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HYDROGEOLOGIC REPORT

In Support of
Water Adequacy Report Application

ARROYO PRESERVE SUBDIVISION

LA PAZ COUNTY, ARIZONA

Prepared for

Mr. James Kunisch



September 28, 2007

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EXECUTIVE SUMMARY

The proposed Arroyo Preserve subdivision is located in La Paz County approximately six miles southwest of the Town of Quartzsite. The project will include approximately 129 site built homes on a total of 40 acres. A public water system will be constructed to eventually serve water to the development. A domestic water improvement district (DWID) will be established as the legal entity to own and operate the water system. An on-site wastewater treatment system will be constructed to manage and treat effluent generated by the development.

Total annual project water demand, at full build out, is expected to approach 35.83 acre feet per year. This annual volume equates to a long term aquifer extraction rate of 22.2 gallons per minute (gpm).

Two project supply wells will eventually be constructed to meet long term average and peak day demands and provide redundancy and emergency back-up within the project water system. The project supply wells will produce groundwater from a deep confined aquifer zone within the regional basin fill aquifer system..

One of the project supply wells has been constructed, test pumped, and sampled. The completed project well is cased to a depth of 700 feet. The depth to water in the well was established at 477 feet. The well was test pumped at a rate of 54 gpm for a period of 48 hours with a total drawdown limited to less than 15 feet. Well pumping test data were utilized to compute aquifer transmissivity values ranging from 15,840 to 16,200 gpd/ft. The storage coefficient of the confined aquifer was assumed to approach 1.0×10^{-4} .

A 100 year drawdown impact analysis was computed using the aquifer properties listed above and assuming all the project water supply (25 gpm) was derived from the one completed supply well. Two negative image wells were also considered in the drawdown calculations to simulate the potential hydraulic impact of the nearby edge of the regional aquifer. The worst case maximum drawdown in the aquifer was computed to approach 8.73 feet.

ADEQ required new source approval samples were collected from the project supply well. Lab results indicate that the groundwater pumped from the project supply well will meet all primary drinking water standards.



INTRODUCTION

This hydrogeologic report has been prepared to support an application for a water adequacy report for the proposed **Arroyo Preserve** subdivision project located in La Paz County approximately six miles southwest of the Town of Quartzsite (Figure 1). The project will include 129 site – built homes (single family residential) on a total of approximately 40 acres. A public water system will be constructed to eventually serve water to the development. A domestic water improvement district (DWID) will be established as the legal entity to own and operate the water system. An on-site wastewater treatment system will be constructed to manage and treat effluent generated by the development.

Most of the future homeowners in the development are expected to be primarily retirees. Occupancy within the development is expected to primarily be on a seasonal basis with a very small percentage of the homeowners living in the development on a year – around basis. Occupancy in the Quartzsite area during the months of May thru October is low. Occupancy tends to steadily increase commencing in late October to early November and typically peaks in January and February of each year.

Water demand for the project, at full build out, is expected to be low. Assuming a conservatively high average demand of about 250 gallons per day (gpd) per residential unit, the average daily demand of the development would approach 32,250 gallons. Peak day demand would be expected to approach 500 gpd per residential unit (twice the long term average) and would be expected to occur in January or February. Short term peak day demand could approach 65,000 gpd, at full build out. The project supply wells will eventually be equipped with submersible pump – motor units with pumping capacities approaching 50 gpm each.

The project supply wells will derive groundwater from the regional basin fill aquifer system. One of the project supply wells has been constructed, test pumped, and sampled. The initial project well was completed to a depth of 700 feet in May 2006. The depth to water in the well was measured at 477 feet. The well was test pumped at a rate of 54 gpm for a period of 48 hours with total drawdown limited to less than 15 feet. The volume of groundwater pumped during the test was about 156,000 gallons. Groundwater samples collected from the supply well were submitted to a state certified laboratory for analyses of the ADEQ *new source approval* list of chemical constituents. Lab results indicate that the groundwater pumped from the supply well will meet current - primary drinking water standards.

This hydrogeologic report includes all the data and technical interpretations pertaining to the construction, test pumping, and sampling of the first project supply well. This report also includes a compilation and interpretation of private well and groundwater information within about two miles of the project property, a computation of the estimated project water demand, and a 100 year theoretical drawdown impact analysis.



APPENDIX C

LABORATORY REPORTS – Groundwater Quality (ADEQ New Source Approval)

Turner Laboratories, Inc.

Date: 15-Aug-07

**CLIENT:** Chuck Dickens, Consulting Hydrogeologist**Project:** Kunisch**Lab Order:** 0707014**Date Received:** 7/2/2007**Work Order Sample Summary**

Lab Sample ID	Client Sample ID	Tag Number	Collection Date
0707014-01A	K-Well		7/1/2007 5:00:00 AM
0707014-01B	K-Well		7/1/2007 5:00:00 AM
0707014-01C	K-Well		7/1/2007 5:00:00 AM
0707014-01D	K-Well		7/1/2007 5:00:00 AM
0707014-01E	K-Well		7/1/2007 5:00:00 AM
0707014-01F	K-Well		7/1/2007 5:00:00 AM
0707014-01G	K-Well		7/1/2007 5:00:00 AM
0707014-01H	K-Well		7/1/2007 5:00:00 AM
0707014-01I	K-Well		7/1/2007 5:00:00 AM
0707014-01J	K-Well		7/1/2007 5:00:00 AM
0707014-01K	K-Well		7/1/2007 5:00:00 AM
0707014-01L	K-Well		7/1/2007 5:00:00 AM
0707014-01M	K-Well		7/1/2007 5:00:00 AM
0707014-01N	K-Well		7/1/2007 5:00:00 AM
0707014-01O	K-Well		7/1/2007 5:00:00 AM

Turner Laboratories, Inc.

Date: 15-Aug-07

CLIENT: Chuck Dickens, Consulting Hydrogeologist
Project: Kunisch
Lab Order: 0707014

CASE NARRATIVE

Analytical Comments for METHOD PH_W, SAMPLE 0707014-01F: Sample received by laboratory outside of method recommended holding time.

The radiochemistry analysis was performed by Radiation Safety Engineering, Inc. in Chandler, AZ.

The asbestos analysis was performed by Fiberquant, Inc. in Phoenix, AZ.

The synthetic organic compound analyses were performed by Columbia Analytical Services, Inc. in Kelso, WA.

Note for reporting of presence/absence bacti results: '1' indicates presence of bacteria, 'ND' indicates absence of bacteria.

Turner Laboratories, Inc.

Date: 15-Aug-07



CLIENT: Chuck Dickens, Consulting Hydrogeologist
Lab Order: 0707014
Project: Kunisch
Lab ID: 0707014-01A

Client Sample ID: K-Well
Collection Date: 7/1/2007 5:00:00 AM

Matrix: DRINKING WATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS IN DRINKING WATER (PHASE II/V) E200.7						
						Analyst: RAD
Barium	ND	1.0		mg/L	1	7/30/2007 6:47:24 PM
Beryllium	ND	0.0020		mg/L	1	7/30/2007 6:47:24 PM
Cadmium	ND	0.0030		mg/L	1	7/30/2007 6:47:24 PM
Calcium	180	0.20		mg/L	1	7/30/2007 6:47:24 PM
Chromium	ND	0.030		mg/L	1	7/30/2007 6:47:24 PM
Copper	ND	0.020		mg/L	1	7/30/2007 6:47:24 PM
Iron	ND	0.30		mg/L	1	7/30/2007 6:47:24 PM
Magnesium	24	0.10		mg/L	1	7/30/2007 6:47:24 PM
Manganese	ND	0.020		mg/L	1	7/30/2007 6:47:24 PM
Nickel	ND	0.080		mg/L	1	7/30/2007 6:47:24 PM
Sodium	360	10		mg/L	10	8/1/2007 1:14:00 PM
GFAA METALS IN WATER E200.9						
						Analyst: RAD
Antimony	ND	0.0048		mg/L	1	8/6/2007 3:10:00 PM
Arsenic	ND	0.0050		mg/L	1	7/23/2007 1:01:00 PM
Lead	ND	0.0050		mg/L	1	7/24/2007 6:07:00 PM
Selenium	ND	0.0050		mg/L	1	7/25/2007 12:32:00 PM
Thallium	ND	0.0016		mg/L	1	8/3/2007 11:37:00 AM
MERCURY IN DRINKING WATER (PHASE II/V) E245.1						
						Analyst: RAD
Mercury	ND	0.0010		mg/L	1	7/20/2007 4:12:00 PM
ANIONS BY ION CHROMATOGRAPHY E300						
						Analyst: JM
Chloride	98	20		mg/L	20	7/4/2007 12:40:00 AM
Nitrogen, Nitrate (As N)	1.4	1.0		mg/L	1	7/3/2007 2:01:00 PM
Nitrogen, Nitrite	ND	0.10		mg/L	1	7/3/2007 2:01:00 PM
Sulfate	830	250		mg/L	50	7/5/2007 11:45:00 AM
EDB AND DBCP E504.1						
						Analyst: TLG
1,2-Dibromo-3-chloropropane	ND	0.000020		mg/L	1	7/6/2007 8:15:00 PM
1,2-Dibromoethane	ND	0.000010		mg/L	1	7/6/2007 8:15:00 PM
Surr: Tetrachloro-m-xylene	116	57-171		%REC	1	7/6/2007 8:15:00 PM
VOLATILES BY GCMS E524.2						
						Analyst: KP
1,1,1,2-Tetrachloroethane	ND	0.00050		mg/L	1	7/6/2007 2:26:00 AM
1,1,1-Trichloroethane	ND	0.00050		mg/L	1	7/6/2007 2:26:00 AM
1,1,2,2-Tetrachloroethane	ND	0.00050		mg/L	1	7/6/2007 2:26:00 AM
1,1,2-Trichloroethane	ND	0.00050		mg/L	1	7/6/2007 2:26:00 AM
1,1-Dichloroethane	ND	0.00050		mg/L	1	7/6/2007 2:26:00 AM
1,1-Dichloroethene	ND	0.00050		mg/L	1	7/6/2007 2:26:00 AM
1,1-Dichloropropene	ND	0.00050		mg/L	1	7/6/2007 2:26:00 AM
1,2,3-Trichlorobenzene	ND	0.00050		mg/L	1	7/6/2007 2:26:00 AM
1,2,3-Trichloropropane	ND	0.00050		mg/L	1	7/6/2007 2:26:00 AM

Qualifiers: ND - Not Detected at or above the PQL
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 * - Value exceeds Maximum Contaminant Level

PQL - Practical Quantitation Limit
 S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 E - Value above quantitation range

Turner Laboratories, Inc.

Date: 15-Aug-07

**CLIENT:** Chuck Dickens, Consulting Hydrogeologist**Client Sample ID:** K-Well**Lab Order:** 0707014**Collection Date:** 7/1/2007 5:00:00 AM**Project:** Kunisch**Lab ID:** 0707014-01A**Matrix:** DRINKING WATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,2,4-Trichlorobenzene	ND	0.00050		mg/L	1	7/6/2007 2:26:00 AM
1,2,4-Trimethylbenzene	ND	0.00050		mg/L	1	7/6/2007 2:26:00 AM
1,2-Dichlorobenzene	ND	0.00050		mg/L	1	7/6/2007 2:26:00 AM
1,2-Dichloroethane	ND	0.00050		mg/L	1	7/6/2007 2:26:00 AM
1,2-Dichloropropane	ND	0.00050		mg/L	1	7/6/2007 2:26:00 AM
1,3,5-Trimethylbenzene	ND	0.00050		mg/L	1	7/6/2007 2:26:00 AM
1,3-Dichlorobenzene	ND	0.00050		mg/L	1	7/6/2007 2:26:00 AM
1,3-Dichloropropane	ND	0.00050		mg/L	1	7/6/2007 2:26:00 AM
1,4-Dichlorobenzene	ND	0.00050		mg/L	1	7/6/2007 2:26:00 AM
2,2-Dichloropropane	ND	0.00050		mg/L	1	7/6/2007 2:26:00 AM
2-Chlorotoluene	ND	0.00050		mg/L	1	7/6/2007 2:26:00 AM
4-Chlorotoluene	ND	0.00050		mg/L	1	7/6/2007 2:26:00 AM
4-Isopropyltoluene	ND	0.00050		mg/L	1	7/6/2007 2:26:00 AM
Benzene	ND	0.00050		mg/L	1	7/6/2007 2:26:00 AM
Bromobenzene	ND	0.00050		mg/L	1	7/6/2007 2:26:00 AM
Bromochloromethane	ND	0.00050		mg/L	1	7/6/2007 2:26:00 AM
Bromodichloromethane	ND	0.00050		mg/L	1	7/6/2007 2:26:00 AM
Bromoform	ND	0.00050		mg/L	1	7/6/2007 2:26:00 AM
Bromomethane	ND	0.00050		mg/L	1	7/6/2007 2:26:00 AM
Carbon tetrachloride	ND	0.00050		mg/L	1	7/6/2007 2:26:00 AM
Chlorobenzene	ND	0.00050		mg/L	1	7/6/2007 2:26:00 AM
Chloroethane	ND	0.00050		mg/L	1	7/6/2007 2:26:00 AM
Chloroform	ND	0.00050		mg/L	1	7/6/2007 2:26:00 AM
Chloromethane	ND	0.00050		mg/L	1	7/6/2007 2:26:00 AM
cis-1,2-Dichloroethene	ND	0.00050		mg/L	1	7/6/2007 2:26:00 AM
cis-1,3-Dichloropropene	ND	0.00050		mg/L	1	7/6/2007 2:26:00 AM
Dibromochloromethane	ND	0.00050		mg/L	1	7/6/2007 2:26:00 AM
Dibromomethane	ND	0.00050		mg/L	1	7/6/2007 2:26:00 AM
Dichlorodifluoromethane	ND	0.00050		mg/L	1	7/6/2007 2:26:00 AM
Ethylbenzene	ND	0.00050		mg/L	1	7/6/2007 2:26:00 AM
Hexachlorobutadiene	ND	0.00050		mg/L	1	7/6/2007 2:26:00 AM
Isopropylbenzene	ND	0.00050		mg/L	1	7/6/2007 2:26:00 AM
Methylene chloride	ND	0.00050		mg/L	1	7/6/2007 2:26:00 AM
n-Butylbenzene	ND	0.00050		mg/L	1	7/6/2007 2:26:00 AM
n-Propylbenzene	ND	0.00050		mg/L	1	7/6/2007 2:26:00 AM
Naphthalene	ND	0.00050		mg/L	1	7/6/2007 2:26:00 AM
sec-Butylbenzene	ND	0.00050		mg/L	1	7/6/2007 2:26:00 AM
Styrene	ND	0.00050		mg/L	1	7/6/2007 2:26:00 AM
tert-Butylbenzene	ND	0.00050		mg/L	1	7/6/2007 2:26:00 AM
Tetrachloroethene	ND	0.00050		mg/L	1	7/6/2007 2:26:00 AM
Toluene	0.0074	0.00050		mg/L	1	7/6/2007 2:26:00 AM
trans-1,2-Dichloroethene	ND	0.00050		mg/L	1	7/6/2007 2:26:00 AM

Qualifiers: ND - Not Detected at or above the PQL

PQL - Practical Quantitation Limit

J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

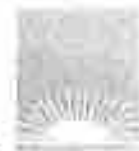
R - RPD outside accepted recovery limits

* - Value exceeds Maximum Contaminant Level

E - Value above quantitation range

Turner Laboratories, Inc.

Date: 15-Aug-07

**CLIENT:** Chuck Dickens, Consulting Hydrogeologist**Client Sample ID:** K-Well**Lab Order:** 0707014**Collection Date:** 7/1/2007 5:00:00 AM**Project:** Kunisch**Lab ID:** 0707014-01A**Matrix:** DRINKING WATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
trans-1,3-Dichloropropene	ND	0.00050		mg/L	1	7/6/2007 2:26:00 AM
Trichloroethene	ND	0.00050		mg/L	1	7/6/2007 2:26:00 AM
Trichlorofluoromethane	ND	0.00050		mg/L	1	7/6/2007 2:26:00 AM
TTHMs	ND	0.0020		mg/L	1	7/6/2007 2:26:00 AM
Vinyl chloride	ND	0.00050		mg/L	1	7/6/2007 2:26:00 AM
Xylenes, Total	ND	0.0015		mg/L	1	7/6/2007 2:26:00 AM
Surr: 1,2-Dichlorobenzene-d4	95.0	70-130		%REC	1	7/6/2007 2:26:00 AM
Surr: 4-Bromofluorobenzene	91.0	70-130		%REC	1	7/6/2007 2:26:00 AM
ALKALINITY		M2320 B				Analyst: JM
Alkalinity, Total (As CaCO3)	120	1.0		mg/L CaCO3	1	7/6/2007 8:00:00 AM
CYANIDE IN DRINKING WATER (PHASE II/V)		E335.4				Analyst: JM
Cyanide	ND	0.10		mg/L	1	7/9/2007 2:30:00 PM
TOTAL COLIFORM BY COLILERT METHOD		M9223				Analyst: PSL
Total Coliform	ND	0		P/A	1	7/3/2007 12:50:00 PM
FLUORIDE		M4500FC				Analyst: PSL
Fluoride	0.69	0.10		mg/L	1	7/6/2007 9:35:00 AM
HARDNESS		M2340 B				Analyst: SB
Hardness, Calcium (As CaCO3)	450	0		mg/L	1	8/13/2007
Hardness, Calcium/Magnesium (As CaCO3)	550	0		mg/L	1	8/13/2007
PH		E150.1				Analyst: PSL
pH	7.5	0		pH units	1	7/3/2007 10:10:00 AM
Temperature	17.0	0		degrees C	1	7/3/2007 10:10:00 AM
TOTAL DISSOLVED SOLIDS		M2540 C				Analyst: PSL
Total Dissolved Solids (Residue, Filterable)	1,500	20		mg/L	1	7/6/2007 2:30:00 PM

Qualifiers: ND - Not Detected at or above the PQL

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Turner Laboratories, Inc.

15-Aug-07

Lab Order: 0707014
Client: Chuck Dickens, Consulting Hydrogeologist
Project: Kunisch

DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
0707014-01A	K-Well	7/1/2007 5:00:00 AM	Drinking Water	Total Coliform by Colilert Method		7/2/2007 12:25:00 PM	7/3/2007 12:50:00 PM
0707014-01B				Volatiles by GCMS			7/6/2007 2:26:00 AM
0707014-01C				EDB and DBCP		7/6/2007	7/6/2007 8:15:00 PM
0707014-01D				GFAA Metals in Water		7/18/2007	8/3/2007 11:37:00 AM
				GFAA Metals in Water		7/18/2007	7/24/2007 6:07:00 PM
				GFAA Metals in Water		7/18/2007	7/23/2007 1:01:00 PM
				GFAA Metals in Water		7/18/2007	7/25/2007 12:32:00 PM
				GFAA Metals in Water		7/18/2007	8/6/2007 3:10:00 PM
				ICP Metals in Drinking Water (Phase		7/18/2007	7/30/2007 6:47:24 PM
				ICP Metals in Drinking Water (Phase		7/18/2007	8/1/2007 1:14:00 PM
				Mercury in Drinking Water (Phase II/		7/19/2007	7/20/2007 4:12:00 PM
				Cyanide in Drinking Water (Phase II/		7/9/2007	7/9/2007 2:30:00 PM
				Alkalinity		7/6/2007	7/6/2007 8:00:00 AM
				Anions by Ion Chromatography		7/5/2007	7/5/2007 11:45:00 AM
				Anions by Ion Chromatography		7/3/2007	7/3/2007 2:01:00 PM
				Anions by Ion Chromatography		7/3/2007	7/4/2007 12:40:00 AM
				Fluoride		7/6/2007	7/6/2007 9:35:00 AM
				Hardness			8/13/2007
				pH		7/3/2007	7/3/2007 10:10:00 AM
				Total Dissolved Solids		7/5/2007 12:15:00 PM	7/6/2007 2:30:00 PM

0707014-01E

0707014-01F



Arizona Department Of Environmental Quality
Drinking Water Source Approval Form
Samples To Be Taken At Source Only

[]		<u>NEW SYSTEM</u>		[]	
System ID				System Name	
[7/1/07]		[5:00] (24 Hr clock)			
Sample date		Sample Time:			
ADEQ Project Number		K-Well			
		Well ID Number		<u>55-209607</u>	
NEW SYSTEM	YES	<input checked="" type="checkbox"/>	NO	<input type="checkbox"/>	
NEW P.O.E.	YES	<input type="checkbox"/>	NO	<input type="checkbox"/>	
Chuck Dickens		520) 444 - 5812			
Owner/Contact Person Name		Owner/Contact Phone Number			
SAMPLE TYPE		SAMPLE COLLECTION POINT/ID			
<input type="checkbox"/> Compliance Monitoring		<input type="checkbox"/> Point of Entry#		[]	

This form is intended to be completely filled out and ALL pages submitted together for all micorbiological and chemical tests detailed on this form. If more than one laboratory participated in the analyses, please attach a copy of the original laboratory report, signed by the performing laboratory, to the back of this form. ALL RESULTS SHALL BE REPORTED IN MILLIGRAMS PER LITER (MG/L) UNLESS OTHERWISE SPECIFIED.

Please note:

The Arsenic MCL is currently .05 mg/L. However, on Jan. 23, 2006, the Arsenic MCL will be .01 mg/L.

There currently is no MCL for Uranium. However, on Dec. 8, 2003 the Uranium MCL will be .03 mg/L.

PLEASE MAIL THIS COMPLETED FORM TO:

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY
TECHNICAL REVIEW UNIT
DRINKING WATER SECTION (5415b-2)
1110 W Washington St,
Phoenix, AZ 85007

***** INORGANIC CHEMICAL ANALYSIS *****

>>> To be filled out by laboratory Personnel <<<

Analysis Method	MCL Value	Reporting Limit	Contaminant Name	Cont. Code	Analysis Run Date/Time	Results	Exceeds MCL	Exceeds Reporting Limit
E200.9	0.01	0.05	Arsenic	1005	7/23/07 13:01	ND (0.005)	<input type="checkbox"/>	<input type="checkbox"/>
E200.7	2.0	2	Barium	1010	7/30/07 18:47	ND (1.0)	<input type="checkbox"/>	<input type="checkbox"/>
E200.7	0.005	0.005	Cadmium	1015	7/30/07 18:47	ND (0.003)	<input type="checkbox"/>	<input type="checkbox"/>
E200.7	0.1	0.1	Chromium	1020	7/30/07 18:47	ND (0.03)	<input type="checkbox"/>	<input type="checkbox"/>
E200.7	1.3	0.050	Copper (Action Level)	1022	7/30/07 18:47	ND (0.02)	<input type="checkbox"/>	<input type="checkbox"/>
SM4500FC	4.0	2.0	Fluoride	1025	7/6/07 9:35	0.69	<input type="checkbox"/>	<input type="checkbox"/>
E200.9	0.015	0.0025	Lead (Action Level)	1030	7/24/07 18:07	ND (0.005)	<input type="checkbox"/>	<input type="checkbox"/>
E245.1	0.002	0.002	Mercury	1035	7/20/07 16:12	ND (0.001)	<input type="checkbox"/>	<input type="checkbox"/>
E300.0	10	5	Nitrate (as N)	1040	7/3/07 14:01	1.4	<input type="checkbox"/>	<input type="checkbox"/>
E300.0	1	0.5	Nitrite (as N)	1041	7/3/07 14:01	ND (0.1)	<input type="checkbox"/>	<input type="checkbox"/>
E200.9	0.05	0.05	Selenium	1045	7/25/07 12:32	ND (0.005)	<input type="checkbox"/>	<input type="checkbox"/>
E200.9	0.006	0.006	Antimony	1074	8/6/07 15:10	ND (0.0048)	<input type="checkbox"/>	<input type="checkbox"/>
E200.7	0.004	0.004	Beryllium	1075	7/30/07 18:47	ND (0.002)	<input type="checkbox"/>	<input type="checkbox"/>
E335.4	0.2	0.2	Cyanide (as free cyanide)	1024	7/9/07 14:30	ND (0.1)	<input type="checkbox"/>	<input type="checkbox"/>
E200.7	0.1	0.1	Nickel	1036	7/30/07 18:47	ND (0.08)	<input type="checkbox"/>	<input type="checkbox"/>
E200.9	0.002	0.002	Thallium	1085	8/3/07 11:37	ND (0.0016)	<input type="checkbox"/>	<input type="checkbox"/>

*Action Level

>>>> LABORATORY INFORMATION <<<<

SPECIMEN NUMBER

[0707014-01]

[7/1/07]

Sample Date

[5:00]

Sample Time

(24 hr clock)

ID Number

[AZ 0066]

Name: [

Turner Laboratories, Inc.]

Comments: [

Authorized Signature:

Shawn Bauman

*****Physical Analysis*****

E300.0	Sulfate	1055	7/3/07 14:01	830
E200.7	Sodium	1052	8/1/07 13:14	380
E150.1	pH	1925	7/3/07 10:10	7.6
SM2320B	Alkalinity	1927	7/3/07 8:00	120
SM2340B	Hardness/Calcium	1918	8/13/07	450
LANG	Langlier Index	1997	10/2/07	0.31 NO
E 150.1	Temperature (°C)	1996	7/3/07 10:10	17.0
SM2540C	Total Dissolved Solids-TDS	1930	7/3/07 14:30	1500

>>>> LABORATORY INFORMATION <<<<

To be filled out by Laboratory Personnel

SPECIMEN NUMBER

[0707014-01]

[7/1/07]

Sample Date

[5:00]

Sample Time

(24 hr clock)

ID Number

[AZ 0066]

Name: [

Turner Laboratories, Inc.]

Comments: [

Authorized Signature:

Shawn Bauman

***** SYNTHETIC ORGANIC CHEMICAL ANALYSIS *****

>>> To be filled out by laboratory Personnel <<<

Analysis Method	MCL Value	Reporting Limit	Contaminant Name	Cont. Code	Analysis Run Date/Time	Results	Exceeds MCL	Exceeds Reporting Limit
	0.07	0.0001	2,4-D	2105			<input type="checkbox"/>	<input type="checkbox"/>
	0.05	0.0002	2,4,5-TP (Silvex)	2110			<input type="checkbox"/>	<input type="checkbox"/>
	0.002	0.0002	Alachlor	2051			<input type="checkbox"/>	<input type="checkbox"/>
	0.003	0.001	Toxaphene	2020			<input type="checkbox"/>	<input type="checkbox"/>
	0.003	0.0001	Atrazine	2050			<input type="checkbox"/>	<input type="checkbox"/>
	0.04	0.0009	Carbofuran	2046			<input type="checkbox"/>	<input type="checkbox"/>
	0.001	0.00004	Pentachlorophenol	2326			<input type="checkbox"/>	<input type="checkbox"/>
	0.002	0.0002	Chlordane	2959			<input type="checkbox"/>	<input type="checkbox"/>
E504.1	0.0002	0.00002	Dibromochloropropane (DBCP)	2931	7/6/07 20:15	ND (0.00002)	<input type="checkbox"/>	<input type="checkbox"/>
E504.1	0.00005	0.00001	Ethylene Dibromide (EDB)	2946	7/6/07 20:15	ND (0.00001)	<input type="checkbox"/>	<input type="checkbox"/>
	0.0004	0.00004	Heptachlor	2065			<input type="checkbox"/>	<input type="checkbox"/>
	0.0002	0.00002	Heptachlor Epoxide	2067			<input type="checkbox"/>	<input type="checkbox"/>
	0.0002	0.00002	Lindane	2010			<input type="checkbox"/>	<input type="checkbox"/>
	0.04	0.0001	Methoxychlor	2015			<input type="checkbox"/>	<input type="checkbox"/>
	0.0005	0.0001	PCB: Polychlorinated Biphenyls*	2383			<input type="checkbox"/>	<input type="checkbox"/>
	0.0002	0.00002	Benzo (a) Pyrene	2306			<input type="checkbox"/>	<input type="checkbox"/>
	0.2	0.001	Dalapon	2031			<input type="checkbox"/>	<input type="checkbox"/>
	0.006	0.0006	Di(2-ethylhexyl)phthalate	2039			<input type="checkbox"/>	<input type="checkbox"/>
	0.4	0.0006	Di(2-ethylhexyl)adipate	2035			<input type="checkbox"/>	<input type="checkbox"/>
	0.007	0.0002	Dinoseb	2041			<input type="checkbox"/>	<input type="checkbox"/>
	3.E-08	5.E-09	2,3,7,8-TCDD (Dioxin)	2063			<input type="checkbox"/>	<input type="checkbox"/>
	0.02	0.0004	Diquat	2032			<input type="checkbox"/>	<input type="checkbox"/>
	0.1	0.009	Endothall	2033			<input type="checkbox"/>	<input type="checkbox"/>
	0.002	0.00001	Endrin	2005			<input type="checkbox"/>	<input type="checkbox"/>
	0.7	0.006	Glyphosate	2034			<input type="checkbox"/>	<input type="checkbox"/>
	0.001	0.0001	Hexachlorobenzene	2274			<input type="checkbox"/>	<input type="checkbox"/>
	0.05	0.0001	Hexachlorocyclopentadiene	2042			<input type="checkbox"/>	<input type="checkbox"/>
	0.2	0.002	Oxamyl	2036			<input type="checkbox"/>	<input type="checkbox"/>
	0.5	0.0001	Picloram	2040			<input type="checkbox"/>	<input type="checkbox"/>
	0.004	0.0007	Simazine	2037			<input type="checkbox"/>	<input type="checkbox"/>

* Aroclor results may be submitted in lieu of PCB

>>>> LABORATORY INFORMATION <<<<

>>> To be filled out by laboratory Personnel <<<

SPECIMEN NUMBER

0707014-01

[7/1/07]

Sample Date

[5:00]

Sample Time

(24 hr clock)

ID Number

[

AZ

0066

] Name: [

Turner Laboratories, Inc.

Comments: [

Authorized Signature:

Shawn Bauman

***** AROCLOR (PCBs SCREENING TEST) *****

>>> To be filled out by laboratory Personnel <<<

Analysis Method	Reporting Limit	Contaminant Name	Cont. Code	Results	Exceeds** Reporting Limit
	0.00008	Aroclor 1016	2388		<input type="checkbox"/>
	0.02	Aroclor 1221	2390		<input type="checkbox"/>
	0.0005	Aroclor 1232	2392		<input type="checkbox"/>
	0.0003	Aroclor 1242	2394		<input type="checkbox"/>
	0.0001	Aroclor 1248	2396		<input type="checkbox"/>
	0.0001	Aroclor 1254	2398		<input type="checkbox"/>
	0.0002	Aroclor 1260	2400		<input type="checkbox"/>

>>>> LABORATORY INFORMATION <<<<

>>> To be filled out by laboratory Personnel <<<

SPECIMEN NUMBER

[]

[]

Sample Date

[]

Sample Time

(24 hr clock)

ID COF0809-0

[]

Name: []

Comments: []

Authorized Signature:

***** VOLATILE ORGANIC CHEMICALS ANALYSIS *****

>>> To be filled out by laboratory Personnel <<<

Analysis Method	MCL Value	Reporting Limit	Contaminant Name	Cont. Code	Analysis Run Date/Time	Results	Exceeds MCL	Exceeds Reporting Limit
E524.2	0.007	0.0005	1,1-Dichloroethylene	2977	7/6/07 2:26	ND (0.0005)	<input type="checkbox"/>	<input type="checkbox"/>
E524.2	0.2	0.0005	1,1,1-Trichloroethane	2981	7/6/07 2:26	ND (0.0005)	<input type="checkbox"/>	<input type="checkbox"/>
E524.2	0.005	0.0005	1,1,2-Trichloroethane	2985	7/6/07 2:26	ND (0.0005)	<input type="checkbox"/>	<input type="checkbox"/>
E524.2	0.005	0.0005	1,2-Dichloroethane	2980	7/6/07 2:26	ND (0.0005)	<input type="checkbox"/>	<input type="checkbox"/>
E524.2	0.005	0.0005	1,2-Dichloropropane	2983	7/6/07 2:26	ND (0.0005)	<input type="checkbox"/>	<input type="checkbox"/>
E524.2	0.005	0.0005	Benzene	2990	7/6/07 2:26	ND (0.0005)	<input type="checkbox"/>	<input type="checkbox"/>
E524.2	0.005	0.0005	Carbon Tetrachloride	2982	7/6/07 2:26	ND (0.0005)	<input type="checkbox"/>	<input type="checkbox"/>
E524.2	0.07	0.0005	cis-1,2-Dichloroethylene	2380	7/6/07 2:26	ND (0.0005)	<input type="checkbox"/>	<input type="checkbox"/>
E524.2	0.7	0.0005	Ethylbenzene	2992	7/6/07 2:26	ND (0.0005)	<input type="checkbox"/>	<input type="checkbox"/>
E524.2	0.1	0.0005	(mono)chlorobenzene	2989	7/6/07 2:26	ND (0.0005)	<input type="checkbox"/>	<input type="checkbox"/>
E524.2	0.6	0.0005	o-Dichlorobenzene	2968	7/6/07 2:26	ND (0.0005)	<input type="checkbox"/>	<input type="checkbox"/>
E524.2	0.075	0.0005	para-Dichlorobenzene	2969	7/6/07 2:26	ND (0.0005)	<input type="checkbox"/>	<input type="checkbox"/>
E524.2	0.1	0.0005	Styrene	2996	7/6/07 2:26	ND (0.0005)	<input type="checkbox"/>	<input type="checkbox"/>
E524.2	0.005	0.0005	Tetrachloroethylene	2987	7/6/07 2:26	ND (0.0005)	<input type="checkbox"/>	<input type="checkbox"/>
E524.2	1	0.0005	Toluene	2991	7/6/07 2:26	0.0074	<input type="checkbox"/>	<input type="checkbox"/>
E524.2	0.1	0.0005	Trans-1,2-Dichloroethylene	2979	7/6/07 2:26	ND (0.0005)	<input type="checkbox"/>	<input type="checkbox"/>
E524.2	0.005	0.0005	Trichloroethylene	2984	7/6/07 2:26	ND (0.0005)	<input type="checkbox"/>	<input type="checkbox"/>
E524.2	0.002	0.0005	Vinyl Chloride	2976	7/6/07 2:26	ND (0.0005)	<input type="checkbox"/>	<input type="checkbox"/>
E524.2	10	0.0015	Xylenes, Total	2955	7/6/07 2:26	ND (0.0005)	<input type="checkbox"/>	<input type="checkbox"/>
E524.2	0.07	0.0005	1,2,4-Trichlorobenzene	2378	7/6/07 2:26	ND (0.0005)	<input type="checkbox"/>	<input type="checkbox"/>
E524.2	0.005	0.0005	Dichloromethane	2964	7/6/07 2:26	ND (0.0005)	<input type="checkbox"/>	<input type="checkbox"/>

>>>> LABORATORY INFORMATION <<<<

>>> To be filled out by laboratory Personnel <<<

SPECIMEN NUMBER

[0707014-01]

[7/1/07]

Sample Date

[5:00]

Sample Time

(24 hr clock)

ID Number [AZ 0066]

Name: []

Turner Laboratories, Inc.

Comments: []

Authorized Signature:

Date Public Water System Notified:

***** RADIOCHEMICAL ANALYSIS *****

>>> To be filled out by laboratory Personnel <<<

Analysis Method	MCL Value	Reporting Limit	Contaminant Name	Cont. Code	Analysis Run Date	Results	Exceeds MCL Reporting	Exceeds Limit
	15 pCi/L		Adjusted Gross Alpha	4000			<input type="checkbox"/>	
		3 pCi/L	Gross Alpha	4002				<input type="checkbox"/>
	30ppb	(reserved)	Combined Uranium	4006			<input type="checkbox"/>	<input type="checkbox"/>
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 Pci/l	1 pCi/L	Combined Radium (226,228)	4010			<input type="checkbox"/>	<input type="checkbox"/>
		1 pCi/L	Radium 226	4020				<input type="checkbox"/>
		1 pCi/L	Radium 228	4030				
	4 mrem	3 pCi/L	Gross Beta	4100			<input type="checkbox"/>	<input type="checkbox"/>
	20,000 pCi/l	1000 pCi/L	Tritium	4102			<input type="checkbox"/>	<input type="checkbox"/>
		10 pCi/L	Strontium-89	4172				<input type="checkbox"/>
	8 pCi/l		Strontium-90	4174			<input type="checkbox"/>	<input type="checkbox"/>
		1 pCi/L	Iodine-131	4264				<input type="checkbox"/>
		10 pCi/L	Cesium-134	4270				<input type="checkbox"/>

>>>> LABORATORY INFORMATION <<<<

To be filled out by Laboratory Personnel <<<<

SPECIMEN NUMBER

[] [] (24 hr clock)
Sample Date Sample Time

ID Number [] Name: []

Comments: []

Authorized Signature: []

Date Public Water System Notified: []

* A composite radiochemical sample means four quarterly samples from a single source only.

** Gross alpha is the value of all alpha particle emitters except for uranium and radon 222. Radium is included in the reported gross alpha value. All units are reported in picocuries per liter (pCi/l) EXCEPT for gross beta which is reported in millirem per year.

*** These values are assumed to produce a total body or organ dose of 4 millirem per year.

***** ASBESTOS *****

>>> To be filled out by laboratory Personnel <<<

Analysis Method	MCL Value	Contaminant Name	Cont. Code	Analysis Run Date	Results	Exceeds MCL
	7 MFL	Asbestos	1094			<input type="checkbox"/>

>>>> LABORATORY INFORMATION <<<<

To be filled out by Laboratory Personnel <<<<

SPECIMEN NUMBER [] (24 hr clock)
 [] Sample Date [] Sample Time

ID Number [] Name: []
 Comments: []
 Authorized Signature: []
 Date Public Water System Notified: []

***** MICROBIOLOGICAL ANALYSIS *****

>>> To be filled out by laboratory Personnel <<<

Analysis Method	MCL Value	Contaminant Name	Cont. Code	Test Start Date/Time	Analysis Run Date/Time	Result	Exceeds MCL
SM9223B	Present/1 1 or more Coliform	Total Coliform	3000	7/2/07 12:25	7/3/07 12:50	ND	<input type="checkbox"/>

ONLY REPORT FECAL RESULT IF TOTAL COLIFORM RESULT IS POSITIVE

Analysis Method	MCL Value	Contaminant Name	Cont. Code	Test Start Date/Time	Analysis Run Date/Time	Result	Exceeds MCL
	Present/1 1 or more Coliform	Fecal Coliform	3013				<input type="checkbox"/>

>>>> LABORATORY INFORMATION <<<<

To be filled out by Laboratory Personnel <<<<

SPECIMEN NUMBER [] (24 hr clock)
 [0707014-01] Sample Date [7/1/07] Sample Time [5:00]

ID Number [AZ 0066] Name: [Turner Laboratories, Inc.]
 Comments: []
 Authorized Signature: [*Donna Bauman*]
 Date Public Water System Notified: []

**INSTRUCTIONS FOR USING THE ARIZONA DRINKING WATER
SOURCE APPROVAL REPORTING FORM**

Revised 2003

SYSTEM ID: This is a unique 5 digit Public Water System Identification (PWSID) number assigned to each public water system by ADEQ.

SYSTEM NAME: Should be in the legal name which the water system will be known as when the system is built. Always notify the Department in writing of any name or ownership change.

ADEQ PROJECT NUMBER: This is the number assigned by ADEQ when the project is first submitted for an "Approval to Construct".

NEW SYSTEM: If this is a new system and a system number has not yet been assigned by ADEQ, then mark "YES" and be sure that the project number is filled in.

NEW POE: If this source represents a new point of entry (POE) for your system, then mark "YES" on the form. This will allow ADEQ to assign a new point of entry number and the appropriate monitoring year for this point of entry.

WELL ID NUMBER: The Department of Water Resources' registration number goes here. This number always begins with a 55-. If the new source does not constitute a new point of entry, fill in the existing point of entry number that this source is joining.

SURFACE WATER INTAKE ID NUMBER: This number must be assigned by ADEQ. If the new source does not constitute a new point of entry, fill in the existing point of entry number that this source is joining.

SAMPLE DATE: The date the specimen was collected in mm/dd/yy format.

SAMPLE TIME: The time the specimen was collected in hh:mm format (24 hr clock time).

OWNER/CONTACT PERSON NAME: The first and last name of the owner or owner's representative, (contact person) who should be contacted with sample results.

OWNER/CONTACT PHONE#: The daytime phone number of the owner's representative, (contact person) who should be contacted with sample results.

SAMPLE TYPE: The compliance reason for specimen collection. Only the relevant sample types for each contaminant group are provided on the ADEQ forms.

SPECIMEN NUMBER: A unique 15 character (max) alphanumeric code that identifies a particular sample used to test one contaminant or one category of contaminants. If reporting on different reporting forms, a different (unique) number is required for each contaminant group and for each report.

NOTE: These definitions are general in nature. For specific questions regarding your laboratory submittal, please contact the Arizona Department of Environmental Quality (ADEQ) Water Quality Compliance Section at 1-800-234-5677, ext. 4624, or 602-771-4624.

www.adeq.state.az.us

Turner Laboratories, Inc.

2445 North Coyote Drive
Suite #104
Tucson, AZ 85745
(520) 882-5880

CHAIN-OF-CUSTODY RECORD

Subcontractor:

Radiation Safety Engineering, Inc.
3245 N. Washington St.

TEL: (480) 897-9459
FAX: (480) 892-5446

02-Jul-07

Chandler, Arizona 852251121

Acci #:

Sample ID	Matrix	Collection Date	Bottle Type	ERAD	Requested Tests				
0707014-01H	Drinking Water	7/1/07 5:00:00 AM	1LCU	1					

30871

Comments:

Please analyze for radiochemistry. Please include new well source form.

Date/Time	
Relinquished by: <i>John Palmer</i>	Received by: <i>P. Poyner</i>
Relinquished by: _____	Received by: _____
	7-3-07 09:00

Arizona Department Of Environmental Quality

Drinking Water Source Approval Form

Samples To Be Taken At Source Only

N/A

System ID #

July 1, 2007

Sample Date

ADEQ Project Number

New System: **YES** **NO**

New POE **YES** **NO**

NEW SYSTEM

System Name

5:00 (24 Hr Clock)

55-209607

Well ID Number

Surface Water Intake ID Number

Jim Kuniseth

Owner/Contact Person Name

Owner/Contact Person Phone Number

Sample Type

☐ Compliance Monitoring

Sample Collection Point/ID

□ Point of Entry#

This form is to be filled out completely, and all pages are to be submitted together. If more than one laboratory participated in the analyses, please attach a copy of the original laboratory report, signed by the performing laboratory, to the back of this form.

All Results Shall Be Reported In Milligrams Per Liter (mg/L) Unless Otherwise Specified.

Please Mail This Completed Form To:

Arizona Department Of Environmental Quality

Technical Review Unit

Drinking Water Section (5415b-2)

1110 W Washington St,

Phoenix, AZ 85007

Radiochemical Analysis

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analysis Run Date	Result	Exceeds MCL	Exceeds Reporting Limit
	15 pCi/L		Adjusted Gross Alpha	4000				
600/00-02		3 pCi/l	Gross Alpha	4002	7/3/2007	12.6 ± 1.8		
	30ppb	(reserved)	Combined Uranium	4006				
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/l	Combined Radium	4010	7/5/2007	<0.2		
903.1		1 pCi/l	Radium 226	4020	7/5/2007	<0.2		
904.0		1 pCi/l	Radium 228	4030	7/5/2007	<0.2		
*	4 mrem	3 pCi/l	Gross Beta	4100				
*	20,000 pCi/l	1,000 pCi/l	Tritium	4102				
*		10 pCi/l	Strontium-89	4172				
*	8 pCi/l	2 pCi/l	Strontium-90	4174				
*		1 pCi/l	Iodine-131	4264				
*		10 pCi/l	Cesium-134	4270				

* Do not analyze for this contaminant unless notified by ADEQ

Laboratory Information

Speciman Number: RSE30871

Lab ID Number: AZ0462 Name: Radiation Safety Engineering, Inc.

Comments 0707014-01H

Authorized Signature: 

Date Public Water System Notified:



Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121
Website: www.radsafe.com

(480) 897-9459
FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Turner Laboratories
2445 N. Coyote Drive, Ste. 104
Tucson, AZ 85745

Sampling Date: July 01, 2007
Sample Received: July 03, 2007
Analysis Completed: July 11, 2007

Sample ID	Gross Alpha Activity Method 600/00-02 (pCi/L)	Radium 226 Activity Method 903.1 (pCi/L)	Radium 228 Activity Method 904 (pCi/L)	Total Radium (pCi/L)
0707014-01H	12.6 ± 1.8	<0.2	<0.2	<0.2

Date of Analysis	7/3/2007	7/5/2007	7/5/2007	7/5/2007
------------------	----------	----------	----------	----------

Robert L. Metzger, Ph.D., C.H.P.



Determination of Asbestos in Water using TEM

JobNumber: 200705701

Client: TURNER LABORATORIES INC

2445 N COYOTE DR STE 104

TUCSON, AZ 85745-0000

Office Phone: (520) 882-5880

FAX: (520) 882-9788

Samples: 1 TEM Rec: 7/3/2007 Method: EPA 100.1

TEM Water

Client Job: 0707014

PO Number:

Report Date: 7/11/2007

Date Analyzed: 7/11/2007

Routing Number: -

Method and Analysis Information: Fiberquant Internal SOP: TEMw

Samples are analyzed using the protocols given in EPA method 100.1, as amended by the 1993 EPA guidance. Samples should be un-preserved water in 1 L containers having about 200 ml headspace for shaking. There is a 48 hr deadline between the time the sample is taken and the time it is filtered to minimize loss of asbestos fibers due to biological interference. Each sample is shaken for 1 minute, and ultrasonicated for at least 10 minutes, shaking every 5 minutes to disperse any fibers that are present. A measured amount of sample is then filtered through a 0.1 um pore size polycarbonate filter, backed by a 5 um pore size MCE filter and a glass frit. Several volumes of liquid may be filtered for each sample in order to assure that a properly loaded sample is obtained. A portion of each resulting filter (and blanks) is then coated with 100-200 um of carbon in a carbon evaporator. The carbon encapsulates all of the larger and most of the smaller particulate on the filter. Three mm square pieces of the coated filter are placed on three or more copper TEM grids, and the original filter material is dissolved away in a Jaffe wick and/or condensation washer. The finished replica in carbon containing the particulate is then examined on a transmission electron microscope at 10,000 to 20,000x magnification. All asbestos fibers >10um in length are tabulated and characterized as asbestos or non-asbestos using a combination of morphology, electron diffraction characteristics, and elemental composition. The result is calculated in millions of fibers per liter greater than 10 microns in length (MFL>10um). The grid is scanned until 20 grid openings have been observed, or until an analytical sensitivity (the hypothetical observation of one fiber) of 0.2 MFL has been reached. The nominal 20 grid opening cut-off is used for those samples containing so much non-asbestos particulate that the desired analytical sensitivity is impractical to attain.

The method was designed to determine EPA drinking water compliance. The standard for drinking water is <7 MFL>10um as measured by this method. Fiberquant maintains Arizona Environmental Laboratory license #AZ0633 covering EPA Method 100.1.

Overall, the coefficient of variation can be expected to be approximately 0.5 for analyses in which >20 asbestos fibers have been counted, ranging up to 1:00 for analyses in which only a few asbestos fibers are counted.

The analysis was performed under an ongoing quality assurance program which includes: Lab blanks, prepared with each set of samples, and analyzed at the rate of one per 25 samples analyzed. Each analyst has suitable background credentials, such as at least a bachelor's degree in geology or chemistry, and has undergone extensive 2-6 month training in TEM techniques and mineralogy specific to TEM asbestos analysis before being allowed to perform client analyses. Unknown reference samples are routinely identified to ensure that each analyst can collect and correctly interpret TEM information. The TEM is aligned and its performance checked daily. Magnification, electron diffraction pattern size, and analytical performance characteristics are calibrated routinely. Samples are re-analyzed sometimes by the same analyst and sometimes by a different analyst in order to determine accuracy and precision. The total of QC analyses (blanks + recounts) are greater than 10% of analyzed samples. Each analyst participates in interlab round robins and proficiency testing in order to show correlation to other lab's analyses. Because TEM samples are not analyzed in batches, which would be traditional for most water analyses, and not every blank is read, and not every sample has a duplicate or replicate analysis associated with it, it is not possible to include a traditional QC report with the analysis. QC reports are produced monthly, and are available on request. All quality checks performed for these samples were in control except as detailed in the "Analytical Notes" below. Fiberquant is accredited by NVLAP to perform TEM analysis of asbestos in air samples, and has been found to be proficient in the EPA water proficiency program. Accreditation or proficiency does not imply endorsement by the EPA, any other United States governmental agency or any private agency or association. Each lab analysis refers only to the sample tested, and may not, due to the sampling process, be representative of the material sampled. This report may not be reproduced except in full, without the approval of Fiberquant Analytical Services.

Some results may have been calculated using client supplied data, such as volume or area sampled, for which Fiberquant assumes no liability for accuracy.

Job Analysis Notes:

Sampled:	7/2/2007	5:00	By:	Chuck Dickens
Received:	7/3/2007	10:03		
Filtered:	7/3/2007	13:40		
Analyzed:	7/11/2007	9:02		

Analysis Results:

Lab Number	Client Number	Date	Condition	Filtered Vol (ml)	#GOs	GO Area	MFL>10um	AsbestosType	Sensitivity (MFL>10um)
							Job Number: 200705701		
2007-05701-1	0707014-01G	7/2/2007	acceptable	30	14	0.00973	<0.2	-	0.2

**Analyst:** UWE .. STEIMLE

Printed: 11-Jul-07

Original Print Date: 11-Jul-07



Larry S. Pierce, Approved Accreditation Signatory

QA Report: Job Number: 200705701

1. Calibrations

TEM magnification. date of last.	12:00:00 AM
TEM camera constant. date of last.	12:00:00 AM
EDS performance check (k-factors, resolution, low-e perf.). date of last.	12:00:00 AM
TEM stage drift, minimum beam size. date of last.	12:00:00 AM
plasma asher. date of last.	6/6/2007

2. Blanks (1/25 samples required)

☒ not required this job str/mm2

3. Recounts (1/17 samples required)

☒ not required this job Rel%Diff

4. Analyst Performance

NVLAP proficiency testing	<input checked="" type="checkbox"/> current
verified counts. cum. % true positives	92.6
verification of diffraction pattern identifications. cum. % correct	100.0
verification of EDS spectra. cum. % correct	100.0

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY
DRINKING WATER SOURCE APPROVAL FORM
SAMPLES TO BE TAKEN AT SOURCE ONLY

<u>N/A</u> System ID	<u>NEW SYSTEM</u> System Name
<u>07/02/07</u> Sample Date	<u>05:00</u> Sample Time (24 hr clock)
 ADEQ Project	<u>55- 209607</u> Well ID Number
NEW SYSTEM YES <u>X</u> NO <u> </u>	 Surface Water Intake ID Number
NEW POE YES <u> </u> NO <u> </u>	 Owner/Contact Person Name
<u>Jim Kunisch</u> Owner/Contact Person Name	 Owner/Contact Person Phone Number
 Owner/Contact Person Fax Number	<u>ARROYO PRESERVE - NEW Supply Well</u> Sample Site ID
<u>0707014-01G</u> Submitters Sample ID	<u>2007-05701- 1</u> Analyzing Laboratory Specimen Number
SAMPLE TYPE <input type="checkbox"/> Compliance Monitoring	SAMPLE COLLECTION POINT/ID <input type="checkbox"/> Point of Entry#

This form is to be filled out completely, and all pages are to be submitted together. If more than one laboratory participated in the analyses, please attach a copy of the original laboratory report, signed by the performing laboratory, to the back of this form.

All Results Shall Be Reported In Milligrams Per Liter (mg/L) Unless Otherwise Specified.

Please note:

The Arsenic MCL is currently .05 mg/L. However, on Jan. 23, 2006, the Arsenic MCL will be .01 mg/L.

There currently is no MCL for Uranium. However, on Dec. 8, 2003 the Uranium MCL will be .03 mg/L.

Please Mail This Completed Form To:

Arizona Department Of Environmental Quality
Technical Review Unit
Drinking Water Section (5415b-2)
1110 W Washington St,
Phoenix, AZ 85007

Inorganic Chemical Analysis

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analysis Run Date	Result	Exceeds MCL	Exceeds Reporting Limit
	0.05	0.05	Arsenic	1005			<input type="checkbox"/>	<input type="checkbox"/>
	2	2	Barium	1010			<input type="checkbox"/>	<input type="checkbox"/>
	0.005	0.005	Cadmium	1015			<input type="checkbox"/>	<input type="checkbox"/>
	0.1	0.1	Chromium	1020			<input type="checkbox"/>	<input type="checkbox"/>
	1.3*	0.050	Copper	1022			<input type="checkbox"/>	<input type="checkbox"/>
	4.0	2.0	Fluoride	1025			<input type="checkbox"/>	<input type="checkbox"/>
	0.015*	0.0025	Lead	1030			<input type="checkbox"/>	<input type="checkbox"/>
	0.002	0.002	Mercury	1035			<input type="checkbox"/>	<input type="checkbox"/>
	10	5	Nitrate (as N)	1040			<input type="checkbox"/>	<input type="checkbox"/>
	1	0.5	Nitrite	1041			<input type="checkbox"/>	<input type="checkbox"/>
	0.05	0.05	Selenium	1045			<input type="checkbox"/>	<input type="checkbox"/>
	0.006	0.006	Antimony	1074			<input type="checkbox"/>	<input type="checkbox"/>
	0.004	0.004	Beryllium	1075			<input type="checkbox"/>	<input type="checkbox"/>
	0.2	0.2	Cyanide (as free	1024			<input type="checkbox"/>	<input type="checkbox"/>
	0.1	0.1	Nickel	1036			<input type="checkbox"/>	<input type="checkbox"/>
	0.002	0.002	Thallium	1085			<input type="checkbox"/>	<input type="checkbox"/>

*Action Level

Laboratory Information

Specimen Number: _____
 Lab ID Number: _____ Name: _____
 Comments: _____
 Authorized Signature: _____

Physical Analysis

Analysis Method	Contaminant Name	Cont. Code	Analysis Run Date	Result
	Sulfate	1055		
	Sodium	1052		
	PH	1925		
	Alkalinity	1927		
	Hardness/Calcium	1918		
	Langelier Index	1997		
	Temperature (°C)	1996		
	Total Dissolved Solids-TDS	1930		

Laboratory Information

Specimen Number: _____
 Lab ID Number: _____ Name: _____
 Comments: _____
 Authorized Signature: _____

*****Synthetic Organic Chemical Analysis*****

Analysis	MCL	Reporting	Contaminant	Cont.	Analysis	Result	Exceeds	Exceeds
	0.07	0.0001	2,4-D	2105			<input type="checkbox"/>	<input type="checkbox"/>
	0.05	0.0002	2,4,5-TP (Silvex)	2110			<input type="checkbox"/>	<input type="checkbox"/>
	0.002	0.0002	Alachlor	2051			<input type="checkbox"/>	<input type="checkbox"/>
	0.003	0.001	Toxaphene	2020			<input type="checkbox"/>	<input type="checkbox"/>
	0.003	0.0001	Atrazine	2050			<input type="checkbox"/>	<input type="checkbox"/>
	0.04	0.0009	Carbofuran	2046			<input type="checkbox"/>	<input type="checkbox"/>
	0.001	0.00004	Pentachlorophenol	2326			<input type="checkbox"/>	<input type="checkbox"/>
	0.002	0.0002	Chlorodane	2959			<input type="checkbox"/>	<input type="checkbox"/>
	0.0002	0.00002	Dibromochloropropane(DBCP)	2931			<input type="checkbox"/>	<input type="checkbox"/>
	0.00005	0.00001	Ethylene Dibromide (EDB)	2946			<input type="checkbox"/>	<input type="checkbox"/>
	0.0004	0.00004	Heptachlor	2065			<input type="checkbox"/>	<input type="checkbox"/>
	0.0002	0.00002	Heptachlor Epoxide	2067			<input type="checkbox"/>	<input type="checkbox"/>
	0.0002	0.00002	Lindane	2010			<input type="checkbox"/>	<input type="checkbox"/>
	0.04	0.0001	Methoxychlor	2015			<input type="checkbox"/>	<input type="checkbox"/>
	0.0005	0.0001	PCB (Polychlorinated Biphenyls)	2383			<input type="checkbox"/>	<input type="checkbox"/>
	0.0002	0.00002	Benzo(a)Pyrene	2306			<input type="checkbox"/>	<input type="checkbox"/>
	0.2	0.001	Dalapon	2031			<input type="checkbox"/>	<input type="checkbox"/>
	0.006	0.0006	Di(2-ethylhexyl)phthalate	2039			<input type="checkbox"/>	<input type="checkbox"/>
	0.4	0.0006	Di(2-ethylhexyl)adipate	2035			<input type="checkbox"/>	<input type="checkbox"/>
	0.007	0.0002	Dinoseb	2041			<input type="checkbox"/>	<input type="checkbox"/>
	3x10 ⁻⁸	5x10 ⁻⁹	2,3,7,8-TCDD (Dioxin)	2063			<input type="checkbox"/>	<input type="checkbox"/>
	0.02	0.0004	Diquat	2032			<input type="checkbox"/>	<input type="checkbox"/>
	0.1	0.0009	Endothall	2033			<input type="checkbox"/>	<input type="checkbox"/>
	0.002	0.00001	Endrin	2005			<input type="checkbox"/>	<input type="checkbox"/>
	0.7	0.006	Glyphosate	2034			<input type="checkbox"/>	<input type="checkbox"/>
	0.001	0.0001	Hexachlorobenzene	2274			<input type="checkbox"/>	<input type="checkbox"/>
	0.05	0.0001	Hexachlorocyclopentadiene	2042			<input type="checkbox"/>	<input type="checkbox"/>
	0.2	0.002	Oxamyl	2036			<input type="checkbox"/>	<input type="checkbox"/>
	0.5	0.0001	Picloram	2040			<input type="checkbox"/>	<input type="checkbox"/>
	0.004	0.0007	Simazine	2037			<input type="checkbox"/>	<input type="checkbox"/>

*Aroclor results may be submitted in lieu of PCB

Laboratory Information

Specimen Number: _____
 Lab ID Number: _____ Name: _____
 Comments: _____
 Authorized Signature: _____

*****Aroclor (PCB Screening Test)*****

Analysis	Reporting	Contaminant	Cont.	Analysis	Result	Exceeds
	0.00008	Aroclor 1016	2388			<input type="checkbox"/>
	0.02	Aroclor 1221	2390			<input type="checkbox"/>
	0.0005	Aroclor 1232	2392			<input type="checkbox"/>
	0.0003	Aroclor 1242	2394			<input type="checkbox"/>
	0.0001	Aroclor 1248	2396			<input type="checkbox"/>
	0.0001	Aroclor 1254	2398			<input type="checkbox"/>
	0.0002	Aroclor 1260	2400			<input type="checkbox"/>

Laboratory Information

Specimen Number: _____
 Lab ID Number: _____ Name: _____
 Comments: _____
 Authorized Signature: _____

*****Volatile Organic Chemical Analysis*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analysis Run Date	Result	Exceeds MCL	Exceeds Reporting Limit
	0.007	0.0005	1,1-Dichloroethylene	2977			<input type="checkbox"/>	<input type="checkbox"/>
	0.2	0.0005	1,1,1-Trichloroethane	2981			<input type="checkbox"/>	<input type="checkbox"/>
	0.005	0.0005	1,1,2-Trichloroethane	2985			<input type="checkbox"/>	<input type="checkbox"/>
	0.005	0.0005	1,2-Dichloroethane	2980			<input type="checkbox"/>	<input type="checkbox"/>
	0.005	0.0005	1,2-Dichloropropane	2983			<input type="checkbox"/>	<input type="checkbox"/>
	0.005	0.0005	Benzene	2990			<input type="checkbox"/>	<input type="checkbox"/>
	0.005	0.0005	Carbon Tetrachloride	2982			<input type="checkbox"/>	<input type="checkbox"/>
	0.07	0.0005	cis-1,2 Dichloroethylene	2380			<input type="checkbox"/>	<input type="checkbox"/>
	0.7	0.0005	Ethylbenzene	2992			<input type="checkbox"/>	<input type="checkbox"/>
	0.1	0.0005	(mono) Chlorobenzene	2989			<input type="checkbox"/>	<input type="checkbox"/>
	0.6	0.0005	o-Dichlorobenzene	2968			<input type="checkbox"/>	<input type="checkbox"/>
	0.075	0.0005	para-Dichlorobenzene	2969			<input type="checkbox"/>	<input type="checkbox"/>
	0.1	0.0005	Styrene	2996			<input type="checkbox"/>	<input type="checkbox"/>
	0.005	0.0005	Tetrachloroethylene	2987			<input type="checkbox"/>	<input type="checkbox"/>
	1	0.0005	Toluene	2991			<input type="checkbox"/>	<input type="checkbox"/>
	0.1	0.0005	Trans-1,2-Dichloroethylene	2979			<input type="checkbox"/>	<input type="checkbox"/>
	0.005	0.0005	Trichloroethylene	2984			<input type="checkbox"/>	<input type="checkbox"/>
	0.002	0.0005	Vinyl Chloride	2976			<input type="checkbox"/>	<input type="checkbox"/>
	10	0.0015	Xylenes, Total	2955			<input type="checkbox"/>	<input type="checkbox"/>
	0.07	0.0005	1,2,4-Trichlorobenzene	2378			<input type="checkbox"/>	<input type="checkbox"/>
	0.005	0.0005	Dichloromethane	2964			<input type="checkbox"/>	<input type="checkbox"/>

Laboratory Information

Specimen Number: _____
 Lab ID Number: _____ Name: _____
 Comments: _____
 Authorized Signature: _____

*****Radiochemical Analysis*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analysis Run Date	Results	Exceeds MCL	Exceeds Reporting Limit
	15 pCi/L		Adjusted Gross Alpha	4000			<input type="checkbox"/>	
		3 pCi/L	Gross Alpha	4002				<input type="checkbox"/>
	30ppb	(reserved)	Combined Uranium	4006			<input type="checkbox"/>	<input type="checkbox"/>
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium	4010			<input type="checkbox"/>	<input type="checkbox"/>
		1 pCi/L	Radium 226	4020				<input type="checkbox"/>
		1 pCi/L	Radium 228	4030				
	4 mrem	3 pCi/L	Gross Beta	4100			<input type="checkbox"/>	<input type="checkbox"/>
	20,000 pCi/L	1,000 pCi/L	Tritium	4102				<input type="checkbox"/>
		10 pCi/L	Strontium-89	4172				<input type="checkbox"/>
	8 pCi/L	2 pCi/L	Strontium-90	4174				<input type="checkbox"/>
		1 pCi/L	Iodine-131	4264				<input type="checkbox"/>
		10 pCi/L	Cesium-134	4270				<input type="checkbox"/>

Laboratory Information

Specimen Number: _____

ID Number _____ Name: _____

Comments: _____

Authorized Signature: _____

Date Public Water System Notified: _____

*****Asbestos Analysis*****

Analysis Method	MCL	Contaminant Name	Cont. Code	Analysis Run Date	Results	Exceeds MCL
<u>EPA 100.1</u>	7 MFL	Asbestos	1094	7/11/2007	<0.2 MFL	No <input type="checkbox"/>

Laboratory Information

Specimen Number: 2007-05701-1

Lab ID Number: AZ 0/6/3/3 Laboratory Name: FIBERQUANT ANALYTICAL SERVICES 5025 S. 33rd St., Phoenix, AZ 85040 1-800-743-2687

Comments: _____

Authorized Signature: Uwe Steinle

Date Public Water System Notified: _____

*****MICROBIOLOGICAL ANALYSIS*****

Analysis Method	MCL	Contaminant Name	Cont. Code	Test Start Date/Time	Analysis Run Date/Time	Result
	Present 1 or More Coliform	Total Coliform	3000			

ONLY REPORT FECAL RESULT IF TOTAL COLIFORM RESULT IS POSITIVE

Analysis Method	MCL	Contaminant Name	Cont. Code	Test Start Date/Time	Analysis Run Date/Time	Result
	Present 1 or More Coliform	Total Coliform	3013			

LABORATORY INFORMATION

>>>To be filled out by laboratory personnel<<<

Specimen Number _____
Lab ID Number _____ Name _____
Comments: _____
Authorized Signature: _____
Date Public Water System Notified: _____
Dwar9: Revised 2003

INSTRUCTIONS FOR USING THE ARIZONA DRINKING WATER SOURCE APPROVAL REPORTING FORM

Revised 2003

SYSTEM ID: This is a unique 5 digit Public Water System Identification (PWSID) number assigned to each public water system by ADEQ.

SYSTEM NAME: Should be in the legal name which the water system will be known as when the system is built. Always notify the Department in writing of any name or ownership change.

ADEQ PROJECT NUMBER: This is the number assigned by ADEQ when the project is first submitted for an "Approval to Construct".

NEW SYSTEM: If this is a new system and a system in number has not yet been assigned by ADEQ, then mark "YES", and be sure that the project number is filled in.

NEW POE: If this source represents a new point of entry (POE) for your system, then mark "YES" on the form. This will allow ADEQ to assign a new point of entry number and the appropriate monitoring year for this point of entry.

WELL ID NUMBER: The Department of Water Resources' registration number goes here. This number always begins with a 55-. If the new source does not constitute a new point of entry, fill in the existing point of entry number that this source is joining.

SURFACE WATER INTAKE ID NUMBER: This number must be assigned by ADEQ. If the new source does not constitute a new point of entry, fill in the existing point of entry number that this source is joining.

SAMPLE DATE: The date the specimen was collected in mm/dd/yy format.

SAMPLE TIME: The time the specimen was collected in hh:mm format (24 hr clock time).

OWNER/CONTACT PERSON NAME: The first and last name of the owner or owner's representative, (contact person) who should be contacted with sample results.

OWNER/CONTACT PHONE#: The daytime phone number of the owner's representative, (contact person) who should be contacted with sample results.

SAMPLE TYPE: The compliance reason for specimen collection. Only the relevant sample types for each contaminant group are provided on the ADEQ forms.

SPECIMEN NUMBER: A unique 15 character (max) alphanumeric code that identifies a particular sample used to test one contaminant or one category of contaminants. If reporting on different reporting forms, a different (unique) number is required for each contaminant group and for each report.

NOTE: These definitions are general in nature. For specific questions regarding your laboratory submittal, please contact the Arizona Department of Environmental Quality (ADEQ) Water Quality Compliance Section at 1-800-234-5677, ext. 4624, or 602-771-4624.

www.adeq.state.az.us

SHIPPER NAME:
ADDRESS:
CITY, STATE:
ZIP:

Sten & RETOZ

7/2/07

[illegible]

August 1, 2007

Analytical Report for Service Request No: K0705720

Nancy Turner
Turner Laboratories, Incorporated
2445 North Coyote Drive
Suite 104
Tucson, AZ 85745

RE: Drinking Water Analyses

Dear Nancy:

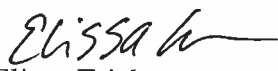
Enclosed are the results of the sample(s) submitted to our laboratory on July 03, 2007. For your reference, these analyses have been assigned our service request number K0705720.

All analyses were performed according to our laboratory's quality assurance program. Where applicable, the methods cited conform to the Methods Update Rule (effective 4/11/2007), which relates to the use of analytical methods for the drinking water and waste water programs. The test results meet requirements of the NELAC standards. Exceptions are noted in the case narrative report where applicable. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3275. You may also contact me via Email at EErickson@kelso.caslab.com.

Respectfully submitted,

Columbia Analytical Services, Inc.


Elissa Erickson
Project Chemist

EE/lb

Page 1 of 50

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
- i The MRL/MDL has been elevated due to a matrix interference.
- X See case narrative.

Metals Data Qualifiers

- # The control limit criteria is not applicable. See case narrative.
- B The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- E The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
- M The duplicate injection precision was not met.
- N The Matrix Spike sample recovery is not within control limits. See case narrative.
- S The reported value was determined by the Method of Standard Additions (MSA).
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
- W The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
- i The MRL/MDL has been elevated due to a matrix interference.
- X See case narrative.
- * The duplicate analysis not within control limits. See case narrative.
- + The correlation coefficient for the MSA is less than 0.995.

Organic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- A A tentatively identified compound, a suspected aldol-condensation product.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result.
- C The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
- D The reported result is from a dilution.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- N The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
- P The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides).
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
- i The MRL/MDL has been elevated due to a chromatographic interference.
- X See case narrative.

Additional Petroleum Hydrocarbon Specific Qualifiers

- F The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
- L The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
- H The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
- O The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
- Y The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
- Z The chromatographic fingerprint does not resemble a petroleum product.

Columbia Analytical Services, Inc.
Kelso, WA
State Certifications, Accreditations, and Licenses

Program	Number
Alaska DEC UST	UST-040
Arizona DHS	AZ0339
Arkansas - DEQ	88-0637
California DHS	2286
Colorado DPHE	-
Florida DOH	E87412
Hawaii DOH	-
Idaho DHW	-
Indiana DOH	C-WA-01
Louisiana DEQ	3016
Louisiana DHH	LA050010
Maine DHS	WA0035
Michigan DEQ	9949
Minnesota DOH	053-999-368
Montana DPHHS	CERT0047
Nevada DEP	WA35
New Jersey DEP	WA005
New Mexico ED	-
North Carolina DWQ	605
Oklahoma DEQ	9801
Oregon - DHS	WA200001
South Carolina DHEC	61002
Utah DOH	COLU
Washington DOE	C1203
Wisconsin DNR	998386840
Wyoming (EPA Region 8)	-

Case Narrative

COLUMBIA ANALYTICAL SERVICES, INC.

Client: Turner Laboratories, Inc.
Project: 0707014
Sample Matrix: Water

Service Request No.: K0705720
Date Received: 7/3/07

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier II data deliverables. When appropriate to the method, method blank results have been reported with each analytical test. Surrogate recoveries have been reported for all applicable organic analyses. Additional quality control analyses reported herein include: Matrix/Duplicate Matrix Spike (MS/DMS), and Laboratory Control Sample (LCS).

Sample Receipt

One water sample was received for analysis at Columbia Analytical Services Kelso on 7/3/07. The sample was received in good condition and consistent with the accompanying chain of custody form. The sample was stored in a refrigerator at 4°C upon receipt at the laboratory.

Pesticides and PCB's by EPA Method 508.1

Surrogate Exceptions:

The lower control criterion was exceeded for 4,4'-Dibromooctafluorobiphenyl in method blank KWG0707713-8. No target analytes were detected in the Method Blank. The problem indicates a potential negative bias to the Method Blank results. Since no target analytes were detected in the field samples the data was not affected. No further corrective action was possible.

The lower control criterion was exceeded for the following surrogate in LCS KWG0707713-7: 4,4'-Dibromooctafluorobiphenyl. The target analytes were acceptable in the LCS indicating the problem is isolated to the surrogate. Since no target analytes were detected in the field samples the data was not affected. No further corrective action was possible.

Herbicides by EPA Method 515.4

No anomalies associated with the analysis of these samples were observed.

Semivolatile Organic Compounds by EPA Method 525.2

Surrogate and Internal standard Exceptions:

The lower control criterion was exceeded for all surrogates and Internal standards in method blank KWG0707571-3. No target analytes were detected in the Method Blank. The problem indicates a potential negative bias to the Method Blank results. Target analytes detected in the field samples could contain a high bias. Since no target analytes were detected in the field samples the results are not affected. It appears that the Method Blank was errantly not spiked. No further corrective action was appropriate.

The control criteria were exceeded for Perylene-d12 in the Batch QC parent sample due to matrix interferences. A re-extraction and reanalysis was performed, but produced similar results. The results of the original analysis are reported. No further corrective action was required.

Approved by Elissa G

Date 8-9-07

00006

Matrix Spike Recovery Exceptions:

The matrix spike recovery of Benzo(a)pyrene for sample Batch QCMS was outside control criteria. Recovery in the Laboratory Control Sample (LCS) was acceptable, which indicates the analytical batch was in control. The matrix spike outlier suggests a potential low bias in this matrix. No further corrective action was appropriate.

No other anomalies associated with the analysis of these samples were observed.

Carbamates and Carbamoyloximes by EPA Method 531.1

No anomalies associated with the analysis of these samples were observed.

Glyphosate by EPA Method 547

No anomalies associated with the analysis of these samples were observed.

Endothall by EPA Method 548.1

Matrix Spike Recovery Exceptions:

The matrix spike recovery of Endothall for sample 0707014-011-OMS was outside control criteria. Recovery in the Laboratory Control Sample (LCS) was acceptable, which indicates the analytical batch was in control. The matrix spike outlier suggests a potential low bias in this matrix. No further corrective action was appropriate.

No other anomalies associated with the analysis of these samples were observed.

Diquat/Paraquat by EPA Method 549.2

No anomalies associated with the analysis of these samples were observed.

Approved by Elissa A

Date 8-9-07

00007

**Chain of Custody
Documentation**

00008

Turner Laboratories, Inc.

2445 North Coyote Drive

Suite #104

Tucson, AZ 85745

(520) 882-5880

CHAIN-OF-CUSTODY RECORD

Page 1 of 1
600000

Subcontractor:

Columbia Analytical Services
1317 S. 13th Ave.

TEL: (360) 577-7222
FAX: (360) 425-9096

Kelso, WA 98626

Acct #: 270079

02-Jul-07

W07D642D

Sample ID	Matrix	Collection Date	Bottle Type	Requested Tests				
				E508	E515.1	E525.2	E531.1	E547
0707014-01I	Drinking Water	7/1/07 5:00:00 AM	1LAMGU	1				
0707014-01J	Drinking Water	7/1/07 5:00:00 AM	515.1		1			
0707014-01K	Drinking Water	7/1/07 5:00:00 AM	531.1					
0707014-01L	Drinking Water	7/1/07 5:00:00 AM	547					1
0707014-01M	Drinking Water	7/1/07 5:00:00 AM	548					
0707014-01N	Drinking Water	7/1/07 5:00:00 AM	549					1
0707014-01O	Drinking Water	7/1/07 5:00:00 AM	525.2			1		

Comments:

Please analyze for SOC's and include new well source forms.

Date/Time

Date/Time

Relinquished by:

Shan Bauer

7/1/07 1500

Received by:

S

7/3/07 10:30

Relinquished by:

Received by:

**Columbia Analytical Services, Inc.
Cooler Receipt and Preservation Form**

PC FE

Client / Project: Turner Labs Service Request K07 05720

Received: 7/3/07 Opened: 7/3/07 By: UA

Samples were received via? US Mail Fed Ex UPS DHL GH GS PDX Courier Hand Delivered

Samples were received in: (circle) Cooler Box Envelope Other NA

Were custody seals on coolers? NA Y N If yes, how many and where? _____

If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Is shipper's air-bill filed? If not, record air-bill number: 71612969046 NA Y N

Temperature of cooler(s) upon receipt (°C): -0.3

Temperature Blank (°C): _____

If applicable, list Chain of Custody Numbers: _____

Were custody papers properly filled out (ink, signed, etc.)? NA Y N

Packing material used. Inserts Bubble Wrap Gel Packs Wet Ice Sleeves Other _____

Did all bottles arrive in good condition (unbroken)? Indicate in the table below. NA Y N

Were all sample labels complete (i.e. analysis, preservation, etc.)? Y N

Did all sample labels and tags agree with custody papers? Indicate in the table below. Y N

Were the correct types of bottles used for the tests indicated? NA Y N

Were all of the preserved bottles received at the lab with the appropriate pH? Indicate in the table below. NA Y N

Were VOA vials and 1631 Mercury bottles checked for absence of air bubbles? Indicate in the table below. NA Y N

Are CWA Microbiology samples received with >1/2 the 24hr. hold time remaining from collection? NA Y N

Was C12/Res negative? NA Y N

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Sample ID	Bottle Count	Bottle Type	Out of Temp	Head-space	Broken	pH	Reagent	Volume added	Reagent Lot Number	Initials

Additional Notes, Discrepancies, & Resolutions: _____

STATE FORMS

00011

Arizona Department Of Environmental Quality
Drinking Water Source Approval Form
Samples To Be Taken At Source Only

System ID#

NEW
System Name

(24 hr. Clock)

Sample Date

Sample Time

55- 209607
Well ID Number

ADEQ Project Number

New System YES ☒ NO ☐

Surface Water Intake ID Number

New POE YES ☐ NO ☐

()
Owner/Contact Person Phone Number

Jim KUNISCH
Owner/Contact Person Name

Sample Type
☐ Compliance

Sample Collection Point/ID
Point Of Entry#

This form is to be filled out completely, and all pages are to be submitted together. If more than one laboratory participated in the analyses, please attach a copy of the original laboratory report, signed by the performing laboratory, to the back of this form.

All Results Shall Be Reported In Milligrams Per Liter (mg/L) Unless Otherwise Specified.

Please note:

The Arsenic MCL is currently .05 mg/L. However, on Jan. 23, 2006m the Arsenic MCL will be .01 mg/L.

There currently is no MCL for Uranium. However, on Dec. 8, 2003 the Uranium MCL will be .03 mg/L.

Please Mail This Completed Form To:

Arizona Department Of Environmental Quality
Technical Review Unit
Drinking Water Section (5415b-2)
1110 W. Washington Street
Phoenix, AZ 85007

00012

*****Inorganic Chemical Analysis*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analysis Run Date	Result	Exceeds MCL	Exceeds Reporting Limit
200.8	0.05	0.05	Arsenic	1005			<input type="checkbox"/>	<input type="checkbox"/>
200.8	2	2	Barium	1010			<input type="checkbox"/>	<input type="checkbox"/>
200.8	0.005	0.005	Cadmium	1015			<input type="checkbox"/>	<input type="checkbox"/>
200.8	0.1	0.1	Chromium	1020			<input type="checkbox"/>	<input type="checkbox"/>
200.8	1.3*	0.05	Copper	1022			<input type="checkbox"/>	<input type="checkbox"/>
300.0	4.0	2.0	Fluoride	1025			<input type="checkbox"/>	<input type="checkbox"/>
200.8	0.015*	0.0025	Lead	1030			<input type="checkbox"/>	<input type="checkbox"/>
245.1	0.002	0.002	Mercury	1035			<input type="checkbox"/>	<input type="checkbox"/>
300.0	10	5	Nitrate (as N)	1040			<input type="checkbox"/>	<input type="checkbox"/>
300.0	1	0.5	Nitrite	1041			<input type="checkbox"/>	<input type="checkbox"/>
200.8	0.05	0.05	Selenium	1045			<input type="checkbox"/>	<input type="checkbox"/>
200.8	0.006	0.006	Antimony	1074			<input type="checkbox"/>	<input type="checkbox"/>
200.8	0.004	0.004	Beryllium	1075			<input type="checkbox"/>	<input type="checkbox"/>
335.4	0.2	0.2	Cyanide (as free)	1024			<input type="checkbox"/>	<input type="checkbox"/>
200.8	0.1	0.1	Nickel	1036			<input type="checkbox"/>	<input type="checkbox"/>
200.8	0.002	0.002	Thallium	1085			<input type="checkbox"/>	<input type="checkbox"/>

*Action Level

Laboratory Information

Specimen Number: _____

Lab ID Number: AZ0339

Name: Columbia Analytical Services

Comments: _____

Authorized Signature: _____

*****Physical Analysis*****

Analysis Method	Contaminant Name	Cont. Code	Analysis Run Date	Result
300	Sulfate	1055		
200.7	Sodium	1052		
	PH	1925		
SM2320B	Alkalinity	1927		
SM2340B/200.7	Hardness/Calcium	1918		
	Langelier Index	1997		
	Temperature (°C)	1996		
SM2540C	Total Dissolved Solids-TDS	1930		

Laboratory Information

Specimen Number: K0705720-001

Lab ID Number: AZ0339

Name: Columbia Analytical Services

Comments: 0707014-01

Authorized Signature: _____

*****Synthetic Organic Chemical Analysis*****

Analysis Method	MCL	Reporting Limit	Contaminant	Cont.	Analysis	Result	Exceeds MCL	Exceeds Reporting Limit
515.4	0.07	0.0001	2,4-D	2105	7/10/07	<0.0001	<input type="checkbox"/>	<input type="checkbox"/>
515.4	0.05	0.0002	2,4,5-TP (Silvex)	2110	7/10/07	<0.0002	<input type="checkbox"/>	<input type="checkbox"/>
525.2	0.002	0.0002	Alachlor	2051	7/11/07	<0.0002	<input type="checkbox"/>	<input type="checkbox"/>
508.1	0.003	0.001	Toxaphene	2020	7/18/07	<0.001	<input type="checkbox"/>	<input type="checkbox"/>
525.2	0.003	0.0001	Atrazine	2050	7/11/07	<0.0001	<input type="checkbox"/>	<input type="checkbox"/>
531.1	0.04	0.0009	Carbofuran	2046	7/7/07	<0.0009	<input type="checkbox"/>	<input type="checkbox"/>
515.4	0.001	0.00004	Pentachlorophenol	2326	7/10/07	<0.00004	<input type="checkbox"/>	<input type="checkbox"/>
508.1	0.002	0.0002	Chlordane	2959	7/18/07	<0.0002	<input type="checkbox"/>	<input type="checkbox"/>
			Dibromochloropropane				<input type="checkbox"/>	<input type="checkbox"/>
504.1	0.0002	0.00002	(DBCP)	2931			<input type="checkbox"/>	<input type="checkbox"/>
			Ethylene Dibromide				<input type="checkbox"/>	<input type="checkbox"/>
504.1	0.00005	0.00001	(EDB)	2946			<input type="checkbox"/>	<input type="checkbox"/>
508.1	0.0004	0.00004	Heptachlor	2065	7/18/07	<0.00004	<input type="checkbox"/>	<input type="checkbox"/>
508.1	0.0002	0.00002	Heptachlor Epoxide	2067	7/18/07	<0.00002	<input type="checkbox"/>	<input type="checkbox"/>
508.1	0.0002	0.00002	Lindane	2010	7/18/07	<0.00002	<input type="checkbox"/>	<input type="checkbox"/>
508.1	0.04	0.0001	Methoxychlor	2015	7/18/07	<0.0001	<input type="checkbox"/>	<input type="checkbox"/>
See Screen test			PCB (Polychlorinated Biphenyls)	2383			<input type="checkbox"/>	<input type="checkbox"/>
525.2	0.0002	0.00002	Benzo(a)Pyrene	2306	7/11/07	<0.00002	<input type="checkbox"/>	<input type="checkbox"/>
515.4	0.2	0.001	Dalapon	2031	7/10/07	<0.001	<input type="checkbox"/>	<input type="checkbox"/>
							<input type="checkbox"/>	<input type="checkbox"/>
525.2	0.006	0.0006	Di(2-ethylhexyl)phthalate	2039	7/11/07	<0.0006	<input type="checkbox"/>	<input type="checkbox"/>
525.2	0.4	0.0006	Di(2-ethylhexyl)adipate	2035	7/11/07	<0.0006	<input type="checkbox"/>	<input type="checkbox"/>
515.4	0.007	0.0002	Dinoseb	2041	7/10/07	<0.0002	<input type="checkbox"/>	<input type="checkbox"/>
1613B	3x10 ⁻³	5x10 ⁻³	2,3,7,8-TCDD (Dioxin)	2063			<input type="checkbox"/>	<input type="checkbox"/>
549.2	0.02	0.0004	Diquat	2032	7/18/07	<0.0004	<input type="checkbox"/>	<input type="checkbox"/>
548.1	0.1	0.009	Endothall	2033	7/10/07	<0.009	<input type="checkbox"/>	<input type="checkbox"/>
508.1	0.002	0.00001	Endrin	2005	7/18/07	<0.00001	<input type="checkbox"/>	<input type="checkbox"/>
547	0.7	0.006	Glyphosate	2034	7/13/07	<0.006	<input type="checkbox"/>	<input type="checkbox"/>
525.2	0.001	0.0001	Hexachlorobenzene	2274	7/11/07	<0.0001	<input type="checkbox"/>	<input type="checkbox"/>
			Hexachlorocyclopenta-				<input type="checkbox"/>	<input type="checkbox"/>
525.2	0.05	0.0001	diene	2042	7/11/07	<0.0001	<input type="checkbox"/>	<input type="checkbox"/>
531.1	0.2	0.002	Oxamyl	2036	7/7/07	<0.002	<input type="checkbox"/>	<input type="checkbox"/>
515.4	0.5	0.0001	Picloram	2040	7/10/07	<0.0001	<input type="checkbox"/>	<input type="checkbox"/>
525.2	0.004	0.00007	Simazine	2037	7/11/07	<0.00007	<input type="checkbox"/>	<input type="checkbox"/>

*Aroclor results may be submitted in lieu of PCB

Laboratory Information

Specimen Number K0705720-001

Lab ID Number: AZ0339 Name: Columbia Analytical Services

Comments: 0707014-01

Authorized Signature: 

Analysis	Reporting	Contaminant	Cont.	Analysis	Result	Exceeds
508.1	0.00008	Aroclor 1016	2388	7/18/07	<0.00008	<input type="checkbox"/>
508.1	0.02	Aroclor 1221	2390	7/18/07	<0.02	<input type="checkbox"/>
508.1	0.0005	Aroclor 1232	2392	7/18/07	<0.0005	<input type="checkbox"/>
508.1	0.0003	Aroclor 1242	2394	7/18/07	<0.0003	<input type="checkbox"/>
508.1	0.0001	Aroclor 1248	2396	7/18/07	<0.0001	<input type="checkbox"/>
508.1	0.0001	Aroclor 1254	2398	7/18/07	<0.0001	<input type="checkbox"/>
508.1	0.0002	Aroclor 1260	2400	7/18/07	<0.0002	<input type="checkbox"/>

Laboratory Information

Specimen Number K0705720-001

Lab ID Number: AZ0339 Name: Columbia Analytical Services

Comments: 0707014-01

Authorized Signature: *ELSSA*

Volatile Organic Chemical Analysis

Analysis Method	MCL	Reporting Limit	Contaminant	Cont. Code	Analysis Run Date	Result	Exceeds MCL	Exceeds Reporting Limit
524.2	0.007	0.0005	1,1-Dichloroethene	2977			<input type="checkbox"/>	<input type="checkbox"/>
524.2	0.2	0.0005	1,1,1-Trichloroethane	2981			<input type="checkbox"/>	<input type="checkbox"/>
524.2	0.005	0.0005	1,1,2-Trichloroethane	2985			<input type="checkbox"/>	<input type="checkbox"/>
524.2	0.005	0.0005	1,2-Dichloroethane	2980			<input type="checkbox"/>	<input type="checkbox"/>
524.2	0.005	0.0005	1,2-Dichloropropane	2983			<input type="checkbox"/>	<input type="checkbox"/>
524.2	0.005	0.0005	Benzene	2990			<input type="checkbox"/>	<input type="checkbox"/>
524.2	0.005	0.0005	Carbon tetrachloride	2982			<input type="checkbox"/>	<input type="checkbox"/>
524.2	0.07	0.0005	cis-1,2 Dichloroethylene	2380			<input type="checkbox"/>	<input type="checkbox"/>
524.2	0.7	0.0005	Ethylbenzene	2992			<input type="checkbox"/>	<input type="checkbox"/>
524.2	0.1	0.0005	(mono)Chlorobenzene	2989			<input type="checkbox"/>	<input type="checkbox"/>
524.2	0.6	0.0005	o-Dichlorobenzene	2968			<input type="checkbox"/>	<input type="checkbox"/>
524.2	0.075	0.0005	para-Dichlorobenzene	2969			<input type="checkbox"/>	<input type="checkbox"/>
524.2	0.1	0.0005	Styrene	2996			<input type="checkbox"/>	<input type="checkbox"/>
524.2	0.005	0.0005	Tetrachloroethylene	2987			<input type="checkbox"/>	<input type="checkbox"/>
524.2	1	0.0005	Toluene	2991			<input type="checkbox"/>	<input type="checkbox"/>
			Trans-1,2-				<input type="checkbox"/>	<input type="checkbox"/>
524.2	0.1	0.0005	Dichloroethylene	2979			<input type="checkbox"/>	<input type="checkbox"/>
524.2	0.005	0.0005	Trichloroethene	2984			<input type="checkbox"/>	<input type="checkbox"/>
524.2	0.002	0.0005	Vinyl Chloride	2976			<input type="checkbox"/>	<input type="checkbox"/>
524.2	10	0.0015	Xylenes, Total	2955			<input type="checkbox"/>	<input type="checkbox"/>
							<input type="checkbox"/>	<input type="checkbox"/>
524.2	0.07	0.0005	1,2,4-Trichlorobenzene	2378			<input type="checkbox"/>	<input type="checkbox"/>
524.2	0.005	0.0005	Dichloromethane	2964			<input type="checkbox"/>	<input type="checkbox"/>

Laboratory Information

Specimen Number:

Lab ID Number: AZ0339 Name: Columbia Analytical Services

Comments:

Authorized Signature:

Radiochemical Analysis

Analysis Method	MCL	Reporting Limit	Contaminant	Cont. Code	Analysis Run Date	Result	Exceeds MCL	Exceeds Reporting Limit
	15 pCi/L		Adjusted Gross Alpha	4000			<input type="checkbox"/>	
		3 pCi/L	Gross Alpha	4002				<input type="checkbox"/>
	30 ppb	(reserved)	Combined Uranium	4006			<input type="checkbox"/>	<input type="checkbox"/>
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium	4010			<input type="checkbox"/>	<input type="checkbox"/>
		1 pCi/L	Radium 226	4020				<input type="checkbox"/>
		1 pCi/L	Radium 228	4030				<input type="checkbox"/>
	4 mrem	3 pCi/L	Gross Beta	4100			<input type="checkbox"/>	<input type="checkbox"/>
	20000 pCi/L						<input type="checkbox"/>	<input type="checkbox"/>
		1,000 pCi/L	Tritium	4102				
		10 pCi/L	Strontium-89	4172				<input type="checkbox"/>
	8 pCi/L	2 pCi/L	Strontium-90	4174			<input type="checkbox"/>	<input type="checkbox"/>
		1 pCi/L	Iodine-131	4264			<input type="checkbox"/>	<input type="checkbox"/>
		10 pCi/L	Cesium-134	4270				<input type="checkbox"/>

Laboratory Information

Specimen Number: _____
 Lab ID Number: _____ Name: _____
 Comments: _____
 Authorized Signature: _____

Asbestos Analysis

Analysis Method	MCL	Contaminant Name	Cont. Code	Analysis Run	Result	Exceeds MCL
	7 MFL	Asbestos	1094			<input type="checkbox"/>

Laboratory Information

Specimen Number: _____
 Lab ID Number: _____ Name: _____
 Comments: _____
 Authorized Signature: _____

Microbiological Analysis

Analysis Method	MCL	Contaminant Name	Cont. Code	Test Start Date/ Time	Analysis Run Date/ Time	Result
	Present 1 or more Coliform	Total Coliform	3000			

ONLY REPORT FECAL RESULT IF TOTAL COLIFORM IS POSITIVE

Analysis Method	MCL	Contaminant Name	Cont. Code	Test Start Date/ Time	Analysis Run Date/ Time	Result
	Present 1 or more Coliform	Fecal Coliform	3013			

Lab ID Number: _____ Name: _____
 Comments: _____
 Authorized Signature: _____

**Pesticides/PCB's by
EPA Method 508.1**

00017

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Turner Laboratories, Incorporated
Project: Drinking Water Analyses
Sample Matrix: Drinking water

Service Request: K0705720
Date Collected: 07/01/2007
Date Received: 07/03/2007

Pesticides/PCBs by EPA method 508.1

Sample Name: 0707014-01I-O
Lab Code: K0705720-001
Extraction Method: METHOD
Analysis Method: 508.1

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Arizona Qualifier
gamma-BHC (Lindane)	ND	U	0.0098	1	07/10/07	07/18/07	
Heptachlor	ND	U	0.0098	1	07/10/07	07/18/07	
Heptachlor Epoxide	ND	U	0.0098	1	07/10/07	07/18/07	
Endrin	ND	U	0.0098	1	07/10/07	07/18/07	
Methoxychlor	ND	U	0.0098	1	07/10/07	07/18/07	
Toxaphene	ND	U	0.098	1	07/10/07	07/18/07	
Chlordane	ND	U	0.098	1	07/10/07	07/18/07	
Aroclor 1016	ND	U	0.049	1	07/10/07	07/18/07	
Aroclor 1221	ND	U	0.098	1	07/10/07	07/18/07	
Aroclor 1232	ND	U	0.098	1	07/10/07	07/18/07	
Aroclor 1242	ND	U	0.098	1	07/10/07	07/18/07	
Aroclor 1248	ND	U	0.098	1	07/10/07	07/18/07	
Aroclor 1254	ND	U	0.098	1	07/10/07	07/18/07	
Aroclor 1260	ND	U	0.098	1	07/10/07	07/18/07	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Arizona Qualifier
4,4'-Dibromooctafluorobiphenyl	79	70-130	07/18/07	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Turner Laboratories, Incorporated
 Project: Drinking Water Analyses
 Sample Matrix: Drinking water

Service Request: K0705720
 Date Collected: NA
 Date Received: NA

Pesticides/PCBs by EPA method 508.1

Sample Name: Method Blank
 Lab Code: KWG0707713-8
 Extraction Method: METHOD
 Analysis Method: 508.1

Units: ug/L
 Basis: NA
 Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Arizona Qualifier
gamma-BHC (Lindane)	ND	U	0.010	1	07/10/07	07/17/07	
Heptachlor	ND	U	0.010	1	07/10/07	07/17/07	
Heptachlor Epoxide	ND	U	0.010	1	07/10/07	07/17/07	
Endrin	ND	U	0.010	1	07/10/07	07/17/07	
Methoxychlor	ND	U	0.010	1	07/10/07	07/17/07	
Toxaphene	ND	U	0.10	1	07/10/07	07/17/07	
Chlordane	ND	U	0.10	1	07/10/07	07/17/07	
Aroclor 1016	ND	U	0.050	1	07/10/07	07/17/07	
Aroclor 1221	ND	U	0.10	1	07/10/07	07/17/07	
Aroclor 1232	ND	U	0.10	1	07/10/07	07/17/07	
Aroclor 1242	ND	U	0.10	1	07/10/07	07/17/07	
Aroclor 1248	ND	U	0.10	1	07/10/07	07/17/07	
Aroclor 1254	ND	U	0.10	1	07/10/07	07/17/07	
Aroclor 1260	ND	U	0.10	1	07/10/07	07/17/07	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Arizona Qualifier
4,4'-Dibromooctafluorobiphenyl	64	70-130	07/17/07	

Comments:

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COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Turner Laboratories, Incorporated
Project: Drinking Water Analyses
Sample Matrix: Drinking water

Service Request: K0705720

Surrogate Recovery Summary
Pesticides/PCBs by EPA method 508.1

Extraction Method: METHOD
Analysis Method: 508.1

Units: ug/L
Level: Low

<u>Sample Name</u>	<u>Lab Code</u>	<u>Sur1</u>
0707014-01I-O	K0705720-001	79
Method Blank	KWG0707713-8	64
0707014-01I-OMS	KWG0707713-6	83
Lab Control Sample	KWG0707713-7	68
Lab Control Sample	KWG0707713-9	73

Surrogate Recovery Control Limits (%)

Sur1 = 4,4'-Dibromooctafluorobiphenyl 70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Printed: 07/31/2007 14:11:47

Form 2A - Organic

SuperSet Reference: RR74802

00020

Page 1 of 1

Client: Turner Laboratories, Incorporated
Project: Drinking Water Analyses
Sample Matrix: Drinking water

Service Request: K0705720
Date Extracted: 07/10/2007
Date Analyzed: 07/18/2007 - 0

Matrix Spike Summary
Pesticides/PCBs by EPA method 508.1

Sample Name: 0707014-01I-O
Lab Code: K0705720-001
Extraction Method: METHOD
Analysis Method: 508.1

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: KWG0707713

0707014-01I-OMS

KWG0707713-6

Matrix Spike

Analyte Name	Sample Result	Matrix Spike			%Rec Limits
		Result	Expected	%Rec	
gamma-BHC (Lindane)	ND	0.0955	0.0971	98	65-135
Heptachlor	ND	0.0989	0.0971	102	65-135
Heptachlor Epoxide	ND	0.0829	0.0971	85	65-135
Endrin	ND	0.0978	0.0971	101	65-135
Methoxychlor	ND	0.120	0.0971	124	65-135

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Turner Laboratories, Incorporated
Project: Drinking Water Analyses
Sample Matrix: Drinking water

Service Request: K0705720
Date Extracted: 07/10/2007
Date Analyzed: 07/17/2007

Lab Control Spike Summary
Pesticides/PCBs by EPA method 508.1

Extraction Method: METHOD
Analysis Method: 508.1

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: KWG0707713

Analyte Name	Lab Control Sample KWG0707713-7 Lab Control Spike			%Rec Limits
	Result	Expected	%Rec	
gamma-BHC (Lindane)	0.0917	0.100	92	70-130
Heptachlor	0.0844	0.100	84	70-130
Heptachlor Epoxide	0.0824	0.100	82	70-130
Endrin	0.0926	0.100	93	70-130
Methoxychlor	0.115	0.100	115	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

00022

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Turner Laboratories, Incorporated
Project: Drinking Water Analyses
Sample Matrix: Drinking water

Service Request: K0705720
Date Extracted: 07/10/2007
Date Analyzed: 07/17/2007

Lab Control Spike Summary
Pesticides/PCBs by EPA method 508.1

Extraction Method: METHOD
Analysis Method: 508.1

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: KWG0707713

Lab Control Sample
KWG0707713-9
Lab Control Spike

Analyte Name	Result	Expected	%Rec	%Rec Limits
Aroclor 1254	0.425	0.500	85	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

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Printed: 07/31/2007 14:11:59

Form 3C - Organic

Page 1 of 1

u:\Steady\Crystal.rpt\Frm3C.S.rpt

SuperSet Reference: RR74802

Chlorinated Acids
EPA Method 515.4

C0024

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Turner Laboratories, Incorporated
Project: Drinking Water Analyses
Sample Matrix: Drinking water

Service Request: K0705720
Date Collected: 07/01/2007
Date Received: 07/03/2007

Chlorinated Acids by EPA Method 515.4

Sample Name: 0707014-01I-O
Lab Code: K0705720-001
Extraction Method: METHOD
Analysis Method: 515.4

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Arizona Qualifier
Dalapon	ND	U	0.99	1	07/09/07	07/10/07	
2,4-D	ND	U	0.099	1	07/09/07	07/10/07	
Pentachlorophenol	ND	U	0.040	1	07/09/07	07/10/07	
2,4,5-TP (Silvex)	ND	U	0.050	1	07/09/07	07/10/07	
Dinoseb	ND	U	0.20	1	07/09/07	07/10/07	
Picloram	ND	U	0.099	1	07/09/07	07/10/07	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Arizona Qualifier
2,4-Dichlorophenylacetic Acid	98	70-130	07/10/07	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Turner Laboratories, Incorporated
Project: Drinking Water Analyses
Sample Matrix: Drinking water

Service Request: K0705720
Date Collected: NA
Date Received: NA

Chlorinated Acids by EPA Method 515.4

Sample Name: Method Blank
Lab Code: KWG0707572-1

Units: ug/L

Basis: NA

Extraction Method: METHOD

Level: Low

Analysis Method: 515.4

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Arizona Qualifier
2,4-D	0.11		0.10	1	07/09/07	07/10/07	
2,4,5-TP (Silvex)	ND	U	0.050	1	07/09/07	07/10/07	
Dinoseb	ND	U	0.20	1	07/09/07	07/10/07	
Dalapon	ND	U	1.0	1	07/09/07	07/10/07	
Pentachlorophenol	ND	U	0.040	1	07/09/07	07/10/07	
Picloram	0.12		0.10	1	07/09/07	07/10/07	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Arizona Qualifier
2,4-Dichlorophenylacetic Acid	106	70-130	07/10/07	

Comments:

00026

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Turner Laboratories, Incorporated
Project: Drinking Water Analyses
Sample Matrix: Drinking water

Service Request: K0705720

Surrogate Recovery Summary
Chlorinated Acids by EPA Method 515.4

Extraction Method: METHOD
Analysis Method: 515.4

Units: ug/L
Level: Low

<u>Sample Name</u>	<u>Lab Code</u>	<u>Sur1</u>
0707014-01I-O	K0705720-001	98
Method Blank	KWG0707572-1	106
Batch QC	K0705812-001	111
Batch QCMS	KWG0707572-3	124
Batch QCDMS	KWG0707572-4	127
Lab Control Sample	KWG0707572-2	117

Surrogate Recovery Control Limits (%)

Sur1 = 2,4-Dichlorophenylacetic Acid 70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Turner Laboratories, Incorporated
Project: Drinking Water Analyses
Sample Matrix: Drinking water

Service Request: K0705720
Date Extracted: 07/09/2007
Date Analyzed: 07/10/2007

Matrix Spike/Duplicate Matrix Spike Summary
Chlorinated Acids by EPA Method 515.4

Sample Name: Batch QC
Lab Code: K0705812-001

Units: ug/L
Basis: NA

Extraction Method: METHOD
Analysis Method: 515.4

Level: Low
Extraction Lot: KWG0707572

Analyte Name	Sample Result	Batch QCMS KWG0707572-3 Matrix Spike			Batch QCDS KWG0707572-4 Duplicate Matrix Spike			%Rec Limits	RPD	RPD Limit
		Result	Expected	%Rec	Result	Expected	%Rec			
Dalapon	ND	5.87	4.96	118	5.07	4.95	102	70-130	15	30
Dinoseb	ND	4.94	4.96	100	5.07	4.95	102	70-130	3	30
Picloram	ND	4.19	4.96	84	4.37	4.95	88	70-130	4	30
2,4-D	ND	4.14	4.96	83	4.25	4.95	86	70-130	3	30
Pentachlorophenol	ND	0.495	0.496	100	0.495	0.495	100	70-130	0	30
2,4,5-TP (Silvex)	ND	1.14	1.24	92	1.16	1.24	93	70-130	1	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

00028

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Turner Laboratories, Incorporated
Project: Drinking Water Analyses
Sample Matrix: Drinking water

Service Request: K0705720
Date Extracted: 07/09/2007
Date Analyzed: 07/10/2007

Lab Control Spike Summary
Chlorinated Acids by EPA Method 515.4

Extraction Method: METHOD
Analysis Method: 515.4

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: KWG0707572

Analyte Name	Lab Control Sample KWG0707572-2 Lab Control Spike			%Rec Limits
	Result	Expected	%Rec	
Picloram	4.56	5.00	91	70-130
Dalapon	5.49	5.00	110	70-130
2,4-D	4.22	5.00	84	70-130
Pentachlorophenol	0.495	0.500	99	70-130
2,4,5-TP (Silvex)	1.15	1.25	92	70-130
Dinoseb	4.80	5.00	96	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Semivolatile Organics
EPA Method 525.2

00030

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Turner Laboratories, Incorporated
Project: Drinking Water Analyses
Sample Matrix: Drinking water

Service Request: K0705720
Date Collected: 07/01/2007
Date Received: 07/03/2007

Semivolatile Organics by EPA method 525.2

Sample Name: 0707014-011-O
Lab Code: K0705720-001
Extraction Method: METHOD
Analysis Method: 525.2

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Arizona Qualifier
Hexachlorocyclopentadiene	ND	U	0.098	1	07/10/07	07/11/07	
Hexachlorobenzene	ND	U	0.049	1	07/10/07	07/11/07	
Simazine	ND	U	0.049	1	07/10/07	07/11/07	
Atrazine	ND	U	0.098	1	07/10/07	07/11/07	
Alachlor	ND	U	0.070	1	07/10/07	07/11/07	
Bis(2-ethylhexyl) Adipate	ND	U	0.49	1	07/10/07	07/11/07	
Bis(2-ethylhexyl) Phthalate	ND	U	0.49	1	07/10/07	07/11/07	
Benzo(a)pyrene	ND	U	0.020	1	07/10/07	07/11/07	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Arizona Qualifier
1,3-Dimethyl-2-nitrobenzene	100	70-130	07/11/07	
Triphenyl Phosphate	102	70-130	07/11/07	
Perylene-d12	82	70-130	07/11/07	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Turner Laboratories, Incorporated
Project: Drinking Water Analyses
Sample Matrix: Drinking water

Service Request: K0705720
Date Collected: NA
Date Received: NA

Semivolatile Organics by EPA method 525.2

Sample Name: Method Blank
Lab Code: KWG0707571-3
Extraction Method: METHOD
Analysis Method: 525.2

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Arizona Qualifier
Hexachlorocyclopentadiene	ND	U	0.10	1	07/10/07	07/11/07	E6
Hexachlorobenzene	ND	U	0.050	1	07/10/07	07/11/07	E6
Simazine	ND	U	0.050	1	07/10/07	07/11/07	E6
Atrazine	ND	U	0.10	1	07/10/07	07/11/07	E6
Alachlor	ND	U	0.072	1	07/10/07	07/11/07	E6
Bis(2-ethylhexyl) Adipate	ND	U	0.50	1	07/10/07	07/11/07	E6
Bis(2-ethylhexyl) Phthalate	ND	U	0.50	1	07/10/07	07/11/07	E6
Benzo(a)pyrene	ND	U	0.020	1	07/10/07	07/11/07	E6

Surrogate Name	%Rec	Control Limits	Date Analyzed	Arizona Qualifier
1,3-Dimethyl-2-nitrobenzene	0	70-130	07/11/07	E6S7
Triphenyl Phosphate	0	70-130	07/11/07	E6S7
Perylene-d12	0	70-130	07/11/07	E6S7

Comments:

00032

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Turner Laboratories, Incorporated
Project: Drinking Water Analyses
Sample Matrix: Drinking water

Service Request: K0705720

Surrogate Recovery Summary
Semivolatile Organics by EPA method 525.2

Extraction Method: METHOD
Analysis Method: 525.2

Units: PERCENT
Level: Low

<u>Sample Name</u>	<u>Lab Code</u>	<u>Sur1</u>	<u>Sur2</u>	<u>Sur3</u>
0707014-011-O	K0705720-001	100	102	82
Method Blank	KWG0707571-3	0 S7	0 S7	0 S7
Batch QC	K0705820-005	108	114	67 S7
Batch QCMS	KWG0707571-1	113	98	75
Lab Control Sample	KWG0707571-2	97	102	82

Surrogate Recovery Control Limits (%)

Sur1 = 1,3-Dimethyl-2-nitrobenzene	70-130
Sur2 = Triphenyl Phosphate	70-130
Sur3 = Perylene-d12	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

00033

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Turner Laboratories, Incorporated
Project: Drinking Water Analyses
Sample Matrix: Drinking water

Service Request: K0705720
Date Extracted: 07/10/2007
Date Analyzed: 07/11/2007

Matrix Spike Summary
Semivolatile Organics by EPA method 525.2

Sample Name: Batch QC
Lab Code: K0705820-005
Extraction Method: METHOD
Analysis Method: 525.2

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: KWG0707571

Analyte Name	Sample Result	Batch QCMS KWG0707571-1 Matrix Spike			%Rec Limits
		Result	Expected	%Rec	
Hexachlorocyclopentadiene	ND	1.03	1.03	100	70-130
Hexachlorobenzene	ND	0.840	1.03	81	70-130
Simazine	ND	0.952	1.03	92	70-130
Atrazine	ND	0.970	1.03	94	70-130
Alachlor	ND	0.885	1.03	86	70-130
Bis(2-ethylhexyl) Adipate	ND	0.921	1.03	89	70-130
Bis(2-ethylhexyl) Phthalate	ND	1.15	1.03	112	70-130
Benzo(a)pyrene	ND	0.0296	1.03	3 M2	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

00034

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Turner Laboratories, Incorporated
Project: Drinking Water Analyses
Sample Matrix: Drinking water

Service Request: K0705720
Date Extracted: 07/10/2007
Date Analyzed: 07/11/2007

Lab Control Spike Summary
Semivolatile Organics by EPA method 525.2

Extraction Method: METHOD
Analysis Method: 525.2

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: KWG0707571

Lab Control Sample
KWG0707571-2
Lab Control Spike

Analyte Name	Result	Expected	%Rec	%Rec Limits
Hexachlorocyclopentadiene	0.906	1.00	91	70-130
Hexachlorobenzene	0.843	1.00	84	70-130
Simazine	0.949	1.00	95	70-130
Atrazine	0.971	1.00	97	70-130
Alachlor	0.878	1.00	88	70-130
Bis(2-ethylhexyl) Adipate	0.854	1.00	85	70-130
Bis(2-ethylhexyl) Phthalate	0.926	1.00	93	70-130
Benzo(a)pyrene	0.733	1.00	73	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

00035

**Carbamates and Carbamoyloximes
EPA Method 531.1**

00036

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Turner Laboratories, Incorporated
Project: Drinking Water Analyses
Sample Matrix: Drinking water

Service Request: K0705720
Date Collected: 07/01/2007
Date Received: 07/03/2007

Carbamates and Carbamoyloximes by EPA Method 531.1

Sample Name: 0707014-01I-O
Lab Code: K0705720-001
Extraction Method: METHOD
Analysis Method: 531.1

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Arizona Qualifier
Oxamyl	ND	U	0.50	1	07/06/07	07/07/07	
Carbofuran	ND	U	0.50	1	07/06/07	07/07/07	

Surrogate Name	%Rec	Control Limits	Note
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Comments:

00037

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Turner Laboratories, Incorporated
Project: Drinking Water Analyses
Sample Matrix: Drinking water

Service Request: K0705720
Date Collected: NA
Date Received: NA

Carbamates and Carbamoyloximes by EPA Method 531.1

Sample Name: Method Blank
Lab Code: KWG0707576-3

Units: ug/L

Basis: NA

Extraction Method: METHOD

Level: Low

Analysis Method: 531.1

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Arizona Qualifier
Oxamyl	ND	U	0.50	1	07/06/07	07/06/07	
Carbofuran	ND	U	0.50	1	07/06/07	07/06/07	

Surrogate Name	%Rec	Control Limits	Note
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Comments

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Turner Laboratories, Incorporated
Project: Drinking Water Analyses
Sample Matrix: Water

Service Request: K0705720
Date Extracted: 07/06/2007
Date Analyzed: 07/07/2007

Matrix Spike Summary
Carbamates and Carbamoyloximes by EPA Method 531.1

Sample Name: Batch QC
Lab Code: K0705554-005

Units: ug/L
Basis: NA

Extraction Method: METHOD
Analysis Method: 531.1

Level: Low
Extraction Lot: KWG0707576

Analyte Name	Sample Result	Batch QCMS KWG0707576-1 Matrix Spike			%Rec Limits
		Result	Expected	%Rec	
Oxamyl	ND	5.11	5.00	102	65-135
Carbofuran	ND	4.28	5.00	86	65-135

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent difference (RPD) are determined by the software using values in the calculation which have not been rounded.

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Form 3A - Organic

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SuperSet Ref: RR74191

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COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Turner Laboratories, Incorporated
Project: Drinking Water Analyses
Sample Matrix: Drinking water

Service Request: K0705720
Date Extracted: 07/06/2007
Date Analyzed: 07/06/2007

Lab Control Spike Summary
Carbamates and Carbamoyloximes by EPA Method 531.1

Extraction Method: METHOD
Analysis Method: 531.1

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: KWG0707576

Lab Control Sample
KWG0707576-2
Lab Control Spike

Analyte Name	Result	Expected	%Rec	%Rec Limits
Oxamyl	5.12	5.00	102	80-120
Carbofuran	4.63	5.00	93	80-120

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

00040

**Glyphosate
EPA Method 547**

00041

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Turner Laboratories, Incorporated
Project: Drinking Water Analyses
Sample Matrix: Drinking water

Service Request: K0705720
Date Collected: 07/01/2007
Date Received: 07/03/2007

Glyphosate by EPA Method 547

Sample Name: 0707014-01I-O
Lab Code: K0705720-001
Extraction Method: METHOD
Analysis Method: 547

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Arizona Qualifier
Glyphosate	ND	U	6.0	1	07/13/07	07/13/07	

Surrogate Name	%Rec	Control Limits	Note
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Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Turner Laboratories, Incorporated
Project: Drinking Water Analyses
Sample Matrix: Drinking water

Service Request: K0705720
Date Collected: NA
Date Received: NA

Glyphosate by EPA Method 547

Sample Name: Method Blank
Lab Code: KWG0707849-3

Units: ug/L
Basis: NA

Extraction Method: METHOD
Analysis Method: 547

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Arizona Qualifier
Glyphosate	ND	U	6.0	1	07/13/07	07/13/07	

Surrogate Name	%Rec	Control Limits	Note
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Comments:

00043

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Turner Laboratories, Incorporated
Project: Drinking Water Analyses
Sample Matrix: Drinking water

Service Request: K0705720
Date Extracted: 07/13/2007
Date Analyzed: 07/13/2007

Matrix Spike Summary
Glyphosate by EPA Method 547

Sample Name: Batch QC
Lab Code: K0705958-004
Extraction Method: METHOD
Analysis Method: 547

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: KWG0707849

Analyte Name	Sample Result	Batch QCMS KWG0707849-1 Matrix Spike			%Rec Limits
		Result	Expected	%Rec	
Glyphosate	ND	50.0	50.0	100	56-148

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Turner Laboratories, Incorporated
Project: Drinking Water Analyses
Sample Matrix: Drinking water

Service Request: K0705720
Date Extracted: 07/13/2007
Date Analyzed: 07/13/2007

Matrix Spike Summary
Glyphosate by EPA Method 547

Sample Name: Batch QC
Lab Code: K0706017-005
Extraction Method: METHOD
Analysis Method: 547

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: KWG0707849

Analyte Name	Sample Result	Batch QCMS KWG0707849-4 Matrix Spike			%Rec Limits
		Result	Expected	%Rec	
Glyphosate	ND	46.6	50.0	93	56-148

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

00045

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Turner Laboratories, Incorporated
Project: Drinking Water Analyses
Sample Matrix: Drinking water

Service Request: K0705720
Date Extracted: 07/13/2007
Date Analyzed: 07/13/2007

Lab Control Spike Summary
Glyphosate by EPA Method 547

Extraction Method: METHOD
Analysis Method: 547

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: KWG0707849

	Lab Control Sample KWG0707849-2 Lab Control Spike			%Rec Limits
Analyte Name	Result	Expected	%Rec	
Glyphosate	41.2	50.0	82	56-148

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Endothall
EPA Method 548.1

00047

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Turner Laboratories, Incorporated
Project: Drinking Water Analyses
Sample Matrix: Drinking water

Service Request: K0705720
Date Collected: 07/01/2007
Date Received: 07/03/2007

Endothall by EPA Method 548.1

Sample Name: 0707014-01I-O
Lab Code: K0705720-001
Extraction Method: METHOD
Analysis Method: 548.1

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Arizona Qualifier
Endothall	ND	U	5.0	1	07/06/07	07/10/07	

Surrogate Name	%Rec	Control Limits	Note
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Comments:

00048

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Turner Laboratories, Incorporated
Project: Drinking Water Analyses
Sample Matrix: Drinking water

Service Request: K0705720
Date Collected: NA
Date Received: NA

Endothall by EPA Method 548.1

Sample Name: Method Blank
Lab Code: KWG0707569-3
Extraction Method: METHOD
Analysis Method: 548.1

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Arizona Qualifier
Endothall	ND	U	5.0	1	07/06/07	07/10/07	

Surrogate Name	%Rec	Control Limits	Note
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Comments:

00049

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Turner Laboratories, Incorporated
Project: Drinking Water Analyses
Sample Matrix: Drinking water

Service Request: K0705720
Date Extracted: 07/06/2007
Date Analyzed: 07/10/2007

Matrix Spike Summary
Endothall by EPA Method 548.1

Sample Name: 0707014-011-O
Lab Code: K0705720-001
Extraction Method: METHOD
Analysis Method: 548.1

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: KWG0707569

Analyte Name	Sample Result	0707014-011-OMS KWG0707569-1 Matrix Spike			%Rec Limits
		Result	Expected	%Rec	
Endothall	ND	0.800	100	1 M2	44-121

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Turner Laboratories, Incorporated
Project: Drinking Water Analyses
Sample Matrix: Drinking water

Service Request: K0705720
Date Extracted: 07/06/2007
Date Analyzed: 07/10/2007

Lab Control Spike Summary
Endothall by EPA Method 548.1

Extraction Method: METHOD
Analysis Method: 548.1

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: KWG0707569

Lab Control Sample
KWG0707569-2
Lab Control Spike

Analyte Name	Result	Expected	%Rec	%Rec Limits
Endothall	92.4	100	92	44-121

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

00051

Diquat by High Performance Liquid Chromatography

00052

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Turner Laboratories, Incorporated
Project: Drinking Water Analyses
Sample Matrix: Drinking water

Service Request: K0705720
Date Collected: 07/01/2007
Date Received: 07/03/2007

Diquat by High Performance Liquid Chromatography

Sample Name: 0707014-01I-O
Lab Code: K0705720-001

Units: ug/L
Basis: NA

Extraction Method: METHOD
Analysis Method: 549.2

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Arizona Qualifier
Diquat	ND	U	0.40	1	07/03/07	07/16/07	

Surrogate Name	%Rec	Control Limits	Note
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Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Turner Laboratories, Incorporated
Project: Drinking Water Analyses
Sample Matrix: Drinking water

Service Request: K0705720
Date Collected: NA
Date Received: NA

Diquat by High Performance Liquid Chromatography

Sample Name: Method Blank
Lab Code: KWG0707779-3
Extraction Method: METHOD
Analysis Method: 549.2

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Arizona Qualifier
Diquat	ND	U	0.40	1	07/03/07	07/16/07	

Surrogate Name	%Rec	Control Limits	Note
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Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Turner Laboratories, Incorporated
Project: Drinking Water Analyses
Sample Matrix: Drinking water

Service Request: K0705720
Date Extracted: 07/03/2007
Date Analyzed: 07/16/2007

Matrix Spike Summary
Diquat by High Performance Liquid Chromatography

Sample Name: Batch QC
Lab Code: K0705669-002
Extraction Method: METHOD
Analysis Method: 549.2

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: KWG0707779

Analyte Name	Sample Result	Batch QCMS KWG0707779-1 Matrix Spike			%Rec Limits
		Result	Expected	%Rec	
Diquat	ND	10.9	12.0	91	76-126

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Turner Laboratories, Incorporated
Project: Drinking Water Analyses
Sample Matrix: Drinking water

Service Request: K0705720
Date Extracted: 07/03/2007
Date Analyzed: 07/16/2007

Lab Control Spike Summary
Diquat by High Performance Liquid Chromatography

Extraction Method: METHOD
Analysis Method: 549.2

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: KWG0707779

Lab Control Sample KWG0707779-2 Lab Control Spike				
Analyte Name	Result	Expected	%Rec	%Rec Limits
Diquat	11.2	12.0	93	76-126

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

00056

TURNER LABORATORIES, INC.

SAMPLE CONTROL RECEIPT CHECKLIST



Turner Laboratories W.O. #: 0907-014

Received By: (Signature)

Received Date/Time: 7/2/02 10:24

Delivered by: CHUCK

- | | | | |
|--|---|---|--------------------------------------|
| 1. Shipping container/cooler in good condition? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Not Present |
| 2. Custody seals intact on sample bottles? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Not Present |
| 3. Chain of custody present? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | |
| 4. COC signed when relinquished and received? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | |
| 5. COC agrees with sample labels? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | |
| 6. Samples in proper container/bottle? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | |
| 7. Sample container intact? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | |
| 8. Sufficient sample volume for requested tests? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | |
| 9. Samples received within holding times? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | |
| 10. VOA vials received with no headspace? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> No Vials |
| 11. Bacti bottles received with appropriate headspace? | <input checked="" type="checkbox"/> Yes | | <input type="checkbox"/> Above 100ml |
| | | <input type="checkbox"/> Not Applicable | <input type="checkbox"/> Below 100ml |
| 12. Temperature upon receipt? | <u>-1°</u> | | |
| 13. Number of sample containers received? | <u>22</u> | | |

Additional Comments: