



ENVIRONMENTAL  
SCIENCE CORP.

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Mt. Juliet, TN 37122  
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Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Carrie Gudorf  
Buys and Associates, Inc - GJ, CO  
838 Grand Avenue, Suite 100

Grand Junction, CO 81506

Report Summary

Friday September 26, 2008

Report Number: L365436

Samples Received: 09/17/08

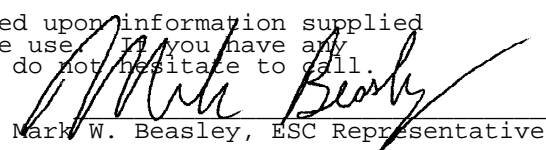
Client Project: 536-08

Description: MOC Background Water Sampling

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

*Laboratory Certification Numbers*

  
Mark W. Beasley, ESC Representative

A2LA - 1461-01, AIHA - 09227, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487  
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375, DW21704, ND - R-140  
NJ - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233  
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910

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## REPORT OF ANALYSIS

Carrie Gudorf  
Buys and Associates, Inc - GJ, CO  
838 Grand Avenue, Suite 100  
Grand Junction, CO 81506

September 26, 2008

Date Received : September 17, 2008  
Description : MOC Background Water Sampling

Sample ID : MOC 17

Collected By : Carrie Gudorf  
Collection Date : 09/16/08 12:30

ESC Sample # : L365436-01

Site ID :

Project # : 536-08

Parameter	Result	MDL	RDL	Units	Q	Method	Date	Dil.
Chloride	4200	220	1000	ug/l		9056	09/17/08	1
Fluoride	U	32.	100	ug/l		9056	09/17/08	1
Nitrate	U	15.	100	ug/l		9056	09/17/08	1
Nitrite	37.	17.	100	ug/l	J	9056	09/17/08	1
Sulfate	52000	170	5000	ug/l		9056	09/17/08	1
Alkalinity	300000	2600	10000	ug/l		2320B	09/23/08	1
Alkalinity,Bicarbonate	300000	1100	10000	ug/l		2320B	09/23/08	1
Alkalinity,Carbonate	U	1100	10000	ug/l		2320B	09/23/08	1
Ammonia Nitrogen	97.	34.	100	ug/l	J	350.1	09/19/08	1
pH	8.2			su	T8	9040C	09/18/08	1
Sulfide	U	16.	50.	ug/l		4500-S2	09/22/08	1
Specific Conductance	640			umhos/cm		9050A	09/23/08	1
TOC (Total Organic Carbon)	4200	310	1000	ug/l		9060A	09/23/08	1
Dissolved Solids	390000	3300	10000	ug/l		2540C	09/19/08	1
Cadmium	U	0.15	0.50	ug/l		6020	09/22/08	1
Chromium	1.9	0.34	1.0	ug/l		6020	09/22/08	1
Copper	2.5	0.48	1.0	ug/l		6020	09/22/08	1
Lead	0.85	0.13	1.0	ug/l	J	6020	09/22/08	1
Nickel	3.0	0.22	1.0	ug/l		6020	09/22/08	1
Selenium	0.37	0.32	1.0	ug/l	J	6020	09/22/08	1
Silver	0.15	0.13	0.50	ug/l	J	6020	09/22/08	1
Zinc	8.1	3.3	10.	ug/l	J	6020	09/22/08	1
Mercury	U	0.044	0.20	ug/l		7470A	09/20/08	1
Barium	120	1.1	5.0	ug/l		6010B	09/23/08	1
Boron	180	16.	200	ug/l	J	6010B	09/23/08	1
Calcium	66000	160	500	ug/l		6010B	09/23/08	1
Magnesium	28000	23.	100	ug/l		6010B	09/23/08	1
Manganese	38.	1.1	10.	ug/l		6010B	09/23/08	1
Molybdenum	5.3	1.8	5.0	ug/l		6010B	09/25/08	1
Potassium	1800	100	500	ug/l		6010B	09/25/08	1
Sodium	51000	120	500	ug/l		6010B	09/23/08	1
Benzene	U	0.29	1.0	ug/l		8260B	09/21/08	1

U = ND (Not Detected)

RDL = Reported Detection Limit = LOQ = PQL = EQL

MDL = Minimum Detection Limit = LOD = SQL(TRRP)

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L365436-01 (PH) - 8.2@21.4c



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Buys and Associates, Inc - GJ, CO  
838 Grand Avenue, Suite 100  
Grand Junction, CO 81506

September 26, 2008

Date Received : September 17, 2008  
Description : MOC Background Water Sampling

Sample ID : MOC 17

Collected By : Carrie Gudorf  
Collection Date : 09/16/08 12:30

ESC Sample # : L365436-01

Site ID :

Project # : 536-08

Parameter	Result	MDL	RDL	Units	Q	Method	Date	Dil.
Toluene	U	0.27	5.0	ug/l		8260B	09/21/08	1
Ethylbenzene	U	0.22	1.0	ug/l		8260B	09/21/08	1
Total Xylenes	U	0.86	3.0	ug/l		8260B	09/21/08	1
Surrogate Recovery								
Toluene-d8	102.			% Rec.		8260B	09/21/08	1
Dibromofluoromethane	101.			% Rec.		8260B	09/21/08	1
a,a,a-Trifluorotoluene	96.3			% Rec.		8260B	09/21/08	1
4-Bromofluorobenzene	102.			% Rec.		8260B	09/21/08	1

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838 Grand Avenue, Suite 100  
Grand Junction, CO 81506

September 26, 2008

Date Received : September 17, 2008  
Description : MOC Background Water Sampling

Sample ID : MOC 18

Collected By : Carrie Gudorf  
Collection Date : 09/16/08 11:35

ESC Sample # : L365436-02

Site ID :

Project # : 536-08

Parameter	Result	MDL	RDL	Units	Q	Method	Date	Dil.
Chloride	3200	220	1000	ug/l		9056	09/17/08	1
Fluoride	U	32.	100	ug/l		9056	09/17/08	1
Nitrate	47.	15.	100	ug/l	J	9056	09/17/08	1
Nitrite	U	17.	100	ug/l		9056	09/17/08	1
Sulfate	56000	170	5000	ug/l		9056	09/17/08	1
Alkalinity	310000	2600	10000	ug/l		2320B	09/23/08	1
Alkalinity,Bicarbonate	310000	1100	10000	ug/l		2320B	09/23/08	1
Alkalinity,Carbonate	U	1100	10000	ug/l		2320B	09/23/08	1
Ammonia Nitrogen	U	34.	100	ug/l		350.1	09/19/08	1
pH	8.3			su	T8	9040C	09/18/08	1
Sulfide	U	16.	50.	ug/l		4500-S2	09/22/08	1
Specific Conductance	650			umhos/cm		9050A	09/23/08	1
TOC (Total Organic Carbon)	3700	310	1000	ug/l		9060A	09/23/08	1
Dissolved Solids	390000	3300	10000	ug/l		2540C	09/19/08	1
Cadmium	U	0.15	0.50	ug/l		6020	09/22/08	1
Chromium	0.90	0.34	1.0	ug/l	J	6020	09/22/08	1
Copper	1.4	0.48	1.0	ug/l		6020	09/22/08	1
Lead	0.15	0.13	1.0	ug/l	J	6020	09/22/08	1
Nickel	2.2	0.22	1.0	ug/l		6020	09/22/08	1
Selenium	0.88	0.32	1.0	ug/l	J	6020	09/22/08	1
Silver	U	0.13	0.50	ug/l		6020	09/22/08	1
Zinc	10.	3.3	10.	ug/l	J	6020	09/22/08	1
Mercury	U	0.044	0.20	ug/l		7470A	09/20/08	1
Barium	100	1.1	5.0	ug/l		6010B	09/23/08	1
Boron	130	16.	200	ug/l	J	6010B	09/23/08	1
Calcium	66000	160	500	ug/l		6010B	09/23/08	1
Magnesium	29000	23.	100	ug/l		6010B	09/23/08	1
Manganese	8.0	1.1	10.	ug/l	J	6010B	09/23/08	1
Molybdenum	6.6	1.8	5.0	ug/l		6010B	09/25/08	1
Potassium	1000	100	500	ug/l		6010B	09/25/08	1
Sodium	43000	120	500	ug/l		6010B	09/23/08	1
Benzene	U	0.29	1.0	ug/l		8260B	09/21/08	1

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L365436-02 (PH) - 8.3@21.2c



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Carrie Gudorf  
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838 Grand Avenue, Suite 100  
Grand Junction, CO 81506

September 26, 2008

Date Received : September 17, 2008  
Description : MOC Background Water Sampling

Sample ID : MOC 18

Collected By : Carrie Gudorf  
Collection Date : 09/16/08 11:35

ESC Sample # : L365436-02

Site ID :

Project # : 536-08

Parameter	Result	MDL	RDL	Units	Q	Method	Date	Dil.
Toluene	U	0.27	5.0	ug/l		8260B	09/21/08	1
Ethylbenzene	U	0.22	1.0	ug/l		8260B	09/21/08	1
Total Xylenes	U	0.86	3.0	ug/l		8260B	09/21/08	1
Surrogate Recovery								
Toluene-d8	103.			% Rec.		8260B	09/21/08	1
Dibromofluoromethane	99.6			% Rec.		8260B	09/21/08	1
a,a,a-Trifluorotoluene	97.2			% Rec.		8260B	09/21/08	1
4-Bromofluorobenzene	105.			% Rec.		8260B	09/21/08	1

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L365436-02 (PH) - 8.3@21.2c



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838 Grand Avenue, Suite 100  
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September 26, 2008

Date Received : September 17, 2008  
Description : MOC Background Water Sampling

Sample ID : MOC 19

Collected By : Carrie Gudorf  
Collection Date : 09/16/08 13:05

ESC Sample # : L365436-03

Site ID :

Project # : 536-08

Parameter	Result	MDL	RDL	Units	Q	Method	Date	Dil.
Chloride	2400	220	1000	ug/l		9056	09/17/08	1
Fluoride	110	32.	100	ug/l		9056	09/17/08	1
Nitrate	160	15.	100	ug/l		9056	09/17/08	1
Nitrite	42.	17.	100	ug/l	J	9056	09/17/08	1
Sulfate	55000	170	5000	ug/l		9056	09/17/08	1
Alkalinity	290000	2600	10000	ug/l		2320B	09/23/08	1
Alkalinity,Bicarbonate	290000	1100	10000	ug/l		2320B	09/23/08	1
Alkalinity,Carbonate	U	1100	10000	ug/l		2320B	09/23/08	1
Ammonia Nitrogen	U	34.	100	ug/l		350.1	09/19/08	1
pH	8.1			su	T8	9040C	09/18/08	1
Sulfide	U	16.	50.	ug/l		4500-S2	09/22/08	1
Specific Conductance	630			umhos/cm		9050A	09/23/08	1
TOC (Total Organic Carbon)	3700	310	1000	ug/l		9060A	09/23/08	1
Dissolved Solids	380000	3300	10000	ug/l		2540C	09/19/08	1
Cadmium	U	0.15	0.50	ug/l		6020	09/22/08	1
Chromium	1.3	0.34	1.0	ug/l		6020	09/22/08	1
Copper	1.7	0.48	1.0	ug/l		6020	09/22/08	1
Lead	0.27	0.13	1.0	ug/l	J	6020	09/22/08	1
Nickel	2.4	0.22	1.0	ug/l		6020	09/22/08	1
Selenium	1.0	0.32	1.0	ug/l		6020	09/22/08	1
Silver	3.0	0.13	0.50	ug/l		6020	09/22/08	1
Zinc	5.5	3.3	10.	ug/l	J	6020	09/22/08	1
Mercury	U	0.044	0.20	ug/l		7470A	09/20/08	1
Barium	100	1.1	5.0	ug/l		6010B	09/23/08	1
Boron	120	16.	200	ug/l	J	6010B	09/23/08	1
Calcium	62000	160	500	ug/l		6010B	09/23/08	1
Magnesium	28000	23.	100	ug/l		6010B	09/23/08	1
Manganese	100	1.1	10.	ug/l		6010B	09/23/08	1
Molybdenum	5.8	1.8	5.0	ug/l		6010B	09/25/08	1
Potassium	780	100	500	ug/l		6010B	09/25/08	1
Sodium	41000	120	500	ug/l		6010B	09/23/08	1
Benzene	U	0.29	1.0	ug/l		8260B	09/21/08	1

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L365436-03 (PH) - 8.1@21.1c



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Buys and Associates, Inc - GJ, CO  
838 Grand Avenue, Suite 100  
Grand Junction, CO 81506

September 26, 2008

Date Received : September 17, 2008  
Description : MOC Background Water Sampling

Sample ID : MOC 19

Collected By : Carrie Gudorf  
Collection Date : 09/16/08 13:05

ESC Sample # : L365436-03

Site ID :

Project # : 536-08

Parameter	Result	MDL	RDL	Units	Q	Method	Date	Dil.
Toluene	U	0.27	5.0	ug/l		8260B	09/21/08	1
Ethylbenzene	U	0.22	1.0	ug/l		8260B	09/21/08	1
Total Xylenes	U	0.86	3.0	ug/l		8260B	09/21/08	1
Surrogate Recovery								
Toluene-d8	103.			% Rec.		8260B	09/21/08	1
Dibromofluoromethane	101.			% Rec.		8260B	09/21/08	1
a,a,a-Trifluorotoluene	97.6			% Rec.		8260B	09/21/08	1
4-Bromofluorobenzene	103.			% Rec.		8260B	09/21/08	1

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September 26, 2008

Date Received : September 17, 2008  
Description : MOC Background Water Sampling

Sample ID : MOC 35

Collected By : Carrie Gudorf  
Collection Date : 09/16/08 14:30

ESC Sample # : L365436-04

Site ID :

Project # : 536-08

Parameter	Result	MDL	RDL	Units	Q	Method	Date	Dil.
Chloride	2900	220	1000	ug/l		9056	09/17/08	1
Fluoride	120	32.	100	ug/l		9056	09/17/08	1
Nitrate	16.	15.	100	ug/l	J	9056	09/17/08	1
Nitrite	36.	17.	100	ug/l	J	9056	09/17/08	1
Sulfate	33000	170	5000	ug/l		9056	09/17/08	1
Alkalinity	300000	2600	10000	ug/l		2320B	09/24/08	1
Alkalinity,Bicarbonate	300000	1100	10000	ug/l		2320B	09/24/08	1
Alkalinity,Carbonate	U	1100	10000	ug/l		2320B	09/24/08	1
Ammonia Nitrogen	U	34.	100	ug/l		350.1	09/19/08	1
pH	8.2			su	T8	9040C	09/18/08	1
Sulfide	U	16.	50.	ug/l		4500-S2	09/22/08	1
Specific Conductance	590			umhos/cm		9050A	09/23/08	1
TOC (Total Organic Carbon)	4700	310	1000	ug/l		9060A	09/23/08	1
Dissolved Solids	360000	3300	10000	ug/l		2540C	09/19/08	1
Cadmium	U	0.15	0.50	ug/l		6020	09/22/08	1
Chromium	0.38	0.34	1.0	ug/l	J	6020	09/22/08	1
Copper	1.4	0.48	1.0	ug/l		6020	09/22/08	1
Lead	U	0.13	1.0	ug/l		6020	09/22/08	1
Nickel	2.5	0.22	1.0	ug/l		6020	09/22/08	1
Selenium	0.49	0.32	1.0	ug/l	J	6020	09/22/08	1
Silver	U	0.13	0.50	ug/l		6020	09/22/08	1
Zinc	31.	3.3	10.	ug/l		6020	09/22/08	1
Mercury	U	0.044	0.20	ug/l		7470A	09/20/08	1
Barium	110	1.1	5.0	ug/l		6010B	09/24/08	1
Boron	69.	16.	200	ug/l	J	6010B	09/24/08	1
Calcium	65000	160	500	ug/l		6010B	09/24/08	1
Magnesium	26000	23.	100	ug/l		6010B	09/24/08	1
Manganese	19.	1.1	10.	ug/l		6010B	09/24/08	1
Molybdenum	4.1	1.8	5.0	ug/l	J	6010B	09/25/08	1
Potassium	2200	100	500	ug/l		6010B	09/24/08	1
Sodium	31000	120	500	ug/l		6010B	09/24/08	1
Benzene	U	0.29	1.0	ug/l		8260B	09/21/08	1

U = ND (Not Detected)

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September 26, 2008

Date Received : September 17, 2008  
Description : MOC Background Water Sampling

Sample ID : MOC 35

Collected By : Carrie Gudorf  
Collection Date : 09/16/08 14:30

ESC Sample # : L365436-04

Site ID :

Project # : 536-08

Parameter	Result	MDL	RDL	Units	Q	Method	Date	Dil.
Toluene	U	0.27	5.0	ug/l		8260B	09/21/08	1
Ethylbenzene	U	0.22	1.0	ug/l		8260B	09/21/08	1
Total Xylenes	U	0.86	3.0	ug/l		8260B	09/21/08	1
Surrogate Recovery								
Toluene-d8	103.			% Rec.		8260B	09/21/08	1
Dibromofluoromethane	100.			% Rec.		8260B	09/21/08	1
a,a,a-Trifluorotoluene	97.7			% Rec.		8260B	09/21/08	1
4-Bromofluorobenzene	106.			% Rec.		8260B	09/21/08	1

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Reported: 09/26/08 17:07 Printed: 09/26/08 17:07  
L365436-04 (PH) - 8.2@21.5c



# ENVIRONMENTAL SCIENCE CORP.

12065 Lebanon Rd.  
Mt. Juliet, TN 37122  
(615) 758-5858  
1-800-767-5859  
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

## REPORT OF ANALYSIS

Carrie Gudorf  
Buys and Associates, Inc - GJ, CO  
838 Grand Avenue, Suite 100  
Grand Junction, CO 81506

September 26, 2008

Date Received : September 17, 2008  
Description : MOC Background Water Sampling

Sample ID : MOC 22

Collected By : Carrie Gudorf  
Collection Date : 09/15/08 15:43

ESC Sample # : L365436-05

Site ID :

Project # : 536-08

Parameter	Result	MDL	RDL	Units	Q	Method	Date	Dil.
Chloride	44000	220	1000	ug/l		9056	09/17/08	1
Fluoride	84.	32.	100	ug/l	J	9056	09/17/08	1
Nitrate	260	15.	100	ug/l		9056	09/17/08	1
Nitrite	U	17.	100	ug/l		9056	09/17/08	1
Sulfate	49000	170	5000	ug/l		9056	09/17/08	1
Alkalinity	220000	2600	10000	ug/l		2320B	09/24/08	1
Alkalinity,Bicarbonate	220000	1100	10000	ug/l		2320B	09/24/08	1
Alkalinity,Carbonate	U	1100	10000	ug/l		2320B	09/24/08	1
Ammonia Nitrogen	U	34.	100	ug/l		350.1	09/19/08	1
pH	8.3			su	T8	9040C	09/18/08	1
Sulfide	16.	16.	50.	ug/l	J	4500-S2	09/22/08	1
Specific Conductance	660			umhos/cm		9050A	09/23/08	1
TOC (Total Organic Carbon)	3900	310	1000	ug/l		9060A	09/23/08	1
Dissolved Solids	430000	3300	10000	ug/l		2540C	09/22/08	1
Cadmium	U	0.15	0.50	ug/l		6020	09/22/08	1
Chromium	1.7	0.34	1.0	ug/l		6020	09/22/08	1
Copper	2.0	0.48	1.0	ug/l		6020	09/22/08	1
Lead	0.42	0.13	1.0	ug/l	J	6020	09/22/08	1
Nickel	2.5	0.22	1.0	ug/l		6020	09/22/08	1
Selenium	1.4	0.32	1.0	ug/l		6020	09/22/08	1
Silver	U	0.13	0.50	ug/l		6020	09/22/08	1
Zinc	9.4	3.3	10.	ug/l	J	6020	09/22/08	1
Mercury	U	0.044	0.20	ug/l		7470A	09/20/08	1
Barium	120	1.1	5.0	ug/l		6010B	09/24/08	1
Boron	84.	16.	200	ug/l	J	6010B	09/24/08	1
Calcium	62000	160	500	ug/l		6010B	09/24/08	1
Magnesium	26000	23.	100	ug/l		6010B	09/24/08	1
Manganese	21.	1.1	10.	ug/l		6010B	09/24/08	1
Molybdenum	5.2	1.8	5.0	ug/l		6010B	09/25/08	1
Potassium	1400	100	500	ug/l		6010B	09/24/08	1
Sodium	41000	120	500	ug/l		6010B	09/24/08	1
Benzene	U	0.29	1.0	ug/l		8260B	09/21/08	1

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L365436-05 (PH) - 8.3@19.6c



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Est. 1970

REPORT OF ANALYSIS

Carrie Gudorf  
Buys and Associates, Inc - GJ, CO  
838 Grand Avenue, Suite 100  
Grand Junction, CO 81506

September 26, 2008

Date Received : September 17, 2008  
Description : MOC Background Water Sampling

Sample ID : MOC 22

Collected By : Carrie Gudorf  
Collection Date : 09/15/08 15:43

ESC Sample # : L365436-05

Site ID :

Project # : 536-08

Parameter	Result	MDL	RDL	Units	Q	Method	Date	Dil.
Toluene	U	0.27	5.0	ug/l		8260B	09/21/08	1
Ethylbenzene	U	0.22	1.0	ug/l		8260B	09/21/08	1
Total Xylenes	U	0.86	3.0	ug/l		8260B	09/21/08	1
Surrogate Recovery								
Toluene-d8	104.			% Rec.		8260B	09/21/08	1
Dibromofluoromethane	102.			% Rec.		8260B	09/21/08	1
a,a,a-Trifluorotoluene	98.6			% Rec.		8260B	09/21/08	1
4-Bromofluorobenzene	103.			% Rec.		8260B	09/21/08	1

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L365436-05 (PH) - 8.3@19.6c



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## REPORT OF ANALYSIS

Carrie Gudorf  
Buys and Associates, Inc - GJ, CO  
838 Grand Avenue, Suite 100  
Grand Junction, CO 81506

September 26, 2008

Date Received : September 17, 2008  
Description : MOC Background Water Sampling

Sample ID : MOC 23

Collected By : Carrie Gudorf  
Collection Date : 09/15/08 14:48

ESC Sample # : L365436-06

Site ID :

Project # : 536-08

Parameter	Result	MDL	RDL	Units	Q	Method	Date	Dil.
Chloride	45000	220	1000	ug/l		9056	09/17/08	1
Fluoride	95.	32.	100	ug/l	J	9056	09/17/08	1
Nitrate	29.	15.	100	ug/l	J	9056	09/17/08	1
Nitrite	U	17.	100	ug/l		9056	09/17/08	1
Sulfate	49000	170	5000	ug/l		9056	09/17/08	1
Alkalinity	210000	2600	10000	ug/l		2320B	09/24/08	1
Alkalinity,Bicarbonate	210000	1100	10000	ug/l		2320B	09/24/08	1
Alkalinity,Carbonate	U	1100	10000	ug/l		2320B	09/24/08	1
Ammonia Nitrogen	U	34.	100	ug/l		350.1	09/19/08	1
pH	8.3			su	T8	9040C	09/18/08	1
Sulfide	U	16.	50.	ug/l		4500-S2	09/22/08	1
Specific Conductance	640			umhos/cm		9050A	09/23/08	1
TOC (Total Organic Carbon)	4600	310	1000	ug/l		9060A	09/23/08	1
Dissolved Solids	420000	3300	10000	ug/l		2540C	09/22/08	1
Cadmium	U	0.15	0.50	ug/l		6020	09/22/08	1
Chromium	U	0.34	1.0	ug/l		6020	09/22/08	1
Copper	1.4	0.48	1.0	ug/l		6020	09/22/08	1
Lead	U	0.13	1.0	ug/l		6020	09/22/08	1
Nickel	1.7	0.22	1.0	ug/l		6020	09/22/08	1
Selenium	1.1	0.32	1.0	ug/l		6020	09/22/08	1
Silver	U	0.13	0.50	ug/l		6020	09/22/08	1
Zinc	3.4	3.3	10.	ug/l	J	6020	09/22/08	1
Mercury	U	0.044	0.20	ug/l		7470A	09/20/08	1
Barium	110	1.1	5.0	ug/l		6010B	09/24/08	1
Boron	80.	16.	200	ug/l	J	6010B	09/24/08	1
Calcium	59000	160	500	ug/l		6010B	09/24/08	1
Magnesium	24000	23.	100	ug/l		6010B	09/24/08	1
Manganese	3.9	1.1	10.	ug/l	J	6010B	09/24/08	1
Molybdenum	5.0	1.8	5.0	ug/l	J	6010B	09/25/08	1
Potassium	1200	100	500	ug/l		6010B	09/24/08	1
Sodium	40000	120	500	ug/l		6010B	09/24/08	1
Benzene	U	0.29	1.0	ug/l		8260B	09/21/08	1

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L365436-06 (PH) - 8.3@20.2c



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REPORT OF ANALYSIS

Carrie Gudorf  
Buys and Associates, Inc - GJ, CO  
838 Grand Avenue, Suite 100  
Grand Junction, CO 81506

September 26, 2008

Date Received : September 17, 2008  
Description : MOC Background Water Sampling

Sample ID : MOC 23

Collected By : Carrie Gudorf  
Collection Date : 09/15/08 14:48

ESC Sample # : L365436-06

Site ID :

Project # : 536-08

Parameter	Result	MDL	RDL	Units	Q	Method	Date	Dil.
Toluene	U	0.27	5.0	ug/l		8260B	09/21/08	1
Ethylbenzene	U	0.22	1.0	ug/l		8260B	09/21/08	1
Total Xylenes	U	0.86	3.0	ug/l		8260B	09/21/08	1
Surrogate Recovery								
Toluene-d8	103.			% Rec.		8260B	09/21/08	1
Dibromofluoromethane	100.			% Rec.		8260B	09/21/08	1
a,a,a-Trifluorotoluene	97.7			% Rec.		8260B	09/21/08	1
4-Bromofluorobenzene	103.			% Rec.		8260B	09/21/08	1

U = ND (Not Detected)

RDL = Reported Detection Limit = LOQ = PQL = EQL

MDL = Minimum Detection Limit = LOD = SQL(TRRP)

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L365436-06 (PH) - 8.3@20.2c

Attachment A  
List of Analytes with QC Qualifiers

Sample #	Analyte	Qualifier
L365436-01	pH	T8
	Boron	J
	Lead	J
	Selenium	J
	Silver	J
	Zinc	J
	Nitrite	J
	Ammonia Nitrogen	J
L365436-02	pH	T8
	Boron	J
	Manganese	J
	Chromium	J
	Lead	J
	Selenium	J
	Zinc	J
	Nitrate	J
L365436-03	pH	T8
	Boron	J
	Lead	J
	Zinc	J
	Nitrite	J
L365436-04	pH	T8
	Boron	J
	Molybdenum	J
	Chromium	J
	Selenium	J
	Nitrate	J
	Nitrite	J
L365436-05	pH	T8
	Boron	J
	Lead	J
	Zinc	J
	Fluoride	J
	Sulfide	J
L365436-06	pH	T8
	Boron	J
	Manganese	J
	Molybdenum	J
	Zinc	J
	Fluoride	J
	Nitrate	J

Attachment B  
Explanation of QC Qualifier Codes

Qualifier	Meaning
J	(EPA) - Estimated value below the lowest calibration point. Confidence correlates with concentration.
T8	(ESC) - Additional method/sample information: Sample(s) received past/too close to holding time expiration.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods, it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable unless qualified as 'R' (Rejected).

Definitions

- Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.
- Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Difference.
- Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromatography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.
- TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

Summary of Remarks For Samples Printed  
09/26/08 at 17:07:35

TSR Signing Reports: 134  
R5 - Desired TAT

Sample: L365436-01 Account: BUYSGJCO Received: 09/17/08 09:00 Due Date: 09/24/08 00:00 RPT Date: 09/26/08 17:07  
Sample: L365436-02 Account: BUYSGJCO Received: 09/17/08 09:00 Due Date: 09/24/08 00:00 RPT Date: 09/26/08 17:07  
Sample: L365436-03 Account: BUYSGJCO Received: 09/17/08 09:00 Due Date: 09/24/08 00:00 RPT Date: 09/26/08 17:07  
Sample: L365436-04 Account: BUYSGJCO Received: 09/17/08 09:00 Due Date: 09/24/08 00:00 RPT Date: 09/26/08 17:07  
Sample: L365436-05 Account: BUYSGJCO Received: 09/17/08 09:00 Due Date: 09/24/08 00:00 RPT Date: 09/26/08 17:07  
Sample: L365436-06 Account: BUYSGJCO Received: 09/17/08 09:00 Due Date: 09/24/08 00:00 RPT Date: 09/26/08 17:07





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Grand Junction, CO 81506

## Quality Assurance Report Level II

L365436

September 26, 2008

Analyte	Result	Laboratory Blank		Date Analyzed	Batch
		Units			
Chloride	< 1	mg/l	09/17/08 10:47	WG383857	
Fluoride	< .1	mg/l	09/17/08 10:47	WG383857	
Nitrate	< .1	mg/l	09/17/08 10:47	WG383857	
Nitrite	< .1	mg/l	09/17/08 10:47	WG383857	
Sulfate	< 5	mg/l	09/17/08 10:47	WG383857	
Chloride	< 1	mg/l	09/17/08 11:20	WG383876	
Fluoride	< .1	mg/l	09/17/08 11:20	WG383876	
Nitrate	< .1	mg/l	09/17/08 11:20	WG383876	
Nitrite	< .1	mg/l	09/17/08 11:20	WG383876	
Sulfate	< 5	mg/l	09/17/08 11:20	WG383876	
Dissolved Solids	< 10	mg/l	09/19/08 11:21	WG383915	
Ammonia Nitrogen	< .1	mg/l	09/19/08 14:33	WG383955	
pH	5.30	su	09/18/08 15:15	WG383990	
Mercury	< .0002	mg/l	09/20/08 21:19	WG384011	
Dissolved Solids	< 10	mg/l	09/22/08 11:34	WG384165	
Cadmium	< .0005	mg/l	09/22/08 12:15	WG384309	
Chromium	< .001	mg/l	09/22/08 12:15	WG384309	
Copper	< .001	mg/l	09/22/08 12:15	WG384309	
Lead	< .001	mg/l	09/22/08 12:15	WG384309	
Nickel	< .001	mg/l	09/22/08 12:15	WG384309	
Selenium	< .001	mg/l	09/22/08 12:15	WG384309	
Silver	< .0005	mg/l	09/22/08 12:15	WG384309	
Zinc	< .01	mg/l	09/22/08 12:15	WG384309	
TOC (Total Organic Carbon)	< 1	mg/l	09/22/08 22:33	WG384404	
Sulfide	< .05	mg/l	09/22/08 14:31	WG384463	
Benzene	< .001	mg/l	09/20/08 22:16	WG384551	
Ethylbenzene	< .001	mg/l	09/20/08 22:16	WG384551	
Toluene	< .005	mg/l	09/20/08 22:16	WG384551	
Total Xylenes	< .003	mg/l	09/20/08 22:16	WG384551	
Barium	< .005	mg/l	09/23/08 21:54	WG384649	
Boron	< .2	mg/l	09/23/08 21:54	WG384649	
Calcium	< .5	mg/l	09/23/08 21:54	WG384649	
Magnesium	< .1	mg/l	09/23/08 21:54	WG384649	
Manganese	< .01	mg/l	09/23/08 21:54	WG384649	
Molybdenum	< .005	mg/l	09/23/08 21:54	WG384649	
Potassium	< .5	mg/l	09/23/08 21:54	WG384649	
Sodium	< .5	mg/l	09/23/08 21:54	WG384649	
Alkalinity	< 10	mg/l	09/23/08 13:16	WG384717	
Specific Conductance	0.490	umhos/cm	09/23/08 15:15	WG384790	
Alkalinity	< 10	mg/l	09/24/08 12:39	WG385100	

Analyte	Units	Duplicate		RPD	Limit	Ref Samp	Batch
		Result	Duplicate				
Chloride	mg/l	2.16	2.15	0.464	20	L365385-04	WG383857
Chloride	mg/l	4.61	4.80	4.04	20	L365428-01	WG383857



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Grand Junction, CO 81506

## Quality Assurance Report Level II

September 26, 2008

L365436

Fluoride	mg/l	0.863	0.869	0.693	20	L365385-04	WG383857
Analyte	Units	Duplicate		RPD	Limit	Ref Samp	Batch
		Result	Duplicate				
Fluoride	mg/l	0.00	0.00	0.00	20	L365428-01	WG383857
Nitrate	mg/l	0.00	0.0380	NA	20	L365385-04	WG383857
Nitrate	mg/l	8.47	8.40	0.830	20	L365428-01	WG383857
Nitrite	mg/l	0.112	0.0860	26.3	20	L365385-04	WG383857
Nitrite	mg/l	0.00	0.00	0.00	20	L365428-01	WG383857
Sulfate	mg/l	13.1	13.0	0.766	20	L365385-04	WG383857
Sulfate	mg/l	5.05	5.00	0.995	20	L365428-01	WG383857
Chloride	mg/l	33.2	33.7	1.49	20	L365454-01	WG383876
Chloride	mg/l	4.55	4.70	3.24	20	L365450-06	WG383876
Fluoride	mg/l	0.321	0.325	1.24	20	L365454-01	WG383876
Fluoride	mg/l	0.100	0.100	0.00	20	L365450-06	WG383876
Nitrate	mg/l	0.113	0.130	14.0	20	L365454-01	WG383876
Nitrate	mg/l	0.994	1.00	0.602	20	L365450-06	WG383876
Nitrite	mg/l	0.00	0.0730	NA	20	L365454-01	WG383876
Nitrite	mg/l	0.00	0.00	0.00	20	L365450-06	WG383876
Sulfate	mg/l	56.8	57.0	0.351	20	L365454-01	WG383876
Sulfate	mg/l	188.	190.	1.06	20	L365450-06	WG383876
Dissolved Solids	mg/l	80.0	83.0	3.68	5	L365407-01	WG383915
Ammonia Nitrogen	mg/l	0.00	0.00	0.00	20	L365436-02	WG383955
Ammonia Nitrogen	mg/l	0.00	0.00	0.00	20	L364514-01	WG383955
pH	su	8.20	8.20	0.00	20	L365450-05	WG383990
pH	su	6.90	6.90	0.00	20	L365394-01	WG383990
Mercury	mg/l	0.00	0.00	0.00	20	L365433-05	WG384011
Dissolved Solids	mg/l	1500	1500	0.0667	5	L365609-13	WG384165
Cadmium	mg/l	0.00	0.00001	NA	20	L365368-01	WG384309
Chromium	mg/l	0.00	0.00002	NA	20	L365368-01	WG384309
Copper	mg/l	0.00	0.00056	NA	20	L365368-01	WG384309
Lead	mg/l	0.00	0.00	0.00	20	L365368-01	WG384309
Nickel	mg/l	0.00228	0.00214	6.33	20	L365368-01	WG384309
Selenium	mg/l	0.00112	0.00062	57.5	20	L365368-01	WG384309
Silver	mg/l	0.00116	0.00013	160.	20	L365368-01	WG384309
Zinc	mg/l	0.0124	0.0240	63.7	20	L365368-01	WG384309
TOC (Total Organic Carbon)	mg/l	8.91	9.70	8.49	20	L365285-01	WG384404
TOC (Total Organic Carbon)	mg/l	10.8	11.0	1.93	20	L365485-02	WG384404
Sulfide	mg/l	0.00	0.00	0.00	20	L365385-05	WG384463
Sulfide	mg/l	0.00	0.00	0.00	20	L365265-01	WG384463
Barium	mg/l	0.00730	0.00797	8.78	20	L365577-01	WG384649
Boron	mg/l	0.00	0.0291	NA	20	L365577-01	WG384649
Calcium	mg/l	5.68	5.73	0.876	20	L365577-01	WG384649
Magnesium	mg/l	1.19	1.21	1.67	20	L365577-01	WG384649
Manganese	mg/l	0.00	0.00110	NA	20	L365577-01	WG384649
Molybdenum	mg/l	0.00	0.00	0.00	20	L365577-01	WG384649
Potassium	mg/l	0.00	0.00	0.00	20	L365577-01	WG384649
Potassium	mg/l	0.00	0.00	0.00	20	L365577-01	WG384649
Sodium	mg/l	6.26	6.41	2.37	20	L365577-01	WG384649
Alkalinity	mg/l	314.	290.	7.95	20	L365436-03	WG384717
Alkalinity	mg/l	396.	390.	1.53	20	L364598-01	WG384717



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## Quality Assurance Report Level II

Grand Junction, CO 81506

September 26, 2008

L365436

Specific Conductance umhos 611. 610. 0.164 20 L365195-01 WG384790

Analyte	Units	Duplicate		RPD	Limit	Ref Samp	Batch
		Result	Duplicate				
Specific Conductance	umhos	1.06	1.10	3.70	20	L366345-01	WG384790
Alkalinity	mg/l	3800	3900	2.60	20	L366447-03	WG385100
Alkalinity	mg/l	292.	300.	2.70	20	L365436-04	WG385100

Analyte	Units	Laboratory Control		Sample Result	% Rec	Limit	Batch
		Known	Val				
Chloride	mg/l	40		37.6	94.0	90-110	WG383857
Fluoride	mg/l	8		8.02	100.	90-110	WG383857
Nitrate	mg/l	8		7.89	98.6	90-110	WG383857
Nitrite	mg/l	8		7.72	96.5	90-110	WG383857
Sulfate	mg/l	40		38.2	95.5	90-110	WG383857
Chloride	mg/l	40		38.1	95.3	90-110	WG383876
Fluoride	mg/l	8		8.17	102.	90-110	WG383876
Nitrate	mg/l	8		7.95	99.4	90-110	WG383876
Nitrite	mg/l	8		7.94	99.3	90-110	WG383876
Sulfate	mg/l	40		38.9	97.3	90-110	WG383876
Dissolved Solids	mg/l	8800		8570	97.4	85-115	WG383915
Ammonia Nitrogen	mg/l	7.5		7.79	104.	85-115	WG383955
pH	su	6.5		6.40	98.5	97.19-10	WG383990
Mercury	mg/l	.003		0.00304	101.	85-115	WG384011
Dissolved Solids	mg/l	8800		8720	99.0	85-115	WG384165
Cadmium	mg/l	.0567		0.0527	92.9	85-115	WG384309
Chromium	mg/l	.0567		0.0550	97.0	85-115	WG384309
Copper	mg/l	.0567		0.0544	95.9	85-115	WG384309
Lead	mg/l	.0567		0.0529	93.3	85-115	WG384309
Nickel	mg/l	.0567		0.0539	95.1	85-115	WG384309
Selenium	mg/l	.0567		0.0528	93.1	85-115	WG384309
Silver	mg/l	.0567		0.0531	93.7	85-115	WG384309
Zinc	mg/l	.0567		0.0547	96.5	85-115	WG384309
TOC (Total Organic Carbon)	mg/l	75		72.1	96.1	85-115	WG384404
Sulfide	mg/l	.5		0.494	98.8	90-110	WG384463
Benzene	mg/l	.05		0.0479	95.7	67-126	WG384551
Ethylbenzene	mg/l	.05		0.0463	92.5	76-129	WG384551
Toluene	mg/l	.05		0.0453	90.6	72-122	WG384551
Total Xylenes	mg/l	.15		0.140	93.4	75-128	WG384551
Barium	mg/l	1.13		1.15	102.	85-115	WG384649
Boron	mg/l	1.13		1.07	94.7	85-115	WG384649
Calcium	mg/l	11.3		11.2	99.1	85-115	WG384649
Magnesium	mg/l	11.3		11.3	100.	85-115	WG384649
Manganese	mg/l	1.13		1.14	101.	85-115	WG384649
Molybdenum	mg/l	1.13		1.13	100.	85-115	WG384649
Potassium	mg/l	11.3		10.8	95.6	85-115	WG384649
Sodium	mg/l	11.3		11.2	99.1	85-115	WG384649
Alkalinity	mg/l	40		39.3	98.3	85-115	WG384717



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## Quality Assurance Report Level II

L365436

September 26, 2008

Specific Conductance	umhos/cm	519	540.	104.	85-115	WG384790
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Analyte	Units	Laboratory Control		Sample Result	% Rec	Limit	Batch
		Known	Val				
Alkalinity	mg/l	40		35.9	89.8	85-115	WG385100

Analyte	Units	Laboratory Control			Sample Duplicate	RPD	Limit	%Rec	Batch
		LCSD	Res	Ref Res					
Chloride	mg/l	37.5		37.6	0.266	20	94	WG383857	
Fluoride	mg/l	8.02		8.02	0.00	20	100	WG383857	
Nitrate	mg/l	7.92		7.89	0.380	20	99	WG383857	
Nitrite	mg/l	7.69		7.72	0.389	20	96	WG383857	
Sulfate	mg/l	38.1		38.2	0.262	20	95	WG383857	
Chloride	mg/l	38.7		38.1	1.56	20	97	WG383876	
Fluoride	mg/l	8.25		8.17	0.974	20	103	WG383876	
Nitrate	mg/l	8.04		7.95	1.13	20	101	WG383876	
Nitrite	mg/l	8.04		7.94	1.25	20	101	WG383876	
Sulfate	mg/l	39.0		38.9	0.257	20	98	WG383876	
Dissolved Solids	mg/l	8580		8570	0.187	20	98	WG383915	
Ammonia Nitrogen	mg/l	7.98		7.79	2.41	20	106	WG383955	
pH	su	6.40		6.40	0.00	20	98	WG383990	
Dissolved Solids	mg/l	8670		8720	0.506	20	99	WG384165	
TOC (Total Organic Carbon)	mg/l	72.2		72.1	0.139	20	96	WG384404	
Sulfide	mg/l	0.490		0.494	0.813	20	98	WG384463	
Benzene	mg/l	0.0500		0.0479	4.40	20	100	WG384551	
Ethylbenzene	mg/l	0.0464		0.0463	0.406	20	93	WG384551	
Toluene	mg/l	0.0469		0.0453	3.42	20	94	WG384551	
Total Xylenes	mg/l	0.142		0.140	1.40	20	95	WG384551	
Alkalinity	mg/l	39.4		39.3	0.254	20	99	WG384717	
Specific Conductance	umhos	540.		540.	0.00	20	104	WG384790	
Alkalinity	mg/l	36.1		35.9	0.556	20	90	WG385100	

Analyte	Units	Matrix Spike		TV	% Rec	Limit	Ref Samp	Batch
		MS Res	Ref Res					
Chloride	mg/l	50.8	0.929	50	99.7	80-120	L365459-06	WG383857
Fluoride	mg/l	5.28	0.178	5	102.	80-120	L365459-06	WG383857
Nitrate	mg/l	5.05	0.00	5	101.	80-120	L365459-06	WG383857
Nitrite	mg/l	5.09	0.0530	5	101.	80-120	L365459-06	WG383857
Sulfate	mg/l	51.3	0.00	50	103.	80-120	L365459-06	WG383857
Fluoride	mg/l	4.86	0.00	5	97.2	80-120	L365454-02	WG383876
Nitrate	mg/l	5.00	0.140	5	97.2	80-120	L365454-02	WG383876
Nitrite	mg/l	5.00	0.00	5	100.	80-120	L365454-02	WG383876
Ammonia Nitrogen	mg/l	4.97	0.00	5	99.4	80-120	L365410-01	WG383955
Mercury	mg/l	0.0027	0.00	.003	92.7	70-130	L365433-05	WG384011
Cadmium	mg/l	0.0540	0.0000	.0567	95.2	75-125	L365368-01	WG384309
Chromium	mg/l	0.0532	0.0000	.0567	93.8	75-125	L365368-01	WG384309



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September 26, 2008

L365436

Copper	mg/l	0.0535	0.0005	.0567	93.4	75-125	L365368-01	WG384309
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Analyte	Units	Matrix Spike		TV	% Rec	Limit	Ref Samp	Batch
		MS Res	Ref Res					
Lead	mg/l	0.0531	0.00	.0567	93.7	75-125	L365368-01	WG384309
Nickel	mg/l	0.0556	0.0021	.0567	94.3	75-125	L365368-01	WG384309
Selenium	mg/l	0.0536	0.0006	.0567	93.4	75-125	L365368-01	WG384309
Silver	mg/l	0.0525	0.0001	.0567	92.4	75-125	L365368-01	WG384309
Zinc	mg/l	0.0657	0.0240	.0567	73.5	75-125	L365368-01	WG384309
TOC (Total Organic Carbon)	mg/l	50.8	3.20	50	95.3	80-120	L365312-01	WG384404
Sulfide	mg/l	0.968	0.00	1	96.8	90-110	L365888-03	WG384463
Benzene	mg/l	0.0540	0.00	.05	108.	16-158	L365583-01	WG384551
Ethylbenzene	mg/l	0.0495	0.00	.05	99.0	29-150	L365583-01	WG384551
Toluene	mg/l	0.0487	0.00	.05	97.5	22-152	L365583-01	WG384551
Total Xylenes	mg/l	0.151	0.00	.15	101.	27-151	L365583-01	WG384551
Barium	mg/l	1.17	0.0079	1.13	103.	75-125	L365577-01	WG384649
Boron	mg/l	1.11	0.0291	1.13	95.7	75-125	L365577-01	WG384649
Calcium	mg/l	16.8	5.73	11.3	98.0	75-125	L365577-01	WG384649
Magnesium	mg/l	12.6	1.21	11.3	101.	75-125	L365577-01	WG384649
Manganese	mg/l	1.14	0.0011	1.13	101.	75-125	L365577-01	WG384649
Molybdenum	mg/l	1.18	0.00	1.13	104.	75-125	L365577-01	WG384649
Potassium	mg/l	11.1	0.00	11.3	98.2	75-125	L365577-01	WG384649
Potassium	mg/l	11.2	0.00	11.3	99.1	75-125	L365577-01	WG384649
Sodium	mg/l	17.5	6.41	11.3	98.1	75-125	L365577-01	WG384649
Alkalinity	mg/l	353.	95.5	200	129.	80-120	L365385-01	WG384717
Alkalinity	mg/l	441.	220.	200	111.	80-120	L365436-05	WG385100

Analyte	Units	Matrix Spike Duplicate		RPD	Limit	%Rec	Ref Samp	Batch
		MSD Res	Ref Res					
Chloride	mg/l	50.6	50.8	0.394	20	99.3	L365459-06	WG383857
Fluoride	mg/l	4.57	5.28	14.4	20	87.8	L365459-06	WG383857
Nitrate	mg/l	4.99	5.05	1.20	20	99.8	L365459-06	WG383857
Nitrite	mg/l	5.08	5.09	0.197	20	101.	L365459-06	WG383857
Sulfate	mg/l	51.0	51.3	0.587	20	102.	L365459-06	WG383857
Fluoride	mg/l	4.84	4.86	0.412	20	96.8	L365454-02	WG383876
Nitrate	mg/l	4.99	5.00	0.200	20	97.0	L365454-02	WG383876
Nitrite	mg/l	4.95	5.00	1.01	20	99.0	L365454-02	WG383876
Ammonia Nitrogen	mg/l	5.32	4.97	6.80	20	106.	L365410-01	WG383955
Mercury	mg/l	0.0022	0.0027	19.3	20	76.3	L365433-05	WG384011
Cadmium	mg/l	0.0541	0.0540	0.185	20	95.4	L365368-01	WG384309
Chromium	mg/l	0.0522	0.0532	1.90	20	92.0	L365368-01	WG384309
Copper	mg/l	0.0520	0.0535	2.84	20	90.7	L365368-01	WG384309
Lead	mg/l	0.0530	0.0531	0.189	20	93.5	L365368-01	WG384309
Nickel	mg/l	0.0542	0.0556	2.55	20	91.8	L365368-01	WG384309
Selenium	mg/l	0.0526	0.0536	1.88	20	91.7	L365368-01	WG384309
Silver	mg/l	0.0527	0.0525	0.380	20	92.7	L365368-01	WG384309
Zinc	mg/l	0.0631	0.0657	4.04	20	69.0	L365368-01	WG384309
TOC (Total Organic Carbon)	mg/l	51.0	50.8	0.255	20	95.5	L365312-01	WG384404
Sulfide	mg/l	0.966	0.968	0.207	20	96.6	L365888-03	WG384463



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Benzene	mg/l	0.0558	0.0540	3.13	21	112.	L365583-01	WG384551
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Analyte	Matrix Spike Duplicate				RPD	Limit	%Rec	Ref Samp	Batch
	Units	MSD	Res	Ref Res					
Ethylbenzene	mg/l	0.0500	0.0495	1.06	24	100.	L365583-01	WG384551	
Toluene	mg/l	0.0512	0.0487	4.91	22	102.	L365583-01	WG384551	
Total Xylenes	mg/l	0.153	0.151	1.35	23	102.	L365583-01	WG384551	
Barium	mg/l	1.16	1.17	0.858	20	102.	L365577-01	WG384649	
Boron	mg/l	1.12	1.11	0.897	20	96.5	L365577-01	WG384649	
Calcium	mg/l	16.8	16.8	0.00	20	98.0	L365577-01	WG384649	
Magnesium	mg/l	12.5	12.6	0.797	20	99.9	L365577-01	WG384649	
Manganese	mg/l	1.14	1.14	0.00	20	101.	L365577-01	WG384649	
Molybdenum	mg/l	1.19	1.18	0.844	20	105.	L365577-01	WG384649	
Potassium	mg/l	11.2	11.2	0.00	20	99.1	L365577-01	WG384649	
Sodium	mg/l	17.2	17.5	1.73	20	95.5	L365577-01	WG384649	
Alkalinity	mg/l	354.	353.	0.283	20	129.	L365385-01	WG384717	
Alkalinity	mg/l	444.	441.	0.678	20	112.	L365436-05	WG385100	

### Batch number /Run number / Sample number cross reference

WG383876: R469204: L365436-03 04 05 06  
WG383857: R469224: L365436-01 02  
WG383990: R470345: L365436-01 02 03 04 05 06  
WG383915: R471084: L365436-01 02 03 04  
WG383955: R471584: L365436-01 02 03 04 05 06  
WG384011: R472844: L365436-01 02 03 04 05 06  
WG384165: R472925: L365436-05 06  
WG384463: R473228: L365436-01 02 03 04 05 06  
WG384551: R473407: L365436-01 02 03 04 05 06  
WG384404: R473904: L365436-01 02 03 04 05 06  
WG384309: R474027: L365436-01 02 03 04 05 06  
WG384717: R474444: L365436-01 02 03  
WG384790: R474706: L365436-01 02 03 04 05 06  
WG384649: R475684: L365436-01 02 03 04 05 06  
WG385100: R476004: L365436-04 05 06

\* \* Calculations are performed prior to rounding of reported values .



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The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.