Energy Laboratories, Inc.
Determination of Method Detection Limits
(40 CFR, Part 136, Appendix B)

MDL Study Number: 952 **Date Of Study: 1/4/2016**

Analyst	Scott R. Wunderlich	**Matrix**	Aqueous
Instrument ID	PHSC_101-H	**Prep Method**	
Method Source	A2320 B	**Units**	mg/L

Parameter	Average Recovery %	Std Deviation	MDL	Concentration Tested	Reporting Limit	Comment
Alkalinity, Total as CaCO3	76.1	0.06089	0.1826	10	4	MDL<0.1*Spike Concentration

Energy Laboratories, Inc.
Determination of Method Detection Limits
(40 CFR, Part 136, Appendix B)

MDL Study Number: 971 **Date Of Study: 1/11/2016**

Analyst	Cole Mergenthaler	**Matrix**	Aqueous
Instrument ID	FIA203-HE	**Prep Method**	
Method Source	E350.1	**Units**	mg/L

Parameter	Average Recovery %	Std Deviation	MDL	Concentration Tested	Reporting Limit	Comment
Nitrogen, Ammonia as N	156.2	0.00517	0.0155	0.03	0.05	

Energy Laboratories, Inc.
Determination of Method Detection Limits
(40 CFR, Part 136, Appendix B)

MDL Study Number: 1029 **Date Of Study: 7/20/2016**

Analyst Scott R. Wunderlich
Instrument ID IC102-H
Method Source E300.0

Matrix Aqueous
Prep Method
Units mg/L

Parameter	Average Recovery %	Std Deviation	MDL	Concentration Tested	Reporting Limit	Comment
Bromide	92.5	0.00255	0.0076	0.05	0.5	
Chloride	164.0	0.00450	0.0135	0.025	1	
Nitrogen, Nitrate as N	91.0	0.00092	0.0027	0.0125	0.125	
Nitrogen, Nitrite as N	382.5	0.00113	0.0034	0.005	0.05	
Phosphorus, Dissolved Orthophos	530.0	0.00648	0.0194	0.025	0.25	
Sulfate	107.5	0.00811	0.0243	0.1	1	

Energy Laboratories, Inc.
Determination of Method Detection Limits
(40 CFR, Part 136, Appendix B)

MDL Study Number: 955 **Date Of Study: 1/5/2016**

Analyst	Scott R. Wunderlich	**Matrix**	Aqueous
Instrument ID	PHSC_101-H	**Prep Method**	
Method Source	A2510 B	**Units**	umhos/cm

Parameter	Average Recovery %	Std Deviation	MDL	Concentration Tested	Reporting Limit	Comment
Conductivity @ 25 C	0.0	0.21213	0.6360	0	1	MDL>Spike Concentration

Energy Laboratories, Inc.
Determination of Method Detection Limits
(40 CFR, Part 136, Appendix B)

MDL Study Number: 962 ***Date Of Study:*** **1/7/2016**

Analyst Scott R. Wunderlich
Instrument ID pH2
Method Source A4500-F C
Matrix Aqueous
Prep Method
Units mg/L

Parameter	Average Recovery %	Std Deviation	MDL	Concentration Tested	Reporting Limit	Comment
Fluoride	98.8	0.00354	0.0106	0.1	0.1	

Energy Laboratories, Inc.

Determination of Method Detection Limits

(40 CFR, Part 136, Appendix B)

Study Name: 16-ICP2-HE-ICP-200.7-W-T

Study Information: **Analyst:** Stephanie Dull **Method Source:** E200.7 **Matrix:** Aqueous **Study Date:** 1/3/2016

Instrument: ICP2-HE **Prep Method Source:** E200.2 **Report Date:** 1/16/2017

Study Analytical Data

Analyte	Analyte Channel	Tune Mode	Tested Conc.	01/26/2016 16:50	01/26/2016 16:54	01/26/2016 16:58	01/26/2016 17:02	01/26/2016 17:05	01/26/2016 17:09	01/26/2016 17:13	Calc MDL	Study Units	Mean	Stnd Dev	Recovery
Copper	Cu3273	na	0.03	0.03294	0.0342	0.03306	0.03008	0.03336	0.03373	0.03254	**0.0042**	mg/L	0.033	0.0013	109.5%
Molybdenum	Mo2816	na	0.03	0.02333	0.02177	0.02306	0.02779	0.02668	0.02403	0.02258	**0.007**	mg/L	0.024	0.0022	80.6%
Potassium	K_7698	na	0.5	0.36684	0.35002	0.33711	0.39674	0.38644	0.37318	0.3115	**0.093**	mg/L	0.36	0.03	72.0%
Silver	Ag3280	na	0.02	0.01407	0.00911	0.01435	0.01278	0.00913	0.01321	0.00947	**0.0075**	mg/L	0.012	0.0024	58.6%
Uranium	U_3670	na	0.4	0.35492	0.40678	0.49187	0.35862	0.41001	0.36425	0.3329	**0.168**	mg/L	0.388	0.054	97.1%
Uranium	U_3859	na	0.4	0.55408	0.52124	0.51099	0.50707	0.5533	0.52394	0.49059	**0.074**	mg/L	0.523	0.024	130.8%

Energy Laboratories, Inc.

Determination of Method Detection Limits

(40 CFR, Part 136, Appendix B)

Study Name: 16-ICP2-HE-ICP-200.7-W-T

Study Information: **Analyst:** Stephanie Dull **Method Source:** E200.7 **Matrix:** Aqueous **Study Date:** 1/3/2016

Instrument: ICP2-HE **Prep Method Source:** E200.2 **Report Date:** 1/16/2017

Study Analytical Data

Analyte	Analyte Channel	Tune Mode	Tested Conc.	01/26/2016 16:12	01/26/2016 16:16	01/26/2016 16:20	01/26/2016 16:24	01/26/2016 16:28	01/26/2016 16:31	01/26/2016 16:35	Calc MDL	Study Units	Mean	Stnd Dev	Recovery
Aluminum	Al3961	na	0.025	0.03818	0.03726	0.03547	0.02385	0.02498	0.04032	0.03732	**0.021**	mg/L	0.034	0.0067	135.6%
Arsenic	As1937	na	0.05	0.06855	0.07297	0.06993	0.0734	0.06807	0.06991	0.0712	**0.0065**	mg/L	0.071	0.0021	141.2%
Cadmium	Cd2144	na	0.0025	0.00253	0.00271	0.00268	0.00257	0.00261	0.00281	0.00265	**0.00029**	mg/L	0.0027	9.4E-05	106.0%
Cobalt	Co2388	na	0.01	0.01129	0.01084	0.01253	0.01161	0.01188	0.01042	0.01102	**0.0022**	mg/L	0.011	0.0007	113.7%
Copper	Cu3247	na	0.015	0.01347	0.01322	0.01414	0.01195	0.01467	0.01289	0.01537	**0.0036**	mg/L	0.014	0.0011	91.1%
Lead	Pb2169	na	0.05	0.05663	0.05925	0.05952	0.05909	0.07288	0.05797	0.06767	**0.019**	mg/L	0.062	0.006	123.7%
Nickel	Ni2316	na	0.01	0.00729	0.00792	0.00801	0.00944	0.00941	0.00844	0.00955	**0.0028**	mg/L	0.0086	0.0009	85.8%
Silicon	Si2516	na	0.1	0.09963	0.09749	0.10271	0.10089	0.10383	0.0959	0.10589	**0.011**	mg/L	0.101	0.0035	100.9%
Silicon	Si2881	na	0.1	0.10548	0.10954	0.10083	0.11465	0.1058	0.11125	0.11695	**0.018**	mg/L	0.109	0.0056	109.2%
Vanadium	V_29240	na	0.025	0.02104	0.02183	0.02007	0.02091	0.02007	0.01675	0.02122	**0.0053**	mg/L	0.02	0.0017	81.0%
Vanadium	V_3102	na	0.025	0.02555	0.0224	0.02194	0.02194	0.02088	0.02117	0.02245	**0.0048**	mg/L	0.022	0.0015	89.3%

Energy Laboratories, Inc.

Determination of Method Detection Limits

(40 CFR, Part 136, Appendix B)

Study Name: 16-ICP2-HE-ICP-200.7-W-T

Study Information: **Analyst:** Stephanie Dull **Method Source:** E200.7 **Matrix:** Aqueous **Study Date:** 1/3/2016

Instrument: ICP2-HE **Prep Method Source:** E200.2 **Report Date:** 1/16/2017

				Study Analytical Data											
Analyte	**Analyte Channel**	**Tune Mode**	**Tested Conc.**	**01/26/2016 15:04**	**01/26/2016 15:08**	**01/26/2016 15:12**	**01/26/2016 15:16**	**01/26/2016 15:20**	**01/26/2016 15:23**	**01/26/2016 16:01**	**Calc MDL**	**Study Units**	**Mean**	**Stnd Dev**	**Recovery**
Antimony	Sb2068	na	0.04	0.03528	0.03351	0.0349	0.03936	0.02901	0.03844	0.04085	**0.013**	mg/L	0.036	0.004	89.7%
Barium	Ba4554	na	0.002	0.00229	0.00142	0.00209	0.00269	0.00275	0.00259	0.00186	**0.0015**	mg/L	0.0022	0.00049	112.0%
Boron	B_2497	na	0.01	0.00694	0.00824	0.00675	0.00774	0.00693	0.00792	0.00676	**0.002**	mg/L	0.0073	0.00062	73.2%
Lead	Pb2203	na	0.02	0.01752	0.01833	0.0146	0.01907	0.02097	0.01943	0.01563	**0.007**	mg/L	0.018	0.0022	89.7%
Magnesium	Mg2852	na	0.1	0.09718	0.0996	0.09794	0.10064	0.09894	0.09863	0.08931	**0.012**	mg/L	0.097	0.0038	97.4%
Mercury	Hg1849	na	0.04	0.03694	0.03736	0.03674	0.03796	0.03897	0.03581	0.0359	**0.0035**	mg/L	0.037	0.0011	92.7%
Molybdenum	Mo2020	na	0.006	0.00696	0.00758	0.00677	0.00589	0.00685	0.00485	0.00682	**0.0028**	mg/L	0.0065	0.00089	108.8%
Nickel	Ni2216	na	0.004	0.00406	0.00409	0.00354	0.00445	0.00417	0.00463	0.00463	**0.0012**	mg/L	0.0042	0.00039	105.6%
Phosphorus	P_1774	na	0.04	0.03171	0.03385	0.02717	0.03134	0.03148	0.03192	0.02668	**0.0083**	mg/L	0.031	0.0026	76.4%
Phosphorus	P_2149	na	0.04	0.02208	0.04218	0.0261	0.03203	0.0282	0.02548	0.03079	**0.02**	mg/L	0.03	0.0065	73.8%
Selenium	Se2039	na	0.04	0.05022	0.04646	0.04428	0.04155	0.0534	0.04344	0.04031	**0.015**	mg/L	0.046	0.0047	114.2%
Strontium	Sr4077	na	0.002	0.00196	0.00198	0.00197	0.00203	0.00201	0.00194	0.00176	**0.00028**	mg/L	0.002	8.9E-05	97.5%
Titanium	Ti3361	na	0.002	0.00143	0.00167	0.00138	0.00183	0.00174	0.00187	0.00081	**0.0012**	mg/L	0.0015	0.00037	76.6%

Energy Laboratories, Inc.

Determination of Method Detection Limits

(40 CFR, Part 136, Appendix B)

Study Name: 16-ICP2-HE-ICP-200.7-W-T

Study Information: **Analyst:** Stephanie Dull **Method Source:** E200.7 **Matrix:** Aqueous **Study Date:** 1/3/2016

Instrument: ICP2-HE **Prep Method Source:** E200.2 **Report Date:** 1/16/2017

Study Analytical Data

Analyte	Analyte Channel	Tune Mode	Tested Conc.	01/21/2016 15:03	01/21/2016 15:07	01/21/2016 15:10	01/21/2016 15:14	01/21/2016 15:25	01/21/2016 15:29	01/21/2016 15:33	Calc MDL	Study Units	Mean	Stnd Dev	Recovery
Silver	Ag3382	na	0.08	0.10833	0.11581	0.11163	0.11794	0.11939	0.11926	0.11992	**0.014**	mg/L	0.116	0.0045	145.0%
Sodium	Na8183	na	2	1.7358	1.8848	1.693	1.6727	1.7537	1.6528	2.0382	**0.436**	mg/L	1.78	0.139	88.8%

Energy Laboratories, Inc.

Determination of Method Detection Limits

(40 CFR, Part 136, Appendix B)

Study Name: 16-ICP2-HE-ICP-200.7-W-T

Study Information: **Analyst:** Stephanie Dull **Method Source:** E200.7 **Matrix:** Aqueous **Study Date:** 1/3/2016

Instrument: ICP2-HE **Prep Method Source:** E200.2 **Report Date:** 1/16/2017

Study Analytical Data

Analyte	Analyte Channel	Tune Mode	Tested Conc.	01/21/2016 14:17	01/21/2016 14:21	01/21/2016 14:25	01/21/2016 14:29	01/21/2016 14:40	01/21/2016 14:44	01/21/2016 14:48	Calc MDL	Study Units	Mean	Stnd Dev	Recovery
Chromium	Cr2055	na	0.02	0.01883	0.02071	0.01921	0.02016	0.01977	0.01913	0.02025	**0.0022**	mg/L	0.02	0.00069	98.6%
Chromium	Cr2666	na	0.02	0.01962	0.02519	0.02144	0.02007	0.01896	0.01142	0.01096	**0.016**	mg/L	0.018	0.0052	91.2%
Chromium	Cr2677	na	0.02	0.02762	0.02574	0.02681	0.02657	0.02622	0.02525	0.02548	**0.0026**	mg/L	0.026	0.00083	131.2%
Copper	Cu2199	na	0.03	0.01883	0.01583	0.02058	0.01418	0.02061	0.02145	0.01617	**0.0089**	mg/L	0.018	0.0028	60.8%
Iron	Fe2332	na	0.02	0.01594	0.01608	0.01531	0.01385	0.02099	0.01415	0.01599	**0.0074**	mg/L	0.016	0.0024	80.2%
Iron	Fe2599	na	0.02	0.02115	0.0222	0.02194	0.02083	0.02099	0.01964	0.02173	**0.0027**	mg/L	0.021	0.00086	106.0%
Mercury	Hg1942	na	0.2	0.14881	0.15865	0.15214	0.15237	0.14557	0.14071	0.14828	**0.018**	mg/L	0.15	0.0057	74.7%
Strontium	Sr3464	na	0.01	0.00999	0.01027	0.0059	0.00756	0.00892	0.00896	0.00931	**0.0048**	mg/L	0.0087	0.0015	87.0%
Titanium	Ti3349	na	0.01	0.01008	0.0095	0.00905	0.0086	0.00913	0.00857	0.00916	**0.0016**	mg/L	0.0092	0.00052	91.5%

Energy Laboratories, Inc.

Determination of Method Detection Limits

(40 CFR, Part 136, Appendix B)

Study Name: 16-ICP2-HE-ICP-200.7-W-T

Study Information: **Analyst:** Stephanie Dull **Method Source:** E200.7 **Matrix:** Aqueous **Study Date:** 1/3/2016

Instrument: ICP2-HE **Prep Method Source:** E200.2 **Report Date:** 1/16/2017

Study Analytical Data

Analyte	Analyte Channel	Tune Mode	Tested Conc.	01/21/2016 13:32	01/21/2016 13:36	01/21/2016 13:40	01/21/2016 13:43	01/21/2016 13:55	01/21/2016 13:58	01/21/2016 14:02	Calc MDL	Study Units	Mean	Stnd Dev	Recovery
Antimony	Sb2175	na	0.1	0.10108	0.10281	0.10065	0.10964	0.10178	0.10944	0.09754	**0.014**	mg/L	0.103	0.0046	103.3%
Boron	B_2089	na	0.025	0.02164	0.0238	0.02417	0.02316	0.02284	0.02434	0.02327	**0.0029**	mg/L	0.023	0.00092	93.2%
Calcium	Ca3179	na	0.25	0.31418	0.31866	0.31504	0.34385	0.30892	0.31359	0.33217	**0.039**	mg/L	0.321	0.012	128.4%
Calcium	Ca3181	na	0.25	0.27826	0.29221	0.26917	0.2928	0.26427	0.25574	0.27223	**0.044**	mg/L	0.275	0.014	110.0%
Gold	Au2427	na	0.05	0.04537	0.05169	0.04513	0.04996	0.044	0.04278	0.04105	**0.012**	mg/L	0.046	0.0038	91.4%
Gold	Au2675	na	0.05	0.0362	0.035	0.02563	0.02972	0.0362	0.03642	0.03383	**0.013**	mg/L	0.033	0.0041	66.5%
Lithium	Li6707	na	0.01	0.00877	0.00946	0.00939	0.0084	0.00936	0.01057	0.00974	**0.0022**	mg/L	0.0094	0.00069	93.8%
Magnesium	Mg2798	na	0.25	0.31283	0.32916	0.31786	0.33357	0.30837	0.32003	0.31542	**0.028**	mg/L	0.32	0.0089	127.8%
Potassium	K_7664	na	0.25	0.26183	0.24364	0.26742	0.26268	0.26727	0.28066	0.27313	**0.036**	mg/L	0.265	0.012	106.1%
Thallium	Tl1908	na	0.15	0.16345	0.17133	0.16709	0.16764	0.1756	0.16286	0.16699	**0.014**	mg/L	0.168	0.0044	111.9%

Energy Laboratories, Inc.

Determination of Method Detection Limits

(40 CFR, Part 136, Appendix B)

Study Name: 16-ICP2-HE-ICP-200.7-W-T

Study Information: **Analyst:** Stephanie Dull **Method Source:** E200.7 **Matrix:** Aqueous **Study Date:** 1/3/2016

Instrument: ICP2-HE **Prep Method Source:** E200.2 **Report Date:** 1/16/2017

Study Analytical Data

Analyte	Analyte Channel	Tune Mode	Tested Conc.	01/21/2016 12:17	01/21/2016 12:21	01/21/2016 12:24	01/21/2016 12:28	01/21/2016 12:32	01/21/2016 13:13	01/21/2016 13:17	Calc MDL	Study Units	Mean	Stnd Dev	Recovery
Aluminum	Al1670	na	0.01	0.01202	0.01144	0.01127	0.01146	0.01272	0.01017	0.0106	**0.0027**	mg/L	0.011	0.00085	113.8%
Arsenic	As1890	na	0.02	0.02079	0.01769	0.01999	0.01681	0.0195	0.02111	0.0176	**0.0053**	mg/L	0.019	0.0017	95.3%
Beryllium	Be3130	na	0.0006	0.00059	0.00053	0.00056	0.00055	0.00055	0.00058	0.0005	**0.000095**	mg/L	0.00055	0.00003	91.9%
Beryllium	Be3131	na	0.0006	0.0005	0.00049	0.00044	0.0005	0.00063	0.00076	0.00058	**0.00034**	mg/L	0.00056	0.00011	92.8%
Manganese	Mn2576	na	0.002	0.00209	0.00222	0.0024	0.00189	0.00212	0.0026	0.00211	**0.00073**	mg/L	0.0022	0.00023	110.2%
Manganese	Mn2593	na	0.002	0.00077	0.00118	0.00112	0.0017	0.00117	0.00195	0.00164	**0.0013**	mg/L	0.0014	0.00041	68.0%
Selenium	Se1960	na	0.04	0.03873	0.03547	0.03766	0.03306	0.03562	0.04086	0.04078	**0.0092**	mg/L	0.037	0.0029	93.6%
Sodium	Na5895	na	0.1	0.10083	0.09154	0.09068	0.09608	0.09072	0.10608	0.0946	**0.018**	mg/L	0.096	0.0058	95.7%
Tin	Sn1899	na	0.04	0.04119	0.03898	0.03949	0.04106	0.0384	0.0458	0.0473	**0.011**	mg/L	0.042	0.0035	104.4%
Zinc	Zn2062	na	0.004	0.00543	0.0056	0.00584	0.00622	0.00543	0.00571	0.00538	**0.00094**	mg/L	0.0057	0.0003	141.5%
Zinc	Zn2138	na	0.004	0.00598	0.00601	0.00563	0.00535	0.00549	0.00623	0.00596	**0.001**	mg/L	0.0058	0.00032	145.2%

Energy Laboratories, Inc.

Determination of Method Detection Limits

(40 CFR, Part 136, Appendix B)

Study Name: 16-ICP2-HE-ICP-200.7-W-D

Study Information: **Analyst:** Stephanie Dull **Method Source:** E200.7 **Matrix:** Aqueous **Study Date:** 1/3/2016

Instrument: ICP2-HE **Prep Method Source:** DIRECT **Report Date:** 1/16/2017

				Study Analytical Data											
Analyte	**Analyte Channel**	**Tune Mode**	**Tested Conc.**	**01/26/2016 14:26**	**01/26/2016 14:30**	**01/26/2016 14:34**	**01/26/2016 14:38**	**01/26/2016 14:49**	**01/26/2016 14:53**	**01/26/2016 14:57**	**Calc MDL**	**Study Units**	**Mean**	**Stnd Dev**	**Recovery**
Aluminum	Al3961	na	0.05	0.06649	0.06582	0.0588	0.05863	0.07331	0.07184	0.07193	**0.019**	mg/L	0.067	0.0061	133.4%
Arsenic	As1937	na	0.1	0.14357	0.14755	0.14671	0.15202	0.1446	0.14862	0.15742	**0.015**	mg/L	0.149	0.0048	148.6%
Copper	Cu3247	na	0.03	0.02746	0.02974	0.03061	0.03112	0.02801	0.02979	0.03035	**0.0043**	mg/L	0.03	0.0014	98.6%
Iron	Fe2332	na	0.02	0.02606	0.02288	0.02258	0.0205	0.0245	0.02492	0.02436	**0.0058**	mg/L	0.024	0.0018	118.4%
Molybdenum	Mo2816	na	0.03	0.02954	0.02374	0.02362	0.02762	0.03003	0.02526	0.02618	**0.0082**	mg/L	0.027	0.0026	88.5%

Energy Laboratories, Inc.

Determination of Method Detection Limits

(40 CFR, Part 136, Appendix B)

Study Name: 16-ICP2-HE-ICP-200.7-W-D

Study Information: **Analyst:** Stephanie Dull **Method Source:** E200.7 **Matrix:** Aqueous **Study Date:** 1/3/2016

Instrument: ICP2-HE **Prep Method Source:** DIRECT **Report Date:** 1/16/2017

Study Analytical Data

Analyte	Analyte Channel	Tune Mode	Tested Conc.	01/26/2016 13:52	01/26/2016 14:03	01/26/2016 14:07	01/26/2016 14:11	01/26/2016 14:15	01/26/2016 14:19	01/26/2016 14:22	Calc MDL	Study Units	Mean	Stnd Dev	Recovery
Calcium	Ca3179	na	0.25	0.3218	0.31654	0.33988	0.3196	0.32529	0.3255	0.32462	**0.023**	mg/L	0.325	0.0074	129.9%
Chromium	Cr2055	na	0.01	0.01444	0.01527	0.01508	0.01427	0.01566	0.01542	0.01504	**0.0016**	mg/L	0.015	0.00051	150.3%
Chromium	Cr2677	na	0.01	0.01439	0.01344	0.01231	0.00979	0.01339	0.01258	0.0126	**0.0045**	mg/L	0.013	0.0014	126.4%
Cobalt	Co2388	na	0.01	0.01157	0.0111	0.0111	0.01018	0.00937	0.01139	0.01031	**0.0025**	mg/L	0.011	0.00079	107.2%
Iron	Fe2599	na	0.01	0.00811	0.00896	0.00773	0.00644	0.00894	0.00842	0.00758	**0.0028**	mg/L	0.008	0.00088	80.2%
Magnesium	Mg2798	na	0.25	0.30025	0.31279	0.32062	0.29886	0.30613	0.31368	0.31571	**0.026**	mg/L	0.31	0.0082	123.9%
Nickel	Ni2316	na	0.01	0.00939	0.00893	0.01089	0.00996	0.01088	0.00981	0.01053	**0.0024**	mg/L	0.01	0.00075	100.6%
Titanium	Ti3349	na	0.005	0.00485	0.00389	0.00437	0.00492	0.00411	0.00475	0.00383	**0.0014**	mg/L	0.0044	0.00046	87.7%

Energy Laboratories, Inc.

Determination of Method Detection Limits

(40 CFR, Part 136, Appendix B)

Study Name: 16-ICP2-HE-ICP-200.7-W-D

Study Information: **Analyst:** Stephanie Dull **Method Source:** E200.7 **Matrix:** Aqueous **Study Date:** 1/3/2016

Instrument: ICP2-HE **Prep Method Source:** DIRECT **Report Date:** 1/16/2017

				Study Analytical Data											
Analyte	**Analyte Channel**	**Tune Mode**	**Tested Conc.**	**01/26/2016 13:25**	**01/26/2016 13:29**	**01/26/2016 13:33**	**01/26/2016 13:37**	**01/26/2016 13:41**	**01/26/2016 13:45**	**01/26/2016 13:48**	**Calc MDL**	**Study Units**	**Mean**	**Stnd Dev**	**Recovery**
Aluminum	Al1670	na	0.01	0.00925	0.00756	0.00885	0.00878	0.0088	0.00916	0.00916	**0.0018**	mg/L	0.0088	0.00058	87.9%
Boron	B_2089	na	0.01	0.0108	0.01107	0.00997	0.01102	0.01052	0.01065	0.00979	**0.0016**	mg/L	0.011	0.0005	105.5%
Potassium	K_7664	na	0.1	0.0939	0.1	0.09336	0.10336	0.09358	0.09727	0.11674	**0.026**	mg/L	0.1	0.0084	99.7%
Selenium	Se1960	na	0.04	0.03102	0.03577	0.03806	0.03559	0.03627	0.03919	0.03034	**0.01**	mg/L	0.035	0.0033	87.9%
Silver	Ag3280	na	0.004	0.00311	0.00423	0.00345	0.00215	0.00258	0.00286	0.00154	**0.0028**	mg/L	0.0028	0.00088	71.1%
Titanium	Ti3361	na	0.002	0.00092	0.00085	0.0019	0.00131	0.00153	0.00206	0.00161	**0.0014**	mg/L	0.0015	0.00046	72.7%
Vanadium	V_29240	na	0.01	0.01142	0.01008	0.00932	0.01062	0.01198	0.0107	0.01097	**0.0027**	mg/L	0.011	0.00087	107.3%
Zinc	Zn2062	na	0.004	0.00461	0.0044	0.00473	0.00457	0.00446	0.00484	0.00471	**0.00049**	mg/L	0.0046	0.00016	115.4%
Zinc	Zn2138	na	0.004	0.00535	0.00538	0.00492	0.00522	0.00559	0.00575	0.00538	**0.00083**	mg/L	0.0054	0.00026	134.2%

Energy Laboratories, Inc.

Determination of Method Detection Limits

(40 CFR, Part 136, Appendix B)

Study Name: 16-ICP2-HE-ICP-200.7-W-D

Study Information: **Analyst:** Stephanie Dull **Method Source:** E200.7 **Matrix:** Aqueous **Study Date:** 1/3/2016

Instrument: ICP2-HE **Prep Method Source:** DIRECT **Report Date:** 1/16/2017

				Study Analytical Data											
Analyte	**Analyte Channel**	**Tune Mode**	**Tested Conc.**	**01/26/2016 12:51**	**01/26/2016 12:55**	**01/26/2016 12:59**	**01/26/2016 13:03**	**01/26/2016 13:07**	**01/26/2016 13:18**	**01/26/2016 13:22**	**Calc MDL**	**Study Units**	**Mean**	**Stnd Dev**	**Recovery**
Phosphorus	P_1774	na	0.02	0.00944	0.01024	0.0082	0.00914	0.00832	0.01174	0.01296	**0.0056**	mg/L	0.01	0.0018	50.0%
Strontium	Sr4077	na	0.001	0.0008	0.00085	0.00075	0.00079	0.00088	0.00086	0.00078	**0.00015**	mg/L	0.00082	4.8E-05	81.5%
Thallium	Tl1908	na	0.03	0.02916	0.0306	0.02521	0.02616	0.02551	0.02964	0.02891	**0.0069**	mg/L	0.028	0.0022	92.9%
Vanadium	V_3102	na	0.005	0.00476	0.00556	0.00561	0.00417	0.0071	0.00608	0.00527	**0.0029**	mg/L	0.0055	0.00094	110.1%

Energy Laboratories, Inc.

Determination of Method Detection Limits

(40 CFR, Part 136, Appendix B)

Study Name: 16-ICP2-HE-ICP-200.7-W-D

Study Information: **Analyst:** Stephanie Dull **Method Source:** E200.7 **Matrix:** Aqueous **Study Date:** 1/3/2016

Instrument: ICP2-HE **Prep Method Source:** DIRECT **Report Date:** 1/16/2017

Study Analytical Data

Analyte	Analyte Channel	Tune Mode	Tested Conc.	01/26/2016 12:17	01/26/2016 12:21	01/26/2016 12:32	01/26/2016 12:36	01/26/2016 12:40	01/26/2016 12:44	01/26/2016 12:48	Calc MDL	Study Units	Mean	Stnd Dev	Recovery
Magnesium	Mg2852	na	0.025	0.02451	0.02345	0.0252	0.02256	0.0235	0.02257	0.0223	**0.0034**	mg/L	0.023	0.0011	93.7%
Mercury	Hg1849	na	0.01	0.00816	0.00905	0.00929	0.00876	0.00944	0.00955	0.00883	**0.0015**	mg/L	0.009	0.00048	90.1%

Energy Laboratories, Inc.

Determination of Method Detection Limits

(40 CFR, Part 136, Appendix B)

Study Name: 16-ICP2-HE-ICP-200.7-W-D

Study Information: **Analyst:** Stephanie Dull **Method Source:** E200.7 **Matrix:** Aqueous **Study Date:** 1/3/2016

Instrument: ICP2-HE **Prep Method Source:** DIRECT **Report Date:** 1/16/2017

				Study Analytical Data											
Analyte	**Analyte Channel**	**Tune Mode**	**Tested Conc.**	**01/21/2016 10:58**	**01/21/2016 11:02**	**01/21/2016 11:13**	**01/21/2016 11:17**	**01/21/2016 11:21**	**01/21/2016 11:24**	**01/21/2016 11:28**	**Calc MDL**	**Study Units**	**Mean**	**Stnd Dev**	**Recovery**
Chromium	Cr2666	na	0.08	0.07211	0.06716	0.07426	0.06836	0.07584	0.06782	0.07406	**0.011**	mg/L	0.071	0.0035	89.2%
Potassium	K_7698	na	2	1.6379	1.6438	1.8035	1.8706	1.7377	1.7694	1.7615	**0.262**	mg/L	1.75	0.083	87.3%
Silver	Ag3382	na	0.08	0.12294	0.11941	0.11498	0.1157	0.11547	0.11227	0.1133	**0.012**	mg/L	0.116	0.0037	145.4%
Sodium	Na8183	na	2	1.5777	1.7127	1.8062	1.9017	1.7695	1.8448	1.8172	**0.331**	mg/L	1.78	0.105	88.8%
Strontium	Sr3464	na	0.04	0.04253	0.03934	0.04251	0.04357	0.04194	0.03766	0.038	**0.0076**	mg/L	0.041	0.0024	102.0%

Energy Laboratories, Inc.

Determination of Method Detection Limits

(40 CFR, Part 136, Appendix B)

Study Name: 16-ICP2-HE-ICP-200.7-W-D

Study Information: **Analyst:** Stephanie Dull **Method Source:** E200.7 **Matrix:** Aqueous **Study Date:** 1/3/2016

Instrument: ICP2-HE **Prep Method Source:** DIRECT **Report Date:** 1/16/2017

				Study Analytical Data											
Analyte	**Analyte Channel**	**Tune Mode**	**Tested Conc.**	**01/21/2016 10:31**	**01/21/2016 10:35**	**01/21/2016 10:39**	**01/21/2016 10:43**	**01/21/2016 10:47**	**01/21/2016 10:50**	**01/21/2016 10:54**	**Calc MDL**	**Study Units**	**Mean**	**Stnd Dev**	**Recovery**
Copper	Cu3273	na	0.03	0.0338	0.02789	0.02876	0.02211	0.02419	0.02694	0.03108	**0.012**	mg/L	0.028	0.004	92.7%

Energy Laboratories, Inc.

Determination of Method Detection Limits

(40 CFR, Part 136, Appendix B)

Study Name: 16-ICP2-HE-ICP-200.7-W-D

Study Information: **Analyst:** Stephanie Dull **Method Source:** E200.7 **Matrix:** Aqueous **Study Date:** 1/3/2016

Instrument: ICP2-HE **Prep Method Source:** DIRECT **Report Date:** 1/16/2017

				Study Analytical Data											
Analyte	**Analyte Channel**	**Tune Mode**	**Tested Conc.**	**01/21/2016 09:57**	**01/21/2016 10:01**	**01/21/2016 10:05**	**01/21/2016 10:09**	**01/21/2016 10:12**	**01/21/2016 10:16**	**01/21/2016 10:27**	**Calc MDL**	**Study Units**	**Mean**	**Stnd Dev**	**Recovery**
Barium	Ba4554	na	0.005	0.00419	0.00382	0.00377	0.0038	0.00333	0.0035	0.00369	**0.00085**	mg/L	0.0037	0.00027	74.5%
Boron	B_2497	na	0.025	0.02547	0.02341	0.02368	0.02368	0.02428	0.02261	0.02455	**0.0029**	mg/L	0.024	0.00091	95.8%
Copper	Cu2199	na	0.015	0.0088	0.01236	0.00966	0.01257	0.00833	0.01261	0.00798	**0.0066**	mg/L	0.01	0.0021	68.8%
Gold	Au2427	na	0.05	0.04898	0.04728	0.04708	0.0502	0.05239	0.04796	0.05193	**0.0068**	mg/L	0.049	0.0022	98.8%
Gold	Au2675	na	0.05	0.06284	0.05995	0.05853	0.05353	0.05413	0.06297	0.05747	**0.012**	mg/L	0.058	0.0038	117.0%
Lead	Pb2169	na	0.05	0.018	0.04211	0.02236	0.03292	0.04552	0.05431	0.02602	**0.042**	mg/L	0.034	0.013	68.9%
Lead	Pb2203	na	0.05	0.05223	0.04634	0.05295	0.04604	0.05349	0.05377	0.05113	**0.01**	mg/L	0.051	0.0033	101.7%
Nickel	Ni2216	na	0.01	0.00941	0.00905	0.00961	0.00952	0.00947	0.00917	0.00865	**0.0011**	mg/L	0.0093	0.00034	92.6%
Phosphorus	P_2149	na	0.1	0.09354	0.09044	0.08406	0.09229	0.09318	0.09051	0.0939	**0.011**	mg/L	0.091	0.0034	91.1%
Selenium	Se2039	na	0.1	0.10448	0.11832	0.10129	0.12586	0.11182	0.10411	0.12581	**0.033**	mg/L	0.113	0.01	113.1%
Uranium	U_3670	na	0.2	0.12748	0.13115	0.20132	0.1521	0.16343	0.15447	0.19191	**0.088**	mg/L	0.16	0.028	80.1%

Energy Laboratories, Inc.

Determination of Method Detection Limits

(40 CFR, Part 136, Appendix B)

Study Name: 16-ICP2-HE-ICP-200.7-W-D

Study Information: **Analyst:** Stephanie Dull **Method Source:** E200.7 **Matrix:** Aqueous **Study Date:** 1/3/2016

Instrument: ICP2-HE **Prep Method Source:** DIRECT **Report Date:** 1/16/2017

				Study Analytical Data											
Analyte	**Analyte Channel**	**Tune Mode**	**Tested Conc.**	**01/21/2016 09:23**	**01/21/2016 09:27**	**01/21/2016 09:31**	**01/21/2016 09:42**	**01/21/2016 09:46**	**01/21/2016 09:49**	**01/21/2016 09:53**	**Calc MDL**	**Study Units**	**Mean**	**Stnd Dev**	**Recovery**
Antimony	Sb2068	na	0.04	0.03107	0.03146	0.03713	0.03125	0.03878	0.0356	0.02695	**0.013**	mg/L	0.033	0.0041	82.9%
Antimony	Sb2175	na	0.04	0.04887	0.0521	0.05387	0.04754	0.05183	0.04354	0.05523	**0.013**	mg/L	0.05	0.004	126.1%
Arsenic	As1890	na	0.02	0.02247	0.01986	0.02358	0.02356	0.02361	0.02143	0.02168	**0.0045**	mg/L	0.022	0.0014	111.6%
Beryllium	Be3130	na	0.0006	0.00066	0.00054	0.00061	0.00064	0.00064	0.00059	0.00055	**0.00015**	mg/L	0.0006	4.6E-05	100.7%
Beryllium	Be3131	na	0.0006	0.0006	0.00063	0.00067	0.0006	0.00058	0.00069	0.00059	**0.00013**	mg/L	0.00062	4.2E-05	103.8%
Cadmium	Cd2144	na	0.001	0.00081	0.00087	0.00087	0.0008	0.00091	0.00095	0.00084	**0.00017**	mg/L	0.00086	5.4E-05	86.4%
Calcium	Ca3181	na	0.1	0.08637	0.07958	0.08902	0.11158	0.08642	0.08864	0.09865	**0.033**	mg/L	0.091	0.011	91.4%
Lithium	Li6707	na	0.004	0.00351	0.00328	0.0025	0.00207	0.00367	0.00241	0.00337	**0.002**	mg/L	0.003	0.00063	74.3%
Manganese	Mn2576	na	0.002	0.0021	0.00202	0.00206	0.00239	0.00222	0.00182	0.00211	**0.00055**	mg/L	0.0021	0.00018	105.2%
Manganese	Mn2593	na	0.002	0.00131	0.00124	0.00099	0.00177	0.00107	0.0013	0.00152	**0.00083**	mg/L	0.0013	0.00026	65.7%
Molybdenum	Mo2020	na	0.006	0.00443	0.00444	0.00506	0.00494	0.00432	0.00489	0.00543	**0.0013**	mg/L	0.0048	0.00041	79.7%
Silicon	Si2516	na	0.04	0.04354	0.04087	0.04588	0.03696	0.04	0.04169	0.04348	**0.0091**	mg/L	0.042	0.0029	104.4%
Silicon	Si2881	na	0.04	0.05084	0.0591	0.05262	0.05404	0.04809	0.06294	0.0538	**0.016**	mg/L	0.054	0.005	136.2%
Sodium	Na5895	na	0.1	0.10407	0.10276	0.09598	0.10108	0.10139	0.10511	0.09068	**0.016**	mg/L	0.1	0.0051	100.2%
Tin	Sn1899	na	0.04	0.04715	0.04323	0.0407	0.04329	0.04168	0.04396	0.0408	**0.007**	mg/L	0.043	0.0022	107.4%

Study Name: 16-ICPMS204-B-ICPMS-200.8-W-T
Analyst: Dustin C. Kono
Instrument: ICPMS204-B

Method Source: E200.8 **Prep Method Source:** E200.2

Study Date: 1/4/2016
Report Date: 1/16/2017
Matrix: Aqueous

Analyte	Channel	AnalDate	Result	True Val	Mean	Recovery	StdDev	MDL	Units	Tune
Aluminum										
	Al 27									
		01/23/2016 18:01	0.007326	0.005	0.0071	143%	0.00057	**0.0017**	mg/L	2
		01/23/2016 18:04	0.007471							
		01/23/2016 18:08	0.006804							
		01/23/2016 18:11	0.007257							
		01/23/2016 18:14	0.006075							
		01/23/2016 18:17	0.006759							
		01/23/2016 18:21	0.007509							
		01/23/2016 18:24	0.007898							
Boron										
	B 11									
		01/23/2016 18:01	0.005012	0.0005	0.0047	940%	0.00034	**0.001**	mg/L	2
		01/23/2016 18:04	0.004521							
		01/23/2016 18:08	0.004865							
		01/23/2016 18:11	0.004698							
		01/23/2016 18:14	0.003972							
		01/23/2016 18:17	0.004707							
		01/23/2016 18:21	0.004872							
		01/23/2016 18:24	0.004971							
Silicon										
	Si 28									
		01/23/2016 18:01	0.02074	0.02	0.021	103%	0.001	**0.0031**	mg/L	1
		01/23/2016 18:04	0.02114							
		01/23/2016 18:08	0.02044							
		01/23/2016 18:11	0.02134							
		01/23/2016 18:14	0.01869							
		01/23/2016 18:17	0.01974							
		01/23/2016 18:21	0.02086							
		01/23/2016 18:24	0.02208							

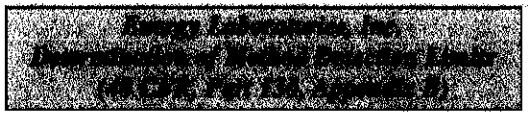
Study Name: 16-ICPMS204-B-ICPMS-200.8-W-T
Analyst: Dustin C. Kono
Instrument: ICPMS204-B

Method Source: E200.8 **Prep Method Source:** E200.2

Study Date: 1/4/2016
Report Date: 1/16/2017
Matrix: Aqueous

Analyte	Channel	AnalDate	Result	True Val	Mean	Recovery	StdDev	MDL	Units	Tune
Tin										
	Sn 118									
		01/23/2016 17:15	0.000684	0.0005	0.00061	123%	0.000034	**0.0001**	mg/L	2
		01/23/2016 17:18	0.000627							
		01/23/2016 17:22	0.000585							
		01/23/2016 17:25	0.000623							
		01/23/2016 17:28	0.000584							
		01/23/2016 17:31	0.000589							
		01/23/2016 17:35	0.000628							
		01/23/2016 17:38	0.000596							
Titanium										
	Ti 47									
		01/23/2016 17:15	0.000585	0.0005	0.00063	125%	0.000082	**0.00024**	mg/L	2
		01/23/2016 17:18	0.000579							
		01/23/2016 17:22	0.000671							
		01/23/2016 17:25	0.000591							
		01/23/2016 17:28	0.000675							
		01/23/2016 17:31	0.000742							
		01/23/2016 17:35	0.000679							
		01/23/2016 17:38	0.000482							

Study Name: 16-ICPMS204-B-ICPMS-200.8-W-T
Analyst: Dustin C. Kono
Instrument: ICPMS204-B

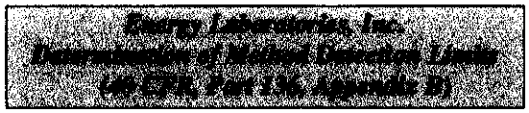


Method Source: E200.8 **Prep Method Source:** E200.2

Study Date: 1/4/2016
Report Date: 1/16/2017
Matrix: Aqueous

Analyte	Channel	AnalDate	Result	True Val	Mean	Recovery	StdDev	MDL	Units	Tune
Antimony										
	Sb 121									
		01/23/2016 16:29	0.00024	0.0001	0.00026	261%	0.00002	**0.000059**	mg/L	2
		01/23/2016 16:32	0.000276							
		01/23/2016 16:36	0.000262							
		01/23/2016 16:39	0.000286							
		01/23/2016 16:42	0.000234							
		01/23/2016 16:46	0.000253							
		01/23/2016 16:49	0.000285							
		01/23/2016 16:52	0.000254							
Barium										
	Ba 137									
		01/23/2016 16:29	0.000152	0.0001	0.00015	148%	0.000015	**0.000046**	mg/L	2
		01/23/2016 16:32	0.000132							
		01/23/2016 16:36	0.000138							
		01/23/2016 16:39	0.00017							
		01/23/2016 16:42	0.000131							
		01/23/2016 16:46	0.000141							
		01/23/2016 16:49	0.000169							
		01/23/2016 16:52	0.000153							
Beryllium										
	Be 9									
		01/23/2016 16:29	0.000095	0.0001	0.00011	111%	0.000025	**0.000074**	mg/L	2
		01/23/2016 16:32	0.000104							
		01/23/2016 16:36	0.000146							
		01/23/2016 16:39	0.000095							
		01/23/2016 16:42	0.000078							
		01/23/2016 16:46	0.000097							
		01/23/2016 16:49	0.000131							
		01/23/2016 16:52	0.000139							

Study Name: 16-ICPMS204-B-ICPMS-200.8-W-T
Analyst: Dustin C. Kono
Instrument: ICPMS204-B



Method Source: E200.8 **Prep Method Source:** E200.2

Study Date: 1/4/2016
Report Date: 1/16/2017
Matrix: Aqueous

Analyte	Channel	AnalDate	Result	True Val	Mean	Recovery	StdDev	MDL	Units	Tune
Iron										
	Fe 56									
		01/23/2016 16:29	0.003893	0.0026	0.004	156%	0.00074	**0.0022**	mg/L	1
		01/23/2016 16:32	0.003372							
		01/23/2016 16:36	0.003963							
		01/23/2016 16:39	0.00361							
		01/23/2016 16:42	0.003461							
		01/23/2016 16:46	0.004628							
		01/23/2016 16:49	0.003819							
		01/23/2016 16:52	0.005611							
		01/23/2016 16:29	0.003758	0.0026	0.0039	151%	0.00075	**0.0022**	mg/L	2
		01/23/2016 16:32	0.003321							
		01/23/2016 16:36	0.0038							
		01/23/2016 16:39	0.003561							
		01/23/2016 16:42	0.003191							
		01/23/2016 16:46	0.004483							
		01/23/2016 16:49	0.00372							
		01/23/2016 16:52	0.005495							

Study Name: 16-ICPMS204-B-ICPMS-200.8-W-T
Analyst: Dustin C. Kono
Instrument: ICPMS204-B

Method Source: E200.8 **Prep Method Source:** E200.2

Study Date: 1/4/2016
Report Date: 1/16/2017
Matrix: Aqueous

Analyte	Channel	AnalDate	Result	True Val	Mean	Recovery	StdDev	MDL	Units	Tune
Molybdenum										
	Mo 95									
		01/23/2016 16:29	0.000133	0.0001	0.00012	120%	0.000018	**0.000053**	mg/L	2
		01/23/2016 16:32	0.000111							
		01/23/2016 16:36	0.000145							
		01/23/2016 16:39	0.000143							
		01/23/2016 16:42	0.000112							
		01/23/2016 16:46	0.000103							
		01/23/2016 16:49	0.000099							
		01/23/2016 16:52	0.000115							
	Mo 98									
		01/23/2016 16:29	0.000131	0.0001	0.00012	118%	0.0000086	**0.000026**	mg/L	2
		01/23/2016 16:32	0.000128							
		01/23/2016 16:36	0.00011							
		01/23/2016 16:39	0.000115							
		01/23/2016 16:42	0.000114							
		01/23/2016 16:46	0.000111							
		01/23/2016 16:49	0.000125							
		01/23/2016 16:52	0.00011							

Study Name: 16-ICPMS204-B-ICPMS-200.8-W-T
Analyst: Dustin C. Kono
Instrument: ICPMS204-B

Method Source: E200.8 **Prep Method Source:** E200.2

Study Date: 1/4/2016
Report Date: 1/16/2017
Matrix: Aqueous

Analyte	Channel	AnalDate	Result	True Val	Mean	Recovery	StdDev	MDL	Units	Tune
Magnesium										
	Mg 24									
		01/23/2016 15:40	0.01544	0.0125	0.016	125%	0.00057	**0.0017**	mg/L	2
		01/23/2016 15:43	0.01476							
		01/23/2016 15:46	0.01478							
		01/23/2016 15:49	0.01566							
		01/23/2016 15:53	0.0162							
		01/23/2016 16:00	0.01613							
		01/23/2016 16:03	0.01603							
		01/23/2016 16:06	0.01573							

Study Name: 16-ICPMS204-B-ICPMS-200.8-W-T
Analyst: Dustin C. Kono
Instrument: ICPMS204-B

Method Source: E200.8 **Prep Method Source:** E200.2

Study Date: 1/4/2016
Report Date: 1/16/2017
Matrix: Aqueous

Analyte	Channel	AnalDate	Result	True Val	Mean	Recovery	StdDev	MDL	Units	Tune
Copper										
	Cu 65									
		01/08/2016 20:21	0.000591	0.0005	0.00057	114%	0.000064	**0.00019**	mg/L	2
		01/08/2016 20:24	0.000592							
		01/08/2016 20:27	0.000594							
		01/08/2016 20:31	0.000629							
		01/08/2016 20:34	0.000638							
		01/08/2016 20:37	0.00045							
		01/08/2016 20:40	0.000505							
		01/08/2016 20:44	0.000544							
Manganese										
	Mn 55									
		01/08/2016 20:21	0.000712	0.0005	0.0006	119%	0.000051	**0.00015**	mg/L	2
		01/08/2016 20:24	0.000595							
		01/08/2016 20:27	0.000552							
		01/08/2016 20:31	0.000615							
		01/08/2016 20:34	0.000589							
		01/08/2016 20:37	0.000582							
		01/08/2016 20:40	0.000564							
		01/08/2016 20:44	0.000563							
Selenium										
	Se 78									
		01/08/2016 20:21	0.000503	0.0005	0.00048	95%	0.00011	**0.00033**	mg/L	2
		01/08/2016 20:24	0.000327							
		01/08/2016 20:27	0.000587							
		01/08/2016 20:31	0.000552							
		01/08/2016 20:34	0.000414							
		01/08/2016 20:37	0.000605							
		01/08/2016 20:40	0.000487							
		01/08/2016 20:44	0.000326							

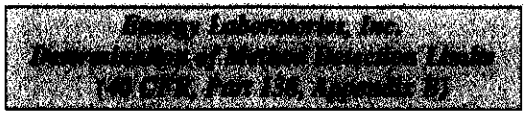
Study Name: 16-ICPMS204-B-ICPMS-200.8-W-T
Analyst: Dustin C. Kono
Instrument: ICPMS204-B

Method Source: E200.8 **Prep Method Source:** E200.2

Study Date: 1/4/2016
Report Date: 1/16/2017
Matrix: Aqueous

Analyte	Channel	AnalDate	Result	True Val	Mean	Recovery	StdDev	MDL	Units	Tune
Vanadium										
	V 51									
		01/08/2016 20:21	0.000307	0.0005	0.00032	64%	0.000033	**0.000098**	mg/L	2
		01/08/2016 20:24	0.000375							
		01/08/2016 20:27	0.000368							
		01/08/2016 20:31	0.000315							
		01/08/2016 20:34	0.000321							
		01/08/2016 20:37	0.000301							
		01/08/2016 20:40	0.000297							
		01/08/2016 20:44	0.000288							
Zinc										
	Zn 66									
		01/08/2016 20:21	0.001625	0.0005	0.0017	348%	0.000099	**0.0003**	mg/L	2
		01/08/2016 20:24	0.001865							
		01/08/2016 20:27	0.001795							
		01/08/2016 20:31	0.001874							
		01/08/2016 20:34	0.001722							
		01/08/2016 20:37	0.001744							
		01/08/2016 20:40	0.001613							
		01/08/2016 20:44	0.001689							

Study Name: 16-ICPMS204-B-ICPMS-200.8-W-T
Analyst: Dustin C. Kono
Instrument: ICPMS204-B



Method Source: E200.8 **Prep Method Source:** E200.2

Study Date: 1/4/2016
Report Date: 1/16/2017
Matrix: Aqueous

Analyte	Channel	AnalDate	Result	True Val	Mean	Recovery	StdDev	MDL	Units	Tune
Arsenic										
	As 75									
		01/08/2016 18:50	0.000094	0.0001	0.000098	98%	0.000022	**0.000066**	mg/L	2
		01/08/2016 18:53	0.000098							
		01/08/2016 18:57	0.000137							
		01/08/2016 19:00	0.000119							
		01/08/2016 19:03	0.000072							
		01/08/2016 19:06	0.000079							
		01/08/2016 19:10	0.000106							
		01/08/2016 19:13	0.000079							
Cadmium										
	Cd 111									
		01/08/2016 18:50	0.000097	0.0001	0.000098	98%	0.0000049	**0.000015**	mg/L	2
		01/08/2016 18:53	0.000099							
		01/08/2016 18:57	0.000102							
		01/08/2016 19:00	0.000102							
		01/08/2016 19:03	0.000101							
		01/08/2016 19:06	0.000087							
		01/08/2016 19:10	0.000097							
		01/08/2016 19:13	0.000096							
	Cd 114									
		01/08/2016 18:50	0.000094	0.0001	0.0001	101%	0.0000058	**0.000018**	mg/L	2
		01/08/2016 18:53	0.000104							
		01/08/2016 18:57	0.000109							
		01/08/2016 19:00	0.000098							
		01/08/2016 19:03	0.000096							
		01/08/2016 19:06	0.000095							
		01/08/2016 19:10	0.000108							
		01/08/2016 19:13	0.000101							

Study Name: 16-ICPMS204-B-ICPMS-200.8-W-T
Analyst: Dustin C. Kono
Instrument: ICPMS204-B

Method Source: E200.8 **Prep Method Source:** E200.2

Study Date: 1/4/2016
Report Date: 1/16/2017
Matrix: Aqueous

Analyte	Channel	AnalDate	Result	True Val	Mean	Recovery	StdDev	MDL	Units	Tune
Calcium										
	Ca 44									
		01/08/2016 18:50	0.03517	0.025	0.036	145%	0.0031	**0.0094**	mg/L	2
		01/08/2016 18:53	0.03354							
		01/08/2016 18:57	0.03571							
		01/08/2016 19:00	0.03807							
		01/08/2016 19:03	0.03697							
		01/08/2016 19:06	0.04298							
		01/08/2016 19:10	0.03299							
		01/08/2016 19:13	0.03547							
Chromium										
	Cr 52									
		01/08/2016 18:50	0.000114	0.0001	0.00013	126%	0.000013	**0.000039**	mg/L	2
		01/08/2016 18:53	0.000119							
		01/08/2016 18:57	0.000133							
		01/08/2016 19:00	0.000123							
		01/08/2016 19:03	0.000106							
		01/08/2016 19:06	0.000136							
		01/08/2016 19:10	0.000147							
		01/08/2016 19:13	0.000129							
Cobalt										
	Co 59									
		01/08/2016 18:50	0.000095	0.0001	0.0001	105%	0.0000092	**0.000027**	mg/L	2
		01/08/2016 18:53	0.000088							
		01/08/2016 18:57	0.000112							
		01/08/2016 19:00	0.000115							
		01/08/2016 19:03	0.000103							
		01/08/2016 19:06	0.000107							
		01/08/2016 19:10	0.000109							
		01/08/2016 19:13	0.00011							

Study Name: 16-ICPMS204-B-ICPMS-200.8-W-T
Analyst: Dustin C. Kono
Instrument: ICPMS204-B

Method Source: E200.8 **Prep Method Source:** E200.2

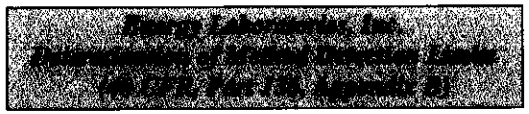
Study Date: 1/4/2016
Report Date: 1/16/2017
Matrix: Aqueous

Analyte	Channel	AnalDate	Result	True Val	Mean	Recovery	StdDev	MDL	Units	Tune
Copper										
	Cu 63									
		01/08/2016 18:50	0.000138	0.0001	0.00012	119%	0.000015	**0.000045**	mg/L	2
		01/08/2016 18:53	0.000117							
		01/08/2016 18:57	0.000125							
		01/08/2016 19:00	0.000128							
		01/08/2016 19:03	0.000135							
		01/08/2016 19:06	0.000098							
		01/08/2016 19:10	0.000111							
		01/08/2016 19:13	0.0001							
Lead										
	Pb 208									
		01/08/2016 18:50	0.000113	0.0001	0.00011	108%	0.000006	**0.000018**	mg/L	2
		01/08/2016 18:53	0.000114							
		01/08/2016 18:57	0.000114							
		01/08/2016 19:00	0.000112							
		01/08/2016 19:03	0.000102							
		01/08/2016 19:06	0.000099							
		01/08/2016 19:10	0.000107							
		01/08/2016 19:13	0.000103							
Nickel										
	Ni 60									
		01/08/2016 18:50	0.00009	0.0001	0.000079	79%	0.000012	**0.000035**	mg/L	2
		01/08/2016 18:53	0.00009							
		01/08/2016 18:57	0.000076							
		01/08/2016 19:00	0.000075							
		01/08/2016 19:03	0.00007							
		01/08/2016 19:06	0.000059							
		01/08/2016 19:10	0.000083							
		01/08/2016 19:13	0.000092							

Study Name: 16-ICPMS204-B-ICPMS-200.8-W-T

Analyst: Dustin C. Kono

Instrument: ICPMS204-B



Method Source: E200.8 **Prep Method Source:** E200.2

Study Date: 1/4/2016

Report Date: 1/16/2017

Matrix: Aqueous

Analyte	Channel	AnalDate	Result	True Val	Mean	Recovery	StdDev	MDL	Units	Tune
Potassium										
	K 39									
		01/08/2016 18:50	0.02443	0.025	0.021	86%	0.0046	**0.014**	mg/L	2
		01/08/2016 18:53	0.0145							
		01/08/2016 18:57	0.02358							
		01/08/2016 19:00	0.0244							
		01/08/2016 19:03	0.02471							
		01/08/2016 19:06	0.01453							
		01/08/2016 19:10	0.02518							
		01/08/2016 19:13	0.01974							
Selenium										
	Se 78									
		01/08/2016 18:50	0.000116	0.0001	0.00012	124%	0.000012	**0.000037**	mg/L	1
		01/08/2016 18:53	0.000117							
		01/08/2016 18:57	0.000128							
		01/08/2016 19:00	0.000124							
		01/08/2016 19:03	0.000149							
		01/08/2016 19:06	0.000108							
		01/08/2016 19:10	0.000121							
		01/08/2016 19:13	0.000131							
Silver										
	Ag 107									
		01/08/2016 18:50	0.000034	0.00004	0.000035	87%	0.0000043	**0.000013**	mg/L	2
		01/08/2016 18:53	0.00004							
		01/08/2016 18:57	0.000042							
		01/08/2016 19:00	0.000034							
		01/08/2016 19:03	0.000029							
		01/08/2016 19:06	0.000035							
		01/08/2016 19:10	0.000032							
		01/08/2016 19:13	0.000032							

Study Name: 16-ICPMS204-B-ICPMS-200.8-W-T
Analyst: Dustin C. Kono
Instrument: ICPMS204-B

Method Source: E200.8 **Prep Method Source:** E200.2

Study Date: 1/4/2016
Report Date: 1/16/2017
Matrix: Aqueous

Analyte	Channel	AnalDate	Result	True Val	Mean	Recovery	StdDev	MDL	Units	Tune
Sodium										
	Na 23									
		01/08/2016 18:50	0.0288	0.025	0.027	107%	0.0016	**0.0049**	mg/L	2
		01/08/2016 18:53	0.02826							
		01/08/2016 18:57	0.02739							
		01/08/2016 19:00	0.02762							
		01/08/2016 19:03	0.02643							
		01/08/2016 19:06	0.0253							
		01/08/2016 19:10	0.02493							
		01/08/2016 19:13	0.02444							
Strontium										
	Sr 88									
		01/08/2016 18:50	0.000178	0.0001	0.00018	178%	0.0000049	**0.000015**	mg/L	2
		01/08/2016 18:53	0.000179							
		01/08/2016 18:57	0.00017							
		01/08/2016 19:00	0.000175							
		01/08/2016 19:03	0.000181							
		01/08/2016 19:06	0.000184							
		01/08/2016 19:10	0.000174							
		01/08/2016 19:13	0.000184							
Thallium										
	Tl 205									
		01/08/2016 18:50	0.000109	0.0001	0.000098	98%	0.0000065	**0.000019**	mg/L	2
		01/08/2016 18:53	0.000095							
		01/08/2016 18:57	0.000097							
		01/08/2016 19:00	0.000103							
		01/08/2016 19:03	0.0001							
		01/08/2016 19:06	0.000098							
		01/08/2016 19:10	0.000088							
		01/08/2016 19:13	0.000092							

Study Name: 16-ICPMS204-B-ICPMS-200.8-W-T
Analyst: Dustin C. Kono
Instrument: ICPMS204-B

Method Source: E200.8 **Prep Method Source:** E200.2

Study Date: 1/4/2016
Report Date: 1/16/2017
Matrix: Aqueous

Analyte	Channel	AnalDate	Result	True Val	Mean	Recovery	StdDev	MDL	Units	Tune
Uranium										
	U 238									
		01/08/2016 18:50	0.000101	0.0001	0.000097	97%	0.0000046	**0.000014**	mg/L	2
		01/08/2016 18:53	0.000091							
		01/08/2016 18:57	0.000101							
		01/08/2016 19:00	0.000101							
		01/08/2016 19:03	0.0001							
		01/08/2016 19:06	0.000093							
		01/08/2016 19:10	0.000095							
		01/08/2016 19:13	0.000091							

Study Name: 16-ICPMS204-B-ICPMS-200.8-W-D
Analyst: Dustin C. Kono
Instrument: ICPMS204-B

Energy Laboratories Inc.
Determination of Method Detection Limits
(40 CFR, Part 136, Appendix B)

Method Source: E200.8 **Prep Method Source:** DIRECT

Study Date: 1/4/2016
Report Date: 1/16/2017
Matrix: Aqueous

Analyte	Channel	AnalDate	Result	True Val	Mean	Recovery	StdDev	MDL	Units	Tune
Vanadium										
	V 51									
		02/22/2016 18:03	0.00102	0.001	0.0011	110%	0.000045	**0.00014**	mg/L	2
		02/22/2016 18:06	0.001097							
		02/22/2016 18:09	0.001099							
		02/22/2016 18:12	0.001132							
		02/22/2016 18:16	0.001092							
		02/22/2016 18:19	0.001064							
		02/22/2016 18:22	0.001118							
		02/22/2016 18:25	0.001173							

Study Name: 16-ICPMS204-B-ICPMS-200.8-W-D
Analyst: Dustin C. Kono
Instrument: ICPMS204-B

Energy Laboratories, Inc.
Determination of Method Detection Limits
(40 CFR, Part 136, Appendix B)

Method Source: E200.8 **Prep Method Source:** DIRECT

Study Date: 1/4/2016
Report Date: 1/16/2017
Matrix: Aqueous

Analyte	Channel	AnalDate	Result	True Val	Mean	Recovery	StdDev	MDL	Units	Tune
Barium										
	Ba 137									
		01/08/2016 14:32	0.000468	0.0005	0.0005	99%	0.000035	**0.00011**	mg/L	2
		01/08/2016 14:36	0.000523							
		01/08/2016 14:39	0.000442							
		01/08/2016 14:42	0.000501							
		01/08/2016 14:45	0.000483							
		01/08/2016 14:49	0.000559							
		01/08/2016 14:52	0.000494							
		01/08/2016 14:55	0.000507							
Zinc										
	Zn 66									
		01/08/2016 14:32	0.000948	0.0005	0.00099	197%	0.000071	**0.00021**	mg/L	2
		01/08/2016 14:36	0.001151							
		01/08/2016 14:39	0.000957							
		01/08/2016 14:42	0.001005							
		01/08/2016 14:45	0.000964							
		01/08/2016 14:49	0.000982							
		01/08/2016 14:52	0.00092							
		01/08/2016 14:55	0.000964							

Study Name: 16-ICPMS204-B-ICPMS-200.8-W-D
Analyst: Dustin C. Kono
Instrument: ICPMS204-B

Reagy Laboratories, Inc.
Determination of Method Detection Limits
(40 CFR, Part 136, Appendix B)

Method Source: E200.8 **Prep Method Source:** DIRECT

Study Date: 1/4/2016
Report Date: 1/16/2017
Matrix: Aqueous

Analyte	Channel	AnalDate	Result	True Val	Mean	Recovery	StdDev	MDL	Units	Tune
Cadmium										
	Cd 111									
		01/08/2016 13:56	0.000026	0.000025	0.000022	87%	0.0000043	**0.000013**	mg/L	2
		01/08/2016 14:00	0.000026							
		01/08/2016 14:03	0.000014							
		01/08/2016 14:06	0.000022							
		01/08/2016 14:09	0.00002							
		01/08/2016 14:13	0.000024							
		01/08/2016 14:16	0.000017							
		01/08/2016 14:19	0.000024							
	Cd 114									
		01/08/2016 13:56	0.000027	0.000025	0.000026	104%	0.0000023	**0.000007**	mg/L	2
		01/08/2016 14:00	0.000026							
		01/08/2016 14:03	0.000025							
		01/08/2016 14:06	0.000027							
		01/08/2016 14:09	0.000027							
		01/08/2016 14:13	0.000026							
		01/08/2016 14:16	0.000021							
		01/08/2016 14:19	0.000029							
Lead										
	Pb 208									
		01/08/2016 13:56	0.000023	0.000025	0.000023	92%	0.0000018	**0.0000054**	mg/L	2
		01/08/2016 14:00	0.00002							
		01/08/2016 14:03	0.000024							
		01/08/2016 14:06	0.000026							
		01/08/2016 14:09	0.000022							
		01/08/2016 14:13	0.000022							
		01/08/2016 14:16	0.000024							
		01/08/2016 14:19	0.000022							

Study Name: 16-ICPMS204-B-ICPMS-200.8-W-D
Analyst: Dustin C. Kono
Instrument: ICPMS204-B

Energy Laboratories, Inc.
Determination of Method Detection Limits
(40 CFR, Part 136, Appendix B)

Study Date: 1/4/2016
Report Date: 1/16/2017
Matrix: Aqueous

Method Source: E200.8 **Prep Method Source:** DIRECT

Analyte	Channel	AnalDate	Result	True Val	Mean	Recovery	StdDev	MDL	Units	Tune
Magnesium										
	Mg 24									
		01/08/2016 13:56	0.006396	0.00625	0.0065	104%	0.00031	**0.00094**	mg/L	2
		01/08/2016 14:00	0.006614							
		01/08/2016 14:03	0.006104							
		01/08/2016 14:06	0.006642							
		01/08/2016 14:09	0.006592							
		01/08/2016 14:13	0.006972							
		01/08/2016 14:16	0.005991							
		01/08/2016 14:19	0.006555							
Thallium										
	Tl 205									
		01/08/2016 13:56	0.000026	0.000025	0.000025	102%	0.0000015	**0.0000045**	mg/L	2
		01/08/2016 14:00	0.000026							
		01/08/2016 14:03	0.000024							
		01/08/2016 14:06	0.000027							
		01/08/2016 14:09	0.000023							
		01/08/2016 14:13	0.000026							
		01/08/2016 14:16	0.000024							
		01/08/2016 14:19	0.000027							

Study Name: 16-ICPMS204-B-ICPMS-200.8-W-D
Analyst: Dustin C. Kono
Instrument: ICPMS204-B

Energy Laboratories, Inc.
Determination of Method Detection Limits
(40 CFR, Part 136, Appendix B)

Method Source: E200.8 **Prep Method Source:** DIRECT

Study Date: 1/4/2016
Report Date: 1/16/2017
Matrix: Aqueous

Analyte	Channel	AnalDate	Result	True Val	Mean	Recovery	StdDev	MDL	Units	Tune
Boron										
	B 11									
		01/07/2016 15:44	0.004949	0.005	0.0049	98%	0.00038	**0.0011**	mg/L	2
		01/07/2016 15:47	0.004258							
		01/07/2016 15:51	0.004581							
		01/07/2016 15:54	0.005454							
		01/07/2016 15:57	0.004715							
		01/07/2016 16:00	0.004903							
		01/07/2016 16:04	0.005264							
		01/07/2016 16:07	0.005029							

Study Name: 16-ICPMS204-B-ICPMS-200.8-W-D
Analyst: Dustin C. Kono
Instrument: ICPMS204-B

Energy Laboratories, Inc.
Determination of Method Detection Limits
(40 CFR, Part 136, Appendix B)

Method Source: E200.8 **Prep Method Source:** DIRECT

Study Date: 1/4/2016
Report Date: 1/16/2017
Matrix: Aqueous

Analyte	Channel	AnalDate	Result	True Val	Mean	Recovery	StdDev	MDL	Units	Tune
Aluminum										
	Al 27									
		01/07/2016 15:09	0.00065	0.0005	0.00084	168%	0.00015	**0.00046**	mg/L	2
		01/07/2016 15:12	0.000936							
		01/07/2016 15:15	0.000923							
		01/07/2016 15:18	0.000828							
		01/07/2016 15:22	0.000786							
		01/07/2016 15:25	0.000795							
		01/07/2016 15:28	0.000686							
		01/07/2016 15:31	0.001128							
Selenium										
	Se 78									
		01/07/2016 15:09	0.000645	0.0005	0.00062	125%	0.00012	**0.00035**	mg/L	2
		01/07/2016 15:12	0.000624							
		01/07/2016 15:15	0.000631							
		01/07/2016 15:18	0.00074							
		01/07/2016 15:22	0.000568							
		01/07/2016 15:25	0.00068							
		01/07/2016 15:28	0.000369							
		01/07/2016 15:31	0.000724							
Silicon										
	Si 28									
		01/07/2016 15:09	0.001464	0.002	0.0013	67%	0.00015	**0.00046**	mg/L	1
		01/07/2016 15:12	0.001384							
		01/07/2016 15:15	0.001294							
		01/07/2016 15:18	0.001515							
		01/07/2016 15:22	0.001511							
		01/07/2016 15:25	0.001115							
		01/07/2016 15:28	0.001347							
		01/07/2016 15:31	0.001152							

Study Name: 16-ICPMS204-B-ICPMS-200.8-W-D
Analyst: Dustin C. Kono
Instrument: ICPMS204-B

Energy Laboratories, Inc.
Determination of Method Detection Limits
(40 CFR, Part 136, Appendix B)

Method Source: E200.8 **Prep Method Source:** DIRECT

Study Date: 1/4/2016
Report Date: 1/16/2017
Matrix: Aqueous

Analyte	Channel	AnalDate	Result	True Val	Mean	Recovery	StdDev	MDL	Units	Tune
Antimony										
	Sb 121									
		01/07/2016 14:33	0.000137	0.0001	0.00012	124%	0.0000091	**0.000027**	mg/L	2
		01/07/2016 14:36	0.000124							
		01/07/2016 14:39	0.00013							
		01/07/2016 14:43	0.000119							
		01/07/2016 14:46	0.000126							
		01/07/2016 14:49	0.000111							
		01/07/2016 14:52	0.000112							
		01/07/2016 14:56	0.00013							
Arsenic										
	As 75									
		01/07/2016 14:33	0.000097	0.0001	0.00011	106%	0.000021	**0.000062**	mg/L	2
		01/07/2016 14:36	0.000084							
		01/07/2016 14:39	0.000133							
		01/07/2016 14:43	0.000101							
		01/07/2016 14:46	0.000082							
		01/07/2016 14:49	0.000139							
		01/07/2016 14:52	0.0001							
		01/07/2016 14:56	0.000108							
Chromium										
	Cr 52									
		01/07/2016 14:33	0.000068	0.0001	0.00008	80%	0.0000094	**0.000028**	mg/L	2
		01/07/2016 14:36	0.000083							
		01/07/2016 14:39	0.000067							
		01/07/2016 14:43	0.000088							
		01/07/2016 14:46	0.000078							
		01/07/2016 14:49	0.00009							
		01/07/2016 14:52	0.000077							
		01/07/2016 14:56	0.000091							

Study Name: 16-ICPMS204-B-ICPMS-200.8-W-D
Analyst: Dustin C. Kono
Instrument: ICPMS204-B

Energy Laboratories, Inc.
Determination of Method Detection Limits
(40 CFR, Part 136, Appendix B)

Method Source: E200.8 **Prep Method Source:** DIRECT

Study Date: 1/4/2016
Report Date: 1/16/2017
Matrix: Aqueous

Analyte	Channel	AnalDate	Result	True Val	Mean	Recovery	StdDev	MDL	Units	Tune
Copper										
	Cu 63									
		01/07/2016 14:33	0.000127	0.0001	0.000084	84%	0.000021	**0.000063**	mg/L	2
		01/07/2016 14:36	0.000093							
		01/07/2016 14:39	0.000064							
		01/07/2016 14:43	0.00007							
		01/07/2016 14:46	0.000062							
		01/07/2016 14:49	0.00009							
		01/07/2016 14:52	0.000087							
		01/07/2016 14:56	0.000079							
	Cu 65									
		01/07/2016 14:33	0.000119	0.0001	0.000096	96%	0.000028	**0.000084**	mg/L	2
		01/07/2016 14:36	0.000093							
		01/07/2016 14:39	0.000078							
		01/07/2016 14:43	0.000134							
		01/07/2016 14:46	0.000115							
		01/07/2016 14:49	0.000099							
		01/07/2016 14:52	0.000043							
		01/07/2016 14:56	0.000089							
Manganese										
	Mn 55									
		01/07/2016 14:33	0.000068	0.0001	0.000059	59%	0.00002	**0.000061**	mg/L	2
		01/07/2016 14:36	0.000087							
		01/07/2016 14:39	0.00003							
		01/07/2016 14:43	0.000033							
		01/07/2016 14:46	0.000062							
		01/07/2016 14:49	0.000059							
		01/07/2016 14:52	0.00008							
		01/07/2016 14:56	0.000054							

Study Name: 16-ICPMS204-B-ICPMS-200.8-W-D
Analyst: Dustin C. Kono
Instrument: ICPMS204-B

Energy Laboratories, Inc.
Determination of Method Detection Limits
(40 CFR, Part 136, Appendix B)

Method Source: E200.8 **Prep Method Source:** DIRECT

Study Date: 1/4/2016
Report Date: 1/16/2017
Matrix: Aqueous

Analyte	Channel	AnalDate	Result	True Val	Mean	Recovery	StdDev	MDL	Units	Tune
Potassium										
	K 39									
		01/07/2016 14:33	0.01752	0.025	0.014	57%	0.0046	**0.014**	mg/L	2
		01/07/2016 14:36	0.02006							
		01/07/2016 14:39	0.01609							
		01/07/2016 14:43	0.01664							
		01/07/2016 14:46	0.007581							
		01/07/2016 14:49	0.01543							
		01/07/2016 14:52	0.01214							
		01/07/2016 14:56	0.007656							
Selenium										
	Se 78									
		01/07/2016 14:33	0.000136	0.0001	0.00014	137%	0.000012	**0.000037**	mg/L	1
		01/07/2016 14:36	0.000126							
		01/07/2016 14:39	0.000125							
		01/07/2016 14:43	0.000159							
		01/07/2016 14:46	0.000148							
		01/07/2016 14:49	0.000123							
		01/07/2016 14:52	0.000139							
		01/07/2016 14:56	0.000139							
Silver										
	Ag 107									
		01/07/2016 14:33	0.000043	0.00004	0.000044	110%	0.0000032	**0.0000095**	mg/L	2
		01/07/2016 14:36	0.000049							
		01/07/2016 14:39	0.000044							
		01/07/2016 14:43	0.000041							
		01/07/2016 14:46	0.000045							
		01/07/2016 14:49	0.000039							
		01/07/2016 14:52	0.000047							
		01/07/2016 14:56	0.000044							

Study Name: 16-ICPMS204-B-ICPMS-200.8-W-D
Analyst: Dustin C. Kono
Instrument: ICPMS204-B

Energy Laboratories, Inc.
Determination of Method Detection Limits
(40 CFR, Part 136, Appendix B)

Method Source: E200.8 **Prep Method Source:** DIRECT

Study Date: 1/4/2016
Report Date: 1/16/2017
Matrix: Aqueous

Analyte	Channel	AnalDate	Result	True Val	Mean	Recovery	StdDev	MDL	Units	Tune
Titanium										
	Ti 47									
		01/07/2016 14:33	0.000055	0.0001	0.000071	71%	0.000021	**0.000062**	mg/L	2
		01/07/2016 14:36	0.00004							
		01/07/2016 14:39	0.000056							
		01/07/2016 14:43	0.000105							
		01/07/2016 14:46	0.000072							
		01/07/2016 14:49	0.000074							
		01/07/2016 14:52	0.000073							
		01/07/2016 14:56	0.00009							

Study Name: 16-ICPMS204-B-ICPMS-200.8-W-D
Analyst: Dustin C. Kono
Instrument: ICPMS204-B

Energy Laboratories, Inc.
Determination of Method Detection Limits
(40 CFR, Part 136, Appendix B)

Method Source: E200.8 **Prep Method Source:** DIRECT

Study Date: 1/4/2016
Report Date: 1/16/2017
Matrix: Aqueous

Analyte	Channel	AnalDate	Result	True Val	Mean	Recovery	StdDev	MDL	Units	Tune
Beryllium										
	Be 9									
		01/07/2016 13:53	0.000053	0.00005	0.000048	95%	0.000016	**0.000048**	mg/L	2
		01/07/2016 13:56	0.000072							
		01/07/2016 14:04	0.000046							
		01/07/2016 14:07	0.000034							
		01/07/2016 14:10	0.000034							
		01/07/2016 14:14	0.000067							
		01/07/2016 14:17	0.000047							
		01/07/2016 14:20	0.000027							
Calcium										
	Ca 44									
		01/07/2016 13:53	0.01258	0.0125	0.013	105%	0.002	**0.0059**	mg/L	2
		01/07/2016 13:56	0.01737							
		01/07/2016 14:04	0.01313							
		01/07/2016 14:07	0.01247							
		01/07/2016 14:10	0.01302							
		01/07/2016 14:14	0.01033							
		01/07/2016 14:17	0.01331							
		01/07/2016 14:20	0.0127							
Cobalt										
	Co 59									
		01/07/2016 13:53	0.000043	0.00005	0.000049	98%	0.0000065	**0.00002**	mg/L	2
		01/07/2016 13:56	0.000055							
		01/07/2016 14:04	0.000057							
		01/07/2016 14:07	0.000053							
		01/07/2016 14:10	0.000048							
		01/07/2016 14:14	0.000037							
		01/07/2016 14:17	0.00005							
		01/07/2016 14:20	0.000049							

Study Name: 16-ICPMS204-B-ICPMS-200.8-W-D
Analyst: Dustin C. Kono
Instrument: ICPMS204-B

Energy Laboratories, Inc.
Determination of Method Detection Limits
(40 CFR, Part 136, Appendix B)

Method Source: E200.8 **Prep Method Source:** DIRECT

Study Date: 1/4/2016
Report Date: 1/16/2017
Matrix: Aqueous

Analyte	Channel	AnalDate	Result	True Val	Mean	Recovery	StdDev	MDL	Units	Tune
Iron										
	Fe 56									
		01/07/2016 13:53	0.001639	0.0013	0.0015	117%	0.00014	**0.00041**	mg/L	1
		01/07/2016 13:56	0.001533							
		01/07/2016 14:04	0.001761							
		01/07/2016 14:07	0.001559							
		01/07/2016 14:10	0.001494							
		01/07/2016 14:14	0.001426							
		01/07/2016 14:17	0.001392							
		01/07/2016 14:20	0.001349							
		01/07/2016 13:53	0.001483	0.0013	0.0014	110%	0.000075	**0.00023**	mg/L	2
		01/07/2016 13:56	0.001501							
		01/07/2016 14:04	0.00145							
		01/07/2016 14:07	0.001472							
		01/07/2016 14:10	0.001414							
		01/07/2016 14:14	0.001284							
		01/07/2016 14:17	0.001359							
		01/07/2016 14:20	0.001486							

Study Name: 16-ICPMS204-B-ICPMS-200.8-W-D
Analyst: Dustin C. Kono
Instrument: ICPMS204-B

Energy Laboratories Inc
Determination of Method Detection Limits
(40 CFR, Part 136, Appendix B)

Method Source: E200.8 **Prep Method Source:** DIRECT

Study Date: 1/4/2016
Report Date: 1/16/2017
Matrix: Aqueous

Analyte	Channel	AnalDate	Result	True Val	Mean	Recovery	StdDev	MDL	Units	Tune
Molybdenum										
	Mo 95									
		01/07/2016 13:53	0.000078	0.00005	0.000063	125%	0.00001	**0.00003**	mg/L	2
		01/07/2016 13:56	0.000054							
		01/07/2016 14:04	0.000049							
		01/07/2016 14:07	0.000071							
		01/07/2016 14:10	0.000057							
		01/07/2016 14:14	0.000072							
		01/07/2016 14:17	0.000061							
		01/07/2016 14:20	0.000059							
	Mo 98									
		01/07/2016 13:53	0.000081	0.00005	0.000079	158%	0.0000072	**0.000022**	mg/L	2
		01/07/2016 13:56	0.000089							
		01/07/2016 14:04	0.000079							
		01/07/2016 14:07	0.000074							
		01/07/2016 14:10	0.000085							
		01/07/2016 14:14	0.000066							
		01/07/2016 14:17	0.000082							
		01/07/2016 14:20	0.000074							
Nickel										
	Ni 60									
		01/07/2016 13:53	0.000069	0.00005	0.00005	100%	0.000013	**0.000039**	mg/L	2
		01/07/2016 13:56	0.000039							
		01/07/2016 14:04	0.000058							
		01/07/2016 14:07	0.000035							
		01/07/2016 14:10	0.00006							
		01/07/2016 14:14	0.000045							
		01/07/2016 14:17	0.000036							
		01/07/2016 14:20	0.000059							

Study Name: 16-ICPMS204-B-ICPMS-200.8-W-D
Analyst: Dustin C. Kono
Instrument: ICPMS204-B

Energy Laboratories, Inc.
Determination of Method Detection Limits
(40 CFR, Part 136, Appendix B)

Method Source: E200.8 **Prep Method Source:** DIRECT

Study Date: 1/4/2016
Report Date: 1/16/2017
Matrix: Aqueous

Analyte	Channel	AnalDate	Result	True Val	Mean	Recovery	StdDev	MDL	Units	Tune
Sodium										
	Na 23									
		01/07/2016 13:53	0.01577	0.0125	0.015	118%	0.00062	**0.0019**	mg/L	2
		01/07/2016 13:56	0.01525							
		01/07/2016 14:04	0.01532							
		01/07/2016 14:07	0.01449							
		01/07/2016 14:10	0.01409							
		01/07/2016 14:14	0.01463							
		01/07/2016 14:17	0.01406							
		01/07/2016 14:20	0.01445							
Strontium										
	Sr 88									
		01/07/2016 13:53	0.000045	0.00005	0.000051	103%	0.0000061	**0.000018**	mg/L	2
		01/07/2016 13:56	0.000051							
		01/07/2016 14:04	0.000041							
		01/07/2016 14:07	0.00006							
		01/07/2016 14:10	0.00005							
		01/07/2016 14:14	0.000055							
		01/07/2016 14:17	0.000054							
		01/07/2016 14:20	0.000055							
Thallium										
	Tl 205									
		01/07/2016 13:53	0.000046	0.00005	0.00005	101%	0.0000027	**0.0000081**	mg/L	2
		01/07/2016 13:56	0.000054							
		01/07/2016 14:04	0.000049							
		01/07/2016 14:07	0.000048							
		01/07/2016 14:10	0.000049							
		01/07/2016 14:14	0.000051							
		01/07/2016 14:17	0.000052							
		01/07/2016 14:20	0.000053							

Study Name: 16-ICPMS204-B-ICPMS-200.8-W-D
Analyst: Dustin C. Kono
Instrument: ICPMS204-B

Energy Laboratories, Inc.
Determination of Method Detection Limits
(40 CFR, Part 136, Appendix B)

Method Source: E200.8 **Prep Method Source:** DIRECT

Study Date: 1/4/2016
Report Date: 1/16/2017
Matrix: Aqueous

Analyte	Channel	AnalDate	Result	True Val	Mean	Recovery	StdDev	MDL	Units	Tune
Tin										
	Sn 118									
		01/07/2016 13:53	0.000115	0.00005	0.000097	194%	0.000015	**0.000045**	mg/L	2
		01/07/2016 13:56	0.000096							
		01/07/2016 14:04	0.000087							
		01/07/2016 14:07	0.000086							
		01/07/2016 14:10	0.000101							
		01/07/2016 14:14	0.000103							
		01/07/2016 14:17	0.000115							
		01/07/2016 14:20	0.000072							
Uranium										
	U 238									
		01/07/2016 13:53	0.000054	0.00005	0.000052	103%	0.0000021	**0.0000062**	mg/L	2
		01/07/2016 13:56	0.000054							
		01/07/2016 14:04	0.000048							
		01/07/2016 14:07	0.000051							
		01/07/2016 14:10	0.000053							
		01/07/2016 14:14	0.000051							
		01/07/2016 14:17	0.00005							
		01/07/2016 14:20	0.000052							

Study Name: 16-ICPMS205-H-ICPMS-200.8-W-T
Analyst: Dustin C. Kono
Instrument: ICPMS205-H

Method Source: E200.8 **Prep Method Source:** E200.2

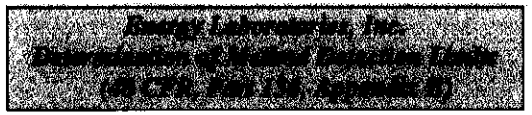
Study Date: 6/27/2016
Report Date: 1/16/2017
Matrix: Aqueous

Analyte	Channel	AnalDate	Result	True Val	Mean	Recovery	StdDev	MDL	Units	Tune
Calcium										
	Ca 40									
		08/21/2016 22:44	0.03625	0.025	0.038	154%	0.0013	**0.004**	mg/L	1
		08/21/2016 22:47	0.03766							
		08/21/2016 22:49	0.03953							
		08/21/2016 22:51	0.0402							
		08/21/2016 22:54	0.03719							
		08/21/2016 22:56	0.03953							
		08/21/2016 22:59	0.03895							
		08/21/2016 23:01	0.03842							
Iron										
	Fe 56									
		08/21/2016 22:44	0.004063	0.0026	0.004	155%	0.00041	**0.0012**	mg/L	2
		08/21/2016 22:47	0.004489							
		08/21/2016 22:49	0.003494							
		08/21/2016 22:51	0.004375							
		08/21/2016 22:54	0.003463							
		08/21/2016 22:56	0.004161							
		08/21/2016 22:59	0.00381							
		08/21/2016 23:01	0.004437							

Study Name: 16-ICPMS205-H-ICPMS-200.8-W-T

Analyst: Dustin C. Kono

Instrument: ICPMS205-H



Method Source: E200.8 **Prep Method Source:** E200.2

Study Date: 6/27/2016

Report Date: 1/16/2017

Matrix: Aqueous

Analyte	Channel	AnalDate	Result	True Val	Mean	Recovery	StdDev	MDL	Units	Tune
Zinc										
	Zn 66									
		08/22/2016 1:19	0.001079	0.0005	0.00097	195%	0.00016	**0.00048**	mg/L	2
		08/22/2016 1:21	0.001186							
		08/22/2016 1:24	0.000953							
		08/22/2016 1:26	0.000779							
		08/22/2016 1:29	0.000838							
		08/22/2016 1:31	0.001193							
		08/22/2016 1:33	0.000877							
		08/22/2016 1:36	0.000885							

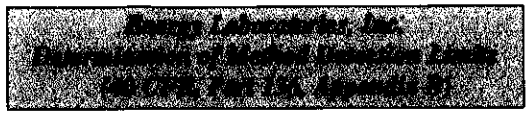
Study Name: 16-ICPMS205-H-ICPMS-200.8-W-T
Analyst: Dustin C. Kono
Instrument: ICPMS205-H

Method Source: E200.8 **Prep Method Source:** E200.2

Study Date: 6/27/2016
Report Date: 1/16/2017
Matrix: Aqueous

Analyte	Channel	AnalDate	Result	True Val	Mean	Recovery	StdDev	MDL	Units	Tune
Antimony										
	Sb 121									
		08/22/2016 0:48	0.000215	0.0001	0.00018	183%	0.000015	**0.000046**	mg/L	2
		08/22/2016 0:50	0.000191							
		08/22/2016 0:53	0.000179							
		08/22/2016 0:55	0.000185							
		08/22/2016 0:58	0.00017							
		08/22/2016 1:00	0.00017							
		08/22/2016 1:02	0.000182							
		08/22/2016 1:05	0.000169							
Lead										
	Pb 208									
		08/22/2016 0:48	0.000114	0.0001	0.00011	108%	0.000003	**0.0000091**	mg/L	2
		08/22/2016 0:50	0.000108							
		08/22/2016 0:53	0.000106							
		08/22/2016 0:55	0.000107							
		08/22/2016 0:58	0.000106							
		08/22/2016 1:00	0.000107							
		08/22/2016 1:02	0.000105							
		08/22/2016 1:05	0.000111							
Manganese										
	Mn 55									
		08/22/2016 0:48	0.000102	0.0001	0.00012	118%	0.000015	**0.000044**	mg/L	2
		08/22/2016 0:50	0.000139							
		08/22/2016 0:53	0.000114							
		08/22/2016 0:55	0.000118							
		08/22/2016 0:58	0.000111							
		08/22/2016 1:00	0.000121							
		08/22/2016 1:02	0.000099							
		08/22/2016 1:05	0.000137							

Study Name: 16-ICPMS205-H-ICPMS-200.8-W-T
Analyst: Dustin C. Kono
Instrument: ICPMS205-H

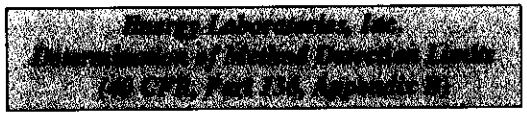


Method Source: E200.8 **Prep Method Source:** E200.2

Study Date: 6/27/2016
Report Date: 1/16/2017
Matrix: Aqueous

Analyte	Channel	AnalDate	Result	True Val	Mean	Recovery	StdDev	MDL	Units	Tune
Molybdenum										
	Mo 95									
		08/22/2016 0:48	0.000102	0.0001	0.00011	112%	0.0000061	**0.000018**	mg/L	2
		08/22/2016 0:50	0.000117							
		08/22/2016 0:53	0.000115							
		08/22/2016 0:55	0.000106							
		08/22/2016 0:58	0.000119							
		08/22/2016 1:00	0.000117							
		08/22/2016 1:02	0.000108							
		08/22/2016 1:05	0.00011							
	Mo 98									
		08/22/2016 0:48	0.00012	0.0001	0.00012	118%	0.0000047	**0.000014**	mg/L	2
		08/22/2016 0:50	0.000114							
		08/22/2016 0:53	0.000124							
		08/22/2016 0:55	0.000121							
		08/22/2016 0:58	0.000113							
		08/22/2016 1:00	0.000118							
		08/22/2016 1:02	0.00012							
		08/22/2016 1:05	0.00011							
Nickel										
	Ni 60									
		08/22/2016 0:48	0.000054	0.0001	0.000048	49%	0.0000052	**0.000016**	mg/L	2
		08/22/2016 0:50	0.00005							
		08/22/2016 0:53	0.000054							
		08/22/2016 0:55	0.00005							
		08/22/2016 0:58	0.000039							
		08/22/2016 1:00	0.000046							
		08/22/2016 1:02	0.000044							
		08/22/2016 1:05	0.000051							

Study Name: 16-ICPMS205-H-ICPMS-200.8-W-T
Analyst: Dustin C. Kono
Instrument: ICPMS205-H



Method Source: E200.8 **Prep Method Source:** E200.2

Study Date: 6/27/2016
Report Date: 1/16/2017
Matrix: Aqueous

Analyte	Channel	AnalDate	Result	True Val	Mean	Recovery	StdDev	MDL	Units	Tune
Potassium										
	K 39									
		08/22/2016 0:48	0.03214	0.025	0.031	123%	0.0013	**0.0038**	mg/L	2
		08/22/2016 0:50	0.03231							
		08/22/2016 0:53	0.031							
		08/22/2016 0:55	0.02926							
		08/22/2016 0:58	0.03074							
		08/22/2016 1:00	0.03201							
		08/22/2016 1:02	0.02974							
		08/22/2016 1:05	0.02926							
Selenium										
	Se 78									
		08/22/2016 0:48	0.000102	0.0001	0.0001	101%	0.00001	**0.00003**	mg/L	1
		08/22/2016 0:50	0.000105							
		08/22/2016 0:53	0.000106							
		08/22/2016 0:55	0.000103							
		08/22/2016 0:58	0.000087							
		08/22/2016 1:00	0.00011							
		08/22/2016 1:02	0.000083							
		08/22/2016 1:05	0.000108							
Sodium										
	Na 23									
		08/22/2016 0:48	0.03422	0.025	0.033	133%	0.0016	**0.0048**	mg/L	2
		08/22/2016 0:50	0.03388							
		08/22/2016 0:53	0.03583							
		08/22/2016 0:55	0.03292							
		08/22/2016 0:58	0.03153							
		08/22/2016 1:00	0.03149							
		08/22/2016 1:02	0.03131							
		08/22/2016 1:05	0.03384							

Study Name: 16-ICPMS205-H-ICPMS-200.8-W-T
Analyst: Dustin C. Kono
Instrument: ICPMS205-H

Method Source: E200.8 **Prep Method Source:** E200.2

Study Date: 6/27/2016
Report Date: 1/16/2017
Matrix: Aqueous

Analyte	Channel	AnalDate	Result	True Val	Mean	Recovery	StdDev	MDL	Units	Tune
Cadmium										
	Cd 111									
		08/22/2016 0:17	0.000056	0.00005	0.000053	106%	0.0000033	**0.0000099**	mg/L	2
		08/22/2016 0:19	0.000052							
		08/22/2016 0:22	0.000052							
		08/22/2016 0:24	0.000057							
		08/22/2016 0:27	0.000056							
		08/22/2016 0:29	0.000049							
		08/22/2016 0:31	0.000053							
		08/22/2016 0:34	0.000048							
	Cd 114									
		08/22/2016 0:17	0.000069	0.00005	0.000068	135%	0.0000027	**0.000008**	mg/L	2
		08/22/2016 0:19	0.000068							
		08/22/2016 0:22	0.00007							
		08/22/2016 0:24	0.000072							
		08/22/2016 0:27	0.000067							
		08/22/2016 0:29	0.000065							
		08/22/2016 0:31	0.000064							
		08/22/2016 0:34	0.000066							
Silver										
	Ag 107									
		08/22/2016 0:17	0.000032	0.00002	0.000025	126%	0.0000043	**0.000013**	mg/L	2
		08/22/2016 0:19	0.00003							
		08/22/2016 0:22	0.000028							
		08/22/2016 0:24	0.000025							
		08/22/2016 0:27	0.000021							
		08/22/2016 0:29	0.000023							
		08/22/2016 0:31	0.000023							
		08/22/2016 0:34	0.00002							

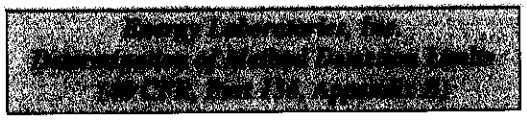
Study Name: 16-ICPMS205-H-ICPMS-200.8-W-T
Analyst: Dustin C. Kono
Instrument: ICPMS205-H

Method Source: E200.8 **Prep Method Source:** E200.2

Study Date: 6/27/2016
Report Date: 1/16/2017
Matrix: Aqueous

Analyte	Channel	AnalDate	Result	True Val	Mean	Recovery	StdDev	MDL	Units	Tune
Thallium										
	Tl 205									
		08/22/2016 0:17	0.000027	0.00005	0.000025	51%	0.0000023	**0.000007**	mg/L	2
		08/22/2016 0:19	0.000029							
		08/22/2016 0:22	0.000026							
		08/22/2016 0:24	0.000025							
		08/22/2016 0:27	0.000022							
		08/22/2016 0:29	0.000027							
		08/22/2016 0:31	0.000024							
		08/22/2016 0:34	0.000023							
Uranium										
	U 238									
		08/22/2016 0:17	0.000054	0.00005	0.000053	106%	0.00000088	**0.0000026**	mg/L	2
		08/22/2016 0:19	0.000052							
		08/22/2016 0:22	0.000054							
		08/22/2016 0:24	0.000053							
		08/22/2016 0:27	0.000052							
		08/22/2016 0:29	0.000053							
		08/22/2016 0:31	0.000052							
		08/22/2016 0:34	0.000052							

Study Name: 16-ICPMS205-H-ICPMS-200.8-W-T
Analyst: Dustin C. Kono
Instrument: ICPMS205-H

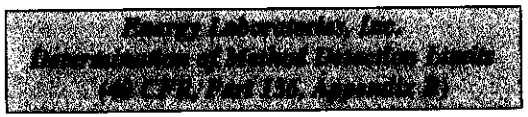


Method Source: E200.8 **Prep Method Source:** E200.2

Study Date: 6/27/2016
Report Date: 1/16/2017
Matrix: Aqueous

Analyte	Channel	AnalDate	Result	True Val	Mean	Recovery	StdDev	MDL	Units	Tune
Arsenic										
	As 75									
		08/21/2016 23:46	0.000541	0.0005	0.00056	113%	0.000021	**0.000063**	mg/L	2
		08/21/2016 23:48	0.000546							
		08/21/2016 23:51	0.000565							
		08/21/2016 23:53	0.000559							
		08/21/2016 23:56	0.000577							
		08/21/2016 23:58	0.000546							
		08/22/2016 0:00	0.000598							
		08/22/2016 0:03	0.000588							
Barium										
	Ba 137									
		08/21/2016 23:46	0.000481	0.0005	0.00049	98%	0.000024	**0.00007**	mg/L	2
		08/21/2016 23:48	0.000483							
		08/21/2016 23:51	0.000464							
		08/21/2016 23:53	0.000538							
		08/21/2016 23:56	0.000478							
		08/21/2016 23:58	0.000487							
		08/22/2016 0:00	0.000469							
		08/22/2016 0:03	0.000504							
Beryllium										
	Be 9									
		08/21/2016 23:46	0.000566	0.0005	0.00052	104%	0.000035	**0.0001**	mg/L	2
		08/21/2016 23:48	0.000521							
		08/21/2016 23:51	0.000523							
		08/21/2016 23:53	0.000496							
		08/21/2016 23:56	0.000542							
		08/21/2016 23:58	0.000553							
		08/22/2016 0:00	0.000482							
		08/22/2016 0:03	0.000467							

Study Name: 16-ICPMS205-H-ICPMS-200.8-W-T
Analyst: Dustin C. Kono
Instrument: ICPMS205-H



Method Source: E200.8 **Prep Method Source:** E200.2

Study Date: 6/27/2016
Report Date: 1/16/2017
Matrix: Aqueous

Analyte	Channel	AnalDate	Result	True Val	Mean	Recovery	StdDev	MDL	Units	Tune
Copper										
	Cu 63									
		08/21/2016 23:46	0.000605	0.0005	0.00058	115%	0.000025	**0.000074**	mg/L	2
		08/21/2016 23:48	0.000602							
		08/21/2016 23:51	0.000558							
		08/21/2016 23:53	0.000555							
		08/21/2016 23:56	0.000571							
		08/21/2016 23:58	0.00056							
		08/22/2016 0:00	0.000547							
		08/22/2016 0:03	0.000606							
	Cu 65									
		08/21/2016 23:46	0.000575	0.0005	0.00058	116%	0.000021	**0.000062**	mg/L	2
		08/21/2016 23:48	0.000609							
		08/21/2016 23:51	0.000565							
		08/21/2016 23:53	0.000562							
		08/21/2016 23:56	0.000579							
		08/21/2016 23:58	0.000592							
		08/22/2016 0:00	0.000557							
		08/22/2016 0:03	0.00061							
Iron										
	Fe 56									
		08/21/2016 23:46	0.01471	0.013	0.015	117%	0.00048	**0.0014**	mg/L	1
		08/21/2016 23:48	0.01506							
		08/21/2016 23:51	0.01494							
		08/21/2016 23:53	0.01604							
		08/21/2016 23:56	0.01572							
		08/21/2016 23:58	0.01508							
		08/22/2016 0:00	0.01475							
		08/22/2016 0:03	0.01545							

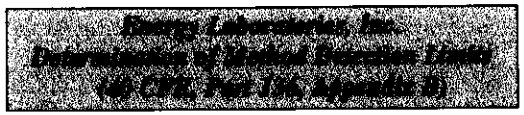
Study Name: 16-ICPMS205-H-ICPMS-200.8-W-T
Analyst: Dustin C. Kono
Instrument: ICPMS205-H

Method Source: E200.8 **Prep Method Source:** E200.2

Study Date: 6/27/2016
Report Date: 1/16/2017
Matrix: Aqueous

Analyte	Channel	AnalDate	Result	True Val	Mean	Recovery	StdDev	MDL	Units	Tune
Selenium										
	Se 78									
		08/21/2016 23:46	0.00044	0.0005	0.0005	101%	0.000083	**0.00025**	mg/L	2
		08/21/2016 23:48	0.000453							
		08/21/2016 23:51	0.00039							
		08/21/2016 23:53	0.000578							
		08/21/2016 23:56	0.000454							
		08/21/2016 23:58	0.000497							
		08/22/2016 0:00	0.000616							
		08/22/2016 0:03	0.000592							
Silicon										
	Si 28									
		08/21/2016 23:46	0.003271	0.002	0.0032	158%	0.0002	**0.00061**	mg/L	1
		08/21/2016 23:48	0.003385							
		08/21/2016 23:51	0.002743							
		08/21/2016 23:53	0.003245							
		08/21/2016 23:56	0.003161							
		08/21/2016 23:58	0.003068							
		08/22/2016 0:00	0.003308							
		08/22/2016 0:03	0.00304							
Tin										
	Sn 118									
		08/21/2016 23:46	0.000613	0.0005	0.0006	120%	0.000024	**0.000071**	mg/L	2
		08/21/2016 23:48	0.000572							
		08/21/2016 23:51	0.000572							
		08/21/2016 23:53	0.00058							
		08/21/2016 23:56	0.000615							
		08/21/2016 23:58	0.000633							
		08/22/2016 0:00	0.0006							
		08/22/2016 0:03	0.000622							

Study Name: 16-ICPMS205-H-ICPMS-200.8-W-T
Analyst: Dustin C. Kono
Instrument: ICPMS205-H



Method Source: E200.8 **Prep Method Source:** E200.2

Study Date: 6/27/2016
Report Date: 1/16/2017
Matrix: Aqueous

Analyte	Channel	AnalDate	Result	True Val	Mean	Recovery	StdDev	MDL	Units	Tune
Titanium										
	Ti 47									
		08/21/2016 23:46	0.000577	0.0005	0.00055	110%	0.000067	**0.0002**	mg/L	2
		08/21/2016 23:48	0.000615							
		08/21/2016 23:51	0.00065							
		08/21/2016 23:53	0.00046							
		08/21/2016 23:56	0.000537							
		08/21/2016 23:58	0.000463							
		08/22/2016 0:00	0.000566							
		08/22/2016 0:03	0.000543							

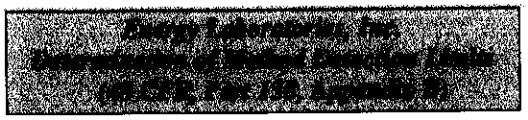
Study Name: 16-ICPMS205-H-ICPMS-200.8-W-T
Analyst: Dustin C. Kono
Instrument: ICPMS205-H

Method Source: E200.8 **Prep Method Source:** E200.2

Study Date: 6/27/2016
Report Date: 1/16/2017
Matrix: Aqueous

Analyte	Channel	AnalDate	Result	True Val	Mean	Recovery	StdDev	MDL	Units	Tune
Aluminum										
	Al 27									
		08/21/2016 23:15	0.009458	0.005	0.0085	170%	0.00094	**0.0028**	mg/L	2
		08/21/2016 23:18	0.008691							
		08/21/2016 23:20	0.009074							
		08/21/2016 23:22	0.007859							
		08/21/2016 23:25	0.007376							
		08/21/2016 23:27	0.00731							
		08/21/2016 23:29	0.008408							
		08/21/2016 23:32	0.009853							
Boron										
	B 11									
		08/21/2016 23:15	0.00507	0.005	0.0052	103%	0.00022	**0.00067**	mg/L	1
		08/21/2016 23:18	0.005319							
		08/21/2016 23:20	0.00526							
		08/21/2016 23:22	0.00496							
		08/21/2016 23:25	0.004858							
		08/21/2016 23:27	0.005548							
		08/21/2016 23:29	0.005025							
		08/21/2016 23:32	0.005212							
		08/21/2016 23:15	0.005893	0.005	0.0049	99%	0.00062	**0.0019**	mg/L	2
		08/21/2016 23:18	0.004096							
		08/21/2016 23:20	0.005212							
		08/21/2016 23:22	0.004656							
		08/21/2016 23:25	0.00572							
		08/21/2016 23:27	0.004642							
		08/21/2016 23:29	0.004917							
		08/21/2016 23:32	0.004433							

Study Name: 16-ICPMS205-H-ICPMS-200.8-W-T
Analyst: Dustin C. Kono
Instrument: ICPMS205-H



Method Source: E200.8 **Prep Method Source:** E200.2

Study Date: 6/27/2016
Report Date: 1/16/2017
Matrix: Aqueous

Analyte	Channel	AnalDate	Result	True Val	Mean	Recovery	StdDev	MDL	Units	Tune
Chromium										
	Cr 52									
		08/21/2016 22:44	0.000119	0.0001	0.00014	135%	0.000017	**0.000052**	mg/L	2
		08/21/2016 22:47	0.000166							
		08/21/2016 22:49	0.000125							
		08/21/2016 22:51	0.00013							
		08/21/2016 22:54	0.000113							
		08/21/2016 22:56	0.000142							
		08/21/2016 22:59	0.000149							
		08/21/2016 23:01	0.000139							
Cobalt										
	Co 59									
		08/21/2016 22:44	0.000102	0.0001	0.0001	105%	0.0000043	**0.000013**	mg/L	2
		08/21/2016 22:47	0.000105							
		08/21/2016 22:49	0.000113							
		08/21/2016 22:51	0.000102							
		08/21/2016 22:54	0.000104							
		08/21/2016 22:56	0.000099							
		08/21/2016 22:59	0.000108							
		08/21/2016 23:01	0.000106							
Strontium										
	Sr 88									
		08/21/2016 22:44	0.000169	0.0001	0.00018	176%	0.0000068	**0.000021**	mg/L	2
		08/21/2016 22:47	0.000181							
		08/21/2016 22:49	0.000183							
		08/21/2016 22:51	0.000167							
		08/21/2016 22:54	0.000182							
		08/21/2016 22:56	0.000183							
		08/21/2016 22:59	0.000174							
		08/21/2016 23:01	0.00017							

Study Name: 16-ICPMS205-H-ICPMS-200.8-W-T
Analyst: Dustin C. Kono
Instrument: ICPMS205-H

Method Source: E200.8 **Prep Method Source:** E200.2

Study Date: 6/27/2016
Report Date: 1/16/2017
Matrix: Aqueous

Analyte	Channel	AnalDate	Result	True Val	Mean	Recovery	StdDev	MDL	Units	Tune
Vanadium										
	V 51									
		08/21/2016 22:44	0.000094	0.0001	0.0001	103%	0.00001	**0.000031**	mg/L	2
		08/21/2016 22:47	0.000084							
		08/21/2016 22:49	0.000109							
		08/21/2016 22:51	0.000101							
		08/21/2016 22:54	0.0001							
		08/21/2016 22:56	0.000108							
		08/21/2016 22:59	0.000107							
		08/21/2016 23:01	0.000117							

Study Name: 16-ICPMS205-H-ICPMS-200.8-W-D
Analyst: Dustin C. Kono
Instrument: ICPMS205-H

Method Source: E200.8 **Prep Method Source:** DIRECT

Study Date: 6/27/2016
Report Date: 1/16/2017
Matrix: Aqueous

Analyte	Channel	AnalDate	Result	True Val	Mean	Recovery	StdDev	MDL	Units	Tune
Copper										
	Cu 63									
		08/24/2016 15:32	0.000552	0.0005	0.00057	115%	0.00003	**0.00009**	mg/L	2
		08/24/2016 15:34	0.000536							
		08/24/2016 15:37	0.000557							
		08/24/2016 15:39	0.000613							
		08/24/2016 15:41	0.000616							
		08/24/2016 15:44	0.000552							
		08/24/2016 15:46	0.000577							
		08/24/2016 15:49	0.000592							
	Cu 65									
		08/24/2016 15:32	0.000563	0.0005	0.00059	118%	0.000035	**0.0001**	mg/L	2
		08/24/2016 15:34	0.000548							
		08/24/2016 15:37	0.000572							
		08/24/2016 15:39	0.000633							
		08/24/2016 15:41	0.000644							
		08/24/2016 15:44	0.000563							
		08/24/2016 15:46	0.000597							
		08/24/2016 15:49	0.000592							

Energy Laboratories, Inc.

Determination of Method Detection Limits

(40 CFR, Part 136, Appendix B)

Study Name: 16-ICPMS205-H-ICPMS-200.8-W-D

Study Information: **Analyst:** Dustin C. Kono **Method Source:** E200.8 **Matrix:** Aqueous **Study Date:** 6/27/2016

Instrument: ICPMS205-H **Prep Method Source:** DIRECT **Report Date:** 1/16/2017

Study Analytical Data

Analyte	Analyte Channel	Tune Mode	Tested Conc.	08/04/2016 17:42	08/04/2016 17:45	08/04/2016 17:47	08/04/2016 17:49	08/04/2016 17:52	08/04/2016 17:56	08/04/2016 17:59	Calc MDL	Study Units	Mean	Stnd Dev	Recovery
Sodium	Na 23	2	0.025	0.03376	0.03265	0.03298	0.0317	0.04064	0.02757	0.02676	**0.014**	mg/L	0.032	0.0046	129.2%

Study Name: 16-ICPMS205-H-ICPMS-200.8-W-D
Analyst: Dustin C. Kono
Instrument: ICPMS205-H

Method Source: E200.8 **Prep Method Source:** DIRECT

Study Date: 6/27/2016
Report Date: 1/16/2017
Matrix: Aqueous

Analyte	Channel	AnalDate	Result	True Val	Mean	Recovery	StdDev	MDL	Units	Tune
Mercury										
	Hg 201									
		08/04/2016 17:17	0.00001	0.00001	0.000011	108%	0.000001	**0.0000031**	mg/L	2
		08/04/2016 17:19	0.000011							
		08/04/2016 17:21	0.000011							
		08/04/2016 17:24	0.000012							
		08/04/2016 17:26	0.000011							
		08/04/2016 17:28	0.000009							
		08/04/2016 17:31	0.00001							
		08/04/2016 17:33	0.000012							
	Hg 202									
		08/04/2016 17:17	0.00001	0.00001	0.0000098	98%	0.00000046	**0.0000014**	mg/L	2
		08/04/2016 17:19	0.000009							
		08/04/2016 17:21	0.000009							
		08/04/2016 17:24	0.00001							
		08/04/2016 17:26	0.00001							
		08/04/2016 17:28	0.00001							
		08/04/2016 17:31	0.00001							
		08/04/2016 17:33	0.00001							
Strontium										
	Sr 88									
		08/04/2016 17:17	0.000733	0.0005	0.00075	150%	0.000031	**0.000093**	mg/L	2
		08/04/2016 17:19	0.000728							
		08/04/2016 17:21	0.000752							
		08/04/2016 17:24	0.000731							
		08/04/2016 17:26	0.000796							
		08/04/2016 17:28	0.000761							
		08/04/2016 17:31	0.000716							
		08/04/2016 17:33	0.000797							

Study Name: 16-ICPMS205-H-ICPMS-200.8-W-D
Analyst: Dustin C. Kono
Instrument: ICPMS205-H

Method Source: E200.8 **Prep Method Source:** DIRECT

Study Date: 6/27/2016
Report Date: 1/16/2017
Matrix: Aqueous

Analyte	Channel	AnalDate	Result	True Val	Mean	Recovery	StdDev	MDL	Units	Tune
Vanadium										
	V 51									
		08/04/2016 17:17	0.000504	0.0005	0.00053	106%	0.000022	**0.000064**	mg/L	2
		08/04/2016 17:19	0.000511							
		08/04/2016 17:21	0.000505							
		08/04/2016 17:24	0.000535							
		08/04/2016 17:26	0.000549							
		08/04/2016 17:28	0.000532							
		08/04/2016 17:31	0.000545							
		08/04/2016 17:33	0.000561							
Zinc										
	Zn 66									
		08/04/2016 17:17	0.000775	0.0005	0.00073	147%	0.000025	**0.000076**	mg/L	2
		08/04/2016 17:19	0.000699							
		08/04/2016 17:21	0.000703							
		08/04/2016 17:24	0.000743							
		08/04/2016 17:26	0.000733							
		08/04/2016 17:28	0.00075							
		08/04/2016 17:31	0.000745							
		08/04/2016 17:33	0.000721							

Study Name: 16-ICPMS205-H-ICPMS-200.8-W-D
Analyst: Dustin C. Kono
Instrument: ICPMS205-H

Method Source: E200.8 **Prep Method Source:** DIRECT

Study Date: 6/27/2016
Report Date: 1/16/2017
Matrix: Aqueous

Analyte	Channel	AnalDate	Result	True Val	Mean	Recovery	StdDev	MDL	Units	Tune
Iron										
	Fe 56									
		08/04/2016 17:42	0.002948	0.0026	0.0029	111%	0.00014	**0.00043**	mg/L	1
		08/04/2016 17:45	0.00296							
		08/04/2016 17:47	0.002735							
		08/04/2016 17:49	0.003152							
		08/04/2016 17:52	0.002815							
		08/04/2016 17:54	0.002863							
		08/04/2016 17:56	0.002718							
		08/04/2016 17:59	0.002807							

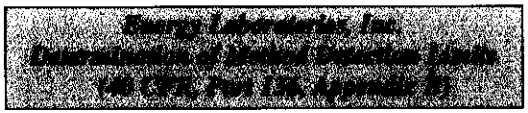
Study Name: 16-ICPMS205-H-ICPMS-200.8-W-D
Analyst: Dustin C. Kono
Instrument: ICPMS205-H

Method Source: E200.8 **Prep Method Source:** DIRECT

Study Date: 6/27/2016
Report Date: 1/16/2017
Matrix: Aqueous

Analyte	Channel	AnalDate	Result	True Val	Mean	Recovery	StdDev	MDL	Units	Tune
Cadmium										
	Cd 111									
		08/04/2016 18:08	0.000014	0.00001	0.00001	103%	0.0000018	**0.0000055**	mg/L	2
		08/04/2016 18:10	0.000012							
		08/04/2016 18:13	0.000009							
		08/04/2016 18:15	0.000009							
		08/04/2016 18:17	0.00001							
		08/04/2016 18:20	0.000009							
		08/04/2016 18:22	0.000009							
		08/04/2016 18:24	0.00001							
	Cd 114									
		08/04/2016 18:08	0.000009	0.00001	0.0000075	75%	0.00000092	**0.0000028**	mg/L	2
		08/04/2016 18:10	0.000007							
		08/04/2016 18:13	0.000007							
		08/04/2016 18:15	0.000006							
		08/04/2016 18:17	0.000008							
		08/04/2016 18:20	0.000008							
		08/04/2016 18:22	0.000008							
		08/04/2016 18:24	0.000007							
Magnesium										
	Mg 24									
		08/04/2016 18:08	0.001748	0.0025	0.002	80%	0.00024	**0.00073**	mg/L	2
		08/04/2016 18:10	0.002213							
		08/04/2016 18:13	0.001976							
		08/04/2016 18:15	0.001745							
		08/04/2016 18:17	0.002338							
		08/04/2016 18:20	0.00202							
		08/04/2016 18:22	0.001749							
		08/04/2016 18:24	0.00225							

Study Name: 16-ICPMS205-H-ICPMS-200.8-W-D
Analyst: Dustin C. Kono
Instrument: ICPMS205-H



Method Source: E200.8 **Prep Method Source:** DIRECT

Study Date: 6/27/2016
Report Date: 1/16/2017
Matrix: Aqueous

Analyte	Channel	AnalDate	Result	True Val	Mean	Recovery	StdDev	MDL	Units	Tune
Uranium										
	U 238									
		08/04/2016 18:08	0.000009	0.00001	0.0000092	93%	0.00000046	**0.0000014**	mg/L	2
		08/04/2016 18:10	0.000009							
		08/04/2016 18:13	0.000009							
		08/04/2016 18:15	0.00001							
		08/04/2016 18:17	0.00001							
		08/04/2016 18:20	0.000009							
		08/04/2016 18:22	0.000009							
		08/04/2016 18:24	0.000009							

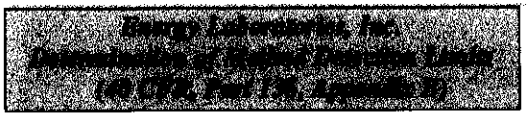
Study Name: 16-ICPMS205-H-ICPMS-200.8-W-D
Analyst: Dustin C. Kono
Instrument: ICPMS205-H

Method Source: E200.8 **Prep Method Source:** DIRECT

Study Date: 6/27/2016
Report Date: 1/16/2017
Matrix: Aqueous

Analyte	Channel	AnalDate	Result	True Val	Mean	Recovery	StdDev	MDL	Units	Tune
Aluminum										
	Al 27									
		07/29/2016 14:25	0.01072	0.01	0.011	112%	0.0013	**0.004**	mg/L	2
		07/29/2016 14:27	0.01173							
		07/29/2016 14:29	0.01365							
		07/29/2016 14:31	0.01177							
		07/29/2016 14:34	0.01174							
		07/29/2016 14:36	0.01025							
		07/29/2016 14:38	0.01062							
		07/29/2016 14:41	0.009182							
Boron										
	B 11									
		07/29/2016 14:25	0.009133	0.01	0.0091	91%	0.00037	**0.0011**	mg/L	1
		07/29/2016 14:27	0.009386							
		07/29/2016 14:29	0.009655							
		07/29/2016 14:31	0.009145							
		07/29/2016 14:34	0.008547							
		07/29/2016 14:36	0.008795							
		07/29/2016 14:38	0.009057							
		07/29/2016 14:41	0.008682							
		07/29/2016 14:25	0.008438	0.01	0.0089	89%	0.00067	**0.002**	mg/L	2
		07/29/2016 14:27	0.008141							
		07/29/2016 14:29	0.009476							
		07/29/2016 14:31	0.008748							
		07/29/2016 14:34	0.007994							
		07/29/2016 14:36	0.009558							
		07/29/2016 14:38	0.009764							
		07/29/2016 14:41	0.008757							

Study Name: 16-ICPMS205-H-ICPMS-200.8-W-D
Analyst: Dustin C. Kono
Instrument: ICPMS205-H



Method Source: E200.8 **Prep Method Source:** DIRECT

Study Date: 6/27/2016
Report Date: 1/16/2017
Matrix: Aqueous

Analyte	Channel	AnalDate	Result	True Val	Mean	Recovery	StdDev	MDL	Units	Tune
Beryllium										
	Be 9									
		07/29/2016 13:59	0.00053	0.0005	0.00051	102%	0.000077	**0.00023**	mg/L	2
		07/29/2016 14:01	0.000507							
		07/29/2016 14:04	0.000454							
		07/29/2016 14:06	0.000655							
		07/29/2016 14:08	0.000448							
		07/29/2016 14:11	0.000403							
		07/29/2016 14:13	0.000551							
		07/29/2016 14:15	0.000516							
Lead										
	Pb 208									
		07/29/2016 13:59	0.000466	0.0005	0.00046	92%	0.0000036	**0.000011**	mg/L	2
		07/29/2016 14:01	0.000462							
		07/29/2016 14:04	0.000458							
		07/29/2016 14:06	0.000463							
		07/29/2016 14:08	0.000461							
		07/29/2016 14:11	0.000456							
		07/29/2016 14:13	0.000458							
		07/29/2016 14:15	0.000465							
Selenium										
	Se 78									
		07/29/2016 13:59	0.000633	0.0005	0.00069	138%	0.000063	**0.00019**	mg/L	2
		07/29/2016 14:01	0.000677							
		07/29/2016 14:04	0.000665							
		07/29/2016 14:06	0.000617							
		07/29/2016 14:08	0.000732							
		07/29/2016 14:11	0.000765							
		07/29/2016 14:13	0.000783							
		07/29/2016 14:15	0.00064							

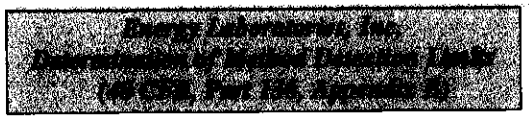
Study Name: 16-ICPMS205-H-ICPMS-200.8-W-D
Analyst: Dustin C. Kono
Instrument: ICPMS205-H

Method Source: E200.8 **Prep Method Source:** DIRECT

Study Date: 6/27/2016
Report Date: 1/16/2017
Matrix: Aqueous

Analyte	Channel	AnalDate	Result	True Val	Mean	Recovery	StdDev	MDL	Units	Tune
Silicon										
	Si 28									
		07/29/2016 13:59	0.001305	0.002	0.0013	64%	0.00026	**0.00078**	mg/L	1
		07/29/2016 14:01	0.001381							
		07/29/2016 14:04	0.001036							
		07/29/2016 14:06	0.001128							
		07/29/2016 14:08	0.001822							
		07/29/2016 14:11	0.001099							
		07/29/2016 14:13	0.001383							
		07/29/2016 14:15	0.001067							
Titanium										
	Ti 47									
		07/29/2016 13:59	0.000483	0.0005	0.00048	95%	0.00005	**0.00015**	mg/L	2
		07/29/2016 14:01	0.000424							
		07/29/2016 14:04	0.000472							
		07/29/2016 14:06	0.000398							
		07/29/2016 14:08	0.000452							
		07/29/2016 14:11	0.000534							
		07/29/2016 14:13	0.000541							
		07/29/2016 14:15	0.000501							

Study Name: 16-ICPMS205-H-ICPMS-200.8-W-D
Analyst: Dustin C. Kono
Instrument: ICPMS205-H



Method Source: E200.8 **Prep Method Source:** DIRECT

Study Date: 6/27/2016
Report Date: 1/16/2017
Matrix: Aqueous

Analyte	Channel	AnalDate	Result	True Val	Mean	Recovery	StdDev	MDL	Units	Tune
Arsenic										
	As 75									
		07/29/2016 13:33	0.000072	0.0001	0.000073	73%	0.0000045	**0.000014**	mg/L	2
		07/29/2016 13:36	0.000077							
		07/29/2016 13:38	0.000077							
		07/29/2016 13:40	0.000078							
		07/29/2016 13:43	0.000073							
		07/29/2016 13:45	0.000067							
		07/29/2016 13:47	0.000072							
		07/29/2016 13:50	0.000066							
Barium										
	Ba 137									
		07/29/2016 13:33	0.000082	0.0001	0.000079	79%	0.0000061	**0.000018**	mg/L	2
		07/29/2016 13:36	0.000078							
		07/29/2016 13:38	0.000072							
		07/29/2016 13:40	0.000079							
		07/29/2016 13:43	0.000081							
		07/29/2016 13:45	0.000074							
		07/29/2016 13:47	0.000077							
		07/29/2016 13:50	0.000092							
Calcium										
	Ca 40									
		07/29/2016 13:33	0.01778	0.025	0.02	79%	0.0035	**0.01**	mg/L	1
		07/29/2016 13:36	0.01932							
		07/29/2016 13:38	0.01773							
		07/29/2016 13:40	0.01902							
		07/29/2016 13:43	0.02814							
		07/29/2016 13:45	0.01829							
		07/29/2016 13:47	0.01806							
		07/29/2016 13:50	0.01892							

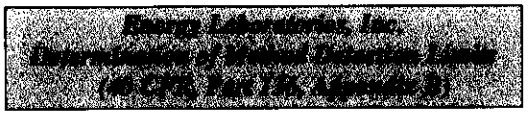
Study Name: 16-ICPMS205-H-ICPMS-200.8-W-D
Analyst: Dustin C. Kono
Instrument: ICPMS205-H

Method Source: E200.8 **Prep Method Source:** DIRECT

Study Date: 6/27/2016
Report Date: 1/16/2017
Matrix: Aqueous

Analyte	Channel	AnalDate	Result	True Val	Mean	Recovery	StdDev	MDL	Units	Tune
Mercury										
	Hg 201									
		07/29/2016 13:33	0.000005	0.000004	0.0000042	106%	0.00000088	**0.0000026**	mg/L	2
		07/29/2016 13:36	0.000006							
		07/29/2016 13:38	0.000003							
		07/29/2016 13:40	0.000004							
		07/29/2016 13:43	0.000004							
		07/29/2016 13:45	0.000004							
		07/29/2016 13:47	0.000004							
		07/29/2016 13:50	0.000004							
Nickel										
	Ni 60									
		07/29/2016 13:33	0.000069	0.0001	0.000078	78%	0.0000077	**0.000023**	mg/L	2
		07/29/2016 13:36	0.000092							
		07/29/2016 13:38	0.000078							
		07/29/2016 13:40	0.000074							
		07/29/2016 13:43	0.000076							
		07/29/2016 13:45	0.000069							
		07/29/2016 13:47	0.000079							
		07/29/2016 13:50	0.000084							
Potassium										
	K 39									
		07/29/2016 13:33	0.02139	0.025	0.02	79%	0.00089	**0.0027**	mg/L	2
		07/29/2016 13:36	0.01995							
		07/29/2016 13:38	0.01963							
		07/29/2016 13:40	0.01944							
		07/29/2016 13:43	0.0199							
		07/29/2016 13:45	0.01843							
		07/29/2016 13:47	0.02064							
		07/29/2016 13:50	0.01925							

Study Name: 16-ICPMS205-H-ICPMS-200.8-W-D
Analyst: Dustin C. Kono
Instrument: ICPMS205-H



Method Source: E200.8 **Prep Method Source:** DIRECT

Study Date: 6/27/2016
Report Date: 1/16/2017
Matrix: Aqueous

Analyte	Channel	AnalDate	Result	True Val	Mean	Recovery	StdDev	MDL	Units	Tune
Thallium										
	Tl 205									
		07/29/2016 13:33	0.000075	0.0001	0.000067	67%	0.0000037	**0.000011**	mg/L	2
		07/29/2016 13:36	0.000068							
		07/29/2016 13:38	0.000067							
		07/29/2016 13:40	0.000064							
		07/29/2016 13:43	0.000066							
		07/29/2016 13:45	0.000066							
		07/29/2016 13:47	0.000063							
		07/29/2016 13:50	0.000065							
Tin										
	Sn 118									
		07/29/2016 13:33	0.000065	0.0001	0.000067	67%	0.000012	**0.000037**	mg/L	2
		07/29/2016 13:36	0.000059							
		07/29/2016 13:38	0.000068							
		07/29/2016 13:40	0.000062							
		07/29/2016 13:43	0.000068							
		07/29/2016 13:45	0.000097							
		07/29/2016 13:47	0.000061							
		07/29/2016 13:50	0.000059							

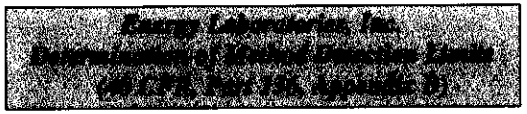
Study Name: 16-ICPMS205-H-ICPMS-200.8-W-D
Analyst: Dustin C. Kono
Instrument: ICPMS205-H

Method Source: E200.8 **Prep Method Source:** DIRECT

Study Date: 6/27/2016
Report Date: 1/16/2017
Matrix: Aqueous

Analyte	Channel	AnalDate	Result	True Val	Mean	Recovery	StdDev	MDL	Units	Tune
Antimony										
	Sb 121									
		07/29/2016 13:08	0.000039	0.00005	0.000041	83%	0.0000038	**0.000011**	mg/L	2
		07/29/2016 13:10	0.000044							
		07/29/2016 13:12	0.000046							
		07/29/2016 13:15	0.000038							
		07/29/2016 13:17	0.000045							
		07/29/2016 13:19	0.000039							
		07/29/2016 13:22	0.000036							
		07/29/2016 13:24	0.000044							
Chromium										
	Cr 52									
		07/29/2016 13:08	0.000041	0.00005	0.000043	86%	0.0000051	**0.000015**	mg/L	2
		07/29/2016 13:10	0.000043							
		07/29/2016 13:12	0.000046							
		07/29/2016 13:15	0.000042							
		07/29/2016 13:17	0.000041							
		07/29/2016 13:19	0.000034							
		07/29/2016 13:22	0.000052							
		07/29/2016 13:24	0.000044							
Cobalt										
	Co 59									
		07/29/2016 13:08	0.000037	0.00005	0.000039	78%	0.0000031	**0.0000093**	mg/L	2
		07/29/2016 13:10	0.000039							
		07/29/2016 13:12	0.000039							
		07/29/2016 13:15	0.000042							
		07/29/2016 13:17	0.000034							
		07/29/2016 13:19	0.000043							
		07/29/2016 13:22	0.000041							
		07/29/2016 13:24	0.000036							

Study Name: 16-ICPMS205-H-ICPMS-200.8-W-D
Analyst: Dustin C. Kono
Instrument: ICPMS205-H



Method Source: E200.8 **Prep Method Source:** DIRECT

Study Date: 6/27/2016
Report Date: 1/16/2017
Matrix: Aqueous

Analyte	Channel	AnalDate	Result	True Val	Mean	Recovery	StdDev	MDL	Units	Tune
Manganese										
	Mn 55									
		07/29/2016 13:08	0.000039	0.00005	0.000047	94%	0.0000058	**0.000018**	mg/L	2
		07/29/2016 13:10	0.000052							
		07/29/2016 13:12	0.000049							
		07/29/2016 13:15	0.000041							
		07/29/2016 13:17	0.000041							
		07/29/2016 13:19	0.000054							
		07/29/2016 13:22	0.00005							
		07/29/2016 13:24	0.000051							
Molybdenum										
	Mo 95									
		07/29/2016 13:08	0.000048	0.00005	0.000048	95%	0.0000018	**0.0000053**	mg/L	2
		07/29/2016 13:10	0.000048							
		07/29/2016 13:12	0.000045							
		07/29/2016 13:15	0.000048							
		07/29/2016 13:17	0.000045							
		07/29/2016 13:19	0.00005							
		07/29/2016 13:22	0.000049							
		07/29/2016 13:24	0.000048							
	Mo 98									
		07/29/2016 13:08	0.000048	0.00005	0.000045	90%	0.0000031	**0.0000094**	mg/L	2
		07/29/2016 13:10	0.000044							
		07/29/2016 13:12	0.000041							
		07/29/2016 13:15	0.000048							
		07/29/2016 13:17	0.000049							
		07/29/2016 13:19	0.000044							
		07/29/2016 13:22	0.000046							
		07/29/2016 13:24	0.000041							

Study Name: 16-ICPMS205-H-ICPMS-200.8-W-D
Analyst: Dustin C. Kono
Instrument: ICPMS205-H

Method Source: E200.8 **Prep Method Source:** DIRECT

Study Date: 6/27/2016
Report Date: 1/16/2017
Matrix: Aqueous

Analyte	Channel	AnalDate	Result	True Val	Mean	Recovery	StdDev	MDL	Units	Tune
Selenium										
	Se 78									
		07/29/2016 13:08	0.00005	0.00005	0.00005	101%	0.0000063	**0.000019**	mg/L	1
		07/29/2016 13:10	0.000044							
		07/29/2016 13:12	0.000058							
		07/29/2016 13:15	0.00006							
		07/29/2016 13:17	0.000041							
		07/29/2016 13:19	0.00005							
		07/29/2016 13:22	0.00005							
		07/29/2016 13:24	0.00005							
Silver										
	Ag 107									
		07/29/2016 13:08	0.000016	0.00002	0.000015	76%	0.000001	**0.0000031**	mg/L	2
		07/29/2016 13:10	0.000016							
		07/29/2016 13:12	0.000017							
		07/29/2016 13:15	0.000014							
		07/29/2016 13:17	0.000015							
		07/29/2016 13:19	0.000015							
		07/29/2016 13:22	0.000014							
		07/29/2016 13:24	0.000015							

Energy Laboratories, Inc.
Determination of Method Detection Limits
(40 CFR, Part 136, Appendix B)

MDL Study Number: 984 ***Date Of Study:*** **1/15/2016**

Analyst	Rodney Kriedeman	***Matrix***	Aqueous
Instrument ID	HGCV201-H	***Prep Method***	E245.1
Method Source	E245.1	***Units***	mg/L

Parameter	Average Recovery %	Std Deviation	MDL	Concentration Tested	Reporting Limit	Comment
Mercury	101.0	0.00000	0.0000	0.00001	0.0001	

Energy Laboratories, Inc.
Determination of Method Detection Limits
(40 CFR, Part 136, Appendix B)

MDL Study Number: 966 **Date Of Study: 1/6/2016**

Analyst	Cole Mergenthaler	**Matrix**	Aqueous
Instrument ID	FIA203-HE	**Prep Method**	
Method Source	E353.2	**Units**	mg/L

Parameter	Average Recovery %	Std Deviation	MDL	Concentration Tested	Reporting Limit	Comment
Nitrogen, Nitrate+Nitrite as N	107.8	0.00040	0.0012	0.02	0.01	MDL<0.1*Spike Concentration

Energy Laboratories, Inc.
Determination of Method Detection Limits
(40 CFR, Part 136, Appendix B)

MDL Study Number: 954 ***Date Of Study:*** **1/4/2016**

Analyst Scott R. Wunderlich
Instrument ID Accu-124 (14410200)
Method Source A2540 C

Matrix Aqueous
Prep Method
Units mg/L

Parameter	Average Recovery %	Std Deviation	MDL	Concentration Tested	Reporting Limit	Comment
Solids, Total Dissolved TDS @ 18	151.2	0.99103	2.9711	10	10	

Energy Laboratories, Inc.
Determination of Method Detection Limits
(40 CFR, Part 136, Appendix B)

MDL Study Number 4504

Parameter	**Nitrogen, Kjeldahl, Total as N**	**Matrix**	Aqueous
Date Of Study	7/13/2016	**Prep Method**	E351.2
Analyst	Brandy A. Schuster	**Concentration Tested**	0.1
Instrument ID	FIA204-B	**Lab Reporting Limit**	0.16
Method Source	E351.2	**Units**	mg/L

Replicate Number	FinalVal
1	0.12600
2	0.14600
3	0.12900
4	0.11200
5	0.10300
6	0.13100
7	0.13000

Average	0.12529 mg/L
Average Recovery %	125.3
Standard Deviation	0.01397
Method Detection Limit	**0.04392 mg/L**
Comment	

Energy Laboratories, Inc.
Determination of Method Detection Limits
(40 CFR, Part 136, Appendix B)

MDL Study Number: 951 ***Date Of Study:*** **1/4/2016**

Analyst	Scott R. Wunderlich	***Matrix***	Aqueous
Instrument ID	Accu-124 (14410200)	***Prep Method***	A2540 D
Method Source	A2540 D	***Units***	mg/L

Parameter	Average Recovery %	Std Deviation	MDL	Concentration Tested	Reporting Limit	Comment
Solids, Total Suspended TSS @ 10	92.5	0.04629	0.1388	1	10	

Energy Laboratories, Inc.
Determination of Method Detection Limits
(40 CFR, Part 136, Appendix B)

MDL Study Number: 958 ***Date Of Study:*** **1/6/2016**

Analyst Scott R. Wunderlich
Instrument ID HACH 2100P
Method Source A2130 B

Matrix Aqueous
Prep Method
Units NTU

Parameter	Average Recovery %	Std Deviation	MDL	Concentration Tested	Reporting Limit	Comment
Turbidity	171.9	0.03615	0.1084	0.4	0.2	

Energy Laboratories, Inc.
Determination of Method Detection Limits
(40 CFR, Part 136, Appendix B)

MDL Study Number: 969 **Date Of Study: 1/6/2016**

Analyst Kathy Wiegand
Instrument ID 1saturn
Method Source SW8260B

Matrix Aqueous
Prep Method
Units ug/L

Parameter	Average Recovery %	Std Deviation	MDL	Concentration Tested	Reporting Limit	Comment
1,1,1,2-Tetrachloroethane	105.7	0.02596	0.0778	0.5	1	
1,1,1-Trichloroethane	101.9	0.03120	0.0935	0.5	1	
1,1,2,2-Tetrachloroethane	101.7	0.02552	0.0765	0.5	0.5	
1,1,2-Trichloroethane	103.0	0.02851	0.0855	0.5	1	
1,1-Dichloroethane	108.5	0.01089	0.0326	0.5	1	MDL<0.1*Spike Concentration
1,1-Dichloroethene	94.7	0.02005	0.0601	0.5	1	
1,1-Dichloropropene	90.0	0.02447	0.0734	0.5	1	
1,2,3-Trichlorobenzene	121.1	0.03691	0.1106	0.5	1	
1,2,3-Trichloropropane	108.9	0.04788	0.1435	0.5	1	
1,2,4-Trichlorobenzene	113.4	0.03799	0.1139	0.5	0.5	
1,2,4-Trimethylbenzene	100.9	0.03146	0.0943	0.5	1	
1,2-Dibromo-3-chloropropane	97.2	0.03387	0.1016	0.5	0.5	
1,2-Dibromoethane	127.8	0.03446	0.1033	0.5	0.5	
1,2-Dichlorobenzene	105.1	0.02252	0.0675	0.5	1	
1,2-Dichloroethane	117.1	0.02094	0.0628	0.5	0.5	
1,2-Dichloropropane	93.7	0.01716	0.0515	0.5	1	
1,3,5-Trimethylbenzene	101.7	0.02534	0.0760	0.5	0.5	
1,3-Dichlorobenzene	99.4	0.01538	0.0461	0.5	0.5	MDL<0.1*Spike Concentration
1,3-Dichloropropane	102.9	0.03884	0.1164	0.5	1	
1,4-Dichlorobenzene	105.9	0.01511	0.0453	0.5	0.5	MDL<0.1*Spike Concentration
2,2-Dichloropropane	101.2	0.02512	0.0753	0.5	1	
2-Chloroethyl vinyl ether	107.3	0.03217	0.0965	0.5	1	
2-Chlorotoluene	92.6	0.02945	0.0883	0.5	0.5	
2-Hexanone	91.9	0.22469	0.6736	5	20	
4-Chlorotoluene	93.1	0.02428	0.0728	0.5	0.5	
Acetone	102.5	0.31672	0.9495	5	20	
Acetonitrile	103.7	0.43500	1.3041	5	20	
Acrolein	91.5	0.42705	1.2803	5	20	
Acrylonitrile	101.0	0.38649	1.1587	5	20	
Benzene	95.1	0.02121	0.0636	0.5	0.5	
Bromobenzene	99.4	0.02890	0.0867	0.5	0.5	
Bromochloromethane	140.4	0.02127	0.0638	0.5	1	

Energy Laboratories, Inc.
Determination of Method Detection Limits
(40 CFR, Part 136, Appendix B)

MDL Study Number: 969 **Date Of Study: 1/6/2016**

Analyst Kathy Wiegand
Instrument ID 1saturn
Method Source SW8260B
Matrix Aqueous
Prep Method
Units ug/L

Parameter	Average Recovery %	Std Deviation	MDL	Concentration Tested	Reporting Limit	Comment
Bromodichloromethane	100.7	0.02257	0.0677	0.5	0.5	
Bromoform	100.6	0.05175	0.1551	0.5	0.5	
Bromomethane	96.7	0.02725	0.0817	0.5	1	
Carbon disulfide	98.7	0.02190	0.0657	0.5	0.5	
Carbon tetrachloride	96.7	0.01393	0.0418	0.5	0.5	MDL<0.1*Spike Concentration
Chlorobenzene	98.3	0.02011	0.0603	0.5	0.5	
Chlorodibromomethane	113.5	0.02648	0.0794	0.5	0.5	
Chloroethane	111.0	0.05928	0.1777	0.5	0.5	
Chloroform	108.3	0.03091	0.0927	0.5	1	
Chloromethane	112.8	0.02836	0.0850	0.5	0.5	
cis-1,2-Dichloroethene	97.5	0.02195	0.0658	0.5	0.5	
cis-1,3-Dichloropropene	99.4	0.03372	0.1011	0.5	1	
Dibromomethane	106.3	0.03619	0.1085	0.5	0.5	
Dichlorodifluoromethane	88.0	0.02530	0.0758	0.5	0.5	
Ethylbenzene	97.2	0.01852	0.0555	0.5	1	
Hexachlorobutadiene	107.8	0.04145	0.1243	0.5	0.5	
Iodomethane	93.4	0.02199	0.0659	0.5	0.5	
Isopropylbenzene	96.1	0.02912	0.0873	0.5	0.5	
m+p-Xylenes	97.7	0.05558	0.1666	1	0.5	
Methyl ethyl ketone	109.6	0.25657	0.7692	5	20	
Methyl isobutyl ketone	90.9	0.25123	0.7532	5	20	
Methyl tert-butyl ether (MTBE)	104.9	0.02277	0.0683	0.5	1	
Methylene chloride	90.3	0.02366	0.0709	0.5	1	
Naphthalene	93.6	0.04157	0.1246	0.5	0.5	
n-Butylbenzene	96.2	0.02968	0.0890	0.5	1	
n-Propylbenzene	97.7	0.02912	0.0873	0.5	0.5	
o-Xylene	97.7	0.02011	0.0603	0.5	1	
p-Isopropyltoluene	98.4	0.02696	0.0808	0.5	1	
sec-Butylbenzene	96.5	0.03016	0.0904	0.5	0.5	
Styrene	95.9	0.02100	0.0629	0.5	1	
tert-Butylbenzene	97.9	0.02302	0.0690	0.5	1	
Tetrachloroethene	96.8	0.02352	0.0705	0.5	0.5	

Energy Laboratories, Inc.
Determination of Method Detection Limits
(40 CFR, Part 136, Appendix B)

MDL Study Number: 969 **Date Of Study: 1/6/2016**

Analyst Kathy Wiegand
Instrument ID 1saturn
Method Source SW8260B

Matrix Aqueous
Prep Method
Units ug/L

Parameter	Average Recovery %	Std Deviation	MDL	Concentration Tested	Reporting Limit	Comment
Toluene	101.2	0.02352	0.0705	0.5	0.5	
trans-1,2-Dichloroethene	95.9	0.01845	0.0553	0.5	0.5	
trans-1,3-Dichloropropene	100.1	0.00990	0.0297	0.5	1	MDL<0.1*Spike Concentration
trans-1,4-Dichloro-2-butene	97.6	0.02456	0.0736	0.5	0.5	
Trichloroethene	102.1	0.02892	0.0867	0.5	1	
Trichlorofluoromethane	90.1	0.02520	0.0756	0.5	1	
Vinyl acetate	103.9	0.01999	0.0599	0.5	1	
Vinyl chloride	86.9	0.01888	0.0566	0.5	1	

Energy Laboratories, Inc.
Determination of Method Detection Limits
(40 CFR, Part 136, Appendix B)

MDL Study Number 4499

Parameter	**Cyanide, Weak Acid Dissociable**	**Matrix**	Aqueous
Date Of Study	7/12/2016	**Prep Method**	
Analyst	Jason M. Gillett	**Concentration Tested**	0.002
Instrument ID	SFA-201-B	**Lab Reporting Limit**	0.002
Method Source	Kelada-01	**Units**	mg/L

Replicate Number	FinalVal
1	0.00280
2	0.00380
3	0.00370
4	0.00360
5	0.00380
6	0.00270
7	0.00330

Average	0.00339 mg/L
Average Recovery %	169.3
Standard Deviation	0.00047
Method Detection Limit	**0.00147 mg/L**
Comment	

CWA - Non-Potable Water
FINAL Performance Evaluation Report
NSI Laboratory Proficiency Testing Program
Study DMRQA-36 - Shipped: 03/18/2016 - Closed: 07/01/2016 - Reports Printed On: 07/18/2016
Participant USEPA Labcode: AK00984

Study Designed and Coordinated by:
NSI Lab Solutions
7212 ACC Blvd., Raleigh, NC 27617
ANAB Certificate#: AP-1693
1-800-234-7837

This evaluation report is being submitted to:
Pollen Environmental
Attention: Jerod Pollen
3536 International Street
Fairbanks, AK, 99701

LabCode and Accreditation Information:

Send Results to: State Only
EPA Lab Code: AK00984
State Lab Code:
Primary Agency: AK -- Alaska Dept of Env'l Conservation
Chris Foley
410 Willoughby AvenueSuite 303
Juneau, AK 99801
Reports to : AK

Participant Information

NSI Lab Code: N11140T4
Permittee Code: AKG572001

This report was submitted by Jerod Pollen, President.

Pollen Environmental
3536 International Street

Fairbanks, AK, 99701
907-479-8368

Please contact Mark Hammersla at NSI Lab Solutions if you have any questions about this report.
(800) 234-7837 - mark.hammersla@nsilabsolutions.com

This PT report may contain data not covered under ANAB Accreditation. Such data is noted by an asterisk.

MIC-003 Total and Fecal Coliform - Pollen Environmental - NSI Lab Solutions/DMRQA-36

NELAC Analyte #	Analyte	NELAC Method Code	Method Description	Reported Value	Study Mean*	Assigned Value	Units	EPA Code[1]	Acceptance Limits	Evaluation	Analysis Date	Analyst's Name
2530	Fecal Coliform, MF	20209807	SM 9222 D (m-FC) 21st ED 1997	100	88.0	88.0	cfu/100mL	AK00984	7.00 to 1080	ACCEPT.	4/19/16	Jerod Pollen
2500	Total Coliform, MF	-- Not Reported --										
2500	Total Coliform, MPN	-- Not Reported --										
2530	Fecal Coliform, MPN	-- Not Reported --										
2525	E.coli, MF	-- Not Reported --										
2525	E.coli, MPN	-- Not Reported --										

PEI-026 Demand - Pollen Environmental - NSI Lab Solutions/DMRQA-36

NELAC Analyte #	Analyte	NELAC Method Code	Method Description	Reported Value	Study Mean*	Assigned Value	Units	Study Standard Deviation*	EPA Code[1]	Acceptance Limits	Evaluation	Analysis Date	Analyst's Name
1530	BOD	20135006	SM 5210 B 21st ED 2001	45.7	45.9	44.4	mg/L	12.6	AK00984	22.9 to 65.8	ACCEPT.	5/26/16	Sterling Ulrich
1555	CBOD	20135266	SM 5210 B 21st ED 2001	43.9	43.6	40.2	mg/L	11.1	AK00984	17.5 to 62.9	ACCEPT.	5/26/16	Sterling Ulrich
1565	COD	20135802	SM 5220 C 21st ED 1997	59.0	70.6	71.6	mg/L	8.67	AK00984	51.8 to 88.5	ACCEPT.	5/26/16	Sterling Ulrich
2040	TOC	-- Not Reported --											

PEI-033 Total Residual Chlorine - Pollen Environmental - NSI Lab Solutions/DMRQA-36

NELAC Analyte #	Analyte	NELAC Method Code	Method Description	Reported Value	Study Mean*	Assigned Value	Units	Study Standard Deviation*	EPA Code[1]	Acceptance Limits	Evaluation	Analysis Date	Analyst's Name
1940	Total Residual Chlorine	20087303	SM 4500-Cl^- G-1997 1997	0.890	0.963	0.976	mg/L	0.172	AK00984	0.728 to 1.17	ACCEPT.	6/15/16	Sterling Ulrich

PEI-035 pH - Pollen Environmental - NSI Lab Solutions/DMRQA-36

NELAC Analyte #	Analyte	NELAC Method Code	Method Description	Reported Value	Study Mean*	Assigned Value	Units	Study Standard Deviation*	EPA Code[1]	Acceptance Limits	Evaluation	Analysis Date	Analyst's Name
1900	pH	10008205	EPA 150.1	7.26	7.27	7.22	units	0.104	AK00984	7.02 to 7.42	ACCEPT.	5/26/16	Jerod Pollen

PEI-079 Residue - Pollen Environmental - NSI Lab Solutions/DMRQA-36

NELAC Analyte #	Analyte	NELAC Method Code	Method Description	Reported Value	Study Mean*	Assigned Value	Units	Study Standard Deviation*	EPA Code[1]	Acceptance Limits	Evaluation	Analysis Date	Analyst's Name
1960	Non-Filterable Residue (TSS)	20051007	SM 2540 D 21st ED 1997	28.5	28.9	31.7	mg/L	5.47	AK00984	22.6 to 37.8	ACCEPT.	4/14/16	Jerod Pollen
1950	Total Solids	-- Not Reported --											

Assigned Values
All assigned values are established in a manner compliant with the current NELAC FOT for Non-Potable Water. With the exception of TDS and Specific Conductance assigned values are equal to the analytically verified gravimetric true value of the PT sample. For TDS and Specific Conductance, the assigned value is set at the robust study mean.

Accuracy/Traceability/Uncertainty
All assigned values are analytically verified for formulation accuracy prior to shipment. A total of 10 randomly chosen samples are taken from the production run and analyzed against NIST SRMs or CRMs. Traceability to SI is established through microbalance calibration with NIST traceable test masses. The expanded uncertainty at 95% CI with K=2 of each assigned value is available upon request and is typically <0.50%.

Batch Homogeneity
Each individual PT sample batch is thoroughly mixed in production and guaranteed to be homogeneous. Homogeneity is verified analytically according to in-house SOP.

Stability
Each analyte has been verified stable through the end of the PT study by either long term monitoring or study closing stability testing.

Acceptance Limits
Acceptance limits are set according to current NELAC limits. Where no limits are set by NELAC, limits are set to ±3 standard deviations around the study mean after outlier correction.

Accredited Analytes
All analytes are included under our ISO 17043/TNI scope of accreditation (Certificate #: AP-1693) unless otherwise noted with an asterisk (*).

PT Study Summary
To view a summary of the PT study results, please see Study Summary Report available in our PT Datalink at www.nsilabsolutions.com.

* The study mean and standard deviation are presented after outlier correction and are based upon pooled reported results without consideration for analytical technology.

[1] If present, the EPA Code of the lab that actually performed the analysis for this analyte.

Reviewed/Approved By: _____ Date: 7/18/16

Mark Hammersla, President

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