

# 2006 Water Analysis



*The following are water analysis of the Upper Leon River MWD, for the year indicated, as required by the Texas Commission on Environmental Quality (TCEQ) and the Federal EPA*

Analysis Type	Collection Date	Analysis Date
SOC <sub>5</sub>	02/08/06	04/18/06 (reported)
Minerals	02/08/06	02/22/06 (reported)
Radiochemicals	002/08/06	04/18/06 (reported)
Trihalomethanes (THM)	07/26/06	07/28/06
VOC	07/26/06	08/01/06
Haloacetic Acids (HAA5)	07/26/06	08/03/06

# TEXAS DEPARTMENT OF STATE HEALTH SERVICES

## WATER ANALYSIS RESULTS by GC/MS

1100 W. 49th Street  
Austin, TX 78756

Contact: Carl Hogberg  
(512)458-7318

Water System ID # 0470015  
 DSHS Sample ID # EP6-03338  
 Method: 525.2 Rev 1.0 SOC5  
 Data File Number: C4588.D  
 QC Batch: o03s0217  
 Sample Type: water  
 TCEQ Sample ID # 0617822

Date Collected: 2/8/06  
 Date Extracted: 2/17/06  
 Date Analyzed: 2/17/06  
 Analyst: dhardin  
 Dilution Factor: 1.02  
 Conc. Units: µg/L

<b>Pesticides</b>	Result:
• Alachlor	<0.20
Aldrin	<0.20
• Atrazine	<0.20
Bromacil	<0.20
Butachlor	<0.20
• Chlordane (alpha-chlordane)	<0.20
• Chlordane (gamma-chlordane)	<0.20
• Chlordane (trans-nonachlor)	<0.20
Dieldrin	<0.20
• Endrin	<0.20
• Heptachlor	<0.20
• Heptachlor epoxide	<0.20
• Hexachlorobenzene	<0.20
• Hexachlorocyclopentadiene*	<1.02
• Lindane	<0.20
• Methoxychlor	<0.20
Metolachlor	<0.20
Metribuzin	<0.20
• Pentachlorophenol	<1.02
Prometon #	<0.20
Propachlor	<0.20
• Simazine	<0.20
Trifluralin	<0.20

<b>PAHs</b>	Result:
Acenaphthene	<0.20
Acenaphthylene	<0.20
Anthracene	<0.20
Benzo[a]anthracene	<0.20
• Benzo[a]pyrene	<0.20

<b>PAHs (cont).</b>	Result:
Benzo[b]fluoranthene	<0.20
Benzo[g,h,i]perylene	<0.20
Benzo[k]fluoranthene	<0.20
Chrysene	<0.20
Dibenz[a,h]anthracene	<0.20
Fluorene	<0.20
Indeno[1,2,3,c,d]pyrene	<0.20
Naphthalene	<0.20
Phenanthrene	<0.20
Pyrene	<0.20

<b>PCBs</b>	Result:
2-Chlorobiphenyl	<0.20
2,3-Dichlorobiphenyl	<0.20
2,4,5-Trichlorobiphenyl	<0.20
2,2',4,4'-Tetrachlorobiphenyl	<0.20
2,2',3',4,6-Pentachlorobiphenyl	<0.20
2,2',4,4',5,6'-Hexachlorobiphenyl	<0.20
2,2',3,3',4,4',6-Heptachlorobiphenyl	<0.51
2,2',3,3',4,5',6,6'-Octachlorobiphenyl	<0.51

<b>Phthalates</b>	Result:
• Di-(2-ethylhexyl)adipate	<2.04
• Di-(2-ethylhexyl)phthalate	<2.04
Butylbenzylphthalate	<2.04
Di-n-butylphthalate	<2.04
Diethylphthalate	<2.04
Dimethylphthalate	<2.04

**Tentatively Identified Cmpds\*\***      Result:  
None

\* This analyte is of known instability and quantitation should be considered approximate

\*\* Significant nontarget peaks are tentatively identified using a mass spectral library search and quantitated using an assumed response factor of one.

J Analyte detected below the quantitation limit.

# This analyte is known for extraction instability and quantitation should be considered approximate.

- Regulated compounds

Comments:                      The recoveries for anthracene were below QC limits in both laboratory fortified blank (LFB) QC samples.

Approval:  FEB 17 2006



# Texas Department of State Health Services

1100 WEST 49TH STREET  
AUSTIN, TEXAS 78756-3194  
(512) 458-7318

LABORATORY SERVICES SECTION  
CLIA #45D0660644

CONFIDENTIAL LABORATORY REPORT  
**WATER ANALYSIS REPORT**  
**MINERALS**

Submitter Identification Number: 0470015

UPPER LEON RIVER MWD

PO BOX 67  
COMANCHE, TX 76442-0067

Laboratory Number: EP603352  
Sample Type:  
Sample Source: 0604760  
Entry Points: 001  
Collector Remarks:

Date Collected: 02/08/2005  
Date Received: 02/10/2006  
Date Reported: 02/22/2006

Constituent Name	Result	Units	+/-
Chloride	162	mg/l	
Fluoride	0.3	mg/l	
Nitrate	0.15	mg/l	
Sulfate	75	mg/l	
pH	7.6		
Dil. Conduct (umhos/cm)	918		
Tot. Alka. as CaCO3	120	mg/l	
Bicarbonate	146	mg/l	
Carbonate	0	mg/l	
Dissolved solids	516	mg/l	
Total Alkalinity as CaCO3	0	mg/l	



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LABORATORY SERVICES SECTION  
CLIA #45D0660644

## CONFIDENTIAL LABORATORY REPORT WATER ANALYSIS REPORT RADIOCHEMICALS

Submitter Identification Number: 0470015

UPPER LEON RIVER MWD

PO BOX 67  
COMANCHE, TX 76442-0067

Laboratory Number: EP603057  
Sample Type:  
Sample Source: 0614582  
Entry Points: 001  
Collector Remarks:

Date Collected: 02/08/2006  
Date Received: 02/10/2006  
Date Reported: 04/18/2006

Constituent Name	Result	Units	+/-
Radium 228	< 1.0	pCi/l	
Gross Beta	9.5	pCi/l	1.4
Gross Alpha Particle Activity	< 2.0	pCi/l	

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# Department of State Health Services

## Trihalomethanes by GC-ELCD

Contact: Carl Hogberg  
(512)458-7318

Water System ID: 0470015  
DSHS Lab ID: EP6-15632  
Method: EPA 502.2 Rev. 2.1 (THM)  
Data File: 07280017.D  
QC File: D:\HPCHEM\1\DATA\I001G0728  
Sample Type: Water  
TCEQ ID: 0620049

Date Collected: 07/26/2006  
Date Prepared: 07/28/2006  
Date Analyzed: 7/28/2006 6:22  
Analyst: CSawyer  
Dilution Factor: 1  
Concentration Units: µg/L

Compound:	Result:
Chloroform	3.8
Bromodichloromethane	9.1
Dibromochloromethane	10.8
Bromoform	7.2
Total THM's	30.9

COMMENTS:

**TEXAS DEPARTMENT OF STATE HEALTH SERVICES**  
**VOLATILE ORGANIC COMPOUNDS by GC/MS**

Water System I.D.	0470015	Date Collected:	07/26/2006
DSHS Sample I.D.	EP615576	Date Extracted:	08/01/2006
Method:	EPA 524.2 rev. 4.1	Date Analyzed:	08/01/2006
Data File Number:	0801-119.D	Analyst:	MK
Q.C. File:	OV010801.S	Dilution Factor:	1
Sample Type:	Water	Concentration Units:	µg/l
TCEQ I.D.	0616993		

<u>Regulated Cmpds. [40 CFR §141.61(a)]</u>	<u>Result</u>
Benzene	<0.5
Carbon tetrachloride	<0.5
Chlorobenzene	<0.5
1,2-Dichlorobenzene	<0.5
1,4-Dichlorobenzene	<0.5
1,2-Dichloroethane	<0.5
1,1-Dichloroethene	<0.5
cis-1,2-Dichloroethene	<0.5
trans-1,2-Dichloroethene	<0.5
1,2-Dichloropropane	<0.5
Methylene chloride (DCM)	<0.5
Ethylbenzene	<0.5
Styrene	<0.5
Tetrachloroethene	<0.5
Toluene	<0.5
1,2,4-Trichlorobenzene	<0.5
1,1,1-Trichloroethane	<0.5
1,1,2-Trichloroethane	<0.5
Trichloroethene	<0.5
Vinyl chloride	<0.5
m&p-Xylene	<1.0
o-Xylene	<0.5

<u>Monitored Cmpds. [40 CFR §141.40(e)]</u>	<u>Result</u>
<b>Chloroform</b>	<b>4.4</b>
<b>Bromodichloromethane</b>	<b>8.7</b>
<b>Dibromochloromethane</b>	<b>8.0</b>
<b>Bromoform</b>	<b>4.2</b>
Dibromomethane	<1.0
1,3-Dichlorobenzene	<1.0
1,1-Dichloropropene	<1.0
1,1-Dichloroethane	<1.0
1,1,2,2-Tetrachloroethane	<1.0
1,3-Dichloropropane	<1.0
Chloromethane	<2.0
Bromomethane	<2.0
1,2,3-Trichloropropane	<1.0
1,1,1,2-Tetrachloroethane	<1.0
Chloroethane	<2.0
2,2-Dichloropropane	<1.0
2-Chlorotoluene	<1.0
4-Chlorotoluene	<1.0
Bromobenzene	<1.0
cis-1,3-Dichloropropene	<1.0
trans-1,3-Dichloropropene	<1.0

**☒ Screened Compounds**

1,2-Dibromo-3-chloropropane	<1.0
1,2-Dibromoethane	<1.0

**☒ EPA 524.2 is not the approved method for analysis of these compounds. Compounds are listed per TCEQ request.**

<u>Monitored Cmpds. [40 CFR §141.40(j)]</u>	<u>Result</u>
1,2,4-Trimethylbenzene	<1.0
1,2,3-Trichlorobenzene	<1.0
n-Propylbenzene	<1.0
n-Butylbenzene	<1.0
Naphthalene	<1.0
Hexachlorobutadiene	<1.0
1,3,5-Trimethylbenzene	<1.0
4-Isopropyltoluene	<1.0
Isopropylbenzene	<1.0
t-Butylbenzene	<1.0
s-Butylbenzene	<1.0
Trichlorofluoromethane	<2.0
Dichlorodifluoromethane	<2.0
Bromochloromethane	<1.0


**Other Compounds**

Acetone	<10
Acrylonitrile	<10
2-Butanone (MEK)	<10
Carbon disulfide	<1.0
Ethyl methacrylate	<1.0
2-Hexanone	<1.0
Iodomethane	<2.0
Methyl methacrylate	<1.0
4-Methyl-2-pentanone (MIBK)	<2.0
Methyl-t-butyl ether (MTBE)	<2.0
Tetrahydrofuran	<5.0
Vinyl acetate	<10

Tentative identification of the largest non-priority pollutant peaks is provided by comparison with the EPA/NIH mass spectral library. Approximate quantitation is performed using internal standards and an assumed response factor of one.

<u>Tentative Compound ID</u>	<u>Result</u>
None	

**Comments:**

Approval:   
AUG 03 2006

**Texas Department of State Health Services  
Haloacetic Acids GC Results**


Water System ID #	0470015	Date Collected	7/26/06
DSHS Lab ID #	EP6-15592	Date Extracted	8/1/06
Method	552.2	Date Analyzed	8/3/2006 7:33
Data File Name	08020027.D	Analyst	dhardin
QC File	C:\HPCHEM\2\DATA\O04P0802\	Dilution Factor	1
Sample Type	Water	Concentration Units	µg/L
TCEQ Sample ID #	0627087		

Regulated Compounds:	Result:
Monochloroacetic acid	<2.0
Dichloroacetic acid	14.1
Trichloroacetic acid	1.5
Monobromoacetic acid	1.5
<u>Dibromoacetic acid</u>	<u>19.2</u>
Total:	36.3

**Monitor Compounds:**

Bromochloroacetic acid	18.8
Dalapon	<1.0

Comments:

Approval: 

AUG 4 2006