WATER SUPPLY PLAN AND WASTEWATER REPORT

For

Forest Lakes Metropolitan District

DECEMBER 2015

Prepared By:

JDS-HYDRO CONSULTANTS, INC.

545 EAST PIKES PEAK AVENUE • COLORADO SPRINGS, CO • 80903 • (719) 227-0072 • FAX (719) 471-3401

FOREST LAKES METROPOLITAN DISTRICT
WATER SUPPLY PLAN
and
WASTEWATER REPORT

December 9, 2015

Prepared for:

Forest Lakes Metropolitan District
2 North Cascade, Suite 1280
Colorado Springs, CO 80903

Prepared by:

JDS-Hydro Consultants, Inc
545 East Pike's Peak, Suite 300
Colorado Springs, CO

TABLE OF CONTENTS

SECTION 1 INTRODUCTION

The purpose of this study if to provide a Water and Wastewater Sufficiency Report for the proposed Forest Lakes Filing 2A and 2B. This report supersedes previous water reports the most recent of which was issued in 2003.

The Forest Lakes overall development consists of three large non-contiguous parcels north of the United States Air Force Academy and west of Interstate-25.

The main or largest parcel will be developed into residential areas. It includes Bristlecone and Pinion Reservoirs and large acreages of open space. The existing and proposed Filings are a part of this parcel.

The Forest Lakes commercial area or Tech Center is east of Monument Creek and is annexed into the Town of Monument. The Dillon well resides within this parcel. This area will be developed as primarily commercial property.

Lastly an additional parcel also sometimes known as the Village parcel, is adjacent to the Tech Center but west of Monument Creek. There are no plans for development of this parcel.

1.1 General:

In 2008, two initial Filings of Forest Lakes were platted and recorded. Although platted, development of the recorded lots was halted partially through construction. Nevertheless, the backbone water system was completed and has been functional in a marginal role since 2008/2009. The existing water system consists of a single large Arapahoe Well, raw water delivery system; Water Treatment Plant; Water Transmission and Distribution systems; and a 1 MG Water Storage Tank. The system, although functional since that time, has only served a single user.

The system is designated as a Public Water Supply System and has been assigned a PWSID # of CO-0121360. Since system use is so low, it has never reached the threshold of being designated for Community system use. However with active development beginning, it is anticipated that the system will reach the threshold of being a Community system by May, 2016. Therefore, it is anticipated that a full monitoring plan will be adopted through CDPHE at that time.

All central water system facilities necessary to serve the existing two filings and proposed Filing 2A and 2B are in place at this time and functional. Additional distribution lines will be constructed with Filing 2.

Most central wastewater systems are also in place as needed to serve the existing and proposed Filings. There are two constructed lift stations, force main and interceptor sewers in place and constructed. Although construction is near complete and connectivity is complete, the wastewater system has never become

fully functional as power was not completed to the two lift stations. Final construction and some probable re-habilitation is currently underway.

Wastewater Treatment will be provided through the Upper Monument Regional Wastewater Treatment Facility which is jointly owned by Triview Metropolitan District; Donala Water and Sanitation District; and Forest Lakes Metropolitan District.

Appendix A is the Preliminary Plan for Forest Lakes Filings 2A and 2B.

SECTION 2 PROJECTION OF WATER AND WASTEWATER NEEDS

2.1 Expected Water User Demands:

An overall factor of 0.392 annual acre-feet per residential unit was utilized for water allocation for lots platted previously. This might be slightly low for the 42 large estate lots but possibly overly conservative for the smaller sized lots. Current user characteristics would suggest an annual water demand of 42.703 AF, but prior factors were based on 44.296 annual AF for existing Filing #1 and Filing #3. For consistency, we will hold with the more conservative 44.296 for existing platted lots but use a more current prediction of 0.353 annual AF for the proposed medium sized lots.

Based on above, adding the new Filing #2A and 2B, Forest lakes Metropolitan District's water demands will rise to a total 101.133 annual Acre-Feet. Maximum Daily Use is projected on a 2.2 multiplier ratio.

Table 1
Projected Water Demands
Forest Lakes Metropolitan District

Land Use	***Annual Need (AF/Unit)***	***Total Annual (AF)***	***Max Day (GPD)***
Existing Plats			
Residential (Filing #1)			
34 Large Estate Lots	0.392 AF /Unit	13.33	26,180 GPD
Residential (Filing #3)			
8 Large Estate Lots			
71 Medium Size Lots	0.392 AF /Unit	30.97	60,826 GPD
Proposed Plats			
Residential (Filing #2 A and B)			
161 Medium Size Lots	0.353 /Unit	56.833	111,622 GPD
Total Revised Demands		**101.13**	**198,608 GPD**

2.2 Expected Wastewater Loads

In the previous water report issued in 2003 a unit user characteristic of 240 GPD-unit was estimated as the anticipated wastewater load. In the last decade or so, low flow plumbing devices and water conservation awareness have driven the typical front range user characteristics downward dramatically. Since all of the houses will be constructed under current codes and conditions a value of 210 PPD-unit is far more applicable.

The maximum day to average day ratio used is 1.25. It should be noted that the factor tends to be a somewhat higher until buildout of the subdivisions is neared.

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Table 2
Projected Wastewater Loads
Forest Lakes Metropolitan District

Land Use	*Average Daily Flow (GPD/Unit)*	*ADF (GPD)*	*Max Day (GPD)*
Existing Plats			
Residential (Filing #1)			
34 Large Estate Lots	210 gal/day- Unit	7140	8,925 GPD
Residential (Filing #3)			
8 Large Estate Lots			
71 Medium Size Lots	210 gal/day- Unit	16,590	20,738 GPD
Proposed Plats			
Residential (Filing #2 A and B)			
161 Medium Size Lots	210 gal/day- Unit	33,810	42,263 GPD
Total Revised Loads		**57,540**	**71,926 GPD**

SECTION 3 WATER RIGHTS AND WATER SYSTEM SUFFICIENCY

3.1 Legal Water Supply and Water Rights:

When originally platted, it was expected that non-tributary water from under the main Forest Lakes residential parcel would be used to provide initial service. After the drilling of an initial Arapahoe well at Forest Lakes, an operational decision was made to rely instead on water taken from the re-drilled Dillon Well which was permitted under a different decree 81 CW 213. This water while under Forest Lakes is under a parcel that is east of Old Denver highway and not associated with the residential lands on which the Filings are platted and proposed. However beneficial use of the Dillon Well is not limited to the lands on which it resides and it can be used on the residential parcel. The legal water right associated with the Dillon Well is an annual decree of 400 annual acre-feet. See attached water right decree and well completion report (17483 -FR) attached as **Appendix B**.

Projecting the legal right to withdraw 400 annual acre-feet on a 100 year basis to net 300 year water, the resulting supply is 133.3 annual acre-feet $_{300}$. The available legal supply of 133.3 AF_{300} obviously exceeds the expected required demand of 101.13 annual acre-feet.

Conclusion: Therefore the Dillon water right is more than adequate to provide 300 year water to all existing Filings and the proposed Filing 2A and 2B.

Forest Lakes owns a portfolio of other rights that include Denver Basin water under the residential parcel and certain CSU wastewater return flows which are fully consumable and are exchanged physically up to Bristlecone Reservoir. A small portion of the on-site Arapahoe Non-tributary water is dedicated to an upstream augmentation plan and some of the CSU wastewater return flows are used to augment evaporative losses from Bristlecone and Pinion Reservoirs.

Neither of these additional rights are necessary to provide legal and/or physical supply to the existing and proposed development at least through the first 3 Filings noted herein.

3.2 Physical Source of Supply:

Municipal water demand would be met using the Dillon Well established on the Tech Center parcel. This well has been drilled, completed and operated since 2008. Current well yield is 180 gallons/minute based on current pumping equipment. The equipment can be modified in the future and actual instantaneous yield of the permitted amount of 290 GPM has been documented as achievable.

For planning purposes, we generally down-rate daily yield to 80% of the maximum instantaneous rate for reliability. Therefore at 180 GPM X 80% X 1440, the current maximum daily capacity is 207,360 GPD which is adequate to

provide physical supply to the existing and proposed Filings. From Table 1, the required Max Daily Flow (MDF) is 198,608 GPD.

It should be noted that although no legal supply from the Dillon well is dedicated to any other purpose, the Dillon well is currently used as the physical supply for an augmentation plan mentioned in paragraph 2.1.

The current source of physical supply is adequate to serve the proposed Filings. However, a single well as a source of supply creates a reliability concern as the development builds out. The tank provides a 5 Max day alternate source of supply, but mechanical failure in this type of well can easily exceed 5 days of downtime. It is strongly recommended that Forest Lakes implement an emergency mutual aid connection to Triview Metropolitan District within the next year so that a back-up supply is available for reliability purposes. This connection has already been planned by both agencies and piping is already stubbed out from both sides to facilitate the connection. The interconnect is expected to be implemented in the first half of 2016.

Conclusion: The existing physical source of supply is adequate for the all existing Filings and the proposed Filing 2A and 2B. We do recommend that the mutual aid connection be implemented to provide an additional reliability factor. It should be implemented by the time Forest Lakes connects about 50 taps, although we are aware that it is currently underway.

3.3 Water Quality and Treatment:

The water quality from the Dillon well is relatively good but iron removal will improve the aesthetic quality. A small Iron and Manganese filter plant is existing and has been operable since roughly 2009. Water quality testing from the original drilling is attached as **Appendix C**. As stated earlier, the system has been in operation for several years but has only served a single user. Consequently, it has not yet risen to the threshold requiring consistent water quality monitoring. The system will pass that threshold when development begins and water quality testing per CDPHE will occur on a more consistent basis.

Conclusion: Water quality currently meets CDPHE Drinking Water Standards. Monitoring will become more routine once the system achieves the CDPHE threshold for such monitoring.

3.4 Water Storage:

An existing 1.5 MG storage tank has been constructed at the site and has been operated within the since 2008. Although 1/3 of the storage is owned by the Town of Monument, storage is treated as coincidental making the full capacity available on an emergency basis. This will provide for all required fire storage as well as domestic demand.

3.5 *Distribution and Transmission Lines:*

An existing 14 and 16 inch line comprises the back-bone of the system. These lines are supplemented with 8 inch or larger distribution lines throughout. New lines will be required and developed within Filing 2A and 2B as required by the District.

SECTION 4 WASTEWATER AND WASTEWATER TREATMENT

4.1 Wastewater Collection

The backbone wastewater system was constructed in 2008/09. The system included two constructed lift stations which were constructed although power has never been extended. The District is in the process of connecting power service and implementing start-up of the two stations. Some rehabilitation may be necessary and those actions are currently underway.

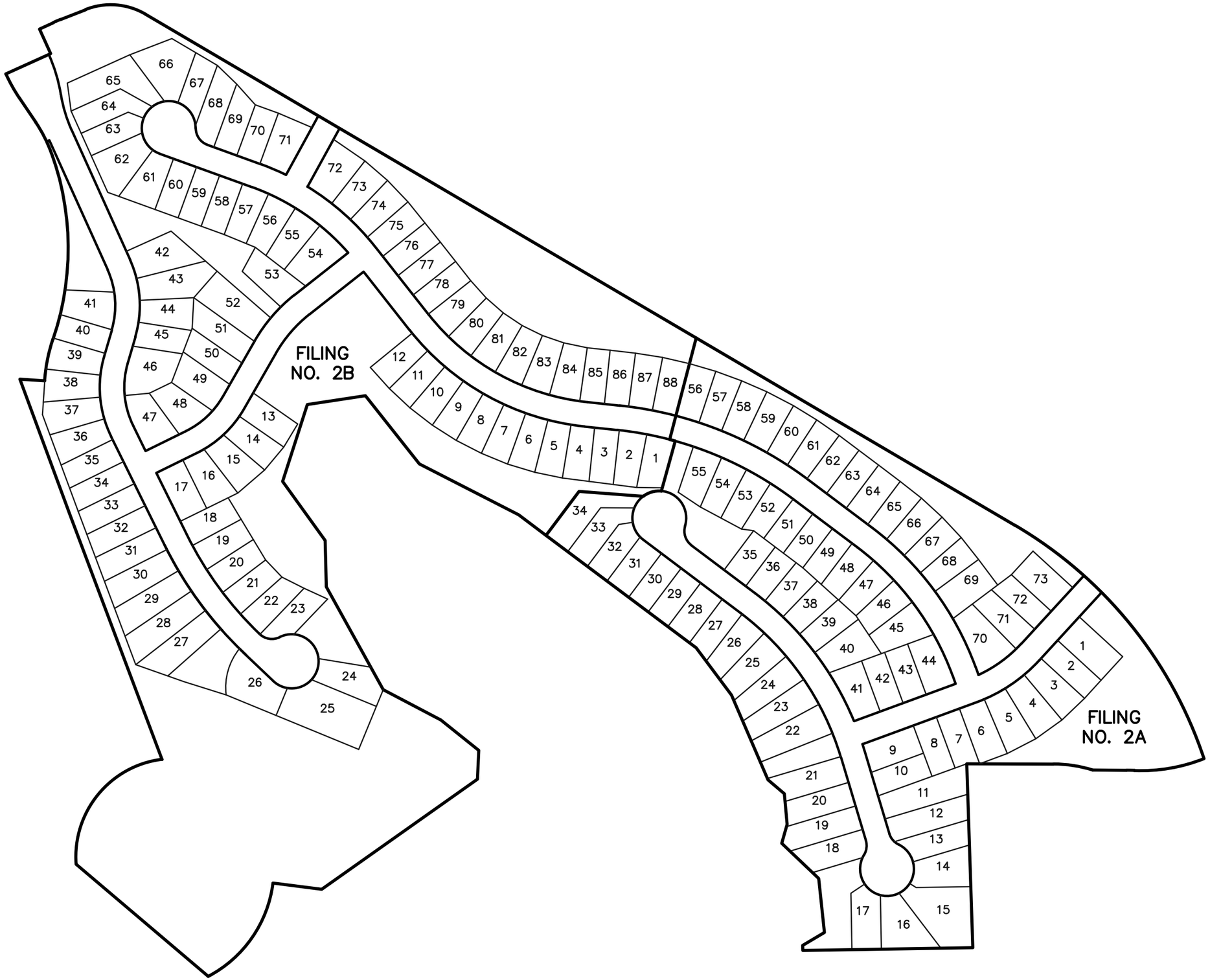
A 6 inch force main and 21 inch sewer interceptor are already in place and connect to the existing Upper Monument Regional Wastewater Treatment Facility.

4.2 Wastewater Treatment

Forest Lakes Metropolitan District is one of three partners who own the Upper Monument Regional Wastewater Treatment Facility (UMRWWTF). Forest Lakes ownership is 300,000 gallons per day. This is available and more than adequate to provide service to all existing Filings including the proposed 2A and 2B.

The plant is currently in compliance with its Discharge Permit.

Appendix A


FILING
NO. 2B
FILING
NO. 2A

Appendix B

FORM NO. GWS-31 02/2005

WELL CONSTRUCTION AND TEST REPORT
STATE OF COLORADO, OFFICE OF THE STATE ENGINEER

1313 Sherman St., Room 818, Denver, CO 80203
Phone - Info (303) 866-3587 Main (303) 866-3581
Fax (303) 866-3589 http://www.water.state.co.us

For Office Use Only: RECEIVED
AUG 08 2006
WATER RESOURCES STATE ENGINEER COLO

RN 3600835

1. WELL PERMIT NUMBER: 17483-FR

2. WELL OWNER INFORMATION

NAME OF WELL OWNER: Forest Lakes Metro. District

MAILING ADDRESS: 2 North Cascade Ave., Suite 1280

CITY: Colorado Springs STATE: CO ZIP CODE: 80903

TELEPHONE NUMBER: (719) 327-5810

3. WELL LOCATION AS DRILLED: NW 1/4, NE 1/4, Sec. 35, Twp. 11 ☐ N or ☒ S, Range 67 ☐ E or ☒ W

DISTANCES FROM SEC. LINES: 200 ft. from ☒ N or ☐ S section line and 2200 ft. from ☒ E or ☐ W section line.

SUBDIVISION: _____, LOT ____, BLOCK ____, FILING (UNIT) ____

Optional GPS Location: GPS Unit must use the following settings: Format must be UTM, Units must be meters, Datum must be NAD83, Unit must be set to true N, ☐ Zone 12 or ☒ Zone 13

Owner's Well Designation: Dillon

Easting: 512435

Northing: 4330745

STREET ADDRESS AT WELL LOCATION:

4. GROUND SURFACE ELEVATION 6810 feet DRILLING METHOD Reverse Rotary

DATE COMPLETED June 27, 2006 TOTAL DEPTH 1316 feet DEPTH COMPLETED 1300 feet

5. GEOLOGIC LOG:

Depth	Type	Grain Size	Color	Water Loc.
0-20	Sand, silty			
20-255	Dawson sands and			
	sandstones			
255-865	Denver, shales			
865-1305	Arapahoe sandstones			
	and shales			
1305-1316	Laramie shales			

6. HOLE DIAM (in.)

	From (ft)	To (ft)
28	0	40
17-1/2	40	1316

7. PLAIN CASING:

OD (in)	Kind	Wall Size (in)	From (ft)	To (ft)
20	Steel	.250	+1	40
10 3/4	Steel	.365	+1	1300

See attached schedule

PERFORATED CASING: Screen Slot Size (in): 0.04

10 3/4	SS		various	

See attached schedule

8. FILTER PACK

Material sand
Size 8-12
Interval 870-1316

9. PACKER PLACEMENT:

Type
Depth

10. GROUTING RECORD

Material	Amount	Density	Interval	Placement
Cement	52 cuft	15 #/gal	825-870	pumped - Tremie
Cement	865 cuft	12 #/gal	0-825	pumped - Tremie
Cement	84 cuft	15 #/gal	0-40	Poured

Remarks: E-log submitted to Dave McElhaney on May 12, 2006

11. DISINFECTION: Type Sodium Hypochlorite - 11% Amt. Used 6 gallons

12. WELL TEST DATA: ☐ Check box if Test Data is submitted on Form Number GWS 39 Supplemental Well Test.

TESTING METHOD Submersible

Static Level 644 ft. Date/Time measured: June 26, 2006 Production Rate 400 gpm.

Pumping Level 950 ft. Date/Time measured June 27, 2006 Test Length (hrs) 24

Remarks:

13. I have read the statements made herein and know the contents thereof, and they are true to my knowledge. This document is signed and certified in accordance with Rule 17.4 of the Water Well Construction Rules, 2 CCR 402-2. [The filing of a document that contains false statements is a violation of section 37-91-108(l)(e), C.R.S., and is punishable by fines up to $5000 and/or revocation of the contracting license.]

Company Name:	Phone:	License Number:
Henkle Drilling and Supply Co.	(800) 742-5889	1408

Mailing Address: P.O. Box 639 Garden City, KA 67946

Signature:	Print Name and Title	Date:
Bruce J Reichmuth	Bruce J Reichmuth - Vice President	8/6/06

Well Casing Details
Forest Lakes Metro. District Dillon Well
Permit 17483-FR

10-3/4 inch Steel Casing

Depth	
From	To
0	890
910	920
970	980
990	1050
1060	1070
1150	1165
1175	1195
1240	1260
1280	1300

10-inch Pipe Size
Stainless Steel - 40 Slot

Depth	
From	To
890	910
920	970
980	990
1050	1060
1070	1150
1165	1175
1195	1240
1260	1280

DISTRICT COURT, WATER DIVISION NO. 2, STATE OF COLORADO

Case No. 81CW213

COPY

FINDINGS OF FACT, CONCLUSIONS OF LAW, JUDGMENT AND DECREE

CONCERNING THE APPLICATION FOR WATER RIGHTS OF RAY E. DILLON, RAY E. DILLON, JR., RICHARD W. DILLON and WILLIAM L. SINGLETON

IN THE ARAPAHOE NONTRIBUTARY FORMATION

IN EL PASO COUNTY, COLORADO.

Filed in the office of the Clerk, District Court Water Division No. 2, State of Colorado

JUL 18 1984

Clerk

Having reviewed all matters contained in the Application and evidence offered in support thereof, and upon stipulation of the parties hereto, the Court enters the following Findings of Fact, Conclusions of Law, Judgment and Decree.

FINDINGS OF FACT

1. Name and Address of Applicants:

Ray E. Dillon, Ray E. Dillon, Jr., Richard W. Dillon, and William L. Singleton
c/o Ray E. Dillon, Jr.
Box 1266
Hutchinson, Kansas 67501

2. Amount of Water Claimed:

Applicants initiated this case by filing an Application for Underground Nontributary Water Rights herein on December 14, 1981. Applicants seek a decree confirming their right to develop and use 290 g.p.m. of water recoverable from the Arapahoe Formation through Well No. 17483-F, with the amount of water to be withdrawn annually therefrom not to exceed 400 acre-feet.

3. Description of Structure:

Name: Well No. 17483-F
Depth: 1,195 feet
Location:
In the Northwest Quarter of the Northeast Quarter of Section 35, Township 11 South, Range 67 West, 6th P.M., El Paso County, former Water District No. 10, Irrigation Division No. 2, State of Colorado, at a

point 200 feet from the North line, and 2,000 feet from the East line, of said Section 35.

4. Well Permit:

In February of 1973, application was made to the Colorado Division of Water Resources for a well permit for the subject structure. The Division issued a permit for Well No. 17483-F on August 17, 1973. The permit authorizes a maximum pumping rate from the subject well of 430 g.p.m., with an annual acre-foot limitation of 580 acre-feet. A statement verifying application of such water to beneficial use was timely submitted to the Division of Water Resources pursuant to extensions of time previously obtained therefrom, and accepted for filing by the State Engineer, on October 17, 1974.

As asserted in paragraph 2 of this Decree, Applicants are claiming only 290 g.p.m. and 400 acre-feet (per annum), which limitations are found to be reasonable and required to protect the interests of Objector, the City of Colorado Springs.

5. Source of Water:

Applicants have proven that the ground water which is withdrawn through Well No. 17483-F is not tributary to or hydraulically connected with the Monument Creek system, and that withdrawals through the subject well will not materially affect the flow of Monument Creek or its tributaries within 100 years. Applicants have further proven that withdrawal of water in accordance with the terms of this Decree will not result in material injury to the vested water rights of others. There is water available for withdrawal by Applicants pursuant to and in accordance with C.R.S. §37-90-137.

6. Uses of Water:

The water which is the subject of the rights claimed herein may be used for municipal, domestic, commercial and irrigation purposes. The right to apply such water to the above-specified beneficial uses shall include the right of successive use pursuant to C.R.S. §37-82-106 and the right to use, reuse, and successively use all such water to extinction and to dispose of

such water, free of any limitation, restriction, or requirement as to the place of use, the amount of discharge after such use, and as to its reuse, successive use or disposition. The water may be produced for immediate application to beneficial use, for storage and subsequent application to beneficial use, for exchange purposes, for replacement of depletions resulting from the use of water from other sources, and for any and all other augmentation purposes.

7. Statements of Opposition/Entries of Appearance:

A verified Statement of Opposition to the granting of this Application was timely filed by the City of Colorado Springs. In addition, the State and Division Engineer entered their appearance in this matter. No other Statements of Opposition or Entries of Appearance were filed herein, and the time for filing the same has now expired.

The Objector and Entrants hereby withdraw their respective Statement of Opposition and Entry of Appearance, as evidence by the signatures of counsel for Objector and Entrants on page 6 hereof consenting to the terms of this Decree.

The Objector, City of Colorado Springs, stipulates with the Applicants and with the Entrants, State and Division Engineer, that this case shall not act as a precedent for any other wells or surface rights alleged to be nontributary, whether said proceedings or claims arose in the past or will arise in the future.

8. Jurisdiction:

Timely and adequate notice was published of the Application herein as required by statute, and the Court has jurisdiction over the subject matter of this proceeding and over all parties affected hereby, whether they have appeared or not. None of the lands or water rights involved in this case is within the boundaries of a designated ground water basin.

CONCLUSIONS OF LAW

9. The Court concludes as a matter of law that the determination of nontributary ground water rights as set forth in the decretal portion hereof is contemplated and authorized by law. C.R.S. §37-92-203(1) and §37-90-137(6) (as amended by S.B. 439, enacted October 11, 1983). Applicants qualify for and are entitled to an absolute Decree confirming their right to withdraw ground water pursuant to C.R.S. §37-90-137.

10. The nontributary water rights herein are determined pursuant to C.R.S. §37-90-137, and shall be subject to administration by the State Engineer pursuant to the terms of this Decree, C.R.S. §37-90-137 and other applicable law as nontributary water rights.

JUDGMENT AND DECREE

IT IS, THEREFORE, ORDERED, ADJUDGED AND DECREED that:

11. The claims which are the subject of this Decree are hereby determined in accordance with the Conclusions of Law herein and as described hereinafter. The Findings of Fact and Conclusions of Law are hereby incorporated into this Decree as if fully set forth herein.

12. Applicants' rights to withdraw nontributary Arapahoe Formation ground water from Well No. 17483-F are hereinafter determined. The location, depth, pumping rate, and annual withdrawal for the well are as follows:

A. Location:

In the Northwest Quarter of the Northeast Quarter of Section 35, Township 11 South, Range 67 West, 6th P.M., El Paso County, former Water District No. 10, Irrigation Division No. 2, State of Colorado, at point 200 feet from the North line, and 2,000 feet from the East line, of said Section 35.

B. Depth: 1,195 feet

C. Pumping Rate: 290 g.p.m. (0.646 c.f.s.)

D. Annual Withdrawal: 400 acre-feet.

13. Well No. 17483-F shall produce nontributary ground water from the Arapahoe Formation only.

14. The subject well shall be operated consistent with sound engineering principles and practices. The well has been encased with an impervious lining at all levels except at the level of the designated aquifer, to prevent withdrawal of ground water in other aquifers.

15. The well shall be identified by its permit number, the Applicants' name, and the name of the producing Formation on the above-ground portion of the well casing or on the pumphouse.

16. A totalizing flow meter shall be installed on the well discharge. Applicants shall keep records of all diversions by the well from the totalizing flow meter, and report the same once annually to the Division 2 Engineer. Said annual reporting shall be broken down by the calendar month.

17. Water is available for withdrawal by Applicants from the Arapahoe Formation, and the withdrawal through Well No. 17483-F of the amounts of water specified in paragraph 12 above will not result in material injury to any other vested water rights or to any other owners or users of water.

18. The nontributary ground water which is the subject of this Decree may be used for municipal, domestic, commercial and irrigation purposes. The right to apply such water to the above-specified beneficial uses shall include the right of successive use pursuant to C.R.S. §37-82-106 and the right to use, reuse, and successively use all such water to extinction and to dispose of such water, free of any limitation, restriction, or requirement as to the place of use, the amount of discharge after such use, and as to its reuse, successive use or disposition. The water may be produced for immediate

application to beneficial use, for storage and subsequent application to beneficial use, for exchange purposes, for replacement of depletions resulting from the use of water from other sources, and for any and all other augmentation purposes.

19. Withdrawals through Applicants' well in accordance with the terms and conditions set forth above will not materially affect the flow of Monument Creek or its tributaries within 100 years and therefore is hereby decreed to be nontributary to Monument Creek or its tributaries.

20. The Findings of Fact, Conclusions of Law and Judgment and Decree herein shall not be considered a precedent as to other water matters which might be filed or have been filed with the Water Court or which are claimed or will be claimed by any person or legal entity.

21. This Judgment and Decree constitutes a final determination of the quantity of ground water which Applicants are entitled to withdraw from the Arapahoe Formation through Well No. 17483-F.

APPROVED AS TO FORM AND CONTENT:

HORN, ANDERSON & JOHNSON

By: William Nowland

William Nowland, No. 490
840 Holly Sugar Building
Colorado Springs, Colorado 80903

Attorneys for Objector
City of Colorado Springs

ATTORNEY GENERAL

By: William O. Paddock, 9478 for

Steven J. Shupe, No. 12523
Assistant Attorney General
Natural Resources Section
1525 Sherman Street, 3rd Floor
Denver, Colorado 80203

Attorneys for Entrant
State of Colorado

SAUNDERS, SNYDER, ROSS & DICKSON, P.C.

By: W.B. Tourtillott

William B. Tourtillott, No. 184
Deborah L. Freeman, No. 12278
303 East Seventeenth Avenue, #600
Denver, Colorado 80203
Attorneys for Applicants

ENTERED AS THE JUDGMENT AND DECREE OF THIS COURT this 18 day of July, 1984.

John R. Tracey

John R. Tracey
Water Judge
Water Division No. 2
State of Colorado

Filed in the office of the Clerk, District Court Water Division No. 2, State of Colorado

JUL 18 1984

Priscilla L. Lyons
Clerk

c: Saunders, Snyder, Ross & Dickson
(W. B. Tourtillott, Jr.)
Horn, Anderson & Johnson (Nowland)
Steven J. Shupe, Assistant Attorney General
Robert W. Jesse, Division Engineer
Dr. Jeris A. Danielson, State Engineer

Appendix C

STATE OF COLORADO

Bill Ritter, Jr., Governor
James B. Martin, Executive Director

Dedicated to protecting and improving the health and environment of the people of Colorado

4300 Cherry Creek Dr. S.
Denver, Colorado 80246-1530
Phone (303) 692-2000
TDD Line (303) 691-7700
Located in Glendale, Colorado

http://www.cdphe.state.co.us

Laboratory Services Division
8100 Lowry Blvd.
Denver, Colorado 80230-6928
(303) 692-3090

Colorado Department
of Public Health
and Environment

PUEBLO DISTRICT OFFICE
4718 North Elizabeth Street, Suite B
Pueblo, Colorado 81008-2054
Phone (719) 545-4650 FAX (719) 543-8441

February 18, 2009

Dr. Ann Nichols
Forest Lakes Metropolitan District
2 N. Cascade, Suite 1280
Colorado Springs, CO 80921

Subject: Receipt of Operations and Maintenance Manual
Forest Lakes Metropolitan District
PWSID CO0121360
El Paso County, Colorado

Dear Dr. Nichols,

The Water Quality Control Division (the Division) has received and reviewed the Operations and Maintenance (O&M) manual for the Forest Lakes Metropolitan District and the O&M manual for the Filtronics filtration equipment. All requirements of the New Water System Capacity Planning Manual have been satisfactorily met. Please inform the Division when the population of the Forest Lakes Metropolitan District has reached 25 year-round residents or when there are 15 service connections in use. The Division will change the status of the water system at that time from Transient, Non-Community to a Community Water System.

Thank you for your time and attention in this matter. If you have any questions or comments, please call me at 719-545-4650 ext. 21.

Sincerely,

Joseph C. Talbott, Jr., P.E.
Engineering Section
Water Quality Control Division

cc: John McGinn, JDS-Hydro Consultants, Inc.
Mike McCarthy, El Paso County Department of Health and Environment
Betsy Beaver, Facility Operator Program, WQCD-Denver
Erica Kannely/DW File, Compliance Assurance & Data Management Section, WQCD-Denver

Jct

Evergreen Analytical Laboratory

January 31, 2006

J P McGinn
JDS-Hydro Consultants Inc
545 East Pikes Peak Avenue Suite 300
Colorado Springs, CO 80903

Lab Work Order: 06-0296
Client Project ID: 105.03

Dear J P McGinn:

Enclosed are the analytical results and invoice for the samples shown in the Laboratory Work Order Summary.

The enclosed data for testing performed at Evergreen Analytical Laboratory (EAL) have been reviewed for quality assurance. A case narrative is included to describe any anomalies associated with the samples or data.

EAL will dispose of all samples one month from the date of this letter. If you want samples returned, please advise us by mail or fax as soon as possible.

A copy of this project report and supporting data will be retained for a period of five years unless we are otherwise advised by you. A document retrieval charge will apply.

Thank you for using the services of Evergreen Analytical. If you have any questions concerning the analytical data, please contact me. Please direct other questions to Client Services.

Sincerely,

Carl Smits
Technical Director of Chemical Analysis

Hazen Research, Inc.
4601 Indiana Street
Golden, CO 80403 USA
Tel: (303) 279-4501
Fax: (303) 278-1528

DATE February 6, 2006
HRI PROJECT 009-93
HRI SERIES NO A253/06
DATE REC'D. 1/17/2006
CUST. P.O.# 4709

Evergreen Analytical, Inc.
Carl Smits
4036 Youngfield
Wheat Ridge, CO 80033

REPORT OF ANALYSIS

SAMPLE NO. A253/06-1

SAMPLE IDENTIFICATION: 06-0290-01P, Q, R - sampled on 01/13/2006 @ 1900 (105.03)

PARAMETER	RESULT	DETECTION LIMIT	METHOD	ANALYSIS DATE	ANALYST
Gross Alpha (+-Precision*), pCi/l (T)	1.6(+-1.4)	0.9	EPA 900.0	2/1/2006 @ 1320	EDF
Gross Beta (+-Precision*), pCi/l (T)	4.9(+-2.3)	1.9	EPA 900.0	2/1/2006 @ 1320	EDF
Radium-226 (+-Precision*), pCi/l (T)	2.5(+-0.7)	0.2	SM 7500-Ra B	1/31/2006 @ 1256	JS
Radium-228 (+-Precision*), pCi/l (T)	0.4(+-0.7)	0.6	EPA Ra-05	1/23/2006 @ 1258	JS
Radon (+-Precision*), pCi/l (T)	530(+-40)	25	SM 7500-Rn B	1/17/2006 @ 1424	JS/AW
Total Solids, mg/l	104	10	EPA 160.3	1/20/2006	DM

*Variability of the radioactive decay process (counting error) at the 95% confidence level, 1.96 sigma.
Certification ID's: CO/EPA CO00008; CT PH-0152; KY 90076; KS E-10265; NH 232805-A;
NYELAP 11417; PADEP 68-00551; RI LA000284; WI 998376810

CODES:
(T) = Total (D) = Dissolved
(S) = Suspended (R) = Total Recoverable
(PD) = Potentially Dissolved
< = Less Than

By: Robert Rostad
Laboratory Manager

WORK ORDER Summary — Evergreen Analytical, Inc. — 06-0296

Rpt To: J P McGinn
JDS-Hydro Consultants Inc
545 East Pikes Peak Avenue Suite 300
Colorado Springs, CO 80903
(719) 227-0072

1/17/06 1:36:03 PM

Client Project ID: 105.03

QC Level: Level I

Comments:

Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Test Code	Test Name	Hold	MS	Date Due	Hold Time
06-0296-01A	Unmarked F	Water	1/13/06 0000	1/17/06	F_W	Fluoride	☐	☐	1/31/06	2/10/06
06-0296-02A	5:45 F	Water	1/13/06 1745	1/17/06	F_W	Fluoride	☐	☐	1/31/06	2/10/06
06-0296-03A	6:45 F	Water	1/13/06 1845	1/17/06	F_W	Fluoride	☐	☐	1/31/06	2/10/06

Definitions: * - Test Code has a Select List

Nat Oppedal
From: Shea Greiner
Sent: Tuesday, January 17, 2006 12:31 PM
To: Carl Smits; Jeremy Dechant; Margot Mosher; Nat Oppedal; Shea Greiner
Cc: Anna Uecker; Patty McClellan
Subject: RE: JDS Hydro

Use the same client project ID as on the large set COC, 105.03.

From: Shea Greiner
Sent: Tuesday, January 17, 2006 12:29 PM
To: Carl Smits; Jeremy Dechant; Margot Mosher; Nat Oppedal
Cc: Anna Uecker; Patty McClellan
Subject: JDS Hydro

Per John McGinn, for the full DW set, run the Nitrate and pH out of HT.

The 3 F samples received in the small cooler with no instructions are also JD Hydro and part of the larger project, HOWEVER, they need to be logged to a separate WO. Per Ryan, label/ID the unmarked bottle "unmarked F". For the other two samples use the times on the sample labels and "F" as the sample IDs ie; 5:45 F, 6:45 F.

Thanks, Shea

01 unmarked F
02 5:45 F
03 6:45 F

1/13/6 ?
↓ 545pm
645pm

WO# 06-0296 BOF# n/c
C/S (O) n/a / n/a C/S (I) c(R) FedEx
Seals Present Y/N NA Intact Y/N
Pres Y/N NA Hd Sp Y/N NA Loc AV
Temp (C) 19 Container 125p By MD

Evergreen Analytical, Inc. **Date:** *30-Jan-06*

Client Project ID: 105.03
Lab Order: 06-0296

CASE NARRATIVE

SAMPLE RECEIVING

Custody seals were not present.
The temperature of the sample(s) upon arrival was 18 °C.
Sample(s) were received in good condition, in the proper container, and within holding times. NJO

QUALITY ASSURANCE

Analyses performed on samples in this work order meet the requirements of the EAL Quality Assurance Program unless otherwise explained.

CLIENT SERVICES

Analysis instructions per client to SG, see email. SG

GENERAL CHEMISTRY

There are no anomalies to report. MM

Evergreen Analytical, Inc.

4036 Youngfield Street, Wheat Ridge, Colorado 80033-3862
(303) 425-6021

Client Project ID 105.03
Collection Date: 1/13/06

Lab Order: 06-0296
Date Received: 1/17/06
Units: mg/L

Fluoride

Method: SM 4500-F C

Prep Method:

Lab ID	Client ID	Matrix	Date Prepared	Date Analyzed	Results	LQL	DF
06-0296-01A	Unmarked F	Water	1/25/06	1/25/06	1.7	0.40	1
06-0296-02A	5:45 F	Water	1/25/06	1/25/06	1.7	0.40	1
06-0296-03A	6:45 F	Water	1/25/06	1/25/06	1.7	0.40	1

Comments

R.P. Music

Analyst

Approved

Qualifiers: J - Indicates an estimated value when the compound is detected, but is below the LQL
H - Sample exceeded analytical holding time
U - Compound analyzed for but not detected
X - See case narrative

Definitions: DF - Dilution Factor
LQL - Lower Quantitation Limit

Print Date: 1/26/2006

Evergreen Analytical, Inc.

Date: *26-Jan-06*

Work Order: 06-0296
Client Project ID: 105.03

ANALYTICAL QC SUMMARY REPORT

TestCode: F_W

Sample ID **MBLK**	SampType: **MBLK**	TestCode: **F_W**	Run ID: **F_060125A**	Prep Date: **1/25/2006**	Units: **mg/L**
	Batch ID: **R22050**	TestNo: **SM 4500-F C**	FileID: **49**	Analysis Date: **1/25/2006**	SeqNo: **403223**

Analyte	Result	LQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	U	0.40									

Sample ID **LCS**	SampType: **LCS**	TestCode: **F_W**	Run ID: **F_060125A**	Prep Date: **1/25/2006**	Units: **mg/L**
	Batch ID: **R22050**	TestNo: **SM 4500-F C**	FileID: **50**	Analysis Date: **1/25/2006**	SeqNo: **403224**

Analyte	Result	LQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	10.17	0.40	10.1	0	101	90	110	0	0		

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank
H - Sample exceeded analytical holding time

Print Date: 1/26/2006

Evergreen Analytical, Inc.

4036 Youngfield St.
Wheat Ridge, CO 80033-3862
PH (303) 425-6021
FAX (303) 425-6854

FAX

"Quality Data On Time"

TO: Tom McHenry	DATE: 01/26/06
COMPANY: EDS - Hydro Geochemistry	# PAGES / 6 (Including Cover):
FAX #:	FROM:

MESSAGE-**Please deliver to the recipient immediately:**

0290

Evergreen Analytical, Inc.

4036 Youngfield Street, Wheat Ridge, Colorado 80033-3862
(303) 425-6021

Client Sample ID: 105.03
Client Project ID: 105.03
Date Collected: 1/13/06 1900
Date Received: 1/17/06

Lab Work Order 06-0290
Lab Sample ID: 06-0290-01
Sample Matrix: Drinking Water

ALKALINITY

Method: SM2320B **Prep Method:**

Date Prepared: 1/19/06
Date Analyzed: 1/19/06
Lab File ID: 164
Method Blank: MBLK
Dilution Factor: 1
Lab Fraction ID: 06-0290-01O

Analytes	CAS Number	Result	LQL	Units
Total Alkalinity		66.0	5.0	mg/L CaCO3

TOTAL CYANIDE

Method: SM4500-CN E **Prep Method:**

Date Prepared: 1/23/06
Date Analyzed: 1/23/06
Lab File ID: 70
Method Blank: MBLK
Dilution Factor: 1
Lab Fraction ID: 06-0290-01K

Analytes	CAS Number	Result	LQL	Units
Total Cyanide		U	0.010	mg/L

SPECIFIC CONDUCTANCE @ 25°C

Method: SM2510 B **Prep Method:**

Date Prepared: 1/18/06
Date Analyzed: 1/18/06
Lab File ID: 31
Dilution Factor: 1
Lab Fraction ID: 06-0290-01S

Analytes	CAS Number	Result	LQL	Units
Specific Conductance		163	1.00	µmhos/cm

FLUORIDE

Method: SM 4500-F C **Prep Method:**

Date Prepared: 1/25/06
Date Analyzed: 1/25/06
Lab File ID: 51
Method Blank: MBLK
Dilution Factor: 1
Lab Fraction ID: 06-0290-01J

Analytes	CAS Number	Result	LQL	Units
Fluoride	16984-48-8	1.7	0.40	mg/L

Analyst

Approved

Qualifiers: B - Analyte detected in the associated Method Blank, value not subtracted from result
E - Extrapolated value,Value exceeds calibration range
H - Sample exceeded analytical holding time
J - Indicates an estimated value when the compound is detected, but is below the LQL
S - Spike Recovery outside accepted limits
U - Compound analyzed for but not detected
X - See case narrative
* -Value exceeded the Maximum Contamination Level (MCL)

Definitions: NA - Not Applicable
LQL - Lower Quantitation Limit
Surr - Surrogate

Print Date: 1/27/2006

Evergreen Analytical, Inc.
4036 Youngfield Street, Wheat Ridge, Colorado 80033-3862
(303) 425-6021

Client Sample ID: 105.03
Client Project ID: 105.03
Date Collected: 1/13/06 1900
Date Received: 1/17/06

Lab Work Order 06-0290
Lab Sample ID: 06-0290-01
Sample Matrix: Drinking Water

LANGELIER INDEX

Method: SM2330B **Prep Method:**

Date Prepared: 1/27/06
Date Analyzed: 1/27/06

Dilution Factor: 1
Lab Fraction ID: 06-0290-01O

Analytes	CAS Number	Result	LQL	Units
Langelier Index		- 1.04		

PH

Method: E150.1 **Prep Method:**

Date Prepared: 1/17/06
Date Analyzed: 1/17/06 0000

Dilution Factor: 1
Lab Fraction ID: 06-0290-01O

Analytes	CAS Number	Result	LQL	Units
pH		7.06 H	1.00	pH Units

TOTAL DISSOLVED SOLIDS (TDS)

Method: SM 2540C **Prep Method:**

Date Prepared: 1/17/06
Date Analyzed: 1/18/06 0000
Lab File ID: 21
Method Blank: MBLK

Dilution Factor: 1
Lab Fraction ID: 06-0290-01O

Analytes	CAS Number	Result	LQL	Units
Total Dissolved Solids		122	10.0	mg/L

TOTAL SUSPENDED SOLIDS (TSS)

Method: SM 2540 D **Prep Method:**

Date Prepared: 1/18/06
Date Analyzed: 1/18/06
Lab File ID: 15
Method Blank: MBLK

Dilution Factor: 1
Lab Fraction ID: 06-0290-01T

Analytes	CAS Number	Result	LQL	Units
Total Suspended Solids		U	5.0	mg/L

Analyst

Approved

Qualifiers:
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S - Spike Recovery outside accepted limits
U - Compound analyzed for but not detected
X - See case narrative
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Definitions:
NA - Not Applicable
LQL - Lower Quantitation Limit
Surr - Surrogate

Print Date: 1/27/2006

Evergreen Analytical, Inc.
4036 Youngfield Street, Wheat Ridge, Colorado 80033-3862
(303) 425-6021

Client Sample ID:	105.03	**Lab Work Order:**	06-0290
Client Project ID:	105.03	**Lab Sample ID:**	06-0290-01A
Date Collected:	1/13/06	**Sample Matrix:**	Drinking Water
Date Received:	1/17/06	**Lab File ID:**	\VOA40118\1801018.D
Date Prepared:	1/18/06	**Method Blank:**	MB4011806
Date Analyzed:	1/18/06	**Prep Factor:**	1.000
Percent Moisture:	NA	**Dilution Factor:**	1.00

VOLATILE COMPOUNDS

Method: E524.2
Prep Method: E524.2

Units: µg/L

Analytes	CAS Number	Result	LQL
Benzene	71-43-2	U	0.50
Bromobenzene	108-86-1	U	0.50
Bromochloromethane	74-97-5	U	0.50
Bromodichloromethane	75-27-4	U	0.50
Bromoform	75-25-2	U	0.50
Bromomethane	74-83-9	U	0.50
n-Butylbenzene	104-51-8	U	0.50
sec-Butylbenzene	135-98-8	U	0.50
t-Butylbenzene	98-06-6	U	0.50
Carbon tetrachloride	56-23-5	U	0.50
Chlorobenzene	108-90-7	U	0.50
Chloroethane	75-00-3	U	0.50
Chloroform	67-66-3	U	0.50
Chloromethane	74-87-3	U	0.50
2-Chlorotoluene	95-49-8	U	0.50
4-Chlorotoluene	106-43-4	U	0.50
Dibromochloromethane	124-48-1	U	0.50
Dibromomethane	74-95-3	U	0.50
1,2-Dichlorobenzene	95-50-1	U	0.50
1,3-Dichlorobenzene	541-73-1	U	0.50
1,4-Dichlorobenzene	106-46-7	U	0.50
Dichlorodifluoromethane	75-71-8	U	0.50
1,1-Dichloroethane	75-34-3	U	0.50
1,2-Dichloroethane	107-06-2	U	0.50
1,1-Dichloroethene	75-35-4	U	0.50
cis-1,2-Dichloroethene	156-59-2	U	0.50
trans-1,2-Dichloroethene	156-60-5	U	0.50
1,2-Dichloropropane	78-87-5	U	0.50
1,3-Dichloropropane	142-28-9	U	0.50
2,2-Dichloropropane	590-20-7	U	0.50
1,1-Dichloropropene	563-58-6	U	0.50
cis-1,3-Dichloropropene	10061-01-5	U	0.50
trans-1,3-Dichloropropene	10061-02-6	U	0.50
Ethylbenzene	100-41-4	U	0.50
Hexachlorobutadiene	87-68-3	U	0.50
Isopropylbenzene	98-82-8	U	0.50
p-Isopropyltoluene	99-87-6	U	0.50
Methylene chloride	75-09-2	U	0.50
Naphthalene	91-20-3	U	0.50
n-Propylbenzene	103-65-1	U	0.50

Analyst

Approved

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U - Compound analyzed for but not detected
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Definitions:
NA - Not Applicable
LQL - Lower Quantitation Limit
MDL - Method Detection Limit
Surr - Surrogate

Print Date: 1/19/06

Evergreen Analytical, Inc.
4036 Youngfield Street, Wheat Ridge, Colorado 80033-3862
(303) 425-6021

Client Sample ID:	105.03	**Lab Work Order:**	06-0290
Client Project ID:	105.03	**Lab Sample ID:**	06-0290-01A
Date Collected:	1/13/06	**Sample Matrix:**	Drinking Water
Date Received:	1/17/06	**Lab File ID:**	\VOA40118\1801018.D
Date Prepared:	1/18/06	**Method Blank:**	MB4011806
Date Analyzed:	1/18/06	**Prep Factor:**	1.000
Percent Moisture:	NA	**Dilution Factor:**	1.00

Method: E524.2
Prep Method: E524.2

VOLATILE COMPOUNDS

Units: µg/L

Analytes	CAS Number	Result	LQL
Styrene	100-42-5	U	0.50
1,1,1,2-Tetrachloroethane	630-20-6	U	0.50
1,1,2,2-Tetrachloroethane	79-34-5	U	0.50
Tetrachloroethene	127-18-4	U	0.50
Toluene	108-88-3	5.0	0.50
1,2,3-Trichlorobenzene	87-61-6	U	0.50
1,2,4-Trichlorobenzene	120-82-1	U	0.50
1,1,1-Trichloroethane	71-55-6	U	0.50
1,1,2-Trichloroethane	79-00-5	U	0.50
Trichloroethene	79-01-6	U	0.50
Trichlorofluoromethane	75-69-4	U	0.50
1,2,3-Trichloropropane	96-18-4	U	0.50
1,2,4-Trimethylbenzene	95-63-6	U	0.50
1,3,5-Trimethylbenzene	108-67-8	U	0.50
Vinyl chloride	75-01-4	U	0.50
m,p-Xylene	1330-20-7	U	0.50
o-Xylene	95-47-6	U	0.50
Xylenes, Total	1330-20-7	U	0.50
Surr: 1,2-Dichlorobenzene-d4	2199-69-1	86	QC Limits: 70-130 %REC
Surr: 4-Bromofluorobenzene	460-00-4	83	QC Limits: 70-130 %REC

Analyst

Approved

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H - Sample exceeded analytical holding time
J - Indicates an estimated value when the compound is detected, but is below the LQL
S - Spike Recovery outside accepted limits
U - Compound analyzed for but not detected
X - See case narrative
* -Value exceeded the Maximum Contamination Level (MCL)

Definitions:
NA - Not Applicable
LQL - Lower Quantitation Limit
MDL - Method Detection Limit
Surr - Surrogate

Print Date: 1/19/06

Evergreen Analytical, Inc.

4036 Youngfield Street, Wheat Ridge, Colorado 80033-3862
(303) 425-6021

Client Sample ID	105.03	**Lab Work Order**	06-0290
Client Project ID	105.03	**Lab Sample ID:**	06-0290-01B
Date Collected:	1/13/06	**Sample Matrix:**	Drinking Water
Date Received:	1/17/06	**Lab File ID:**	\GCMS20124\1901019.D
Date Prepared:	1/24/06	**Method Blank:**	MB-9108
Date Analyzed:	1/25/06	**Prep Factor:**	0.001
Percent Moisture	NA	**Dilution Factor:**	1.00

Method: E525.2
Prep Method: E525.2

ORGANIC COMPOUNDS

Units: µg/L

Analytes	CAS Number	Result	MDL	LQL
Alachlor	15972-60-8	U	0.20	0.25
Atrazine	1912-24-9	U	0.10	0.25
Benzo(a)pyrene	50-32-8	U	0.020	0.20
Butachlor	23184-66-9	U	0.020	0.25
Bis(2-Ethylhexyl)adipate	103-23-1	U	0.60	0.60
Bis(2-ethylhexyl)phthalate	117-81-7	U	0.60	0.60
Metolachlor	51218-45-2	U	0.020	0.25
Metribuzin	21087-64-9	U	0.020	0.25
Propachlor	1918-16-7	U	0.010	0.25
Simazine	122-34-9	U	0.070	0.25
Surr: Perylene-d12	1520-96-3	104	**QC Limits:** 70-130 %REC	

Analyst

Approved

Qualifiers:
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H - Sample exceeded analytical holding time
J - Indicates an estimated value when the compound is detected, but is below the LQL
S - Spike Recovery outside accepted limits
U - Compound analyzed for but not detected
X - See case narrative
* - Value exceeded the Maximum Contamination Level (MCL)

Definitions:
NA - Not Applicable
LQL - Lower Quantitation Limit
MDL - Method Detection Limit
Surr - Surrogate

Print Date: 1/25/06

Evergreen Analytical, Inc.
4036 Youngfield Street, Wheat Ridge, Colorado 80033-3862
(303) 425-6021

Client Sample ID:	105.03	**Lab Work Order:**	06-0290
Client Project ID:	105.03	**Lab Sample ID:**	06-0290-01C
Date Collected:	1/13/2006	**Sample Matrix:**	Drinking Water
Date Received:	1/17/2006	**Lab File ID:**	26.D
Date Prepared:	1/19/2006	**Method Blank:**	MB-9080
Date Analyzed:	1/19/2006	**Prep Factor:**	0.057
Percent Moisture:	NA	**Dilution Factor:**	1.00

Method: E504.1 **EDB/DBCP**
Prep Method: E504.1

Units: µg/L

Analytes	CAS Number	Result	MDL	LQL
1,2-Dibromo-3-chloropropane	96-12-8	U	0.02	0.02
1,2-Dibromoethane	106-93-4	U	0.01	0.01

KW
Analyst

Approved

Qualifiers: B - Analyte detected in the associated Method Blank, value not subtracted from result
E - Extrapolated value.Value exceeds calibration range
H - Sample exceeded analytical holding time
J - Indicates an estimated value when the compound is detected, but is below the LQL
S - Spike Recovery outside accepted limits
U - Compound analyzed for but not detected
X - See case narrative
* - Value exceeded the Maximum Contamination Level (MCL)

Definitions: NA - Not Applicable
LQL - Lower Quantitation Limit
MDL - Method Detection Limit
Surr - Surrogate

Print Date: 1/20/2006

Evergreen Analytical, Inc.

4036 Youngfield Street, Wheat Ridge, Colorado 80033-3862
(303) 425-6021

Client Sample ID:	105.03	**Lab Work Order:**	06-0290
Client Project ID:	105.03	**Lab Sample ID:**	06-0290-01D
Date Collected:	1/13/2006	**Sample Matrix:**	Drinking Water
Date Received:	1/17/2006	**Lab File ID:**	ECD10117\038F
Date Prepared:	1/18/2006	**Method Blank:**	MB-9071
Date Analyzed:	1/18/2006	**Prep Factor:**	0.005
Percent Moisture:	NA	**Dilution Factor:**	1.00

Method: E508
Prep Method: E508

CHLORINATED PESTICIDES AND PCBS

Units: µg/L

Analytes	CAS Number	Result	MDL	LQL
Aldrin	309-00-2	U	0.010	0.010
g-BHC	58-89-9	U	0.010	0.010
a-Chlordane	5103-71-9	U	0.010	0.010
g-Chlordane	5103-74-2	U	0.010	0.010
Dieldrin	60-57-1	U	0.010	0.010
Endrin	72-20-8	U	0.010	0.010
HCCPD	77-47-4	U	0.050	0.050
Heptachlor	76-44-8	U	0.010	0.010
Heptachlor epoxide	1024-57-3	U	0.010	0.010
Hexachlorobenzene	118-74-1	U	0.012	0.012
Methoxychlor	72-43-5	U	0.050	0.050
Toxaphene	8001-35-2	U	0.50	0.50
Chlordane	57-74-9	U	0.20	0.20
Aroclor 1016	12674-11-2	U	0.080	0.080
Aroclor 1221	11104-28-2	U	0.25	0.25
Aroclor 1232	11141-16-5	U	0.25	0.25
Aroclor 1242	53469-21-9	U	0.25	0.25
Aroclor 1248	12672-29-6	U	0.10	0.10
Aroclor 1254	11097-69-1	U	0.10	0.10
Aroclor 1260	11096-82-5	U	0.20	0.20
PCBs, Total	1336-36-3	U	0.25	0.25
Surr: TCMX	877-09-8	83	**QC Limits:**	70-130 %REC
Surr: DCB	2051-24-3	82	**QC Limits:**	70-130 %REC

Analyst **Approved**

Qualifiers:
B - Analyte detected in the associated Method Blank, value not subtracted from result
E - Extrapolated value. Value exceeds calibration range
H - Sample exceeded analytical holding time
J - Indicates an estimated value when the compound is detected, but is below the LQL
S - Spike Recovery outside accepted limits
U - Compound analyzed for but not detected
X - See case narrative
* - Value exceeded the Maximum Contamination Level (MCL)

Definitions:
NA - Not Applicable
LQL - Lower Quantitation Limit
MDL - Method Detection Limit
Surr - Surrogate

Print Date: 1/19/2006

Evergreen Analytical, Inc.

4036 Youngfield Street, Wheat Ridge, Colorado 80033-3862
(303) 425-6021

Client Sample ID:	105.03	**Lab Work Order:**	06-0290
Client Project ID:	105.03	**Lab Sample ID:**	06-0290-01E
Date Collected:	1/13/2006	**Sample Matrix:**	Drinking Water
Date Received:	1/17/2006	**Lab File ID:**	EC7001011023
Date Prepared:	1/23/2006	**Method Blank:**	MB-9097
Date Analyzed:	1/23/2006	**Prep Factor:**	0.100
Percent Moisture:	NA	**Dilution Factor:**	1.00

Method: E515.4
Prep Method: E515.4

CHLORINATED HERBICIDES

Units: µg/L

Analytes	CAS Number	Result	MDL	LQL
2,4-D	94-75-7	U	0.10	0.10
Dicamba	1918-00-9	U	0.30	0.30
Dalapon	75-99-0	U	1.0	1.0
Dinoseb	88-85-7	U	0.20	0.20
Pentachlorophenol	87-86-5	U	0.040	0.040
Picloram	1918-02-1	U	0.10	0.10
2,4,5-TP (Silvex)	93-72-1	U	0.20	0.20
Surr: DCAA	19719-28-9	100	**QC Limits:** 70-130 %REC	

KW
Analyst

Approved

Qualifiers:
B - Analyte detected in the associated Method Blank, value not subtracted from result
E - Extrapolated value.Value exceeds calibration range
H - Sample exceeded analytical holding time
J - Indicates an estimated value when the compound is detected, but is below the LQL
S - Spike Recovery outside accepted limits
U - Compound analyzed for but not detected
X - See case narrative
* -Value exceeded the Maximum Contamination Level (MCL)

Definitions:
NA - Not Applicable
LQL - Lower Quantitation Limit
MDL - Method Detection Limit
Surr - Surrogate

Print Date: 1/24/2006

Evergreen Analytical, Inc.

4036 Youngfield Street, Wheat Ridge, Colorado 80033-3862
(303) 425-6021

Client Sample ID: 105.03
Client Project ID: 105.03
Date Collected: 1/13/06
Date Received: 1/17/06

Lab Work Order 06-0290
Lab Sample ID: 06-0290-01
Sample Matrix: Drinking Water

CARBAMATES

Method: E531.1 **Prep Method:**

Date Prepared: 1/17/06
Date Analyzed: 1/18/06
Lab File ID: 12
Method Blank: MBLK
Dilution Factor: 1
Lab Fraction ID: 06-0290-01F

Analytes	CAS Number	Result	LQL	Units
3-Hydroxycarbofuran	16655-82-6	U	0.50	µg/L
Aldicarb	116-06-3	U	0.50	µg/L
Aldicarb sulfone	1646-88-4	U	0.50	µg/L
Aldicarb sulfoxide	1646-87-3	U	0.50	µg/L
Carbaryl	63-25-2	U	0.50	µg/L
Carbofuran	1563-66-2	U	0.50	µg/L
Methiocarb	2032-65-7	U	1.0	µg/L
Methomyl	16752-77-5	U	0.50	µg/L
Oxamyl	23135-22-0	U	0.50	µg/L
Propoxur	114-26-1	U	0.50	µg/L

Analyst

RAK
Approved

Qualifiers: B - Analyte detected in the associated Method Blank, value not subtracted from result
E - Extrapolated value.Value exceeds calibration range
H - Sample exceeded analytical holding time
J - Indicates an estimated value when the compound is detected, but is below the LQL
S - Spike Recovery outside accepted limits
U - Compound analyzed for but not detected
X - See case narrative
* -Value exceeded the Maximum Contamination Level (MCL)

Definitions: NA - Not Applicable
LQL - Lower Quantitation Limit
Surr - Surrogate

Print Date: 1/19/2006

Evergreen Analytical, Inc.

4036 Youngfield Street, Wheat Ridge, Colorado 80033-3862
(303) 425-6021

Client Sample ID	105.03	**Lab Work Order**	06-0290
Client Project ID	105.03	**Lab Sample ID:**	06-0290-01G
Date Collected:	1/13/06	**Sample Matrix:**	Drinking Water
Date Received:	1/17/06	**Lab File ID:**	\GCMS20120\1601016.D
Date Prepared:	1/20/06	**Method Blank:**	MB-9089
Date Analyzed:	1/20/06	**Prep Factor:**	0.100
Percent Moisture	NA	**Dilution Factor:**	1.00

Method: E548.1
Prep Method: E548.1

ENDOTHALL

Analytes	CAS Number	Result	Units: µg/L LQL
Endothall	145-73-3	U	40

TW
Analyst

Approved

Qualifiers: B - Analyte detected in the associated Method Blank, value not subtracted from result
E - Extrapolated value. Value exceeds calibration range
H - Sample exceeded analytical holding time
J - Indicates an estimated value when the compound is detected, but is below the LQL
S - Spike Recovery outside accepted limits
U - Compound analyzed for but not detected
X - See case narrative
* - Value exceeded the Maximum Contamination Level (MCL)

Definitions: NA - Not Applicable
LQL - Lower Quantitation Limit
MDL - Method Detection Limit
Surr - Surrogate

Print Date: 1/24/06

Evergreen Analytical, Inc.

4036 Youngfield Street, Wheat Ridge, Colorado 80033-3862
(303) 425-6021

Client Project ID 105.03
Collection Date: 1/13/06

Lab Order: 06-0290
Date Received: 1/17/06
Units: µg/L

Diquat

Method: E549.2 **Prep Method: E549.2**

Lab ID	Client ID	Matrix	Date Prepared	Date Analyzed	Results	LQL	DF
06-0290-01H	105.03	Drinking Water	1/20/06	1/23/06	U	0.40	1

Comments

Analyst

Approved

Qualifiers: J - Indicates an estimated value when the compound is detected, but is below the LQL
H - Sample exceeded analytical holding time
U - Compound analyzed for but not detected
X - See case narrative

Definitions: DF - Dilution Factor
LQL - Lower Quantitation Limit

Print Date: 1/24/2006

Evergreen Analytical, Inc.

4036 Youngfield Street, Wheat Ridge, Colorado 80033-3862
(303) 425-6021

Client Sample ID: 105.03
Client Project ID: 105.03
Date Collected: 1/13/06 1900
Date Received: 1/17/06

Lab Work Order 06-0290
Lab Sample ID: 06-0290-01
Sample Matrix: Drinking Water

ANIONS BY IC

Method: E300 **Prep Method:**

Date Prepared: 1/17/06
Date Analyzed: 1/17/06 1311
Method Blank: METHOD BLANK
Dilution Factor: 1
Lab Fraction ID: 06-0290-011

Analytes	CAS Number	Result	LQL	Units
Nitrite-N		U H	0.076	mg/L
Nitrate-N		U H	0.056	mg/L
Nitrite+Nitrate-N		U H	0.076	mg/L
Sulfate	7778-80-2	12.3	0.50	mg/L

J. Lange
Analyst

Approved

Qualifiers: B - Analyte detected in the associated Method Blank, value not subtracted from result
E - Extrapolated value. Value exceeds calibration range
H - Sample exceeded analytical holding time
J - Indicates an estimated value when the compound is detected, but is below the LQL
S - Spike Recovery outside accepted limits
U - Compound analyzed for but not detected
X - See case narrative
* - Value exceeded the Maximum Contamination Level (MCL)

Definitions: NA - Not Applicable
LQL - Lower Quantitation Limit
Surr - Surrogate

Print Date: 1/18/06

Evergreen Analytical, Inc.

4036 Youngfield Street, Wheat Ridge, Colorado 80033-3862
(303) 425-6021

Client Sample ID: 105.03
Client Project ID: 105.03
Date Collected: 1/13/06 1900
Date Received: 1/17/06

Lab Work Order 06-0290
Lab Sample ID: 06-0290-01
Sample Matrix: Drinking Water

TURBIDITY

Method: E180.1 **Prep Method:**

Date Prepared: 1/17/06
Date Analyzed: 1/17/06 1320
Method Blank: MB-R21857
Dilution Factor: 1
Lab Fraction ID: 06-0290-01U

Analytes	CAS Number	Result	LQL	Units
Turbidity		7.31 H	0.10	NTU

Analyst

Approved

Qualifiers: B - Analyte detected in the associated Method Blank, value not subtracted from result
E - Extrapolated value, Value exceeds calibration range
H - Sample exceeded analytical holding time
J - Indicates an estimated value when the compound is detected, but is below the LQL
S - Spike Recovery outside accepted limits
U - Compound analyzed for but not detected
X - See case narrative
* - Value exceeded the Maximum Contamination Level (MCL)

Definitions: NA - Not Applicable
LQL - Lower Quantitation Limit
Surr - Surrogate

Print Date: 1/27/2006

Evergreen Analytical, Inc.

4036 Youngfield Street, Wheat Ridge, Colorado 80033-3862
(303) 425-6021

Client Sample ID:	105.03	**Lab Work Order:**	06-0290
Client Project ID:	105.03	**Lab Sample ID:**	06-0290-01
Date Collected:	1/13/06	**Sample Matrix:**	Drinking Water
Date Received:	1/17/06		

DISSOLVED METALS

Method: E200.7 **Prep Method: E200.7/SW3010**

Date Prepared:	1/20/06	**Lab File ID:**	012306PM
Date Analyzed:	1/24/06	**Method Blank:**	MB-9085
Dilution Factor:	1		
Lab Fraction ID:	06-0290-01L		

Analytes	CAS Number	Result	LQL	Units
Iron	7439-89-6	1.5	0.070	mg/L
Manganese	7439-96-5	0.23	0.0050	mg/L

METALS, DRINKING WATER

Method: E200.8 **Prep Method: E200.8**

Date Prepared:	1/18/06	**Lab File ID:**	060118B.B\044SMPL.D
Date Analyzed:	1/18/06	**Method Blank:**	MB-9073
Dilution Factor:	1		
Lab Fraction ID:	06-0290-01N		

Analytes	CAS Number	Result	LQL	Units
Antimony	7440-36-0	U	0.0020	mg/L
Arsenic	7440-38-2	U	0.0020	mg/L
Barium	7440-39-3	0.079	0.010	mg/L
Beryllium	7440-41-7	U	0.0010	mg/L
Cadmium	7440-43-9	U	0.00050	mg/L
Chromium	7440-47-3	U	0.0060	mg/L
Copper	7440-50-8	U	0.010	mg/L
Lead	7439-92-1	U	0.0020	mg/L
Nickel	7440-02-0	U	0.010	mg/L
Selenium	7782-49-2	0.0031	0.0020	mg/L
Sodium	7440-23-5	3.6	0.50	mg/L
Thallium	7440-28-0	U	0.0010	mg/L
Uranium	7440-61-1	U	0.0010	mg/L

MG
Analyst

Approved

Qualifiers: B - Analyte detected in the associated Method Blank, value not subtracted from result
E - Extrapolated value. Value exceeds calibration range
H - Sample exceeded analytical holding time
I - Indicates an estimated value when the compound is detected, but is below the LQL
S - Spike Recovery outside accepted limits
U - Compound analyzed for but not detected
X - See case narrative
* -Value exceeded the Maximum Contamination Level (MCL)

Definitions: NA - Not Applicable
LQL - Lower Quantitation Limit
Surr - Surrogate

Print Date: 1/24/06

Evergreen Analytical, Inc.

4036 Youngfield Street, Wheat Ridge, Colorado 80033-3862

(303) 425-6021

Client Sample ID:	105.03	**Lab Work Order:**	06-0290
Client Project ID:	105.03	**Lab Sample ID:**	06-0290-01
Date Collected:	1/13/06	**Sample Matrix:**	Drinking Water
Date Received:	1/17/06		

MERCURY, DRINKING WATER

Method: E245.1 **Prep Method: E245.1**

Date Prepared:	1/19/06	**Lab File ID:** 06011901	**Dilution Factor:** 1
Date Analyzed:	1/19/06	**Method Blank:** MB-9076	**Lab Fraction ID:** 06-0290-01N

Analytes	CAS Number	Result	LQL	Units
Mercury	7439-97-6	U	0.00010	mg/L

MB
Analyst

Approved

Qualifiers: B - Analyte detected in the associated Method Blank, value not subtracted from result
E - Extrapolated value. Value exceeds calibration range
H - Sample exceeded analytical holding time
J - Indicates an estimated value when the compound is detected, but is below the LQL
N - Spike Recovery outside accepted limits
U - Compound analyzed for but not detected
X - See case narrative
* -Value exceeded the Maximum Contamination Level (MCL)

Definitions: NA - Not Applicable
LQL - Lower Quantitation Limit
Surr - Surrogate

Print Date: 1/24/06