Matrix: Water	**Client:** ARCADIS		**Collector:** Client
Sampled: 10/13/2012 09:25	**Site:**		**Notes:**
Sample #: 312094-002	**Client Sample #:** B-1-CW20		

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Chloroform	ND	1	0.044	0.5	ug/L	10/19/12	nicollez	
Chloromethane	ND	1	0.055	0.5	ug/L	10/19/12	nicollez	
cis-1,2-Dichloroethene	ND	1	0.055	0.5	ug/L	10/19/12	nicollez	
cis-1,3-dichloropropene	ND	1	0.061	0.5	ug/L	10/19/12	nicollez	
cis-1,4-dichloro-2-butene	ND	1	0.075	5	ug/L	10/19/12	nicollez	
Dibromomethane	ND	1	0.06	0.5	ug/L	10/19/12	nicollez	
Dichlorodifluoromethane	ND	1	0.062	0.5	ug/L	10/19/12	nicollez	
Di-isopropyl ether (DIPE)	ND	1	0.17	0.5	ug/L	10/19/12	nicollez	
Ethylbenzene	ND	1	0.091	0.5	ug/L	10/19/12	nicollez	
Ethyl-tertbutylether (ETBE)	ND	1	0.25	0.5	ug/L	10/19/12	nicollez	
Hexachlorobutadiene	ND	1	0.073	1	ug/L	10/19/12	nicollez	
Isopropylbenzene	ND	1	0.089	0.5	ug/L	10/19/12	nicollez	
m and p-Xylene	ND	1	0.17	0.5	ug/L	10/19/12	nicollez	
Methylene chloride	ND	1	0.15	0.5	ug/L	10/19/12	nicollez	
Methyl-t-butyl Ether (MTBE)	ND	1	0.068	0.5	ug/L	10/19/12	nicollez	
Naphthalene	ND	1	0.061	0.5	ug/L	10/19/12	nicollez	
N-butylbenzene	ND	1	0.094	0.5	ug/L	10/19/12	nicollez	
N-propylbenzene	ND	1	0.09	0.5	ug/L	10/19/12	nicollez	
o-Xylene	ND	1	0.075	0.5	ug/L	10/19/12	nicollez	
Sec-butylbenzene	ND	1	0.077	0.5	ug/L	10/19/12	nicollez	
Styrene	ND	1	0.088	0.5	ug/L	10/19/12	nicollez	
t-Butyl alcohol (TBA)	ND	1	5	5	ug/L	10/19/12	nicollez	
Tert-amylmethylether (TAME)	ND	1	0.13	0.5	ug/L	10/19/12	nicollez	
Tert-butylbenzene	ND	1	0.092	0.5	ug/L	10/19/12	nicollez	
Tetrachloroethene	**1.0**	1	0.15	0.5	ug/L	10/19/12	nicollez	
Toluene	ND	1	0.078	0.5	ug/L	10/19/12	nicollez	
trans-1,2-dichloroethene	ND	1	0.17	0.5	ug/L	10/19/12	nicollez	
trans-1,3-dichloropropene	ND	1	0.056	0.5	ug/L	10/19/12	nicollez	
trans-1,4-dichloro-2-butene	ND	1	0.075	5	ug/L	10/19/12	nicollez	
Trichloroethene	ND	1	0.078	0.5	ug/L	10/19/12	nicollez	
Trichlorofluoromethane	ND	1	0.06	0.5	ug/L	10/19/12	nicollez	
Vinyl Chloride	ND	1	0.08	0.5	ug/L	10/19/12	nicollez	
Xylenes (Total)	ND	1	0.25	0.5	ug/L	10/19/12	nicollez	

Analyte	% Recovery	Limits	Notes
1,2-Dichloroethane-d4 (SUR)	*107*	*70-145*	
4-Bromofluorobenzene (SUR)	*110*	*70-145*	
Dibromodifluoromethane (SUR)	*100*	*70-145*	
Toluene-d8 (SUR)	*103*	*70-145*	

Method: SM 2320-B **Prep Method:** Method **QCBatchID:** QC1130512

Bicarbonate (HCO3)	**262**	1	1	5	mg/L	10/15/12	hanhkhong
Carbonate (CO3)	ND	1	0.7	5	mg/L	10/15/12	hanhkhong
Hydroxide (OH)	ND	1	0.3	5	mg/L	10/15/12	hanhkhong
Total Alkalinity (as CaCO3)	**215**	1	1.8	5	mg/L	10/15/12	hanhkhong

Method: SM 2510-B **Prep Method:** Method **QCBatchID:**

Specific Conductance	**853**	1	0.86	1	umhos/cm	10/17/12	ame

Method: SM 2540-C **Prep Method:** Method **QCBatchID:** QC1130545

Total Dissolved Solids	**428**	1	5.7	10	mg/L	10/15/12	rvenal

Method: SM 4500-H+B **Prep Method:** Method **QCBatchID:**

pH	**7.51**	1			pH Units	10/13/12	dung

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

Matrix: Water	**Client:** ARCADIS	**Collector:** Client	
Sampled: 10/13/2012 09:25	**Site:**	**Notes:**	
Sample #: 312094-002	**Client Sample #:** B-1-CW20		

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Method: SM 4500-Si-C **Prep Method:** Method							**QCBatchID:** QC1130568	
Silica	**27.6**	5	0.5	5	mg/L	10/16/12	cathy	
Method: SM 5310B **Prep Method:** Method							**QCBatchID:** QC1130670	
Total Organic Carbon (TOC)	**0.5**	1	0.1	0.5	mg/L	10/16/12	quang	

ND = Not Detected or < MDL **MDL = Method Detection Limit** **RDL = Reporting Detection Limit** **DF = Dilution Factor**

Matrix: Water	Client: ARCADIS		Collector: Client
Sampled: 10/13/2012 12:15	Site:		Notes:
Sample #: 312094-003	Client Sample #: C-1-CW06		

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Method: EPA 218.6	Prep Method: EPA 218.6						QCBatchID: QC1130697	
Hexavalent Chromium	0.6 J	1	0.1	1	ug/L	10/19/12	rybechay	
Method: EPA 6010 *NELAC*	Prep Method: EPA 3010A/Filtered						QCBatchID: QC1130591	
Chromium	0.004 J	1	0.002	0.01	mg/L	10/17/12	nina	
Method: EPA 8260 *NELAC*	Prep Method: EPA 5030B						QCBatchID: QC1130739	
1,1,1,2-Tetrachloroethane	ND	1	0.122	0.5	ug/L	10/19/12	nicollez	
1,1,1-Trichloroethane	ND	1	0.063	0.5	ug/L	10/19/12	nicollez	
1,1,2,2-Tetrachloroethane	ND	1	0.063	0.5	ug/L	10/19/12	nicollez	
1,1,2-Trichloroethane	ND	1	0.045	0.5	ug/L	10/19/12	nicollez	
1,1,2-Trichlorotrifluoroethane	ND	1	0.119	0.5	ug/L	10/19/12	nicollez	
1,1-Dichloroethane	ND	1	0.078	0.5	ug/L	10/19/12	nicollez	
1,1-Dichloroethene	0.7	1	0.13	0.5	ug/L	10/19/12	nicollez	
1,1-Dichloropropene	ND	1	0.06	0.5	ug/L	10/19/12	nicollez	
1,2,3-Trichlorobenzene	ND	1	0.06	0.5	ug/L	10/19/12	nicollez	
1,2,3-Trichloropropane	ND	1	0.073	0.5	ug/L	10/19/12	nicollez	
1,2,4-Trichlorobenzene	ND	1	0.068	0.5	ug/L	10/19/12	nicollez	
1,2,4-Trimethylbenzene	ND	1	0.078	0.5	ug/L	10/19/12	nicollez	
1,2-Dibromo-3-chloropropane	ND	1	0.08	0.5	ug/L	10/19/12	nicollez	
1,2-Dibromoethane	ND	1	0.043	0.5	ug/L	10/19/12	nicollez	
1,2-Dichlorobenzene	ND	1	0.051	0.5	ug/L	10/19/12	nicollez	
1,2-Dichloroethane	ND	1	0.066	0.5	ug/L	10/19/12	nicollez	
1,2-Dichloropropane	ND	1	0.06	0.5	ug/L	10/19/12	nicollez	
1,3,5-Trimethylbenzene	ND	1	0.097	0.5	ug/L	10/19/12	nicollez	
1,3-Dichlorobenzene	ND	1	0.052	0.5	ug/L	10/19/12	nicollez	
1,3-Dichloropropane	ND	1	0.68	0.5	ug/L	10/19/12	nicollez	
1,4-Dichlorobenzene	ND	1	0.12	0.5	ug/L	10/19/12	nicollez	
2,2-Dichloropropane	ND	1	0.11	0.5	ug/L	10/19/12	nicollez	
2-Butanone (MEK)	ND	1	0.3	5	ug/L	10/19/12	nicollez	
2-Chloroethyl Vinyl Ether	ND	1	0.23	0.5	ug/L	10/19/12	nicollez	
2-Chlorotoluene	ND	1	0.079	0.5	ug/L	10/19/12	nicollez	
4-Chlorotoluene	ND	1	0.08	0.5	ug/L	10/19/12	nicollez	
4-Isopropyltoluene	ND	1	0.091	0.5	ug/L	10/19/12	nicollez	
4-Methyl-2-pentanone (MIBK)	ND	1	0.16	5	ug/L	10/19/12	nicollez	
Acetone	ND	1	0.2	10	ug/L	10/19/12	nicollez	
Allyl Chloride	ND	1	0.08	0.5	ug/L	10/19/12	nicollez	
Benzene	ND	1	0.071	0.5	ug/L	10/19/12	nicollez	
Bromobenzene	ND	1	0.073	1	ug/L	10/19/12	nicollez	
Bromochloromethane	ND	1	0.06	0.5	ug/L	10/19/12	nicollez	
Bromodichloromethane	ND	1	0.06	0.5	ug/L	10/19/12	nicollez	
Bromoform	ND	1	0.053	0.5	ug/L	10/19/12	nicollez	
Bromomethane	ND	1	0.13	1	ug/L	10/19/12	nicollez	
Carbon Tetrachloride	ND	1	0.045	0.5	ug/L	10/19/12	nicollez	
Chlorobenzene	ND	1	0.075	0.5	ug/L	10/19/12	nicollez	
Chlorodibromomethane	ND	1	0.045	0.5	ug/L	10/19/12	nicollez	
Chloroethane	ND	1	0.4	0.5	ug/L	10/19/12	nicollez	
Chloroform	0.5	1	0.044	0.5	ug/L	10/19/12	nicollez	
Chloromethane	ND	1	0.055	0.5	ug/L	10/19/12	nicollez	
cis-1,2-Dichloroethene	ND	1	0.055	0.5	ug/L	10/19/12	nicollez	
cis-1,3-dichloropropene	ND	1	0.061	0.5	ug/L	10/19/12	nicollez	
cis-1,4-dichloro-2-butene	ND	1	0.075	5	ug/L	10/19/12	nicollez	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

Matrix: Water	**Client:** ARCADIS		**Collector:** Client
Sampled: 10/13/2012 12:15	**Site:**		**Notes:**
Sample #: 312094-003	**Client Sample #:** C-1-CW06		

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Dibromomethane	ND	1	0.06	0.5	ug/L	10/19/12	nicollez	
Dichlorodifluoromethane	ND	1	0.062	0.5	ug/L	10/19/12	nicollez	
Di-isopropyl ether (DIPE)	ND	1	0.17	0.5	ug/L	10/19/12	nicollez	
Ethylbenzene	ND	1	0.091	0.5	ug/L	10/19/12	nicollez	
Ethyl-tertbutylether (ETBE)	ND	1	0.25	0.5	ug/L	10/19/12	nicollez	
Hexachlorobutadiene	ND	1	0.073	1	ug/L	10/19/12	nicollez	
Isopropylbenzene	ND	1	0.089	0.5	ug/L	10/19/12	nicollez	
m and p-Xylene	ND	1	0.17	0.5	ug/L	10/19/12	nicollez	
Methylene chloride	ND	1	0.15	0.5	ug/L	10/19/12	nicollez	
Methyl-t-butyl Ether (MTBE)	ND	1	0.068	0.5	ug/L	10/19/12	nicollez	
Naphthalene	ND	1	0.061	0.5	ug/L	10/19/12	nicollez	
N-butylbenzene	ND	1	0.094	0.5	ug/L	10/19/12	nicollez	
N-propylbenzene	ND	1	0.09	0.5	ug/L	10/19/12	nicollez	
o-Xylene	ND	1	0.075	0.5	ug/L	10/19/12	nicollez	
Sec-butylbenzene	ND	1	0.077	0.5	ug/L	10/19/12	nicollez	
Styrene	ND	1	0.088	0.5	ug/L	10/19/12	nicollez	
t-Butyl alcohol (TBA)	ND	1	5	5	ug/L	10/19/12	nicollez	
Tert-amylmethylether (TAME)	ND	1	0.13	0.5	ug/L	10/19/12	nicollez	
Tert-butylbenzene	ND	1	0.092	0.5	ug/L	10/19/12	nicollez	
Tetrachloroethene	12	1	0.15	0.5	ug/L	10/19/12	nicollez	
Toluene	ND	1	0.078	0.5	ug/L	10/19/12	nicollez	
trans-1,2-dichloroethene	ND	1	0.17	0.5	ug/L	10/19/12	nicollez	
trans-1,3-dichloropropene	ND	1	0.056	0.5	ug/L	10/19/12	nicollez	
trans-1,4-dichloro-2-butene	ND	1	0.075	5	ug/L	10/19/12	nicollez	
Trichloroethene	190	10	0.78	5	ug/L	10/19/12	nicollez	
Trichlorofluoromethane	ND	1	0.06	0.5	ug/L	10/19/12	nicollez	
Vinyl Chloride	ND	1	0.08	0.5	ug/L	10/19/12	nicollez	
Xylenes (Total)	ND	1	0.25	0.5	ug/L	10/19/12	nicollez	

Analyte	% Recovery	Limits	Notes
1,2-Dichloroethane-d4 (SUR)	*113*	*70-145*	
4-Bromofluorobenzene (SUR)	*109*	*70-145*	
Dibromodifluoromethane (SUR)	*103*	*70-145*	
Toluene-d8 (SUR)	*102*	*70-145*	

Method: EPA 8260M **Prep Method:** EPA 5030B **QCBatchID:** QC1130838

1,2,3-Trichloropropane	ND	1	0.005	0.005	ug/L	10/23/12	akk	

Analyte	% Recovery	Limits	Notes
Toluene-d8 (SUR)	*94*	*50-150*	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

Matrix: Water	**Client:** ARCADIS	**Collector:** Client	
Sampled: 10/13/2012 15:20	**Site:**	**Notes:**	
Sample #: 312094-004	**Client Sample #:** B-5-CW02		

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Method: EPA 218.6	**Prep Method:** EPA 218.6						**QCBatchID:** QC1130697	
Hexavalent Chromium	ND	1	0.1	1	ug/L	10/19/12	rybechay	
Method: EPA 6010 *NELAC*	**Prep Method:** EPA 3010A/Filtered						**QCBatchID:** QC1130591	
Chromium	ND	1	0.002	0.01	mg/L	10/17/12	nina	
Method: EPA 8260 *NELAC*	**Prep Method:** EPA 5030B						**QCBatchID:** QC1130739	
1,1,1,2-Tetrachloroethane	ND	1	0.122	0.5	ug/L	10/19/12	nicollez	
1,1,1-Trichloroethane	ND	1	0.063	0.5	ug/L	10/19/12	nicollez	
1,1,2,2-Tetrachloroethane	ND	1	0.063	0.5	ug/L	10/19/12	nicollez	
1,1,2-Trichloroethane	ND	1	0.045	0.5	ug/L	10/19/12	nicollez	
1,1,2-Trichlorotrifluoroethane	ND	1	0.119	0.5	ug/L	10/19/12	nicollez	
1,1-Dichloroethane	ND	1	0.078	0.5	ug/L	10/19/12	nicollez	
1,1-Dichloroethene	ND	1	0.13	0.5	ug/L	10/19/12	nicollez	
1,1-Dichloropropene	ND	1	0.06	0.5	ug/L	10/19/12	nicollez	
1,2,3-Trichlorobenzene	ND	1	0.06	0.5	ug/L	10/19/12	nicollez	
1,2,3-Trichloropropane	ND	1	0.073	0.5	ug/L	10/19/12	nicollez	
1,2,4-Trichlorobenzene	ND	1	0.068	0.5	ug/L	10/19/12	nicollez	
1,2,4-Trimethylbenzene	ND	1	0.078	0.5	ug/L	10/19/12	nicollez	
1,2-Dibromo-3-chloropropane	ND	1	0.08	0.5	ug/L	10/19/12	nicollez	
1,2-Dibromoethane	ND	1	0.043	0.5	ug/L	10/19/12	nicollez	
1,2-Dichlorobenzene	ND	1	0.051	0.5	ug/L	10/19/12	nicollez	
1,2-Dichloroethane	ND	1	0.066	0.5	ug/L	10/19/12	nicollez	
1,2-Dichloropropane	ND	1	0.06	0.5	ug/L	10/19/12	nicollez	
1,3,5-Trimethylbenzene	ND	1	0.097	0.5	ug/L	10/19/12	nicollez	
1,3-Dichlorobenzene	ND	1	0.052	0.5	ug/L	10/19/12	nicollez	
1,3-Dichloropropane	ND	1	0.68	0.5	ug/L	10/19/12	nicollez	
1,4-Dichlorobenzene	ND	1	0.12	0.5	ug/L	10/19/12	nicollez	
2,2-Dichloropropane	ND	1	0.11	0.5	ug/L	10/19/12	nicollez	
2-Butanone (MEK)	ND	1	0.3	5	ug/L	10/19/12	nicollez	
2-Chloroethyl Vinyl Ether	ND	1	0.23	0.5	ug/L	10/19/12	nicollez	
2-Chlorotoluene	ND	1	0.079	0.5	ug/L	10/19/12	nicollez	
4-Chlorotoluene	ND	1	0.08	0.5	ug/L	10/19/12	nicollez	
4-Isopropyltoluene	ND	1	0.091	0.5	ug/L	10/19/12	nicollez	
4-Methyl-2-pentanone (MIBK)	ND	1	0.16	5	ug/L	10/19/12	nicollez	
Acetone	ND	1	0.2	10	ug/L	10/19/12	nicollez	
Allyl Chloride	ND	1	0.08	0.5	ug/L	10/19/12	nicollez	
Benzene	ND	1	0.071	0.5	ug/L	10/19/12	nicollez	
Bromobenzene	ND	1	0.073	1	ug/L	10/19/12	nicollez	
Bromochloromethane	ND	1	0.06	0.5	ug/L	10/19/12	nicollez	
Bromodichloromethane	ND	1	0.06	0.5	ug/L	10/19/12	nicollez	
Bromoform	ND	1	0.053	0.5	ug/L	10/19/12	nicollez	
Bromomethane	ND	1	0.13	1	ug/L	10/19/12	nicollez	
Carbon Tetrachloride	ND	1	0.045	0.5	ug/L	10/19/12	nicollez	
Chlorobenzene	ND	1	0.075	0.5	ug/L	10/19/12	nicollez	
Chlorodibromomethane	ND	1	0.045	0.5	ug/L	10/19/12	nicollez	
Chloroethane	ND	1	0.4	0.5	ug/L	10/19/12	nicollez	
Chloroform	ND	1	0.044	0.5	ug/L	10/19/12	nicollez	
Chloromethane	ND	1	0.055	0.5	ug/L	10/19/12	nicollez	
cis-1,2-Dichloroethene	ND	1	0.055	0.5	ug/L	10/19/12	nicollez	
cis-1,3-dichloropropene	ND	1	0.061	0.5	ug/L	10/19/12	nicollez	
cis-1,4-dichloro-2-butene	ND	1	0.075	5	ug/L	10/19/12	nicollez	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

Matrix: Water	Client: ARCADIS		Collector: Client
Sampled: 10/13/2012 15:20	Site:		Notes:
Sample #: 312094-004	Client Sample #: B-5-CW02		

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Dibromomethane	ND	1	0.06	0.5	ug/L	10/19/12	nicollez	
Dichlorodifluoromethane	ND	1	0.062	0.5	ug/L	10/19/12	nicollez	
Di-isopropyl ether (DIPE)	ND	1	0.17	0.5	ug/L	10/19/12	nicollez	
Ethylbenzene	ND	1	0.091	0.5	ug/L	10/19/12	nicollez	
Ethyl-tertbutylether (ETBE)	ND	1	0.25	0.5	ug/L	10/19/12	nicollez	
Hexachlorobutadiene	ND	1	0.073	1	ug/L	10/19/12	nicollez	
Isopropylbenzene	ND	1	0.089	0.5	ug/L	10/19/12	nicollez	
m and p-Xylene	ND	1	0.17	0.5	ug/L	10/19/12	nicollez	
Methylene chloride	ND	1	0.15	0.5	ug/L	10/19/12	nicollez	
Methyl-t-butyl Ether (MTBE)	ND	1	0.068	0.5	ug/L	10/19/12	nicollez	
Naphthalene	ND	1	0.061	0.5	ug/L	10/19/12	nicollez	
N-butylbenzene	ND	1	0.094	0.5	ug/L	10/19/12	nicollez	
N-propylbenzene	ND	1	0.09	0.5	ug/L	10/19/12	nicollez	
o-Xylene	ND	1	0.075	0.5	ug/L	10/19/12	nicollez	
Sec-butylbenzene	ND	1	0.077	0.5	ug/L	10/19/12	nicollez	
Styrene	ND	1	0.088	0.5	ug/L	10/19/12	nicollez	
t-Butyl alcohol (TBA)	ND	1	5	5	ug/L	10/19/12	nicollez	
Tert-amylmethylether (TAME)	ND	1	0.13	0.5	ug/L	10/19/12	nicollez	
Tert-butylbenzene	ND	1	0.092	0.5	ug/L	10/19/12	nicollez	
Tetrachloroethene	3.8	1	0.15	0.5	ug/L	10/19/12	nicollez	
Toluene	ND	1	0.078	0.5	ug/L	10/19/12	nicollez	
trans-1,2-dichloroethene	ND	1	0.17	0.5	ug/L	10/19/12	nicollez	
trans-1,3-dichloropropene	ND	1	0.056	0.5	ug/L	10/19/12	nicollez	
trans-1,4-dichloro-2-butene	ND	1	0.075	5	ug/L	10/19/12	nicollez	
Trichloroethene	ND	1	0.078	0.5	ug/L	10/19/12	nicollez	
Trichlorofluoromethane	ND	1	0.06	0.5	ug/L	10/19/12	nicollez	
Vinyl Chloride	ND	1	0.08	0.5	ug/L	10/19/12	nicollez	
Xylenes (Total)	ND	1	0.25	0.5	ug/L	10/19/12	nicollez	

Analyte	% Recovery	Limits	Notes
1,2-Dichloroethane-d4 (SUR)	*116*	*70-145*	
4-Bromofluorobenzene (SUR)	*109*	*70-145*	
Dibromodifluoromethane (SUR)	*104*	*70-145*	
Toluene-d8 (SUR)	*101*	*70-145*	

Method: EPA 8260M Prep Method: EPA 5030B QCBatchID: QC1130838

1,2,3-Trichloropropane	ND	1	0.005	0.005	ug/L	10/23/12	akk

Analyte	% Recovery	Limits	Notes
Toluene-d8 (SUR)	*105*	*50-150*	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

Matrix: Water	Client: ARCADIS	Collector: Client	
Sampled: 10/13/2012 13:25	Site:	Notes:	
Sample #: 312094-005	Client Sample #: M-W-6		

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Method: EPA 218.6	**Prep Method: EPA 218.6**						**QCBatchID: QC1130697**	
Hexavalent Chromium	**2.23**	1	0.1	1	ug/L	10/19/12	rybechay	
Method: EPA 300.0	**Prep Method: Method**						**QCBatchID: QC1130592**	
Nitrate, as Nitrogen	**16.3**	5	0.3	0.5	mg/L	10/13/12	wei	
Nitrite, as Nitrogen	ND	1	0.018	0.1	mg/L	10/13/12	wei	
Method: EPA 6010 *NELAC*	**Prep Method: EPA 3010A/Filtered**						**QCBatchID: QC1130591**	
Chromium	**0.005 J**	1	0.002	0.01	mg/L	10/17/12	nina	
Thallium	ND	1	0.003	0.005	mg/L	10/17/12	nina	
Method: EPA 8260 *NELAC*	**Prep Method: EPA 5030B**						**QCBatchID: QC1130739**	
1,1,1,2-Tetrachloroethane	ND	1	0.122	0.5	ug/L	10/19/12	nicollez	
1,1,1-Trichloroethane	ND	1	0.063	0.5	ug/L	10/19/12	nicollez	
1,1,2,2-Tetrachloroethane	ND	1	0.063	0.5	ug/L	10/19/12	nicollez	
1,1,2-Trichloroethane	ND	1	0.045	0.5	ug/L	10/19/12	nicollez	
1,1,2-Trichlorotrifluoroethane	**1.0**	1	0.119	0.5	ug/L	10/19/12	nicollez	
1,1-Dichloroethane	ND	1	0.078	0.5	ug/L	10/19/12	nicollez	
1,1-Dichloroethene	**2.4**	1	0.13	0.5	ug/L	10/19/12	nicollez	
1,1-Dichloropropene	ND	1	0.06	0.5	ug/L	10/19/12	nicollez	
1,2,3-Trichlorobenzene	ND	1	0.06	0.5	ug/L	10/19/12	nicollez	
1,2,3-Trichloropropane	ND	1	0.073	0.5	ug/L	10/19/12	nicollez	
1,2,4-Trichlorobenzene	ND	1	0.068	0.5	ug/L	10/19/12	nicollez	
1,2,4-Trimethylbenzene	ND	1	0.078	0.5	ug/L	10/19/12	nicollez	
1,2-Dibromo-3-chloropropane	ND	1	0.08	0.5	ug/L	10/19/12	nicollez	
1,2-Dibromoethane	ND	1	0.043	0.5	ug/L	10/19/12	nicollez	
1,2-Dichlorobenzene	ND	1	0.051	0.5	ug/L	10/19/12	nicollez	
1,2-Dichloroethane	ND	1	0.066	0.5	ug/L	10/19/12	nicollez	
1,2-Dichloropropane	ND	1	0.06	0.5	ug/L	10/19/12	nicollez	
1,3,5-Trimethylbenzene	ND	1	0.097	0.5	ug/L	10/19/12	nicollez	
1,3-Dichlorobenzene	ND	1	0.052	0.5	ug/L	10/19/12	nicollez	
1,3-Dichloropropane	ND	1	0.68	0.5	ug/L	10/19/12	nicollez	
1,4-Dichlorobenzene	ND	1	0.12	0.5	ug/L	10/19/12	nicollez	
2,2-Dichloropropane	ND	1	0.11	0.5	ug/L	10/19/12	nicollez	
2-Butanone (MEK)	ND	1	0.3	5	ug/L	10/19/12	nicollez	
2-Chloroethyl Vinyl Ether	ND	1	0.23	0.5	ug/L	10/19/12	nicollez	
2-Chlorotoluene	ND	1	0.079	0.5	ug/L	10/19/12	nicollez	
4-Chlorotoluene	ND	1	0.08	0.5	ug/L	10/19/12	nicollez	
4-Isopropyltoluene	ND	1	0.091	0.5	ug/L	10/19/12	nicollez	
4-Methyl-2-pentanone (MIBK)	ND	1	0.16	5	ug/L	10/19/12	nicollez	
Acetone	ND	1	0.2	10	ug/L	10/19/12	nicollez	
Allyl Chloride	ND	1	0.08	0.5	ug/L	10/19/12	nicollez	
Benzene	ND	1	0.071	0.5	ug/L	10/19/12	nicollez	
Bromobenzene	ND	1	0.073	1	ug/L	10/19/12	nicollez	
Bromochloromethane	ND	1	0.06	0.5	ug/L	10/19/12	nicollez	
Bromodichloromethane	ND	1	0.06	0.5	ug/L	10/19/12	nicollez	
Bromoform	ND	1	0.053	0.5	ug/L	10/19/12	nicollez	
Bromomethane	ND	1	0.13	1	ug/L	10/19/12	nicollez	
Carbon Tetrachloride	**1.9**	1	0.045	0.5	ug/L	10/19/12	nicollez	
Chlorobenzene	ND	1	0.075	0.5	ug/L	10/19/12	nicollez	
Chlorodibromomethane	ND	1	0.045	0.5	ug/L	10/19/12	nicollez	
Chloroethane	ND	1	0.4	0.5	ug/L	10/19/12	nicollez	
Chloroform	**3.3**	1	0.044	0.5	ug/L	10/19/12	nicollez	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

Matrix: Water	Client: ARCADIS	Collector: Client
Sampled: 10/13/2012 13:25	Site:	Notes:
Sample #: 312094-005	Client Sample #: M-W-6	

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Chloromethane	ND	1	0.055	0.5	ug/L	10/19/12	nicollez	
cis-1,2-Dichloroethene	ND	1	0.055	0.5	ug/L	10/19/12	nicollez	
cis-1,3-dichloropropene	ND	1	0.061	0.5	ug/L	10/19/12	nicollez	
cis-1,4-dichloro-2-butene	ND	1	0.075	5	ug/L	10/19/12	nicollez	
Dibromomethane	ND	1	0.06	0.5	ug/L	10/19/12	nicollez	
Dichlorodifluoromethane	ND	1	0.062	0.5	ug/L	10/19/12	nicollez	
Di-isopropyl ether (DIPE)	ND	1	0.17	0.5	ug/L	10/19/12	nicollez	
Ethylbenzene	ND	1	0.091	0.5	ug/L	10/19/12	nicollez	
Ethyl-tertbutylether (ETBE)	ND	1	0.25	0.5	ug/L	10/19/12	nicollez	
Hexachlorobutadiene	ND	1	0.073	1	ug/L	10/19/12	nicollez	
Isopropylbenzene	ND	1	0.089	0.5	ug/L	10/19/12	nicollez	
m and p-Xylene	ND	1	0.17	0.5	ug/L	10/19/12	nicollez	
Methylene chloride	ND	1	0.15	0.5	ug/L	10/19/12	nicollez	
Methyl-t-butyl Ether (MTBE)	ND	1	0.068	0.5	ug/L	10/19/12	nicollez	
Naphthalene	ND	1	0.061	0.5	ug/L	10/19/12	nicollez	
N-butylbenzene	ND	1	0.094	0.5	ug/L	10/19/12	nicollez	
N-propylbenzene	ND	1	0.09	0.5	ug/L	10/19/12	nicollez	
o-Xylene	ND	1	0.075	0.5	ug/L	10/19/12	nicollez	
Sec-butylbenzene	ND	1	0.077	0.5	ug/L	10/19/12	nicollez	
Styrene	ND	1	0.088	0.5	ug/L	10/19/12	nicollez	
t-Butyl alcohol (TBA)	ND	1	5	5	ug/L	10/19/12	nicollez	
Tert-amylmethylether (TAME)	ND	1	0.13	0.5	ug/L	10/19/12	nicollez	
Tert-butylbenzene	ND	1	0.092	0.5	ug/L	10/19/12	nicollez	
Tetrachloroethene	72	1	0.15	0.5	ug/L	10/19/12	nicollez	
Toluene	13	1	0.078	0.5	ug/L	10/19/12	nicollez	
trans-1,2-dichloroethene	ND	1	0.17	0.5	ug/L	10/19/12	nicollez	
trans-1,3-dichloropropene	ND	1	0.056	0.5	ug/L	10/19/12	nicollez	
trans-1,4-dichloro-2-butene	ND	1	0.075	5	ug/L	10/19/12	nicollez	
Trichloroethene	56	1	0.078	0.5	ug/L	10/19/12	nicollez	
Trichlorofluoromethane	ND	1	0.06	0.5	ug/L	10/19/12	nicollez	
Vinyl Chloride	ND	1	0.08	0.5	ug/L	10/19/12	nicollez	
Xylenes (Total)	ND	1	0.25	0.5	ug/L	10/19/12	nicollez	

Analyte	% Recovery	Limits	Notes
1,2-Dichloroethane-d4 (SUR)	*111*	*70-145*	
4-Bromofluorobenzene (SUR)	*104*	*70-145*	
Dibromodifluoromethane (SUR)	*100*	*70-145*	
Toluene-d8 (SUR)	*105*	*70-145*	

Method: EPA 8260M **Prep Method:** EPA 5030B **QCBatchID:** QC1130838

1,2,3-Trichloropropane	0.175	5	0.025	0.025	ug/L	10/23/12	akk	

Analyte	% Recovery	Limits	Notes
Toluene-d8 (SUR)	*123*	*50-150*	

Method: EPA 8270M **Prep Method:** EPA 3535 **QCBatchID:** QC1130590

1,4-Dioxane	1.1	1	0.12	1	ug/L	10/16/12	qnguyen	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

Matrix: Water	Client: ARCADIS	Collector: Client	
Sampled: 10/13/2012 09:36	Site:	Notes:	
Sample #: 312094-006	Client Sample #: C-1-CW08		

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Method: EPA 218.6	**Prep Method: EPA 218.6**						**QCBatchID: QC1130697**	
Hexavalent Chromium	ND	1	0.1	1	ug/L	10/19/12	rybechay	
Method: EPA 6010 *NELAC*	**Prep Method: EPA 3010A/Filtered**						**QCBatchID: QC1130591**	
Chromium	ND	1	0.002	0.01	mg/L	10/17/12	nina	
Method: EPA 8260 *NELAC*	**Prep Method: EPA 5030B**						**QCBatchID: QC1130739**	
1,1,1,2-Tetrachloroethane	ND	1	0.122	0.5	ug/L	10/19/12	nicollez	
1,1,1-Trichloroethane	ND	1	0.063	0.5	ug/L	10/19/12	nicollez	
1,1,2,2-Tetrachloroethane	ND	1	0.063	0.5	ug/L	10/19/12	nicollez	
1,1,2-Trichloroethane	ND	1	0.045	0.5	ug/L	10/19/12	nicollez	
1,1,2-Trichlorotrifluoroethane	ND	1	0.119	0.5	ug/L	10/19/12	nicollez	
1,1-Dichloroethane	ND	1	0.078	0.5	ug/L	10/19/12	nicollez	
1,1-Dichloroethene	ND	1	0.13	0.5	ug/L	10/19/12	nicollez	
1,1-Dichloropropene	ND	1	0.06	0.5	ug/L	10/19/12	nicollez	
1,2,3-Trichlorobenzene	ND	1	0.06	0.5	ug/L	10/19/12	nicollez	
1,2,3-Trichloropropane	ND	1	0.073	0.5	ug/L	10/19/12	nicollez	
1,2,4-Trichlorobenzene	ND	1	0.068	0.5	ug/L	10/19/12	nicollez	
1,2,4-Trimethylbenzene	ND	1	0.078	0.5	ug/L	10/19/12	nicollez	
1,2-Dibromo-3-chloropropane	ND	1	0.08	0.5	ug/L	10/19/12	nicollez	
1,2-Dibromoethane	ND	1	0.043	0.5	ug/L	10/19/12	nicollez	
1,2-Dichlorobenzene	ND	1	0.051	0.5	ug/L	10/19/12	nicollez	
1,2-Dichloroethane	ND	1	0.066	0.5	ug/L	10/19/12	nicollez	
1,2-Dichloropropane	ND	1	0.06	0.5	ug/L	10/19/12	nicollez	
1,3,5-Trimethylbenzene	ND	1	0.097	0.5	ug/L	10/19/12	nicollez	
1,3-Dichlorobenzene	ND	1	0.052	0.5	ug/L	10/19/12	nicollez	
1,3-Dichloropropane	ND	1	0.68	0.5	ug/L	10/19/12	nicollez	
1,4-Dichlorobenzene	ND	1	0.12	0.5	ug/L	10/19/12	nicollez	
2,2-Dichloropropane	ND	1	0.11	0.5	ug/L	10/19/12	nicollez	
2-Butanone (MEK)	ND	1	0.3	5	ug/L	10/19/12	nicollez	
2-Chloroethyl Vinyl Ether	ND	1	0.23	0.5	ug/L	10/19/12	nicollez	
2-Chlorotoluene	ND	1	0.079	0.5	ug/L	10/19/12	nicollez	
4-Chlorotoluene	ND	1	0.08	0.5	ug/L	10/19/12	nicollez	
4-Isopropyltoluene	ND	1	0.091	0.5	ug/L	10/19/12	nicollez	
4-Methyl-2-pentanone (MIBK)	ND	1	0.16	5	ug/L	10/19/12	nicollez	
Acetone	ND	1	0.2	10	ug/L	10/19/12	nicollez	
Allyl Chloride	ND	1	0.08	0.5	ug/L	10/19/12	nicollez	
Benzene	ND	1	0.071	0.5	ug/L	10/19/12	nicollez	
Bromobenzene	ND	1	0.073	1	ug/L	10/19/12	nicollez	
Bromochloromethane	ND	1	0.06	0.5	ug/L	10/19/12	nicollez	
Bromodichloromethane	ND	1	0.06	0.5	ug/L	10/19/12	nicollez	
Bromoform	ND	1	0.053	0.5	ug/L	10/19/12	nicollez	
Bromomethane	ND	1	0.13	1	ug/L	10/19/12	nicollez	
Carbon Tetrachloride	ND	1	0.045	0.5	ug/L	10/19/12	nicollez	
Chlorobenzene	ND	1	0.075	0.5	ug/L	10/19/12	nicollez	
Chlorodibromomethane	ND	1	0.045	0.5	ug/L	10/19/12	nicollez	
Chloroethane	ND	1	0.4	0.5	ug/L	10/19/12	nicollez	
Chloroform	ND	1	0.044	0.5	ug/L	10/19/12	nicollez	
Chloromethane	ND	1	0.055	0.5	ug/L	10/19/12	nicollez	
cis-1,2-Dichloroethene	ND	1	0.055	0.5	ug/L	10/19/12	nicollez	
cis-1,3-dichloropropene	ND	1	0.061	0.5	ug/L	10/19/12	nicollez	
cis-1,4-dichloro-2-butene	ND	1	0.075	5	ug/L	10/19/12	nicollez	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

Matrix: Water	**Client:** ARCADIS		**Collector:** Client
Sampled: 10/13/2012 09:36	**Site:**		**Notes:**
Sample #: 312094-006	**Client Sample #:** C-1-CW08		

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Dibromomethane	ND	1	0.06	0.5	ug/L	10/19/12	nicollez	
Dichlorodifluoromethane	ND	1	0.062	0.5	ug/L	10/19/12	nicollez	
Di-isopropyl ether (DIPE)	ND	1	0.17	0.5	ug/L	10/19/12	nicollez	
Ethylbenzene	ND	1	0.091	0.5	ug/L	10/19/12	nicollez	
Ethyl-tertbutylether (ETBE)	ND	1	0.25	0.5	ug/L	10/19/12	nicollez	
Hexachlorobutadiene	ND	1	0.073	1	ug/L	10/19/12	nicollez	
Isopropylbenzene	ND	1	0.089	0.5	ug/L	10/19/12	nicollez	
m and p-Xylene	ND	1	0.17	0.5	ug/L	10/19/12	nicollez	
Methylene chloride	ND	1	0.15	0.5	ug/L	10/19/12	nicollez	
Methyl-t-butyl Ether (MTBE)	ND	1	0.068	0.5	ug/L	10/19/12	nicollez	
Naphthalene	ND	1	0.061	0.5	ug/L	10/19/12	nicollez	
N-butylbenzene	ND	1	0.094	0.5	ug/L	10/19/12	nicollez	
N-propylbenzene	ND	1	0.09	0.5	ug/L	10/19/12	nicollez	
o-Xylene	ND	1	0.075	0.5	ug/L	10/19/12	nicollez	
Sec-butylbenzene	ND	1	0.077	0.5	ug/L	10/19/12	nicollez	
Styrene	ND	1	0.088	0.5	ug/L	10/19/12	nicollez	
t-Butyl alcohol (TBA)	ND	1	5	5	ug/L	10/19/12	nicollez	
Tert-amylmethylether (TAME)	ND	1	0.13	0.5	ug/L	10/19/12	nicollez	
Tert-butylbenzene	ND	1	0.092	0.5	ug/L	10/19/12	nicollez	
Tetrachloroethene	7.9	1	0.15	0.5	ug/L	10/19/12	nicollez	
Toluene	ND	1	0.078	0.5	ug/L	10/19/12	nicollez	
trans-1,2-dichloroethene	ND	1	0.17	0.5	ug/L	10/19/12	nicollez	
trans-1,3-dichloropropene	ND	1	0.056	0.5	ug/L	10/19/12	nicollez	
trans-1,4-dichloro-2-butene	ND	1	0.075	5	ug/L	10/19/12	nicollez	
Trichloroethene	0.6	1	0.078	0.5	ug/L	10/19/12	nicollez	
Trichlorofluoromethane	ND	1	0.06	0.5	ug/L	10/19/12	nicollez	
Vinyl Chloride	ND	1	0.08	0.5	ug/L	10/19/12	nicollez	
Xylenes (Total)	ND	1	0.25	0.5	ug/L	10/19/12	nicollez	

Analyte	% Recovery	Limits	Notes
1,2-Dichloroethane-d4 (SUR)	*114*	*70-145*	
4-Bromofluorobenzene (SUR)	*110*	*70-145*	
Dibromodifluoromethane (SUR)	*104*	*70-145*	
Toluene-d8 (SUR)	*105*	*70-145*	

Method: EPA 8260M **Prep Method:** EPA 5030B **QCBatchID:** QC1130844

1,2,3-Trichloropropane	ND	1	0.005	0.005	ug/L	10/24/12	akk

Analyte	% Recovery	Limits	Notes
Toluene-d8 (SUR)	*96*	*50-150*	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

Matrix: Water	**Client:** ARCADIS			**Collector:** Client	
Sampled: 10/13/2012 08:20	**Site:**			**Notes:**	
Sample #: 312094-007	**Client Sample #:** 3871G				

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Method: EPA 218.6	**Prep Method:** EPA 218.6						**QCBatchID:** QC1130697	
Hexavalent Chromium	1.36	1	0.1	1	ug/L	10/19/12	rybechay	
Method: EPA 6010 *NELAC*	**Prep Method:** EPA 3010A/Filtered						**QCBatchID:** QC1130591	
Chromium	0.006 J	1	0.002	0.01	mg/L	10/17/12	nina	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

ASSOCIATED LABORATORIES QC SUMMARY FOR LAB REQUEST #312094

QCBatchID:	QC1130512	**Analyst:**	hanhkhong	**Method:**	SM 2320-B
Matrix:	Water	**Analyzed:**	10/15/2012	**Instrument:**	CHEM (group)

Duplicate Summary

Analyte	Sample Amount	Duplicate Amount	Units	RPD	Limits RPD	Notes
QC1130512DUP1						**Source: 311995-010**
Bicarbonate (HCO3)	336	332	mg/L	1.2	20	
Carbonate (CO3)	ND	ND	mg/L	0.0	20	
Hydroxide (OH)	ND	ND	mg/L	0.0	20	
Total Alkalinity (as CaCO3)	275	273	mg/L	0.7	20	

ND = Not Detected or < MDL **MDL = Method Detection Limit** **RDL = Reporting Detection Limit** **DF = Dilution Factor**

ASSOCIATED LABORATORIES QC SUMMARY FOR LAB REQUEST #312094

QCBatchID: QC1130545	**Analyst:** rvenal	**Method:** SM 2540-C
Matrix: Water	**Analyzed:** 10/15/2012	**Instrument:** CHEM (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1130545MB1					
Total Dissolved Solids	ND	mg/L	5.7	10	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1130545LCS1											
Total Dissolved Solids	293		275		mg/L	94			90-110		

Duplicate Summary

Analyte	Sample Amount	Duplicate Amount	Units	RPD	Limits RPD	Notes
QC1130545DUP1						**Source: 312149-001**
Total Dissolved Solids	8340	8320	mg/L	0.2	5	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

ASSOCIATED LABORATORIES QC SUMMARY FOR LAB REQUEST #312094

QCBatchID: QC1130568	Analyst: cathy	Method: SM 4500-Si-C
Matrix: Water	Analyzed: 10/16/2012	Instrument: CHEM (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1130568MB1					
Silica	ND	mg/L	0.1	1	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1130568LCS1											
Silica	2		2.05		mg/L	103			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1130568MS1, QC1130568MSD1												**Source: 312080-013**
Silica	33.8	10	10	44.8	43.8	mg/L	110	100	2.3	75-125	20	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

ASSOCIATED LABORATORIES QC SUMMARY FOR LAB REQUEST #312094

QCBatchID:	QC1130590	**Analyst:**	qnguyen	**Method:**	EPA 8270M
Matrix:	Water	**Analyzed:**	10/15/2012	**Instrument:**	SVOA-MS (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1130590MB1					
1,4-Dioxane	ND	ug/L	0.12	1	
N-nitrosodiethylamine (NDEA)	ND	ug/L	0.68	2	
N-Nitrosodimethylamine (NDMA)	ND	ug/L	0.29	2	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD		%Rec	RPD	
QC1130590LCS1, QC1130590LCSD1											
1,4-Dioxane	20	20	13	14	ug/L	65	70	7	65-135	35	
N-nitrosodiethylamine (NDEA)	20	20	14	15	ug/L	70	75	7	65-135	35	
N-Nitrosodimethylamine (NDMA)	20	20	14	15	ug/L	70	75	7	65-135	35	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

ASSOCIATED LABORATORIES QC SUMMARY FOR LAB REQUEST #312094

QCBatchID: QC1130591	**Analyst:** metha	**Method:** EPA 6010B
Matrix: Water	**Analyzed:** 10/17/2012	**Instrument:** AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1130591MB1					
Chromium	ND	mg/L	0.002	0.01	
Thallium	ND	mg/L	0.003	0.005	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD		%Rec	RPD	
QC1130591LCS1											
Chromium	2		2.24		mg/L	112			80-120		
Thallium	2		2.20		mg/L	110			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
		MS	MSD	MS	MSD		MS	MSD		%Rec	RPD	
QC1130591MS1, QC1130591MSD1												**Source: 311877-003**
Chromium	0.015	1	1	1.09	1.05	mg/L	108	104	3.7	75-125	20	
Thallium	ND	1	1	0.991	0.976	mg/L	99	98	1.5	75-125	20	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

ASSOCIATED LABORATORIES QC SUMMARY FOR LAB REQUEST #312094

QCBatchID: QC1130592	Analyst: wei	Method: EPA 300.0
Matrix: Water	Analyzed: 10/13/2012	Instrument: CHEM (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1130592MB1					
Chloride	ND	mg/L	0.1	1	
Fluoride	ND	mg/L	0.04	0.2	
Nitrate, as Nitrogen	ND	mg/L	0.06	0.1	
Nitrite, as Nitrogen	ND	mg/L	0.018	0.1	
Sulfate	ND	mg/L	0.12	1	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1130592LCS1											
Chloride	40		40.7		mg/L	102			90-110		
Fluoride	8		7.89		mg/L	99			90-110		
Nitrate, as Nitrogen	4.5		4.60		mg/L	102			90-110		
Nitrite, as Nitrogen	3.1		3.10		mg/L	100			90-110		
Sulfate	40		39.2		mg/L	98			90-110		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1130592MS1												**Source: 312094-002**
Chloride	67.3	200		250		mg/L	91			75-125		
Fluoride	0.44	40		37.0		mg/L	91			75-125		
Nitrate, as Nitrogen	6.80	22.6		29.3		mg/L	100			75-125		
Nitrite, as Nitrogen	0.05	30.5		30.1		mg/L	99			75-125		
Sulfate	100	200		277		mg/L	89			75-125		

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

ASSOCIATED LABORATORIES QC SUMMARY FOR LAB REQUEST #312094

QCBatchID: QC1130599	**Analyst:** nina	**Method:** EPA 200.7
Matrix: Water	**Analyzed:** 10/17/2012	**Instrument:** AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1130599MB1					
Calcium	ND	mg/L	0.038	0.1	
Magnesium	0.031 J	mg/L	0.016	0.1	

ND = Not Detected or < MDL **MDL = Method Detection Limit** **RDL = Reporting Detection Limit** **DF = Dilution Factor**

ASSOCIATED LABORATORIES QC SUMMARY FOR LAB REQUEST #312094

QCBatchID: QC1130670	Analyst: quang	Method: SM 5310B
Matrix: Water	Analyzed: 10/16/2012	Instrument: TOC-BIO (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1130670MB1					
Total Organic Carbon (TOC)	ND	mg/L	0.1	0.5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1130670LCS1											
Total Organic Carbon (TOC)	10		9.9		mg/L	99			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1130670MS1, QC1130670MSD1												Source: 312080-013
Total Organic Carbon (TOC)	ND	10	10	10.5	10.6	mg/L	105	106	0.9	80-120	20	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

ASSOCIATED LABORATORIES QC SUMMARY FOR LAB REQUEST #312094

QCBatchID: QC1130697	Analyst: rybechay	Method: EPA 218.6
Matrix: Water	Analyzed: 10/22/2012	Instrument: CHEM (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1130697MB1					
Hexavalent Chromium	ND	ug/L	0.1	1	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1130697LCS1											
Hexavalent Chromium	5		4.77		ug/L	95			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1130697MS1, QC1130697MSD1												**Source: 312080-015**
Hexavalent Chromium	0.6	2	2	2.43	2.57	ug/L	92	99	5.6	75-125	20	
QC1130697MS2, QC1130697MSD2												**Source: 312094-004**
Hexavalent Chromium	ND	2	2	1.79	1.81	ug/L	90	91	1.1	75-125	20	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

ASSOCIATED LABORATORIES QC SUMMARY FOR LAB REQUEST #312094

QCBatchID: QC1130739	Analyst: nicollez	Method: EPA 8260B
Matrix: Water	Analyzed: 10/19/2012	Instrument: VOA-MS (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1130739MB1					
1,1,1,2-Tetrachloroethane	ND	ug/L	0.122	0.5	
1,1,1-Trichloroethane	ND	ug/L	0.063	0.5	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.063	0.5	
1,1,2-Trichloroethane	ND	ug/L	0.045	0.5	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	0.119	0.5	
1,1-Dichloroethane	ND	ug/L	0.078	0.5	
1,1-Dichloroethene	ND	ug/L	0.13	0.5	
1,1-Dichloropropene	ND	ug/L	0.06	0.5	
1,2,3-Trichlorobenzene	ND	ug/L	0.06	0.5	
1,2,3-Trichloropropane	ND	ug/L	0.073	0.5	
1,2,4-Trichlorobenzene	ND	ug/L	0.068	0.5	
1,2,4-Trimethylbenzene	ND	ug/L	0.078	0.5	
1,2-Dibromo-3-chloropropane	ND	ug/L	0.08	0.5	
1,2-Dibromoethane	ND	ug/L	0.043	0.5	
1,2-Dichlorobenzene	ND	ug/L	0.051	0.5	
1,2-Dichloroethane	ND	ug/L	0.066	0.5	
1,2-Dichloropropane	ND	ug/L	0.06	0.5	
1,3,5-Trimethylbenzene	ND	ug/L	0.097	0.5	
1,3-Dichlorobenzene	ND	ug/L	0.052	0.5	
1,3-Dichloropropane	ND	ug/L	0.68	0.5	
1,4-Dichlorobenzene	ND	ug/L	0.12	0.5	
2,2-Dichloropropane	ND	ug/L	0.11	0.5	
2-Butanone (MEK)	ND	ug/L	0.3	5	
2-Chloroethyl Vinyl Ether	ND	ug/L	0.23	0.5	
2-Chlorotoluene	ND	ug/L	0.079	0.5	
4-Chlorotoluene	ND	ug/L	0.08	0.5	
4-Isopropyltoluene	ND	ug/L	0.091	0.5	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	0.16	5	
Acetone	ND	ug/L	0.2	10	
Allyl Chloride	ND	ug/L	0.08	0.5	
Benzene	ND	ug/L	0.071	0.5	
Bromobenzene	ND	ug/L	0.073	1	
Bromochloromethane	ND	ug/L	0.06	0.5	
Bromodichloromethane	ND	ug/L	0.06	0.5	
Bromoform	ND	ug/L	0.053	0.5	
Bromomethane	ND	ug/L	0.13	1	
Carbon Tetrachloride	ND	ug/L	0.045	0.5	
Chlorobenzene	ND	ug/L	0.075	0.5	
Chlorodibromomethane	ND	ug/L	0.045	0.5	
Chloroethane	ND	ug/L	0.4	0.5	
Chloroform	ND	ug/L	0.044	0.5	
Chloromethane	ND	ug/L	0.055	0.5	
cis-1,2-Dichloroethene	ND	ug/L	0.055	0.5	
cis-1,3-dichloropropene	ND	ug/L	0.061	0.5	
cis-1,4-dichloro-2-butene	ND	ug/L	0.075	5	
Dibromomethane	ND	ug/L	0.06	0.5	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

ASSOCIATED LABORATORIES QC SUMMARY FOR LAB REQUEST #312094

QCBatchID: QC1130739	**Analyst:** nicollez	**Method:** EPA 8260B
Matrix: Water	**Analyzed:** 10/19/2012	**Instrument:** VOA-MS (group)

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1130739MB1					
Dichlorodifluoromethane	ND	ug/L	0.062	0.5	
Di-isopropyl ether (DIPE)	ND	ug/L	0.17	0.5	
Ethylbenzene	ND	ug/L	0.091	0.5	
Ethyl-tertbutylether (ETBE)	ND	ug/L	0.25	0.5	
Hexachlorobutadiene	ND	ug/L	0.073	1	
Isopropylbenzene	ND	ug/L	0.089	0.5	
m and p-Xylene	ND	ug/L	0.17	0.5	
Methylene chloride	ND	ug/L	0.15	0.5	
Methyl-t-butyl Ether (MTBE)	ND	ug/L	0.068	0.5	
Naphthalene	ND	ug/L	0.061	0.5	
N-butylbenzene	ND	ug/L	0.094	0.5	
N-propylbenzene	ND	ug/L	0.09	0.5	
o-Xylene	ND	ug/L	0.075	0.5	
Sec-butylbenzene	ND	ug/L	0.077	0.5	
Styrene	ND	ug/L	0.088	0.5	
t-Butyl alcohol (TBA)	ND	ug/L	5	5	
Tert-amylmethylether (TAME)	ND	ug/L	0.13	0.5	
Tert-butylbenzene	ND	ug/L	0.092	0.5	
Tetrachloroethene	ND	ug/L	0.15	0.5	
Toluene	ND	ug/L	0.078	0.5	
trans-1,2-dichloroethene	ND	ug/L	0.17	0.5	
trans-1,3-dichloropropene	ND	ug/L	0.056	0.5	
trans-1,4-dichloro-2-butene	ND	ug/L	0.075	5	
Trichloroethene	ND	ug/L	0.078	0.5	
Trichlorofluoromethane	ND	ug/L	0.06	0.5	
Vinyl Chloride	ND	ug/L	0.08	0.5	
Xylenes (Total)	ND	ug/L	0.25	0.5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1130739LCS1											
1,1-Dichloroethene	25		24		ug/L	96			59-172		
Benzene	25		25		ug/L	100			62-137		
Chlorobenzene	25		26		ug/L	104			60-133		
Methyl-t-butyl Ether (MTBE)	25		24		ug/L	96			62-137		
Toluene	25		26		ug/L	104			59-139		
Trichloroethene	25		26		ug/L	104			66-142		

ND = Not Detected or < MDL **MDL = Method Detection Limit** **RDL = Reporting Detection Limit** **DF = Dilution Factor**

ASSOCIATED LABORATORIES QC SUMMARY FOR LAB REQUEST #312094

QCBatchID: QC1130739	**Analyst:** nicollez	**Method:** EPA 8260B
Matrix: Water	**Analyzed:** 10/19/2012	**Instrument:** VOA-MS (group)

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1130739MS1, QC1130739MSD1												**Source: 312094-002**
1,1-Dichloroethene	ND	25	25	26	26	ug/L	104	104	0.0	59-172	22	
Benzene	ND	25	25	25	26	ug/L	100	104	3.9	62-137	24	
Chlorobenzene	ND	25	25	26	26	ug/L	104	104	0.0	60-133	24	
Methyl-t-butyl Ether (MTBE)	ND	25	25	27	26	ug/L	108	104	3.8	62-137	21	
Toluene	ND	25	25	26	26	ug/L	104	104	0.0	59-139	21	
Trichloroethene	ND	25	25	26	25	ug/L	104	100	3.9	66-142	21	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

ASSOCIATED LABORATORIES QC SUMMARY FOR LAB REQUEST #312094

QCBatchID: QC1130838	**Analyst:** akk	**Method:** EPA 8260M
Matrix: Water	**Analyzed:** 10/24/2012	**Instrument:**

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1130838MB1					
1,2,3-Trichloropropane	ND	ug/L	0.005	0.005	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD		%Rec	RPD	
QC1130838LCS1, QC1130838LCSD1											
1,2,3-Trichloropropane	0.02	0.02	0.022	0.028	ug/L	110	140	24	50-150	30	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

ASSOCIATED LABORATORIES QC SUMMARY FOR LAB REQUEST #312094

QCBatchID: QC1130844	**Analyst:** akk	**Method:** EPA 8260M
Matrix: Water	**Analyzed:** 10/25/2012	**Instrument:** VOA-MS (group)

Blank Summary

Analyte	Blank Result	Units	**MDL**	**RDL**	Notes
QC1130844MB1					
1,2,3-Trichloropropane	ND	ug/L	0.005	0.005	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		**Units**	Recoveries		RPD	Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD		%Rec	RPD	
QC1130844LCS1, QC1130844LCSD1											
1,2,3-Trichloropropane	0.02	0.02	0.022	0.019	ug/L	110	95	15	50-150	30	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

Notes and Definitions

B	Analyte was present in an associated method blank. Associated sample data was reported with qualifier.
C	Laboratory Contamination.
D	The sample duplicate RPD was not within control limits, the sample data was reported without further clarification.
DF	Dilution Factor
DW	Sample result is calculated on a dry weigh basis
J	Reported value is estimated
L	The laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) was out of control limits. Associated sample data was reported with qualifier.
M	The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification.
MDL	Method Detection Limit
NC	The analyte concentration in the sample exceeded the spike level by a factor of four or greater, spike recovery and limits do not apply.
ND	Analyte was not detected or was less than the detection limit.
P	Sample was received without proper preservation according to EPA guidelines.
RDL	Reporting Detection Limit
S	The surrogate recovery was out of control limits due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification.
T	Sample was extracted/analyzed past the holding time.

ASSOCIATED LABORATORIES

NARRATIVE

Date: October 31, 2012

Narrative for Lab Request LR: 312094

Client Project Identification:

Client Name: ARCADIS
Project: BOU Burbank

This narrative includes all samples as shown on the attached Lab Request final report.

Data Validation:

Holding Times
Samples were received on October 13th, 2012 intact and at a temperature of 3.0°C. All EPA recommended holding times were met for this project.

Calibration
Initial calibration criteria were met. Initial and Continuing Calibration Check samples were run at the required frequency. All results were within required limits.

Quality Control Samples
All QC results were within control limits.

Other Anomalies or Comments
Estimated concentrations ("J" Flags) were reported on all samples and method blanks. The following samples have reported "J" flags:

Metals: C-1-CW06 M-W-6
3871G QC1130599MB1

Anions: B-1-CW20

Hex Chromium: C-1-CW06

ASSOCIATED LABORATORIES
806 North Batavia ▪ Orange, CA 92868
Phone: (714) 771-6900 ▪ Fax: (714) 538-1209

Chain of Custody Record

Lab Job No. 312094
Page 1 of

REQUIRED TURN AROUND TIME: Standard: X
72 Hours: 48 Hours: 24 Hours:

CUSTOMER INFORMATION		PROJECT INFORMATION	
COMPANY	ARCADIS	PROJECT NAME:	BOU Burbank
SEND REPORT TO:	Erik Gaiser	NUMBER:	B0038189.0000.00001
EMAIL:		ADDRESS:	Hollywood Way Burbank CA
ADDRESS:	on file	P.O. #:	B0038189.0000.00001
PHONE:		SAMPLED BY:	H. Tauscher, H. Armstrong

ANALYSIS REQUEST

	Sample ID	Date	Time	Matrix	Container Number/Size	Pres.	VOC's 8260B + Freon Vitrite	1,2,3 TCP	Nitrate/Nitrite	TDS	General Minerals	Total Chromium (filtered)	Hexavalent Chrome	1/4 dioxane	Thallium (filtered)		Test Instructions & Comments
1	TB101312	10/13/12	0730	W	2 voas	HCL	X										
2	B-1-CW20	10/13/12	0925	W	10 various	HCL/HNO3	X		X	X	X						
3	C-1-CW06	10/13/12	1215	W	8 various	HCL/HNO3	X	X				X	X				
4	B-5-CW02	10/13/12	1520	W	8 various	HCL/HNO3	X	X				X	X				
5	M-W-6	10/13/12	1325	W		HCL/HNO3	X	X	X			X	X	X	X		
6	~~MW-6 Duplicate~~	~~10/13/12~~		~~W~~		~~HCL/HNO3~~											
7	C-1-CW08	10/13/12	0936	W	8 various	HCL/HNO3	X	X				X	X				
8	3871G	10/13/12	0820	W	2 poly	HNO3						X	X				
9																	
10																	
11																	
12																	
13																	
14																	
15																	

Total No. of Samples: Method of Shipment: Preservative: 1 = Ice 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

Relinquished by 1.	Received By: 1.	Relinquished by 2.	Received By: 2.	Relinquished by 3.	Received By: 3.
ARCADIS					
Signature: [signature]	Signature: Howard Armstrong	Signature:	Signature: M. E[signature]	Signature:	Signature:
Printed Name: Howard Armstrong	Printed Name:	Printed Name:	Printed Name:	Printed Name:	Printed Name:
Date: 10/13/12 Time: 1740	Date: Time:	Date: Time:	Date: 10/13/12 Time: 12:40	Date: Time:	Date: Time:

Distribution: White - Laboratory Canary - Laboratory Pink - Project/Account Manager Goldenrod - Sampler/Originator

ALAB : 00032

LMC-PET-00001296

CONFIDENTIAL

ASSOCIATED LABORATORIES
806 North Batavia – Orange, California 92868 – 714-771-6900 *FAX 714-538-1209*

SAMPLE ACCEPTANCE CHECKLIST

Section 1
Client: Arcadis
Project: BOU Burbank
Date Received: 10/13/12
Sampler's Name: Yes No
Sample(s) received in cooler: Yes No (Skip Section 2)
Shipping Information:

Section 2
Was the cooler packed with: X Ice ___ Ice Packs ___ Bubble Wrap ___ Styrofoam ___ Paper ___ None ___ Other ___
Cooler or box temperature: 3.0 C

(Acceptance range is 0 to 6 Deg. C.)

Section 3	YES	NO	N/A
Was a COC received?	X		
Is it properly completed? (IDs, sampling date and time, signature, test)	X		
Were custody seals present?		X	
If Yes – were they intact?			X
Were all samples sealed in plastic bags?	X		
Did all samples arrive intact? If no, indicate below.	X		
Did all bottle labels agree with COC? (ID, dates and times)	X		
Were correct containers used for the tests required?	X		
Was a sufficient amount of sample sent for tests indicated?	X		
Was there headspace in VOA vials?		X	
Were the containers labeled with correct preservatives?	X		
Was total residual chlorine measured (Fish Bioassay samples only)? *			X

*: If the answer is no, please inform Fish Bioassay Dept. immediately.

Section 4
Explanations/Comments

Section 5
Was Project Manager notified of discrepancies: Y / N N/A

Completed By: M. Elliott Date: 10/13/12

Created on 7/6/2012 1:29:00 PM

ALAB : 00033

SM 2320B

CONFIDENTIAL

Alkalinity
EPA 310.1 / SM 2320B

Analyst H. K

Date 10 15 2012

H2SO4 (0.020 N) ID # 04 04 2012

Phenolphthalein ID # 01 17 2011

Methyl Orange ID # 05 30 2012

Lab Request #	Init. Vol.	Ml of H2SO4	PH	Tot. Alk.	Bicarb.	Carb.	OH	Comments
blank	50	0.10		ND	ND	ND	ND	9:45 AM
311995-010 #9	20	5.50		275	336	ND	ND	
dup.		5.45		273	332	ND	ND	
312080-013 #5		5.90		295	360	ND	ND	
014 #1		5.90		295	360	ND	ND	
312094-02 #10		4.30		215	262	ND	ND	

ALAB : 00035

CONFIDENTIAL

LMC-PET-00001299

SM 2510B

Electrical Conductivity
EPA 120.1 / SM 2510

Date	Lab ID #	Reading	EC	Temp.	Sigh.	Comments
10-16-12	312060-001/1	65.2 µS	65.2	24.5	RV	
	312060-002/1	111.3 µS	111.3	24.6		
	312062-001/2	83.4 µS	83.4	24.6		
	312062-002/1	62.2 µS	62.2	24.8		
	312062-003/2	47.7 µS	47.7	24.7		
	312063-001/1	186.6 µS	186.6	24.8		
	312064-001/~~4~~ 1	180.5 µS	180.5	25.0		
	312065-001/4	468 µS	468	25.1		
	312066-001/1	278.2 µS	278.2	25.1		
	312066-002/1	271.1 µS	271.1	25.1		
	312066-002/1 dup	272.3 µS	272.3	25.0		
	312067-001/1	48.6 µS	48.6	24.9		
	312067-002/1	36.7 µS	36.7 ~~25~~	25.2		
10/17/12	Std 100	99.9	100	21.3	AB	EC041712-3
	Std 1413	1419	1419	21.6	AB	SS020112EC-3
	Std 19000	19.10	19100	21.6	AB	Cond 081712
	DI water	0.68	0.68	21.5	AB	
11:07am	311976/001 2	1339 µs	1339	23.2	AB	
Dup1	311976/001 2	1335 µs	1335	23.8	AB	
2:02pm	312094/002 10	853 µs	853	25.7	AB	ARC & DIS

ALAB : 00037

CONFIDENTIAL

SM 2540C

ALAB: 00037 A

QC1130545 J

ASSOCIATED LABORATORIES

Date 10.15.12

Chem. Dept. Total Dissolved Solids T.D.S. EPA 160-1

Initials RV

SAMPLE # MB1 Company

90.2960 1:16pm Electroconductivity _____ µmhos/cm

D. Solids + container 90.2865 g. 10:11am Sample amount 100 ml

Cont. wt. # _____ - 90.2892 g. 6:03pm

Dissolved solids g. T.D.S. ND mg/L

SAMPLE # LCS1 Company

94.7715 1:15pm Electroconductivity _____ µmhos/cm

D. Solids + container 94.7723 g. 10:19am Sample amount 100 ml

Cont. wt. # _____ - 94.7440 g. 6:10pm

Dissolved solids g. T.D.S. 275 mg/L

SAMPLE # 311995-002/3 Company Equipment Blank

118.3780 ~~118.3780~~ RV 1:17pm Electroconductivity 0.96 µmhos/cm

D. Solids + container 118.3781 g. 10:29am Sample amount 200 ml

Cont. wt. # _____ - 118.3830 g. 6:21pm

Dissolved solids g. T.D.S. ND mg/L

SAMPLE # 312080-008/1 Company Equipment Blank

111.0275 1:19pm Electroconductivity 0.93 µmhos/cm

D. Solids + container 111.0279 g. 10:30am Sample amount 200 ml

Cont. wt. # _____ - 111.0325 g. 6:24pm

Dissolved solids g. T.D.S. ND mg/L

$$T.D.S = \frac{\text{Dissolved Solids g}}{\text{Sample Amount ml}} \quad \frac{1000\ \text{mg}}{1\text{g}} \quad \frac{1000\ \text{ml}}{1\text{L}}$$

ALAB : 00038

ASSOCIATED LABORATORIES

Chem. Dept. Total Dissolved Solids T.D.S. EPA 160-1

Date Ø RV 10.15.12

Initials RV

SAMPLE # 312080-013/4 Company B-1 CW12

80.6375 1:10pm Electroconductivity 987 µmhos/cm

D. Solids + container 80.6380 g. 10:31am Sample amount 50 ml

Cont. wt. # _____ - 80.6121 g. 6:29pm

Dissolved solids g. T.D.S. 508 mg/L

SAMPLE # 312080-014/3 Company B-1 CW12 Dup

81.5580 1:20pm Electroconductivity 980 µmhos/cm

D. Solids + container 81.5583 g. 10:32am Sample amount 50 ml

Cont. wt. # _____ - 81.5326 g. 6:33pm

Dissolved solids g. T.D.S. 508 mg/L

SAMPLE # 312080-015/1 Company

83.4927 1:21pm Electroconductivity 929 µmhos/cm

D. Solids + container 83.4930 g. 10:33am Sample amount 50 ml

Cont. wt. # _____ - 83.4683 g. 6:35pm

Dissolved solids g. T.D.S. 488 mg/L

SAMPLE # 312094-002/1 Company B-1 CW20

80.9523 1:23pm Electroconductivity 857 µmhos/cm

D. Solids + container 80.9529 g. 10:35am Sample amount 50 ml

Cont. wt. # _____ - 80.9309 g. 6:40pm

Dissolved solids g. T.D.S. 428 mg/L

$$T.D.S = \frac{\text{Dissolved Solids g}}{\text{Sample Amount ml}} \cdot \frac{1000\text{ mg}}{1\text{g}} \cdot \frac{1000\text{ ml}}{1\text{L}}$$

ALAB : 00039

EPA 218.6

Hexavalent Chromium

DATA PACKAGE
218.6-CR VI

ALAB : 00041

Sequence: 2012_1019
Last Update Operator: rybechay

312094

UV_VIS_1	Name	Type	Level	Position	Volume [µl]	Instrument Method	Processing Method	Status	Inject Time
	MB	Unknown		1	5000	AS7	AS7	Finished	10/18/2012 8:30:18 AM -07:
	MB	Unknown		2	5000	AS7	AS7	Finished	10/18/2012 8:42:48 AM -07:
	MB	Unknown		3	5000	AS7	AS7	Finished	10/18/2012 8:55:45 AM -07:
	STD1 0.5ppb	Calibration Stan	01	4	5000	AS7	AS7	Finished	10/18/2012 9:08:41 AM -07:
	STD2 2.5ppb	Calibration Stan	02	5	5000	AS7	AS7	Finished	10/18/2012 9:21:38 AM -07:
	STD3 5.0ppb	Calibration Stan	03	6	5000	AS7	AS7	Finished	10/18/2012 9:34:34 AM -07:
	STD4 7.5ppb	Calibration Stan	04	7	5000	AS7	AS7	Finished	10/18/2012 9:47:31 AM -07:
	STD5 10.0ppb	Calibration Stan	05	8	5000	AS7	AS7	Finished	10/18/2012 10:00:26 AM -07
	MB	Unknown		9	5000	AS7	AS7	Finished	10/19/2012 9:18:14 AM -07:
	MB	Unknown		10	5000	AS7	AS7	Finished	10/19/2012 9:30:37 AM -07:
	lcv 2.5ppb	Unknown		11	5000	AS7	AS7	Finished	10/19/2012 9:43:34 AM -07:
	lcs 5.0ppb	Unknown		12	5000	AS7	AS7	Finished	10/19/2012 9:56:31 AM -07:
	312080-003/2	Unknown		13	5000	AS7	AS7	Finished	10/19/2012 10:16:40 AM -07
	312080-004/4	Unknown		14	5000	AS7	AS7	Finished	10/19/2012 10:29:36 AM -07
	312080-005/2	Unknown		15	5000	AS7	AS7	Finished	10/19/2012 10:42:32 AM -07
	312080-006/1	Unknown		16	5000	AS7	AS7	Finished	10/19/2012 10:55:30 AM -07
	312080-008/2	Unknown		17	5000	AS7	AS7	Finished	10/19/2012 11:08:27 AM -07
	312080-009/1	Unknown		18	5000	AS7	AS7	Finished	10/19/2012 11:21:22 AM -07
	312080-010/2	Unknown		19	5000	AS7	AS7	Finished	10/19/2012 11:34:18 AM -07
	312080-013/1	Unknown		20	5000	AS7	AS7	Finished	10/19/2012 11:47:14 AM -07
	ccv 4.0ppb	Unknown		21	5000	AS7	AS7	Finished	10/19/2012 12:00:11 PM -07
	ccb	Unknown		22	5000	AS7	AS7	Finished	10/19/2012 12:13:08 PM -07
	312080-015/2	Unknown		23	5000	AS7	AS7	Finished	10/19/2012 12:26:04 PM -07
	312080-015ms	Unknown		24	5000	AS7	AS7	Finished	10/19/2012 12:39:01 PM -07
	312080-015ms	Unknown		25	5000	AS7	AS7	Finished	10/19/2012 12:51:57 PM -07
	312324-006/1	Unknown		26	5000	AS7	AS7	Finished	10/19/2012 1:04:53 PM -07:
	312324-006ms	Unknown		27	5000	AS7	AS7	Finished	10/19/2012 1:17:50 PM -07:
	312324-006ms	Unknown		28	5000	AS7	AS7	Finished	10/19/2012 1:30:45 PM -07:
	ccv 2.5ppb	Unknown		29	5000	AS7	AS7	Finished	10/19/2012 1:43:42 PM -07:
	312094-003/2	Unknown		31	5000	AS7	AS7	Finished	10/19/2012 1:59:10 PM -07:
	312094-004/1	Unknown		32	5000	AS7	AS7	Finished	10/19/2012 2:12:06 PM -07:
	312094-005/4	Unknown		33	5000	AS7	AS7	Finished	10/19/2012 2:25:03 PM -07:
	312094-006/2	Unknown		34	5000	AS7	AS7	Finished	10/19/2012 2:37:59 PM -07:
	312094-007/1	Unknown		35	5000	AS7	AS7	Finished	10/19/2012 2:50:56 PM -07:
	312094-04ms	Unknown		36	5000	AS7	AS7	Finished	10/19/2012 3:03:53 PM -07:

ALAB : 000142
LMC-PET-00001307
CONFIDENTIAL

Sequence: 2012_1019
Last Update Operator: rybechay

	312094-04msd	Unknown		37	5000	AS7	AS7	Finished	10/19/2012 3:16:49 PM -07:0
	ccv 4.0ppb	Unknown		37	5000	AS7	AS7	Finished	10/19/2012 4:01:33 PM -07:0
	ccb	Unknown		38	5000	AS7	AS7	Finished	10/19/2012 4:14:18 PM -07:0

ALAB : 000113

LMC-PET-00001308

CONFIDENTIAL

Sequence: 2012_1019
Last Update Operator: rybechay

Lock Status	Weight	Dilution	IntStd	Replicate ID	Comment	Spike Group
	1.0000	1.0000	1.0000		Arcadis	
	1.0000	1.0000	1.0000			
	1.0000	1.0000	1.0000			
	1.0000	1.0000	1.0000			
	1.0000	1.0000	1.0000			
	1.0000	1.0000	1.0000			
	1.0000	1.0000	1.0000			
	1.0000	1.0000	1.0000			
	1.0000	1.0000	1.0000			
	1.0000	1.0000	1.0000			
	1.0000	1.0000	1.0000			
	1.0000	1.0000	1.0000			
	1.0000	1.0000	1.0000			
	1.0000	1.0000	1.0000			
	1.0000	1.0000	1.0000			
	1.0000	1.0000	1.0000			
	1.0000	1.0000	1.0000			
	1.0000	1.0000	1.0000			
	1.0000	1.0000	1.0000			
	1.0000	1.0000	1.0000			
	1.0000	1.0000	1.0000			
	1.0000	1.0000	1.0000			
	1.0000	1.0000	1.0000			
	1.0000	1.0000	1.0000			
	1.0000	1.0000	1.0000			2ppb
	1.0000	1.0000	1.0000			2ppb
	1.0000	1.0000	1.0000			
	1.0000	1.0000	1.0000			2ppb
	1.0000	1.0000	1.0000			2ppb
	1.0000	1.0000	1.0000			
	1.0000	1.0000	1.0000			
	1.0000	1.0000	1.0000			
	1.0000	1.0000	1.0000			
	1.0000	1.0000	1.0000			
	1.0000	1.0000	1.0000			2ppb

ALAB : 000H
LMC-PET-00001309
CONFIDENTIAL

Sequence: 2012_1019
Last Update Operator: rybechay

	1.0000	1.0000	1.0000			2ppb
	1.0000	1.0000	1.0000			
	1.0000	1.0000	1.0000			

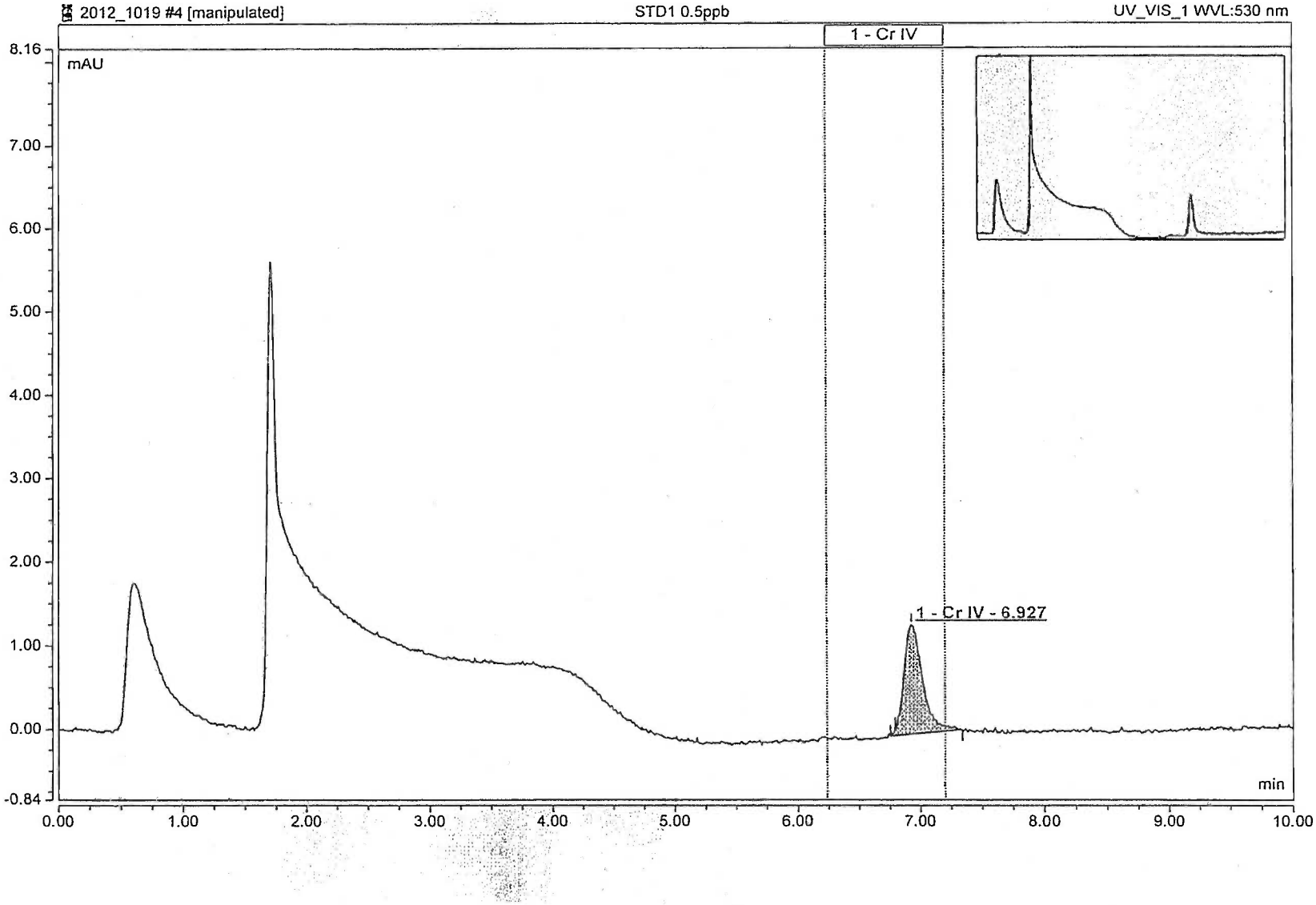
ALAB : 00015

LMC-PET-00001310

CONFIDENTIAL

Sequence: 2012_1019
Injection #4: STD1 0.5ppb

Chromatogram



Chromeleon 7,
Version 7.1.1.1127, Dionex Corporation

Printed by rybechay
19/10/12 11:16

ALAB:00045A

LMC-PET-00001311

CONFIDENTIAL

Peak No.	Peak Name	Ret.Time min	Amount ppb	Rel.Area %	Area mAU*min	Height mAU	Type	Width (50%) min	Asym. EP	Resol. EP	Plates EP
1	Cr IV	6.927	0.5092	100.00	0.2288	1.31	BMB*	0.152	1.43	n.a.	11460
Maximum			0.5092	100.00	0.2288	1.31		0.152	1.43	0.00	11460
Minimum			0.5092	100.00	0.2288	1.31		0.152	1.43	0.00	11460
Sum			0.5092	100.00	0.2288	1.31					

ALAB : 00015
LMC-PET-00001312
CONFIDENTIAL

Sequence: 2012_1019
Injection #5: STD2 2.5ppb

Peak Results

Peak No.	Peak Name	Ret.Time min	Amount ppb	Rel.Area %	Area mAU*min	Height mAU	Type	Width (50%) min	Asym. EP	Resol. EP	Plates EP
1	Cr IV	6.909	2.5408	100.00	1.1417	6.86	M	0.147	1.33	n.a.	12256
Maximum			2.5408	100.00	1.1417	6.86		0.147	1.33	0.00	12256
Minimum			2.5408	100.00	1.1417	6.86		0.147	1.33	0.00	12256
Sum			2.5408	100.00	1.1417	6.86					

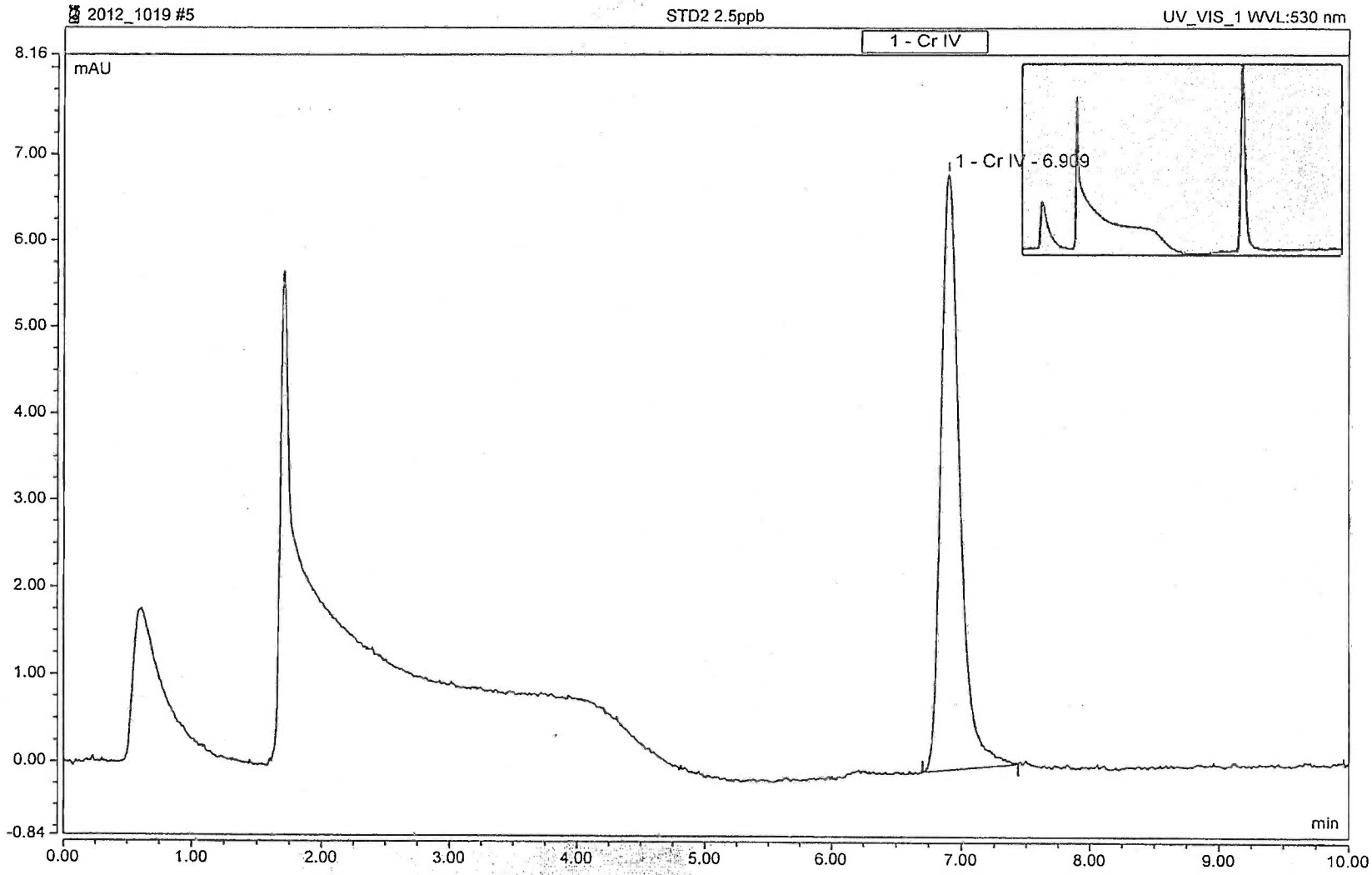
ALAB : 00017

LMC-PET-00001313

CONFIDENTIAL

Sequence: 2012_1019
Injection #5: STD2 2.5ppb

Chromatogram



Chromeleon 7,
Version 7.1.1.1127, Dionex Corporation

Printed by rybechay
19/10/12 11:17

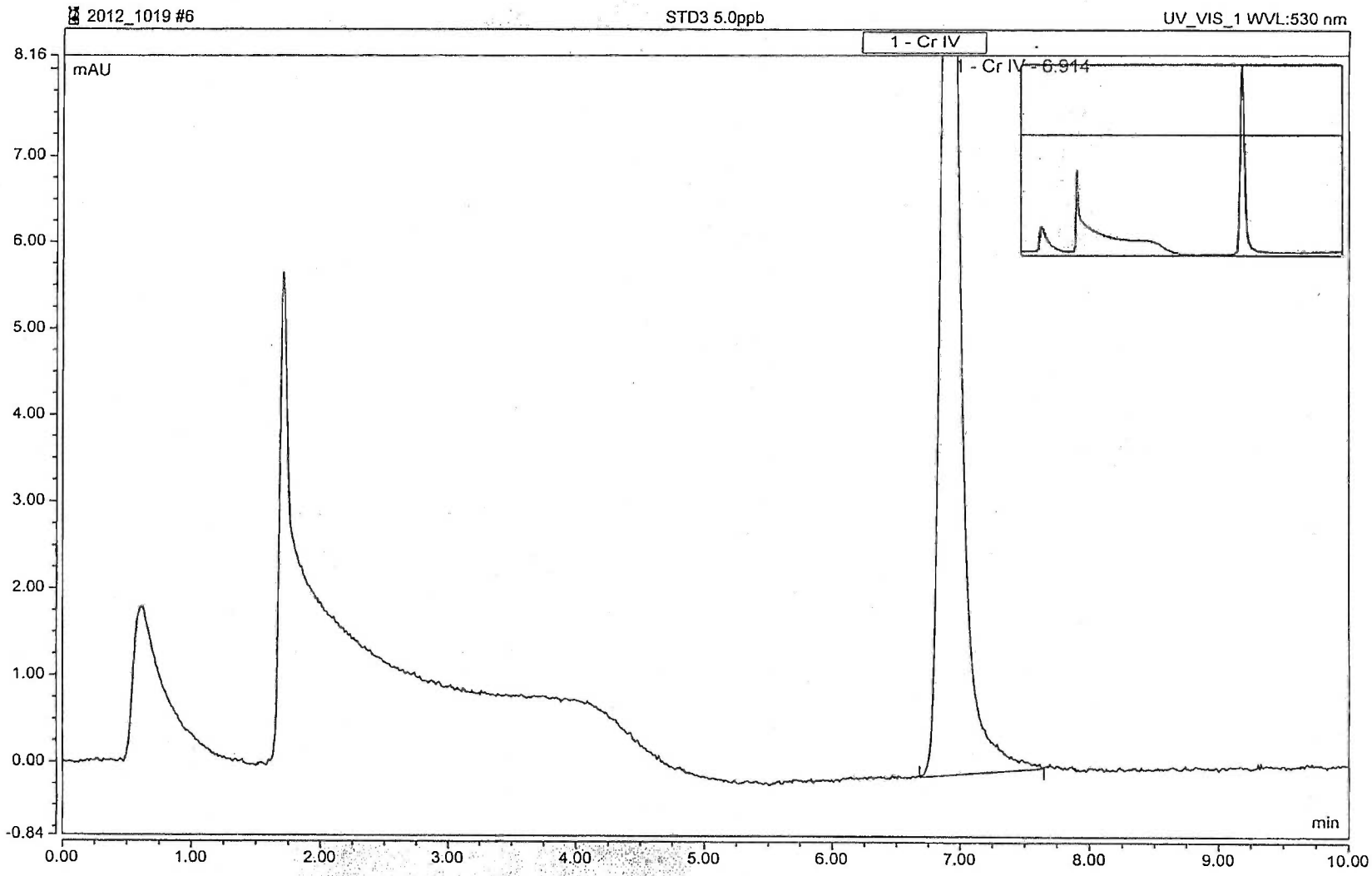
ALAB : C0047 A.

LMC-PET-00001314

CONFIDENTIAL

Sequence: 2012_1019
Injection #6: STD3 5.0ppb

Chromatogram



Chromeleon 7,
Version 7.1.1.1127, Dionex Corporation

Printed by rybechay
19/10/12 11:17

ALAB : 06018
LMC-PET-00001315
CONFIDENTIAL

Sequence: 2012_1019
Injection #6: STD3 5.0ppb

Peak Results

Peak No.	Peak Name	Ret.Time min	Amount ppb	Rel.Area %	Area mAU*min	Height mAU	Type	Width (50%) min	Asym. EP	Resol. EP	Plates EP
1	Cr IV	6.914	4.9634	100.00	2.2303	13.09	M	0.147	1.36	a	12230
Maximum			4.9634	100.00	2.2303	13.09		0.147	1.36	0.00	12230
Minimum			4.9634	100.00	2.2303	13.09		0.147	1.36	0.00	12230
Sum			4.9634	100.00	2.2303	13.09					

ALAB : 00015

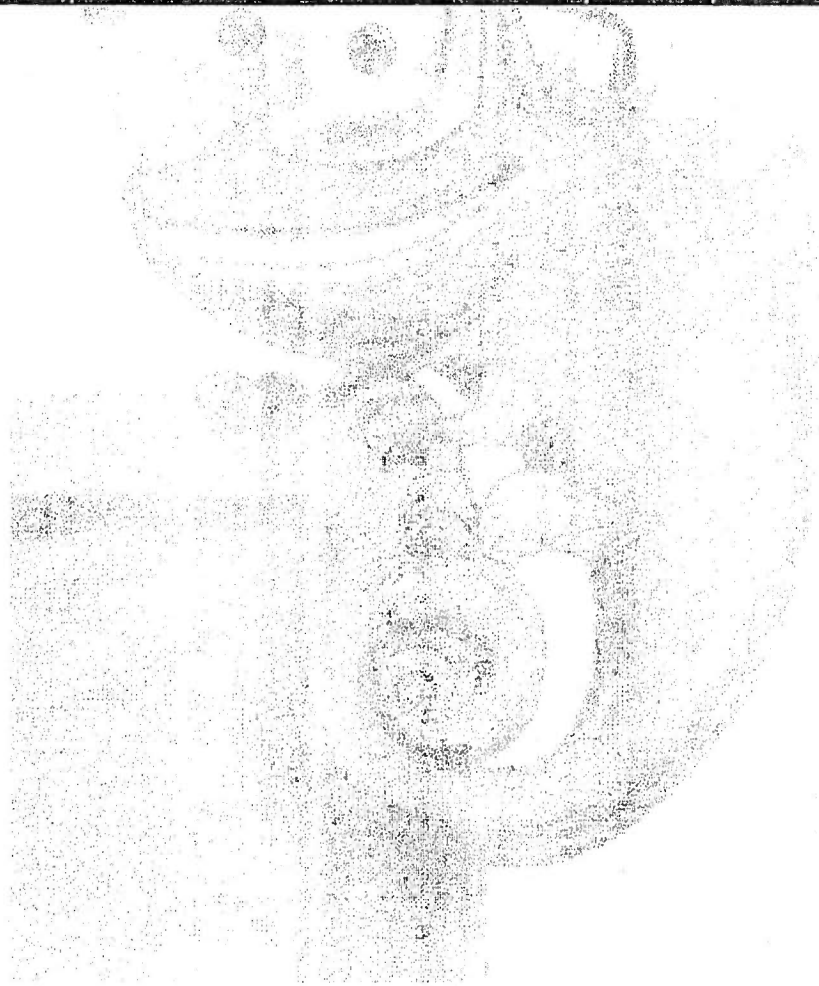
LMC-PET-00001316

CONFIDENTIAL

Sequence: 2012_1019
Injection #7: STD4 7.5ppb

Peak Results

Peak No.	Peak Name	Ret.Time min	Amount ppb	Rel.Area %	Area mAU*min	Height mAU	Type	Width (50%) min	Asym. EP	Resol. EP	Plates EP
1	Cr IV	6.912	7.4097	100.00	3.3295	19.47	BM	0.147	1.38	n/a	12241
Maximum			7.4097	100.00	3.3295	19.47		0.147	1.38	0.00	12241
Minimum			7.4097	100.00	3.3295	19.47		0.147	1.38	0.00	12241
Sum			7.4097	100.00	3.3295	19.47					



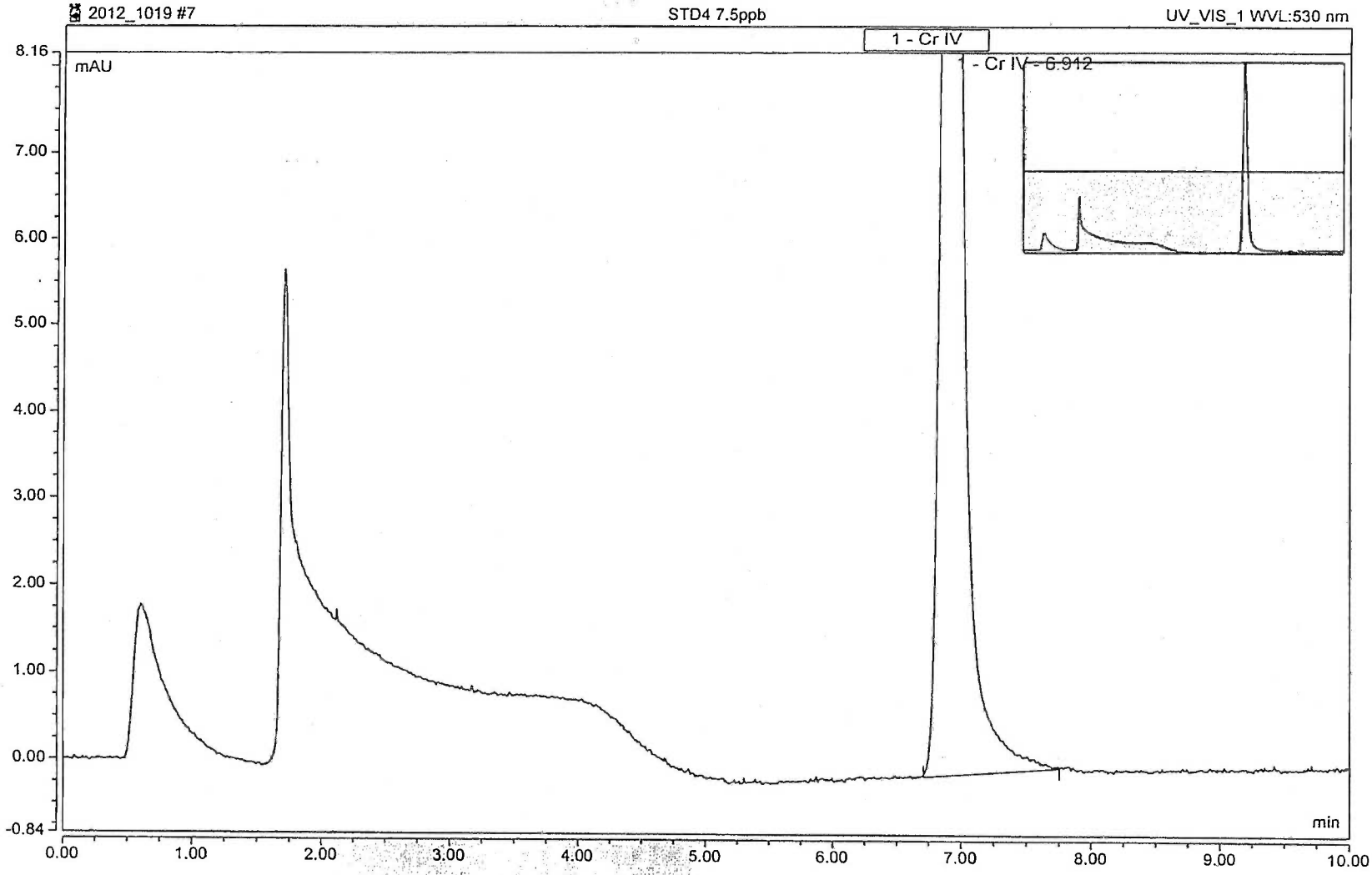
ALAB : 00050

LMC-PET-00001317

CONFIDENTIAL

Sequence: 2012_1019
Injection #7: STD4 7.5ppb

Chromatogram



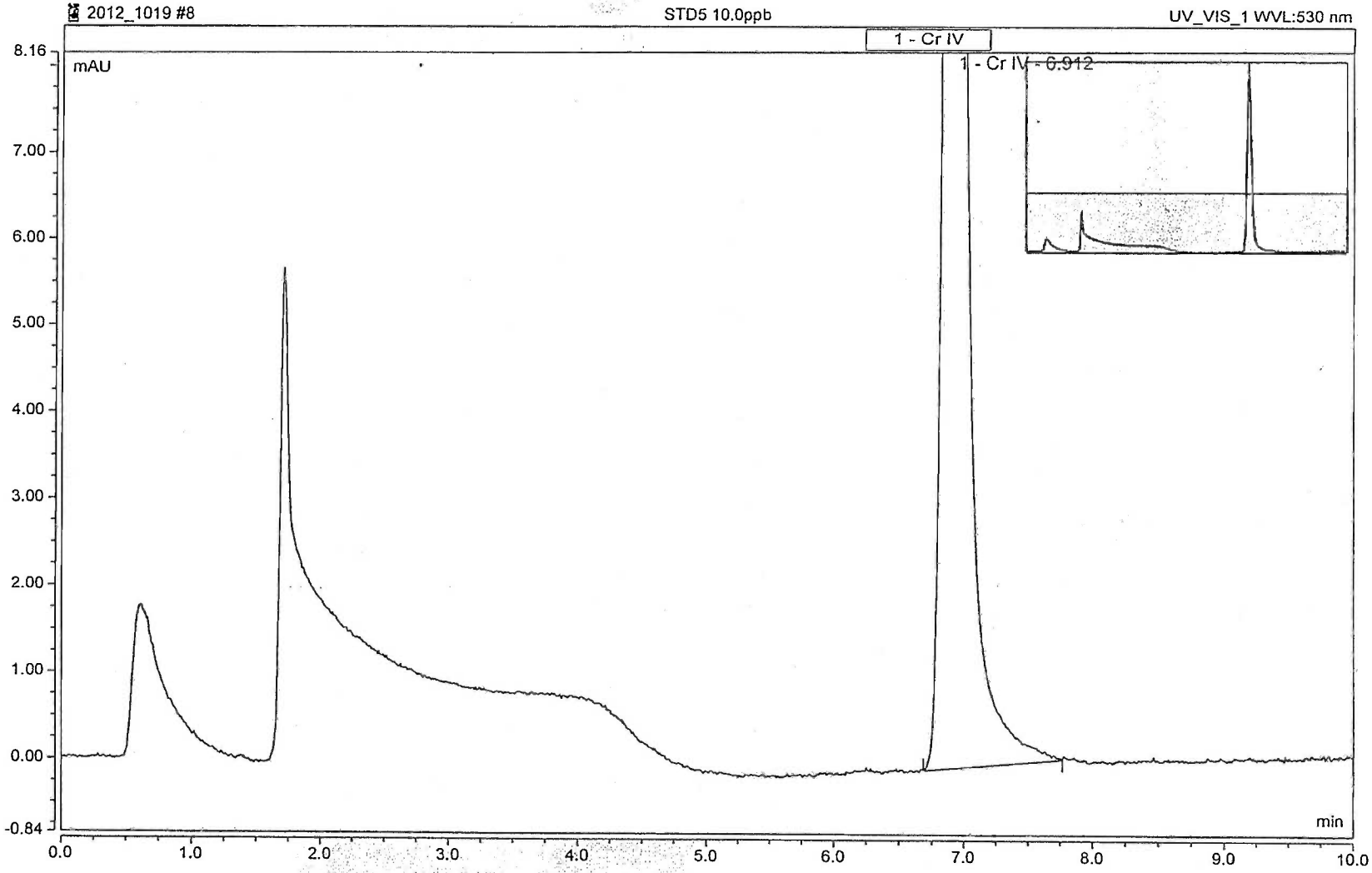
Chromeleon 7,
Version 7.1.1.1127, Dionex Corporation

Printed by rybechay
19/10/12 11:17

ALAB : 88851
LMC-PET-00001318
CONFIDENTIAL

Sequence: 2012_1019
Injection #8: STD5 10.0ppb

Chromatogram



Chromeleon 7,
Version 7.1.1.1127, Dionex Corporation

Printed by rybechay
19/10/12 11:17

ALAB : 000051A

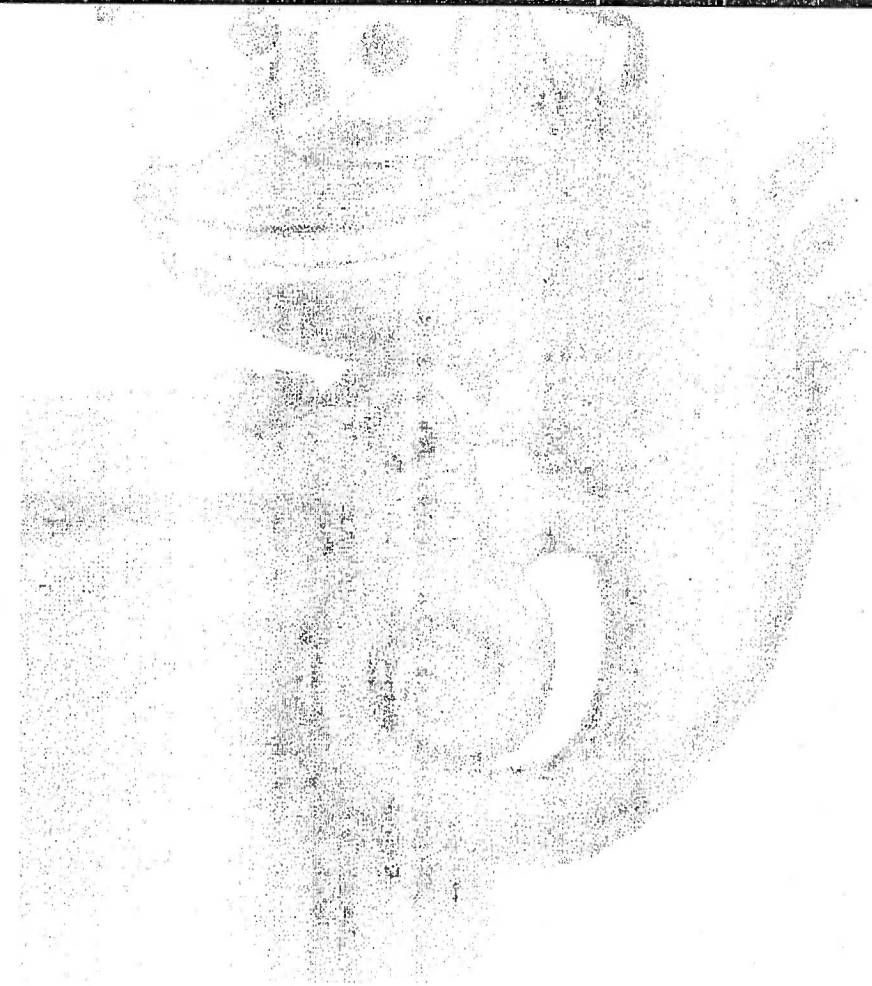
LMC-PET-00001319

CONFIDENTIAL

Sequence: 2012_1019
Injection #8: STD5 10.0ppb

Peak Results

Peak No.	Peak Name	Ret.Time min	Amount ppb	Rel.Area %	Area mAU*min	Height mAU	Type	Width (50%) min	Asym. EP	Resol. EP	Plates EP
1	Cr IV	6.912	10.0753	100.00	4.5272	6.54	M	0.147	1.39	n.a.	12275
Maximum			10.0753	100.00	4.5272	26.54		0.147	1.39	0.00	12275
Minimum			10.0753	100.00	4.5272	26.54		0.147	1.39	0.00	12275
Sum			10.0753	100.00	4.5272	26.54					



ALAB : 00052

LMC-PET-00001320

CONFIDENTIAL

Peak No.	Peak Name	Ret.Time min	Amount n.a.	Rel.Area %	Area mAU min	Height mAU	Type	Width (50%) min	Asym. EP	Resol. EP	Plates EP
Maximum			0.0000	0.00	0.0000	0.00		0.000	0.00	0.00	0
Minimum			0.0000	0.00	0.0000	0.00		0.000	0.00	0.00	0
Sum			0.0000	0.00	0.0000	0.00					

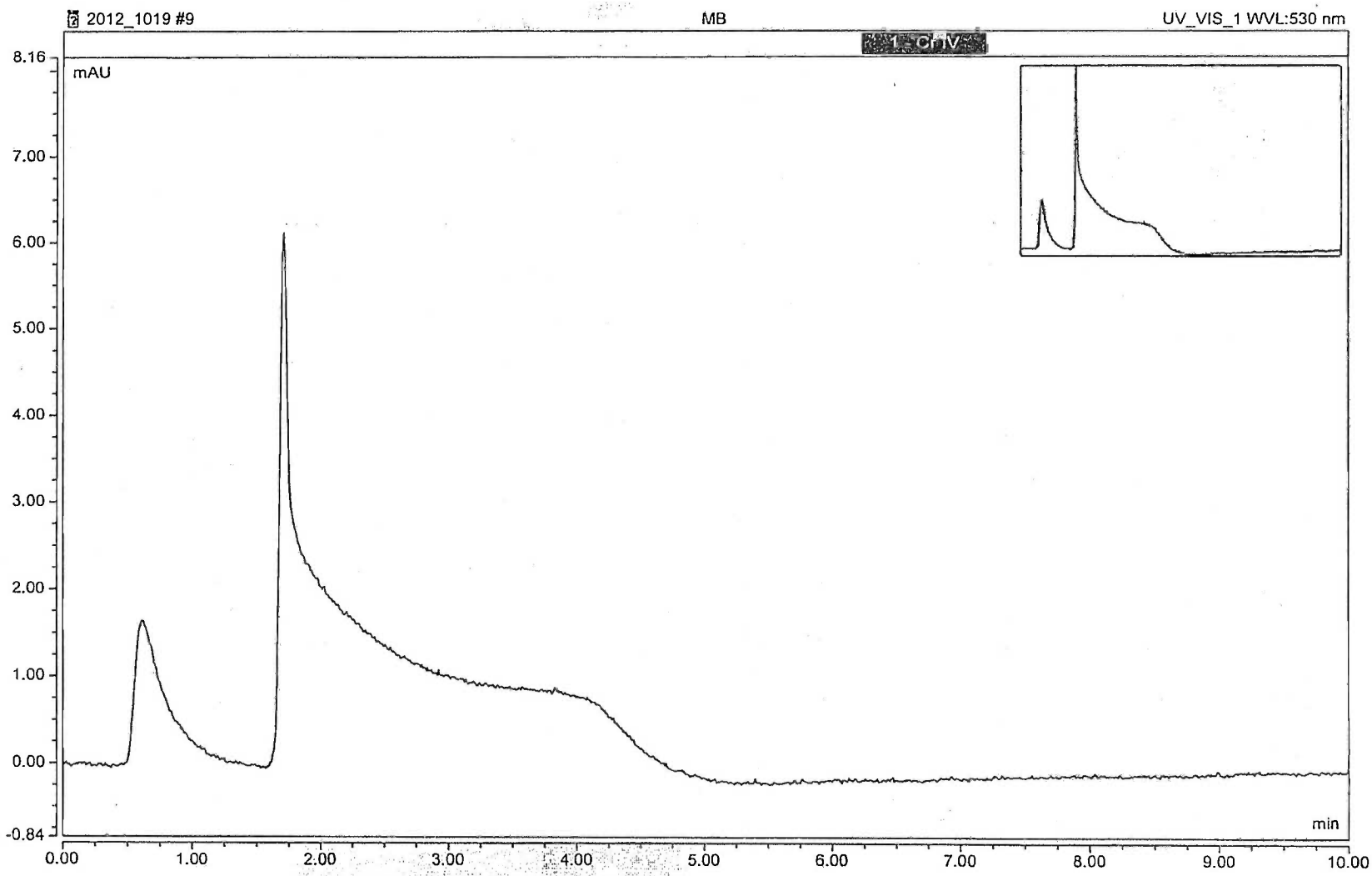
ALAB : 66053

LMC-PET-00001321

CONFIDENTIAL

Sequence: 2012_1019
Injection #9: MB

Chromatogram



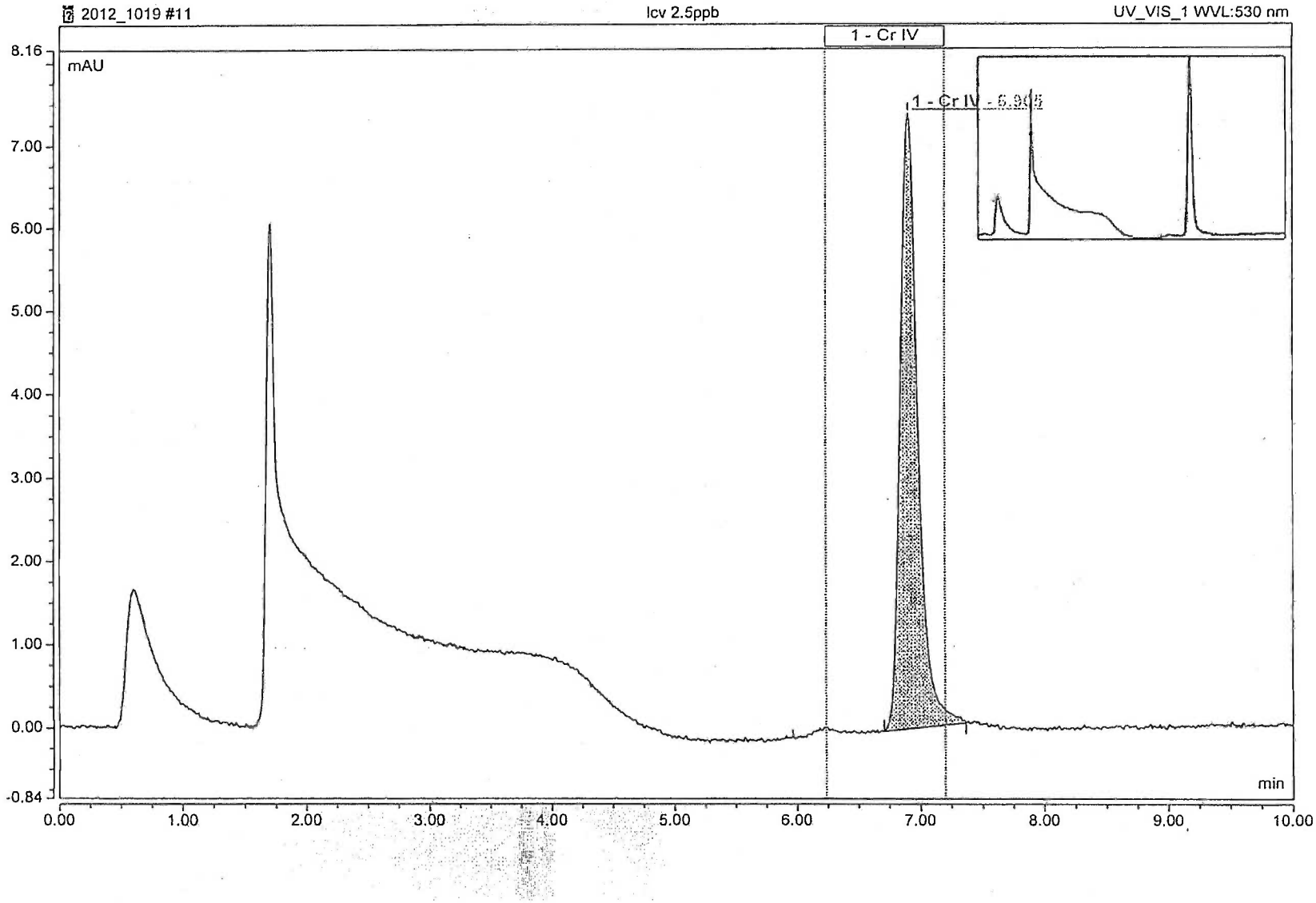
Chromeleon 7,
Version 7.1.1.1127, Dionex Corporation

Printed by rybechay
19/10/12 11:18

ALAB : 00051
LMC-PET-00001322
CONFIDENTIAL

Sequence: 2012_1019
Injection #11: lcv 2.5ppb

Chromatogram



Chromeleon 7,
Version 7.1.1.1127, Dionex Corporation

Printed by rybechay
19/10/12 11:18

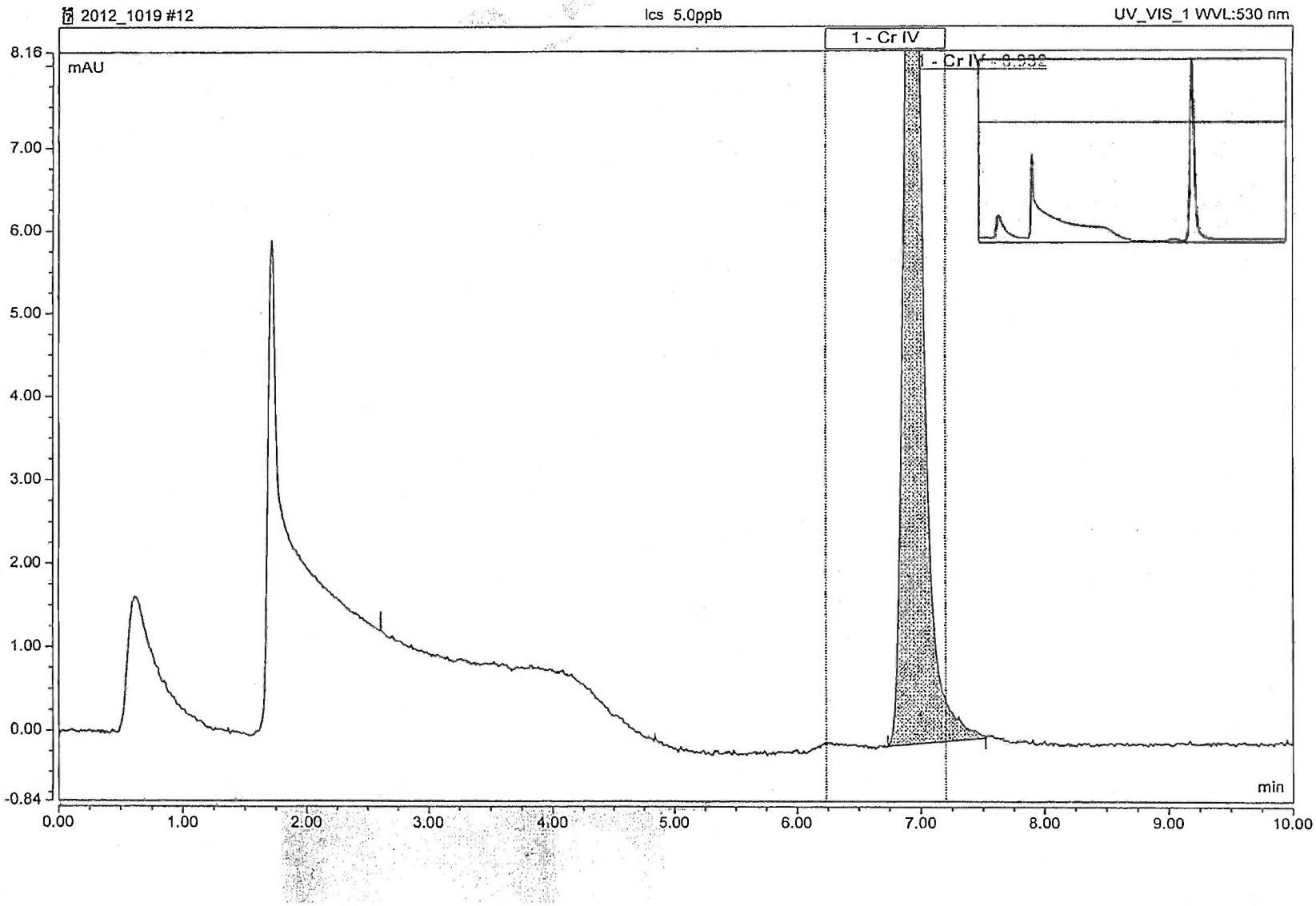
ALAB : 00055
LMC-PET-00001323
CONFIDENTIAL

Peak No.	Peak Name	Ret.Time min	Amount ppb	Rel.Area %	Area mAU*min	Height mAU	Type	Width (50%) min	Asym. EP	Resol. EP	Plates EP
1	Cr IV	6.905	2.7084	100.00	1.2170	7.40	M	0.145	1.34	n.a.	12509
Maximum			2.7084	100.00	1.2170	7.40		0.145	1.34	0.00	12509
Minimum			2.7084	100.00	1.2170	7.40		0.145	1.34	0.00	12509
Sum			2.7084	100.00	1.2170	7.40					

ALAB : 08655
LMC-PET-00001324
CONFIDENTIAL

Sequence: 2012_1019
Injection #12: lcs 5.0ppb

Chromatogram



Chromeleon 7,
Version 7.1.1.1127, Dionex Corporation

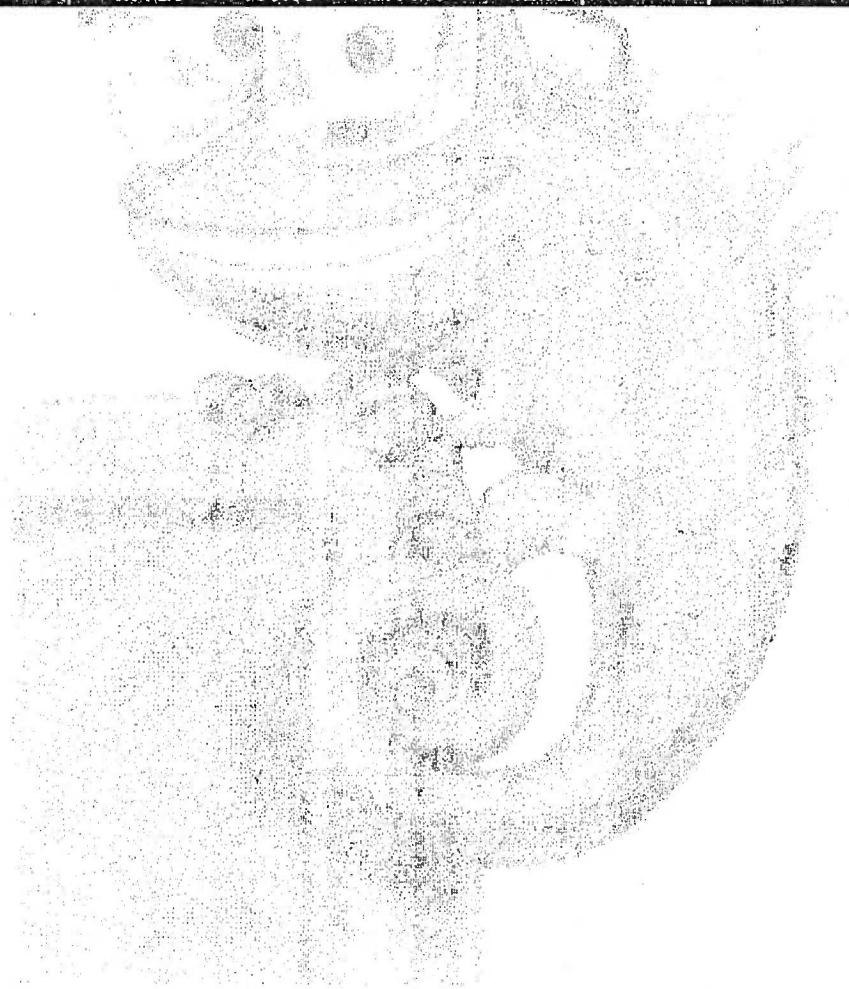
Printed by rybechay
19/10/12 11:18

ALAB : 00057
LMC-PET-00001325
CONFIDENTIAL

Sequence: 2012_1019
Injection #12: lcs 5.0ppb

Peak Results

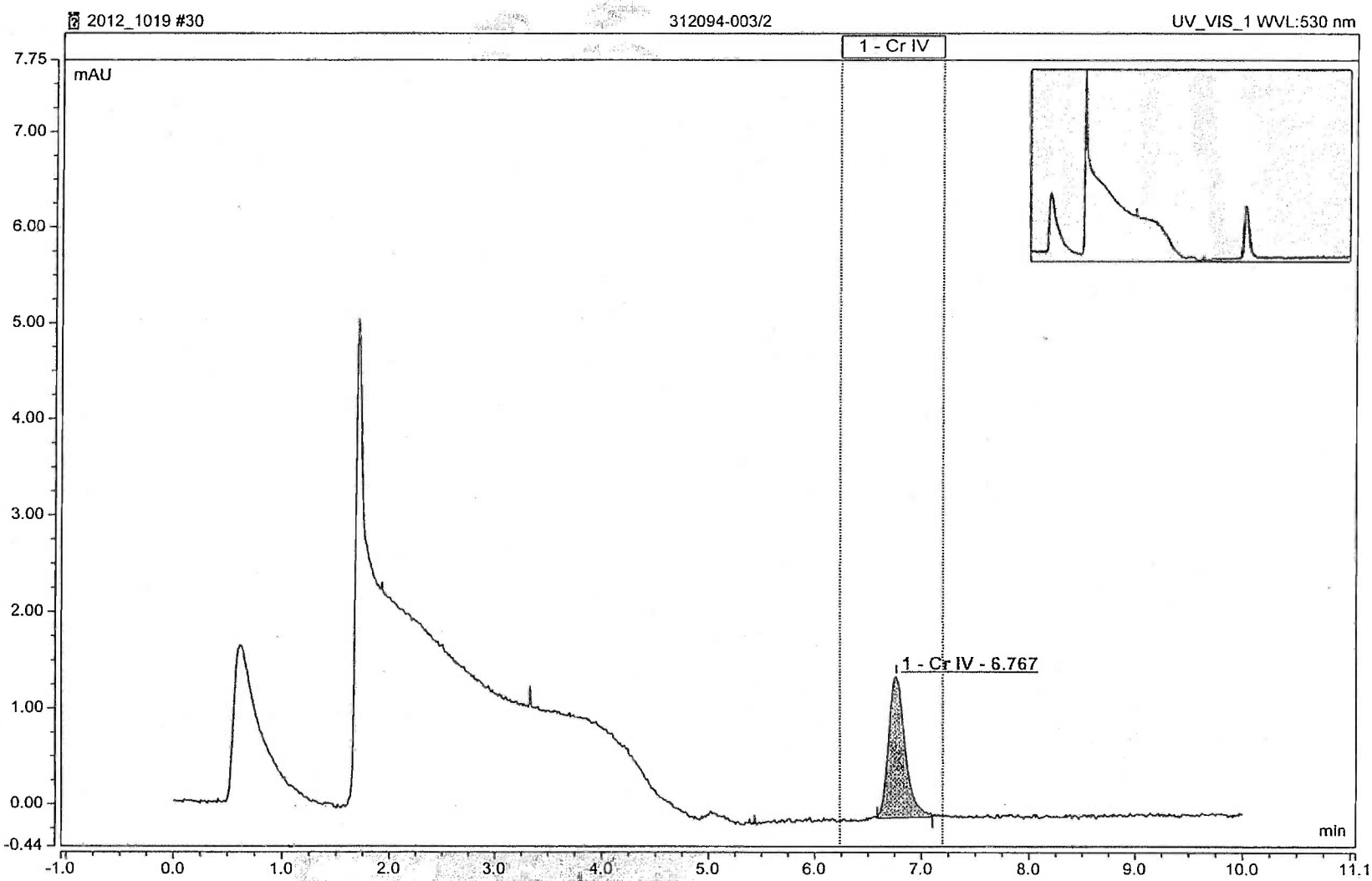
Peak No.	Peak Name	Ret.Time min	Amount ppb	Rel.Area %	Area mAU*min	Height mAU	Type	Width (50%) min	Asym. EP	Resol. EP	Plates EP
1	Cr IV	6.932	4.7726	100.00	2.1445	12.72	M	0.147	1.37	n.a.	12245
Maximum			4.7726	100.00	2.1445	12.72		0.147	1.37	0.00	12245
Minimum			4.7726	100.00	2.1445	12.72		0.147	1.37	0.00	12245
Sum			4.7726	100.00	2.1445	12.72					



ALAB : 00058
LMC-PET-00001326
CONFIDENTIAL

Sequence: 2012_1019
Injection #30: 312094-003/2

Chromatogram



Chromeleon 7,
Version 7.1.1.1127, Dionex Corporation

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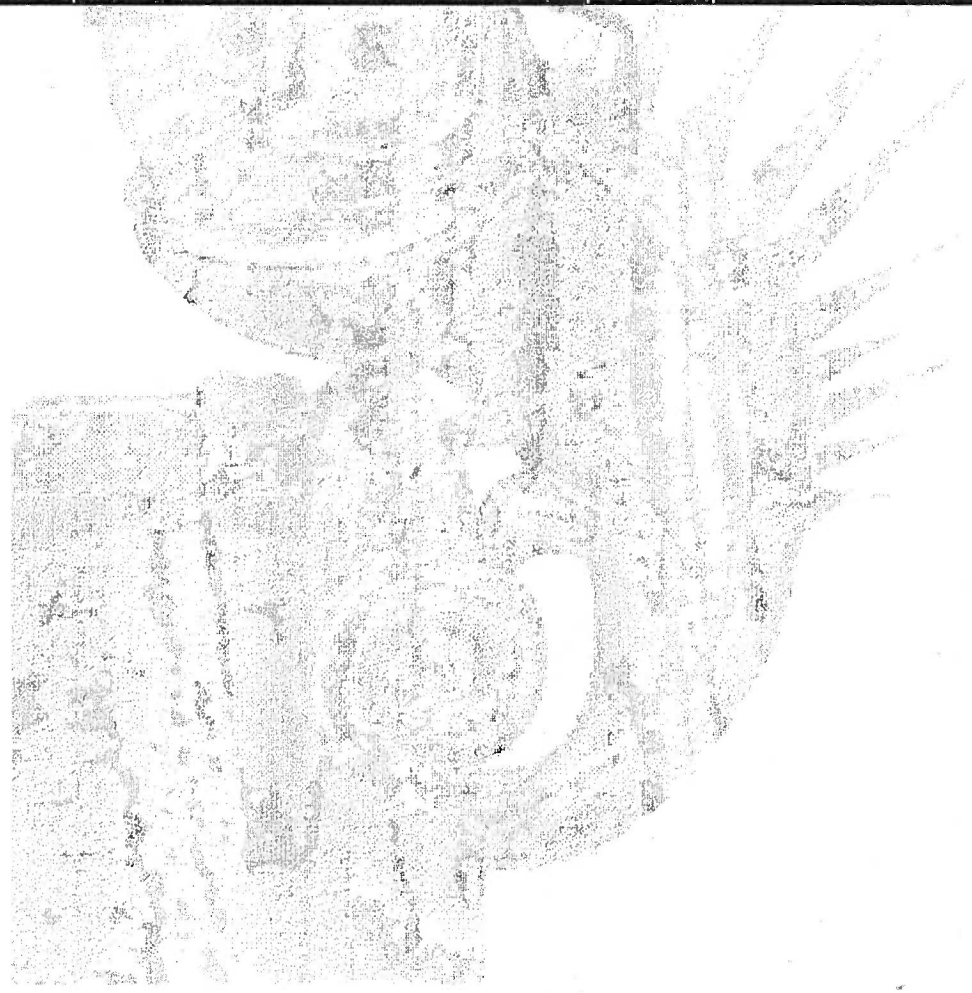
19/10/12 14:33

ALAB : 000655
LMC-PET-00001327
CONFIDENTIAL

Peak No.	Peak Name	Ret.Time min	Amount ppb	Rel.Area %	Area mAU*min	Height mAU	Type	Width (50%) min	Asym. EP	Resol. EP	Plates EP
1	Cr IV	6.767	0.5858	100.00	0.2632	1.48	M	0.158	1.29	n.a.	10120
Maximum			0.5858	100.00	0.2632	1.48		0.158	1.29	0.00	10120
Minimum			0.5858	100.00	0.2632	1.48		0.158	1.29	0.00	10120
Sum			0.5858	100.00	0.2632	1.48					



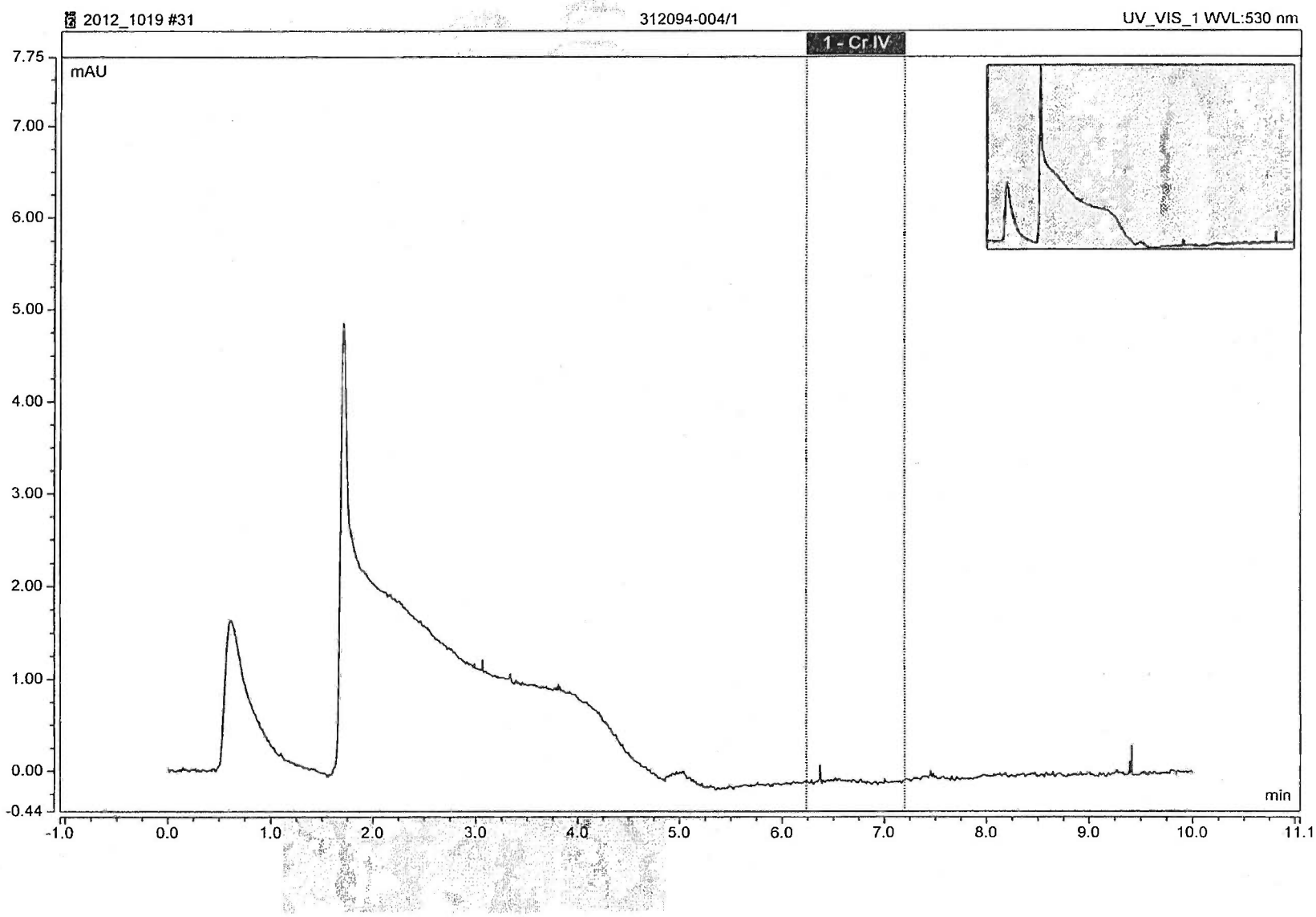
ALAB : 000059

LMC-PET-00001328

CONFIDENTIAL

Sequence: 2012_1019
Injection #31: 312094-004/1

Chromatogram



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Version 7.1.1.1127, Dionex Corporation

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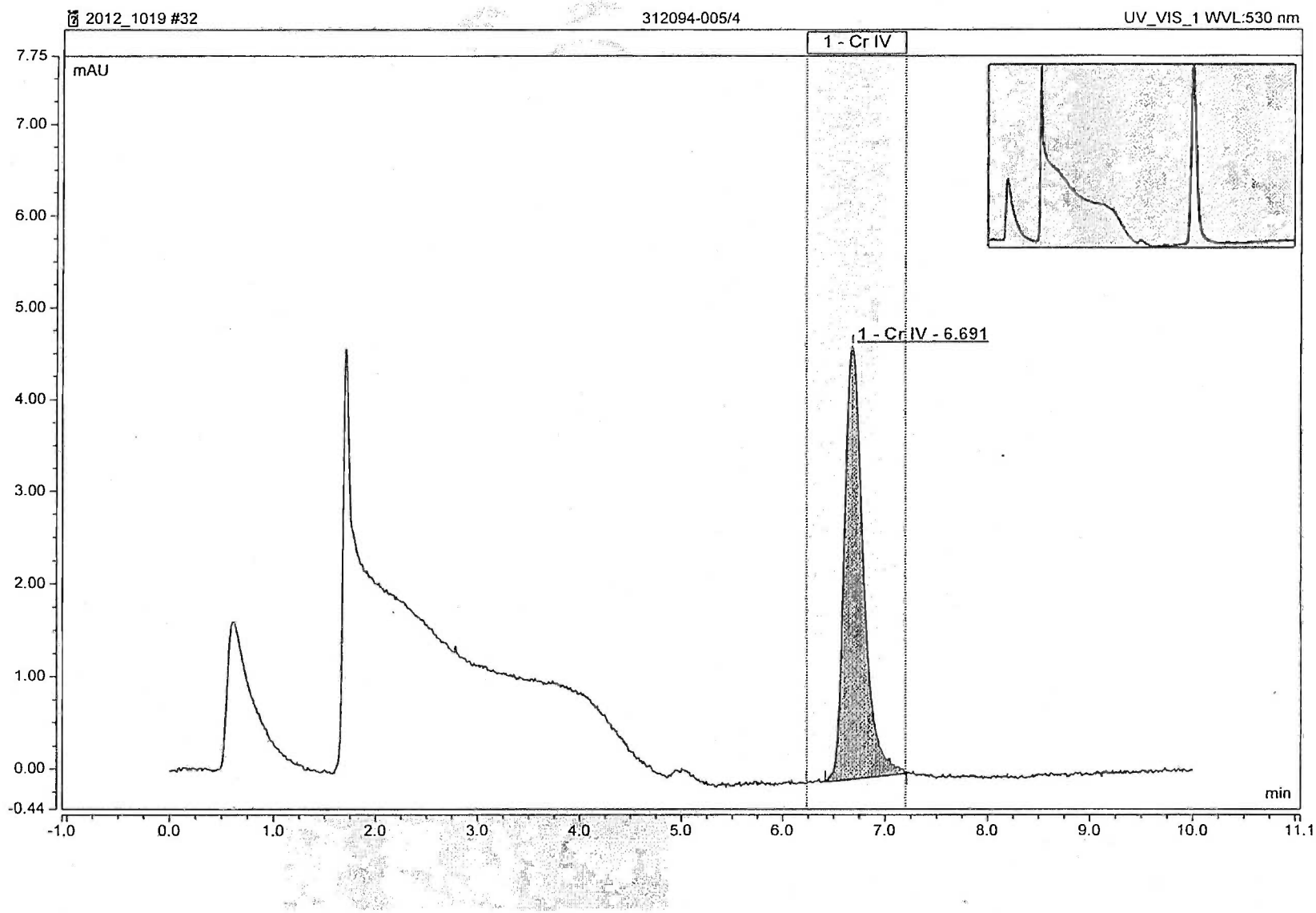
ALAB : 000061
LMC-PET-00001329
CONFIDENTIAL

Peak No.	Peak Name	Ret.Time min	Amount n.a.	Rel.Area %	Area mAU*min	Height mAU	Type	Width (50%) min	Asym. EP	Resol. EP	Plates EP
Maximum			0.0000	0.00	0.0000	0.00		0.000	0.00	0.00	0
Minimum			0.0000	0.00	0.0000	0.00		0.000	0.00	0.00	0
Sum			0.0000	0.00	0.0000	0.00					

ALAB : 00052
LMC-PET-00001330
CONFIDENTIAL

Sequence: 2012_1019
Injection #32: 312094-005/4

Chromatogram



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Version 7.1.1.1127, Dionex Corporation

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ALAB : 0063
LMC-PET-00001331
CONFIDENTIAL

Peak No.	Peak Name	Ret.Time min	Amount ppb	Rel.Area %	Area mAU*min	Height mAU	Type	Width (50%) min	Asym. EP	Resol. EP	Plates EP
1	Cr IV	6.691	2.2287	100.00	1.0015	4.69	M	0.190	1.35	n.a.	6849
Maximum			2.2287	100.00	1.0015	4.69		0.190	1.35	0.00	6849
Minimum			2.2287	100.00	1.0015	4.69		0.190	1.35	0.00	6849
Sum			2.2287	100.00	1.0015	4.69					

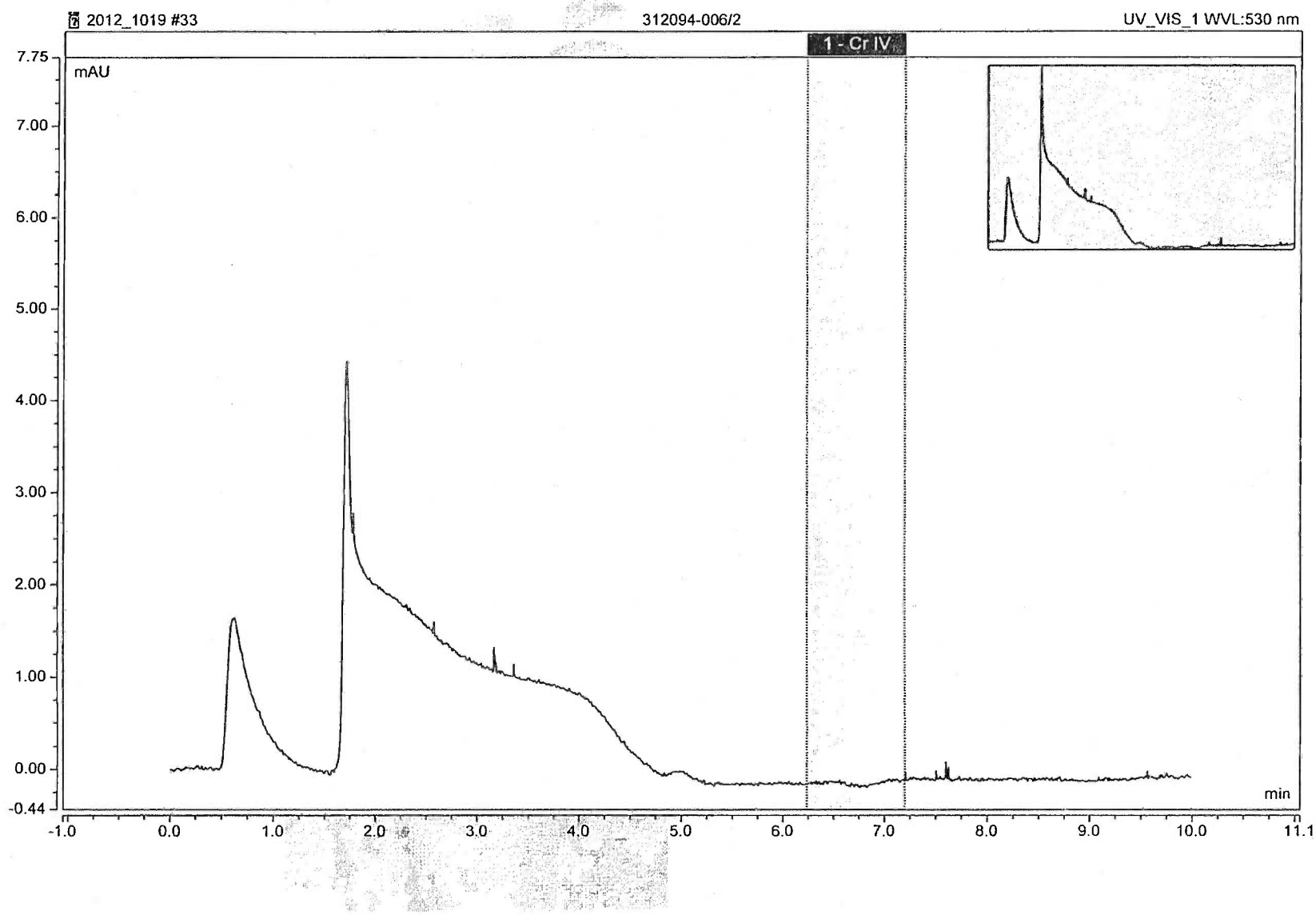
ALAB : 000611

LMC-PET-00001332

CONFIDENTIAL

Sequence: 2012_1019
Injection #33: 312094-006/2

Chromatogram



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ALAB : 00055
LMC-PET-00001333
CONFIDENTIAL

Peak No.	Peak Name	Ret.Time min	Amount n.a.	Rel.Area %	Area mAU*min	Height mAU	Type	Width (50%) min	Asym. EP	Resol. EP	Plates EP
Maximum			0.0000	0.00	0.0000	0.00		0.000	0.00	0.00	0
Minimum			0.0000	0.00	0.0000	0.00		0.000	0.00	0.00	0
Sum			0.0000	0.00	0.0000	0.00					

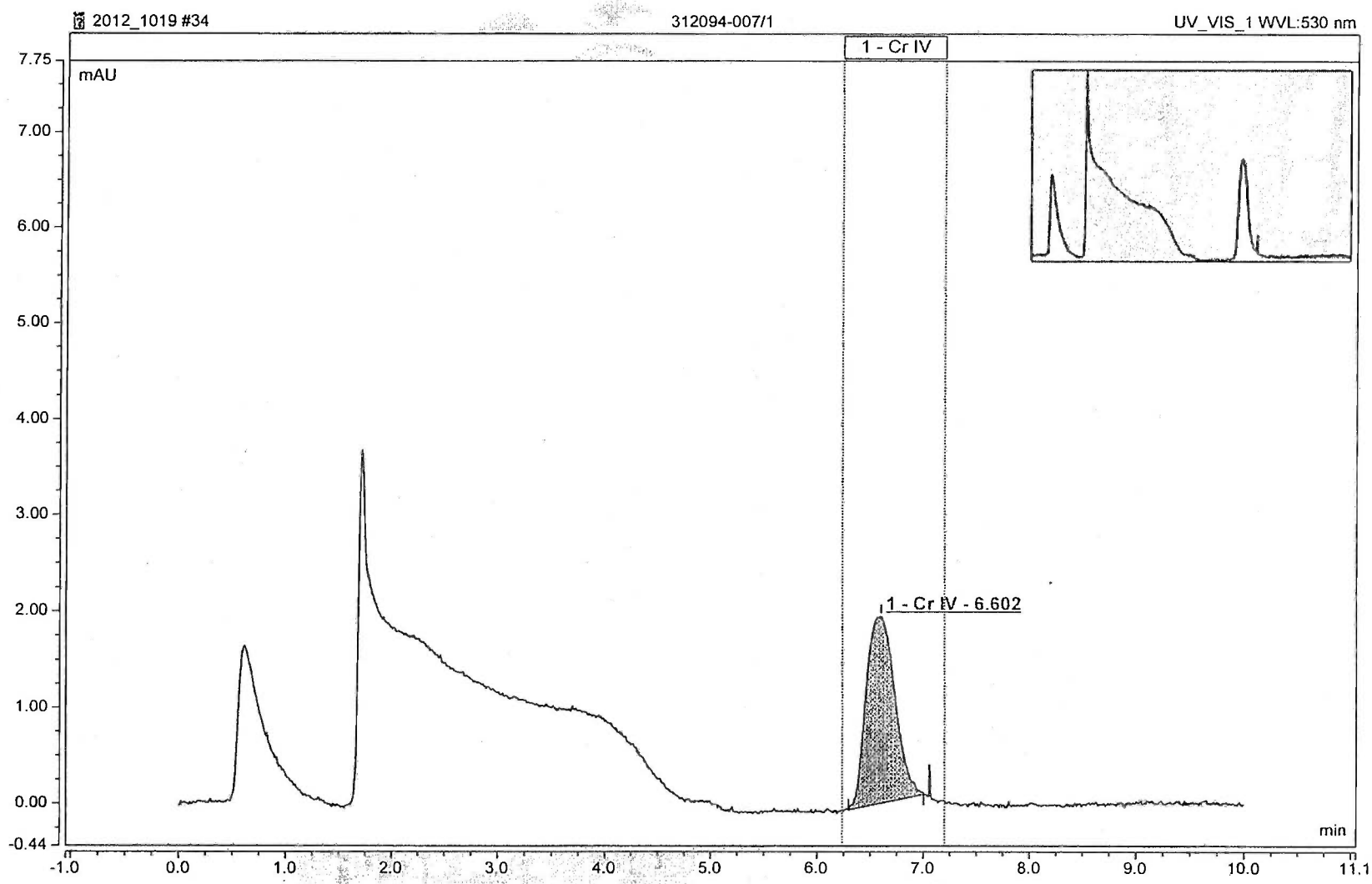
ALAB : 00066

LMC-PET-00001334

CONFIDENTIAL

Sequence: 2012_1019
Injection #34: 312094-007/1

Chromatogram



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ALAB : 99867
LMC-PET-00001335
CONFIDENTIAL

Sequence: 2012_1019
Injection #34: 312094-007/1

Peak Results

Peak No.	Peak Name	Ret.Time min	Amount ppb	Rel.Area %	Area mAU*min	Height mAU	Type	Width (50%) min	Asym. EP	Resol. EP	Plates EP
1	Cr IV	6.602	1.3558	100.00	0.6092	1.95	M	0.299	1.17	n.a.	2695
Maximum			1.3558	100.00	0.6092	1.95		0.299	1.17	0.00	2695
Minimum			1.3558	100.00	0.6092	1.95		0.299	1.17	0.00	2695
Sum			1.3558	100.00	0.6092	1.95					

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Version 7.1.1.1127, Dionex Corporation

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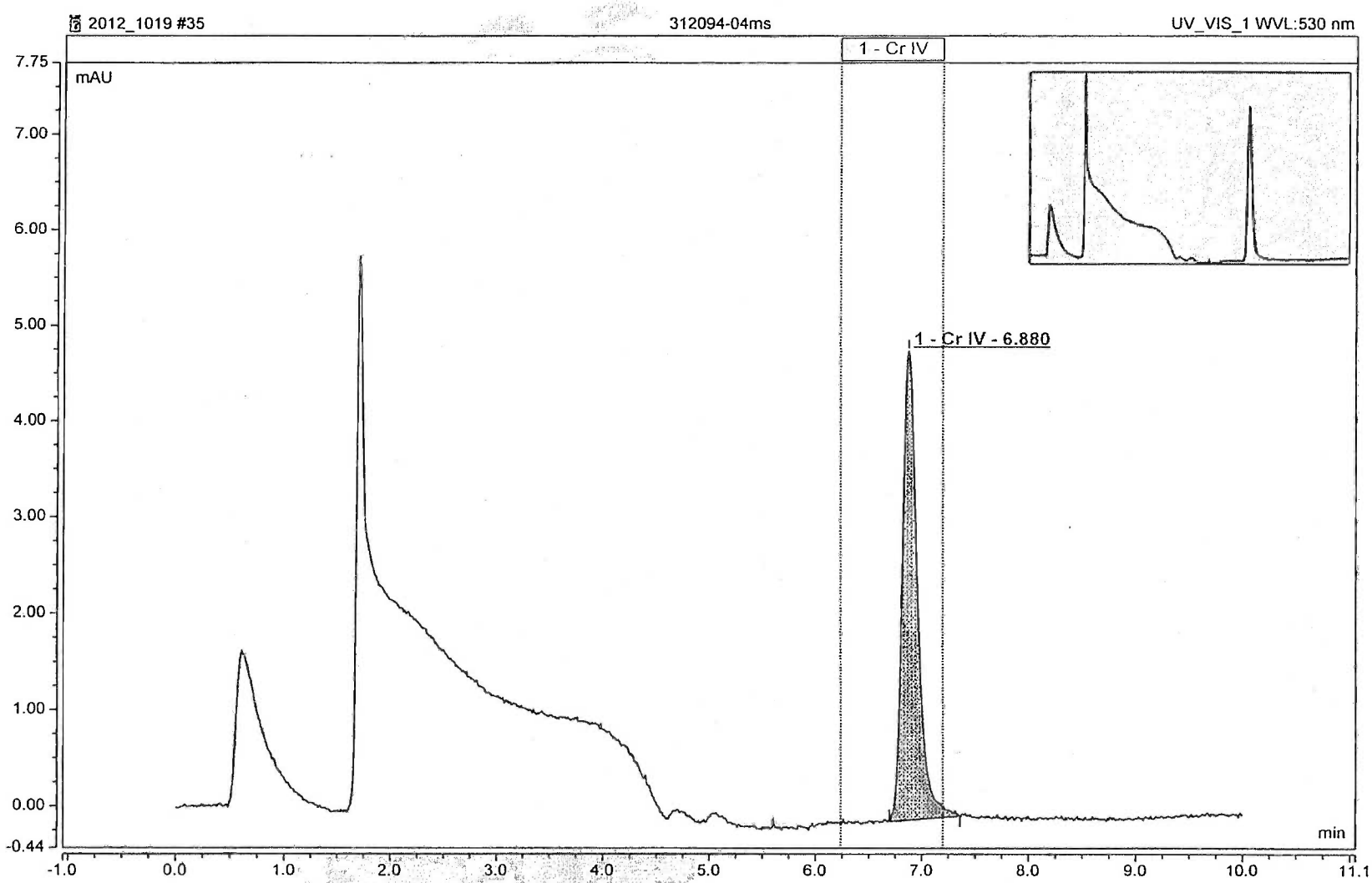
ALAB : 00068
LMC-PET-00001336
CONFIDENTIAL

Sequence: 2012_1019
Injection #35: 312094-04ms

Chromatogram



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Version 7.1.1.1127, Dionex Corporation

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19/10/12 16:35

ALAB : 00065
LMC-PET-00001337
CONFIDENTIAL

Sequence: 2012_1019
Injection #35: 312094-04ms

Peak Results

Peak No.	Peak Name	Ret.Time min	Amount ppb	Rel.Area %	Area mAU*min	Height mAU	Type	Width (50%) min	Asym. EP	Resol. EP	Plates EP
1	Cr IV	6.880	1.7873	100.00	0.8031	4.88	M	0.146	1.35	n.a.	12353
Maximum			1.7873	100.00	0.8031	4.88		0.146	1.35	0.00	12353
Minimum			1.7873	100.00	0.8031	4.88		0.146	1.35	0.00	12353
Sum			1.7873	100.00	0.8031	4.88					

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Version 7.1.1.1127, Dionex Corporation

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ALAB : 00070
LMC-PET-00001338
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