Wed	14.5	<	0.1			7.70	7.25	2.70	3.75	<	2	<	2			140	128
02/15/01	Thu	11.0	<	0.1			7.75	7.27	3.50	5.32	<	2	<	2			141	130
02/16/01	Fri	11.0	<	0.1			7.54	7.22	3.50	5.32	<	2	<	2			141	130
02/17/01	Sat	14.0	<	0.1			7.54	7.63	4.60	6.98	<	2	<	2			162	144
02/18/01	Sun	12.0	<	0.1			7.63	7.40	5.25	7.82	<	2	<	2			166	152
02/19/01	Mon	11.5	<	0.1			7.56	7.42	4.60	6.25	<	2	<	2	271	242	159	153
02/20/01	Tue	11.5	<	0.1			7.66	7.47	4.30	6.15	<	2	<	2			143	138
02/21/01	Wed	8.5	<	0.1			7.66	7.36	4.50	5.32	<	2	<	2			138	132
02/22/01	Thu	10.0	<	0.1			7.64	7.17	5.65	5.21	<	2	<	2			148	132
02/23/01	Fri	11.0	<	0.1			7.58	7.38	5.70	4.59	<	2	<	2			151	137
02/24/01	Sat	13.0	<	0.1			7.70	7.54	6.20	4.06	<	2	<	2			159	140
02/25/01	Sun	13.0	<	0.1			7.70	7.47	6.10	4.17	<	2	<	2			155	143
02/26/01	Mon	10.5	<	0.1			7.53	7.42	5.50	6.67		2	<	2	279	256	147	128
02/27/01	Tue	11.0	<	0.1			7.51	7.22	5.00	6.15	<	2	<	2			143	126
02/28/01	Wed	13.5	<	0.1			7.65	7.36	4.20	5.27	<	2	<	2			127	125
PERMIT MAX				0.1		2.0		8.5	20			240		23				
PERMIT MIN								6.5										
PERMIT AVE						1.0			10									
TOTAL		332.5		2.8	0.00	0.000	205.15	206.20	117.15	149.43		56		56	1101	977	4009	3755
MAXIMUM		25.0		0.1	ERR	ERR	7.75	7.63	6.20	7.82		2		2	279	256	166	153
MINIMUM		8.5		0.1	ERR	ERR	7.41	7.17	2.40	3.44		2		2	271	239	127	122
AVERAGE		12.3		0.1	ERR	ERR	7.60	7.36	4.18	5.34		2		2	275	244	148	134
# Tests		27		28	0	0	27	28	28	28		28		28	4	4	27	28

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SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT
COMPLIANCE RECORD

03/13/01
10:36:49

2001

Parameter	# Tests	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Compliance, %
Total Plant Inflow; 7.7 MGD; Dry Weather	59	0	0											0	100.0
2-Hour Peak Inflow; 18.5 MGD	59	0	0											0	100.0
COD, 30 Day Ave: 60 mg/L	2	0	0											0	100.0
COD, Max: 300 mg/L	17	0	0											0	100.0
BOD, 30 Day Ave: 30 mg/L	2	0	0											0	100.0
BOD, Max: 45 mg/L	17	0	0											0	100.0
SS, 30 Day Ave: 30 mg/L	2	0	0											0	100.0
SS, Max: 60 mg/L	17	0	0											0	100.0
Settleable Solids, Max: 0.1 mL/L	59	0	0											0	100.0
Turbidity, 30 Day Ave: 10 NTU	2	0	0											0	100.0
Turbidity, Max: 20 NTU	59	0	0											0	100.0
pH, 6.5 to 8.5	59	0	0											0	100.0
Total Coliforms, Max: 240 MPN/100 mL	59	0	0											0	100.0
Total Coliforms, 7-day Median: 23 MPN	59	0	0											0	100.0
Total	472	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0

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SOUTH TAHOE
PUBLIC UTILITY DISTRICT
MEMORANDUM

Date: March 1, 2001

To: Bob Baer, Diane Noble

From: Tim Rieger

Topic: Export Line Check

****

On February 28, 2001, Greg Schrempp and I conducted our check of the District's export line from the treatment plant to station 564+06 near the Harvey Place reservoir. No damage to the pipe was found.

CC Terry Powers

EXPRT201.MEM

SAMPLE LOCATIONS

TAHOE BASIN MONITORING WELLS

Site	Location
ERB	Emergency Retention Basin
CONTROL	North of Post Office
MW02-25, -50	Emergency Retention Basin, S side
MW03-25, -50	Emergency Retention Basin, S side
MW04-25, -50	Emergency Retention Basin, W side
MW07-25, -50	Emergency Retention Basin, N side
MW08-25, -50	Pond #1, SW corner
MW11	S.E. corner of wastewater treatment plant grounds
MW12	South of Emergency Pump Building, for buried sludge
MW13	Pond 2, along Heavenly Valley Creek, for buried sludge

HEAVENLY VALLEY CREEK

HVC-1	At Pioneer Trail
HVC-2	250 ft upstream of Pond #2
HVC-3	25 ft downstream of Johnson Blvd.
HVC-4	Effluent of drain pipe from Lower Shop area
HVC-5	Effluent of drainage pipe along Johnson Blvd, 10 feet upstream of Johnson Blvd.

ALPINE COUNTY MONITORING WELLS

Site	Location
ACMW-01AW	Below main dam at Harvey Place Reservoir
ACMW-01BE	Below auxiliary dam at Harvey Place Reservoir
ACMW-02, N&S	On dam access road at Diamond Valley Road
ACMW-03	Bruns ranch, east side of Highway 88
ACMW-04W	Gansberg ranch, west side of Highway 88
ACMW-05	Dressler ranch
ACMW-06, N&S	Celio ranch, on Diamond Valley Road

ALPINE SOILS

Site	Ranch
S2	Celio
S3	Hall
S4	Gansberg
S5	Gansberg
S6	Neddenriep
S7	Bruns
S8	Dressler

ALPINE GROUNDWATERS

Site	Homeowner
GW-01	Sagues
GW-03	Smith/Springmeyer
GW-04	Celio
GW-05	Neddenriep
GW-07	Gansberg, Jr.
GW-08	Arant
GW-11	Diamond Valley School
GW-14	Sierra Pines Store

ALPINE SURFACEWATERS

Site	Location
SW-01	Carson River, Woodfords
SW-02	Indian Creek, @ HWY 89
SW-03	Indian Creek, @ upper bridge
SW-04	Indian Creek, @ lower bridge
SW-05	Carson River, Paynesville
SW-06	Carson River, Stateline
SW-07	Fredericksberg Ditch, Stateline
SW-08	Irrigation Ditch along Carson River Road
SW-09	Carson River, Dressler Lane
SW-10	Indian Creek, @ Smith-Springmeyer Ranch

TAHOE BASIN MONITORING

Site	Date	ID	Location	Depth msl	Temp C	pH	EC umho	Cl mg/L		COD mg/L	TKN mg/L		NO3-N mg/L	Comment
Buried Sludge Monitoring														
MW11	02/14/01	20010214-30	Sludge Pond	6265.7	8.8	6.92	8	0.9	<	5.0			0.062	
MW12	02/14/01	20010214-31	Sludge Pond	6263.5	9.3	6.40	104	1.8	<	5.0			0.563	
MW13	02/14/01	20010214-32	Sludge Pond	6256.2	6.0	6.87	681	4.4		12.8			2.080	
ERB Monitoring														
CONTROL	02/14/01	20010214-24	At Post Office	6281.3	8.3	6.90	175	7.8	<	5.0			2.360	
MW02-50	02/14/01	20010214-25	Black Bart side of ERB	6268.4	9.1	6.62	393	37.6	<	5.0			8.040	
MW03-50	02/14/01	20010214-26	Black Bart side of ERB	6268.4	9.4	6.45	369	32.2	<	5.0			5.880	
MW04-50	02/14/01	20010214-27	Hank Monk side of ERB	6268.1	7.9	6.29	77	5.9	<	5.0			0.058	
MW07-50	02/14/01	20010214-28	North side of ERB	6278.2	7.4	6.43	257	25.4		5.6			0.634	
Heavenly Valley Creek														
HVC-1	02/07/01	0010207-HVC1	Downstream of Pioneer											Frozen over, no access
HVC-2	02/07/01	0010207-HVC2	250' upstream of Pond #2											Frozen over and covered with snow
HVC-3	02/07/01	0010207-HVC3	25' downstream of Johnson Blvd											Frozen over, no access
HVC-4	02/07/01	0010207-HVC4	Effluent of drain from Lower Shop a											Standing snow and slush
HVC-5	02/07/01	0010207-HVC5	Effluent of drainage pipe along John											Snowed in
Treatment Plant Monitoring														
MW08-25	02/14/01	20010214-29	SW side of Pond #1	6246.4	9.1	6.39	1040	53.9		78.2		<	0.010	

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ALPINE COUNTY MONITORING

Site	Date	ID	Location	Temp C	pH	EC umhos	DO mg/L	Alk mg/L	TDS mg/L	SS mg/L	Turb NTU	Cl mg/L	SO4 mg/L
Alpine Monitoring Wells													
ACMW-01AW	02/07/01	20010207-09	Main Dam	6.9	6.77	64		29	66			1.2	2.4
ACMW-01BE	02/07/01	20010207-10	Secondary Dam	9.9	7.07	86		41	76			1.1	1.4
ACMW-02N	02/07/01	20010207-11	Access Gate	11.2	6.56	135		61	91			3.4	3.5
ACMW-02S	02/07/01	20010207-12	Access Gate	9.5	6.50	97		46	72			2.0	1.3
ACMW-04W	02/07/01	20010207-13	Gansberg	9.9	6.40	196		52	135			15.2	8.3
ACMW-06N	02/07/01	20010207-14	Cello	9.7	6.94	712		259	436			61.4	23.6
ACMW-06S	02/07/01	20010207-15	Cello	11.4	6.84	790		269	476			79.9	34.6
Groundwaters													
GW-03	02/01/01	20010201-14	Smith/Springmeyer	9.5	7.46	313		130	220		.15	1.5	26.7
GW-04	02/01/01	20010201-15	Cello	12.6	7.43	273		119	189		.51	3.3	11.6
GW-05	02/01/01	20010201-16	Neddenriep	9.4	6.29	265		62	162		.23	58.6	17.2
GW-11	02/01/01	20010201-17	Diamond Val. School	7.7	6.87	151		77	109		.31	0.8	0.8
GW-14	02/01/01	20010201-18	Sierra Pines	4.9	6.52	111		53	89		.26	1.2	1.8
GW-07	02/07/01	20010207-07	Gansberg	6.0	6.76	126		53	93		.2	1.5	2.5
GW-08	02/07/01	20010207-08	Arant	7.1	6.64	241		53	154		2	23.7	9.6
Reservoirs													
HPR	02/22/01	20010222-06	Harvey Place Reservoir	4.0	7.38	510	7.50	122	245	1.56	1.6	61.0	19.4
Surfacewaters: Carson R													
SW-01	02/01/01	20010201-19	Carson R Woodfords	0.3	6.87	79	9.10	37	55	0.64	.48	1.3	2.6
SW-05	02/01/01	20010201-21	Carson R Paynesville	0.5	7.31	96	6.10	45	73	0.56	.57	1.5	3.3
Surfacewaters: Indian Cr													
SW-02	02/01/01	20010201-20	Indian Cr Upper	0.5	7.06	90	5.80	46	67	0.10	2.2	0.6	0.3

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ALPINE COUNTY MONITORING

03/13/01

Site	Date	TotalP mg/L	PO4-P mg/L	TKN mg/L	NH3-N mg/L	NO2-N mg/L	NO3-N mg/L	Total N mg/L	MBAS mg/L
Alpine Monitoring Wells									
ACMW-01AW	02/07/01				0.025	< 0.030	0.034	0.064	
ACMW-01BE	02/07/01				< 0.020	< 0.010	0.074	0.084	
ACMW-02N	02/07/01				< 0.020	< 0.010	0.094	0.104	
ACMW-02S	02/07/01				< 0.020	< 0.010	< 0.010	0.020	
ACMW-04W	02/07/01				< 0.020	< 0.020	2.540	2.560	
ACMW-06N	02/07/01				0.045	< 0.010	< 0.010	0.020	
ACMW-06S	02/07/01				0.021	< 0.020	0.022	0.042	
Groundwaters									
GW-03	02/01/01				0.043	< 0.010	0.731	0.741	
GW-04	02/01/01				< 0.020	< 0.010	0.831	0.841	
GW-05	02/01/01				< 0.020	0.073	< 0.030	0.103	
GW-11	02/01/01				< 0.020	< 0.010	0.481	0.491	
GW-14	02/01/01				< 0.020	< 0.010	0.480	0.490	
GW-07	02/07/01				< 0.020	< 0.010	0.862	0.872	
GW-08	02/07/01				< 0.020	< 0.040	4.000	4.040	
Reservoirs									
HPR	02/22/01	2.380	2.300	21.900	15.900	0.118	0.522	22.540	
Surfacewaters: Carson R									
SW-01	02/01/01	< 0.010	< 0.010	0.134	< 0.020	< 0.010	0.021	0.165	
SW-05	02/01/01	< 0.010	< 0.010	0.280	< 0.020	< 0.010	0.083	0.373	
Surfacewaters: Indian Cr									
SW-02	02/01/01	0.011	< 0.010	0.248	< 0.020	< 0.010	< 0.010	0.268	

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ALPINE COUNTY MONITORING

Site	Date	COD mg/L	BOD mg/L	O & G mg/L	Boron mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	SAR	Exch Na %	Hardness mg/L	Water Level MSL or Ft
Alpine Monitoring Wells													
ACMW-01AW	02/07/01												5482.5
ACMW-01BE	02/07/01												5488.6
ACMW-02N	02/07/01												5457.9
ACMW-02S	02/07/01												5458.9
ACMW-04W	02/07/01												4896.5
ACMW-06N	02/07/01												5216.5
ACMW-06S	02/07/01												5204.0
Groundwaters													
GW-03	02/01/01												
GW-04	02/01/01												
GW-05	02/01/01												
GW-11	02/01/01												
GW-14	02/01/01												
GW-07	02/07/01												
GW-08	02/07/01												
Reservoirs													
HPR	02/22/01	23	2		0.24	15.8	3.3	40.7	9.1	2.44	57.9		47.8
Surfacewaters: Carson R													
SW-01	02/01/01					7.9	1.9	4.5	1.5	0.37	24.9		
SW-05	02/01/01					9.4	2.3	6.0	1.8	0.45	26.8		
Surfacewaters: Indian Cr													
SW-02	02/01/01					8.4	2.0	7.1	1.1	0.57	33.5		

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ALPINE COUNTY
BACTERIOLOGICAL MONITORING

Alpine Monitoring Wells

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
ACMW-01AW	02/07/01	<	1.1	<	1.1	
ACMW-01BE	02/07/01	<	1.1	<	1.1	
ACMW-02N	02/07/01	<	1.1	<	1.1	
ACMW-02S	02/07/01	<	1.1	<	1.1	
ACMW-04W	02/07/01		2.2	<	1.1	
ACMW-06N	02/07/01	<	1.1	<	1.1	
ACMW-06S	02/07/01	<	1.1	<	1.1	

Groundwaters

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
GW-03	02/01/01	<	1.1	<	1.1	
GW-04	02/01/01	<	1.1	<	1.1	
GW-05	02/01/01	<	1.1	<	1.1	
GW-11	02/01/01	<	1.3	<	1.3	
GW-14	02/01/01	<	1.1	<	1.1	
GW-07	02/07/01		3.6	<	1.1	
GW-08	02/07/01	<	1.1	<	1.1	

Reservoirs

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL		Fecal Streptococci MPN/100mLL
HPR	02/22/01	2	2	<	2

Surfacewaters: Carson R

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-01	02/01/01	<	30	<	30	
SW-05	02/01/01	<	30	<	30	

Surfacewaters: Indian Cr

Site	Date	Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-02	02/01/01	90	<	30	

ALPINE COUNTY
BLUE GREEN ALGAE

ID#	Site	Location	Date	Colonies #	Colony # Cells	Filaments #	Filaments # Cells	Filaments #	Filament Length	Single Cells, #
February, 2001										
20010222-06	HPR	Harvey Place Reservoir	02/22/01	0	0	0	0	0	0	0

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TOTAL P.31

Site	Location	TDS		Cl⁻		TKN		NO_3-N		Total N		Total P		SO_4		Boron		Exch Na %	
		Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence
SW-01	Carson River, Woodfords	55	✓	1.0	✓	0.13		0.02		0.15		0.02		2.0	✓	0.02		20	✓
SW-06	Carson River, Stateline	70	✓	2.5	✓	0.22		0.03	✓	0.25	✓	0.03		2.0	✓	0.02		20	✓
SW-02	Indian Creek, Upper	100		6.0						0.30		0.03		8.0		0.25		30	✓
SW-03	Indian Creek, Mid	100		6.0						0.30		0.03		8.0		0.25		30	
SW-04	Indian Creek, Lower	100		6.0						0.30		0.03		8.0		0.25		30	
SW-10	Indian Creek, Stateline	100		6.0						0.30		0.03		8.0		0.25		30	

The March soils tests are not yet completed. They will be sent to you as soon as they are available.

Certification

I hereby certify that the enclosed monitoring report was prepared under my direct supervision and that I am a duly Registered Engineer under the laws of the State of California.

Sincerely,

REGISTERED PROFESSIONAL ENGINEER
RICHARD H. SOLBRIG
No. 28283
exp 3-31-02
CIVIL
STATE OF CALIFORNIA

Richard Solbrig,
Assistant Manager/Engineer

Enclosures:

1.

March Monthly Report	Pages
Wastewater Treatment plant	2
Permit Compliance Record	1
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Sample site locations	2
Monitoring wells (ERB) and Heavenly Valley Creek (HVC) - Tahoe Basin	1
Alpine County Surfacewaters, Groundwaters, and HPR	4
Alpine County Blue green algae: March 2001	1
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cc: Calif. Dept. of Health Services, ODW - Jess Morehouse
El Dorado Co. Dept. of Environmental Health - Virginia Huber
Nevada Division of Environmental Protection - Wendel McCurry
Alpine County Health Department - Dr. Richard Botto
Alpine County Health Department - Jim Goodloe
Alpine County Board of Supervisors
Desert Research Group (Alpine County Consultants) - David McGraw
STPUD Board of Directors
STPUD General Manager / District Engineer - Robert G. Baer
STPUD Manager of Operations - Ross Johnson
STPUD Operations Chief Plant Operator - Jeff Lee
STPUD Laboratory Director - Terry Powers
STPUD Manager of Alpine County Operations - Hal Bird

File: \LAHONTAN\03-01 Report.WPD

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

MARCH 2001

		FLOW MGD					PRECIP		D.O.	COD		BOD		SS	
			2-Hr Peak		Pond	Pond			mg/L	mg/L		mg/L		mg/L	
Date	Day	Inf	Inf	Eff	Return	Inf	Inch	Type	Fin	Raw	Fin	Raw	Fin	Raw	Fin
03/01/01	Thu	4.13	5.4	3.90					5.54	436					
03/02/01	Fri	4.36	5.9	4.56			0.04	Snow	5.68	403					
03/03/01	Sat	4.97	7.2	5.01					5.65	447	63.0	188	17.2	181	6.3
03/04/01	Sun	4.76	6.5	4.82			0.04	Snow	5.68	484					
03/05/01	Mon	4.31	5.6	4.39			0.20	Snow	5.82	401					
03/06/01	Tue	4.20	5.7	4.29					5.82	380					
03/07/01	Wed	4.31	5.6	3.95					5.40	425	54.9	169	12.0	176	3.4
03/08/01	Thu	4.42	5.6	4.55	0.60	1.95			5.83	376					
03/09/01	Fri	4.45	6.4	5.58	1.13		0.17	Snow	5.44	466					
03/10/01	Sat	5.10	7.0	5.10	0.22				5.57	436	69.3	205	19.6	148	6.6
03/11/01	Sun	4.95	7.2	5.23					4.64	415					
03/12/01	Mon	4.26	6.4	4.13					5.21	425	79.9	174	20.0	174	7.2
03/13/01	Tue	4.32	5.5	4.40					5.50	424					
03/14/01	Wed	4.15	6.7	4.08					5.53	415					
03/15/01	Thu	4.32	5.5	4.10					6.18	412					
03/16/01	Fri	4.61	6.0	4.68					5.55	408					
03/17/01	Sat	5.12	7.6	4.88					5.88	434	43.3	202	9.3	163	3.9
03/18/01	Sun	5.10	7.8	5.49					4.73	433					
03/19/01	Mon	4.49	6.0	4.45					5.57	389	48.8				
03/20/01	Tue	4.42	6.0	4.34					5.15	410					
03/21/01	Wed	4.36	6.2	4.35					5.40		56.2	164	9.4	160	9.2
03/22/01	Thu	4.53	5.8	4.66			0.03	Rain	5.01	378					
03/23/01	Fri	4.56	6.3	4.14					5.54	424	57.4				
03/24/01	Sat	5.23	7.0	4.95			0.14	Rain	4.89	436	69.0	187	14.2	149	14.7
03/25/01	Sun	4.96	7.3	4.56					4.71	412					
03/26/01	Mon	4.80	6.7	4.12					3.75	389					
03/27/01	Tue	4.11	5.8	3.92					4.10	371					
03/28/01	Wed	4.52	6.0	4.52					3.83	426	54.6	172	7.0	152	6.4
03/29/01	Thu	4.42	6.2	4.60					4.00	403					
03/30/01	Fri	4.57	7.1	3.81					4.41	332					
03/31/01	Sat	4.76	6.6	4.47					4.36	386	45.6	166	7.5	168	6.4
Permit Max		7.7									300		45		60
Permit Min															
Permit Ave											60		30		30
Total		141.57	196.6	140.03	1.95	1.95	0.62		160.37	12376	642.0	1627	116.2	1471	64.1
Maximum		5.23	7.8	5.58	1.13	1.95	0.20		6.18	484	79.9	205	20.0	181	14.7
Minimum		4.11	5.4	3.81	0.22	1.95	0.03		3.75	332	43.3	164	7.0	148	3.4
Average		4.57	6.3	4.52	0.65	1.95	0.10		5.17	413	58.4	181	12.9	163	7.1
# Tests		31	31	31	3	1	6		31	30	11	9	9	9	9

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

MARCH 2001

Date	Day	SETTLEABLE SOLIDS mL/L Raw		SETTLEABLE SOLIDS mL/L Fin	MBAS mg/L Raw	MBAS mg/L Fin	pH Units Raw	pH Units Fin	TURBIDITY NTU Fin	Cl2 mg/L Fin	FINAL COLIFORMS MPN/100 mL Total		FINAL COLIFORMS MPN/100 mL 7day-Median		TDS mg/L Raw	TDS mg/L Fin	ALKALINITY mg/L Raw	ALKALINITY mg/L Fin
03/01/01	Thu	10.0	<	0.1			7.73	7.39	5.00	5.07	<	2	<	2			137	123
03/02/01	Fri	12.0	<	0.1			7.58	7.26	4.50	4.66	<	2	<	2			144	130
03/03/01	Sat	14.0	<	0.1			7.67	7.64	4.30	5.58	<	2	<	2			154	137
03/04/01	Sun	12.0	<	0.1			7.47	7.36	4.10	4.46	<	2	<	2			154	138
03/05/01	Mon	10.5	<	0.1			7.76	7.52	4.10	4.87	<	2	<	2			140	132
03/06/01	Tue	10.0	<	0.1			7.33	7.40	3.50	4.97	<	2	<	2			135	125
03/07/01	Wed	10.5	<	0.1			7.45	7.47	5.90	4.87	<	2	<	2	260	240	139	122
03/08/01	Thu	10.0	<	0.1			7.50	7.44	7.23								135	123
03/09/01	Fri	12.0	<	0.1			7.67	7.44	6.88	4.66	<	2	<	2			142	117
03/10/01	Sat	12.0	<	0.1			7.56	7.56	9.00	5.68	<	2	<	2			152	133
03/11/01	Sun	12.0	<	0.1			7.46	7.21	12.10	6.49	<	2	<	2			156	138
03/12/01	Mon	12.0	<	0.1			7.53	7.41	9.50	7.10	<	2	<	2	246	246	153	128
03/13/01	Tue	10.5	<	0.1			7.46	7.18	8.52	7.71	<	2	<	2			144	124
03/14/01	Wed	11.5	<	0.1			7.37	7.32	7.85	8.01	<	2	<	2			128	112
03/15/01	Thu	10.5	<	0.1			7.26	7.45	5.53	7.10	<	2	<	2			96	98
03/16/01	Fri	10.0	<	0.1			7.20	7.22	3.83	5.58	<	2	<	2			117	98
03/17/01	Sat	12.5	<	0.1			7.27	7.42	3.65	5.07	<	2	<	2			146	114
03/18/01	Sun	12.0	<	0.1			7.34	7.26	4.10	5.07	<	2	<	2			158	128
03/19/01	Mon	10.5	<	0.1			7.55	7.47	4.50	4.97	<	2	<	2			144	131
03/20/01	Tue	11.0	<	0.1			7.50	7.57	5.63	7.40	<	2	<	2			135	124
03/21/01	Wed	12.0	<	0.1			7.40	7.37	8.00	7.50	<	2	<	2	246	235	138	121
03/22/01	Thu	10.0	<	0.1			7.41	7.28	9.75	7.50	<	2	<	2			134	120
03/23/01	Fri	10.5	<	0.1			7.43	7.38	10.60	7.20	<	2	<	2			138	121
03/24/01	Sat	12.5	<	0.1			7.39	7.56	13.00	7.00	<	2	<	2			150	128
03/25/01	Sun	11.0	<	0.1			7.30	7.34	12.40	5.98	<	2	<	2			146	130
03/26/01	Mon	11.0	<	0.1			7.57	7.50	9.74	5.58	<	2	<	2			143	128
03/27/01	Tue	10.0	<	0.1			7.39	7.35	6.69	7.10	<	2	<	2			142	122
03/28/01	Wed	12.5	<	0.1			7.53	7.58	5.25	6.59	<	2	<	2			136	120
03/29/01	Thu	11.5	<	0.1			7.65	7.57	8.44	6.29	<	2	<	2			139	119
03/30/01	Fri	11.0	<	0.1			7.28	7.13	7.96	2.33	<	2	<	2			139	112
03/31/01	Sat	11.5	<	0.1			7.50	7.49	4.22	6.08	<	2	<	2			150	118
Permit Max				0.1		2.0		8.5	20			240		23				
Permit Min								6.5										
Permit Ave						1.0			10									
Total		349.0		3.1	0.00	0.000	231.51	229.54	215.77	178.47		60		60	752	721	4364	3814
Maximum		14.0		0.1	ERR	ERR	7.76	7.64	13.00	8.01		2		2	260	246	158	138
Minimum		10.0		0.1	ERR	ERR	7.20	7.13	3.50	2.33		2		2	246	235	96	98
Average		11.3		0.1	ERR	ERR	7.47	7.40	6.96	5.95		2		2	251	240	141	123
# Tests		31		31	0	0	31	31	31	30		30		30	3	3	31	31

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT
COMPLIANCE RECORD

2001

Parameter	# Tests	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Compliance, %
Total Plant Inflow; 7.7 MGD; Dry Weather	90	0	0	0										0	100.0
2-Hour Peak Inflow; 18.5 MGD	90	0	0	0										0	100.0
COD, 30 Day Ave: 60 mg/L	3	0	0	0										0	100.0
COD, Max: 300 mg/L	28	0	0	0										0	100.0
BOD, 30 Day Ave: 30 mg/L	3	0	0	0										0	100.0
BOD, Max: 45 mg/L	26	0	0	0										0	100.0
SS, 30 Day Ave: 30 mg/L	3	0	0	0										0	100.0
SS, Max: 60 mg/L	26	0	0	0										0	100.0
Settleable Solids, Max: 0.1 mL/L	90	0	0	0										0	100.0
Turbidity, 30 Day Ave: 10 NTU	3	0	0	0										0	100.0
Turbidity, Max: 20 NTU	90	0	0	0										0	100.0
pH, 6.5 to 8.5	90	0	0	0										0	100.0
Total Coliforms, Max: 240 MPN/100 mL	89	0	0	0										0	100.0
Total Coliforms, 7-day Median: 23 MPN	89	0	0	0										0	100.0
Total	720	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0

SOUTH TAHOE
PUBLIC UTILITY DISTRICT
MEMORANDUM

Date: March 28, 2001

To: Bob Baer, Diane Noble

From: David Johnson

Topic: Export Line Check

****

On March 28, Greg Schrempp and I conducted our check of the District's export line from the treatment plant to station 564+06 near the Harvey Place reservoir.
No damage to the pipe was found.

CC Terry Powers

SAMPLE LOCATIONS

TAHOE BASIN MONITORING WELLS

Site	Location
ERB	Emergency Retention Basin
CONTROL	North of Post Office
MW02-25, -50	Emergency Retention Basin, S side
MW03-25, -50	Emergency Retention Basin, S side
MW04-25, -50	Emergency Retention Basin, W side
MW07-25, -50	Emergency Retention Basin, N side
MW08-25, -50	Pond #1, SW corner
MW11	S.E. corner of wastewater treatment plant grounds
MW12	South of Emergency Pump Building, for buried sludge
MW13	Pond 2, along Heavenly Valley Creek, for buried sludge

HEAVENLY VALLEY CREEK

HVC-1	At Pioneer Trail
HVC-2	250 ft upstream of Pond #2
HVC-3	25 ft downstream of Johnson Blvd.
HVC-4	Effluent of drain pipe from Lower Shop area
HVC-5	Effluent of drainage pipe along Johnson Blvd, 10 feet upstream of Johnson Blvd.

ALPINE COUNTY MONITORING WELLS

Site	Location
ACMW-01AW	Below main dam at Harvey Place Reservoir
ACMW-01BE	Below auxiliary dam at Harvey Place Reservoir
ACMW-02, N&S	On dam access road at Diamond Valley Road
ACMW-03	Bruns ranch, east side of Highway 88
ACMW-04W	Gansberg ranch, west side of Highway 88
ACMW-05	Dressler ranch
ACMW-06, N&S	Celio ranch, on Diamond Valley Road

ALPINE SOILS

Site	Ranch
S2	Celio
S3	Hall
S4	Gansberg
S5	Gansberg
S6	Neddenriep
S7	Bruns
S8	Dressler

ALPINE GROUNDWATERS

Site	Homeowner
GW-01	Sagues
GW-03	Smith/Springmeyer
GW-04	Celio
GW-05	Neddenriep
GW-07	Gansberg, Jr.
GW-08	Arant
GW-11	Diamond Valley School
GW-14	Sierra Pines Store

ALPINE SURFACEWATERS

Site	Location
SW-01	Carson River, Woodfords
SW-02	Indian Creek, @ HWY 89
SW-03	Indian Creek, @ upper bridge
SW-04	Indian Creek, @ lower bridge
SW-05	Carson River, Paynesville
SW-06	Carson River, Stateline
SW-07	Fredericksberg Ditch, Stateline
SW-08	Irrigation Ditch along Carson River Road
SW-09	Carson River, Dressler Lane
SW-10	Indian Creek, @ Smith-Springmeyer Ranch

TAHOE BASIN MONITORING

Site	Date	ID	Location	Depth msl	Temp C	pH	EC umho	Cl mg/L	COD mg/L	TKN mg/L	NO3-N mg/L	Comment
Buried Sludge Monitoring												
MW11	03/27/01	20010327-16	Sludge Pond	6265.5	9.7	7.00	78	0.9	< 5.0		0.066	
MW12	03/27/01	20010327-17	Sludge Pond	6263.9	9.8	6.62	122	2.3	8.1		0.450	
MW13	03/27/01	20010327-18	Sludge Pond	6258.2	4.0	6.50	688	3.0	21.6		6.570	
ERB Monitoring												
CONTROL	03/27/01	20010327-10	At Post Office	6281.1	9.2	7.34	171	8.0	5.7		2.350	
MW02-50	03/27/01	20010327-11	Black Bart side of ERB	6268.3	11.4	6.95	388	38.9	6.1		8.850	
MW03-50	03/27/01	20010327-12	Black Bart side of ERB	6268.3	11.4	6.93	337	31.5	5.1		5.060	
MW04-50	03/27/01	20010327-13	Hank Monk side of ERB	6268.2	9.5	7.01	75	5.7	< 5.0		0.065	
MW07-50	03/27/01	20010327-14	North side of ERB	6278.2	7.9	6.09	250	24.8	< 5.0		0.572	
Heavenly Valley Creek												
HVC-1	03/14/01	20010314-29	Downstream of Pioneer		4.0	7.16	67	1.8	5.7	< 0.100	0.219	
HVC-2	03/14/01	20010314-30	250' upstream of Pond #2		2.7	7.33	51	1.8	10.0	0.350	0.026	
HVC-3	03/14/01	0010314-HVC3	25' downstream of Johnson Blvd									Frozen
HVC-4	03/14/01	0010314-HVC4	Effluent of drain from Lower Shop a									Frozen
HVC-5	03/14/01	0010314-HVC5	Effluent of drainage pipe along John									Standing water
Treatment Plant Monitoring												
MW08-25	03/27/01	20010327-15	SW side of Pond #1	6247.8	10.0	6.38	993	43.7	89.0		0.040	

ALPINE COUNTY MONITORING

Site	Date	ID	Location	Temp C	pH	EC umhos	DO mg/L	Alk mg/L	TDS mg/L	SS mg/L	Turb NTU	Cl mg/L	SO4 mg/L
Alpine Monitoring Wells													
ACMW-01AW	03/20/01	20010320-07	Main Dam	11.6	7.02	61		28	83			1.4	2.4
ACMW-01BE	03/20/01	20010320-08	Secondary Dam	9.1	7.24	63		58	72			1.2	1.5
ACMW-02N	03/20/01	20010320-09	Access Gate	13.1	6.66	130		61	90			3.1	3.0
ACMW-02S	03/20/01	20010320-10	Access Gate	12.0	6.71	94		45	79			1.9	1.3
ACMW-04W	03/20/01	20010320-11	Gansberg	13.3	6.11	186		51	136			14.8	7.8
ACMW-06N	03/20/01	20010320-12	Celio	11.7	6.79	697		260	441			62.5	22.2
ACMW-06S	03/20/01	20010320-13	Celio	12.6	7.50	620		186	382			74.1	23.4
Groundwaters													
GW-03	03/14/01	20010314-20	Smith/Springmeyer	11.6	7.15	303		132	225			1.6	25.9
GW-04	03/14/01	20010314-21	Celio	13.0	6.88	260		121	188			3.6	11.5
GW-05	03/14/01	20010314-22	Neddenriep	11.2	6.52	259		62	172			23.8	13.5
GW-07	03/14/01	20010314-23	Gansberg	10.5	6.55	121		53	95			2.0	2.4
GW-08	03/14/01	20010314-24	Arant	9.5	6.90	237		53	152			24.1	9.3
GW-11	03/14/01	20010314-25	Diamond Val. School	10.1	7.17	148		77	115			0.8	0.8
GW-14	03/14/01	20010314-26	Sierrra Pines	7.5	7.04	108		53	97			1.2	1.7
ICR TMDL													
SW-11	03/14/01	20010314-28	ICR Effluent @ HPR box	7.0	7.26	110		51	78	9.36	7.45	1.4	4.3
SW-11	03/20/01	20010320-15	ICR Effluent @ HPR box	7.0	7.65	107				9.50	9.16	1.4	
Reservoirs													
HPR	03/07/01	20010307-12	Harvey Place Reservoir	5.3	7.75	504	6.78	124	238	0.26	1.4	59.5	18.0
Surfacewaters: Carson R													
SW-01	03/06/01	20010306-07	Carson R Woodfords	2.2	7.38	77	9.40	36	59	0.91	.35	1.8	2.4
SW-05	03/06/01	20010306-11	Carson R Paynesville	4.3	7.39	93	10.30	42	70	1.73	.48	2.0	3.2
SW-06	03/06/01	20010306-12	Carson R Stateline	6.2	7.69	100	10.80	42	73	1.22	.45	2.9	3.7
SW-08	03/06/01	20010306-13	Irrigation Ditch	10.8	7.60	128	9.10	52	107	6.02	2.1	3.2	6.3
Surfacewaters: Indian Cr													
SW-02	03/06/01	20010306-08	Indian Cr Upper	4.0	7.37	79	10.45	41	66	0.47	1.7	0.8	< 0.5
SW-03	03/06/01	20010306-09	Indian Cr Mid	2.0	7.39	83	10.42	37	60	2.26	1.3	1.9	2.5
SW-04	03/06/01	20010306-10	Indian Cr Lower	3.0	7.19	97	9.61	45	72	5.97	2	2.6	2.1

ALPINE COUNTY MONITORING

04/05/01

Site	Date	TotalP mg/L	PO4-P mg/L	TKN mg/L	NH3-N mg/L	NO2-N mg/L	NO3-N mg/L	Total N mg/L	MBAS mg/L
Alpine Monitoring Wells									
ACMW-01AW	03/20/01	0.264		< 0.100		< 0.020	0.026	0.146	
ACMW-01BE	03/20/01	0.046		< 0.100		< 0.010	0.032	0.142	
ACMW-02N	03/20/01	0.018		< 0.100		< 0.010	0.073	0.183	
ACMW-02S	03/20/01	0.016		< 0.100		< 0.010	< 0.010	0.120	
ACMW-04W	03/20/01	0.020		0.135		< 0.020	2.810	2.965	
ACMW-06N	03/20/01	0.400		0.241		< 0.010	< 0.100	0.351	
ACMW-06S	03/20/01	0.022		0.194		0.053	0.099	0.346	
Groundwaters									
GW-03	03/14/01	0.032		0.082		0.195	0.718	0.995	
GW-04	03/14/01	0.052		0.143		< 0.010	0.817	0.970	
GW-05	03/14/01	0.028		0.078		< 0.030	3.530	3.638	
GW-07	03/14/01	0.098		< 0.100		< 0.010	1.270	1.380	
GW-08	03/14/01	0.058		0.103		< 0.010	4.270	4.383	
GW-11	03/14/01	0.034		< 0.100		< 0.010	0.454	0.564	
GW-14	03/14/01	0.052		0.142		< 0.010	0.463	0.615	
ICR TMDL									
SW-11	03/14/01	0.062	< 0.010	0.688	< 0.100	< 0.010	< 0.010	0.708	
SW-11	03/20/01	0.062	< 0.010	0.674		< 0.010	< 0.010	0.694	
Reservoirs									
HPR	03/07/01	2.400	2.410	18.600	19.400	0.105	0.441	19.146	
Surfacewaters: Carson R									
SW-01	03/06/01	< 0.010	0.042	0.118		< 0.010	0.011	0.139	
SW-05	03/06/01	0.012	0.010	< 0.100		< 0.010	0.034	0.144	
SW-06	03/06/01	0.012	< 0.010	0.199		< 0.010	0.054	0.263	
SW-08	03/06/01	0.052	0.028	0.418		< 0.010	0.277	0.705	
Surfacewaters: Indian Cr									
SW-02	03/06/01	0.012	0.046	0.121		< 0.010	< 0.010	0.141	
SW-03	03/06/01	0.018	< 0.010	0.153		< 0.010	< 0.010	0.173	
SW-04	03/06/01	0.034	< 0.010	0.236		< 0.010	< 0.010	0.256	

ALPINE COUNTY MONITORING

Site	Date	COD mg/L	BOD mg/L	O & G mg/L		Boron mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	SAR	Exch Na %	Hardness mg/L	Water Level MSL or Ft
Alpine Monitoring Wells														
ACMW-01AW	03/20/01													5482.9
ACMW-01BE	03/20/01													5490.9
ACMW-02N	03/20/01													5458.3
ACMW-02S	03/20/01													5459.2
ACMW-04W	03/20/01													4895.9
ACMW-06N	03/20/01													5216.2
ACMW-06S	03/20/01													5204.8
Groundwaters														
GW-03	03/14/01													
GW-04	03/14/01													
GW-05	03/14/01													
GW-07	03/14/01													
GW-08	03/14/01													
GW-11	03/14/01													
GW-14	03/14/01													
ICR TMDL														
SW-11	03/14/01					0.01								
SW-11	03/20/01						12.0	2.0	6.6	2.2	0.47	26.0		
Reservoirs														
HPR	03/07/01	28	3			0.24	14.6	3.3	41.4	9.2	2.55	59.4		49.5
Surfacewaters: Carson R														
SW-01	03/06/01		1		<	0.01	7.9	2.0	4.2	1.4	0.35	23.4		
SW-05	03/06/01		1		<	0.01	8.7	2.3	5.4	1.8	0.42	26.0		
SW-06	03/06/01		1		<	0.01	8.9	2.6	5.7	1.9	0.43	26.0		
SW-08	03/06/01		1		<	0.01	10.0	2.5	9.8	3.0	0.72	35.2		
Surfacewaters: Indian Cr														
SW-02	03/06/01		1		<	0.01	7.4	1.9	6.2	1.3	0.52	32.5		
SW-03	03/06/01		2		<	0.01	8.2	2.1	4.6	1.5	0.37	24.3		
SW-04	03/06/01		1		<	0.01	9.3	2.7	5.4	1.6	0.40	24.4		

ALPINE COUNTY
BACTERIOLOGICAL MONITORING

Alpine Monitoring Wells

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
ACMW-01AW	03/20/01	<	1.1	<	1.1	
ACMW-01BE	03/20/01	<	1.1	<	1.1	
ACMW-02N	03/20/01	<	1.1	<	1.1	
ACMW-02S	03/20/01	<	1.1	<	1.1	
ACMW-04W	03/20/01	<	1.1	<	1.1	
ACMW-06N	03/20/01	<	1.1	<	1.1	
ACMW-06S	03/20/01	<	1.1	<	1.1	

Groundwaters

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
GW-03	03/14/01	<	1.1	<	1.1	
GW-04	03/14/01	<	1.1	<	1.1	
GW-05	03/14/01	<	1.1	<	1.1	
GW-07	03/14/01	<	1.1	<	1.1	
GW-08	03/14/01	<	1.1	<	1.1	
GW-11	03/14/01	<	1.1	<	1.1	
GW-14	03/14/01	<	1.1	<	1.1	

ICR TMDL

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-11	03/14/01		30	<	30	
SW-11	03/20/01	<	3	<	3	

Reservoirs

Site	Date	Total Coliform MPN/100mL		Fecal Coliform MPN/100mL		Fecal Streptococci MPN/100mLL
HPR	03/07/01	8	<	2	<	2

Surfacewaters: Carson R

Site	Date	Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-01	03/06/01	9	<	3	
SW-05	03/06/01	93		4	
SW-06	03/06/01	93	<	3	
SW-08	03/06/01	93		43	

Surfacewaters: Indian Cr

Site	Date	Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-02	03/06/01	43	<	3	
SW-03	03/06/01	39		4	
SW-04	03/06/01	9	<	3	

ALPINE COUNTY
BLUE GREEN ALGAE

ID#	Site	Location	Date	Colonies #	Colony # Cells	Filaments #	Filaments # Cells	Filaments #	Filament Length	Single Cells, #
March, 2001										
20010306-07	SW-01	Carson R Woodfords	03/06/01	0	0	0	0	0	0	0
20010306-08	SW-02	Indian Cr Upper	03/06/01	0	0	0	0	0	0	0
20010306-09	SW-03	Indian Cr Mid	03/06/01	0	0	0	0	0	0	0
20010306-10	SW-04	Indian Cr Lower	03/06/01	0	0	0	0	0	0	0
20010306-11	SW-05	Carson R Paynesville	03/06/01	0	0	0	0	0	0	0
20010306-12	SW-06	Carson R Stateline	03/06/01	0	0	0	0	0	0	0
20010306-13	SW-08	Irrigation Ditch	03/06/01	0	0	0	0	0	0	0
20010307-12	HPR	Harvey Place Reservoir	03/07/01	0	0	0	0	0	0	0
20010307-16	ICR-1	Indian Creek Reservoir	03/07/01	0	0	0	0	0	0	0
20010307-17	ICR-1	Indian Creek Reservoir	03/07/01	0	0	0	0	0	0	0
20010307-18	ICR-1	Indian Creek Reservoir	03/07/01	0	0	0	0	0	0	0
20010314-28	SW-11	ICR Effluent @ HPR box	03/14/01	0	0	0	0	0	0	0

WASTEWATER TREATMENT PLANT
FINAL EFFLUENT
ANNUAL TRENDS

	<---------Flow---------->										
Year	Total MG	Daily MGD	Turbidity NTU	COD mg/L	BOD mg/L	SS mg/L	NH3-N mg/L	NO3-N mg/L	Total P mg/L	Chloride mg/L	TDS mg/L
1998	1,693.4	4.64	2.55	35.6	6.9	4.0	18.6	0.28	2.56	47.6	227
1999	1,742.2	4.78	2.42	34.8	6.5	3.1	19.3	0.16	2.65	48.8	220
2000	1,685.9	4.74	2.83	42.4	7.9	3.9	20.7	0.04	2.55	53.1	226
Maximum	1,742.2	4.78	2.83	42.4	7.9	4.0	20.7	0.28	2.65	53.1	227
Minimum	1,685.9	4.64	2.42	34.8	6.5	3.1	18.6	0.04	2.55	47.6	220
Average	1,707.2	4.72	2.60	37.6	7.1	3.6	19.5	0.16	2.59	49.8	224
# Years	3	3	3	3	3	3	3	3	3	3	3

FINAL EFFLUENT COLIFORM DATA

TABLE 3

	1998	1999	2000
Total Coliform			
Maximum	27	240	8
Minimum	< 2	< 2	< 2
Average	2.1	2.8	2
Fecal Coliform			
Maximum	2	2	2
Minimum	< 2	< 2	< 2
Average	< 2	< 2	< 2

SOUTH TAHOE
PUBLIC UTILITY DISTRICT

1275 Meadow Crest Drive • South Lake Tahoe, CA 96150
Phone: (530) 544-6474 • Facsimile: (530) 541-0614

Robert G. Baer, General Manager

BOARD MEMBERS
Christopher H. Strohm
James R. Jones
Mary Lou Mosbacher
Duane Wallace
Eric Schafer

Transmittal Form

To: Brian Schaefer, Rick Bower, Ginger Huber, Laurie Kemper, Lyn Barnett

Date: May 4, 2001

Regarding: Engineering Report for Recycled Water

We are sending you: ☐Attached ☐Under separate cover via_____
the following items:

☐Shop Drawings ☐Prints ☐Plans ☐Samples ☐Specifications
☐Copy of Letter ☐Change Order ☐Other_____

Copies	Description
1	Table 2 - WWTP Final Effluent Annual Trends
1	Table 3 - Final Effluent Coliform Data

These are transmitted as checked below:

☐For approval ☐Approved as submitted ☐Resubmit_____copies for approval
☐For your use ☐Approved as noted ☐Submit _____copies for distribution
☐As requested ☐Returned for corrections ☐Return_____corrected prints
☐For review/comment ☐Other_____
☐For bids due_____ ☐Prints returned after loan to us

Remarks: These two pages were inadvertently left out of the District's Engineering Report for Recycled Water which was delivered to you on April 6, 2001. Please insert them after page 8 of the report (before Exhibit 1).

Encls: X
d:\forms\transmittal

From: Sue Hrbacek
Sue Hrbacek, Contracts Administrator

cc: Richard Solbrig, Dennis Cocking

ENTERED 7-90

RFM

FACILITY VIOLATION REPORT

11/10/99 3:03:47 PM

Violation #:

WDID: 6A095900700

Staff: RFM

Agency: South Tahoe Public Utility District

Facility: South Tahoe Public Utility District

Fac. Street: 1275 Meadow Crest Drive

Fac. City: South Lake Tahoe **Zip:** 96150

Watershed: Wastewater Reclaimation Plant

Program Type: NON15

NPDES	DOD
NON15	RCRA
PTPRG	REDEV
SUB15	REC
CONSTW	CER
INDSTW	WIP
TANKS	UNREGS
AGT	OLDNUR
SLIC	COHEAL

Violation Type: RPT

CAT1	Category 1 pollutant
CAT2	Category 2 pollutant
OEV	Other effluent violation
CTOX	Chronic Toxicity
ATOX	Acute Toxicity
PRMC	Viol. of Non-effluent Prmt Cond.
RPT	Failure to submit or deficient rpt.
CSCH	Compliance schedule
PRET	Pretreatment
SSO	Sanitary Sewer Overflow
UNRD	Unregulated Discharge
RLGW	Release to groundwater
NOTR	Failure to Notify per Requirement
PAYF	Failure to pay fees
OBPR	Failure to obtain permit
PENF	Previous Enforcement Order
PROH	Basin Plan Prohibition

Period Type: MNTH

CONT	Continuous
INST	Instantaneous / Grab
HOUR	Hourly
DAY	Daily
WEEK	Weekly / Multi-day
MNTH	Monthly
QRT	Quarterly
ANLY	Annually
OTHR	Other
NA	Not Applicable

Significant Violation: No Y/N

1.4 x CAT1 or 1.2 x CAT2

Reportable on QNCR: No Y/N

Data Source: STFD

COMP	Caught by compliance routine
DRPT	Discharger Reported
STFD	Staff Detected
CMPL	Complaint
INSP	Inspection
REFD	Referred by Other Agency

Date Occurred: 04/15/01

Date Determined: 05/10/01

Report Receipt Date: 04/11/01

Description: 255 Characters

Discharger submitted deficient March monitoring report; Report missing HPR storage, MW 1.5-50, and ACMW 3 & 5.

Corrective Action Taken by Discharger: 255 Characters

Discharger agreed to supply missing information in subsequent monitoring reports.

Comments: 255 Characters

Levels of Nitrogen at HPR were at high levels, staff should monitor future trends. No further action necessary.

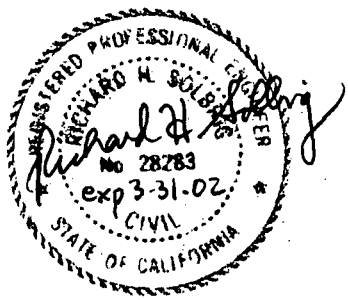
Site	Location	TDS		Cl⁻		TKN		NO_3-N		Total N		Total P		SO_4		Boron		Exch Na %	
		Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence
SW-01	Carson River, Woodfords	55	✓	1.0	✓	0.13		0.02		0.15		0.02		2.0	✓	0.02		20	✓
SW-06	Carson River, Stateline	70	✓	2.5	✓	0.22		0.03	✓	0.25	✓	0.03		2.0	✓	0.02		20	✓
SW-02	Indian Creek, Upper	100		6.0						0.30		0.03		8.0		0.25		30	✓
SW-03	Indian Creek, Mid	100		6.0						0.30		0.03		8.0		0.25		30	
SW-04	Indian Creek, Lower	100		6.0						0.30		0.03		8.0		0.25		30	
SW-10	Indian Creek, Stateline	100		6.0						0.30		0.03		8.0		0.25		30	

The March soils tests are not yet completed. They will be sent to you as soon as they are available.

Certification

I hereby certify that the enclosed monitoring report was prepared under my direct supervision and that I am a duly Registered Engineer under the laws of the State of California.

Sincerely,



Richard Solbrig,
Assistant Manager/Engineer

Enclosures:

1.

March Monthly Report	Pages
Wastewater Treatment plant	2
Permit Compliance Record	1
Export pipeline inspection	1
Sample site locations	2
Monitoring wells (ERB) and Heavenly Valley Creek (HVC) - Tahoe Basin	1
Alpine County Surfacewaters, Groundwaters, and HPR	4
Alpine County Blue green algae: March 2001	1
Total number of pages:	12

cc: Calif. Dept. of Health Services, ODW - Jess Morehouse
El Dorado Co. Dept. of Environmental Health - Virginia Huber
Nevada Division of Environmental Protection - Wendel McCurry
Alpine County Health Department - Dr. Richard Botto
Alpine County Health Department - Jim Goodloe
Alpine County Board of Supervisors
Desert Research Group (Alpine County Consultants) - David McGraw
STPUD Board of Directors
STPUD General Manager / District Engineer - Robert G. Baer
STPUD Manager of Operations - Ross Johnson
STPUD Operations Chief Plant Operator - Jeff Lee
STPUD Laboratory Director - Terry Powers
STPUD Manager of Alpine County Operations - Hal Bird

File: \LAHONTAN\03-01 Report.WPD

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

MARCH 2001

Date	Day	FLOW MGD Inf	2-Hr Peak Inf	Eff	Pond Return	Pond Inf	PRECIP Inch	Type	D.O. mg/L Fin	COD mg/L Raw	COD mg/L Fin	BOD mg/L Raw	BOD mg/L Fin	SS mg/L Raw	SS mg/L Fin
03/01/01	Thu	4.13	5.4	3.90					5.54	436					
03/02/01	Fri	4.36	5.9	4.56			0.04	Snow	5.68	403					
03/03/01	Sat	4.97	7.2	5.01					5.65	447	63.0	188	17.2	181	6.3
03/04/01	Sun	4.76	6.5	4.82			0.04	Snow	5.68	484					
03/05/01	Mon	4.31	5.6	4.39			0.20	Snow	5.82	401					
03/06/01	Tue	4.20	5.7	4.29					5.82	380					
03/07/01	Wed	4.31	5.6	3.95					5.40	425	54.9	169	12.0	176	3.4
03/08/01	Thu	4.42	5.6	4.55	0.60	1.95			5.83	376					
03/09/01	Fri	4.45	6.4	5.58	1.13		0.17	Snow	5.44	466					
03/10/01	Sat	5.10	7.0	5.10	0.22				5.57	436	69.3	205	19.6	148	6.6
03/11/01	Sun	4.95	7.2	5.23					4.64	415					
03/12/01	Mon	4.26	6.4	4.13					5.21	425	79.9	174	20.0	174	7.2
03/13/01	Tue	4.32	5.5	4.40					5.50	424					
03/14/01	Wed	4.15	6.7	4.08					5.53	415					
03/15/01	Thu	4.32	5.5	4.10					6.18	412					
03/16/01	Fri	4.61	6.0	4.68					5.55	408					
03/17/01	Sat	5.12	7.6	4.88					5.88	434	43.3	202	9.3	163	3.9
03/18/01	Sun	5.10	7.8	5.49					4.73	433					
03/19/01	Mon	4.49	6.0	4.45					5.57	389	48.8				
03/20/01	Tue	4.42	6.0	4.34					5.15	410					
03/21/01	Wed	4.36	6.2	4.35					5.40		56.2	164	9.4	160	9.2
03/22/01	Thu	4.53	5.8	4.66			0.03	Rain	5.01	378					
03/23/01	Fri	4.56	6.3	4.14					5.54	424	57.4				
03/24/01	Sat	5.23	7.0	4.95			0.14	Rain	4.89	436	69.0	187	14.2	149	14.7
03/25/01	Sun	4.96	7.3	4.56					4.71	412					
03/26/01	Mon	4.80	6.7	4.12					3.75	389					
03/27/01	Tue	4.11	5.8	3.92					4.10	371					
03/28/01	Wed	4.52	6.0	4.52					3.83	426	54.6	172	7.0	152	6.4
03/29/01	Thu	4.42	6.2	4.60					4.00	403					
03/30/01	Fri	4.57	7.1	3.81					4.41	332					
03/31/01	Sat	4.76	6.6	4.47					4.36	386	45.6	166	7.5	168	6.4
Permit Max		7.7									300		45		60
Permit Min															
Permit Ave											60		30		30
Total		141.57	196.6	140.03	1.95	1.95	0.62		160.37	12376	642.0	1627	116.2	1471	64.1
Maximum		5.23	7.8	5.58	1.13	1.95	0.20		6.18	484	79.9	205	20.0	181	14.7
Minimum		4.11	5.4	3.81	0.22	1.95	0.03		3.75	332	43.3	164	7.0	148	3.4
Average		4.57	6.3	4.52	0.65	1.95	0.10		5.17	413	58.4	181	12.9	163	7.1
# Tests		31	31	31	3	1	6		31	30	11	9	9	9	9

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

MARCH 2001

Date	Day	SETTLEABLE SOLIDS mL/L Raw		SETTLEABLE SOLIDS mL/L Fin	MBAS mg/L Raw	MBAS mg/L Fin	pH Units Raw	pH Units Fin	TURBIDITY NTU Fin	Cl2 mg/L Fin	FINAL COLIFORMS MPN/100 mL Total		FINAL COLIFORMS MPN/100 mL 7day-Median	TDS mg/L Raw	TDS mg/L Fin	ALKALINITY mg/L Raw	ALKALINITY mg/L Fin
03/01/01	Thu	10.0	<	0.1			7.73	7.39	5.00	5.07	<	2	< 2			137	123
03/02/01	Fri	12.0	<	0.1			7.58	7.26	4.50	4.66	<	2	< 2			144	130
03/03/01	Sat	14.0	<	0.1			7.67	7.64	4.30	5.58	<	2	< 2			154	137
03/04/01	Sun	12.0	<	0.1			7.47	7.36	4.10	4.46	<	2	< 2			154	138
03/05/01	Mon	10.5	<	0.1			7.76	7.52	4.10	4.87	<	2	< 2			140	132
03/06/01	Tue	10.0	<	0.1			7.33	7.40	3.50	4.97	<	2	< 2			135	125
03/07/01	Wed	10.5	<	0.1			7.45	7.47	5.90	4.87	<	2	< 2	260	240	139	122
03/08/01	Thu	10.0	<	0.1			7.50	7.44	7.23							135	123
03/09/01	Fri	12.0	<	0.1			7.67	7.44	6.88	4.66	<	2	< 2			142	117
03/10/01	Sat	12.0	<	0.1			7.56	7.56	9.00	5.68	<	2	< 2			152	133
03/11/01	Sun	12.0	<	0.1			7.46	7.21	12.10	6.49	<	2	< 2			156	138
03/12/01	Mon	12.0	<	0.1			7.53	7.41	9.50	7.10	<	2	< 2	246	246	153	128
03/13/01	Tue	10.5	<	0.1			7.46	7.18	8.52	7.71	<	2	< 2			144	124
03/14/01	Wed	11.5	<	0.1			7.37	7.32	7.85	8.01	<	2	< 2			128	112
03/15/01	Thu	10.5	<	0.1			7.26	7.45	5.53	7.10	<	2	< 2			96	98
03/16/01	Fri	10.0	<	0.1			7.20	7.22	3.83	5.58	<	2	< 2			117	98
03/17/01	Sat	12.5	<	0.1			7.27	7.42	3.65	5.07	<	2	< 2			146	114
03/18/01	Sun	12.0	<	0.1			7.34	7.26	4.10	5.07	<	2	< 2			158	128
03/19/01	Mon	10.5	<	0.1			7.55	7.47	4.50	4.97	<	2	< 2			144	131
03/20/01	Tue	11.0	<	0.1			7.50	7.57	5.63	7.40	<	2	< 2			135	124
03/21/01	Wed	12.0	<	0.1			7.40	7.37	8.00	7.50	<	2	< 2	246	235	138	121
03/22/01	Thu	10.0	<	0.1			7.41	7.28	9.75	7.50	<	2	< 2			134	120
03/23/01	Fri	10.5	<	0.1			7.43	7.38	10.60	7.20	<	2	< 2			138	121
03/24/01	Sat	12.5	<	0.1			7.39	7.56	13.00	7.00	<	2	< 2			150	128
03/25/01	Sun	11.0	<	0.1			7.30	7.34	12.40	5.98	<	2	< 2			146	130
03/26/01	Mon	11.0	<	0.1			7.57	7.50	9.74	5.58	<	2	< 2			143	128
03/27/01	Tue	10.0	<	0.1			7.39	7.35	6.69	7.10	<	2	< 2			142	122
03/28/01	Wed	12.5	<	0.1			7.53	7.58	5.25	6.59	<	2	< 2			136	120
03/29/01	Thu	11.5	<	0.1			7.65	7.57	8.44	6.29	<	2	< 2			139	119
03/30/01	Fri	11.0	<	0.1			7.28	7.13	7.96	2.33	<	2	< 2			139	112
03/31/01	Sat	11.5	<	0.1			7.50	7.49	4.22	6.08	<	2	< 2			150	118
Permit Max				0.1		2.0		8.5	20			240	23				
Permit Min								6.5									
Permit Ave						1.0			10								
Total		349.0		3.1	0.00	0.000	231.51	229.54	215.77	178.47		60	60	752	721	4364	3814
Maximum		14.0		0.1	ERR	ERR	7.76	7.64	13.00	8.01		2	2	260	246	158	138
Minimum		10.0		0.1	ERR	ERR	7.20	7.13	3.50	2.33		2	2	246	235	96	98
Average		11.3		0.1	ERR	ERR	7.47	7.40	6.96	5.95		2	2	251	240	141	123
# Tests		31		31	0	0	31	31	31	30		30	30	3	3	31	31

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT
COMPLIANCE RECORD

2001

Parameter	# Tests	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Compliance, %
Total Plant Inflow; 7.7 MGD; Dry Weather	90	0	0	0										0	100.0
2-Hour Peak Inflow; 18.5 MGD	90	0	0	0										0	100.0
COD, 30 Day Ave: 60 mg/L	3	0	0	0										0	100.0
COD, Max: 300 mg/L	28	0	0	0										0	100.0
BOD, 30 Day Ave: 30 mg/L	3	0	0	0										0	100.0
BOD, Max: 45 mg/L	26	0	0	0										0	100.0
SS, 30 Day Ave: 30 mg/L	3	0	0	0										0	100.0
SS, Max: 60 mg/L	26	0	0	0										0	100.0
Settleable Solids, Max: 0.1 mL/L	90	0	0	0										0	100.0
Turbidity, 30 Day Ave: 10 NTU	3	0	0	0										0	100.0
Turbidity, Max: 20 NTU	90	0	0	0										0	100.0
pH, 6.5 to 8.5	90	0	0	0										0	100.0
Total Coliforms, Max: 240 MPN/100 mL	89	0	0	0										0	100.0
Total Coliforms, 7-day Median: 23 MPN	89	0	0	0										0	100.0
Total	720	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0

SOUTH TAHOE
PUBLIC UTILITY DISTRICT
MEMORANDUM

Date: March 28, 2001

To: Bob Baer, Diane Noble

From: David Johnson

Topic: Export Line Check

****

On March 28, Greg Schrempp and I conducted our check of the District's export line from the treatment plant to station 564+06 near the Harvey Place reservoir.
No damage to the pipe was found.

CC Terry Powers

SAMPLE LOCATIONS

TAHOE BASIN MONITORING WELLS

Site	Location
ERB	Emergency Retention Basin
CONTROL	North of Post Office
MW02-25, -50	Emergency Retention Basin, S side
MW03-25, -50	Emergency Retention Basin, S side
MW04-25, -50	Emergency Retention Basin, W side
MW07-25, -50	Emergency Retention Basin, N side
MW08-25, -50	Pond #1, SW corner
MW11	S.E. corner of wastewater treatment plant grounds
MW12	South of Emergency Pump Building, for buried sludge
MW13	Pond 2, along Heavenly Valley Creek, for buried sludge

HEAVENLY VALLEY CREEK

HVC-1	At Pioneer Trail
HVC-2	250 ft upstream of Pond #2
HVC-3	25 ft downstream of Johnson Blvd.
HVC-4	Effluent of drain pipe from Lower Shop area
HVC-5	Effluent of drainage pipe along Johnson Blvd, 10 feet upstream of Johnson Blvd.

ALPINE COUNTY MONITORING WELLS

Site	Location
ACMW-01AW	Below main dam at Harvey Place Reservoir
ACMW-01BE	Below auxiliary dam at Harvey Place Reservoir
ACMW-02, N&S	On dam access road at Diamond Valley Road
ACMW-03	Bruns ranch, east side of Highway 88
ACMW-04W	Gansberg ranch, west side of Highway 88
ACMW-05	Dressler ranch
ACMW-06, N&S	Celio ranch, on Diamond Valley Road

ALPINE SOILS

Site	Ranch
S2	Celio
S3	Hall
S4	Gansberg
S5	Gansberg
S6	Neddenriep
S7	Bruns
S8	Dressler

ALPINE GROUNDWATERS

Site	Homeowner
GW-01	Sagues
GW-03	Smith/Springmeyer
GW-04	Celio
GW-05	Neddenriep
GW-07	Gansberg, Jr.
GW-08	Arant
GW-11	Diamond Valley School
GW-14	Sierra Pines Store

ALPINE SURFACEWATERS

Site	Location
SW-01	Carson River, Woodfords
SW-02	Indian Creek, @ HWY 89
SW-03	Indian Creek, @ upper bridge
SW-04	Indian Creek, @ lower bridge
SW-05	Carson River, Paynesville
SW-06	Carson River, Stateline
SW-07	Fredericksberg Ditch, Stateline
SW-08	Irrigation Ditch along Carson River Road
SW-09	Carson River, Dressler Lane
SW-10	Indian Creek, @ Smith-Springmeyer Ranch

TAHOE BASIN MONITORING

Site	Date	ID	Location	Depth msl	Temp C	pH	EC umho	Cl mg/L		COD mg/L	TKN mg/L	NO3-N mg/L	Comment
Buried Sludge Monitoring													
MW11	03/27/01	20010327-16	Sludge Pond	6265.5	9.7	7.00	78	0.9	<	5.0		0.066	
MW12	03/27/01	20010327-17	Sludge Pond	6263.9	9.8	6.62	122	2.3		8.1		0.450	
MW13	03/27/01	20010327-18	Sludge Pond	6258.2	4.0	6.50	688	3.0		21.6		6.570	
ERB Monitoring													
CONTROL	03/27/01	20010327-10	At Post Office	6281.1	9.2	7.34	171	8.0		5.7		2.350	
MW02-50	03/27/01	20010327-11	Black Bart side of ERB	6268.3	11.4	6.95	388	38.9		6.1		8.850	
MW03-50	03/27/01	20010327-12	Black Bart side of ERB	6268.3	11.4	6.93	337	31.5		5.1		5.060	
MW04-50	03/27/01	20010327-13	Hank Monk side of ERB	6268.2	9.5	7.01	75	5.7	<	5.0		0.065	
MW07-50	03/27/01	20010327-14	North side of ERB	6278.2	7.9	6.09	250	24.8	<	5.0		0.572	
Heavenly Valley Creek													
HVC-1	03/14/01	20010314-29	Downstream of Pioneer		4.0	7.16	67	1.8		5.7	< 0.100	0.219	
HVC-2	03/14/01	20010314-30	250' upstream of Pond #2		2.7	7.33	51	1.8		10.0	0.350	0.026	
HVC-3	03/14/01	0010314-HVC3	25' downstream of Johnson Blvd										Frozen
HVC-4	03/14/01	0010314-HVC4	Effluent of drain from Lower Shop a										Frozen
HVC-5	03/14/01	0010314-HVC5	Effluent of drainage pipe along John										Standing water
Treatment Plant Monitoring													
MW08-25	03/27/01	20010327-15	SW side of Pond #1	6247.8	10.0	6.38	993	43.7		89.0		0.040	

ALPINE COUNTY MONITORING

Site	Date	ID	Location	Temp C	pH	EC umhos	DO mg/L	Alk mg/L	TDS mg/L	SS mg/L	Turb NTU	Cl mg/L	SO4 mg/L
Alpine Monitoring Wells													
ACMW-01AW	03/20/01	20010320-07	Main Dam	11.6	7.02	61		28	83			1.4	2.4
ACMW-01BE	03/20/01	20010320-08	Secondary Dam	9.1	7.24	63		58	72			1.2	1.5
ACMW-02N	03/20/01	20010320-09	Access Gate	13.1	6.66	130		61	90			3.1	3.0
ACMW-02S	03/20/01	20010320-10	Access Gate	12.0	6.71	94		45	79			1.9	1.3
ACMW-04W	03/20/01	20010320-11	Gansberg	13.3	6.11	186		51	136			14.8	7.8
ACMW-06N	03/20/01	20010320-12	Celio	11.7	6.79	697		260	441			62.5	22.2
ACMW-06S	03/20/01	20010320-13	Celio	12.6	7.50	620		186	382			74.1	23.4
Groundwaters													
GW-03	03/14/01	20010314-20	Smith/Springmeyer	11.6	7.15	303		132	225			1.6	25.9
GW-04	03/14/01	20010314-21	Celio	13.0	6.88	260		121	188			3.6	11.5
GW-05	03/14/01	20010314-22	Neddenriep	11.2	6.52	259		62	172			23.8	13.5
GW-07	03/14/01	20010314-23	Gansberg	10.5	6.55	121		53	95			2.0	2.4
GW-08	03/14/01	20010314-24	Arant	9.5	6.90	237		53	152			24.1	9.3
GW-11	03/14/01	20010314-25	Diamond Val. School	10.1	7.17	148		77	115			0.8	0.8
GW-14	03/14/01	20010314-26	Sierrra Pines	7.5	7.04	108		53	97			1.2	1.7
ICR TMDL													
SW-11	03/14/01	20010314-28	ICR Effluent @ HPR box	7.0	7.26	110		51	78	9.36	7.45	1.4	4.3
SW-11	03/20/01	20010320-15	ICR Effluent @ HPR box	7.0	7.65	107				9.50	9.16	1.4	
Reservoirs													
HPR	03/07/01	20010307-12	Harvey Place Reservoir	5.3	7.75	504	6.78	124	238	0.26	1.4	59.5	18.0
Surfacewaters: Carson R													
SW-01	03/06/01	20010306-07	Carson R Woodfords	2.2	7.38	77	9.40	36	59	0.91	.35	1.8	2.4
SW-05	03/06/01	20010306-11	Carson R Paynesville	4.3	7.39	93	10.30	42	70	1.73	.48	2.0	3.2
SW-06	03/06/01	20010306-12	Carson R Stateline	6.2	7.69	100	10.80	42	73	1.22	.45	2.9	3.7
SW-08	03/06/01	20010306-13	Irrigation Ditch	10.8	7.60	128	9.10	52	107	6.02	2.1	3.2	6.3
Surfacewaters: Indian Cr													
SW-02	03/06/01	20010306-08	Indian Cr Upper	4.0	7.37	79	10.45	41	66	0.47	1.7	0.8	< 0.5
SW-03	03/06/01	20010306-09	Indian Cr Mid	2.0	7.39	83	10.42	37	60	2.26	1.3	1.9	2.5
SW-04	03/06/01	20010306-10	Indian Cr Lower	3.0	7.19	97	9.61	45	72	5.97	2	2.6	2.1

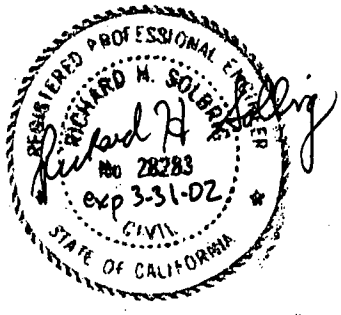
Site	Location	TDS		Cl		TKN		NO_3-N		Total N		Total P		SO_4		Boron		Exch Na %	
		Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence
SW-01	Carson River, Woodfords	55		1.0	✓	0.13	✓	0.02		0.15		0.02		2.0	✓	0.02		20	✓
SW-06	Carson River, Stateline	70		2.5		0.22		0.03	✓	0.25	✓	0.03		2.0	✓	0.02		20	✓
SW-02	Indian Creek, Upper	100		6.0						0.30		0.03		8.0		0.25		30	✓
SW-03	Indian Creek, Mid	100		6.0						0.30		0.03	✓	8.0		0.25		30	
SW-04	Indian Creek, Lower	100		6.0						0.30		0.03		8.0		0.25		30	
SW-10	Indian Creek, Stateline	100		6.0						0.30		0.03		8.0		0.25		30	

The March soils tests are not yet completed. They will be sent to you as soon as they are available.

Certification

I hereby certify that the enclosed monitoring report was prepared under my direct supervision and that I am a duly Registered Engineer under the laws of the State of California.

Sincerely,



Richard Solbrig,
Assistant Manager/Engineer

Enclosures:

1.

April Monthly Report	Pages
Wastewater Treatment plant	2
Permit Compliance Record	1
Export pipeline inspection	1
Sample site locations	2
Monitoring wells (ERB) and Heavenly Valley Creek (HVC) - Tahoe Basin	1
Alpine County Surfacewaters, Groundwaters, and HPR	4
Alpine County Blue green algae: April 2001	1
Total number of pages:	12

cc: Calif. Dept. of Health Services, ODW - Jess Morehouse
El Dorado Co. Dept. of Environmental Health - Virginia Huber
Nevada Division of Environmental Protection - Wendel McCurry
Alpine County Health Department - Dr. Richard Botto
Alpine County Health Department - Jim Goodloe
Alpine County Board of Supervisors
Desert Research Group (Alpine County Consultants) - David McGraw
STPUD Board of Directors
STPUD General Manager / District Engineer - Robert G. Baer
STPUD Manager of Operations - Ross Johnson
STPUD Operations Chief Plant Operator - Jeff Lee
STPUD Laboratory Director - Terry Powers
STPUD Manager of Alpine County Operations - Hal Bird

File: \LAHONTAN\04-01 Report.WPD

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

APRIL 2001

Date	Day	FLOW MGD Inf	2-Hr Peak Inf	Eff	Pond Return	Pond Inf	PRECIP Inch	Type	D.O. mg/L Fin	COD mg/L Raw	COD mg/L Fin	BOD mg/L Raw	BOD mg/L Fin	SS mg/L Raw	SS mg/L Fin
04/01/01	Sun	4.89	7.4	4.13					3.18	415					
04/02/01	Mon	5.09	6.0	4.83					4.84	395	51.6	179	8.8	138	6.8
04/03/01	Tue	4.31	6.6	4.45					4.53	475					
04/04/01	Wed	4.06	6.3	4.30					4.92	422					
04/05/01	Thu	4.04	5.4	3.66					5.64	380					
04/06/01	Fri	4.14	5.8	4.31			0.35	Snow	4.60	442					
04/07/01	Sat	4.52	6.0	4.63			0.13	Snow	4.67	426	60.2	184	11.6	138	11.0
04/08/01	Sun	4.53	6.2	4.60				Snow	4.65	466					11.2
04/09/01	Mon	4.24	5.6	3.57			0.01	Snow	4.57	431					
04/10/01	Tue	4.18	5.8	3.88					6.52	403					
04/11/01	Wed	4.09	6.4	4.55			0.20	Snow	6.11	521	55.8	197	10.3	189	12.2
04/12/01	Thu	4.27	5.9	4.30					6.15	449					
04/13/01	Fri	4.34	6.8	4.95					4.90	412					
04/14/01	Sat	4.49	6.3	5.15					4.10	463	62.4	190	11.0	150	8.1
04/15/01	Sun	4.47	7.2	4.44					6.12	384					
04/16/01	Mon	4.22	6.6	4.08					5.63	399					
04/17/01	Tue	3.98	6.4	4.08					5.59	385					
04/18/01	Wed	4.13	5.7	4.21			0.08	Snow	5.60	408	58.0	170	8.6	124	9.9
04/19/01	Thu	4.11	5.5	4.00					5.63	356					
04/20/01	Fri	4.11	6.2	4.24			0.44	Snow	5.59	354					
04/21/01	Sat	4.60	6.7	4.74			0.07	Snow	5.31	366	60.4	172	9.4	144	9.3
04/22/01	Sun	4.58	6.4	4.81					5.05	349					
04/23/01	Mon	4.04	5.7	3.91					5.17	322					
04/24/01	Tue	4.06	5.6	4.77					5.12	399					
04/25/01	Wed	3.96	5.4	3.88					6.59	350	32.2	143	5.8	160	3.9
04/26/01	Thu	3.94	5.4	4.20					5.86	352					
04/27/01	Fri	3.98	5.8	3.52					6.11	398					
04/28/01	Sat	4.45	6.6	4.53					5.47	426	47.2	179	10.4	142	8.7
04/29/01	Sun	4.28	6.5	4.37					5.00	418					
04/30/01	Mon	3.97	5.3	3.93					5.54	406					
Permit Max		7.7									300		45		60
Permit Min															
Permit Ave											60		30		30
Total		128.07	183.5	129.02			1.28		158.76	12172	427.8	1414	75.9	1185	81.1
Maximum		5.09	7.4	5.15			0.44		6.59	521	62.4	197	11.6	189	12.2
Minimum		3.94	5.3	3.52			0.01		3.18	322	32.2	143	5.8	124	3.9
Average		4.27	6.1	4.30			0.18		5.29	406	53.5	177	9.5	148	9.0
# Tests		30	30	30	0	0	7		30	30	8	8	8	8	9

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

APRIL 2001

Date	Day	SETTLEABLE SOLIDS mL/L Raw		SETTLEABLE SOLIDS mL/L Fin	MBAS mg/L Raw	MBAS mg/L Fin	pH Units Raw	pH Units Fin	TURBIDITY NTU Fin	Cl2 mg/L Fin	FINAL COLIFORMS MPN/100 mL Total		FINAL COLIFORMS MPN/100 mL 7day-Median	TDS mg/L Raw	TDS mg/L Fin	ALKALINITY mg/L Raw	ALKALINITY mg/L Fin
04/01/01	Sun	11.0	<	0.1			7.41	7.35	5.69	6.49	<	2	< 2			147	120
04/02/01	Mon	10.0	<	0.1			7.54	7.50	5.51	6.59	<	2	< 2	288	248	131	115
04/03/01	Tue	9.0	<	0.1			7.71	7.41	5.01	6.49	<	2	< 2			136	113
04/04/01	Wed	13.0	<	0.1			7.19	7.35	5.81	7.00	<	2	< 2			114	114
04/05/01	Thu	11.5	<	0.1			7.34	7.22	5.96	5.17	<	2	< 2			139	118
04/06/01	Fri	10.0	<	0.1			7.49	7.28	6.98	5.98	<	2	< 2			133	116
04/07/01	Sat	11.0	<	0.1			7.45	7.49	9.26	6.08	<	2	< 2			143	119
04/08/01	Sun	12.5	<	0.1			7.52	7.23	11.10	5.98	<	2	< 2			149	122
04/09/01	Mon	11.0	<	0.1			7.55	7.30	11.10	6.69	<	2	< 2			141	119
04/10/01	Tue	11.0	<	0.1			7.46	7.26	11.45	7.60	<	2	< 2			138	117
04/11/01	Wed	12.0	<	0.1			7.42	7.20	8.33	7.30	<	2	< 2	252	243	144	117
04/12/01	Thu	11.5	<	0.1			7.54	7.41	6.00	7.00	<	2	< 2			134	120
04/13/01	Fri	11.0	<	0.1			7.51	7.37	7.00	4.36	<	2				135	127
04/14/01	Sat	12.0	<	0.1			7.48	7.50	7.76	4.16	<	2	< 2			139	130
04/15/01	Sun	10.0	<	0.1			7.34	7.40	8.22	4.46	<	2	< 2			141	132
04/16/01	Mon	9.5	<	0.1			7.30	7.31	8.20	7.40	<	2	< 2			132	130
04/17/01	Tue	10.0	<	0.1			7.37	7.30	9.40	6.49	<	2	< 2			135	127
04/18/01	Wed	10.5	<	0.1			7.46	7.42	8.17	5.68	<	2	< 2	276	238	131	121
04/19/01	Thu	8.5	<	0.1			7.66	7.50	8.62	6.08	<	2	< 2			129	117
04/20/01	Fri	10.0	<	0.1			7.38	7.20	8.05	6.08	<	2	< 2			134	116
04/21/01	Sat	12.0	<	0.1			7.45	7.51	8.44	6.08	<	2	< 2			133	118
04/22/01	Sun	9.5	<	0.1			7.35	7.26	9.50	5.58	<	2	< 2			139	122
04/23/01	Mon	10.5	<	0.1			7.60	7.38	5.99	5.98	<	2	< 2			142	119
04/24/01	Tue	14.0	<	0.1			7.46	7.38	2.51	4.97	<	2	< 2			153	126
04/25/01	Wed	10.0	<	0.1			7.41	7.34	2.88	4.36	<	2	< 2	234	226	150	133
04/26/01	Thu	10.5	<	0.1			7.61	7.44	4.96	4.36	<	2	< 2			149	135
04/27/01	Fri	9.0	<	0.1			7.45	7.32	6.13	3.55	<	2	< 2			152	138
04/28/01	Sat	11.0	<	0.1			7.45	7.62	7.04	3.85	<	2	< 2			159	139
04/29/01	Sun	11.0	<	0.1			7.47	7.24	6.85	4.76	<	2	< 2			156	136
04/30/01	Mon	9.5	<	0.1			7.56	7.42	4.77	8.92	<	2	< 2			152	131
Permit Max				0.1		2.0		8.5	20			240	23				
Permit Min								6.5									
Permit Ave						1.0			10								
Total		322.0		3.0	0.00	0.000	223.93	220.91	216.69	175.49		60	58	1050	955	4210	3707
Maximum		14.0		0.1	ERR	ERR	7.71	7.62	11.45	8.92		2	2	288	248	159	139
Minimum		8.5		0.1	ERR	ERR	7.19	7.20	2.51	3.55		2	2	234	226	114	113
Average		10.7		0.1	ERR	ERR	7.46	7.36	7.22	5.85		2	2	263	239	140	124
# Tests		30		30	0	0	30	30	30	30		30	29	4	4	30	30

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT
COMPLIANCE RECORD

2001

Parameter	# Tests	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Compliance, %
Total Plant Inflow; 7.7 MGD; Dry Weather	120	0	0	0	0									0	100.0
2-Hour Peak Inflow; 18.5 MGD	120	0	0	0	0									0	100.0
COD, 30 Day Ave: 60 mg/L	4	0	0	0	0									0	100.0
COD, Max: 300 mg/L	36	0	0	0	0									0	100.0
BOD, 30 Day Ave: 30 mg/L	4	0	0	0	0									0	100.0
BOD, Max: 45 mg/L	34	0	0	0	0									0	100.0
SS, 30 Day Ave: 30 mg/L	4	0	0	0	0									0	100.0
SS, Max: 60 mg/L	35	0	0	0	0									0	100.0
Settleable Solids, Max: 0.1 mL/L	120	0	0	0	0									0	100.0
Turbidity, 30 Day Ave: 10 NTU	4	0	0	0	0									0	100.0
Turbidity, Max: 20 NTU	120	0	0	0	0									0	100.0
pH, 6.5 to 8.5	120	0	0	0	0									0	100.0
Total Coliforms, Max: 240 MPN/100 mL	119	0	0	0	0									0	100.0
Total Coliforms, 7-day Median: 23 MPN	118	0	0	0	0									0	100.0
Total	958	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0

SOUTH TAHOE
PUBLIC UTILITY DISTRICT
MEMORANDUM

Date: April 26, 2001

To: Bob Baer, Diane Noble

From: Tim Rieger

Topic: Export Line Check

****

On April 26, 2001, David Johnson and I conducted our check of the District's export line from the treatment plant to station 564+06 near the Harvey Place reservoir. Several wet areas where checked. No damage to the pipe was found.

CC Terry Powers

EXPRT401.MEM

SAMPLE LOCATIONS

TAHOE BASIN MONITORING WELLS

Site	Location
ERB	Emergency Retention Basin
CONTROL	North of Post Office
MW02-25, -50	Emergency Retention Basin, S side
MW03-25, -50	Emergency Retention Basin, S side
MW04-25, -50	Emergency Retention Basin, W side
MW07-25, -50	Emergency Retention Basin, N side
MW08-25, -50	Pond #1, SW corner
MW11	S.E. corner of wastewater treatment plant grounds
MW12	South of Emergency Pump Building, for buried sludge
MW13	Pond 2, along Heavenly Valley Creek, for buried sludge

HEAVENLY VALLEY CREEK

HVC-1	At Pioneer Trail
HVC-2	250 ft upstream of Pond #2
HVC-3	25 ft downstream of Johnson Blvd.
HVC-4	Effluent of drain pipe from Lower Shop area
HVC-5	Effluent of drainage pipe along Johnson Blvd, 10 feet upstream of Johnson Blvd.

ALPINE COUNTY MONITORING WELLS

Site	Location
ACMW-01AW	Below main dam at Harvey Place Reservoir
ACMW-01BE	Below auxiliary dam at Harvey Place Reservoir
ACMW-02, N&S	On dam access road at Diamond Valley Road
ACMW-03	Bruns ranch, east side of Highway 88
ACMW-04W	Gansberg ranch, west side of Highway 88
ACMW-05	Dressler ranch
ACMW-06, N&S	Celio ranch, on Diamond Valley Road

ALPINE SOILS

Site	Ranch
S2	Celio
S3	Hall
S4	Gansberg
S5	Gansberg
S6	Neddenriep
S7	Bruns
S8	Dressler

ALPINE GROUNDWATERS

Site	Homeowner
GW-01	Sagues
GW-03	Smith/Springmeyer
GW-04	Celio
GW-05	Neddenriep
GW-07	Gansberg, Jr.
GW-08	Arant
GW-11	Diamond Valley School
GW-14	Sierra Pines Store

ALPINE SURFACEWATERS

Site	Location
SW-01	Carson River, Woodfords
SW-02	Indian Creek, @ HWY 89
SW-03	Indian Creek, @ upper bridge
SW-04	Indian Creek, @ lower bridge
SW-05	Carson River, Paynesville
SW-06	Carson River, Stateline
SW-07	Fredericksberg Ditch, Stateline
SW-08	Irrigation Ditch along Carson River Road
SW-09	Carson River, Dressler Lane
SW-10	Indian Creek, @ Smith-Springmeyer Ranch

TAHOE BASIN MONITORING

Site	Date	ID	Location	Depth msl	Temp C	pH	EC umho	Cl mg/L		COD mg/L	TKN mg/L		NO3-N mg/L	Comment
Buried Sludge Monitoring														
MW11	04/24/01	20010424-31	Sludge Pond	6265.3	9.1	7.07	79	0.9	<	5.0			0.054	
MW12	04/24/01	20010424-32	Sludge Pond	6263.5	9.5	6.97	117	1.9	<	5.0			0.391	
MW13	04/24/01	20010424-33	Sludge Pond	6257.5	5.3	6.82	703	3.5		18.1			6.460	
ERB Monitoring														
CONTROL	04/24/01	20010424-24	At Post Office	6281.1	10.0	6.78	168	7.6	<	5.0			2.370	
MW01.5	04/24/01	20010424-25	SW corner of ERB	6268.5	9.3	6.80	157	2.6	<	5.0			0.514	
MW02-50	04/24/01	20010424-26	Black Bart side of ERB	6268.3	11.6	6.53	389	35.9	<	5.0			8.500	
MW03-50	04/24/01	20010424-27	Black Bart side of ERB	6268.3	10.8	6.44	338	29.4	<	5.0			4.680	
MW04-50	04/24/01	20010424-28	Hank Monk side of ERB	6268.2	8.8	6.65	77	5.3	<	5.0			0.054	
MW07-50	04/24/01	20010424-29	North side of ERB	6278.3	7.8	6.39	250	24.5	<	5.0			0.589	
Heavenly Valley Creek														
HVC-1	04/10/01	20010410-27	Downstream of Pioneer		1.7	6.91	60	1.3		6.4	0.137		0.131	
HVC-2	04/10/01	20010410-28	250' upstream of Pond #2		3.3	6.36	56	2.3		9.7	0.211		0.012	
HVC-3	04/10/01	20010410-29	25' downstream of Johnson Blvd		1.0	6.20	90	3.3		9.0	0.549	<	0.010	
HVC-4	04/10/01	20010410-30	Effluent of drain from Lower Shop a		5.6	6.31	115	1.3		24.6	0.588		0.107	
HVC-5	04/10/01	0010410-HVC5	Effluent of drainage pipe along John											Dry
Treatment Plant Monitoring														
MW08-25	04/24/01	20010424-30	SW side of Pond #1	6248.1	8.7	6.30	1001	45.4		77.8		<	0.010	

ALPINE COUNTY MONITORING

Site	Date	ID	Location	Temp C	pH	EC umhos	DO mg/L	Alk mg/L	TDS mg/L	SS mg/L	Turb NTU	Cl mg/L	SO4 mg/L
Alpine Monitoring Wells													
ACMW-01AW	04/17/2001	20010417-11	Main Dam	10.0	6.79	65		28	76			2.0	2.2
ACMW-01BE	04/17/2001	20010417-12	Secondary Dam	8.0	6.91	62		29	60			1.6	1.4
ACMW-02N	04/17/2001	20010417-13	Access Gate	12.1	7.10	127		61	86			3.1	3.0
ACMW-02S	04/17/2001	20010417-14	Access Gate	11.0	6.48	95		46	68			1.7	1.3
ACMW-04W	04/17/2001	20010417-15	Gansberg	11.5	6.46	182		49	124			15.4	7.7
ACMW-06N	04/17/2001	20010417-16	Celio	10.5	6.83	701		258	434			62.5	22.6
ACMW-06S	04/17/2001	20010417-17	Celio	11.8	6.85	64		229	392			71.2	27.1
Groundwaters													
GW-03	04/10/2001	20010410-19	Smith/Springmeyer	11.2	6.81	303		129	223			1.6	27.2
GW-04	04/10/2001	20010410-20	Celio	13.4	6.46	258		118	195			3.7	12.0
GW-05	04/10/2001	20010410-21	Neddenriep	9.5	6.51	256		60	167			25.0	14.1
GW-07	04/10/2001	20010410-22	Gansberg	10.1	6.55	123		52	97			2.1	2.5
GW-08	04/10/2001	20010410-23	Arant	11.2	6.04	239		52	154			25.3	9.7
GW-11	04/10/2001	20010410-24	Diamond Val. School	11.2	6.97	144		75	110			0.7	0.8
GW-14	04/10/2001	20010410-25	Sierrra Pines	9.0	6.90	109		52	91			1.4	1.8
Reservoirs													
HPR	04/03/2001	20010403-14	Harvey Place Reservoir	10.5	7.64	516	6.31	120	235	4.06	1.71	60.8	19.2
Surfacewaters: Carson R													
SW-01	04/03/2001	20010403-07	Carson R Woodfords	2.8	7.46	56	11.44	24	50	6.42	2.75	1.5	2.1
SW-05	04/03/2001	20010403-11	Carson R Paynesville	5.6	7.71	59	10.74	25	45	7.15	2.89	1.6	2.5
SW-06	04/03/2001	20010403-12	Carson R Stateline	6.7	7.77	65	10.13	27	50	3.79	2.36	2.1	2.8
SW-08	04/03/2001	20010403-13	Irrigation Ditch	9.8	7.72	82	9.39	42	80	4.64	2.75	1.7	3.3
Surfacewaters: Indian Cr													
SW-02	04/03/2001	20010403-08	Indian Cr Upper	3.4	7.52	95	10.14	48	78	0.31	1.23	1.0	< 0.5
SW-03	04/03/2001	20010403-09	Indian Cr Mid	6.9	7.48	132	8.64	62	97	1.15	2.46	2.6	2.4
SW-04	04/03/2001	20010403-10	Indian Cr Lower	5.0	7.56	111	10.52	53	84	3.36	2.34	2.0	1.7

ALPINE COUNTY MONITORING

05/03/01

Site	Date	TotalP mg/L	PO4-P mg/L	TKN mg/L	NH3-N mg/L	NO2-N mg/L	NO3-N mg/L	Total N mg/L	MBAS mg/L
Alpine Monitoring Wells									
ACMW-01AW	04/17/2001					< 0.020	0.023	0.043	
ACMW-01BE	04/17/2001					< 0.010	0.038	0.048	
ACMW-02N	04/17/2001					< 0.010	0.071	0.081	
ACMW-02S	04/17/2001					< 0.010	< 0.010	0.020	
ACMW-04W	04/17/2001					< 0.020	2.070	2.090	
ACMW-06N	04/17/2001					< 0.010	< 0.010	0.020	
ACMW-06S	04/17/2001					0.014	0.081	0.095	
Groundwaters									
GW-03	04/10/2001					< 0.010	0.748	0.758	
GW-04	04/10/2001					< 0.010	0.859	0.869	
GW-05	04/10/2001					< 0.030	3.640	3.670	
GW-07	04/10/2001					< 0.010	1.360	1.370	
GW-08	04/10/2001					< 0.030	4.480	4.510	
GW-11	04/10/2001					< 0.010	0.436	0.446	
GW-14	04/10/2001					< 0.010	0.485	0.495	
Reservoirs									
HPR	04/03/2001	2.330	2.290	20.200	19.000	0.087	0.521	20.808	
Surfacewaters: Carson R									
SW-01	04/03/2001	0.022	< 0.010	0.231	0.028	< 0.010	0.016	0.257	
SW-05	04/03/2001	0.026	< 0.010	0.216	0.025	< 0.010	0.020	0.246	
SW-06	04/03/2001	0.018	< 0.010	0.173	0.033	< 0.010	0.038	0.221	
SW-08	04/03/2001	0.020	< 0.010	0.157	0.022	< 0.010	0.084	0.251	
Surfacewaters: Indian Cr									
SW-02	04/03/2001	0.010	0.025	0.159	0.029	< 0.010	< 0.010	0.179	
SW-03	04/03/2001	0.072	< 0.010	< 0.100	0.030	< 0.010	0.042	0.152	
SW-04	04/03/2001	0.032	< 0.010	< 0.100	0.021	< 0.010	0.014	0.124	

ALPINE COUNTY MONITORING

Site	Date	COD mg/L	BOD mg/L	O & G mg/L		Boron mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	SAR	Exch Na %	Hardness mg/L	Water Level MSL or Ft
Alpine Monitoring Wells														
ACMW-01AW	04/17/2001													5482.1
ACMW-01BE	04/17/2001													5489.2
ACMW-02N	04/17/2001													5458.0
ACMW-02S	04/17/2001													5458.8
ACMW-04W	04/17/2001													4900.8
ACMW-06N	04/17/2001													5215.9
ACMW-06S	04/17/2001													5204.6
Groundwaters														
GW-03	04/10/2001													
GW-04	04/10/2001													
GW-05	04/10/2001													
GW-07	04/10/2001													
GW-08	04/10/2001													
GW-11	04/10/2001													
GW-14	04/10/2001													
Reservoirs														
HPR	04/03/2001	32	4			0.18	16.6	3.6	43.4	9.1	2.52	58.2		51.2
Surfacewaters: Carson R														
SW-01	04/03/2001		1			0.01	6.0	1.7	2.8	1.1	0.26	20.7		
SW-05	04/03/2001		1		<	0.01	6.5	1.8	3.2	1.3	0.29	21.8		
SW-06	04/03/2001		1		<	0.01	6.8	1.9	3.5	1.4	0.31	22.4		
SW-08	04/03/2001		0			0.02	9.4	2.3	7.4	1.7	0.56	31.4		
Surfacewaters: Indian Cr														
SW-02	04/03/2001		1			0.02	9.3	2.4	7.3	1.2	0.55	31.3		
SW-03	04/03/2001		1			0.02	12.6	3.7	7.9	1.5	0.50	26.1		
SW-04	04/03/2001		1			0.01	11.2	3.4	6.3	1.6	0.42	23.6		

ALPINE COUNTY
BACTERIOLOGICAL MONITORING

Alpine Monitoring Wells

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
ACMW-01AW	04/17/2001	<	1.1	<	1.1	
ACMW-01BE	04/17/2001	<	1.1	<	1.1	
ACMW-02N	04/17/2001	<	1.1	<	1.1	
ACMW-02S	04/17/2001	<	1.1	<	1.1	
ACMW-04W	04/17/2001	<	1.1	<	1.1	
ACMW-06N	04/17/2001	<	1.1	<	1.1	
ACMW-06S	04/17/2001	<	1.1	<	1.1	

Groundwaters

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
GW-03	04/10/2001	<	1.1	<	1.1	
GW-04	04/10/2001	<	1.1	<	1.1	
GW-05	04/10/2001	<	1.1	<	1.1	
GW-07	04/10/2001	<	1.1	<	1.1	
GW-08	04/10/2001	<	1.1	<	1.1	
GW-11	04/10/2001	<	1.1	<	1.1	
GW-14	04/10/2001	<	1.1	<	1.1	

Reservoirs

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
HPR	04/03/2001	50	2	4

Surfacewaters: Carson R

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-01	04/03/2001		7	<	3	
SW-05	04/03/2001		43	<	3	
SW-06	04/03/2001		43		9	
SW-08	04/03/2001		43		9	

Surfacewaters: Indian Cr

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-02	04/03/2001		15	<	3	
SW-03	04/03/2001		43		43	
SW-04	04/03/2001		9		9	

ALPINE COUNTY
BLUE GREEN ALGAE

ID#	Site	Location	Date	Colonies #	Colony # Cells	Filaments #	Filaments # Cells	Filaments #	Filament Length	Single Cells, #
April, 2001										
20010403-07	SW-01	Carson R Woodfords	04/03/01	0	0	0	0	0	0	0
20010403-08	SW-02	Indian Cr Upper	04/03/01	0	0	0	0	0	0	0
20010403-09	SW-03	Indian Cr Mid	04/03/01	0	0	0	0	0	0	0
20010403-10	SW-04	Indian Cr Lower	04/03/01	0	0	0	0	0	0	0
20010403-11	SW-05	Carson R Paynesville	04/03/01	0	0	0	0	0	0	0
20010403-12	SW-06	Carson R Stateline	04/03/01	0	0	0	0	0	0	0
20010403-13	SW-08	Irrigation Ditch	04/03/01	0	0	0	0	0	0	0
20010403-14	HPR	Harvey Place Reservoir	04/03/01	0	0	0	0	0	0	0
20010404-16	ICR-1	Indian Creek Reservoir	04/04/01	35	1,470	0	0	0	0	0
20010404-17	ICR-1	Indian Creek Reservoir	04/04/01	141	4,290	0	0	0	0	0
20010404-18	ICR-1	Indian Creek Reservoir	04/04/01	35	38,700	0	0	0	0	0

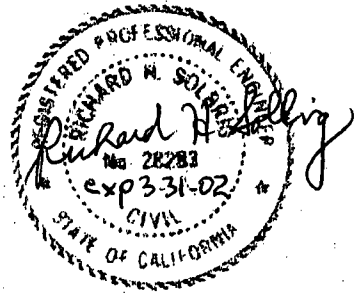
Site	Location	TDS		Cl		TKN		NO_3-N		Total N		Total P		SO_4		Boron		Exch Na %	
		Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence
SW-01	Carson River, Woodfords	55		1.0		0.13	✓	0.02		0.15	✓	0.02	✓	2.0		0.02		20	✓
SW-06	Carson River, Stateline	70		2.5		0.22	✓	0.03		0.25	✓	0.03	✓	2.0		0.02		20	✓
SW-02	Indian Creek, Upper	100		6.0						0.30		0.03		8.0		0.25		30	
SW-03	Indian Creek, Mid	100	✓	6.0						0.30	✓	0.03	✓	8.0		0.25		30	
SW-04	Indian Creek, Lower	100		6.0						0.30	✓	0.03	✓	8.0		0.25		30	
SW-10	Indian Creek, Stateline	100		6.0						0.30	✓	0.03	✓	8.0		0.25		30	

I have also included the soils results for December 2000 and March 2001.

Certification

I hereby certify that the enclosed monitoring report was prepared under my direct supervision and that I am a duly Registered Engineer under the laws of the State of California.

Sincerely,



Richard Solbrig,
Assistant Manager/Engineer

Enclosures:

1.

May Monthly Report	Pages
Wastewater Treatment plant	2
Permit Compliance Record	1
Export pipeline inspection	1
Sample site locations	2
Monitoring wells (ERB) and Heavenly Valley Creek (HVC) - Tahoe Basin	1
Alpine County Surfacewaters, Groundwaters, and HPR	4
Alpine County Blue green algae: May 2001	1
Alpine County Soils March 2001 and December 2000	2
Total number of pages:	14

cc: Calif. Dept. of Health Services, ODW - Jess Morehouse
El Dorado Co. Dept. of Environmental Health - Virginia Huber
Nevada Division of Environmental Protection - Wendel McCurry
Alpine County Health Department - Dr. Richard Botto
Alpine County Health Department - Jim Goodloe
Alpine County Board of Supervisors
Desert Research Group (Alpine County Consultants) - David McGraw
STPUD Board of Directors
STPUD General Manager / District Engineer - Robert G. Baer
STPUD Manager of Operations - Ross Johnson
STPUD Operations Chief Plant Operator - Jeff Lee
STPUD Laboratory Director - Terry Powers
STPUD Manager of Alpine County Operations - Hal Bird

File: \LAHONTAN\05-01 Report.WPD

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

MAY 2001

		FLOW MGD					PRECIP		D.O.	COD		BOD		SS	
			2-Hr Peak		Pond	Pond			mg/L	mg/L		mg/L		mg/L	
Date	Day	Inf	Inf	Eff	Return	Inf	Inch	Type	Fin	Raw	Fin	Raw	Fin	Raw	Fin
05/01/01	Tue	3.74	6.8	3.78					5.58	387					
05/02/01	Wed	3.84	5.7	4.02					5.46	372	50.2	158	7.5	116	6.0
05/03/01	Thu	3.81	5.5	3.90					5.53	433					
05/04/01	Fri	3.84	5.4	3.43					5.61	393					
05/05/01	Sat	4.33	6.6	4.63					5.47	386	38.2	185	6.3	122	2.5
05/06/01	Sun	4.25	6.2	4.39					5.54	421					
05/07/01	Mon	3.91	5.0	3.80					5.95	423					
05/08/01	Tue	3.82	5.6	3.72					6.07	382					
05/09/01	Wed	3.85	6.0	4.44					5.10	432	38.6	166	4.0	195	1.9
05/10/01	Thu	3.83	5.6	3.93					5.98	317					
05/11/01	Fri	3.94	5.2	3.46					5.93	357					
05/12/01	Sat	4.11	6.5	4.39					5.68	390	44.4	150	3.6	155	1.2
05/13/01	Sun	4.26	6.0	4.28					5.83	384					
05/14/01	Mon	3.84	5.6	3.54					6.03	373					
05/15/01	Tue	3.82	5.6	3.87			0.02	Rain	5.74	439					
05/16/01	Wed	3.88	6.0	3.66					5.79	443	40.6	169	4.0	167	0.9
05/17/01	Thu	3.89	5.5	4.04					5.51	376					
05/18/01	Fri	3.91	6.0	4.16					5.95	437					
05/19/01	Sat	4.38	7.0	4.04					5.88	414	32.1	176	2.9	140	1.0
05/20/01	Sun	4.38	6.5	4.36					5.58	406					
05/21/01	Mon	4.03	6.5	4.36					5.78	375					
05/22/01	Tue	3.98	6.4	4.05					5.18	368					
05/23/01	Wed	3.91	5.8	4.21					5.48	554	37.9	215	3.7	213	1.0
05/24/01	Thu	3.95	5.8	3.84					5.74	376					
05/25/01	Fri	4.14	5.7	3.95					5.66	423					
05/26/01	Sat	4.88	7.0	4.93					5.61	448	34.9	206	4.1	158	1.0
05/27/01	Sun	5.38	8.0	5.15					5.09	499					
05/28/01	Mon	4.58	8.2	4.52					5.25	447					
05/29/01	Tue	4.09	6.6	4.10					5.22	382	37.4	160	3.2	120	1.4
05/30/01	Wed	3.96	7.0	3.46					5.71	414					
05/31/01	Thu	3.96	5.5	4.38					5.17	379					
Permit Max		7.7									300		45		60
Permit Min															
Permit Ave											60		30		30
Total		126.49	190.8	126.79			0.02		174.10	12630	354.3	1585	39.2	1386	16.9
Maximum		5.38	8.2	5.15			0.02		6.07	554	50.2	215	7.5	213	6.0
Minimum		3.74	5.0	3.43			0.02		5.09	317	32.1	150	2.9	116	0.9
Average		4.08	6.2	4.09			0.02		5.62	407	39.4	176	4.4	154	1.9
# Tests		31	31	31	0	0	1		31	31	9	9	9	9	9

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

06/08/01
16:39:26

MAY 2001

Date	Day	SETTLEABLE SOLIDS mL/L Raw		SETTLEABLE SOLIDS mL/L Fin	MBAS mg/L Raw	MBAS mg/L Fin	pH Units Raw	pH Units Fin	TURBIDITY NTU Fin	Cl2 mg/L Fin	FINAL COLIFORMS MPN/100 mL Total		FINAL COLIFORMS MPN/100 mL 7day-Median	TDS mg/L Raw	TDS mg/L Fin	ALKALINITY mg/L Raw	ALKALINITY mg/L Fin
05/01/01	Tue	10.0	<	0.1			7.47	7.42	4.18	4.56		2	< 2			155	132
05/02/01	Wed	9.0	<	0.1			7.68	7.50	3.56	5.58	<	2	< 2	260	230	149	133
05/03/01	Thu	12.5	<	0.1			7.49	7.38	3.58							152	132
05/04/01	Fri	10.0	<	0.1			7.48	7.33	2.52	4.66	<	2	< 2			151	132
05/05/01	Sat	11.5	<	0.1			7.48	7.60	2.56	4.16	<	2	< 2			158	134
05/06/01	Sun	12.0	<	0.1			7.45	7.28	2.58	7.20	<	2	< 2			158	132
05/07/01	Mon	11.5	<	0.1			7.67	7.64	2.59	5.47	<	2	< 2			153	133
05/08/01	Tue	12.0	<	0.1			7.44	7.42	2.81	5.47	<	2	< 2			153	137
05/09/01	Wed	16.0	<	0.1			7.39	7.52	2.58	4.87	<	2	< 2	247	232	155	134
05/10/01	Thu	10.5	<	0.1			7.67	7.50	2.53							154	134
05/11/01	Fri	11.0	<	0.1			7.42	7.38	2.21	5.58	<	2	< 2			156	138
05/12/01	Sat	11.5	<	0.1			7.57	7.58	2.19	5.37	<	2	< 2			156	140
05/13/01	Sun	11.0	<	0.1			7.42	7.44	2.07	5.17	<	2	< 2			158	142
05/14/01	Mon	11.0	<	0.1			7.34	7.40	1.96	5.68	<	2	< 2			152	138
05/15/01	Tue	11.0	<	0.1			7.43	7.48	1.78	5.27	<	2	< 2			153	145
05/16/01	Wed	13.5	<	0.1			7.62	7.46	1.60	4.06	<	2	< 2	247	232	151	143
05/17/01	Thu	11.0	<	0.1			7.48	7.40	1.16	4.36	<	2	< 2			157	143
05/18/01	Fri	12.5	<	0.1			7.42	7.47	1.06	5.58	<	2	< 2			156	140
05/19/01	Sat	10.0	<	0.1			7.36	7.82	0.96	4.66	<	2	< 2			156	144
05/20/01	Sun	12.0	<	0.1			7.45	7.45	0.72	4.26	<	2	< 2			162	143
05/21/01	Mon	13.0	<	0.1			7.52	7.44	0.87	3.75	<	2	< 2			156	142
05/22/01	Tue	10.5	<	0.1			7.65	7.51	1.21	4.46	<	2	< 2			157	138
05/23/01	Wed	15.0	<	0.1			7.38	7.51	1.84	3.65	<	2	< 2	252	234	154	136
05/24/01	Thu	12.0	<	0.1			7.59	7.48	2.63	3.14	<	2	< 2			154	131
05/25/01	Fri	14.0	<	0.1			7.60	7.45	2.44	3.65	<	2	< 2			157	125
05/26/01	Sat	13.5	<	0.1			7.49	7.90	2.24	2.74	<	2	< 2			165	126
05/27/01	Sun	15.5	<	0.1			7.66	7.58	3.26	2.03	<	2	< 2			172	129
05/28/01	Mon	14.0	<	0.1			7.65	7.56	2.72	6.69	<	2	< 2			176	126
05/29/01	Tue	10.0	<	0.1			7.47	7.64	1.81	2.84	<	2	< 2	254	242	163	104
05/30/01	Wed	15.0	<	0.1			7.63	7.44	1.88	2.13	<	2	< 2			160	88
05/31/01	Thu	13.0	<	0.1			7.62	7.48	4.24	5.78	<	2	< 2			158	90
Permit Max				0.1		2.0		8.5	20			240	23				
Permit Min								6.5									
Permit Ave						1.0			10								
Total		375.0		3.1	0.00	0.000	232.99	232.46	70.34	132.82		58	58	1260	1170	4867	4084
Maximum		16.0		0.1	ERR	ERR	7.68	7.90	4.24	7.20		2	2	260	242	176	145
Minimum		9.0		0.1	ERR	ERR	7.34	7.28	0.72	2.03		2	2	247	230	149	88
Average		12.1		0.1	ERR	ERR	7.52	7.50	2.27	4.58		2	2	252	234	157	132
# Tests		31		31	0	0	31	31	31	29		29	29	5	5	31	31

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT
COMPLIANCE RECORD

2001

Parameter	# Tests	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Compliance, %
Total Plant Inflow; 7.7 MGD; Dry Weather	151	0	0	0	0	0								0	100.0
2-Hour Peak Inflow; 18.5 MGD	151	0	0	0	0	0								0	100.0
COD, 30 Day Ave: 60 mg/L	5	0	0	0	0	0								0	100.0
COD, Max: 300 mg/L	45	0	0	0	0	0								0	100.0
BOD, 30 Day Ave: 30 mg/L	5	0	0	0	0	0								0	100.0
BOD, Max: 45 mg/L	43	0	0	0	0	0								0	100.0
SS, 30 Day Ave: 30 mg/L	5	0	0	0	0	0								0	100.0
SS, Max: 60 mg/L	44	0	0	0	0	0								0	100.0
Settleable Solids, Max: 0.1 mL/L	151	0	0	0	0	0								0	100.0
Turbidity, 30 Day Ave: 10 NTU	5	0	0	0	0	0								0	100.0
Turbidity, Max: 20 NTU	151	0	0	0	0	0								0	100.0
pH, 6.5 to 8.5	151	0	0	0	0	0								0	100.0
Total Coliforms, Max: 240 MPN/100 mL	148	0	0	0	0	0								0	100.0
Total Coliforms, 7-day Median: 23 MPN	147	0	0	0	0	0								0	100.0
Total	1,202	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0

SOUTH TAHOE PUBLIC UTILITY DISTRICT
MEMORANDUM

Date:June 4, 2001

To: Bob Baer, Diane Noble, Terry Powers

From: Greg Schrempp

Topic: Export Line Inspection
****

On May 31 2001, Tim Rieger and I conducted our check of the District's export line from the treatment plant to where the "C" line daylights at Harvey Place at Station 564+04. Several wet spots were checked, however no leaks were found. (I haven't seen it this dry in May in a lot of years.)

SAMPLE LOCATIONS

TAHOE BASIN MONITORING WELLS

Site	Location
ERB	Emergency Retention Basin
CONTROL	North of Post Office
MW02-25, -50	Emergency Retention Basin, S side
MW03-25, -50	Emergency Retention Basin, S side
MW04-25, -50	Emergency Retention Basin, W side
MW07-25, -50	Emergency Retention Basin, N side
MW08-25, -50	Pond #1, SW corner
MW11	S.E. corner of wastewater treatment plant grounds
MW12	South of Emergency Pump Building, for buried sludge
MW13	Pond 2, along Heavenly Valley Creek, for buried sludge

HEAVENLY VALLEY CREEK

HVC-1	At Pioneer Trail
HVC-2	250 ft upstream of Pond #2
HVC-3	25 ft downstream of Johnson Blvd.
HVC-4	Effluent of drain pipe from Lower Shop area
HVC-5	Effluent of drainage pipe along Johnson Blvd, 10 feet upstream of Johnson Blvd.

ALPINE COUNTY MONITORING WELLS

Site	Location
ACMW-01AW	Below main dam at Harvey Place Reservoir
ACMW-01BE	Below auxiliary dam at Harvey Place Reservoir
ACMW-02, N&S	On dam access road at Diamond Valley Road
ACMW-03	Bruns ranch, east side of Highway 88
ACMW-04W	Gansberg ranch, west side of Highway 88
ACMW-05	Dressler ranch
ACMW-06, N&S	Celio ranch, on Diamond Valley Road

ALPINE SOILS

Site	Ranch
S2	Celio
S3	Hall
S4	Gansberg
S5	Gansberg
S6	Neddenriep
S7	Bruns
S8	Dressler

ALPINE GROUNDWATERS

Site	Homeowner
GW-01	Sagues
GW-03	Smith/Springmeyer
GW-04	Celio
GW-05	Neddenriep
GW-07	Gansberg, Jr.
GW-08	Arant
GW-11	Diamond Valley School
GW-14	Sierra Pines Store

ALPINE SURFACEWATERS

Site	Location
SW-01	Carson River, Woodfords
SW-02	Indian Creek, @ HWY 89
SW-03	Indian Creek, @ upper bridge
SW-04	Indian Creek, @ lower bridge
SW-05	Carson River, Paynesville
SW-06	Carson River, Stateline
SW-07	Fredericksberg Ditch, Stateline
SW-08	Irrigation Ditch along Carson River Road
SW-09	Carson River, Dressler Lane
SW-10	Indian Creek, @ Smith-Springmeyer Ranch

TAHOE BASIN MONITORING

Site	Date	ID	Location	Depth msl	Temp C	pH	EC umho	Cl mg/L		COD mg/L	TKN mg/L		NO3-N mg/L	Comment
Buried Sludge Monitoring														
MW11	05/22/01	20010522-34	Sludge Pond	6265.0	9.2	6.62	83	1.0	<	5.0			0.061	
MW12	05/22/01	20010522-35	Sludge Pond	6263.8	9.8	6.55	113	1.9	<	5.0			0.386	
MW13	05/22/01	20010522-36	Sludge Pond	6257.0	8.7	6.60	720	5.7		20.7			4.820	
ERB Monitoring														
CONTROI	05/22/01	20010522-29	At Post Office	6281.0	11.0	6.64	167	7.8	<	5.0			2.470	
MW03-50	05/22/01	20010522-30	Black Bart side of ERB	6268.1	12.0	6.44	340	31.9	<	5.0			6.340	
MW04-50	05/22/01	20010522-31	Hank Monk side of ERB	6268.0	9.8	7.01	75	5.9	<	5.0			0.108	
MW07-50	05/22/01	20010522-32	North side of ERB	6278.1	9.0	6.51	254	24.2	<	5.0			0.617	
Heavenly Valley Creek														
HVC-1	05/08/01	20010508-24	Downstream of Pioneer		10.4	7.14	37	1.4		6.1	0.118		0.016	
HVC-2	05/08/01	20010508-25	250' upstream of Pond #2		14.2	6.98	36	1.5		5.4	0.136	<	0.010	
HVC-3	05/08/01	20010508-26	25' downstream of Johnson Blvd		13.5	7.12	37	1.4	<	5.0	0.118		0.011	
HVC-4	05/08/01	20010508-HVC4	Effluent of drain from Lower Shop a											Trickle
HVC-5	05/08/01	20010508-HVC5	Effluent of drainage pipe along Johi											Dry
Treatment Plant Monitoring														
MW08-25	05/22/01	20010522-33	SW side of Pond #1	6247.1	10.0	6.40	1012	45.7		77.2			0.032	

ALPINE COUNTY MONITORING

Site	Date	ID	Location	Temp C	pH	EC umhos	DO mg/L	Alk mg/L	TDS mg/L	SS mg/L	Turb NTU	Cl mg/L	SO4 mg/L
Alpine Monitoring Wells													
ACMW-01AW	05/15/2001	20010515-06	Main Dam	8.2	6.48	67		29	71		21.6	2.1	2.2
ACMW-01BE	05/15/2001	20010515-07	Secondary Dam	6.0	6.52	70		29	57		5.09	1.8	1.3
ACMW-02N	05/15/2001	20010515-08	Access Gate	12.6	6.51	121		58	76		1.32	2.3	2.4
ACMW-02S	05/15/2001	20010515-09	Access Gate	10.7	6.52	96		41	64		1.5	2.0	1.5
ACMW-03	05/15/2001	20010515-10	HWY 88	9.9	6.19	295		21	188		1.4	49.0	12.1
ACMW-04W	05/15/2001	20010515-11	Gansberg	11.4	6.08	185		50	123		.36	15.0	7.6
ACMW-06N	05/15/2001	20010515-12	Celio	10.9	6.80	717		263	435		16.1	61.5	22.1
ACMW-06S	05/15/2001	20010515-13	Celio	123.0	7.16	7		229	399		.51	70.1	27.5
Groundwaters													
GW-03	05/08/2001	20010508-15	Smith/Springmeyer	16.8	7.36	302		133	226		.2	1.6	25.4
GW-04	05/08/2001	20010508-16	Celio	15.2	7.30	257		120	202		1.31	3.5	11.3
GW-05	05/08/2001	20010508-17	Neddenriep	13.0	6.50	252		64	171		.12	23.2	13.5
GW-07	05/08/2001	20010508-18	Gansberg	12.2	6.54	120		55	99		.1	1.9	2.5
GW-08	05/08/2001	20010508-19	Arant	12.5	6.74	251		49	166		5.98	27.9	9.6
GW-11	05/08/2001	20010508-20	Diamond Val. School	15.9	7.30	147		78	119		.06	0.8	0.8
GW-14	05/08/2001	20010508-21	Sierrra Pines	13.5	6.70	110		54	96		.17	1.3	1.7
Reservoirs													
HPR	05/09/2001	20010509-13	Harvey Place Reservoir	18.5	8.62	474	13.68	114	231	20.00	6.86	60.2	19.5
Surfacewaters: Carson R													
SW-01	05/01/2001	20010501-06	Carson R Woodfords	4.6	6.97	41	10.50	19	41	23.70	7.88	0.7	1.2
SW-05	05/01/2001	20010501-10	Carson R Paynesville	7.5	7.10	45	10.90	20	39	19.90	8.48	0.7	1.3
SW-06	05/01/2001	20010501-11	Carson R Stateline	10.9	6.92	51	10.30	22	39	17.80	8.12	0.9	1.4
SW-08	05/01/2001	20010501-12	Irrigation Ditch	18.5	6.85	118	7.95	52	87	6.78	4.25	1.2	3.2
SW-09	05/01/2001	20010501-13	Carson R Dressler Ln	12.1	6.94	58	10.70	24	51	13.80	8.34	1.4	2.1
Surfacewaters: Indian Cr													
SW-02	05/01/2001	20010501-07	Indian Cr Upper	10.4	6.93	107	9.20	55	84	0.32	1.28	1.1	< 0.5
SW-03	05/01/2001	20010501-08	Indian Cr Mid	14.7	6.59	196	8.20	92	130	1.38	4.78	3.1	2.3
SW-04	05/01/2001	20010501-09	Indian Cr Lower	12.5	6.68	106	8.25	50	91	19.60	7.4	1.8	1.9
SW-10	05/01/2001	20010501-14	Indian Cr at Bruns	13.2	7.07	116	9.50	55	98	9.36	6.58	1.8	1.9

ALPINE COUNTY MONITORING

05/25/01

Site	Date	TotalP mg/L		PO4-P mg/L		TKN mg/L	NH3-N mg/L		NO2-N mg/L		NO3-N mg/L		Total N mg/L
Alpine Monitoring Wells													
ACMW-01AV	05/15/2001	0.061				0.145		<	0.020		0.063		0.228
ACMW-01BE	05/15/2001	0.024				0.107		<	0.010		0.103		0.220
ACMW-02N	05/15/2001	0.016			<	0.100		<	0.010		0.035		0.145
ACMW-02S	05/15/2001	0.013			<	0.100		<	0.010		0.094		0.204
ACMW-03	05/15/2001	0.069				0.207		<	0.010		7.190		7.407
ACMW-04W	05/15/2001	0.019				0.155		<	0.020		2.480		2.655
ACMW-06N	05/15/2001	0.318				0.371		<	0.020	<	0.020		0.411
ACMW-06S	05/15/2001	0.042				0.238		<	0.020		0.042		0.300
Groundwaters													
GW-03	05/08/2001	0.034			<	0.100		<	0.010		0.741		0.851
GW-04	05/08/2001	0.052			<	0.100		<	0.010		0.810		0.920
GW-05	05/08/2001	0.028			<	0.100		<	0.030		3.310		3.440
GW-07	05/08/2001	0.097			<	0.100		<	0.010		1.200		1.310
GW-08	05/08/2001	0.103			<	0.100		<	0.030		5.420		5.550
GW-11	05/08/2001	0.044			<	0.100		<	0.010		0.458		0.568
GW-14	05/08/2001	0.051				0.146		<	0.010		0.467		0.623
Reservoirs													
HPR	05/09/2001	2.390		2.150		22.700	19.000		0.112		0.468		23.280
Surfacewaters: Carson R													
SW-01	05/01/2001	0.053	<	0.010		0.423		<	0.010		0.018		0.451
SW-05	05/01/2001	0.052	<	0.010		0.310		<	0.010		0.015		0.335
SW-06	05/01/2001	0.051	<	0.010		0.233		<	0.010		0.012		0.255
SW-08	05/01/2001	0.038		0.028		0.315		<	0.010		0.015		0.340
SW-09	05/01/2001	0.052	<	0.010		0.544		<	0.010		0.014		0.568
Surfacewaters: Indian Cr													
SW-02	05/01/2001	0.016		0.049		0.284		<	0.010	<	0.010		0.304
SW-03	05/01/2001	0.091	<	0.010		0.280		<	0.010		0.029		0.319
SW-04	05/01/2001	0.140		0.060		0.766		<	0.010	<	0.010		0.786
SW-10	05/01/2001	0.130		0.047		0.744		<	0.010	<	0.010		0.764

ALPINE COUNTY MONITORING

Site	Date	COD mg/L	BOD mg/L	O & G mg/L	Boron mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	SAR	Exch Na %	Hardness mg/L	Water Level MSL or Ft
Alpine Monitoring Wells													
ACMW-01AV	05/15/2001	11										25.8	5482.5
ACMW-01BE	05/15/2001	11										24.3	5493.1
ACMW-02N	05/15/2001	13										43.9	5460.0
ACMW-02S	05/15/2001	9										34.5	5462.3
ACMW-03	05/15/2001	12										55.8	5038.2
ACMW-04W	05/15/2001	7										44.9	4907.1
ACMW-06N	05/15/2001	13										258	5215.1
ACMW-06S	05/15/2001	10										275	5203.9
Groundwaters													
GW-03	05/08/2001	< 5										126	
GW-04	05/08/2001	< 5										103	
GW-05	05/08/2001	< 5										85.1	
GW-07	05/08/2001	< 5										47.4	
GW-08	05/08/2001	< 5										46.6	
GW-11	05/08/2001	< 5										57.8	
GW-14	05/08/2001	< 5										34.3	
Reservoirs													
HPR	05/09/2001	57	> 15		0.25	15.4	3.3	36.7	9.0	2.21	55.7		56.0
Surfacewaters: Carson R													
SW-01	05/01/2001	24	1		< 0.01	3.5	1.3	2.1	0.6	0.24	23.5		
SW-05	05/01/2001	23	1		< 0.01	4.8	1.3	2.4	0.9	0.25	21.7		
SW-06	05/01/2001	21	1		< 0.01	4.8	1.4	2.5	1.1	0.26	22.2		
SW-08	05/01/2001	20	1		0.01	9.3	2.4	8.7	1.6	0.66	35.1		
SW-09	05/01/2001	20	1		0.01	5.5	1.6	3.2	1.3	0.31	23.9		
Surfacewaters: Indian Cr													
SW-02	05/01/2001	20	1		< 0.01	10.5	2.5	7.7	1.3	0.55	30.3		
SW-03	05/01/2001	17	1		0.03	17.3	4.5	12.5	1.8	0.69	29.9		
SW-04	05/01/2001	39	2		0.01	9.8	3.0	5.8	2.7	0.41	23.7		
SW-10	05/01/2001	38	2		0.01	11.8	3.7	6.1	3.0	0.40	21.6		

ALPINE COUNTY
BACTERIOLOGICAL MONITORING

Alpine Monitoring Wells

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
ACMW-01AV	05/15/2001		1.1	<	1.1	
ACMW-01BE	05/15/2001	<	1.1	<	1.1	
ACMW-02N	05/15/2001	<	1.1	<	1.1	
ACMW-02S	05/15/2001	<	1.1	<	1.1	
ACMW-03	05/15/2001	<	1.1	<	1.1	
ACMW-04W	05/15/2001	<	1.1	<	1.1	
ACMW-06N	05/15/2001	<	1.1	<	1.1	
ACMW-06S	05/15/2001	<	1.1	<	1.1	

Groundwaters

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
GW-03	05/08/2001	<	1.1	<	1.1	
GW-04	05/08/2001	<	1.1	<	1.1	
GW-05	05/08/2001	<	1.1	<	1.1	
GW-07	05/08/2001		2.2	<	1.1	
GW-08	05/08/2001	<	1.1	<	1.1	
GW-11	05/08/2001	<	1.1	<	1.1	
GW-14	05/08/2001	<	1.1	<	1.1	

Reservoirs

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
HPR	05/09/2001	1600	50	500

Surfacewaters: Carson R

Site	Date	Total Coliform MPN/100mL		Fecal Coliform MPN/100mL		Fecal Streptococci MPN/100mLL
SW-01	05/01/2001	23	<	3	<	30
SW-05	05/01/2001	43		43		40
SW-06	05/01/2001	230		23		230
SW-08	05/01/2001	2400		240		930
SW-09	05/01/2001	230		93		40

Surfacewaters: Indian Cr

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-02	05/01/2001	43	9	90
SW-03	05/01/2001	150	43	150
SW-04	05/01/2001	43	15	430
SW-10	05/01/2001	4600	460	430

INDIAN CREEK RESERVOIR PROFILING

Date	Time	Depth ft	Temp C	pH	EC umhos	DO mg/L	Total P Unfilter mg/L	Total P 0.45 um mg/L	PO4-P mg/L	TKN mg/L	Total NH3-N mg/L	Unionized NH3-N mg/L	NO2-N mg/L	NO3-N mg/L	Total N mg/L
Site: **ICR-1**															
05/09/2001	10:38	0.5	16.0	7.54	108.0	7.53	0.022		0.016	0.553	0.044	< 0.010	< 0.010	< 0.010	0.573
05/09/2001	11:00	18.0	12.2	7.65	107.0	5.42	0.035		0.015	0.613	< 0.020	< 0.010	< 0.010	< 0.010	0.633
05/09/2001	10:50	33.0	10.0	7.18	112.0	0.60	0.051	<	0.010	0.979	0.116	< 0.010	< 0.010	< 0.010	0.999

INDIAN CREEK RESERVOIR PROFILING

Date	Depth ft	Chloro-phyll a mg/m3	Cl mg/L	TDS mg/L	SS mg/L	Turb NTU	Alka-linity mg/L	COD mg/L	BOD mg/L	Boron mg/L	SO4 mg/L	Fe ug/L	Mn ug/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L
Site: **ICR-1**																	
05/09/2001	0.5	2.8	1.37	70	1.20	1.85	50.3	25.9	0.94	0.025	4.31	201	< 20				
05/09/2001	18.0	5.1	1.37	80	4.44	4.48	50.2	24.6	1.38	0.030	4.32	323	< 20				
05/09/2001	33.0	5.0	1.39	73	5.26	5.95	52.3	26.0	0.66	0.018	4.47	422	41.1				

ALPINE COUNTY DITCH MONITORING

Date	ID	Location	Temp C	pH	EC umhos	SS mg/L	Turb NTU	Cl mg/L
Site: D-3		Stream: Carson R. / Indian Cr.						
05/01/01	20010501-16	Dressler @ ICR Inlet	11.3	7.09	46	3.26	5.77	0.7
05/08/01	20010508-23	Dressler @ ICR Inlet	16.9	7.71	47	2.12	3.22	0.6
Site: SW-02		Stream: Indian Creek						
05/01/01	20010501-07	Indian Cr Upper	10.4	6.93	107	0.32	1.28	1.1

ALPINE COUNTY DITCH MONITORING

Date	ID	Location	Total P mg/L	PO4-P mg/L	TKN mg/L	NH3-N mg/L	NO2-N mg/L	NO3-N mg/L
Site: D-3		Stream: Carson R. / Indian Cr.						
05/01/01	20010501-16	Dressler @ ICR Inlet	0.022	< 0.010	0.298		< 0.010	< 0.010
05/08/01	20010508-23	Dressler @ ICR Inlet	0.017	< 0.010	0.321		< 0.010	< 0.010
Site: SW-02		Stream: Indian Creek						
05/01/01	20010501-07	Indian Cr Upper	0.016	0.049	0.284		< 0.010	< 0.010

ALPINE COUNTY
BLUE GREEN ALGAE

ID#	Site	Location	Date	Colonies #	Colony # Cells	Filaments #	Filaments # Cells	Filaments #	Filament Length	Single Cells, #
May, 2001										
20010501-06	SW-01	Carson R Woodfords	05/01/01	0	0	0	0	0	0	0
20010501-07	SW-02	Indian Cr Upper	05/01/01	0	0	0	0	0	0	0
20010501-08	SW-03	Indian Cr Mid	05/01/01	0	0	0	0	0	0	0
20010501-09	SW-04	Indian Cr Lower	05/01/01	0	0	0	0	0	0	0
20010501-10	SW-05	Carson R Paynesville	05/01/01	0	0	0	0	0	0	0
20010501-11	SW-06	Carson R Stateline	05/01/01	0	0	0	0	0	0	0
20010501-12	SW-08	Irrigation Ditch	05/01/01	0	0	0	0	0	0	0
20010501-13	SW-09	Carson R Dressler Ln	05/01/01	0	0	0	0	0	0	0
20010501-14	SW-10	Indian Cr at Bruns	05/01/01	0	0	0	0	0	0	0

ALPINE COUNTY SOILS

06/13/01

Site	Date	Location	Type	pH	EC mmho	%Sat	TKN mg/Kg	NO3-N mg/L	Total P mg/Kg	Exch P mg/L
S2a	12/01/00	Celio	KT	8.19	2.40	55.6	1,760	0.8	850	3.7
S3a	12/01/00	Hall	SMB	5.97	0.33	34.0	1,070	2.3	1,080	16.9
S4a	12/01/00	Gansberg	DI	6.64	2.27	40.7	1,690	1.0	590	24.2
S5a	12/01/00	Gansberg	HRB	5.98	0.27	31.5	970	4.8	810	7.9
S6a	12/01/00	Neddenriep	DWB	5.31	0.18	37.9	862	10.6	620	31.8
S7a	12/01/00	Bruns	JaC	6.12	0.11	37.4	1,390	1.5	820	3.6
S8a	12/01/00	Dressler	SOD	6.41	0.13	17.4	249	0.8	300	9.4

Site	Date	Cl mg/L	SO4 mg/Kg	CEC meq/100g	Cu mg/Kg		Mo mg/Kg	Ca mg/L	Mg mg/L	Na mg/L	SAR		% Na
S2a	12/01/00		74	35.7	22.0	<	1.0	68.6	61.0	328.0	6.94		8.1
S3a	12/01/00		4	17.9	29.0	<	1.0	18.1	6.0	31.9	1.66		1.1
S4a	12/01/00		26	20.4	43.0	<	1.0	85.7	24.8	199.0	4.87		5.5
S5a	12/01/00		2	15.8	33.0	<	1.0	14.9	3.0	28.3	1.75		1.3
S6a	12/01/00		13	17.0	44.0	<	1.0	5.8	1.3	18.8	1.83		1.4
S7a	12/01/00		3	16.9	46.0	<	1.0	5.4	1.3	10.5	1.05	<	1.0
S8a	12/01/00		5	13.3	19.0	<	1.0	4.5	2.2	13.5	1.30	<	1.0

ALPINE COUNTY SOILS

06/13/01

Site	Date	Location	Type	pH	EC mmho	%Sat	TKN mg/Kg	NO3-N mg/L	Total P mg/Kg	Exch P mg/L
S2a	03/09/01	Celio	KT	8.35	1.66	61.5	1,870	1.1	820	3.9
S3a	03/09/01	Hall	SMB	6.15	0.32	31.6	665	1.9	960	12.6
S4a	03/09/01	Gansberg	DI	6.39	0.90	33.7	998	1.7	560	9.5
S5a	03/09/01	Gansberg	HRB	5.88	0.42	34.4	967	7.0	900	10.9
S6a	03/09/01	Neddenriep	DWB	7.01	0.42	40.5	1,300	5.2	880	
S7a	03/09/01	Bruns	JaC	5.84	0.32	38.7	1,300	3.7	880	8.5
S8a	03/09/01	Dressler	SOD	6.44	0.12	16.5	198	1.0	340	7.0

Site	Date	Cl mg/L	SO4 mg/Kg	CEC meq/100g	Cu mg/Kg	Mo mg/Kg	Ca mg/L	Mg mg/L	Na mg/L	SAR	% Na
S2a	03/09/01		44	31.0	20.0	2.0	55.4	33.8	242.0	6.32	7.3
S3a	03/09/01	<	1	15.3	28.0	3.0	19.8	6.5	30.4	1.52 <	1.0
S4a	03/09/01		2	17.1	46.0	1.0	52.4	11.3	115.0	3.76	4.0
S5a	03/09/01	<	1	14.6	37.0 <	1.0	27.2	5.3	41.1	1.89	1.5
S6a	03/09/01	<	1	16.2	45.0 <	1.0	20.2	4.0	62.8	3.34	3.5
S7a	03/09/01	<	1	14.7	51.0	1.0	26.2	5.8	15.3	0.71 <	1.0
S8a	03/09/01	<	1	10.2	25.0	3.0	5.3	1.9	12.3	1.17 <	1.0

LRWQCB - Page 2

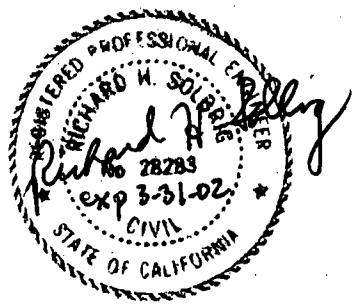
Site	Location	TDS		Cl		TKN		NO_3-N		Total N		Total P		SO_4		Boron		Exch Na %	
		Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence
SW-01	Carson River, Woodfords	55		1.0	✓	0.13	✓	0.02		0.15	✓	0.02		2.0		0.02	✓	20	
SW-06	Carson River, Stateline	70		2.5		0.22	✓	0.03		0.25	✓	0.03		2.0		0.02		20	✓
SW-02	Indian Creek, Upper	100	✓	6.0						0.30	✓	0.03		8.0		0.25		30	
SW-03	Indian Creek, Mid	100	✓	6.0						0.30	✓	0.03	✓	8.0		0.25		30	
SW-04	Indian Creek, Lower	100		6.0						0.30	✓	0.03	✓	8.0		0.25		30	
SW-10	Indian Creek, Stateline	100		6.0						0.30		0.03		8.0		0.25		30	

The Alpine County soils and blue green algae tests have not yet been completed. The results will be sent to you as soon as they are available.

Certification

I hereby certify that the enclosed monitoring report was prepared under my direct supervision and that I am a duly Registered Engineer under the laws of the State of California.

Sincerely,



Richard Solbrig,
Assistant Manager/Engineer

Enclosures:

1.

June Monthly Report	Pages
Wastewater Treatment plant	2
Permit Compliance Record	1
Export pipeline inspection	1
Sample site locations	2
Monitoring wells (ERB) and Heavenly Valley Creek (HVC) - Tahoe Basin	1
Alpine County Surfacewaters, Groundwaters, and HPR	8
Alpine County Blue green algae:	
Total number of pages:	15

cc: Calif. Dept. of Health Services, ODW - Jess Morehouse
El Dorado Co. Dept. of Environmental Health - Virginia Huber
Nevada Division of Environmental Protection - Wendel McCurry
Alpine County Health Department - Dr. Richard Botto
Alpine County Health Department - Jim Goodloe
Alpine County Board of Supervisors
Desert Research Group (Alpine County Consultants) - David McGraw
STPUD Board of Directors
STPUD General Manager / District Engineer - Robert G. Baer
STPUD Manager of Operations - Ross Johnson
STPUD Operations Chief Plant Operator - Jeff Lee
STPUD Laboratory Director - Terry Powers
STPUD Manager of Alpine County Operations - Hal Bird

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SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

JUNE 2001

Date	Day	FLOW MGD Inf	2-Hr Peak Inf	Eff	Pond Return	Pond Inf	PRECIP Inch	Type	D.O. mg/L Fin	COD mg/L Raw	COD Fin	BOD mg/L Raw	BOD Fin	SS mg/L Raw	SS Fin
06/01/01	Fri	4.08	5.7	4.27					4.81	425					
06/02/01	Sat	4.47	6.4	3.94					5.86	452	36.2	205	5.2	164	2.2
06/03/01	Sun	4.59	7.0	4.76					5.08	429					
06/04/01	Mon	4.11	6.0	3.88					5.02	426					
06/05/01	Tue	3.98	6.2	4.21					5.28	384					
06/06/01	Wed	4.08	5.6	3.98					6.05	397	33.6	160	4.3	126	1.2
06/07/01	Thu	4.06	5.6	4.03					4.55	367					
06/08/01	Fri	4.09	5.6	3.72					4.85	380					
06/09/01	Sat	4.63	6.8	4.69					5.58	408	28.1	189		176	1.1
06/10/01	Sun	4.48	6.8	4.24					5.43	451					
06/11/01	Mon	4.32	6.0	4.47					4.79	396					
06/12/01	Tue	4.02	6.0	4.01					5.47	438	33.3	189	3.8	176	1.2
06/13/01	Wed	3.96	6.2	3.40					5.73	595					
06/14/01	Thu	4.09	5.8	4.28					5.28	429					
06/15/01	Fri	4.13	6.4	4.05					5.44	424					
06/16/01	Sat	4.57	7.0	4.18					5.49	446	35.0	189	4.9	157	1.2
06/17/01	Sun	4.48	6.6	4.44					5.14	408					
06/18/01	Mon	4.30	6.3	4.42					5.24	433					
06/19/01	Tue	4.21	5.7	3.47					5.86	352					
06/20/01	Wed	4.38	5.8	4.43					5.10	526	36.9	167	5.6	255	1.4
06/21/01	Thu	4.43	5.6	4.26					4.86	414					
06/22/01	Fri	4.58	6.1	4.32					5.21	446					
06/23/01	Sat	5.03	7.6	4.15					5.11	484	39.4	188	7.3	178	2.5
06/24/01	Sun	4.77	7.8	4.63					5.20	445					
06/25/01	Mon	4.50	6.6	4.38					5.50	423					
06/26/01	Tue	4.37	6.4	4.50					4.94	426					
06/27/01	Wed	4.34	6.6	4.35			0.02	Rain	5.91	492	35.8	189	4.6	199	1.6
06/28/01	Thu	4.54	6.5	3.97					5.60	373					
06/29/01	Fri	4.47	6.4	4.43					5.38	426					
06/30/01	Sat	4.97	7.2	4.71					5.66	476	34.2			181	1.6
Permit Max		7.7									300		45		60
Permit Min															
Permit Ave											60		30		30
Total		131.03	190.3	126.57			0.02		159.42	12971	312.5	1476	35.6	1612	14.1
Maximum		5.03	7.8	4.76			0.02		6.05	595	39.4	205	7.3	255	2.5
Minimum		3.96	5.6	3.40			0.02		4.55	352	28.1	160	3.8	126	1.1
Average		4.37	6.3	4.22			0.02		5.31	432	34.7	185	5.1	179	1.6
# Tests		30	30	30	0	0	1		30	30	9	8	7	9	9

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

JUNE 2001

Date	Day	SETTLEABLE SOLIDS mL/L Raw		SETTLEABLE SOLIDS mL/L Fin	MBAS mg/L Raw	MBAS mg/L Fin	pH Units Raw	pH Units Fin	TURBIDITY NTU Fin	Cl2 mg/L Fin	FINAL COLIFORMS MPN/100 mL Total		FINAL COLIFORMS MPN/100 mL 7day- Median		TDS mg/L Raw	TDS mg/L Fin	ALKALINITY mg/L Raw	ALKALINITY mg/L Fin
06/01/01	Fri	12.0	<	0.1			7.53	7.32	3.30	5.58		2	<	2			158	107
06/02/01	Sat	14.0	<	0.1			7.47	7.72	2.22	7.81	<	2	<	2			166	120
06/03/01	Sun	12.0	<	0.1			7.56	7.47	2.06	3.35	<	2	<	2			172	128
06/04/01	Mon	12.0	<	0.1			7.65	7.61	1.28	4.56	<	2	<	2			161	120
06/05/01	Tue	11.0	<	0.1			7.50	7.55	1.26	3.35	<	2	<	2			163	122
06/06/01	Wed	11.0	<	0.1			7.59	7.62	1.26	3.14	<	2	<	2	232	231	162	118
06/07/01	Thu	10.0	<	0.1			7.44	7.51	1.12	2.43	<	2	<	2			161	112
06/08/01	Fri	11.0	<	0.1			7.48	7.44	1.28	2.94	<	2	<	2			164	113
06/09/01	Sat	11.5	<	0.1			7.53	7.60	1.22	3.35	<	2	<	2			171	126
06/10/01	Sun	14.0	<	0.1			7.45	7.44	2.69	4.06	<	2	<	2			171	137
06/11/01	Mon	12.0	<	0.1			7.62	7.50	1.60	9.63	<	2	<	2			167	136
06/12/01	Tue	12.5	<	0.1			7.48	7.64	1.21	5.47	<	2	<	2			166	131
06/13/01	Wed	17.0	<	0.1			7.43	7.50	1.26	4.56	<	2	<	2			164	128
06/14/01	Thu	12.0	<	0.1			7.72	7.63	1.61	4.66	<	2	<	2			165	131
06/15/01	Fri	14.5	<	0.1			7.59	7.68	2.10	5.37	<	2	<	2			159	137
06/16/01	Sat	13.0	<	0.1			7.53	7.83	2.12	3.24	<	2	<	2			171	140
06/17/01	Sun	12.5	<	0.1			7.48	7.56	2.54	3.14	<	2	<	2			175	144
06/18/01	Mon	14.0	<	0.1			7.46	7.48	2.26	6.39	<	2	<	2			170	137
06/19/01	Tue	11.5					7.50			4.46	<	2	<	2			168	
06/20/01	Wed	15.0	<	0.1			7.63	7.54	2.74	5.58	<	2	<	2	248	236	167	138
06/21/01	Thu	12.0	<	0.1			7.54	7.41	3.00	5.17	<	2	<	2			167	144
06/22/01	Fri	13.5	<	0.1			7.55	7.60	2.82	4.66	<	2	<	2			165	146
06/23/01	Sat	15.0	<	0.1			7.54	7.84	3.85	5.58	<	2	<	2			174	148
06/24/01	Sun	14.0	<	0.1			7.48	7.46	4.50	3.65	<	2	<	2			178	152
06/25/01	Mon	11.0	<	0.1			7.52	7.56	4.08	4.06	<	2	<	2			171	152
06/26/01	Tue	11.0	<	0.1			7.38	7.43	3.29	6.08	<	2	<	2			168	142
06/27/01	Wed	20.0	<	0.1			7.55	7.56	2.42	5.68	<	2	<	2	257	230	169	139
06/28/01	Thu	13.0	<	0.1			7.42	7.34	2.33	7.30	<	2	<	2			165	140
06/29/01	Fri	12.5	<	0.1			7.51	7.41	1.98	4.56	<	2	<	2			168	136
06/30/01	Sat	13.5	<	0.1			7.46	7.59	2.53	4.77	<	2	<	2			172	142
Permit Max				0.1		2.0		8.5	20			240		23				
Permit Min								6.5										
Permit Ave						1.0			10									
Total		388.0		2.9	0.00	0.000	225.59	218.84	65.93	144.58		60		60	737	697	5018	3866
Maximum		20.0		0.1	ERR	ERR	7.72	7.84	4.50	9.63		2		2	257	236	178	152
Minimum		10.0		0.1	ERR	ERR	7.38	7.32	1.12	2.43		2		2	232	230	158	107
Average		12.9		0.1	ERR	ERR	7.52	7.55	2.27	4.82		2		2	246	232	167	133
# Tests		30		29	0	0	30	29	29	30		30		30	3	3	30	29

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT
COMPLIANCE RECORD

2001

Parameter	# Tests	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Compliance, %
Total Plant Inflow; 7.7 MGD; Dry Weather	181	0	0	0	0	0	0							0	100.0
2-Hour Peak Inflow; 18.5 MGD	181	0	0	0	0	0	0							0	100.0
COD, 30 Day Ave: 60 mg/L	6	0	0	0	0	0	0							0	100.0
COD, Max: 300 mg/L	54	0	0	0	0	0	0							0	100.0
BOD, 30 Day Ave: 30 mg/L	6	0	0	0	0	0	0							0	100.0
BOD, Max: 45 mg/L	50	0	0	0	0	0	0							0	100.0
SS, 30 Day Ave: 30 mg/L	6	0	0	0	0	0	0							0	100.0
SS, Max: 60 mg/L	53	0	0	0	0	0	0							0	100.0
Settleable Solids, Max: 0.1 mL/L	180	0	0	0	0	0	0							0	100.0
Turbidity, 30 Day Ave: 10 NTU	6	0	0	0	0	0	0							0	100.0
Turbidity, Max: 20 NTU	180	0	0	0	0	0	0							0	100.0
pH, 6.5 to 8.5	180	0	0	0	0	0	0							0	100.0
Total Coliforms, Max: 240 MPN/100 mL	178	0	0	0	0	0	0							0	100.0
Total Coliforms, 7-day Median: 23 MPN	177	0	0	0	0	0	0							0	100.0
Total	1,438	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0

SOUTH TAHOE
PUBLIC UTILITY DISTRICT
MEMORANDUM

Date: June 26, 2001

To: Bob Baer, Lisa Coyner

From: David Johnson

Topic: Export Line Check

****

On June 26, 2001, Greg Schrempp and I conducted our check of the District's export line from the treatment plant to station 564+06 near the Harvey Place reservoir.
No damage to the pipe was found.

CC Terry Powers

SAMPLE LOCATIONS

TAHOE BASIN MONITORING WELLS

Site	Location
ERB	Emergency Retention Basin
CONTROL	North of Post Office
MW02-25, -50	Emergency Retention Basin, S side
MW03-25, -50	Emergency Retention Basin, S side
MW04-25, -50	Emergency Retention Basin, W side
MW07-25, -50	Emergency Retention Basin, N side
MW08-25, -50	Pond #1, SW corner
MW11	S.E. corner of wastewater treatment plant grounds
MW12	South of Emergency Pump Building, for buried sludge
MW13	Pond 2, along Heavenly Valley Creek, for buried sludge

HEAVENLY VALLEY CREEK

HVC-1	At Pioneer Trail
HVC-2	250 ft upstream of Pond #2
HVC-3	25 ft downstream of Johnson Blvd.
HVC-4	Effluent of drain pipe from Lower Shop area
HVC-5	Effluent of drainage pipe along Johnson Blvd, 10 feet upstream of Johnson Blvd.

ALPINE COUNTY MONITORING WELLS

Site	Location
ACMW-01AW	Below main dam at Harvey Place Reservoir
ACMW-01BE	Below auxiliary dam at Harvey Place Reservoir
ACMW-02, N&S	On dam access road at Diamond Valley Road
ACMW-03	Bruns ranch, east side of Highway 88
ACMW-04W	Gansberg ranch, west side of Highway 88
ACMW-05	Dressler ranch
ACMW-06, N&S	Celio ranch, on Diamond Valley Road

ALPINE SOILS

Site	Ranch
S2	Celio
S3	Hall
S4	Gansberg
S5	Gansberg
S6	Neddenriep
S7	Bruns
S8	Dressler

ALPINE GROUNDWATERS

Site	Homeowner
GW-01	Sagues
GW-03	Smith/Springmeyer
GW-04	Celio
GW-05	Neddenriep
GW-07	Gansberg, Jr.
GW-08	Arant
GW-11	Diamond Valley School
GW-14	Sierra Pines Store

ALPINE SURFACEWATERS

Site	Location
SW-01	Carson River, Woodfords
SW-02	Indian Creek, @ HWY 89
SW-03	Indian Creek, @ upper bridge
SW-04	Indian Creek, @ lower bridge
SW-05	Carson River, Paynesville
SW-06	Carson River, Stateline
SW-07	Fredericksberg Ditch, Stateline
SW-08	Irrigation Ditch along Carson River Road
SW-09	Carson River, Dressler Lane
SW-10	Indian Creek, @ Smith-Springmeyer Ranch

TAHOE BASIN MONITORING

Site	Date	ID	Location	Depth msl	Temp C	pH	EC umho	Cl mg/L		COD mg/L	TKN mg/L	NO3-N mg/L	Comment
Buried Sludge Monitoring													
MW11	06/26/01	20010626-14	Sludge Pond	6264.7	9.0	6.61	89	121.0	<	5.0		0.066	
MW12	06/26/01	20010626-15	Sludge Pond	6262.8	9.2	6.14	111	1.8	<	5.0		0.437	
MW13	06/26/01	20010626-16	Sludge Pond	6255.9	8.0	6.75	754	4.0		15.9		5.820	
ERB Monitoring													
CONTROl	06/26/01	20010626-09	At Post Office	6280.8	10.0	6.92	176	8.1	<	5.0		2.380	
MW03-50	06/26/01	20010626-10	Black Bart side of ERB	6267.9	12.0	6.58	360	33.8	<	5.0		7.200	
MW04-50	06/26/01	20010626-11	Hank Monk side of ERB	6267.5	10.1	6.24	78	5.8	<	5.0		0.061	
MW07-50	06/26/01	20010626-12	North side of ERB	6277.9	8.1	6.53	254	24.3	<	5.0		0.595	
Heavenly Valley Creek													
HVC-1	06/26/01	20010626-18	Downstream of Pioneer		10.0	6.97	47	1.3	<	5.0	0.197	0.029	Low flow
HVC-2	06/26/01	20010626-HVC2	250' upstream of Pond #2										Dry
HVC-3	06/26/01	20010626-HVC3	25' downstream of Johnson Blvd										Dry
HVC-4	06/26/01	20010626-HVC4	Effluent of drain from Lower Shop a										Dry
HVC-5	06/26/01	20010626-HVC5	Effluent of drainage pipe along Johı										Dry
Treatment Plant Monitoring													
MW08-25	06/26/01	20010626-13	SW side of Pond #1	6246.0	9.5	6.42	1053	45.5		65.9		0.034	

ALPINE COUNTY MONITORING

Site	Date	ID	Location	Temp C	pH	EC umhos	DO mg/L	Alk mg/L	TDS mg/L	SS mg/L	Turb NTU	Cl mg/L	SO4 mg/L
Alpine Monitoring Wells													
ACMW-01AW	06/19/2001	20010619-15	Main Dam	10.5	6.75	71		30	64		7.06	1.9	2.2
ACMW-01BE	06/19/2001	20010619-16	Secondary Dam	13.3	6.63	80		38	63		2.65	1.5	1.3
ACMW-02N	06/19/2001	20010619-17	Access Gate	12.8	6.70	122		58	79		1.04	2.6	2.6
ACMW-02S	06/19/2001	20010619-18	Access Gate	13.0	6.55	86		42	60		1.21	1.3	1.7
ACMW-03	06/19/2001	20010619-19	HWY 88	13.0	6.17	178		41	107		1.76	15.5	12.2
ACMW-04W	06/19/2001	20010619-20	Gansberg	12.3	6.18	192		47	125		.21	19.1	7.7
ACMW-06N	06/19/2001	20010619-21	Celio	11.8	6.88	715		260	426		18.5	62.2	23.0
ACMW-06S	06/19/2001	20010619-22	Celio	13.6	6.85	736		261	449		.34	73.6	32.3
Groundwaters													
GW-03	06/11/2001	20010611-09	Smith/Springmeyer	17.0	7.04	312		130	269		.03	1.6	26.1
GW-04	06/11/2001	20010611-10	Celio	15.6	7.06	266		119	195		.48	3.5	11.6
GW-05	06/11/2001	20010611-11	Neddenriep	15.2	6.73	257		62	166		.11	23.1	13.1
GW-07	06/11/2001	20010611-12	Gansberg	13.0	7.15	124		53	91		.08	1.8	2.6
GW-08	06/11/2001	20010611-13	Arant	14.5	6.41	255		47	157		4.84	28.0	9.5
GW-11	06/11/2001	20010611-14	Diamond Val. School	16.1	6.84	168		75	111		.02	0.8	0.8
GW-14	06/11/2001	20010611-15	Sierrra Pines	13.7	6.98	113		53	88		.02	1.3	1.8
Irrigation Waters													
SW-07	06/05/2001	20010605-16	Fredericksburg Ditch	19.0	8.15	192	11.60	74	131	2.72	3.15	10.6	5.0
SW-07	06/19/2001	20010619-31	Fredericksburg Ditch	14.2	7.16	218			147			16.3	6.9
SW-08	06/05/2001	20010605-17	Irrigation Ditch	19.0	7.42	112	6.50	53	87	1.46	1.06	1.3	3.5
Reservoirs													
HPR	06/05/2001	20010605-21	Harvey Place Reservoir	18.0	8.55	471	11.20	108	239	14.80	7.92	60.4	19.7
Surfacewaters: Carson R													
SW-01	06/05/2001	20010605-10	Carson R Woodfords	10.2	7.43	58	9.00	27	48	3.78	1.49	1.1	1.5
SW-05	06/05/2001	20010605-14	Carson R Paynesville	14.8	7.27	63	10.60	30	48	3.12	1.63	1.0	1.6
SW-05	06/11/2001	20010611-17	Carson R Paynesville	17.0	7.83	72	8.43		50			1.2	1.9
SW-05	06/19/2001	20010619-30	Carson R Paynesville	13.6	7.70	74			54			1.2	2.0
SW-05	06/27/2001	20010627-20	Carson R Paynesville	18.0	7.40	85			61			1.4	2.2
SW-06	06/05/2001	20010605-15	Carson R Stateline	14.7	7.18	67	10.20	30	57	4.60	2.17	1.7	1.7

ALPINE COUNTY MONITORING

Site	Date	ID	Location	Temp C	pH	EC umhos	DO mg/L	Alk mg/L	TDS mg/L	SS mg/L	Turb NTU	Cl mg/L	SO4 mg/L
Surfacewaters: Indian Cr													
SW-02	06/05/2001	20010605-11	Indian Cr Upper	13.0	7.13	130	7.20	67	101	1.76	2.6	1.5	< 0.5
SW-03	06/05/2001	20010605-12	Indian Cr Mid	14.1	7.64	131	9.60	65	109	1.08	2.5	2.0	1.2
SW-04	06/05/2001	20010605-13	Indian Cr Lower	13.0	7.55	119	8.80	60	87	5.30	3.12	1.2	0.9

ALPINE COUNTY MONITORING

07/11/01

Site	Date	TotalP mg/L	PO4-P mg/L	TKN mg/L	NH3-N mg/L	NO2-N mg/L	NO3-N mg/L	Total N mg/L
Alpine Monitoring Wells								
ACMW-01AV	06/19/2001					< 0.020	0.084	0.104
ACMW-01BE	06/19/2001					< 0.010	0.284	0.294
ACMW-02N	06/19/2001					< 0.010	0.037	0.047
ACMW-02S	06/19/2001					< 0.010	0.019	0.029
ACMW-03	06/19/2001					< 0.040	1.790	1.830
ACMW-04W	06/19/2001					< 0.020	2.200	2.220
ACMW-06N	06/19/2001					< 0.010	< 0.010	0.020
ACMW-06S	06/19/2001					< 0.010	0.015	0.025
Groundwaters								
GW-03	06/11/2001					< 0.010	0.718	0.728
GW-04	06/11/2001					< 0.010	0.887	0.897
GW-05	06/11/2001					< 0.030	3.200	3.230
GW-07	06/11/2001					< 0.010	1.080	1.090
GW-08	06/11/2001					< 0.030	5.510	5.540
GW-11	06/11/2001					< 0.010	0.464	0.474
GW-14	06/11/2001					< 0.010	0.479	0.489
Irrigation Waters								
SW-07	06/05/2001	0.066	< 0.010	0.434		< 0.010	0.449	0.893
SW-07	06/19/2001	0.144	0.031	0.622		0.032	0.845	1.499
SW-08	06/05/2001	0.020	0.021	0.195		< 0.010	0.010	0.215
Reservoirs								
HPR	06/05/2001	2.440	2.450	18.700	14.400	0.402	0.673	19.775
Surfacewaters: Carson R								
SW-01	06/05/2001	0.014	< 0.010	0.147		< 0.010	0.014	0.171
SW-05	06/05/2001	0.018	< 0.010	0.104		< 0.010	< 0.010	0.124
SW-05	06/11/2001	0.018	< 0.010	0.313		< 0.010	< 0.010	0.333
SW-05	06/19/2001	0.028	< 0.010	< 0.100		< 0.010	0.014	0.124
SW-05	06/27/2001	0.019	< 0.010	0.139		< 0.010	0.016	0.165
SW-06	06/05/2001	0.025	< 0.010	0.404		< 0.010	0.011	0.425

ALPINE COUNTY MONITORING

07/11/01

Site	Date	TotalP mg/L	PO4-P mg/L	TKN mg/L	NH3-N mg/L	NO2-N mg/L	NO3-N mg/L	Total N mg/L
Surfacewaters: Indian Cr								
SW-02	06/05/2001	0.028	< 0.010	0.319		< 0.010	< 0.010	0.339
SW-03	06/05/2001	0.068	< 0.010	0.459		< 0.010	< 0.010	0.479
SW-04	06/05/2001	0.060	0.024	0.373		< 0.010	< 0.010	0.393

ALPINE COUNTY MONITORING

Site	Date	COD mg/L	BOD mg/L	O & G mg/L	Boron mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	SAR	Exch Na %	Hardness mg/L	Water Level MSL or Ft
Alpine Monitoring Wells													
ACMW-01AV	06/19/2001												5482.1
ACMW-01BE	06/19/2001												5491.1
ACMW-02N	06/19/2001												5459.2
ACMW-02S	06/19/2001												5460.7
ACMW-03	06/19/2001												5038.9
ACMW-04W	06/19/2001												4906.9
ACMW-06N	06/19/2001												5213.7
ACMW-06S	06/19/2001												5203.2
Groundwaters													
GW-03	06/11/2001												
GW-04	06/11/2001												
GW-05	06/11/2001												
GW-07	06/11/2001												
GW-08	06/11/2001												
GW-11	06/11/2001												
GW-14	06/11/2001												
Irrigation Waters													
SW-07	06/05/2001		1		0.04	16.9	4.3	14.3	3.1	0.80	32.7		
SW-07	06/19/2001												
SW-08	06/05/2001		0		0.02	10.7	3.3	8.1	1.9	0.55	29.1		
Reservoirs													
HPR	06/05/2001	40	8		0.25	16.8				0.00	0.0		56.0
Surfacewaters: Carson R													
SW-01	06/05/2001		1		0.03	6.0	1.6	2.6	1.0	0.25	20.0		
SW-05	06/05/2001		1		0.02	6.3	1.7	3.2	1.1	0.29	22.3		
SW-05	06/11/2001												
SW-05	06/19/2001												
SW-05	06/27/2001												
SW-06	06/05/2001		1		0.01	6.5	1.9	3.5	1.3	0.31	23.1		

ALPINE COUNTY MONITORING

Site	Date	COD mg/L	BOD mg/L	O & G mg/L	Boron mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	SAR	Exch Na %	Hardness mg/L	Water Level MSL or Ft
Surfacewaters: Indian Cr													
SW-02	06/05/2001		1		0.02	13.6	3.4	8.7	1.7	0.55	27.6		
SW-03	06/05/2001		1		0.03	13.3	4.1	8.1	1.3	0.50	25.4		
SW-04	06/05/2001		1		0.03	13.5	3.9	5.7	1.1	0.35	19.4		

ALPINE COUNTY
BACTERIOLOGICAL MONITORING

Alpine Monitoring Wells

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
ACMW-01AV	06/19/2001		1.1	<	1.1	
ACMW-01BE	06/19/2001	<	1.1	<	1.1	
ACMW-02N	06/19/2001	<	1.1	<	1.1	
ACMW-02S	06/19/2001		1.1	<	1.1	
ACMW-03	06/19/2001	<	1.1	<	1.1	
ACMW-04W	06/19/2001	<	1.1	<	1.1	
ACMW-06N	06/19/2001	<	1.1	<	1.1	
ACMW-06S	06/19/2001	<	1.1	<	1.1	

Groundwaters

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
GW-03	06/11/2001	<	.2	<	.2	
GW-04	06/11/2001	<	.2	<	.2	
GW-05	06/11/2001	<	.2	<	.2	
GW-07	06/11/2001		2.2	<	.2	
GW-08	06/11/2001	<	.2	<	.2	
GW-11	06/11/2001	<	.2	<	.2	
GW-14	06/11/2001	<	.2	<	.2	

Irrigation Waters

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-07	06/05/2001	240	240	
SW-07	06/19/2001			
SW-08	06/05/2001	930	150	

Reservoirs

Site	Date		Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
HPR	06/05/2001	>	1600	1600	

Surfacewaters: Carson R

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-01	06/05/2001	43	7	
SW-05	06/05/2001	150	150	
SW-05	06/11/2001			
SW-05	06/19/2001			
SW-05	06/27/2001			
SW-06	06/05/2001	930	75	

ALPINE COUNTY
BACTERIOLOGICAL MONITORING

Surfacewaters: Indian Cr

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-02	06/05/2001	430	430	
SW-03	06/05/2001	4600	430	
SW-04	06/05/2001	930	240	

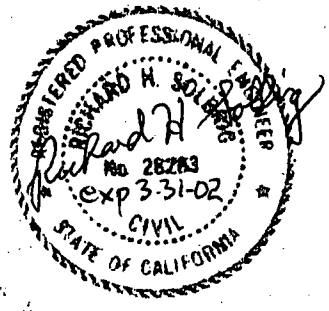
Site	Location	TDS		Cl		TKN		NO_3-N		Total N		Total P		SO_4		Boron		Exch Na %	
		Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence
SW-01	Carson River, Woodfords	55		1.0	✓	0.13	✓	0.02		0.15	✓	0.02	✓	2.0		0.02		20	✓
SW-06	Carson River, Stateline	70		2.5		0.22		0.03		0.25		0.03		2.0		0.02		20	✓
SW-02	Indian Creek, Upper	100		6.0						0.30		0.03		8.0		0.25		30	
SW-03	Indian Creek, Mid	100	✓	6.0						0.30		0.03	✓	8.0		0.25		30	✓
SW-04	Indian Creek, Lower	100	✓	6.0						0.30	✓	0.03	✓	8.0		0.25		30	
SW-10	Indian Creek, Stateline	100		6.0						0.30		0.03		8.0		0.25		30	

The Alpine County soils for June and blue green algae tests for June and July included in this report.

Certification

I hereby certify that the enclosed monitoring report was prepared under my direct supervision and that I am a duly Registered Engineer under the laws of the State of California.

Sincerely,



Richard Solbrig,
Assistant Manager/Engineer

Enclosures:

1.

July Monthly Report	Pages
Wastewater Treatment plant	2
Permit Compliance Record	1
Export pipeline inspection	1
Sample site locations	2
Monitoring wells (ERB) and Heavenly Valley Creek (HVC) - Tahoe Basin	1
Alpine County Surfacewaters, Groundwaters, and HPR	8
Alpine County Soils for June	1
Alpine County Blue green algae for June and July	2
Total number of pages:	18

cc: Calif. Dept. of Health Services, ODW - Jess Morehouse
El Dorado Co. Dept. of Environmental Health - Virginia Huber
Nevada Division of Environmental Protection - Wendel McCurry
Alpine County Health Department - Dr. Richard Botto
Alpine County Health Department - Jim Goodloe
Alpine County Board of Supervisors
Desert Research Group (Alpine County Consultants) - David McGraw
STPUD Board of Directors
STPUD General Manager / District Engineer - Robert G. Baer
STPUD Manager of Operations - Ross Johnson
STPUD Operations Chief Plant Operator - Jeff Lee
STPUD Laboratory Director - Terry Powers
STPUD Manager of Alpine County Operations - Hal Bird

File: \LAHONTAN\07-01 Report.WPD

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

JULY 2001

		FLOW MGD					PRECIP		D.O.	COD		BOD		SS	
			2-Hr Peak		Pond	Pond			mg/L	mg/L		mg/L		mg/L	
Date	Day	Inf	Inf	Eff	Return	Inf	Inch	Type	Fin	Raw	Fin	Raw	Fin	Raw	Fin
07/01/01	Sun	4.85	7.5	4.64					5.22	486					
07/02/01	Mon	4.96	8.1	4.63					5.06	470	39.2	172	5.3	176	2.2
07/03/01	Tue	5.10	7.4	4.75			0.13	Rain	4.80	491					
07/04/01	Wed	5.72	8.6	5.33					4.18	478					
07/05/01	Thu	5.50	8.0	5.31					5.25	516					
07/06/01	Fri	5.20	8.0	4.57					5.31	463					
07/07/01	Sat	5.56	8.0	5.15					4.46	450	45.0	181	6.6	161	4.1
07/08/01	Sun	5.15	8.0	5.00					4.46	437					
07/09/01	Mon	4.67	6.2	4.81					5.32	402					
07/10/01	Tue	4.67	8.0	5.02			0.08	Rain	3.85	384					
07/11/01	Wed	4.57	6.8	4.37					5.73	520	42.8	185	8.6	248	8.0
07/12/01	Thu	4.56	6.3	4.80					4.66	433					
07/13/01	Fri	4.58	6.5	4.53					5.27	465					
07/14/01	Sat	5.16	7.6	4.64					5.47	478	49.6	192	8.6	186	4.6
07/15/01	Sun	5.08	8.0	5.25					5.41	521					
07/16/01	Mon	4.67	6.2	4.47					5.29	550					
07/17/01	Tue	4.70	6.6	0.22					5.21	1042					
07/18/01	Wed	4.62	6.6	0.00						479					
07/19/01	Thu	4.57	6.3	4.78					5.76	440	56.5	180	8.8	170	7.5
07/20/01	Fri	4.61	7.2	5.36					4.68	457					
07/21/01	Sat	5.29	8.0	5.50					4.35	492	62.0	182	12.6	176	5.9
07/22/01	Sun	5.09	7.2	5.55					4.99	463					
07/23/01	Mon	4.75	7.8	5.48					5.39	447					
07/24/01	Tue	4.71	7.2	5.64					5.58	445					
07/25/01	Wed	4.66	6.6	5.55					4.71	497	60.8	210	11.4	194	5.4
07/26/01	Thu	4.83	6.1	4.90					4.25	451					
07/27/01	Fri	5.03	6.6	5.55					6.42	453					
07/28/01	Sat	5.50	8.6	6.65					5.75	465	66.6	178	14.0	180	8.0
07/29/01	Sun	5.21	8.8	4.88					5.13	463					
07/30/01	Mon	4.94	6.6	4.68					5.24	437	52.4	177	10.3	190	5.1
07/31/01	Tue	4.66	6.7	4.73					5.15	429					
Permit Max		7.7									300		45		60
Permit Min															
Permit Ave											60		30		30
Total		153.17	226.1	146.74			0.21		152.35	15004	474.9	1657	86.3	1681	50.7
Maximum		5.72	8.8	6.65			0.13		6.42	1042	66.6	210	14.0	248	8.0
Minimum		4.56	6.1	0.00			0.08		0.00	384	39.2	172	5.3	161	2.2
Average		4.94	7.3	4.73			0.11		4.91	484	52.8	184	9.6	187	5.6
# Tests		31	31	31	0	0	2		31	31	9	9	9	9	9

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

JULY 2001

		SETTLEABLE SOLIDS mL/L			MBAS mg/L		pH Units		TURBIDITY NTU	Cl2 mg/L	FINAL COLIFORMS MPN/100 mL				TDS mg/L		ALKALINITY mg/L	
Date	Day	Raw		Fin	Raw	Fin	Raw	Fin	Fin	Fin	Total		7day- Median		Raw	Fin	Raw	Fin
07/01/01	Sun	12.0	<	0.1			7.45	7.46	3.50	4.56	< 2	<	2				178	150
07/02/01	Mon	12.0	<	0.1			7.48	7.64	2.68	8.31	< 2	<	2		276	244	176	154
07/03/01	Tue	15.0	<	0.1			7.48	7.39	7.46	5.17	2	<	2				182	154
07/04/01	Wed	15.0	<	0.1			7.45	7.44	4.81	5.27	< 2	<	2				185	158
07/05/01	Thu	12.0	<	0.1			7.46	7.48	4.30	4.67	< 2	<	2				184	164
07/06/01	Fri	13.0	<	0.1			7.50	7.44	3.49	4.57	< 2	<	2				184	164
07/07/01	Sat	13.0	<	0.1			7.49	7.78	4.57	5.66	< 2	<	2				180	167
07/08/01	Sun	14.0	<	0.1			7.45	7.48	5.10	5.28	< 2	<	2				181	159
07/09/01	Mon	16.0	<	0.1			7.56	7.40	8.27	2.74	< 2	<	2				182	150
07/10/01	Tue	14.0	<	0.1			7.51	7.54	6.17	6.30	2	<	2				173	135
07/11/01	Wed	13.5	<	0.1			7.54	7.65	7.07	5.08	< 2	<	2		255	245	168	138
07/12/01	Thu	12.0	<	0.1			7.47	7.46	7.18	5.18	< 2	<	2				172	145
07/13/01	Fri	12.5	<	0.1			7.50	7.58	5.38	5.28	< 2	<	2				172	144
07/14/01	Sat	14.0	<	0.1			7.40	7.80	6.23	3.62	2	<	2				179	153
07/15/01	Sun	17.0					7.40			4.67	< 2	<	2				185	
07/16/01	Mon	20.0	<	0.1			7.53	7.40	7.84	7.72	< 2	<	2				186	160
07/17/01	Tue	40.0					7.43					<	2				191	
07/18/01	Wed	14.0					7.46					<	2				174	
07/19/01	Thu	13.5	<	0.1			7.56	7.57	6.06	10.40	< 2	<	2				175	147
07/20/01	Fri	12.5	<	0.1			7.56	7.54	6.44	6.60	2	<	2		254	247	174	152
07/21/01	Sat	14.0	<	0.1			7.54	7.74	7.09	4.98	< 2	<	2				178	160
07/22/01	Sun	11.5	<	0.1			7.58	7.54	6.32	5.18	< 2	<	2				181	160
07/23/01	Mon	13.5	<	0.1			7.60	7.65	5.14	5.38	< 2	<	2				176	161
07/24/01	Tue	13.5	<	0.1			7.54	7.58	5.52	5.69		<	2				176	162
07/25/01	Wed	16.0	<	0.1			7.54	7.72	6.76	3.86	< 2	<	2		290	255	173	160
07/26/01	Thu	14.0	<	0.1			7.39	7.56	5.89	5.38	< 2	<	2				163	154
07/27/01	Fri	14.5	<	0.1			7.41	7.48	5.55	2.54	2	<	2				163	154
07/28/01	Sat	15.0	<	0.1			7.55	7.74	7.66	3.86	< 2	<	2				172	156
07/29/01	Sun	14.5	<	0.1			7.70	7.56	8.38	4.57	< 2	<	2				177	158
07/30/01	Mon	14.0	<	0.1			7.43	7.34	5.08	7.92	< 2	<	2		267	241	161	150
07/31/01	Tue	13.5	<	0.1			7.51	7.48	4.52	5.28	< 2	<	2				166	157
Permit Max				0.1		2.0		8.5	20		240		23					
Permit Min								6.5										
Permit Ave						1.0			10									
Total		459.0		2.8	0.00	0.000	232.47	211.44	164.46	155.72	56		62		1342	1232	5467	4326
Maximum		40.0		0.1	ERR	ERR	7.70	7.80	8.38	10.40	2		2		290	255	191	167
Minimum		11.5		0.1	ERR	ERR	7.39	7.34	2.68	2.54	2		2		254	241	161	135
Average		14.8		0.1	ERR	ERR	7.50	7.55	5.87	5.37	2		2		268	246	176	155
# Tests		31		28	0	0	31	28	28	29	28		31		5	5	31	28

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT
COMPLIANCE RECORD

2001

Parameter	# Tests	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Compliance, %
Total Plant Inflow; 7.7 MGD; Dry Weather	212	0	0	0	0	0	0	0						0	100.0
2-Hour Peak Inflow; 18.5 MGD	212	0	0	0	0	0	0	0						0	100.0
COD, 30 Day Ave: 60 mg/L	7	0	0	0	0	0	0	0						0	100.0
COD, Max: 300 mg/L	63	0	0	0	0	0	0	0						0	100.0
BOD, 30 Day Ave: 30 mg/L	7	0	0	0	0	0	0	0						0	100.0
BOD, Max: 45 mg/L	59	0	0	0	0	0	0	0						0	100.0
SS, 30 Day Ave: 30 mg/L	7	0	0	0	0	0	0	0						0	100.0
SS, Max: 60 mg/L	62	0	0	0	0	0	0	0						0	100.0
Settleable Solids, Max: 0.1 mL/L	208	0	0	0	0	0	0	0						0	100.0
Turbidity, 30 Day Ave: 10 NTU	7	0	0	0	0	0	0	0						0	100.0
Turbidity, Max: 20 NTU	208	0	0	0	0	0	0	0						0	100.0
pH, 6.5 to 8.5	208	0	0	0	0	0	0	0						0	100.0
Total Coliforms, Max: 240 MPN/100 mL	206	0	0	0	0	0	0	0						0	100.0
Total Coliforms, 7-day Median: 23 MPN	208	0	0	0	0	0	0	0						0	100.0
Total	1,674	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0

SOUTH TAHOE
PUBLIC UTILITY DISTRICT
MEMORANDUM

Date: July 20, 2001

To: Bob Baer, Lisa Coyner

From: Tim Rieger

Topic: Export Line Check

****

On July 19, 2001, David Johnson and I conducted our check of the District's export line, including the Luther pass surge line from the treatment plant to station 564+06 near the Harvey Place reservoir.
No damage to the pipe was found.

CC Terry Powers

EXPRT701.MEM

SAMPLE LOCATIONS

TAHOE BASIN MONITORING WELLS

Site	Location
ERB	Emergency Retention Basin
CONTROL	North of Post Office
MW02-25, -50	Emergency Retention Basin, S side
MW03-25, -50	Emergency Retention Basin, S side
MW04-25, -50	Emergency Retention Basin, W side
MW07-25, -50	Emergency Retention Basin, N side
MW08-25, -50	Pond #1, SW corner
MW11	S.E. corner of wastewater treatment plant grounds
MW12	South of Emergency Pump Building, for buried sludge
MW13	Pond 2, along Heavenly Valley Creek, for buried sludge

HEAVENLY VALLEY CREEK

HVC-1	At Pioneer Trail
HVC-2	250 ft upstream of Pond #2
HVC-3	25 ft downstream of Johnson Blvd.
HVC-4	Effluent of drain pipe from Lower Shop area
HVC-5	Effluent of drainage pipe along Johnson Blvd, 10 feet upstream of Johnson Blvd.

ALPINE COUNTY MONITORING WELLS

Site	Location
ACMW-01AW	Below main dam at Harvey Place Reservoir
ACMW-01BE	Below auxiliary dam at Harvey Place Reservoir
ACMW-02, N&S	On dam access road at Diamond Valley Road
ACMW-03	Bruns ranch, east side of Highway 88
ACMW-04W	Gansberg ranch, west side of Highway 88
ACMW-05	Dressler ranch
ACMW-06, N&S	Celio ranch, on Diamond Valley Road

ALPINE SOILS

Site	Ranch
S2	Celio
S3	Hall
S4	Gansberg
S5	Gansberg
S6	Neddenriep
S7	Bruns
S8	Dressler

ALPINE GROUNDWATERS

Site	Homeowner
GW-01	Sagues
GW-03	Smith/Springmeyer
GW-04	Celio
GW-05	Neddenriep
GW-07	Gansberg, Jr.
GW-08	Arant
GW-11	Diamond Valley School
GW-14	Sierra Pines Store

ALPINE SURFACEWATERS

Site	Location
SW-01	Carson River, Woodfords
SW-02	Indian Creek, @ HWY 89
SW-03	Indian Creek, @ upper bridge
SW-04	Indian Creek, @ lower bridge
SW-05	Carson River, Paynesville
SW-06	Carson River, Stateline
SW-07	Fredericksberg Ditch, Stateline
SW-08	Irrigation Ditch along Carson River Road
SW-09	Carson River, Dressler Lane
SW-10	Indian Creek, @ Smith-Springmeyer Ranch

TAHOE BASIN MONITORING

08/14/01

Site	Date	ID	Location	Depth msl	Temp C	pH	EC umho	Cl mg/L	COD mg/L	TKN mg/L	NO3-N mg/L	Comment
Buried Sludge Monitoring												
MW11	07/24/01	20010724-22	Sludge Pond	6264.4	8.8	6.12	93	1.1 <	5.0		0.068	
MW12	07/24/01	20010724-23	Sludge Pond	6262.7	9.5	6.11	110	1.6 <	5.0		0.428	
MW13	07/24/01	20010724-24	Sludge Pond	6255.3	9.4	6.90	773	4.1	16.3		7.110	
ERB Monitoring												
CONTROl	07/24/01	20010724-17	At Post Office	6280.6	10.9	6.84	177	8.0 <	5.0		2.310	
ERB	07/24/01	20010724-25	Emergency Retention Basin		18.9	7.91	596	60.2	41.7		0.122	
MW03-50	07/24/01	20010724-18	Black Bart side of ERB	6267.8	12.0	6.49	381	34.2 <	5.0		8.400	
MW04-50	07/24/01	20010724-19	Hank Monk side of ERB	6267.2	13.0	6.36	76	5.5 <	5.0		0.055	
MW07-50	07/24/01	20010724-20	North side of ERB	6277.6	10.0	6.54	253	23.4 <	5.0		0.581	
Heavenly Valley Creek												
HVC-1	07/24/01	20010724-27	Downstream of Pioneer		11.0	6.97	66	1.3 <	5.0	0.125	0.097	Low flow / trickle
HVC-2	07/24/01	20010724-HVC2	250' upstream of Pond #2									Dry
HVC-3	07/24/01	20010724-HVC3	25' downstream of Johnson Blvd									Dry
HVC-4	07/24/01	20010724-HVC4	Effluent of drain from Lower Shop a									Dry
HVC-5	07/24/01	20010724-HVC5	Effluent of drainage pipe along Johi									Dry
Treatment Plant Monitoring												
MW08-25	07/24/01	20010724-21	SW side of Pond #1	6245.8	10.1	6.39	1055	44.9	94.6		< 0.030	

ALPINE COUNTY MONITORING

Site	Date	ID	Location	Temp C	pH	EC umhos	DO mg/L	Alk mg/L	TDS mg/L	SS mg/L	Turb NTU	Cl mg/L	SO4 mg/L
Alpine Monitoring Wells													
ACMW-01AW	07/17/2001	20010717-15	Main Dam	10.8	6.75	76		34	71			1.9	2.1
ACMW-01BE	07/17/2001	20010717-16	Secondary Dam	10.0	6.94	94		44	69			1.4	1.2
ACMW-02N	07/17/2001	20010717-17	Access Gate	13.4	6.72	125		59	89			2.9	2.8
ACMW-02S	07/17/2001	20010717-18	Access Gate	15.0	6.39	93		46	68			1.3	1.5
ACMW-03	07/17/2001	20010717-19	HWY 88	14.3	6.35	159		49	104			11.7	8.1
ACMW-04W	07/17/2001	20010717-20	Gansberg	12.0	6.30	196		46	128			21.9	7.4
ACMW-06N	07/17/2001	20010717-21	Celio	11.8	6.72	706		265	431			60.6	25.1
ACMW-06S	07/17/2001	20010717-22	Celio	12.5	6.72	765		285	471			73.8	33.4
Groundwaters													
GW-03	07/10/2001	20010710-17	Smith/Springmeyer	17.9	7.44	310		132	227			1.6	26.8
GW-04	07/10/2001	20010710-18	Celio	15.0	7.18	262		120	200			3.7	11.7
GW-05	07/10/2001	20010710-19	Neddenriep	13.5	6.78	252		63	170			23.6	13.2
GW-07	07/10/2001	20010710-20	Gansberg	13.8	6.56	124		54	98			1.6	2.7
GW-08	07/10/2001	20010710-21	Arant	16.0	6.57	253		49	165			26.9	10.1
GW-11	07/10/2001	20010710-22	Diamond Val. School	23.7	7.25	152		79	121			0.9	0.8
GW-14	07/10/2001	20010710-23	Sierra Pines	15.8	7.12	112		56	102			1.6	1.9
Irrigation Waters													
SW-07	07/05/2001	20010705-13	Fredericksburg Ditch	17.7	6.99	267	6.68	70	168	7.68	11.8	28.8	9.0
SW-07	07/10/2001	20010710-26	Fredericksburg Ditch	17.3	7.04	282	8.35		167			29.4	10.2
SW-07	07/17/2001	20010717-11	Fredericksburg Ditch	15.3	7.21	223	9.68		150			17.0	7.6
SW-08	07/05/2001	20010705-14	Irrigation Ditch	15.0	7.35	130	7.11	60	92	10.90	3.6	2.0	4.2
Reservoirs													
HPR	07/05/2001	20010705-15	Harvey Place Reservoir	23.2	8.58	436	10.44	84	240	2.50	1.62	61.2	18.4
Surfacewaters: Carson R													
SW-01	07/05/2001	20010705-08	Carson R Woodfords	15.5	7.19	66	8.04	31	43	4.67	1.01	1.1	1.4
SW-05	07/05/2001	20010705-11	Carson R Paynesville	17.4	7.46	73	8.47	34	46	2.72	1.25	1.5	1.7
SW-05	07/10/2001	20010710-25	Carson R Paynesville	17.5	8.17	89	8.13		71			1.6	2.3
SW-05	07/17/2001	20010717-10	Carson R Paynesville	13.4	7.62	83	8.98		61			1.6	2.2
SW-06	07/05/2001	20010705-12	Carson R Stateline	16.8	7.98	75	8.43	35	53	4.06	1.4	1.7	1.9

ALPINE COUNTY MONITORING

Site	Date	ID	Location	Temp C	pH	EC umhos	DO mg/L	Alk mg/L	TDS mg/L	SS mg/L	Turb NTU	Cl mg/L	SO4 mg/L
Surfacewaters: Indian Cr													
SW-03	07/05/2001	20010705-09	Indian Cr Mid	18.6	7.35	224	8.32	113	155	13.00	4.57	4.8	1.9
SW-04	07/05/2001	20010705-10	Indian Cr Lower	17.7	7.38	158	8.01	80	108	12.80	5.42	2.4	0.9

ALPINE COUNTY MONITORING

08/14/01

Site	Date	TotalP mg/L	PO4-P mg/L	TKN mg/L	NH3-N mg/L	NO2-N mg/L	NO3-N mg/L	Total N mg/L
Alpine Monitoring Wells								
ACMW-01AV	07/17/2001	0.028		< 0.100		< 0.020	0.097	0.217
ACMW-01BE	07/17/2001	0.020		< 0.100		< 0.010	0.293	0.403
ACMW-02N	07/17/2001	0.019		< 0.100		< 0.010	0.042	0.152
ACMW-02S	07/17/2001	0.014		< 0.100		< 0.010	< 0.010	0.120
ACMW-03	07/17/2001	0.084		0.240		< 0.010	1.090	1.340
ACMW-04W	07/17/2001	0.014		< 0.100		< 0.020	2.220	2.340
ACMW-06N	07/17/2001	1.340		0.360		< 0.010	< 0.010	0.380
ACMW-06S	07/17/2001	0.055		0.101		< 0.010	0.089	0.200
Groundwaters								
GW-03	07/10/2001	0.034		0.187		< 0.010	0.726	0.923
GW-04	07/10/2001	0.053		< 0.100		< 0.010	0.869	0.979
GW-05	07/10/2001	0.032		< 0.100		< 0.030	3.220	3.350
GW-07	07/10/2001	0.099		< 0.100		< 0.010	1.060	1.170
GW-08	07/10/2001	0.046		0.122		< 0.040	5.550	5.712
GW-11	07/10/2001	0.045		< 0.100		< 0.010	0.482	0.592
GW-14	07/10/2001	0.052		< 0.100		< 0.010	0.492	0.602
Irrigation Waters								
SW-07	07/05/2001	0.054	0.499	2.090		0.232	1.060	3.382
SW-07	07/10/2001	0.981	0.814	4.560		0.341	0.912	5.813
SW-07	07/17/2001	0.112	0.069	0.308		0.014	1.360	1.682
SW-08	07/05/2001	0.048	0.023	0.273		< 0.010	0.207	0.490
Reservoirs								
HPR	07/05/2001	2.620	2.260	9.470	9.200	1.060	2.360	12.890
Surfacewaters: Carson R								
SW-01	07/05/2001	0.025	< 0.010	0.153		< 0.010	0.010	0.173
SW-05	07/05/2001	0.031	< 0.010	0.226		< 0.010	0.014	0.250
SW-05	07/10/2001	0.023	< 0.010	0.209		< 0.010	0.019	0.238
SW-05	07/17/2001	0.014	0.023	< 0.100		< 0.010	0.017	0.127
SW-06	07/05/2001	0.030	< 0.010	0.178		< 0.010	0.018	0.206
Surfacewaters: Indian Cr								
SW-03	07/05/2001	0.148	0.031	0.147		< 0.010	0.053	0.210
SW-04	07/05/2001	0.105	0.023	0.451		< 0.010	< 0.010	0.471

ALPINE COUNTY MONITORING

08/14/01

Site	Date	TotalP mg/L	PO4-P mg/L	TKN mg/L	NH3-N mg/L	NO2-N mg/L	NO3-N mg/L	Total N mg/L

Surfacewaters: Indian Cr

ALPINE COUNTY MONITORING

Site	Date	COD mg/L	BOD mg/L	O & G mg/L	Boron mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	SAR	Exch Na %	Hardness mg/L	Water Level MSL or Ft
Alpine Monitoring Wells													
ACMW-01AV	07/17/2001												5481.7
ACMW-01BE	07/17/2001												5489.4
ACMW-02N	07/17/2001												5458.8
ACMW-02S	07/17/2001												5460.1
ACMW-03	07/17/2001												5038.2
ACMW-04W	07/17/2001												4905.7
ACMW-06N	07/17/2001												5214.7
ACMW-06S	07/17/2001												5203.7
Groundwaters													
GW-03	07/10/2001												
GW-04	07/10/2001												
GW-05	07/10/2001												
GW-07	07/10/2001												
GW-08	07/10/2001												
GW-11	07/10/2001												
GW-14	07/10/2001												
Irrigation Waters													
SW-07	07/05/2001				0.05	15.7	4.2	25.2	7.5	1.46	45.4		
SW-07	07/10/2001												
SW-07	07/17/2001												
SW-08	07/05/2001				0.02	12.2	2.8	9.3	2.7	0.63	30.8		
Reservoirs													
HPR	07/05/2001	63			0.22	15.1	3.6	45.7	9.3	2.74	60.6		50.0
Surfacewaters: Carson R													
SW-01	07/05/2001				0.01	6.6	1.9	3.3	1.5	0.29	21.6		
SW-05	07/05/2001				0.02	6.9	2.0	3.8	1.6	0.33	23.1		
SW-05	07/10/2001												
SW-05	07/17/2001												
SW-06	07/05/2001				0.02	7.3	2.1	3.9	1.7	0.33	22.8		

ALPINE COUNTY MONITORING

Site	Date	COD mg/L	BOD mg/L	O & G mg/L	Boron mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	SAR	Exch Na %	Hardness mg/L	Water Level MSL or Ft
Surfacewaters: Indian Cr													
SW-03	07/05/2001				0.07	21.3		14.5	2.4	0.86	36.0		
SW-04	07/05/2001				0.05	17.3	5.2	6.8	2.6	0.37	17.8		

ALPINE COUNTY
BACTERIOLOGICAL MONITORING

Alpine Monitoring Wells

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
ACMW-01AV	07/17/2001	<	1.1	<	1.1	
ACMW-01BE	07/17/2001	<	1.1	<	1.1	
ACMW-02N	07/17/2001	<	1.1	<	1.1	
ACMW-02S	07/17/2001		3.6	<	1.1	
ACMW-03	07/17/2001	<	1.1	<	1.1	
ACMW-04W	07/17/2001	<	1.1	<	1.1	
ACMW-06N	07/17/2001	<	1.1	<	1.1	
ACMW-06S	07/17/2001	<	1.1	<	1.1	

Groundwaters

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
GW-03	07/10/2001	<	1.1	<	1.1	
GW-04	07/10/2001	<	1.1	<	1.1	
GW-05	07/10/2001	<	1.1	<	1.1	
GW-07	07/10/2001	<	1.1	<	1.1	
GW-08	07/10/2001		5.1	<	1.1	
GW-11	07/10/2001	<	1.1	<	1.1	
GW-14	07/10/2001	<	1.1	<	1.1	

Irrigation Waters

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-07	07/05/2001	11000	11000	
SW-07	07/10/2001			
SW-07	07/17/2001			
SW-08	07/05/2001	2400	930	

Reservoirs

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
HPR	07/05/2001	60	2	12

Surfacewaters: Carson R

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-01	07/05/2001	150	23	
SW-05	07/05/2001	930	39	
SW-05	07/10/2001			
SW-05	07/17/2001			
SW-06	07/05/2001	2400	240	

ALPINE COUNTY
BACTERIOLOGICAL MONITORING

Surfacewaters: Indian Cr

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-03	07/05/2001	4600	2400	
SW-04	07/05/2001	2400	240	

08/14/01

ALPINE COUNTY SOILS

Site	Date	Location	Type	pH	EC mmho	%Sat	TKN mg/Kg	NO3-N mg/L	Total P mg/Kg	Exch P mg/L
S2a	05/31/01	Celio	KT	8.16	2.29	67.9	2,280	1.0	680	6.8
S3a	05/31/01	Hall	SMB	6.34	0.37	37.4	1,400	0.9	820	8.1
S5a	05/31/01	Gansberg	HRB	6.20	0.36	34.2	1,160	6.8	840	7.7
S6a	05/31/01	Neddenriep	DWB	6.08	0.27	44.5	1,370	1.0	510	17.1
~~S7a~~	~~05/31/01~~	~~Bruns~~	~~JaC~~	~~6.22~~	~~0.22~~	~~44.6~~	~~1,610~~	~~5.1~~	~~930~~	~~10.2~~
S8a	06/05/01	Dressler	SOD	6.38	0.10	16.0	188	0.5	310	7.9
S4a	06/19/01	Gansberg	DI	7.04	1.16	40.6	2,120	11.9	610	19.9

Site	Date	Cl mg/L	SO4 mg/Kg	CEC meq/100g	Cu mg/Kg		Mo mg/Kg	Ca mg/L	Mg mg/L	Na mg/L	SAR		% Na
S2a	05/31/01	433.0		33.2	15.0		1.0	61.9	56.3	339.0	7.50		8.8
S3a	05/31/01	21.2		21.4	26.0		4.0	25.1	9.6	35.9	1.55	<	1.0
S5a	05/31/01	11.5		17.3	34.0		2.0	18.2	3.3	49.0	2.77		2.7
S6a	05/31/01	30.3		20.0	38.0		4.0	12.2	2.9	35.6	2.38		2.1
~~S7a~~	~~05/31/01~~	~~5.6~~		~~20.1~~	~~46.0~~	~~<~~	~~1.0~~	~~21.5~~	~~4.3~~	~~9.2~~	~~0.47~~	~~<~~	~~1.0~~
S8a	06/05/01	8.4		13.4	21.0		3.0	4.6	2.1	11.7			
S4a	06/19/01	118.0		25.4	78.0	<	1.0	43.3	10.7	73.2	2.58		2.4

ALPINE COUNTY
BLUE GREEN ALGAE

ID#	Site	Location	Date	Colonies #	Colony # Cells	Filaments #	Filaments # Cells	Filaments #	Filament Length	Single Cells, #
June, 2001										
20010605-10	SW-01	Carson R Woodfords	06/05/01	0	0	0	0	0	0	0
20010605-11	SW-02	Indian Cr Upper	06/05/01	0	0	0	0	0	0	0
20010605-12	SW-03	Indian Cr Mid	06/05/01	0	0	0	0	0	0	0
20010605-13	SW-04	Indian Cr Lower	06/05/01	0	0	0	0	0	0	0
20010605-14	SW-05	Carson R Paynesville	06/05/01	0	0	0	0	0	0	0
20010605-15	SW-06	Carson R Stateline	06/05/01	0	0	0	0	0	0	0
20010605-16	SW-07	Fredericksburg Ditch	06/05/01	0	0	0	0	0	0	0
20010605-17	SW-08	Irrigation Ditch	06/05/01	0	0	0	0	0	0	0

ALPINE COUNTY
BLUE GREEN ALGAE

ID#	Site	Location	Date	Colonies #	Colony # Cells	Filaments #	Filaments # Cells	Filaments #	Filament Length	Single Cells, #
July, 2001										
20010705-08	SW-01	Carson R Woodfords	07/05/01	0	0	0	0	0	0	0
20010705-09	SW-03	Indian Cr Mid	07/05/01	0	0	0	0	0	0	0
20010705-10	SW-04	Indian Cr Lower	07/05/01	0	0	0	0	0	0	0
20010705-11	SW-05	Carson R Paynesville	07/05/01	0	0	0	0	0	0	0
20010705-12	SW-06	Carson R Stateline	07/05/01	0	0	0	0	0	0	0
20010705-13	SW-07	Fredericksburg Ditch	07/05/01	0	0	0	0	0	0	0
20010705-14	SW-08	Irrigation Ditch	07/05/01	0	0	0	0	0	0	0

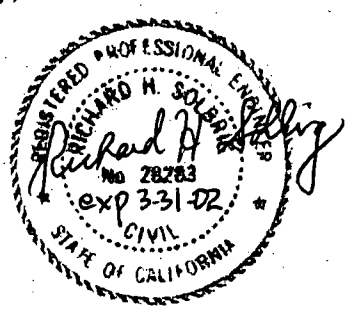
LRWQCB - Page 2

Site	Location	TDS		Cl		TKN		NO_3-N		Total N		Total P		SO_4		Boron		Exch Na %	
		Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence
SW-01	Carson River, Woodfords	55	✓	1.0	✓	0.13		0.02		0.15		0.02		2.0		0.02		20	✓
SW-06	Carson River, Stateline	70	✓	2.5		0.22		0.03		0.25		0.03		2.0	✓	0.02		20	✓
SW-02	Indian Creek, Upper	100		6.0						0.30		0.03		8.0		0.25		30	
SW-03	Indian Creek, Mid	100	✓	6.0						0.30		0.03	✓	8.0		0.25		30	✓
SW-04	Indian Creek, Lower	100	✓	6.0						0.30		0.03	✓	8.0		0.25		30	
SW-10	Indian Creek, Stateline	100		6.0						0.30		0.03		8.0		0.25		30	

Certification

I hereby certify that the enclosed monitoring report was prepared under my direct supervision and that I am a duly Registered Engineer under the laws of the State of California.

Sincerely,



Richard Solbrig,
Assistant Manager/Engineer

Enclosures:

1.

August Monthly Report	Pages
Wastewater Treatment plant	2
Permit Compliance Record	1
Export pipeline inspection	1
Sample site locations	2
Monitoring wells (ERB) and Heavenly Valley Creek (HVC) - Tahoe Basin	1
Alpine County Surfacewaters, Groundwaters, and HPR	5
Alpine County blue-green algae	1
Total number of pages:	13

cc: Calif. Dept. of Health Services, ODW - Jess Morehouse
El Dorado Co. Dept. of Environmental Health - Virginia Huber
Nevada Division of Environmental Protection - Wendel McCurry
Alpine County Health Department - Dr. Richard Botto
Alpine County Health Department - Jim Goodloe
Alpine County Board of Supervisors
Desert Research Group (Alpine County Consultants) - David McGraw
STPUD Board of Directors
STPUD General Manager / District Engineer - Robert G. Baer
STPUD Manager of Operations - Ross Johnson
STPUD Operations Chief Plant Operator - Jeff Lee
STPUD Laboratory Director - Terry Powers
STPUD Manager of Alpine County Operations - Hal Bird

File: \LAHONTAN\08-01 Report.WPD

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

AUGUST 2001

		FLOW MGD					PRECIP		D.O.	COD		BOD		SS	
			2-Hr Peak		Pond	Pond			mg/L	mg/L		mg/L		mg/L	
Date	Day	Inf	Inf	Eff	Return	Inf	Inch	Type	Fin	Raw	Fin	Raw	Fin	Raw	Fin
08/01/01	Wed	4.67	6.8	4.32					5.64	472					
08/02/01	Thu	4.78	6.4	4.46					5.32	430					
08/03/01	Fri	4.98	7.0	4.80					4.12	483	66.6	169	9.6	181	7.2
08/04/01	Sat	5.54	7.8	5.40					3.92	569					
08/05/01	Sun	5.20	8.3	4.95					3.98	546					
08/06/01	Mon	5.06	7.0	4.48					5.38	556	47.8				
08/07/01	Tue	4.99	6.8	0.00		4.99				433					
08/08/01	Wed	5.10	6.9	0.00		5.28	0.06	Rain		544					
08/09/01	Thu	5.09	6.8	0.00		5.11				502					
08/10/01	Fri	5.29	7.8	6.08	0.80				5.41	529					
08/11/01	Sat	5.44	8.5	6.31	0.58				5.37	530	47.2	185	11.1	249	3.8
08/12/01	Sun	5.31	7.3	6.32	0.97				4.81	451					
08/13/01	Mon	5.15	6.8	6.50	1.37				5.87	434					
08/14/01	Tue	4.96	7.0	6.44	1.46				5.89	423					
08/15/01	Wed	4.89	6.6	6.25	1.58				6.71	428	55.4	156	9.3	194	9.3
08/16/01	Thu	4.94	7.0	6.43	1.28				3.28	507					
08/17/01	Fri	5.01	7.3	6.43	1.48				6.08	521					
08/18/01	Sat	5.45	8.0	6.32	0.80				3.44	455	61.0	176	9.4	165	13.6
08/19/01	Sun	5.08	7.5	4.57					3.80	494					
08/20/01	Mon	4.78	7.0	4.53					5.35	447					
08/21/01	Tue	4.81	6.8	4.42					5.30	468					
08/22/01	Wed	4.65	6.6	4.81					5.43	534	39.6	194	6.5	234	3.9
08/23/01	Thu	4.47	6.4	4.01					5.43	443					
08/24/01	Fri	4.63	6.1	4.50					5.55	438					
08/25/01	Sat	5.04	7.1	5.13					5.11	491	41.1	84	8.5	191	4.4
08/26/01	Sun	4.77	7.6	4.30					5.24	455					
08/27/01	Mon	4.40	6.2	4.39					5.24	406					
08/28/01	Tue	4.29	5.5	4.42					5.02	424					
08/29/01	Wed	4.09	5.9	3.72					5.49	443	44.8	165	7.2	173	3.0
08/30/01	Thu	4.22	5.9	3.96					5.44	438					
08/31/01	Fri	4.48	6.0	4.44					5.57	409					
Permit Max		7.7									300		45		60
Permit Min															
Permit Ave											60		30		30
Total		151.56	214.7	142.69	10.32	15.38	0.06		143.19	14703	403.5	1129	61.7	1387	45.2
Maximum		5.54	8.5	6.50	1.58	5.28	0.06		6.71	569	66.6	194	11.1	249	13.6
Minimum		4.09	5.5	0.00	0.58	4.99	0.06		3.28	406	39.6	84	6.5	165	3.0
Average		4.89	6.9	4.60	1.15	5.13	0.06		5.11	474	50.4	161	8.8	198	6.5
# Tests		31	31	31	9	3	1		28	31	8	7	7	7	7

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

AUGUST 2001

Date	Day	SETTLEABLE SOLIDS mL/L Raw		SETTLEABLE SOLIDS mL/L Fin	MBAS mg/L Raw	MBAS mg/L Fin	pH Units Raw	pH Units Fin	TURBIDITY NTU Fin	Cl2 mg/L Fin	FINAL COLIFORMS MPN/100 mL Total		FINAL COLIFORMS MPN/100 mL 7day-Median		TDS mg/L Raw	TDS mg/L Fin	ALKALINITY mg/L Raw	ALKALINITY mg/L Fin
08/01/01	Wed	15.0	<	0.1			7.50	7.48	5.32	4.67	<	2	<	2			164	152
08/02/01	Thu	16.0	<	0.1			7.42	7.40	5.84	3.76	<	2	<	2			168	150
08/03/01	Fri	14.5	<	0.1			7.55	7.62	6.79	5.59	<	2	<	2			162	149
08/04/01	Sat	19.0	<	0.1			7.64	7.77	6.66	4.77	<	2	<	2			170	155
08/05/01	Sun	17.0	<	0.1			7.35	7.36	6.92	4.37	<	2	<	2			181	158
08/06/01	Mon	13.0	<	0.1			7.43	7.58	5.72	4.77	<	2	<	2			176	156
08/07/01	Tue	13.5	<	0.1			7.58						<	2			169	
08/08/01	Wed	18.0	<	0.1			7.22						<	2			170	
08/09/01	Thu	18.5	<	0.1			7.51						<	2			175	
08/10/01	Fri	16.0	<	0.1			7.43	7.38	5.54	4.98	<	2	<	2			176	146
08/11/01	Sat	17.5	<	0.1			7.53	7.68	5.82	4.67	<	2	<	2			171	153
08/12/01	Sun	13.0	<	0.1			7.41	7.53	5.67	3.55	<	2	<	2			180	156
08/13/01	Mon	12.5	<	0.1			7.40	7.56	4.36	5.59	<	2	<	2			172	150
08/14/01	Tue	15.0	<	0.1			7.41	7.58	5.70	3.25	<	2	<	2			170	148
08/15/01	Wed	14.0	<	0.1			7.48	7.82	7.02	4.98	<	2	<	2	259	252	167	156
08/16/01	Thu	15.5	<	0.1			7.61	7.62	8.21	3.05	<	2	<	2			167	143
08/17/01	Fri	14.0	<	0.1			7.53	7.53	6.28	4.88	<	2	<	2			174	137
08/18/01	Sat	14.0	<	0.1			7.40	7.65	6.64	4.16	<	2	<	2			172	134
08/19/01	Sun	15.0	<	0.1			7.22	7.27	5.05	5.79	<	2	<	2			169	144
08/20/01	Mon	13.0	<	0.1			7.54	7.60	2.92	6.70	<	2	<	2			169	152
08/21/01	Tue	13.5	<	0.1			7.64	7.56	3.72	5.59	<	2	<	2			168	152
08/22/01	Wed	17.0	<	0.1			7.69	7.76	3.14	5.08	<	2	<	2	289	253	196	155
08/23/01	Thu	15.5	<	0.1			7.58	7.62	3.26	4.06	<	2	<	2			167	148
08/24/01	Fri	13.0	<	0.1			7.52	7.39	4.32	4.88	<	2	<	2			162	147
08/25/01	Sat	14.0	<	0.1			7.49	7.59	4.73	4.77	<	2	<	2			169	152
08/26/01	Sun	11.0	<	0.1			7.55	7.54	4.56	3.25	<	2	<	2			175	153
08/27/01	Mon	11.0	<	0.1			7.50	7.47	4.15	8.63	<	2	<	2			165	147
08/28/01	Tue	12.0	<	0.1			7.54	7.64	3.45	5.59	<	2	<	2			164	142
08/29/01	Wed	13.5	<	0.1			7.47	7.33	4.44	5.18	<	2	<	2	256	238	167	135
08/30/01	Thu	11.0	<	0.1			7.61	7.56	4.26	6.30	<	2	<	2			172	138
08/31/01	Fri	11.0	<	0.1			7.52	7.40	3.78	5.79	<	2	<	2			160	139
Permit Max				0.1		2.0		8.5	20			240		23				
Permit Min								6.5										
Permit Ave						1.0			10									
Total		446.5		3.1	0.00	0.000	232.27	211.29	144.27	138.65		56		62	804	743	5287	4147
Maximum		19.0		0.1	ERR	ERR	7.69	7.82	8.21	8.63		2		2	289	253	196	158
Minimum		11.0		0.1	ERR	ERR	7.22	7.27	2.92	3.05		2		2	256	238	160	134
Average		14.4		0.1	ERR	ERR	7.49	7.55	5.15	4.95		2		2	268	248	171	148
# Tests		31		31	0	0	31	28	28	28		28		31	3	3	31	28

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT
COMPLIANCE RECORD

2001

Parameter	# Tests	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Compliance, %
Total Plant Inflow; 7.7 MGD; Dry Weather	243	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*					*0*	100.0
2-Hour Peak Inflow; 18.5 MGD	243	0	0	0	0	0	0	0	0					0	100.0
COD, 30 Day Ave: 60 mg/L	8	0	0	0	0	0	0	0	0					0	100.0
COD, Max: 300 mg/L	71	0	0	0	0	0	0	0	0					0	100.0
BOD, 30 Day Ave: 30 mg/L	8	0	0	0	0	0	0	0	0					0	100.0
BOD, Max: 45 mg/L	66	0	0	0	0	0	0	0	0					0	100.0
SS, 30 Day Ave: 30 mg/L	8	0	0	0	0	0	0	0	0					0	100.0
SS, Max: 60 mg/L	69	0	0	0	0	0	0	0	0					0	100.0
Settleable Solids, Max: 0.1 mL/L	239	0	0	0	0	0	0	0	0					0	100.0
Turbidity, 30 Day Ave: 10 NTU	8	0	0	0	0	0	0	0	0					0	100.0
Turbidity, Max: 20 NTU	236	0	0	0	0	0	0	0	0					0	100.0
pH, 6.5 to 8.5	236	0	0	0	0	0	0	0	0					0	100.0
Total Coliforms, Max: 240 MPN/100 mL	234	0	0	0	0	0	0	0	0					0	100.0
Total Coliforms, 7-day Median: 23 MPN	239	0	0	0	0	0	0	0	0					0	100.0
Total	1,908	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0

SOUTH TAHOE PUBLIC UTILITY DISTRICT
MEMORANDUM

Date: August 30, 2001

To: Lisa Coyner, Bob Baer, Terry Powers

From: Greg Schrempp

Topic: Export Line Inspection
****

On August 29 2001, Tim Rieger and I conducted our check of the District's export line from the treatment plant to where the "C" line daylights at Harvey Place at Station 564+04. Several wet spots were checked, however no leaks were found.
We would have completed the check sooner, however due to Mr. Rieger's advancing age and resultant slowdown, this wasn't possible.

SAMPLE LOCATIONS

TAHOE BASIN MONITORING WELLS

Site	Location
ERB	Emergency Retention Basin
CONTROL	North of Post Office
MW02-25, -50	Emergency Retention Basin, S side
MW03-25, -50	Emergency Retention Basin, S side
MW04-25, -50	Emergency Retention Basin, W side
MW07-25, -50	Emergency Retention Basin, N side
MW08-25, -50	Pond #1, SW corner
MW11	S.E. corner of wastewater treatment plant grounds
MW12	South of Emergency Pump Building, for buried sludge
MW13	Pond 2, along Heavenly Valley Creek, for buried sludge

HEAVENLY VALLEY CREEK

HVC-1	At Pioneer Trail
HVC-2	250 ft upstream of Pond #2
HVC-3	25 ft downstream of Johnson Blvd.
HVC-4	Effluent of drain pipe from Lower Shop area
HVC-5	Effluent of drainage pipe along Johnson Blvd, 10 feet upstream of Johnson Blvd.

ALPINE COUNTY MONITORING WELLS

Site	Location
ACMW-01AW	Below main dam at Harvey Place Reservoir
ACMW-01BE	Below auxiliary dam at Harvey Place Reservoir
ACMW-02, N&S	On dam access road at Diamond Valley Road
ACMW-03	Bruns ranch, east side of Highway 88
ACMW-04W	Gansberg ranch, west side of Highway 88
ACMW-05	Dressler ranch
ACMW-06, N&S	Celio ranch, on Diamond Valley Road

ALPINE SOILS

Site	Ranch
S2	Celio
S3	Hall
S4	Gansberg
S5	Gansberg
S6	Neddenriep
S7	Bruns
S8	Dressler

ALPINE GROUNDWATERS

Site	Homeowner
GW-01	Sagues
GW-03	Smith/Springmeyer
GW-04	Celio
GW-05	Neddenriep
GW-07	Gansberg, Jr.
GW-08	Arant
GW-11	Diamond Valley School
GW-14	Sierra Pines Store

ALPINE SURFACEWATERS

Site	Location
SW-01	Carson River, Woodfords
SW-02	Indian Creek, @ HWY 89
SW-03	Indian Creek, @ upper bridge
SW-04	Indian Creek, @ lower bridge
SW-05	Carson River, Paynesville
SW-06	Carson River, Stateline
SW-07	Fredericksberg Ditch, Stateline
SW-08	Irrigation Ditch along Carson River Road
SW-09	Carson River, Dressler Lane
SW-10	Indian Creek, @ Smith-Springmeyer Ranch

TAHOE BASIN MONITORING

Site	Date	ID	Location	Depth msl	Temp C	pH	EC umho	Cl mg/L		COD mg/L	TKN mg/L		NO3-N mg/L	Comment
Buried Sludge Monitoring														
MW11	08/21/01	20010821-21	Sludge Pond	6264.1	7.9	7.03	92	1.4		7.8			0.101	
MW12	08/21/01	20010821-22	Sludge Pond	6262.0	7.7	6.34	95	1.9		8.7			0.468	
MW13	08/21/01	20010821-23	Sludge Pond	6254.7	6.3	6.73	747	5.2		18.9			2.770	
ERB Monitoring														
CONTROI	08/21/01	20010821-16	At Post Office	6280.3	9.8	6.62	172	8.3	<	5.0			2.300	
MW03-50	08/21/01	20010821-17	Black Bart side of ERB	6267.8	12.2	6.24	675	58.8		5.1			36.000	
MW04-50	08/21/01	20010821-18	Hank Monk side of ERB	6266.9	8.9	6.65	75	5.4	<	5.0			0.064	
MW07-50	08/21/01	20010821-19	North side of ERB	6277.3	8.6	6.48	247	23.7	<	5.0			0.594	
Heavenly Valley Creek														
HVC-1	08/21/01	20010821-HVC1	Downstream of Pioneer											
HVC-2	08/21/01	20010821-HVC2	250' upstream of Pond #2											
HVC-3	08/21/01	20010821-HVC3	25' downstream of Johnson Blvd											
HVC-4	08/21/01	20010821-HVC4	Effluent of drain from Lower Shop a											
HVC-5	08/21/01	20010821-HVC5	Effluent of drainage pipe along Johi											
Treatment Plant Monitoring														
MW08-25	08/21/01	20010821-20	SW side of Pond #1	6245.7	10.6	6.32	1041	52.1		92.4		<	0.030	

ALPINE COUNTY MONITORING

Site	Date	ID	Location	Temp C	pH	EC umhos	DO mg/L	Alk mg/L	TDS mg/L	SS mg/L	Turb NTU	Cl mg/L	SO4 mg/L
Alpine Monitoring Wells													
ACMW-01AW	08/14/2001	20010814-22	Main Dam	12.4	7.33	78		37	71			1.9	2.0
ACMW-01BE	08/14/2001	20010814-23	Secondary Dam	12.6	6.84	93		47	77			1.4	1.2
ACMW-02N	08/14/2001	20010814-24	Access Gate	13.0	6.79	121		60	88			2.9	2.6
ACMW-02S	08/14/2001	20010814-25	Access Gate	14.7	6.61	100		51	71			1.5	1.3
ACMW-03	08/14/2001	20010814-26	HWY 88	15.6	6.01	332		44	202			60.4	14.8
ACMW-04W	08/14/2001	20010814-27	Gansberg	13.3	6.25	195		46	141			22.4	7.3
ACMW-06N	08/14/2001	20010814-28	Celio	12.2	6.65	685		266	440			64.4	25.1
ACMW-06S	08/14/2001	20010814-29	Celio	12.9	6.68	748		275	480			72.6	34.2
Groundwaters													
GW-03	08/07/2001	20010807-09	Smith/Springmeyer	19.0	7.48	311		132	246			1.7	28.0
GW-04	08/07/2001	20010807-10	Celio	15.6	7.53	270		119	195			3.5	12.9
GW-05	08/07/2001	20010807-11	Neddenriep	13.5	6.42	257		63	159			22.3	12.4
GW-07	08/07/2001	20010807-12	Gansberg	14.4	6.56	122		55	91			1.6	2.6
GW-08	08/07/2001	20010807-13	Arant	15.8	6.40	254		50	149			26.1	9.5
GW-11	08/07/2001	20010807-14	Diamond Val. School	26.6	7.01	155		80				0.8	0.9
GW-14	08/07/2001	20010807-15	Sierrra Pines	16.2	6.40	112		54	89			1.3	1.8
Irrigation Waters													
SW-08	08/01/2001	20010801-21	Irrigation Ditch	14.2	7.13	127	7.80	57	103	48.70	8.23	1.6	4.1
Reservoirs													
HPR	08/01/2001	20010801-22	Harvey Place Reservoir	21.5	7.58	5	5.59	99	255	23.00	3.38	61.8	19.3
Surfacewaters: Carson R													
SW-01	08/01/2001	20010801-16	Carson R Woodfords	11.9	7.15	81	8.71	36	62	1.14	.72	1.6	1.9
SW-05	08/01/2001	20010801-19	Carson R Paynesville	16.3	7.10	89	8.25	41	65	1.42	.66	1.6	2.2
SW-05	08/07/2001	20010807-17	Carson R Paynesville	17.8	7.76	100	7.86		65			1.9	2.9
SW-06	08/01/2001	20010801-20	Carson R Stateline	16.5	7.37	92	9.07	42	72	2.10	1.34	1.9	2.4
Surfacewaters: Indian Cr													
SW-03	08/01/2001	20010801-17	Indian Cr Mid	18.2	7.09	224	7.72	111	153	3.98	4.05	4.8	1.6
SW-04	08/01/2001	20010801-18	Indian Cr Lower	16.4	7.04	159	7.83	80	118	3.04	3.97	2.3	1.0

ALPINE COUNTY MONITORING

08/24/01

Site	Date	TotalP mg/L	PO4-P mg/L	TKN mg/L	NH3-N mg/L	NO2-N mg/L	NO3-N mg/L	Total N mg/L
Alpine Monitoring Wells								
ACMW-01AV	08/14/2001					< 0.020	0.108	
ACMW-01BE	08/14/2001					< 0.010	0.282	
ACMW-02N	08/14/2001					< 0.010	0.037	
ACMW-02S	08/14/2001					< 0.010	< 0.010	
ACMW-03	08/14/2001					< 0.010	1.990	
ACMW-04W	08/14/2001					< 0.020	2.380	
ACMW-06N	08/14/2001					< 0.010	0.010	
ACMW-06S	08/14/2001					< 0.010	0.020	
Groundwaters								
GW-03	08/07/2001					< 0.010	0.722	
GW-04	08/07/2001					< 0.010	0.833	
GW-05	08/07/2001					< 0.030	3.120	
GW-07	08/07/2001					< 0.010	1.030	
GW-08	08/07/2001					< 0.040	5.490	
GW-11	08/07/2001					< 0.010	0.407	
GW-14	08/07/2001					< 0.010	0.485	
Irrigation Waters								
SW-08	08/01/2001	1.000	0.028	0.413	0.027	< 0.010	0.275	0.698
Reservoirs								
HPR	08/01/2001	3.020	2.630	13.000	11.000	0.501	1.620	15.121
Surfacewaters: Carson R								
SW-01	08/01/2001	0.015	0.068	< 0.100	< 0.020	< 0.010	0.015	0.125
SW-05	08/01/2001	0.019	< 0.010	0.105	0.024	< 0.010	0.016	0.131
SW-05	08/07/2001	0.028	0.026	0.109	0.024	< 0.010	0.031	0.150
SW-06	08/01/2001	0.023	< 0.010	0.101	< 0.020	< 0.010	0.026	0.137
Surfacewaters: Indian Cr								
SW-03	08/01/2001	0.084	0.037	0.124	0.025	< 0.010	0.012	0.146
SW-04	08/01/2001	0.087	0.034	0.214	0.038	< 0.010	0.029	0.253

ALPINE COUNTY MONITORING

Site	Date	COD mg/L	BOD mg/L	O & G mg/L	Boron mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	SAR	Exch Na %	Hardness mg/L	Water Level MSL or Ft
Alpine Monitoring Wells													
ACMW-01AV	08/14/2001												5480.8
ACMW-01BE	08/14/2001												5489.1
ACMW-02N	08/14/2001												5459.0
ACMW-02S	08/14/2001												5459.9
ACMW-03	08/14/2001												5040.5
ACMW-04W	08/14/2001												4904.5
ACMW-06N	08/14/2001												5214.5
ACMW-06S	08/14/2001												5203.7
Groundwaters													
GW-03	08/07/2001												
GW-04	08/07/2001												
GW-05	08/07/2001												
GW-07	08/07/2001												
GW-08	08/07/2001												
GW-11	08/07/2001												
GW-14	08/07/2001												
Irrigation Waters													
SW-08	08/01/2001		1		< 0.01	12.5	3.1	9.7	2.7	0.64	30.8		
Reservoirs													
HPR	08/01/2001	53	11		0.22	17.8	4.0	49.0	10.8	2.73	58.8		43.5
Surfacewaters: Carson R													
SW-01	08/01/2001		1		0.01	9.0	2.2	4.1	1.7	0.32	21.1		
SW-05	08/01/2001		1		0.01	8.8	2.4	4.9	1.9	0.38	23.7		
SW-05	08/07/2001												
SW-06	08/01/2001		1		0.02	10.0	2.6	5.2	2.1	0.38	22.9		
Surfacewaters: Indian Cr													
SW-03	08/01/2001		1		0.04	22.5	7.5	14.3	2.3	0.67	25.7		
SW-04	08/01/2001		1		0.02	17.0	5.3	7.8	2.2	0.42	20.1		

ALPINE COUNTY
BACTERIOLOGICAL MONITORING

Alpine Monitoring Wells

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
ACMW-01AV	08/14/2001		1.1	<	1.1	
ACMW-01BE	08/14/2001	<	1.1	<	1.1	
ACMW-02N	08/14/2001	<	1.1	<	1.1	
ACMW-02S	08/14/2001	<	1.1	<	1.1	
ACMW-03	08/14/2001	<	1.1	<	1.1	
ACMW-04W	08/14/2001	<	1.1	<	1.1	
ACMW-06N	08/14/2001	<	1.1	<	1.1	
ACMW-06S	08/14/2001	<	1.1	<	1.1	

Groundwaters

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
GW-03	08/07/2001	<	1.1	<	1.1	
GW-04	08/07/2001	<	1.1	<	1.1	
GW-05	08/07/2001	<	1.1	<	1.1	
GW-07	08/07/2001		5.1	<	1.1	
GW-08	08/07/2001	<	1.1	<	1.1	
GW-11	08/07/2001	<	1.1	<	1.1	
GW-14	08/07/2001	<	1.1	<	1.1	

Irrigation Waters

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-08	08/01/2001	4600	4600	

Reservoirs

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
HPR	08/01/2001	900	4	130

Surfacewaters: Carson R

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-01	08/01/2001		9	<	3	
SW-05	08/01/2001		460		240	
SW-05	08/07/2001					
SW-06	08/01/2001		1500		240	

ALPINE COUNTY
BACTERIOLOGICAL MONITORING

Surfacewaters: Indian Cr

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-03	08/01/2001	1100	1100	
SW-04	08/01/2001	460	460	

ALPINE COUNTY
BLUE GREEN ALGAE

ID#	Site	Location	Date	Colonies #	Colony # Cells	Filaments #	Filaments # Cells	Filaments #	Filament Length	Single Cells, #
August, 2001										
20010801-16	SW-01	Carson R Woodfords	08/01/01	0	0	0	0	0	0	0
20010801-17	SW-03	Indian Cr Mid	08/01/01	0	0	0	0	35	563	0
20010801-18	SW-04	Indian Cr Lower	08/01/01	0	0	0	0	0	0	0
20010801-19	SW-05	Carson R Paynesville	08/01/01	0	0	0	0	0	0	0
20010801-20	SW-06	Carson R Stateline	08/01/01	0	0	0	0	0	0	0
20010801-21	SW-08	Irrigation Ditch	08/01/01	0	0	0	0	0	0	0

Site	Location	TDS		Cl		TKN		NO_3-N		Total N		Total P		SO_4		Boron		Exch Na %	
		Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence
SW-01	Carson River, Woodfords	55	✓	1.0	✓	0.13		0.02		0.15		0.02		2.0	✓	0.02		20	✓
SW-06	Carson River, Stateline	70	✓	2.5	✓	0.22		0.03		0.25		0.03		2.0	✓	0.02		20	✓
SW-02	Indian Creek, Upper	100		6.0						0.30		0.03		8.0		0.25		30	
SW-03	Indian Creek, Mid	100	✓	6.0						0.30		0.03	✓	8.0		0.25		30	✓
SW-04	Indian Creek, Lower	100	✓	6.0						0.30		0.03	✓	8.0		0.25		30	
SW-10	Indian Creek, Stateline	100		6.0						0.30		0.03		8.0		0.25		30	

The Alpine County soils for and blue green algae tests have not yet been completed. The results will be sent to you as soon as they are available.

Certification

I hereby certify that the enclosed monitoring report was prepared under my direct supervision and that I am a duly Registered Engineer under the laws of the State of California.

Sincerely,

REGISTERED PROFESSIONAL ENGINEER
RICHARD H. SOLBRIG
No 28283
exp 3-31-02
CIVIL
STATE OF CALIFORNIA

Richard Solbrig,
Assistant Manager/Engineer

Enclosures:

1.

September Monthly Report	Pages
Wastewater Treatment plant	2
Permit Compliance Record	1
Export pipeline inspection	1
Sample site locations	2
Monitoring wells (ERB) and Heavenly Valley Creek (HVC) - Tahoe Basin	1
Alpine County Surfacewaters, Groundwaters, and HPR	8
Alpine County blue-green algae	0
Total number of pages:	15

cc: Calif. Dept. of Health Services, ODW - Jess Morehouse
El Dorado Co. Dept. of Environmental Health - Virginia Huber
Nevada Division of Environmental Protection - Wendel McCurry
Alpine County Health Department - Dr. Richard Botto
Alpine County Health Department - Jim Goodloe
Alpine County Board of Supervisors
Desert Research Group (Alpine County Consultants) - David McGraw
STPUD Board of Directors
STPUD General Manager / District Engineer - Robert G. Baer
STPUD Manager of Operations - Ross Johnson
STPUD Operations Chief Plant Operator - Jeff Lee
STPUD Laboratory Director - Terry Powers
STPUD Manager of Alpine County Operations - Hal Bird

File: \LAHONTAN\09-01 Report.WPD

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

SEPTEMBER 2001

Date	Day	FLOW MGD Inf	2-Hr Peak Inf	Eff	Pond Return	Pond Inf	PRECIP Inch	Type	D.O. mg/L Fin	COD mg/L Raw	COD mg/L Fin	BOD mg/L Raw	BOD mg/L Fin	SS mg/L Raw	SS mg/L Fin
09/01/01	Sat	5.24	7.2	4.94					5.43	442	42.8	193	10.6	164	2.8
09/02/01	Sun	5.30	8.9	5.34					3.41	472					
09/03/01	Mon	4.87	7.7	4.76					4.92	474	51.6	188	9.6	154	5.7
09/04/01	Tue	3.99	5.8	3.84					5.63	330					
09/05/01	Wed	4.02	5.2	3.84					5.16	352					
09/06/01	Thu	3.82	5.4	4.21					4.96	354					
09/07/01	Fri	3.98	6.3	3.49					5.64	379					
09/08/01	Sat	4.26	6.5	4.31					5.25	412	39.5			166	2.7
09/09/01	Sun	4.38	5.6	4.48					5.27	434					
09/10/01	Mon	3.90	5.1	3.91					5.19	410					
09/11/01	Tue	3.65	5.1	3.96					5.21	393					
09/12/01	Wed	3.71	5.1	3.55			0.06	Rain	5.60	428	31.8			173	2.3
09/13/01	Thu	3.87	5.6	4.35					5.50	416					
09/14/01	Fri	3.89	5.5	3.43					5.40	409					
09/15/01	Sat	4.35	6.5	4.68					5.08	594	33.8	187	6.5	189	2.1
09/16/01	Sun	4.34	6.7	4.23					5.24	444					
09/17/01	Mon	3.94	5.6	3.80					5.32	425					
09/18/01	Tue	3.63	5.2	3.87					5.23	404					
09/19/01	Wed	3.67	5.2	3.54					5.26	476	34.2	201	4.9	191	1.9
09/20/01	Thu	3.62	5.3	4.39					5.13	450					
09/21/01	Fri	3.70	5.4	3.58					5.63	478					
09/22/01	Sat	4.12	6.2	4.35					5.52	469	40.0	211	7.9	186	2.2
09/23/01	Sun	4.08	6.6	4.20					5.45	488					
09/24/01	Mon	3.71	5.5	4.03			0.28	Rain	5.25	439					
09/25/01	Tue	3.69	5.2	3.91			0.06	Rain	6.14	410					
09/26/01	Wed	3.61	5.4	3.65					5.49	421	45.0	173	4.8	162	3.1
09/27/01	Thu	3.79	5.9	4.07					5.20	396					
09/28/01	Fri	3.74	5.3	4.12					5.17	377					
09/29/01	Sat	4.15	6.2	4.23					5.89	430	42.0	188	6.8	175	3.7
09/30/01	Sun	3.90	6.5	4.08					5.31	457					
Permit Max		7.7									300		45		60
Permit Min															
Permit Ave											60		30		30
Total		120.92	177.7	123.14			0.40		158.88	12863	360.7	1341	51.1	1560	26.5
Maximum		5.30	8.9	5.34			0.28		6.14	594	51.6	211	10.6	191	5.7
Minimum		3.61	5.1	3.43			0.06		3.41	330	31.8	173	4.8	154	1.9
Average		4.03	5.9	4.10			0.13		5.30	429	40.1	192	7.3	173	2.9
# Tests		30	30	30	0	0	3		30	30	9	7	7	9	9

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

SEPTEMBER 2001

Date	Day	SETTLEABLE SOLIDS mL/L Raw		SETTLEABLE SOLIDS mL/L Fin	MBAS mg/L Raw	MBAS mg/L Fin	pH Units Raw	pH Units Fin	TURBIDITY NTU Fin	Cl2 mg/L Fin	FINAL COLIFORMS MPN/100 mL Total		FINAL COLIFORMS MPN/100 mL 7day- Median	TDS mg/L Raw	TDS mg/L Fin	ALKALINITY mg/L Raw	ALKALINITY mg/L Fin
09/01/01	Sat	13.0	<	0.1			7.48	7.50	5.27	4.77	<	2	< 2			171	149
09/02/01	Sun	13.5	<	0.1			7.44	7.36	6.36	3.86	<	2	< 2			177	154
09/03/01	Mon	13.0	<	0.1			7.45	7.50	5.95	7.72	<	2	< 2	283	255	176	154
09/04/01	Tue	11.0	<	0.1			7.58	7.47	3.58	6.09	<	2	< 2			164	144
09/05/01	Wed	10.5	<	0.1			7.32	7.44	2.92	6.50	<	2	< 2			153	146
09/06/01	Thu	12.0	<	0.1			7.46	7.48	2.52	5.59	<	2	< 2			159	146
09/07/01	Fri	15.0	<	0.1			7.39	7.38	3.56	4.47	<	2	< 2			160	150
09/08/01	Sat	12.0	<	0.1			7.48	7.46	2.91	4.47	<	2	< 2			165	148
09/09/01	Sun	11.0	<	0.1			7.50	7.45	2.50	4.88		2	< 2			165	144
09/10/01	Mon	11.5	<	0.1			7.60	7.58	2.32	4.88	<	2	< 2			154	136
09/11/01	Tue	10.5	<	0.1			7.40	7.35	2.41	5.18	<	2	< 2			154	130
09/12/01	Wed	12.0	<	0.1			7.55	7.52	2.72	4.67	<	2	< 2	259	240	157	124
09/13/01	Thu	10.5	<	0.1			7.43	7.40	2.34	4.27	<	2	< 2			154	120
09/14/01	Fri	11.0	<	0.1			7.43	7.33	2.53	3.76		2	< 2			155	114
09/15/01	Sat	11.0	<	0.1			7.43	7.39	2.89	2.95	<	2	< 2			161	118
09/16/01	Sun	10.5	<	0.1			7.45	7.26	3.87	3.76		2	< 2			161	118
09/17/01	Mon	10.5	<	0.1			7.60	7.41	3.54	9.04	<	2	< 2			156	107
09/18/01	Tue	11.0	<	0.1			7.46	7.37	3.21	7.41	<	2	< 2			155	104
09/19/01	Wed	13.0	<	0.1			7.54	7.40	3.30	5.69	<	2	< 2	258	238	158	109
09/20/01	Thu	13.0	<	0.1			7.60	7.49	3.68	4.37	<	2	< 2			160	107
09/21/01	Fri	14.0	<	0.1			7.72	7.36	4.15	3.96	<	2	< 2			157	110
09/22/01	Sat	14.0	<	0.1			7.51	7.43	4.08	6.60	<	2	< 2			168	121
09/23/01	Sun	12.0	<	0.1			7.56	7.24	4.73	6.60	<	2	< 2			168	128
09/24/01	Mon	11.0	<	0.1			7.49	7.35	3.98	8.33	<	2	< 2			166	122
09/25/01	Tue	11.5	<	0.1			7.57	7.38	3.45	4.16	<	2	< 2			154	117
09/26/01	Wed	10.0	<	0.1			7.58	7.52	2.46	4.06	<	2	< 2	265	257	168	121
09/27/01	Thu	11.0	<	0.1			7.60	7.40	2.47	3.96		2	< 2			159	120
09/28/01	Fri	11.0	<	0.1			7.48	7.27	2.54	2.74		2	< 2			156	112
09/29/01	Sat	11.0	<	0.1			7.52	7.36	2.78	3.35	<	2	< 2			160	111
09/30/01	Sun	13.0	<	0.1			7.45	7.24	3.90	4.16	<	2	< 2			170	112
Permit Max				0.1		2.0		8.5	20			240	23				
Permit Min								6.5									
Permit Ave						1.0			10								
Total		354.0		3.0	0.00	0.000	225.07	222.09	102.92	152.25		60	60	1065	990	4841	3796
Maximum		15.0		0.1	ERR	ERR	7.72	7.58	6.36	9.04		2	2	283	257	177	154
Minimum		10.0		0.1	ERR	ERR	7.32	7.24	2.32	2.74		2	2	258	238	153	104
Average		11.8		0.1	ERR	ERR	7.50	7.40	3.43	5.08		2	2	266	248	161	127
# Tests		30		30	0	0	30	30	30	30		30	30	4	4	30	30

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT
COMPLIANCE RECORD

2001

Parameter	# Tests	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Compliance, %
Total Plant Inflow; 7.7 MGD; Dry Weather	273	0	0	0	0	0	0	0	0	0				0	100.0
2-Hour Peak Inflow; 18.5 MGD	273	0	0	0	0	0	0	0	0	0				0	100.0
COD, 30 Day Ave: 60 mg/L	9	0	0	0	0	0	0	0	0	0				0	100.0
COD, Max: 300 mg/L	80	0	0	0	0	0	0	0	0	0				0	100.0
BOD, 30 Day Ave: 30 mg/L	9	0	0	0	0	0	0	0	0	0				0	100.0
BOD, Max: 45 mg/L	73	0	0	0	0	0	0	0	0	0				0	100.0
SS, 30 Day Ave: 30 mg/L	9	0	0	0	0	0	0	0	0	0				0	100.0
SS, Max: 60 mg/L	78	0	0	0	0	0	0	0	0	0				0	100.0
Settleable Solids, Max: 0.1 mL/L	269	0	0	0	0	0	0	0	0	0				0	100.0
Turbidity, 30 Day Ave: 10 NTU	9	0	0	0	0	0	0	0	0	0				0	100.0
Turbidity, Max: 20 NTU	266	0	0	0	0	0	0	0	0	0				0	100.0
pH, 6.5 to 8.5	266	0	0	0	0	0	0	0	0	0				0	100.0
Total Coliforms, Max: 240 MPN/100 mL	264	0	0	0	0	0	0	0	0	0				0	100.0
Total Coliforms, 7-day Median: 23 MPN	269	0	0	0	0	0	0	0	0	0				0	100.0
Total	2,147	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0

SOUTH TAHOE
PUBLIC UTILITY DISTRICT
MEMORANDUM

Date: September 27, 2001

To: Bob Baer, Lisa Coyner

From: David Johnson

Topic: Export Line Inspection

****

On September 27, 2001 Greg Schrempp and I conducted our inspection of the District's export line from the treatment plant to station 564+06 near the Harvey Place reservoir. No damage to the pipe was found.

CC Terry Powers

SAMPLE LOCATIONS

TAHOE BASIN MONITORING WELLS

Site	Location
ERB	Emergency Retention Basin
CONTROL	North of Post Office
MW02-25, -50	Emergency Retention Basin, S side
MW03-25, -50	Emergency Retention Basin, S side
MW04-25, -50	Emergency Retention Basin, W side
MW07-25, -50	Emergency Retention Basin, N side
MW08-25, -50	Pond #1, SW corner
MW11	S.E. corner of wastewater treatment plant grounds
MW12	South of Emergency Pump Building, for buried sludge
MW13	Pond 2, along Heavenly Valley Creek, for buried sludge

HEAVENLY VALLEY CREEK

HVC-1	At Pioneer Trail
HVC-2	250 ft upstream of Pond #2
HVC-3	25 ft downstream of Johnson Blvd.
HVC-4	Effluent of drain pipe from Lower Shop area
HVC-5	Effluent of drainage pipe along Johnson Blvd, 10 feet upstream of Johnson Blvd.

ALPINE COUNTY MONITORING WELLS

Site	Location
ACMW-01AW	Below main dam at Harvey Place Reservoir
ACMW-01BE	Below auxiliary dam at Harvey Place Reservoir
ACMW-02, N&S	On dam access road at Diamond Valley Road
ACMW-03	Bruns ranch, east side of Highway 88
ACMW-04W	Gansberg ranch, west side of Highway 88
ACMW-05	Dressler ranch
ACMW-06, N&S	Celio ranch, on Diamond Valley Road

ALPINE SOILS

Site	Ranch
S2	Celio
S3	Hall
S4	Gansberg
S5	Gansberg
S6	Neddenriep
S7	Bruns
S8	Dressler

ALPINE GROUNDWATERS

Site	Homeowner
GW-01	Sagues
GW-03	Smith/Springmeyer
GW-04	Celio
GW-05	Neddenriep
GW-07	Gansberg, Jr.
GW-08	Arant
GW-11	Diamond Valley School
GW-14	Sierra Pines Store

ALPINE SURFACEWATERS

Site	Location
SW-01	Carson River, Woodfords
SW-02	Indian Creek, @ HWY 89
SW-03	Indian Creek, @ upper bridge
SW-04	Indian Creek, @ lower bridge
SW-05	Carson River, Paynesville
SW-06	Carson River, Stateline
SW-07	Fredericksberg Ditch, Stateline
SW-08	Irrigation Ditch along Carson River Road
SW-09	Carson River, Dressler Lane
SW-10	Indian Creek, @ Smith-Springmeyer Ranch

TAHOE BASIN MONITORING

Site	Date	ID	Location	Depth msl	Temp C	pH	EC umho	Cl mg/L		COD mg/L	TKN mg/L		NO3-N mg/L	Comment
Buried Sludge Monitoring														
MW11	09/25/01	20010925-17	Sludge Pond	6263.8	9.2	6.52	92	1.1	<	5.0			0.086	
MW12	09/25/01	20010925-18	Sludge Pond	6261.6	9.5	6.43	96	1.6		9.1			0.426	
MW13	09/25/01	20010925-19	Sludge Pond	6254.3	9.2	6.70	717	5.1		19.1			1.540	
ERB Monitoring														
CONTROl	09/25/01	20010925-12	At Post Office	6280.1	9.2	7.14	172	8.4	<	5.0			2.300	
MW03-50	09/25/01	20010925-13	Black Bart side of ERB	6267.7	10.2	6.13	665	54.4		7.5			31.100	
MW04-50	09/25/01	20010925-14	Hank Monk side of ERB	6266.6	8.7	6.31	70	2.8	<	5.0			0.019	
MW07-50	09/25/01	20010925-15	North side of ERB	6276.9	7.9	6.58	246	23.5		5.6			0.645	
Heavenly Valley Creek														
HVC-1	09/27/01	20010927-HVC1	Downstream of Pioneer											Dry
HVC-2	09/27/01	20010927-HVC2	250' upstream of Pond #2											Dry
HVC-3	09/27/01	20010927-HVC3	25' downstream of Johnson Blvd											Dry
HVC-4	09/27/01	20010927-HVC4	Effluent of drain from Lower Shop a											Dry
HVC-5	09/25/01	20010925-HVC5	Effluent of drainage pipe along Johı											Dry
HVC-5	09/27/01	20010927-HVC5	Effluent of drainage pipe along Johı											Dry
Treatment Plant Monitoring														
MW08-25	09/25/01	20010925-16	SW side of Pond #1	6245.6	11.8	6.47	1016	52.4		91.9		<	0.100	

ALPINE COUNTY MONITORING

Site	Date	ID	Location	Temp C	pH	EC umhos	DO mg/L	Alk mg/L	TDS mg/L	SS mg/L	Turb NTU	Cl mg/L	SO4 mg/L
Alpine Monitoring Wells													
ACMW-01AW	09/18/2001	20010918-11	Main Dam	14.5	7.05	84		39	76			3.0	2.0
ACMW-01BE	09/18/2001	20010918-12	Secondary Dam	11.1	6.86	93		48	75			1.3	1.2
ACMW-02N	09/18/2001	20010918-13	Access Gate	12.7	7.10	124		60	88			3.1	3.0
ACMW-02S	09/18/2001	20010918-14	Access Gate	14.7	6.91	98		50	70			1.5	1.4
ACMW-03	09/18/2001	20010918-15	HWY 88	16.6	7.10	378		45	227			68.1	18.4
ACMW-04W	09/18/2001	20010918-16	Gansberg	12.3	6.90	193		48	127			21.5	6.9
ACMW-06N	09/18/2001	20010918-17	Celio	11.8	7.66	675		264	430			58.5	22.3
ACMW-06S	09/18/2001	20010918-18	Celio	13.1	7.53	716		261	452			72.1	31.3
Groundwaters													
GW-03	09/11/2001	20010911-11	Smith/Springmeyer	17.0	7.50	304		131	227			1.6	25.7
GW-04	09/11/2001	20010911-12	Celio	14.6	7.53	256		120	198			3.5	11.6
GW-05	09/11/2001	20010911-13	Neddenriep	13.1	6.37	246		63	158			23.1	12.7
GW-07	09/11/2001	20010911-14	Gansberg	11.9	6.64	121		55	93			1.6	2.6
GW-08	09/11/2001	20010911-15	Arant	15.0	6.49	248		50	154			24.7	10.1
GW-11	09/11/2001	20010911-16	Diamond Val. School	20.2	7.36	141		76	108			0.8	0.8
GW-14	09/11/2001	20010911-17	Sierra Pines	13.6	6.61	109		54	91			1.2	1.8
ICR TMDL													
GW-15	09/11/2001	20010911-23	ICR Campground										
Irrigation Waters													
SW-07	09/11/2001	20010911-20	Fredericksburg Ditch	14.6	7.29	226			138			17.6	7.9
SW-08	09/05/2001	20010905-14	Irrigation Ditch	22.1	7.81	133	7.18	60	117	31.70	13.4	2.8	4.5
Reservoirs													
HPR	09/05/2001	20010905-18	Harvey Place Reservoir	19.3	7.97	515	7.52	113	257	227.00	48.7	64.3	19.5
Surfacewaters: Carson R													
SW-01	09/05/2001	20010905-09	Carson R Woodfords	13.1	7.02	84	8.63	39	63	0.40	.5	1.5	2.1
SW-05	09/05/2001	20010905-12	Carson R Paynesville	16.0	8.16	100	9.12	46	76	1.04	.63	1.8	2.8
SW-05	09/11/2001	20010911-19	Carson R Paynesville	14.0	7.89	85			53			1.6	2.3
SW-06	09/05/2001	20010905-13	Carson R Stateline	18.4	8.12	115	9.34	51	86	1.06	.7	3.4	3.5

ALPINE COUNTY MONITORING

Site	Date	ID	Location	Temp C	pH	EC umhos	DO mg/L	Alk mg/L	TDS mg/L	SS mg/L	Turb NTU	Cl mg/L	SO4 mg/L
Surfacewaters: Indian Cr													
SW-03	09/05/2001	20010905-10	Indian Cr Mid	14.5	7.30	235	7.65	116	160	1.72	2.1	4.8	1.6
SW-04	09/05/2001	20010905-11	Indian Cr Lower	15.1	7.53	160	7.70	80	120	34.30	8.82	2.7	1.2

ALPINE COUNTY MONITORING

10/05/01

Site	Date	TotalP mg/L	PO4-P mg/L	TKN mg/L	NH3-N mg/L	NO2-N mg/L	NO3-N mg/L	Total N mg/L
Alpine Monitoring Wells								
ACMW-01AV	09/18/2001	0.034		0.170		< 0.020	0.627	0.817
ACMW-01BE	09/18/2001	0.044		0.137		< 0.010	0.276	0.423
ACMW-02N	09/18/2001	0.019		0.153		< 0.010	0.054	0.217
ACMW-02S	09/18/2001	0.014		0.158		< 0.010	< 0.010	0.178
ACMW-03	09/18/2001	0.050		0.246		< 0.010	4.500	4.756
ACMW-04W	09/18/2001	0.013		0.135		< 0.020	2.410	2.565
ACMW-06N	09/18/2001	0.237		0.318		< 0.010	< 0.010	0.338
ACMW-06S	09/18/2001	0.050		0.182		< 0.010	0.025	0.217
Groundwaters								
GW-03	09/11/2001	0.038		0.134		< 0.010	0.694	0.838
GW-04	09/11/2001	0.057		0.237		< 0.010	0.820	1.067
GW-05	09/11/2001	0.044		< 0.100		< 0.030	3.340	3.470
GW-07	09/11/2001	0.106		0.120		< 0.010	1.160	1.290
GW-08	09/11/2001	0.045		0.189		< 0.040	5.210	5.439
GW-11	09/11/2001	0.050		0.180		< 0.010	0.460	0.650
GW-14	09/11/2001	0.058		0.214		< 0.010	0.482	0.706
ICR TMDL								
GW-15	09/11/2001	0.049						
Irrigation Waters								
SW-07	09/11/2001	0.171	0.067	0.564	0.033	0.013	0.636	1.213
SW-08	09/05/2001	0.143	0.045	0.835	0.031	< 0.010	0.120	0.965
Reservoirs								
HPR	09/05/2001	3.520	2.230	21.500	15.800	0.361	0.857	22.718
Surfacewaters: Carson R								
SW-01	09/05/2001	0.010	< 0.010	< 0.100	0.027	< 0.010	0.014	0.124
SW-05	09/05/2001	0.016	< 0.010	0.224	0.023	< 0.010	0.015	0.249
SW-05	09/11/2001	0.017	0.012	< 0.100	0.038	< 0.010	< 0.010	0.120
SW-06	09/05/2001	0.013	< 0.010	0.118	0.022	< 0.010	0.016	0.144

ALPINE COUNTY MONITORING

Site	Date	TotalP mg/L	PO4-P mg/L	TKN mg/L	NH3-N mg/L	NO2-N mg/L	NO3-N mg/L	Total N mg/L
Surfacewaters: Indian Cr								
SW-03	09/05/2001	0.062	0.026	0.146	0.035	< 0.010	0.030	0.186
SW-04	09/05/2001	0.084	0.044	0.145	0.039	< 0.010	< 0.010	0.165

ALPINE COUNTY MONITORING

Site	Date	COD mg/L	BOD mg/L	O & G mg/L		Boron mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	SAR	Exch Na %	Hardness mg/L	Water Level MSL or Ft
Alpine Monitoring Wells														
ACMW-01AV	09/18/2001													5481.3
ACMW-01BE	09/18/2001													5487.1
ACMW-02N	09/18/2001													5458.0
ACMW-02S	09/18/2001													5458.7
ACMW-03	09/18/2001													5038.6
ACMW-04W	09/18/2001													4904.0
ACMW-06N	09/18/2001													5216.0
ACMW-06S	09/18/2001													5204.8
Groundwaters														
GW-03	09/11/2001													
GW-04	09/11/2001													
GW-05	09/11/2001													
GW-07	09/11/2001													
GW-08	09/11/2001													
GW-11	09/11/2001													
GW-14	09/11/2001													
ICR TMDL														
GW-15	09/11/2001													
Irrigation Waters														
SW-07	09/11/2001													
SW-08	09/05/2001					0.02	11.9	3.2	10.7	3.6	0.71	32.9		
Reservoirs														
HPR	09/05/2001	108				0.25	17.5	4.8	54.4	11.6	2.97	60.2		29.0
Surfacewaters: Carson R														
SW-01	09/05/2001				<	0.01	8.7	2.4	4.5	1.8	0.35	22.3		
SW-05	09/05/2001				<	0.01	9.4	2.7	6.0	2.2	0.44	25.8		
SW-05	09/11/2001													
SW-06	09/05/2001				<	0.01	11.1	3.3	6.3	2.2	0.43	23.7		

ALPINE COUNTY MONITORING

Site	Date	COD mg/L	BOD mg/L	O & G mg/L	Boron mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	SAR	Exch Na %	Hardness mg/L	Water Level MSL or Ft
Surfacewaters: Indian Cr													
SW-03	09/05/2001				0.03	21.8	7.3	14.7	2.2	0.70	26.8		
SW-04	09/05/2001				0.01	15.6	4.9	8.5	2.4	0.48	22.9		

ALPINE COUNTY
BACTERIOLOGICAL MONITORING

Alpine Monitoring Wells

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
ACMW-01AV	09/18/2001		6.9	<	1.1	
ACMW-01BE	09/18/2001	<	1.1	<	1.1	
ACMW-02N	09/18/2001	<	1.1	<	1.1	
ACMW-02S	09/18/2001	<	1.1	<	1.1	
ACMW-03	09/18/2001	<	1.1	<	1.1	
ACMW-04W	09/18/2001	<	1.1	<	1.1	
ACMW-06N	09/18/2001	<	1.1	<	1.1	
ACMW-06S	09/18/2001	<	1.1	<	1.1	

Groundwaters

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
GW-03	09/11/2001	<	1.1	<	1.1	
GW-04	09/11/2001	<	1.1	<	1.1	
GW-05	09/11/2001	<	1.1	<	1.1	
GW-07	09/11/2001		1.1	<	1.1	
GW-08	09/11/2001	<	1.1	<	1.1	
GW-11	09/11/2001	<	1.1	<	1.1	
GW-14	09/11/2001	<	1.1	<	1.1	

ICR TMDL

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
GW-15	09/11/2001			

Irrigation Waters

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-07	09/11/2001					
SW-08	09/05/2001	>	24000	>	24000	

Reservoirs

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
HPR	09/05/2001	240	30	170

ALPINE COUNTY
BACTERIOLOGICAL MONITORING

Surfacewaters: Carson R

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-01	09/05/2001	75	23	
SW-05	09/05/2001	93	93	
SW-05	09/11/2001			
SW-06	09/05/2001	460	460	

Surfacewaters: Indian Cr

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-03	09/05/2001	460	460	
SW-04	09/05/2001	460	150	

LRWQCB - Page 2

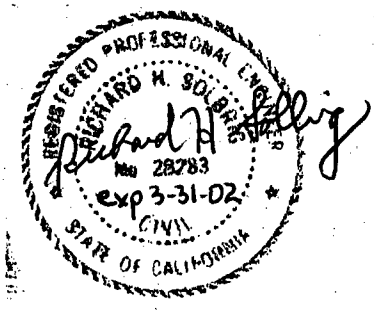
Site	Location	TDS		Cl		TKN		NO_3-N		Total N		Total P		SO_4		Boron		Exch Na %	
		Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence
SW-01	Carson River, Woodfords	55	✓	1.0	✓	0.13		0.02		0.15		0.02		2.0		0.02		20	✓
SW-06	Carson River, Stateline	70	✓	2.5	✓	0.22	✓	0.03		0.25	✓	0.03		2.0	✓	0.02		20	
SW-02	Indian Creek, Upper	100		6.0						0.30		0.03		8.0		0.25		30	
SW-03	Indian Creek, Mid	100	✓	6.0						0.30		0.03	✓	8.0		0.25		30	✓
SW-04	Indian Creek, Lower	100	✓	6.0						0.30	✓	0.03	✓	8.0		0.25		30	
SW-10	Indian Creek, Stateline	100		6.0						0.30		0.03		8.0		0.25		30	

The Alpine County soils for September have not yet been completed. The results will be sent to you as soon as they are available.

Certification

I hereby certify that the enclosed monitoring report was prepared under my direct supervision and that I am a duly Registered Engineer under the laws of the State of California.

Sincerely,



Richard Solbrig,
Assistant Manager/Engineer

Enclosures:

1.

October Monthly Report	Pages
Wastewater Treatment plant	2
Permit Compliance Record	1
Export pipeline inspection	1
Sample site locations	2
Monitoring wells (ERB) and Heavenly Valley Creek (HVC) - Tahoe Basin	1
Alpine County Surfacewaters, Groundwaters, and HPR	4
Alpine County blue-green algae, September and October	2
Total number of pages:	13

cc: Calif. Dept. of Health Services, ODW - Jess Morehouse
El Dorado Co. Dept. of Environmental Health - Virginia Huber
Nevada Division of Environmental Protection - Wendel McCurry
Alpine County Health Department - Dr. Richard Botto
Alpine County Health Department - Jim Goodloe
Alpine County Board of Supervisors
Desert Research Group (Alpine County Consultants) - David McGraw
STPUD Board of Directors
STPUD General Manager / District Engineer - Robert G. Baer
STPUD Manager of Operations - Ross Johnson
STPUD Operations Chief Plant Operator - Jeff Lee
STPUD Laboratory Director - Terry Powers
STPUD Manager of Alpine County Operations - Hal Bird

File: \LAHONTAN\10-01 Report.WPD

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

OCTOBER 2001

		FLOW MGD					PRECIP		D.O.	COD		BOD		SS	
			2-Hr Peak		Pond	Pond			mg/L	mg/L		mg/L		mg/L	
Date	Day	Inf	Inf	Eff	Return	Inf	Inch	Type	Fin	Raw	Fin	Raw	Fin	Raw	Fin
10/01/01	Mon	3.56	4.9	3.63					5.24	429					
10/02/01	Tue	3.80	5.1	3.71					5.12	573					
10/03/01	Wed	3.90	5.7	3.80					5.22	592	32.0	213	4.8	258	2.6
10/04/01	Thu	3.91	5.5	3.52					5.40	468					
10/05/01	Fri	4.11	5.4	4.25					5.19	409					
10/06/01	Sat	4.40	6.3	3.93					5.37	441	30.0	198	6.2	163	4.0
10/07/01	Sun	4.47	6.9	4.18					5.08						
10/08/01	Mon	4.12	5.5	4.03					5.06	415					
10/09/01	Tue	3.96	5.3	3.76					5.18	400					
10/10/01	Wed	3.82	5.4	3.74					5.35	446	41.2	200	5.9	174	3.3
10/11/01	Thu	3.94	5.1	3.94					5.54	452					
10/12/01	Fri	4.00	5.3	3.80					5.70	394					
10/13/01	Sat	4.54	6.2	4.34					5.71	425	32.3	204	6.0	163	3.3
10/14/01	Sun	4.35	6.6	3.72					5.53	420					
10/15/01	Mon	4.08	5.4	3.97					5.26	409					
10/16/01	Tue	3.78	5.3	3.59					5.58	470					
10/17/01	Wed	3.75	5.3	3.33					5.59	662	37.8	267	6.7	290	3.1
10/18/01	Thu	3.84	5.3	3.98					5.64	414					
10/19/01	Fri	3.93	5.3	3.59					5.40	427					
10/20/01	Sat	4.49	6.0	4.55					5.25	438	38.2	186	7.3	166	5.0
10/21/01	Sun	4.19	6.7	3.80					5.54	450					
10/22/01	Mon	4.07	5.1	3.89					5.30	415					
10/23/01	Tue	3.61	5.1	3.30					5.38	388					
10/24/01	Wed	3.72	5.1	3.72					5.41	474	45.1	205	6.5	194	3.7
10/25/01	Thu	3.69	5.0	3.64					5.46	404					
10/26/01	Fri	3.85	5.3	3.78					5.60	420					
10/27/01	Sat	4.26	6.0	3.76					5.57	410	31.2	189	6.4	146	3.9
10/28/01	Sun	4.27	6.2	4.22					5.25	407					
10/29/01	Mon	3.56	5.2	3.42					5.22	349					
10/30/01	Tue	3.63	5.0	3.90			0.36	Rain	5.44	414	34.5	163	5.9	155	3.5
10/31/01	Wed	3.65	4.9	3.60					5.51	424					
Permit Max		7.7									300		45		60
Permit Min															
Permit Ave											60		30		30
Total		123.25	171.4	118.39			0.36		167.09	13239	322.3	1825	55.7	1709	32.4
Maximum		4.54	6.9	4.55			0.36		5.71	662	45.1	267	7.3	290	5.0
Minimum		3.56	4.9	3.30			0.36		5.06	349	30.0	163	4.8	146	2.6
Average		3.98	5.5	3.82			0.36		5.39	441	35.8	203	6.2	190	3.6
# Tests		31	31	31	0	0	1		31	30	9	9	9	9	9

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

OCTOBER 2001

Date	Day	SETTLEABLE SOLIDS mL/L Raw		SETTLEABLE SOLIDS mL/L Fin	MBAS mg/L Raw	MBAS mg/L Fin	pH Units Raw	pH Units Fin	TURBIDITY NTU Fin	Cl2 mg/L Fin	FINAL COLIFORMS MPN/100 mL Total		FINAL COLIFORMS MPN/100 mL 7day- Median		TDS mg/L Raw	TDS mg/L Fin	ALKALINITY mg/L Raw	ALKALINITY mg/L Fin
10/01/01	Mon	10.5	<	0.1			7.37	7.21	2.82	4.88	<	2	<	2			157	101
10/02/01	Tue	10.0	<	0.1			7.49	7.22	2.26	4.16	<	2	<	2			155	93
10/03/01	Wed	15.0	<	0.1			7.36	7.18	2.39	3.76	<	2	<	2	264	246	154	88
10/04/01	Thu	11.0	<	0.1			7.38	7.19	2.82	4.67		2	<	2			153	94
10/05/01	Fri	9.0	<	0.1			7.46	7.20	3.34	4.16	<	2	<	2			157	96
10/06/01	Sat	11.0	<	0.1			7.63	7.42	3.56	3.96		2	<	2			166	104
10/07/01	Sun		<	0.1				7.31	4.15	3.45	<	2	<	2				115
10/08/01	Mon	11.0	<	0.1			7.39	7.21	4.28	4.57	<	2	<	2			159	104
10/09/01	Tue	11.0	<	0.1			7.50	7.21	3.86	3.86		2	<	2			158	95
10/10/01	Wed	11.0	<	0.1			7.43	7.42	3.32	4.47	<	2	<	2	258	248	164	85
10/11/01	Thu	11.5	<	0.1			7.50	7.17	3.72	4.67	<	2	<	2			149	86
10/12/01	Fri	14.5	<	0.1			7.69	7.40	3.46	3.45	<	2	<	2			152	103
10/13/01	Sat	11.5	<	0.1			7.68	7.49	2.78	2.95	<	2	<	2			162	103
10/14/01	Sun	10.0	<	0.1			7.49	7.30	2.45	3.55	<	2	<	2			167	109
10/15/01	Mon	10.0	<	0.1			7.42	7.35	2.50	5.18	<	2	<	2			163	106
10/16/01	Tue	11.0	<	0.1			7.42	7.23	2.76	2.94	<	2	<	2			155	108
10/17/01	Wed	15.0	<	0.1			7.43	7.26	3.34	5.28	<	2	<	2	269	243	160	109
10/18/01	Thu	10.5	<	0.1			7.40	7.24	3.60	4.57	<	2	<	2			157	112
10/19/01	Fri	11.0	<	0.1			7.44	7.25	3.71	4.06	<	2	<	2			152	117
10/20/01	Sat	10.0	<	0.1			7.47	7.32	3.82	3.66	<	2	<	2			160	117
10/21/01	Sun	10.5	<	0.1			7.44	7.29	4.30	4.26	<	2	<	2			156	118
10/22/01	Mon	9.5	<	0.1			7.35	7.17	3.60	4.88	<	2	<	2			151	112
10/23/01	Tue	9.5	<	0.1			7.56	7.44	3.19	4.57	<	2	<	2			152	105
10/24/01	Wed	11.5	<	0.1			7.52	7.22	3.07	4.88	<	2	<	2	250	250	146	99
10/25/01	Thu	10.5	<	0.1			7.62	7.13	2.87	4.67	<	2	<	2			147	91
10/26/01	Fri	9.5	<	0.1			7.42	7.07	2.66	4.06	<	2	<	2			151	90
10/27/01	Sat	9.5	<	0.1			7.41	7.20	3.56	3.86	<	2	<	2			150	91
10/28/01	Sun	10.0	<	0.1			7.41	7.08	3.05	3.76	<	2	<	2			154	93
10/29/01	Mon	9.5	<	0.1			7.56	7.22	3.12	4.47	<	2	<	2			150	84
10/30/01	Tue	10.0	<	0.1			7.43	7.15	2.84	3.55	<	2	<	2	257	244	147	85
10/31/01	Wed	12.0	<	0.1			7.43	7.04	3.04	5.89	<	2	<	2			144	92
Permit Max				0.1		2.0		8.5	20			240		23				
Permit Min								6.5										
Permit Ave						1.0			10									
Total		326.5		3.1	0.00	0.000	224.10	224.59	100.24	131.10		62		62	1298	1231	4648	3103
Maximum		15.0		0.1	ERR	ERR	7.69	7.49	4.30	5.89		2		2	269	250	167	118
Minimum		9.0		0.1	ERR	ERR	7.35	7.04	2.26	2.94		2		2	250	243	144	84
Average		10.9		0.1	ERR	ERR	7.47	7.24	3.23	4.23		2		2	260	246	155	100
# Tests		30		31	0	0	30	31	31	31		31		31	5	5	30	31

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT
COMPLIANCE RECORD

2001

Parameter	# Tests	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Compliance, %
Total Plant Inflow; 7.7 MGD; Dry Weather	304	0	0	0	0	0	0	0	0	0	0			0	100.0
2-Hour Peak Inflow; 18.5 MGD	304	0	0	0	0	0	0	0	0	0	0			0	100.0
COD, 30 Day Ave: 60 mg/L	10	0	0	0	0	0	0	0	0	0	0			0	100.0
COD, Max: 300 mg/L	89	0	0	0	0	0	0	0	0	0	0			0	100.0
BOD, 30 Day Ave: 30 mg/L	10	0	0	0	0	0	0	0	0	0	0			0	100.0
BOD, Max: 45 mg/L	82	0	0	0	0	0	0	0	0	0	0			0	100.0
SS, 30 Day Ave: 30 mg/L	10	0	0	0	0	0	0	0	0	0	0			0	100.0
SS, Max: 60 mg/L	87	0	0	0	0	0	0	0	0	0	0			0	100.0
Settleable Solids, Max: 0.1 mL/L	300	0	0	0	0	0	0	0	0	0	0			0	100.0
Turbidity, 30 Day Ave: 10 NTU	10	0	0	0	0	0	0	0	0	0	0			0	100.0
Turbidity, Max: 20 NTU	297	0	0	0	0	0	0	0	0	0	0			0	100.0
pH, 6.5 to 8.5	297	0	0	0	0	0	0	0	0	0	0			0	100.0
Total Coliforms, Max: 240 MPN/100 mL	295	0	0	0	0	0	0	0	0	0	0			0	100.0
Total Coliforms, 7-day Median: 23 MPN	300	0	0	0	0	0	0	0	0	0	0			0	100.0
Total	2,395	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0

SOUTH TAHOE
PUBLIC UTILITY DISTRICT
MEMORANDUM

Date: October 30, 2001

To: Bob Baer, Lisa Coyner

From: Tim Rieger

Topic: Export Line Check

****

On October 30, 2001, David Johnson and I conducted our check of the District's export line from the treatment plant to station 564+06 near the Harvey Place reservoir.

No damage to the pipe was found.

CC Terry Powers

EXPRT1001.MEM

SAMPLE LOCATIONS

TAHOE BASIN MONITORING WELLS

Site	Location
ERB	Emergency Retention Basin
CONTROL	North of Post Office
MW02-25, -50	Emergency Retention Basin, S side
MW03-25, -50	Emergency Retention Basin, S side
MW04-25, -50	Emergency Retention Basin, W side
MW07-25, -50	Emergency Retention Basin, N side
MW08-25, -50	Pond #1, SW corner
MW11	S.E. corner of wastewater treatment plant grounds
MW12	South of Emergency Pump Building, for buried sludge
MW13	Pond 2, along Heavenly Valley Creek, for buried sludge

HEAVENLY VALLEY CREEK

HVC-1	At Pioneer Trail
HVC-2	250 ft upstream of Pond #2
HVC-3	25 ft downstream of Johnson Blvd.
HVC-4	Effluent of drain pipe from Lower Shop area
HVC-5	Effluent of drainage pipe along Johnson Blvd, 10 feet upstream of Johnson Blvd.

ALPINE COUNTY MONITORING WELLS

Site	Location
ACMW-01AW	Below main dam at Harvey Place Reservoir
ACMW-01BE	Below auxiliary dam at Harvey Place Reservoir
ACMW-02, N&S	On dam access road at Diamond Valley Road
ACMW-03	Bruns ranch, east side of Highway 88
ACMW-04W	Gansberg ranch, west side of Highway 88
ACMW-05	Dressler ranch
ACMW-06, N&S	Celio ranch, on Diamond Valley Road

ALPINE SOILS

Site	Ranch
S2	Celio
S3	Hall
S4	Gansberg
S5	Gansberg
S6	Neddenriep
S7	Bruns
S8	Dressler

ALPINE GROUNDWATERS

Site	Homeowner
GW-01	Sagues
GW-03	Smith/Springmeyer
GW-04	Celio
GW-05	Neddenriep
GW-07	Gansberg, Jr.
GW-08	Arant
GW-11	Diamond Valley School
GW-14	Sierra Pines Store

ALPINE SURFACEWATERS

Site	Location
SW-01	Carson River, Woodfords
SW-02	Indian Creek, @ HWY 89
SW-03	Indian Creek, @ upper bridge
SW-04	Indian Creek, @ lower bridge
SW-05	Carson River, Paynesville
SW-06	Carson River, Stateline
SW-07	Fredericksberg Ditch, Stateline
SW-08	Irrigation Ditch along Carson River Road
SW-09	Carson River, Dressler Lane
SW-10	Indian Creek, @ Smith-Springmeyer Ranch

TAHOE BASIN MONITORING

Site	Date	ID	Location	Depth msl	Temp C	pH	EC umho	Cl mg/L	COD mg/L	TKN mg/L	NO3-N mg/L	Comment
Buried Sludge Monitoring												
MW11	10/23/01	20011023-14	Sludge Pond	6262.7	8.4	6.52	96	2.1 <	5.0		0.091	
MW12	10/23/01	20011023-15	Sludge Pond	6261.5	9.8	6.47	97	1.5 <	5.0		0.401	
MW13	10/23/01	20011023-16	Sludge Pond	6254.0	7.7	6.85	731	5.0	19.8		1.440	
ERB Monitoring												
CONTROI	10/23/01	20011023-10	At Post Office	6279.6	8.5	6.28	177	8.4 <	5.0		2.290	
MW03-50	10/23/01	20011023-11	Black Bart side of ERB	6267.6	9.6	5.99	692	57.0 <	5.0		34.400	
MW07-50	10/23/01	20011023-12	North side of ERB	6276.5	7.2	6.30	254	24.4 <	5.0		0.667	
Heavenly Valley Creek												
HVC-1	10/23/01	20011023-HVC1	Downstream of Pioneer									Dry
HVC-1	10/30/01	20011030-HVC1a	Downstream of Pioneer									Dry
HVC-1	10/30/01	20011030-HVC1p	Downstream of Pioneer									Dry
HVC-2	10/23/01	20011023-HVC2	250' upstream of Pond #2									Dry
HVC-2	10/30/01	20011030-HVC2a	250' upstream of Pond #2									Dry
HVC-2	10/30/01	20011030-HVC2p	250' upstream of Pond #2									Dry
HVC-3	10/23/01	20011023-HVC3	25' downstream of Johnson Blvd									Dry
HVC-3	10/30/01	20011030-HVC3a	25' downstream of Johnson Blvd									Dry
HVC-3	10/30/01	20011030-HVC3p	25' downstream of Johnson Blvd									Dry
HVC-4	10/23/01	20011023-HVC4	Effluent of drain from Lower Shop a									Dry
HVC-4	10/30/01	20011030-HVC4a	Effluent of drain from Lower Shop a									Dry
HVC-4	10/30/01	20011030-HVC4p	Effluent of drain from Lower Shop a									Dry
HVC-5	10/23/01	20011023-HVC5	Effluent of drainage pipe along Johı									Dry
HVC-5	10/30/01	20011030-HVC5a	Effluent of drainage pipe along Johı									Dry
HVC-5	10/30/01	20011030-HVC5p	Effluent of drainage pipe along Johı									Dry
Treatment Plant Monitoring												
MW08-25	10/23/01	20011023-13	SW side of Pond #1	6245.5	11.3	6.32	1038	56.0	89.2		< 0.100	

ALPINE COUNTY MONITORING

Site	Date	ID	Location	Temp C	pH	EC umhos	DO mg/L	Alk mg/L	TDS mg/L	SS mg/L	Turb NTU	Cl mg/L	SO4 mg/L
Alpine Monitoring Wells													
ACMW-01AW	10/16/2001	20011016-18	Main Dam	12.5	6.45	111		41	85			5.9	1.8
ACMW-01BE	10/16/2001	20011016-19	Secondary Dam	11.4	6.34	102		49	58			1.3	1.2
ACMW-02N	10/16/2001	20011016-20	Access Gate	13.4	6.55	133		62	96			3.5	3.5
ACMW-02S	10/16/2001	20011016-21	Access Gate	14.2	6.36	100		50	75			1.5	1.4
ACMW-04W	10/16/2001	20011016-22	Gansberg	12.6	6.02	196		48	132			20.7	7.0
ACMW-06N	10/16/2001	20011016-23	Celio	11.8	6.81	703		263	424			57.6	21.1
ACMW-06S	10/16/2001	20011016-24	Celio	12.4	6.89	794		277	463			73.0	32.3
Groundwaters													
GW-03	10/09/2001	20011009-26	Smith/Springmeyer	15.5	7.37	311		132	228			1.6	25.8
GW-04	10/09/2001	20011009-27	Celio	14.7	7.67	262		120	199			3.6	11.4
GW-05	10/09/2001	20011009-28	Neddenriep	11.6	6.19	256		63	159			23.5	12.9
GW-07	10/09/2001	20011009-29	Gansberg	12.2	6.30	129		55	87			2.0	2.7
GW-08	10/09/2001	20011009-30	Arant	14.0	6.10	266		50	169			29.4	9.5
GW-11	10/09/2001	20011009-31	Diamond Val. School	15.4	7.08	147		77	112			1.1	0.8
GW-14	10/09/2001	20011009-32	Sierrra Pines	11.5	6.37	114		54	82			1.5	1.8
Irrigation Waters													
SW-08	10/02/2001	20011002-22	Irrigation Ditch	19.3	7.52	124	5.18	58	104	18.80	6.55	1.9	4.1
Reservoirs													
HPR	10/02/2001	20011002-24	Harvey Place Reservoir	17.1	7.55	516	6.17	116	253	9.70	7.17	62.9	18.4
Surfacewaters: Carson R													
SW-01	10/02/2001	20011002-17	Carson R Woodfords	9.4	6.86	89	9.19	39	68	0.70	.33	1.7	2.0
SW-05	10/02/2001	20011002-20	Carson R Paynesville	13.4	7.89	95	10.10	46	78	0.86	.58	1.8	2.6
SW-05	10/09/2001	20011009-23	Carson R Paynesville	8.0	7.10	94	10.49		71			1.7	2.5
SW-06	10/02/2001	20011002-21	Carson R Stateline	14.1	7.67	164	6.13	48	83	0.76	.54	3.0	3.0
Surfacewaters: Indian Cr													
SW-03	10/02/2001	20011002-18	Indian Cr Mid	11.2	7.34	227	7.95	114	164	1.22	2.05	4.7	1.7
SW-04	10/02/2001	20011002-19	Indian Cr Lower	12.4	7.82	172	8.32	83	132	4.22	6.26	4.2	1.3

ALPINE COUNTY MONITORING

11/15/01

Site	Date	TotalP mg/L	PO4-P mg/L	TKN mg/L	NH3-N mg/L	NO2-N mg/L	NO3-N mg/L	Total N mg/L
Alpine Monitoring Wells								
ACMW-01AV	10/16/2001					< 0.020	1.660	
ACMW-01BE	10/16/2001					< 0.010	0.281	
ACMW-02N	10/16/2001					< 0.010	0.068	
ACMW-02S	10/16/2001					< 0.010	< 0.010	
ACMW-04W	10/16/2001					< 0.020	2.452	
ACMW-06N	10/16/2001					< 0.010	0.037	
ACMW-06S	10/16/2001					< 0.010	< 0.020	
Groundwaters								
GW-03	10/09/2001					< 0.010	0.723	
GW-04	10/09/2001					< 0.010	0.831	
GW-05	10/09/2001					< 0.030	3.470	
GW-07	10/09/2001					< 0.010	1.360	
GW-08	10/09/2001					< 0.040	5.950	
GW-11	10/09/2001					< 0.010	0.457	
GW-14	10/09/2001					< 0.010	0.486	
Irrigation Waters								
SW-08	10/02/2001	0.068	0.051	0.450	0.027	< 0.010	0.160	0.620
Reservoirs								
HPR	10/02/2001	2.480	2.290	17.600	17.300	0.999	1.100	19.699
Surfacewaters: Carson R								
SW-01	10/02/2001	< 0.010	< 0.010	0.121	< 0.020	< 0.010	< 0.010	0.141
SW-05	10/02/2001	< 0.010	0.021	0.154	0.021	< 0.010	0.010	0.174
SW-05	10/09/2001	< 0.010	0.022	< 0.100	< 0.020	< 0.010	< 0.010	0.120
SW-06	10/02/2001	0.011	0.023	0.259	< 0.020	< 0.010	0.021	0.290
Surfacewaters: Indian Cr								
SW-03	10/02/2001	0.065	0.033	0.161	< 0.020	< 0.010	0.021	0.192
SW-04	10/02/2001	0.074	0.035	0.301	0.032	< 0.010	< 0.010	0.321

ALPINE COUNTY MONITORING

Site	Date	COD mg/L	BOD mg/L	O & G mg/L	Boron mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	SAR	Exch Na %	Hardness mg/L	Water Level MSL or Ft
Alpine Monitoring Wells													
ACMW-01AV	10/16/2001												5479.7
ACMW-01BE	10/16/2001												5484.8
ACMW-02N	10/16/2001												5457.4
ACMW-02S	10/16/2001												5457.4
ACMW-04W	10/16/2001												4903.0
ACMW-06N	10/16/2001												5216.0
ACMW-06S	10/16/2001												5204.7
Groundwaters													
GW-03	10/09/2001												
GW-04	10/09/2001												
GW-05	10/09/2001												
GW-07	10/09/2001												
GW-08	10/09/2001												
GW-11	10/09/2001												
GW-14	10/09/2001												
Irrigation Waters													
SW-08	10/02/2001		1		0.02	5.4	2.7	9.8	2.2	0.86	43.8		
Reservoirs													
HPR	10/02/2001	32	6		0.25	16.7	3.7	51.1	10.3	2.94	61.3		10.0
Surfacewaters: Carson R													
SW-01	10/02/2001		1		0.01	8.0	2.3	4.3	1.7	0.34	22.7		
SW-05	10/02/2001		1		0.02	7.9	2.6	5.6	1.9	0.44	27.1		
SW-05	10/09/2001												
SW-06	10/02/2001		1		0.02		3.0	5.8	2.2				
Surfacewaters: Indian Cr													
SW-03	10/02/2001		1		0.04	10.1	6.9	14.4	1.9	0.86	35.9		
SW-04	10/02/2001		1		0.02	16.6	5.5	9.8	2.7	0.53	24.0		

ALPINE COUNTY
BACTERIOLOGICAL MONITORING

Alpine Monitoring Wells

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
ACMW-01AV	10/16/2001	< 1.1	< 1.1	
ACMW-01BE	10/16/2001	< 1.1	< 1.1	
ACMW-02N	10/16/2001	< 1.1	< 1.1	
ACMW-02S	10/16/2001	< 1.1	< 1.1	
ACMW-04W	10/16/2001	< 1.1	< 1.1	
ACMW-06N	10/16/2001	< 1.1	< 1.1	
ACMW-06S	10/16/2001	< 1.1	< 1.1	

Groundwaters

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
GW-03	10/09/2001	< 1.1	< 1.1	
GW-04	10/09/2001	< 1.1	< 1.1	
GW-05	10/09/2001	< 1.1	< 1.1	
GW-07	10/09/2001	< 1.1	< 1.1	
GW-08	10/09/2001	< 1.1	< 1.1	
GW-11	10/09/2001	< 1.1	< 1.1	
GW-14	10/09/2001	< 1.1	< 1.1	

Irrigation Waters

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-08	10/02/2001	11000	90	

Reservoirs

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
HPR	10/02/2001	70	8	4

Surfacewaters: Carson R

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-01	10/02/2001	< 30	< 30	
SW-05	10/02/2001	430	< 30	
SW-05	10/09/2001			
SW-06	10/02/2001	430	150	

Surfacewaters: Indian Cr

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-03	10/02/2001	90	90	
SW-04	10/02/2001	430	70	

ALPINE COUNTY
BLUE GREEN ALGAE

ID#	Site	Location	Date	Colonies #	Colony # Cells	Filaments #	Filaments # Cells	Filaments #	Filament Length	Single Cells, #
September, 2001										
20010905-09	SW-01	Carson R Woodfords	09/05/01	0	0	0	0	0	0	0
20010905-10	SW-03	Indian Cr Mid	09/05/01	0	0	0	0	0	0	0
20010905-11	SW-04	Indian Cr Lower	09/05/01	0	0	0	0	0	0	0
20010905-12	SW-05	Carson R Paynesville	09/05/01	0	0	0	0	0	0	0
20010905-13	SW-06	Carson R Stateline	09/05/01	0	0	0	0	0	0	0
20010905-14	SW-08	Irrigation Ditch	09/05/01	0	0	0	0	0	0	0

ALPINE COUNTY
BLUE GREEN ALGAE

ID#	Site	Location	Date	Colonies #	Colony # Cells	Filaments #	Filaments # Cells	Filaments #	Filament Length	Single Cells, #
October, 2001										
20011002-17	SW-01	Carson R Woodfords	10/02/01	0	0	0	0	0	0	0
20011002-18	SW-03	Indian Cr Mid	10/02/01	0	0	0	0	0	0	0
20011002-19	SW-04	Indian Cr Lower	10/02/01	0	0	0	0	0	0	0
20011002-20	SW-05	Carson R Paynesville	10/02/01	0	0	0	0	0	0	0
20011002-21	SW-06	Carson R Stateline	10/02/01	0	0	0	0	0	0	0
20011002-22	SW-08	Irrigation Ditch	10/02/01	0	0	0	0	0	0	0

6-41
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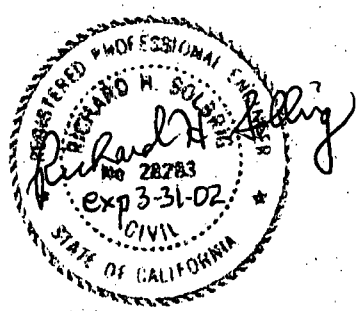
Site	Location	TDS		Cl		TKN		NO_3-N		Total N		Total P		SO_4		Boron		Exch Na %	
		Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence
SW-01	Carson River, Woodfords	55		1.0	✓	0.13	✓	0.02		0.15	✓	0.02		2.0	✓	0.02		20	✓
SW-06	Carson River, Stateline	70	✓	2.5		0.22		0.03		0.25		0.03		2.0	✓	0.02		20	✓
SW-02	Indian Creek, Upper	100		6.0						0.30		0.03		8.0		0.25		30	
SW-03	Indian Creek, Mid	100		6.0						0.30		0.03	✓	8.0		0.25		30	
SW-04	Indian Creek, Lower	100		6.0						0.30		0.03	✓	8.0		0.25		30	
SW-10	Indian Creek, Stateline	100		6.0						0.30		0.03	✓	8.0		0.25		30	

The Alpine County soils for September and the blue-green algae for November have not yet been completed. The results will be sent to you as soon as they are available.

Certification

I hereby certify that the enclosed monitoring report was prepared under my direct supervision and that I am a duly Registered Engineer under the laws of the State of California.

Sincerely,



Richard Solbrig,
Assistant Manager/Engineer

Enclosures:

1.

November Monthly Report	Pages
Wastewater Treatment plant	2
Permit Compliance Record	1
Export pipeline inspection	1
Sample site locations	2
Monitoring wells (ERB) and Heavenly Valley Creek (HVC) - Tahoe Basin	1
Alpine County Surfacewaters, Groundwaters, and HPR	5
Total number of pages:	12

cc: Calif. Dept. of Health Services, ODW - Jess Morehouse
El Dorado Co. Dept. of Environmental Health - Virginia Huber
Nevada Division of Environmental Protection - Wendel McCurry
Alpine County Health Department - Dr. Richard Botto
Alpine County Health Department - Jim Goodloe
Alpine County Board of Supervisors
Desert Research Group (Alpine County Consultants) - David McGraw
STPUD Board of Directors
STPUD General Manager / District Engineer - Robert G. Baer
STPUD Manager of Operations - Ross Johnson
STPUD Operations Chief Plant Operator - Jeff Lee
STPUD Laboratory Director - Terry Powers
STPUD Manager of Alpine County Operations - Hal Bird

File: \LAHONTAN\11-01 Report.WPD

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

NOVEMBER 2001

		FLOW MGD					PRECIP		D.O.	COD		BOD		SS	
			2-Hr Peak		Pond	Pond			mg/L	mg/L		mg/L		mg/L	
Date	Day	Inf	Inf	Eff	Return	Inf	Inch	Type	Fin	Raw	Fin	Raw	Fin	Raw	Fin
11/01/01	Thu	3.62	4.8	3.51					5.83	383					
11/02/01	Fri	3.61	4.9	3.39					5.65	454					
11/03/01	Sat	4.20	5.9	4.24					5.78	458	36.0	200	6.6	182	4.3
11/04/01	Sun	4.17	6.0	3.71					5.23	436					
11/05/01	Mon	3.35	5.0	3.55					5.03	353					
11/06/01	Tue	3.59	4.9	3.50					4.81	364					
11/07/01	Wed	3.46	4.7	3.24					5.18	504	41.2	202	6.2	199	3.4
11/08/01	Thu	3.57	4.7	3.31					5.75	445					
11/09/01	Fri	3.65	4.9	3.49					5.08	472					
11/10/01	Sat	4.03	5.6	4.18			0.01	Rain	3.91	440	56.1	192	9.6	164	4.9
11/11/01	Sun	4.22	6.2	3.91			0.04	Rain	4.99	385					
11/12/01	Mon	4.04	5.5	4.17			0.41	Rain	4.00	396	39.0	173	6.9	149	3.9
11/13/01	Tue	3.60	4.8	3.71					4.61	358					
11/14/01	Wed	3.60	4.8	3.55					5.13	533					
11/15/01	Thu	3.59	4.8	3.53					5.35	386					
11/16/01	Fri	3.58	4.8	3.44					4.27	425					
11/17/01	Sat	3.82	5.4	3.48					5.50	378	35.2	191	5.8	132	2.6
11/18/01	Sun	3.85	5.6	3.70					5.40	423					
11/19/01	Mon	3.65	4.8	3.49					4.79	453					
11/20/01	Tue	3.81	4.8	3.90					4.65	416					
11/21/01	Wed	4.44	5.4	4.81			0.90	Rain	2.63	482	38.9	242	7.0	164	4.0
11/22/01	Thu	4.41	6.9	4.69			0.19	Rain	5.75	469					
11/23/01	Fri	4.70	6.7	4.78			0.06	Rain	5.14	571					
11/24/01	Sat	4.90	8.1	5.23			0.94	Rain/Snow	5.76	496	51.0	229	12.2	183	9.7
11/25/01	Sun	4.20	6.2	3.93					5.38	448					
11/26/01	Mon	3.54	5.0	3.46					5.16	417					
11/27/01	Tue	3.59	4.7	3.85					5.09	404					
11/28/01	Wed	3.58	4.8	3.80			0.37	Snow	5.67	444	35.6	185	6.5	156	5.3
11/29/01	Thu	3.54	4.5	3.61			0.20	Snow	5.88	417					
11/30/01	Fri	3.57	4.7	3.73					6.37	400					
Permit Max		7.7									300		45		60
Permit Min															
Permit Ave											60		30		30
Total		115.48	159.9	114.89			3.12		153.77	13010	333.0	1614	60.7	1329	38.1
Maximum		4.90	8.1	5.23			0.94		6.37	571	56.1	242	12.2	199	9.7
Minimum		3.35	4.5	3.24			0.01		2.63	353	35.2	173	5.8	132	2.6
Average		3.85	5.3	3.83			0.35		5.13	434	41.6	202	7.6	166	4.8
# Tests		30	30	30	0	0	9		30	30	8	8	8	8	8

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

NOVEMBER 2001

Date	Day	SETTLEABLE SOLIDS mL/L Raw		SETTLEABLE SOLIDS mL/L Fin	MBAS mg/L Raw	MBAS mg/L Fin	pH Units Raw	pH Units Fin	TURBIDITY NTU Fin	Cl2 mg/L Fin	FINAL COLIFORMS MPN/100 mL Total		7day- Median		TDS mg/L Raw	TDS mg/L Fin	ALKALINITY mg/L Raw	ALKALINITY mg/L Fin
11/01/01	Thu	9.5	<	0.1			7.39	7.08	2.78	4.37	<	2	<	2			142	83
11/02/01	Fri	9.0	<	0.1			7.49	6.98	2.94	2.95		2	<	2			145	79
11/03/01	Sat	9.0	<	0.1			7.35	7.14	3.11	3.76	<	2	<	2			150	86
11/04/01	Sun	9.0	<	0.1			7.36	7.13	3.45	4.06	<	2	<	2			157	96
11/05/01	Mon	9.5	<	0.1			7.42	7.14	3.73	3.76	<	2	<	2			149	93
11/06/01	Tue	12.0	<	0.1			7.64	7.31	3.24	6.40		2	<	2			145	89
11/07/01	Wed	14.0	<	0.1			7.37	7.26	3.00	6.20	<	2	<	2	266	252	149	88
11/08/01	Thu	10.5	<	0.1			7.58	7.24	3.76	4.77	<	2	<	2			146	93
11/09/01	Fri	10.0	<	0.1			7.59	7.24	5.03	5.18	<	2	<	2			142	100
11/10/01	Sat	10.5	<	0.1			7.55	7.28	5.77	5.08	<	2	<	2			146	107
11/11/01	Sun	11.0	<	0.1			7.43	7.14	4.78	6.91	<	2	<	2			150	112
11/12/01	Mon	10.0	<	0.1			7.47	7.52	3.71	7.72	<	2	<	2	263	232	151	110
11/13/01	Tue	8.0	<	0.1			7.50	7.23	3.17	5.59	<	2	<	2			141	108
11/14/01	Wed	12.5	<	0.1			7.58	7.40	2.47	6.20	<	2	<	2			150	111
11/15/01	Thu	10.0	<	0.1			7.40	7.25	2.02	6.09	<	2	<	2			143	116
11/16/01	Fri	10.0	<	0.1			7.46	7.23	2.37	4.06		2	<	2			143	120
11/17/01	Sat	9.0	<	0.1			7.51	7.50	3.07	5.08	<	2	<	2			151	124
11/18/01	Sun	10.0	<	0.1			7.48	7.35	3.74	5.28	<	2	<	2			153	124
11/19/01	Mon	9.0	<	0.1			7.42	7.30	3.76	5.48	<	2	<	2			147	120
11/20/01	Tue	9.0	<	0.1			7.43	7.28	3.57	5.43	<	2	<	2			141	118
11/21/01	Wed	10.5	<	0.1			7.39	7.53	3.80	5.74	<	2	<	2	267	222	140	116
11/22/01	Thu	11.5	<	0.1			7.50	7.43	5.33	5.53	<	2	<	2			142	116
11/23/01	Fri	12.0	<	0.1			7.67	7.53	5.83	4.91	<	2	<	2			162	135
11/24/01	Sat	14.0	<	0.1			7.63	7.48	7.14	4.70	<	2	<	2			160	131
11/25/01	Sun	12.0	<	0.1			7.53	7.40	5.28	5.85	<	2	<	2			156	133
11/26/01	Mon	10.0	<	0.1			7.64	7.52	5.64	8.35	<	2	<	2			149	130
11/27/01	Tue	10.0	<	0.1			7.51	7.39	4.39	8.66	<	2	<	2			146	127
11/28/01	Wed	10.0	<	0.1			7.65	7.37	4.00	6.16	<	2	<	2	262	238	145	124
11/29/01	Thu	10.0	<	0.1			7.49	7.31	4.94	6.26	<	2	<	2			148	120
11/30/01	Fri	10.0	<	0.1			7.51	7.48	6.65	6.37	<	2	<	2			146	126
Permit Max				0.1		2.0		8.5	20			240		23				
Permit Min								6.5										
Permit Ave						1.0			10									
Total		311.5		3.0	0.00	0.000	224.94	219.44	122.47	166.90		60		60	1058	944	4435	3335
Maximum		14.0		0.1	ERR	ERR	7.67	7.53	7.14	8.66		2		2	267	252	162	135
Minimum		8.0		0.1	ERR	ERR	7.35	6.98	2.02	2.95		2		2	262	222	140	79
Average		10.4		0.1	ERR	ERR	7.50	7.31	4.08	5.56		2		2	265	236	148	111
# Tests		30		30	0	0	30	30	30	30		30		30	4	4	30	30

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT
COMPLIANCE RECORD

2001

Parameter	# Tests	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Compliance, %
Total Plant Inflow; 7.7 MGD; Dry Weather	334	0	0	0	0	0	0	0	0	0	0	0		0	100.0
2-Hour Peak Inflow; 18.5 MGD	334	0	0	0	0	0	0	0	0	0	0	0		0	100.0
COD, 30 Day Ave: 60 mg/L	11	0	0	0	0	0	0	0	0	0	0	0		0	100.0
COD, Max: 300 mg/L	97	0	0	0	0	0	0	0	0	0	0	0		0	100.0
BOD, 30 Day Ave: 30 mg/L	11	0	0	0	0	0	0	0	0	0	0	0		0	100.0
BOD, Max: 45 mg/L	90	0	0	0	0	0	0	0	0	0	0	0		0	100.0
SS, 30 Day Ave: 30 mg/L	11	0	0	0	0	0	0	0	0	0	0	0		0	100.0
SS, Max: 60 mg/L	95	0	0	0	0	0	0	0	0	0	0	0		0	100.0
Settleable Solids, Max: 0.1 mL/L	330	0	0	0	0	0	0	0	0	0	0	0		0	100.0
Turbidity, 30 Day Ave: 10 NTU	11	0	0	0	0	0	0	0	0	0	0	0		0	100.0
Turbidity, Max: 20 NTU	327	0	0	0	0	0	0	0	0	0	0	0		0	100.0
pH, 6.5 to 8.5	327	0	0	0	0	0	0	0	0	0	0	0		0	100.0
Total Coliforms, Max: 240 MPN/100 mL	325	0	0	0	0	0	0	0	0	0	0	0		0	100.0
Total Coliforms, 7-day Median: 23 MPN	330	0	0	0	0	0	0	0	0	0	0	0		0	100.0
Total	2,633	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0

SOUTH TAHOE PUBLIC UTILITY DISTRICT
MEMORANDUM

Date: November 28, 2001

To: Lisa Coyner, Bob Baer, Terry Powers

From: Greg Schrempp

Topic: Export Line Inspection
****

On November 27 2001, Tim Rieger and I conducted our check of the District's export line from the treatment plant to where the "C" line daylights at Harvey Place at Station 564+04. One wet spot was checked, however no leaks were found.
We would have completed the check sooner, however due to Mr. Rieger exceeding his allowance of turkey consumption over the weekend and the resultant slowdown, this wasn't possible.

SAMPLE LOCATIONS

TAHOE BASIN MONITORING WELLS

Site	Location
ERB	Emergency Retention Basin
CONTROL	North of Post Office
MW02-25, -50	Emergency Retention Basin, S side
MW03-25, -50	Emergency Retention Basin, S side
MW04-25, -50	Emergency Retention Basin, W side
MW07-25, -50	Emergency Retention Basin, N side
MW08-25, -50	Pond #1, SW corner
MW11	S.E. corner of wastewater treatment plant grounds
MW12	South of Emergency Pump Building, for buried sludge
MW13	Pond 2, along Heavenly Valley Creek, for buried sludge

HEAVENLY VALLEY CREEK

HVC-1	At Pioneer Trail
HVC-2	250 ft upstream of Pond #2
HVC-3	25 ft downstream of Johnson Blvd.
HVC-4	Effluent of drain pipe from Lower Shop area
HVC-5	Effluent of drainage pipe along Johnson Blvd, 10 feet upstream of Johnson Blvd.

ALPINE COUNTY MONITORING WELLS

Site	Location
ACMW-01AW	Below main dam at Harvey Place Reservoir
ACMW-01BE	Below auxiliary dam at Harvey Place Reservoir
ACMW-02, N&S	On dam access road at Diamond Valley Road
ACMW-03	Bruns ranch, east side of Highway 88
ACMW-04W	Gansberg ranch, west side of Highway 88
ACMW-05	Dressler ranch
ACMW-06, N&S	Celio ranch, on Diamond Valley Road

ALPINE SOILS

Site	Ranch
S2	Celio
S3	Hall
S4	Gansberg
S5	Gansberg
S6	Neddenriep
S7	Bruns
S8	Dressler

ALPINE GROUNDWATERS

Site	Homeowner
GW-01	Sagues
GW-03	Smith/Springmeyer
GW-04	Celio
GW-05	Neddenriep
GW-07	Gansberg, Jr.
GW-08	Arant
GW-11	Diamond Valley School
GW-14	Sierra Pines Store

ALPINE SURFACEWATERS

Site	Location
SW-01	Carson River, Woodfords
SW-02	Indian Creek, @ HWY 89
SW-03	Indian Creek, @ upper bridge
SW-04	Indian Creek, @ lower bridge
SW-05	Carson River, Paynesville
SW-06	Carson River, Stateline
SW-07	Fredericksberg Ditch, Stateline
SW-08	Irrigation Ditch along Carson River Road
SW-09	Carson River, Dressler Lane
SW-10	Indian Creek, @ Smith-Springmeyer Ranch

TAHOE BASIN MONITORING

Site	Date	ID	Location	Depth msl	Temp C	pH	EC umho	Cl mg/L	COD mg/L	TKN mg/L	NO3-N mg/L	Comment
Buried Sludge Monitoring												
MW11	11/27/01	20011127-16	Sludge Pond	6263.2	8.1	6.99	91	1.2 <	5.0		0.076	
MW12	11/27/01	20011127-17	Sludge Pond	6261.8	8.6	6.54	94	1.5 <	5.0		0.385	
MW13	11/27/01	20011127-18	Sludge Pond	6255.1	5.9	6.73	654	4.1	16.0		4.080	
ERB Monitoring												
CONTROI	11/27/01	20011127-11	At Post Office	6279.3	8.4	6.70	175	8.4 <	5.0		2.290	
MW03-50	11/27/01	20011127-12	Black Bart side of ERB	6267.6	9.2	5.99	664	56.4 <	5.0		35.700	
MW04-50	11/27/01	20011127-13	Hank Monk side of ERB	6267.9	7.5	6.07	82	2.3 <	5.0		0.220	
MW07-50	11/27/01	20011127-14	North side of ERB	6276.4	7.0	6.46	244	23.6 <	5.0		0.550	
Heavenly Valley Creek												
HVC-1	11/22/01	20011122-HVC1	Downstream of Pioneer									
HVC-2	11/22/01	20011122-HVC2	250' upstream of Pond #2									
HVC-3	11/22/01	20011122-HVC3	25' downstream of Johnson Blvd									
HVC-4	11/22/01	20011122-HVC4	Effluent of drain from Lower Shop a		6.9	6.59	162	22.8	20.3	0.341	0.047	
HVC-5	11/22/01	20011122-HVC5	Effluent of drainage pipe along Johi									
Treatment Plant Monitoring												
MW08-25	11/27/01	20011127-15	SW side of Pond #1	6246.4	9.8	6.40	966	55.3	84.5		< 0.030	

ALPINE COUNTY MONITORING

Site	Date	ID	Location	Temp C	pH	EC umhos	DO mg/L	Alk mg/L	TDS mg/L	SS mg/L	Turb NTU	Cl mg/L	SO4 mg/L
Alpine Monitoring Wells													
ACMW-01AW	11/20/2001	20011120-16	Main Dam	11.3	6.28	162		56	113		1	10.1	2.3
ACMW-01BE	11/20/2001	20011120-17	Secondary Dam	10.5	6.16	100		49	82		3.98	1.3	1.2
ACMW-02N	11/20/2001	20011120-18	Access Gate	11.7	6.40	134		61	94		1	3.4	3.6
ACMW-02S	11/20/2001	20011120-19	Access Gate	12.5	6.47	107		52	74		1.14	1.8	1.3
ACMW-04W	11/20/2001	20011120-20	Gansberg	11.5	6.23	197		48	137		24	20.1	6.9
ACMW-06N	11/20/2001	20011120-21	Celio	11.8	6.66	703		261	440		9.14	58.2	21.7
ACMW-06S	11/20/2001	20011120-22	Celio	11.3	7.15	661		213	407		2.98	68.9	24.8
Groundwaters													
GW-03	11/06/2001	20011106-12	Smith/Springmeyer	15.2	6.52	310		131	231		.13	1.7	26.2
GW-04	11/06/2001	20011106-13	Celio	14.4	7.02	263		119	210		1.2	3.6	11.6
GW-05	11/06/2001	20011106-14	Neddenriep	12.5	6.88	257		63	175		.14	23.6	12.9
GW-07	11/06/2001	20011106-15	Gansberg	11.0	6.64	134		54	105		.06	2.1	2.8
GW-08	11/06/2001	20011106-16	Arant	13.8	6.58	271		49	177		.88	32.0	9.4
GW-11	11/06/2001	20011106-17	Diamond Val. School	14.7	6.59	148		77	121		.08	0.8	0.8
GW-14	11/06/2001	20011106-18	Sierra Pines	11.0	6.83	115		54	98		.09	1.2	1.8
Irrigation Waters													
SW-08	11/14/2001	20011114-12	Irrigation Ditch	13.5	7.68	140	7.54	58	102	9.62	5.21	1.7	10.7
Reservoirs													
HPR	11/14/2001	20011114-15	Harvey Place Reservoir	9.4	8.34	478	10.91	81	246	2.44	1.39	65.9	22.2
Surfacewaters: Carson R													
SW-01	11/14/2001	20011114-07	Carson R Woodfords	4.2	6.57	8	9.94	37	54	0.84	.56	1.5	2.4
SW-05	11/14/2001	20011114-10	Carson R Paynesville	7.1	6.80	95	10.30	44	68	3.54	1.02	1.8	3.3
SW-06	11/14/2001	20011114-11	Carson R Stateline	7.7	6.46	98	10.80	46	72	0.60	.6	2.4	3.7
SW-09	11/14/2001	20011114-13	Carson R Dressler Ln	8.4	6.22	130	10.40	53	87	0.62	.84	5.1	6.0
Surfacewaters: Indian Cr													
SW-03	11/14/2001	20011114-08	Indian Cr Mid	5.3	6.72	85	10.50	39	61	2.18	2.7	1.7	2.9
SW-04	11/14/2001	20011114-09	Indian Cr Lower	5.6	6.71	94	9.97	44	67	5.64	3.28	2.1	2.7
SW-10	11/14/2001	20011114-14	Indian Cr at Bruns	6.0	6.85	97	10.80	46	71	19.40	7.99	2.0	2.7

ALPINE COUNTY MONITORING

12/12/01

Site	Date	TotalP mg/L	PO4-P mg/L	TKN mg/L	NH3-N mg/L	NO2-N mg/L	NO3-N mg/L	Total N mg/L
Alpine Monitoring Wells								
ACMW-01AV	11/20/2001	0.014		< 0.100		< 0.020	1.640	1.760
ACMW-01BE	11/20/2001	0.019		< 0.100		< 0.010	0.296	0.406
ACMW-02N	11/20/2001	0.014		< 0.100		< 0.010	0.066	0.176
ACMW-02S	11/20/2001	0.011		< 0.100		< 0.010	0.010	0.120
ACMW-04W	11/20/2001	0.130		0.145		< 0.020	2.200	2.365
ACMW-06N	11/20/2001	0.262		0.249		< 0.010	< 0.010	0.269
ACMW-06S	11/20/2001	0.017		0.320		0.096	0.049	0.465
Groundwaters								
GW-03	11/06/2001	0.037		< 0.100		< 0.010	0.732	0.842
GW-04	11/06/2001	0.050		0.107		< 0.010	0.947	1.064
GW-05	11/06/2001	0.042		< 0.100		< 0.030	3.640	3.770
GW-07	11/06/2001	0.104		0.175		< 0.010	1.660	1.845
GW-08	11/06/2001	0.052		< 0.100		< 0.040	6.100	6.240
GW-11	11/06/2001	0.077		< 0.100		< 0.010	0.470	0.580
GW-14	11/06/2001	0.086		0.108		< 0.010	0.487	0.605
Irrigation Waters								
SW-08	11/14/2001	0.044	0.027	0.527	< 0.020	< 0.010	0.251	0.788
Reservoirs								
HPR	11/14/2001	2.660	2.540	13.200	13.000	1.200	2.760	17.160
Surfacewaters: Carson R								
SW-01	11/14/2001	0.013	< 0.010	0.246	< 0.020	< 0.010	< 0.010	0.266
SW-05	11/14/2001	0.015	< 0.010	0.142	0.022	< 0.010	< 0.010	0.162
SW-06	11/14/2001	< 0.010	< 0.010	0.180	< 0.020	< 0.010	0.010	0.200
SW-09	11/14/2001	0.016	< 0.010	0.176	< 0.020	< 0.010	< 0.010	0.196
Surfacewaters: Indian Cr								
SW-03	11/14/2001	0.032	< 0.010	0.114	< 0.020	< 0.010	< 0.010	0.134
SW-04	11/14/2001	0.038	0.022	0.256	< 0.020	< 0.010	< 0.010	0.276
SW-10	11/14/2001	0.076	0.027	0.230	< 0.020	< 0.010	< 0.010	0.250

ALPINE COUNTY MONITORING

Site	Date		COD mg/L	BOD mg/L	O & G mg/L		Boron mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	SAR	Exch Na %	Hardness mg/L	Water Level MSL or Ft
Alpine Monitoring Wells															
ACMW-01AV	11/20/2001	<	5											64.1	
ACMW-01BE	11/20/2001	<	5											38.6	
ACMW-02N	11/20/2001	<	5											45.7	
ACMW-02S	11/20/2001	<	5											41.2	
ACMW-04W	11/20/2001	<	5											45.1	
ACMW-06N	11/20/2001		9											246	
ACMW-06S	11/20/2001	<	5											243	
Groundwaters															
GW-03	11/06/2001	<	5											120	
GW-04	11/06/2001	<	5											98.5	
GW-05	11/06/2001	<	5											80	
GW-07	11/06/2001	<	5											48.1	
GW-08	11/06/2001	<	5											48.6	
GW-11	11/06/2001	<	5											56	
GW-14	11/06/2001	<	5											33.3	
Irrigation Waters															
SW-08	11/14/2001		8	1		<	0.01	12.1	3.0	11.4	2.4	0.76	35.3		
Reservoirs															
HPR	11/14/2001		30	4			0.30	16.9	3.7	51.2	9.7	2.94	61.5		24.8
Surfacewaters: Carson R															
SW-01	11/14/2001		7	1		<	0.01	8.0	2.0	4.7	1.6	0.38	25.2		
SW-05	11/14/2001		7	1		<	0.01	9.5	2.6	6.3	2.0	0.47	27.1		
SW-06	11/14/2001	<	5	1			0.01	9.6	2.7	6.4	2.0	0.47	27.0		
SW-09	11/14/2001	<	5	2			0.02		3.5	9.0	2.3				
Surfacewaters: Indian Cr															
SW-03	11/14/2001		10	2		<	0.01	8.2	2.2	5.2	1.8	0.42	26.3		
SW-04	11/14/2001		7	1			0.01	9.4	2.7	6.0	2.0	0.45	26.2		
SW-10	11/14/2001		10	2			0.02	9.4	2.9	6.2	2.1	0.45	26.1		

ALPINE COUNTY
BACTERIOLOGICAL MONITORING

Alpine Monitoring Wells

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL		Fecal Streptococci MPN/100mLL
ACMW-01AV	11/20/2001		2.2	<	1.1		
ACMW-01BE	11/20/2001	<	1.1	<	1.1		
ACMW-02N	11/20/2001	<	1.1	<	1.1		
ACMW-02S	11/20/2001	<	1.1	<	1.1		
ACMW-04W	11/20/2001	<	1.1	<	1.1		
ACMW-06N	11/20/2001	<	1.1	<	1.1		
ACMW-06S	11/20/2001	<	1.1	<	1.1		

Groundwaters

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL		Fecal Streptococci MPN/100mLL
GW-03	11/06/2001	<	1.1	<	1.1		
GW-04	11/06/2001	<	1.1	<	1.1		
GW-05	11/06/2001	<	1.1	<	1.1		
GW-07	11/06/2001	<	1.1	<	1.1		
GW-08	11/06/2001	<	1.1	<	1.1		
GW-11	11/06/2001	<	1.1	<	1.1		
GW-14	11/06/2001	<	1.1	<	1.1		

Irrigation Waters

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL		Fecal Streptococci MPN/100mLL
SW-08	11/14/2001		430		430		230

Reservoirs

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL		Fecal Streptococci MPN/100mLL
HPR	11/14/2001		240		240		2

Surfacewaters: Carson R

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL		Fecal Streptococci MPN/100mLL
SW-01	11/14/2001	<	30	<	30	<	30
SW-05	11/14/2001	<	30	<	30		40
SW-06	11/14/2001		40	<	30	<	30
SW-09	11/14/2001		40		40	<	30

ALPINE COUNTY
BACTERIOLOGICAL MONITORING

Surfacewaters: Indian Cr

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL		Fecal Streptococci MPN/100mLL
SW-03	11/14/2001	2400	930	<	30
SW-04	11/14/2001	930	930		210
SW-10	11/14/2001	2400	2400		430

Enclosures:

1.

December Monthly Report	Pages
Wastewater Treatment plant	2
Permit Compliance Record	1
Export pipeline inspection	0
Sample site locations	2
Tahoe Basin: Monitoring wells (ERB) and Heavenly Valley Creek (HVC)	1
Alpine County Surfacewaters, Groundwaters, and HPR	4
Blue Green Algae for November and December, 2001	1
Total number of pages:	11

cc: Calif. Dept. of Health Services, ODW - Jess Morehouse
El Dorado Co. Dept. of Environmental Health - Virginia Huber
Nevada Division of Environmental Protection - Wendel McCurry
Alpine County Health Department - Dr. Richard Botto
Alpine County Health Department - Jim Goodloe
Alpine County Board of Supervisors
Desert Research Group (Alpine County Consultants) - David McGraw
STPUD Board of Directors
STPUD General Manager / District Engineer - Robert G. Baer
STPUD Manager of Operations - Ross Johnson
STPUD Operations Chief Plant Operator - Jeff Lee
STPUD Laboratory Director - Terry Powers
STPUD Manager of Alpine County Operations - Hal Bird

File: \LAHONTAN\12-01 Report.WPD

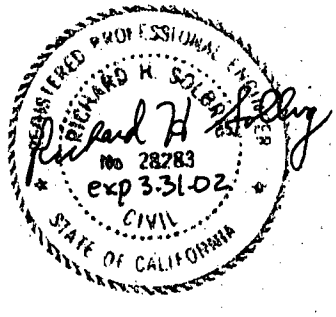
Site	Location	TDS		Cl		TKN		NO_3-N		Total N		Total P		SO_4		Boron		Exch Na %	
		Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence
SW-01	Carson River, Woodfords	55	✓	1.0	✓	0.13		0.02		0.15		0.02		2.0	✓	0.02		20	✓
SW-06	Carson River, Stateline	70		2.5		0.22		0.03		0.25		0.03		2.0		0.02		20	
SW-02	Indian Creek, Upper	100		6.0						0.30	✓	0.03	✓	8.0		0.25		30	✓
SW-03	Indian Creek, Mid	100		6.0						0.30		0.03		8.0		0.25		30	
SW-04	Indian Creek, Lower	100		6.0						0.30		0.03		8.0		0.25		30	
SW-10	Indian Creek, Stateline	100		6.0						0.30		0.03		8.0		0.25		30	

I have included the Blue Green Algae results for November and December, 2001. Soils results for September and December, 2001, will be sent as soon as they are available.

Certification

I hereby certify that the enclosed monitoring report was prepared under my direct supervision and that I am a duly Registered Engineer under the laws of the State of California.

Sincerely,



Richard Solbrig,
Assistant Manager/Engineer

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

DECEMBER 2001

		FLOW MGD					PRECIP		D.O.	COD		BOD		SS	
			2-Hr Peak		Pond	Pond			mg/L	mg/L		mg/L		mg/L	
Date	Day	Inf	Inf	Eff	Return	Inf	Inch	Type	Fin	Raw	Fin	Raw	Fin	Raw	Fin
12/01/01	Sat	3.78	5.3	4.35			0.60	Snow	6.38	426	42.7	176	9.6	136	6.6
12/02/01	Sun	4.17	5.8	4.33			1.73	Snow	6.40	402					
12/03/01	Mon	3.71	4.9	3.90			0.02	Snow	6.39	345					
12/04/01	Tue	3.53	4.6	3.52					6.42	317					
12/05/01	Wed	3.59	5.1	3.60					6.11	424	39.7	167	7.6	245	4.2
12/06/01	Thu	3.73	4.8	3.90					6.15	421					
12/07/01	Fri	3.66	4.9	3.83					6.02	399					
12/08/01	Sat	4.11	5.5	4.16					6.70	418	42.4	202	9.7	136	5.2
12/09/01	Sun	4.11	5.7	4.05			0.05	Snow	6.19	431					
12/10/01	Mon	3.52	4.8	3.41			0.05	Snow	6.02	432					
12/11/01	Tue	3.74	4.9	3.93					5.88	388					
12/12/01	Wed	3.65	5.0	3.14					6.11	426	46.8	184		158	5.8
12/13/01	Thu	3.59	4.9	3.71			0.39	Snow	6.12	382					
12/14/01	Fri	3.71	4.8	3.93					5.59	389					
12/15/01	Sat	4.10	5.4	3.93					5.99	422	40.4	209	8.3	151	4.1
12/16/01	Sun	4.12	5.8	4.13					5.61	451					
12/17/01	Mon	3.70	5.6	3.82			0.26	Snow	5.57	402	41.0	180	8.4	132	3.6
12/18/01	Tue	3.87	5.1	3.92					5.50	425					
12/19/01	Wed	3.87	5.4	3.95			0.05	Snow	5.56	447					
12/20/01	Thu	3.87	5.0	4.12			0.23	Snow	5.98	419					
12/21/01	Fri	4.00	5.2	4.11					5.80	425					
12/22/01	Sat	4.58	6.1	4.47			0.11	Snow	4.38	441	41.4	225	9.6	140	4.1
12/23/01	Sun	5.03	8.4	4.72					5.49	463					
12/24/01	Mon	5.15	7.3	2.75		1.93			5.66	461					
12/25/01	Tue	4.59	7.0	4.55					5.57	528					
12/26/01	Wed	5.06	6.8	5.34	0.38				6.31	502	46.5	229	8.8	157	7.2
12/27/01	Thu	5.77	7.4	5.26		0.60	0.01	Snow	5.81					144	5.7
12/28/01	Fri	5.99	8.2	7.64	1.72		0.29	Rain	3.41	471					
12/29/01	Sat	6.25	8.4	6.72	0.28				4.72	414	50.4	197	13.0	119	9.3
12/30/01	Sun	6.41	8.7	6.38	0.03		0.26	Rain	6.32	451					
12/31/01	Mon	6.78	9.1	7.00	0.12				5.40	516	63.8	223		196	13.3
Permit Max		7.7									300		45		60
Permit Min															
Permit Ave											60		30		30
Total		135.74	185.9	136.57	2.53	2.53	4.05		179.56	12838	455.1	1992	74.9	1714	68.9
Maximum		6.78	9.1	7.64	1.72	1.93	1.73		6.70	528	63.8	229	13.0	245	13.3
Minimum		3.52	4.6	2.75	0.03	0.60	0.01		3.41	317	39.7	167	7.6	119	3.6
Average		4.38	6.0	4.41	0.51	1.27	0.31		5.79	428	45.5	199	9.4	156	6.3
# Tests		31	31	31	5	2	13		31	30	10	10	8	11	11

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

DECEMBER 2001

		SETTLEABLE SOLIDS mL/L			MBAS mg/L		pH Units		TURBIDITY NTU	CI2 mg/L	FINAL COLIFORMS MPN/100 mL				TDS mg/L		ALKALINITY mg/L	
Date	Day	Raw		Fin	Raw	Fin	Raw	Fin	Fin	Fin	Total		7day- Median		Raw	Fin	Raw	Fin
12/01/01	Sat	9.5	<	0.1			7.39	7.61	5.81	6.26	2	<	2				153	125
12/02/01	Sun	9.0	<	0.1			7.54	7.51	6.50	5.95	< 2	<	2				148	126
12/03/01	Mon	10.0	<	0.1			7.65	7.57	4.16	6.89	< 2	<	2				144	120
12/04/01	Tue	8.5	<	0.1			7.58	7.66	4.04	7.10	< 2	<	2		265	237	148	124
12/05/01	Wed	10.0	<	0.1			7.46	7.56	4.00	5.43	< 2	<	2				145	122
12/06/01	Thu	9.5	<	0.1			7.69	7.54	4.75	5.22	< 2	<	2				144	123
12/07/01	Fri	8.5	<	0.1			7.49	7.55	3.90	5.43	< 2	<	2				147	125
12/08/01	Sat	10.0	<	0.1			7.49	7.56	5.06	5.12	< 2	<	2				151	130
12/09/01	Sun	9.0	<	0.1			7.47	7.50	5.90	5.64	< 2	<	2				155	134
12/10/01	Mon	8.0	<	0.1			7.49	7.49	6.50	6.37	< 2	<	2				146	128
12/11/01	Tue	8.5	<	0.1			7.71	7.58	5.19	5.64	2	<	2				143	125
12/12/01	Wed	11.0	<	0.1			7.40	7.56	6.00	6.47	< 2	<	2		270	238	146	118
12/13/01	Thu	7.5	<	0.1			7.55	7.48	3.80	7.31	2	<	2				146	124
12/14/01	Fri	10.0	<	0.1			7.64	7.51	4.70	6.06	< 2	<	2				148	128
12/15/01	Sat	10.0	<	0.1			7.56	7.58	4.00	5.32	< 2	<	2				154	134
12/16/01	Sun	9.0	<	0.1			7.65	7.62	4.20	5.22	< 2	<	2				161	138
12/17/01	Mon	10.0	<	0.1			7.48	7.61	4.20	6.99	< 2	<	2		268	233	155	134
12/18/01	Tue	10.0	<	0.1			7.45	7.54	4.00	5.32	2	<	2				146	134
12/19/01	Wed	10.0	<	0.1			7.55	7.46	3.20	5.53	< 2	<	2				151	132
12/20/01	Thu	9.0	<	0.1			7.63	7.61	2.75	5.53	< 2	<	2				149	131
12/21/01	Fri	9.0	<	0.1			7.54	7.52	3.20	5.01	< 2	<	2				152	134
12/22/01	Sat	10.0	<	0.1			7.44	7.56	4.50	5.53	< 2	<	2				161	137
12/23/01	Sun	9.5	<	0.1			7.63	7.47	6.30	5.53	< 2	<	2				170	142
12/24/01	Mon	11.0	<	0.1			7.53	7.54	6.70	5.22	2	<	2				165	143
12/25/01	Tue	10.5	<	0.1			7.51	7.52	5.70	5.64	< 2	<	2				161	144
12/26/01	Wed	10.5	<	0.1			7.32	7.61	5.76	5.85	2	<	2		279	234	170	148
12/27/01	Thu	10.0	<	0.1			7.47	7.63	5.54	6.26	< 2	<	2				172	154
12/28/01	Fri	11.0	<	0.1			7.36	7.36	7.10	5.85	< 2	<	2				176	144
12/29/01	Sat	6.5	<	0.1			7.40	7.43	8.04	5.74	< 2	<	2				166	152
12/30/01	Sun	10.0	<	0.1			7.32	7.24	10.20	7.83	< 2	<	2				171	150
12/31/01	Mon	11.0	<	0.1			7.40	7.25	11.80	9.92	2	<	2		268	244	174	148
Permit Max				0.1		2.0		8.5	20		240		23					
Permit Min								6.5										
Permit Ave						1.0			10									
Total		296.0		3.1	0.00	0.000	232.79	233.23	167.50	187.18	62		62		1350	1186	4818	4151
Maximum		11.0		0.1	ERR	ERR	7.71	7.66	11.80	9.92	2		2		279	244	176	154
Minimum		6.5		0.1	ERR	ERR	7.32	7.24	2.75	5.01	2		2		265	233	143	118
Average		9.5		0.1	ERR	ERR	7.51	7.52	5.40	6.04	2		2		270	237	155	134
# Tests		31		31	0	0	31	31	31	31	31		31		5	5	31	31

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT
COMPLIANCE RECORD

2001

Parameter	# Tests	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Compliance, %
Total Plant Inflow; 7.7 MGD; Dry Weather	365	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0
2-Hour Peak Inflow; 18.5 MGD	365	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0
COD, 30 Day Ave: 60 mg/L	12	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0
COD, Max: 300 mg/L	107	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0
BOD, 30 Day Ave: 30 mg/L	12	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0
BOD, Max: 45 mg/L	98	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0
SS, 30 Day Ave: 30 mg/L	12	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0
SS, Max: 60 mg/L	106	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0
Settleable Solids, Max: 0.1 mL/L	361	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0
Turbidity, 30 Day Ave: 10 NTU	12	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0
Turbidity, Max: 20 NTU	358	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0
pH, 6.5 to 8.5	358	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0
Total Coliforms, Max: 240 MPN/100 mL	356	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0
Total Coliforms, 7-day Median: 23 MPN	361	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0
Total	2,883	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0

SAMPLE LOCATIONS

TAHOE BASIN MONITORING WELLS

Site	Location
ERB	Emergency Retention Basin
CONTROL	North of Post Office
MW02-25, -50	Emergency Retention Basin, S side
MW03-25, -50	Emergency Retention Basin, S side
MW04-25, -50	Emergency Retention Basin, W side
MW07-25, -50	Emergency Retention Basin, N side
MW08-25, -50	Pond #1, SW corner
MW11	S.E. corner of wastewater treatment plant grounds
MW12	South of Emergency Pump Building, for buried sludge
MW13	Pond 2, along Heavenly Valley Creek, for buried sludge

HEAVENLY VALLEY CREEK

HVC-1	At Pioneer Trail
HVC-2	250 ft upstream of Pond #2
HVC-3	25 ft downstream of Johnson Blvd.
HVC-4	Effluent of drain pipe from Lower Shop area
HVC-5	Effluent of drainage pipe along Johnson Blvd, 10 feet upstream of Johnson Blvd.

ALPINE COUNTY MONITORING WELLS

Site	Location
ACMW-01AW	Below main dam at Harvey Place Reservoir
ACMW-01BE	Below auxiliary dam at Harvey Place Reservoir
ACMW-02, N&S	On dam access road at Diamond Valley Road
ACMW-03	Bruns ranch, east side of Highway 88
ACMW-04W	Gansberg ranch, west side of Highway 88
ACMW-05	Dressler ranch
ACMW-06, N&S	Celio ranch, on Diamond Valley Road

ALPINE SOILS

Site	Ranch
S2	Celio
S3	Hall
S4	Gansberg
S5	Gansberg
S6	Neddenriep
S7	Bruns
S8	Dressler

ALPINE GROUNDWATERS

Site	Homeowner
GW-01	Sagues
GW-03	Smith/Springmeyer
GW-04	Celio
GW-05	Neddenriep
GW-07	Gansberg, Jr.
GW-08	Arant
GW-11	Diamond Valley School
GW-14	Sierra Pines Store

ALPINE SURFACEWATERS

Site	Location
SW-01	Carson River, Woodfords
SW-02	Indian Creek, @ HWY 89
SW-03	Indian Creek, @ upper bridge
SW-04	Indian Creek, @ lower bridge
SW-05	Carson River, Paynesville
SW-06	Carson River, Stateline
SW-07	Fredericksberg Ditch, Stateline
SW-08	Irrigation Ditch along Carson River Road
SW-09	Carson River, Dressler Lane
SW-10	Indian Creek, @ Smith-Springmeyer Ranch

TAHOE BASIN MONITORING

Site	Date	ID	Location	Depth msl	Temp C	pH	EC umho	Cl mg/L	COD mg/L	TKN mg/L	NO3-N mg/L	Comment
Buried Sludge Monitoring												
MW11	12/12/01	20011212-26	Sludge Pond	6263.0	7.2	7.05	91	1.0 <	5.0		0.073	
MW12	12/12/01	20011212-27	Sludge Pond	6261.4	8.3	6.91	95	1.6 <	5.0		0.378	
MW13	12/12/01	20011212-28	Sludge Pond	6255.7	6.1	6.97	624	4.0	18.7		2.640	
ERB Monitoring												
CONTROL	12/12/01	20011212-21	At Post Office	6279.0	8.9	7.48	171	8.7 <	5.0		2.300	
MW03-50	12/12/01	20011212-22	Black Bart side of ERB	6267.6	9.2	6.10	657	57.2	5.3		33.600	
MW04-50	12/12/01	20011212-23	Hank Monk side of ERB	6267.0	7.8	6.61	84	2.4 <	5.0		0.304	
MW07-50	12/12/01	20011212-24	North side of ERB	6275.3	6.7	6.48	244	23.4 <	5.0		0.621	
Heavenly Valley Creek												
HVC-1	12/12/01	20011212-HVC1	Downstream of Pioneer									Trickle; 2nd site check of the day
HVC-2	12/12/01	20011212-HVC2	250' upstream of Pond #2									Dry; 2nd site check of the day
HVC-3	12/12/01	20011212-HVC3	25' downstream of Johnson Blvd									Dry; 2nd site check of the day
HVC-4	12/12/01	20011212-HVC4	Effluent of drain from Lower Shop a									Dry; 2nd site check of the day
HVC-5	12/12/01	20011212-HVC5	Effluent of drainage pipe along Johi									Dry; 2nd site check of the day
Treatment Plant Monitoring												
MW08-25	12/12/01	20011212-25	SW side of Pond #1	6246.4	9.8	6.41	927	70.5	86.0		< 0.030	

ALPINE COUNTY MONITORING

Site	Date	ID	Location	Temp C	pH	EC umhos	DO mg/L	Alk mg/L	TDS mg/L	SS mg/L	Turb NTU	Cl mg/L	SO4 mg/L
Alpine Monitoring Wells													
ACMW-01AW	12/19/2001	20011219-14	Main Dam	10.5	7.08	87		36	74			2.7	3.5
ACMW-01BE	12/19/2001	20011219-15	Secondary Dam	10.7	7.34	93		43	76			1.5	1.3
ACMW-02N	12/19/2001	20011219-16	Access Gate	11.4	6.58	129		60	85			2.4	2.7
ACMW-02S	12/19/2001	20011219-17	Access Gate	11.5	6.57	110		53	77			2.0	1.3
ACMW-04W	12/19/2001	20011219-18	Gansberg	11.4	6.13	201		48	134			19.4	7.2
ACMW-06N	12/19/2001	20011219-19	Celio	11.5	6.93	692		262	430			58.6	21.8
ACMW-06S	12/19/2001	20011219-20	Celio	11.8	6.80	746		259	444			69.6	31.1
Groundwaters													
GW-03	12/11/2001	20011211-13	Smith/Springmeyer	9.2	6.91	299		132	234			1.6	26.0
GW-04	12/11/2001	20011211-14	Celio	12.2	6.89	257		121	204			3.5	11.4
GW-05	12/11/2001	20011211-15	Neddenriep	8.9	6.08	249		63	174			23.8	12.9
GW-07	12/11/2001	20011211-16	Gansberg	6.1	6.73	125		55	105			2.2	2.8
GW-08	12/11/2001	20011211-17	Arant	10.3	6.78	258		50	175			29.8	9.7
GW-11	12/11/2001	20011211-18	Diamond Val. School	9.1	7.06	143		77	120			0.7	0.7
GW-14	12/11/2001	20011211-19	Sierrra Pines	8.0	7.18	109		53	101			1.3	1.8
Reservoirs													
HPR	12/04/2001	20011204-09	Harvey Place Reservoir	2.5	7.72	484		88	243	3.76	5.6	59.5	21.3
Surfacewaters: Carson R													
SW-01	12/04/2001	20011204-06	Carson R Woodfords	0.9	6.99	81	11.48	38	60	2.24	.62	1.9	2.4
SW-05	12/04/2001	20011204-08	Carson R Paynesville	0.9	6.59	114	10.52	44	88	0.34	.81	3.2	7.2
Surfacewaters: Indian Cr													
SW-02	12/04/2001	20011204-07	Indian Cr Upper	1.6	7.56	90	9.43	45	92	6.06	3.48	4.3	1.4

ALPINE COUNTY MONITORING

01/07/02

Site	Date	TotalP mg/L	PO4-P mg/L	TKN mg/L	NH3-N mg/L	NO2-N mg/L	NO3-N mg/L	Total N mg/L
Alpine Monitoring Wells								
ACMW-01AV	12/19/2001					< 0.020	0.147	
ACMW-01BE	12/19/2001					< 0.010	0.238	
ACMW-02N	12/19/2001					< 0.010	0.039	
ACMW-02S	12/19/2001					< 0.010	< 0.010	
ACMW-04W	12/19/2001					< 0.020	2.450	
ACMW-06N	12/19/2001					< 0.010	< 0.010	
ACMW-06S	12/19/2001					0.015	0.018	
Groundwaters								
GW-03	12/11/2001					< 0.010	0.715	
GW-04	12/11/2001					< 0.010	0.811	
GW-05	12/11/2001					< 0.030	3.720	
GW-07	12/11/2001					< 0.010	1.740	
GW-08	12/11/2001					< 0.050	5.710	
GW-11	12/11/2001					< 0.010	0.443	
GW-14	12/11/2001					< 0.010	0.482	
Reservoirs								
HPR	12/04/2001	2.500	2.340	13.000	14.100	0.834	3.140	16.974
Surfacewaters: Carson R								
SW-01	12/04/2001	0.010	< 0.010	< 0.100	0.026	< 0.010	0.016	0.126
SW-05	12/04/2001	0.035	0.012	0.221	0.022	< 0.010	0.078	0.309
Surfacewaters: Indian Cr								
SW-02	12/04/2001	0.068	0.027	0.385	< 0.020	< 0.010	0.052	0.447

ALPINE COUNTY MONITORING

Site	Date	COD mg/L	BOD mg/L	O & G mg/L	Boron mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	SAR	Exch Na %	Hardness mg/L	Water Level MSL or Ft
Alpine Monitoring Wells													
ACMW-01AV	12/19/2001												5482.8
ACMW-01BE	12/19/2001												5491.5
ACMW-02N	12/19/2001												5458.5
ACMW-02S	12/19/2001												5460.0
ACMW-04W	12/19/2001												4897.2
ACMW-06N	12/19/2001												5216.8
ACMW-06S	12/19/2001												5205.3
Groundwaters													
GW-03	12/11/2001												
GW-04	12/11/2001												
GW-05	12/11/2001												
GW-07	12/11/2001												
GW-08	12/11/2001												
GW-11	12/11/2001												
GW-14	12/11/2001												
Reservoirs													
HPR	12/04/2001	29	2		0.24	16.4	3.8	46.7	9.2	2.70	59.8		32.5
Surfacewaters: Carson R													
SW-01	12/04/2001		1			8.0	2.2	4.7	1.6	0.38	24.7		
SW-05	12/04/2001		1			10.6	2.9	7.0	2.4	0.49	26.9		
Surfacewaters: Indian Cr													
SW-02	12/04/2001		1			8.7	2.2	9.0	1.4	0.70	37.4		

ALPINE COUNTY
BACTERIOLOGICAL MONITORING

Alpine Monitoring Wells

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
ACMW-01AV	12/19/2001		1.1	<	1.1	
ACMW-01BE	12/19/2001	<	1.1	<	1.1	
ACMW-02N	12/19/2001	<	1.1	<	1.1	
ACMW-02S	12/19/2001	<	1.1	<	1.1	
ACMW-04W	12/19/2001	<	1.1	<	1.1	
ACMW-06N	12/19/2001	<	1.1	<	1.1	
ACMW-06S	12/19/2001	<	1.1	<	1.1	

Groundwaters

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
GW-03	12/11/2001	<	1.1	<	1.1	
GW-04	12/11/2001		1.1	<	1.1	
GW-05	12/11/2001	<	1.1	<	1.1	
GW-07	12/11/2001		1.1	<	1.1	
GW-08	12/11/2001	<	1.1	<	1.1	
GW-11	12/11/2001	<	1.1	<	1.1	
GW-14	12/11/2001	<	1.1	<	1.1	

Reservoirs

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
HPR	12/04/2001	>	1600		300	30

Surfacewaters: Carson R

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-01	12/04/2001	<	30	<	30	
SW-05	12/04/2001		210	<	30	

Surfacewaters: Indian Cr

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-02	12/04/2001		230	<	30	

ALPINE COUNTY
BLUE GREEN ALGAE

ID#	Site	Location	Date	Colonies #	Colony # Cells	Filaments #	Filaments # Cells	Filaments #	Filament Length	Single Cells, #
November, 2001										
20011101-16	ICR-1	Indian Creek Reservoir	11/01/01	0	0	0	0	0	0	0
20011101-17	ICR-1	Indian Creek Reservoir	11/01/01	0	0	0	0	0	0	0
20011101-18	ICR-1	Indian Creek Reservoir	11/01/01	0	0	0	0	0	0	0
20011114-07	SW-01	Carson R Woodfords	11/14/01	0	0	0	0	0	0	0
20011114-08	SW-03	Indian Cr Mid	11/14/01	0	0	0	0	0	0	0
20011114-09	SW-04	Indian Cr Lower	11/14/01	0	0	0	0	0	0	0
20011114-10	SW-05	Carson R Paynesville	11/14/01	0	0	0	0	0	0	0
20011114-11	SW-06	Carson R Stateline	11/14/01	0	0	0	0	0	0	0
20011114-12	SW-08	Irrigation Ditch	11/14/01	0	0	0	0	0	0	0
20011114-13	SW-09	Carson R Dressler Ln	11/14/01	0	0	0	0	0	0	0
20011114-14	SW-10	Indian Cr at Bruns	11/14/01	0	0	0	0	0	0	0
20011114-15	HPR	Harvey Place Reservoir	11/14/01	0	0	0	0	0	0	0
December, 2001										
20011204-09	HPR	Harvey Place Reservoir	12/04/01	0	0	0	0	0	0	0

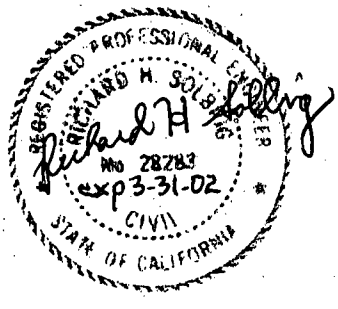
Site	Location	TDS		Cl		TKN		NO_3-N		Total N		Total P		SO_4		Boron		Exch Na %	
		Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence
SW-01	Carson River, Woodfords	55	✓	1.0	✓	0.13	✓	0.02		0.15	✓	0.02		2.0	✓	0.02		20	✓
SW-06	Carson River, Stateline	70		2.5		0.22		0.03		0.25		0.03		2.0		0.02		20	
SW-02	Indian Creek, Upper	100		6.0						0.30	✓	0.03	✓	8.0		0.25		30	✓
SW-03	Indian Creek, Mid	100		6.0						0.30		0.03		8.0		0.25		30	
SW-04	Indian Creek, Lower	100		6.0						0.30		0.03		8.0		0.25		30	
SW-10	Indian Creek, Stateline	100		6.0						0.30		0.03		8.0		0.25		30	

Soils results for September and December, 2001, will be sent as soon as they are available.

Certification

I hereby certify that the enclosed monitoring report was prepared under my direct supervision and that I am a duly Registered Engineer under the laws of the State of California.

Sincerely,



Richard Solbrig,
Assistant Manager/Engineer

Enclosures:

1.

January Monthly Report	Pages
Wastewater Treatment plant	2
Permit Compliance Record	1
Export pipeline inspection	1
Sample site locations	2
Tahoe Basin: Monitoring wells (ERB) and Heavenly Valley Creek (HVC)	1
Alpine County Surfacewaters, Groundwaters, and HPR	4
Total number of pages:	11

cc: Calif. Dept. of Health Services, ODW - Jess Morehouse
El Dorado Co. Dept. of Environmental Health - Virginia Huber
Nevada Division of Environmental Protection - Wendel McCurry
Alpine County Health Department - Dr. Richard Botto
Alpine County Health Department - Jim Goodloe
Alpine County Board of Supervisors
Desert Research Group (Alpine County Consultants) - David McGraw
STPUD Board of Directors
STPUD General Manager / District Engineer - Robert G. Baer
STPUD Manager of Operations - Ross Johnson
STPUD Operations Chief Plant Operator - Jeff Lee
STPUD Laboratory Director - Terry Powers
STPUD Manager of Alpine County Operations - Hal Bird

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SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

JANUARY 2002

		FLOW, MGD					PRECIP		D.O. mg/L	COD mg/L		BOD mg/L		SS mg/L	
Date	Day	Inf	2-Hr Peak Inf	Eff	Pond Return	Pond Inf	Inch	Type	Fin	Raw	Fin	Raw	Fin	Raw	Fin
01/01/02	Tue	5.79	8.6	5.19					6.44	454					
01/02/02	Wed	5.48	7.6	5.67			0.29	Rain	5.09	534					
01/03/02	Thu	5.23	7.1	5.60					4.64	400					
01/04/02	Fri	5.07	7.1	5.03					5.70	401					
01/05/02	Sat	5.27	7.2	5.27			0.09	Rain	5.57	430	51.0	193	8.9	137	6.5
01/06/02	Sun	5.23	7.3	4.61			0.01	Rain	6.36	404					
01/07/02	Mon	4.50	6.0	4.40					5.58	381					
01/08/02	Tue	4.29	5.7	4.18					5.91	364					
01/09/02	Wed	4.25	5.6	4.42					5.48	416	37.7	178	6.8	174	6.7
01/10/02	Thu	4.28	5.6	4.47					6.00	368					
01/11/02	Fri	4.29	5.7	3.87					6.00	424					
01/12/02	Sat	4.83	6.8	5.01					5.53	408	27.8	202	6.1	144	4.6
01/13/02	Sun	4.78	6.9	4.65					5.76	401					
01/14/02	Mon	4.33	5.8	4.45					5.24	385					
01/15/02	Tue	3.83	5.3	3.90					6.14	357					
01/16/02	Wed	4.15	6.2	3.98					6.02	368	29.7	182	4.5	130	2.8
01/17/02	Thu	4.11	6.1	4.26					5.94	374					
01/18/02	Fri	4.33	5.6	4.22					6.34	434					
01/19/02	Sat	5.39	7.2	5.18					5.71	441	36.4	207	7.5	140	4.1
01/20/02	Sun	5.50	7.8	5.25					5.68	418					
01/21/02	Mon	4.67	7.5	4.71			0.07	Snow	5.29	420					
01/22/02	Tue	4.17	5.5	4.19			0.01	Snow	5.69	382					
01/23/02	Wed	4.13	5.6	3.64					5.77	454	35.8	187	4.9	186	3.5
01/24/02	Thu	4.91	6.5	4.44					5.68	366					
01/25/02	Fri	4.17	7.0	4.17					5.99	359					
01/26/02	Sat	4.87	7.8	4.87			0.34	Snow	6.06	284	40.8	238	5.9	102	4.7
01/27/02	Sun	4.44	8.3	4.44					5.01	412					
01/28/02	Mon	4.76	7.2	4.76			0.05	Snow	5.59	357					
01/29/02	Tue	3.67	6.7	3.61					5.78	421					
01/30/02	Wed	4.19	5.6	3.79					6.10	425	37.3	224	7.6	142	5.0
01/31/02	Thu	4.29	5.6	4.19					5.77	346					
Permit Max		7.7									300		45		60
Permit Min															
Permit Ave											60		30		30
Total		143.20	204.5	140.42			0.86		177.86	12388	296.5	1611	52.2	1155	38.0
Maximum		5.79	8.6	5.67			0.34		6.44	534	51.0	238	8.9	186	6.7
Minimum		3.67	5.3	3.61			0.01		4.64	284	27.8	178	4.5	102	2.8
Average		4.62	6.6	4.53			0.12		5.74	400	37.1	201	6.5	144	4.7
# Tests		31	31	31	0	0	7		31	31	8	8	8	8	8

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

JANUARY 2002

Date	Day	SETTLEABLE SOLIDS mL/L Raw		SETTLEABLE SOLIDS mL/L Fin	MBAS mg/L Raw	MBAS mg/L Fin	pH Units Raw	pH Units Fin	TURBIDITY NTU Fin	CI2 mg/L Fin	FINAL COLIFORMS MPN/100 mL Total		FINAL COLIFORMS MPN/100 mL 7day- Median		TDS mg/L Raw	TDS mg/L Fin	ALKALINITY mg/L Raw	ALKALINITY mg/L Fin
01/01/02	Tue	11.0	<	0.1			7.54	7.51	11.30	6.37	<	2	<	2			170	152
01/02/02	Wed	10.0	<	0.1			7.37	7.48	7.60	8.35	<	2	<	2			163	137
01/03/02	Thu	10.0	<	0.1			7.52	7.41	6.24	6.47	<	2	<	2			157	138
01/04/02	Fri	9.0	<	0.1			7.58	7.46	5.27	6.37	<	2	<	2			157	142
01/05/02	Sat	9.5	<	0.1			7.50	7.50	5.50	5.74		2	<	2			157	144
01/06/02	Sun	8.0	<	0.1			7.40	7.53	7.71	5.95	<	2	<	2			153	133
01/07/02	Mon	8.0	<	0.1			7.45	7.50	4.50	6.68	<	2	<	2			142	132
01/08/02	Tue	8.5	<	0.1			7.44	7.50	4.70	7.31	<	2	<	2			138	130
01/09/02	Wed	10.0	<	0.1			7.70	7.82	4.60	6.47	<	2	<	2	252	224	148	130
01/10/02	Thu	9.0	<	0.1			7.63	7.70	4.05	6.68	<	2	<	2			139	132
01/11/02	Fri	9.5	<	0.1			7.57	7.58	3.30	4.70	<	2	<	2			142	132
01/12/02	Sat	10.0	<	0.1			7.41	7.56	3.85	5.85	<	2	<	2			136	136
01/13/02	Sun	9.0	<	0.1			7.45	7.66	3.50	5.43	<	2	<	2			152	136
01/14/02	Mon	8.5	<	0.1			7.58	7.42	2.80	5.74	<	2	<	2			138	131
01/15/02	Tue	8.0	<	0.1			7.59	7.32	2.90	6.47	<	2	<	2			141	125
01/16/02	Wed	9.0	<	0.1			7.50	7.25	2.30	6.79	<	2	<	2	254	230	143	126
01/17/02	Thu	9.0	<	0.1			7.61	7.22	2.70	5.64	<	2	<	2			139	128
01/18/02	Fri	9.5	<	0.1			7.68	7.44	2.90	4.59	<	2	<	2			144	127
01/19/02	Sat	10.0	<	0.1			7.73	7.38	3.52	5.22	<	2	<	2			161	136
01/20/02	Sun	10.0	<	0.1			7.31	7.16	3.30	5.74	<	2	<	2			159	140
01/21/02	Mon	10.0	<	0.1			7.52	7.36	2.90	5.43	<	2	<	2			153	138
01/22/02	Tue	6.5	<	0.1			7.40	7.33	3.20	6.06	<	2	<	2			146	128
01/23/02	Wed	10.0	<	0.1			7.52	7.30	2.90	6.37	<	2	<	2	253	236	140	119
01/24/02	Thu	7.5	<	0.1			7.69	7.34	3.30	5.32	<	2	<	2			139	117
01/25/02	Fri	8.0	<	0.1			7.50	7.35	3.20	4.59	<	2	<	2			145	115
01/26/02	Sat	12.0	<	0.1			7.65	7.30	3.92	4.70	<	2	<	2			152	120
01/27/02	Sun	9.0	<	0.1			7.74	7.44	3.70	5.22	<	2	<	2			156	124
01/28/02	Mon	8.5	<	0.1			7.64	7.25	3.40	6.06	<	2	<	2			149	113
01/29/02	Tue	9.0	<	0.1			7.60	7.28	3.60	5.74	<	2	<	2			147	104
01/30/02	Wed	7.0	<	0.1			7.73	7.42	4.60	6.16	<	2	<	2	282	244	144	95
01/31/02	Thu	7.5	<	0.1			7.68	7.42	6.00	5.53	<	2	<	2			148	99
Permit Max				0.1		2.0		8.5	20			240		23				
Permit Min								6.5										
Permit Ave						1.0			10									
Total		280.5		3.1	0.00	0.000	234.23	230.19	133.26	183.74		62		62	1041	934	4598	3959
Maximum		12.0		0.1	ERR	ERR	7.74	7.82	11.30	8.35		2		2	282	244	170	152
Minimum		6.5		0.1	ERR	ERR	7.31	7.16	2.30	4.59		2		2	252	224	136	95
Average		9.0		0.1	ERR	ERR	7.56	7.43	4.30	5.93		2		2	260	234	148	128
# Tests		31		31	0	0	31	31	31	31		31		31	4	4	31	31

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT
COMPLIANCE RECORD

2002

Parameter	# Tests	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Compliance, %
Total Plant Inflow; 7.7 MGD; Dry Weather	31	0													100.0
2-Hour Peak Inflow; 18.5 MGD	31	0													100.0
COD, 30 Day Ave: 60 mg/L	1	0													100.0
COD, Max: 300 mg/L	8	0													100.0
BOD, 30 Day Ave: 30 mg/L	1	0													100.0
BOD, Max: 45 mg/L	8	0													100.0
SS, 30 Day Ave: 30 mg/L	1	0													100.0
SS, Max: 60 mg/L	8	0													100.0
Settleable Solids, Max: 0.1 mL/L	31	0													100.0
Turbidity, 30 Day Ave: 10 NTU	1	0													100.0
Turbidity, Max: 20 NTU	31	0													100.0
pH, 6.5 to 8.5	31	0													100.0
Total Coliforms, Max: 240 MPN/100 mL	31	0													100.0
Total Coliforms, 7-day Median: 23 MPN	31	0													100.0
Total	245	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0

SOUTH TAHOE PUBLIC UTILITY DISTRICT
MEMORANDUM

Date: February 4, 2002

To: Lisa Coyner, Bob Baer, Terry Powers

From: Greg Schrempp

Topic: Export Line Inspection
****

On January 23 2002, Tim Rieger and I conducted our check of the District's export line from the treatment plant to where the "C" line daylights at Harvey Place at Station 564+04. Several wet spots were checked, however no leaks were found.

SAMPLE LOCATIONS

TAHOE BASIN MONITORING WELLS

Site	Location
ERB	Emergency Retention Basin
CONTROL	North of Post Office
MW02-25, -50	Emergency Retention Basin, S side
MW03-25, -50	Emergency Retention Basin, S side
MW04-25, -50	Emergency Retention Basin, W side
MW07-25, -50	Emergency Retention Basin, N side
MW08-25, -50	Pond #1, SW corner
MW11	S.E. corner of wastewater treatment plant grounds
MW12	South of Emergency Pump Building, for buried sludge
MW13	Pond 2, along Heavenly Valley Creek, for buried sludge

HEAVENLY VALLEY CREEK

HVC-1	At Pioneer Trail
HVC-2	250 ft upstream of Pond #2
HVC-3	25 ft downstream of Johnson Blvd.
HVC-4	Effluent of drain pipe from Lower Shop area
HVC-5	Effluent of drainage pipe along Johnson Blvd, 10 feet upstream of Johnson Blvd.

ALPINE COUNTY MONITORING WELLS

Site	Location
ACMW-01AW	Below main dam at Harvey Place Reservoir
ACMW-01BE	Below auxiliary dam at Harvey Place Reservoir
ACMW-02, N&S	On dam access road at Diamond Valley Road
ACMW-03	Bruns ranch, east side of Highway 88
ACMW-04W	Gansberg ranch, west side of Highway 88
ACMW-05	Dressler ranch
ACMW-06, N&S	Celio ranch, on Diamond Valley Road

ALPINE SOILS

Site	Ranch
S2	Celio
S3	Hall
S4	Gansberg
S5	Gansberg
S6	Neddenriep
S7	Bruns
S8	Dressler

ALPINE GROUNDWATERS

Site	Homeowner
GW-01	Sagues
GW-03	Smith/Springmeyer
GW-04	Celio
GW-05	Neddenriep
GW-07	Gansberg, Jr.
GW-08	Arant
GW-11	Diamond Valley School
GW-14	Sierra Pines Store

ALPINE SURFACEWATERS

Site	Location
SW-01	Carson River, Woodfords
SW-02	Indian Creek, @ HWY 89
SW-03	Indian Creek, @ upper bridge
SW-04	Indian Creek, @ lower bridge
SW-05	Carson River, Paynesville
SW-06	Carson River, Stateline
SW-07	Fredericksberg Ditch, Stateline
SW-08	Irrigation Ditch along Carson River Road
SW-09	Carson River, Dressler Lane
SW-10	Indian Creek, @ Smith-Springmeyer Ranch

TAHOE BASIN MONITORING

Site	Date	ID	Location	Depth msl	Temp C	pH	EC umho	Cl mg/L	COD mg/L	TKN mg/L	NO3-N mg/L	Comment
Buried Sludge Monitoring												
MW11	01/22/02	20020122-12	Sludge Pond	6263.1	7.5	6.48	97	1.3	< 5.0		0.127	
MW12	01/22/02	20020122-13	Sludge Pond	6262.5	8.5	5.85	103	1.6	< 5.0		0.368	
MW13	01/22/02	20020122-14	Sludge Pond	6256.9	4.2	6.47	537	2.2	15.9		2.380	
ERB Monitoring												
CONTROL	01/22/02	20020122-07	At Post Office	6278.9	8.5	6.67	180	8.7	6.3		2.350	
MW03-50	01/22/02	20020122-08	Black Bart side of ERB	6267.7	9.5	6.08	692	57.7	6.6		31.700	
MW04-50	01/22/02	20020122-09	Hank Monk side of ERB	6267.2	7.8	6.32	83	2.7	< 5.0		0.166	
MW04-50	01/22/02	20020122-10	Hank Monk side of ERB	6278.5	6.5	6.46	250	24.0	< 5.0		0.576	
Heavenly Valley Creek												
HVC-1	01/22/02	20020122-HVC1	Downstream of Pioneer									Frozen
HVC-2	01/22/02	20020122-HVC2	250' upstream of Pond #2									Frozen
HVC-3	01/22/02	20020122-HVC3	25' downstream of Johnson Blvd									Frozen
HVC-4	01/22/02	20020122-HVC4	Effluent of drain from Lower Shop a									Dry
HVC-5	01/22/02	20020122-HVC5	Effluent of drainage pipe along Johi									Dry
Treatment Plant Monitoring												
MW08-25	01/22/02	20020122-11	SW side of Pond #1	6247.0	9.5	6.22	954	45.1	77.2		< 0.030	

ALPINE COUNTY MONITORING

Site	Date	ID	Location	Temp C	pH	EC umhos	DO mg/L	Alk mg/L	TDS mg/L	SS mg/L	Turb NTU	Cl mg/L	SO4 mg/L
Alpine Monitoring Wells													
ACMW-01AW	01/15/2002	20020115-11	Main Dam	10.0	6.45	73		31	66			2.2	3.4
ACMW-01BE	01/15/2002	20020115-12	Secondary Dam	10.0	6.33	82		40	72			3.9	1.3
ACMW-02N	01/15/2002	20020115-13	Access Gate	11.3	6.37	126		59	89			2.8	2.8
ACMW-02S	01/15/2002	20020115-14	Access Gate	11.2	6.32	108		52	79			3.3	1.3
ACMW-04W	01/15/2002	20020115-15	Gansberg	10.5	6.40	196		48	139			22.1	7.2
ACMW-06N	01/15/2002	20020115-16	Celio	10.0	6.88	705		260	439			57.2	22.2
ACMW-06S	01/15/2002	20020115-17	Celio	9.0	8.66	637		212	393			71.5	23.4
Groundwaters													
GW-03	01/08/2002	20020108-09	Smith/Springmeyer	12.0	7.42	311		132	235			1.6	26.2
GW-04	01/08/2002	20020108-10	Celio	13.5	7.08	265		120	205			3.5	11.7
GW-04	01/08/2002	20020108-11	Celio	10.9	6.32	257		62	175			23.1	12.6
GW-07	01/08/2002	20020108-12	Gansberg	7.6	6.46	123		56	101			1.6	2.4
GW-08	01/08/2002	20020108-13	Arant	10.5	6.81	264		50	175			27.9	9.7
GW-11	01/08/2002	20020108-14	Diamond Val. School	14.1	6.93	149		76	123			0.7	0.7
GW-14	01/08/2002	20020108-15	Sierra Pines	7.0	6.38	114		53	103			1.2	1.7
Reservoirs													
HPR	01/02/2002	20020102-15	Harvey Place Reservoir	3.9	7.03	494	8.59	103	241	1.94	3.44	57.7	19.0
Surfacewaters: Carson R													
SW-01	01/02/2002	20020102-12	Carson R Woodfords	2.4	7.50	80	10.30	34	65	1.14	.9	2.6	2.9
SW-05	01/02/2002	20020102-14	Carson R Paynesville	4.2	6.39	105	10.70	39	72	0.86	1.31	2.7	4.2
Surfacewaters: Indian Cr													
SW-02	01/02/2002	20020102-13	Indian Cr Upper	2.7	6.69	78	7.16	36	75	0.94	2.6	2.0	0.7

ALPINE COUNTY MONITORING

01/31/02

Site	Date	TotalP mg/L	PO4-P mg/L	TKN mg/L	NH3-N mg/L	NO2-N mg/L	NO3-N mg/L	Total N mg/L
Alpine Monitoring Wells								
ACMW-01AV	01/15/2002	0.028		< 0.100		< 0.010	0.063	0.173
ACMW-01BE	01/15/2002	0.037		< 0.100		< 0.010	0.168	0.278
ACMW-02N	01/15/2002	0.015		< 0.100		< 0.010	0.046	0.156
ACMW-02S	01/15/2002	0.013		0.139		< 0.010	0.051	0.200
ACMW-04W	01/15/2002	0.015		< 0.100		< 0.020	2.540	2.660
ACMW-06N	01/15/2002	0.445		0.319		< 0.010	< 0.010	0.339
ACMW-06S	01/15/2002	0.024		0.346		< 0.010	0.052	0.408
Groundwaters								
GW-03	01/08/2002	0.034		0.295		< 0.010	0.712	1.017
GW-04	01/08/2002	0.055		0.112		< 0.010	0.824	0.946
GW-04	01/08/2002	0.032		0.147		< 0.030	3.540	3.717
GW-07	01/08/2002	0.072		0.247		< 0.010	1.000	1.257
GW-08	01/08/2002	0.082		0.375		< 0.040	5.480	5.895
GW-11	01/08/2002	0.143		0.553		< 0.010	0.446	1.009
GW-14	01/08/2002	0.056		0.120		< 0.010	0.478	0.608
Reservoirs								
HPR	01/02/2002	3.160	2.280	17.100	15.800	0.471	1.840	19.411
Surfacewaters: Carson R								
SW-01	01/02/2002	< 0.010	< 0.010	0.258	< 0.020	< 0.010	< 0.010	0.278
SW-05	01/02/2002	0.031	< 0.010	0.153	0.021	< 0.010	0.014	0.177
Surfacewaters: Indian Cr								
SW-02	01/02/2002	0.033	0.022	0.296	< 0.020	< 0.010	< 0.010	0.316

ALPINE COUNTY MONITORING

Site	Date	COD mg/L	BOD mg/L	O & G mg/L	Boron mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	SAR	Exch Na %	Hardness mg/L	Water Level MSL or Ft
Alpine Monitoring Wells													
ACMW-01AV	01/15/2002												5482.8
ACMW-01BE	01/15/2002												5491.9
ACMW-02N	01/15/2002												5458.2
ACMW-02S	01/15/2002												5459.3
ACMW-04W	01/15/2002												4896.3
ACMW-06N	01/15/2002												5216.6
ACMW-06S	01/15/2002												5205.3
Groundwaters													
GW-03	01/08/2002												
GW-04	01/08/2002												
GW-04	01/08/2002												
GW-07	01/08/2002												
GW-08	01/08/2002												
GW-11	01/08/2002												
GW-14	01/08/2002												
Reservoirs													
HPR	01/02/2002	29	3		0.15	15.0	2.9	49.6	8.6	3.07	64.1		39.0
Surfacewaters: Carson R													
SW-01	01/02/2002					7.6	1.9	5.1	1.4	0.43	28.0		
SW-05	01/02/2002					8.0	2.1	6.5	1.7	0.53	31.5		
Surfacewaters: Indian Cr													
SW-02	01/02/2002					5.6	1.5	8.3	1.7	0.81	44.8		

ALPINE COUNTY
BACTERIOLOGICAL MONITORING

Alpine Monitoring Wells

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
ACMW-01AV	01/15/2002		1.1	<	1.1	
ACMW-01BE	01/15/2002	<	1.1	<	1.1	
ACMW-02N	01/15/2002	<	1.1	<	1.1	
ACMW-02S	01/15/2002	<	1.1	<	1.1	
ACMW-04W	01/15/2002		1.1	<	1.1	
ACMW-06N	01/15/2002	<	1.1	<	1.1	
ACMW-06S	01/15/2002	<	1.1	<	1.1	

Groundwaters

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
GW-03	01/08/2002	<	1.1	<	1.1	
GW-04	01/08/2002	<	1.1	<	1.1	
GW-04	01/08/2002	<	1.1	<	1.1	
GW-07	01/08/2002		3.6	<	1.1	
GW-08	01/08/2002	<	1.1	<	1.1	
GW-11	01/08/2002	<	1.2	<	1.2	
GW-14	01/08/2002	<	1.1	<	1.1	

Reservoirs

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
HPR	01/02/2002	30	2	2

Surfacewaters: Carson R

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-01	01/02/2002	23	4	
SW-05	01/02/2002	43	4	

Surfacewaters: Indian Cr

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-02	01/02/2002	43	4	

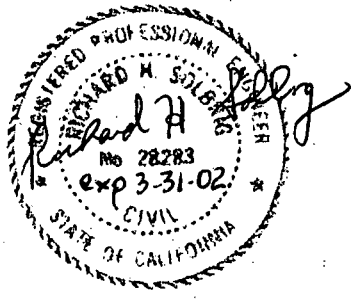
Site	Location	TDS		Cl⁻		TKN		NO_3-N		Total N		Total P		SO_4		Boron		Exch Na %	
		Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence
SW-01	Carson River, Woodfords	55	✓	1.0	✓	0.13	✓	0.02		0.15	✓	0.02		2.0	✓	0.02		20	✓
SW-06	Carson River, Stateline	70		2.5		0.22		0.03		0.25		0.03		2.0		0.02		20	
SW-02	Indian Creek, Upper	100		6.0						0.30		0.03	✓	8.0		0.25		30	✓
SW-03	Indian Creek, Mid	100		6.0						0.30		0.03		8.0		0.25		30	
SW-04	Indian Creek, Lower	100		6.0						0.30		0.03		8.0		0.25		30	
SW-10	Indian Creek, Stateline	100		6.0						0.30		0.03		8.0		0.25		30	

Soils results for September is included in this report. Soil results for December, 2001, will be sent as soon as they are available.

Certification

I hereby certify that the enclosed monitoring report was prepared under my direct supervision and that I am a duly Registered Engineer under the laws of the State of California.

Sincerely,



Richard Solbrig,
Assistant Manager/Engineer

Enclosures:

1.

February Monthly Report	Pages
Wastewater Treatment plant	2
Permit Compliance Record	1
Export pipeline inspection	1
Sample site locations	2
Tahoe Basin: Monitoring wells (ERB) and Heavenly Valley Creek (HVC)	1
Alpine County Surfacewaters, Groundwaters, and HPR	4
Alpine County Soils, September	1
Total number of pages:	12

cc: Calif. Dept. of Health Services, ODW - Jess Morehouse
El Dorado Co. Dept. of Environmental Health - Virginia Huber
Nevada Division of Environmental Protection - Wendel McCurry
Alpine County Health Department - Dr. Richard Botto
Alpine County Health Department - Jim Goodloe
Alpine County Board of Supervisors
Desert Research Group (Alpine County Consultants) - David McGraw
STPUD Board of Directors
STPUD General Manager / District Engineer - Robert G. Baer
STPUD Manager of Operations - Ross Johnson
STPUD Operations Chief Plant Operator - Jeff Lee
STPUD Laboratory Director - Terry Powers
STPUD Manager of Alpine County Operations - Hal Bird

File: \LAHONTAN\02-02 Report.WPD

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

FEBRAURY 2002

		FLOW MGD					PRECIP		D.O. mg/L	COD mg/L		BOD mg/L		SS mg/L	
Date	Day	Inf	2-Hr Peak Inf	Eff	Pond Return	Pond Inf	Inch	Type	Fin	Raw	Fin	Raw	Fin	Raw	Fin
02/01/02	Fri	4.55	5.8	4.68					5.47	387					
02/02/02	Sat	4.98	6.8	4.47					6.38	389	43.8	196	9.5	126	5.8
02/03/02	Sun	5.02	7.6	4.87					5.38	429					
02/04/02	Mon	4.30	6.3	4.16					5.35	382					
02/05/02	Tue	4.07	5.7	3.79					5.72	395					
02/06/02	Wed	4.11	5.3	4.36					5.24	459	40.0	161	6.9	141	3.6
02/07/02	Thu	4.17	5.1	3.73			0.47	Snow	5.76	473					
02/08/02	Fri	4.49	5.9	4.60					5.36	420					
02/09/02	Sat	5.29	7.0	4.68					5.86	410	44.0	206	6.3	134	3.2
02/10/02	Sun	4.90	7.9	4.67					5.52	450					
02/11/02	Mon	4.58	6.3	4.23					5.41	368	30.7	184	4.8	133	2.2
02/12/02	Tue	4.07	5.5	4.18					5.37	355					
02/13/02	Wed	4.22	5.8	3.94					5.68						
02/14/02	Thu	4.33	5.7	4.59					5.14	456					
02/15/02	Fri	4.69	6.2	4.24					6.02	385					
02/16/02	Sat	5.72	7.4	5.57			0.12	Snow	5.48	456	37.0	214	7.0	158	4.0
02/17/02	Sun	5.58	7.8	5.24			0.04	Snow	5.32	444					
02/18/02	Mon	5.02	7.7	5.02					5.12	438					
02/19/02	Tue	4.57	6.3	4.56			0.18	Rain	6.18	382					
02/20/02	Wed	4.89	6.5	4.48					4.41	422	41.1	182	9.8	148	3.6
02/21/02	Thu	4.78	6.5	5.47					5.48	385					
02/22/02	Fri	5.14	6.7	4.95					4.94	402					
02/23/02	Sat	5.76	7.7	5.68					3.11	384	49.0	170		146	3.4
02/24/02	Sun	5.58	8.4	5.78					3.13	386					
02/25/02	Mon	4.67	6.6	4.43					5.31	722					
02/26/02	Tue	4.54	6.3	4.56					5.30	419					
02/27/02	Wed	4.62	6.2	4.69					4.78	371	49.4	153	10.6	120	4.0
02/28/02	Thu	4.64	6.2	0.54		3.45			5.53	328					
Permit Max		7.7									300		45		60
Permit Min															
Permit Ave											60		30		30
Total		133.28	183.2	126.16		3.45	0.81		147.75	11297	335.0	1466	54.8	1106	29.9
Maximum		5.76	8.4	5.78		3.45	0.47		6.38	722	49.4	214	10.6	158	5.8
Minimum		4.07	5.1	0.54		3.45	0.04		3.11	328	30.7	153	4.8	120	2.2
Average		4.76	6.5	4.51		3.45	0.20		5.28	418	41.9	183	7.8	138	3.7
# Tests		28	28	28	0	1	4		28	27	8	8	7	8	8

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

FEBRAURY 2002

Date	Day	SETTLEABLE SOLIDS mL/L Raw		SETTLEABLE SOLIDS mL/L Fin	MBAS mg/L Raw	MBAS mg/L Fin	pH Units Raw	pH Units Fin	TURBIDITY NTU Fin	Cl2 mg/L Fin	FINAL COLIFORMS MPN/100 mL Total		FINAL COLIFORMS MPN/100 mL 7day-Median		TDS mg/L Raw	TDS mg/L Fin	ALKALINITY mg/L Raw	ALKALINITY mg/L Fin
02/01/02	Fri	8.5	<	0.1			7.61	7.30	5.65	5.12	<	2	<	2			157	102
02/02/02	Sat	8.0	<	0.1			7.52	7.35	5.70	4.38	<	2	<	2			160	110
02/03/02	Sun	9.0	<	0.1			7.91	7.77	5.40	5.95	<	2	<	2			185	118
02/04/02	Mon	9.5	<	0.1			7.63	7.42	4.55	7.52		2	<	2			154	102
02/05/02	Tue	7.5	<	0.1			7.59	7.33	3.70	6.58	<	2	<	2			148	89
02/06/02	Wed	8.0	<	0.1			7.56	7.24	3.75	5.64	<	2	<	2	268	245	150	84
02/07/02	Thu	10.0	<	0.1			7.46	7.32	3.35	4.59	<	2	<	2			151	81
02/08/02	Fri	8.0	<	0.1			7.62	7.27	3.30	4.80	<	2	<	2			154	81
02/09/02	Sat	10.5	<	0.1			7.41	7.24	3.14	4.70	<	2	<	2			155	88
02/10/02	Sun	9.5	<	0.1			7.44	7.27	3.20	5.95	<	2	<	2			167	94
02/11/02	Mon	9.0	<	0.1			7.47	7.28	2.20	6.26	<	2	<	2			156	80
02/12/02	Tue	9.0	<	0.1			7.52	7.10	2.10	6.16		2	<	2			149	67
02/13/02	Wed	10.0	<	0.1			7.72	7.17	2.45	6.26	<	2	<	2			152	64
02/14/02	Thu	10.0	<	0.1			7.56	7.12	3.55	5.53	<	2	<	2			146	61
02/15/02	Fri	9.5	<	0.1			7.64	7.39	3.60	3.86	<	2	<	2			155	65
02/16/02	Sat	10.0	<	0.1			7.36	7.18	4.24	8.25	<	2	<	2			163	88
02/17/02	Sun	10.0	<	0.1			7.67	7.34	4.05	7.62	<	2	<	2			173	99
02/18/02	Mon	10.0	<	0.1			7.40	7.28	4.00	8.77	<	2	<	2			166	99
02/19/02	Tue	9.0	<	0.1			7.56	7.38	4.55	5.12	<	2	<	2			148	99
02/20/02	Wed	10.0	<	0.1			7.55	7.56	5.45	6.89					245	220	137	100
02/21/02	Thu	8.5	<	0.1			7.53	7.52	6.20	5.85	<	2	<	2			147	106
02/22/02	Fri	8.0					7.36			5.32	<	2	<	2			145	
02/23/02	Sat	10.0	<	0.1			7.48	7.36	7.60	5.64	<	2	<	2			152	120
02/24/02	Sun	8.5	<	0.1			7.40	7.32	8.00	6.26	<	2	<	2			145	126
02/25/02	Mon	7.0	<	0.1			7.56	7.46	6.40	9.08	<	2	<	2			140	118
02/26/02	Tue	8.0	<	0.1			7.41	7.44	6.20	5.74	<	2	<	2			136	116
02/27/02	Wed	7.5	<	0.1			7.49	7.44	5.90	6.37	<	2	<	2	240	219	136	115
02/28/02	Thu	9.0					7.58										133	
Permit Max				0.1		2.0		8.5	20			240		23				
Permit Min								6.5										
Permit Ave						1.0			10									
Total		251.5		2.6	0.00	0.000	211.01	190.85	118.23	164.21		52		52	753	684	4260	2472
Maximum		10.5		0.1	ERR	ERR	7.91	7.77	8.00	9.08		2		2	268	245	185	126
Minimum		7.0		0.1	ERR	ERR	7.36	7.10	2.10	3.86		2		2	240	219	133	61
Average		9.0		0.1	ERR	ERR	7.54	7.34	4.55	6.08		2		2	251	228	152	95
# Tests		28		26	0	0	28	26	26	27		26		26	3	3	28	26

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT
COMPLIANCE RECORD

2002

Parameter	# Tests	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Compliance, %
Total Plant Inflow; 7.7 MGD; Dry Weather	59	0	0												100.0
2-Hour Peak Inflow; 18.5 MGD	59	0	0												100.0
COD, 30 Day Ave: 60 mg/L	2	0	0												100.0
COD, Max: 300 mg/L	16	0	0												100.0
BOD, 30 Day Ave: 30 mg/L	2	0	0												100.0
BOD, Max: 45 mg/L	15	0	0												100.0
SS, 30 Day Ave: 30 mg/L	2	0	0												100.0
SS, Max: 60 mg/L	16	0	0												100.0
Settleable Solids, Max: 0.1 mL/L	57	0	0												100.0
Turbidity, 30 Day Ave: 10 NTU	2	0	0												100.0
Turbidity, Max: 20 NTU	57	0	0												100.0
pH, 6.5 to 8.5	57	0	0												100.0
Total Coliforms, Max: 240 MPN/100 mL	57	0	0												100.0
Total Coliforms, 7-day Median: 23 MPN	57	0	0												100.0
Total	458	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0

SOUTH TAHOE
PUBLIC UTILITY DISTRICT
MEMORANDUM

Date: February 14, 2002

To: Bob Baer, Lisa Coyner

From: David Johnson

Topic: Export Line Check

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On February 14, Tim Rieger and I conducted our check of the District's export line from the treatment plant to station 564+06 near the Harvey Place reservoir..

Several wet spots were checked. However, nothing positive was found. No damage to the pipe was found.

CC Terry Powers

SAMPLE LOCATIONS

TAHOE BASIN MONITORING WELLS

Site	Location
ERB	Emergency Retention Basin
CONTROL	North of Post Office
MW02-25, -50	Emergency Retention Basin, S side
MW03-25, -50	Emergency Retention Basin, S side
MW04-25, -50	Emergency Retention Basin, W side
MW07-25, -50	Emergency Retention Basin, N side
MW08-25, -50	Pond #1, SW corner
MW11	S.E. corner of wastewater treatment plant grounds
MW12	South of Emergency Pump Building, for buried sludge
MW13	Pond 2, along Heavenly Valley Creek, for buried sludge

HEAVENLY VALLEY CREEK

HVC-1	At Pioneer Trail
HVC-2	250 ft upstream of Pond #2
HVC-3	25 ft downstream of Johnson Blvd.
HVC-4	Effluent of drain pipe from Lower Shop area
HVC-5	Effluent of drainage pipe along Johnson Blvd, 10 feet upstream of Johnson Blvd.

ALPINE COUNTY MONITORING WELLS

Site	Location
ACMW-01AW	Below main dam at Harvey Place Reservoir
ACMW-01BE	Below auxiliary dam at Harvey Place Reservoir
ACMW-02, N&S	On dam access road at Diamond Valley Road
ACMW-03	Bruns ranch, east side of Highway 88
ACMW-04W	Gansberg ranch, west side of Highway 88
ACMW-05	Dressler ranch
ACMW-06, N&S	Celio ranch, on Diamond Valley Road

ALPINE SOILS

Site	Ranch
S2	Celio
S3	Hall
S4	Gansberg
S5	Gansberg
S6	Neddenriep
S7	Bruns
S8	Dressler

ALPINE GROUNDWATERS

Site	Homeowner
GW-01	Sagues
GW-03	Smith/Springmeyer
GW-04	Celio
GW-05	Neddenriep
GW-07	Gansberg, Jr.
GW-08	Arant
GW-11	Diamond Valley School
GW-14	Sierra Pines Store

ALPINE SURFACEWATERS

Site	Location
SW-01	Carson River, Woodfords
SW-02	Indian Creek, @ HWY 89
SW-03	Indian Creek, @ upper bridge
SW-04	Indian Creek, @ lower bridge
SW-05	Carson River, Paynesville
SW-06	Carson River, Stateline
SW-07	Fredericksberg Ditch, Stateline
SW-08	Irrigation Ditch along Carson River Road
SW-09	Carson River, Dressler Lane
SW-10	Indian Creek, @ Smith-Springmeyer Ranch

TAHOE BASIN MONITORING

Site	Date	ID	Location	Depth msl	Temp C	pH	EC umho	Cl mg/L	COD mg/L	TKN mg/L	NO3-N mg/L	Comment
Buried Sludge Monitoring												
MW11	02/19/02	20020219-15	Sludge Pond	6262.8	7.9	6.23	98	1.1	5.2		0.107	
MW12	02/19/02	20020219-16	Sludge Pond	6262.5	9.2	6.07	99	1.5	< 5.0		0.420	
MW13	02/19/02	20020219-17	Sludge Pond	6256.9	5.5	6.67	554	2.5	20.1		1.740	
ERB Monitoring												
CONTROL	02/19/02	20020219-10	At Post Office	6278.7	8.3	6.56	178	8.4	7.2		2.390	
MW03-50	02/19/02	20020219-11	Black Bart side of ERB	6267.7	9.6	5.86	667	56.2	9.8		32.400	
MW04-50	02/19/02	20020219-12	Hank Monk side of ERB	6267.2	7.9	6.00	80	3.7	5.6		0.132	
MW07-50	02/19/02	20020219-13	North side of ERB	6276.2	6.9	6.49	251	23.9	7.1		0.594	
Heavenly Valley Creek												
HVC-1	02/19/02	20020219-HVC1	Downstream of Pioneer									Frozen
HVC-2	02/19/02	20020219-HVC2	250' upstream of Pond #2									Frozen
HVC-3	02/19/02	20020219-HVC3	25' downstream of Johnson Blvd									Frozen
HVC-4	02/19/02	20020219-HVC4	Effluent of drain from Lower Shop a									Ditch filled with snow
HVC-5	02/19/02	20020219-HVC5	Effluent of drainage pipe along Johi									Ditch filled with snow
Treatment Plant Monitoring												
MW08-25	02/19/02	20020219-14	SW side of Pond #1	6247.3	9.2	6.17	949	45.2	83.2		0.063	

ALPINE COUNTY MONITORING

Site	Date	ID	Location	Temp C	pH	EC umhos	DO mg/L	Alk mg/L	TDS mg/L	SS mg/L	Turb NTU	Cl mg/L	SO4 mg/L
Alpine Monitoring Wells													
ACMW-01AW	02/13/2002	20020213-11	Main Dam	8.0	6.67	71		28	62			3.0	3.0
ACMW-01BE	02/13/2002	20020213-12	Secondary Dam	6.7	6.34	81		39	62			2.2	1.2
ACMW-02N	02/13/2002	20020213-13	Access Gate	10.5	6.40	127		59	85			2.9	2.9
ACMW-02S	02/13/2002	20020213-14	Access Gate	8.6	6.75	111		48	74			3.7	1.4
ACMW-04W	02/13/2002	20020213-15	Gansberg	11.4	6.19	197		48	133			20.4	7.3
ACMW-06N	02/13/2002	20020213-16	Celio	11.0	6.68	703		260	436			58.6	22.2
ACMW-06S	02/13/2002	20020213-17	Celio	10.5	7.74	686		241	378			72.5	24.8
Groundwaters													
GW-03	02/06/2002	20020206-06	Smith/Springmeyer	10.0	7.19	313		132	226			1.6	26.8
GW-04	02/06/2002	20020206-07	Celio	12.7	7.12	266		118	198			3.7	12.0
GW-05	02/06/2002	20020206-08	Neddenriep	8.4	7.27	259		62	166			23.3	12.6
GW-07	02/06/2002	20020206-09	Gansberg	5.9	7.60	127		54	94			2.0	2.7
GW-08	02/06/2002	20020206-10	Arant	7.9	6.86	264		51	163			28.2	9.9
GW-11	02/06/2002	20020206-11	Diamond Val. School	9.9	7.83	145		75	116			0.7	0.7
GW-14	02/06/2002	20020206-12	Sierrra Pines	5.9	6.77	115		53	97			1.3	1.7
Surfacewaters: Carson R													
SW-01	02/05/2002	20020205-08	Carson R Woodfords	1.0	7.48	84		35	64	0.46	.5	2.6	2.9
SW-05	02/05/2002	20020205-10	Carson R Paynesville	0.6	7.22	97		42	75	1.27	.49	2.7	4.0
Surfacewaters: Indian Cr													
SW-02	02/05/2002	20020205-09	Indian Cr Upper	0.8	6.90	85		40	76	22.90	5.6	2.2	0.8

ALPINE COUNTY MONITORING

02/27/02

Site	Date	TotalP mg/L	PO4-P mg/L	TKN mg/L	NH3-N mg/L	NO2-N mg/L	NO3-N mg/L	Total N mg/L
Alpine Monitoring Wells								
ACMW-01AV	02/13/2002					< 0.020	0.029	
ACMW-01BE	02/13/2002					< 0.010	0.088	
ACMW-02N	02/13/2002					< 0.010	0.052	
ACMW-02S	02/13/2002					< 0.010	0.374	
ACMW-04W	02/13/2002					< 0.020	2.670	
ACMW-06N	02/13/2002					< 0.010	< 0.010	
ACMW-06S	02/13/2002					< 0.010	0.037	
Groundwaters								
GW-03	02/06/2002					< 0.010	0.725	
GW-04	02/06/2002					< 0.010	0.841	
GW-05	02/06/2002					< 0.030	3.560	
GW-07	02/06/2002					< 0.010	1.320	
GW-08	02/06/2002					< 0.040	5.560	
GW-11	02/06/2002					< 0.010	0.440	
GW-14	02/06/2002					< 0.010	0.485	
Surfacewaters: Carson R								
SW-01	02/05/2002	< 0.010	< 0.010	0.669	< 0.020	< 0.010	0.013	0.692
SW-05	02/05/2002	0.011	< 0.010	0.298	< 0.020	< 0.010	0.058	0.366
Surfacewaters: Indian Cr								
SW-02	02/05/2002	0.031	< 0.010	0.260	< 0.020	< 0.010	< 0.010	0.280

ALPINE COUNTY MONITORING

Site	Date	COD mg/L	BOD mg/L	O & G mg/L	Boron mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	SAR	Exch Na %	Hardness mg/L	Water Level MSL or Ft
Alpine Monitoring Wells													
ACMW-01AV	02/13/2002												5482.7
ACMW-01BE	02/13/2002												5492.3
ACMW-02N	02/13/2002												5458.3
ACMW-02S	02/13/2002												5459.2
ACMW-04W	02/13/2002												4895.3
ACMW-06N	02/13/2002												5216.8
ACMW-06S	02/13/2002												5205.3
Groundwaters													
GW-03	02/06/2002												
GW-04	02/06/2002												
GW-05	02/06/2002												
GW-07	02/06/2002												
GW-08	02/06/2002												
GW-11	02/06/2002												
GW-14	02/06/2002												
Surfacewaters: Carson R													
SW-01	02/05/2002					9.1	2.1	4.4	1.5	0.34	22.3		
SW-05	02/05/2002					10.1	2.4	5.7	1.8	0.42	24.7		
Surfacewaters: Indian Cr													
SW-02	02/05/2002					8.0	1.8	7.4	1.4	0.61	35.3		

ALPINE COUNTY
BACTERIOLOGICAL MONITORING

Alpine Monitoring Wells

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
ACMW-01AV	02/13/2002	<	1.1	<	1.1	
ACMW-01BE	02/13/2002	<	1.1	<	1.1	
ACMW-02N	02/13/2002	<	1.1	<	1.1	
ACMW-02S	02/13/2002	<	1.1	<	1.1	
ACMW-04W	02/13/2002		1.1			
ACMW-06N	02/13/2002	<	1.1	<	1.1	
ACMW-06S	02/13/2002	<	1.1	<	1.1	

Groundwaters

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
GW-03	02/06/2002	<	1.1	<	1.1	
GW-04	02/06/2002	<	1.1	<	1.1	
GW-05	02/06/2002	<	1.1	<	1.1	
GW-07	02/06/2002	<	1.1	<	1.1	
GW-08	02/06/2002	<	1.1	<	1.1	
GW-11	02/06/2002	<	1.1	<	1.1	
GW-14	02/06/2002	<	1.1	<	1.1	

Surfacewaters: Carson R

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-01	02/05/2002		23	<	3	
SW-05	02/05/2002		23	<	3	

Surfacewaters: Indian Cr

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-02	02/05/2002		93	<	3	

ALPINE COUNTY SOILS

Site	Date	Location	Type	pH	EC mmho	%Sat	TKN mg/Kg	NO3-N mg/L	Total P mg/Kg	Exch P mg/L
S2a	09/07/01	Celio	KT	8.28	2.47	69.9	2,800	4.2	790	5.7
S3a	09/07/01	Hall	SMB	6.11	0.24	37.7	1,670	1.4	890	35.2
S4a	09/07/01	Gansberg	DI	6.33	0.60	35.2	1,070	3.3	430	7.8
S5a	09/07/01	Gansberg	HRB	6.14	0.48	31.3	1,050	7.1	570	9.4
S6a	09/07/01	Neddenriep	DWB	6.29	0.47	44.3	1,470	3.5	720	38.9
S7a	09/07/01	Bruns	JaC	6.21	0.23	46.4	2,100	3.7	710	12.1
S8a	09/07/01	Dressler	SOD	6.58	0.11	17.2	245	1.5	300	7.3

Site	Date	Cl mg/L	SO4 mg/Kg	CEC meq/100g	Cu mg/Kg	Mo mg/Kg	Ca mg/L	Mg mg/L	Na mg/L	SAR	% Na
S2a	09/07/01	530.0		35.3	60.0	3.0	73.1	59.2	397.0	8.36	9.8
S3a	09/07/01	22.5		17.8	52.0	3.0	21.4	5.4	23.1	1.16 <	1.0
S4a	09/07/01	95.5		19.5	56.0	3.0	112.0	11.7	53.2	1.28 <	1.0
S5a	09/07/01	56.9		19.1	50.0	2.0	30.2	6.3	50.3	2.17	1.9
S6a	09/07/01	75.0		15.3	57.0	3.0	13.3	3.0	72.1	4.64	5.2
S7a	09/07/01	12.0		19.4	57.0	6.0	25.7	5.6	11.9	0.55 <	1.0
S8a	09/07/01	0.4		11.0	38.0	4.0	7.2	3.2	9.3	0.73 <	1.0

LRWQCB - Page 2

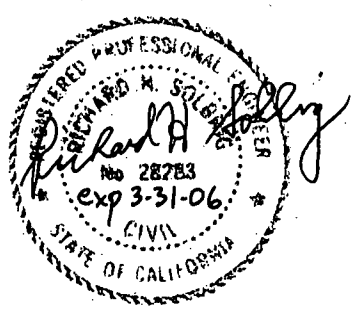
Site	Location	TDS		Cl		TKN		NO_3-N		Total N		Total P		SO_4		Boron		Exch Na %	
		Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence
SW-01	Carson River, Woodfords	55	✓	1.0	✓	0.13		0.02		0.15		0.02		2.0	✓	0.02		20	✓
SW-06	Carson River, Stateline	70		2.5	✓	0.22	✓	0.03		0.25	✓	0.03		2.0	✓	0.02		20	✓
SW-02	Indian Creek, Upper	100		6.0						0.30		0.03	✓	8.0		0.25		30	✓
SW-03	Indian Creek, Mid	100		6.0						0.30		0.03	✓	8.0		0.25		30	
SW-04	Indian Creek, Lower	100		6.0						0.30		0.03		8.0		0.25		30	
SW-10	Indian Creek, Stateline	100		6.0						0.30		0.03		8.0		0.25		30	

Soil results for December, 2001, will be sent as soon as they are available.

Certification

I hereby certify that the enclosed monitoring report was prepared under my direct supervision and that I am a duly Registered Engineer under the laws of the State of California.

Sincerely,



Richard Solbrig,
Assistant Manager/Engineer

Enclosures:

1.

March Monthly Report	Pages
Wastewater Treatment plant	2
Permit Compliance Record	1
Export pipeline inspection	1
Sample site locations	2
Tahoe Basin: Monitoring wells (ERB) and Heavenly Valley Creek (HVC)	1
Alpine County Surfacewaters, Groundwaters, and HPR	4
Total number of pages:	11

cc: Calif. Dept. of Health Services, ODW - Jess Morehouse
El Dorado Co. Dept. of Environmental Health - Virginia Huber
Nevada Division of Environmental Protection - Wendel McCurry
Alpine County Health Department - Dr. Richard Botto
Alpine County Health Department - Jim Goodloe
Alpine County Board of Supervisors
Desert Research Group (Alpine County Consultants) - David McGraw
STPUD Board of Directors
STPUD General Manager / District Engineer - Robert G. Baer
STPUD Manager of Operations - Ross Johnson
STPUD Operations Chief Plant Operator - Jeff Lee
STPUD Laboratory Director - Terry Powers
STPUD Manager of Alpine County Operations - Hal Bird

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SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

MARCH 2002

		FLOW MGD					PRECIP		D.O. mg/L	COD mg/L		BOD mg/L		SS mg/L	
Date	Day	Inf	2-Hr Peak Inf	Eff	Pond Return	Pond Inf	Inch	Type	Fin	Raw	Fin	Raw	Fin	Raw	Fin
03/01/02	Fri	5.17	6.4	5.70		0.28			4.86	361					
03/02/02	Sat	5.47	7.6	6.08	0.83				5.27	388	53.4	171	11.0	147	5.7
03/03/02	Sun	5.11	8.1	6.16	1.07				3.85	366					
03/04/02	Mon	4.81	6.8	6.52	1.69				5.46	366					
03/05/02	Tue	4.63	5.9	4.59	0.17		0.06	Rain	5.13	339					
03/06/02	Wed	4.89	7.0	4.90			0.89	Snow	5.83	344	43.1	151	7.4	120	2.7
03/07/02	Thu	4.93	6.1	4.84			0.12	Snow	6.19	373					
03/08/02	Fri	5.04	6.4	4.79					5.31	388					
03/09/02	Sat	5.56	7.4	5.65					5.59	416	49.2	170	11.1	132	3.5
03/10/02	Sun	5.98	7.5	4.77			0.19	Rain	5.59	412					
03/11/02	Mon	4.45	6.8	4.98					5.11	373					
03/12/02	Tue	4.63	6.2	4.46					4.86	357					
03/13/02	Wed	4.83	6.3	4.81			0.05	Snow	5.46	376	41.4	132	7.9	111	1.8
03/14/02	Thu	4.80	6.0	4.87					5.01	364					
03/15/02	Fri	4.81	6.5	4.37			0.04	Snow	5.87	344					
03/16/02	Sat	5.25	7.2	4.86					5.27	378	50.1	176	12.0	128	3.9
03/17/02	Sun	5.21	7.3	4.89			0.02	Snow	5.58	390					
03/18/02	Mon	4.46	6.2	4.08					5.20	348					
03/19/02	Tue	4.39	6.0	4.31					5.31	341					
03/20/02	Wed	4.43	6.0	4.79					5.15	304	40.3	134	8.5	102	3.0
03/21/02	Thu	4.50	5.7	4.44					5.28	311					
03/22/02	Fri	4.88	6.1	4.51			0.16	Snow	5.81	328					
03/23/02	Sat	5.41	7.1	5.20			0.10	Snow	4.87	375	41.3	159	10.3	120	4.7
03/24/02	Sun	5.16	7.7	4.92					4.80	372					
03/25/02	Mon	5.15	7.2	4.86					4.88	364					
03/26/02	Tue	4.71	6.4	4.68					4.77	344					
03/27/02	Wed	4.70	6.2	4.68					5.08	446	44.5	202	8.0	167	3.0
03/28/02	Thu	5.46	5.8	4.77					4.77	333					
03/29/02	Fri	4.81	6.4	5.06					4.61	325					
03/30/02	Sat	5.13	7.1	5.14					5.53	363	43.8	178	10.1	136	4.1
03/31/02	Sun	5.00	7.4	4.71					4.67	388					
Permit Max		7.7									300		45		60
Permit Min															
Permit Ave											60		30		30
Total		153.76	206.8	153.39	3.76	0.28	1.63		160.97	11277	407.1	1473	86.4	1163	32.2
Maximum		5.98	8.1	6.52	1.69		0.89		6.19	446	53.4	202	12.0	167	5.7
Minimum		4.39	5.7	4.08	0.17		0.02		3.85	304	40.3	132	7.4	102	1.8
Average		4.96	6.7	4.95	0.93		0.18		5.19	364	45.2	164	9.6	129	3.6
# Tests		31	31	31	4	1	9		31	31	9	9	9	9	9

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

MARCH 2002

Date	Day	SETTLEABLE SOLIDS mL/L Raw		SETTLEABLE SOLIDS mL/L Fin	MBAS mg/L Raw	MBAS mg/L Fin	pH Units Raw	pH Units Fin	TURBIDITY NTU Fin	Cl2 mg/L Fin	FINAL COLIFORMS MPN/100 mL Total		FINAL COLIFORMS MPN/100 mL 7day- Median		TDS mg/L Raw	TDS mg/L Fin	ALKALINITY mg/L Raw	ALKALINITY mg/L Fin
03/01/02	Fri	8.0	<	0.1			7.50	7.34	4.90	6.47	<	2	<	2			141	116
03/02/02	Sat	10.0	<	0.1			7.44	7.21	5.87	5.71	<	2	<	2			137	119
03/03/02	Sun	8.0	<	0.1			7.47	7.34	6.00	6.47		2	<	2			151	127
03/04/02	Mon	8.5	<	0.1			7.38	7.24	4.70	6.36	<	2	<	2			140	118
03/05/02	Tue	7.5	<	0.1			7.41	7.41	3.80	6.90	<	2	<	2			136	117
03/06/02	Wed	8.0	<	0.1			7.47	7.46	3.80	7.00	<	2	<	2	249	216	130	114
03/07/02	Thu	9.0	<	0.1			7.51	7.50	3.90	6.68	<	2	<	2			131	118
03/08/02	Fri	8.5	<	0.1			7.58	7.62	4.25	5.28	<	2	<	2			139	122
03/09/02	Sat	10.0	<	0.1			7.61	7.56	5.10	4.53	<	2	<	2			156	132
03/10/02	Sun	10.0	<	0.1			7.42	7.73	6.10	5.17	<	2	<	2			160	134
03/11/02	Mon	7.5	<	0.1			7.43	7.36	4.55	6.90	<	2	<	2			155	127
03/12/02	Tue	7.0	<	0.1			7.67	7.67	3.75	6.68	<	2	<	2			136	119
03/13/02	Wed	7.0	<	0.1			7.54	7.46	3.70	6.57	<	2	<	2	247	216	131	117
03/14/02	Thu	8.5	<	0.1			7.60	7.50	5.05	5.28	<	2	<	2			137	122
03/15/02	Fri	8.0	<	0.1			7.65	7.50	5.30	4.53	<	2	<	2			143	126
03/16/02	Sat	8.5	<	0.1			7.61	7.42	5.50	5.50	<	2	<	2			145	130
03/17/02	Sun	8.0	<	0.1			7.50	7.42	5.00	5.71	<	2	<	2			152	133
03/18/02	Mon	7.5	<	0.1			7.48	7.34	4.60	5.50	<	2	<	2			141	128
03/19/02	Tue	7.5	<	0.1			7.39	7.35	3.95	6.57	<	2	<	2			142	122
03/20/02	Wed	7.0	<	0.1			7.41	7.56	3.90	6.14	<	2	<	2	238	219	139	121
03/21/02	Thu	7.5	<	0.1			7.37	7.36	3.65	5.71	<	2	<	2			136	122
03/22/02	Fri	8.0	<	0.1			7.32	7.24	4.60	4.63	<	2	<	2			138	123
03/23/02	Sat	8.5	<	0.1			7.49	7.46	5.60	4.85	<	2	<	2			143	127
03/24/02	Sun	8.0	<	0.1			7.61	7.56	5.00	5.50	<	2	<	2			149	131
03/25/02	Mon	7.0	<	0.1			7.42	7.46	4.25	6.25	<	2	<	2			139	129
03/26/02	Tue	8.0	<	0.1			7.42	7.34	3.60	5.60	<	2	<	2			140	125
03/27/02	Wed	10.5	<	0.1			7.35	7.28	3.40	4.96	<	2	<	2	259	220	137	126
03/28/02	Thu	8.0	<	0.1			7.39	7.42	3.15	4.40	<	2	<	2			140	126
03/29/02	Fri	8.0	<	0.1			7.32	7.29	4.20	4.20	<	2	<	2			136	126
03/30/02	Sat	9.0	<	0.1			7.33	7.50	5.10	3.99	<	2	<	2			127	126
03/31/02	Sun	9.0	<	0.1			7.26	7.30	3.60	5.06	<	2	<	2			139	128
Permit Max				0.1		2.0		8.5	20			240		23				
Permit Min								6.5										
Permit Ave						1.0			10									
Total		255.5		3.1	0.00	0.000	231.35	230.20	139.87	175.10		62		62	993	871	4366	3851
Maximum		10.5		0.1	ERR	ERR	7.67	7.73	6.10	7.00		2		2	259	220	160	134
Minimum		7.0		0.1	ERR	ERR	7.26	7.21	3.15	3.99		2		2	238	216	127	114
Average		8.2		0.1	ERR	ERR	7.46	7.43	4.51	5.65		2		2	248	218	141	124
# Tests		31		31	0	0	31	31	31	31		31		31	4	4	31	31

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT
COMPLIANCE RECORD

2002

Parameter	# Tests	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Compliance, %
Total Plant Inflow; 7.7 MGD; Dry Weather	90	0	0	0											100.0
2-Hour Peak Inflow; 18.5 MGD	90	0	0	0											100.0
COD, 30 Day Ave: 60 mg/L	3	0	0	0											100.0
COD, Max: 300 mg/L	25	0	0	0											100.0
BOD, 30 Day Ave: 30 mg/L	3	0	0	0											100.0
BOD, Max: 45 mg/L	24	0	0	0											100.0
SS, 30 Day Ave: 30 mg/L	3	0	0	0											100.0
SS, Max: 60 mg/L	25	0	0	0											100.0
Settleable Solids, Max: 0.1 mL/L	88	0	0	0											100.0
Turbidity, 30 Day Ave: 10 NTU	3	0	0	0											100.0
Turbidity, Max: 20 NTU	88	0	0	0											100.0
pH, 6.5 to 8.5	88	0	0	0											100.0
Total Coliforms, Max: 240 MPN/100 mL	88	0	0	0											100.0
Total Coliforms, 7-day Median: 23 MPN	88	0	0	0											100.0
Total	706	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0

SOUTH TAHOE PUBLIC UTILITY DISTRICT
MEMORANDUM

Date: March 13, 2002

To: Bob Baer, Lisa Coyner, Terry Powers

From: Greg Schrempp

Topic: Export Line Inspection
****

On March 13, 2002, David Johnson and I conducted our check of the District's export line from the treatment plant to where the "C" line daylights at Harvey Place at Station 564+04. Several wet spots were checked, however no leaks were found.

SAMPLE LOCATIONS

TAHOE BASIN MONITORING WELLS

Site	Location
ERB	Emergency Retention Basin
CONTROL	North of Post Office
MW02-25, -50	Emergency Retention Basin, S side
MW03-25, -50	Emergency Retention Basin, S side
MW04-25, -50	Emergency Retention Basin, W side
MW07-25, -50	Emergency Retention Basin, N side
MW08-25, -50	Pond #1, SW corner
MW11	S.E. corner of wastewater treatment plant grounds
MW12	South of Emergency Pump Building, for buried sludge
MW13	Pond 2, along Heavenly Valley Creek, for buried sludge

HEAVENLY VALLEY CREEK

HVC-1	At Pioneer Trail
HVC-2	250 ft upstream of Pond #2
HVC-3	25 ft downstream of Johnson Blvd.
HVC-4	Effluent of drain pipe from Lower Shop area
HVC-5	Effluent of drainage pipe along Johnson Blvd, 10 feet upstream of Johnson Blvd.

ALPINE COUNTY MONITORING WELLS

Site	Location
ACMW-01AW	Below main dam at Harvey Place Reservoir
ACMW-01BE	Below auxiliary dam at Harvey Place Reservoir
ACMW-02, N&S	On dam access road at Diamond Valley Road
ACMW-03	Bruns ranch, east side of Highway 88
ACMW-04W	Gansberg ranch, west side of Highway 88
ACMW-05	Dressler ranch
ACMW-06, N&S	Celio ranch, on Diamond Valley Road

ALPINE SOILS

Site	Ranch
S2	Celio
S3	Hall
S4	Gansberg
S5	Gansberg
S6	Neddenriep
S7	Bruns
S8	Dressler

ALPINE GROUNDWATERS

Site	Homeowner
GW-01	Sagues
GW-03	Smith/Springmeyer
GW-04	Celio
GW-05	Neddenriep
GW-07	Gansberg, Jr.
GW-08	Arant
GW-11	Diamond Valley School
GW-14	Sierra Pines Store

ALPINE SURFACEWATERS

Site	Location
SW-01	Carson River, Woodfords
SW-02	Indian Creek, @ HWY 89
SW-03	Indian Creek, @ upper bridge
SW-04	Indian Creek, @ lower bridge
SW-05	Carson River, Paynesville
SW-06	Carson River, Stateline
SW-07	Fredericksberg Ditch, Stateline
SW-08	Irrigation Ditch along Carson River Road
SW-09	Carson River, Dressler Lane
SW-10	Indian Creek, @ Smith-Springmeyer Ranch

TAHOE BASIN MONITORING

Site	Date	ID	Location	Depth msl	Temp C	pH	EC umho	Cl mg/L		COD mg/L	TKN mg/L	NO3-N mg/L	Comment
Buried Sludge Monitoring													
MW11	03/26/02	20020326-19	Sludge Pond	6262.7	8.4	6.80	101	1.2	<	5.0		0.134	
MW12	03/26/02	20020326-20	Sludge Pond	6263.0	9.3	6.59	126	1.5	<	5.0		1.900	
MW13	03/26/02	20020326-21	Sludge Pond	6258.4	5.7	6.70	1196	3.6		31.7		32.100	
ERB Monitoring													
CONTROL	03/26/02	20020326-14	At Post Office	6278.6	8.2	6.56	177	8.1	<	5.0		2.370	
MW03-50	03/26/02	20020326-15	Black Bart side of ERB	6267.9	9.5	5.96	675	56.9	<	5.0		27.600	
MW04-50	03/26/02	20020326-16	Hank Monk side of ERB	6267.5	8.0	6.15	79	4.6	<	5.0		0.089	
MW07-50	03/26/02	20020326-17	North side of ERB	6276.3	6.9	6.21	256	23.2		5.8		0.544	
Heavenly Valley Creek													
HVC-1	03/26/02	20020326-HVC1	Downstream of Pioneer										Frozen
HVC-2	03/26/02	20020326-23	250' upstream of Pond #2		5.6	7.18	58	3.7		18.8	0.337	0.018	
HVC-3	03/26/02	20020326-24	25' downstream of Johnson Blvd		4.5	7.67	108	6.4		20.2	0.852	0.217	
HVC-4	03/26/02	20020326-25	Effluent of drain from Lower Shop a		3.9	7.20	152	1.2		13.5	0.403	0.273	
HVC-5	03/26/02	20020326-HVC5	Effluent of drainage pipe along Johi										Standing water
Treatment Plant Monitoring													
MW08-25	03/26/02	20020326-18	SW side of Pond #1	6248.1	8.8	6.31	890	38.9		73.9		0.018	

ALPINE COUNTY MONITORING

04/03/02

Site	Date	ID	Location	Temp C	pH	EC umhos	DO mg/L	Alk mg/L	TDS mg/L	SS mg/L	Turb NTU	Cl mg/L	SO4 mg/L
Alpine Monitoring Wells													
ACMW-01AW	03/19/2002	20020319-19	Main Dam	8.4	6.40	69		27	59			2.9	2.8
ACMW-01BE	03/19/2002	20020319-20	Secondary Dam	5.9	6.42	75		34	61			2.7	1.2
ACMW-02N	03/19/2002	20020319-21	Access Gate	11.2	6.59	126		59	82			2.7	2.8
ACMW-02S	03/19/2002	20020319-22	Access Gate	11.5	6.31	107		48	69			3.2	1.5
ACMW-04W	03/19/2002	20020319-23	Gansberg	11.5	6.12	198		51	127			19.6	7.2
ACMW-06N	03/19/2002	20020319-24	Celio	11.9	6.81	742		262	422			58.7	22.2
ACMW-06S	03/19/2002	20020319-25	Celio	10.8	6.83	702		257	450			72.1	32.6
Groundwaters													
GW-03	03/12/2002	20020312-06	Smith/Springmeyer	12.4	7.38	315		132	225			1.8	27.4
GW-04	03/12/2002	20020312-07	Celio	14.2	7.14	262		121	195			3.9	12.1
GW-05	03/12/2002	20020312-08	Neddenriep	10.2	6.23	257		63	162			24.5	13.0
GW-07	03/12/2002	20020312-09	Gansberg	9.2	6.28	126		54	96			2.0	3.0
GW-08	03/12/2002	20020312-10	Arant	9.6	6.39	265		52	162			30.3	10.4
GW-11	03/12/2002	20020312-11	Diamond Val. School	12.5	6.65	148		76	113			0.8	0.8
GW-14	03/12/2002	20020312-12	Sierra Pines	7.5	6.30	113		54	88			1.3	1.8
Irrigation Waters													
SW-08	03/05/2002	20020305-12	Irrigation Ditch	13.1	6.98	125	8.97	57	98	3.58	2.4	2.1	4.6
Reservoirs													
HPR	03/05/2002	20020305-13	Harvey Place Reservoir	6.7	7.38	483	9.97	105	223	1.54	2.3	59.1	18.3
Surfacewaters: Carson R													
SW-01	03/05/2002	20020305-06	Carson R Woodfords	1.4	7.04	81	11.75	32	60	1.18	.9	4.1	3.1
SW-05	03/05/2002	20020305-10	Carson R Paynesville	3.7	6.98	85	12.12	34	62	1.36	.93	3.6	3.5
SW-06	03/05/2002	20020305-11	Carson R Stateline	5.5	6.90	88	12.04	35	60	1.88	1.1	3.8	3.6
Surfacewaters: Indian Cr													
SW-02	03/05/2002	20020305-07	Indian Cr Upper	2.2	6.89	77	11.19	38	69	0.60	1.7	1.7	< 0.5
SW-03	03/05/2002	20020305-08	Indian Cr Mid	2.9	6.65	83	12.13	31	61	3.02	4.1	4.7	3.1
SW-04	03/05/2002	20020305-09	Indian Cr Lower	3.6	6.69	87	12.21	35	63	4.44	4.3	4.1	2.9

ALPINE COUNTY MONITORING

04/03/02

Site	Date	TotalP mg/L	PO4-P mg/L	TKN mg/L	NH3-N mg/L	NO2-N mg/L	NO3-N mg/L	Total N mg/L
Alpine Monitoring Wells								
ACMW-01AV	03/19/2002	0.056		< 0.100		< 0.020	0.022	0.142
ACMW-01BE	03/19/2002	0.026		< 0.100		< 0.010	0.057	0.167
ACMW-02N	03/19/2002	0.014		< 0.100		< 0.010	0.047	0.157
ACMW-02S	03/19/2002	< 0.010		< 0.100		< 0.010	0.228	0.338
ACMW-04W	03/19/2002	0.019		< 0.100		< 0.020	2.770	2.890
ACMW-06N	03/19/2002	0.345		0.267		< 0.010	< 0.010	0.287
ACMW-06S	03/19/2002	0.067		0.208		< 0.010	0.016	0.234
Groundwaters								
GW-03	03/12/2002	0.036		0.247		< 0.010	0.759	1.016
GW-04	03/12/2002	0.051		< 0.100		< 0.010	0.880	0.990
GW-05	03/12/2002	0.032		< 0.100		< 0.030	3.690	3.820
GW-07	03/12/2002	0.110		0.148		< 0.010	1.430	1.588
GW-08	03/12/2002	0.043		0.282		< 0.040	5.950	6.272
GW-11	03/12/2002	0.037		< 0.100		< 0.010	0.481	0.591
GW-14	03/12/2002	0.054		0.114		< 0.010	0.509	0.633
Irrigation Waters								
SW-08	03/05/2002	0.031	0.023	0.301	0.031	< 0.010	0.132	0.443
Reservoirs								
HPR	03/05/2002	2.330	2.370	16.200	16.100	0.214	2.150	18.564
Surfacewaters: Carson R								
SW-01	03/05/2002	< 0.010	< 0.010	< 0.100	< 0.020	< 0.010	< 0.010	0.120
SW-05	03/05/2002	0.023	< 0.010	< 0.100	0.026	< 0.010	0.010	0.120
SW-06	03/05/2002	< 0.010	< 0.010	0.290	0.023	< 0.010	0.018	0.318
Surfacewaters: Indian Cr								
SW-02	03/05/2002	0.034	0.014	0.198	0.023	< 0.010	< 0.010	0.218
SW-03	03/05/2002	0.033	< 0.010	0.127	< 0.020	< 0.010	< 0.010	0.147
SW-04	03/05/2002	0.022	< 0.010	0.208	0.023	< 0.010	< 0.010	0.228

ALPINE COUNTY MONITORING

Site	Date	COD mg/L	BOD mg/L	O & G mg/L	Boron mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	SAR	Exch Na %	Hardness mg/L	Water Level MSL or Ft
Alpine Monitoring Wells													
ACMW-01AV	03/19/2002												5482.9
ACMW-01BE	03/19/2002												5492.9
ACMW-02N	03/19/2002												5458.4
ACMW-02S	03/19/2002												5459.2
ACMW-04W	03/19/2002												4894.4
ACMW-06N	03/19/2002												5216.2
ACMW-06S	03/19/2002												5205.3
Groundwaters													
GW-03	03/12/2002												
GW-04	03/12/2002												
GW-05	03/12/2002												
GW-07	03/12/2002												
GW-08	03/12/2002												
GW-11	03/12/2002												
GW-14	03/12/2002												
Irrigation Waters													
SW-08	03/05/2002		1			10.0	2.5	10.6	1.8	0.78	38.2		
Reservoirs													
HPR	03/05/2002	26	3		0.25	13.5	3.6	45.4	8.4	2.83	62.5		49.5
Surfacewaters: Carson R													
SW-01	03/05/2002		1			7.7	2.0	4.3	1.2	0.36	24.5		
SW-05	03/05/2002		1			7.6	2.0	4.9	1.3	0.41	26.8		
SW-06	03/05/2002		1			7.8	2.2	5.2	1.3	0.42	27.1		
Surfacewaters: Indian Cr													
SW-02	03/05/2002		1			6.3	1.7	7.4	1.3	0.67	39.8		
SW-03	03/05/2002		1			7.7	2.0	4.6	1.2	0.38	25.3		
SW-04	03/05/2002		2			7.7	2.2	4.8	1.2	0.39	26.0		

ALPINE COUNTY
BACTERIOLOGICAL MONITORING

Alpine Monitoring Wells

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
ACMW-01AV	03/19/2002	<	1.1	<	1.1	
ACMW-01BE	03/19/2002	<	1.1	<	1.1	
ACMW-02N	03/19/2002	<	1.1	<	1.1	
ACMW-02S	03/19/2002	<	1.1	<	1.1	
ACMW-04W	03/19/2002		1.1	<	1.1	
ACMW-06N	03/19/2002	<	1.1	<	1.1	
ACMW-06S	03/19/2002	<	1.1	<	1.1	

Groundwaters

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
GW-03	03/12/2002	<	1.1	<	1.1	
GW-04	03/12/2002	<	1.1	<	1.1	
GW-05	03/12/2002	<	1.1	<	1.1	
GW-07	03/12/2002	<	1.1	<	1.1	
GW-08	03/12/2002	<	1.1	<	1.1	
GW-11	03/12/2002	<	1.1	<	1.1	
GW-14	03/12/2002	<	1.1	<	1.1	

Irrigation Waters

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-08	03/05/2002	39	23	

Reservoirs

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
HPR	03/05/2002		2	<	2	2

Surfacewaters: Carson R

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-01	03/05/2002		23	<	3	
SW-05	03/05/2002		9	<	3	
SW-06	03/05/2002		7		4	

Surfacewaters: Indian Cr

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-02	03/05/2002	93	4	
SW-03	03/05/2002	43	43	
SW-04	03/05/2002	15	4	

Site	Location	TDS		Cl		TKN		NO_3-N		Total N		Total P		SO_4		Boron		Exch Na %	
		Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence
SW-01	Carson River, Woodfords	55		1.0	✓	0.13	✓	0.02	✓	0.15	✓	0.02	✓	2.0	✓	0.02		20	✓
SW-06	Carson River, Stateline	70		2.5		0.22	✓	0.03	✓	0.25	✓	0.03	✓	2.0	✓	0.02	✓	20	✓
SW-02	Indian Creek, Upper	100		6.0						0.30	✓	0.03		8.0		0.25		30	✓
SW-03	Indian Creek, Mid	100	✓	8.0						0.30		0.03	✓	8.0		0.25		30	
SW-04	Indian Creek, Lower	100		6.0						0.30		0.03	✓	8.0		0.25		30	
SW-10	Indian Creek, Stateline	100		6.0						0.30		0.03		8.0		0.25		30	

Soil results for December, 2001, are included.

Certification

I hereby certify that the enclosed monitoring report was prepared under my direct supervision and that I am a duly Registered Engineer under the laws of the State of California.

Sincerely,

REGISTERED PROFESSIONAL ENGINEER
RICHARD H. SOLBRIG
No 28283
exp 3-31-06
CIVIL
STATE OF CALIFORNIA

Richard Solbrig,
Assistant Manager/Engineer

Enclosures:

1.

April Monthly Report	Pages
Wastewater Treatment plant	2
Permit Compliance Record	1
Export pipeline inspection	1
Sample site locations	2
Tahoe Basin: Monitoring wells (ERB) and Heavenly Valley Creek (HVC)	1
Alpine County Surfacewaters, Groundwaters, and HPR	4
Soils results for December 2001	1
Total number of pages:	12

cc: Calif. Dept. of Health Services, ODW - Jess Morehouse
El Dorado Co. Dept. of Environmental Health - Virginia Huber
Nevada Division of Environmental Protection - Wendel McCurry
Alpine County Health Department - Dr. Richard Botto
Alpine County Health Department - Jim Goodloe
Alpine County Board of Supervisors
Desert Research Group (Alpine County Consultants) - David McGraw
STPUD Board of Directors
STPUD General Manager / District Engineer - Robert G. Baer
STPUD Manager of Operations - Ross Johnson
STPUD Operations Chief Plant Operator - Jeff Lee
STPUD Laboratory Director - Terry Powers
STPUD Manager of Alpine County Operations - Hal Bird

File: \LAHONTAN\04-02 Report.WPD

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

APRIL 2002

		FLOW MGD					PRECIP		D.O. mg/L	COD mg/L		BOD mg/L		SS mg/L	
Date	Day	Inf	2-Hr Peak Inf	Eff	Pond Return	Pond Inf	Inch	Type	Fin	Raw	Fin	Raw	Fin	Raw	Fin
04/01/02	Mon	4.89	6.9	4.80					5.02	378					
04/02/02	Tue	4.89	6.6	4.58					5.01	331					
04/03/02	Wed	4.80	6.6	4.79					4.86	374	38.8	140	8.9	152	2.6
04/04/02	Thu	4.94	6.8	4.95			0.12	Rain	4.91	349					
04/05/02	Fri	5.03	6.7	4.78					5.08	337					
04/06/02	Sat	5.03	7.3	4.59					5.11	361	42.2	167	8.2	104	2.6
04/07/02	Sun	4.88	6.8	4.71					4.84	338					
04/08/02	Mon	4.66	6.1	4.40					5.13	326					
04/09/02	Tue	4.57	5.8	4.15					5.52	324					
04/10/02	Wed	4.48	6.5	4.69					5.10	322	37.0	127	5.2	129	1.6
04/11/02	Thu	4.46	5.9	4.05					5.55	403					
04/12/02	Fri	4.39	5.9	4.55					5.06	349					
04/13/02	Sat	4.56	6.5	4.37					5.87	350	36.4	163	5.7	128	2.7
04/14/02	Sun	4.66	7.0	4.31					5.45	377					
04/15/02	Mon	4.35	5.8	4.24					5.05	359					
04/16/02	Tue	4.35	5.8	4.30			0.32	Snow	5.25	396					
04/17/02	Wed	4.36	5.7	4.27					5.37		36.0		7.1		2.2
04/18/02	Thu	4.52	5.7	4.37			0.02	Snow	3.88	449					
04/19/02	Fri	4.51	5.7	4.37					5.60	388					
04/20/02	Sat	4.72	6.6	4.43					6.09	442	27.8	194	7.2	172	2.4
04/21/02	Sun	4.49	6.9	4.21					5.26	337					
04/22/02	Mon	4.15	6.0	4.05					5.45						
04/23/02	Tue	4.44	5.7	4.31					5.08	343					
04/24/02	Wed	4.20	5.4	4.24					5.12	353	35.0	143	5.9	124	1.0
04/25/02	Thu	4.26	5.5	4.27					5.34	356					
04/26/02	Fri	4.31	5.6	4.05			0.08	Rain	5.68	365					
04/27/02	Sat	4.78	6.4	4.52					5.66	352	39.2	167	8.2	115	1.9
04/28/02	Sun	4.83	6.6	4.23					5.27	354					
04/29/02	Mon	4.58	5.7	4.24			0.06	Snow	5.21	341	43.9	169	7.2	121	1.2
04/30/02	Tue	4.00	5.7	4.06			0.39	Snow	5.23	324					
Permit Max		7.7									300		45		60
Permit Min															
Permit Ave											60		30		30
Total		137.09	186.2	131.88			0.99		157.05	10078	336.3	1270	63.6	1045	18.1
Maximum		5.03	7.3	4.95			0.39		6.09	449	43.9	194	8.9	172	2.7
Minimum		4.00	5.4	4.05			0.02		3.88	322	27.8	127	5.2	104	1.0
Average		4.57	6.2	4.40			0.17		5.24	360	37.4	159	7.1	131	2.0
# Tests		30	30	30	0	0	6		30	28	9	8	9	8	9

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

APRIL 2002

Date	Day	SETTLEABLE SOLIDS mL/L Raw		SETTLEABLE SOLIDS mL/L Fin	MBAS mg/L Raw	MBAS mg/L Fin	pH Units Raw	pH Units Fin	TURBIDITY NTU Fin	CI2 mg/L Fin	FINAL COLIFORMS MPN/100 mL Total		FINAL COLIFORMS MPN/100 mL 7day- Median		TDS mg/L Raw	TDS mg/L Fin	ALKALINITY mg/L Raw	ALKALINITY mg/L Fin
04/01/02	Mon	7.5	<	0.1			7.29	7.27	3.55	7.22	<	2	<	2			133	124
04/02/02	Tue	8.0	<	0.1			7.24	7.30	3.00	7.76	<	2	<	2			133	121
04/03/02	Wed	9.0	<	0.1			7.42	7.48	3.40	5.60	<	2	<	2	236		141	123
04/04/02	Thu	9.0	<	0.1			7.33	7.43	2.85	4.53	<	2	<	2			133	123
04/05/02	Fri	8.5	<	0.1			7.37	7.22	3.15	5.07	<	2	<	2			129	124
04/06/02	Sat	8.0	<	0.1			7.47	7.38	2.90	4.74		2	<	2			140	124
04/07/02	Sun	7.5	<	0.1			7.31	7.22	2.70	5.39	<	2	<	2			135	126
04/08/02	Mon	8.5	<	0.1			7.35	7.32	2.30	5.60	<	2	<	2			129	122
04/09/02	Tue	7.0	<	0.1			7.46	7.37	2.20	6.57	<	2	<	2			127	120
04/10/02	Wed	10.0	<	0.1			7.35	7.46	2.10	6.25	<	2	<	2	235	218	128	117
04/11/02	Thu	7.5	<	0.1			7.55	7.42	2.70	5.39	<	2	<	2			125	117
04/12/02	Fri	7.5	<	0.1			7.61	7.40	2.50	5.17	<	2	<	2			129	119
04/13/02	Sat	8.0	<	0.1			7.37	7.44	2.30	4.85	<	2	<	2			122	120
04/14/02	Sun	8.0	<	0.1			7.47	7.56	2.80	5.50	<	2	<	2			146	126
04/15/02	Mon	9.0	<	0.1			7.38	7.50	2.40	5.82	<	2	<	2			137	122
04/16/02	Tue	11.5	<	0.1			7.55	7.42	2.20	5.71	<	2	<	2			140	121
04/17/02	Wed		<	0.1				7.60	2.30	5.39	<	2	<	2		209		115
04/18/02	Thu	8.0	<	0.1			7.58	7.56	2.80	5.60	<	2	<	2			135	117
04/19/02	Fri	10.0	<	0.1			7.43	7.51	2.60	4.74	<	2	<	2			132	120
04/20/02	Sat	10.5	<	0.1			7.28	7.40	3.00	5.39	<	2	<	2			135	120
04/21/02	Sun	7.5	<	0.1			7.42	7.60	2.90	4.63	<	2	<	2			153	122
04/22/02	Mon		<	0.1				7.39	2.60	8.62	<	2	<	2				122
04/23/02	Tue	7.0	<	0.1			7.41	7.42	2.25	6.14	<	2	<	2			138	118
04/24/02	Wed	8.5	<	0.1			7.30	7.40	2.45	5.50	<	2	<	2	255	228	139	121
04/25/02	Thu	7.5	<	0.1			7.36	7.29	2.90	5.17	<	2	<	2			141	122
04/26/02	Fri	7.0	<	0.1			7.35	7.36	3.50	3.45	<	2	<	2			133	122
04/27/02	Sat	7.5	<	0.1			7.38	7.43	3.50	6.04	<	2	<	2			139	124
04/28/02	Sun	8.0	<	0.1			7.35	7.28	3.95	4.96	<	2	<	2			142	127
04/29/02	Mon	7.5	<	0.1			7.60	7.54	3.35	7.00	<	2	<	2	231	213	134	120
04/30/02	Tue	7.5	<	0.1			7.62	7.41	3.30	5.82	<	2	<	2			126	119
Permit Max				0.1		2.0		8.5	20			240		23				
Permit Min								6.5										
Permit Ave						1.0			10									
Total		231.0		3.0	0.00	0.000	207.60	222.38	84.45	169.62		60		60	957	868	3774	3638
Maximum		11.5		0.1	ERR	ERR	7.62	7.60	3.95	8.62		2		2	255	228	153	127
Minimum		7.0		0.1	ERR	ERR	7.24	7.22	2.10	3.45		2		2	231	209	122	115
Average		8.3		0.1	ERR	ERR	7.41	7.41	2.81	5.65		2		2	239	217	135	121
# Tests		28		30	0	0	28	30	30	30		30		30	4	4	28	30

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT
COMPLIANCE RECORD

2002

Parameter	# Tests	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Compliance, %
Total Plant Inflow; 7.7 MGD; Dry Weather	120	0	0	0	0										100.0
2-Hour Peak Inflow; 18.5 MGD	120	0	0	0	0										100.0
COD, 30 Day Ave: 60 mg/L	4	0	0	0	0										100.0
COD, Max: 300 mg/L	34	0	0	0	0										100.0
BOD, 30 Day Ave: 30 mg/L	4	0	0	0	0										100.0
BOD, Max: 45 mg/L	33	0	0	0	0										100.0
SS, 30 Day Ave: 30 mg/L	4	0	0	0	0										100.0
SS, Max: 60 mg/L	34	0	0	0	0										100.0
Settleable Solids, Max: 0.1 mL/L	118	0	0	0	0										100.0
Turbidity, 30 Day Ave: 10 NTU	4	0	0	0	0										100.0
Turbidity, Max: 20 NTU	118	0	0	0	0										100.0
pH, 6.5 to 8.5	118	0	0	0	0										100.0
Total Coliforms, Max: 240 MPN/100 mL	118	0	0	0	0										100.0
Total Coliforms, 7-day Median: 23 MPN	118	0	0	0	0										100.0
Total	947	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0

SOUTH TAHOE
PUBLIC UTILITY DISTRICT
MEMORANDUM

Date: April 24, 2002

To: Bob Baer, Lisa Coyner

From: Tim Rieger

Topic: Export Line Check

****

On April 24, 2001, Greg Schrempp and I conducted our check of the District's export line from the treatment plant to station 564+06 near the Harvey Place reservoir. Several wet areas where checked. No damage to the pipe was found.

CC Terry Powers

EXPRT402.MEM

SAMPLE LOCATIONS

TAHOE BASIN MONITORING WELLS

Site	Location
ERB	Emergency Retention Basin
CONTROL	North of Post Office
MW02-25, -50	Emergency Retention Basin, S side
MW03-25, -50	Emergency Retention Basin, S side
MW04-25, -50	Emergency Retention Basin, W side
MW07-25, -50	Emergency Retention Basin, N side
MW08-25, -50	Pond #1, SW corner
MW11	S.E. corner of wastewater treatment plant grounds
MW12	South of Emergency Pump Building, for buried sludge
MW13	Pond 2, along Heavenly Valley Creek, for buried sludge

HEAVENLY VALLEY CREEK

HVC-1	At Pioneer Trail
HVC-2	250 ft upstream of Pond #2
HVC-3	25 ft downstream of Johnson Blvd.
HVC-4	Effluent of drain pipe from Lower Shop area
HVC-5	Effluent of drainage pipe along Johnson Blvd, 10 feet upstream of Johnson Blvd.

ALPINE COUNTY MONITORING WELLS

Site	Location
ACMW-01AW	Below main dam at Harvey Place Reservoir
ACMW-01BE	Below auxiliary dam at Harvey Place Reservoir
ACMW-02, N&S	On dam access road at Diamond Valley Road
ACMW-03	Bruns ranch, east side of Highway 88
ACMW-04W	Gansberg ranch, west side of Highway 88
ACMW-05	Dressler ranch
ACMW-06, N&S	Celio ranch, on Diamond Valley Road

ALPINE SOILS

Site	Ranch
S2	Celio
S3	Hall
S4	Gansberg
S5	Gansberg
S6	Neddenriep
S7	Bruns
S8	Dressler

ALPINE GROUNDWATERS

Site	Homeowner
GW-01	Sagues
GW-03	Smith/Springmeyer
GW-04	Celio
GW-05	Neddenriep
GW-07	Gansberg, Jr.
GW-08	Arant
GW-11	Diamond Valley School
GW-14	Sierra Pines Store

ALPINE SURFACEWATERS

Site	Location
SW-01	Carson River, Woodfords
SW-02	Indian Creek, @ HWY 89
SW-03	Indian Creek, @ upper bridge
SW-04	Indian Creek, @ lower bridge
SW-05	Carson River, Paynesville
SW-06	Carson River, Stateline
SW-07	Fredericksberg Ditch, Stateline
SW-08	Irrigation Ditch along Carson River Road
SW-09	Carson River, Dressler Lane
SW-10	Indian Creek, @ Smith-Springmeyer Ranch

TAHOE BASIN MONITORING

Site	Date	ID	Location	Depth msl	Temp C	pH	EC umho	Cl mg/L	COD mg/L	TKN mg/L	NO3-N mg/L	Comment
Buried Sludge Monitoring												
MW11	04/23/02	20020423-12	Sludge Pond	6262.6	9.2	6.99	100	1.2 <	5.0		0.230	
MW12	04/23/02	20020423-13	Sludge Pond	6262.8	10.3	6.14	117	1.5 <	5.0		0.883	
MW13	04/23/02	20020423-14	Sludge Pond	6258.2	7.0	6.87	1129	9.1	25.2		35.000	
ERB Monitoring												
CONTROL	04/23/02	20020423-07	At Post Office	6278.7	9.8	7.26	177	8.0 <	5.0		2.330	
MW03-50	04/23/02	20020423-08	Black Bart side of ERB	6267.8	10.1	5.96	643	51.7 <	5.0		25.800	
MW04-50	04/23/02	20020423-09	Hank Monk side of ERB	6267.8	8.2	6.18	80	4.5 <	5.0		0.096	
MW07-50	04/23/02	20020423-10	North side of ERB	6276.7	8.6	6.55	250	21.9 <	5.0		0.559	
Heavenly Valley Creek												
HVC-1	04/23/02	20020423-16	Downstream of Pioneer		7.5	7.12	62	1.4 <	5.0	0.161	0.098	
HVC-2	04/23/02	20020423-17	250' upstream of Pond #2		11.0	7.13	67	4.4	11.0	0.324 <	0.010	
HVC-3	04/23/02	20020423-18	25' downstream of Johnson Blvd		9.9	6.82	141	7.3	16.5	0.489	0.093	
HVC-4	04/04/02	20020404-HVC4	Effluent of drain from Lower Shop a									No Flow
HVC-4	04/23/02	20020423-19	Effluent of drain from Lower Shop a		9.4	7.29	156	1.2	10.7	0.419	0.855	
HVC-5	04/04/02	20020404-HVC5	Effluent of drainage pipe along Johi									No Flow
HVC-5	04/23/02	20020423-HVC5	Effluent of drainage pipe along Johi									No Flow
Treatment Plant Monitoring												
MW08-25	04/23/02	20020423-11	SW side of Pond #1	6247.5	9.1	6.55	954	40.4	86.7		0.017	

ALPINE COUNTY MONITORING

Site	Date	ID	Location	Temp C	pH	EC umhos	DO mg/L	Alk mg/L	TDS mg/L	SS mg/L	Turb NTU	Cl mg/L	SO4 mg/L
Alpine Monitoring Wells													
ACMW-01AW	04/16/2002	20020416-08	Main Dam	7.9	6.69	73		28	78			3.5	2.9
ACMW-01BE	04/16/2002	20020416-09	Secondary Dam	4.2	6.68	81		36	71			2.8	1.2
ACMW-02N	04/16/2002	20020416-10	Access Gate	10.0	6.70	121		59	74			2.3	2.4
ACMW-02S	04/16/2002	20020416-11	Access Gate	8.7	6.46	109		46	69			3.2	1.7
ACMW-04W	04/16/2002	20020416-12	Gansberg	10.7	6.13	196		48	129			20.1	7.2
ACMW-06N	04/16/2002	20020416-13	Celio	11.0	6.89	705		262	414			58.9	22.2
ACMW-06S	04/16/2002	20020416-14	Celio	11.0	9.25	498		156	317			75.2	23.1
Groundwaters													
GW-03	04/09/2002	20020409-21	Smith/Springmeyer	13.4	7.59	310		132	231			1.6	26.6
GW-04	04/09/2002	20020409-22	Celio	12.3	7.63	266		122	200			3.7	11.6
GW-05	04/09/2002	20020409-23	Neddenriep	11.0	6.32	256		63	173			23.2	12.5
GW-07	04/09/2002	20020409-24	Gansberg	11.0	6.43	127		54	99			2.0	3.0
GW-08	04/09/2002	20020409-25	Arant	11.0	6.24	272		52	173			29.3	10.6
GW-11	04/09/2002	20020409-26	Diamond Val. School	13.9	7.19	146		77	119			0.7	0.7
GW-14	04/09/2002	20020409-27	Sierra Pines	10.0	6.40	112		54	98			1.4	1.7
Irrigation Waters													
SW-07	04/02/2002	20020402-20	Fredericksburg Ditch	16.3	7.85	215	8.05	77	151	10.00	12	13.9	8.5
SW-08	04/02/2002	20020402-21	Irrigation Ditch	18.8	7.02	123	7.12	59	91	2.12	1.6	1.3	4.0
Reservoirs													
HPR	04/02/2002	20020402-22	Harvey Place Reservoir	11.3	7.26	47	9.24	104	218	0.92	1.5	54.5	16.7
Surfacewaters: Carson R													
SW-01	04/02/2002	20020402-14	Carson R Woodfords	1.9	6.90	56	11.36	24	50	12.40	6.4	2.2	2.0
SW-05	04/02/2002	20020402-18	Carson R Paynesville	5.1	6.75	60	10.94	25	50	14.30	7	2.3	2.2
SW-06	04/02/2002	20020402-19	Carson R Stateline	7.4	6.94	60	9.06	25	48	14.70	7.3	2.4	2.3
Surfacewaters: Indian Cr													
SW-02	04/02/2002	20020402-15	Indian Cr Upper	7.8	6.71	80	9.69	40	71	0.48	1.6	1.5	< 0.5
SW-03	04/02/2002	20020402-16	Indian Cr Mid	12.0	6.58	182	9.11	90	130	1.56	5.2	3.3	3.4
SW-04	04/02/2002	20020402-17	Indian Cr Lower	9.9	8.06	138	10.09	67	98	2.32	3.1	2.4	1.7

ALPINE COUNTY MONITORING

05/12/02

Site	Date	TotalP mg/L	PO4-P mg/L	TKN mg/L	NH3-N mg/L	NO2-N mg/L	NO3-N mg/L	Total N mg/L
Alpine Monitoring Wells								
ACMW-01AV	04/16/2002					< 0.020	0.095	
ACMW-01BE	04/16/2002					< 0.010	0.063	
ACMW-02N	04/16/2002					< 0.010	0.035	
ACMW-02S	04/16/2002					< 0.010	0.181	
ACMW-04W	04/16/2002					< 0.020	2.610	
ACMW-06N	04/16/2002					< 0.010	< 0.010	
ACMW-06S	04/16/2002					0.026	0.048	
Groundwaters								
GW-03	04/09/2002					< 0.010	0.731	
GW-04	04/09/2002					< 0.010	0.849	
GW-05	04/09/2002					< 0.300	3.510	
GW-07	04/09/2002					< 0.010	1.280	
GW-08	04/09/2002					< 0.040	5.760	
GW-11	04/09/2002					< 0.010	0.456	
GW-14	04/09/2002					< 0.010	0.504	
Irrigation Waters								
SW-07	04/02/2002	0.173	0.047	0.746	0.047	< 0.010	0.292	1.048
SW-08	04/02/2002	0.017	< 0.010	0.256	0.047	< 0.010	< 0.010	0.276
Reservoirs								
HPR	04/02/2002	2.230	2.180	16.300	14.800	0.146	1.650	18.096
Surfacewaters: Carson R								
SW-01	04/02/2002	0.032	< 0.010	0.392	0.030	< 0.010	0.046	0.448
SW-05	04/02/2002	0.040	< 0.010	0.383	0.044	< 0.010	0.033	0.426
SW-06	04/02/2002	0.046	< 0.010	0.337	0.035	< 0.010	0.042	0.389
Surfacewaters: Indian Cr								
SW-02	04/02/2002	0.014	0.010	0.356	< 0.020	< 0.010	< 0.010	0.376
SW-03	04/02/2002	0.107	0.038	0.243	0.023	< 0.010	0.018	0.271
SW-04	04/02/2002	0.038	< 0.010	0.195	0.025	< 0.010	< 0.010	0.215

ALPINE COUNTY MONITORING

Site	Date	COD mg/L	BOD mg/L	O & G mg/L		Boron mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	SAR	Exch Na %	Hardness mg/L	Water Level MSL or Ft
Alpine Monitoring Wells														
ACMW-01AV	04/16/2002													5482.9
ACMW-01BE	04/16/2002													5491.4
ACMW-02N	04/16/2002													5459.8
ACMW-02S	04/16/2002													5462.2
ACMW-04W	04/16/2002													4903.1
ACMW-06N	04/16/2002													5215.9
ACMW-06S	04/16/2002													5203.7
Groundwaters														
GW-03	04/09/2002													
GW-04	04/09/2002													
GW-05	04/09/2002													
GW-07	04/09/2002													
GW-08	04/09/2002													
GW-11	04/09/2002													
GW-14	04/09/2002													
Irrigation Waters														
SW-07	04/02/2002		2			0.04	17.4	5.0	13.7	7.3	0.74	28.9		
SW-08	04/02/2002		0			0.02	11.5	2.8	9.4	1.6	0.65	32.7		
Reservoirs														
HPR	04/02/2002		2			0.19	14.1	3.6	37.3	7.9	2.30	57.4		52.3
Surfacewaters: Carson R														
SW-01	04/02/2002		1			0.02	5.7	1.8	3.3	1.0	0.31	24.0		
SW-05	04/02/2002		1			0.01	5.4	1.8	3.6	1.2	0.34	25.6		
SW-06	04/02/2002		2			0.03	5.5	1.9	3.5	1.3	0.33	24.8		
Surfacewaters: Indian Cr														
SW-02	04/02/2002		1		<	0.01	7.7	2.1	7.1	1.5	0.59	34.4		
SW-03	04/02/2002		1			0.03	18.1	5.2	11.2	2.0	0.60	26.0		
SW-04	04/02/2002		1			0.02	13.3	4.3	7.8	1.7	0.48	24.4		

ALPINE COUNTY
BACTERIOLOGICAL MONITORING

Alpine Monitoring Wells

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
ACMW-01AV	04/16/2002		2.2	<	1.1	
ACMW-01BE	04/16/2002	<	1.1	<	1.1	
ACMW-02N	04/16/2002	<	1.1	<	1.1	
ACMW-02S	04/16/2002	<	1.1	<	1.1	
ACMW-04W	04/16/2002		1.1	<	1.1	
ACMW-06N	04/16/2002	<	1.1	<	1.1	
ACMW-06S	04/16/2002	<	1.1	<	1.1	

Groundwaters

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
GW-03	04/09/2002	<	1.1	<	1.1	
GW-04	04/09/2002	<	1.1	<	1.1	
GW-05	04/09/2002	<	1.1	<	1.1	
GW-07	04/09/2002		2.2	<	1.1	
GW-08	04/09/2002	<	1.1	<	1.1	
GW-11	04/09/2002	<	1.1	<	1.1	
GW-14	04/09/2002	<	1.1	<	1.1	

Irrigation Waters

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-07	04/02/2002		2400		460	
SW-08	04/02/2002		28	<	3	

Reservoirs

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
HPR	04/02/2002		13	<	2	8

Surfacewaters: Carson R

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-01	04/02/2002		9	<	3	
SW-05	04/02/2002		9	<	3	
SW-06	04/02/2002		240		4	

Surfacewaters: Indian Cr

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-02	04/02/2002		43	<	3	
SW-03	04/02/2002		4	<	3	
SW-04	04/02/2002		43		4	

ALPINE COUNTY SOILS

05/13/02

Site	Date	Location	Type	pH	EC mmho	%Sat	TKN mg/Kg	NO3-N mg/L	Total P mg/Kg	Exch P mg/L
S2a	12/04/01	Celio	KT	8.17	2.10	57.0	1,850	5.5	740	7.1
S3a	12/04/01	Hall	SMB	6.17	0.25	34.2	932	0.5	770	9.2
S4a	12/04/01	Gansberg	DI	7.57	1.77	39.6	2,150	3.4	460	29.6
S5a	12/04/01	Gansberg	HRB	5.78	0.61	28.7	883	12.7	520	11.0
S6a	12/04/01	Neddenriep	DWB	6.14	0.52	39.1	1,290	4.0	650	59.3
S7a	12/04/01	Bruns	JaC	5.97	0.33	41.4	2,140	8.2	740	13.4
S8a	12/04/01	Dressler	SOD	6.31	0.12	15.8	122	1.4	250	8.9

Site	Date	Cl mg/L	SO4 mg/Kg	CEC meq/100g	Cu mg/Kg		Mo mg/Kg	Ca mg/L	Mg mg/L	Na mg/L	SAR		% Na
S2a	12/04/01	402.0	52	28.9	21.0	<	1.0	85.4	71.6	280.0	5.40		6.2
S3a	12/04/01	30.1	7	19.0	26.0		1.0	39.8	13.8	43.2	1.50	<	1.0
S4a	12/04/01	242.0	13	21.9	31.0		3.0	136.0	44.7	165.0	3.14		3.2
S5a	12/04/01	37.2	3	10.9	22.0		1.0	47.8	9.8	50.2	1.73		1.2
S6a	12/04/01	91.0	8	16.9	29.0		1.0	21.3	4.9	68.7	3.49		3.7
S7a	12/04/01	8.6	3	16.8	35.0	<	1.0	40.6	8.6	7.8	0.29	<	1.0
S8a	12/04/01	7.5	2	10.1	18.0	<	1.0	7.1	3.2	13.8	1.08	<	1.0

ALPINE COUNTY
BLUE GREEN ALGAE

ID#	Site	Location	Date	Colonies #	Colony # Cells	Filaments #	Filaments # Cells	Filaments #	Filament Length	Single Cells, #
April, 2002										
20020402-14	SW-01	Carson R Woodfords	04/02/02	0	0	0	0	0	0	0
20020402-15	SW-02	Indian Cr Upper	04/02/02	0	0	0	0	0	0	0
20020402-16	SW-03	Indian Cr Mid	04/02/02	0	0	0	0	0	0	0
20020402-17	SW-04	Indian Cr Lower	04/02/02	0	0	0	0	0	0	0
20020402-18	SW-05	Carson R Paynesville	04/02/02	0	0	0	0	0	0	0
20020402-19	SW-06	Carson R Stateline	04/02/02	0	0	0	0	0	0	0
20020402-20	SW-07	Fredericksburg Ditch	04/02/02	0	0	0	0	0	0	0
20020402-21	SW-08	Irrigation Ditch	04/02/02	0	0	0	0	0	0	0

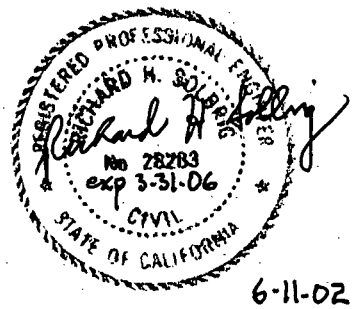
Site	Location	TDS		Cl⁻		TKN		NO_3-N		Total N		Total P		SO_4		Boron		Exch Na %	
		Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence
SW-01	Carson River, Woodfords	55		1.0	✓	0.13	✓	0.02	✓	0.15	✓	0.02		2.0		0.02		20	✓
SW-06	Carson River, Stateline	70		2.5		0.22	✓	0.03	✓	0.25	✓	0.03		2.0	✓	0.02		20	✓
SW-02	Indian Creek, Upper	100		6.0						0.30	✓	0.03		8.0		0.25		30	✓
SW-03	Indian Creek, Mid	100	✓	6.0						0.30	✓	0.03	✓	8.0		0.25		30	
SW-04	Indian Creek, Lower	100		6.0						0.30	✓	0.03	✓	8.0		0.25		30	
SW-10	Indian Creek, Stateline	100		6.0						0.30	✓	0.03	✓	8.0		0.25		30	

Blue algae reports for March and April are included in this report. May blue-green algae results will be included as soon as they are completed.

Certification

I hereby certify that the enclosed monitoring report was prepared under my direct supervision and that I am a duly Registered Engineer under the laws of the State of California.

Sincerely,



6-11-02

Richard Solbrig,
Assistant Manager/Engineer

Enclosures:

1.

May Monthly Report	Pages
Wastewater Treatment plant	2
Permit Compliance Record	1
Export pipeline inspection	1
Sample site locations	2
Tahoe Basin: Monitoring wells (ERB) and Heavenly Valley Creek (HVC)	1
Alpine County Surfacewaters, Groundwaters, and HPR	7
Blue-green algae for March and April	2
Total number of pages:	16

cc: Calif. Dept. of Health Services, ODW - Jess Morehouse
El Dorado Co. Dept. of Environmental Health - Virginia Huber
Nevada Division of Environmental Protection - Wendel McCurry
Alpine County Health Department - Dr. Richard Botto
Alpine County Health Department - Jim Goodloe
Alpine County Board of Supervisors
Desert Research Group (Alpine County Consultants) - David McGraw
STPUD Board of Directors
STPUD General Manager / District Engineer - Robert G. Baer
STPUD Manager of Operations - Ross Johnson
STPUD Operations Chief Plant Operator - Jeff Lee
STPUD Laboratory Director - Terry Powers
STPUD Manager of Alpine County Operations - Hal Bird

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SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

MAY 2002

Date	Day	FLOW MGD Inf	2-Hr Peak Inf	Eff	Pond Return	Pond Inf	PRECIP Inch	Type	D.O. mg/L Fin	COD mg/L Raw	COD mg/L Fin	BOD mg/L Raw	BOD mg/L Fin	SS mg/L Raw	SS mg/L Fin
05/01/02	Wed	4.26	5.8	4.32					5.17	350					
05/02/02	Thu	4.07	6.0	4.15					5.36	328					
05/03/02	Fri	4.17	5.6	3.92					5.52	327					
05/04/02	Sat	4.33	6.4	4.36					5.25	327	29.7	152	6.4	118	1.7
05/05/02	Sun	4.39	6.6	4.17					5.31	355					
05/06/02	Mon	4.00	5.6	4.02					5.29	349					
05/07/02	Tue	4.06	5.5	4.01					5.24	360	38.7	154	5.8	121	1.7
05/08/02	Wed	3.97	5.9	3.68					5.36	343					
05/09/02	Thu	4.38	9.5	3.71					4.84	358					
05/10/02	Fri	4.23	5.2	4.38					5.20	348					
05/11/02	Sat	4.34	6.2	4.20					5.73	358	36.0			125	2.3
05/12/02	Sun	4.23	6.3	3.90					5.62	373					
05/13/02	Mon	4.18	5.8	4.12					5.56	374					
05/14/02	Tue	3.90	5.5	3.70					5.79	346					
05/15/02	Wed	3.96	5.6	4.07					5.33	364	42.0			142	1.7
05/16/02	Thu	3.99	5.4	3.70					5.34	341					
05/17/02	Fri	4.09	5.5	4.21					5.63	386					
05/18/02	Sat	4.51	6.4	4.35					5.71	390	30.6	161	5.7	125	2.0
05/19/02	Sun	4.57	6.6	4.09			0.18	Snow	5.53	412					
05/20/02	Mon	4.32	5.8	4.40			0.08	Snow	4.27	391	38.2			145	1.8
05/21/02	Tue	4.13	5.6	3.57					6.18	362					
05/22/02	Wed	4.24	6.0	4.30					5.67	407					
05/23/02	Thu	4.08	5.5	3.82					5.74	389					
05/24/02	Fri	4.43	5.9	3.97					5.38	397					
05/25/02	Sat	4.97	6.8	4.74					5.11	420	32.2			159	2.5
05/26/02	Sun	5.22	7.9	4.75					4.65	428					
05/27/02	Mon	4.99	7.2	4.65					4.43	408					
05/28/02	Tue	5.16	6.9	4.26					5.01	386					
05/29/02	Wed	4.42	6.4	3.97					5.42	346	45.4	130	5.3	140	5.2
05/30/02	Thu	4.31	5.8	3.78					5.40	332					
05/31/02	Fri	4.45	5.9	4.41					5.43	324					
Permit Max		7.7									300		45		60
Permit Min															
Permit Ave											60		30		30
Total		134.35	191.1	127.68			0.26		165.47	11379	292.8	597	23.2	1075	18.8
Maximum		5.22	9.5	4.75			0.18		6.18	428	45.4	161	6.4	159	5.2
Minimum		3.90	5.2	3.57			0.08		4.27	324	29.7	130	5.3	118	1.7
Average		4.33	6.2	4.12			0.13		5.34	367	36.6	149	5.8	134	2.4
# Tests		31	31	31	0	0	2		31	31	8	4	4	8	8

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

MAY 2002

Date	Day	SETTLEABLE SOLIDS mL/L Raw		SETTLEABLE SOLIDS mL/L Fin	MBAS mg/L Raw	MBAS mg/L Fin	pH Units Raw	pH Units Fin	TURBIDITY NTU Fin	Cl2 mg/L Fin	FINAL COLIFORMS MPN/100 mL Total		FINAL COLIFORMS MPN/100 mL 7day-Median		TDS mg/L Raw	TDS mg/L Fin	ALKALINITY mg/L Raw	ALKALINITY mg/L Fin
05/01/02	Wed	8.0	<	0.1			7.35	7.22	3.20	5.82	<	2	<	2			129	119
05/02/02	Thu	6.5	<	0.1			7.39	7.30	2.70	7.76	<	2	<	2			129	119
05/03/02	Fri	6.5	<	0.1			7.30	7.22	2.60	5.07	<	2	<	2			131	122
05/04/02	Sat	7.5	<	0.1			7.36	7.38	2.60	5.93	<	2	<	2			132	126
05/05/02	Sun	7.5	<	0.1			7.33	7.28	2.60	5.39	<	2	<	2			137	128
05/06/02	Mon	7.5	<	0.1			7.59	7.41	2.60	6.68	<	2	<	2			134	125
05/07/02	Tue	7.5	<	0.1			7.46	7.31	2.40	4.53	<	2	<	2	234	218	127	122
05/08/02	Wed	8.0	<	0.1			7.35	7.33	2.20	5.28	<	2	<	2			130	122
05/09/02	Thu	8.0	<	0.1			7.40	7.26	2.50	6.36	<	2	<	2			130	122
05/10/02	Fri	8.0	<	0.1			7.50	7.24	2.20	4.74	<	2	<	2			126	124
05/11/02	Sat	8.0	<	0.1			7.35	7.38	2.70	4.63	<	2	<	2			131	126
05/12/02	Sun	7.5	<	0.1			7.36	7.24	2.50	4.85	<	2	<	2			134	130
05/13/02	Mon	8.5	<	0.1			7.39	7.22	2.40	7.54	<	2	<	2			132	129
05/14/02	Tue	8.5	<	0.1			7.71	7.50	2.10	7.65	<	2	<	2			130	128
05/15/02	Wed	8.5	<	0.1			7.40	7.36	2.40	7.33	<	2	<	2	257	234	135	129
05/16/02	Thu	8.0	<	0.1			7.46	7.48	2.50	4.42	<	2					128	126
05/17/02	Fri	8.5	<	0.1			7.49	7.57	2.20	4.31	<	2	<	2			131	127
05/18/02	Sat	8.0	<	0.1			7.53	7.34	2.60	4.63	<	2	<	2			128	128
05/19/02	Sun	10.5	<	0.1			7.48	7.22	2.95	4.96	<	2	<	2			142	127
05/20/02	Mon	9.5	<	0.1			7.59	7.58	2.45	8.41	<	2	<	2	249	220	140	126
05/21/02	Tue	9.0	<	0.1			7.35	7.50	2.60	5.71	<	2	<	2			129	130
05/22/02	Wed	10.0	<	0.1			7.34	7.41	4.60	3.99	<	2	<	2			126	132
05/23/02	Thu	7.5	<	0.1			7.41	7.51	4.30	5.60	<	2	<	2			136	127
05/24/02	Fri	9.0	<	0.1			7.37	7.34	2.65	4.63	<	2	<	2			133	129
05/25/02	Sat	8.0	<	0.1			7.37	7.58	1.98	5.71	<	2	<	2			140	133
05/26/02	Sun	10.5	<	0.1			7.40	7.32	2.35	4.53	<	2	<	2			153	138
05/27/02	Mon	9.5	<	0.1			7.39	7.36	2.35	4.96	<	2	<	2			147	142
05/28/02	Tue	10.5	<	0.1			7.63	7.41	2.25	8.62	<	2	<	2			138	135
05/29/02	Wed	8.0	<	0.1			7.34	7.43	5.00	6.79	<	2	<	2	256	237	136	131
05/30/02	Thu	9.0	<	0.1			7.38	7.37	2.55	5.93	<	2	<	2			134	128
05/31/02	Fri	8.5	<	0.1			7.48	7.46	1.90	5.34	<	2	<	2			142	129
Permit Max				0.1		2.0		8.5	20			240		23				
Permit Min								6.5										
Permit Ave						1.0			10									
Total		260.0		3.1	0.00	0.000	230.25	228.53	82.93	178.10		62		60	996	909	4150	3959
Maximum		10.5		0.1	ERR	ERR	7.71	7.58	5.00	8.62		2		2	257	237	153	142
Minimum		6.5		0.1	ERR	ERR	7.30	7.22	1.90	3.99		2		2	234	218	126	119
Average		8.4		0.1	ERR	ERR	7.43	7.37	2.68	5.75		2		2	249	227	134	128
# Tests		31		31	0	0	31	31	31	31		31		30	4	4	31	31

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT
COMPLIANCE RECORD

2002

Parameter	# Tests	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Compliance, %
Total Plant Inflow; 7.7 MGD; Dry Weather	151	0	0	0	0	0									100.0
2-Hour Peak Inflow; 18.5 MGD	151	0	0	0	0	0									100.0
COD, 30 Day Ave: 60 mg/L	5	0	0	0	0	0									100.0
COD, Max: 300 mg/L	42	0	0	0	0	0									100.0
BOD, 30 Day Ave: 30 mg/L	5	0	0	0	0	0									100.0
BOD, Max: 45 mg/L	37	0	0	0	0	0									100.0
SS, 30 Day Ave: 30 mg/L	5	0	0	0	0	0									100.0
SS, Max: 60 mg/L	42	0	0	0	0	0									100.0
Settleable Solids, Max: 0.1 mL/L	149	0	0	0	0	0									100.0
Turbidity, 30 Day Ave: 10 NTU	5	0	0	0	0	0									100.0
Turbidity, Max: 20 NTU	149	0	0	0	0	0									100.0
pH, 6.5 to 8.5	149	0	0	0	0	0									100.0
Total Coliforms, Max: 240 MPN/100 mL	149	0	0	0	0	0									100.0
Total Coliforms, 7-day Median: 23 MPN	148	0	0	0	0	0									100.0
Total	1,187	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0

SOUTH TAHOE
PUBLIC UTILITY DISTRICT
MEMORANDUM

Date: May 22, 2002

To: Bob Baer, Lisa Coyner

From: David Johnson

Topic: Export Line Check

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****

On May 22 Tim Rieger and I conducted our check of the District's export line from the treatment plant to station 564+06 near the Harvey Place reservoir..

Several wet spots were checked. However, nothing positive was found. No damage to the pipe was found.

CC Terry Powers

SAMPLE LOCATIONS

TAHOE BASIN MONITORING WELLS

Site	Location
ERB	Emergency Retention Basin
CONTROL	North of Post Office
MW02-25, -50	Emergency Retention Basin, S side
MW03-25, -50	Emergency Retention Basin, S side
MW04-25, -50	Emergency Retention Basin, W side
MW07-25, -50	Emergency Retention Basin, N side
MW08-25, -50	Pond #1, SW corner
MW11	S.E. corner of wastewater treatment plant grounds
MW12	South of Emergency Pump Building, for buried sludge
MW13	Pond 2, along Heavenly Valley Creek, for buried sludge

HEAVENLY VALLEY CREEK

HVC-1	At Pioneer Trail
HVC-2	250 ft upstream of Pond #2
HVC-3	25 ft downstream of Johnson Blvd.
HVC-4	Effluent of drain pipe from Lower Shop area
HVC-5	Effluent of drainage pipe along Johnson Blvd, 10 feet upstream of Johnson Blvd.

ALPINE COUNTY MONITORING WELLS

Site	Location
ACMW-01AW	Below main dam at Harvey Place Reservoir
ACMW-01BE	Below auxiliary dam at Harvey Place Reservoir
ACMW-02, N&S	On dam access road at Diamond Valley Road
ACMW-03	Bruns ranch, east side of Highway 88
ACMW-04W	Gansberg ranch, west side of Highway 88
ACMW-05	Dressler ranch
ACMW-06, N&S	Celio ranch, on Diamond Valley Road

ALPINE SOILS

Site	Ranch
S2	Celio
S3	Hall
S4	Gansberg
S5	Gansberg
S6	Neddenriep
S7	Bruns
S8	Dressler

ALPINE GROUNDWATERS

Site	Homeowner
GW-01	Sagues
GW-03	Smith/Springmeyer
GW-04	Celio
GW-05	Neddenriep
GW-07	Gansberg, Jr.
GW-08	Arant
GW-11	Diamond Valley School
GW-14	Sierra Pines Store

ALPINE SURFACEWATERS

Site	Location
SW-01	Carson River, Woodfords
SW-02	Indian Creek, @ HWY 89
SW-03	Indian Creek, @ upper bridge
SW-04	Indian Creek, @ lower bridge
SW-05	Carson River, Paynesville
SW-06	Carson River, Stateline
SW-07	Fredericksberg Ditch, Stateline
SW-08	Irrigation Ditch along Carson River Road
SW-09	Carson River, Dressler Lane
SW-10	Indian Creek, @ Smith-Springmeyer Ranch

TAHOE BASIN MONITORING

Site	Date	ID	Location	Depth msl	Temp C	pH	EC umho	Cl mg/L		COD mg/L	TKN mg/L		NO3-N mg/L	Comment
Buried Sludge Monitoring														
MW11	05/22/02	20020522-17	Sludge Pond	6262.5	8.8	6.47	100	1.1	<	5.0			0.116	
MW12	05/22/02	20020522-18	Sludge Pond	6262.8	9.1	6.24	120	1.5	<	5.0			0.471	
MW13	05/22/02	20020522-19	Sludge Pond	6257.5	6.9	7.10	888	3.8		21.2			14.300	
ERB Monitoring														
CONTROL	05/22/02	20020522-12	At Post Office	6278.9	9.4	7.30	177	7.9	<	5.0			2.360	
MW03-50	05/22/02	20020522-13	Black Bart side of ERB	6267.8	11.2	6.32	651	51.8	<	5.0			26.200	
MW04-50	05/22/02	20020522-14	Hank Monk side of ERB	6267.9	9.1	6.06	81	4.6		10.2			0.106	
MW07-50	05/22/02	20020522-15	North side of ERB	6276.9	7.5	6.53	246	21.6	<	5.0			0.586	
Heavenly Valley Creek														
HVC-1	05/22/02	20020522-06	Downstream of Pioneer		4.0	7.17	42	1.8	<	5.0	0.108		0.029	
HVC-2	05/22/02	20020522-07	250' upstream of Pond #2		3.3	6.83	44	1.9		16.0	0.227	<	0.010	
HVC-3	05/22/02	20020522-08	25' downstream of Johnson Blvd		3.5	6.77	53	2.3		10.9	0.314	<	0.010	
HVC-4	05/22/02	20020522-HVC4	Effluent of drain from Lower Shop a											
HVC-5	05/22/02	20020522-HVC5	Effluent of drainage pipe along Johi											
Treatment Plant Monitoring														
MW08-25	05/22/02	20020522-16	SW side of Pond #1	6247.2	8.5	6.55	960	40.7		80.7		<	0.030	

ALPINE COUNTY MONITORING

06/06/02

Site	Date	ID	Location	Temp C	pH	EC umhos	DO mg/L	Alk mg/L	TDS mg/L	SS mg/L	Turb NTU	Cl mg/L	SO4 mg/L
Alpine Monitoring Wells													
ACMW-01AW	05/14/2002	20020514-09	Main Dam	10.0	6.66	72		30	82		28.7	2.7	2.9
ACMW-01BE	05/14/2002	20020514-10	Secondary Dam	5.4	6.60	79		35	64		12.8	3.2	1.2
ACMW-02N	05/14/2002	20020514-11	Access Gate	10.8	6.75	124		59	85		2	2.3	2.3
ACMW-02S	05/14/2002	20020514-12	Access Gate	10.4	6.48	101		40	76		1.3	3.4	1.9
ACMW-03	05/14/2002	20020514-13	HWY 88	10.4	6.30	153		40	111		6.5	10.8	6.1
ACMW-04W	05/14/2002	20020514-14	Gansberg	12.2	6.18	194		46	134		3.4	19.7	7.3
ACMW-06N	05/14/2002	20020514-15	Celio	11.7	7.00	703		262	430		18	56.5	21.9
ACMW-06S	05/14/2002	20020514-16	Celio	13.1	9.37	524		146	310		51	68.0	21.6
Groundwaters													
GW-03	05/08/2002	20020508-07	Smith/Springmeyer	13.6	7.60	311		133	226			1.5	26.2
GW-04	05/08/2002	20020508-08	Celio	13.2	7.19	266		121	198			3.6	11.5
GW-05	05/08/2002	20020508-09	Neddenriep	11.9	6.52	258		63	160			22.9	12.8
GW-07	05/08/2002	20020508-10	Gansberg	16.0	6.52	123		53	94			1.7	3.0
GW-08	05/08/2002	20020508-11	Arant	12.2	6.54	316		46	194			39.9	10.3
GW-11	05/08/2002	20020508-12	Diamond Val. School	13.8	7.29	151		78	114			0.7	0.9
GW-14	05/08/2002	20020508-13	Sierrra Pines	11.2	6.53	114		53	98			1.3	1.7
Irrigation Waters													
SW-07	05/08/2002	20020508-15	Fredericksburg Ditch	10.0	7.51	126	9.53		104			6.2	4.2
SW-08	05/01/2002	20020501-21	Irrigation Ditch	14.3	7.55	118	7.89	60	105	0.30	2	1.3	4.1
Reservoirs													
HPR	05/01/2002	20020501-27	Harvey Place Reservoir	11.9	7.76	469	7.45	105	229	0.91	1.8	53.3	16.6
Surfacewaters: Carson R													
SW-01	05/01/2002	20020501-15	Carson R Woodfords	2.4	7.46	54	11.10	25	46	2.38	1.5	1.5	1.7
SW-05	05/01/2002	20020501-19	Carson R Paynesville	5.6	7.44	59	11.05	27	57	2.80	1.6	1.6	1.9
SW-05	05/08/2002	20020508-14	Carson R Paynesville	5.0	7.58	48	10.89		45			0.8	1.3
SW-06	05/01/2002	20020501-20	Carson R Stateline	7.6	7.48	63	10.75	27	62	2.94	.74	1.7	2.1
SW-09	05/01/2002	20020501-22	Carson R Dressler Ln	7.4	6.38	63	10.58	32	72	3.00	1.6	2.7	3.0

ALPINE COUNTY MONITORING

Site	Date	ID	Location	Temp C	pH	EC umhos	DO mg/L	Alk mg/L	TDS mg/L	SS mg/L	Turb NTU	Cl mg/L	SO4 mg/L
Surfacewaters: Indian Cr													
SW-02	05/01/2002	20020501-16	Indian Cr Upper	6.3	7.86	87	9.70	43	88	0.04	1.8	1.5	< 0.5
SW-03	05/01/2002	20020501-17	Indian Cr Mid	8.3	7.34	201	9.01	100	148	1.14	7.9	3.1	2.3
SW-04	05/01/2002	20020501-18	Indian Cr Lower	6.2	7.23	95	10.82	45	87	0.94	2.2	1.9	1.6
SW-10	05/01/2002	20020501-23	Indian Cr at Bruns	6.3	7.39	105	10.86	49	92	6.30	3.9	2.1	2.8

ALPINE COUNTY MONITORING

06/06/02

Site	Date	TotalP mg/L	PO4-P mg/L	TKN mg/L	NH3-N mg/L	NO2-N mg/L	NO3-N mg/L	Total N mg/L
Alpine Monitoring Wells								
ACMW-01AV	05/14/2002	0.060		0.127		< 0.020	0.169	0.316
ACMW-01BE	05/14/2002	0.030		< 0.100		< 0.010	0.059	0.169
ACMW-02N	05/14/2002	0.011		0.117		< 0.010	0.045	0.172
ACMW-02S	05/14/2002	0.010		0.121		< 0.010	0.916	1.047
ACMW-03	05/14/2002	0.113		0.443		< 0.040	2.640	3.123
ACMW-04W	05/14/2002	0.013		0.118		< 0.020	2.320	2.458
ACMW-06N	05/14/2002	0.422		0.356		< 0.010	< 0.010	0.376
ACMW-06S	05/14/2002	0.027		0.369		0.026	0.097	0.492
Groundwaters								
GW-03	05/08/2002	0.033		< 0.100		< 0.010	0.722	0.832
GW-04	05/08/2002	0.051		< 0.100		< 0.010	0.830	0.940
GW-05	05/08/2002	0.028		< 0.100		< 0.030	3.410	3.540
GW-07	05/08/2002	0.098		0.135		< 0.010	1.040	1.185
GW-08	05/08/2002	0.101		0.114		< 0.040	8.250	8.404
GW-11	05/08/2002	0.043		< 0.010		< 0.010	0.445	0.465
GW-14	05/08/2002	0.052		0.129		< 0.010	0.487	0.626
Irrigation Waters								
SW-07	05/08/2002	0.138	0.079	0.910	0.037	< 0.010	0.225	1.145
SW-08	05/01/2002	< 0.010	< 0.010	0.206	0.020	< 0.010	< 0.010	0.226
Reservoirs								
HPR	05/01/2002	2.160	2.130	18.500	14.000	0.113	1.460	20.073
Surfacewaters: Carson R								
SW-01	05/01/2002	0.011	< 0.010	0.183	< 0.020	< 0.010	0.012	0.205
SW-05	05/01/2002	0.013	< 0.010	0.313	0.025	< 0.010	0.013	0.336
SW-05	05/08/2002	0.028	< 0.010	0.255	< 0.020	< 0.010	0.011	0.276
SW-06	05/01/2002	0.017	< 0.010	0.370	0.028	< 0.010	0.012	0.392
SW-09	05/01/2002	0.017	< 0.010	0.196	< 0.020	< 0.010	0.019	0.225
Surfacewaters: Indian Cr								
SW-02	05/01/2002	0.011	< 0.010	0.338	< 0.020	< 0.010	< 0.010	0.358
SW-03	05/01/2002	0.080	0.017	0.278	< 0.020	< 0.010	0.013	0.301
SW-04	05/01/2002	0.033	0.016	0.554	< 0.020	< 0.010	0.022	0.586
SW-10	05/01/2002	0.061	0.019	0.596	0.025	< 0.010	0.024	0.630

ALPINE COUNTY MONITORING

Site	Date	TotalP mg/L	PO4-P mg/L	TKN mg/L	NH3-N mg/L	NO2-N mg/L	NO3-N mg/L	Total N mg/L

Surfacewaters: Indian Cr

ALPINE COUNTY MONITORING

Site	Date		COD mg/L	BOD mg/L	O & G mg/L		Boron mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	SAR	Exch Na %	Hardness mg/L	Water Level MSL or Ft
Alpine Monitoring Wells															
ACMW-01AV	05/14/2002	<	5											26.3	5483.6
ACMW-01BE	05/14/2002	<	5											27.5	5493.0
ACMW-02N	05/14/2002	<	5											39	5459.9
ACMW-02S	05/14/2002	<	5											35.1	5462.6
ACMW-03	05/14/2002	<	5											22.7	5040.3
ACMW-04W	05/14/2002	<	5											42.1	4906.8
ACMW-06N	05/14/2002		5											238	5216.0
ACMW-06S	05/14/2002	<	5											153	5204.7
Groundwaters															
GW-03	05/08/2002	<	5											120	
GW-04	05/08/2002	<	5											96.8	
GW-05	05/08/2002	<	5											76.5	
GW-07	05/08/2002	<	5											43.7	
GW-08	05/08/2002	<	5											56.6	
GW-11	05/08/2002	<	5											54.5	
GW-14	05/08/2002	<	5											31.9	
Irrigation Waters															
SW-07	05/08/2002														
SW-08	05/01/2002	<	5	0		<	0.01	10.5	2.4	9.9	1.8	0.72	36.0		
Reservoirs															
HPR	05/01/2002		13	2			0.17	14.1	3.7	40.3	8.3	2.47	59.0		53.5
Surfacewaters: Carson R															
SW-01	05/01/2002		5	0		<	0.01	5.3	1.5	2.9	0.9	0.28	23.4		
SW-05	05/01/2002	<	5	1		<	0.01	6.0	1.6	3.0	1.0	0.28	22.0		
SW-05	05/08/2002														
SW-06	05/01/2002	<	5	1		<	0.01	5.8	1.6	3.3	1.1	0.31	23.9		
SW-09	05/01/2002	<	5	0			0.01	7.0	1.9	4.3	1.3	0.37	25.8		

ALPINE COUNTY MONITORING

Site	Date		COD mg/L	BOD mg/L	O & G mg/L		Boron mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	SAR	Exch Na %	Hardness mg/L	Water Level MSL or Ft
Surfacewaters: Indian Cr															
SW-02	05/01/2002	<	5	0		<	0.01	7.1	2.0	7.3	1.4	0.62	36.5		
SW-03	05/01/2002	<	5	0			0.04	17.8	6.0	13.2	1.8	0.69	28.7		
SW-04	05/01/2002	<	5	1			0.01	9.0	2.9	5.6	1.5	0.42	25.2		
SW-10	05/01/2002		8	1			0.02	9.7	3.3	5.8	1.9	0.41	23.8		

ALPINE COUNTY
BACTERIOLOGICAL MONITORING

Alpine Monitoring Wells

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
ACMW-01AV	05/14/2002	< 1.1	< 1.1	
ACMW-01BE	05/14/2002	< 1.1	< 1.1	
ACMW-02N	05/14/2002	< 1.1	< 1.1	
ACMW-02S	05/14/2002	< 1.1	< 1.1	
ACMW-03	05/14/2002	> 23	> 23	
ACMW-04W	05/14/2002	< 1.1	< 1.1	
ACMW-06N	05/14/2002	< 1.1	< 1.1	
ACMW-06S	05/14/2002	< 1.1	< 1.1	

Groundwaters

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
GW-03	05/08/2002	< 1.1	< 1.1	
GW-04	05/08/2002	< 1.1	< 1.1	
GW-05	05/08/2002	< 1.1	< 1.1	
GW-07	05/08/2002	2.2	< 1.1	
GW-08	05/08/2002	< 1.1	< 1.1	
GW-11	05/08/2002	< 1.1	< 1.1	
GW-14	05/08/2002	< 1.1	< 1.1	

Irrigation Waters

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-07	05/08/2002			
SW-08	05/01/2002	230	< 3	210

Reservoirs

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
HPR	05/01/2002	17	2	4

Surfacewaters: Carson R

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-01	05/01/2002	9	< 3	< 3
SW-05	05/01/2002	4	4	14
SW-05	05/08/2002			
SW-06	05/01/2002	7	3	93
SW-09	05/01/2002	15	9	150

Surfacewaters: Indian Cr

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-02	05/01/2002	15	< 3	43
SW-03	05/01/2002	93	93	93
SW-04	05/01/2002	430	4	230
SW-10	05/01/2002	> 11000	> 11000	11000

ALPINE COUNTY
BLUE GREEN ALGAE

ID#	Site	Location	Date	Colonies #	Colony # Cells	Filaments #	Filaments # Cells	Filaments #	Filament Length	Single Cells, #
March, 2002										
20020305-06	SW-01	Carson R Woodfords	03/05/02	0	0	0	0	0	0	0
20020305-07	SW-02	Indian Cr Upper	03/05/02	0	0	0	0	0	0	0
20020305-08	SW-03	Indian Cr Mid	03/05/02	0	0	0	0	0	0	0
20020305-09	SW-04	Indian Cr Lower	03/05/02	0	0	0	0	0	0	0
20020305-10	SW-05	Carson R Paynesville	03/05/02	0	0	0	0	0	0	0
20020305-11	SW-06	Carson R Stateline	03/05/02	0	0	0	0	0	0	0
20020305-12	SW-08	Irrigation Ditch	03/05/02	0	0	0	0	0	0	0
20020305-13	HPR	Harvey Place Reservoir	03/05/02	0	0	0	0	0	0	0

INORGANICS

Analytical Method: EPA 300.0

Company: California Laboratory Services
Project Name: N5258
Sample Description: NA
Date/Time Received: 11/08/96 17:00

SDG #: 15179
Project Number:
Lab ID: 15179-1/68723-8272
Date/Time Sampled: 11/07/96 00:00
Matrix: Water (W)

Preparation Information	Prep Method	Batch Number	Date Prepared	Initial Wt./Vol.	Final Vol.	Sample Number
EPA300.0	EPA 300.0	9419	NA	NA	NA	967EN36

Analyte/Method	Units	Result	Reporting Limit	Dilution Factor	Date Analyzed
Chloride	mg/L (ppm)	48	5.0	25	11/15/96
Nitrite-N	mg/L (ppm)	0.42	0.06	1	11/08/96
Nitrate-N	mg/L (ppm)	0.70	0.045	1	11/08/96

The cover letter and enclosures are integral parts of this report.

Approved by: _____ Date: 11/19/96

C L S Labs

INORGANICS

Analytical Method: EPA 300.0

Company: California Laboratory Services
Project Name: N5258
Sample Description: NA
Date/Time Received: 11/08/96 17:00

SDG #: 15179
Project Number:
Lab ID: 15179-2/68724-8272
Date/Time Sampled: 11/07/96 16:55
Matrix: Water (W)

Preparation Information	Prep Method	Batch Number	Date Prepared	Initial Wt./Vol.	Final Vol.	Sample Number
EPA300.0	EPA 300.0	9419	NA	NA	NA	967EN37

Analyte/Method	Units	Result	Reporting Limit	Dilution Factor	Date Analyzed
Chloride	mg/L (ppm)	16	4.0	20	11/15/96
Nitrite-N	mg/L (ppm)	0.082	0.06	1	11/08/96
Nitrate-N	mg/L (ppm)	0.12	0.045	1	11/08/96

The cover letter and enclosures are integral parts of this report.

Approved by: _____ Date: 11/19/96

C L S Labs

INORGANICS

Analytical Method: EPA 300.0

Company: California Laboratory Services
Project Name: N5258
Sample Description: NA
Date/Time Received: 11/08/96 17:00

SDG #: 15179
Project Number:
Lab ID: 15179-3/68725-8272
Date/Time Sampled: 11/07/96 16:58
Matrix: Water (W)

Preparation Information	Prep Method	Batch Number	Date Prepared	Initial Wt./Vol.	Final Vol.	Sample Number
EPA300.0	EPA 300.0	9419	NA	NA	NA	967EN38

Analyte/Method	Units	Result	Reporting Limit	Dilution Factor	Date Analyzed
Chloride	mg/L (ppm)	11	2.0	10	11/15/96
Nitrite-N	mg/L (ppm)	BRL	0.06	1	11/08/96
Nitrate-N	mg/L (ppm)	0.075	0.045	1	11/08/96

The cover letter and enclosures are integral parts of this report.

Approved by: _____ Date: 11/19/96

C L S Labs

INORGANICS

Analytical Method: EPA 300.0

Company: California Laboratory Services
Project Name: N5258
Sample Description: NA
Date/Time Received: 11/08/96 17:00

SDG #: 15179
Project Number:
Lab ID: 15179-4/68726-8272
Date/Time Sampled: 11/07/96 17:10
Matrix: Water (W)

Preparation Information	Prep Method	Batch Number	Date Prepared	Initial Wt./Vol.	Final Vol.	Sample Number
EPA300.0	EPA 300.0	9419	NA	NA	NA	967EN39

Analyte/Method	Units	Result	Reporting Limit	Dilution Factor	Date Analyzed
Chloride	mg/L (ppm)	10	0.20	1	11/08/96
Nitrite-N	mg/L (ppm)	BRL	0.06	1	11/08/96
Nitrate-N	mg/L (ppm)	0.064	0.045	1	11/08/96

The cover letter and enclosures are integral parts of this report.

Approved by: _____ Date: 11/19/96

C L S Labs

Method Blank

INORGANICS

Analytical Method: EPA 300.0
Preparation Method: EPA 300.0

Sample ID: 11/08/96 MB/69739
Date Prepared: NA

Lab ID: 69739-MB /8272
Matrix: Water
Batch Number: 9419

Analyte	Result mg/L (ppm)	Reporting Limit mg/L (ppm)	Date Analyzed
Chloride	BRL	0.20	11/08/96
Nitrite-N	BRL	0.06	11/08/96
Nitrate-N	BRL	0.045	11/08/96

The cover letter and enclosures are integral parts of this report.

Approved by: _____ Date: 11/19/96

C L S Labs

LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE

INORGANICS

Analytical Method: EPA 300.0
Preparation Method: EPA 300.0

Date Prepared: NA

Lab ID: 69737-LS1 ,69738-LSD1/8272
Matrix: Water Units: mg/L (ppm)
Batch Number: 9419

LCS Date Analyzed: 11/08/96

LCSD Date Analyzed: 11/08/96

Analyte	Sample Conc.	Spike Conc.	LCS Conc.	LCS Rec %	LCSD Conc.	LCSD Rec %	RPD %	Limits % Rec.	Limits RPD
Chloride	0	5.0	4.9	98	4.9	98	1	80-120	≤20
Nitrite-N	0	1.5	1.4	93	1.4	92	1	80-120	≤20
Nitrate-N	0	1.1	1.1	100	1.1	99	1	80-120	≤20

The cover letter and enclosures are integral parts of this report.

Approved by: _____ Date: 11/19/96

C L S Labs

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

INORGANICS

Analytical Method: EPA 300.0
Preparation Method: EPA 300.0

Company: California Laboratory Services
Project Name: N5258
Sample Description: NA
Sample Number: 967EN38
Date/Time Received: 11/08/96 17:00
Date Prepared: NA

MS Date Analyzed: 11/15/96

SDG #: 15179
Project Number:
Lab ID: 15179-3/69740,69741-8272 MS
Date/Time Sampled: 11/07/96 16:58
Matrix: Water (W) Units: mg/L (ppm)
Batch Number: 9419
% Moisture: NA
MSD Date Analyzed: 11/15/96

Analyte	Sample Conc.	Spike Conc.	MS Conc.	MS Rec %	MSD Conc.	MSD Rec %	RPD %	Limits % Rec.	Limits RPD
Chloride	11	50	63	104	63	104	0	80-120	≤20
Nitrite-N	0	15	14	91	14	91	1	80-120	≤20
Nitrate-N	0.075	11	11	100	11	100	0	80-120	≤20

The cover letter and enclosures are integral parts of this report.

Approved by: _____ Date: 11/15/96

C L S Labs

CLS Labs

Analysis Report: **Iron, EPA Method 200.7**

Client: **CRWQCB - Lahontan Region**
2092 Lake Tahoe Blvd.
Suite 2
South Lake Tahoe, Ca 96150

Project: **STPUD U.T.P.S A-Line**

Date Sampled: **11/07/96**
Date Received: **11/08/96**
Date Digested: **11/11/96**
Date Analyzed: **11/14/96**
Date Reported: **11/21/96**

Project No.:
Contact: **Scott Ferguson**
Phone: **(916)542-5416**

Lab Contact: **George Hampton**
Lab ID No.: **N5258**
Job No.: **805258**
COC Log No.: **18548**
Batch No.: **M961111A**
Instrument ID: **IP002**
Analyst ID: **JAMESL**
Matrix: **WASTEWATER**

ANALYTE

Sample I.D. Client	Lab	Fe (Iron) CAS No. 7439-89-6 [Rep. Limit] (Dilution)
967EN36	1A	10 [0.10] (1.0)
967EN37	2A	4.1 [0.10] (1.0)
967EN38	3A	1.7 [0.10] (1.0)
967EN39	4A	0.31 [0.10] (1.0)
Units		mg/L

ND = Not detected at or above indicated Reporting Limit

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Fax (916) 852-7292

CLS Labs

Analysis Report: **Iron, EPA Method 200.7**

Client: **CRWQCB - Lahontan Region**
2092 Lake Tahoe Blvd.
Suite 2
South Lake Tahoe, Ca 96150

Project: **STPUD U.T.P.S A-Line**

Date Digested: **11/11/96**
Date Analyzed: **11/14/96**
Date Reported: **11/21/96**

Project No.:
Contact: **Scott Ferguson**
Phone: **(916)542-5416**

Lab Contact: **George Hampton**
Lab ID No.: **N5258**
Job No.: **805258**
COC Log No.: **18548**
Batch No.: **M961111A**
Instrument ID: **IP002**
Analyst ID: **JAMESL**
Matrix: **WASTEWATER**

METHOD BLANK

Analyte	CAS No.	Results (mg/L)	Reporting Limit (mg/L)
Fe (Iron)	7439-89-6	ND	0.10

ND = Not detected at or above indicated Reporting Limit

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Fax (916) 852-7292

CLS Labs

Analysis Report: **Iron, EPA Method 200.7**

Client: **CRWQCB - Lahontan Region**
2092 Lake Tahoe Blvd.
Suite 2
South Lake Tahoe, Ca 96150

Project: **STPUD U.T.P.S A-Line**

Date Digested: **11/11/96**
Date Analyzed: **11/14/96**
Date Reported: **11/21/96**

Project No.:
Contact: **Scott Ferguson**
Phone: **(916)542-5416**

Lab Contact: **George Hampton**
Lab ID No.: **N5258**
Job No.: **805258**
COC Log No.: **18548**
Batch No.: **M961111A**
Instrument ID: **IP002**
Analyst ID: **JAMESL**
Matrix: **WASTEWATER**

LAB CONTROL SAMPLE

Analyte	CAS No.	LCS Conc. (mg/L)	LCS Recovery (percent)
Fe (Iron)	7439-89-6	1.00	97

LAB CONTROL SAMPLE DUPLICATE

Analyte	CAS No.	LCS Conc. (mg/L)	LCSD Recovery (percent)
Fe (Iron)	7439-89-6	1.00	96

LCS RPD

Analyte	CAS No.	LCS Relative Percent Difference (percent)
Fe (Iron)	7439-89-6	1

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CLS Labs

Analysis Report: **Total Kjeldahl Nitrogen, EPA Method 351.3**

Client: **CRWQCB - Lahontan Region**
2092 Lake Tahoe Blvd.
Suite 2
South Lake Tahoe, Ca 96150

Project: **STPUD U.T.P.S A-Line**

Date Sampled: **11/07/96**
Date Received: **11/08/96**
Date Extracted: **N/A**
Date Analyzed: **11/19/96**
Date Reported: **11/26/96**

Project No.:
Contact: **Scott Ferguson**
Phone: **(916)542-5416**

Lab Contact: **George Hampton**
Lab ID No.: **N5258**
Job No.: **805258**
COC Log No.: **18548**
Batch No.: **W961111B**
Instrument ID: **UV002**
Analyst ID: **CHARLESS**
Matrix: **WASTEWATER**

ANALYTE

Sample I.D. Client	Lab	Total Kjeldahl Nitrogen [Rep. Limit] (Dilution)
967EN36	1A	8.3 [5.0] (10)
967EN37	2A	1.3 [0.50] (1.0)
967EN38	3A	ND [0.50] (1.0)
967EN39	4A	ND [0.50] (1.0)
Units		mg/L

ND = Not detected at or above indicated Reporting Limit

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Fax (916) 852-7292

CLS Labs

Analysis Report: **Total Kjeldahl Nitrogen, EPA Method 351.3**

Client: **CRWQCB - Lahontan Region**
2092 Lake Tahoe Blvd.
Suite 2
South Lake Tahoe, Ca 96150

Project: **STPUD U.T.P.S A-Line**

Date Extracted: **N/A**
Date Analyzed: **11/19/96**
Date Reported: **11/26/96**

Project No.:
Contact: **Scott Ferguson**
Phone: **(916)542-5416**

Lab Contact: **George Hampton**
Lab ID No.: **N5258**
Job No.: **805258**
COC Log No.: **18548**
Batch No.: **W961111B**
Instrument ID: **UV002**
Analyst ID: **CHARLESS**
Matrix: **WASTEWATER**

METHOD BLANK

Analyte	CAS No.	Results (mg/L)	Reporting Limit (mg/L)
Total Kjeldahl Nitrogen	N/A	ND	0.50

ND = Not detected at or above indicated Reporting Limit

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CLS Labs

Analysis Report: **Total Kjeldahl Nitrogen, EPA Method 351.3**

Client: **CRWQCB - Lahontan Region**
2092 Lake Tahoe Blvd.
Suite 2
South Lake Tahoe, Ca 96150

Project: **STPUD U.T.P.S A-Line**

Date Extracted: **N/A**
Date Analyzed: **11/19/96**
Date Reported: **11/26/96**

Project No.:
Contact: **Scott Ferguson**
Phone: **(916)542-5416**

Lab Contact: **George Hampton**
Lab ID No.: **N5258**
Job No.: **805258**
COC Log No.: **18548**
Batch No.: **W961111B**
Instrument ID: **UV002**
Analyst ID: **CHARLESS**
Matrix: **WASTEWATER**

LAB CONTROL SAMPLE

Analyte	CAS No.	LCS Conc. (mg/L)	LCS Recovery (percent)
Total Kjeldahl Nitrogen	N/A	1.00	83

LAB CONTROL SAMPLE DUPLICATE

Analyte	CAS No.	LCS Conc. (mg/L)	LCSD Recovery (percent)
Total Kjeldahl Nitrogen	N/A	1.00	78

LCS RPD

Analyte	CAS No.	LCS Relative Percent Difference (percent)
Total Kjeldahl Nitrogen	N/A	6

California Laboratory Services

N5258

CHAIN OF CUSTODY

File: South Tahoe Public Utility District WWTP GA0959700

LOG NO. 18548

CLIENT NAME: CRWQCB-Lahontan
ADDRESS: 2092 Lake Tahoe Bl. South Lake Tahoe, CA 96150
PROJECT NAME: STPUD U.T.P.S. A-Line
PROJECT MANAGER: Scott Ferguson PHONE # 916 542 5432
SAMPLED BY: Scott Ferguson
JOB DESCRIPTION: Treated (Filtered Secondary) Wastewater Effluent Discharge
SITE LOCATION: Upper Truckee P.S., A-Line Flow Sending Unit

CLIENT JOB NUMBER

DESTINATION LABORATORY
- ☑ CLS 3249 FITZGERALD RD. RANCHO CORDOVA, CA 95742
- ☐ OTHER

PRESERVATIVES

ANALYSIS REQUESTED: NO3/NO2; TKN; Total Phosphorus; Turbidity; Total Iron; Chlorides

FIELD CONDITIONS: Clear and cool.

COMPOSITE:

SPECIAL INSTRUCTIONS: On sample 967EN39, eliminate total iron and chlorides if insufficient sample volume

TURN AROUND TIME: 24 HOURS; 48 HOURS; 1 WEEK; 2 WEEKS

NOTE / FIELD READINGS

DATE	TIME	SAMPLE IDENTIFICATION	METHOD	MATRIX	CONTAINER NO.	CONTAINER TYPE	1 WEEK	NOTE / FIELD READINGS
11/7/96	1650	967EN36	Grab	Wastewater	2	Plas.	✓	Discharge to River
11/7/96	1655	967EN37	Grab	Water	2	Plas.	✓	River downstream, side channel
11/7/96	1658	967EN38	Grab	Water	2	Plas	✓	River downstream, main ch.
11/7/96	1710	967EN39	Grab	Water	1	Plas.	✓	River, upstream

RECEIVED DEC - 5 SCE

SUSPECTED CONSTITUENTS

SAMPLE RETENTION TIME

PRESERVATIVES: (1) HCL (2) HNO_3 (3) = COLD (4)

RELINQUISHED BY (SIGN)	PRINT NAME / COMPANY	DATE TIME	REC'D BY (SIGN)	PRINT NAME COMPANY
Scott C. Ferguson	Scott C. Ferguson/Lahontan	11/7/96 1800	Bruce Warden	Bruce Warden/Lahontan
Bruce Warden	Bruce Warden/Lahontan	11/8/96 0830		

REC'D AT LAB BY: Mike O'Hara DATE / TIME: 11/8/96 1600 CONDITIONS / COMMENTS:

SHIPPED VIA ☐ FED X ☐ UPS ☐ OTHER _____ AIR BILL #

CLS Labs

CRWQCB - Lahontan Region
2092 Lake Tahoe Blvd.
Suite 2
South Lake Tahoe, Ca 96150

11/27/96

Attention: **Scott Ferguson**

Reference: **Analytical Results**

Project Name: **STPUD U.T.P.S A-Line**
Project No.:
Date Received: **11/08/96**
Chain Of Custody: **18548**

CLS ID No.: **N5258**
CLS Job No.: **805258**

The following analyses were performed on the above referenced project:

No. of Samples	*Turnaround Time*	*Analysis Description*
4	5 Days	Kjeldahl Nitrogen
4	5 Days	Nitrate Analysis
4	5 Days	Nitrite Analysis
4	5 Days	Chloride Analysis
4	5 Days	Turbidity, Nephelometric by EPA 180.1
4	5 Days	Total Phosphorus, Standard Method 4500-P
4	5 Days	Iron by EPA Method 200.7

These samples were received by California Laboratory Services in a chilled, intact state and accompanied by a valid chain of custody document.

Calibrations for analytical testing have been performed in accordance to and pass the EPA's criteria for acceptability.

Analytical results are attached to this letter. Please call if we can provide additional assistance.

Sincerely,

George Hampton
Laboratory Director

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Fax (916) 852-7292

CLS Labs

Analysis Report: **Total Phosphorus, EPA Method 365.2**
Sulfuric Acid-Ammonium Persulfate Digestion, EPA Method 365.2

Client: **CRWQCB - Lahontan Region**
2092 Lake Tahoe Blvd.
Suite 2
South Lake Tahoe, Ca 96150

Project: **STPUD U.T.P.S A-Line**

Date Sampled: **11/07/96**
Date Received: **11/08/96**
Date Extracted: **N/A**
Date Analyzed: **11/20/96**
Date Reported: **11/27/96**

Project No.:
Contact: **Scott Ferguson**
Phone: **(916)542-5416**

Lab Contact: **George Hampton**
Lab ID No.: **N5258**
Job No.: **805258**
COC Log No.: **18548**
Batch No.: **W961111B**
Instrument ID: **UV002**
Analyst ID: **CHARLESS**
Matrix: **WASTEWATER**

ANALYTE

Sample I.D. Client	Lab	Total Phosphorus [Rep. Limit] (Dilution)
967EN36	1A	4.7 [0.50] (10)
967EN37	2A	0.49 [0.050] (1.0)
967EN38	3A	0.17 [0.050] (1.0)
967EN39	4A	ND [0.050] (1.0)
Units		mg/L

ND = Not detected at or above indicated Reporting Limit

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Fax (916) 852-7292

CLS Labs

Analysis Report: **Total Phosphorus, EPA Method 365.2**
Sulfuric Acid-Ammonium Persulfate Digestion, EPA Method 365.2

Client: **CRWQCB - Lahontan Region**
2092 Lake Tahoe Blvd.
Suite 2
South Lake Tahoe, Ca 96150

Project: **STPUD U.T.P.S A-Line**

Date Extracted: **N/A**
Date Analyzed: **11/20/96**
Date Reported: **11/27/96**

Project No.:
Contact: **Scott Ferguson**
Phone: **(916)542-5416**

Lab Contact: **George Hampton**
Lab ID No.: **N5258**
Job No.: **805258**
COC Log No.: **18548**
Batch No.: **W961111B**
Instrument ID: **UV002**
Analyst ID: **CHARLESS**
Matrix: **WASTEWATER**

METHOD BLANK

Analyte	CAS No.	Results (mg/L)	Reporting Limit (mg/L)
Total Phosphorus	N/A	ND	0.050

ND = Not detected at or above indicated Reporting Limit

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Fax (916) 852-7292

CLS Labs

Analysis Report: **Total Phosphorus, EPA Method 365.2**
Sulfuric Acid-Ammonium Persulfate Digestion, EPA Method 365.2

Client: **CRWQCB - Lahontan Region**
2092 Lake Tahoe Blvd.
Suite 2
South Lake Tahoe, Ca 96150

Project: **STPUD U.T.P.S A-Line**

Date Extracted: **N/A**
Date Analyzed: **11/20/96**
Date Reported: **11/27/96**

Project No.:
Contact: **Scott Ferguson**
Phone: **(916)542-5416**

Lab Contact: **George Hampton**
Lab ID No.: **N5258**
Job No.: **805258**
COC Log No.: **18548**
Batch No.: **W961111B**
Instrument ID: **UV002**
Analyst ID: **CHARLESS**
Matrix: **WASTEWATER**

LAB CONTROL SAMPLE

Analyte	CAS No.	LCS Conc. (mg/L)	LCS Recovery (percent)
Total Phosphorus	N/A	0.300	96

LAB CONTROL SAMPLE DUPLICATE

Analyte	CAS No.	LCS Conc. (mg/L)	LCSD Recovery (percent)
Total Phosphorus	N/A	0.300	97

LCS RPD

Analyte	CAS No.	LCS Relative Percent Difference (percent)
Total Phosphorus	N/A	1

CA DOHS ELAP Accreditation/Registration Number 1233

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Rancho Cordova, CA 95670
(916) 852-6600
Fax (916) 852-7292

CLS Labs

Analysis Report: **Turbidity by EPA Method 180.1**

Client: **CRWQCB - Lahontan Region**
2092 Lake Tahoe Blvd.
Suite 2
South Lake Tahoe, Ca 96150

Project: **STPUD U.T.P.S A-Line**

Date Sampled: **11/07/96**
Date Received: **11/08/96**
Date Extracted: **11/08/96**
Date Analyzed: **11/08/96**
Date Reported: **11/20/96**

Project No.:
Contact: **Scott Ferguson**
Phone: **(916)542-5416**

Lab Contact: **George Hampton**
Lab ID No.: **N5258**
Job No.: **805258**
COC Log No.: **18548**
Batch No.: **T961108**
Instrument ID: **TU001**
Analyst ID: **AMBERLEE**
Matrix: **WASTEWATER**

ANALYTE

Sample I.D. Client	Lab	Turbidity [Rep. Limit] (Dilution)
967EN36	1A	500 [1.0] (1.0)
967EN37	2A	75 [1.0] (1.0)
967EN38	3A	25 [1.0] (1.0)
967EN39	4A	1.0 [1.0] (1.0)
Units		NTU

ND = Not detected at or above indicated Reporting Limit

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Rancho Cordova, CA 95670
(916) 852-6600
Fax (916) 852-7292

CLS Labs

Date: November 20, 1996
LP #: 15179

Donna Desrosiers
California Laboratory Services
3249 Fitzgerald Road
Rancho Cordova, CA 95742

Dear Ms. Desrosiers:

Enclosed are the laboratory results for the samples submitted to CLS Labs on November 8, 1996, for the project *N5258*.

The report consists of the following sections:

1. Cover Page
2. Copy of Chain-of-Custody
3. General Narrative
4. Analytical and Quality Control Results

Unless otherwise instructed by you, samples will be disposed of two weeks from the date of this letter.

Thank you for choosing CLS Labs. We are looking forward to serving you in the future. Should you have any questions concerning this analytical report or the analytical methods employed, please do not hesitate to call.

Sincerely,

George Hampton
Laboratory Director

3249 Fitzgerald Road
Rancho Cordova, CA 95742
(916) 638-7301
Fax (916) 638-4510

3083 Gold Canal Drive
Rancho Cordova, CA 95670
(916) 852-6600
Fax (916) 852-7292

California Laboratory Services LP 15179 Temp 3.2° CHAIN OF CUSTODY Loc: 19-24 LOG NO. 18812

CLIENT NAME: California Laboratory Services
ADDRESS: 3249 Fitzgerald Road
Rancho Cordova CA 95742
PROJECT NAME:
PROJECT MANAGER: Donna Desrosiers PHONE #: (916) 638-7301
SAMPLED BY:
JOB DESCRIPTION:
SITE LOCATION:

CLIENT JOB NUMBER: W5258

DESTINATION LABORATORY:
☐ CLS
3249 FITZGERALD RD.
RANCHO CORDOVA, CA
95742
☒ OTHER CLS
Gold Canal

FIELD CONDITIONS:
COMPOSITE:
SPECIAL INSTRUCTIONS:

TURN AROUND TIME: 24 HOURS | 48 HOURS | 1 WEEK | 2 WEEKS

DATE	TIME	SAMPLE IDENTIFICATION	METHOD	MATRIX	CONTAINER NO.	CONTAINER TYPE	PRESERVATIVES	ANALYSIS REQUESTED: NO2/NO3	Chloride	24 HOURS	48 HOURS	1 WEEK	2 WEEKS	NOTE / FIELD READINGS
11/7/96	1650	96EN36			1	125 PLY	3	X	X			X		LP15179-001
"	1655	96EN37			1	"	3	X	X			X		002
"	1658	96EN38			1	"	3	X	X			X		003
"	1710	96EN39			1	"	3	X	X			X		004

SUSPECTED CONSTITUENTS:
SAMPLE RETENTION TIME:
PRESERVATIVES: (1) HCL (2) HNO_3 (3) = COLD (4)

RELINQUISHED BY (SIGN)	PRINT NAME / COMPANY	DATE TIME	REC'D BY (SIGN)	PRINT NAME COMPANY
[signature]	MARC Thompson /CLS	11/8/96		

REC'D AT LAB BY:
DATE / TIME:
CONDITIONS / COMMENTS:

SHIPPED VIA: ☐ FED X ☐ UPS x ☐ OTHER CLS- Courier AIR BILL #

CLS Labs

GENERAL NARRATIVE

Comments:

Test methods may include minor modifications of published EPA methods (e.g., reporting limits or parameter lists). Reporting limits are adjusted to reflect dilution of the sample when appropriate. Solids and waste are analyzed with no correction made for moisture content.

Percent recoveries for laboratory control samples and matrix spikes have been calculated using unrounded concentration values. Therefore, percent recoveries reported may differ slightly from those obtained from the rounded concentration values which appear on the report.

The analyses performed by CLS Labs in this report comply with the requirements under the following certification/approval: CALIFORNIA --Hazardous Waste, #1233; Waste Water, # 1233; Drinking Water, #1233.

The following samples were analyzed at a dilution to bring chloride within linear working range: 15179-1, 15179-2, and 15179-3.

MS/MSD on 15179-3 were analyzed on 11/15/96, which was outside the 48 hour hold-time for nitrate-N and nitrate-N.

Abbreviations and Definitions:

MB	*Method Blank* - An aliquot of a blank matrix carried throughout the entire analytical process
LCS	*Laboratory Control Sample* - A blank to which known quantities of specific analytes are added prior to sample preparation and analysis to assess the accuracy of the method
MS/MSD	*Matrix Spike/Matrix Spike Duplicate* - Duplicate samples to which known quantities of specific analytes are added prior to sample preparation and analysis to assess the extent of matrix bias or interference on analyte recovery
RPD	*Relative Percent Difference* - The measurement of precision between duplicate analyses
BRL	*Below Reporting Limit*
NS	*Not Specified*
NA	*Not Applicable*
NR	*Not Reportable* - Due to the high level of analyte present in the sample

(cn15179)

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CLS Labs

Flags:

Organics -

J	Estimated value below the reporting limit and at or above the method detection limit.
B	Analyte found in the associated blank, as well as in the sample.
E	Exceeds linear range.

Inorganics -

B	Estimated value below the reporting limit and at or above the method detection limit.

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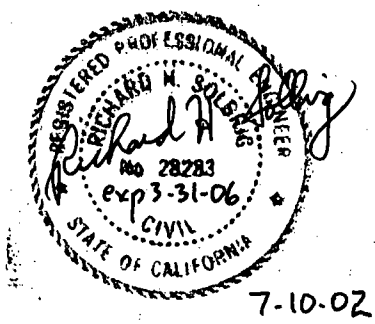
Site	Location	TDS		Cl		TKN		NO_3-N		Total N		Total P		SO_4		Boron		Exch Na %	
		Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence
SW-01	Carson River, Woodfords	55		1.0		0.13		0.02		0.15		0.02		2.0		0.02		20	✓
SW-06	Carson River, Stateline	70		2.5		0.22		0.03		0.25		0.03		2.0		0.02		20	✓
SW-02	Indian Creek, Upper	100		6.0						0.30	✓	0.03		8.0		0.25		30	✓
SW-03	Indian Creek, Mid	100	✓	6.0						0.30	✓	0.03	✓	8.0		0.25		30	
SW-04	Indian Creek, Lower	100	✓	6.0						0.30	✓	0.03	✓	8.0		0.25		30	
SW-10	Indian Creek, Stateline	100		6.0						0.30		0.03		8.0		0.25		30	

Blue algae reports for May are included in this report. June blue-green algae results will be included as soon as they are completed.

Certification

I hereby certify that the enclosed monitoring report was prepared under my direct supervision and that I am a duly Registered Engineer under the laws of the State of California.

Sincerely,



7-10-02

Richard Solbrig,
Assistant Manager/Engineer

Enclosures:

1.

June Monthly Report	Pages
Wastewater Treatment plant	2
Permit Compliance Record	1
Export pipeline inspection	1
Sample site locations	2
Tahoe Basin: Monitoring wells (ERB) and Heavenly Valley Creek (HVC)	1
Alpine County Surfacewaters, Groundwaters, and HPR	4
Blue-green algae for May	1
Total number of pages:	12

cc: Calif. Dept. of Health Services, ODW - Jess Morehouse
El Dorado Co. Dept. of Environmental Health - Virginia Huber
Nevada Division of Environmental Protection - Wendel McCurry
Alpine County Health Department - Dr. Richard Botto
Alpine County Health Department - Jim Goodloe
Alpine County Board of Supervisors
Desert Research Group (Alpine County Consultants) - David McGraw
STPUD Board of Directors
STPUD General Manager / District Engineer - Robert G. Baer
STPUD Manager of Operations - Ross Johnson
STPUD Operations Chief Plant Operator - Jeff Lee
STPUD Laboratory Director - Terry Powers
STPUD Manager of Alpine County Operations - Hal Bird

File: \LAHONTAN\06-02 Report.WPD

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

07/10/02
08:26:16

JUNE 2002

Date	Day	FLOW MGD Inf	2-Hr Peak Inf	Eff	Pond Return	Pond Inf	PRECIP Inch	Type	D.O. mg/L Fin	COD mg/L Raw	COD Fin	BOD mg/L Raw	BOD Fin	SS mg/L Raw	SS Fin
06/01/02	Sat	5.05	7.0	4.69					5.67	344	31.6	156	4.2	138	1.5
06/02/02	Sun	4.96	7.4	4.18					5.67	361					
06/03/02	Mon	4.37	6.3	4.49					4.74	302					
06/04/02	Tue	4.42	5.8	4.12					5.53	331					
06/05/02	Wed	4.32	5.9	4.04					5.42	374	32.2	140	3.4	193	1.1
06/06/02	Thu	4.41	5.7	4.09					5.48	356					
06/07/02	Fri	4.54	6.0	4.14					5.71	364					
06/08/02	Sat	4.77	6.9	4.41					5.58	379	36.6	152	4.9	152	1.6
06/09/02	Sun	4.84	7.4	4.47					5.27	435					
06/10/02	Mon	4.63	6.3	4.30					5.14	472					
06/11/02	Tue	4.45	6.0	4.43					5.26	362					
06/12/02	Wed	4.43	6.1	4.07					5.54	390	46.2	158	4.5	161	1.5
06/13/02	Thu	4.36	6.0	4.06					5.49	401					
06/14/02	Fri	4.45	5.8	4.17					5.70	366					
06/15/02	Sat	4.77	6.8	4.62					5.48	386	35.2	170		146	2.0
06/16/02	Sun	4.90	7.2	4.72					5.58	408					
06/17/02	Mon	4.59	6.2	4.18					5.26	432					
06/18/02	Tue	4.84	6.6	4.14					5.56	395					
06/19/02	Wed	4.63	6.4	4.52					5.13	490	37.4	177	6.1	196	3.0
06/20/02	Thu	4.73	6.4	4.51					5.08	380					
06/21/02	Fri	4.79	6.6	4.64					5.12	418					
06/22/02	Sat	5.30	7.9	4.74					5.65	430	41.5	164		157	5.7
06/23/02	Sun	5.14	7.8	4.98					4.85	397					
06/24/02	Mon	4.69	6.5	4.00					5.35						
06/25/02	Tue	4.70	6.4	4.61					4.89	433					
06/26/02	Wed	4.63	6.7	4.10					5.06	426	32.1	162	3.8	183	1.4
06/27/02	Thu	4.64	6.4	4.65					5.31	385					
06/28/02	Fri	4.71	6.5	4.17					5.65	395					
06/29/02	Sat	5.10	7.0	4.95					5.44	398	34.8	161	4.6	211	1.6
06/30/02	Sun	5.25	7.7	4.96					5.39	406					
Permit Max		7.7									300		45		60
Permit Min															
Permit Ave											60		30		30
Total		141.41	197.7	132.15			0.00		161.00	11416	327.6	1440	31.5	1537	19.3
Maximum		5.30	7.9	4.98			ERR		5.71	490	46.2	177	6.1	211	5.7
Minimum		4.32	5.7	4.00			ERR		4.74	302	31.6	140	3.4	138	1.1
Average		4.71	6.6	4.41			ERR		5.37	394	36.4	160	4.5	171	2.1
# Tests		30	30	30	0	0	0		30	29	9	9	7	9	9

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

07/10/02
08:26:16

JUNE 2002

Date	Day	SETTLEABLE SOLIDS mL/L Raw		SETTLEABLE SOLIDS mL/L Fin	MBAS mg/L Raw	MBAS mg/L Fin	pH Units Raw	pH Units Fin	TURBIDITY NTU Fin	Cl2 mg/L Fin	FINAL COLIFORMS MPN/100 mL Total		FINAL COLIFORMS MPN/100 mL 7day- Median		TDS mg/L Raw	TDS mg/L Fin	ALKALINITY mg/L Raw	ALKALINITY mg/L Fin
06/01/02	Sat	11.0	<	0.1			7.48	7.45	1.70	4.27	<	2	<	2			146	121
06/02/02	Sun	9.5	<	0.1			7.41	7.68	1.40	5.24	<	2	<	2			145	133
06/03/02	Mon	9.5	<	0.1			7.41	7.43	1.70	6.22	<	2	<	2			137	134
06/04/02	Tue	8.5	<	0.1			7.41	7.62	1.50	4.47	<	2	<	2			137	132
06/05/02	Wed	9.0	<	0.1			7.46	7.57	1.50	5.05	<	2	<	2	242	222	144	133
06/06/02	Thu	8.5	<	0.1			7.46	7.50	1.70	4.08	<	2	<	2			133	131
06/07/02	Fri	9.0	<	0.1			7.53	7.66	2.00	4.08	<	2	<	2			141	134
06/08/02	Sat	10.0	<	0.1			7.58	7.36	2.40	4.37	<	2	<	2			127	135
06/09/02	Sun	9.0	<	0.1			7.36	7.44	2.50	5.05	<	2	<	2			145	140
06/10/02	Mon	11.0	<	0.1			7.32	7.42	2.40	7.28	<	2	<	2			151	138
06/11/02	Tue	8.5	<	0.1			7.34	7.50	2.70	7.96	<	2	<	2			141	140
06/12/02	Wed	11.0	<	0.1			7.33	7.46	2.00	4.37	<	2	<	2	236	229	145	138
06/13/02	Thu	11.0	<	0.1			7.28	7.49	2.10	4.95	<	2	<	2			145	136
06/14/02	Fri	8.5	<	0.1			7.43	7.49	2.20	4.18	<	2	<	2			152	137
06/15/02	Sat	10.0	<	0.1			7.47	7.55	2.80	4.27	<	2	<	2			149	131
06/16/02	Sun	10.0	<	0.1			7.52	7.58	3.40	4.76	<	2	<	2			157	144
06/17/02	Mon	11.0	<	0.1			7.46	7.72	3.25	4.76	<	2	<	2			143	140
06/18/02	Tue	10.0	<	0.1			7.43	7.54	3.20	4.08	<	2	<	2			139	142
06/19/02	Wed	12.0	<	0.1			7.55	7.68	3.20	5.34	<	2	<	2	271	228	141	138
06/20/02	Thu	10.0	<	0.1			7.58	7.65	3.65	5.15	<	2	<	2			143	140
06/21/02	Fri	10.0	<	0.1			7.38	7.56	3.95	3.98	<	2	<	2			148	144
06/22/02	Sat	9.0	<	0.1			7.43	7.49	4.90	4.18	<	2	<	2			149	140
06/23/02	Sun	11.0	<	0.1			7.46	7.45	4.00	6.12	<	2	<	2			156	146
06/24/02	Mon		<	0.1				7.63	2.80	4.37	<	2	<	2				146
06/25/02	Tue	9.5	<	0.1			7.46	7.60	2.20	5.24	<	2	<	2			156	144
06/26/02	Wed	11.5	<	0.1			7.54	7.76	2.00	4.95	<	2	<	2	269	230	150	142
06/27/02	Thu	10.0	<	0.1			7.44	7.60	2.00	4.08	<	2	<	2			154	146
06/28/02	Fri	11.0	<	0.1			7.45	7.58	2.00	4.27	<	2	<	2			152	144
06/29/02	Sat	11.5	<	0.1			7.42	7.58	2.40	4.27	<	2	<	2			150	144
06/30/02	Sun	11.0	<	0.1			7.43	7.55	3.20	4.37	<	2	<	2			164	150
Permit Max				0.1		2.0		8.5	20			240		23				
Permit Min								6.5										
Permit Ave						1.0			10									
Total		291.5		3.0	0.00	0.000	215.82	226.59	76.75	145.76		60		60	1018	909	4240	4163
Maximum		12.0		0.1	ERR	ERR	7.58	7.76	4.90	7.96		2		2	271	230	164	150
Minimum		8.5		0.1	ERR	ERR	7.28	7.36	1.40	3.98		2		2	236	222	127	121
Average		10.1		0.1	ERR	ERR	7.44	7.55	2.56	4.86		2		2	255	227	146	139
# Tests		29		30	0	0	29	30	30	30		30		30	4	4	29	30

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT
COMPLIANCE RECORD

2002

Parameter	# Tests	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Compliance, %
Total Plant Inflow; 7.7 MGD; Dry Weather	181	0	0	0	0	0	0								100.0
2-Hour Peak Inflow; 18.5 MGD	181	0	0	0	0	0	0								100.0
COD, 30 Day Ave: 60 mg/L	6	0	0	0	0	0	0								100.0
COD, Max: 300 mg/L	51	0	0	0	0	0	0								100.0
BOD, 30 Day Ave: 30 mg/L	6	0	0	0	0	0	0								100.0
BOD, Max: 45 mg/L	44	0	0	0	0	0	0								100.0
SS, 30 Day Ave: 30 mg/L	6	0	0	0	0	0	0								100.0
SS, Max: 60 mg/L	51	0	0	0	0	0	0								100.0
Settleable Solids, Max: 0.1 mL/L	179	0	0	0	0	0	0								100.0
Turbidity, 30 Day Ave: 10 NTU	6	0	0	0	0	0	0								100.0
Turbidity, Max: 20 NTU	179	0	0	0	0	0	0								100.0
pH, 6.5 to 8.5	179	0	0	0	0	0	0								100.0
Total Coliforms, Max: 240 MPN/100 mL	179	0	0	0	0	0	0								100.0
Total Coliforms, 7-day Median: 23 MPN	178	0	0	0	0	0	0								100.0
Total	1,426	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0

SOUTH TAHOE PUBLIC UTILITY DISTRICT
MEMORANDUM

Date: July 10, 2002

To: Bob Baer, Lisa Coyner, Terry Powers

From: Greg Schrempp

Topic: Export Line Inspection
****

On June 13, 2002, Heather Ross, Tim Rieger and I conducted our check of the District's export line from the treatment plant to where the "C" line daylights at Harvey Place at Station 564+04. Several wet spots were checked, however no leaks were found.

SAMPLE LOCATIONS

TAHOE BASIN MONITORING WELLS

Site	Location
ERB	Emergency Retention Basin
CONTROL	North of Post Office
MW02-25, -50	Emergency Retention Basin, S side
MW03-25, -50	Emergency Retention Basin, S side
MW04-25, -50	Emergency Retention Basin, W side
MW07-25, -50	Emergency Retention Basin, N side
MW08-25, -50	Pond #1, SW corner
MW11	S.E. corner of wastewater treatment plant grounds
MW12	South of Emergency Pump Building, for buried sludge
MW13	Pond 2, along Heavenly Valley Creek, for buried sludge

HEAVENLY VALLEY CREEK

HVC-1	At Pioneer Trail
HVC-2	250 ft upstream of Pond #2
HVC-3	25 ft downstream of Johnson Blvd.
HVC-4	Effluent of drain pipe from Lower Shop area
HVC-5	Effluent of drainage pipe along Johnson Blvd, 10 feet upstream of Johnson Blvd.

ALPINE COUNTY MONITORING WELLS

Site	Location
ACMW-01AW	Below main dam at Harvey Place Reservoir
ACMW-01BE	Below auxiliary dam at Harvey Place Reservoir
ACMW-02, N&S	On dam access road at Diamond Valley Road
ACMW-03	Bruns ranch, east side of Highway 88
ACMW-04W	Gansberg ranch, west side of Highway 88
ACMW-05	Dressler ranch
ACMW-06, N&S	Celio ranch, on Diamond Valley Road

ALPINE SOILS

Site	Ranch
S2	Celio
S3	Hall
S4	Gansberg
S5	Gansberg
S6	Neddenriep
S7	Bruns
S8	Dressler

ALPINE GROUNDWATERS

Site	Homeowner
GW-01	Sagues
GW-03	Smith/Springmeyer
GW-04	Celio
GW-05	Neddenriep
GW-07	Gansberg, Jr.
GW-08	Arant
GW-11	Diamond Valley School
GW-14	Sierra Pines Store

ALPINE SURFACEWATERS

Site	Location
SW-01	Carson River, Woodfords
SW-02	Indian Creek, @ HWY 89
SW-03	Indian Creek, @ upper bridge
SW-04	Indian Creek, @ lower bridge
SW-05	Carson River, Paynesville
SW-06	Carson River, Stateline
SW-07	Fredericksberg Ditch, Stateline
SW-08	Irrigation Ditch along Carson River Road
SW-09	Carson River, Dressler Lane
SW-10	Indian Creek, @ Smith-Springmeyer Ranch

TAHOE BASIN MONITORING

Site	Date	ID	Location	Depth msl	Temp C	pH	EC umho	Cl mg/L		COD mg/L		TKN mg/L		NO3-N mg/L	Comment
Buried Sludge Monitoring															
MW11	06/25/02	20020625-19	Sludge Pond	6262.4	8.7	6.86	101	1.2		5.0				0.132	
MW12	06/25/02	20020625-20	Sludge Pond	6262.7	9.1	6.20	117	1.4	<	5.0				0.347	
MW13	06/25/02	20020625-21	Sludge Pond	6256.4	7.7	7.29	813	4.0		17.8				6.680	
ERB Monitoring															
CONTROL	06/25/02	20020625-14	At Post Office	6279.0	11.2	6.94	174	7.8	<	5.0				2.340	
MW01.5	06/25/02	0020625-MW01.	SW corner of ERB												No Flow
MW02-50	06/25/02	0020625-MW02-	Black Bart side of ERB												No Flow
MW03-50	06/25/02	20020625-15	Black Bart side of ERB	6267.6	11.1	6.00	664	55.5	<	5.0				29.900	
MW04-50	06/25/02	20020625-16	Hank Monk side of ERB	6267.8	9.1	5.47	81	4.7	<	5.0				0.087	
MW07-50	06/25/02	20020625-17	North side of ERB	6276.9	8.0	6.36	245	21.4	<	5.0				0.566	
Heavenly Valley Creek															
HVC-1	06/25/02	20020625-23	Downstream of Pioneer		12.2	7.19	34	1.3	<	5.0		0.158		0.044	
HVC-2	06/25/02	20020625-24	250' upstream of Pond #2		14.8	6.51	45	1.4		9.9	<	0.100		0.026	
HVC-3	06/25/02	20020625-25	25' downstream of Johnson Blvd		14.1	6.82	45	1.4		6.1		0.342		0.018	
HVC-4	06/25/02	20020625-HVC4	Effluent of drain from Lower Shop a												No Flow
HVC-5	06/25/02	20020625-HVC5	Effluent of drainage pipe along Johi												No Flow
Treatment Plant Monitoring															
MW08-25	06/25/02	20020625-18	SW side of Pond #1	6246.6	9.6	6.26	987	41.6		79.1			<	0.030	

ALPINE COUNTY MONITORING

07/10/02

Site	Date	ID	Location	Temp C	pH	EC umhos	DO mg/L	Alk mg/L	TDS mg/L	SS mg/L	Turb NTU	Cl mg/L	SO4 mg/L
Alpine Monitoring Wells													
ACMW-01AW	06/18/2002	20020618-10	Main Dam	10.8	6.65	75		32	71			2.0	2.6
ACMW-01BE	06/18/2002	20020618-11	Secondary Dam	7.5	6.47	83		37	63			2.8	1.2
ACMW-02N	06/18/2002	20020618-12	Access Gate	13.8	6.89	122		58	89			2.5	2.3
ACMW-02S	06/18/2002	20020618-13	Access Gate	13.0	6.55	90		41	76			1.6	1.6
ACMW-03	06/18/2002	20020618-14	HWY 88	13.8	6.28	204		49	145			19.3	7.5
ACMW-04W	06/18/2002	20020618-15	Gansberg	13.5	6.23	215		43	149			28.3	6.5
ACMW-06N	06/18/2002	20020618-16	Celio	12.5	7.04	707		262	430			56.8	22.8
ACMW-06S	06/18/2002	20020618-17	Celio	13.0	8.93	575		212	320			70.3	22.6
Groundwaters													
GW-03	06/11/2002	20020611-11	Smith/Springmeyer	16.4	7.75	298		134	227		.02	1.6	27.0
GW-04	06/11/2002	20020611-12	Celio	15.0	7.82	256		121	197		.16	3.6	12.0
GW-05	06/11/2002	20020611-13	Neddenriep	12.2	6.56	242		62	163		.02	22.7	12.4
GW-07	06/11/2002	20020611-14	Gansberg	12.5	6.50	115		53	90		.02	1.5	3.0
GW-08	06/11/2002	20020611-15	Arant	13.2	6.50	292		46	183		.16	35.1	11.5
GW-11	06/11/2002	20020611-16	Diamond Val. School	16.0	7.28	147		77	111		.02	0.7	0.8
GW-14	06/11/2002	20020611-17	Sierrra Pines	14.0	6.65	107		54	87		.02	1.3	1.8
Irrigation Waters													
SW-08	06/04/2002	20020604-22	Irrigation Ditch	12.7	7.33	121	7.20	62	103	0.96	.67	1.1	3.9
SW-16	06/11/2002	20020611-21	Drain Ditch @ Fairview Ln	14.0	7.50	222			154			18.1	5.4
Reservoirs													
HPR	06/04/2002	20020604-26	Harvey Place Reservoir	20.3	7.97	439	7.93	100	225	1.38	2.2	53.3	16.1
Surfacewaters: Carson R													
SW-01	06/04/2002	20020604-16	Carson R Woodfords	8.9	6.93	42	9.52	21	41	5.71	2.8	0.8	1.2
SW-05	06/04/2002	20020604-20	Carson R Paynesville	12.4	7.66	47	9.18	23	45	5.80	3.05	0.9	1.3
SW-06	06/04/2002	20020604-21	Carson R Stateline	11.6	7.35	53	9.16	26	49	6.16	2.8	1.1	1.4
Surfacewaters: Indian Cr													
SW-02	06/04/2002	20020604-17	Indian Cr Upper	17.2	7.79	96	8.48	51	79	0.03	1.4	1.2	< 0.5
SW-03	06/04/2002	20020604-18	Indian Cr Mid	18.4	7.42	236	7.31	125	174	3.44	12.2	3.5	1.7
SW-04	06/04/2002	20020604-19	Indian Cr Lower	15.6	7.49	127	8.01	66	108	3.72	4.8	1.5	0.9

ALPINE COUNTY MONITORING

07/10/02

Site	Date	TotalP mg/L	PO4-P mg/L	TKN mg/L	NH3-N mg/L	NO2-N mg/L	NO3-N mg/L	Total N mg/L
Alpine Monitoring Wells								
ACMW-01AV	06/18/2002					< 0.020	0.115	
ACMW-01BE	06/18/2002					< 0.010	0.134	
ACMW-02N	06/18/2002					0.015	0.082	
ACMW-02S	06/18/2002					< 0.010	0.132	
ACMW-03	06/18/2002					< 0.040	3.060	
ACMW-04W	06/18/2002					< 0.020	1.910	
ACMW-06N	06/18/2002					< 0.010	< 0.010	
ACMW-06S	06/18/2002					0.027	0.078	
Groundwaters								
GW-03	06/11/2002					< 0.010	0.789	
GW-04	06/11/2002					< 0.010	0.819	
GW-05	06/11/2002					< 0.030	3.290	
GW-07	06/11/2002					< 0.010	0.964	
GW-08	06/11/2002					< 0.100	7.490	
GW-11	06/11/2002					< 0.010	0.469	
GW-14	06/11/2002					< 0.010	0.488	
Irrigation Waters								
SW-08	06/04/2002	< 0.010	< 0.010	0.161	0.037	< 0.010	< 0.010	0.181
SW-16	06/11/2002	0.094	0.019	0.904	0.055	< 0.020	0.037	0.961
Reservoirs								
HPR	06/04/2002	2.340	2.090	19.300	11.400	0.298	1.610	21.208
Surfacewaters: Carson R								
SW-01	06/04/2002	0.019	< 0.010	< 0.100	0.045	< 0.010	< 0.010	0.120
SW-05	06/04/2002	0.025	< 0.010	0.392	0.033	< 0.010	< 0.010	0.412
SW-06	06/04/2002	0.028	< 0.010	0.197	0.047	< 0.010	0.013	0.220
Surfacewaters: Indian Cr								
SW-02	06/04/2002	0.010	< 0.010	0.257	0.049	< 0.010	< 0.100	0.367
SW-03	06/04/2002	0.112	0.013	0.688	0.082	< 0.010	0.019	0.717
SW-04	06/04/2002	0.106	0.032	0.697	0.074	< 0.010	< 0.010	0.717

ALPINE COUNTY MONITORING

Site	Date	COD mg/L	BOD mg/L	O & G mg/L		Boron mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	SAR	Exch Na %	Hardness mg/L	Water Level MSL or Ft
Alpine Monitoring Wells														
ACMW-01AV	06/18/2002													5482.2
ACMW-01BE	06/18/2002													5491.9
ACMW-02N	06/18/2002													5459.5
ACMW-02S	06/18/2002													5462.2
ACMW-03	06/18/2002													5043.1
ACMW-04W	06/18/2002													4908.4
ACMW-06N	06/18/2002													5214.5
ACMW-06S	06/18/2002													5205.7
Groundwaters														
GW-03	06/11/2002													
GW-04	06/11/2002													
GW-05	06/11/2002													
GW-07	06/11/2002													
GW-08	06/11/2002													
GW-11	06/11/2002													
GW-14	06/11/2002													
Irrigation Waters														
SW-08	06/04/2002		1		<	0.01	13.1	2.7	10.3	1.5	0.68	33.0		
SW-16	06/11/2002													
Reservoirs														
HPR	06/04/2002	23	3			0.25	17.4	3.5	43.9	8.0	2.51	58.3		
Surfacewaters: Carson R														
SW-01	06/04/2002		1		<	0.01	4.2	1.4	2.1	0.8	0.23	21.0		
SW-05	06/04/2002		1		<	0.01	5.6	1.5	2.7	0.9	0.26	21.6		
SW-06	06/04/2002		1		<	0.01	6.1	1.7	3.0	1.0	0.28	21.6		
Surfacewaters: Indian Cr														
SW-02	06/04/2002		1			0.01	8.6	2.3	7.9	1.6	0.62	34.3		
SW-03	06/04/2002		2			0.03	25.3	7.5	14.1	2.8	0.63	23.9		
SW-04	06/04/2002		2			0.02	15.9	4.3	6.6	2.2	0.38	19.2		

ALPINE COUNTY
BACTERIOLOGICAL MONITORING

Alpine Monitoring Wells

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
ACMW-01AV	06/18/2002	<	1.1	<	1.1	
ACMW-01BE	06/18/2002	<	1.1	<	1.1	
ACMW-02N	06/18/2002	<	1.1	<	1.1	
ACMW-02S	06/18/2002		2.2	<	1.1	
ACMW-03	06/18/2002		16.1		6.9	
ACMW-04W	06/18/2002	<	1.1	<	1.1	
ACMW-06N	06/18/2002	<	1.1	<	1.1	
ACMW-06S	06/18/2002	<	1.1	<	1.1	

Groundwaters

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
GW-03	06/11/2002	<	1.1	<	1.1	
GW-04	06/11/2002	<	1.1	<	1.1	
GW-05	06/11/2002	<	1.1	<	1.1	
GW-07	06/11/2002	<	1.1	<	1.1	
GW-08	06/11/2002	<	1.1	<	1.1	
GW-11	06/11/2002	<	1.1	<	1.1	
GW-14	06/11/2002	<	1.1	<	1.1	

Irrigation Waters

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-08	06/04/2002	390	230	
SW-16	06/11/2002			

Reservoirs

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
HPR	06/04/2002	500	8	1600

Surfacewaters: Carson R

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-01	06/04/2002	93	4	
SW-05	06/04/2002	930	230	
SW-06	06/04/2002	2400	150	

Surfacewaters: Indian Cr

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-02	06/04/2002	230	43	
SW-03	06/04/2002	1500	930	
SW-04	06/04/2002	11000	2400	

ALPINE COUNTY
BLUE GREEN ALGAE

ID#	Site	Location	Date	Colonies #	Colony # Cells	Filaments #	Filaments # Cells	Filaments #	Filament Length	Single Cells, #
May, 2002										
20020501-15	SW-01	Carson R Woodfords	05/01/02	0	0	0	0	0	0	0
20020501-16	SW-02	Indian Cr Upper	05/01/02	0	0	0	0	0	0	0
20020501-17	SW-03	Indian Cr Mid	05/01/02	0	0	0	0	0	0	0
20020501-18	SW-04	Indian Cr Lower	05/01/02	0	0	0	0	0	0	0
20020501-19	SW-05	Carson R Paynesville	05/01/02	0	0	0	0	0	0	0
20020501-20	SW-06	Carson R Stateline	05/01/02	0	0	0	0	0	0	0
20020501-21	SW-08	Irrigation Ditch	05/01/02	0	0	0	0	0	0	0
20020501-22	SW-09	Carson R Dressler Ln	05/01/02	0	0	0	0	0	0	0
20020501-23	SW-10	Indian Cr at Bruns	05/01/02	0	0	0	0	0	0	0

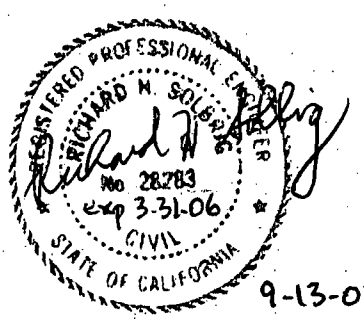
Site	Location	TDS		Cl		TKN		NO_3-N		Total N		Total P		SO_4		Boron		Exch Na %	
		Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence
SW-01	Carson River, Woodfords	55	✓	1.0	✓	0.13	✓	0.02		0.15	✓	0.02		2.0		0.02		20	✓
SW-06	Carson River, Stateline	70		2.5		0.22		0.03		0.25		0.03		2.0	✓	0.02		20	✓
SW-02	Indian Creek, Upper	100		6.0						0.30		0.03		8.0		0.25		30	
SW-03	Indian Creek, Mid	100	✓	6.0						0.30		0.03	✓	8.0		0.25		30	
SW-04	Indian Creek, Lower	100	✓	6.0						0.30	✓	0.03	✓	8.0		0.25		30	
SW-10	Indian Creek, Stateline	100		6.0						0.30		0.03		8.0		0.25		30	

August blue-green algae results will be sent as soon as they are completed.

Certification

I hereby certify that the enclosed monitoring report was prepared under my direct supervision and that I am a duly Registered Engineer under the laws of the State of California.

Sincerely,



9-13-02

Richard Solbrig,
Assistant Manager/Engineer

Enclosures:

1.

August Monthly Report	Pages
Wastewater Treatment plant	2
Permit Compliance Record	1
Export pipeline inspection	0
Sample site locations	2
Tahoe Basin: Monitoring wells (ERB) and Heavenly Valley Creek (HVC)	1
Alpine County Surfacewaters, Groundwaters, and HPR	4
Total number of pages:	10

cc: Calif. Dept. of Health Services, ODW - Jess Morehouse
El Dorado Co. Dept. of Environmental Health - Virginia Huber
Nevada Division of Environmental Protection - Wendel McCurry
Alpine County Health Department - Dr. Richard Botto
Alpine County Health Department - Jim Goodloe
Alpine County Board of Supervisors
Desert Research Group (Alpine County Consultants) - David McGraw
STPUD Board of Directors
STPUD General Manager / District Engineer - Robert G. Baer
STPUD Manager of Operations - Ross Johnson
STPUD Operations Chief Plant Operator - Jeff Lee
STPUD Laboratory Director - Terry Powers
STPUD Manager of Alpine County Operations - Hal Bird

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SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

AUGUST 2002

Date	Day	FLOW MGD Inf	2-Hr Peak Inf	Eff	Pond Return	Pond Inf	PRECIP Inch	Type	D.O. mg/L Fin	COD mg/L Raw	COD Fin	BOD mg/L Raw	BOD Fin	SS mg/L Raw	SS Fin
08/01/02	Thu	4.89	6.9	4.24					5.31	370					
08/02/02	Fri	5.13	7.2	4.64					4.88	416					
08/03/02	Sat	5.42	7.9	4.98					4.65	458	46.9	175	8.1	180	2.5
08/04/02	Sun	5.48	8.4	4.84					4.72	468					
08/05/02	Mon	5.16	7.0	4.75					4.60	387					
08/06/02	Tue	5.06	7.4	4.53					4.76	354					
08/07/02	Wed	5.10	7.6	4.63					5.05	421	35.2	193	5.8	192	2.2
08/08/02	Thu	5.08	6.9	4.61					4.84	433					
08/09/02	Fri	5.28	7.7	4.74					5.02	485					
08/10/02	Sat	5.59	8.4	5.07					4.48	454	40.5	191	7.3	180	2.5
08/11/02	Sun	5.39	8.5	4.87					4.46	418					
08/12/02	Mon	5.08	7.4	4.85					4.52	354					
08/13/02	Tue	5.07	7.4	4.62					5.25	347					
08/14/02	Wed	5.16	7.3	4.30					5.11	375	48.1	160	5.4	131	2.2
08/15/02	Thu	5.00	7.1	4.88					4.67	357					
08/16/02	Fri	5.09	6.9	5.05					4.39	379					
08/17/02	Sat	5.42	7.6	4.84					5.14	460	54.0	209		202	6.2
08/18/02	Sun	5.24	6.5	4.87					4.53	394					
08/19/02	Mon	4.85	6.8	4.58					4.69	411					
08/20/02	Tue	4.76	6.8	4.22					4.99	394					
08/21/02	Wed	5.10	6.7	4.17					5.27	420	46.9	181		186	5.5
08/22/02	Thu	4.82	6.5	4.41					4.88	411					
08/23/02	Fri	4.87	6.7	4.38					5.35	392					
08/24/02	Sat	5.16	6.9	4.84					4.70	455	47.0	166	7.6	188	6.2
08/25/02	Sun	4.87	7.6	4.48					4.95	414					
08/26/02	Mon	4.71	6.4	4.37					4.98	434					
08/27/02	Tue	4.35	6.1	4.01					5.20	429					
08/28/02	Wed	4.58	6.1	4.44					4.79	387	49.7	160	6.2	152	5.5
08/29/02	Thu	4.61	6.3	4.06					5.63	456					
08/30/02	Fri	4.57	6.2	4.36					4.23	403					
08/31/02	Sat	5.28	7.5	4.75					5.52	480	50.9	182	7.2	184	3.7
Permit Max		7.7									300		45		60
Permit Min															
Permit Ave											60		30		30
Total		156.17	220.7	142.38			0.00		151.56	12816	419.2	1617	47.6	1595	36.7
Maximum		5.59	8.5	5.07			ERR		5.63	485	54.0	209	8.1	202	6.2
Minimum		4.35	6.1	4.01			ERR		4.23	347	35.2	160	5.4	131	2.2
Average		5.04	7.1	4.59			ERR		4.89	413	46.6	180	6.8	177	4.1
# Tests		31	31	31	0	0	0		31	31	9	9	7	9	9

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

AUGUST 2002

Date	Day	SETTLEABLE SOLIDS mL/L Raw		SETTLEABLE SOLIDS mL/L Fin	MBAS mg/L Raw	MBAS mg/L Fin	pH Units Raw	pH Units Fin	TURBIDITY NTU Fin	Cl2 mg/L Fin	FINAL COLIFORMS MPN/100 mL Total		FINAL COLIFORMS MPN/100 mL 7day-Median	TDS mg/L Raw	TDS mg/L Fin	ALKALINITY mg/L Raw	ALKALINITY mg/L Fin
08/01/02	Thu	11.0	<	0.1			7.43	7.50	3.85	4.27	< 2	<	2			164	154
08/02/02	Fri	11.5	<	0.1			7.41	7.52	4.25	4.95	< 2	<	2			162	152
08/03/02	Sat	12.0	<	0.1			7.44	7.60	4.65	3.98	< 2	<	2			172	156
08/04/02	Sun	13.0	<	0.1			7.46	7.62	5.00	4.47	< 2	<	2			175	161
08/05/02	Mon	12.5	<	0.1			7.51	7.58	4.15	4.27	< 2	<	2			164	159
08/06/02	Tue	12.0	<	0.1			7.48	7.55	3.40	3.59	< 2	<	2			171	156
08/07/02	Wed	12.0	<	0.1			7.46	7.61	3.00	3.69	< 2	<	2	239		170	154
08/08/02	Thu	12.0	<	0.1			7.47	7.58	3.05	4.27	< 2	<	2			173	156
08/09/02	Fri	12.5	<	0.1			7.50	7.60	3.90	4.27	< 2					173	163
08/10/02	Sat	12.0	<	0.1			7.61	7.70	3.65	3.59	< 2	<	2			179	163
08/11/02	Sun	10.0	<	0.1			7.45	7.56	3.50	3.50	< 2	<	2			181	166
08/12/02	Mon	8.0	<	0.1			7.46	7.63	3.45	4.66	< 2	<	2			162	167
08/13/02	Tue	8.0	<	0.1			7.48	7.62	3.20	4.66	< 2	<	2			163	162
08/14/02	Wed	8.5	<	0.1			7.56	7.80	3.35	4.86	< 2	<	2	280	242	164	161
08/15/02	Thu	9.5	<	0.1			7.45	7.57	4.00	3.88	< 2	<	2			162	156
08/16/02	Fri	9.0	<	0.1			7.40	7.48	5.40	4.08	< 2	<	2			160	160
08/17/02	Sat	11.0	<	0.1			7.48	7.74	6.00	3.88	< 2	<	2			168	157
08/18/02	Sun	13.0	<	0.1			7.46	7.57	6.10	4.66	< 2	<	2			182	164
08/19/02	Mon	11.5	<	0.1			7.61	7.66	6.00	5.54	< 2	<	2			166	156
08/20/02	Tue	12.0	<	0.1			7.45	7.58	5.15	5.73	< 2	<	2			168	154
08/21/02	Wed	12.5	<	0.1			7.50	7.61	5.00	5.24	< 2	<	2	248	241	170	154
08/22/02	Thu	11.0	<	0.1			7.46	7.60	5.45	4.86	< 2	<	2			170	156
08/23/02	Fri	10.5	<	0.1			7.46	7.52	5.40	4.66	< 2	<	2			169	153
08/24/02	Sat	12.0	<	0.1			7.46	7.46	6.10	3.89	< 2	<	2			174	154
08/25/02	Sun	10.0	<	0.1			7.50	7.30	5.80	4.47	< 2	<	2			177	157
08/26/02	Mon	10.0	<	0.1			7.41	7.26	5.00	8.06	< 2	<	2			164	148
08/27/02	Tue	10.0	<	0.1			7.46	7.24	8.75	6.99	< 2	<	2			168	142
08/28/02	Wed	9.0	<	0.1			7.51	7.35	5.00	8.16	< 2	<	2			160	139
08/29/02	Thu	12.0	<	0.1			7.40	7.24	4.75	5.05	< 2	<	2	249	236	161	134
08/30/02	Fri	10.0	<	0.1			7.49	7.27	4.15	4.47	< 2	<	2			168	136
08/31/02	Sat	10.0	<	0.1			7.44	7.64	4.35	4.66	< 2	<	2			177	149
Permit Max				0.1		2.0		8.5	20		240		23				
Permit Min								6.5									
Permit Ave						1.0			10								
Total		338.0		3.1	0.00	0.000	231.66	233.56	144.80	147.31	62		60	1016	719	5237	4799
Maximum		13.0		0.1	ERR	ERR	7.61	7.80	8.75	8.16	2		2	280	242	182	167
Minimum		8.0		0.1	ERR	ERR	7.40	7.24	3.00	3.50	2		2	239	236	160	134
Average		10.9		0.1	ERR	ERR	7.47	7.53	4.67	4.75	2		2	254	240	169	155
# Tests		31		31	0	0	31	31	31	31	31		30	4	3	31	31

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT
COMPLIANCE RECORD

2002

Parameter	# Tests	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Compliance, %
Total Plant Inflow; 7.7 MGD; Dry Weather	243	0	0	0	0	0	0	0	0						100.0
2-Hour Peak Inflow; 18.5 MGD	242	0	0	0	0	0	0	0	0						100.0
COD, 30 Day Ave: 60 mg/L	8	0	0	0	0	0	0	0	0						100.0
COD, Max: 300 mg/L	69	0	0	0	0	0	0	0	0						100.0
BOD, 30 Day Ave: 30 mg/L	8	0	0	0	0	0	0	0	0						100.0
BOD, Max: 45 mg/L	59	0	0	0	0	0	0	0	0						100.0
SS, 30 Day Ave: 30 mg/L	8	0	0	0	0	0	0	0	0						100.0
SS, Max: 60 mg/L	69	0	0	0	0	0	0	0	0						100.0
Settleable Solids, Max: 0.1 mL/L	241	0	0	0	0	0	0	0	0						100.0
Turbidity, 30 Day Ave: 10 NTU	8	0	0	0	0	0	0	0	0						100.0
Turbidity, Max: 20 NTU	241	0	0	0	0	0	0	0	0						100.0
pH, 6.5 to 8.5	241	0	0	0	0	0	0	0	0						100.0
Total Coliforms, Max: 240 MPN/100 mL	241	0	0	0	0	0	0	0	0						100.0
Total Coliforms, 7-day Median: 23 MPN	239	0	0	0	0	0	0	0	0						100.0
Total	1,917	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0

SAMPLE LOCATIONS

TAHOE BASIN MONITORING WELLS

Site	Location
ERB	Emergency Retention Basin
CONTROL	North of Post Office
MW02-25, -50	Emergency Retention Basin, S side
MW03-25, -50	Emergency Retention Basin, S side
MW04-25, -50	Emergency Retention Basin, W side
MW07-25, -50	Emergency Retention Basin, N side
MW08-25, -50	Pond #1, SW corner
MW11	S.E. corner of wastewater treatment plant grounds
MW12	South of Emergency Pump Building, for buried sludge
MW13	Pond 2, along Heavenly Valley Creek, for buried sludge

HEAVENLY VALLEY CREEK

HVC-1	At Pioneer Trail
HVC-2	250 ft upstream of Pond #2
HVC-3	25 ft downstream of Johnson Blvd.
HVC-4	Effluent of drain pipe from Lower Shop area
HVC-5	Effluent of drainage pipe along Johnson Blvd, 10 feet upstream of Johnson Blvd.

ALPINE COUNTY MONITORING WELLS

Site	Location
ACMW-01AW	Below main dam at Harvey Place Reservoir
ACMW-01BE	Below auxiliary dam at Harvey Place Reservoir
ACMW-02, N&S	On dam access road at Diamond Valley Road
ACMW-03	Bruns ranch, east side of Highway 88
ACMW-04W	Gansberg ranch, west side of Highway 88
ACMW-05	Dressler ranch
ACMW-06, N&S	Celio ranch, on Diamond Valley Road

ALPINE SOILS

Site	Ranch
S2	Celio
S3	Hall
S4	Gansberg
S5	Gansberg
S6	Neddenriep
S7	Bruns
S8	Dressler

ALPINE GROUNDWATERS

Site	Homeowner
GW-01	Sagues
GW-03	Smith/Springmeyer
GW-04	Celio
GW-05	Neddenriep
GW-07	Gansberg, Jr.
GW-08	Arant
GW-11	Diamond Valley School
GW-14	Sierra Pines Store

ALPINE SURFACEWATERS

Site	Location
SW-01	Carson River, Woodfords
SW-02	Indian Creek, @ HWY 89
SW-03	Indian Creek, @ upper bridge
SW-04	Indian Creek, @ lower bridge
SW-05	Carson River, Paynesville
SW-06	Carson River, Stateline
SW-07	Fredericksberg Ditch, Stateline
SW-08	Irrigation Ditch along Carson River Road
SW-09	Carson River, Dressler Lane
SW-10	Indian Creek, @ Smith-Springmeyer Ranch

TAHOE BASIN MONITORING

09/12/02

Site	Date	ID	Location	Depth msl	Temp C	pH	EC umho	Cl mg/L		COD mg/L	TKN mg/L	NO3-N mg/L	Comment
Buried Sludge Monitoring													
MW11	08/27/02	20020827-14	Sludge Pond	6262.0	7.1	6.98	98	2.4		12.8		0.206	
MW12	08/27/02	20020827-15	Sludge Pond	6262.1	7.3	6.27	106	1.4		6.4		0.351	
MW13	08/27/02	20020827-16	Sludge Pond	6254.8	6.8	7.26	716	4.5		28.4		3.750	
ERB Monitoring													
CONTROL	08/27/02	20020827-09	At Post Office	6278.7	8.8	6.96	171	8.0	<	5.0		2.370	
MW01.5	08/27/02	20020827-MW01	SW corner of ERB										Dry
MW02-50	08/27/02	20020827-MW02	Black Bart side of ERB										Dry
MW03-50	08/27/02	20020827-10	Black Bart side of ERB	6267.3	10.3	5.85	658	56.6	<	5.0		30.400	
MW04-50	08/27/02	20020827-11	Hank Monk side of ERB	6266.9	8.2	6.05	75	4.8	<	5.0		0.082	
MW07-50	08/27/02	20020827-12	North side of ERB	6276.2	6.8	6.05	235	21.4		11.9		0.584	
Heavenly Valley Creek													
HVC-1	08/20/02	20020820-HVC1	Downstream of Pioneer										No Flow
HVC-2	08/20/02	20020820-HVC2	250' upstream of Pond #2										No Flow
HVC-3	08/20/02	20020820-HVC3	25' downstream of Johnson Blvd										No Flow
HVC-4	08/20/02	20020820-HVC4	Effluent of drain from Lower Shop a										No Flow
HVC-5	08/20/02	20020820-HVC5	Effluent of drainage pipe along Johi										No Flow
Treatment Plant Monitoring													
MW08-25	08/27/02	20020827-13	SW side of Pond #1	6245.4	9.4	6.14	931	40.0		122.0		0.031	

ALPINE COUNTY MONITORING

Site	Date	ID	Location	Temp C	pH	EC umhos	DO mg/L	Alk mg/L	TDS mg/L	SS mg/L	Turb NTU	Cl mg/L	SO4 mg/L
Alpine Monitoring Wells													
ACMW-01AW	08/20/2002	20020820-12	Main Dam	11.9	6.41	76		37	70			2.1	2.5
ACMW-01BE	08/20/2002	20020820-13	Secondary Dam	10.5	6.85	79		38	71			2.4	1.3
ACMW-02N	08/20/2002	20020820-14	Access Gate	12.1	6.57	116		59	88			2.6	2.5
ACMW-02S	08/20/2002	20020820-15	Access Gate	14.2	6.39	105		55	78			1.9	1.3
ACMW-03	08/20/2002	20020820-16	HWY 88	17.3	6.03	346		58	213			57.7	12.7
ACMW-04W	08/20/2002	20020820-17	Gansberg	12.0	6.12	213		42	143			31.7	6.5
ACMW-06N	08/20/2002	20020820-18	Celio	11.5	6.91	671		268	428			58.9	23.8
ACMW-06S	08/20/2002	20020820-19	Celio	12.9	6.90	669		266	435			65.6	30.9
Groundwaters													
GW-03	08/06/2002	20020806-13	Smith/Springmeyer	17.5	7.34	297		134	226			1.6	26.7
GW-04	08/06/2002	20020806-14	Celio	14.8	7.43	251		121	202			3.6	11.6
GW-05	08/06/2002	20020806-15	Neddenriep	13.6	6.46	239		62	157			22.4	11.8
GW-07	08/06/2002	20020806-16	Gansberg	11.6	6.50	114		52	97			1.5	3.0
GW-08	08/06/2002	20020806-17	Arant	15.6	6.51	270		49	176			31.0	11.5
GW-11	08/06/2002	20020806-18	Diamond Val. School	17.0	6.88	140		76	116			0.7	0.7
GW-14	08/06/2002	20020806-19	Sierra Pines	13.7	6.63	107		54	93			1.3	1.8
Irrigation Waters													
SW-07	08/06/2002	20020806-SW07	Fredericksburg Ditch										
SW-07	08/13/2002	20020813-20	Fredericksburg Ditch	14.5	7.16	262	8.88	92	174	1.00	1.66	21.8	8.3
SW-08	08/13/2002	20020813-21	Irrigation Ditch	18.5	6.97	131	5.55	63	102	30.00	3.7	1.6	4.5
Reservoirs													
HPR	08/13/2002	20020813-22	Harvey Place Reservoir	22.0	8.92	410	12.20	77	252	8.94	4.1	58.9	17.0
Surfacewaters: Carson R													
SW-01	08/13/2002	20020813-15	Carson R Woodfords	12.0	7.53	79	8.60	38	59	0.46	.1	1.2	1.9
SW-05	08/06/2002	20020806-08	Carson R Paynesville	14.3	7.70	89			68			1.7	2.5
SW-05	08/13/2002	20020813-18	Carson R Paynesville	16.0	7.27	86	8.05	41	67	1.58	.59	1.4	2.2
SW-06	08/13/2002	20020813-19	Carson R Stateline	16.5	8.03	91	8.29	43	66	2.00	.7	1.7	2.4
Surfacewaters: Indian Cr													
SW-02	08/13/2002	20020813-SW02	Indian Cr Upper										
SW-03	08/13/2002	20020813-16	Indian Cr Mid	19.0	7.31	239	7.14	120	167	12.50	2.7	5.1	1.9
SW-04	08/13/2002	20020813-17	Indian Cr Lower	19.0	7.26	204	5.38	108	155	4.70	6.6	3.0	0.8

ALPINE COUNTY MONITORING

09/12/02

Site	Date	TotalP mg/L	PO4-P mg/L	TKN mg/L	NH3-N mg/L	NO2-N mg/L	NO3-N mg/L	Total N mg/L
Alpine Monitoring Wells								
ACMW-01AV	08/20/2002					< 0.020	0.129	
ACMW-01BE	08/20/2002					< 0.010	0.170	
ACMW-02N	08/20/2002					< 0.010	0.129	
ACMW-02S	08/20/2002					< 0.010	0.073	
ACMW-03	08/20/2002					< 0.040	3.190	
ACMW-04W	08/20/2002					< 0.020	2.240	
ACMW-06N	08/20/2002					< 0.010	< 0.010	
ACMW-06S	08/20/2002					< 0.010	0.028	
Groundwaters								
GW-03	08/06/2002					< 0.010	0.730	
GW-04	08/06/2002					< 0.010	0.829	
GW-05	08/06/2002					< 0.030	3.240	
GW-07	08/06/2002					< 0.010	1.020	
GW-08	08/06/2002					< 0.070	6.600	
GW-11	08/06/2002					< 0.010	0.458	
GW-14	08/06/2002					< 0.010	0.495	
Irrigation Waters								
SW-07	08/06/2002							
SW-07	08/13/2002	0.127	0.034	0.456	0.032	< 0.010	0.300	0.766
SW-08	08/13/2002	0.101	0.022	0.735	0.051	< 0.010	0.134	0.879
Reservoirs								
HPR	08/13/2002	2.660	2.170	7.670	6.100	0.808	3.460	11.938
Surfacewaters: Carson R								
SW-01	08/13/2002	0.014	0.012	0.172	0.027	< 0.010	0.017	0.199
SW-05	08/06/2002	0.017	< 0.010	0.173	0.024	< 0.010	0.028	0.211
SW-05	08/13/2002	0.013	< 0.010	0.247	< 0.020	< 0.010	0.015	0.272
SW-06	08/13/2002	0.020	< 0.010	0.190	0.023	< 0.010	0.010	0.210
Surfacewaters: Indian Cr								
SW-02	08/13/2002							
SW-03	08/13/2002	0.094	0.033	0.259	0.025	< 0.010	0.024	0.293
SW-04	08/13/2002	0.120	0.020	0.596	0.025	< 0.010	< 0.010	0.616

ALPINE COUNTY MONITORING

Site	Date	COD mg/L	BOD mg/L	O & G mg/L		Boron mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	SAR	Exch Na %	Hardness mg/L	Water Level MSL or Ft
Alpine Monitoring Wells														
ACMW-01AV	08/20/2002													5482.7
ACMW-01BE	08/20/2002													5490.1
ACMW-02N	08/20/2002													5458.7
ACMW-02S	08/20/2002													5461.0
ACMW-03	08/20/2002													5039.5
ACMW-04W	08/20/2002													4903.4
ACMW-06N	08/20/2002													5214.2
ACMW-06S	08/20/2002													5203.8
Groundwaters														
GW-03	08/06/2002													
GW-04	08/06/2002													
GW-05	08/06/2002													
GW-07	08/06/2002													
GW-08	08/06/2002													
GW-11	08/06/2002													
GW-14	08/06/2002													
Irrigation Waters														
SW-07	08/06/2002													
SW-07	08/13/2002		0.5			0.04	21.3	5.3	21.2	3.6	1.06	36.7		
SW-08	08/13/2002		1.3		<	0.01	12.2	2.9	10.1	2.6	0.68	32.5		
Reservoirs														
HPR	08/13/2002	30	5.7			0.23	15.8	3.7	49.2	8.8	2.89	61.9		
Surfacewaters: Carson R														
SW-01	08/13/2002		0.2		<	0.01	7.6	2.3	4.5	1.5	0.37	24.3		
SW-05	08/06/2002													
SW-05	08/13/2002		0.3				8.3	2.3	5.3	1.7	0.42	26.2		
SW-06	08/13/2002		0.5		<	0.01	8.6	2.5	5.4	1.7	0.42	25.8		
Surfacewaters: Indian Cr														
SW-02	08/13/2002													
SW-03	08/13/2002		1.2			0.02	21.7	6.6	15.0	2.5	0.72	27.8		
SW-04	08/13/2002		0.8		<	0.01	22.0	6.1	9.0	3.4	0.44	18.8		

ALPINE COUNTY
BACTERIOLOGICAL MONITORING

Alpine Monitoring Wells

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
ACMW-01AV	08/20/2002	<	1.1	<	1.1	
ACMW-01BE	08/20/2002	<	1.1	<	1.1	
ACMW-02N	08/20/2002	<	1.1	<	1.1	
ACMW-02S	08/20/2002	>	23		1.1	
ACMW-03	08/20/2002	>	23	<	1.1	
ACMW-04W	08/20/2002	<	1.1	<	1.1	
ACMW-06N	08/20/2002	<	1.1	<	1.1	
ACMW-06S	08/20/2002	<	1.1	<	1.1	

Groundwaters

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
GW-03	08/06/2002	<	1.1	<	1.1	
GW-04	08/06/2002	<	1.1	<	1.1	
GW-05	08/06/2002	<	1.1	<	1.1	
GW-07	08/06/2002		1.1	<	1.1	
GW-08	08/06/2002	<	1.1	<	1.1	
GW-11	08/06/2002	<	1.1	<	1.1	
GW-14	08/06/2002	<	1.1	<	1.1	

Irrigation Waters

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-07	08/06/2002			
SW-07	08/13/2002	930	930	
SW-08	08/13/2002	11000	930	

Reservoirs

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
HPR	08/13/2002	30	2	2

Surfacewaters: Carson R

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-01	08/13/2002	39	9	
SW-05	08/06/2002			
SW-05	08/13/2002	430	430	
SW-06	08/13/2002	1500	750	

Surfacewaters: Indian Cr

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-02	08/13/2002			
SW-03	08/13/2002	430	230	
SW-04	08/13/2002	230	90	

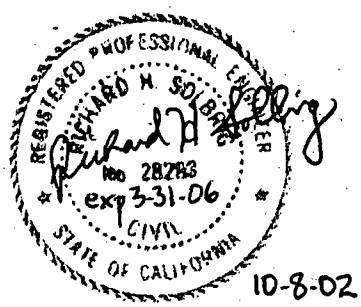
Site	Location	TDS		Cl		TKN		NO_3-N		Total N		Total P		SO_4		Boron		Exch Na %	
		Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence
SW-01	Carson River, Woodfords	55	✓	1.0	✓	0.13		0.02		0.15		0.02		2.0		0.02		20	N/A
SW-06	Carson River, Stateline	70	✓	2.5	✓	0.22		0.03		0.25		0.03		2.0	✓	0.02	✓	20	N/A
SW-02	Indian Creek, Upper	100		6.0						0.30		0.03		8.0		0.25		30	
SW-03	Indian Creek, Mid	100	✓	6.0						0.30		0.03	✓	8.0		0.25		30	
SW-04	Indian Creek, Lower	100	✓	6.0						0.30	✓	0.03	✓	8.0		0.25		30	
SW-10	Indian Creek, Stateline	100		6.0						0.30	✓	0.03		8.0		0.25		30	

September blue-green algae results will be sent as soon as they are completed. Surfacewater calcium and magnesium have not yet been analyzed. These results and the calculated SAR and Exchangeable Sodium will be sent as soon as they are available.

Certification

I hereby certify that the enclosed monitoring report was prepared under my direct supervision and that I am a duly Registered Engineer under the laws of the State of California.

Sincerely,



10-8-02

Richard Solbrig,
Assistant Manager/Engineer

Enclosures:

1.

September Monthly Report	Pages
Wastewater Treatment plant	2
Permit Compliance Record	1
Export pipeline inspection	0
Sample site locations	2
Tahoe Basin: Monitoring wells (ERB) and Heavenly Valley Creek (HVC)	1
Alpine County Surfacewaters, Groundwaters, and HPR	4
Total number of pages:	10

cc: Calif. Dept. of Health Services, ODW - Jess Morehouse
El Dorado Co. Dept. of Environmental Health - Virginia Huber
Nevada Division of Environmental Protection - Wendel McCurry
Alpine County Health Department - Dr. Richard Botto
Alpine County Health Department - Jim Goodloe
Alpine County Board of Supervisors
Desert Research Group (Alpine County Consultants) - David McGraw
STPUD Board of Directors
STPUD General Manager / District Engineer - Robert G. Baer
STPUD Manager of Operations - Ross Johnson
STPUD Operations Chief Plant Operator - Jeff Lee
STPUD Laboratory Director - Terry Powers
STPUD Manager of Alpine County Operations - Hal Bird

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SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

SEPTEMBER 2002

		FLOW MGD					PRECIP		D.O. mg/L	COD mg/L		BOD mg/L		SS mg/L	
Date	Day	Inf	2-Hr Peak Inf	Eff	Pond Return	Pond Inf	Inch	Type	Fin	Raw	Fin	Raw	Fin	Raw	Fin
09/01/02	Sun	5.72	8.6	5.30					4.41	480					
09/02/02	Mon	4.77	8.0	4.74					4.08	455					
09/03/02	Tue	4.18	6.0	4.08					4.54	408					
09/04/02	Wed	4.18	5.6	3.82					5.51	439	34.8	147	5.1	179	2.8
09/05/02	Thu	4.25	5.5	4.07					6.06	366					
09/06/02	Fri	4.09	5.6	3.88			0.01	Rain	4.71	422					
09/07/02	Sat	4.80	6.6	4.53					5.59	403	34.7	153	5.4	146	2.4
09/08/02	Sun	4.48	7.0	4.16					5.14	424					
09/09/02	Mon	4.19	5.7	4.06					5.42	383	39.3	157	5.2	159	2.3
09/10/02	Tue	3.93	5.6	3.64					5.51	434					
09/11/02	Wed	4.01	5.7	4.05					4.35	479					
09/12/02	Thu	3.95	5.6	3.71					5.47	376					
09/13/02	Fri	4.15	5.6	4.08					5.31	428					
09/14/02	Sat	4.52	6.5	4.40					5.56	436	46.8	148	7.1	161	2.0
09/15/02	Sun	4.48	7.0	4.14					5.37	417					
09/16/02	Mon	4.10	5.9	3.98					5.24	343					
09/17/02	Tue	3.98	5.8	3.57					5.63	330					
09/18/02	Wed	3.94	5.4	3.86					5.14	524	42.4	172	7.3	202	3.2
09/19/02	Thu	4.04	5.3	3.64					5.22	362					
09/20/02	Fri	4.05	5.8	4.23					4.89	413					
09/21/02	Sat	4.49	6.5	4.29					5.20	427	42.5	174	5.6	160	2.3
09/22/02	Sun	4.39	6.9	4.03					5.33	420					
09/23/02	Mon	4.04	5.6	3.94					5.01	387					
09/24/02	Tue	3.94	5.6	3.59					5.02	383	43.5	157	5.9	141	2.8
09/25/02	Wed	3.88	5.9	4.08					4.90	416					
09/26/02	Thu	3.80	5.5	3.29						395					
09/27/02	Fri	4.16	5.5	4.08					4.87	421					
09/28/02	Sat	4.36	6.7	4.12					4.97	414	30.9	184	6.1	147	1.9
09/29/02	Sun	4.46	7.1	4.19					4.75	422					
09/30/02	Mon	4.05	5.6	3.66					4.93	454					
Permit Max		7.7									300		45		60
Permit Min															
Permit Ave											60		30		30
Total		127.38	183.7	121.21			0.01		148.13	12461	314.9	1292	47.6	1295	19.6
Maximum		5.72	8.6	5.30			0.01		6.06	524	46.8	184	7.3	202	3.2
Minimum		3.80	5.3	3.29			0.01		4.08	330	30.9	147	5.1	141	1.9
Average		4.25	6.1	4.04			0.01		5.11	415	39.4	162	6.0	162	2.4
# Tests		30	30	30	0	0	1		29	30	8	8	8	8	8

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

SEPTEMBER 2002

Date	Day	SETTLEABLE SOLIDS mL/L Raw		SETTLEABLE SOLIDS mL/L Fin	MBAS mg/L Raw	MBAS mg/L Fin	pH Units Raw	pH Units Fin	TURBIDITY NTU Fin	Cl2 mg/L Fin	FINAL COLIFORMS MPN/100 mL Total		FINAL COLIFORMS MPN/100 mL 7day- Median		TDS mg/L Raw	TDS mg/L Fin	ALKALINITY mg/L Raw	ALKALINITY mg/L Fin
09/01/02	Sun	12.0	<	0.1			7.49	7.38	5.20	4.27	<	2	<	2			186	156
09/02/02	Mon	11.0	<	0.1			7.56	7.31	4.90	8.16	<	2	<	2			181	160
09/03/02	Tue	9.0	<	0.1			7.56	7.39	3.40	8.35	<	2	<	2			163	147
09/04/02	Wed	12.0	<	0.1			7.62	7.52	3.00	3.88	<	2	<	2	254		164	139
09/05/02	Thu	9.0	<	0.1			7.54	7.34	3.50	3.40	<	2	<	2			144	137
09/06/02	Fri	10.0	<	0.1			7.45	7.28	3.45	6.70	<	2	<	2			154	134
09/07/02	Sat	10.5	<	0.1			7.51	7.64	3.25	6.02	<	2	<	2			166	137
09/08/02	Sun	11.0	<	0.1			7.48	7.32	3.40	4.57	<	2	<	2			167	140
09/09/02	Mon	11.0	<	0.1			7.47	7.28	2.80	7.77	<	2	<	2	245	224	158	134
09/10/02	Tue	11.0	<	0.1			7.41	7.19	2.84	4.47	<	2	<	2			151	126
09/11/02	Wed	13.0	<	0.1			7.40	7.20	3.15	6.99	<	2	<	2			157	122
09/12/02	Thu	11.0	<	0.1			7.36	7.18	3.50	4.95	<	2	<	2			155	120
09/13/02	Fri	11.0	<	0.1			7.43	7.18	3.20	4.47	<	2	<	2			164	120
09/14/02	Sat	11.5	<	0.1			7.45	7.32	3.80	3.59	<	2	<	2			168	127
09/15/02	Sun	10.0	<	0.1			7.49	7.26	3.75	3.88		2	<	2			168	132
09/16/02	Mon	11.0	<	0.1			7.42	7.24	3.40	8.35	<	2	<	2			158	130
09/17/02	Tue	9.0	<	0.1			7.40	7.20	2.80	5.34	<	2	<	2			154	122
09/18/02	Wed	13.0	<	0.1			7.45	7.30	3.10	5.63	<	2	<	2	255	234	161	118
09/19/02	Thu	9.0	<	0.1			7.40	7.15	3.40	4.76	<	2	<	2			158	116
09/20/02	Fri	10.0	<	0.1			7.43	7.11	3.00	3.89	<	2	<	2			159	113
09/21/02	Sat	10.5	<	0.1			7.44	7.15	2.70	3.05	<	2	<	2			169	116
09/22/02	Sun	10.0	<	0.1			7.47	7.32	3.00	4.46	<	2	<	2			172	120
09/23/02	Mon	9.5	<	0.1			7.44	7.23	3.70	5.92	<	2	<	2			159	128
09/24/02	Tue	9.5	<	0.1			7.50	7.32	3.50	8.64	<	2	<	2	261	238	161	117
09/25/02	Wed	9.5	<	0.1			7.49	7.40	3.90	5.34	<	2	<	2			163	116
09/26/02	Thu	9.5	<	0.1			7.43	7.14	4.00	6.41	<	2	<	2			159	124
09/27/02	Fri	11.5	<	0.1			7.43	7.28	3.65	5.25	<	2	<	2			164	129
09/28/02	Sat	11.0	<	0.1			7.38	7.41	3.40	4.57	<	2	<	2			169	139
09/29/02	Sun	11.0	<	0.1			7.42	7.25	3.30	4.57	<	2	<	2			170	145
09/30/02	Mon	10.5	<	0.1			7.37	7.28	2.80	7.48	<	2	<	2			162	139
Permit Max				0.1		2.0		8.5	20			240		23				
Permit Min								6.5										
Permit Ave						1.0			10									
Total		317.5		3.0	0.00	0.000	223.69	218.57	102.79	165.13		60		60	1015	696	4884	3903
Maximum		13.0		0.1	ERR	ERR	7.62	7.64	5.20	8.64		2		2	261	238	186	160
Minimum		9.0		0.1	ERR	ERR	7.36	7.11	2.70	3.05		2		2	245	224	144	113
Average		10.6		0.1	ERR	ERR	7.46	7.29	3.43	5.50		2		2	254	232	163	130
# Tests		30		30	0	0	30	30	30	30		30		30	4	3	30	30

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT
COMPLIANCE RECORD

2002

Parameter	# Tests	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Compliance, %
Total Plant Inflow; 7.7 MGD; Dry Weather	273	0	0	0	0	0	0	0	0	0					100.0
2-Hour Peak Inflow; 18.5 MGD	272	0	0	0	0	0	0	0	0	0					100.0
COD, 30 Day Ave: 60 mg/L	9	0	0	0	0	0	0	0	0	0					100.0
COD, Max: 300 mg/L	77	0	0	0	0	0	0	0	0	0					100.0
BOD, 30 Day Ave: 30 mg/L	9	0	0	0	0	0	0	0	0	0					100.0
BOD, Max: 45 mg/L	67	0	0	0	0	0	0	0	0	0					100.0
SS, 30 Day Ave: 30 mg/L	9	0	0	0	0	0	0	0	0	0					100.0
SS, Max: 60 mg/L	77	0	0	0	0	0	0	0	0	0					100.0
Settleable Solids, Max: 0.1 mL/L	271	0	0	0	0	0	0	0	0	0					100.0
Turbidity, 30 Day Ave: 10 NTU	9	0	0	0	0	0	0	0	0	0					100.0
Turbidity, Max: 20 NTU	271	0	0	0	0	0	0	0	0	0					100.0
pH, 6.5 to 8.5	271	0	0	0	0	0	0	0	0	0					100.0
Total Coliforms, Max: 240 MPN/100 mL	271	0	0	0	0	0	0	0	0	0					100.0
Total Coliforms, 7-day Median: 23 MPN	271	0	0	0	0	0	0	0	0	0					100.0
Total	2,157	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0

SAMPLE LOCATIONS

TAHOE BASIN MONITORING WELLS

Site	Location
ERB	Emergency Retention Basin
CONTROL	North of Post Office
MW02-25, -50	Emergency Retention Basin, S side
MW03-25, -50	Emergency Retention Basin, S side
MW04-25, -50	Emergency Retention Basin, W side
MW07-25, -50	Emergency Retention Basin, N side
MW08-25, -50	Pond #1, SW corner
MW11	S.E. corner of wastewater treatment plant grounds
MW12	South of Emergency Pump Building, for buried sludge
MW13	Pond 2, along Heavenly Valley Creek, for buried sludge

HEAVENLY VALLEY CREEK

HVC-1	At Pioneer Trail
HVC-2	250 ft upstream of Pond #2
HVC-3	25 ft downstream of Johnson Blvd.
HVC-4	Effluent of drain pipe from Lower Shop area
HVC-5	Effluent of drainage pipe along Johnson Blvd, 10 feet upstream of Johnson Blvd.

ALPINE COUNTY MONITORING WELLS

Site	Location
ACMW-01AW	Below main dam at Harvey Place Reservoir
ACMW-01BE	Below auxiliary dam at Harvey Place Reservoir
ACMW-02, N&S	On dam access road at Diamond Valley Road
ACMW-03	Bruns ranch, east side of Highway 88
ACMW-04W	Gansberg ranch, west side of Highway 88
ACMW-05	Dressler ranch
ACMW-06, N&S	Celio ranch, on Diamond Valley Road

ALPINE SOILS

Site	Ranch
S2	Celio
S3	Hall
S4	Gansberg
S5	Gansberg
S6	Neddenriep
S7	Bruns
S8	Dressler

ALPINE GROUNDWATERS

Site	Homeowner
GW-01	Sagues
GW-03	Smith/Springmeyer
GW-04	Celio
GW-05	Neddenriep
GW-07	Gansberg, Jr.
GW-08	Arant
GW-11	Diamond Valley School
GW-14	Sierra Pines Store

ALPINE SURFACEWATERS

Site	Location
SW-01	Carson River, Woodfords
SW-02	Indian Creek, @ HWY 89
SW-03	Indian Creek, @ upper bridge
SW-04	Indian Creek, @ lower bridge
SW-05	Carson River, Paynesville
SW-06	Carson River, Stateline
SW-07	Fredericksberg Ditch, Stateline
SW-08	Irrigation Ditch along Carson River Road
SW-09	Carson River, Dressler Lane
SW-10	Indian Creek, @ Smith-Springmeyer Ranch

TAHOE BASIN MONITORING

Site	Date	ID	Location	Depth msl	Temp C	pH	EC umho	Cl mg/L		COD mg/L	TKN mg/L	NO3-N mg/L	Comment
Buried Sludge Monitoring													
MW11	09/24/02	20020924-31	Sludge Pond	6261.8	10.3	6.81	99	1.4		8.9		0.191	
MW12	09/24/02	20020924-32	Sludge Pond	6261.8	11.1	6.14	107	3.4	<	5.0		0.363	
MW13	09/24/02	20020924-33	Sludge Pond	6254.4	10.2	6.46	710	4.5		20.5		1.650	
ERB Monitoring													
CONTROL	09/24/02	20020924-26	At Post Office	6278.5	11.2	6.86	182	8.0		9.7		2.360	
MW01.5	09/24/02	0020924-MW01.	SW corner of ERB										Dry
MW02-50	09/24/02	20020924-MW02	Black Bart side of ERB										Dry
MW03-50	09/24/02	20020924-27	Black Bart side of ERB	6267.2	11.8	5.91	704	56.1		9.1		29.400	
MW04-50	09/24/02	20020924-28	Hank Monk side of ERB	6266.7	10.5	6.21	83	4.4		5.7		0.074	
MW07-50	09/24/02	20020924-29	North side of ERB	6275.9	9.0	6.51	248	21.9		8.3		0.562	
Heavenly Valley Creek													
HVC-1	09/18/02	20020918-HVC1	Downstream of Pioneer										Dry
HVC-2	09/18/02	20020918-HVC2	250' upstream of Pond #2										Dry
HVC-3	09/18/02	20020918-HVC3	25' downstream of Johnson Blvd										Dry
HVC-4	09/18/02	20020918-HVC4	Effluent of drain from Lower Shop a										Dry
HVC-5	09/18/02	20020918-HVC5	Effluent of drainage pipe along Johi										Dry
Treatment Plant Monitoring													
MW08-25	09/24/02	20020924-30	SW side of Pond #1	6245.1	12.0	6.42	1030	40.3		107.0		0.041	

ALPINE COUNTY MONITORING

Site	Date	ID	Location	Temp C	pH	EC umhos	DO mg/L	Alk mg/L	TDS mg/L	SS mg/L	Turb NTU	Cl mg/L	SO4 mg/L
Alpine Monitoring Wells													
ACMW-01AW	09/17/2002	20020917-10	Main Dam	13.6	6.46	86		39	70			2.7	2.3
ACMW-01BE	09/17/2002	20020917-11	Secondary Dam	11.1	6.50	82		40	66			2.2	1.3
ACMW-02N	09/17/2002	20020917-12	Access Gate	13.0	6.95	119		59	87			2.9	2.8
ACMW-02S	09/17/2002	20020917-13	Access Gate	15.1	6.30	101		53	73			2.0	1.5
ACMW-03	09/17/2002	20020917-14	HWY 88	16.9	5.73	372		50	217			68.0	18.2
ACMW-04W	09/17/2002	20020917-15	Gansberg	14.5	6.02	208		44	139			28.4	6.6
ACMW-06N	09/17/2002	20020917-16	Celio	12.3	6.96	678		266	433			59.2	24.1
ACMW-06S	09/17/2002	20020917-17	Celio	13.8	6.88	709		276	458			67.6	32.2
Groundwaters													
GW-03	09/11/2002	20020911-08	Smith/Springmeyer	17.6	7.10	301		132	230			1.7	27.6
GW-04	09/11/2002	20020911-09	Celio	15.3	7.57	253		122	206			3.5	12.0
GW-05	09/11/2002	20020911-10	Neddenriep	14.4	7.51	238		61	170			22.6	12.0
GW-07	09/11/2002	20020911-11	Gansberg	12.5	7.22	114		51	98			1.6	3.1
GW-08	09/11/2002	20020911-12	Arant	14.8	6.93	261		48	182			29.1	11.0
GW-11	09/11/2002	20020911-13	Diamond Val. School	15.6	6.48	143		77	121			0.8	0.9
GW-14	09/11/2002	20020911-14	Sierrra Pines	15.3	6.48	110		54	104			1.3	1.9
Irrigation Waters													
SW-07	09/03/2002	20020903-SW07	Fredericksburg Ditch										
SW-07	09/11/2002	20020911-SW07	Fredericksburg Ditch										
SW-08	09/03/2002	20020903-20	Irrigation Ditch	21.9	7.36	132	4.37	62	104	60.90	4.45	1.6	4.5
Reservoirs													
HPR	09/03/2002	20020903-21	Harvey Place Reservoir	19.5	8.46	436	9.90	93	246	58.60	10.3	60.7	18.2
Surfacewaters: Carson R													
SW-01	09/03/2002	20020903-15	Carson R Woodfords	13.1	7.77	79	8.90	37	56	0.70	.13	1.2	1.9
SW-05	09/03/2002	20020903-18	Carson R Paynesville	17.0	8.55	98	7.92	46	72	0.98	.52	1.7	2.8
SW-05	09/11/2002	20020911-16	Carson R Paynesville	12.7	7.84	81			71			1.4	2.4
SW-06	09/03/2002	20020903-19	Carson R Stateline	19.2	8.75	104	7.66	46	78	1.12	.56	2.7	3.1
Surfacewaters: Indian Cr													
SW-02	09/03/2002	20020903-SW02	Indian Cr Upper										
SW-03	09/03/2002	20020903-16	Indian Cr Mid	15.2	7.41	268	5.40	135	178	29.60	14.3	5.5	1.8
SW-04	09/03/2002	20020903-17	Indian Cr Lower	16.9	7.24	174	6.33	88	126	33.00	10.6	2.9	1.0

ALPINE COUNTY MONITORING

Site	Date	TotalP mg/L	PO4-P mg/L	TKN mg/L	NH3-N mg/L	NO2-N mg/L	NO3-N mg/L	Total N mg/L
Alpine Monitoring Wells								
ACMW-01AV	09/17/2002	0.026		< 0.100		< 0.010	0.459	0.569
ACMW-01BE	09/17/2002	0.028		< 0.100		< 0.010	0.176	0.286
ACMW-02N	09/17/2002	0.018		< 0.100		< 0.010	0.123	0.233
ACMW-02S	09/17/2002	0.018		0.167		< 0.010	0.019	0.196
ACMW-03	09/17/2002	0.056		0.298		< 0.040	3.080	3.418
ACMW-04W	09/17/2002	0.017		0.154		< 0.020	2.270	2.444
ACMW-06N	09/17/2002	0.296		0.289		< 0.010	< 0.010	0.309
ACMW-06S	09/17/2002	0.043		0.327		< 0.010	0.024	0.361
Groundwaters								
GW-03	09/11/2002	0.037		< 0.100		< 0.010	0.739	0.849
GW-04	09/11/2002	0.054		< 0.100		< 0.010	0.841	0.951
GW-05	09/11/2002	0.031		< 0.100		< 0.030	3.200	3.330
GW-07	09/11/2002	0.103		0.278		< 0.010	1.140	1.428
GW-08	09/11/2002	0.043		< 0.100		< 0.050	5.760	5.910
GW-11	09/11/2002	0.050		< 0.100		< 0.010	0.444	0.554
GW-14	09/11/2002	0.064		< 0.100		< 0.010	0.506	0.616
Irrigation Waters								
SW-07	09/03/2002							
SW-07	09/11/2002							
SW-08	09/03/2002	0.121	0.025	0.463	0.104	0.010	0.156	0.629
Reservoirs								
HPR	09/03/2002	2.820	2.410	10.500	8.970	0.718	2.000	13.218
Surfacewaters: Carson R								
SW-01	09/03/2002	0.011	< 0.010	< 0.100	0.078	< 0.010	0.013	0.123
SW-05	09/03/2002	0.028	< 0.010	0.112	0.087	< 0.010	0.020	0.142
SW-05	09/11/2002	0.024	< 0.010	0.176	0.072	< 0.010	0.016	0.202
SW-06	09/03/2002	0.013	< 0.010	0.138	0.086	< 0.010	0.029	0.177
Surfacewaters: Indian Cr								
SW-02	09/03/2002							
SW-03	09/03/2002	0.184	0.017	0.321	0.090	< 0.010	< 0.010	0.341
SW-04	09/03/2002	0.112	0.021	0.306	0.097	< 0.010	< 0.010	0.326

ALPINE COUNTY MONITORING

Site	Date	COD mg/L	BOD mg/L	O & G mg/L	Boron mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	SAR	Exch Na %	Hardness mg/L	Water Level MSL or Ft
Alpine Monitoring Wells													
ACMW-01AV	09/17/2002												5480.8
ACMW-01BE	09/17/2002												5488.0
ACMW-02N	09/17/2002												5458.0
ACMW-02S	09/17/2002												5458.8
ACMW-03	09/17/2002												5039.0
ACMW-04W	09/17/2002												4904.4
ACMW-06N	09/17/2002												5214.2
ACMW-06S	09/17/2002												5204.8
Groundwaters													
GW-03	09/11/2002												
GW-04	09/11/2002												
GW-05	09/11/2002												
GW-07	09/11/2002												
GW-08	09/11/2002												
GW-11	09/11/2002												
GW-14	09/11/2002												
Irrigation Waters													
SW-07	09/03/2002												
SW-07	09/11/2002												
SW-08	09/03/2002		1.3		0.02			10.3	2.8				
Reservoirs													
HPR	09/03/2002	50	14.2		0.22			44.2	10.2				29.5
Surfacewaters: Carson R													
SW-01	09/03/2002		0.2		0.02			4.2	1.7				
SW-05	09/03/2002		0.6		0.02			5.8	2.1				
SW-05	09/11/2002												
SW-06	09/03/2002		0.5		0.03			6.0	2.2				
Surfacewaters: Indian Cr													
SW-02	09/03/2002												
SW-03	09/03/2002		3.1		0.05			16.9	3.2				
SW-04	09/03/2002		0.5		0.05			8.9	3.0				

ALPINE COUNTY
BACTERIOLOGICAL MONITORING

Alpine Monitoring Wells

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
ACMW-01AV	09/17/2002	<	1.1	<	1.1	
ACMW-01BE	09/17/2002	<	1.1	<	1.1	
ACMW-02N	09/17/2002	<	1.1	<	1.1	
ACMW-02S	09/17/2002	<	1.1	<	1.1	
ACMW-03	09/17/2002		6.9	<	1.1	
ACMW-04W	09/17/2002	<	1.1	<	1.1	
ACMW-06N	09/17/2002	<	1.1	<	1.1	
ACMW-06S	09/17/2002	<	1.1	<	1.1	

Groundwaters

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
GW-03	09/11/2002	<	1.1	<	1.1	
GW-04	09/11/2002		2.2	<	1.1	
GW-05	09/11/2002	<	1.1	<	1.1	
GW-07	09/11/2002	<	1.1	<	1.1	
GW-08	09/11/2002	<	1.1	<	1.1	
GW-11	09/11/2002	<	1.1	<	1.1	
GW-14	09/11/2002	<	1.1	<	1.1	

Irrigation Waters

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-07	09/03/2002					
SW-07	09/11/2002					
SW-08	09/03/2002	>	11000		4600	

Reservoirs

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
HPR	09/03/2002	110	8	300

Surfacewaters: Carson R

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-01	09/03/2002		43	<	3	
SW-05	09/03/2002		210		40	
SW-05	09/11/2002					
SW-06	09/03/2002		40	<	30	

Surfacewaters: Indian Cr

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-02	09/03/2002			
SW-03	09/03/2002	930	230	
SW-04	09/03/2002	930	90	

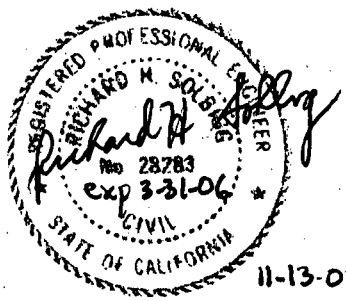
Site	Location	TDS		Cl		TKN		NO_3-N		Total N		Total P		SO_4		Boron		Exch Na %	
		Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence
SW-01	Carson River, Woodfords	55	✓	1.0	✓	0.13	✓	0.02		0.15	✓	0.02		2.0	✓	0.02		20	✓
SW-06	Carson River, Stateline	70	✓	2.5	✓	0.22		0.03	✓	0.25		0.03		2.0	✓	0.02		20	✓
SW-02	Indian Creek, Upper	100		6.0						0.30		0.03		8.0		0.25		30	
SW-03	Indian Creek, Mid	100	✓	6.0						0.30	✓	0.03	✓	8.0		0.25		30	
SW-04	Indian Creek, Lower	100	✓	6.0						0.30	✓	0.03	✓	8.0		0.25		30	
SW-10	Indian Creek, Stateline	100		6.0						0.30		0.03		8.0		0.25		30	

September and October blue-green algae results will be sent as soon as they are completed. Surfacewater calcium and magnesium results are included in this report. Also included in this report are the soil results from March, June and September, 2002.

Certification

I hereby certify that the enclosed monitoring report was prepared under my direct supervision and that I am a duly Registered Engineer under the laws of the State of California.

Sincerely,



11-13-02

Richard Solbrig,
Assistant Manager/Engineer

Enclosures:

1.

October Monthly Report	Pages
Wastewater Treatment plant	2
Permit Compliance Record	1
Export pipeline inspection	1
Sample site locations	2
Tahoe Basin: Monitoring wells (ERB) and Heavenly Valley Creek (HVC)	1
Alpine County Surfacewaters, Groundwaters, and HPR	4
Alpine County Surfacewaters for September	1
Alpine County Soils for March, June, and September	3
Total number of pages:	15

cc: Calif. Dept. of Health Services, ODW - Jess Morehouse
El Dorado Co. Dept. of Environmental Health - Virginia Huber
Nevada Division of Environmental Protection - Wendel McCurry
Alpine County Health Department - Dr. Richard Botto
Alpine County Health Department - Jim Goodloe
Alpine County Board of Supervisors
Desert Research Group (Alpine County Consultants) - David McGraw
STPUD Board of Directors
STPUD General Manager / District Engineer - Robert G. Baer
STPUD Manager of Operations - Ross Johnson
STPUD Operations Chief Plant Operator - Jeff Lee
STPUD Laboratory Director - Terry Powers
STPUD Manager of Alpine County Operations - Hal Bird

File: \LAHONTAN\10-02 Report.WPD

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

OCTOBER 2002

		FLOW MGD					PRECIP		D.O. mg/L	COD mg/L		BOD mg/L		SS mg/L	
Date	Day	Inf	2-Hr Peak Inf	Eff	Pond Return	Pond Inf	Inch	Type	Fin	Raw	Fin	Raw	Fin	Raw	Fin
10/01/02	Tue	3.94	5.2	3.89			0.06	Snow	4.89	388					
10/02/02	Wed	3.89	5.6	3.54					4.64	449	35.2	184	4.9	190	2.4
10/03/02	Thu	3.93	5.4	3.64			0.01	Rain	4.30	388					
10/04/02	Fri	3.83	5.6	3.50			0.02	Rain	4.91	427					
10/05/02	Sat	4.36	6.4	4.41					4.99	445	34.8	169	5.4	163	2.8
10/06/02	Sun	4.43	6.6	4.05					5.20	477					
10/07/02	Mon	3.75	5.4	3.67					5.06	402					
10/08/02	Tue	3.77	5.2	3.51					5.30	395					
10/09/02	Wed	3.81	5.1	3.71					5.12	419	40.0			182	4.0
10/10/02	Thu	3.80	5.2	3.62					5.33	363					
10/11/02	Fri	3.81	5.1	3.53					5.50	399					
10/12/02	Sat	4.36	6.4	4.22					5.50	456	47.4	175	6.7	157	3.3
10/13/02	Sun	4.42	6.6	4.11					5.46	435					
10/14/02	Mon	3.85	5.0	0.00		3.72				408					
10/15/02	Tue	3.62	5.1	0.00		3.70				379					
10/16/02	Wed	3.92	5.7	0.00		4.04				457		201		177	
10/17/02	Thu	3.66	5.0	4.86	1.24					456					
10/18/02	Fri	4.21	5.9	7.08	2.94				6.60	463					
10/19/02	Sat	4.65	6.4	7.33	2.67				4.35	414	52.0	193	9.2	149	4.9
10/20/02	Sun	4.28	6.8	5.60	1.28				5.29	449					
10/21/02	Mon	3.84	6.6	3.63	3.33				5.67	417					
10/22/02	Tue	3.57	5.2	3.40					5.29	393	43.5	146	5.6	135	2.4
10/23/02	Wed	3.53	5.6	3.57					5.20	394					
10/24/02	Thu	3.70	5.0	3.36					5.51	380					
10/25/02	Fri	3.74	5.1	3.42					5.65	396					
10/26/02	Sat	4.01	6.0	3.97					5.48	399	42.7	187	6.1	138	2.1
10/27/02	Sun	4.06	6.3	4.02					5.60	420					
10/28/02	Mon	3.82	5.3	3.63					5.57	415					
10/29/02	Tue	3.62	5.1	3.55					5.67	450	40.5	154	4.6	150	2.4
10/30/02	Wed	3.59	5.0	3.03					5.59	316					
10/31/02	Thu	3.52	4.8	3.64					5.08	324					
Permit Max		7.7									300		45		60
Permit Min															
Permit Ave											60		30		30
Total		121.29	173.7	113.49	11.46	11.46	0.09		142.75	12773	336.1	1409	42.5	1441	24.2
Maximum		4.65	6.8	7.33	3.33	4.04	0.06		6.60	477	52.0	201	9.2	190	4.9
Minimum		3.52	4.8	0.00	1.24	3.70	0.01		4.30	316	34.8	146	4.6	135	2.1
Average		3.91	5.6	3.66	2.29	3.82	0.03		5.29	412	42.0	176	6.1	160	3.0
# Tests		31	31	31	5	3	3		27	31	8	8	7	9	8

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

OCTOBER 2002

		SETTLEABLE SOLIDS mL/L			MBAS mg/L		pH Units		TURBIDITY NTU	Cl2 mg/L	FINAL COLIFORMS MPN/100 mL			TDS mg/L		ALKALINITY mg/L	
Date	Day	Raw		Fin	Raw	Fin	Raw	Fin	Fin	Fin	Total	7day-	Median	Raw	Fin	Raw	Fin
10/01/02	Tue	10.5	<	0.1			7.44	7.48	2.50	5.44	< 2	<	2			154	136
10/02/02	Wed	12.0	<	0.1			7.37	7.38	2.70	5.05	< 2	<	2	260	249	156	132
10/03/02	Thu	10.0	<	0.1			7.39	7.20	3.30	2.91	< 2	<	2			158	134
10/04/02	Fri	11.5	<	0.1			7.59	7.32	3.50	5.34	< 2	<	2			155	133
10/05/02	Sat	12.0	<	0.1			7.42	7.28	3.50	4.37	< 2	<	2			167	138
10/06/02	Sun	11.0	<	0.1			7.42	7.24	4.10	4.37	< 2	<	2			172	140
10/07/02	Mon	9.0	<	0.1			7.43	7.22	3.95	5.63	< 2	<	2			163	135
10/08/02	Tue	10.0	<	0.1			7.41	7.18	4.30	7.67	< 2	<	2			161	132
10/09/02	Wed	12.0	<	0.1			7.38	7.43	4.55	5.34	< 2	<	2	257	242	162	132
10/10/02	Thu	10.0	<	0.1			7.36	7.30	6.60	6.31	< 2	<	2			154	145
10/11/02	Fri	10.0	<	0.1			7.45	7.28	4.40	5.44	< 2	<	2			163	145
10/12/02	Sat	11.5	<	0.1			7.41	7.24	3.70	5.44	< 2	<	2			164	140
10/13/02	Sun	11.0	<	0.1			7.43	7.25	4.70	5.05	< 2	<	2			176	144
10/14/02	Mon	11.0					7.53									160	
10/15/02	Tue	10.0					7.40									158	
10/16/02	Wed	11.0					7.60									164	
10/17/02	Thu	10.5	<	0.1			7.52	7.36	5.75	6.00	< 2	<	2			162	120
10/18/02	Fri	10.5	<	0.1			7.43	7.32	5.45	4.60	< 2	<	2			165	124
10/19/02	Sat	10.0	<	0.1			7.36	7.52	4.90	4.60	< 2	<	2			165	127
10/20/02	Sun	11.5	<	0.1			7.60	7.46	4.15	4.90	< 2	<	2			168	129
10/21/02	Mon	10.0	<	0.1			7.55	7.57	3.35	8.00	< 2	<	2			154	129
10/22/02	Tue	9.5	<	0.1			7.47	7.60	2.50	8.00	< 2	<	2	251	243	155	124
10/23/02	Wed	11.0	<	0.1			7.59	7.43	2.80	6.20	< 2	<	2			154	123
10/24/02	Thu	11.0	<	0.1			7.30	7.28	2.80	4.60	< 2	<	2			145	116
10/25/02	Fri	11.0	<	0.1			7.38	7.22	2.70	4.30	2	<	2			148	120
10/26/02	Sat	10.0	<	0.1			7.38	7.36	2.90	6.00	< 2	<	2			151	120
10/27/02	Sun	11.0	<	0.1			7.50	7.27	2.90	5.80	< 2	<	2			154	119
10/28/02	Mon	10.0	<	0.1			7.52	7.43	2.60	6.40	< 2	<	2			155	114
10/29/02	Tue	10.0	<	0.1			7.46	7.34	2.40	5.40	< 2	<	2	253	236	151	114
10/30/02	Wed	12.0	<	0.1			7.35	7.18	2.70	5.50	< 2	<	2			147	116
10/31/02	Thu	11.0	<	0.1			7.38	7.16	2.70	7.30	< 2	<	2			147	122
Permit Max				0.1		2.0		8.5	20		240		23				
Permit Min								6.5									
Permit Ave						1.0			10								
Total		331.5		2.8	0.00	0.000	230.82	205.30	102.40	155.96	56		56	1021	970	4908	3603
Maximum		12.0		0.1	ERR	ERR	7.60	7.60	6.60	8.00	2		2	260	249	176	145
Minimum		9.0		0.1	ERR	ERR	7.30	7.16	2.40	2.91	2		2	251	236	145	114
Average		10.7		0.1	ERR	ERR	7.45	7.33	3.66	5.57	2		2	255	243	158	129
# Tests		31		28	0	0	31	28	28	28	28		28	4	4	31	28

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT
COMPLIANCE RECORD

2002

Parameter	# Tests	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Compliance, %
Total Plant Inflow; 7.7 MGD; Dry Weather	304	0	0	0	0	0	0	0	0	0	0				100.0
2-Hour Peak Inflow; 18.5 MGD	303	0	0	0	0	0	0	0	0	0	0				100.0
COD, 30 Day Ave: 60 mg/L	10	0	0	0	0	0	0	0	0	0	0				100.0
COD, Max: 300 mg/L	85	0	0	0	0	0	0	0	0	0	0				100.0
BOD, 30 Day Ave: 30 mg/L	10	0	0	0	0	0	0	0	0	0	0				100.0
BOD, Max: 45 mg/L	74	0	0	0	0	0	0	0	0	0	0				100.0
SS, 30 Day Ave: 30 mg/L	10	0	0	0	0	0	0	0	0	0	0				100.0
SS, Max: 60 mg/L	85	0	0	0	0	0	0	0	0	0	0				100.0
Settleable Solids, Max: 0.1 mL/L	299	0	0	0	0	0	0	0	0	0	0				100.0
Turbidity, 30 Day Ave: 10 NTU	10	0	0	0	0	0	0	0	0	0	0				100.0
Turbidity, Max: 20 NTU	299	0	0	0	0	0	0	0	0	0	0				100.0
pH, 6.5 to 8.5	299	0	0	0	0	0	0	0	0	0	0				100.0
Total Coliforms, Max: 240 MPN/100 mL	299	0	0	0	0	0	0	0	0	0	0				100.0
Total Coliforms, 7-day Median: 23 MPN	299	0	0	0	0	0	0	0	0	0	0				100.0
Total	2,386	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0

SOUTH TAHOE
PUBLIC UTILITY DISTRICT
MEMORANDUM

Date: October 24, 2002

To: Bob Baer, Lisa Coyner

From: David Johnson

Topic: Export Line Check

****

On October 23 Greg Schrempp, Heather Ross and I conducted our check of the District's export line from the treatment plant to station 564+06 near the Harvey Place reservoir..

Several wet spots were checked. However, nothing positive was found. No damage to the pipe was found.

CC Terry Powers

EXPRT800.MEM

TAHOE BASIN MONITORING

Site	Date	ID	Location	Depth msl	Temp C	pH	EC umho	Cl mg/L	COD mg/L	TKN mg/L	NO3-N mg/L	Comment
Buried Sludge Monitoring												
MW11	10/22/02	20021022-13	Sludge Pond	6261.6	8.2	6.39	103	1.4	7.3		0.177	
MW12	10/22/02	20021022-14	Sludge Pond	6261.5	9.7	6.05	114	1.4	10.2		0.361	
MW13	10/22/02	20021022-15	Sludge Pond	6254.1	9.1	7.18	724	4.1	14.2		1.360	
ERB Monitoring												
CONTROL	10/22/02	20021022-08	At Post Office	6278.3	9.6	6.83	177	8.1	5.0		2.380	
MW01.5	10/22/02	20021022-MW1.5	SW corner of ERB									Dry
MW02-50	10/22/02	20021022-MW02	Black Bart side of ERB									Dry
MW03-50	10/22/02	20021022-09	Black Bart side of ERB	6267.2	10.5	5.69	713	60.2	8.0		29.200	
MW04-50	10/22/02	20021022-10	Hank Monk side of ERB	6266.8	8.3	5.84	79	4.6 <	5.0		0.075	
MW07-50	10/22/02	20021022-11	North side of ERB	6275.7	9.1	6.60	252	21.9	5.4		0.573	
Heavenly Valley Creek												
HVC-1	10/16/02	20021016-HVC1	Downstream of Pioneer									Dry
HVC-2	10/16/02	20021016-HVC2	250' upstream of Pond #2									Dry
HVC-3	10/16/02	20021016-HVC3	25' downstream of Johnson Blvd									Dry
HVC-4	10/16/02	20021016-HVC4	Effluent of drain from Lower Shop a									Dry
HVC-5	10/16/02	20021016-HVC5	Effluent of drainage pipe along Johi									Dry
Treatment Plant Monitoring												
MW08-25	10/22/02	20021022-12	SW side of Pond #1	6245.0	11.5	6.29	1017	41.6	94.6		0.036	

SAMPLE LOCATIONS

TAHOE BASIN MONITORING WELLS

Site	Location
ERB	Emergency Retention Basin
CONTROL	North of Post Office
MW02-25, -50	Emergency Retention Basin, S side
MW03-25, -50	Emergency Retention Basin, S side
MW04-25, -50	Emergency Retention Basin, W side
MW07-25, -50	Emergency Retention Basin, N side
MW08-25, -50	Pond #1, SW corner
MW11	S.E. corner of wastewater treatment plant grounds
MW12	South of Emergency Pump Building, for buried sludge
MW13	Pond 2, along Heavenly Valley Creek, for buried sludge

HEAVENLY VALLEY CREEK

HVC-1	At Pioneer Trail
HVC-2	250 ft upstream of Pond #2
HVC-3	25 ft downstream of Johnson Blvd.
HVC-4	Effluent of drain pipe from Lower Shop area
HVC-5	Effluent of drainage pipe along Johnson Blvd, 10 feet upstream of Johnson Blvd.

ALPINE COUNTY MONITORING WELLS

Site	Location
ACMW-01AW	Below main dam at Harvey Place Reservoir
ACMW-01BE	Below auxiliary dam at Harvey Place Reservoir
ACMW-02, N&S	On dam access road at Diamond Valley Road
ACMW-03	Bruns ranch, east side of Highway 88
ACMW-04W	Gansberg ranch, west side of Highway 88
ACMW-05	Dressler ranch
ACMW-06, N&S	Celio ranch, on Diamond Valley Road

ALPINE SOILS

Site	Ranch
S2	Celio
S3	Hall
S4	Gansberg
S5	Gansberg
S6	Neddenriep
S7	Bruns
S8	Dressler

ALPINE GROUNDWATERS

Site	Homeowner
GW-01	Sagues
GW-03	Smith/Springmeyer
GW-04	Celio
GW-05	Neddenriep
GW-07	Gansberg, Jr.
GW-08	Arant
GW-11	Diamond Valley School
GW-14	Sierra Pines Store

ALPINE SURFACEWATERS

Site	Location
SW-01	Carson River, Woodfords
SW-02	Indian Creek, @ HWY 89
SW-03	Indian Creek, @ upper bridge
SW-04	Indian Creek, @ lower bridge
SW-05	Carson River, Paynesville
SW-06	Carson River, Stateline
SW-07	Fredericksberg Ditch, Stateline
SW-08	Irrigation Ditch along Carson River Road
SW-09	Carson River, Dressler Lane
SW-10	Indian Creek, @ Smith-Springmeyer Ranch

ALPINE COUNTY MONITORING

Site	Date	ID	Location	Temp C	pH	EC umhos	DO mg/L	Alk mg/L	TDS mg/L	SS mg/L	Turb NTU	Cl mg/L	SO4 mg/L
Alpine Monitoring Wells													
ACMW-01AW	10/15/2002	20021015-10	Main Dam	12.8	6.42	98		39	78			4.5	2.1
ACMW-01BE	10/15/2002	20021015-11	Secondary Dam	11.3	6.32	83		38	55			1.7	1.5
ACMW-02N	10/15/2002	20021015-12	Access Gate	12.2	6.60	116		58	80			2.6	2.5
ACMW-02S	10/15/2002	20021015-13	Access Gate	15.0	6.47	99		48	75			1.6	1.5
ACMW-03	10/15/2002	20021015-MW0	HWY 88										
ACMW-04W	10/15/2002	20021015-14	Gansberg	12.9	6.23	209		45	142			27.9	6.8
ACMW-06N	10/15/2002	20021015-15	Celio	11.8	6.96	709		265	435			58.3	24.0
ACMW-06S	10/15/2002	20021015-16	Celio	11.8	6.92	673		258	449			63.5	31.8
Groundwaters													
GW-03	10/08/2002	20021008-15	Smith/Springmeyer	15.5	7.55	293		39	231			1.5	26.0
GW-04	10/08/2002	20021008-16	Celio	15.5	7.68	247		126	204			3.5	11.4
GW-05	10/08/2002	20021008-17	Neddenriep	12.9	6.18	239		65	166			21.9	11.4
GW-07	10/08/2002	20021008-18	Gansberg	11.9	6.44	112		56	96			1.6	3.1
GW-08	10/08/2002	20021008-19	Arant	14.3	6.50	256		52	179			30.4	10.7
GW-11	10/08/2002	20021008-20	Diamond Val. School	14.7	7.01	141		79	118			0.7	0.7
GW-14	10/08/2002	20021008-21	Sierrra Pines	11.8	6.39	107		57	100			1.2	1.8
Irrigation Waters													
SW-07	10/01/2002	20021001-SW07	Fredericksburg Ditch										
SW-07	10/08/2002	20021008-SW07	Fredericksburg Ditch										
SW-08	10/01/2002	20021001-26	Irrigation Ditch	12.3	7.53	122	3.93	62	101	46.20	7.31	2.1	4.8
Reservoirs													
HPR	10/01/2002	20021001-27	Harvey Place Reservoir	13.8	7.60	503	4.03	115	239	13.30	9.51	60.3	18.3
Surfacewaters: Carson R													
SW-01	10/01/2002	20021001-21	Carson R Woodfords	6.8	7.34	84	9.75	39	60	0.52	.23	1.1	2.2
SW-05	10/01/2002	20021001-24	Carson R Paynesville	8.5	7.60	92	7.93	46	72	0.52	.46	1.6	3.1
SW-05	10/08/2002	20021008-23	Carson R Paynesville	9.8	7.03	83	9.32		60			1.3	2.6
SW-06	10/01/2002	20021001-25	Carson R Stateline	9.7	7.93	89	5.24	48	76	1.00	.41	2.6	3.4
Surfacewaters: Indian Cr													
SW-02	10/01/2002	20021001-SW02	Indian Cr Upper										
SW-03	10/01/2002	20021001-22	Indian Cr Mid	9.8	7.26	277	6.53	141	184	14.60	14.1	5.3	1.5
SW-04	10/01/2002	20021001-23	Indian Cr Lower	6.8	7.24	171	8.02	86	127	2.62	3.61	3.9	1.1

ALPINE COUNTY MONITORING

11/13/02

Site	Date	TotalP mg/L	PO4-P mg/L	TKN mg/L	NH3-N mg/L	NO2-N mg/L	NO3-N mg/L	Total N mg/L
Alpine Monitoring Wells								
ACMW-01AV	10/15/2002					< 0.010	1.140	
ACMW-01BE	10/15/2002					< 0.010	0.222	
ACMW-02N	10/15/2002					< 0.010	0.137	
ACMW-02S	10/15/2002					< 0.010	0.022	
ACMW-03	10/15/2002							
ACMW-04W	10/15/2002					< 0.010	2.040	
ACMW-06N	10/15/2002					< 0.010	< 0.010	
ACMW-06S	10/15/2002					< 0.010	0.025	
Groundwaters								
GW-03	10/08/2002					< 0.010	0.701	
GW-04	10/08/2002					< 0.010	0.817	
GW-05	10/08/2002					< 0.030	3.040	
GW-07	10/08/2002					< 0.010	1.230	
GW-08	10/08/2002					< 0.040	5.840	
GW-11	10/08/2002					< 0.010	0.477	
GW-14	10/08/2002					< 0.010	0.484	
Irrigation Waters								
SW-07	10/01/2002							
SW-07	10/08/2002							
SW-08	10/01/2002	0.129	0.023	0.539	0.029	< 0.010	0.304	0.853
Reservoirs								
HPR	10/01/2002	2.680	2.340	16.600	15.000	0.923	1.040	18.563
Surfacewaters: Carson R								
SW-01	10/01/2002	0.014	< 0.010	0.195	0.028	< 0.010	0.010	0.215
SW-05	10/01/2002	0.017	< 0.010	0.167	< 0.020	< 0.010	0.036	0.213
SW-05	10/08/2002	0.012	< 0.010	0.216	0.065	< 0.010	0.014	0.240
SW-06	10/01/2002	< 0.010	< 0.010	0.132	< 0.020	< 0.010	0.049	0.191
Surfacewaters: Indian Cr								
SW-02	10/01/2002							
SW-03	10/01/2002	0.231	0.022	0.574	0.043	< 0.010	< 0.010	0.594
SW-04	10/01/2002	0.090	0.021	0.443	0.065	< 0.010	< 0.010	0.463

ALPINE COUNTY MONITORING

Site	Date	COD mg/L	BOD mg/L	O & G mg/L	Boron mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	SAR	Exch Na %	Hardness mg/L	Water Level MSL or Ft
Alpine Monitoring Wells													
ACMW-01AV	10/15/2002												5481.7
ACMW-01BE	10/15/2002												5489.5
ACMW-02N	10/15/2002												5458.7
ACMW-02S	10/15/2002												5460.5
ACMW-03	10/15/2002												5035.1
ACMW-04W	10/15/2002												4903.7
ACMW-06N	10/15/2002												5216.3
ACMW-06S	10/15/2002												5205.0
Groundwaters													
GW-03	10/08/2002												
GW-04	10/08/2002												
GW-05	10/08/2002												
GW-07	10/08/2002												
GW-08	10/08/2002												
GW-11	10/08/2002												
GW-14	10/08/2002												
Irrigation Waters													
SW-07	10/01/2002												
SW-07	10/08/2002												
SW-08	10/01/2002		1.1		0.01	12.1	3.0	10.1	3.5	0.67	31.9		
Reservoirs													
HPR	10/01/2002	30	7.4		0.25	16.4	3.5	49.4	9.7	2.89	61.4		11.5
Surfacewaters: Carson R													
SW-01	10/01/2002		0.9		0.02	7.7	2.1	4.4	1.7	0.36	24.1		
SW-05	10/01/2002		1.0		0.02	9.2	2.5	5.8	2.1	0.44	25.9		
SW-05	10/08/2002												
SW-06	10/01/2002		1.0		0.02	9.8	2.9	5.9	2.3	0.42	24.6		
Surfacewaters: Indian Cr													
SW-02	10/01/2002												
SW-03	10/01/2002		2.6		0.05	25.8	8.3	17.4	3.3	0.76	26.9		
SW-04	10/01/2002		1.3		0.02	16.2	5.2	9.8	3.7	0.54	24.3		

ALPINE COUNTY
BACTERIOLOGICAL MONITORING

Alpine Monitoring Wells

Site	Date	Total Coliform MPN/100mL		Fecal Coliform MPN/100mL		Fecal Streptococci MPN/100mLL
ACMW-01AV	10/15/2002	<	1.1	<	1.1	
ACMW-01BE	10/15/2002	<	1.1	<	1.1	
ACMW-02N	10/15/2002	<	1.1	<	1.1	
ACMW-02S	10/15/2002		1.1	<	1.1	
ACMW-03	10/15/2002					
ACMW-04W	10/15/2002	>	23	<	1.1	
ACMW-06N	10/15/2002	<	1.1	<	1.1	
ACMW-06S	10/15/2002	<	1.1	<	1.1	

Groundwaters

Site	Date	Total Coliform MPN/100mL		Fecal Coliform MPN/100mL		Fecal Streptococci MPN/100mLL
GW-03	10/08/2002	<	1.1	<	1.1	
GW-04	10/08/2002	<	1.1	<	1.1	
GW-05	10/08/2002	<	1.1	<	1.1	
GW-07	10/08/2002		1.1	<	1.1	
GW-08	10/08/2002	<	1.1	<	1.1	
GW-11	10/08/2002	<	1.1	<	1.1	
GW-14	10/08/2002	<	1.1	<	1.1	

Irrigation Waters

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-07	10/01/2002			
SW-07	10/08/2002			
SW-08	10/01/2002	1200	750	

Reservoirs

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
HPR	10/01/2002	220	8	< 2

Surfacewaters: Carson R

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-01	10/01/2002	43	4	
SW-05	10/01/2002	460	93	
SW-05	10/08/2002			
SW-06	10/01/2002	150	43	

Surfacewaters: Indian Cr

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-02	10/01/2002			
SW-03	10/01/2002	2100	240	
SW-04	10/01/2002	750	43	

ALPINE COUNTY MONITORING

Site	Date	COD mg/L	BOD mg/L	O & G mg/L	Boron mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	SAR	Exch Na %	Hardness mg/L	Water Level MSL or Ft
Alpine Monitoring Wells													
ACMW-01AV	09/17/2002												5480.8
ACMW-01BE	09/17/2002												5488.0
ACMW-02N	09/17/2002												5458.0
ACMW-02S	09/17/2002												5458.8
ACMW-03	09/17/2002												5039.0
ACMW-04W	09/17/2002												4904.4
ACMW-06N	09/17/2002												5214.2
ACMW-06S	09/17/2002												5204.9
Groundwaters													
GW-03	09/11/2002												
GW-04	09/11/2002												
GW-05	09/11/2002												
GW-07	09/11/2002												
GW-08	09/11/2002												
GW-11	09/11/2002												
GW-14	09/11/2002												
Irrigation Waters													
SW-07	09/03/2002												
SW-07	09/11/2002												
SW-08	09/03/2002		1.3		0.02	12.1	2.7	10.3	2.8	0.70	33.2		
Reservoirs													
HPR	09/03/2002	50	14.2		0.22	15.9	3.5	44.2	10.2	2.62	58.9		29.5
Surfacewaters: Carson R													
SW-01	09/03/2002		0.2		0.02	7.5	2.1	4.2	1.7	0.35	23.6		
SW-05	09/03/2002		0.6		0.02	9.0	2.4	5.8	2.1	0.44	26.3		
SW-05	09/11/2002												
SW-06	09/03/2002		0.5		0.03	9.9	2.8	6.0	2.2	0.43	25.0		
Surfacewaters: Indian Cr													
SW-02	09/03/2002												
SW-03	09/03/2002		3.1		0.05	25.1	7.0	16.9	3.2	0.77	27.8		
SW-04	09/03/2002		0.5		0.05	18.1	4.9	8.9	3.0	0.48	21.9		

ALPINE COUNTY SOILS

Site	Date	Location	Type	pH	EC mmho	%Sat	TKN mg/Kg	NO3-N mg/L	Total P mg/Kg	Exch P mg/L
S2a	03/08/02	Celio	KT	8.18	1.82	65.5	2,640	6.7	910	7.1
S4a	03/08/02	Gansberg	DI	6.46	0.34	32.5	1,670	2.9	370	29.6
S5a	03/08/02	Gansberg	HRB	6.53	0.27	29.4	999	3.5	600	11.0
S6a	03/08/02	Neddenriep	DWB	6.91	0.36	47.5	1,170	6.1	820	59.3
S7a	03/08/02	Bruns	JaC	5.72	0.86	38.8	1,870	32.7	640	13.4
S8a	03/08/02	Dressler	SOD	6.34	0.15	18.1	307	1.2	330	8.9
S3a	03/12/02	Hall	SMB	6.75	0.21	33.4	1,410	6.6	840	9.2

Site	Date	Cl mg/L		SO4 mg/Kg	CEC meq/100g	Cu mg/Kg		Mo mg/Kg	Ca mg/L	Mg mg/L	Na mg/L	SAR		% Na
S2a	03/08/02	344.0		39	32.3	20.0		5.0	59.0	37.8	246.0	6.15		7.1
S4a	03/08/02	20.3		1	17.0	26.0		2.0	52.8	13.2	21.9	0.70	<	1.0
S5a	03/08/02	16.4		1	16.4	23.0	<	1.0	14.2	2.8	36.9	2.34		2.1
S6a	03/08/02	4.1		1	21.5	31.0		3.0	20.9	3.7	50.4	2.67		2.5
S7a	03/08/02	19.8		1	17.3	30.0		1.0	74.5	19.3	11.2	0.30	<	1.0
S8a	03/08/02	6.5	<	1	15.0	18.0		2.0	8.1	3.8	12.1	0.88	<	1.0
S3a	03/12/02	16.6		1	18.2	23.0		2.0	13.1	3.1	16.6	1.07	<	1.0

ALPINE COUNTY SOILS

Site	Date	Location	Type	pH	EC mmho	%Sat	TKN mg/Kg	NO3-N mg/L	Total P mg/Kg	Exch P mg/L
S2a	06/07/02	Celio	KT	8.31	1.80	63.8	2,410	1.7	760	5.2
S3a	06/07/02	Hall	SMB	5.66	0.33	37.3	1,700	1.7	770	22.7
S4a	06/07/02	Gansberg	DI	6.48	0.37	40.1	1,960	5.2	500	24.1
S5a	06/07/02	Gansberg	HRB	6.24	0.24	33.0	1,280	4.9	550	13.9
S6a	06/07/02	Neddenriep	DWB	6.67	0.26	49.2	2,050	4.3	900	49.5
S7a	06/07/02	Bruns	JaC	6.37	0.21	38.5	1,370	2.3	670	12.9
S8a	06/07/02	Dressler	SOD	6.78	0.14	16.9	303	1.6	260	10.9

Site	Date	Cl mg/L	SO4 mg/Kg	CEC meq/100g	Cu mg/Kg		Mo mg/Kg	Ca mg/L	Mg mg/L	Na mg/L	SAR		% Na
S2a	06/07/02	282.0	68	27.7	16.0	<	1.0	43.0	24.8	288.0	8.65		10.1
S3a	06/07/02	24.0	14	17.0	27.0		3.0	21.7	7.4	24.4	1.15	<	1.0
S4a	06/07/02	28.4	3	17.6	36.0		2.0	27.5	6.1	34.0	1.53	<	1.0
S5a	06/07/02	6.2	2	12.4	26.0		3.0	18.1	2.9	23.6	1.36	<	1.0
S6a	06/07/02	14.1	5	19.2	35.0	<	1.0	14.6	2.3	35.8	2.30		2.0
S7a	06/07/02	4.1	3	14.6	34.0		1.0	22.2	4.6	8.4	0.42	<	1.0
S8a	06/07/02	2.2	3	8.7	17.0		2.0	12.7	5.3	6.4	0.38	<	1.0

ALPINE COUNTY SOILS

Site	Date	Location	Type	pH	EC mmho	%Sat	TKN mg/Kg	NO3-N mg/L	Total P mg/Kg	Exch P mg/L
S2a	09/06/02	Celio	KT	8.15	1.63	69.0	3,400	15.8	910	10.0
S3a	09/06/02	Hall	SMB	6.42	0.61	30.4	1,350	2.6	1,120	13.3
S4a	09/06/02	Gansberg	DI	6.50	0.53	40.2	1,890	5.9	730	12.7
S5a	09/06/02	Gansberg	HRB	5.90	0.39	32.6	1,210	6.8	880	8.9
S6a	09/06/02	Neddenriep	DWB	6.16	0.72	40.1	1,710	6.9	750	37.1
S7a	09/06/02	Bruns	JaC	6.50	0.18	41.9	1,870	1.3	930	10.4
S8a	09/06/02	Dressler	SOD	6.65	0.43	16.0	257	0.9	390	9.7

Site	Date	Cl mg/L		SO4 mg/Kg	CEC meq/100g	Cu mg/Kg		Mo mg/Kg	Ca mg/L	Mg mg/L	Na mg/L	SAR		% Na
S2a	09/06/02	232.0		55	29.6	28.0	<	1.0	60.0	46.4	217.0	5.11		5.8
S3a	09/06/02	108.0		7	16.3	37.0		3.0	38.8	14.9	39.7	1.37	<	1.0
S4a	09/06/02	67.3		5	21.6	62.0		2.0	37.4	6.8	63.2	2.49		2.3
S5a	09/06/02	39.2		3	15.0	45.0		2.0	22.8	3.7	44.9	2.30		2.0
S6a	09/06/02	103.0		7	19.3	46.0		1.0	26.2	4.5	104.0	4.94		5.6
S7a	09/06/02	3.1		2	19.1	53.0		2.0	24.0	3.9	13.6	0.68	<	1.0
S8a	09/06/02	85.4	<	1	13.0	27.0		1.0	24.0	9.4	10.6	0.46	<	1.0

Wastewater Reclamation Permit Compliance

The District is monitoring under the revisions approved by the Regional Board (letter dated November 30, 1998). The revisions provide for: discontinued surfacewater monitoring, except SW-01, SW-02 and SW-05, during the months of December, January and February. The West Fork, Carson River Water Quality Objectives and East Fork, Carson River limitations were exceeded as follows (a ✓ indicates objective exceeded):

Site	Location	TDS		Cl		TKN		NO_3-N		Total N		Total P		SO_4		Boron		Exch Na %	
		Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence
SW-01	Carson River, Woodfords	55	✓	1.0	✓	0.13	✓	0.02		0.15	✓	0.02	✓	2.0	✓	0.02		20	✓
SW-06	Carson River, Stateline	70	✓	2.5		0.22	✓	0.03		0.25	✓	0.03	✓	2.0	✓	0.02		20	✓
SW-02	Indian Creek, Upper	100		6.0						0.30		0.03	✓	8.0		0.25		30	✓
SW-03	Indian Creek, Mid	100		6.0						0.30		0.03	✓	8.0		0.25		30	
SW-04	Indian Creek, Lower	100		6.0						0.30		0.03	✓	8.0		0.25		30	
SW-10	Indian Creek, Stateline	100		6.0						0.30		0.03	✓	8.0		0.25		30	

November Blue Green Algae results will be sent to you as soon as they are completed. July Blue Green Algae results are included.

Certification

I hereby certify that the enclosed monitoring report was prepared under my direct supervision and that I am a duly Registered Engineer under the laws of the State of California.

Sincerely,

REGISTERED PROFESSIONAL ENGINEER
RICHARD H. SOLBRIG
No 28783
exp 3-31-06
CIVIL
STATE OF CALIFORNIA

12-13-02

Richard Solbrig,
Assistant Manager/Engineer

Enclosures:

1.

November Monthly Report	Pages
Wastewater Treatment plant	2
Permit Compliance Record	1
Export pipeline inspection	1
Sample site locations	2
Tahoe Basin: Monitoring wells (ERB) and Heavenly Valley Creek (HVC)	1
Alpine County Surfacewaters, Groundwaters, and HPR	4
Alpine County Surfacewaters Blue Green Algae for July	1
Total number of pages:	12

cc: Calif. Dept. of Health Services, ODW - Jess Morehouse
El Dorado Co. Dept. of Environmental Health - Virginia Huber
Nevada Division of Environmental Protection - Wendel McCurry
Alpine County Health Department - Dr. Richard Botto
Alpine County Health Department - Jim Goodloe
Alpine County Board of Supervisors
Desert Research Group (Alpine County Consultants) - David McGraw
STPUD Board of Directors
STPUD General Manager / District Engineer - Robert G. Baer
STPUD Manager of Operations - Ross Johnson
STPUD Operations Chief Plant Operator - Jeff Lee
STPUD Laboratory Director - Terry Powers
STPUD Manager of Alpine County Operations - Hal Bird

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SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

NOVEMBER 2002

		FLOW MGD					PRECIP		D.O. mg/L	COD mg/L		BOD mg/L		SS mg/L	
Date	Day	Inf	2-Hr Peak Inf	Eff	Pond Return	Pond Inf	Inch	Type	Fin	Raw	Fin	Raw	Fin	Raw	Fin
11/01/02	Fri	3.53	4.8	3.59					5.28	457					
11/02/02	Sat	3.97	5.9	3.68					6.17	392	36.2	202	5.9	157	2.5
11/03/02	Sun	4.03	6.2	3.81					5.45	457					
11/04/02	Mon	3.57	5.0	3.60					5.32	448					
11/05/02	Tue	3.44	4.8	2.87					5.77	422					
11/06/02	Wed	3.45	4.9	3.51			0.02	Rain	5.20	443	43.2			146	3.4
11/07/02	Thu	3.95	4.8	4.61			1.63	Rain	4.94	433					
11/08/02	Fri	4.40	6.3	5.14			1.86	Rain	6.59	380					
11/09/02	Sat	4.15	5.9	4.36			0.49	Snow	5.80	390	31.3	179	5.4	111	2.1
11/10/02	Sun	4.09	5.8	3.78			0.28	Snow	6.16	412					
11/11/02	Mon	3.80	5.9	3.96					5.64	405					
11/12/02	Tue	3.82	4.8	3.86					5.44	390					
11/13/02	Wed	3.50	4.8	3.37					5.70	414	42.7	176	5.8	148	
11/14/02	Thu	3.51	4.9	3.56					5.60	427					
11/15/02	Fri	3.57	4.9	3.60					5.47	392					
11/16/02	Sat	3.90	5.5	3.73					5.37	390	36.0	174	5.2	114	1.0
11/17/02	Sun	3.82	5.9	4.00					3.98	449					
11/18/02	Mon	3.54	4.7	3.71					5.33	380	37.6	186	5.2	119	1.6
11/19/02	Tue	3.62	4.7	3.41					5.56	323					
11/20/02	Wed	3.50	4.7	3.38					5.52	444					
11/21/02	Thu	3.56	4.6	3.45					5.18	397					
11/22/02	Fri	3.75	4.9	3.66					5.01	432					
11/23/02	Sat	3.90	5.7	3.77					5.34	434	44.8	201	6.9	150	2.0
11/24/02	Sun	4.04	5.7	3.81					5.11	524					
11/25/02	Mon	3.79	4.8	3.94					3.95	478					
11/26/02	Tue	3.83	5.1	3.51					5.24	407					
11/27/02	Wed	4.06	5.5	3.91					3.99	482	42.4	227	5.9	163	2.1
11/28/02	Thu	4.51	6.6	4.42					4.73	510					
11/29/02	Fri	4.73	6.8	4.64					3.94	530					
11/30/02	Sat	4.96	7.5	4.68					4.75	598	57.2	265	13.4	190	3.7
Permit Max		7.7									300		45		60
Permit Min															
Permit Ave											60		30		30
Total		116.29	162.4	115.32			4.28		157.53	13040	371.4	1610	53.7	1298	18.4
Maximum		4.96	7.5	5.14			1.86		6.59	598	57.2	265	13.4	190	3.7
Minimum		3.44	4.6	2.87			0.02		3.94	323	31.3	174	5.2	111	1.0
Average		3.88	5.4	3.84			0.86		5.25	435	41.3	201	6.7	144	2.3
# Tests		30	30	30	0	0	5		30	30	9	8	8	9	8

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

NOVEMBER 2002

Date	Day	SETTLEABLE SOLIDS mL/L Raw		SETTLEABLE SOLIDS mL/L Fin	MBAS mg/L Raw	MBAS mg/L Fin	pH Units Raw	pH Units Fin	TURBIDITY NTU Fin	Cl2 mg/L Fin	FINAL COLIFORMS MPN/100 mL Total		FINAL COLIFORMS MPN/100 mL 7day-Median	TDS mg/L Raw	TDS mg/L Fin	ALKALINITY mg/L Raw	ALKALINITY mg/L Fin
11/01/02	Fri	10.5	<	0.1			7.38	7.27	3.00	5.40	< 2	<	2			153	122
11/02/02	Sat	10.0	<	0.1			7.39	7.29	3.50	5.10	< 2	<	2			166	128
11/03/02	Sun	7.0	<	0.1			7.37	7.31	4.00	4.60	< 2	<	2			169	134
11/04/02	Mon	5.5	<	0.1			7.49	7.36	3.95	6.40	< 2	<	2			162	129
11/05/02	Tue	6.5	<	0.1			7.43	7.38	3.40	5.75	< 2	<	2			165	131
11/06/02	Wed	6.0	<	0.1			7.48	7.64	3.90	4.70	< 2	<	2	270	236	163	130
11/07/02	Thu	7.0	<	0.1			7.31	7.44	4.50	5.10	< 2	<	2			153	124
11/08/02	Fri	5.5	<	0.1			7.44	7.44	5.20	4.90	< 2	<	2			134	100
11/09/02	Sat	7.0	<	0.1			7.46	7.55	3.40	5.80	< 2	<	2			157	109
11/10/02	Sun	8.5	<	0.1			7.43	7.68	3.45	5.60	< 2	<	2			162	126
11/11/02	Mon	8.0	<	0.1			7.42	7.66	3.20	6.90	< 2	<	2			162	134
11/12/02	Tue	6.0	<	0.1			7.42	7.68	3.30	5.80	< 2	<	2			156	130
11/13/02	Wed	7.0	<	0.1			7.36	7.64	3.05	5.70	< 2	<	2	256	228	154	131
11/14/02	Thu	6.0	<	0.1			7.36	7.60	2.85	5.20	< 2	<	2			154	132
11/15/02	Fri	6.5	<	0.1			7.41	7.54	2.25	4.70	< 2	<	2			155	134
11/16/02	Sat	7.0	<	0.1			7.31	7.43	2.50	4.60	< 2	<	2			158	134
11/17/02	Sun	8.0	<	0.1			7.44	7.56	2.40	5.90	< 2	<	2			167	141
11/18/02	Mon	7.0	<	0.1			7.43	7.42	2.40	6.00	< 2	<	2	267	239	158	136
11/19/02	Tue	6.5	<	0.1			7.65	7.42	2.35	5.90	< 2	<	2			166	136
11/20/02	Wed	11.0	<	0.1			7.56	7.44	2.70	6.40	< 2	<	2			166	141
11/21/02	Thu	10.0	<	0.1			7.44	7.44	2.25	6.40	< 2	<	2			154	134
11/22/02	Fri	9.5	<	0.1			7.44	7.42	2.40	6.00	< 2	<	2			157	137
11/23/02	Sat	12.0	<	0.1			7.41	7.38	3.70	4.90	< 2	<	2			161	142
11/24/02	Sun	11.0	<	0.1			7.51	7.45	3.20	6.60	< 2	<	2			173	140
11/25/02	Mon	12.0	<	0.1			7.52	7.44	2.90	5.60	< 2	<	2			163	137
11/26/02	Tue	11.0	<	0.1			7.42	7.48	2.80	5.80	< 2	<	2			159	137
11/27/02	Wed	11.0	<	0.1			7.39	7.54	3.50	5.70	< 2	<	2	252	228	161	139
11/28/02	Thu	10.0	<	0.1			7.45	7.66	4.90	4.60	< 2	<	2			171	146
11/29/02	Fri	12.0	<	0.1			7.54	7.58	5.80	4.70	< 2	<	2			193	148
11/30/02	Sat	13.5	<	0.1			7.43	7.57	6.50	5.50	< 2	<	2			181	156
Permit Max				0.1		2.0		8.5	20		240		23				
Permit Min								6.5									
Permit Ave						1.0			10								
Total		258.5		3.0	0.00	0.000	223.09	224.71	103.25	166.25	60		60	1045	931	4853	3998
Maximum		13.5		0.1	ERR	ERR	7.65	7.68	6.50	6.90	2		2	270	239	193	156
Minimum		5.5		0.1	ERR	ERR	7.31	7.27	2.25	4.60	2		2	252	228	134	100
Average		8.6		0.1	ERR	ERR	7.44	7.49	3.44	5.54	2		2	261	233	162	133
# Tests		30		30	0	0	30	30	30	30	30		30	4	4	30	30

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT
COMPLIANCE RECORD

2002

Parameter	# Tests	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Compliance, %
Total Plant Inflow; 7.7 MGD; Dry Weather	334	0	0	0	0	0	0	0	0	0	0	0			100.0
2-Hour Peak Inflow; 18.5 MGD	333	0	0	0	0	0	0	0	0	0	0	0			100.0
COD, 30 Day Ave: 60 mg/L	11	0	0	0	0	0	0	0	0	0	0	0			100.0
COD, Max: 300 mg/L	94	0	0	0	0	0	0	0	0	0	0	0			100.0
BOD, 30 Day Ave: 30 mg/L	11	0	0	0	0	0	0	0	0	0	0	0			100.0
BOD, Max: 45 mg/L	82	0	0	0	0	0	0	0	0	0	0	0			100.0
SS, 30 Day Ave: 30 mg/L	11	0	0	0	0	0	0	0	0	0	0	0			100.0
SS, Max: 60 mg/L	93	0	0	0	0	0	0	0	0	0	0	0			100.0
Settleable Solids, Max: 0.1 mL/L	329	0	0	0	0	0	0	0	0	0	0	0			100.0
Turbidity, 30 Day Ave: 10 NTU	11	0	0	0	0	0	0	0	0	0	0	0			100.0
Turbidity, Max: 20 NTU	329	0	0	0	0	0	0	0	0	0	0	0			100.0
pH, 6.5 to 8.5	329	0	0	0	0	0	0	0	0	0	0	0			100.0
Total Coliforms, Max: 240 MPN/100 mL	329	0	0	0	0	0	0	0	0	0	0	0			100.0
Total Coliforms, 7-day Median: 23 MPN	329	0	0	0	0	0	0	0	0	0	0	0			100.0
Total	2,625	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0

SOUTH TAHOE
PUBLIC UTILITY DISTRICT
MEMORANDUM

Date: November 21, 2002

To: Bob Baer, Lisa Coyner, Terry Powers

From: Heather Ross

Topic: Export Line Check

****

On November 20, David Johnson and I conducted our check of the District's export line from the treatment plant to station 564+06 near the Harvey Place reservoir..

Several wet spots were checked. However, nothing positive was found. No damage to the pipe was found.

Heather Ross

EXPR .MEM

SAMPLE LOCATIONS

TAHOE BASIN MONITORING WELLS

Site	Location
ERB	Emergency Retention Basin
CONTROL	North of Post Office
MW02-25, -50	Emergency Retention Basin, S side
MW03-25, -50	Emergency Retention Basin, S side
MW04-25, -50	Emergency Retention Basin, W side
MW07-25, -50	Emergency Retention Basin, N side
MW08-25, -50	Pond #1, SW corner
MW11	S.E. corner of wastewater treatment plant grounds
MW12	South of Emergency Pump Building, for buried sludge
MW13	Pond 2, along Heavenly Valley Creek, for buried sludge

HEAVENLY VALLEY CREEK

HVC-1	At Pioneer Trail
HVC-2	250 ft upstream of Pond #2
HVC-3	25 ft downstream of Johnson Blvd.
HVC-4	Effluent of drain pipe from Lower Shop area
HVC-5	Effluent of drainage pipe along Johnson Blvd, 10 feet upstream of Johnson Blvd.

ALPINE COUNTY MONITORING WELLS

Site	Location
ACMW-01AW	Below main dam at Harvey Place Reservoir
ACMW-01BE	Below auxiliary dam at Harvey Place Reservoir
ACMW-02, N&S	On dam access road at Diamond Valley Road
ACMW-03	Bruns ranch, east side of Highway 88
ACMW-04W	Gansberg ranch, west side of Highway 88
ACMW-05	Dressler ranch
ACMW-06, N&S	Celio ranch, on Diamond Valley Road

ALPINE SOILS

Site	Ranch
S2	Celio
S3	Hall
S4	Gansberg
S5	Gansberg
S6	Neddenriep
S7	Bruns
S8	Dressler

ALPINE GROUNDWATERS

Site	Homeowner
GW-01	Sagues
GW-03	Smith/Springmeyer
GW-04	Celio
GW-05	Neddenriep
GW-07	Gansberg, Jr.
GW-08	Arant
GW-11	Diamond Valley School
GW-14	Sierra Pines Store

ALPINE SURFACEWATERS

Site	Location
SW-01	Carson River, Woodfords
SW-02	Indian Creek, @ HWY 89
SW-03	Indian Creek, @ upper bridge
SW-04	Indian Creek, @ lower bridge
SW-05	Carson River, Paynesville
SW-06	Carson River, Stateline
SW-07	Fredericksberg Ditch, Stateline
SW-08	Irrigation Ditch along Carson River Road
SW-09	Carson River, Dressler Lane
SW-10	Indian Creek, @ Smith-Springmeyer Ranch

TAHOE BASIN MONITORING

Site	Date	ID	Location	Depth msl	Temp C	pH	EC umho	Cl mg/L		COD mg/L	TKN mg/L	NO3-N mg/L	Comment
Buried Sludge Monitoring													
MW11	11/26/02	20021126-21	Sludge Pond	6261.4	8.1	6.47	105	1.4	<	5.0		0.196	
MW12	11/26/02	20021126-22	Sludge Pond	6261.2	9.4	6.15	119	1.4	<	5.0		0.377	
MW13	11/26/02	20021126-23	Sludge Pond	6255.4	7.5	6.99	773	4.2		13.0		5.950	
ERB Monitoring													
CONTROL	11/26/02	20021126-16	At Post Office	6278.1	10.2	6.72	177	8.0	<	5.0		2.340	
MW01.5	11/26/02	20021126-MW1.5	SW corner of ERB										Dry
MW02-50	11/26/02	0021126-MW2-5	Black Bart side of ERB										Dry
MW03-50	11/26/02	20021126-17	Black Bart side of ERB	6267.5	10.0	5.81	688	56.5	<	5.0		28.000	
MW04-50	11/26/02	20021126-18	Hank Monk side of ERB	6267.0	8.8	6.01	80	4.8	<	5.0		0.084	
MW07-50	11/26/02	20021126-19	North side of ERB	6275.6	7.8	6.42	248	21.4	<	5.0		0.548	
Heavenly Valley Creek													
HVC-1	11/19/02	20021119-23	Downstream of Pioneer		3.4	6.51	87	2.1		7.1	0.163	0.087	
HVC-2	11/07/02	20021107-HVC2	250' upstream of Pond #2										Dry
HVC-2	11/19/02	20021119-HVC2	250' upstream of Pond #2										Dry
HVC-3	11/07/02	20021107-06	25' downstream of Johnson Blvd		4.7	6.70	37	1.5		95.0	1.300	0.431	
HVC-3	11/19/02	20021119-HVC3	25' downstream of Johnson Blvd										Dry
HVC-4	11/07/02	20021107-07	Effluent of drain from Lower Shop a		6.9	6.71	168	7.8		83.7	2.030	0.926	
HVC-4	11/19/02	20021119-HVC4	Effluent of drain from Lower Shop a										Dry
HVC-5	11/07/02	20021107-08	Effluent of drainage pipe along Johi		4.9	6.74	30	1.1		92.9	1.460	0.352	
HVC-5	11/19/02	20021119-HVC5	Effluent of drainage pipe along Johi										Dry
Treatment Plant Monitoring													
MW08-25	11/26/02	20021126-20	SW side of Pond #1	6245.9	11.0	6.30	1024	39.9		93.7		0.046	

ALPINE COUNTY MONITORING

12/11/02

Site	Date	ID	Location	Temp C	pH	EC umhos	DO mg/L	Alk mg/L	TDS mg/L	SS mg/L	Turb NTU	Cl mg/L	SO4 mg/L
Alpine Monitoring Wells													
ACMW-01AW	11/19/2002	20021119-15	Main Dam	11.3	6.26	209		50	155		.56	19.3	1.5
ACMW-01BE	11/19/2002	20021119-16	Secondary Dam	12.7	6.54	82		38	78		7.42	1.5	1.6
ACMW-02N	11/19/2002	20021119-17	Access Gate	12.5	6.77	124		56	89		.62	2.3	2.3
ACMW-02S	11/19/2002	20021119-18	Access Gate	14.7	6.43	102		46	82		.67	1.8	1.4
ACMW-03	11/19/2002	20021119-MW0	HWY 88										
ACMW-04W	11/19/2002	20021119-19	Gansberg	9.5	5.95	222		44	147		5.51	27.6	7.3
ACMW-06N	11/19/2002	20021119-20	Celio	11.3	6.88	727		250	431		15.1	60.1	24.6
ACMW-06S	11/19/2002	20021119-21	Celio	11.1	8.58	615		186	350		1.04	66.3	22.5
Groundwaters													
GW-03	11/12/2002	20021112-10	Smith/Springmeyer	13.0	7.83	314		131	221		.02	1.6	26.7
GW-04	11/12/2002	20021112-11	Celio	14.4	7.91	267		118	190		2.49	3.4	11.5
GW-05	11/12/2002	20021112-12	Neddenriep	11.3	6.64	249		60	155		.02	22.2	11.6
GW-07	11/12/2002	20021112-13	Gansberg	10.8	6.65	124		51	88		.02	1.6	3.1
GW-08	11/12/2002	20021112-14	Arant	11.5	6.67	282		48	170		.55	30.7	10.5
GW-11	11/12/2002	20021112-15	Diamond Val. School	13.5	7.48	149		75	108		.02	0.7	0.7
GW-14	11/12/2002	20021112-16	Sierrra Pines	9.9	6.75	114		53	88		.02	1.2	1.8
Irrigation Waters													
SW-07	11/05/2002	20021105-SW07	Fredericksburg Ditch										
SW-08	11/05/2002	20021105-16	Irrigation Ditch	12.8	7.97	131	6.77	58	90	35.50	10.3	1.5	5.7
Reservoirs													
HPR	11/05/2002	20021105-19	Harvey Place Reservoir	8.3	8.58	486	11.56	108	250	11.10	5.1	60.5	22.3
Surfacewaters: Carson R													
SW-01	11/05/2002	20021105-10	Carson R Woodfords	2.9	7.70	73	12.20	34	61	4.59	2.6	1.1	2.1
SW-05	11/05/2002	20021105-14	Carson R Paynesville	4.0	8.05	96	9.31	44	75	0.23	.4	1.6	3.3
SW-06	11/05/2002	20021105-15	Carson R Stateline	4.2	7.92	106	9.06	46	85	0.88	.66	2.3	3.7
SW-09	11/05/2002	20021105-17	Carson R Dressler Ln	6.1	7.81	202	8.60	67	141	1.11	2.2	10.3	16.7
Surfacewaters: Indian Cr													
SW-02	11/05/2002	20021105-11	Indian Cr Upper	5.6	7.10	101	8.05	50	85	5.08	2.4	1.9	1.1
SW-03	11/05/2002	20021105-12	Indian Cr Mid	2.7	7.48	80	9.44	38	64	1.38	2.7	1.1	2.3
SW-04	11/05/2002	20021105-13	Indian Cr Lower	2.6	7.67	95	9.42	45	74	6.54	3.5	1.4	2.1
SW-10	11/05/2002	20021105-18	Indian Cr at Bruns	1.9	7.72	96	9.19	45	76	13.70	8.7	1.4	2.3

ALPINE COUNTY MONITORING

12/11/02

Site	Date	TotalP mg/L	PO4-P mg/L	TKN mg/L	NH3-N mg/L	NO2-N mg/L	NO3-N mg/L	Total N mg/L
Alpine Monitoring Wells								
ACMW-01AV	11/19/2002	0.020		0.160		< 0.020	4.380	4.560
ACMW-01BE	11/19/2002	0.030		0.150		< 0.010	0.244	0.404
ACMW-02N	11/19/2002	0.019		< 0.100		< 0.010	0.130	0.240
ACMW-02S	11/19/2002	0.018		< 0.100		< 0.010	< 0.010	0.120
ACMW-03	11/19/2002							
ACMW-04W	11/19/2002	0.066		0.983		< 0.020	1.800	2.803
ACMW-06N	11/19/2002	0.270		0.329		< 0.010	0.044	0.383
ACMW-06S	11/19/2002	0.025		0.229		< 0.010	0.113	0.352
Groundwaters								
GW-03	11/12/2002	0.037		< 0.100		< 0.010	0.712	0.822
GW-04	11/12/2002	0.052		< 0.100		< 0.010	0.814	0.924
GW-05	11/12/2002	0.028		< 0.100		< 0.030	3.020	3.150
GW-07	11/12/2002	0.102		< 0.100		< 0.010	1.350	1.460
GW-08	*11/12/2002*	*0.033*		*0.178*		*< 0.040*	*5.800*	*6.018*
GW-11	11/12/2002	0.030		0.202		< 0.010	0.431	0.643
GW-14	11/12/2002	0.049		< 0.100		< 0.010	0.485	0.595
Irrigation Waters								
SW-07	11/05/2002							
SW-08	11/05/2002	0.089	0.028	0.481	0.078	< 0.010	0.289	0.780
Reservoirs								
HPR	11/05/2002	2.600	2.200	17.200	16.000	0.875	1.260	19.335
Surfacewaters: Carson R								
SW-01	11/05/2002	0.031	< 0.010	0.231	0.022	< 0.010	0.010	0.251
SW-05	11/05/2002	0.010	< 0.010	0.167	< 0.020	< 0.010	0.016	0.193
SW-06	11/05/2002	0.093	< 0.010	0.237	0.086	< 0.010	0.027	0.274
SW-09	11/05/2002	0.033	< 0.010	0.203	0.066	< 0.010	0.027	0.240
Surfacewaters: Indian Cr								
SW-02	11/05/2002	0.033	0.016	0.174	0.079	< 0.010	0.062	0.246
SW-03	11/05/2002	0.033	< 0.010	0.256	< 0.020	< 0.010	< 0.010	0.276
SW-04	11/05/2002	0.039	0.011	0.264	< 0.020	< 0.010	< 0.010	0.284
SW-10	11/05/2002	0.063	0.018	0.297	0.067	< 0.010	< 0.010	0.317

ALPINE COUNTY MONITORING

Site	Date		COD mg/L	BOD mg/L	O & G mg/L	Boron mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	SAR	Exch Na %	Hardness mg/L	Water Level MSL or Ft
Alpine Monitoring Wells														
ACMW-01AV	11/19/2002	<	5										81.7	5483.0
ACMW-01BE	11/19/2002	<	5										32.1	5491.0
ACMW-02N	11/19/2002	<	5										44.5	5458.9
ACMW-02S	11/19/2002	<	5										41.2	5461.5
ACMW-03	11/19/2002													
ACMW-04W	11/19/2002		28										52.1	4899.5
ACMW-06N	11/19/2002	<	5										254	5216.6
ACMW-06S	11/19/2002		6										209	5205.0
Groundwaters														
GW-03	11/12/2002	<	5										127	
GW-04	11/12/2002	<	5										102	
GW-05	11/12/2002	<	5										79.6	
GW-07	11/12/2002	<	5										46.6	
GW-08	11/12/2002	<	5										52.5	
GW-11	11/12/2002	<	5										58.2	
GW-14	11/12/2002	<	5										35.9	
Irrigation Waters														
SW-07	11/05/2002													
SW-08	11/05/2002		15	1.1		0.02	11.1	2.9	9.9	2.5	0.68	33.3		
Reservoirs														
HPR	11/05/2002		36	9.1		0.24	15.5	3.6	46.0	9.5	2.73	60.3		21.5
Surfacewaters: Carson R														
SW-01	11/05/2002	<	5	2.4		0.02	7.0	1.9	4.1	1.5	0.36	24.8		
SW-05	11/05/2002	<	5	1.3		0.01	8.6	2.6	5.8	1.9	0.45	26.9		
SW-06	11/05/2002	<	5	1.5		0.02	9.3	2.9	6.1	2.1	0.45	25.9		
SW-09	11/05/2002		7	1.5		0.07	14.5	5.1	15.2	2.7	0.88	35.4		
Surfacewaters: Indian Cr														
SW-02	11/05/2002	<	5	1.2		0.01	9.0	2.5	7.8	1.4	0.59	32.9		
SW-03	11/05/2002	<	5	2.0		0.02	7.5	2.2	4.6	1.6	0.38	24.9		
SW-04	11/05/2002	<	5	1.7		0.01	8.5	2.7	5.3	1.9	0.40	24.9		
SW-10	11/05/2002		7	2.0		0.02	8.3	2.8	5.2	1.9	0.40	24.6		

ALPINE COUNTY
BACTERIOLOGICAL MONITORING

Alpine Monitoring Wells

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
ACMW-01AV	11/19/2002		2.2	<	1.1	
ACMW-01BE	11/19/2002	<	1.1	<	1.1	
ACMW-02N	11/19/2002	<	1.1	<	1.1	
ACMW-02S	11/19/2002		2.2		1.1	
ACMW-03	11/19/2002					
ACMW-04W	11/19/2002	>	23	<	1.1	
ACMW-06N	11/19/2002	<	1.1	<	1.1	
ACMW-06S	11/19/2002	<	1.1	<	1.1	

Groundwaters

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
GW-03	11/12/2002	<	1.1	<	1.1	
GW-04	11/12/2002	<	1.1	<	1.1	
GW-05	11/12/2002	<	1.1	<	1.1	
GW-07	11/12/2002	>	23		1.1	
GW-08	11/12/2002		1.1	<	1.1	
GW-11	11/12/2002	<	1.1	<	1.1	
GW-14	11/12/2002	<	1.1	<	1.1	

Irrigation Waters

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-07	11/05/2002			
SW-08	11/05/2002	4600	4600	93

Reservoirs

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
HPR	11/05/2002	220	220	7

Surfacewaters: Carson R

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-01	11/05/2002	43	43	210
SW-05	11/05/2002	93	9	150
SW-06	11/05/2002	7	< 3	23
SW-09	11/05/2002	240	93	15

Surfacewaters: Indian Cr

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-02	11/05/2002	20	< 3	93
SW-03	11/05/2002	93	43	93
SW-04	11/05/2002	43	23	430
SW-10	11/05/2002	1100	430	230

ALPINE COUNTY
BLUE GREEN ALGAE

ID#	Site	Location	Date	Colonies #	Colony # Cells	Filaments #	Filaments # Cells	Filaments #	Filament Length	Single Cells, #
July, 2002										
20020702-15	SW-01	Carson R Woodfords	07/02/02	0	0	35	1,020	0	0	0
20020702-16	SW-02	Indian Cr Upper	07/02/02	0	0	246	2,250	0	0	0
20020702-17	SW-03	Indian Cr Mid	07/02/02	0	0	0	0	0	0	0
20020702-18	SW-04	Indian Cr Lower	07/02/02	0	0	0	0	0	0	0
20020702-19	SW-05	Carson R Paynesville	07/02/02	0	0	0	0	0	0	0
20020702-20	SW-06	Carson R Stateline	07/02/02	0	0	0	0	0	0	0
20020702-21	SW-07	Fredericksburg Ditch	07/02/02	0	0	0	0	0	0	0
20020702-22	SW-08	Irrigation Ditch	07/02/02	0	0	0	0	0	0	0
20020702-23	HPR	Harvey Place Reservoir	07/02/02	0	0	0	0	0	0	0
20020710-13	ICR-1	Indian Creek Reservoir	07/10/02	0	0	7,760	252,000	0	0	0
20020710-14	ICR-1	Indian Creek Reservoir	07/10/02	0	0	28,200	902,000	0	0	0
20020710-15	ICR-1	Indian Creek Reservoir	07/10/02	0	0	1,090	33,600	0	0	0

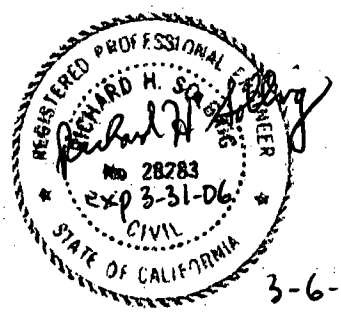
Site	Location	TDS		Cl		TKN		NO_3-N		Total N		Total P		SO_4		Boron		Exch Na %	
		Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence
SW-01	Carson River, Woodfords	55		1.0	✓	0.13		0.02		0.15	✓	0.02	✓	2.0	✓	0.02		20	✓
SW-06	Carson River, Stateline	70		2.5		0.22		0.03		0.25		0.03		2.0		0.02		20	
SW-02	Indian Creek, Upper	100		6.0						0.30		0.03		8.0		0.25		30	✓
SW-03	Indian Creek, Mid	100		6.0						0.30		0.03		8.0		0.25		30	
SW-04	Indian Creek, Lower	100		6.0						0.30		0.03		8.0		0.25		30	
SW-10	Indian Creek, Stateline	100		6.0						0.30		0.03		8.0		0.25		30	

Soil samples for December 2002 have not yet been completed. The results will be sent as soon as they are available.

Certification

I hereby certify that the enclosed monitoring report was prepared under my direct supervision and that I am a duly Registered Engineer under the laws of the State of California.

Sincerely,



3-6-03

Richard Solbrig,
Assistant Manager/Engineer

Enclosures:

1.

February Monthly Report	Pages
Wastewater Treatment plant	2
Permit Compliance Record	1
Export pipeline inspection	1
Sample site locations	2
Tahoe Basin: Monitoring wells (ERB) and Heavenly Valley Creek (HVC)	1
Alpine County Surfacewaters, Groundwaters, and HPR	4
Total number of pages:	11

cc: Calif. Dept. of Health Services, ODW - Jess Morehouse
El Dorado Co. Dept. of Environmental Health - Virginia Huber
Nevada Division of Environmental Protection - Wendel McCurry
Alpine County Health Department - Dr. Janice Levesque
Alpine County Health Department - Jim Goodloe
Alpine County Board of Supervisors
Desert Research Group (Alpine County Consultants) - David McGraw
STPUD Board of Directors
STPUD General Manager / District Engineer - Robert G. Baer
STPUD Senior Engineer - John Thiel
STPUD Manager of Operations - Ross Johnson
STPUD Operations Chief Plant Operator - Jeff Lee
STPUD Laboratory Director - Terry Powers
STPUD Manager of Alpine County Operations - Hal Bird

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SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

FEBRUARY 2003

Date	Day	FLOW MGD Inf	2-Hr Peak Inf	Eff	Pond Return	Pond Inf	PRECIP Inch	Type	D.O. mg/L Fin	COD mg/L Raw	COD mg/L Fin	BOD mg/L Raw	BOD mg/L Fin	SS mg/L Raw	SS mg/L Fin
02/01/03	Sat	4.93	6.9	4.98			0.14	Rain/Snow	5.01	412	41.6	191	7.6	130	2.0
02/02/03	Sun	4.77	7.3	4.85					4.24	442					
02/03/03	Mon	4.24	5.9	5.29					4.72	434					
02/04/03	Tue	4.06	6.0	3.65					4.58	410					
02/05/03	Wed	3.85	5.5	3.56					4.50	430	51.4	174	10.8	156	3.3
02/06/03	Thu	4.12	5.5	3.91					5.38	403					
02/07/03	Fri	4.18	5.8	4.56					3.82	452					
02/08/03	Sat	4.93	7.0	4.89					4.66	448	65.4	190	17.1	146	3.3
02/09/03	Sun	4.80	7.5	5.03					3.88	450					
02/10/03	Mon	4.03	6.0	3.93					5.62	420	71.7	155	17.4	110	4.0
02/11/03	Tue	3.94	5.5	4.12					5.32	376					
02/12/03	Wed	3.97	5.4	3.53			0.02	Rain	6.13	467					
02/13/03	Thu	4.12	5.5	4.39			0.07	Rain	5.08	459					
02/14/03	Fri	4.38	5.9	4.66					4.78	426					
02/15/03	Sat	5.47	7.4	5.55			0.17	Snow	4.88	432	57.4	203	12.5	133	4.0
02/16/03	Sun	5.50	8.0	5.49			0.32	Snow	4.30	432					
02/17/03	Mon	4.58	7.8	4.78					4.40	461					
02/18/03	Tue	4.17	6.0	3.97					5.63	436					
02/19/03	Wed	4.07	5.9	4.40					4.74	422	58.0	167	11.3	127	7.2
02/20/03	Thu	4.06	5.7	4.31					5.11	477					
02/21/03	Fri	4.44	6.1	4.13					5.22	438					
02/22/03	Sat	4.90	7.2	5.38					3.18	440	60.4	179	11.6	131	7.5
02/23/03	Sun	4.64	7.4	4.88					4.80	519					
02/24/03	Mon	4.04	5.6	4.05			0.07	Snow	5.21	392					
02/25/03	Tue	3.79	5.2	4.38					5.80	429					
02/26/03	Wed	3.66	5.4	3.61			0.04	Snow	5.71	452	45.2			140	4.6
02/27/03	Thu	3.89	5.3	3.87					4.92	421					
02/28/03	Fri	4.13	5.8	4.65			0.05	Snow	5.72	433					
Permit Max		7.7									300		45		60
Permit Min															
Permit Ave											60		30		30
Total		121.66	174.5	124.80			0.88		137.34	12213	451.1	1259	88.3	1073	36.0
Maximum		5.50	8.0	5.55			0.32		6.13	519	71.7	203	17.4	156	7.5
Minimum		3.66	5.2	3.53			0.02		3.18	376	41.6	155	7.6	110	2.0
Average		4.35	6.2	4.46			0.11		4.91	436	56.4	180	12.6	134	4.5
# Tests		28	28	28	0	0	8		28	28	8	7	7	8	8

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

FEBRUARY 2003

Date	Day	SETTLEABLE SOLIDS mL/L Raw		SETTLEABLE SOLIDS mL/L Fin	MBAS mg/L Raw	MBAS mg/L Fin	pH Units Raw	pH Units Fin	TURBIDITY NTU Fin	Cl2 mg/L Fin	FINAL COLIFORMS MPN/100 mL Total		FINAL COLIFORMS MPN/100 mL 7day- Median		TDS mg/L Raw	TDS mg/L Fin	ALKALINITY mg/L Raw	ALKALINITY mg/L Fin
02/01/03	Sat	9.0	<	0.1			7.53	7.72	3.60	4.53	<	2	<	2			166	136
02/02/03	Sun	9.0	<	0.1			7.46	7.53	4.80	5.17		2	<	2			158	139
02/03/03	Mon	8.0	<	0.1			7.70	7.64	4.80	7.99	<	2	<	2			153	135
02/04/03	Tue	8.0	<	0.1			7.54	7.54	5.40	5.51		2	<	2			152	132
02/05/03	Wed	9.0	<	0.1			7.47	7.54	5.60	6.00	<	2	<	2	243	228	151	125
02/06/03	Thu	8.0	<	0.1			7.78	7.66	9.05	5.46	<	2	<	2			155	135
02/07/03	Fri	8.5	<	0.1			7.59	7.70	7.40	4.87	<	2	<	2			163	136
02/08/03	Sat	9.5	<	0.1			7.63	7.57	8.80	4.34	<	2	<	2			170	143
02/09/03	Sun	8.5	<	0.1			7.54	7.40	10.00	7.07	<	2	<	2			166	142
02/10/03	Mon	7.5	<	0.1			7.43	7.24	9.00	11.60	<	2	<	2	251	248	158	125
02/11/03	Tue	9.0	<	0.1			7.59	7.22	8.40	11.20	<	2	<	2			148	118
02/12/03	Wed	9.0	<	0.1			7.67	7.52	6.10	11.20	<	2	<	2			158	120
02/13/03	Thu	9.0	<	0.1			7.67	7.52	4.45	12.50	<	2	<	2			154	120
02/14/03	Fri	10.0	<	0.1			7.48	7.40	3.60	6.82	<	2	<	2			156	128
02/15/03	Sat	10.0	<	0.1			7.49	7.52	5.40	4.04	<	2	<	2			176	146
02/16/03	Sun	10.0	<	0.1			7.49	7.32	6.40	6.78	<	2	<	2			173	142
02/17/03	Mon	9.5	<	0.1			7.53	7.49	6.95	8.29	<	2	<	2			175	142
02/18/03	Tue	9.0	<	0.1			7.42	7.46	5.80	7.46	<	2	<	2			158	126
02/19/03	Wed	8.0	<	0.1			7.54	7.61	6.20	7.85	<	2	<	2	291	252	160	124
02/20/03	Thu	9.5	<	0.1			7.44	7.32	5.75	4.82	<	2	<	2			153	124
02/21/03	Fri	10.0	<	0.1			7.64	7.62	7.00	6.97	<	2	<	2			162	134
02/22/03	Sat	9.5	<	0.1			7.55	7.60	6.60	4.48	<	2	<	2			172	140
02/23/03	Sun	11.0	<	0.1			7.41	7.41	7.40	7.80	<	2	<	2			169	137
02/24/03	Mon	6.5	<	0.1			7.49	7.50	5.15	13.20	<	2	<	2			155	120
02/25/03	Tue	9.0	<	0.1			7.54	7.44	3.60	9.02	<	2	<	2			157	118
02/26/03	Wed	9.5	<	0.1			7.47	7.43	3.00	8.04	<	2	<	2	275	254	156	118
02/27/03	Thu	9.0	<	0.1			7.47	7.52	3.65	8.28	<	2	<	2			154	128
02/28/03	Fri	10.5	<	0.1			7.55	7.43	3.95	7.94	<	2	<	2			157	134
Permit Max				0.1		2.0		8.5	20			240		23				
Permit Min								6.5										
Permit Ave						1.0			10									
Total		253.0		2.8	0.00	0.000	211.11	209.87	167.85	209.23		56		56	1060	982	4485	3667
Maximum		11.0		0.1	ERR	ERR	7.78	7.72	10.00	13.20		2		2	291	254	176	146
Minimum		6.5		0.1	ERR	ERR	7.41	7.22	3.00	4.04		2		2	243	228	148	118
Average		9.0		0.1	ERR	ERR	7.54	7.50	5.99	7.47		2		2	265	246	160	131
# Tests		28		28	0	0	28	28	28	28		28		28	4	4	28	28

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT
COMPLIANCE RECORD

2003

Parameter	# Tests	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Compliance, %
Total Plant Inflow; 7.7 MGD; Dry Weather	59	0	0											0	100.0
2-Hour Peak Inflow; 18.5 MGD	59	0	0											0	100.0
COD, 30 Day Ave: 60 mg/L	2	0	0											0	100.0
COD, Max: 300 mg/L	16	0	0											0	100.0
BOD, 30 Day Ave: 30 mg/L	2	0	0											0	100.0
BOD, Max: 45 mg/L	15	0	0											0	100.0
SS, 30 Day Ave: 30 mg/L	2	0	0											0	100.0
SS, Max: 60 mg/L	16	0	0											0	100.0
Settleable Solids, Max: 0.1 mL/L	59	0	0											0	100.0
Turbidity, 30 Day Ave: 10 NTU	2	0	0											0	100.0
Turbidity, Max: 20 NTU	59	0	0											0	100.0
pH, 6.5 to 8.5	59	0	0											0	100.0
Total Coliforms, Max: 240 MPN/100 mL	59	0	0											0	100.0
Total Coliforms, 7-day Median: 23 MPN	58	0	0											0	100.0
Total	467	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0

SOUTH TAHOE
PUBLIC UTILITY DISTRICT
MEMORANDUM

Date: February 20, 2003

To: Bob Baer, Lisa Coyner, Terry Powers

From: Heather Ross

Topic: Export Line Check

****

On February 20, David Johnson and I conducted our check of the District's export line from the treatment plant to station 564+06 near the Harvey Place reservoir..

Several wet spots were checked. However, nothing positive was found. No damage to the pipe was found.

EXPR .MEM

SAMPLE LOCATIONS

TAHOE BASIN MONITORING WELLS

Site	Location
ERB	Emergency Retention Basin
CONTROL	North of Post Office
MW02-25, -50	Emergency Retention Basin, S side
MW03-25, -50	Emergency Retention Basin, S side
MW04-25, -50	Emergency Retention Basin, W side
MW07-25, -50	Emergency Retention Basin, N side
MW08-25, -50	Pond #1, SW corner
MW11	S.E. corner of wastewater treatment plant grounds
MW12	South of Emergency Pump Building, for buried sludge
MW13	Pond 2, along Heavenly Valley Creek, for buried sludge

HEAVENLY VALLEY CREEK

HVC-1	At Pioneer Trail
HVC-2	250 ft upstream of Pond #2
HVC-3	25 ft downstream of Johnson Blvd.
HVC-4	Effluent of drain pipe from Lower Shop area
HVC-5	Effluent of drainage pipe along Johnson Blvd, 10 feet upstream of Johnson Blvd.

ALPINE COUNTY MONITORING WELLS

Site	Location
ACMW-01AW	Below main dam at Harvey Place Reservoir
ACMW-01BE	Below auxiliary dam at Harvey Place Reservoir
ACMW-02, N&S	On dam access road at Diamond Valley Road
ACMW-03	Bruns ranch, east side of Highway 88
ACMW-04W	Gansberg ranch, west side of Highway 88
ACMW-05	Dressler ranch
ACMW-06, N&S	Celio ranch, on Diamond Valley Road

ALPINE SOILS

Site	Ranch
S2	Celio
S3	Hall
S4	Gansberg
S5	Gansberg
S6	Neddenriep
S7	Bruns
S8	Dressler

ALPINE GROUNDWATERS

Site	Homeowner
GW-01	Sagues
GW-03	Smith/Springmeyer
GW-04	Celio
GW-05	Neddenriep
GW-07	Gansberg, Jr.
GW-08	Arant
GW-11	Diamond Valley School
GW-14	Sierra Pines Store

ALPINE SURFACEWATERS

Site	Location
SW-01	Carson River, Woodfords
SW-02	Indian Creek, @ HWY 89
SW-03	Indian Creek, @ upper bridge
SW-04	Indian Creek, @ lower bridge
SW-05	Carson River, Paynesville
SW-06	Carson River, Stateline
SW-07	Fredericksberg Ditch, Stateline
SW-08	Irrigation Ditch along Carson River Road
SW-09	Carson River, Dressler Lane
SW-10	Indian Creek, @ Smith-Springmeyer Ranch

TAHOE BASIN MONITORING

Site	Date	ID	Location	Depth msl	Temp C	pH	EC umho	Cl mg/L		COD mg/L	TKN mg/L	NO3-N mg/L	Comment
Buried Sludge Monitoring													
MW11	02/18/03	20030218-11	Sludge Pond	6261.3	7.6	6.67	100	1.5		13.1		0.186	
MW12	02/18/03	20030218-12	Sludge Pond	6262.4	9.3	6.13	129	1.7		11.7		0.736	
MW13	02/18/03	20030218-13	Sludge Pond	6257.9	5.4	7.28	1000	3.5		28.9		19.800	
ERB Monitoring													
CONTROL	02/18/03	20030218-06	At Post Office	6277.8	7.8	6.91	177	8.4		6.2		2.460	
MW01.5	02/18/03	20030218-MW1.5	SW corner of ERB										Dry
MW02-50	02/18/03	20030218-MW02	Black Bart side of ERB										Dry
MW03-50	02/18/03	20030218-07	Black Bart side of ERB	6267.7	8.1	5.99	577	58.6	<	5.0		16.700	
MW04-50	02/18/03	20030218-08	Hank Monk side of ERB	6267.4	7.6	6.13	82	5.7		7.0		0.098	
MW07-50	02/18/03	20030218-09	North side of ERB	6275.7	6.2	6.21	244	22.3	<	5.0		0.530	
Heavenly Valley Creek													
HVC-1	02/25/03	20030225-HVC1	Downstream of Pioneer										Dry
HVC-2	02/25/03	20030225-HVC2	250' upstream of Pond #2										Dry
HVC-3	02/25/03	20030225-HVC3	25' downstream of Johnson Blvd										Dry
HVC-4	02/25/03	20030225-HVC4	Effluent of drain from Lower Shop a										Dry
HVC-5	02/25/03	20030225-HVC5	Effluent of drainage pipe along Johr										Dry
Treatment Plant Monitoring													
MW08-25	02/18/03	20030218-10	SW side of Pond #1	6247.4	9.2	6.56	902	37.3		62.8		0.031	

ALPINE COUNTY MONITORING

Site	Date	ID	Location	Temp C	pH	EC umhos	DO mg/L	Alk mg/L	TDS mg/L	SS mg/L	Turb NTU	Cl mg/L	SO4 mg/L
Alpine Monitoring Wells													
ACMW-01AW	02/14/2003	20030214-07	Main Dam	11.4	6.68	78	4.83	33	66			2.5	3.0
ACMW-01BE	02/14/2003	20030214-08	Secondary Dam	8.4	7.10	90	5.59	35	74			2.0	1.5
ACMW-02N	02/14/2003	20030214-09	Access Gate	12.2	6.50	122	5.26	56	80			2.7	2.4
ACMW-02S	02/14/2003	20030214-10	Access Gate	10.3	7.31	93	2.55	38	58			3.7	1.4
ACMW-03	02/14/2003	20030214-MW03	HWY 88										
ACMW-04W	02/14/2003	20030214-11	Gansberg	11.6	6.65	216	7.00	46	133			25.4	8.6
ACMW-06N	02/14/2003	20030214-12	Celio	11.8	8.34	594	3.80	253	433			64.7	26.0
ACMW-06S	02/14/2003	20030214-13	Celio	11.7	7.00	732	1.20	203	374			72.5	26.6
Groundwaters													
GW-03	02/04/2003	20030204-11	Smith/Springmeyer	10.2	7.29	292		133	230			1.6	26.8
GW-04	02/04/2003	20030204-12	Celio	12.1	7.70	266		123	199			3.5	11.5
GW-05	02/04/2003	20030204-13	Neddenriep	9.6	6.97	227		62	163			22.5	11.7
GW-07	02/04/2003	20030204-14	Gansberg	8.1	6.90	115		52	97			1.9	3.1
GW-08	02/04/2003	20030204-15	Arant	8.6	6.95	258		50	172			29.6	10.8
GW-11	02/04/2003	20030204-16	Diamond Val. School	9.6	7.25	138		77	121			0.8	0.8
GW-14	02/04/2003	20030204-17	Sierrra Pines	6.9	6.70	104		54	99			1.3	1.8
Reservoirs													
HPR	02/04/2003	20030204-21	Harvey Place Reservoir	5.8	7.47	445	5.74	121	217	0.72	1.21	52.0	17.7
Surfacewaters: Carson R													
SW-01	02/04/2003	20030204-18	Carson R Woodfords	0.3	7.70	75	9.08	33	55			2.8	2.6
SW-05	02/04/2003	20030204-20	Carson R Paynesville	0.5	7.70	73	9.90	35	58			2.7	3.1
Surfacewaters: Indian Cr													
SW-02	02/04/2003	20030204-19	Indian Cr Upper	1.8	7.22	72	8.25	37	69			2.8	0.8

ALPINE COUNTY MONITORING

03/06/03

Site	Date	TotalP mg/L	PO4-P mg/L	TKN mg/L	NH3-N mg/L	NO2-N mg/L	NO3-N mg/L	Total N mg/L
Alpine Monitoring Wells								
ACMW-01AV	02/14/2003					< 0.020	0.211	
ACMW-01BE	02/14/2003					< 0.020	2.160	
ACMW-02N	02/14/2003					< 0.010	0.121	
ACMW-02S	02/14/2003					< 0.010	0.417	
ACMW-03	02/14/2003							
ACMW-04W	02/14/2003					< 0.020	2.010	
ACMW-06N	02/14/2003					< 0.010	< 0.010	
ACMW-06S	02/14/2003					0.022	0.075	
Groundwaters								
GW-03	02/04/2003					< 0.010	0.721	
GW-04	02/04/2003					< 0.010	0.819	
GW-05	02/04/2003					< 0.030	3.120	
GW-07	02/04/2003					< 0.010	1.550	
GW-08	02/04/2003					< 0.040	5.580	
GW-11	02/04/2003					< 0.010	0.495	
GW-14	02/04/2003					< 0.010	0.479	
Reservoirs								
HPR	02/04/2003	2.340	2.160	19.900	17.300	0.237	0.882	21.019
Surfacewaters: Carson R								
SW-01	02/04/2003	0.010	< 0.010	< 0.100	< 0.020	< 0.010	0.012	0.122
SW-05	02/04/2003	0.016	< 0.010	< 0.100	< 0.020	< 0.010	0.033	0.143
Surfacewaters: Indian Cr								
SW-02	02/04/2003	0.020	< 0.010	0.185	< 0.020	< 0.010	< 0.010	0.205

ALPINE COUNTY MONITORING

Site	Date	COD mg/L	BOD mg/L	O & G mg/L	Boron mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	SAR	Exch Na %	Hardness mg/L	Water Level MSL or Ft
Alpine Monitoring Wells													
ACMW-01AV	02/14/2003												5481.5
ACMW-01BE	02/14/2003												5487.6
ACMW-02N	02/14/2003												5458.4
ACMW-02S	02/14/2003												5459.9
ACMW-03	02/14/2003												
ACMW-04W	02/14/2003												4897.4
ACMW-06N	02/14/2003												5216.8
ACMW-06S	02/14/2003												5205.2
Groundwaters													
GW-03	02/04/2003												
GW-04	02/04/2003												
GW-05	02/04/2003												
GW-07	02/04/2003												
GW-08	02/04/2003												
GW-11	02/04/2003												
GW-14	02/04/2003												
Reservoirs													
HPR	02/04/2003	19	2.5		0.22	17.3	3.4	47.0	8.8	2.70	59.8		45.5
Surfacewaters: Carson R													
SW-01	02/04/2003					8.1	2.1	4.4	1.3	0.35	23.8		
SW-05	02/04/2003					8.2	2.1	4.7	1.3	0.38	24.7		
Surfacewaters: Indian Cr													
SW-02	02/04/2003					7.2	1.9	6.6	1.4	0.57	34.4		

ALPINE COUNTY
BACTERIOLOGICAL MONITORING

Alpine Monitoring Wells

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
ACMW-01AV	02/14/2003		1.1	<	1.1	
ACMW-01BE	02/14/2003	<	1.1	<	1.1	
ACMW-02N	02/14/2003	<	1.1	<	1.1	
ACMW-02S	02/14/2003	<	1.1	<	1.1	
ACMW-03	02/14/2003					
ACMW-04W	02/14/2003		23	<	1.1	
ACMW-06N	02/14/2003	<	1.1	<	1.1	
ACMW-06S	02/14/2003	<	1.1	<	1.1	

Groundwaters

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
GW-03	02/04/2003	<	1.1	<	1.1	
GW-04	02/04/2003	<	1.1	<	1.1	
GW-05	02/04/2003	<	1.1	<	1.1	
GW-07	02/04/2003	<	1.1	<	1.1	
GW-08	02/04/2003	<	1.1	<	1.1	
GW-11	02/04/2003	<	1.1	<	1.1	
GW-14	02/04/2003	<	1.1	<	1.1	

Reservoirs

Site	Date	Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
HPR	02/04/2003	8	<	2	2

Surfacewaters: Carson R

Site	Date	Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-01	02/04/2003	6.1	<	3	
SW-05	02/04/2003	15	<	3	

Surfacewaters: Indian Cr

Site	Date	Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-02	02/04/2003	11	<	3	

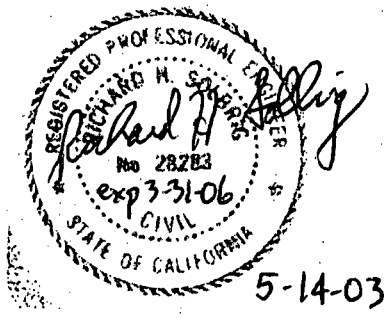
Site	Location	TDS		Cl⁻		TKN		NO_3-N		Total N		Total P		SO_4		Boron		Exch Na %	
		Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence
SW-01	Carson River, Woodfords	55		1.0	✓	0.13	✓	0.02	✓	0.15	✓	0.02		2.0		0.02		20	✓
SW-06	Carson River, Stateline	70		2.5	✓	0.22	✓	0.03	✓	0.25	✓	0.03	✓	2.0	✓	0.02		20	✓
SW-02	Indian Creek, Upper	100		6.0						0.30	✓	0.03		8.0		0.25		30	✓
SW-03	Indian Creek, Mid	100	✓	6.0						0.30		0.03	✓	8.0		0.25		30	
SW-04	Indian Creek, Lower	100		6.0						0.30	✓	0.03	✓	8.0		0.25		30	
SW-10	Indian Creek, Stateline	100		6.0						0.30		0.03		8.0		0.25		30	

Soil samples for March 2003 and Heavenly Valley Creek TKN for April 2003 have not yet been completed. The results will be sent as soon as they are available.

Certification

I hereby certify that the enclosed monitoring report was prepared under my direct supervision and that I am a duly Registered Engineer under the laws of the State of California.

Sincerely,



Richard Solbrig,
Assistant Manager/Engineer

Enclosures:

1.

March Monthly Report	Pages
Wastewater Treatment plant	2
Permit Compliance Record	1
Export pipeline inspection	1
Sample site locations	2
Tahoe Basin: Monitoring wells (ERB) and Heavenly Valley Creek (HVC)	1
Alpine County Surfacewaters, Groundwaters, and HPR	5
Total number of pages:	12

cc: Calif. Dept. of Health Services, ODW - Jess Morehouse
El Dorado Co. Dept. of Environmental Health - Virginia Huber
Nevada Division of Environmental Protection - Wendel McCurry
Alpine County Health Department - Dr. Janice Levesque
Alpine County Health Department - Jim Goodloe
Alpine County Board of Supervisors
Desert Research Group (Alpine County Consultants) - David McGraw
STPUD Board of Directors
STPUD General Manager / District Engineer - Robert G. Baer
STPUD Senior Engineer - John Thiel
STPUD Manager of Operations - Ross Johnson
STPUD Operations Chief Plant Operator - Jeff Lee
STPUD Laboratory Director - Terry Powers
STPUD Manager of Alpine County Operations - Hal Bird

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SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

APRIL 2003

		FLOW MGD					PRECIP		D.O. mg/L	COD mg/L		BOD mg/L		SS mg/L	
Date	Day	Inf	2-Hr Peak Inf	Eff	Pond Return	Pond Inf	Inch	Type	Fin	Raw	Fin	Raw	Fin	Raw	Fin
04/01/03	Tue	3.80	5.1	3.98			0.18	Snow	4.85	367					
04/02/03	Wed	3.98	5.7	3.84			0.34	Snow	4.82	407	49.4	164	6.9	137	2.2
04/03/03	Thu	3.94	5.0	4.45					4.13	377					
04/04/03	Fri	4.02	5.2	3.78			0.32	Snow	4.34	378					
04/05/03	Sat	4.10	6.1	4.25					4.75	398	47.1	169	8.8	135	2.0
04/06/03	Sun	4.31	6.2	4.65					3.69	428					
04/07/03	Mon	4.08	5.7	3.85					4.42	384					
04/08/03	Tue	3.58	5.6	4.13					4.36	436					
04/09/03	Wed	3.77	6.1	3.54					4.44	397	43.4	165	8.0	148	3.9
04/10/03	Thu	3.96	5.5	4.19					4.75	366					
04/11/03	Fri	3.94	5.3	4.13					4.35	404					
04/12/03	Sat	4.13	5.7	4.46			1.09	Snow	3.93	397	49.6	182	8.5	146	2.3
04/13/03	Sun	4.30	6.3	4.45			1.47	Snow	4.25	432					
04/14/03	Mon	4.49	6.0	4.17			0.01	Snow	3.68	393					
04/15/03	Tue	4.36	5.8	4.74					3.25	372					
04/16/03	Wed	3.89	6.4	4.23			0.14	Snow	4.75	399	54.5	331	12.5	154	3.8
04/17/03	Thu	4.45	5.9	4.90			0.01	Snow	3.98	379					
04/18/03	Fri	4.40	6.0	3.98			0.01	Snow	3.24	381					
04/19/03	Sat	4.67	6.7	5.61					2.72	371	54.4	182	14.2	118	3.5
04/20/03	Sun	4.30	6.7	4.47					4.22	400					
04/21/03	Mon	4.22	6.4	4.38			0.16	Snow	4.43	368					
04/22/03	Tue	4.11	5.9	3.94					4.32	419					
04/23/03	Wed	4.14	6.1	4.23					4.25	404	49.9	174	15.9	160	5.0
04/24/03	Thu	3.80	5.1	4.51			0.16	Snow	3.50	327					
04/25/03	Fri	4.29	5.9	4.27			0.24	Snow	4.87	369					
04/26/03	Sat	4.39	6.4	4.57					4.37	365	42.1	223	10.3	130	3.3
04/27/03	Sun	4.34	6.6	4.72			0.08	Snow	4.33	376					
04/28/03	Mon	4.27	5.8	4.42			0.17	Snow	4.22	321	44.9	185	10.0	131	4.3
04/29/03	Tue	3.95	5.4	4.34					5.02	352					
04/30/03	Wed	4.04	5.6	4.25					3.94	353					
Permit Max		7.7									300		45		60
Permit Min															
Permit Ave											60		30		30
Total		124.02	176.2	129.43			4.38		126.17	11520	435.3	1775	95.0	1259	30.2
Maximum		4.67	6.7	5.61			1.47		5.02	436	54.5	331	15.9	160	5.0
Minimum		3.58	5.0	3.54			0.01		2.72	321	42.1	164	6.9	118	2.0
Average		4.13	5.9	4.31			0.31		4.21	384	48.4	197	10.6	140	3.4
# Tests		30	30	30	0	0	14		30	30	9	9	9	9	9

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

APRIL 2003

Date	Day	SETTLEABLE SOLIDS mL/L Raw		SETTLEABLE SOLIDS mL/L Fin	MBAS mg/L Raw	MBAS mg/L Fin	pH Units Raw	pH Units Fin	TURBIDITY NTU Fin	Cl2 mg/L Fin	FINAL COLIFORMS MPN/100 mL Total		FINAL COLIFORMS MPN/100 mL 7day-Median		TDS mg/L Raw	TDS mg/L Fin	ALKALINITY mg/L Raw	ALKALINITY mg/L Fin
04/01/03	Tue	9.0	<	0.1			7.70	7.58	3.35	8.67	<	2	<	2			142	129
04/02/03	Wed	11.0	<	0.1			7.66	7.56	3.40	6.47	<	2	<	2	250	232	143	127
04/03/03	Thu	8.0	<	0.1			7.58	7.59	3.20	5.63	<	2	<	2			116	124
04/04/03	Fri	7.5	<	0.1			7.64	7.69	3.05	5.48	<	2	<	2			143	128
04/05/03	Sat	9.0	<	0.1			7.52	7.76	3.70	5.30	<	2	<	2			149	130
04/06/03	Sun	9.0	<	0.1			7.55	7.54	4.80	5.88	<	2	<	2			150	133
04/07/03	Mon	8.5	<	0.1			7.54	7.52	4.85	5.63	<	2	<	2			141	128
04/08/03	Tue	9.0	<	0.1			7.39	7.44	4.20	6.13	<	2	<	2			153	126
04/09/03	Wed	8.0	<	0.1			7.44	7.44	4.40	7.52	<	2	<	2	235	230	139	126
04/10/03	Thu	8.0	<	0.1			7.57	7.44	4.50	5.58	<	2	<	2			134	124
04/11/03	Fri	9.5	<	0.1			7.53	7.56	4.15	5.43	<	2	<	2			139	123
04/12/03	Sat	10.0	<	0.1			7.63	7.62	4.45	5.63	<	2	<	2			143	126
04/13/03	Sun	10.0	<	0.1			7.56	7.49	5.40	6.13	<	2	<	2			147	129
04/14/03	Mon	9.0	<	0.1			7.59	7.62	4.00	7.77	<	2	<	2			138	122
04/15/03	Tue	10.0	<	0.1			7.38	7.39	5.00	5.88	<	2	<	2			138	118
04/16/03	Wed	10.0	<	0.1			7.53	7.54	6.60	6.57	<	2	<	2	240	228	142	122
04/17/03	Thu	9.0	<	0.1			7.62	7.52	6.05	4.73							135	114
04/18/03	Fri	8.5	<	0.1			7.46	7.58	5.00	5.44	<	2	<	2			138	105
04/19/03	Sat	8.5	<	0.1			7.44	7.55	5.70	9.76	<	2	<	2			141	109
04/20/03	Sun	9.0	<	0.1			7.44	7.32	5.20	7.22	<	2	<	2			142	111
04/21/03	Mon	9.0	<	0.1			7.59	7.44	8.50	10.40	<	2	<	2			135	112
04/22/03	Tue	8.5	<	0.1			7.59	7.44	6.75	9.86	<	2	<	2			133	107
04/23/03	Wed	10.5	<	0.1			7.27	7.38	5.90	10.22	<	2	<	2	234	229	134	103
04/24/03	Thu	8.5	<	0.1			7.60	7.30	5.95	9.26	<	2	<	2			135	104
04/25/03	Fri	8.0	<	0.1			7.41	7.35	4.60	6.52	<	2	<	2			136	109
04/26/03	Sat	10.5	<	0.1			7.43	7.56	4.60	6.47	<	2	<	2			135	112
04/27/03	Sun	8.5	<	0.1			7.35	7.39	5.00	6.13	<	2	<	2			140	117
04/28/03	Mon	9.0	<	0.1			7.54	7.56	4.00	6.62	<	2	<	2			133	111
04/29/03	Tue	8.5	<	0.1			7.40	7.22	3.60	6.57	<	2	<	2	242	225	130	107
04/30/03	Wed	9.0	<	0.1			7.41	7.36	3.00	5.33	<	2	<	2			132	101
Permit Max				0.1		2.0		8.5	20			240		23				
Permit Min								6.5										
Permit Ave						1.0			10									
Total		270.5		3.0	0.00	0.000	225.36	224.75	142.90	204.23		58		58	1201	1144	4156	3537
Maximum		11.0		0.1	ERR	ERR	7.70	7.76	8.50	10.40		2		2	250	232	153	133
Minimum		7.5		0.1	ERR	ERR	7.27	7.22	3.00	4.73		2		2	234	225	116	101
Average		9.0		0.1	ERR	ERR	7.51	7.49	4.76	6.81		2		2	240	229	139	118
# Tests		30		30	0	0	30	30	30	30		29		29	5	5	30	30

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT
COMPLIANCE RECORD

2003

Parameter	# Tests	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Compliance, %
Total Plant Inflow; 7.7 MGD; Dry Weather	120	0	0	0	0									0	100.0
2-Hour Peak Inflow; 18.5 MGD	120	0	0	0	0									0	100.0
COD, 30 Day Ave: 60 mg/L	4	0	0	0	0									0	100.0
COD, Max: 300 mg/L	34	0	0	0	0									0	100.0
BOD, 30 Day Ave: 30 mg/L	4	0	0	0	0									0	100.0
BOD, Max: 45 mg/L	32	0	0	0	0									0	100.0
SS, 30 Day Ave: 30 mg/L	4	0	0	0	0									0	100.0
SS, Max: 60 mg/L	34	0	0	0	0									0	100.0
Settleable Solids, Max: 0.1 mL/L	120	0	0	0	0									0	100.0
Turbidity, 30 Day Ave: 10 NTU	4	0	0	0	0									0	100.0
Turbidity, Max: 20 NTU	120	0	0	0	0									0	100.0
pH, 6.5 to 8.5	120	0	0	0	0									0	100.0
Total Coliforms, Max: 240 MPN/100 mL	119	0	0	0	0									0	100.0
Total Coliforms, 7-day Median: 23 MPN	118	0	0	0	0									0	100.0
Total	953	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0

SOUTH TAHOE
PUBLIC UTILITY DISTRICT
MEMORANDUM

Date: April 24, 2003

To: Richard Solbrig, Lisa Coyner, Terry Powers

From: Heather Ross

Topic: Export Line Check

****

On April 23,24, David Johnson and I conducted our check of the District's export line from the treatment plant to station 564+06 near the Harvey Place reservoir..

Several wet spots were checked. However, nothing positive was found. No damage to the pipe was found.

Heather Ross
Inspector

Heather

EXPR .MEM

SAMPLE LOCATIONS

TAHOE BASIN MONITORING WELLS

Site	Location
ERB	Emergency Retention Basin
CONTROL	North of Post Office
MW02-25, -50	Emergency Retention Basin, S side
MW03-25, -50	Emergency Retention Basin, S side
MW04-25, -50	Emergency Retention Basin, W side
MW07-25, -50	Emergency Retention Basin, N side
MW08-25, -50	Pond #1, SW corner
MW11	S.E. corner of wastewater treatment plant grounds
MW12	South of Emergency Pump Building, for buried sludge
MW13	Pond 2, along Heavenly Valley Creek, for buried sludge

HEAVENLY VALLEY CREEK

HVC-1	At Pioneer Trail
HVC-2	250 ft upstream of Pond #2
HVC-3	25 ft downstream of Johnson Blvd.
HVC-4	Effluent of drain pipe from Lower Shop area
HVC-5	Effluent of drainage pipe along Johnson Blvd, 10 feet upstream of Johnson Blvd.

ALPINE COUNTY MONITORING WELLS

Site	Location
ACMW-01AW	Below main dam at Harvey Place Reservoir
ACMW-01BE	Below auxiliary dam at Harvey Place Reservoir
ACMW-02, N&S	On dam access road at Diamond Valley Road
ACMW-03	Bruns ranch, east side of Highway 88
ACMW-04W	Gansberg ranch, west side of Highway 88
ACMW-05	Dressler ranch
ACMW-06, N&S	Celio ranch, on Diamond Valley Road

ALPINE SOILS

Site	Ranch
S2	Celio
S3	Hall
S4	Gansberg
S5	Gansberg
S6	Neddenriep
S7	Bruns
S8	Dressler

ALPINE GROUNDWATERS

Site	Homeowner
GW-01	Sagues
GW-03	Smith/Springmeyer
GW-04	Celio
GW-05	Neddenriep
GW-07	Gansberg, Jr.
GW-08	Arant
GW-11	Diamond Valley School
GW-14	Sierra Pines Store

ALPINE SURFACEWATERS

Site	Location
SW-01	Carson River, Woodfords
SW-02	Indian Creek, @ HWY 89
SW-03	Indian Creek, @ upper bridge
SW-04	Indian Creek, @ lower bridge
SW-05	Carson River, Paynesville
SW-06	Carson River, Stateline
SW-07	Fredericksberg Ditch, Stateline
SW-08	Irrigation Ditch along Carson River Road
SW-09	Carson River, Dressler Lane
SW-10	Indian Creek, @ Smith-Springmeyer Ranch

TAHOE BASIN MONITORING

Site	Date	ID	Location	Depth msl	Temp C	pH	EC umho	Cl mg/L		COD mg/L	TKN mg/L	NO3-N mg/L	Comment
Buried Sludge Monitoring													
MW11	04/29/03	20030429-13	Sludge Pond	6261.1	7.8	6.42	100	1.6	<	5.0		0.184	
MW12	04/29/03	20030429-14	Sludge Pond	6263.2	8.3	6.15	154	2.1	<	5.0		1.240	
MW13	04/29/03	20030429-15	Sludge Pond	6258.8	5.7	6.63	1012	4.1		23.9		19.600	
ERB Monitoring													
CONTROL	04/29/03	20030429-08	At Post Office	6278.0	8.9	7.32	175	8.4	<	5.0		2.500	
MW01.5	04/29/03	0030429-MW01.	SW corner of ERB										Dry
MW02-50	04/29/03	20030429-MW02	Black Bart side of ERB										Dry
MW03-50	04/29/03	20030429-09	Black Bart side of ERB	6267.7	9.5	6.14	600	64.2		5.0		22.300	
MW04-50	04/29/03	20030429-10	Hank Monk side of ERB	6268.1	7.8	6.56	76	5.9	<	5.0		0.092	
MW07-50	04/29/03	20030429-11	North side of ERB	6276.2	6.1	6.36	235	22.1		6.2		0.597	
Heavenly Valley Creek													
HVC-1	04/22/03	20030422-17	Downstream of Pioneer		4.5	7.54	75	1.6	<	5.0		0.151	
HVC-2	04/22/03	20030422-18	250' upstream of Pond #2		6.0	7.50	75	7.9		17.6		0.037	
HVC-3	04/22/03	20030422-19	25' downstream of Johnson Blvd		4.8	6.82	142	9.0		15.7		0.464	
HVC-4	04/22/03	20030422-20	Effluent of drain from Lower Shop a		4.9	6.18	142	1.2		10.2		0.818	
HVC-5	04/22/03	20030422-HVC5	Effluent of drainage pipe along Johi										No flow
Treatment Plant Monitoring													
MW08-25	04/29/03	20030429-12	SW side of Pond #1	6248.3	7.2	6.28	867	35.1		86.0		0.037	

ALPINE COUNTY MONITORING

Site	Date	ID	Location	Temp C	pH	EC umhos	DO mg/L	Alk mg/L	TDS mg/L	SS mg/L	Turb NTU	Cl mg/L	SO4 mg/L
Alpine Monitoring Wells													
ACMW-01AW	04/22/2003	20030422-09	Main Dam	8.8	6.46	79		31	68			3.0	2.5
ACMW-01BE	04/22/2003	20030422-10	Secondary Dam	7.5	6.47	80		33	73			1.9	1.6
ACMW-02N	04/22/2003	20030422-11	Access Gate	10.5	6.52	118		54	89			3.1	2.8
ACMW-02S	04/22/2003	20030422-12	Access Gate	7.9	6.42	95		40	63			3.2	1.5
ACMW-03	04/22/2003	20030422-MW03	HWY 88										
ACMW-04W	04/22/2003	20030422-13	Gansberg	11.4	6.10	207		43	139			25.3	8.4
ACMW-06N	04/22/2003	20030422-14	Celio	10.9	6.88	726		247	441			65.3	26.2
ACMW-06S	04/22/2003	20030422-15	Celio	12.3	9.30	543		157	286			76.6	22.4
Groundwaters													
GW-03	04/15/2003	20030415-21	Smith/Springmeyer	12.1	7.58	303		128	227			1.6	27.8
GW-04	04/15/2003	20030415-22	Celio	12.5	7.31	259		116	200			3.8	11.8
GW-05	04/15/2003	20030415-23	Neddenriep	10.5	6.56	244		59	168			24.9	11.9
GW-07	04/15/2003	20030415-24	Gansberg	9.2	7.09	123		50	100			2.0	3.0
GW-08	04/15/2003	20030415-25	Arant	11.3	8.21	270		47	170			33.7	11.2
GW-11	04/15/2003	20030415-26	Diamond Val. School	12.0	7.46	145		73	125			0.8	0.8
GW-14	04/15/2003	20030415-27	Sierrra Pines	9.5	6.98	110		51	97			1.4	1.7
ICR TMDL													
SW-11	04/08/2003	20030408-SW11	ICR Effluent @ HPR box										
Irrigation Waters													
SW-07	04/08/2003	20030408-SW07	Fredericksburg Ditch										
SW-08	04/08/2003	20030408-17	Irrigation Ditch	11.6	7.68	101	10.20	52	96	12.10	3.82	1.9	4.7
Reservoirs													
HPR	04/08/2003	20030408-18	Harvey Place Reservoir	12.1	7.69	479	10.40	118	223	21.50	3.33	54.8	17.6
Surfacewaters: Carson R													
SW-01	04/08/2003	20030408-11	Carson R Woodfords	3.1	7.67	61	11.80	26	52	2.58	1.43	2.4	2.0
SW-05	04/08/2003	20030408-15	Carson R Paynesville	5.1	7.39	65	12.40	28	57	3.40	1.83	2.4	2.4
SW-06	04/08/2003	20030408-16	Carson R Stateline	6.5	7.56	74	12.40	30	68	9.56	5.36	3.3	3.0
Surfacewaters: Indian Cr													
SW-02	04/08/2003	20030408-12	Indian Cr Upper	7.2	8.14	80	11.20	38	75	0.34	1.49	1.7	< 0.5
SW-03	04/08/2003	20030408-13	Indian Cr Mid	10.2	7.40	92	11.60	62	101	2.10	5.44	2.6	1.2
SW-04	04/08/2003	20030408-14	Indian Cr Lower	8.3	7.61	124	11.00	62	100	10.40	4.05	2.6	1.5

ALPINE COUNTY MONITORING

05/12/03

Site	Date	TotalP mg/L	PO4-P mg/L	TKN mg/L	NH3-N mg/L	NO2-N mg/L	NO3-N mg/L	Total N mg/L
Alpine Monitoring Wells								
ACMW-01AV	04/22/2003					< 0.020	0.317	
ACMW-01BE	04/22/2003					< 0.010	0.721	
ACMW-02N	04/22/2003					< 0.010	0.132	
ACMW-02S	04/22/2003					< 0.010	0.113	
ACMW-03	04/22/2003							
ACMW-04W	04/22/2003					< 0.020	2.020	
ACMW-06N	04/22/2003					< 0.010	< 0.010	
ACMW-06S	04/22/2003					0.022	0.083	
Groundwaters								
GW-03	04/15/2003					< 0.010	0.741	
GW-04	04/15/2003					< 0.010	0.885	
GW-05	04/15/2003					< 0.030	3.340	
GW-07	04/15/2003					< 0.010	1.600	
GW-08	04/15/2003					< 0.050	5.730	
GW-11	04/15/2003					< 0.010	0.508	
GW-14	04/15/2003					< 0.010	0.508	
ICR TMDL								
SW-11	04/08/2003							
Irrigation Waters								
SW-07	04/08/2003							
SW-08	04/08/2003	0.034	< 0.010	0.227	< 0.020	< 0.010	0.114	0.351
Reservoirs								
HPR	04/08/2003	2.500	2.240	19.300	17.500	0.105	0.729	20.134
Surfacewaters: Carson R								
SW-01	04/08/2003	0.011	< 0.010	0.291	< 0.020	< 0.010	0.033	0.334
SW-05	04/08/2003	0.025	< 0.010	0.197	< 0.020	< 0.010	0.027	0.234
SW-06	04/08/2003	0.050	< 0.010	0.407	< 0.020	< 0.010	0.034	0.451
Surfacewaters: Indian Cr								
SW-02	04/08/2003	0.019	0.010	0.304	< 0.020	< 0.010	< 0.010	0.324
SW-03	04/08/2003	0.101	< 0.010	0.269	< 0.020	< 0.010	< 0.010	0.289
SW-04	04/08/2003	0.052	0.015	0.318	< 0.020	< 0.010	< 0.010	0.338

ALPINE COUNTY MONITORING

Site	Date	COD mg/L	BOD mg/L	O & G mg/L	Boron mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	SAR	Exch Na %	Hardness mg/L	Water Level MSL or Ft
Alpine Monitoring Wells													
ACMW-01AV	04/22/2003												5480.8
ACMW-01BE	04/22/2003												5486.0
ACMW-02N	04/22/2003												5458.1
ACMW-02S	04/22/2003												5458.6
ACMW-03	04/22/2003												
ACMW-04W	04/22/2003												4903.1
ACMW-06N	04/22/2003												5216.1
ACMW-06S	04/22/2003												5204.8
Groundwaters													
GW-03	04/15/2003												
GW-04	04/15/2003												
GW-05	04/15/2003												
GW-07	04/15/2003												
GW-08	04/15/2003												
GW-11	04/15/2003												
GW-14	04/15/2003												
ICR TMDL													
SW-11	04/08/2003												
Irrigation Waters													
SW-07	04/08/2003												
SW-08	04/08/2003		0.9		0.02	9.8	2.5	9.7	2.0	0.71	36.0		
Reservoirs													
HPR	04/08/2003	29	4.0		0.17	14.6	3.4	44.7	9.6	2.73	60.7		52.0
Surfacewaters: Carson R													
SW-01	04/08/2003		1.3		0.05	6.2	1.7	3.6	1.0	0.33	24.8		
SW-05	04/08/2003		1.7	<	0.01	6.4	1.8	4.0	1.3	0.36	25.7		
SW-06	04/08/2003		1.5		0.02	7.0	2.1	4.6	1.7	0.39	26.3		
Surfacewaters: Indian Cr													
SW-02	04/08/2003		1.6		0.02	6.5	1.8	7.4	1.8	0.67	38.6		
SW-03	04/08/2003		1.2		0.02	12.0	3.4	8.6	1.8	0.56	28.9		
SW-04	04/08/2003		1.1		0.01	11.9	3.8	7.7	1.7	0.50	26.1		

ALPINE COUNTY
BACTERIOLOGICAL MONITORING

Alpine Monitoring Wells

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
ACMW-01AV	04/22/2003		1.1	<	1.1	
ACMW-01BE	04/22/2003	<	1.1	<	1.1	
ACMW-02N	04/22/2003	<	1.1	<	1.1	
ACMW-02S	04/22/2003	<	1.1	<	1.1	
ACMW-03	04/22/2003					
ACMW-04W	04/22/2003		1.1	<	1.1	
ACMW-06N	04/22/2003	<	1.1	<	1.1	
ACMW-06S	04/22/2003	<	1.1	<	1.1	

Groundwaters

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
GW-03	04/15/2003	<	1.1	<	1.1	
GW-04	04/15/2003	<	1.1	<	1.1	
GW-05	04/15/2003	<	1.1	<	1.1	
GW-07	04/15/2003		1.1	<	1.1	
GW-08	04/15/2003	<	1.1	<	1.1	
GW-11	04/15/2003	<	1.1	<	1.1	
GW-14	04/15/2003	<	1.1	<	1.1	

ICR TMDL

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-11	04/08/2003			

Irrigation Waters

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-07	04/08/2003			
SW-08	04/08/2003	15	4	

Reservoirs

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
HPR	04/08/2003	8	< 2	50

Surfacewaters: Carson R

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-01	04/08/2003	9	< 3	
SW-05	04/08/2003	93	< 3	
SW-06	04/08/2003	150	9	

ALPINE COUNTY
BACTERIOLOGICAL MONITORING

Surfacewaters: Indian Cr

Site	Date	Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-02	04/08/2003	23	<	3	
SW-03	04/08/2003	43		9	
SW-04	04/08/2003	20	<	3	

6-40
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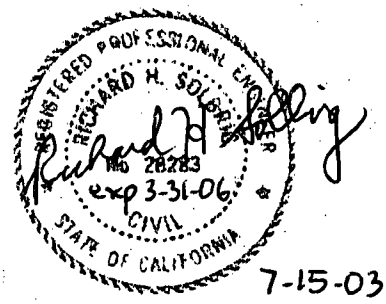
Site	Location	TDS		Cl		TKN		NO_3-N		Total N		Total P		SO_4		Boron		Exch Na %	
		Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence
SW-01	Carson River, Woodfords	55		1.0		0.13	✓	0.0		0.15	✓	0.02	✓	2.0		0.02		20	
SW-06	Carson River, Stateline	70		2.5		0.22	✓	0.0		0.25	✓	0.03	✓	2.0		0.02		20	✓
SW-02	Indian Creek, Upper	100		6.0						0.30	✓	0.03		8.0		0.25		30	✓
SW-03	Indian Creek, Mid	100	✓	6.0						0.30	✓	0.03	✓	8.0		0.25		30	
SW-04	Indian Creek, Lower	100		6.0						0.30	✓	0.03	✓	8.0		0.25		30	
SW-10	Indian Creek, Stateline	100		6.0						0.30		0.03		8.0		0.25		30	

Certification

I hereby certify that the enclosed monitoring report was prepared under my direct supervision and that I am a duly Registered Engineer under the laws of the State of California.

Sincerely,



7-15-03

Richard Solbrig,
Assistant Manager/Engineer

Considered in 2002 list
BN

Enclosures:

1.

Monthly Report Summary	Pages
Wastewater Treatment plant	2
Permit Compliance Record	1
Export pipeline inspection	
Sample site locations	2
Map of Alpine County sample sites	1
Tahoe Basin: Monitoring wells (ERB) and Heavenly Valley Creek (HVC)	1
Alpine County Surfacewaters, Groundwaters, and HPR	1
May TKN results for Alpine County and Heavenly Valley Creek	2
Total number of pages:	10

cc: Calif. Dept. of Health Services, ODW - Jess Morehouse
El Dorado Co. Dept. of Environmental Health - Virginia Huber
Nevada Division of Environmental Protection - Wendel McCurry
Alpine County Health Department - Dr. Janice Levesque
Alpine County Health Department - Jim Goodloe
Alpine County Board of Supervisors
Desert Research Group (Alpine County Consultants) - David McGraw
STPUD Board of Directors
STPUD General Manager / District Engineer - Robert G. Baer
STPUD Senior Engineer - John Thiel
STPUD Manager of Operations - Ross Johnson
STPUD Operations Chief Plant Operator - Jeff Lee
STPUD Laboratory Director - Terry Powers
STPUD Manager of Alpine County Operations - Hal Bird

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SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

JUNE 2003

		FLOW MGD					PRECIP		D.O. mg/L	COD mg/L		BOD mg/L		SS mg/L	
Date	Day	Inf	2-Hr Peak Inf	Eff	Pond Return	Pond Inf	Inch	Type	Fin	Raw	Fin	Raw	Fin	Raw	Fin
06/01/03	Sun	4.19	6.6	4.29					3.92	390					
06/02/03	Mon	3.95	5.7	4.04					4.65	356					
06/03/03	Tue	3.69	5.4	3.64					4.21	449					
06/04/03	Wed	3.78	5.6	4.21					3.97	387	40.0	174	5.7	161	1.6
06/05/03	Thu	3.74	5.5	3.70					4.22	379					
06/06/03	Fri	4.05	5.6	4.42					4.13	404					
06/07/03	Sat	4.45	6.4	4.31					4.88	413	42.7	168	4.8	144	2.6
06/08/03	Sun	4.36	6.8	4.38					4.44	371					
06/09/03	Mon	4.21	6.1	3.94					4.34	363					
06/10/03	Tue	3.93	5.8	4.52					3.94	354					
06/11/03	Wed	3.95	5.7	4.03					4.28	434	45.9	166	5.5	158	3.2
06/12/03	Thu	3.97	5.3	4.04					4.49	373					
06/13/03	Fri	3.94	5.6	4.12					4.63	378					
06/14/03	Sat	4.35	6.4	4.41					3.66	393	45.9	184	7.7	138	5.5
06/15/03	Sun	4.25	6.5	3.82					3.69	423					
06/16/03	Mon	4.13	6.1	4.79					3.27	417					
06/17/03	Tue	4.00	6.3	4.20					3.95	388	58.0	146	8.1	143	6.9
06/18/03	Wed	3.99	5.9	4.05					3.65	461					
06/19/03	Thu	4.26	6.2	4.32					3.93	413					
06/20/03	Fri	4.14	5.8	4.16					3.89	424					
06/21/03	Sat	4.66	7.0	4.63					3.70	414	54.4	177	10.6	165	7.8
06/22/03	Sun	4.53	7.5	4.74					3.27	435					
06/23/03	Mon	4.25	6.1	4.16			0.06	Rain	4.08	426	62.9			165	7.8
06/24/03	Tue	4.10	6.2	4.34					3.61	404					
06/25/03	Wed	4.04	6.1	4.24					3.78	406					
06/26/03	Thu	4.04	6.1	4.20					4.11	401					
06/27/03	Fri	4.21	6.1	3.99					4.52	402					
06/28/03	Sat	4.65	7.2	4.71					4.96	448	36.2	175	4.1	185	2.7
06/29/03	Sun	4.54	7.5	4.41					4.38	448					
06/30/03	Mon	4.14	6.5	4.27					4.71	431					
Permit Max		7.7									300		45		60
Permit Min															
Permit Ave											60		30		30
Total		124.49	185.6	127.08			0.06		123.26	12185	386.0	1190	46.5	1259	38.0
Maximum		4.66	7.5	4.79			0.06		4.96	461	62.9	184	10.6	185	7.8
Minimum		3.69	5.3	3.64			0.06		3.27	354	36.2	146	4.1	138	1.6
Average		4.15	6.2	4.24			0.06		4.11	406	48.3	170	6.6	157	4.8
# Tests		30	30	30	0	0	1		30	30	8	7	7	8	8

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

JUNE 2003

Date	Day	SETTLEABLE SOLIDS mL/L Raw		SETTLEABLE SOLIDS mL/L Fin	MBAS mg/L Raw	MBAS mg/L Fin	pH Units Raw	pH Units Fin	TURBIDITY NTU Fin	Cl2 mg/L Fin	FINAL COLIFORMS MPN/100 mL Total		FINAL COLIFORMS MPN/100 mL 7day-Median		TDS mg/L Raw	TDS mg/L Fin	ALKALINITY mg/L Raw	ALKALINITY mg/L Fin
06/01/03	Sun	10.0	<	0.1			7.45	7.58	3.30	5.65	<	2	<	2			152	138
06/02/03	Mon	9.0	<	0.1			7.56	7.73	2.50	5.81	<	2	<	2			146	138
06/03/03	Tue	9.0	<	0.1			7.49	7.72	2.40	5.45	<	2	<	2			158	138
06/04/03	Wed	10.0	<	0.1			7.51	7.74	2.20	6.06	<	2	<	2	241	234	141	134
06/05/03	Thu	8.0	<	0.1			7.61	7.68	2.45	6.58	<	2	<	2			143	132
06/06/03	Fri	10.0	<	0.1			7.44	7.56	2.80	9.41	<	2	<	2			148	134
06/07/03	Sat	11.0	<	0.1			7.58	7.76	2.45	4.42	<	2	<	2			154	140
06/08/03	Sun	9.5	<	0.1			7.47	7.60	2.40	5.04	<	2	<	2			152	140
06/09/03	Mon	7.5	<	0.1			7.58	7.70	2.60	6.01	<	2	<	2			144	137
06/10/03	Tue	8.5	<	0.1			7.43	7.55	3.00	6.63	<	2	<	2			140	134
06/11/03	Wed	10.0	<	0.1			7.44	7.38	3.25	5.60	<	2	<	2	262		140	133
06/12/03	Thu	9.0	<	0.1			7.41	7.40	4.00	5.24	<	2	<	2			141	139
06/13/03	Fri	11.0	<	0.1			7.56	7.56	4.35	5.60	<	2	<	2			144	140
06/14/03	Sat	10.0	<	0.1			7.46	7.73	5.30	5.14	<	2	<	2			152	144
06/15/03	Sun	11.0	<	0.1			7.44	7.50	5.60	4.37	<	2	<	2			160	148
06/16/03	Mon	11.0	<	0.1			7.48	7.46	5.70	6.12		2	<	2			153	148
06/17/03	Tue	9.5	<	0.1			7.52	7.42	6.20	7.86	<	2	<	2	243	230	148	135
06/18/03	Wed	14.0	<	0.1			7.52	7.46	6.80	7.86	<	2	<	2			152	136
06/19/03	Thu	10.5	<	0.1			7.53	7.77	6.95	5.29	<	2	<	2			144	144
06/20/03	Fri	12.0	<	0.1			7.64	7.62	7.30	7.03	<	2	<	2			146	142
06/21/03	Sat	12.0	<	0.1			7.58	7.77	6.85	5.55	<	2	<	2			159	149
06/22/03	Sun	11.0	<	0.1			7.47	7.51	8.10	5.45	<	2	<	2			158	152
06/23/03	Mon	11.0	<	0.1			7.61	7.64	7.20	5.60	<	2	<	2	252	243	149	149
06/24/03	Tue	10.0	<	0.1			7.56	7.92	4.70	6.74	<	2	<	2			154	143
06/25/03	Wed	7.5	<	0.1			7.53	7.60	3.32	6.32	<	2	<	2			158	144
06/26/03	Thu	10.0	<	0.1			7.52	7.52	2.70	6.38	<	2	<	2			156	144
06/27/03	Fri	11.0	<	0.1			7.59	7.68	2.80	7.01	<	2					154	146
06/28/03	Sat	11.0	<	0.1			7.66	7.66	2.40	5.44	<	2	<	2			168	152
06/29/03	Sun	10.0	<	0.1			7.48	7.63	3.20	4.55	<	2	<	2			161	156
06/30/03	Mon	14.0	<	0.1			7.59	7.86	3.30	6.52	<	2	<	2			165	158
Permit Max				0.1		2.0		8.5	20			240		23				
Permit Min								6.5										
Permit Ave						1.0			10									
Total		308.0		3.0	0.00	0.000	225.71	228.71	126.12	180.73		60		58	998	707	4540	4267
Maximum		14.0		0.1	ERR	ERR	7.66	7.92	8.10	9.41		2		2	262	243	168	158
Minimum		7.5		0.1	ERR	ERR	7.41	7.38	2.20	4.37		2		2	241	230	140	132
Average		10.3		0.1	ERR	ERR	7.52	7.62	4.20	6.02		2		2	250	236	151	142
# Tests		30		30	0	0	30	30	30	30		30		29	4	3	30	30

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT
COMPLIANCE RECORD

2003

Parameter	# Tests	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Compliance, %
Total Plant Inflow; 7.7 MGD; Dry Weather	181	0	0	0	0	0	0							0	100.0
2-Hour Peak Inflow; 18.5 MGD	181	0	0	0	0	0	0							0	100.0
COD, 30 Day Ave: 60 mg/L	6	0	0	0	0	0	0							0	100.0
COD, Max: 300 mg/L	51	0	0	0	0	0	0							0	100.0
BOD, 30 Day Ave: 30 mg/L	6	0	0	0	0	0	0							0	100.0
BOD, Max: 45 mg/L	47	0	0	0	0	0	0							0	100.0
SS, 30 Day Ave: 30 mg/L	6	0	0	0	0	0	0							0	100.0
SS, Max: 60 mg/L	51	0	0	0	0	0	0							0	100.0
Settleable Solids, Max: 0.1 mL/L	181	0	0	0	0	0	0							0	100.0
Turbidity, 30 Day Ave: 10 NTU	6	0	0	0	0	0	0							0	100.0
Turbidity, Max: 20 NTU	181	0	0	0	0	0	0							0	100.0
pH, 6.5 to 8.5	181	0	0	0	0	0	0							0	100.0
Total Coliforms, Max: 240 MPN/100 mL	180	0	0	0	0	0	0							0	100.0
Total Coliforms, 7-day Median: 23 MPN	178	0	0	0	0	0	0							0	100.0
Total	1,436	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0

SAMPLE LOCATIONS

TAHOE BASIN MONITORING WELLS

Site	Location
ERB	Emergency Retention Basin
CONTROL	North of Post Office
MW02-25, -50	Emergency Retention Basin, S side
MW03-25, -50	Emergency Retention Basin, S side
MW04-25, -50	Emergency Retention Basin, W side
MW07-25, -50	Emergency Retention Basin, N side
MW08-25, -50	Pond #1, SW corner
MW11	S.E. corner of wastewater treatment plant grounds
MW12	South of Emergency Pump Building, for buried sludge
MW13	Pond 2, along Heavenly Valley Creek, for buried sludge

HEAVENLY VALLEY CREEK

HVC-1	At Pioneer Trail
HVC-2	250 ft upstream of Pond #2
HVC-3	25 ft downstream of Johnson Blvd.
HVC-4	Effluent of drain pipe from Lower Shop area
HVC-5	Effluent of drainage pipe along Johnson Blvd, 10 feet upstream of Johnson Blvd.

ALPINE COUNTY MONITORING WELLS

Site	Location
ACMW-01AW	Below main dam at Harvey Place Reservoir
ACMW-01BE	Below auxiliary dam at Harvey Place Reservoir
ACMW-02, N&S	On dam access road at Diamond Valley Road
ACMW-03	Bruns ranch, east side of Highway 88
ACMW-04W	Gansberg ranch, west side of Highway 88
ACMW-05	Dressler ranch
ACMW-06, N&S	Celio ranch, on Diamond Valley Road

ALPINE SOILS

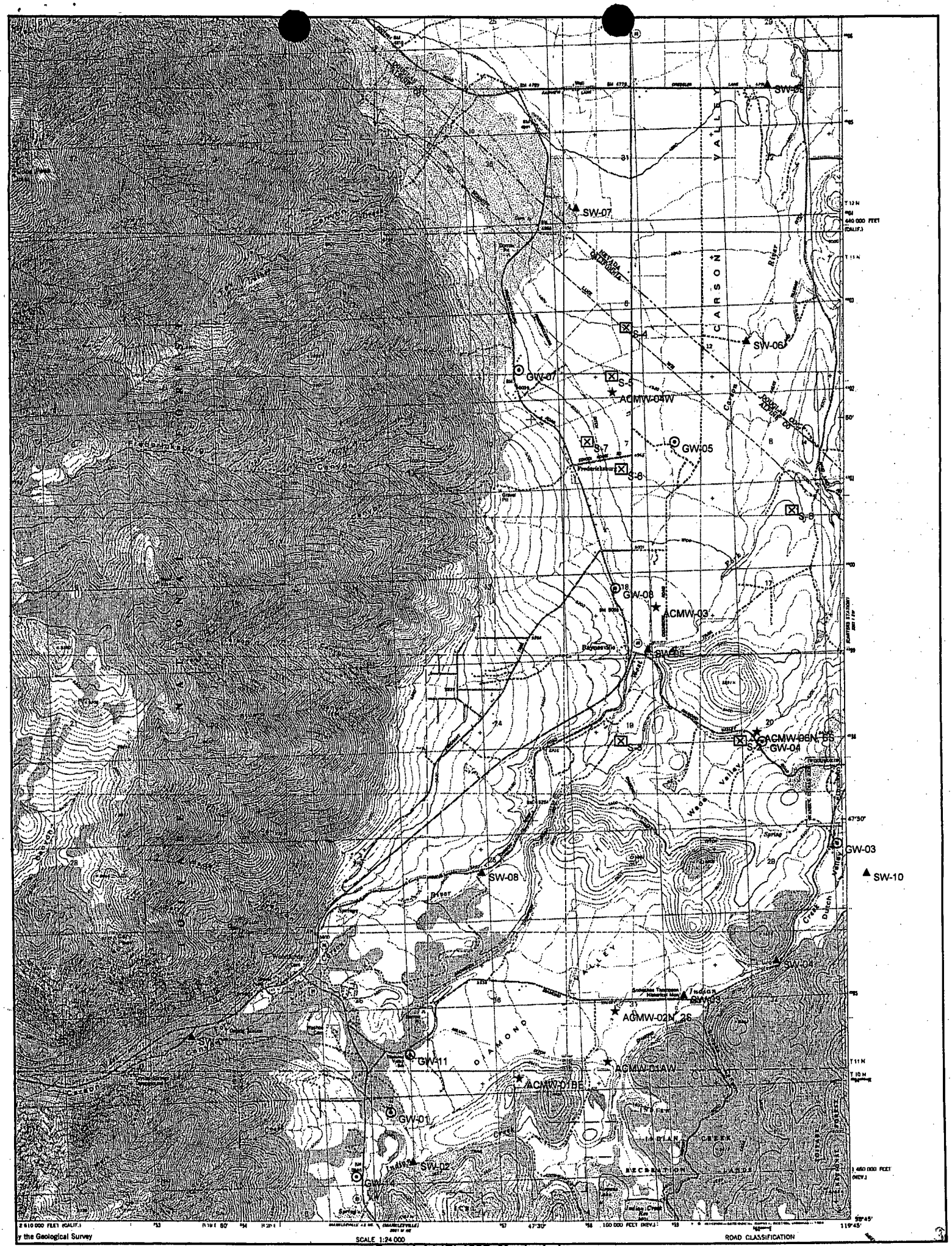
Site	Ranch
S2	Celio
S3	Hall
S4	Gansberg
S5	Gansberg
S6	Neddenriep
S7	Bruns
S8	Dressler

ALPINE GROUNDWATERS

Site	Homeowner
GW-01	Sagues
GW-03	Smith/Springmeyer
GW-04	Celio
GW-05	Neddenriep
GW-07	Gansberg, Jr.
GW-08	Arant
GW-11	Diamond Valley School
GW-14	Sierra Pines Store

ALPINE SURFACEWATERS

Site	Location
SW-01	Carson River, Woodfords
SW-02	Indian Creek, @ HWY 89
SW-03	Indian Creek, @ upper bridge
SW-04	Indian Creek, @ lower bridge
SW-05	Carson River, Paynesville
SW-06	Carson River, Stateline
SW-07	Fredericksberg Ditch, Stateline
SW-08	Irrigation Ditch along Carson River Road
SW-09	Carson River, Dressler Lane
SW-10	Indian Creek, @ Smith-Springmeyer Ranch



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TAHOE BASIN MONITORING

07/07/03

Site	Date	ID	Location	Depth msl	Temp C	pH	EC umho	Cl mg/L		COD mg/L	TKN mg/L		NO3-N mg/L	Comment
Buried Sludge Monitoring														
MW11	06/25/03	20030625-19	Sludge Pond	6260.9	9.5	6.86	106	1.5	<	5.0			0.180	
MW12	06/25/03	20030625-20	Sludge Pond	6262.4	10.5	6.20	190	2.1	<	5.0			0.478	
MW13	06/25/03	20030625-21	Sludge Pond	6256.9	9.0	6.90	947	5.1		18.2			15.000	
ERB Monitoring														
CONTROL	06/25/03	20030625-14	At Post Office	6278.3	10.4	7.08	180	8.7	<	5.0			2.690	
MW01-50	06/25/03	0030625-MW01.	SW corner of ERB											Dry
MW02-50	06/25/03	20030625-MW02	Black Bart side of ERB											Dry
MW03-50	06/25/03	20030625-15	Black Bart side of ERB	6267.6	12.4	6.25	625	61.1	<	5.0			23.700	
MW04-50	06/25/03	20030625-16	Hank Monk side of ERB	6267.9	10.0	6.37	79	5.7	<	5.0			0.080	
MW07-50	06/25/03	20030625-17	North side of ERB	6276.6	9.5	6.44	240	22.0	<	5.0			0.575	
Heavenly Valley Creek														
HVC-1	06/25/03	20030625-07	Downstream of Pioneer		6.8	7.10	33	1.1	<	5.0			0.023	Plastic baggie
HVC-2	06/25/03	20030625-08	250' upstream of Pond #2		6.7	7.19	37	1.1		11.1			0.012	Some foam
HVC-3	06/25/03	20030625-09	25' downstream of Johnson Blvd		6.7	6.81	37	1.1		14.3		<	0.010	
HVC-4	06/25/03	20030625-HVC4	Effluent of drain from Lower Shop a											Dry
HVC-5	06/25/03	20030625-HVC5	Effluent of drainage pipe along Johi											Dry
Treatment Plant Monitoring														
MW08-25	06/25/03	20030625-18	SW side of Pond #1	6246.9	10.0	6.49	999	37.6		92.6			0.014	

ALPINE COUNTY MONITORING

07/14/03

Site	Date	ID	Location	Temp C	pH	EC umhos	DO mg/L	Alk mg/L	TDS mg/L	SS mg/L	Turb NTU	Cl mg/L	SO4 mg/L
Alpine Monitoring Wells													
ACMW-01AW	06/17/2003	20030617-20	Main Dam	10.2	7.68	81		34	67			2.8	2.5
ACMW-01BE	06/17/2003	20030617-21	Secondary Dam	9.6	7.16	83		38	67			1.9	1.6
ACMW-02N	06/17/2003	20030617-22	Access Gate	14.2	7.00	116		52	77			3.1	2.3
ACMW-02S	06/17/2003	20030617-23	Access Gate	13.0	6.89	100		45	73			3.1	1.6
ACMW-03	06/17/2003	20030617-24	HWY 88	14.3	6.88	309		29	188			35.9	19.5
ACMW-04W	06/17/2003	20030617-25	Gansberg	14.1	6.50	209		41	130			30.1	7.5
ACMW-06N	06/17/2003	20030617-26	Celio	13.9	6.82	719		250	435			69.0	27.1
ACMW-06S	06/17/2003	20030617-27	Celio	13.4	8.46	582		171	305			74.1	22.5
Groundwaters													
GW-01	06/10/2003	20030610-16	Cohen	10.1	7.29	145							
GW-02	06/10/2003	20030610-17	Heiss	12.9	7.29	150		58	124			5.0	3.4
GW-03	06/10/2003	20030610-18	Smith/Springmeyer	17.1	7.65	307		128	238			1.7	28.4
GW-04	06/10/2003	20030610-19	Celio	15.0	7.53	263		115	204			3.8	11.8
GW-05	06/10/2003	20030610-20	Neddenriep	12.6	6.75	246		58	174			24.9	11.9
GW-07	06/10/2003	20030610-21	Gansberg	12.8	6.62	122		50	105			2.0	3.0
GW-08	06/10/2003	20030610-22	Arant	15.3	7.15	282		44	187			31.5	8.9
GW-11	06/10/2003	20030610-23	Diamond Val. School	15.5	7.38	144		71	122			0.8	0.8
GW-14	06/10/2003	20030610-24	Sierrra Pines	11.8	7.00	110		53	103			1.4	1.8
Irrigation Waters													
SW-07	06/03/2003	20030603-18	Fredericksburg Ditch	13.0	7.01	118	6.42	50	108	14.30	9.5	7.6	3.0
SW-07	06/10/2003	20030610-26	Fredericksburg Ditch	14.0	7.26	154	4.44		140			5.1	2.3
SW-08	06/03/2003	20030603-19	Irrigation Ditch	12.4	7.03	92	6.91	45	78	4.50	2.64	1.1	2.6
Reservoirs													
HPR	06/03/2003	20030603-20	Harvey Place Reservoir	19.6	7.93	469	2.18	109	227	2.52	1.7	56.4	18.6
Surfacewaters: Carson R													
SW-01	06/03/2003	20030603-12	Carson R Woodfords	6.2	7.87	37	8.70	20	40	17.70	6.52	0.8	1.0
SW-05	06/03/2003	20030603-16	Carson R Paynesville	8.2	7.14	39	2.07	20	40	17.50	8.01	0.8	1.0
SW-05	06/10/2003	20030610-25	Carson R Paynesville	8.8	7.80	37	9.35		42			0.7	1.0
SW-06	06/03/2003	20030603-17	Carson R Stateline	10.0	7.45	45	6.44	20	43	20.60	8.09	0.9	1.0
Surfacewaters: Indian Cr													
SW-02	06/03/2003	20030603-13	Indian Cr Upper	15.7	7.26	76	2.49	40	82	1.40	2.43	0.9	< 0.5
SW-03	06/03/2003	20030603-14	Indian Cr Mid	17.5	7.33	213	1.74	106	151	6.72	10.5	4.5	2.4
SW-04	06/03/2003	20030603-15	Indian Cr Lower	15.2	7.55	107	1.35	54	86	3.26	2.91	1.4	0.9

ALPINE COUNTY MONITORING

07/14/03

Site	Date	TotalP mg/L	PO4-P mg/L	TKN mg/L	NH3-N mg/L	NO2-N mg/L	NO3-N mg/L	Total N mg/L
Alpine Monitoring Wells								
ACMW-01AV	06/17/2003					< 0.200	0.260	
ACMW-01BE	06/17/2003					< 0.010	0.287	
ACMW-02N	06/17/2003					< 0.010	0.106	
ACMW-02S	06/17/2003					< 0.010	0.120	
ACMW-03	06/17/2003					< 0.060	9.890	
ACMW-04W	06/17/2003					< 0.020	1.620	
ACMW-06N	06/17/2003					< 0.010	< 0.010	
ACMW-06S	06/17/2003					0.020	0.085	
Groundwaters								
GW-01	06/10/2003							
GW-02	06/10/2003					< 0.020	2.310	
GW-03	06/10/2003					< 0.010	0.746	
GW-04	06/10/2003					< 0.010	0.858	
GW-05	06/10/2003					< 0.030	3.360	
GW-07	06/10/2003					< 0.010	1.460	
GW-08	06/10/2003					< 0.050	4.720	
GW-11	06/10/2003					< 0.010	0.518	
GW-14	06/10/2003					< 0.100	0.495	
Irrigation Waters								
SW-07	06/03/2003	0.204	0.075	1.060	0.179	0.017	0.138	1.215
SW-07	06/10/2003	0.171	0.067	1.110	0.156	0.015	0.099	1.224
SW-08	06/03/2003	0.026	< 0.010	0.587	0.034	< 0.100	0.056	0.743
Reservoirs								
HPR	06/03/2003	2.100	2.140	15.600	15.800	0.370	1.010	16.980
Surfacewaters: Carson R								
SW-01	06/03/2003	0.043	< 0.010	0.427	0.044	< 0.010	0.017	0.454
SW-05	06/03/2003	0.036	< 0.010	0.411	0.075	< 0.010	0.013	0.434
SW-05	06/10/2003	0.038	< 0.010	0.235	< 0.020	< 0.010	< 0.100	0.345
SW-06	06/03/2003	0.047	< 0.010	0.534	0.038	< 0.010	0.014	0.558
Surfacewaters: Indian Cr								
SW-02	06/03/2003	0.020	< 0.010	0.413	0.027	< 0.010	< 0.010	0.433
SW-03	06/03/2003	0.136	0.015	0.629	0.063	< 0.100	0.012	0.741
SW-04	06/03/2003	0.066	0.019	0.585	0.022	< 0.010	< 0.010	0.605

ALPINE COUNTY MONITORING

Site	Date	COD mg/L	BOD mg/L	O & G mg/L	Boron mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	SAR	Exch Na %	Hardness mg/L	Water Level MSL or Ft
Alpine Monitoring Wells													
ACMW-01AV	06/17/2003												5480.9
ACMW-01BE	06/17/2003												5492.8
ACMW-02N	06/17/2003												5458.9
ACMW-02S	06/17/2003												5460.6
ACMW-03	06/17/2003												5039.9
ACMW-04W	06/17/2003												4907.6
ACMW-06N	06/17/2003												5214.9
ACMW-06S	06/17/2003												5205.1
Groundwaters													
GW-01	06/10/2003												
GW-02	06/10/2003												
GW-03	06/10/2003												
GW-04	06/10/2003												
GW-05	06/10/2003												
GW-07	06/10/2003												
GW-08	06/10/2003												
GW-11	06/10/2003												
GW-14	06/10/2003												
Irrigation Waters													
SW-07	06/03/2003		1.9		0.03	10.6	3.4	8.1	5.1	0.55	27.3		
SW-07	06/10/2003												
SW-08	06/03/2003		0.1		0.02	8.6	2.2	6.8	1.7	0.54	31.4		
Reservoirs													
HPR	06/03/2003	24	2.9		0.16	14.1	3.5	45.6	8.5	2.81	62.1		56.0
Surfacewaters: Carson R													
SW-01	06/03/2003		0.5		0.02	4.2	1.3	2.0	0.8	0.22	20.4		
SW-05	06/03/2003		0.5	<	0.01	4.2	1.4	2.1	0.9	0.23	21.2		
SW-05	06/10/2003												
SW-06	06/03/2003		0.6		0.02	4.4	1.5	2.2	0.9	0.23	21.0		
Surfacewaters: Indian Cr													
SW-02	06/03/2003		0.5		0.01	6.9	1.9	6.0	1.5	0.52	32.5		
SW-03	06/03/2003		1.4		0.04	19.2	6.5	14.0	2.2	0.70	28.2		
SW-04	06/03/2003		1.0		0.01	11.4	3.6	5.0	1.4	0.33	19.4		

ALPINE COUNTY
BACTERIOLOGICAL MONITORING

Alpine Monitoring Wells

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
ACMW-01AV	06/17/2003	< 1.1	< 1.1	
ACMW-01BE	06/17/2003	1.1	< 1.1	
ACMW-02N	06/17/2003	< 1.1	< 1.1	
ACMW-02S	06/17/2003	5.1	< 1.1	
ACMW-03	06/17/2003	< 1.1	< 1.1	
ACMW-04W	06/17/2003	< 1.1	< 1.1	
ACMW-06N	06/17/2003	< 1.1	< 1.1	
ACMW-06S	06/17/2003	< 1.1	< 1.1	

Groundwaters

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
GW-01	06/10/2003			
GW-02	06/10/2003	< 1.1	< 1.1	
GW-03	06/10/2003	< 1.1	< 1.1	
GW-04	06/10/2003	< 1.1	< 1.1	
GW-05	06/10/2003	1.1	< 1.1	
GW-07	06/10/2003	< 1.1	< 1.1	
GW-08	06/10/2003	< 1.1	< 1.1	
GW-11	06/10/2003	< 1.1	< 1.1	
GW-14	06/10/2003	< 1.1	< 1.1	

Irrigation Waters

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-07	06/03/2003	4600	4600	
SW-07	06/10/2003			
SW-08	06/03/2003	930	930	

Reservoirs

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
HPR	06/03/2003	30	4	80

Surfacewaters: Carson R

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-01	06/03/2003	43	23	
SW-05	06/03/2003	23	23	
SW-05	06/10/2003			
SW-06	06/03/2003	75	43	

Surfacewaters: Indian Cr

Site	Date	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-02	06/03/2003	460	9	
SW-03	06/03/2003	11000	11000	
SW-04	06/03/2003	930	93	

HEAVENLY VALLEY CREEK
TOTAL KJELDAHL NITROGEN
Results from Previous Months

Site	Date	ID	TKN mg/L
HVC-1	04/22/03	20030422-17	0.134
HVC-1	05/20/03	20030520-19	0.210
HVC-2	04/22/03	20030422-18	0.349
HVC-2	05/20/03	20030520-20	0.440
HVC-3	04/22/03	20030422-19	0.428
HVC-3	05/20/03	20030520-21	0.580
HVC-4	04/22/03	20030422-20	0.240

ALPINE COUNTY MONITORING
TOTAL KJELDAHL NITROGEN
Results from Previous Months

Site	Date	ID		TKN mg/L
ACMW-01AW	05/13/03	20030513-13		0.100
ACMW-01BE	05/13/03	20030513-14		0.076
ACMW-02N	05/13/03	20030513-15		0.089
ACMW-02S	05/13/03	20030513-16		0.120
ACMW-03	05/20/03	20030520-15		0.180
ACMW-04W	05/13/03	20030513-17		0.061
ACMW-06N	05/13/03	20030513-18		0.290
ACMW-06S	05/13/03	20030513-19		0.300
GW-01	05/01/03	20030501-08		0.150
GW-02	05/01/03	20030501-09		0.100
GW-03	05/01/03	20030501-10		0.081
GW-04	05/01/03	20030501-11		0.071
GW-05	05/01/03	20030501-12	<	0.050
GW-07	05/01/03	20030501-13		0.050
GW-08	05/01/03	20030501-14	<	0.050
GW-11	05/01/03	20030501-15	<	0.050
GW-14	05/01/03	20030501-16		0.053
HPR	05/01/03	20030501-17		22.000
ICR-1	05/20/03	20030520-12		0.550
ICR-1	05/20/03	20030520-13		0.640
ICR-1	05/20/03	20030520-14		0.630
SW-01	05/06/03	20030506-16		0.200
SW-02	05/06/03	20030506-17		0.200
SW-03	05/06/03	20030506-18		0.200
SW-04	05/06/03	20030506-19		0.500
SW-05	05/06/03	20030506-20		0.200
SW-05	05/13/03	20030513-20		0.400
SW-06	05/06/03	20030506-21		0.200
SW-07	05/06/03	20030506-22		0.800
SW-08	05/06/03	20030506-23		0.300
SW-09	05/06/03	20030506-24		0.300
SW-10	05/06/03	20030506-25		0.400
SW-13	05/06/03	20030506-26		0.200
SW-13	05/13/03	20030513-21		0.310
SW-15	05/06/03	20030506-27		0.300
SW-15	05/13/03	20030513-22		0.390
SW-16	05/06/03	20030506-28		0.500
SW-16	05/13/03	20030513-23		0.880

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The West Fork, Carson River Water Quality Objectives and East Fork, Carson River limitations were exceeded as follows (a ✓ indicates objective exceeded):

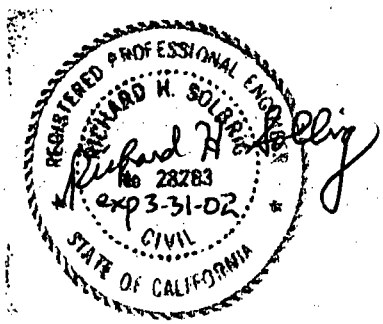
Site	Location	TDS		Cl		TKN		NO_3-N		Total N		Total P		SO_4		Boron		Exch Na %	
		Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence
SW-01	Carson River, Woodfords	55		1.0		0.13	✓	0.02		0.15	✓	0.02		2.0		0.02		20	✓
SW-06	Carson River, Stateline	70		2.5		0.22	✓	0.03		0.25	✓	0.03		2.0	✓	0.02		20	✓
SW-02	Indian Creek, Upper	100		6.0						0.30	✓	0.03	✓	8.0		0.25		30	
SW-03	Indian Creek, Mid	100	✓	6.0						0.30	✓	0.03	✓	8.0		0.25		30	✓
SW-04	Indian Creek, Lower	100	✓	6.0						0.30	✓	0.03	✓	8.0		0.25		30	
SW-10	Indian Creek, Stateline	100		6.0						0.30		0.03		8.0		0.25		30	

Blue Green Algae test results will be sent as soon as the tests are completed.

Certification

I hereby certify that the enclosed monitoring report was prepared under my direct supervision and that I am a duly Registered Engineer under the laws of the State of California.

Sincerely,



Richard Solbrig,
Assistant Manager/Engineer

Enclosures:

1.

July Monthly Report	Pages
Wastewater Treatment plant	2
Permit Compliance Record	1
Export pipeline inspection	1
Sample site locations	2
Monitoring wells (ERB) and Heavenly Valley Creek (HVC) - Tahoe Basin	1
Alpine County Surfacewaters, Groundwaters, and HPR	4
Alpine County Soils	
Total number of pages:	11

cc: Calif. Dept. of Health Services, ODW - Jess Morehouse
El Dorado Co. Dept. of Environmental Health - Virginia Huber
Nevada Division of Environmental Protection - Wendel McCurry
Alpine County Health Department - Dr. Richard Botto
Alpine County Health Department - Jim Goodloe
Alpine County Board of Supervisors
Desert Research Group (Alpine County Consultants) - Bill Albright
STPUD Board of Directors
STPUD General Manager / District Engineer - Robert G. Baer
STPUD Manager of Operations - Ross Johnson
STPUD Operations Chief Plant Operator - Jeff Lee
STPUD Laboratory Director - Terry Powers
STPUD Manager of Alpine County Operations - Hal Bird

File: \LAHONTAN\07-00 Report.WPD

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

08/09/00
15:35:57

JULY 2000

Date	Day	FLOW MGD Inf	2-Hr Peak Inf	Eff	Pond Return	Pond Inf	PRECIP Inch	Type	D.O. mg/L Fin	COD mg/L Raw	COD mg/L Fin	BOD mg/L Raw	BOD mg/L Fin	SS mg/L Raw	SS mg/L Fin
07/01/00	Sat	5.98	7.5	5.27					6.65	406	45.4	161	9.7	130	4.0
07/02/00	Sun	6.54	9.3	5.60					5.71	423					
07/03/00	Mon	6.40	9.2	5.90					5.68	424	49.2	145	9.5	174	4.0
07/04/00	Tue	6.36	9.8	6.04					2.86	437					
07/05/00	Wed	5.41	8.9	5.12					4.63	502					
07/06/00	Thu	5.33	7.3	4.75					5.50	373					
07/07/00	Fri	5.38	7.4	5.06					4.80	382					
07/08/00	Sat	5.45	8.1	5.16					4.83	415	40.0			144	3.5
07/09/00	Sun	5.46	8.1	4.96					5.11	527					
07/10/00	Mon	5.18	7.3	4.70					5.43	384					
07/11/00	Tue	4.95	7.8	4.56					5.12	402					
07/12/00	Wed	5.02	8.0	4.60					5.06	464	40.7	150	5.2	160	2.7
07/13/00	Thu	5.00	7.0	4.47					5.30	384					
07/14/00	Fri	5.26	7.5	4.79					5.23	442					
07/15/00	Sat	5.77	8.0	5.33					5.28	408	45.6	137	7.0	161	3.5
07/16/00	Sun	5.57	8.2	5.11					5.26	366					
07/17/00	Mon	5.21	7.5	4.87					4.93	375					
07/18/00	Tue	5.04	7.4	4.55					4.68	370					
07/19/00	Wed	5.09	7.2	4.71					5.06	566	42.6	171	5.6	201	2.4
07/20/00	Thu	5.24	7.5	5.03					4.79	393					
07/21/00	Fri	5.54	7.5	4.85					5.28	396					
07/22/00	Sat	5.86	8.0	5.46					4.51	388	43.4	158	6.5	144	3.9
07/23/00	Sun	5.56	10.1	4.97					4.77	426					
07/24/00	Mon	5.29	7.8	4.83					5.12	354					
07/25/00	Tue	5.27	8.0	4.81					5.00	368					
07/26/00	Wed	5.16	7.6	4.73					5.02	428	31.7	126	4.2	163	4.3
07/27/00	Thu	5.14	7.5	4.62					4.96	426					
07/28/00	Fri	5.37	8.0	4.97					3.51	414					
07/29/00	Sat	5.96	8.2	5.53					4.74	444	36.1	156	5.5	156	2.9
07/30/00	Sun	5.76	10.3	5.07					4.84	384					
07/31/00	Mon	5.41	8.0	5.08					4.48	352					
PERMIT MAX		7.7									300		45		60
PERMIT MIN															
PERMIT AVE											60		30		30
TOTAL		169.96	250.0	155.50			0.00		154.14	12823	374.7	1204	53.2	1433	31.2
MAXIMUM		6.54	10.3	6.04			ERR		6.65	566	49.2	171	9.7	201	4.3
MINIMUM		4.95	7.0	4.47			ERR		2.86	352	31.7	126	4.2	130	2.4
AVERAGE		5.48	8.1	5.02			ERR		4.97	414	41.6	151	6.6	159	3.5
# Tests		31	31	31	0	0	0		31	31	9	8	8	9	9

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

JULY 2000

		SETTLEABLE SOLIDS mL/L			MBAS mg/L		pH Units		TURBIDITY NTU	CI2 mg/L	FINAL COLIFORMS MPN/100 mL			TDS mg/L		ALKALINITY mg/L	
Date	Day	Raw		Fin	Raw	Fin	Raw	Fin	Fin	Fin	Total	7day- Median		Raw	Fin	Raw	Fin
07/01/00	Sat	10.5	<	0.1			7.37	7.74	4.00	7.86	< 2	<	2			153	140
07/02/00	Sun	14.0	<	0.1			7.42	7.47	3.40	5.68	< 2	<	2			162	148
07/03/00	Mon	12.0	<	0.1			7.43	7.55	3.70	3.38	< 2	<	2	267	244	163	148
07/04/00	Tue	14.0	<	0.1			7.63	7.62	4.30	6.22	< 2	<	2			167	151
07/05/00	Wed	15.0	<	0.1			7.49	7.68	4.40	3.49	< 2	<	2			164	148
07/06/00	Thu	12.5	<	0.1			7.55	7.64	4.40	2.51	< 2	<	2			156	148
07/07/00	Fri	12.0	<	0.1			7.40	7.40	3.10	4.37	< 2	<	2			152	146
07/08/00	Sat	12.5	<	0.1			7.38	7.62	2.90	4.37	< 2	<	2			157	144
07/09/00	Sun	14.0	<	0.1			7.40	7.49	2.60	4.37	2	<	2			159	146
07/10/00	Mon	11.5	<	0.1			7.57	7.62	2.90	6.55	< 2	<	2			150	145
07/11/00	Tue	11.0	<	0.1			7.48	7.67	2.40	6.22	< 2	<	2			151	142
07/12/00	Wed	13.5	<	0.1			7.57	7.58	2.25	4.26	< 2	<	2	271	232	152	139
07/13/00	Thu	12.0	<	0.1			7.42	7.50	2.30	4.04	2	<	2			155	138
07/14/00	Fri	13.0	<	0.1			7.44	7.46	2.60	2.84	< 2	<	2			155	144
07/15/00	Sat	13.5	<	0.1			7.44	7.62	3.10	3.60	< 2	<	2			157	145
07/16/00	Sun	13.0	<	0.1			7.40	7.50	3.00	3.17	< 2	<	2			162	147
07/17/00	Mon	11.5	<	0.1			7.42	7.58	3.00	6.11	< 2	<	2			152	144
07/18/00	Tue	14.0	<	0.1			7.56	7.81	2.80	6.44	2	<	2			152	142
07/19/00	Wed	13.0	<	0.1			7.45	7.62	2.70	4.69	< 2	<	2	265	236	147	139
07/20/00	Thu	13.0	<	0.1			7.54	7.56	2.80	4.91	< 2	<	2			148	140
07/21/00	Fri	11.0	<	0.1			7.38	7.46	2.30	3.82	2	<	2			149	140
07/22/00	Sat	12.0	<	0.1			7.30	7.68	2.50	3.17	< 2	<	2			153	144
07/23/00	Sun	14.0	<	0.1			7.32	7.46	2.40	3.82	< 2	<	2			160	148
07/24/00	Mon	13.0	<	0.1			7.43	7.52	2.10	3.71	< 2	<	2			154	147
07/25/00	Tue	12.0	<	0.1			7.42	7.54	2.10	6.00	4	<	2			148	146
07/26/00	Wed	13.0	<	0.1			7.40	7.58	1.80	3.93	< 2	<	2	232	228	149	142
07/27/00	Thu	12.0	<	0.1			7.38	7.66	1.50	5.13	< 2	<	2			151	138
07/28/00	Fri	13.5	<	0.1			7.47	7.52	1.80	3.71	< 2	<	2			150	143
07/29/00	Sat	16.5	<	0.1			7.53	7.58	1.80	3.06	< 2	<	2			157	148
07/30/00	Sun	13.0	<	0.1			7.44	7.43	2.30	2.51	2	<	2			169	152
07/31/00	Mon	11.5	<	0.1			7.54	7.42	2.00	4.26	< 2	<	2			162	150
PERMIT MAX				0.1		2.0		8.5	20		240		23				
PERMIT MIN								6.5									
PERMIT AVE						1.0			10								
TOTAL		397.0		3.1	0.00	0.000	230.97	234.58	85.25	138.20	64		62	1035	940	4816	4482
MAXIMUM		16.5		0.1	ERR	ERR	7.63	7.81	4.40	7.86	4		2	271	244	169	152
MINIMUM		10.5		0.1	ERR	ERR	7.30	7.40	1.50	2.51	2		2	232	228	147	138
AVERAGE		12.8		0.1	ERR	ERR	7.45	7.57	2.75	4.46	2		2	259	235	155	145
# Tests		31		31	0	0	31	31	31	31	31		31	4	4	31	31

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT
COMPLIANCE RECORD

2000

Parameter	# Tests	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Compliance, %
Total Plant Inflow; 7.7 MGD; Dry Weather	213	0	0	0	0	0	0	0						0	100.0
2-Hour Peak Inflow; 18.5 MGD	212	0	0	0	0	0	0	0						0	100.0
COD, 30 Day Ave: 60 mg/L	7	0	0	0	0	0	0	0						0	100.0
COD, Max: 300 mg/L	58	0	0	0	0	0	0	0						0	100.0
BOD, 30 Day Ave: 30 mg/L	7	0	0	0	0	0	0	0						0	100.0
BOD, Max: 45 mg/L	55	0	0	0	0	0	0	0						0	100.0
SS, 30 Day Ave: 30 mg/L	7	0	0	0	0	0	0	0						0	100.0
SS, Max: 60 mg/L	60	0	0	0	0	0	0	0						0	100.0
Settleable Solids, Max: 0.1 mL/L	210	0	0	0	0	0	0	0						0	100.0
Turbidity, 30 Day Ave: 10 NTU	7	0	0	0	0	0	0	0						0	100.0
Turbidity, Max: 20 NTU	209	0	0	0	0	0	0	0						0	100.0
pH, 6.5 to 8.5	209	0	0	0	0	0	0	0						0	100.0
Total Coliforms, Max: 240 MPN/100 mL	207	0	0	0	0	0	0	0						0	100.0
Total Coliforms, 7-day Median: 23 MPN	207	0	0	0	0	0	0	0						0	100.0
MBAS, 30 Day Ave: 1.0 mg/L	6	0	0	0	0	0	0							0	100.0
MBAS, Max: 2.0 mg/L	6	0	0	0	0	0	0							0	100.0
Total	1,680	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0

SOUTH TAHOE PUBLIC UTILITY DISTRICT
MEMORANDUM

Date:July 13, 2000

To: Bob Baer, Diane Noble, Terry Powers

From: Greg Schrempp

Topic: Export Line Inspection
****

On July 13 2000, Tim Rieger and I conducted our check of the District's export line from the treatment plant to where the "C" line daylights at Harvey Place at Station 564+04. Numerous wet spots were checked, however no leaks were found.

SAMPLE LOCATIONS

TAHOE BASIN MONITORING WELLS

Site	Location
ERB	Emergency Retention Basin
CONTROL	North of Post Office
MW02-25, -50	Emergency Retention Basin, S side
MW03-25, -50	Emergency Retention Basin, S side
MW04-25, -50	Emergency Retention Basin, W side
MW07-25, -50	Emergency Retention Basin, N side
MW08-25, -50	Pond #1, SW corner
MW11	S.E. corner of wastewater treatment plant grounds
MW12	South of Emergency Pump Building, for buried sludge
MW13	Pond 2, along Heavenly Valley Creek, for buried sludge

HEAVENLY VALLEY CREEK

HVC-1	At Pioneer Trail
HVC-2	250 ft upstream of Pond #2
HVC-3	25 ft downstream of Johnson Blvd.
HVC-4	Effluent of drain pipe from Lower Shop area
HVC-5	Effluent of drainage pipe along Johnson Blvd, 10 feet upstream of Johnson Blvd.

ALPINE COUNTY MONITORING WELLS

Site	Location
ACMW-01AW	Below main dam at Harvey Place Reservoir
ACMW-01BE	Below auxiliary dam at Harvey Place Reservoir
ACMW-02, N&S	On dam access road at Diamond Valley Road
ACMW-03	Bruns ranch, east side of Highway 88
ACMW-04W	Gansberg ranch, west side of Highway 88
ACMW-05	Dressler ranch
ACMW-06, N&S	Celio ranch, on Diamond Valley Road

ALPINE SOILS

Site	Ranch
S2	Celio
S3	Hall
S4	Gansberg
S5	Gansberg
S6	Neddenriep
S7	Bruns
S8	Dressler

ALPINE GROUNDWATERS

Site	Homeowner
GW-01	Sagues
GW-03	Smith/Springmeyer
GW-04	Celio
GW-05	Neddenriep
GW-07	Gansberg, Jr.
GW-08	Arant
GW-11	Diamond Valley School
GW-14	Sierra Pines Store

ALPINE SURFACEWATERS

Site	Location
SW-01	Carson River, Woodfords
SW-02	Indian Creek, @ HWY 89
SW-03	Indian Creek, @ upper bridge
SW-04	Indian Creek, @ lower bridge
SW-05	Carson River, Paynesville
SW-06	Carson River, Stateline
SW-07	Fredericksberg Ditch, Stateline
SW-08	Irrigation Ditch along Carson River Road
SW-09	Carson River, Dressler Lane
SW-10	Indian Creek, @ Smith-Springmeyer Ranch

TAHOE BASIN MONITORING

08/09/00

Site	Date	ID	Location	Depth msl	Temp C	pH	EC umhos	Cl mg/L		COD mg/L		NO3-N mg/L	Comment
Buried Sludge Monitoring													
MW11	07/25/00	20000725-32	Sludge Pond	6267.6	10.5	6.54	77	0.8	<	5.0		0.115	NO3-N is (NO2 + NO3)-N
MW12	07/25/00	20000725-33	Sludge Pond	6265.5	11.3	6.41	149	1.8	<	5.0		0.191	NO3-N is (NO2 + NO3)-N
MW13	07/25/00	20000725-34	Sludge Pond	6256.5	10.6	6.78	754	2.5		11.7		1.840	NO3-N is (NO2 + NO3)-N
ERB Monitoring													
CONTROL	07/25/00	20000725-25	At Post Office	6282.9	11.7	6.67	174	7.3	<	5.0		2.340	
MW01.5	07/25/00	20000725-26	SW corner of ERB	6268.7	10.8	7.14	173	2.5	<	5.0		0.614	NO3-N is (NO2 + NO3)-N
MW02-50	07/25/00	20000725-27	Black Bart side of ERB	6268.4	12.0	6.59	398	37.4	<	5.0		8.040	NO3-N is (NO2 + NO3)-N
MW03-50	07/25/00	20000725-28	Black Bart side of ERB	6268.4	11.5	6.44	379	32.0	<	5.0		3.630	NO3-N is (NO2 + NO3)-N
MW04-50	07/25/00	20000725-29	Hank Monk side of ERB	6268.4	9.0	6.51	75	5.3	<	5.0		0.111	NO3-N is (NO2 + NO3)-N
MW07-50	07/25/00	20000725-30	North side of ERB	6279.1	9.5	6.46	261	25.1	<	5.0		0.616	NO3-N is (NO2 + NO3)-N
Heavenly Valley Creek													
HVC-1	07/11/00	20000711-06	Downstream of Pioneer		9.7	7.37	40	0.7	<	5.0	<	0.030	
HVC-2	07/11/00	20000711-07	250' upstream of Pond #2		9.2	7.32	44	0.7	<	5.0	<	0.010	
HVC-3	07/11/00	20000711-08	25' downstream of Johnson Blvd		9.9	7.36	47	0.8	<	5.0		0.032	
HVC-4	07/11/00	20000711-HVC4	Effluent of drain from Lower Shop										
HVC-5	07/11/00	20000711-HVC5	Effluent of drainage pipe along Jo										
Treatment Plant Monitoring													
MW08-25	07/25/00	20000725-31	SW side of Pond #1	6246.9	12.0	6.40	1025	52.3		75.4		0.026	NO3-N is (NO2 + NO3)-N

ALPINE COUNTY MONITORING

Site	Date	ID	Location	Temp C	pH	EC umhos	DO mg/L	Alk mg/L	TDS mg/L	SS mg/L	Turb NTU	Cl mg/L	SO4 mg/L
Alpine Monitoring Wells													
ACMW-01AW	07/18/00	20000718-07	Main Dam	12.3	6.73	98		43	79			2.3	2.1
ACMW-01BE	07/18/00	20000718-09	Secondary Dam	11.8	6.57	94		46	77			0.8	1.6
ACMW-02N	07/18/00	20000718-11	Access Gate	13.5	6.64	124		57	84			2.6	3.4
ACMW-02S	07/18/00	20000718-13	Access Gate	13.7	6.42	99		48	71			1.1	1.5
ACMW-03	07/18/00	20000718-14	HWY 88	15.1	6.50	198		68	118			6.9	3.6
ACMW-04W	07/18/00	20000718-16	Gansberg	11.7	6.13	186		48	128			14.6	9.2
ACMW-06N	07/18/00	20000718-18	Celio	12.0	6.92	692		255	427			55.5	22.0
ACMW-06S	07/18/00	20000718-20	Celio	12.4	6.82	772		268	471			75.9	33.2
Groundwaters													
GW-03	07/11/00	20000711-15	Smith/Springmeyer	17.4	7.75	307		130	232			1.5	
GW-04	07/11/00	20000711-17	Celio	16.0	7.69	263		118	202			3.1	
GW-05	07/11/00	20000711-19	Neddenriep	12.9	6.81	268		63	173			23.6	
GW-07	07/11/00	20000711-21	Gansberg	13.5	6.87	122		53	100			1.3	
GW-08	07/11/00	20000711-23	Arant	16.6	6.85	264		52	172			27.7	
GW-11	07/11/00	20000711-25	Diamond Val. School	23.2	6.60	103		50	91			0.9	
GW-14	07/11/00	20000711-27	Sierra Pines	13.0	7.13	113		52	102			1.1	
Reservoirs													
HPR	07/05/00	20000705-19	Harvey Place Reservoir	20.2	7.74	453	5.80	102	224	70.70	4.9	53.5	17.2
Surfacewaters: Carson R													
SW-01	07/05/00	20000705-11	Carson R Woodfords	11.5	7.08	58	8.30	29	45	2.30	.55	0.7	1.6
SW-05	07/05/00	20000705-15	Carson R Paynesville	13.9	6.96	66	7.80	32	51	3.16	.8	0.7	1.9
SW-06	07/05/00	20000705-16	Carson R Stateline	13.0	7.27	69	7.40	33	55	3.24	.72	1.0	2.1
SW-07	07/05/00	20000705-17	Fredericksburg Ditch	14.2	7.21	230	6.80	75	155	4.26	2.7	19.5	7.3
SW-08	07/05/00	20000705-18	Irrigation Ditch	14.2	7.18	107	6.80	53	89	3.14	.86	1.3	3.5
Surfacewaters: Indian Cr													
SW-02	07/05/00	20000705-12	Indian Cr Upper	17.5	7.63	152	5.80	79	110	0.42	.64	1.8	0.1
SW-03	07/05/00	20000705-13	Indian Cr Mid	17.0	7.06	220	8.50	109	154	1.84	3.2	6.0	3.3
SW-04	07/05/00	20000705-14	Indian Cr Lower	14.5	7.31	121	6.70	63	92	3.64	2	1.4	1.1

ALPINE COUNTY MONITORING

08/09/00

Site	Date	TotalP mg/L	PO4-P mg/L	TKN mg/L	NH3-N mg/L	NO2-N mg/L	NO3-N mg/L	Total N mg/L	MBAS mg/L
Alpine Monitoring Wells									
ACMW-01AW	07/18/00	0.032		< 0.100	< 0.020	< 0.010	0.232	0.342	
ACMW-01BE	07/18/00	0.030		< 0.100	< 0.020	< 0.010	0.062	0.172	
ACMW-02N	07/18/00	0.020		< 0.100	< 0.020	< 0.010	0.058	0.168	
ACMW-02S	07/18/00	0.020		< 0.100	< 0.020	< 0.010	< 0.010	0.120	
ACMW-03	07/18/00	0.160		0.352	0.139	0.011	0.725	1.088	
ACMW-04W	07/18/00	0.024		< 0.100	< 0.020	< 0.010	2.320	2.430	
ACMW-06N	07/18/00	0.280		0.126	0.044	< 0.010	< 0.010	0.146	
ACMW-06S	07/18/00	0.052		0.160	< 0.020	< 0.010	< 0.010	0.180	
Groundwaters									
GW-03	07/11/00	0.058		0.107	< 0.020	< 0.010	0.731	0.848	
GW-04	07/11/00	0.052		< 0.100	0.020	< 0.010	0.853	0.963	
GW-05	07/11/00	0.036		0.110	< 0.020	< 0.010	3.200	3.320	
GW-07	07/11/00	0.104		< 0.100	< 0.020	< 0.010	0.930	1.040	
GW-08	07/11/00	0.042		0.133	< 0.020	< 0.010	5.940	6.083	
GW-11	07/11/00	0.026		< 0.100	0.020	< 0.010	0.353	0.463	
GW-14	07/11/00	0.052		< 0.100	< 0.020	< 0.010	0.474	0.584	
Reservoirs									
HPR	07/05/00	2.420	2.220	15.800	12.700	0.448	0.756	17.004	
Surfacewaters: Carson R									
SW-01	07/05/00	0.020	< 0.010	0.185	0.024	< 0.010	0.010	0.205	
SW-05	07/05/00	0.021	< 0.010	0.197	< 0.020	< 0.010	0.018	0.225	
SW-06	07/05/00	0.024	< 0.010	0.254	< 0.020	< 0.010	0.023	0.287	
SW-07	07/05/00	0.286	0.232	1.490	0.683	0.075	0.711	2.276	
SW-08	07/05/00	0.036	0.014	0.265	< 0.020	< 0.010	0.104	0.379	
Surfacewaters: Indian Cr									
SW-02	07/05/00	0.050	0.010	0.418	< 0.020	< 0.010	< 0.010	0.438	
SW-03	07/05/00	0.068	0.030	0.438	< 0.020	< 0.010	0.012	0.460	
SW-04	07/05/00	0.064	0.028	0.344	< 0.020	< 0.010	< 0.010	0.364	

ALPINE COUNTY MONITORING

Site	Date	COD mg/L	BOD mg/L	O & G mg/L		Boron mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	SAR	Exch Na %	Hardness mg/L	Water Level MSL or Ft
Alpine Monitoring Wells														
ACMW-01AW	07/18/00													5483.5
ACMW-01BE	07/18/00													5494.2
ACMW-02N	07/18/00													5459.6
ACMW-02S	07/18/00													5461.2
ACMW-03	07/18/00													5041.5
ACMW-04W	07/18/00													4906.3
ACMW-06N	07/18/00													5215.1
ACMW-06S	07/18/00													5204.0
Groundwaters														
GW-03	07/11/00													
GW-04	07/11/00													
GW-05	07/11/00													
GW-07	07/11/00													
GW-08	07/11/00													
GW-11	07/11/00													
GW-14	07/11/00													
Reservoirs														
HPR	07/05/00	41	7			0.20	11.3	3.6	41.2	9.0	2.73	62.2		49.5
Surfacewaters: Carson R														
SW-01	07/05/00		1		<	0.01	5.5	1.7	2.8	1.1	0.27	21.7		
SW-05	07/05/00		0			0.01	5.6	1.9	3.5	1.2	0.32	24.5		
SW-06	07/05/00		1		<	0.01	5.8	2.0	3.7	1.3	0.34	24.8		
SW-07	07/05/00		1			0.07	13.2	4.1	21.2	4.3	1.31	45.5		
SW-08	07/05/00		1			0.02	8.7	2.6	7.9	1.8	0.60	33.2		
Surfacewaters: Indian Cr														
SW-02	07/05/00		1			0.01	14.2	4.0	9.0	1.9	0.55	26.6		
SW-03	07/05/00		1			0.04	17.1	6.5	15.0	2.0	0.78	31.2		
SW-04	07/05/00		1			0.02	11.0	3.8	6.2	1.1	0.41	23.3		

ALPINE COUNTY
BACTERIOLOGICAL MONITORING

08/09/00

Alpine Monitoring Wells

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
ACMW-01AW	07/18/00	<	1.1	<	1.1	
ACMW-01BE	07/18/00	<	1.1	<	1.1	
ACMW-02N	07/18/00	<	1.1	<	1.1	
ACMW-02S	07/18/00	<	1.1	<	1.1	
ACMW-03	07/18/00	>	23	>	23	
ACMW-04W	07/18/00		3.6	<	1.1	
ACMW-06N	07/18/00		1.1	<	1.1	
ACMW-06S	07/18/00	<	1.1	<	1.1	

Groundwaters

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
GW-03	07/11/00	<	1.1	<	1.1	
GW-04	07/11/00	<	1.1	<	1.1	
GW-05	07/11/00	<	1.1	<	1.1	
GW-07	07/11/00	<	1.1	<	1.1	
GW-08	07/11/00	<	1.1	<	1.1	
GW-11	07/11/00	<	1.1	<	1.1	
GW-14	07/11/00	<	1.1	<	1.1	

Reservoirs

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL		Fecal Streptococci MPN/100mLL
HPR	07/05/00		240	<	2	<	30

Surfacewaters: Carson R

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-01	07/05/00		90	<	30	
SW-05	07/05/00		430		40	
SW-06	07/05/00		230		40	
SW-07	07/05/00		4600		2400	
SW-08	07/05/00		430		430	

Surfacewaters: Indian Cr

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-02	07/05/00		230		40	
SW-03	07/05/00		2400		930	
SW-04	07/05/00		90		90	

The West Fork, Carson River Water Quality Objectives and East Fork, Carson River limitations were exceeded as follows (a ✓ indicates objective exceeded):

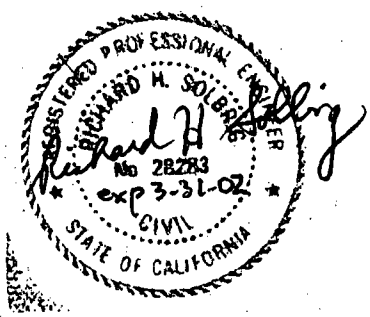
Site	Location	TDS		Cl		TKN		NO_3-N		Total N		Total P		SO_4		Boron		Exch Na %	
		Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence	Limit	Exceedence
SW-01	Carson River, Woodfords	55		1.0		0.13	✓	0.02		0.15	✓	0.02		2.0		0.02	✓	20	
SW-06	Carson River, Stateline	70		2.5		0.22		0.03		0.25		0.03		2.0		0.02	✓	20	✓
SW-02	Indian Creek, Upper	100		6.0						0.30	✓	0.03		8.0		0.25		30	
SW-03	Indian Creek, Mid	100	✓	6.0						0.30	✓	0.03	✓	8.0		0.25		30	
SW-04	Indian Creek, Lower	100		6.0						0.30	✓	0.03	✓	8.0		0.25		30	
SW-10	Indian Creek, Stateline	100		6.0						0.30		0.03		8.0		0.25		30	

Blue Green Algae and soils test results will be sent as soon as the tests are completed.

Certification

I hereby certify that the enclosed monitoring report was prepared under my direct supervision and that I am a duly Registered Engineer under the laws of the State of California.

Sincerely,



Richard Solbrig,
Assistant Manager/Engineer

Enclosures:

1.

June Monthly Report	Pages
Wastewater Treatment plant	2
Permit Compliance Record	1
Export pipeline inspection	1
Sample site locations	2
Monitoring wells (ERB) and Heavenly Valley Creek (HVC) - Tahoe Basin	1
Alpine County Surfacewaters, Groundwaters, and HPR	4
Alpine County Soils	
Total number of pages:	11

cc: Calif. Dept. of Health Services, ODW - Jess Morehouse
El Dorado Co. Dept. of Environmental Health - Virginia Huber
Nevada Division of Environmental Protection - Wendel McCurry
Alpine County Health Department - Dr. Richard Botto
Alpine County Health Department - Jim Goodloe
Alpine County Board of Supervisors
Desert Research Group (Alpine County Consultants) - Bill Albright
STPUD Board of Directors
STPUD General Manager / District Engineer - Robert G. Baer
STPUD Manager of Operations - Ross Johnson
STPUD Operations Chief Plant Operator - Jeff Lee
STPUD Laboratory Director - Terry Powers
STPUD Manager of Alpine County Operations - Hal Bird

File: \LAHONTAN\06-00 Report.WPD

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

07/09/00
14:56:08

JUNE 2000

Date	Day	FLOW MGD Inf	2-Hr Peak Inf	Eff	Pond Return	Pond Inf	PRECIP Inch	Type	D.O. mg/L Fin	COD mg/L Raw	COD mg/L Fin	BOD mg/L Raw	BOD mg/L Fin	SS mg/L Raw	SS mg/L Fin
06/01/00	Thu	4.28	6.0	4.86					6.36	345					
06/02/00	Fri	4.51	6.2	4.27					6.02	366					
06/03/00	Sat	5.03	6.6	4.65					6.60	372	43.9	146	6.3	127	2.2
06/04/00	Sun	5.04	7.5	4.58					5.94	370					
06/05/00	Mon	4.48	6.5	3.92					6.11	356					
06/06/00	Tue	4.46	6.2	4.45					6.46	389	37.3	154	5.2	160	1.3
06/07/00	Wed	4.38	6.0	4.23			0.03	Rain	5.99	405					
06/08/00	Thu	4.32	6.4	0.68		3.34			6.33	343					
06/09/00	Fri	4.50	6.5	5.08	0.80				6.40	414					
06/10/00	Sat	4.97	7.3	5.34	0.50				6.32	352	46.1	155	10.1	162	3.6
06/11/00	Sun	5.04	7.5	5.69	0.75				5.56	426					
06/12/00	Mon	4.87	7.2	5.27	1.29				6.49	373					
06/13/00	Tue	4.69	6.5	4.23					6.01	373					
06/14/00	Wed	4.64	6.0	4.25					6.78	436	33.6	124	5.7	146	1.6
06/15/00	Thu	4.76	6.5	3.51					5.89	405					
06/16/00	Fri	4.90	6.9	5.27					6.10	349					
06/17/00	Sat	5.32	7.7	4.84					6.66	404	42.9	133	6.9	132	2.0
06/18/00	Sun	5.34	8.3	5.02					5.70	391					
06/19/00	Mon	5.03	6.7	4.61					6.00	331					
06/20/00	Tue	4.86	6.5	4.37					5.95	356					
06/21/00	Wed	4.88	6.5	4.40					6.49	424	40.2	151	5.7	171	1.9
06/22/00	Thu	4.91	7.1	4.52					6.56	345					
06/23/00	Fri	5.04	6.7	4.56					6.26	414					
06/24/00	Sat	5.85	7.5	5.39					6.14	444	45.0	178	5.9	148	2.4
06/25/00	Sun	5.12	7.8	4.53					5.98	596					
06/26/00	Mon	5.50	7.7	4.83					6.14	542	45.2	192	6.3	242	2.9
06/27/00	Tue	5.30	7.5	4.46			0.02	Rain	6.61	377					
06/28/00	Wed	4.97	7.2	4.60					5.98	368					
06/29/00	Thu	5.14	6.7	4.77			0.06	Rain	6.09	366					
06/30/00	Fri	5.11	7.1	4.88					5.86	412					
PERMIT MAX		7.7									300		45		60
PERMIT MIN															
PERMIT AVE											60		30		30
TOTAL		147.24	206.8	136.06	3.34	3.34	0.11		185.78	11844	334.2	1233	52.0	1288	18.0
MAXIMUM		5.85	8.3	5.69	1.29	3.34	0.06		6.78	596	46.1	192	10.1	242	3.6
MINIMUM		4.28	6.0	0.68	0.50	3.34	0.02		5.56	331	33.6	124	5.2	127	1.3
AVERAGE		4.91	6.9	4.54	0.84	3.34	0.04		6.19	395	41.8	154	6.5	161	2.2
# Tests		30	30	30	4	1	3		30	30	8	8	8	8	8

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT MONTHLY REPORT

JUNE 2000

Date	Day	SETTLEABLE SOLIDS mL/L Raw		SETTLEABLE SOLIDS mL/L Fin	MBAS mg/L Raw	MBAS mg/L Fin	pH Units Raw	pH Units Fin	TURBIDITY NTU Fin	Cl2 mg/L Fin	FINAL COLIFORMS MPN/100 mL Total		FINAL COLIFORMS MPN/100 mL 7day-Median		TDS mg/L Raw	TDS mg/L Fin	ALKALINITY mg/L Raw	ALKALINITY mg/L Fin
06/01/00	Thu	10.0	<	0.1			7.39	7.19	2.30	4.59	<	2	<	2			146	123
06/02/00	Fri	9.0	<	0.1			7.47	7.38	1.70	3.28	<	2					148	128
06/03/00	Sat	11.0	<	0.1			7.38	7.56	1.80	2.95	<	2	<	2			151	135
06/04/00	Sun	12.0	<	0.1			7.41	7.38	1.80	4.26	<	2	<	2			159	136
06/05/00	Mon	10.0	<	0.1			7.45	7.48	1.40	4.15		2	<	2			152	132
06/06/00	Tue	12.0	<	0.1			7.64	7.46	1.20	4.80		2	<	2	248	242	146	126
06/07/00	Wed	13.0	<	0.1			7.46	7.51	1.20	3.49	<	2	<	2			153	126
06/08/00	Thu	8.5	<	0.1			7.51										152	
06/09/00	Fri	11.0	<	0.1			7.47	7.41	2.00								152	130
06/10/00	Sat	12.0	<	0.1			7.43	7.62	3.40	4.91		2	<	2			151	136
06/11/00	Sun	12.5	<	0.1			7.40	7.38	3.20	5.57	<	2	<	2			158	133
06/12/00	Mon	11.5	<	0.1			7.60	7.57	2.50	3.49	<	2	<	2			152	127
06/13/00	Tue	10.0	<	0.1	3.77	0.077	7.54	7.72	1.80	7.10	<	2	<	2			152	124
06/14/00	Wed	12.5	<	0.1			7.61	7.64	1.50	3.28	<	2	<	2	265	240	152	130
06/15/00	Thu	11.5	<	0.1			7.47	7.60	2.80				<	2			147	127
06/16/00	Fri	11.0	<	0.1			7.37	7.40	1.60	4.26		2	<	2			149	128
06/17/00	Sat	11.5	<	0.1			7.41	7.58	2.50	2.95	<	2	<	2			156	134
06/18/00	Sun	12.0	<	0.1			7.39	7.41	3.10	4.69	<	2	<	2			156	139
06/19/00	Mon	11.0	<	0.1			7.44	7.45	2.20	5.02	<	2	<	2			150	132
06/20/00	Tue	10.0	<	0.1			7.32	7.43	2.40	4.37	<	2	<	2			145	132
06/21/00	Wed	14.0	<	0.1			7.43	7.64	2.30	4.48	<	2	<	2	249	232	146	132
06/22/00	Thu	10.5	<	0.1			7.53	7.46	2.40	4.80	<	2	<	2			141	131
06/23/00	Fri	14.0	<	0.1			7.54	7.48	2.30	3.49	<	2	<	2			145	134
06/24/00	Sat	17.0	<	0.1			7.39	7.52	2.20	3.38	<	2	<	2			151	138
06/25/00	Sun	20.0	<	0.1			7.26	7.39	2.60	4.80	<	2	<	2			158	142
06/26/00	Mon	17.0	<	0.1			7.38	7.60	2.90	5.24	<	2	<	2	232	230	148	137
06/27/00	Tue	11.5	<	0.1			7.53	7.56	2.80	4.37	<	2	<	2			143	132
06/28/00	Wed	12.0	<	0.1			7.39	7.45	2.20	3.93	<	2	<	2			142	134
06/29/00	Thu	10.0	<	0.1			7.45	7.60	2.00	4.04	<	2	<	2			142	136
06/30/00	Fri	10.0	<	0.1			7.36	7.48	2.90	3.71	<	2	<	2			144	126
PERMIT MAX				0.1		2.0		8.5	20			240		23				
PERMIT MIN								6.5										
PERMIT AVE						1.0			10									
TOTAL		358.0		3.0	3.77	0.077	223.42	217.35	65.00	115.40		54		54	994	944	4487	3820
MAXIMUM		20.0		0.1	3.77	0.077	7.64	7.72	3.40	7.10		2		2	265	242	159	142
MINIMUM		8.5		0	3.77	0.077	7.26	7.19	1.20	2.95		2		2	232	230	141	123
AVERAGE		11.9		0.1	3.77	0.077	7.45	7.49	2.24	4.27		2		2	249	236	150	132
# Tests		30		30	1	1	30	29	29	27		27		27	4	4	30	29

SOUTH TAHOE PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT
COMPLIANCE RECORD

2000

Parameter	# Tests	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Compliance, %
Total Plant Inflow; 7.7 MGD; Dry Weather	182	0	0	0	0	0	0							0	100.0
2-Hour Peak Inflow; 18.5 MGD	181	0	0	0	0	0	0							0	100.0
COD, 30 Day Ave: 60 mg/L	6	0	0	0	0	0	0							0	100.0
COD, Max: 300 mg/L	49	0	0	0	0	0	0							0	100.0
BOD, 30 Day Ave: 30 mg/L	6	0	0	0	0	0	0							0	100.0
BOD, Max: 45 mg/L	47	0	0	0	0	0	0							0	100.0
SS, 30 Day Ave: 30 mg/L	6	0	0	0	0	0	0							0	100.0
SS, Max: 60 mg/L	51	0	0	0	0	0	0							0	100.0
Settleable Solids, Max: 0.1 mL/L	179	0	0	0	0	0	0							0	100.0
Turbidity, 30 Day Ave: 10 NTU	6	0	0	0	0	0	0							0	100.0
Turbidity, Max: 20 NTU	178	0	0	0	0	0	0							0	100.0
pH, 6.5 to 8.5	178	0	0	0	0	0	0							0	100.0
Total Coliforms, Max: 240 MPN/100 mL	176	0	0	0	0	0	0							0	100.0
Total Coliforms, 7-day Median: 23 MPN	176	0	0	0	0	0	0							0	100.0
MBAS, 30 Day Ave: 1.0 mg/L	6	0	0	0	0	0	0							0	100.0
MBAS, Max: 2.0 mg/L	6	0	0	0	0	0	0							0	100.0
Total	1,433	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0

SOUTH TAHOE
PUBLIC UTILITY DISTRICT
MEMORANDUM

Date: June 15, 2000

To: Bob Baer, Diane Noble

From: Tim Rieger

Topic: Export Line Check

****

On June 13, 2000, David Johnson and I conducted our check of the District's export line from the treatment plant to station 564+06 near the Harvey Place reservoir. A few wet areas were checked. However, nothing positive was found. No damage to the pipe was found.

CC Terry Powers

EXPRT600.MEM

SAMPLE LOCATIONS

TAHOE BASIN MONITORING WELLS

Site	Location
ERB	Emergency Retention Basin
CONTROL	North of Post Office
MW02-25, -50	Emergency Retention Basin, S side
MW03-25, -50	Emergency Retention Basin, S side
MW04-25, -50	Emergency Retention Basin, W side
MW07-25, -50	Emergency Retention Basin, N side
MW08-25, -50	Pond #1, SW corner
MW11	S.E. corner of wastewater treatment plant grounds
MW12	South of Emergency Pump Building, for buried sludge
MW13	Pond 2, along Heavenly Valley Creek, for buried sludge

HEAVENLY VALLEY CREEK

HVC-1	At Pioneer Trail
HVC-2	250 ft upstream of Pond #2
HVC-3	25 ft downstream of Johnson Blvd.
HVC-4	Effluent of drain pipe from Lower Shop area
HVC-5	Effluent of drainage pipe along Johnson Blvd, 10 feet upstream of Johnson Blvd.

ALPINE COUNTY MONITORING WELLS

Site	Location
ACMW-01AW	Below main dam at Harvey Place Reservoir
ACMW-01BE	Below auxiliary dam at Harvey Place Reservoir
ACMW-02, N&S	On dam access road at Diamond Valley Road
ACMW-03	Bruns ranch, east side of Highway 88
ACMW-04W	Gansberg ranch, west side of Highway 88
ACMW-05	Dressler ranch
ACMW-06, N&S	Celio ranch, on Diamond Valley Road

ALPINE SOILS

Site	Ranch
S2	Celio
S3	Hall
S4	Gansberg
S5	Gansberg
S6	Neddenriep
S7	Bruns
S8	Dressler

ALPINE GROUNDWATERS

Site	Homeowner
GW-01	Sagues
GW-03	Smith/Springmeyer
GW-04	Celio
GW-05	Neddenriep
GW-07	Gansberg, Jr.
GW-08	Arant
GW-11	Diamond Valley School
GW-14	Sierra Pines Store

ALPINE SURFACEWATERS

Site	Location
SW-01	Carson River, Woodfords
SW-02	Indian Creek, @ HWY 89
SW-03	Indian Creek, @ upper bridge
SW-04	Indian Creek, @ lower bridge
SW-05	Carson River, Paynesville
SW-06	Carson River, Stateline
SW-07	Fredericksberg Ditch, Stateline
SW-08	Irrigation Ditch along Carson River Road
SW-09	Carson River, Dressler Lane
SW-10	Indian Creek, @ Smith-Springmeyer Ranch

TAHOE BASIN MONITORING

Site	Date	ID	Location	Depth msl	Temp C	pH	EC umhos	Cl mg/L		COD mg/L		NO3-N mg/L	Comment
Buried Sludge Monitoring													
MW11	06/20/00	20000620-13	Sludge Pond	6267.8	8.1	6.79	77	0.8	<	5.0		0.076	
MW12	06/20/00	20000620-14	Sludge Pond	6266.0	8.6	6.22	147	1.9	<	5.0		0.119	
MW13	06/20/00	20000620-15	Sludge Pond	6257.2	7.1	6.83	729	2.6		16.3		1.520	
ERB Monitoring													
CONTROL	06/20/00	20000620-06	At Post Office	6282.9	9.8	7.01	175	6.9	<	5.0		2.490	
MW01.5	06/20/00	20000620-07	SW corner of ERB	6268.8	10.4	7.25	170	2.9	<	5.0		0.630	
MW02-50	06/20/00	20000620-08	Black Bart side of ERB	6268.6	11.0	6.87	408	38.9	<	5.0		8.820	
MW03-50	06/20/00	20000620-09	Black Bart side of ERB	6268.6	11.0	6.56	375	33.4	<	5.0		3.490	
MW04-50	06/20/00	20000620-10	Hank Monk side of ERB	6268.7	8.8	6.67	75	4.9	<	5.0		0.057	
MW07-50	06/20/00	20000620-11	North side of ERB	6279.3	8.8	6.30	261	26.7	<	5.0		0.649	
Heavenly Valley Creek													
HVC-1	06/02/00	20000602-06	Downstream of Pioneer		5.8	7.62	33	0.6	<	5.0		0.015	
HVC-2	06/02/00	20000602-07	250' upstream of Pond #2		5.4	7.40	35	0.7	<	5.0	<	0.010	
HVC-3	06/02/00	20000602-08	25' downstream of Johnson Blvd		5.4	7.44	36	0.9	<	5.0		0.015	
HVC-4	06/02/00	20000602-09	Effluent of drain from Lower Shop		9.4	7.41	115	0.7	<	5.0		0.071	
HVC-5	06/02/00	20000602-HVC5	Effluent of drainage pipe along Jo										Dry
Treatment Plant Monitoring													
MW08-25	06/20/00	20000620-12	SW side of Pond #1	6247.4	10.1	6.30	1031	50.6		85.2	<	0.010	

ALPINE COUNTY MONITORING

Site	Date	ID	Location	Temp C	pH	EC umhos	DO mg/L	Alk mg/L	TDS mg/L	SS mg/L	Turb NTU		Cl mg/L	SO4 mg/L
Alpine Monitoring Wells														
ACMW-01AW	06/13/00	20000613-24	Main Dam	11.1	7.02	110		49	82				3.2	
ACMW-01BE	06/13/00	20000613-25	Secondary Dam	10.3	7.03	95		47	72				0.5	
ACMW-02N	06/13/00	20000613-26	Access Gate	13.4	7.01	125		59	91				2.4	
ACMW-02S	06/13/00	20000613-27	Access Gate	13.0	6.87	93		46	70				0.9	
ACMW-03	06/13/00	20000613-28	HWY 88	13.6	5.64	166		69	121				4.8	
ACMW-04W	06/13/00	20000613-29	Gansberg	12.0	5.83	189		51	138				13.8	
ACMW-06N	06/13/00	20000613-30	Celio	12.0	7.00	686		260	431				56.2	
ACMW-06S	06/13/00	20000613-31	Celio	13.7	6.97	776		272	479				76.1	
Groundwaters														
GW-01	06/01/00	20000601-16	Cohen	11.6	7.36	152								
GW-03	06/01/00	20000601-17	Smith/Springmeyer	16.2	7.49	307		130	229				1.5	
GW-04	06/01/00	20000601-18	Celio	14.4	7.48	263		117	200				3.1	
GW-05	06/01/00	20000601-19	Neddenriep	12.8	7.03	269		62	177				23.9	
GW-07	06/01/00	20000601-20	Gansberg	13.0	7.11	124		54	98				1.3	
GW-08	06/01/00	20000601-21	Arant	14.4	7.20	288		50	191				34.5	
GW-11	06/01/00	20000601-22	Diamond Val. School	17.2	7.13	100		48	87				0.9	
GW-14	06/01/00	20000601-23	Sierrra Pines	14.3	7.23	112		52	102				1.2	
Reservoirs														
HPR	06/13/00	20000613-10	Harvey Place Reservoir	21.2	9.01	414	15.20	92	222	17.40	3.6		52.6	19.4
Surfacewaters: Carson R														
SW-01	06/06/00	20000606-10	Carson R Woodfords	8.1	7.49	41	7.30	20	41	4.84	1.4		0.6	1.8
SW-05	06/06/00	20000606-14	Carson R Paynesville	12.0	7.18	45	6.50	21	49	5.48	1.6	<	0.5	2.3
SW-06	06/06/00	20000606-15	Carson R Stateline	12.3	7.42	49	5.80	24	56	5.29	1.6		0.5	1.7
SW-08	06/06/00	20000606-16	Irrigation Ditch	13.8	7.08	78	5.10	38	81	3.21	1.8		0.8	5.8
Surfacewaters: Indian Cr														
SW-02	06/01/00	20000601-27	Indian Cr Upper	9.6	7.58	110				1.80	1.7		0.6	
SW-02	06/06/00	20000606-11	Indian Cr Upper	15.6	7.65	113	5.80	60	92	0.33	1.4		1.0	1.9
SW-03	06/06/00	20000606-12	Indian Cr Mid	17.1	7.23	186	5.70	90	135	5.81	6.2		4.7	3.6
SW-04	06/06/00	20000606-13	Indian Cr Lower	13.8	7.09	84	5.50	43	77	11.60	2.1		0.7	3.0

ALPINE COUNTY MONITORING

07/09/00

Site	Date	TotalP mg/L	PO4-P mg/L	TKN mg/L	NH3-N mg/L	NO2-N mg/L	NO3-N mg/L	Total N mg/L	MBAS mg/L
Alpine Monitoring Wells									
ACMW-01AW	06/13/00				< 0.020	< 0.010	0.556	0.566	
ACMW-01BE	06/13/00				< 0.020	< 0.010	0.084	0.094	
ACMW-02N	06/13/00				0.041	< 0.010	0.069	0.079	
ACMW-02S	06/13/00				0.029	< 0.010	0.062	0.072	
ACMW-03	06/13/00				0.040	< 0.010	0.320	0.330	
ACMW-04W	06/13/00				0.025	< 0.010	2.470	2.480	
ACMW-06N	06/13/00				0.067	< 0.010	< 0.010	0.020	
ACMW-06S	06/13/00				< 0.020	< 0.010	0.022	0.032	
Groundwaters									
GW-01	06/01/00							0.000	
GW-03	06/01/00				< 0.020	< 0.010	0.707	0.717	
GW-04	06/01/00				< 0.020	< 0.010	0.808	0.818	
GW-05	06/01/00				< 0.020	< 0.010	3.460	3.470	
GW-07	06/01/00				< 0.020	< 0.010	1.010	1.020	
GW-08	06/01/00				< 0.020	< 0.010	6.680	6.690	
GW-11	06/01/00				< 0.020	< 0.010	0.396	0.406	
GW-14	06/01/00				< 0.020	< 0.010	0.450	0.460	
Reservoirs									
HPR	06/13/00	2.380	2.110	15.400	10.600	0.369	1.110	16.879	0.057
Surfacewaters: Carson R									
SW-01	06/06/00	0.022	< 0.010	0.221	0.024	< 0.010	< 0.010	0.241	
SW-05	06/06/00	0.078	< 0.010	0.114	0.022	< 0.010	< 0.010	0.134	
SW-06	06/06/00	0.030	< 0.010	0.107	0.021	< 0.010	< 0.010	0.127	
SW-08	06/06/00	0.076	0.014	0.745	0.052	< 0.010	0.038	0.793	
Surfacewaters: Indian Cr									
SW-02	06/01/00	0.024	< 0.010	0.306	< 0.020	< 0.010	< 0.010	0.326	
SW-02	06/06/00	0.032	< 0.010	0.417	0.020	< 0.010	< 0.010	0.437	
SW-03	06/06/00	0.096	0.043	0.288	0.029	< 0.010	0.023	0.321	
SW-04	06/06/00	0.064	0.020	0.416	0.023	< 0.010	< 0.010	0.436	

ALPINE COUNTY MONITORING

Site	Date	COD mg/L	BOD mg/L	O & G mg/L	Boron mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	SAR	Exch Na %	Hardness mg/L	Water Level MSL or Ft
Alpine Monitoring Wells													
ACMW-01AW	06/13/00												5483.0
ACMW-01BE	06/13/00												5495.7
ACMW-02N	06/13/00												5460.1
ACMW-02S	06/13/00												5461.9
ACMW-03	06/13/00												5042.6
ACMW-04W	06/13/00												4908.1
ACMW-06N	06/13/00												5214.8
ACMW-06S	06/13/00												5204.0
Groundwaters													
GW-01	06/01/00												
GW-03	06/01/00												
GW-04	06/01/00												
GW-05	06/01/00												
GW-07	06/01/00												
GW-08	06/01/00												
GW-11	06/01/00												
GW-14	06/01/00												
Reservoirs													
HPR	06/13/00	54	> 12		0.23	14.5	3.4	42.3	8.8	2.59	59.9		53.8
Surfacewaters: Carson R													
SW-01	06/06/00		1		0.03	4.3	1.2	1.8	0.7	0.20	19.1		
SW-05	06/06/00		0		0.03	4.6	1.3	2.1	0.8	0.23	20.5		
SW-06	06/06/00		1		0.04	5.0	1.5	2.4	0.9	0.24	20.7		
SW-08	06/06/00		2		0.05	8.1	2.1	5.2	1.3	0.42	27.1		
Surfacewaters: Indian Cr													
SW-02	06/01/00												
SW-02	06/06/00		0		0.04	12.3	2.9	6.8	1.7	0.45	24.7		
SW-03	06/06/00		1		0.06	17.2	5.1	12.7	2.3	0.69	29.3		
SW-04	06/06/00		1		0.04	9.2	2.8	3.9	0.9	0.29	19.4		

ALPINE COUNTY
BACTERIOLOGICAL MONITORING

Alpine Monitoring Wells

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
ACMW-01AW	06/13/00	<	1.1	<	1.1	
ACMW-01BE	06/13/00	<	1.1	<	1.1	
ACMW-02N	06/13/00	<	1.1	<	1.1	
ACMW-02S	06/13/00	<	1.1	<	1.1	
ACMW-03	06/13/00		23	<	1.1	
ACMW-04W	06/13/00	<	1.1	<	1.1	
ACMW-06N	06/13/00	<	1.1	<	1.1	
ACMW-06S	06/13/00	<	1.1	<	1.1	

Groundwaters

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
GW-01	06/01/00					
GW-03	06/01/00	<	1.1	<	1.1	
GW-04	06/01/00	<	1.1	<	1.1	
GW-05	06/01/00	<	1.1	<	1.1	
GW-07	06/01/00	<	1.1	<	1.1	
GW-08	06/01/00		1.1	<	1.1	
GW-11	06/01/00	<	1.1	<	1.1	
GW-14	06/01/00	<	1.1	<	1.1	

Reservoirs

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
HPR	06/13/00	>	1600	<	2	80

Surfacewaters: Carson R

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-01	06/06/00	<	30	<	30	
SW-05	06/06/00		430		430	
SW-06	06/06/00		430		230	
SW-08	06/06/00		11000		11000	

Surfacewaters: Indian Cr

Site	Date		Total Coliform MPN/100mL		Fecal Coliform MPN/100mL	Fecal Streptococci MPN/100mLL
SW-02	06/01/00					
SW-02	06/06/00	<	30	<	30	
SW-03	06/06/00		430		430	
SW-04	06/06/00		2400		930	