

<http://ftp.casr.wr.usgs.gov/data/lrtbl.txt>

174

For copy of

County Sanitation Districts of Los Angeles County:
Beneficial Use Designation Report for Amargosa Creek, Painte
Ponds and Rosamond Dry Lake, October 2003,

Tahoe Research Group

Department of Civil & Environmental Engineering

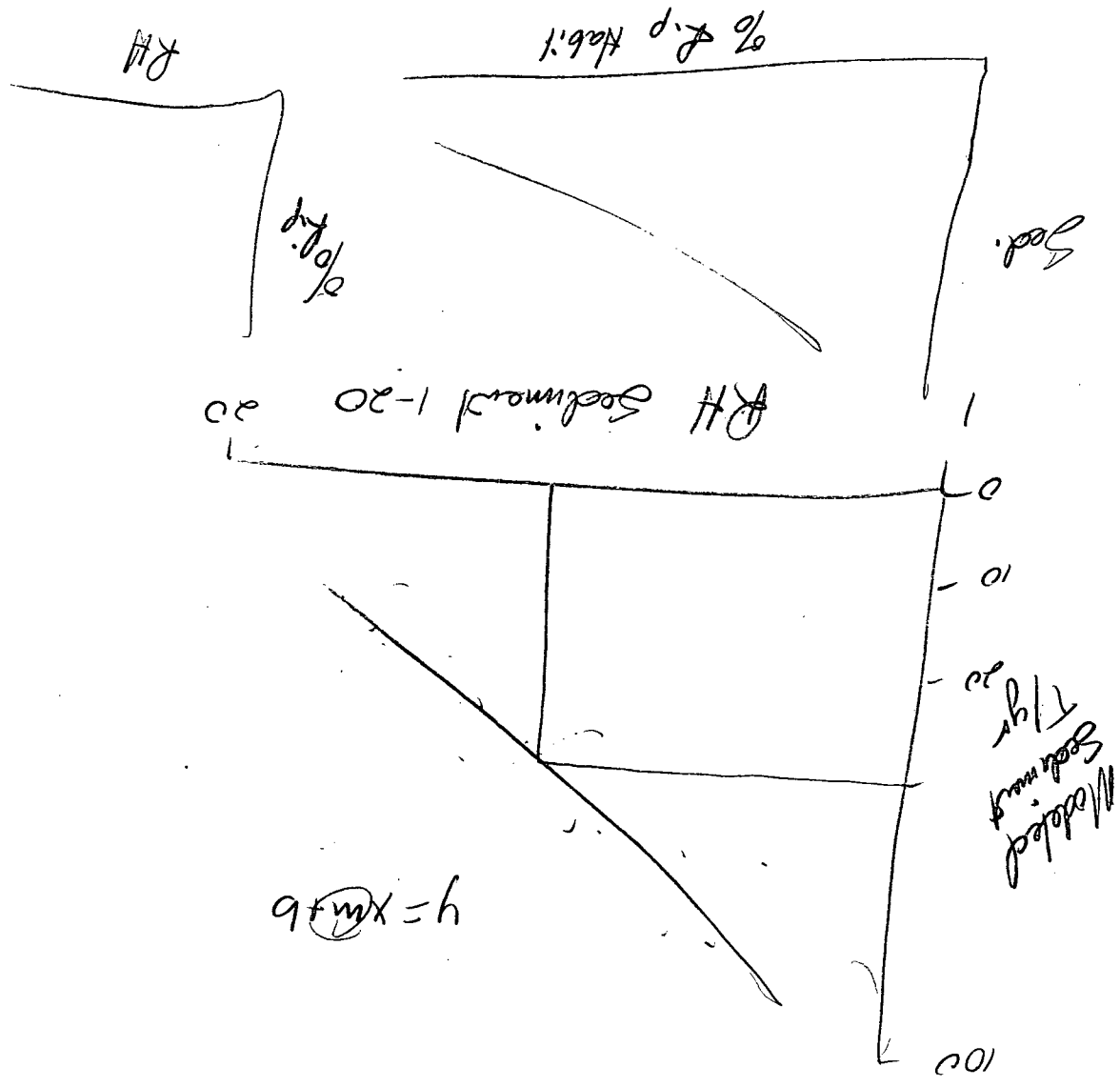
Center for Ecological Health Research

John Muir Institute for the Environment

Annual Progress Report - 2001

Water Quality, Air Quality & Watersheds: Research Monitoring
& Modeling

USGS WRIR 00-4001 <http://water.usgs.gov/pubs/wri/wri004001>



$$y = mx + b$$

File STPUD WWTFF - M&R file

1/7/88

Subject: MTBE Monitoring in Alpine County

Dear Ms. Kemper,

Enclosed are the most recent monitoring results for methyl tert-butyl ether (MTBE) in Alpine County. Samples were obtained from the wastewater treatment plant final effluent, Harvey Place Reservoir, domestic wells and dedicated monitoring wells.

Reports	Pages
Wastewater Treatment Plant Final Effluent	1
Harvey Place Reservoir (HPR) and Indian Creek Reservoir (ICR)	1
Harvey Place Reservoir (HPR) comparison of profiles	1
Alpine County Domestic Wells	1
Diamond Ditch	1
Total number of pages.	5

Please call me if you have any questions regarding these data.

Very truly yours,

Terry Powers
Laboratory Director

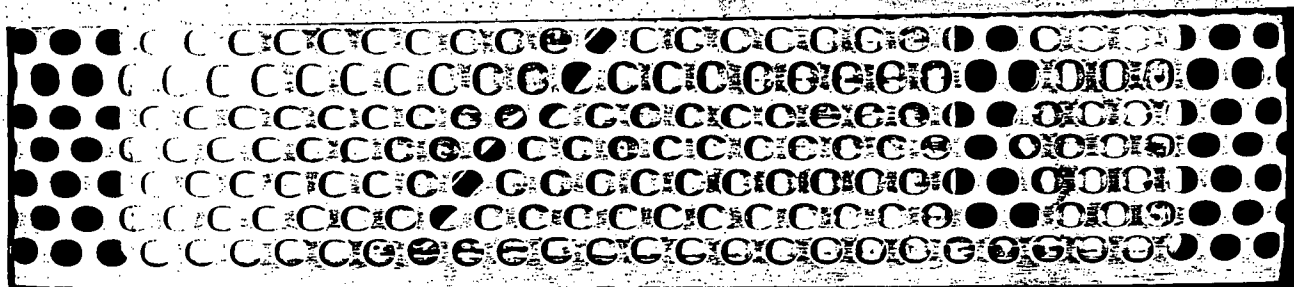
- cc: Alpine County Health Department - Jim Goodloe
- Alpine County Health Department - Dr. Richard Botto
- Alpine County Clerk of the Board of Supervisors - Barbara Jones
- Washoe Tribe Utility Manager - Dave Murphy
- Desert Research Group (Alpine County Consultants) - Bill Albright
- Cliff Cello, Alpine County Resident
- Nevada Division of Environmental Protection - Tom Porta, Bureau Chief
- STPUD Manager of Alpine County Operations - Hal Bird

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

1275 Meadow Lakes Road
South Lake Tahoe, CA 96150

File: MTBE\MTBE Reports\MTBE9908.wpd

100% Recycled Fiber Content

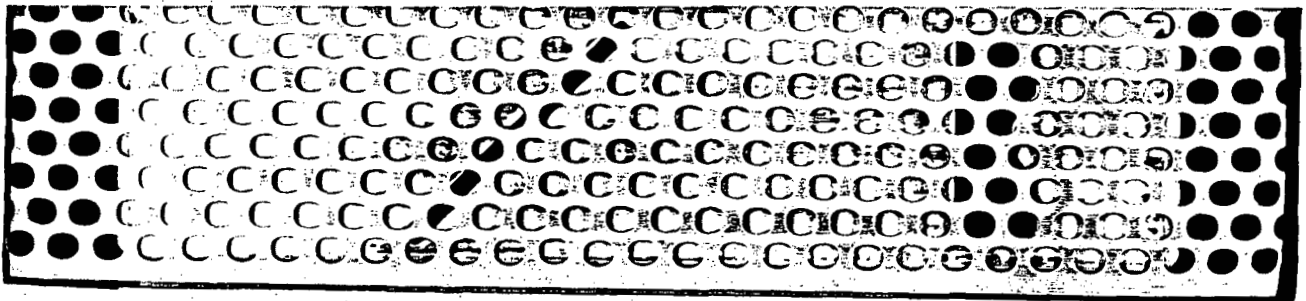


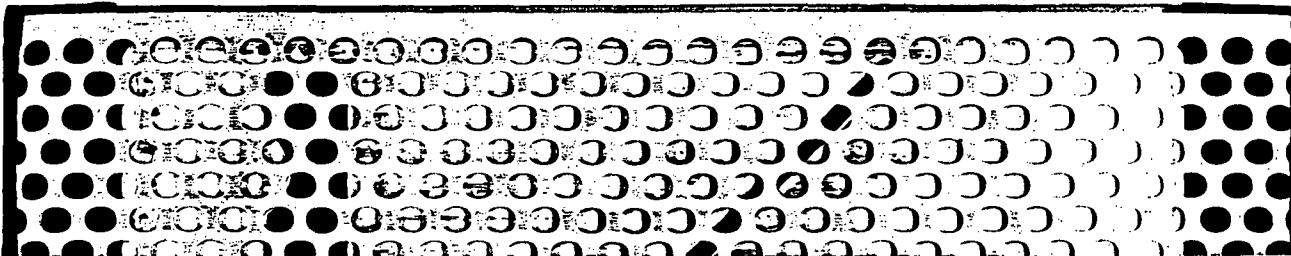
MTBE

Program: Alpine County Drinking Water Wells

Site	Date	MTBE ug/L
Washoe Indian Res N Well	04/02/99	0.0
Washoe Indian Res E Well	04/02/99	0.0

Note: 0.0 means not detected at 0.5 ug/L and scan reviewed for any detection of MTBE. Values < 0.5 ug/L are estimated.





07/07/99

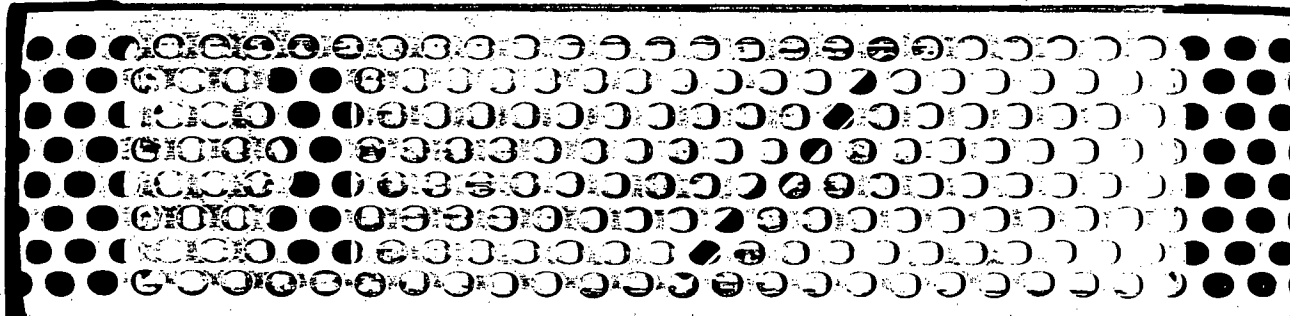
MTBE

Page 2

Program: Diamond Ditch

Site	Date	MTBE ug/L
HPR Effluent	06/29/99	0.3
Diamond Ditch: Screen #3	06/29/99	0.0
Diamond Ditch @ Bridge	06/29/99	0.0
Diamond Ditch Terminus	06/29/99	0.0
Trip Blank	06/29/99	0.0

Note: 0.0 means not detected at 0.5 ug/L and scan reviewed for any detection of MTBE. Values < 0.5 ug/L are estimated.



07/07/99

MTBE IN WASTEWATER
Results report as ug/L

Site	12/17/98	03/18/99	06/24/99	06/29/99
Harvey Place Reservoir				
Export Pipeline Terminus	1.2	2.3	1.2	
HPR Influent	1.1	2.1	1.0	
HPR-1; Top	0.8	0.4	0.6	
HPR-1; Mid	0.7	0.3	0.5	
HPR-1; Bottom	0.6	0.3	ND	
HPR-2; Top	ND	0.4	0.6	
HPR-2; Mid	0.8	0.3	0.8	
HPR-2; Bottom	0.7	0.3	0.3	
HPR-3; Top	0.9	0.4	0.6	
HPR-3; Mid	0.8	0.3	0.6	
HPR-3; Bottom	0.8	0.4	0.6	
Field Blank	ND	ND	ND	
Average HPR	0.7	0.3	0.5	

Diamond Ditch

HPR Effluent	0.3
Diamond Ditch Screen #3	ND
Diamond Ditch @ Bridge	ND
Diamond Ditch Terminus	ND

Indian Creek Reservoir

ICR-1; Surface	ND
ICR-2; Surface	ND
ICR-3; Surface	ND
ICR-4; Surface	ND
ICR-5; Surface	ND
ICR; 15' from shore	ND
Field Blank	ND

Program: Reservoirs

Site	Date	MTBE ug/L
Exportline Terminus	06/24/99	1.2
HPR Influent	06/24/99	1.0
HPR-1; Top	06/24/99	0.6
HPR-1; Mid	06/24/99	0.5
HPR-1; Bottom	06/24/99	0.0
HPR-2; Top	06/24/99	0.6
HPR-2; Mid	06/24/99	0.8
HPR-2; Bottom	06/24/99	0.3
HPR-3; Top	06/24/99	0.6
HPR-3; Mid	06/24/99	0.6
HPR-3; Bottom	06/24/99	0.6
Field Blank	06/24/99	0.0
Trip Blank	06/24/99	0.0

Note: 0.0 means not detected at 0.5 ug/L and scan reviewed for any detection of MTBE. Values < 0.5 ug/L are estimated.

07/07/99

MTBE

Page 3

Program: Wastewater Plant

Site	Date	MTBE ug/L
Final Effluent	04/12/99	1.8
Final Effluent	05/10/99	1.3
Final Effluent	06/07/99	0.4
Final Effluent	06/15/99	1.4
Final Effluent	06/21/99	14.0
Final Effluent	06/28/99	1.6

Note: 0.0 means not detected at 0.5 ug/L and scan reviewed for any detection of MTBE. Values < 0.5 ug/L are estimated.

Program: Wastewater Plant

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Site	Date	MTBE ug/L
Final Effluent	05/10/99	1.3
Final Effluent	06/07/99	0.4
Final Effluent	06/15/99	1.4
Final Effluent	06/21/99	14.0
Final Effluent	06/28/99	1.6

Note: 0.0 means not detected at 0.5 ug/L and scan reviewed for any detection of MTBE. Values < 0.5 ug/L are estimated.



REPORT OF ANALYTICAL RESULTS

Client: Terry Powers
 South Tahoe PUD
 1275 Meadow Crest Dr.
 So. Lake Tahoe, CA 96150

Lab Number: 16861-8
 Collected: 05/10/99
 Received: 05/11/99
 Matrix: Aqueous

Site: Final
 Project Number: 990510
 Collected by: Trebotich

Sample ID#: 990510-13g
 Analyzed: 05/13/99
 Method: EPA 8260

CONSTITUENT	PQL* ug/L	RESULT** ug/L
Benzene	0.5	ND
Toluene	0.5	1.5
Ethylbenzene	0.5	ND
Xylenes	0.5	ND
Methyl-t-Butyl Ether (MTBE)	0.5	1.3
Percent Surrogate Recovery		98

ZymaX envirotechnology, inc. is certified by CA Department of Health Services: Laboratory #1717

*PQL - Practical Quantitation Limit

**Results listed as ND would have been reported if present at or above the listed PQL.

Note: Analyzed by EPA 8260 and GC/MS Combination.

MSD #8
 16861-8.xls
 GLP/jgt/kh/ds

Submitted by,
 ZymaX envirotechnology, inc.

Georges L. Paradis
 Georges L. Paradis
 Project Manager

Client: Terry Powers
 South Tahoe PUD
 1275 Meadow Crest Dr.
 So. Lake Tahoe, CA 96150

Lab Number: 16861-9
 Collected: 05/10/99
 Received: 05/11/99
 Matrix: Aqueous

Site: Travel Blank
 Project Number: 990510
 Collected by: Trebotich

Sample ID#: 990510-14g
 Analyzed: 05/13/99
 Method: See Below

CONSTITUENT	PQL* ug/L	RESULT** ug/L
Benzene	0.5	ND
Toluene	0.5	ND
Ethylbenzene	0.5	ND
Xylenes	0.5	ND
Methyl-t-Butyl Ether (MTBE)	0.5	ND
Percent Surrogate Recovery		100

TOTAL PETROLEUM HYDROCARBONS

Gasoline	50.	ND
BTX as a Percent of Fuel		N/A

ZymaX envirotechnology, inc. is certified by CA Department of Health Services: Laboratory #1717

*PQL - Practical Quantitation Limit

**Results listed as ND would have been reported if present at or above the listed PQL.

Note: Analyzed by EPA 8260 and GC/MS Combination.

MSD #8
 16861-9.xls
 GLP/jgt/kh/ds

Submitted by,
 ZymaX envirotechnology, inc.
Georges L. Paradis
 Georges L. Paradis
 Project Manager



REPORT OF ANALYTICAL RESULTS

Client: Terry Powers
South Tahoe PUD
1275 Meadow Crest Dr.
So. Lake Tahoe, CA 96150

Lab Number: 17095-1
Collected: 06/07/99
Received: 06/09/99
Matrix: Aqueous

Site: Final Eff Grab
Project Number: 990607
Collected by: D. Arce

Sample ID#: 990607-07g
Analyzed: 06/15/99
Method: See Below

CONSTITUENT	PQL* ug/L	RESULT** ug/L
Benzene	0.5	ND
Toluene	0.5	1.4
Ethylbenzene	0.5	ND
Xylenes	0.5	ND
Methyl-t-Butyl Ether (MTBE)	0.5	ND
Percent Surrogate Recovery		101

TOTAL PETROLEUM HYDROCARBONS

Gasoline	50.	ND
BTX as a Percent of Fuel		N/A

ZymaX envirotechnology, inc. is certified by CA Department of Health Services: Laboratory #1717

*PQL - Practical Quantitation Limit

**Results listed as ND would have been reported if present at or above the listed PQL.

Note: Analyzed by EPA 8260 and GC/MS Combination.

Note: MTBE was present at an estimated value of 0.4 ug/L.

MSD #2
17095-1.xls
GLP/jgt/bp/st

Submitted by,
ZymaX envirotechnology, inc.

Georges L. Paradis
Georges L. Paradis
Project Manager



Client: Terry Powers
 South Tahoe PUD
 1275 Meadow Crest Dr.
 So. Lake Tahoe, CA 96150

Lab Number: 17095-2
 Collected: 06/07/99
 Received: 06/09/99
 Matrix: Aqueous

Site: Trip Blank
 Project Number: 990607
 Collected by: D. Arce

Sample ID#: 990607-20g
 Analyzed: 06/15/99
 Method: See Below

CONSTITUENT	PQL* ug/L	RESULT** ug/L
Benzene	0.5	ND
Toluene	0.5	ND
Ethylbenzene	0.5	ND
Xylenes	0.5	ND
Methyl-t-Butyl Ether (MTBE)	0.5	ND
Percent Surrogate Recovery		95

TOTAL PETROLEUM HYDROCARBONS

Gasoline	50.	ND
BTX as a Percent of Fuel		N/A

ZymaX envirotechnology, inc. is certified by CA Department of Health Services: Laboratory #1717

*PQL - Practical Quantitation Limit

**Results listed as ND would have been reported if present at or above the listed PQL.

Note: Analyzed by EPA 8260 and GC/MS Combination.

MSD #2
 17095-2.xls
 GLP/jgt/bp/st

Submitted by,
 ZymaX envirotechnology, inc.

Georges L. Paradis
 Project Manager



REPORT OF ANALYTICAL RESULTS

Client: Terry Powers
 South Tahoe PUD
 1275 Meadow Crest Dr.
 So. Lake Tahoe, CA 96150

Lab Number: 17160-12
 Collected: 06/15/99
 Received: 08/16/99
 Matrix: Aqueous

Site: Final Grab
 Project Number: 990615
 Collected by: D. Trebotich

Sample ID#: 990615-06g
 Analyzed: 06/21/99
 Method: See Below

CONSTITUENT	PQL* ug/L	RESULT** ug/L
Benzene	0.5	ND
Toluene	0.5	1.6
Ethylbenzene	0.5	ND
Xylenes	0.5	ND
Methyl-t-Butyl Ether (MTBE)	0.5	1.4
Percent Surrogate Recovery		100

TOTAL PETROLEUM HYDROCARBONS

Gasoline	50.	ND
BTX as a Percent of Fuel		N/A

ZymaX envirotechnology, inc. is certified by CA Department of Health Services: Laboratory #1717

*PQL - Practical Quantitation Limit

**Results listed as ND would have been reported if present at or above the listed PQL.

Note: Analyzed by EPA 8260 and GC/MS Combination.

MSD #6
 17160-12.xls
 GLP/jgt/bp/st

Submitted by,
 ZymaX envirotechnology, inc.


 Georges L. Paradis
 Project Manager



envirotechnology

REPORT OF ANALYTICAL RESULTS

Client: Terry Powers
 South Tahoe PUD
 1275 Meadow Crest Dr.
 So. Lake Tahoe, CA 96150

Lab Number: 17221-1
 Collected: 06/21/99
 Received: 06/22/99
 Matrix: Aqueous

Site: Final Effluent
 Project Number: 990621
 Collected by: Trebotich

Sample ID#: 990621-08g
 Analyzed: 06/29/99
 Method: See Below

CONSTITUENT	PQL* ug/L	RESULT** ug/L
Benzene	0.5	ND
Toluene	0.5	0.6
Ethylbenzene	0.5	ND
Xylenes	0.5	ND
Methyl-t-Butyl Ether (MTBE)	0.5	14.
Percent Surrogate Recovery		100

TOTAL PETROLEUM HYDROCARBONS

Gasoline	50.	ND
BTX as a Percent of Fuel		N/A

ZyMAX envirotechnology, inc. is certified by CA Department of Health Services: Laboratory #1717

*PQL - Practical Quantitation Limit

**Results listed as ND would have been reported if present at or above the listed PQL.

Note: Analyzed by EPA 8260 and GC/MS Combination.

Submitted by,
ZyMAX envirotechnology, inc.

Georges L. Paradis
Project Manager

MSD #2
17221-1.xls
GLP/jgt/gp/st

Client: Terry Powers
 South Tahoe PUD
 1275 Meadow Crest Dr.
 So. Lake Tahoe, CA 96150

Lab Number: 17221-2
 Collected: 06/21/99
 Received: 06/22/99
 Matrix: Aqueous

Site: Travel Blank
 Project Number: 990621
 Collected by: Trebotich

Sample ID#: 990621-09g
 Analyzed: 06/29/99
 Method: See Below

CONSTITUENT	PQL* ug/L	RESULT** ug/L
Benzene	0.5	ND
Toluene	0.5	ND
Ethylbenzene	0.5	ND
Xylenes	0.5	ND
Methyl-t-Butyl Ether (MTBE)	0.5	ND
Percent Surrogate Recovery		100

TOTAL PETROLEUM HYDROCARBONS

Gasoline	50.	ND
BTX as a Percent of Fuel		N/A

ZymaX envirotechnology, inc. is certified by CA Department of Health Services: Laboratory #1717

*PQL - Practical Quantitation Limit

**Results listed as ND would have been reported if present at or above the listed PQL.

Note: Analyzed by EPA 8260 and GC/MS Combination.

MSD #2
 17221-2.xls
 GLP/jgt/gp/st

Submitted by,
 ZymaX envirotechnology, inc.

Marion Farris Fox
 Georges L. Paradis
 Project Manager

ZymaX

envirotechnology

REPORT OF ANALYTICAL RESULTS

Client: Terry Powers
 South Tahoe PUD
 1275 Meadow Crest Dr.
 So. Lake Tahoe, CA 96150

Lab Number: 17278-3
 Collected: 06/28/99
 Received: 06/29/99
 Matrix: Aqueous

Site: Final Effluent
 Project Number: 990628
 Collected by: D. Arce/T. Powers

Sample ID#: 990628-07g
 Analyzed: 07/06/99
 Method: See Below

CONSTITUENT	PQL* ug/L	RESULT** ug/L
Benzene	0.5	ND
Toluene	0.5	1.3
Ethylbenzene	0.5	ND
Xylenes	0.5	ND
Methyl-t-Butyl Ether (MTBE)	0.5	1.6
Percent Surrogate Recovery		99
TOTAL PETROLEUM HYDROCARBONS		
Gasoline	50.	ND
BTX as a Percent of Fuel		N/A

ZymaX envirotechnology, inc. is certified by CA Department of Health Services: Laboratory #1717

*PQL - Practical Quantitation Limit

**Results listed as ND would have been reported if present at or above the listed PQL.

Note: Analyzed by EPA 8260 and GC/MS Combination.

Submitted by,
 ZymaX envirotechnology, inc.

Georges L. Paradis

Georges L. Paradis
 Project Manager

MSD #8
 17278-3.xls
 GLP/jgt/bp/mb



REPORT OF ANALYTICAL RESULTS

Client: Terry Powers
 South Tahoe PUD
 1275 Meadow Crest Dr.
 So. Lake Tahoe, CA 96150

Lab Number: 17278-2
 Collected: 06/24/99
 Received: 06/29/99
 Matrix: Aqueous

Site: Trip Blank
 Project Number: 990624
 Collected by: D. Arce/T. Powers

Sample ID#: 990624-27g
 Analyzed: 07/06/99
 Method: See Below

CONSTITUENT	PQL* ug/L	RESULT** ug/L
Benzene	0.5	ND
Toluene	0.5	ND
Ethylbenzene	0.5	ND
Xylenes	0.5	ND
Methyl-t-Butyl Ether (MTBE)	0.5	ND
Percent Surrogate Recovery		100

TOTAL PETROLEUM HYDROCARBONS

Gasoline	50.	ND
BTX as a Percent of Fuel		N/A

ZymaX envirotechnology, inc. is certified by CA Department of Health Services: Laboratory #1717

*PQL - Practical Quantitation Limit

**Results listed as ND would have been reported if present at or above the listed PQL.

Note: Analyzed by EPA 8260 and GC/MS Combination.

MSD #8
 17278-2.xls
 GLP/jgt/bp/mb

Submitted by:
 ZymaX envirotechnology, inc.

Georges L. Paradis

Georges L. Paradis
 Project Manager