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Final Report of Tank-241-C-105 Dissolution, the Phase 2 Study

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Executive Summary

Three clamshell grab samples were taken from Tank 241-C-105 in October 2015 in accordance with RPP-PLAN-60011. Analytical results of those samples were issued in the report RPP-RPT-59115 by Wastren Advantage, Inc., Hanford Laboratory. Solid phase characterization results were reported separately in LAB-RPT-15-00011 and in RPP-RPT-59147. The major solid phases reported to be present were dawsonite [$NaAlCO_3(OH)_2$], trona [$Na_3(HCO_3)(CO_3)\cdot 2H_2O$], cejkaite [$Na_4(UO_2)(CO_3)_3$], and an unidentified organic solid, with minor amounts of gibbsite [$Al(OH)_3$], natrophosphate [$Na_7F(PO_4)_2\cdot 19H_2O$], and traces of unidentified iron-rich and manganese-rich phases. Note that the presence of dawsonite, trona, and cejkaite requires a relatively low pH, likely around pH 9 to 10.

One aliquot of each grab sample was provided to 222-S Laboratory Process Chemistry for dissolution studies. Phase 1 of the dissolution testing followed the approved test plan, WRPS-1404813, Rev. 3, and examined the behavior of the Tank 241-C-105 solids treated with water, 19M sodium hydroxide, 2M nitric acid, and 0.5M oxalic acid/2M nitric acid. Phase 2 of the testing was conducted in accordance with instructions from the client and emphasized treatment with 19M sodium hydroxide followed by water washing. This is the report of the Phase 2 testing.

Aliquots of grab samples 105C-15-01 (S15R000640) and 105C-15-02 (S15R000641) were used for the Phase 2 testing. Sample 105C-15-03 was studied extensively in Phase 1 (treated with water, 19M sodium hydroxide, 2M nitric acid, and/or 0.5M oxalate), and therefore, 105C-15-03 was excluded in the Phase 2 study. Two sub-aliquots from each sample (4 total sub-aliquots) were mixed with 19M sodium hydroxide for 7 days to metathesize the dawsonite (and gibbsite) to sodium aluminate, then water was added to dissolve the sodium aluminate and other water soluble solids. The material was then mixed and centrifuged. The centrifuged solids were washed two more times with water, with mixing and centrifuging after each water addition. This treatment resulted in dissolution of virtually all of the aluminum, carbonate/bicarbonate (CO_3^{2-}/HCO_3^-), fluoride (F^-), nitrite (NO_2^-), and nitrate (NO_3^-) in the samples, plus most or all of the oxalate ($C_2O_4^{2-}$), hydrogen phosphate (HPO_4^{2-}), and sulfate (SO_4^{2-}). Very little of the iron, manganese, and unidentified organic solids dissolved. The uranium phase metathesized (converted) from cejkaite to either clarkeite [$Na(UO_2)(O)(OH)$] or an amorphous uranium solid with the same approximate composition as clarkeite, but did not dissolve.

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LIST OF TERMS

Abbreviations and Acronyms

C-105	Tank 241-C-105
CWP1	PUREX cladding removal waste
DL	detection limit
EDS	energy dispersive spectrometer
IC	ion chromatography
ICP	inductively coupled plasma
ID	identification
m	minor
M	major or Molar
MARS-V	Vacuum Mobile Arm Retrieval System
OH	Free hydroxide
PLM	polarized light microscope
PUREX	Plutonium and Uranium Extraction
RPD	relative percent difference
SD	standard deviation
SEM	scanning electron microscopy
SPC	solid phase characterization
TBP	tributyl phosphate
TGA	thermogravimetric analysis
TIC	total inorganic carbon
TOC	total organic carbon
Vol	volume
W	water
$\%H_2O$	percent of water
W(t)	weight
WAI	Wastren Advantage, Inc.
WHL	Wastren Advantage, Inc., Hanford Laboratory
XRD	X-ray diffraction

Units

g	gram
gal	gallon(s)
kgal	kilogallon
kL	kiloliter
µCi	microcuries
µg	microgram
mg	milligram
mL	milliliter
min	minute(s)
M	molarity or moles per liter

1 INTRODUCTION

Waste retrieval of single-shell Tank 241-C-105 (C-105) was initiated in June 2014 using the Vacuum Mobile Arm Retrieval System (MARS-V) to transfer C-105 waste into double-shell Tank 241-AN-106. To date, Single-Shell Tank Retrieval Operations has removed approximately 92,000 gal of sludge from C-105, and approximately 30,000 gal of sludge currently remains in the tank (RPP-CALC-60933, "Residual Waste Volume of Tank 241-C-105 Following Operations of MARS-V System"). Retrieval performance degraded until the eductor supply hose failed, resulting in a shutdown of operations. Chemical cleaning is being considered as a supplement to further sluicing operations in C-105, and characterization of the residual solids is necessary to support retrieval design and planning. One of these chemical cleaning techniques is to metathesize aluminum-rich wastes to sodium aluminate with 19M sodium hydroxide (NaOH) followed by dissolution of the sodium aluminate using water (water/caustic dissolution). The liquid will then be pumped to a double-shell tank.

The tank previously contained 462 kL (122 kgal) of sludge assumed to consist of Plutonium Uranium Extraction (PUREX) cladding removal waste (CWP1) (416 kL [110 kgal]) and tributyl phosphate (TBP) (46kL [12 kgal]) sludge, from top to bottom. Elevated levels of aluminum (Al) and sodium (Na) indicate that the tank contains a large amount of cladding waste (RPP-RPT-58071, "Derivation of Best Basis Inventory Report for Tank 241-C-105 as of June 11, 2014").

Prior to sampling, the waste consisted primarily of a soft sludge with rocky, white material around the edges of the tank. Three clamshell grab samples were taken from C-105 in October 2015 (RPP-PLAN-60011, "Tank Sampling and Analysis Plan for Tank 241-C-105 Solids"). The analytical report for those samples (RPP-RPT-59115, "Final Analytical Report for Tank 241-C-105 Solid Waste Samples in Support of Retrieval Operations") was issued by Wastren Advantage, Inc., (WAI) Hanford Laboratory (WHL). Solid phase characterization (SPC) results were reported separately in LAB-RPT-1500011, "Solid Phase Characterization of Tank 241-C-105 Grab Samples." Additional SPC to characterize binding phases of C-105 solids was reported in RPP-RPT-59147, "Development of a Scanning Electron Microscopy Based Method to Characterize Binding Phases of Hanford Tank Waste."

Two dissolution studies, Phase 1 and Phase 2, were conducted to identify suitable chemicals to dissolve the hard waste present in the C-105 tank. Phase 1 was conducted based on the test plan, WRPS-1404813, "Test Plan for Solids Dissolution on Tank 241-C-105 Samples," and examined the behavior of the C-105 solids treated with water, 19M NaOH, 2M nitric acid, and 0.5M oxalic acid/2M nitric acid. The Phase 1 study will be reported in a separate report.

Phase 2 of the testing followed instructions from the client and involved treatment by 19M NaOH and water in a process similar to the tank retrieval process. This approach is supported by Table 1 (a copy of Table 7 from LAB-RPT-1500011) that shows dawsonite is likely soluble in 19M NaOH. This is the report of the Phase 2 testing.

Table 1. Summary of Solid Phase Characterization and Anticipated Solubility on Tank 241-C-105 Solid Samples.

Phase	Estimated solubility in:		
	H_2O	19M NaOH	Nitric and/or oxalic acid
Dawsonite	Insoluble	Readily soluble	Readily soluble
Thermonatrite and/or Trona	Soluble (given time)	Insoluble	Soluble (decomposes with gas evolution)
Cejkaite	Partially soluble (pH dependent)	Likely insoluble	Soluble (decomposes with gas evolution)
Natrophosphate	Soluble	Insoluble	Soluble
Unknown organic	Unknown, likely insoluble		
Trace phases (Fe-rich, gibbsite …)	Insoluble	Potentially soluble (Al phases)	Potentially soluble

This report includes observations obtained in the Phase 2 study, concentrations of analytes in the centrifuged liquid that had contact with the C-105 grab samples, the percentage of analytes dissolved in the liquid, and SPC of the washed solids after dissolution.

2 SAMPLES

The three 2015 C-105 grab samples were generally dark brown to black with some visible white grains. A tan piece was found in grab sample 105C-15-03 and was subsampled as an additional sample prior to homogenizing the grab samples for chemical analyses (reported in RPP-RPT-59115) and SPC (LAB-RPT-1500011 and RPP-RPT-59147). It was noticed that the tan aggregates were crushed with some difficulty while the darker aggregates broke apart easily (LAB-RPT-1500011).

The major solid phases reported to be present in the grab samples were dawsonite [$NaAlCO_3(OH)_2$], trona [$Na_3(HCO_3)(CO_3)\cdot 2H_2O$], cejkaite [$Na_4(UO_2)(CO_3)_3$], and an unidentified organic solid, with minor amounts of gibbsite [$Al(OH)_3$], natrophosphate [$Na_7F(PO_4)_2\cdot 19H_2O$], and traces of unidentified iron-rich and manganese-rich phases. Note that the presence of dawsonite, trona, and cejkaite requires a relatively low pH, likely around pH 9 to 10. See Table 2 for details of the relative amounts of each phase reported in LAB-RPT-1500011.

Table 2. Summary of X-Ray Diffraction Phase Content in Tank 241-C-105 Solids.

105C-15-01 (S15R000640)	105C-15-02 (S15R000641)	105C-15-03 (S15R000642)	105C-15-03 Tan (S15R000642)
Trona (M)	Trona (m)	Trona (M)	Trona (M)
----	Dawsonite (M)	Dawsonite (M)	Dawsonite (M)
Cejkaite (M)	Cejkaite (M)	---	---
----	Gibbsite (m)	---	---
----	----	Natrophosphate (trace)	----

M: Major
m: Minor

Subsampling the grab samples for the dissolution study was conducted in the 222-S Laboratory 11A hot cell. The parent grab sample 105C-15-01 consisted of black aggregates and some very large chunks. The very large chunks were excluded during subsampling for sample S15R000640. The second grab sample, 105C-15-02, consisted of black aggregates and some chunks. The black aggregates, with some chunks, were subsampled to S15R000641. S15R000641 had the highest dose rate. Both samples appeared moist or waxy, the color was generally black, and each had some visible light tan material. Only 105C-15-01 and 105C-15-02 were used for the Phase 2 study. Sample 105C-15-03 was studied extensively in Phase 1 (treated with water, 19M NaOH, 2M nitric acid, and/or 0.5M oxalate), therefore, 105C-15-03 was excluded in the Phase 2 study per client's instruction.

Table 3 lists concentrations of components found in all three grab samples and reported in WHL report RPP-RPT-59115, plus those detected in the light tan aggregate portion of 105C-15-03. The results of 105C-15-01 and 105C-15-02 shown in Table 3 were used to calculate the total mass of analytes in each dissolution sample and the percentage of analyte dissolution for the corresponding samples.

Table 3. Concentrations of Analytes in the Parent Grab Samples.

Analytes	105C-15-01	105C-15-01, Duplicate	105C-15-02	105C-15-02, Duplicate	105C-15-03	105C-15-03-Tan Color	Mean n=5	SD n=5
	µg/g	µg/g	µg/g	µg/g	µg/g	µg/g	µg/g	µg/g
Aluminum	47800	na	64100	27700	143000	39700	64460	45855
Calcium	4640	na	3380	1590	4200	2410	3244	1256
Chromium	852	na	1000	470	1090	1050	892	253
Copper	3070	na	2200	938	4370	2370	2590	1258
Iron	14900	na	14000	6530	23200	8030	13332	6608
Manganese	7010	na	7210	3210	8310	2300	5608	2670
Nickel	1080	na	1130	521	1220	364	863	391
Phosphorus	5420	na	7100	3090	5260	6660	5506	1563
Potassium	541	na	684	351	565	476	523	122
Sodium	136000	na	159000	154000	76900	208000	146780	47299
Silicon	395	na	460	218	290	367	346	94
Strontium (Sr)	109	na	126	51	112	58	91	34
Sr-90, µCi/g	2080	1890	861	na	2010	831	1446	632
Sulfur	3030	na	4330	2010	2640	2500	2902	878
Technetium (Tc), Tc-99	2.69	na	2.32	2.29	4.23	2.63	2.96	1
Thorium	354	na	333	137	523	224	314	146
Uranium	53400	na	49500	56700	14200	10300	36820	22616
Yttrium	89	na	92	42	92	94	82	23
Zirconium	536	na	413	388	418	298	411	85
Acetate	418	454	447	na	695	508	504	111
Chloride	298	295	279	na	450	317	328	70
Fluoride	5150	5290	3280	na	3850	2960	4106	1067
Formate	200	198	185	na	215	213	202	12
Nitrate	8490	8600	8140	na	10100	8540	8774	763
Nitrite	25700	25500	24300	na	36300	28400	28040	4855
Oxalate	20100	21500	5780	na	8670	6710	12552	7617
Phosphate	12000	10500	12400	na	12400	13400	12140	1053
Sulfate	9800	9250	8870	na	10200	7400	9104	1080
TIC	31100	na	26800	44000	30750*	46500*	36629	13169
TOC	7590	na	3110	2950	4265*	2550	3897	1814
Wt%, H_2O	21.8	na	22.6	19.3	24.5	27.0*	23.7	3.0
Density	1.818	1.848	1.889	na	2.253	2.995	2.161	0.498
*Average of sample and sample duplicate			SD: Standard deviation					

3 DISSOLUTION PROCEDURE

Table 4 shows the data collected in the Phase 2 dissolution study (conducted from March 15 to March 23, 2016) in the 222-S Laboratory room 1A hot cell. The parent samples (105C-15-01 and 105C-15-02) were mixed by a spatula, and approximately 3 g of each was transferred into pre-weighed 50-mL cones. Cones 11 and 12 were for sample 105C-15-01 (S15R000640), and cones 13 and 14 were for 105C-15-02 (S15R000641). The cones were then weighed to determine the weight of solids in each cone. Sodium hydroxide (12 mL of 19M NaOH) was added to each cone to start the reaction. The cones were weighed again to determine the weight of NaOH solution added. The samples were then mixed by inverting the cones several times with hot cell manipulators. Mixing was repeated twice a day (except Saturday, Sunday, and during the afternoon of March 17, 2016) for 7 days. (No entry to the laboratory was allowed on the afternoon of March 17 due to a drill.)

On the seventh day (March 22, 2016), when the aqueous phase had a consistency of uniformly dispersed suspensions, and the solids were less visible, not cohesive, and remained black, 10 mL of water was added to each cone (see Table 4) to dissolve the water soluble solids. The cones were weighed before and after the addition to determine the weight of added water. Samples were mixed three times at 10-min intervals, then centrifuged for 30 min. The supernatant liquid was decanted from each cone into a corresponding sample vial for chemical analysis (i.e., centrifuged liquid). The cones were re-weighed to determine the weight of centrifuged solids (see Tables 4 and 7, "Wt [g] Centrifuged Solids #1") and the weight of centrifuged liquid (1st centrifuged liquid containing NaOH and water).

Another 10 mL water was added to the centrifuged solids. The cones were re-weighed to determine the weight of added water, mixed as before, and centrifuged for 30 min. The liquids were decanted into sample vials for analysis (2nd centrifuged liquid containing rinse water), and the cones were re-weighed to calculate the remaining weight of centrifuged solids (#2 in Tables 4 and 7) and the weight of the 2nd liquid. Water was added one more time on March 23, 2016; the cones were weighed before and after the addition of water, followed by mixing and centrifuging. Liquids were decanted into sample vials (3rd centrifuged liquid containing rinse water), and the cones were re-weighed to find the final weight of centrifuged solids (#3 in Tables 4 and 7) and the weight of the 3rd liquid. Aliquots of the centrifuged solids were then transferred to sample vials for SPC.

Chemical analyses requested for the centrifuged liquid included density, anions and small organic acids by ion chromatography (IC), metals/elements by inductively coupled plasma (ICP) emission spectrometry, free hydroxide (OH), pH, percent water (%H_2O) by thermogravimetric analysis (TGA), and total inorganic carbon/total organic carbon (TIC/TOC). Table 5 summarizes the laboratory sample identification numbers for the centrifuged liquids and centrifuged solids and their requested chemical analyses or SPC. Only ICP and OH were requested for the 2nd centrifuged liquid.

See Appendix A for the sample break down diagram.

Table 4. Collected Weights in the Phase 2 Study.

Parent Sample Identification	105C-15-01 (S15R000640)		105C-15-02 (S15R000641)	
Cone	11	12	13	14
Wt (g), Cone	14.78	14.78	14.67	14.74
Wt (g), Cone + Sample	17.74	17.72	17.65	17.83
Wt (g), Cone + Sample + NaOH	34.65	35.11	34.31	35.05
Wt (g), Cone + Sample + NaOH, 7 Days Later	34.65	35.12	34.32	35.06
Wt (g), Cone + Sample + NaOH + 1st Water	44.06	45.06	44.18	44.91
Wt (g), Cone + Centrifuged Solids (#1)	20.31	19.98	19.83	20.54
Wt (g), Cone + Centrifuged Solids + 2nd Water	30.1	29.71	29.02	29.65
Wt (g), Cone + Centrifuged Solids (#2) on 3/22/16	18.27	18.26	17.48	17.52
Wt (g), Cone + Centrifuged Solids (#2), on 3/23/2016	18.23	18.22	17.43	17.46
Wt (g), Cone + Centrifuged Solids + 3rd Water	28.12	28.16	27.5	27.62
Wt (g), Cone + Centrifuged Solids (#3)	17.09	17.07	16.47	16.54

Table 5. Laboratory Sample Identification Numbers.

Grab Sample	**105C-15-01 (S15R000640)**		**105C-15-02 (S15R000641)**	
	Laboratory Sample Identification			
1st Centrifuged Liquid (NaOH + W)[a]	S16R000162	S16R000163	S16R000166	S16R000167
2nd Centrifuged Liquid (rinse water)[b]	S16R000164	S16R000165	S16R000168	S16R000169
3rd Centrifuged Liquid (rinse water)[a]	S16R000174	S16R000175	S16R000176	S16R000177
Centrifuged Solids for SPC[c]	S16R000170	S16R000171	S16R000172	S16R000173

[a] Analyses requested: Density, IC, ICP, OH, pH, TIC/TOC, and TGA.
[b] Analyses requested: ICP and OH. Density was calculated based on linear regression of density and [OH] concentrations in the 1st and 3rd centrifuged liquid.
[c] Solid phase characterization includes polarized light microscopy (PLM), scanning electron microscopy (SEM), and X-ray diffraction (XRD).

3.1 ANALYSES

Chemical analyses were performed by WHL per their analytical procedures (see Table 6) for anions and small organic acids by IC, density, OH, metals/elements by ICP, TIC/TOC by persulfate oxidation and coulometric detection, and percent of weight loss by TGA. Process Chemistry of the 222-S Laboratory performed SPC including PLM, SEM, and XRD per the applicable procedures listed in Table 6. Balance usage and verification was performed according to ATS-LO-140-008, "Routine Use and Quality Assurance for Analytical Balances at 222-S Laboratory Complex."

Table 6. Analytical and Solid Phase Characterization Procedures.

Analyte(s) or Method	Procedure Number	Procedure Title
Anions and Small Organic Acids	LA-533-166	Ion Chromatographic Analysis of Anions and Small Organic Acids on DIONEX Model ICS 3000
Density	LA-510-112	Determination of Density for Free Liquid Samples
Free Hydroxide (OH)	LA-211-102	Determination of Free OH^-/OH^+ Using Metrohm Titrando
Metals	LA-505-174	Inductively Coupled Plasma Emission Spectrometric Method for the Thermo Scientific iCAP 6500
pH	LA-212-106	pH Determination of Aqueous Samples
TIC/TOC	LA-342-100	Determination of Carbon by Hot Persulfate Oxidation and Coulometric Detection
%H_2O by TGA	LA-514-115	Thermal Stability and Percent Weight Loss Using the TA DSC and TGA
Solid Phase Characterization	**Procedure Number**	**Procedure Title**
PLM	ATS-LT-519-107	222-S Laboratory Polarized Light Microscopy
SEM, Preparation	ATS-LT-161-104	SEM Sample Preparation Procedure
SEM	ATS-LT-161-103	222-S Laboratory Technology Procedure for the ASPEX Explorer Scanning Electron Microscope
XRD	ATS-LT-507-103	222-S Laboratory X-Ray Diffractometry (XRD) Using the Rigaku™[1] MiniFlexII

[1] Rigaku is a trademark of Rigaku Americas Corporation, The Woodlands, Texas.

3.2 CALCULATIONS

The weight of 19M NaOH added to the solids was calculated as the weight difference before and after adding the NaOH. The volume of 19M NaOH added to the solids was calculated by dividing the weight of added NaOH by the density of 19M NaOH. The density of 19M NaOH was taken from Perry's Chemical Engineers' Handbook (Perry 1985). A similar calculation was used for the weight of rinse water added and the volume of the rinse water (assuming the density of water was 1.00 g/mL). The volume of centrifuged liquid was calculated as the weight difference between the total weight (cone + sample + NaOH + water or cone + centrifuged solids + water) and the decanted weight (cone + centrifuged solids) divided by the density of the centrifuged liquid (i.e., density of the 1st, 2nd, and 3rd liquids), as reported by WHL.

The percentage of weight change relative to the initial sample weight was calculated by taking the weight of the centrifuged solids, subtracting the initial sample weight, dividing by the initial sample weight, and multiplying by 100.

The total analyte mass in the centrifuged liquid was calculated by multiplying the analyte concentration measured in the centrifuged liquid by the volume of centrifuged liquid. The total analyte mass present in the solids used for dissolution was calculated as the analyte concentration in the solids multiplied by the sample weight. The percentage of dissolution for each analyte was calculated as the total mass of analyte in the centrifuged liquid divided by the total analyte mass in the corresponding solids, multiplied by 100. Sodium (Na) from 19M NaOH added to the solids in the cone was accounted for. The amount of Na added to the solids was calculated by the concentration of Na in 19M NaOH multiplied by the volume of NaOH added. The percentage of Na dissolution was calculated by dividing the total amounts of Na in the centrifuged liquid by the sum of the total amounts of Na in the solids in the cone plus the amounts of Na added to the solids. The recovery of Na plus dissolution of Na from the sample was calculated by dividing the total amounts of Na collected in all three liquids by the sum of the added Na and total Na mass in the solids.

4 RESULTS AND DISCUSSION

4.1 OBSERVATIONS DURING DISSOLUTION

Samples were mixed twice a day on working days with 15 inversions (a total of 30 inversions per day) except that only one mixing was performed on March 17, 2016. During inversion, the solids dispersed well in the 19M NaOH solution where the majority of the mixed solution flowed toward the top of the cone except for trace amounts of solids that remained on the bottom of the cone. There was a darker black, thin ring on the top of the aqueous layer. Solids settled on the bottom after inversion. Toward the end of 7 days, the aqueous phase had a consistency of uniformly dispersed suspensions, and solids were less visible, not cohesive, and remained black. Figures 1 through 5 show the appearance of samples at different stages of the dissolution study.

Some droplets were noted on the top of the aqueous solution after the first 10 mL of water was added to the samples containing 12 mL of 19M NaOH on day 7 (Figure 3) prior to mixing and centrifugation. The formation of droplets may be related to the micellization of TBP (RPP-RPT-58822, "Final Report for Investigation of Separable Organics in Solids"). After the third water wash and centrifugation, solids in sample 105C-15-01 (S15R000640, cones 11 and 12) appeared darker than the solids in sample 105C-15-02 (S15R000641, cones 13 and 14) (Figure 5). The centrifuged solids of sample S15R000641 appeared light brown or tan as shown in Figure 5.

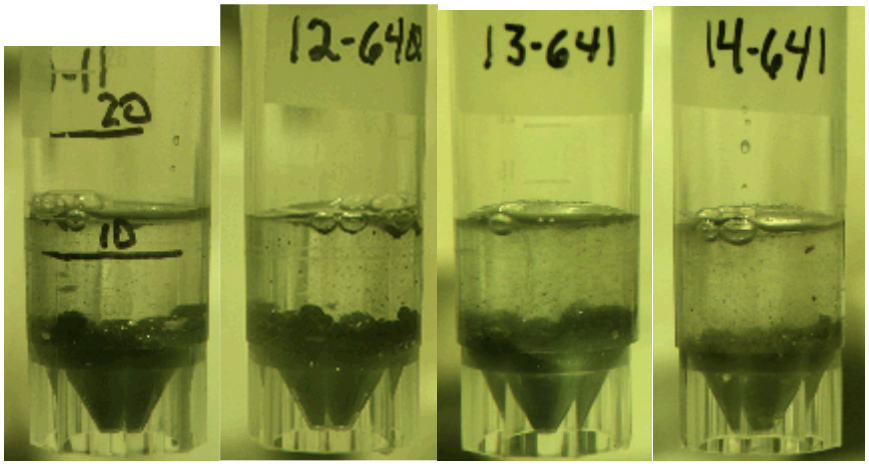


Figure 1. Approximately 3 g of S15R000640 (Cones 11 & 12) and S15R000641 (Cones 13 & 14) Treated with 12 mL of 19M Sodium Hydroxide (Day 0).

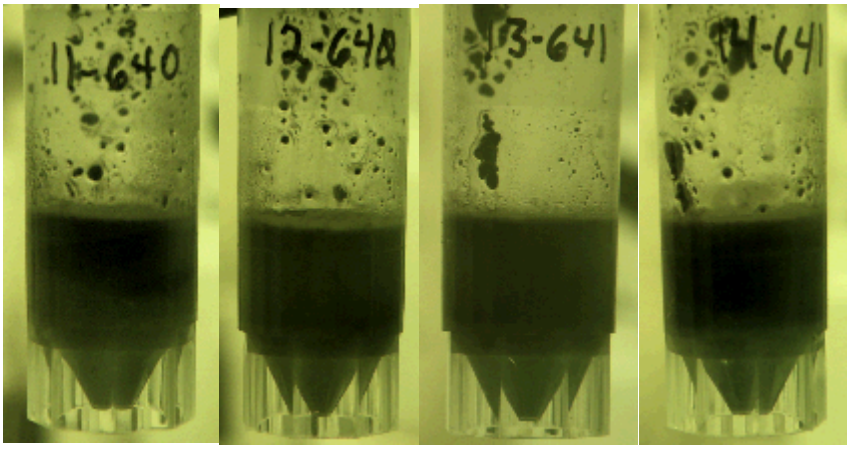


Figure 2. One Week after Treatment with NaOH (Day 7).

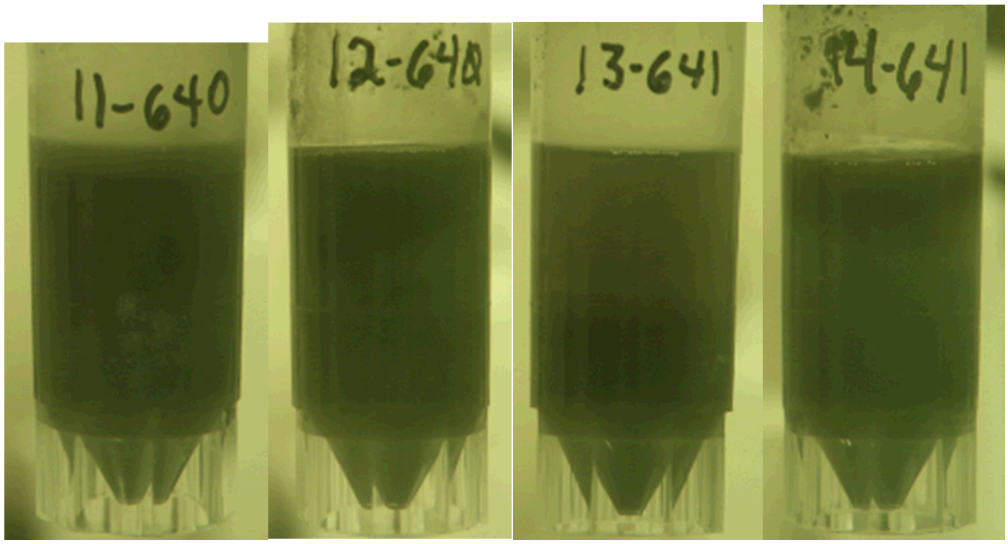


Figure 3. Samples Following Addition of 10-mL Water (Day 7).

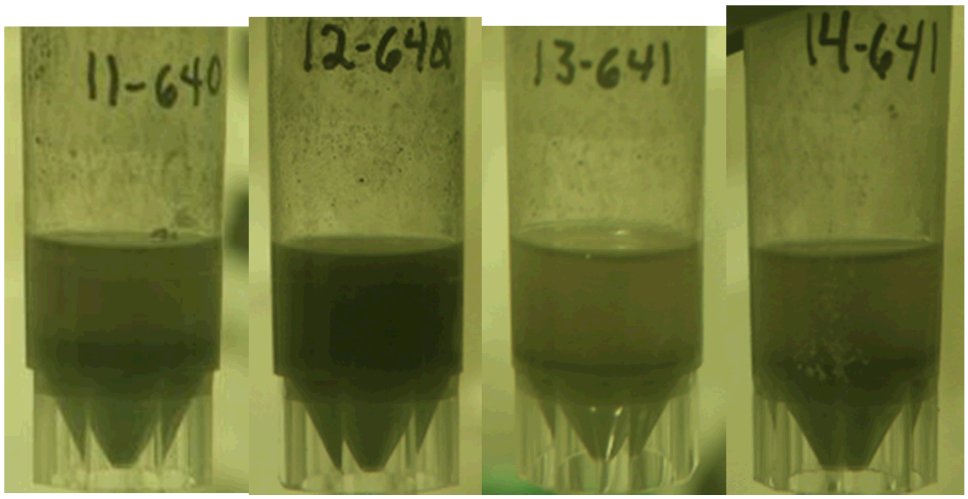


Figure 4. The Third 10-mL Water Rinse (Day 8).

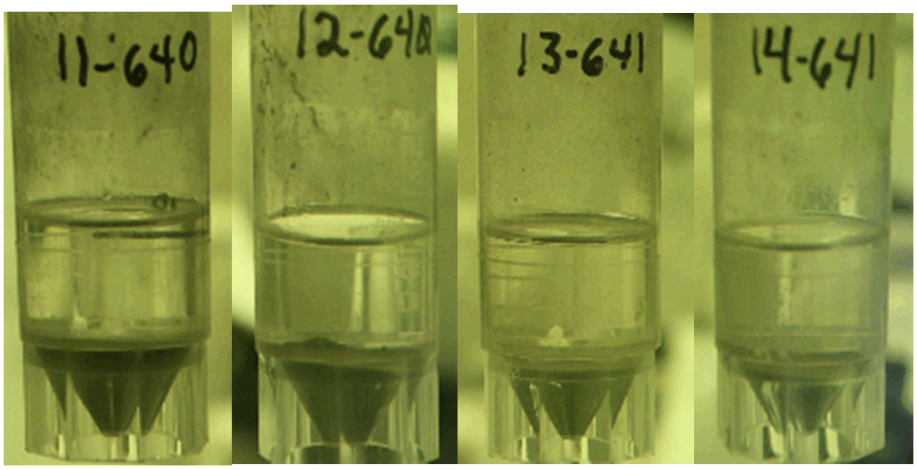


Figure 5. Centrifuged Samples after the Third 10-mL Water Rinse.

Table 7 summarizes the weights of samples and centrifuged solids after the 19M NaOH and water rinse, the calculated volume of centrifuged liquid, and measurement of density, free hydroxide concentration, and water content in the centrifuged liquid. Weights of samples and centrifuged solids were calculated using the weights listed in Table 4. The volume of centrifuged liquid was calculated using the weights and densities.

Note that the weight of centrifuged solids #1 (~5.5 g) was higher than the initial sample weight (~3 g) because the spaces between the particles, initially occupied by air, are now occupied by dense liquid (average 1.34 g/mL) containing approximately 9M NaOH (12 mL of 19M NaOH + 10 mL of water) as well as other salts dissolved from the sample (Table 7).

The second water wash reduced the solids weight from 5.5 g to 3.5 g (S15R000640, 105C-15-01), implying (a) some probable dissolution and (b) dilution of the high-density interstitial liquid. The third water wash caused more weight loss, implying (a) additional dissolution and (b) additional dilution of the interstitial liquid. The third water wash reduced the solids weight from 3.5 g to 2.3 g, or 22% less than the initial sample weight of approximately 3 g (Tables 7 and 8). The entrapment of high-density 19M NaOH in the solids was also reflected by less volume collected in the centrifuged liquid #1 (17.72 mL) than the total volume of added 19M NaOH and water (20.5 mL) (Table 7). There may be some advantage to adding supernatant liquid to fill the spaces between the particles prior to adding 19M NaOH in the future.

Similar observations were noted in sample S15R000641 (105C-15-02), except less solids remained after the second and third water wash compared to 105C-15-01. Solids reduced from 5.2 g and 5.8 g to ~2.8 g in the second wash and from ~2.8 g to 1.8 g in the third wash, or about 40% less than the initial sample weight of approximately 3 g (Tables 7 and 8).

Table 7. Weights, Volumes, Densities (g/mL), Hydroxide Concentrations, and Percent Water Measurements.

Parent Sample ID and Mass/Volume	105C-15-01 (S15R000640)		105C-15-02 (S15R000641)	
Cone Identification	11	12	13	14
Wt (g) sample in cone	2.96	2.94	2.98	3.09
Vol (mL) 19M NaOH	11.09	11.40	10.93	11.30
Vol (mL) dilution H_2O	9.41	9.94	9.86	9.85
Vol (mL) Centrifuged Liquid #1	17.72	18.99	18.13	18.23
Wt (g) Centrifuged Solids #1	5.53	5.20	5.16	5.80
Vol (mL) H_2O rinse	9.79	9.73	9.19	9.11
Vol (mL) Centrifuged Liquid #2	10.76	10.41	10.49	11.03
Wt (g) Centrifuged Solids #2	3.49	3.48	2.81	2.78
Vol (mL) H_2O rinse	9.89	9.94	10.07	10.16
Vol (mL) Centrifuged Liquid #3	10.62	10.50	10.46	10.58
Wt (g) Centrifuged Solids #3	2.31	2.29	1.80	1.80
Density[a] of Centrifuged Liquid #1	1.340	1.321	1.343	1.337
Density[a] of Centrifuged Liquid #2[b]	1.1	1.1	1.1	1.1
Density[a] of Centrifuged Liquid #3	1.039	1.056	1.055	1.047
[OH][c] in Centrifuged Liquid #1	9.18	9.12	9.06	9.29
[OH][c] in Centrifuged Liquid #2	1.80	1.97	1.75	2.22
[OH][c] in Centrifuged Liquid #3	0.71	0.45	0.28	0.25
%H_2O in Centrifuged Liquid #1	70	72	70	71
%H_2O in Centrifuged Liquid #2	na[d]	na[d]	na[d]	na[d]
%H_2O in Centrifuged Liquid #3	92	93	94	94

ID = Identification
Vol = Volume
Wt = Weight
%H_2O = percent water by thermogravimetric analysis
[a]: Density expressed as g/mL.
[b]: Density was calculated by the slope and intercept of linear regression between the density vs. the concentrations of hydroxide in the centrifuged liquid #1 and #3.
[c] [OH]: Free hydroxide concentration, expressed as molarity.
[d]: %H_2O by TGA was not requested.

Table 8. The Percentage of Centrifuged Solids Weight Change Relative to the Initial Sample Weight.

Sample Identification	Cone ID and Treatment Step	Treatment	Initial Sample Weight	Centrifuged Solids Weight	Percentage of Weight Change Relative to Initial Sample Weight
			g	g	%
S15R000640	11 - 1	1: 12 mL 19M NaOH + 10 mL H_2O	2.96	5.53	87
	11 - 2	2: 10 mL H_2O	na*	3.49	18
	11 - 3	3: 10 mL H_2O	na*	2.31	-22
S15R000640	12 - 1	1: 12 mL 19M NaOH + 10 mL H_2O	2.94	5.2	77
	12 - 2	2: 10 mL H_2O	na*	3.48	18
	12 - 3	3: 10 mL H_2O	na*	2.29	-22
S15R000641	13 - 1	1: 12 mL 19M NaOH + 10 mL H_2O	2.98	5.16	73
	13 - 2	2: 10 mL H_2O	na*	2.81	-6
	13 - 3	3: 10 mL H_2O	na*	1.8	-40
S15R000641	14 - 1	1: 12 mL 19M NaOH + 10 mL H_2O	3.09	5.8	88
	14 - 2	2: 10 mL H_2O	na*	2.78	-10
	14 - 3	3: 10 mL H_2O	na*	1.8	-42

Weight change relative to initial sample weight = [(Centrifuged Solids - Initial Sample Weight)/Initial Sample Weight]*100

* na addition sample was added. Initial sample weight was used for calculating the percentage of weight change.

Note that the drop in the weight of centrifuged solids from one contact to the next is due to the combined effect of lowering the density of the interstitial liquid (from 1.34 g/mL for the first contact to about 1.05 g/mL for the third contact) *and* the dissolution of solids. From the weight data alone, the percentage of solids that dissolved cannot be estimated. However, the fact that the final weight of centrifuged solids is lower than the initial sample weight, even though the interstitial air has been replaced with liquid, is a clear indication that a significant amount of dissolution occurred. The data in Table 8 also suggest that the extent of dissolution was somewhat greater for grab sample 105C-15-02 than for 105C-15-01.

4.2 CHEMICAL DISSOLUTION RESULTS

Concentrations of analytes in the first, second, and third centrifuged liquid are listed in Table 9. Note that metals in the liquid were determined at a relative high dilution, e.g., 2000, to accommodate the high Na. Data Summary Reports received from WHL are provided in Appendix B.

Table 9. Concentrations of Analytes in the First, Second, and Third Centrifuged Liquid. (2 sheets).

Analytes	105C-15-01 (S15R000640)		105C-15-02 (S15R000641)	
	Cone 11	Cone 12	Cone 13	Cone 14
	µg/mL	µg/mL	µg/mL	µg/mL
Aluminum				
1st Liquid	8870	8600	6530	8070
2nd Liquid	1650	1890	1600	1900
3rd Liquid	1520	767	939	437
Sodium				
1st Liquid	243000	249000	233000	255000
2nd Liquid	65900	68100	74200	93000
3rd Liquid	39400	35600	29800	25700
TIC				
1st Liquid	1100	881	1320	1360
2nd Liquid	na*	na*	na*	na*
3rd Liquid	4370	4780	4820	4130
TOC				
1st Liquid	66	69	54	79
2nd Liquid	na*	na*	na*	na*
3rd Liquid	769	723	296	326
Fluoride				
1st Liquid	202	167	203	207
2nd Liquid	na*	na*	na*	na*
3rd Liquid	463	568	302	276
Nitrite				
1st Liquid	3250	3420	2840	3210
2nd Liquid	na*	na*	na*	na*
3rd Liquid	649	470	600	314
Nitrate				
1st Liquid	1120	1170	1010	1150
2nd Liquid	na*	na*	na*	na*
3rd Liquid	259	210	238	150
Sulfate				
1st Liquid	348	321	424	418
2nd Liquid	na*	na*	na*	na*
3rd Liquid	923	1140	507	455
Sulfur				
1st Liquid	138	127	155	168
2nd Liquid	426	442	509	609
3rd Liquid	335	411	195	174

Table 9. Concentrations of Analytes in the First, Second, and Third Centrifuged Liquid. (2 sheets).

Analytes	105C-15-01 (S15R000640)		105C-15-02 (S15R000641)	
	Cone 11	Cone 12	Cone 13	Cone 14
	µg/mL	µg/mL	µg/mL	µg/mL
Oxalate				
1st Liquid	58	53.2	48	48
2nd Liquid	na*	na*	na*	na*
3rd Liquid	2890	3250	2070	1300
Phosphate				
1st Liquid	438	485	452	411
2nd Liquid	na*	na*	na*	na*
3rd Liquid	1050	1440	1000	916
Phosphorus				
1st Liquid	158	188	168	245
2nd Liquid	622	703	841	1130
3rd Liquid	354	478	341	312
Iron				
1st Liquid	66	68	121	227
2nd Liquid	<DL	<DL	<DL	<DL
3rd Liquid	<DL	<DL	<DL	<DL
Manganese				
1st Liquid	<DL	<DL	49	128
2nd Liquid	<DL	<DL	<DL	<DL
3rd Liquid	<DL	<DL	<DL	<DL
Uranium				
1st Liquid	<DL	<DL	<DL	<DL
2nd Liquid	82	<DL	116	112
3rd Liquid	<DL	<DL	62	<DL

DL = detection limit.

*na indicates that analytes were not requested for analysis.

Multiplying the concentration of each analyte in the solids (Table 3) by the weight of sample in the cone (Wt [g] sample in cone, Table 7) gave the mass of each analyte placed into each cone. Multiplying the concentration of each analyte in each liquid sample (Table 9) by the volume of centrifuged liquid (i.e., Vol [mL] centrifuged liquid, Table 7) gave the total mass of each analyte in each centrifuged liquid sample. Dividing the mass in the liquid sample by the total mass placed into the cone times 100 gave the percentage of the analyte that dissolved in each contact. The percentage of dissolution for selected analytes is shown in Tables 10 and 11.

Some of the variability in the data in Table 10 can be attributed to the obvious inhomogeneity of the initial grab samples, as pointed out in the analytical report for those samples (RPP-RPT-59115). The sharp differences between 105C-15-01, 105C-15-02, and 105C-15-03 (Table 3) are evidence for this inhomogeneity. Although sample 105C-15-03 was not included in the Phase 2 study, concentration of each analyte of 105C-15-03 was included in Table 3 and Figure 6. Sample 105C-15-03 contained two distinguished populations, and each population was subsampled for chemical analysis. The metals results of these two populations were used as a reference for evaluation of ICP results of 105C-15-01 and 105C-15-02.

A high relative percent difference (RPD) was noted in 105C-15-02 and its duplicate for Al, calcium, chromium, copper, iron, phosphorus, manganese, sulfur, and nickel, but not for the Na and uranium (U) results (Figure 6). Na and U that were well within the acceptance criteria of RPD were analyzed under the same dilution as Al and other elements. Therefore, the dilution error was ruled out between C105C-15-02 and its duplicate. The large discrepancy is also attributed to inhomogeneity of the grab samples.

An evaluation was performed by comparing each analyte concentration and the average of all five results obtained from the three grab samples (105C-15-01, 105C-02, 105C-15-02 duplicate, 105C-15-03, and 105C-15-03 tan solids) (shown in Figure 6, the top and middle charts). It was decided to include the 105C-15-02 duplicate results for calculating the percentage dissolution for 105C-15-02.

Concentration of Al in the three grab samples was the second highest element (after Na) compared to other analytes and had a wide range of variation. A relatively similar range in 105C-15-01, 105C-15-02 (slightly higher than 105C-15-01), and the light tan aggregate portion of 105C-15-03 was observed, except Al was ~3 times higher in 105C-15-03 and ~50% less in 105C-15-02 duplicate (Table 3 and Figure 6).

In the 1st liquid, Al was also the second highest element (again, after Na) and had nearly 100% dissolution (Tables 9 and 10). Concentration of Al detected in the 2nd and 3rd liquids was the result of washing out the remaining Al in the interstitial liquid and centrifuged solids after the NaOH and water treatment along with dissolution of any sodium aluminate that might have formed. The free hydroxide concentration was ~9M in the 1st contact, and it decreased to ~1.7 to 2.2M in the 2nd liquid and ~0.3 to 0.5M in the 3rd contact (Table 7). Note that for the liquid in cones 11 and 12, the percentage of Al dissolution using the five average solid Al values would be 82% and 86% for the 1st liquid, ~10% for the 2nd, and ~4 to 9% for the 3rd liquid. Percentage of Al dissolution in cones 13 and 14 is 62 to 74% for the 1st liquid, ~9 to 11% for the 2nd, and 2 to 5% for the 3rd liquid. The greater than 100% Al dissolution may be caused by the wide range of Al concentration in the solids.

Although dawsonite and/or gibbsite were not identified in 105C-15-01 by the XRD technique (Table 2), dawsonite or gibbsite should be present in 105C-15-01 based on the Al concentration in the 1st liquid in cones 11 and 12, and on the PLM and SEM analyses. Dawsonite and/or gibbsite were the major components in all grab samples. Soluble Al by 19M NaOH was generated as a result of insoluble dawsonite or gibbsite reacting with NaOH to produce sodium aluminate [$NaAl(OH)_4$], which was soluble at moderate hydroxide concentration. The reactions are shown below:

$$NaAl(CO_3)(OH)_2 + 2\ NaOH \rightarrow NaAl(OH)_4 + Na_2CO_3$$

$$Al(OH)_3 + NaOH \rightarrow NaAl(OH)_4$$

Sodium had the highest concentration in C-105 grab samples, but the concentration range was broad (Table 3 and Figure 6). However, Na concentrations in both 105C-15-01 and 105C-15-02 were relatively similar (slightly higher in 105C-15-02). Approximately 5 g Na (~0.4 to ~0.5 g of original Na mass in each cone) was added as NaOH to cones 11 to 14; concentrations of Na in the first centrifuged liquid were similar among the four cones and had 79 to 86% dissolution of the original Na mass and added Na for both 105C-15-01 and 105C-15-02 (Tables 9 and 10). Approximately 1g Na remained in the cone after the NaOH and water solution was decanted. The high percentage of Na removal in the 2nd and 3rd liquids showed that the dissolved and/or added Na in the interstitial liquid and in the centrifuged solids continued to wash out.

The total Na dissolution should include both the recovery of added Na plus dissolution of original Na in solids, calculated by taking the total Na collected in all three liquids divided by the sum of added Na and original Na mass in the solids. The percentage of total recovery and dissolution of Na was 102, 106, 100, and 108% for 105C-15-01 and 105C-15-02, respectively.

Iron (Fe) concentration in the solids was ~14 mg/g in both 105C-15-01 and 105C-15-02, ~23 mg/g in 105C-15-03, and 6.5 to 8 mg/g in the 105C-15-02 duplicate and 105C-15-03 tan sample (Table 3 and Figure 6). It is not clear why there is a large discrepancy between 105C-15-02 and its duplicate, although sample inhomogeneity is a likely cause.

Fe-containing particulates were not readily soluble in 19M NaOH or in water, as indicated by a very low Fe concentration (<~0.2 mg/g) in the centrifuged liquid (Table 9). The total Fe dissolution was 3% in 105C-15-01 and 7% to 13% in 105C-15-02 (Table 10).

Manganese (Mn) was present in the grab samples, ranging from ~7 to 8 mg/g in all three samples, except ~2 to ~3 mg/g in the 105C-15-02 duplicate and 105C-15-03 tan sample (Table 3 and Figure 6). Manganese was less than the detection limit in all three liquids for 105C-15-01 and in the 2rd and 3rd liquids of 105C-15-02, except for a trace amount in the 1st liquid of 105C-15-02 (Table 9).

Uranium from cejkaite was present in high concentrations in all three grab samples, averaging 36.8 mg/g (Table 3 and Figure 6). However, cejkaite was not soluble in 19M NaOH, indicated by a very low U concentration in all three centrifuged liquids, i.e., either less than detection limit or ranging from 0.08 mg/mL to 0.16 mg/mL. The total U dissolution from all three liquids was approximately 1%. However, the cejkaite *did* react with the NaOH. Cejkaite was not detected by XRD in any of the post-treatment solids samples. It was replaced by an (apparently amorphous) U compound with composition similar to clarkeite [$Na(UO_2)(O)(OH)$], based on SEM/energy dispersive spectrometry (EDS) evidence. The presumed metathesis reaction is:

$$Na_4UO_2(CO_3)_3 + 3\ NaOH \rightarrow Na(UO_2)(O)(OH) + 3\ Na_2CO_3 + H_2O$$

TIC was partially soluble in 9M NaOH (19M NaOH diluted with water), indicated by 18 to 23% dissolution in the 1st liquid (Table 10). The TIC solubility increased as the OH concentration

dropped, indicated by the increased TIC in the 3rd liquid (<1M NaOH). Formation of soluble sodium carbonate (Na_2CO_3) was the result of dawsonite and trona reacting with NaOH (see the reaction shown below) as well as the preceding metathesis reaction. It is expected that TIC continued to be soluble in the 2nd liquid. Therefore, total TIC dissolution is expected to be greater than 63%.

$$NaAl(CO_3)(OH)_2 + 2\ NaOH \rightarrow NaAl(OH)_4 + Na_2CO_3$$

$$Na_3(HCO_3)CO_3 + NaOH \rightarrow 2\ Na_2CO_3 + H_2O$$

Table 10. Percentage Dissolution in Three Centrifuged Liquids and Total Percentage Dissolution.

Analyte	Sample ID	105C-15-01 (S15R000640)		105C-15-02 (S15R000641)	
	Contact	Cone 11	Cone 12	Cone 13	Cone 14
Aluminum	1	111	116	87	104
	2	13	14	12	15
	3	11	6	7	3
	Total	135	136	106	122
Sodium	1	81	86	79	84
	2	176	177	167	212
	3	104	94	67	56
	Total	361	357	313	352
TIC	1	21	18	23	23
	2	na*	na*	na*	na*
	3	50	55	48	40
	Total	>71	>73	>71	>63
TOC	1	5	6	11	15
	2	na*	na*	na*	na*
	3	36	34	34	37
	Total	>41	>40	>45	>52
Iron	Total	3	3	7	13
Manganese	Total	0	0	6	14
Uranium	Total	1	0	1	1

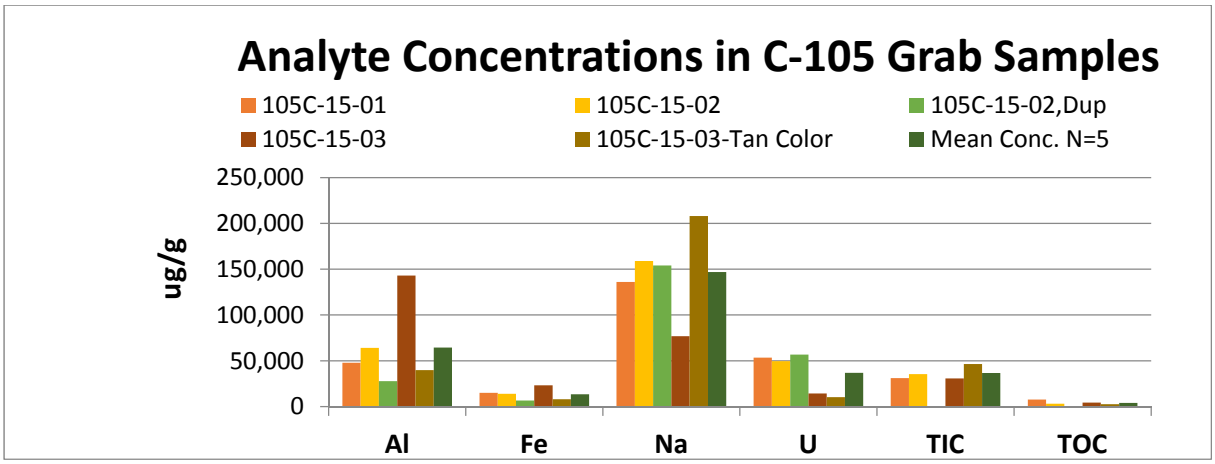
*:TIC/TOC analysis was not performed on the second contact liquid sample.

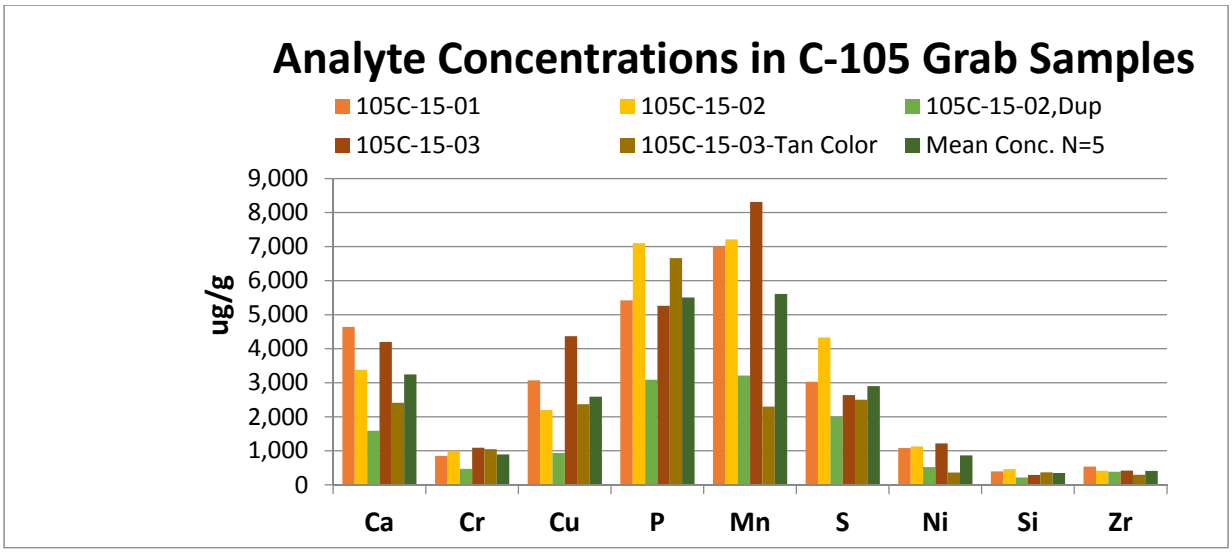
ID: Identification. TIC: Total inorganic carbon. TOC: Total organic carbon.

Concentration of TOC in the grab samples, averaging 3.9 mg/g, is listed in Table 3. Lower TOC in the 1st liquid, ~0.05 to 0.08 mg/mL, increased to ~0.3 to ~0.7 mg/mL in the 3rd liquid, indicating higher dissolution of TOC in water driven by sodium oxalate dissolution (see the third paragraph on page 26 and Table 11) at lower Na and hydroxide concentrations (Figure 7). Higher TOC concentration in the 1st liquid of 105C-15-01 is consistent with the higher TOC concentration in the 105C-15-01 solids.

Summation of carbon from the small organic acids measured by IC (acetate, formate, glycolate, and oxalate) was compared to the TOC by the persulfate method. Glycolate was <DL; therefore, the carbon of acetate, formate, and oxalate contributed to the TOC by summation. The higher TOC by the persulfate method in the 1st liquid compared to the TOC by summation showed some carbon was not accounted for (Figure 7). The unaccounted for carbon indicated the presence of some unknown organics in the 1st liquid. The results of TOC using the persulfate method in the 3rd liquid were less than the TOC by summation and indicated the absence of unknown organics in the 3rd liquid. The absence of organics in the 3rd liquid may be related to the water solubility of the unknown organics. It is noted that the difference was not significant.

In contrast, the difference between the TOC by persulfate method and the TOC by summation was much larger in the grab samples than the TOC difference in each liquid, 1.69 mg/g for 105C-15-01 and 1.22 mg/g for 105C-15-02. The large difference in the solids indicates the presence of insoluble organics in the grab samples. Methylene chloride was used to extract the organics present in the grab samples in the Phase 1 study and will be discussed in the Phase 1 report.





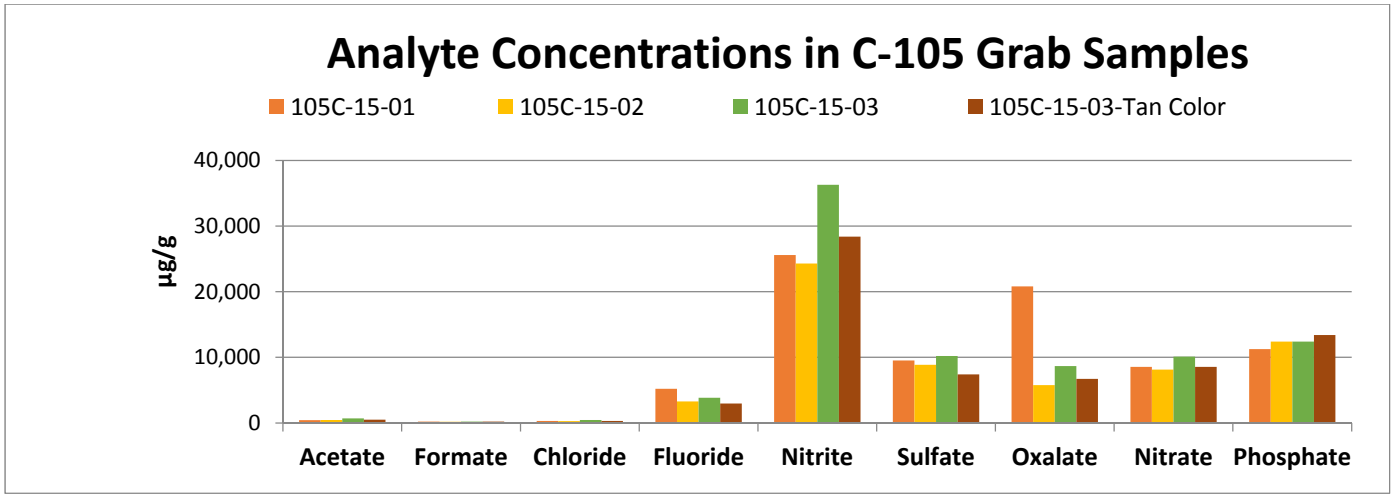


Figure 6. Analyte Concentrations and Mean Metals/Elements Concentrations from All Five Results of Tank-241-C-105 Grab Samples.

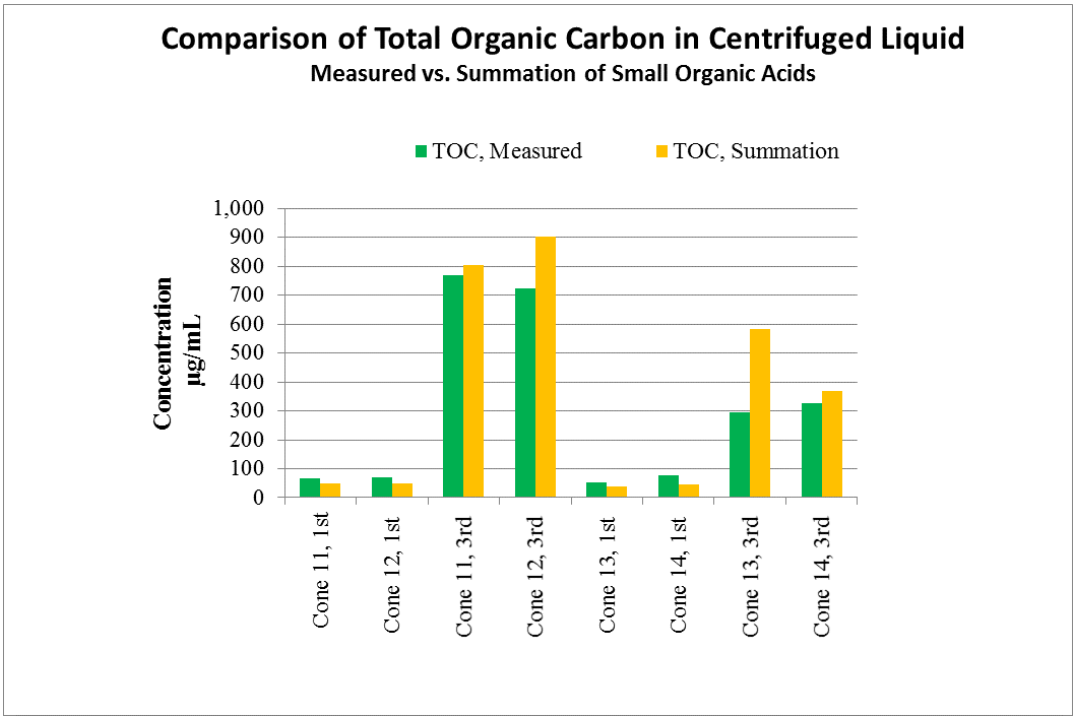


Figure 7. Comparison of Total Organic Carbon in the Centrifuged Liquid by the Persulfate Method and by the Summation of Carbon from the Small Organic Acids.

Fluoride (F) concentration in the grab samples was relatively constant, averaging 4.1 mg/g, but less than nitrite, nitrate, phosphate, and sulfate (Table 3 and Figure 6). Fluoride concentration was generally less than ~0.6 mg/mL in the 1st and the 3rd liquids, indicating a similar percentage of dissolution in the 1st and 3rd liquids (Tables 9 and 11).

Nitrite (averaging 28 mg/g) and nitrate (averaging 8.8 mg/g) concentrations in the grab samples were relatively constant (Table 3 and Figure 6). Both were relatively high in the 1st liquid: ~3 mg/mL for nitrite with 75 to 86% dissolution and ~1 mg/mL for nitrate with 77 – 88% dissolution. Concentrations of nitrite and nitrate in the 3rd liquid decreased to <0.6 mg/mL (Tables 9 and 11) with 4 to 9% dissolution for nitrite and 6 to 11% dissolution for nitrate as the remaining dissolved nitrite and nitrate were washed out of the interstitial liquid.

By contrast, oxalate (averaging 12.6 mg/g in grab samples) was not soluble in the NaOH, but was soluble in water. The percentage of oxalate dissolution was much higher in the 3rd liquid (greater than 50%) than in the 1st liquid (up to 5%) (Table 11). The total percentage of oxalate in the 3rd liquid of 105C-15-02 was much higher than that found in 105C-15-01, 131% and 82%. It is not clear why there is a large oxalate concentration discrepancy between cones 13 and 14 for the 3rd liquid.

The concentration of oxalate in 105C-15-01 was ~20 mg/g and ~5.8 to ~8.7 mg/g in the 105C-15-02 and 105C-15-03 samples. Oxalate concentration, being the highest in 105C-15-01 in comparison to the other three samples, had a pattern similar to the TOC concentration in these samples (Table 3 and Figure 6).

Table 11. Percentage Dissolution for Anions and Small Organic Acids.

Analyte	Sample ID	105C-15-01 (S15R000640)		105C-15-02 (S15R000641)	
	Contact	Cone 11	Cone 12	Cone 13	Cone 14
Fluoride	1	23	21	38	37
	2	na*	na*	na*	na*
	3	32	39	32	29
	Total	>55	>60	>70	>66
Nitrite	1	76	86	71	78
	2	na*	na*	na*	na*
	3	9	7	9	4
	Total	>85	>93	>80	>82
Nitrate	1	78	88	75	83
	2	na*	na*	na*	na*
	3	11	9	10	6
	Total	>89	>97	>85	>89
Oxalate	1	2	2	5	5
	2	na*	na*	na*	na*
	3	50	56	126	77
	Total	>52	>58	>131	>82
Phosphate	1	23	28	22	20
	2	na*	na*	na*	na*
	3	33	46	28	25
	Total	>56	>74	>50	>45
Sulfate	1	22	22	29	28
	2	na*	na*	na*	na*
	3	35	43	20	18
	Total	>57	>65	>49	>46
*:IC analysis was not performed on the second contact liquid sample					
ID: Identification					

Other small organic acids, acetate and formate, had much lower concentrations in the grab samples, ~0.2 mg/g up to ~0.7 mg/g (Table 3 and Figure 6). The concentrations of acetate and formate in the liquid were also much lower, ~0.07 mg/mL in the 1st liquid and ~0.02 mg/mL in the 3rd liquid for acetate and ~0.02 mg/mL in the 1st and ~0.03 mg/mL in the 3rd for formate. Both acetate and formate were soluble after 19M NaOH + H_2O treatment and water rinses (the percentage of dissolution near 100%).

Phosphate (averaging 12.1 mg/g) and sulfate (averaging 9.1 mg/g) were relatively uniform among the three grab samples as shown in Table 3 and Figure 6. Phosphate and sulfate concentrations in the 1st liquid shared a similar range, ~0.3 mg/mL to ~0.48 mg/mL, but were elevated to ~1 mg/mL in the 3rd liquid, except for ~0.5 mg/mL for sulfate in cones 11 and 12 (Table 9). Dissolution for both sulfate and phosphate was generally ~20 to 30% in the 1st liquid and ~20 to 46% in the 3rd liquid (Table 11). It was noted that both phosphate and sulfate in the 3rd liquid had a lower dissolution in cones 13 and 14 compared to cones 11 and 12.

Figure 8 summarizes the mean and standard deviation of total percentage of dissolution and the recovery of Na plus dissolution of Na between 105C-15-01 and 105C-15-02. It is expected that the percentage of dissolution for TIC, TOC, anions, and small organic acids would be higher than the values shown in the graph were it not for missing dissolution information in the 2nd liquid. Despite the variability, some trends of the percentage of dissolution are obvious. Of the solids containing Al (dawsonite and gibbsite), nitrite, and nitrate, the majority of the dissolution occurred in the 19M NaOH + H_2O treatment. Dissolution of solids containing Na (e.g., trona) and recovery of added Na occurred in both 19M NaOH + H_2O treatment and water rinses. Carbonates, phosphate, sulfate, and fluoride can be dissolved in both 19M NaOH + H_2O treatment and water rinses, with higher dissolution in water. Dissolution of oxalate occurred mainly in water. Solids containing Fe, Mn, and U were not soluble in NaOH or water.

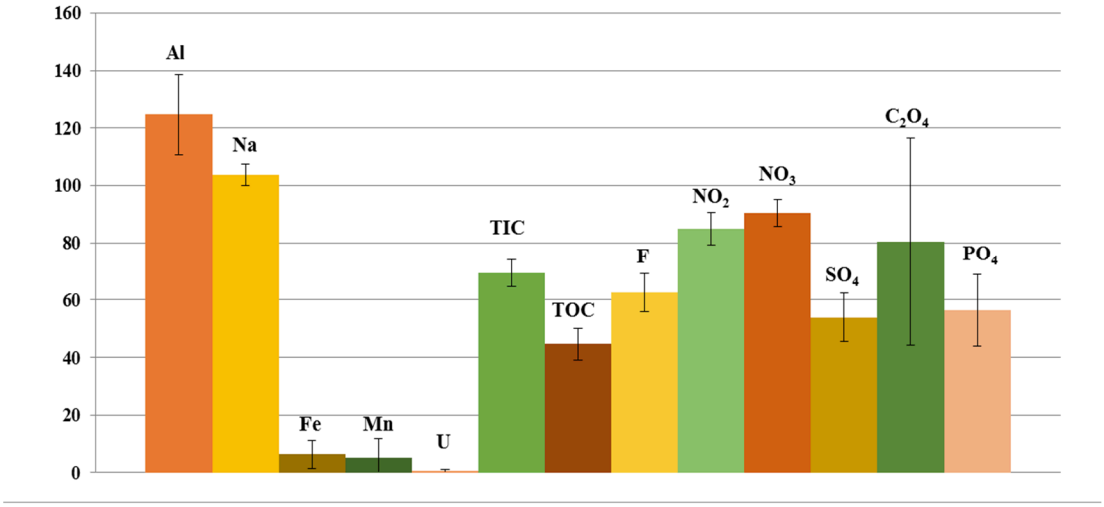


Figure 8. Mean and Standard Deviation of Total Percentage Dissolution and Recovery of Spiked Sodium Plus Sodium Dissolution between 105C-15-01 and 105C-15-02.

5 SOLID PHASE CHARACTERIZATION

For this study, we examined four centrifuged solids after 19M NaOH and three water rinses from the two grab samples. Based on the prior SPC of the parent grab samples (reported in LAB-RPT-1500011), the major solid phases present before caustic addition were expected to include trona [$Na_3(HCO_3)CO_3 \cdot 2H_2O$], dawsonite [$NaAlCO_3(OH)_2$], and cejkaite

[$Na_4(UO_2)(CO_3)_3$], with small amounts of gibbsite [$Al(OH)_3$] and natrophosphate [$Na_7F(PO_4)_2 \cdot 19H_2O$], and traces of unidentified Fe-rich, Mn-rich, and carbon-rich solids. It is expected that the following reactions occurred when these solids were mixed with 19M NaOH for 7 days:

$$Na_3(HCO_3)CO_3 \cdot 2H_2O + NaOH \rightarrow 2\ Na_2CO_3 + 3\ H_2O$$

$$NaAlCO_3(OH)_2 + 2\ NaOH \rightarrow NaAl(OH)_4 + Na_2CO_3$$

$$Na_4(UO_2)(CO_3)_3 + 3\ NaOH \rightarrow Na(UO_2)(O)(OH) + 3\ Na_2CO_3 + H_2O$$

$$Al(OH)_3 + NaOH \rightarrow NaAl(OH)_4$$

All of the product salts are water soluble with the exception of the clarkeite [$Na(UO_2)(O)(OH)$]. If any sodium carbonate remained undissolved, it would convert to thermonatrite ($Na_2CO_3 \cdot H_2O$) after water treatment. The natrophosphate would not react with NaOH, but would dissolve in water. The unidentified phases (Fe-rich, Mn-rich, and organic) are not likely to react with NaOH and are not likely to dissolve in water. Thus, the solids remaining after NaOH treatment and water wash are expected to contain clarkeite, Fe-rich, Mn-rich, and carbon-rich solids, plus any water-insoluble phases that were present in the parent samples in amounts too small to identify.

The SPC results for the residual centrifuged solids (samples S16R000170, -171, -172, and -173) are largely consistent with these expectations, except that the U residue appears to be amorphous rather than crystalline clarkeite, and some cejkaite appears to remain unreacted but "protected" by a coating of the amorphous product.

The XRD patterns for all four samples have very broad peaks (indicating the samples were largely amorphous) (see Appendix C). Sample S16R000170 contained no identifiable peaks. Sample S16R000171 contained traces of thermonatrite ($Na_2CO_3 \cdot H_2O$) and quartz (SiO_2). Sample S16R000172 contained both hydrated and anhydrous Na_2CO_3, though the hydrate may have been dehydrated during sample preparation. Sample S16R000173 contained thermonatrite and traces of natrophosphate, hematite (Fe_2O_3), and natroxalate ($Na_2C_2O_4$). A more complete XRD report is included in Appendix C.

There were no clearly identifiable phases in the PLM portion of the SPC. Although the samples were described as dominated by the sub-micron Fe-rich, Mn-rich, and (presumed) carbon-rich particulate, a number of unidentified anisotropic crystals were present (see Figure 9). All of the samples were described as dark brown, tar-like, and tacky. A more complete PLM report is included in Appendix D.

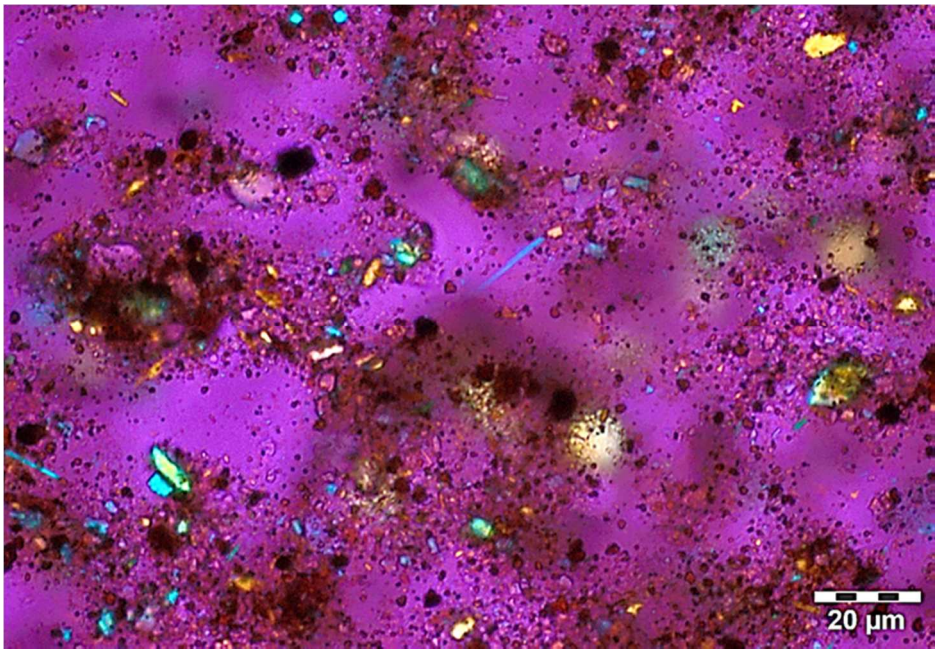


Figure 9. S16R000170 (Centrifuged Solids of 105C-15-01) by Polarized Light Microscopy.

The SEM/EDS analysis indicated the samples were dominated by U and Fe/Mn phases. (The SEM samples were carbon-coated, so organic phase identification was not possible.) Figure 10 shows a typical view and the associated area scan. The dark regions in Figure 10 are rich in Fe and Mn, though the particle size is too small to resolve into any identifiable shape. The bright rod-shaped particles are rich in U, and the morphology resembles the cejkaite crystals present in the parent samples (Figure 11), but without the sharply defined crystal faces and edges. It is likely that these bright rod-shaped particles in Figure 10 were originally cejkaite crystals, and the addition of NaOH converted the cejkaite into an amorphous U oxy-hydroxide phase that coated the cejkaite crystals and prevented complete reaction. Another interesting morphological feature is shown in Figure 12. Several of these U-rich "box work" aggregates were observed. They may result from the amorphous U phase precipitating around the original cejkaite crystals. The "holes" in the box work represent the locations of the original cejkaite crystals. A more complete SEM/EDS report is included in Appendix E.

Sodium hydroxide and water treatments have largely reduced particle size to the point where PLM cannot provide diagnostic information and smaller particle sizes were also noted by the SEM analysis.

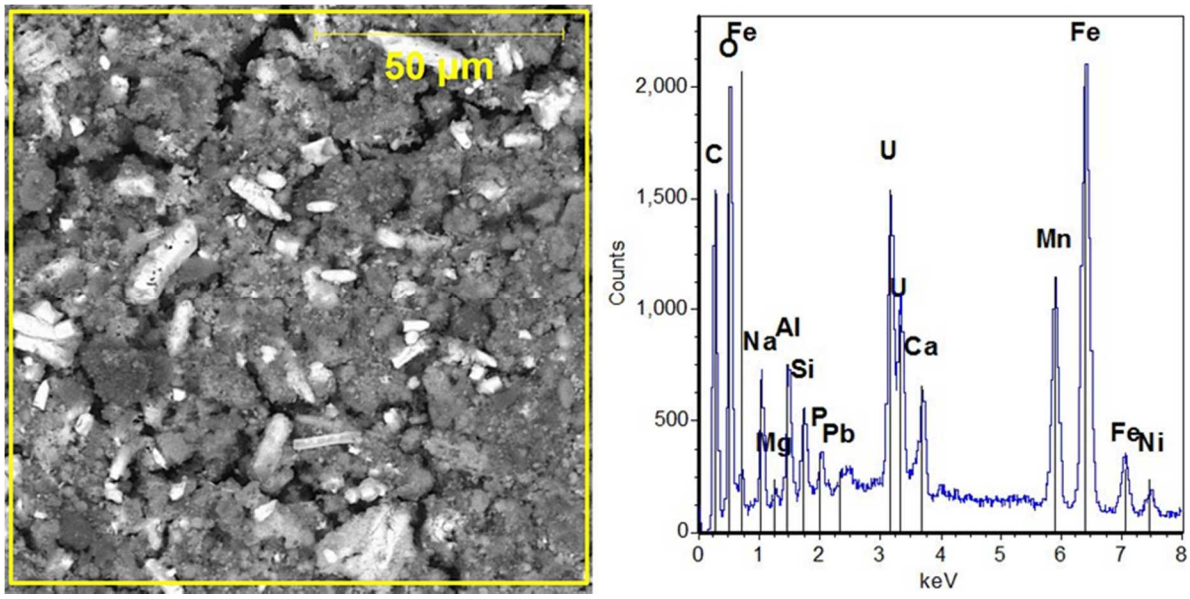


Figure 10. S16R000171 – 3a/3b (Centrifuged Solids of 105C-15-01) by Scanning Electron Microscopy; Area-Scan.

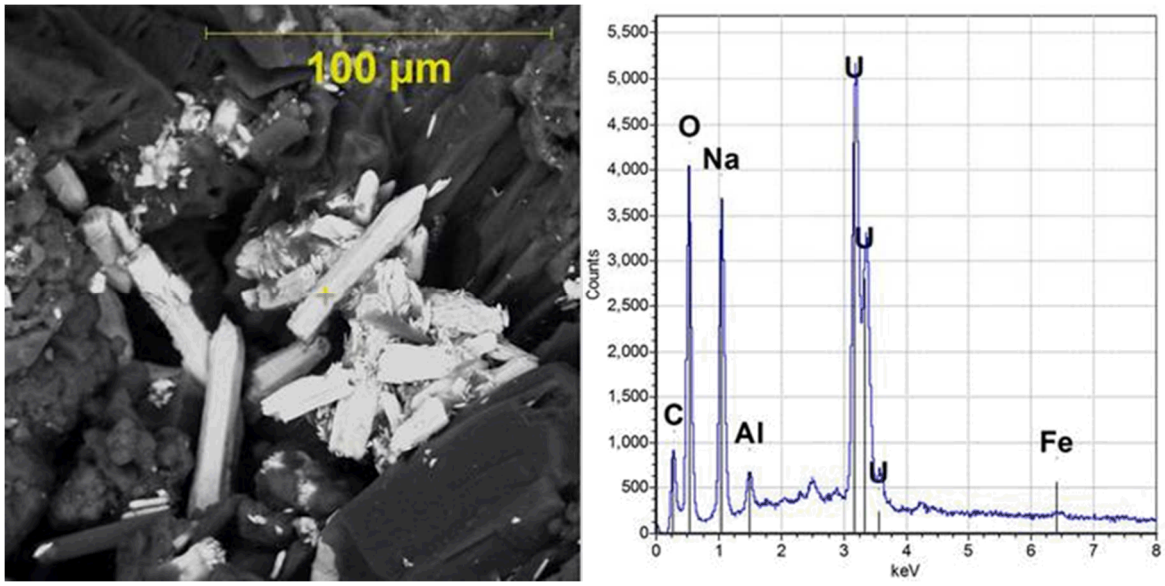


Figure 11. Cejkaite in Parent Grab Sample; Copy of Figure 23 from LAB-RPT-1500011.

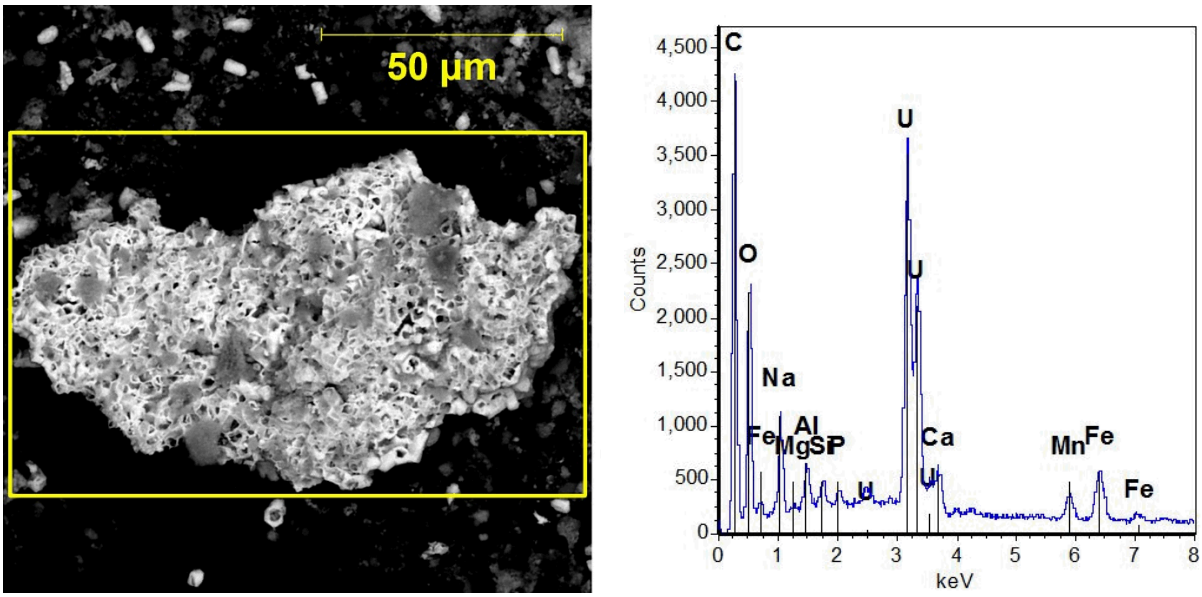


Figure 12. S16R000171 - 4a/4b (Centrifuged Solids of 105C-15-02) by Scanning Electron Microscopy.

6 QUALITY CONTROL

All testing carried out under this test plan followed ATS-MP-1032, "222-S Laboratory Quality Assurance Project Plan." All data entries specified in the test procedure were retained in controlled laboratory notebooks: HNF-N-832-1, "PSEM Instrument Notebook," HNF-N-710-1, "Rigaku Miniflex II XRD," HNF-N-395-1, "PLM Sample Log," and HNF-N-841-1, "Studies of Tank Samples e.g., C-105 Dissolution, AN-101 Floating Solids." Balance verification (for LE-BAL-048) was performed prior to use. Balance verification records are maintained in the Integrated Document Management System.

7 REFERENCES

ATS-LO-140-008, "Routine Use and Quality Assurance for Analytical Balances at 222-S Laboratory Complex," Washington River Protection Solutions LLC, Richland, Washington.

ATS-LT-161-103, "222-S Laboratory Technology Procedure for the ASPEX Explorer Scanning Electron Microscope," Washington River Protection Solutions LLC, Richland, Washington.

ATS-LT-161-104, "SEM Sample Preparation Procedure," Washington River Protection Solutions LLC, Richland, Washington.

ATS-LT-507-103, "222-S Laboratory X-Ray Diffractometry (XRD) Using the Rigaku MiniFlexII," Washington River Protection Solutions LLC, Richland, Washington.

ATS-LT-519-107, "222-S Laboratory Polarized Light Microscopy," Washington River Protection Solutions LLC, Richland, Washington.

ATS-MP-1032, "222-S Laboratory Quality Assurance Project Plan," Washington River Protection Solutions LLC, Richland, Washington.

HNF-N-395-1, "PLM Sample Log," 222-S Laboratory Analytical Notebook, Washington River Protection Solutions LLC, Richland, Washington.

HNF-N-710-1, "Rigaku Miniflex II XRD," 222-S Laboratory Analytical Notebook, Washington River Protection Solutions LLC, Richland, Washington.

HNF-N-832-1, "PSEM Instrument Notebook," 222-S Laboratory Analytical Notebook, Washington River Protection Solutions LLC, Richland, Washington.

HNF-N-841-1, "Studies of Tank Samples e.g., C-105 Dissolution, AN-101 Floating Solids," 222-S Laboratory Analytical Notebook, Washington River Protection Solutions LLC, Richland, Washington.

LA-211-102, "Determination of Free OH^-/H^+ Using Metrohm Titrando," WAI Hanford Laboratory, Richland, Washington.

LA-212-106, "pH Determination of Aqueous Samples," WAI Hanford Laboratory, Richland, Washington.

LA-342-100, "Determination of Carbon by Hot Persulfate Oxidation and Coulometric Detection," WAI Hanford Laboratory, Richland, Washington.

LA-505-174, "Inductively Coupled Plasma Emission Spectrometric Method for the Thermo Scientific iCAP 6500," WAI Hanford Laboratory, Richland, Washington.

LA-510-112, "Determination of Density for Free Liquid Samples," WAI Hanford Laboratory, Richland, Washington.

LA-514-115, "Thermal Stability and Percent Weight Loss Using the TA DSC and TGA," WAI Hanford Laboratory, Richland, Washington.

LA-533-166, "Ion Chromatographic Analysis of Anions and Small Organic Acids on DIONEX Model ICS 3000," WAI Hanford Laboratory, Richland, Washington.

LAB-RPT-1500011, 2015, "Solid Phase Characterization of Tank 241-C-105 Grab Samples," Rev. 0, Washington River Protection Solutions LLC, Richland, Washington.

Perry, R. H. and D. Green, 1985, Perry's Chemical Engineers' Handbook, 6th Ed., McGraw-Hill Book Co., New York, New York.

RPP-CALC-60933, 2016, "Residual Waste Volume of Tank 241-C-105 Following Operations of MARS-V System," Rev. 0, Washington River Protection Solutions LLC, Richland, Washington.

RPP-PLAN-60011, 2015, "Tank Sampling and Analysis Plan for Tank 241-C-105 Solids," Rev. 3, Washington River Protection Solutions LLC, Richland, Washington.

RPP-RPT-58071, 2014, "Derivation of Best-Basis Inventory for Tank 241-C-105 as of June 11, 2014," Rev. 0, Washington River Protection Solutions LLC, Richland, Washington.

RPP-RPT-58822, 2016, "Final Report for Investigation of Separable Organics in Solids," Rev.0, Washington River Protection Solutions LLC, Richland, Washington.

RPP-RPT-59115, 2016, "Final Analytical Report for Tank 241-C-105 Solid Waste Samples in Support of Retrieval Operations," Rev. 0, WAI Hanford Laboratory, Richland, Washington.

RPP-RPT-59147, 2016, "Development of a Scanning Electron Microscopy Based Method to Characterize Binding Phases of Hanford Tank Waste," Rev. 0, Washington River Protection Solutions LLC, Richland, Washington.

WRPS-1404813, 2015, "Test Plan for Solids Dissolution on Tank 241-C-105 Samples," Rev. 3, (internal letter from H. K. Meznarich to D. W. Hendrickson, December 9), Washington River Protection Solutions LLC, Richland, Washington.

APPENDIX A.

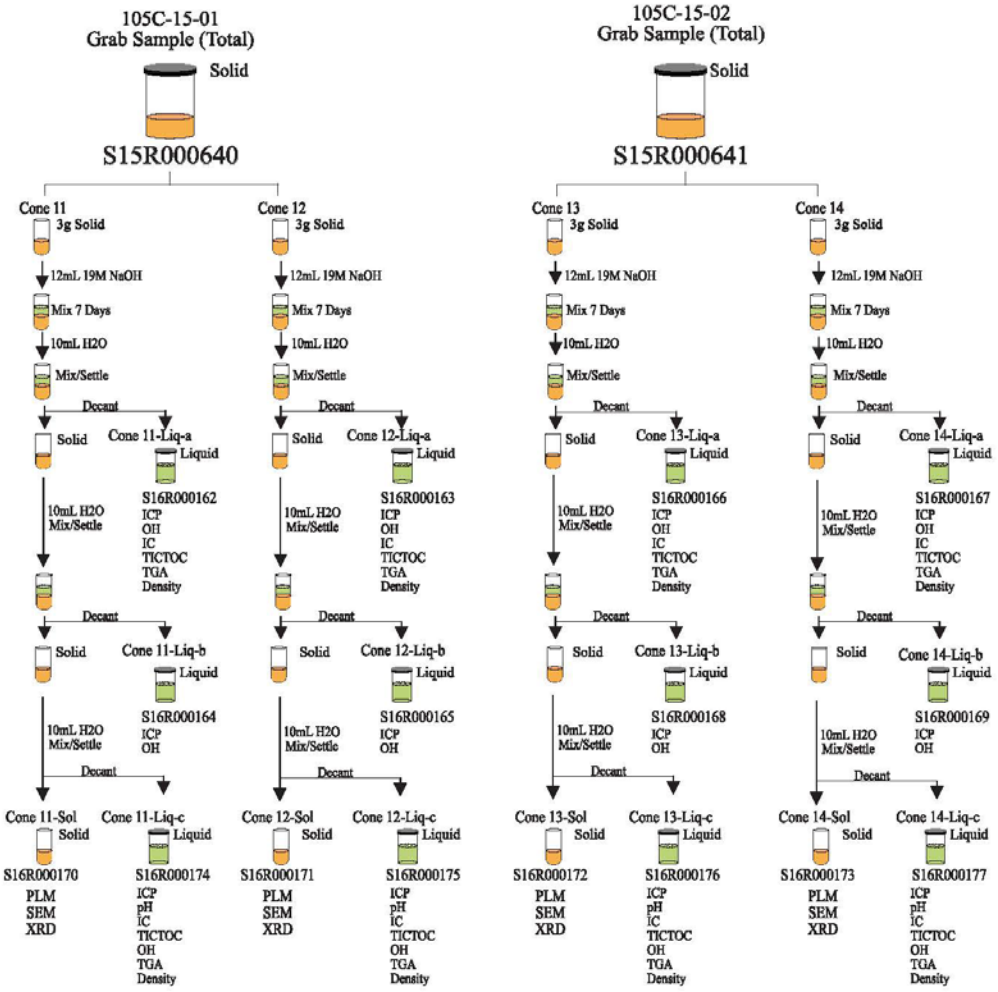
TANK 241-C-105 DISSOLUTION PHASE 2 STUDY

SAMPLE BREAK DOWN DIAGRAM

(2 pages, including cover page)

Customer: RESEARCH
Project: C105 Solids 2015 APD
Group: 20160542

TSCA: No Regulated Amount



APPENDIX B.

TANK 241-C-105 DISSOLUTION PHASE 2 STUDY

DATA SUMMARY REPORT – TANK 241-C-105 SOLIDS 2015-ANALYTICAL PROJECT DEVELOPMENT (APD)

(34 pages, including cover page)

DATA SUMMARY REPORT - C105 SOLIDS 2015-APD

Customer Sample ID	Segment Number	Laboratory Sample ID	Method	A	CAS #	Analyte	Result Unit	Standard % Recovery	Blank	Result	Duplicate	Average	RPD	Spike % Recovery	Det Limit	Qualifier	Sample Group
Con 11-Liq-c	C105-15-01	S16R000174	% Water by TGA		%WATER	Percent water	%	99.8	n/a	92.2	92.2	92.2	0.0542	n/a	0.0100		20160542
Con 12-Liq-c	C105-15-01	S16R000175	% Water by TGA		%WATER	Percent water	%	99.8	n/a	92.9	n/a	n/a	n/a	n/a	0.0100		20160542
Con 13-Liq-c	C105-15-02	S16R000176	% Water by TGA		%WATER	Percent water	%	99.8	n/a	93.8	n/a	n/a	n/a	n/a	0.0100		20160542
Con 14-Liq-c	C105-15-02	S16R000177	% Water by TGA		%WATER	Percent water	%	99.2	n/a	94.5	94.2	94.4	0.265	n/a	0.0100		20160542
Cone 1-Liq-a	C105-15-01	S15R000665	% Water by TGA		%WATER	Percent water	%	100	n/a	96.0	98.8	97.4	2.79	n/a	0.0100		20152628
Cone 1-Liq-a	C105-15-02	S15R000673	% Water by TGA		%WATER	Percent water	%	99.8	n/a	92.6	n/a	n/a	n/a	n/a	0.0100		20152628
Cone 1-Liq-a	C105-15-03	S15R000681	% Water by TGA		%WATER	Percent water	%	102	n/a	89.0	n/a	n/a	n/a	n/a	0.0100		20152628
Cone 1-Liq-b	C105-15-03	S15R000687	% Water by TGA		%WATER	Percent water	%	99.4	n/a	83.6	n/a	n/a	n/a	n/a	0.0100		20152628
Cone 11-Liq-a	C105-15-01	S16R000162	% Water by TGA		%WATER	Percent water	%	101	n/a	68.2	71.6	69.9	4.82	n/a	0.0100		20160542
Cone 12-Liq-a	C105-15-01	S16R000163	% Water by TGA		%WATER	Percent water	%	101	n/a	72.0	n/a	n/a	n/a	n/a	0.0100		20160542
Cone 13-Liq-a	C105-15-02	S16R000166	% Water by TGA		%WATER	Percent water	%	99.6	n/a	69.5	69.8	69.6	0.445	n/a	0.0100		20160542
Cone 14-Liq-a	C105-15-02	S16R000167	% Water by TGA		%WATER	Percent water	%	99.6	n/a	71.4	n/a	n/a	n/a	n/a	0.0100		20160542
Cone 2-Liq-a	C105-15-01	S15R000666	% Water by TGA		%WATER	Percent water	%	100	n/a	95.3	n/a	n/a	n/a	n/a	0.0100		20152628
Cone 2-Liq-a	C105-15-02	S15R000674	% Water by TGA		%WATER	Percent water	%	99.8	n/a	95.4	n/a	n/a	n/a	n/a	0.0100		20152628
Cone 2-Liq-a	C105-15-03	S15R000682	% Water by TGA		%WATER	Percent water	%	99.5	n/a	94.9	95.2	95.0	0.316	n/a	0.0100		20152628
Cone 2-Liq-b	C105-15-03	S15R000688	% Water by TGA		%WATER	Percent water	%	98.5	n/a	99.9	99.5	99.7	0.431	n/a	0.0100		20152628
Cone 3-Liq-a	C105-15-01	S15R000667	% Water by TGA		%WATER	Percent water	%	99.8	n/a	51.8	51.7	51.8	0.174	n/a	0.0100		20152628
Cone 3-Liq-a	C105-15-02	S15R000675	% Water by TGA		%WATER	Percent water	%	102	n/a	52.8	55.8	54.3	5.38	n/a	0.0100		20152628
Cone 3-Liq-a	C105-15-03	S15R000683	% Water by TGA		%WATER	Percent water	%	99.5	n/a	51.9	n/a	n/a	n/a	n/a	0.0100		20152628
Cone 3-Liq-b	C105-15-03	S15R000689	% Water by TGA		%WATER	Percent water	%	98.5	n/a	91.3	n/a	n/a	n/a	n/a	0.0100		20152628
Cone 4-Liq-a	C105-15-01	S15R000668	% Water by TGA		%WATER	Percent water	%	99.8	n/a	52.2	n/a	n/a	n/a	n/a	0.0100		20152628
Cone 4-Liq-a	C105-15-02	S15R000676	% Water by TGA		%WATER	Percent water	%	102	n/a	52.8	n/a	n/a	n/a	n/a	0.0100		20152628
Cone 4-Liq-a	C105-15-03	S15R000684	% Water by TGA		%WATER	Percent water	%	99.5	n/a	52.0	n/a	n/a	n/a	n/a	0.0100		20152628
Cone 4-Liq-b	C105-15-03	S15R000690	% Water by TGA		%WATER	Percent water	%	98.5	n/a	91.3	n/a	n/a	n/a	n/a	0.0100		20152628
Cone 5-Liq-a	C105-15-03	S15R000685	% Water by TGA		%WATER	Percent water	%	99.8	n/a	90.6	90.7	90.6	0.154	n/a	0.0100		20152628
Cone 5-Liq-b	C105-15-03	S15R000691	% Water by TGA		%WATER	Percent water	%	99.4	n/a	99.4	100	99.8	0.921	n/a	0.0100		20152628
Cone 6-Liq-a	C105-15-03	S15R000686	% Water by TGA		%WATER	Percent water	%	99.4	n/a	90.2	89.8	90.0	0.389	n/a	0.0100		20152628
Cone 6-Liq-b	C105-15-03	S15R000692	% Water by TGA		%WATER	Percent water	%	99.4	n/a	52.3	n/a	n/a	n/a	n/a	0.0100		20152628
Cone 7-Liq-a	C105-15-03	S15R000699	% Water by TGA		%WATER	Percent water	%	99.4	n/a	90.4	90.2	90.3	0.288	n/a	0.0100		20152628
Cone 7-Liq-b	C105-15-03	S15R000701	% Water by TGA		%WATER	Percent water	%	99.4	n/a	100	n/a	n/a	n/a	n/a	0.0100		20152628
Cone 8-Liq-a	C105-15-03	S15R000700	% Water by TGA		%WATER	Percent water	%	99.4	n/a	90.7	n/a	n/a	n/a	n/a	0.0100		20152628
Cone 8-Liq-b	C105-15-03	S15R000702	% Water by TGA		%WATER	Percent water	%	99.4	n/a	52.9	n/a	n/a	n/a	n/a	0.0100		20152628
Con 11-Liq-c	C105-15-01	S16R000174	Anions and Small Organic Acids		16984-48-8	Fluoride	ug/mL	102	<1.00E-03	463	464	463	0.301	101	0.500		20160542
Con 11-Liq-c	C105-15-01	S16R000174	Anions and Small Organic Acids		666-14-8	Glycolate	ug/mL	102	<5.00E-03	<2.50	<2.50	n/a	n/a	98.9	2.50	U	20160542
Con 11-Liq-c	C105-15-01	S16R000174	Anions and Small Organic Acids		71-50-1	Acetate	ug/mL	101	<0.0100	20.5	19.4	20.0	5.47	99.9	5.00	J	20160542
Con 11-Liq-c	C105-15-01	S16R000174	Anions and Small Organic Acids		12311-97-6	Formate	ug/mL	102	0.0530	31.3	31.6	31.5	1.07	97.8	3.50	BJ	20160542
Con 11-Liq-c	C105-15-01	S16R000174	Anions and Small Organic Acids		16887-00-6	Chloride	ug/mL	99.7	4.00E-03	11.0	11.0	11.0	0.246	94.8	2.00	BJ	20160542
Con 11-Liq-c	C105-15-01	S16R000174	Anions and Small Organic Acids		14797-65-0	Nitrite	ug/mL	103	<9.00E-03	649	650	649	0.184	100	4.50		20160542
Con 11-Liq-c	C105-15-01	S16R000174	Anions and Small Organic Acids		14808-79-8	Sulfate	ug/mL	103	<9.00E-03	922	923	923	0.0934	99.6	4.50		20160542
Con 11-Liq-c	C105-15-01	S16R000174	Anions and Small Organic Acids		338-70-5	Oxalate	ug/mL	103	0.0290	2.88E+03	2.89E+03	2.89E+03	0.0931	96.5	4.50		20160542
Con 11-Liq-c	C105-15-01	S16R000174	Anions and Small Organic Acids		24959-67-9	Bromide	ug/mL	106	<6.00E-03	<3.00	<3.00	n/a	n/a	99.0	3.00	U	20160542
Con 11-Liq-c	C105-15-01	S16R000174	Anions and Small Organic Acids		14797-55-8	Nitrate	ug/mL	106	<0.0210	260	259	259	0.457	101	10.5		20160542
Con 11-Liq-c	C105-15-01	S16R000174	Anions and Small Organic Acids		14265-44-2	Phosphate	ug/mL	107	<0.0140	1.05E+03	1.06E+03	1.05E+03	0.226	103	7.00		20160542
Con 11-Liq-c	C105-15-01	S16R000174	Anions and Small Organic Acids		7772-98-7	Thiosulfate	ug/mL	106	<6.00E-03	<3.00	<3.00	n/a	n/a	99.7	3.00	U	20160542
Con 12-Liq-c	C105-15-01	S16R000175	Anions and Small Organic Acids		16984-48-8	Fluoride	ug/mL	102	<1.00E-03	568	n/a	n/a	n/a	n/a	0.500		20160542
Con 12-Liq-c	C105-15-01	S16R000175	Anions and Small Organic Acids		666-14-8	Glycolate	ug/mL	102	<5.00E-03	<2.50	n/a	n/a	n/a	n/a	2.50	U	20160542
Con 12-Liq-c	C105-15-01	S16R000175	Anions and Small Organic Acids		71-50-1	Acetate	ug/mL	101	<0.0100	18.0	n/a	n/a	n/a	n/a	5.00	J	20160542
Con 12-Liq-c	C105-15-01	S16R000175	Anions and Small Organic Acids		12311-97-6	Formate	ug/mL	102	0.0530	31.9	n/a	n/a	n/a	n/a	3.50	BJ	20160542
Con 12-Liq-c	C105-15-01	S16R000175	Anions and Small Organic Acids		16887-00-6	Chloride	ug/mL	99.7	4.00E-03	10.1	n/a	n/a	n/a	n/a	2.00	BJ	20160542
Con 12-Liq-c	C105-15-01	S16R000175	Anions and Small Organic Acids		14797-65-0	Nitrite	ug/mL	103	<9.00E-03	470	n/a	n/a	n/a	n/a	4.50		20160542
Con 12-Liq-c	C105-15-01	S16R000175	Anions and Small Organic Acids		14808-79-8	Sulfate	ug/mL	103	<9.00E-03	1.14E+03	n/a	n/a	n/a	n/a	4.50		20160542
Con 12-Liq-c	C105-15-01	S16R000175	Anions and Small Organic Acids		338-70-5	Oxalate	ug/mL	103	0.0290	3.25E+03	n/a	n/a	n/a	n/a	4.50		20160542
Con 12-Liq-c	C105-15-01	S16R000175	Anions and Small Organic Acids		24959-67-9	Bromide	ug/mL	106	<6.00E-03	<3.00	n/a	n/a	n/a	n/a	3.00	U	20160542
Con 12-Liq-c	C105-15-01	S16R000175	Anions and Small Organic Acids		14797-55-8	Nitrate	ug/mL	106	<0.0210	210	n/a	n/a	n/a	n/a	10.5		20160542
Con 12-Liq-c	C105-15-01	S16R000175	Anions and Small Organic Acids		14265-44-2	Phosphate	ug/mL	107	<0.0140	1.44E+03	n/a	n/a	n/a	n/a	7.00		20160542
Con 12-Liq-c	C105-15-01	S16R000175	Anions and Small Organic Acids		7772-98-7	Thiosulfate	ug/mL	106	<6.00E-03	<3.00	n/a	n/a	n/a	n/a	3.00	U	20160542
Con 13-Liq-c	C105-15-02	S16R000176	Anions and Small Organic Acids		16984-48-8	Fluoride	ug/mL	102	<1.00E-03	302	n/a	n/a	n/a	n/a	0.500		20160542
Con 13-Liq-c	C105-15-02	S16R000176	Anions and Small Organic Acids		666-14-8	Glycolate	ug/mL	102	<5.00E-03	<2.50	n/a	n/a	n/a	n/a	2.50	U	20160542
Con 13-Liq-c	C105-15-02	S16R000176	Anions and Small Organic Acids		71-50-1	Acetate	ug/mL	101	<0.0100	22.0	n/a	n/a	n/a	n/a	5.00	J	20160542
Con 13-Liq-c	C105-15-02	S16R000176	Anions and Small Organic Acids		12311-97-6	Formate	ug/mL	102	0.0530	33.2	n/a	n/a	n/a	n/a	3.50	BJ	20160542
Con 13-Liq-c	C105-15-02	S16R000176	Anions and Small Organic Acids		16887-00-6	Chloride	ug/mL	99.7	4.00E-03	7.60	n/a	n/a	n/a	n/a	2.00	BJ	20160542
Con 13-Liq-c	C105-15-02	S16R000176	Anions and Small Organic Acids		14797-65-0	Nitrite	ug/mL	103	<9.00E-03	600	n/a	n/a	n/a	n/a	4.50		20160542
Con 13-Liq-c	C105-15-02	S16R000176	Anions and Small Organic Acids		14808-79-8	Sulfate	ug/mL	103	<9.00E-03	507	n/a	n/a	n/a	n/a	4.50		20160542
Con 13-Liq-c	C105-15-02	S16R000176	Anions and Small Organic Acids		338-70-5	Oxalate	ug/mL	103	0.0290	2.07E+03	n/a	n/a	n/a	n/a	4.50		20160542
Con 13-Liq-c	C105-15-02	S16R000176	Anions and Small Organic Acids		24959-67-9	Bromide	ug/mL	106	<6.00E-03	<3.00	n/a	n/a	n/a	n/a	3.00	U	20160542
Con 13-Liq-c	C105-15-02	S16R000176	Anions and Small Organic Acids		14797-55-8	Nitrate	ug/mL	106	<0.0210	238	n/a	n/a	n/a	n/a	10.5		20160542
Con 13-Liq-c	C105-15-02	S16R000176	Anions and Small Organic Acids		14265-44-2	Phosphate	ug/mL	107	<0.0140	1.00E+03	n/a	n/a	n/a	n/a	7.00		20160542
Con 13-Liq-c	C105-15-02	S16R000176	Anions and Small Organic Acids		7772-98-7	Thiosulfate	ug/mL	106	<6.00E-03	<3.00	n/a	n/a	n/a	n/a	3.00	U	20160542
Con 14-Liq-c	C105-15-02	S16R000177	Anions and Small Organic Acids		16984-48-8	Fluoride	ug/mL	102	<1.00E-03	276	n/a	n/a	n/a	n/a	0.500		20160542
Con 14-Liq-c	C105-15-02	S16R000177	Anions and Small Organic Acids		666-14-8	Glycolate	ug/mL	102	<5.00E-03	<2.50	n/a	n/a	n/a	n/a	2.50	U	20160542
Con 14-Liq-c	C105-15-02	S16R000177	Anions and Small Organic Acids		71-50-1	Acetate	ug/mL	101	<0.0100	16.7	n/a	n/a	n/a	n/a	5.00	J	20160542
Con 14-Liq-c	C105-15-02	S16R000177	Anions and Small Organic Acids		12311-97-6	Formate	ug/mL	102	0.0530	30.6	n/a	n/a	n/a	n/a	3.50	BJ	20160542
Con 14-Liq-c	C105-15-02	S16R000177	Anions and Small Organic Acids		16887-00-6	Chloride	ug/mL	99.7	4.00E-03	4.41	n/a	n/a	n/a	n/a	2.00	BJ	20160542
Con 14-Liq-c	C105-15-02	S16R000177	Anions and Small Organic Acids		14797-65-0	Nitrite	ug/mL	103	<9.00E-03	314	n/a	n/a	n/a	n/a	4.50		20160542
Con 14-Liq-c	C105-15-02	S16R000177	Anions and Small Organic Acids		14808-79-8	Sulfate	ug/mL	103	<9.00E-03	455	n/a	n/a	n/a	n/a	4.50		20160542
Con 14-Liq-c	C105-15-02	S16R000177	Anions and Small Organic Acids		338-70-5	Oxalate	ug/mL	103	0.0290	1.30E+03	n/a	n/a	n/a	n/a	4.50		20160542

Con 14-Liq-c	C105-15-02	S16R000177	Anions and Small Organic Acids	24959-67-9	Bromide	ug/mL	106	<6.00E-03	<3.00	n/a	n/a	n/a	n/a	3.00	U	20160542
Con 14-Liq-c	C105-15-02	S16R000177	Anions and Small Organic Acids	14797-55-8	Nitrate	ug/mL	106	<0.0210	150	n/a	n/a	n/a	n/a	10.5		20160542
Con 14-Liq-c	C105-15-02	S16R000177	Anions and Small Organic Acids	14265-44-2	Phosphate	ug/mL	107	<0.0140	916	n/a	n/a	n/a	n/a	7.00		20160542
Con 14-Liq-c	C105-15-02	S16R000177	Anions and Small Organic Acids	7772-98-7	Thiosulfate	ug/mL	106	<6.00E-03	<3.00	n/a	n/a	n/a	n/a	3.00	U	20160542
Cone 1-Liq-a	C105-15-01	S15R000665	Anions and Small Organic Acids	16984-48-8	Fluoride	ug/mL	97.0	<1.00E-03	270	272	271	0.754	101	0.500		20152628
Cone 1-Liq-a	C105-15-01	S15R000665	Anions and Small Organic Acids	666-14-8	Glycolate	ug/mL	96.8	<5.00E-03	<2.50	<2.50	n/a	n/a	98.5	2.50	U	20152628
Cone 1-Liq-a	C105-15-01	S15R000665	Anions and Small Organic Acids	71-50-1	Acetate	ug/mL	95.8	<0.0100	40.2	40.3	40.2	0.179	100	5.00	J	20152628
Cone 1-Liq-a	C105-15-01	S15R000665	Anions and Small Organic Acids	12311-97-6	Formate	ug/mL	97.5	0.0440	30.8	30.8	30.8	0.156	98.9	3.50	BJ	20152628
Cone 1-Liq-a	C105-15-01	S15R000665	Anions and Small Organic Acids	16887-00-6	Chloride	ug/mL	97.2	<4.00E-03	25.2	26.2	25.7	3.84	98.0	2.00		20152628
Cone 1-Liq-a	C105-15-01	S15R000665	Anions and Small Organic Acids	14797-65-0	Nitrite	ug/mL	97.3	<9.00E-03	2.29E+03	2.32E+03	2.31E+03	1.22	100	4.50		20152628
Cone 1-Liq-a	C105-15-01	S15R000665	Anions and Small Organic Acids	14808-79-8	Sulfate	ug/mL	97.1	<9.00E-03	907	904	905	0.305	99.2	4.50		20152628
Cone 1-Liq-a	C105-15-01	S15R000665	Anions and Small Organic Acids	338-70-5	Oxalate	ug/mL	97.0	0.0170	1.79E+03	1.81E+03	1.80E+03	0.951	97.2	4.50		20152628
Cone 1-Liq-a	C105-15-01	S15R000665	Anions and Small Organic Acids	24959-67-9	Bromide	ug/mL	98.0	<6.00E-03	<3.00	<3.00	n/a	n/a	96.3	3.00	U	20152628
Cone 1-Liq-a	C105-15-01	S15R000665	Anions and Small Organic Acids	14797-55-8	Nitrate	ug/mL	97.1	<0.0210	769	739	754	4.06	97.7	10.5		20152628
Cone 1-Liq-a	C105-15-01	S15R000665	Anions and Small Organic Acids	14265-44-2	Phosphate	ug/mL	96.1	<0.0140	937	883	910	5.94	94.8	7.00		20152628
Cone 1-Liq-a	C105-15-01	S15R000665	Anions and Small Organic Acids	7772-98-7	Thiosulfate	ug/mL	101	<6.00E-03	<3.00	<3.00	n/a	n/a	98.5	3.00	U	20152628
Cone 1-Liq-a	C105-15-02	S15R000673	Anions and Small Organic Acids	16984-48-8	Fluoride	ug/mL	97.0	<1.00E-03	372	n/a	n/a	n/a	n/a	0.500		20152628
Cone 1-Liq-a	C105-15-02	S15R000673	Anions and Small Organic Acids	666-14-8	Glycolate	ug/mL	96.8	<5.00E-03	<2.50	n/a	n/a	n/a	n/a	2.50	U	20152628
Cone 1-Liq-a	C105-15-02	S15R000673	Anions and Small Organic Acids	71-50-1	Acetate	ug/mL	95.8	<0.0100	60.8	n/a	n/a	n/a	n/a	5.00	J	20152628
Cone 1-Liq-a	C105-15-02	S15R000673	Anions and Small Organic Acids	12311-97-6	Formate	ug/mL	97.5	0.0440	37.8	n/a	n/a	n/a	n/a	3.50	BJ	20152628
Cone 1-Liq-a	C105-15-02	S15R000673	Anions and Small Organic Acids	16887-00-6	Chloride	ug/mL	97.2	<4.00E-03	36.9	n/a	n/a	n/a	n/a	2.00		20152628
Cone 1-Liq-a	C105-15-02	S15R000673	Anions and Small Organic Acids	14797-65-0	Nitrite	ug/mL	97.3	<9.00E-03	3.37E+03	n/a	n/a	n/a	n/a	4.50		20152628
Cone 1-Liq-a	C105-15-02	S15R000673	Anions and Small Organic Acids	14808-79-8	Sulfate	ug/mL	97.1	<9.00E-03	1.40E+03	n/a	n/a	n/a	n/a	4.50		20152628
Cone 1-Liq-a	C105-15-02	S15R000673	Anions and Small Organic Acids	338-70-5	Oxalate	ug/mL	97.0	0.0170	1.65E+03	n/a	n/a	n/a	n/a	4.50		20152628
Cone 1-Liq-a	C105-15-02	S15R000673	Anions and Small Organic Acids	24959-67-9	Bromide	ug/mL	98.0	<6.00E-03	<3.00	n/a	n/a	n/a	n/a	3.00	U	20152628
Cone 1-Liq-a	C105-15-02	S15R000673	Anions and Small Organic Acids	14797-55-8	Nitrate	ug/mL	97.1	<0.0210	1.08E+03	n/a	n/a	n/a	n/a	10.5		20152628
Cone 1-Liq-a	C105-15-02	S15R000673	Anions and Small Organic Acids	14265-44-2	Phosphate	ug/mL	96.1	<0.0140	1.88E+03	n/a	n/a	n/a	n/a	7.00		20152628
Cone 1-Liq-a	C105-15-02	S15R000673	Anions and Small Organic Acids	7772-98-7	Thiosulfate	ug/mL	101	<6.00E-03	<3.00	n/a	n/a	n/a	n/a	3.00	U	20152628
Cone 1-Liq-a	C105-15-03	S15R000681	Anions and Small Organic Acids	16984-48-8	Fluoride	ug/mL	96.4	<1.00E-03	401	n/a	n/a	n/a	n/a	0.500		20152628
Cone 1-Liq-a	C105-15-03	S15R000681	Anions and Small Organic Acids	666-14-8	Glycolate	ug/mL	96.5	<5.00E-03	<2.50	n/a	n/a	n/a	n/a	2.50	U	20152628
Cone 1-Liq-a	C105-15-03	S15R000681	Anions and Small Organic Acids	71-50-1	Acetate	ug/mL	95.8	<0.0100	97.2	n/a	n/a	n/a	n/a	5.00	J	20152628
Cone 1-Liq-a	C105-15-03	S15R000681	Anions and Small Organic Acids	12311-97-6	Formate	ug/mL	97.5	0.0460	38.5	n/a	n/a	n/a	n/a	3.50	BJ	20152628
Cone 1-Liq-a	C105-15-03	S15R000681	Anions and Small Organic Acids	16887-00-6	Chloride	ug/mL	95.6	<4.00E-03	56.9	n/a	n/a	n/a	n/a	2.00		20152628
Cone 1-Liq-a	C105-15-03	S15R000681	Anions and Small Organic Acids	14797-65-0	Nitrite	ug/mL	96.6	<9.00E-03	5.44E+03	n/a	n/a	n/a	n/a	4.50		20152628
Cone 1-Liq-a	C105-15-03	S15R000681	Anions and Small Organic Acids	14808-79-8	Sulfate	ug/mL	96.3	<9.00E-03	1.76E+03	n/a	n/a	n/a	n/a	4.50		20152628
Cone 1-Liq-a	C105-15-03	S15R000681	Anions and Small Organic Acids	338-70-5	Oxalate	ug/mL	95.3	0.0170	1.25E+03	n/a	n/a	n/a	n/a	4.50		20152628
Cone 1-Liq-a	C105-15-03	S15R000681	Anions and Small Organic Acids	24959-67-9	Bromide	ug/mL	95.1	<6.00E-03	<3.00	n/a	n/a	n/a	n/a	3.00	U	20152628
Cone 1-Liq-a	C105-15-03	S15R000681	Anions and Small Organic Acids	14797-55-8	Nitrate	ug/mL	95.0	<0.0210	1.44E+03	n/a	n/a	n/a	n/a	10.5		20152628
Cone 1-Liq-a	C105-15-03	S15R000681	Anions and Small Organic Acids	14265-44-2	Phosphate	ug/mL	92.9	<0.0140	1.70E+03	n/a	n/a	n/a	n/a	7.00		20152628
Cone 1-Liq-a	C105-15-03	S15R000681	Anions and Small Organic Acids	7772-98-7	Thiosulfate	ug/mL	96.3	<6.00E-03	<3.00	n/a	n/a	n/a	n/a	3.00	U	20152628
Cone 1-Liq-b	C105-15-03	S15R000687	Anions and Small Organic Acids	16984-48-8	Fluoride	ug/mL	96.4	<1.00E-03	297	n/a	n/a	n/a	n/a	0.500		20152628
Cone 1-Liq-b	C105-15-03	S15R000687	Anions and Small Organic Acids	666-14-8	Glycolate	ug/mL	96.5	<5.00E-03	<2.50	n/a	n/a	n/a	n/a	2.50	U	20152628
Cone 1-Liq-b	C105-15-03	S15R000687	Anions and Small Organic Acids	71-50-1	Acetate	ug/mL	95.8	<0.0100	14.2	n/a	n/a	n/a	n/a	5.00	J	20152628
Cone 1-Liq-b	C105-15-03	S15R000687	Anions and Small Organic Acids	12311-97-6	Formate	ug/mL	97.5	0.0460	23.9	n/a	n/a	n/a	n/a	3.50	BJ	20152628
Cone 1-Liq-b	C105-15-03	S15R000687	Anions and Small Organic Acids	16887-00-6	Chloride	ug/mL	95.6	<4.00E-03	7.86	n/a	n/a	n/a	n/a	2.00	J	20152628
Cone 1-Liq-b	C105-15-03	S15R000687	Anions and Small Organic Acids	14797-65-0	Nitrite	ug/mL	96.6	<9.00E-03	438	n/a	n/a	n/a	n/a	4.50		20152628
Cone 1-Liq-b	C105-15-03	S15R000687	Anions and Small Organic Acids	14808-79-8	Sulfate	ug/mL	96.3	<9.00E-03	180	n/a	n/a	n/a	n/a	4.50		20152628
Cone 1-Liq-b	C105-15-03	S15R000687	Anions and Small Organic Acids	338-70-5	Oxalate	ug/mL	95.3	0.0170	125	n/a	n/a	n/a	n/a	4.50	BJ	20152628
Cone 1-Liq-b	C105-15-03	S15R000687	Anions and Small Organic Acids	24959-67-9	Bromide	ug/mL	95.1	<6.00E-03	<3.00	n/a	n/a	n/a	n/a	3.00	U	20152628
Cone 1-Liq-b	C105-15-03	S15R000687	Anions and Small Organic Acids	14797-55-8	Nitrate	ug/mL	95.0	<0.0210	135	n/a	n/a	n/a	n/a	10.5	J	20152628
Cone 1-Liq-b	C105-15-03	S15R000687	Anions and Small Organic Acids	14265-44-2	Phosphate	ug/mL	92.9	<0.0140	184	n/a	n/a	n/a	n/a	7.00		20152628
Cone 1-Liq-b	C105-15-03	S15R000687	Anions and Small Organic Acids	7772-98-7	Thiosulfate	ug/mL	96.3	<6.00E-03	<3.00	n/a	n/a	n/a	n/a	3.00	U	20152628
Cone 11-Liq-a	C105-15-01	S16R000162	Anions and Small Organic Acids	16984-48-8	Fluoride	ug/mL	102	<1.00E-03	203	201	202	0.940	96.4	0.200		20160542
Cone 11-Liq-a	C105-15-01	S16R000162	Anions and Small Organic Acids	666-14-8	Glycolate	ug/mL	102	<5.00E-03	<1.00	<1.00	n/a	n/a	101	1.00	U	20160542
Cone 11-Liq-a	C105-15-01	S16R000162	Anions and Small Organic Acids	71-50-1	Acetate	ug/mL	100	<0.0100	71.2	75.9	73.6	6.46	99.9	2.00		20160542
Cone 11-Liq-a	C105-15-01	S16R000162	Anions and Small Organic Acids	12311-97-6	Formate	ug/mL	102	<7.00E-03	17.9	17.0	17.4	5.37	102	1.40	J	20160542
Cone 11-Liq-a	C105-15-01	S16R000162	Anions and Small Organic Acids	16887-00-6	Chloride	ug/mL	98.0	<4.00E-03	31.5	31.0	31.2	1.49	90.4	0.800		20160542
Cone 11-Liq-a	C105-15-01	S16R000162	Anions and Small Organic Acids	14797-65-0	Nitrite	ug/mL	103	<9.00E-03	3.25E+03	3.24E+03	3.25E+03	0.206	98.1	1.80		20160542
Cone 11-Liq-a	C105-15-01	S16R000162	Anions and Small Organic Acids	14808-79-8	Sulfate	ug/mL	102	<9.00E-03	348	348	348	0.147	98.6	1.80		20160542
Cone 11-Liq-a	C105-15-01	S16R000162	Anions and Small Organic Acids	338-70-5	Oxalate	ug/mL	102	<9.00E-03	58.2	57.7	58.0	0.933	86.9	1.80		20160542
Cone 11-Liq-a	C105-15-01	S16R000162	Anions and Small Organic Acids	24959-67-9	Bromide	ug/mL	103	<6.00E-03	<1.20	<1.20	n/a	n/a	110	1.20	U	20160542
Cone 11-Liq-a	C105-15-01	S16R000162	Anions and Small Organic Acids	14797-55-8	Nitrate	ug/mL	103	<0.0210	1.12E+03	1.12E+03	1.12E+03	0.0771	99.3	4.20		20160542
Cone 11-Liq-a	C105-15-01	S16R000162	Anions and Small Organic Acids	14265-44-2	Phosphate	ug/mL	103	<0.0140	440	437	438	0.691	99.3	2.80		20160542
Cone 11-Liq-a	C105-15-01	S16R000162	Anions and Small Organic Acids	7772-98-7	Thiosulfate	ug/mL	102	<6.00E-03	<1.20	<1.20	n/a	n/a	101	1.20	U	20160542
Cone 12-Liq-a	C105-15-01	S16R000163	Anions and Small Organic Acids	16984-48-8	Fluoride	ug/mL	102	<1.00E-03	167	n/a	n/a	n/a	n/a	0.200		20160542
Cone 12-Liq-a	C105-15-01	S16R000163	Anions and Small Organic Acids	666-14-8	Glycolate	ug/mL	102	<5.00E-03	<1.00	n/a	n/a	n/a	n/a	1.00	U	20160542
Cone 12-Liq-a	C105-15-01	S16R000163	Anions and Small Organic Acids	71-50-1	Acetate	ug/mL	100	<0.0100	74.5	n/a	n/a	n/a	n/a	2.00		20160542
Cone 12-Liq-a	C105-15-01	S16R000163	Anions and Small Organic Acids	12311-97-6	Formate	ug/mL	102	<7.00E-03	16.7	n/a	n/a	n/a	n/a	1.40	J	20160542
Cone 12-Liq-a	C105-15-01	S16R000163	Anions and Small Organic Acids	16887-00-6	Chloride	ug/mL	98.0	<4.00E-03	31.2	n/a	n/a	n/a	n/a	0.800		20160542
Cone 12-Liq-a	C105-15-01	S16R000163	Anions and Small Organic Acids	14797-65-0	Nitrite	ug/mL	103	<9.00E-03	3.42E+03	n/a	n/a	n/a	n/a	1.80		20160542
Cone 12-Liq-a	C105-15-01	S16R000163	Anions and Small Organic Acids	14808-79-8	Sulfate	ug/mL	102	<9.00E-03	321	n/a	n/a	n/a	n/a	1.80		20160542
Cone 12-Liq-a	C105-15-01	S16R000163	Anions and Small Organic Acids	338-70-5	Oxalate	ug/mL	102	<9.00E-03	53.2	n/a	n/a	n/a	n/a	1.80		20160542
Cone 12-Liq-a	C105-15-01	S16R000163	Anions and Small Organic Acids	24959-67-9	Bromide	ug/mL	103	<6.00E-03	<1.20	n/a	n/a	n/a	n/a	1.20	U	20160542
Cone 12-Liq-a	C105-15-01	S16R000163	Anions and Small Organic Acids	14797-55-8	Nitrate	ug/mL	103	<0.0210	1.17E+03	n/a	n/a	n/a	n/a	4.20		20160542
Cone 12-Liq-a	C105-15-01	S16R000163	Anions and Small Organic Acids	14265-44-2	Phosphate	ug/mL	103	<0.0140	485	n/a	n/a	n/a	n/a	2.80		20160542
Cone 12-Liq-a	C105-15-01	S16R000163	Anions and Small Organic Acids	7772-98-7	Thiosulfate	ug/mL	102	<6.00E-03	<1.20	n/a	n/a	n/a	n/a	1.20	U	20160542
Cone 13-Liq-a	C105-15-02	S16R000166	Anions and Small Organic Acids	16984-48-8	Fluoride	ug/mL	102	<1.00E-03	203	n/a	n/a	n/a	n/a	0.200		20160542
Cone 13-Liq-a	C105-15-02	S16R000166	Anions and Small Organic Acids	666-14-8	Glycolate	ug/mL	102	<5.00E-03	<1.00	n/a	n/a	n/a	n/a	1.00	U	20160542
Cone 13-Liq-a	C105-15-02	S16R000166	Anions and Small Organic Acids	71-50-1	Acetate	ug/mL	100	<0.0100	56.6	n/a	n/a	n/a	n/a	2.00		20160542
Cone 13-Liq-a	C105-15-02	S16R000166	Anions and Small Organic Acids	12311-97-6	Formate	ug/mL	102	<7.00E-03	13.9	n/a	n/a	n/a	n/a	1.40	J	20160542
Cone 13-Liq-a	C105-15-02	S16R000166	Anions and Small Organic Acids	16887-00-6	Chloride	ug/mL	98.0	<4.00E-03	28.4	n/a	n/a	n/a	n/a	0.800		20160542
Cone 13-Liq-a	C105-15-02	S16R000166	Anions and Small Organic Acids	14797-65-0	Nitrite	ug/mL	103	<9.00E-03	2.84E+03	n/a	n/a	n/a	n/a	1.80		20160542

Cone 13-Liq-a	C105-15-02	S16R000166	Anions and Small Organic Acids	14808-79-8	Sulfate	ug/mL	102	<9.00E-03	424	n/a	n/a	n/a	n/a	1.80		20160542
Cone 13-Liq-a	C105-15-02	S16R000166	Anions and Small Organic Acids	338-70-5	Oxalate	ug/mL	102	<9.00E-03	48.1	n/a	n/a	n/a	n/a	1.80	J	20160542
Cone 13-Liq-a	C105-15-02	S16R000166	Anions and Small Organic Acids	24959-67-9	Bromide	ug/mL	103	<6.00E-03	<1.20	n/a	n/a	n/a	n/a	1.20	U	20160542
Cone 13-Liq-a	C105-15-02	S16R000166	Anions and Small Organic Acids	14797-55-8	Nitrate	ug/mL	103	<0.0210	1.01E+03	n/a	n/a	n/a	n/a	4.20		20160542
Cone 13-Liq-a	C105-15-02	S16R000166	Anions and Small Organic Acids	14265-44-2	Phosphate	ug/mL	103	<0.0140	452	n/a	n/a	n/a	n/a	2.80		20160542
Cone 13-Liq-a	C105-15-02	S16R000166	Anions and Small Organic Acids	7772-98-7	Thiosulfate	ug/mL	102	<6.00E-03	<1.20	n/a	n/a	n/a	n/a	1.20	U	20160542
Cone 14-Liq-a	C105-15-02	S16R000167	Anions and Small Organic Acids	16984-48-8	Fluoride	ug/mL	102	<1.00E-03	207	n/a	n/a	n/a	n/a	0.200		20160542
Cone 14-Liq-a	C105-15-02	S16R000167	Anions and Small Organic Acids	666-14-8	Glycolate	ug/mL	102	<5.00E-03	<1.00	n/a	n/a	n/a	n/a	1.00	U	20160542
Cone 14-Liq-a	C105-15-02	S16R000167	Anions and Small Organic Acids	71-50-1	Acetate	ug/mL	100	<0.0100	70.6	n/a	n/a	n/a	n/a	2.00		20160542
Cone 14-Liq-a	C105-15-02	S16R000167	Anions and Small Organic Acids	12311-97-6	Formate	ug/mL	102	<7.00E-03	15.0	n/a	n/a	n/a	n/a	1.40	J	20160542
Cone 14-Liq-a	C105-15-02	S16R000167	Anions and Small Organic Acids	16887-00-6	Chloride	ug/mL	98.0	<4.00E-03	32.3	n/a	n/a	n/a	n/a	0.800		20160542
Cone 14-Liq-a	C105-15-02	S16R000167	Anions and Small Organic Acids	14797-65-0	Nitrite	ug/mL	103	<9.00E-03	3.21E+03	n/a	n/a	n/a	n/a	1.80		20160542
Cone 14-Liq-a	C105-15-02	S16R000167	Anions and Small Organic Acids	14808-79-8	Sulfate	ug/mL	102	<9.00E-03	418	n/a	n/a	n/a	n/a	1.80		20160542
Cone 14-Liq-a	C105-15-02	S16R000167	Anions and Small Organic Acids	338-70-5	Oxalate	ug/mL	102	<9.00E-03	47.8	n/a	n/a	n/a	n/a	1.80	J	20160542
Cone 14-Liq-a	C105-15-02	S16R000167	Anions and Small Organic Acids	24959-67-9	Bromide	ug/mL	103	<6.00E-03	<1.20	n/a	n/a	n/a	n/a	1.20	U	20160542
Cone 14-Liq-a	C105-15-02	S16R000167	Anions and Small Organic Acids	14797-55-8	Nitrate	ug/mL	103	<0.0210	1.15E+03	n/a	n/a	n/a	n/a	4.20		20160542
Cone 14-Liq-a	C105-15-02	S16R000167	Anions and Small Organic Acids	14265-44-2	Phosphate	ug/mL	103	<0.0140	411	n/a	n/a	n/a	n/a	2.80		20160542
Cone 14-Liq-a	C105-15-02	S16R000167	Anions and Small Organic Acids	7772-98-7	Thiosulfate	ug/mL	102	<6.00E-03	<1.20	n/a	n/a	n/a	n/a	1.20	U	20160542
Cone 2-Liq-a	C105-15-01	S15R000666	Anions and Small Organic Acids	16984-48-8	Fluoride	ug/mL	97.0	<1.00E-03	329	n/a	n/a	n/a	n/a	0.500		20152628
Cone 2-Liq-a	C105-15-01	S15R000666	Anions and Small Organic Acids	666-14-8	Glycolate	ug/mL	96.8	<5.00E-03	<2.50	n/a	n/a	n/a	n/a	2.50	U	20152628
Cone 2-Liq-a	C105-15-01	S15R000666	Anions and Small Organic Acids	71-50-1	Acetate	ug/mL	95.8	<0.0100	55.7	n/a	n/a	n/a	n/a	5.00	J	20152628
Cone 2-Liq-a	C105-15-01	S15R000666	Anions and Small Organic Acids	12311-97-6	Formate	ug/mL	97.5	0.0440	35.6	n/a	n/a	n/a	n/a	3.50	BJ	20152628
Cone 2-Liq-a	C105-15-01	S15R000666	Anions and Small Organic Acids	16887-00-6	Chloride	ug/mL	97.2	<4.00E-03	36.5	n/a	n/a	n/a	n/a	2.00		20152628
Cone 2-Liq-a	C105-15-01	S15R000666	Anions and Small Organic Acids	14797-65-0	Nitrite	ug/mL	97.3	<9.00E-03	3.30E+03	n/a	n/a	n/a	n/a	4.50		20152628
Cone 2-Liq-a	C105-15-01	S15R000666	Anions and Small Organic Acids	14808-79-8	Sulfate	ug/mL	97.1	<9.00E-03	1.42E+03	n/a	n/a	n/a	n/a	4.50		20152628
Cone 2-Liq-a	C105-15-01	S15R000666	Anions and Small Organic Acids	338-70-5	Oxalate	ug/mL	97.0	0.0170	2.58E+03	n/a	n/a	n/a	n/a	4.50		20152628
Cone 2-Liq-a	C105-15-01	S15R000666	Anions and Small Organic Acids	24959-67-9	Bromide	ug/mL	98.0	<6.00E-03	<3.00	n/a	n/a	n/a	n/a	3.00	U	20152628
Cone 2-Liq-a	C105-15-01	S15R000666	Anions and Small Organic Acids	14797-55-8	Nitrate	ug/mL	97.1	<0.0210	1.06E+03	n/a	n/a	n/a	n/a	10.5		20152628
Cone 2-Liq-a	C105-15-01	S15R000666	Anions and Small Organic Acids	14265-44-2	Phosphate	ug/mL	96.1	<0.0140	1.36E+03	n/a	n/a	n/a	n/a	7.00		20152628
Cone 2-Liq-a	C105-15-01	S15R000666	Anions and Small Organic Acids	7772-98-7	Thiosulfate	ug/mL	101	<6.00E-03	<3.00	n/a	n/a	n/a	n/a	3.00	U	20152628
Cone 2-Liq-a	C105-15-02	S15R000674	Anions and Small Organic Acids	16984-48-8	Fluoride	ug/mL	97.0	<1.00E-03	419	n/a	n/a	n/a	n/a	0.500		20152628
Cone 2-Liq-a	C105-15-02	S15R000674	Anions and Small Organic Acids	666-14-8	Glycolate	ug/mL	96.8	<5.00E-03	<2.50	n/a	n/a	n/a	n/a	2.50	U	20152628
Cone 2-Liq-a	C105-15-02	S15R000674	Anions and Small Organic Acids	71-50-1	Acetate	ug/mL	95.8	<0.0100	66.1	n/a	n/a	n/a	n/a	5.00	J	20152628
Cone 2-Liq-a	C105-15-02	S15R000674	Anions and Small Organic Acids	12311-97-6	Formate	ug/mL	97.5	0.0440	39.2	n/a	n/a	n/a	n/a	3.50	BJ	20152628
Cone 2-Liq-a	C105-15-02	S15R000674	Anions and Small Organic Acids	16887-00-6	Chloride	ug/mL	97.2	<4.00E-03	40.7	n/a	n/a	n/a	n/a	2.00		20152628
Cone 2-Liq-a	C105-15-02	S15R000674	Anions and Small Organic Acids	14797-65-0	Nitrite	ug/mL	97.3	<9.00E-03	3.78E+03	n/a	n/a	n/a	n/a	4.50		20152628
Cone 2-Liq-a	C105-15-02	S15R000674	Anions and Small Organic Acids	14808-79-8	Sulfate	ug/mL	97.1	<9.00E-03	1.56E+03	n/a	n/a	n/a	n/a	4.50		20152628
Cone 2-Liq-a	C105-15-02	S15R000674	Anions and Small Organic Acids	338-70-5	Oxalate	ug/mL	97.0	0.0170	1.62E+03	n/a	n/a	n/a	n/a	4.50		20152628
Cone 2-Liq-a	C105-15-02	S15R000674	Anions and Small Organic Acids	24959-67-9	Bromide	ug/mL	98.0	<6.00E-03	<3.00	n/a	n/a	n/a	n/a	3.00	U	20152628
Cone 2-Liq-a	C105-15-02	S15R000674	Anions and Small Organic Acids	14797-55-8	Nitrate	ug/mL	97.1	<0.0210	1.22E+03	n/a	n/a	n/a	n/a	10.5		20152628
Cone 2-Liq-a	C105-15-02	S15R000674	Anions and Small Organic Acids	14265-44-2	Phosphate	ug/mL	96.1	<0.0140	2.07E+03	n/a	n/a	n/a	n/a	7.00		20152628
Cone 2-Liq-a	C105-15-02	S15R000674	Anions and Small Organic Acids	7772-98-7	Thiosulfate	ug/mL	101	<6.00E-03	<3.00	n/a	n/a	n/a	n/a	3.00	U	20152628
Cone 2-Liq-a	C105-15-03	S15R000682	Anions and Small Organic Acids	16984-48-8	Fluoride	ug/mL	96.4	<1.00E-03	358	n/a	n/a	n/a	n/a	0.500		20152628
Cone 2-Liq-a	C105-15-03	S15R000682	Anions and Small Organic Acids	666-14-8	Glycolate	ug/mL	96.5	<5.00E-03	<2.50	n/a	n/a	n/a	n/a	2.50	U	20152628
Cone 2-Liq-a	C105-15-03	S15R000682	Anions and Small Organic Acids	71-50-1	Acetate	ug/mL	95.8	<0.0100	89.7	n/a	n/a	n/a	n/a	5.00	J	20152628
Cone 2-Liq-a	C105-15-03	S15R000682	Anions and Small Organic Acids	12311-97-6	Formate	ug/mL	97.5	0.0460	38.3	n/a	n/a	n/a	n/a	3.50	BJ	20152628
Cone 2-Liq-a	C105-15-03	S15R000682	Anions and Small Organic Acids	16887-00-6	Chloride	ug/mL	95.6	<4.00E-03	52.9	n/a	n/a	n/a	n/a	2.00		20152628
Cone 2-Liq-a	C105-15-03	S15R000682	Anions and Small Organic Acids	14797-65-0	Nitrite	ug/mL	96.6	<9.00E-03	4.99E+03	n/a	n/a	n/a	n/a	4.50		20152628
Cone 2-Liq-a	C105-15-03	S15R000682	Anions and Small Organic Acids	14808-79-8	Sulfate	ug/mL	96.3	<9.00E-03	1.49E+03	n/a	n/a	n/a	n/a	4.50		20152628
Cone 2-Liq-a	C105-15-03	S15R000682	Anions and Small Organic Acids	338-70-5	Oxalate	ug/mL	95.3	0.0170	1.19E+03	n/a	n/a	n/a	n/a	4.50		20152628
Cone 2-Liq-a	C105-15-03	S15R000682	Anions and Small Organic Acids	24959-67-9	Bromide	ug/mL	95.1	<6.00E-03	<3.00	n/a	n/a	n/a	n/a	3.00	U	20152628
Cone 2-Liq-a	C105-15-03	S15R000682	Anions and Small Organic Acids	14797-55-8	Nitrate	ug/mL	95.0	<0.0210	1.31E+03	n/a	n/a	n/a	n/a	10.5		20152628
Cone 2-Liq-a	C105-15-03	S15R000682	Anions and Small Organic Acids	14265-44-2	Phosphate	ug/mL	92.9	<0.0140	1.44E+03	n/a	n/a	n/a	n/a	7.00		20152628
Cone 2-Liq-a	C105-15-03	S15R000682	Anions and Small Organic Acids	7772-98-7	Thiosulfate	ug/mL	96.3	<6.00E-03	<3.00	n/a	n/a	n/a	n/a	3.00	U	20152628
Cone 2-Liq-b	C105-15-03	S15R000688	Anions and Small Organic Acids	16984-48-8	Fluoride	ug/mL	96.4	<1.00E-03	272	n/a	n/a	n/a	n/a	0.500		20152628
Cone 2-Liq-b	C105-15-03	S15R000688	Anions and Small Organic Acids	666-14-8	Glycolate	ug/mL	96.5	<5.00E-03	<2.50	n/a	n/a	n/a	n/a	2.50	U	20152628
Cone 2-Liq-b	C105-15-03	S15R000688	Anions and Small Organic Acids	71-50-1	Acetate	ug/mL	95.8	<0.0100	13.0	n/a	n/a	n/a	n/a	5.00	J	20152628
Cone 2-Liq-b	C105-15-03	S15R000688	Anions and Small Organic Acids	12311-97-6	Formate	ug/mL	97.5	0.0460	23.5	n/a	n/a	n/a	n/a	3.50	J	20152628
Cone 2-Liq-b	C105-15-03	S15R000688	Anions and Small Organic Acids	16887-00-6	Chloride	ug/mL	95.6	<4.00E-03	7.16	n/a	n/a	n/a	n/a	2.00	J	20152628
Cone 2-Liq-b	C105-15-03	S15R000688	Anions and Small Organic Acids	14797-65-0	Nitrite	ug/mL	96.6	<9.00E-03	374	n/a	n/a	n/a	n/a	4.50		20152628
Cone 2-Liq-b	C105-15-03	S15R000688	Anions and Small Organic Acids	14808-79-8	Sulfate	ug/mL	96.3	<9.00E-03	147	n/a	n/a	n/a	n/a	4.50	J	20152628
Cone 2-Liq-b	C105-15-03	S15R000688	Anions and Small Organic Acids	338-70-5	Oxalate	ug/mL	95.3	0.0170	126	n/a	n/a	n/a	n/a	4.50	BJ	20152628
Cone 2-Liq-b	C105-15-03	S15R000688	Anions and Small Organic Acids	24959-67-9	Bromide	ug/mL	95.1	<6.00E-03	<3.00	n/a	n/a	n/a	n/a	3.00	U	20152628
Cone 2-Liq-b	C105-15-03	S15R000688	Anions and Small Organic Acids	14797-55-8	Nitrate	ug/mL	95.0	<0.0210	119	n/a	n/a	n/a	n/a	10.5	J	20152628
Cone 2-Liq-b	C105-15-03	S15R000688	Anions and Small Organic Acids	14265-44-2	Phosphate	ug/mL	92.9	<0.0140	171	n/a	n/a	n/a	n/a	7.00		20152628
Cone 2-Liq-b	C105-15-03	S15R000688	Anions and Small Organic Acids	7772-98-7	Thiosulfate	ug/mL	96.3	<6.00E-03	<3.00	n/a	n/a	n/a	n/a	3.00	U	20152628
Cone 3-Liq-a	C105-15-01	S15R000667	Anions and Small Organic Acids	16984-48-8	Fluoride	ug/mL	96.7	<1.00E-03	65.2	n/a	n/a	n/a	n/a	0.500		20152628
Cone 3-Liq-a	C105-15-01	S15R000667	Anions and Small Organic Acids	666-14-8	Glycolate	ug/mL	96.8	<5.00E-03	<2.50	n/a	n/a	n/a	n/a	2.50	U	20152628
Cone 3-Liq-a	C105-15-01	S15R000667	Anions and Small Organic Acids	71-50-1	Acetate	ug/mL	96.1	<0.0100	46.7	n/a	n/a	n/a	n/a	5.00	J	20152628
Cone 3-Liq-a	C105-15-01	S15R000667	Anions and Small Organic Acids	12311-97-6	Formate	ug/mL	98.0	0.0480	30.3	n/a	n/a	n/a	n/a	3.50	BJ	20152628
Cone 3-Liq-a	C105-15-01	S15R000667	Anions and Small Organic Acids	16887-00-6	Chloride	ug/mL	95.8	<4.00E-03	27.5	n/a	n/a	n/a	n/a	2.00		20152628
Cone 3-Liq-a	C105-15-01	S15R000667	Anions and Small Organic Acids	14797-65-0	Nitrite	ug/mL	96.8	<9.00E-03	2.69E+03	n/a	n/a	n/a	n/a	4.50		20152628
Cone 3-Liq-a	C105-15-01	S15R000667	Anions and Small Organic Acids	14808-79-8	Sulfate	ug/mL	96.4	<9.00E-03	57.8	n/a	n/a	n/a	n/a	4.50	J	20152628
Cone 3-Liq-a	C105-15-01	S15R000667	Anions and Small Organic Acids	338-70-5	Oxalate	ug/mL	95.2	0.0200	12.7	n/a	n/a	n/a	n/a	4.50	BJ	20152628
Cone 3-Liq-a	C105-15-01	S15R000667	Anions and Small Organic Acids	24959-67-9	Bromide	ug/mL	95.3	<6.00E-03	<3.00	n/a	n/a	n/a	n/a	3.00	U	20152628
Cone 3-Liq-a	C105-15-01	S15R000667	Anions and Small Organic Acids	14797-55-8	Nitrate	ug/mL	95.1	<0.0210	800	n/a	n/a	n/a	n/a	10.5		20152628
Cone 3-Liq-a	C105-15-01	S15R000667	Anions and Small Organic Acids	14265-44-2	Phosphate	ug/mL	92.7	<0.0140	633	n/a	n/a	n/a	n/a	7.00		20152628
Cone 3-Liq-a	C105-15-01	S15R000667	Anions and Small Organic Acids	7772-98-7	Thiosulfate	ug/mL	96.4	<6.00E-03	<3.00	n/a	n/a	n/a	n/a	3.00	U	20152628
Cone 3-Liq-a	C105-15-02	S15R000675	Anions and Small Organic Acids	16984-48-8	Fluoride	ug/mL	96.4	<1.00E-03	75.8	n/a	n/a	n/a	n/a	0.500		20152628
Cone 3-Liq-a	C105-15-02	S15R000675	Anions and Small Organic Acids	666-14-8	Glycolate	ug/mL	96.5	<5.00E-03	<2.50	n/a	n/a	n/a	n/a	2.50	U	20152628
Cone 3-Liq-a	C105-15-02	S15R000675	Anions and Small Organic Acids	71-50-1	Acetate	ug/mL	95.8	<0.0100	34.9	n/a	n/a	n/a	n/a	5.00	J	20152628
Cone 3-Liq-a	C105-15-02	S15R000675	Anions and Small Organic Acids	12311-97-6	Formate	ug/mL	97.5	0.0460	26.4	n/a	n/a	n/a	n/a	3.50	BJ	20152628

Cone 3-Liq-a	C105-15-02	S15R000675	Anions and Small Organic Acids	16887-00-6	Chloride	ug/mL	95.6	<4.00E-03	18.0	n/a	n/a	n/a	n/a	2.00	J	20152628
Cone 3-Liq-a	C105-15-02	S15R000675	Anions and Small Organic Acids	14797-65-0	Nitrite	ug/mL	96.6	<9.00E-03	1.69E+03	n/a	n/a	n/a	n/a	4.50		20152628
Cone 3-Liq-a	C105-15-02	S15R000675	Anions and Small Organic Acids	14808-79-8	Sulfate	ug/mL	96.3	<9.00E-03	61.9	n/a	n/a	n/a	n/a	4.50	J	20152628
Cone 3-Liq-a	C105-15-02	S15R000675	Anions and Small Organic Acids	338-70-5	Oxalate	ug/mL	95.3	0.0170	13.1	n/a	n/a	n/a	n/a	4.50	BJ	20152628
Cone 3-Liq-a	C105-15-02	S15R000675	Anions and Small Organic Acids	24959-67-9	Bromide	ug/mL	95.1	<6.00E-03	<3.00	n/a	n/a	n/a	n/a	3.00	U	20152628
Cone 3-Liq-a	C105-15-02	S15R000675	Anions and Small Organic Acids	14797-55-8	Nitrate	ug/mL	95.0	<0.0210	516	n/a	n/a	n/a	n/a	10.5		20152628
Cone 3-Liq-a	C105-15-02	S15R000675	Anions and Small Organic Acids	14265-44-2	Phosphate	ug/mL	92.9	<0.0140	411	n/a	n/a	n/a	n/a	7.00		20152628
Cone 3-Liq-a	C105-15-02	S15R000675	Anions and Small Organic Acids	7772-98-7	Thiosulfate	ug/mL	96.3	<6.00E-03	<3.00	n/a	n/a	n/a	n/a	3.00	U	20152628
Cone 3-Liq-a	C105-15-03	S15R000683	Anions and Small Organic Acids	16984-48-8	Fluoride	ug/mL	96.4	<1.00E-03	77.7	n/a	n/a	n/a	n/a	0.500		20152628
Cone 3-Liq-a	C105-15-03	S15R000683	Anions and Small Organic Acids	666-14-8	Glycolate	ug/mL	96.5	<5.00E-03	<2.50	n/a	n/a	n/a	n/a	2.50	U	20152628
Cone 3-Liq-a	C105-15-03	S15R000683	Anions and Small Organic Acids	71-50-1	Acetate	ug/mL	95.8	<0.0100	67.6	n/a	n/a	n/a	n/a	5.00	J	20152628
Cone 3-Liq-a	C105-15-03	S15R000683	Anions and Small Organic Acids	12311-97-6	Formate	ug/mL	97.5	0.0460	31.2	n/a	n/a	n/a	n/a	3.50	BJ	20152628
Cone 3-Liq-a	C105-15-03	S15R000683	Anions and Small Organic Acids	16887-00-6	Chloride	ug/mL	95.6	<4.00E-03	34.5	n/a	n/a	n/a	n/a	2.00		20152628
Cone 3-Liq-a	C105-15-03	S15R000683	Anions and Small Organic Acids	14797-65-0	Nitrite	ug/mL	96.6	<9.00E-03	3.79E+03	n/a	n/a	n/a	n/a	4.50		20152628
Cone 3-Liq-a	C105-15-03	S15R000683	Anions and Small Organic Acids	14808-79-8	Sulfate	ug/mL	96.3	<9.00E-03	65.4	n/a	n/a	n/a	n/a	4.50	J	20152628
Cone 3-Liq-a	C105-15-03	S15R000683	Anions and Small Organic Acids	338-70-5	Oxalate	ug/mL	95.3	0.0170	15.2	n/a	n/a	n/a	n/a	4.50	BJ	20152628
Cone 3-Liq-a	C105-15-03	S15R000683	Anions and Small Organic Acids	24959-67-9	Bromide	ug/mL	95.1	<6.00E-03	<3.00	n/a	n/a	n/a	n/a	3.00	U	20152628
Cone 3-Liq-a	C105-15-03	S15R000683	Anions and Small Organic Acids	14797-55-8	Nitrate	ug/mL	95.0	<0.0210	975	n/a	n/a	n/a	n/a	10.5		20152628
Cone 3-Liq-a	C105-15-03	S15R000683	Anions and Small Organic Acids	14265-44-2	Phosphate	ug/mL	92.9	<0.0140	589	n/a	n/a	n/a	n/a	7.00		20152628
Cone 3-Liq-a	C105-15-03	S15R000683	Anions and Small Organic Acids	7772-98-7	Thiosulfate	ug/mL	96.3	<6.00E-03	<3.00	n/a	n/a	n/a	n/a	3.00	U	20152628
Cone 3-Liq-b	C105-15-03	S15R000689	Anions and Small Organic Acids	16984-48-8	Fluoride	ug/mL	96.7	<1.00E-03	504	n/a	n/a	n/a	n/a	0.500		20152628
Cone 3-Liq-b	C105-15-03	S15R000689	Anions and Small Organic Acids	666-14-8	Glycolate	ug/mL	96.8	<5.00E-03	<2.50	n/a	n/a	n/a	n/a	2.50	U	20152628
Cone 3-Liq-b	C105-15-03	S15R000689	Anions and Small Organic Acids	71-50-1	Acetate	ug/mL	96.1	<0.0100	26.8	n/a	n/a	n/a	n/a	5.00	J	20152628
Cone 3-Liq-b	C105-15-03	S15R000689	Anions and Small Organic Acids	12311-97-6	Formate	ug/mL	98.0	0.0480	29.3	n/a	n/a	n/a	n/a	3.50	BJ	20152628
Cone 3-Liq-b	C105-15-03	S15R000689	Anions and Small Organic Acids	16887-00-6	Chloride	ug/mL	95.8	<4.00E-03	16.1	n/a	n/a	n/a	n/a	2.00	J	20152628
Cone 3-Liq-b	C105-15-03	S15R000689	Anions and Small Organic Acids	14797-65-0	Nitrite	ug/mL	96.8	<9.00E-03	1.05E+03	n/a	n/a	n/a	n/a	4.50		20152628
Cone 3-Liq-b	C105-15-03	S15R000689	Anions and Small Organic Acids	14808-79-8	Sulfate	ug/mL	96.4	<9.00E-03	1.11E+03	n/a	n/a	n/a	n/a	4.50		20152628
Cone 3-Liq-b	C105-15-03	S15R000689	Anions and Small Organic Acids	338-70-5	Oxalate	ug/mL	95.2	0.0200	1.16E+03	n/a	n/a	n/a	n/a	4.50		20152628
Cone 3-Liq-b	C105-15-03	S15R000689	Anions and Small Organic Acids	24959-67-9	Bromide	ug/mL	95.3	<6.00E-03	<3.00	n/a	n/a	n/a	n/a	3.00	U	20152628
Cone 3-Liq-b	C105-15-03	S15R000689	Anions and Small Organic Acids	14797-55-8	Nitrate	ug/mL	95.1	<0.0210	303	n/a	n/a	n/a	n/a	10.5		20152628
Cone 3-Liq-b	C105-15-03	S15R000689	Anions and Small Organic Acids	14265-44-2	Phosphate	ug/mL	92.7	<0.0140	1.43E+03	n/a	n/a	n/a	n/a	7.00		20152628
Cone 3-Liq-b	C105-15-03	S15R000689	Anions and Small Organic Acids	7772-98-7	Thiosulfate	ug/mL	96.4	<6.00E-03	<3.00	n/a	n/a	n/a	n/a	3.00	U	20152628
Cone 4-Liq-a	C105-15-01	S15R000668	Anions and Small Organic Acids	16984-48-8	Fluoride	ug/mL	97.0	<1.00E-03	80.8	n/a	n/a	n/a	n/a	0.500		20152628
Cone 4-Liq-a	C105-15-01	S15R000668	Anions and Small Organic Acids	666-14-8	Glycolate	ug/mL	96.8	<5.00E-03	<2.50	n/a	n/a	n/a	n/a	2.50	U	20152628
Cone 4-Liq-a	C105-15-01	S15R000668	Anions and Small Organic Acids	71-50-1	Acetate	ug/mL	95.8	<0.0100	60.0	n/a	n/a	n/a	n/a	5.00	J	20152628
Cone 4-Liq-a	C105-15-01	S15R000668	Anions and Small Organic Acids	12311-97-6	Formate	ug/mL	97.5	0.0440	31.1	n/a	n/a	n/a	n/a	3.50	BJ	20152628
Cone 4-Liq-a	C105-15-01	S15R000668	Anions and Small Organic Acids	16887-00-6	Chloride	ug/mL	97.2	<4.00E-03	33.3	n/a	n/a	n/a	n/a	2.00		20152628
Cone 4-Liq-a	C105-15-01	S15R000668	Anions and Small Organic Acids	14797-65-0	Nitrite	ug/mL	97.3	<9.00E-03	3.32E+03	n/a	n/a	n/a	n/a	4.50		20152628
Cone 4-Liq-a	C105-15-01	S15R000668	Anions and Small Organic Acids	14808-79-8	Sulfate	ug/mL	97.1	<9.00E-03	63.3	n/a	n/a	n/a	n/a	4.50	J	20152628
Cone 4-Liq-a	C105-15-01	S15R000668	Anions and Small Organic Acids	338-70-5	Oxalate	ug/mL	97.0	0.0170	14.9	n/a	n/a	n/a	n/a	4.50	BJ	20152628
Cone 4-Liq-a	C105-15-01	S15R000668	Anions and Small Organic Acids	24959-67-9	Bromide	ug/mL	98.0	<6.00E-03	<3.00	n/a	n/a	n/a	n/a	3.00	U	20152628
Cone 4-Liq-a	C105-15-01	S15R000668	Anions and Small Organic Acids	14797-55-8	Nitrate	ug/mL	97.1	<0.0210	1.01E+03	n/a	n/a	n/a	n/a	10.5		20152628
Cone 4-Liq-a	C105-15-01	S15R000668	Anions and Small Organic Acids	14265-44-2	Phosphate	ug/mL	96.1	<0.0140	563	n/a	n/a	n/a	n/a	7.00		20152628
Cone 4-Liq-a	C105-15-01	S15R000668	Anions and Small Organic Acids	7772-98-7	Thiosulfate	ug/mL	101	<6.00E-03	<3.00	n/a	n/a	n/a	n/a	3.00	U	20152628
Cone 4-Liq-a	C105-15-02	S15R000676	Anions and Small Organic Acids	16984-48-8	Fluoride	ug/mL	96.4	<1.00E-03	78.8	n/a	n/a	n/a	n/a	0.500		20152628
Cone 4-Liq-a	C105-15-02	S15R000676	Anions and Small Organic Acids	666-14-8	Glycolate	ug/mL	96.5	<5.00E-03	<2.50	n/a	n/a	n/a	n/a	2.50	U	20152628
Cone 4-Liq-a	C105-15-02	S15R000676	Anions and Small Organic Acids	71-50-1	Acetate	ug/mL	95.8	<0.0100	37.3	n/a	n/a	n/a	n/a	5.00	J	20152628
Cone 4-Liq-a	C105-15-02	S15R000676	Anions and Small Organic Acids	12311-97-6	Formate	ug/mL	97.5	0.0460	27.3	n/a	n/a	n/a	n/a	3.50	BJ	20152628
Cone 4-Liq-a	C105-15-02	S15R000676	Anions and Small Organic Acids	16887-00-6	Chloride	ug/mL	95.6	<4.00E-03	20.8	n/a	n/a	n/a	n/a	2.00	J	20152628
Cone 4-Liq-a	C105-15-02	S15R000676	Anions and Small Organic Acids	14797-65-0	Nitrite	ug/mL	96.6	<9.00E-03	1.97E+03	n/a	n/a	n/a	n/a	4.50		20152628
Cone 4-Liq-a	C105-15-02	S15R000676	Anions and Small Organic Acids	14808-79-8	Sulfate	ug/mL	96.3	<9.00E-03	63.7	n/a	n/a	n/a	n/a	4.50	J	20152628
Cone 4-Liq-a	C105-15-02	S15R000676	Anions and Small Organic Acids	338-70-5	Oxalate	ug/mL	95.3	0.0170	12.1	n/a	n/a	n/a	n/a	4.50	BJ	20152628
Cone 4-Liq-a	C105-15-02	S15R000676	Anions and Small Organic Acids	24959-67-9	Bromide	ug/mL	95.1	<6.00E-03	<3.00	n/a	n/a	n/a	n/a	3.00	U	20152628
Cone 4-Liq-a	C105-15-02	S15R000676	Anions and Small Organic Acids	14797-55-8	Nitrate	ug/mL	95.0	<0.0210	594	n/a	n/a	n/a	n/a	10.5		20152628
Cone 4-Liq-a	C105-15-02	S15R000676	Anions and Small Organic Acids	14265-44-2	Phosphate	ug/mL	92.9	<0.0140	468	n/a	n/a	n/a	n/a	7.00		20152628
Cone 4-Liq-a	C105-15-02	S15R000676	Anions and Small Organic Acids	7772-98-7	Thiosulfate	ug/mL	96.3	<6.00E-03	<3.00	n/a	n/a	n/a	n/a	3.00	U	20152628
Cone 4-Liq-a	C105-15-03	S15R000684	Anions and Small Organic Acids	16984-48-8	Fluoride	ug/mL	96.4	<1.00E-03	49.6	n/a	n/a	n/a	n/a	0.500		20152628
Cone 4-Liq-a	C105-15-03	S15R000684	Anions and Small Organic Acids	666-14-8	Glycolate	ug/mL	96.5	<5.00E-03	<2.50	n/a	n/a	n/a	n/a	2.50	U	20152628
Cone 4-Liq-a	C105-15-03	S15R000684	Anions and Small Organic Acids	71-50-1	Acetate	ug/mL	95.8	<0.0100	43.1	n/a	n/a	n/a	n/a	5.00	J	20152628
Cone 4-Liq-a	C105-15-03	S15R000684	Anions and Small Organic Acids	12311-97-6	Formate	ug/mL	97.5	0.0460	27.8	n/a	n/a	n/a	n/a	3.50	BJ	20152628
Cone 4-Liq-a	C105-15-03	S15R000684	Anions and Small Organic Acids	16887-00-6	Chloride	ug/mL	95.6	<4.00E-03	22.6	n/a	n/a	n/a	n/a	2.00		20152628
Cone 4-Liq-a	C105-15-03	S15R000684	Anions and Small Organic Acids	14797-65-0	Nitrite	ug/mL	96.6	<9.00E-03	2.34E+03	n/a	n/a	n/a	n/a	4.50		20152628
Cone 4-Liq-a	C105-15-03	S15R000684	Anions and Small Organic Acids	14808-79-8	Sulfate	ug/mL	96.3	<9.00E-03	59.5	n/a	n/a	n/a	n/a	4.50	J	20152628
Cone 4-Liq-a	C105-15-03	S15R000684	Anions and Small Organic Acids	338-70-5	Oxalate	ug/mL	95.3	0.0170	13.6	n/a	n/a	n/a	n/a	4.50	BJ	20152628
Cone 4-Liq-a	C105-15-03	S15R000684	Anions and Small Organic Acids	24959-67-9	Bromide	ug/mL	95.1	<6.00E-03	<3.00	n/a	n/a	n/a	n/a	3.00	U	20152628
Cone 4-Liq-a	C105-15-03	S15R000684	Anions and Small Organic Acids	14797-55-8	Nitrate	ug/mL	95.0	<0.0210	585	n/a	n/a	n/a	n/a	10.5		20152628
Cone 4-Liq-a	C105-15-03	S15R000684	Anions and Small Organic Acids	14265-44-2	Phosphate	ug/mL	92.9	<0.0140	339	n/a	n/a	n/a	n/a	7.00		20152628
Cone 4-Liq-a	C105-15-03	S15R000684	Anions and Small Organic Acids	7772-98-7	Thiosulfate	ug/mL	96.3	<6.00E-03	<3.00	n/a	n/a	n/a	n/a	3.00	U	20152628
Cone 4-Liq-b	C105-15-03	S15R000690	Anions and Small Organic Acids	16984-48-8	Fluoride	ug/mL	97.6	<1.00E-03	174	n/a	n/a	n/a	n/a	2.00		20152628
Cone 4-Liq-b	C105-15-03	S15R000690	Anions and Small Organic Acids	666-14-8	Glycolate	ug/mL	97.2	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20152628
Cone 4-Liq-b	C105-15-03	S15R000690	Anions and Small Organic Acids	71-50-1	Acetate	ug/mL	95.8	<0.0100	49.5	n/a	n/a	n/a	n/a	20.0	J	20152628
Cone 4-Liq-b	C105-15-03	S15R000690	Anions and Small Organic Acids	12311-97-6	Formate	ug/mL	97.4	0.0450	166	n/a	n/a	n/a	n/a	14.0	BJ	20152628
Cone 4-Liq-b	C105-15-03	S15R000690	Anions and Small Organic Acids	16887-00-6	Chloride	ug/mL	96.9	<4.00E-03	22.6	n/a	n/a	n/a	n/a	8.00	J	20152628
Cone 4-Liq-b	C105-15-03	S15R000690	Anions and Small Organic Acids	14797-65-0	Nitrite	ug/mL	96.7	<9.00E-03	790	n/a	n/a	n/a	n/a	18.0		20152628
Cone 4-Liq-b	C105-15-03	S15R000690	Anions and Small Organic Acids	14808-79-8	Sulfate	ug/mL	96.5	<9.00E-03	667	n/a	n/a	n/a	n/a	18.0		20152628
Cone 4-Liq-b	C105-15-03	S15R000690	Anions and Small Organic Acids	338-70-5	Oxalate	ug/mL	95.7	0.0270	2.36E+04	n/a	n/a	n/a	n/a	18.0		20152628
Cone 4-Liq-b	C105-15-03	S15R000690	Anions and Small Organic Acids	24959-67-9	Bromide	ug/mL	96.5	<6.00E-03	<12.0	n/a	n/a	n/a	n/a	12.0	U	20152628
Cone 4-Liq-b	C105-15-03	S15R000690	Anions and Small Organic Acids	14797-55-8	Nitrate	ug/mL	96.1	<0.0210	2.56E+04	n/a	n/a	n/a	n/a	42.0		20152628
Cone 4-Liq-b	C105-15-03	S15R000690	Anions and Small Organic Acids	14265-44-2	Phosphate	ug/mL	94.7	<0.0140	279	n/a	n/a	n/a	n/a	28.0	J	20152628
Cone 4-Liq-b	C105-15-03	S15R000690	Anions and Small Organic Acids	7772-98-7	Thiosulfate	ug/mL	101	<6.00E-03	<12.0	n/a	n/a	n/a	n/a	12.0	U	20152628
Cone 5-Liq-a	C105-15-03	S15R000685	Anions and Small Organic Acids	16984-48-8	Fluoride	ug/mL	97.6	<1.00E-03	772	774	773	0.291	97.5	6.00		20152628
Cone 5-Liq-a	C105-15-03	S15R000685	Anions and Small Organic Acids	666-14-8	Glycolate	ug/mL	97.2	<5.00E-03	<30.0	<30.0	n/a	n/a	96.9	30.0	U	20152628

Cone 5-Liq-a	C105-15-03	S15R000685	Anions and Small Organic Acids	71-50-1	Acetate	ug/mL	95.8	<0.0100	166	171	169	3.30	99.0	60.0	J	20152628
Cone 5-Liq-a	C105-15-03	S15R000685	Anions and Small Organic Acids	12311-97-6	Formate	ug/mL	97.4	0.0450	274	268	271	2.10	97.3	42.0	BJ	20152628
Cone 5-Liq-a	C105-15-03	S15R000685	Anions and Small Organic Acids	16887-00-6	Chloride	ug/mL	96.9	<4.00E-03	<24.0	<24.0	n/a	n/a	94.9	24.0	U	20152628
Cone 5-Liq-a	C105-15-03	S15R000685	Anions and Small Organic Acids	14797-65-0	Nitrite	ug/mL	96.7	<9.00E-03	<54.0	<54.0	n/a	n/a	97.2	54.0	U	20152628
Cone 5-Liq-a	C105-15-03	S15R000685	Anions and Small Organic Acids	14808-79-8	Sulfate	ug/mL	96.5	<9.00E-03	1.52E+03	1.52E+03	1.52E+03	0.113	96.8	54.0	J	20152628
Cone 5-Liq-a	C105-15-03	S15R000685	Anions and Small Organic Acids	338-70-5	Oxalate	ug/mL	95.7	0.0270	706	704	705	0.229	96.5	54.0	BJ	20152628
Cone 5-Liq-a	C105-15-03	S15R000685	Anions and Small Organic Acids	24959-67-9	Bromide	ug/mL	96.5	<6.00E-03	<36.0	<36.0	n/a	n/a	95.1	36.0	U	20152628
Cone 5-Liq-a	C105-15-03	S15R000685	Anions and Small Organic Acids	14797-55-8	Nitrate	ug/mL	96.1	<0.0210	1.15E+05	1.15E+05	1.15E+05	0.0365	90.0	126		20152628
Cone 5-Liq-a	C105-15-03	S15R000685	Anions and Small Organic Acids	14265-44-2	Phosphate	ug/mL	94.7	<0.0140	1.84E+03	1.77E+03	1.81E+03	4.00	93.4	84.0		20152628
Cone 5-Liq-a	C105-15-03	S15R000685	Anions and Small Organic Acids	7772-98-7	Thiosulfate	ug/mL	101	<6.00E-03	<36.0	<36.0	n/a	n/a	96.4	36.0	U	20152628
Cone 5-Liq-b	C105-15-03	S15R000691	Anions and Small Organic Acids	16984-48-8	Fluoride	ug/mL	96.7	<1.00E-03	19.5	n/a	n/a	n/a	n/a	0.500		20152628
Cone 5-Liq-b	C105-15-03	S15R000691	Anions and Small Organic Acids	666-14-8	Glycolate	ug/mL	96.8	<5.00E-03	<2.50	n/a	n/a	n/a	n/a	2.50	U	20152628
Cone 5-Liq-b	C105-15-03	S15R000691	Anions and Small Organic Acids	71-50-1	Acetate	ug/mL	96.1	<0.0100	9.14	n/a	n/a	n/a	n/a	5.00	J	20152628
Cone 5-Liq-b	C105-15-03	S15R000691	Anions and Small Organic Acids	12311-97-6	Formate	ug/mL	98.0	0.0480	24.0	n/a	n/a	n/a	n/a	3.50	BJ	20152628
Cone 5-Liq-b	C105-15-03	S15R000691	Anions and Small Organic Acids	16887-00-6	Chloride	ug/mL	95.8	<4.00E-03	4.40	n/a	n/a	n/a	n/a	2.00	J	20152628
Cone 5-Liq-b	C105-15-03	S15R000691	Anions and Small Organic Acids	14797-65-0	Nitrite	ug/mL	96.8	<9.00E-03	<4.50	n/a	n/a	n/a	n/a	4.50	U	20152628
Cone 5-Liq-b	C105-15-03	S15R000691	Anions and Small Organic Acids	14808-79-8	Sulfate	ug/mL	96.4	<9.00E-03	54.0	n/a	n/a	n/a	n/a	4.50	J	20152628
Cone 5-Liq-b	C105-15-03	S15R000691	Anions and Small Organic Acids	338-70-5	Oxalate	ug/mL	95.2	0.0200	56.0	n/a	n/a	n/a	n/a	4.50	BJ	20152628
Cone 5-Liq-b	C105-15-03	S15R000691	Anions and Small Organic Acids	24959-67-9	Bromide	ug/mL	95.3	<6.00E-03	<3.00	n/a	n/a	n/a	n/a	3.00	U	20152628
Cone 5-Liq-b	C105-15-03	S15R000691	Anions and Small Organic Acids	14797-55-8	Nitrate	ug/mL	95.1	<0.0210	1.96E+03	n/a	n/a	n/a	n/a	10.5		20152628
Cone 5-Liq-b	C105-15-03	S15R000691	Anions and Small Organic Acids	14265-44-2	Phosphate	ug/mL	92.7	<0.0140	<7.00	n/a	n/a	n/a	n/a	7.00	U	20152628
Cone 5-Liq-b	C105-15-03	S15R000691	Anions and Small Organic Acids	7772-98-7	Thiosulfate	ug/mL	96.4	<6.00E-03	<3.00	n/a	n/a	n/a	n/a	3.00	U	20152628
Cone 6-Liq-a	C105-15-03	S15R000686	Anions and Small Organic Acids	16984-48-8	Fluoride	ug/mL	97.6	<1.00E-03	741	n/a	n/a	n/a	n/a	6.00		20152628
Cone 6-Liq-a	C105-15-03	S15R000686	Anions and Small Organic Acids	666-14-8	Glycolate	ug/mL	97.2	<5.00E-03	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 6-Liq-a	C105-15-03	S15R000686	Anions and Small Organic Acids	71-50-1	Acetate	ug/mL	95.8	<0.0100	148	n/a	n/a	n/a	n/a	60.0	J	20152628
Cone 6-Liq-a	C105-15-03	S15R000686	Anions and Small Organic Acids	12311-97-6	Formate	ug/mL	97.4	0.0450	290	n/a	n/a	n/a	n/a	42.0	BJ	20152628
Cone 6-Liq-a	C105-15-03	S15R000686	Anions and Small Organic Acids	16887-00-6	Chloride	ug/mL	96.9	<4.00E-03	59.1	n/a	n/a	n/a	n/a	24.0	J	20152628
Cone 6-Liq-a	C105-15-03	S15R000686	Anions and Small Organic Acids	14797-65-0	Nitrite	ug/mL	96.7	<9.00E-03	<54.0	n/a	n/a	n/a	n/a	54.0	U	20152628
Cone 6-Liq-a	C105-15-03	S15R000686	Anions and Small Organic Acids	14808-79-8	Sulfate	ug/mL	96.5	<9.00E-03	1.44E+03	n/a	n/a	n/a	n/a	54.0	J	20152628
Cone 6-Liq-a	C105-15-03	S15R000686	Anions and Small Organic Acids	338-70-5	Oxalate	ug/mL	95.7	0.0270	642	n/a	n/a	n/a	n/a	54.0	BJ	20152628
Cone 6-Liq-a	C105-15-03	S15R000686	Anions and Small Organic Acids	24959-67-9	Bromide	ug/mL	96.5	<6.00E-03	<36.0	n/a	n/a	n/a	n/a	36.0	U	20152628
Cone 6-Liq-a	C105-15-03	S15R000686	Anions and Small Organic Acids	14797-55-8	Nitrate	ug/mL	96.1	<0.0210	1.16E+05	n/a	n/a	n/a	n/a	126		20152628
Cone 6-Liq-a	C105-15-03	S15R000686	Anions and Small Organic Acids	14265-44-2	Phosphate	ug/mL	94.7	<0.0140	1.82E+03	n/a	n/a	n/a	n/a	84.0		20152628
Cone 6-Liq-a	C105-15-03	S15R000686	Anions and Small Organic Acids	7772-98-7	Thiosulfate	ug/mL	101	<6.00E-03	<36.0	n/a	n/a	n/a	n/a	36.0	U	20152628
Cone 6-Liq-b	C105-15-03	S15R000692	Anions and Small Organic Acids	16984-48-8	Fluoride	ug/mL	96.7	<1.00E-03	14.2	n/a	n/a	n/a	n/a	0.500	J	20152628
Cone 6-Liq-b	C105-15-03	S15R000692	Anions and Small Organic Acids	666-14-8	Glycolate	ug/mL	96.8	<5.00E-03	<2.50	n/a	n/a	n/a	n/a	2.50	U	20152628
Cone 6-Liq-b	C105-15-03	S15R000692	Anions and Small Organic Acids	71-50-1	Acetate	ug/mL	96.1	<0.0100	13.1	n/a	n/a	n/a	n/a	5.00	J	20152628
Cone 6-Liq-b	C105-15-03	S15R000692	Anions and Small Organic Acids	12311-97-6	Formate	ug/mL	98.0	0.0480	23.5	n/a	n/a	n/a	n/a	3.50	J	20152628
Cone 6-Liq-b	C105-15-03	S15R000692	Anions and Small Organic Acids	16887-00-6	Chloride	ug/mL	95.8	<4.00E-03	30.7	n/a	n/a	n/a	n/a	2.00		20152628
Cone 6-Liq-b	C105-15-03	S15R000692	Anions and Small Organic Acids	14797-65-0	Nitrite	ug/mL	96.8	<9.00E-03	23.7	n/a	n/a	n/a	n/a	4.50	J	20152628
Cone 6-Liq-b	C105-15-03	S15R000692	Anions and Small Organic Acids	14808-79-8	Sulfate	ug/mL	96.4	<9.00E-03	66.2	n/a	n/a	n/a	n/a	4.50	J	20152628
Cone 6-Liq-b	C105-15-03	S15R000692	Anions and Small Organic Acids	338-70-5	Oxalate	ug/mL	95.2	0.0200	35.0	n/a	n/a	n/a	n/a	4.50	BJ	20152628
Cone 6-Liq-b	C105-15-03	S15R000692	Anions and Small Organic Acids	24959-67-9	Bromide	ug/mL	95.3	<6.00E-03	<3.00	n/a	n/a	n/a	n/a	3.00	U	20152628
Cone 6-Liq-b	C105-15-03	S15R000692	Anions and Small Organic Acids	14797-55-8	Nitrate	ug/mL	95.1	<0.0210	1.13E+03	n/a	n/a	n/a	n/a	10.5		20152628
Cone 6-Liq-b	C105-15-03	S15R000692	Anions and Small Organic Acids	14265-44-2	Phosphate	ug/mL	92.7	<0.0140	284	n/a	n/a	n/a	n/a	7.00		20152628
Cone 6-Liq-b	C105-15-03	S15R000692	Anions and Small Organic Acids	7772-98-7	Thiosulfate	ug/mL	96.4	<6.00E-03	<3.00	n/a	n/a	n/a	n/a	3.00	U	20152628
Cone 7-Liq-a	C105-15-03	S15R000699	Anions and Small Organic Acids	16984-48-8	Fluoride	ug/g	97.5	<1.00E-03	723	730	727	0.845	102	2.00		20152628
Cone 7-Liq-a	C105-15-03	S15R000699	Anions and Small Organic Acids	666-14-8	Glycolate	ug/g	97.4	<5.00E-03	<10.0	<10.0	n/a	n/a	98.7	10.0	U	20152628
Cone 7-Liq-a	C105-15-03	S15R000699	Anions and Small Organic Acids	71-50-1	Acetate	ug/g	96.4	<0.0100	93.9	114	104	19.1	101	20.0	J	20152628
Cone 7-Liq-a	C105-15-03	S15R000699	Anions and Small Organic Acids	12311-97-6	Formate	ug/g	97.5	<7.00E-03	98.4	105	102	6.13	99.0	14.0	J	20152628
Cone 7-Liq-a	C105-15-03	S15R000699	Anions and Small Organic Acids	16887-00-6	Chloride	ug/g	96.2	<4.00E-03	53.5	54.6	54.1	2.21	96.2	8.00	J	20152628
Cone 7-Liq-a	C105-15-03	S15R000699	Anions and Small Organic Acids	14797-65-0	Nitrite	ug/g	97.9	<9.00E-03	419	425	422	1.27	99.1	18.0	J	20152628
Cone 7-Liq-a	C105-15-03	S15R000699	Anions and Small Organic Acids	14808-79-8	Sulfate	ug/g	97.9	<9.00E-03	1.65E+03	1.64E+03	1.65E+03	0.619	99.6	18.0		20152628
Cone 7-Liq-a	C105-15-03	S15R000699	Anions and Small Organic Acids	338-70-5	Oxalate	ug/g	98.0	0.0290	2.60E+04	2.59E+04	2.59E+04	0.0978	100	18.0		20152628
Cone 7-Liq-a	C105-15-03	S15R000699	Anions and Small Organic Acids	24959-67-9	Bromide	ug/g	98.3	<6.00E-03	<12.0	<12.0	n/a	n/a	99.8	12.0	U	20152628
Cone 7-Liq-a	C105-15-03	S15R000699	Anions and Small Organic Acids	14797-55-8	Nitrate	ug/g	98.1	<0.0210	3.54E+04	3.53E+04	3.53E+04	0.203	95.8	42.0		20152628
Cone 7-Liq-a	C105-15-03	S15R000699	Anions and Small Organic Acids	14265-44-2	Phosphate	ug/g	97.8	<0.0140	493	470	481	4.70	97.2	28.0	J	20152628
Cone 7-Liq-a	C105-15-03	S15R000699	Anions and Small Organic Acids	7772-98-7	Thiosulfate	ug/g	97.6	<6.00E-03	<12.0	<12.0	n/a	n/a	97.4	12.0	U	20152628
Cone 7-Liq-b	C105-15-03	S15R000701	Anions and Small Organic Acids	16984-48-8	Fluoride	ug/g	97.5	<1.00E-03	24.6	n/a	n/a	n/a	n/a	0.100		20152628
Cone 7-Liq-b	C105-15-03	S15R000701	Anions and Small Organic Acids	666-14-8	Glycolate	ug/g	97.4	<5.00E-03	<0.500	n/a	n/a	n/a	n/a	0.500	U	20152628
Cone 7-Liq-b	C105-15-03	S15R000701	Anions and Small Organic Acids	71-50-1	Acetate	ug/g	96.4	<0.0100	2.46	n/a	n/a	n/a	n/a	1.00	J	20152628
Cone 7-Liq-b	C105-15-03	S15R000701	Anions and Small Organic Acids	12311-97-6	Formate	ug/g	97.5	<7.00E-03	4.85	n/a	n/a	n/a	n/a	0.700	J	20152628
Cone 7-Liq-b	C105-15-03	S15R000701	Anions and Small Organic Acids	16887-00-6	Chloride	ug/g	96.2	<4.00E-03	4.02	n/a	n/a	n/a	n/a	0.400	J	20152628
Cone 7-Liq-b	C105-15-03	S15R000701	Anions and Small Organic Acids	14797-65-0	Nitrite	ug/g	97.9	<9.00E-03	15.0	n/a	n/a	n/a	n/a	0.900	J	20152628
Cone 7-Liq-b	C105-15-03	S15R000701	Anions and Small Organic Acids	14808-79-8	Sulfate	ug/g	97.9	<9.00E-03	25.5	n/a	n/a	n/a	n/a	0.900	J	20152628
Cone 7-Liq-b	C105-15-03	S15R000701	Anions and Small Organic Acids	338-70-5	Oxalate	ug/g	98.0	0.0290	1.12E+03	n/a	n/a	n/a	n/a	0.900		20152628
Cone 7-Liq-b	C105-15-03	S15R000701	Anions and Small Organic Acids	24959-67-9	Bromide	ug/g	98.3	<6.00E-03	<0.600	n/a	n/a	n/a	n/a	0.600	U	20152628
Cone 7-Liq-b	C105-15-03	S15R000701	Anions and Small Organic Acids	14797-55-8	Nitrate	ug/g	98.1	<0.0210	277	n/a	n/a	n/a	n/a	2.10		20152628
Cone 7-Liq-b	C105-15-03	S15R000701	Anions and Small Organic Acids	14265-44-2	Phosphate	ug/g	97.8	<0.0140	7.37	n/a	n/a	n/a	n/a	1.40	J	20152628
Cone 7-Liq-b	C105-15-03	S15R000701	Anions and Small Organic Acids	7772-98-7	Thiosulfate	ug/g	97.6	<6.00E-03	<0.600	n/a	n/a	n/a	n/a	0.600	U	20152628
Cone 8-Liq-a	C105-15-03	S15R000700	Anions and Small Organic Acids	16984-48-8	Fluoride	ug/g	97.5	<1.00E-03	786	n/a	n/a	n/a	n/a	2.00		20152628
Cone 8-Liq-a	C105-15-03	S15R000700	Anions and Small Organic Acids	666-14-8	Glycolate	ug/g	97.4	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20152628
Cone 8-Liq-a	C105-15-03	S15R000700	Anions and Small Organic Acids	71-50-1	Acetate	ug/g	96.4	<0.0100	99.6	n/a	n/a	n/a	n/a	20.0	J	20152628
Cone 8-Liq-a	C105-15-03	S15R000700	Anions and Small Organic Acids	12311-97-6	Formate	ug/g	97.5	<7.00E-03	101	n/a	n/a	n/a	n/a	14.0	J	20152628
Cone 8-Liq-a	C105-15-03	S15R000700	Anions and Small Organic Acids	16887-00-6	Chloride	ug/g	96.2	<4.00E-03	51.2	n/a	n/a	n/a	n/a	8.00	J	20152628
Cone 8-Liq-a	C105-15-03	S15R000700	Anions and Small Organic Acids	14797-65-0	Nitrite	ug/g	97.9	<9.00E-03	111	n/a	n/a	n/a	n/a	18.0	J	20152628
Cone 8-Liq-a	C105-15-03	S15R000700	Anions and Small Organic Acids	14808-79-8	Sulfate	ug/g	97.9	<9.00E-03	1.71E+03	n/a	n/a	n/a	n/a	18.0		20152628
Cone 8-Liq-a	C105-15-03	S15R000700	Anions and Small Organic Acids	338-70-5	Oxalate	ug/g	98.0	0.0290	2.71E+04	n/a	n/a	n/a	n/a	18.0		20152628
Cone 8-Liq-a	C105-15-03	S15R000700	Anions and Small Organic Acids	24959-67-9	Bromide	ug/g	98.3	<6.00E-03	<12.0	n/a	n/a	n/a	n/a	12.0	U	20152628
Cone 8-Liq-a	C105-15-03	S15R000700	Anions and Small Organic Acids	14797-55-8	Nitrate	ug/g	98.1	<0.0210	3.39E+04	n/a	n/a	n/a	n/a	42.0		20152628
Cone 8-Liq-a	C105-15-03	S15R000700	Anions and Small Organic Acids	14265-44-2	Phosphate	ug/g	97.8	<0.0140	751	n/a	n/a	n/a	n/a	28.0		20152628
Cone 8-Liq-a	C105-15-03	S15R000700	Anions and Small Organic Acids	7772-98-7	Thiosulfate	ug/g	97.6	<6.00E-03	<12.0	n/a	n/a	n/a	n/a	12.0	U	20152628

Cone 8-Liq-b	C105-15-03	S15R000702	Anions and Small Organic Acids	16984-48-8	Fluoride	ug/mL	96.7	<1.00E-03	38.7	n/a	n/a	n/a	n/a	0.500		20152628
Cone 8-Liq-b	C105-15-03	S15R000702	Anions and Small Organic Acids	666-14-8	Glycolate	ug/mL	96.8	<5.00E-03	<2.50	n/a	n/a	n/a	n/a	2.50	U	20152628
Cone 8-Liq-b	C105-15-03	S15R000702	Anions and Small Organic Acids	71-50-1	Acetate	ug/mL	96.1	<0.0100	11.7	n/a	n/a	n/a	n/a	5.00	J	20152628
Cone 8-Liq-b	C105-15-03	S15R000702	Anions and Small Organic Acids	12311-97-6	Formate	ug/mL	98.0	0.0480	23.8	n/a	n/a	n/a	n/a	3.50	BJ	20152628
Cone 8-Liq-b	C105-15-03	S15R000702	Anions and Small Organic Acids	16887-00-6	Chloride	ug/mL	95.8	<4.00E-03	16.2	n/a	n/a	n/a	n/a	2.00	J	20152628
Cone 8-Liq-b	C105-15-03	S15R000702	Anions and Small Organic Acids	14797-65-0	Nitrite	ug/mL	96.8	<9.00E-03	29.6	n/a	n/a	n/a	n/a	4.50	J	20152628
Cone 8-Liq-b	C105-15-03	S15R000702	Anions and Small Organic Acids	14808-79-8	Sulfate	ug/mL	96.4	<9.00E-03	43.5	n/a	n/a	n/a	n/a	4.50	J	20152628
Cone 8-Liq-b	C105-15-03	S15R000702	Anions and Small Organic Acids	338-70-5	Oxalate	ug/mL	95.2	0.0200	18.3	n/a	n/a	n/a	n/a	4.50	BJ	20152628
Cone 8-Liq-b	C105-15-03	S15R000702	Anions and Small Organic Acids	24959-67-9	Bromide	ug/mL	95.3	<6.00E-03	<3.00	n/a	n/a	n/a	n/a	3.00	U	20152628
Cone 8-Liq-b	C105-15-03	S15R000702	Anions and Small Organic Acids	14797-55-8	Nitrate	ug/mL	95.1	<0.0210	194	n/a	n/a	n/a	n/a	10.5		20152628
Cone 8-Liq-b	C105-15-03	S15R000702	Anions and Small Organic Acids	14265-44-2	Phosphate	ug/mL	92.7	<0.0140	924	n/a	n/a	n/a	n/a	7.00		20152628
Cone 8-Liq-b	C105-15-03	S15R000702	Anions and Small Organic Acids	7772-98-7	Thiosulfate	ug/mL	96.4	<6.00E-03	<3.00	n/a	n/a	n/a	n/a	3.00	U	20152628
Con 11-Liq-c	C105-15-01	S16R000174	DENSITY	Density	Density	g/mL	100.1	n/a	1.074	1.004	1.039	6.737	n/a	1.000E-03		20160542
Con 12-Liq-c	C105-15-01	S16R000175	DENSITY	Density	Density	g/mL	100.1	n/a	1.056	n/a	n/a	n/a	n/a	1.000E-03		20160542
Con 13-Liq-c	C105-15-02	S16R000176	DENSITY	Density	Density	g/mL	100.1	n/a	1.055	n/a	n/a	n/a	n/a	1.000E-03		20160542
Con 14-Liq-c	C105-15-02	S16R000177	DENSITY	Density	Density	g/mL	100.1	n/a	1.047	n/a	n/a	n/a	n/a	1.000E-03		20160542
Cone 1-Liq-a	C105-15-01	S15R000665	DENSITY	Density	Density	g/mL	100.1	n/a	1.031	n/a	n/a	n/a	n/a	1.000E-03		20152628
Cone 1-Liq-a	C105-15-02	S15R000673	DENSITY	Density	Density	g/mL	100.1	n/a	1.055	n/a	n/a	n/a	n/a	1.000E-03		20152628
Cone 1-Liq-a	C105-15-03	S15R000681	DENSITY	Density	Density	g/mL	100.1	n/a	1.044	n/a	n/a	n/a	n/a	1.000E-03		20152628
Cone 1-Liq-b	C105-15-03	S15R000687	DENSITY	Density	Density	g/mL	100.5	n/a	1.006	1.078	1.042	6.910	n/a	1.000E-03		20152628
Cone 11-Liq-a	C105-15-01	S16R000162	DENSITY	Density	Density	g/mL	99.50	n/a	1.359	1.322	1.340	2.760	n/a	1.000E-03		20160542
Cone 12-Liq-a	C105-15-01	S16R000163	DENSITY	Density	Density	g/mL	99.50	n/a	1.321	n/a	n/a	n/a	n/a	1.000E-03		20160542
Cone 13-Liq-a	C105-15-02	S16R000166	DENSITY	Density	Density	g/mL	99.50	n/a	1.343	n/a	n/a	n/a	n/a	1.000E-03		20160542
Cone 14-Liq-a	C105-15-02	S16R000167	DENSITY	Density	Density	g/mL	99.50	n/a	1.337	n/a	n/a	n/a	n/a	1.000E-03		20160542
Cone 2-Liq-a	C105-15-01	S15R000666	DENSITY	Density	Density	g/mL	100.1	n/a	1.046	n/a	n/a	n/a	n/a	1.000E-03		20152628
Cone 2-Liq-a	C105-15-02	S15R000674	DENSITY	Density	Density	g/mL	100.1	n/a	1.050	n/a	n/a	n/a	n/a	1.000E-03		20152628
Cone 2-Liq-a	C105-15-03	S15R000682	DENSITY	Density	Density	g/mL	100.1	n/a	1.039	n/a	n/a	n/a	n/a	1.000E-03		20152628
Cone 2-Liq-b	C105-15-03	S15R000688	DENSITY	Density	Density	g/mL	100.5	n/a	1.005	n/a	n/a	n/a	n/a	1.000E-03		20152628
Cone 3-Liq-a	C105-15-01	S15R000667	DENSITY	Density	Density	g/mL	100.1	n/a	1.507	n/a	n/a	n/a	n/a	1.000E-03		20152628
Cone 3-Liq-a	C105-15-02	S15R000675	DENSITY	Density	Density	g/mL	100.1	n/a	1.501	n/a	n/a	n/a	n/a	1.000E-03		20152628
Cone 3-Liq-a	C105-15-03	S15R000683	DENSITY	Density	Density	g/mL	100.1	n/a	1.492	n/a	n/a	n/a	n/a	1.000E-03		20152628
Cone 3-Liq-b	C105-15-03	S15R000689	DENSITY	Density	Density	g/mL	100.5	n/a	1.082	n/a	n/a	n/a	n/a	1.000E-03		20152628
Cone 4-Liq-a	C105-15-01	S15R000668	DENSITY	Density	Density	g/mL	100.1	n/a	1.483	n/a	n/a	n/a	n/a	1.000E-03		20152628
Cone 4-Liq-a	C105-15-02	S15R000676	DENSITY	Density	Density	g/mL	100.1	n/a	1.490	n/a	n/a	n/a	n/a	1.000E-03		20152628
Cone 4-Liq-a	C105-15-03	S15R000684	DENSITY	Density	Density	g/mL	100.1	n/a	1.488	n/a	n/a	n/a	n/a	1.000E-03		20152628
Cone 4-Liq-b	C105-15-03	S15R000690	DENSITY	Density	Density	g/mL	100.5	n/a	1.055	n/a	n/a	n/a	n/a	1.000E-03		20152628
Cone 5-Liq-a	C105-15-03	S15R000685	DENSITY	Density	Density	g/mL	100.1	n/a	1.101	n/a	n/a	n/a	n/a	1.000E-03		20152628
Cone 5-Liq-b	C105-15-03	S15R000691	DENSITY	Density	Density	g/mL	100.5	n/a	1.000	n/a	n/a	n/a	n/a	1.000E-03		20152628
Cone 6-Liq-a	C105-15-03	S15R000686	DENSITY	Density	Density	g/mL	100.1	n/a	1.102	n/a	n/a	n/a	n/a	1.000E-03		20152628
Cone 6-Liq-b	C105-15-03	S15R000692	DENSITY	Density	Density	g/mL	100.5	n/a	1.472	n/a	n/a	n/a	n/a	1.000E-03		20152628
Cone 7-Liq-a	C105-15-03	S15R000699	DENSITY	Density	Density	g/mL	100.5	n/a	1.063	n/a	n/a	n/a	n/a	1.000E-03		20152628
Cone 7-Liq-b	C105-15-03	S15R000701	DENSITY	Density	Density	g/mL	100.5	n/a	1.004	n/a	n/a	n/a	n/a	1.000E-03		20152628
Cone 8-Liq-a	C105-15-03	S15R000700	DENSITY	Density	Density	g/mL	100.5	n/a	1.061	n/a	n/a	n/a	n/a	1.000E-03		20152628
Cone 8-Liq-b	C105-15-03	S15R000702	DENSITY	Density	Density	g/mL	100.5	n/a	1.478	n/a	n/a	n/a	n/a	1.000E-03		20152628
Con 11-Liq-c	C105-15-01	S16R000174	ICP-AES	7440-22-4	Silver	ug/mL	99.9	<3.00E-03	<6.00	n/a	n/a	n/a	n/a	6.00	U	20160542
Con 11-Liq-c	C105-15-01	S16R000174	ICP-AES	7429-90-5	Aluminum	ug/mL	98.5	<0.0140	1.52E+03	n/a	n/a	n/a	n/a	28.0		20160542
Con 11-Liq-c	C105-15-01	S16R000174	ICP-AES	7440-38-2	Arsenic	ug/mL	98.6	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20160542
Con 11-Liq-c	C105-15-01	S16R000174	ICP-AES	7440-42-8	Boron	ug/mL	97.9	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20160542
Con 11-Liq-c	C105-15-01	S16R000174	ICP-AES	7440-39-3	Barium	ug/mL	99.6	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Con 11-Liq-c	C105-15-01	S16R000174	ICP-AES	7440-41-7	Beryllium	ug/mL	100	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Con 11-Liq-c	C105-15-01	S16R000174	ICP-AES	7440-69-9	Bismuth	ug/mL	99.1	<0.0190	<38.0	n/a	n/a	n/a	n/a	38.0	U	20160542
Con 11-Liq-c	C105-15-01	S16R000174	ICP-AES	7440-70-2	Calcium	ug/mL	101	<0.120	<240	n/a	n/a	n/a	n/a	240	U	20160542
Con 11-Liq-c	C105-15-01	S16R000174	ICP-AES	7440-43-9	Cadmium	ug/mL	100	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Con 11-Liq-c	C105-15-01	S16R000174	ICP-AES	7440-45-1	Cerium	ug/mL	99.9	<0.0250	76.1	n/a	n/a	n/a	n/a	50.0	BJ	20160542
Con 11-Liq-c	C105-15-01	S16R000174	ICP-AES	7440-48-4	Cobalt	ug/mL	99.7	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Con 11-Liq-c	C105-15-01	S16R000174	ICP-AES	7440-47-3	Chromium	ug/mL	99.6	<2.00E-03	31.2	n/a	n/a	n/a	n/a	4.00	J	20160542
Con 11-Liq-c	C105-15-01	S16R000174	ICP-AES	7440-50-8	Copper	ug/mL	99.1	<2.00E-03	10.3	n/a	n/a	n/a	n/a	4.00	J	20160542
Con 11-Liq-c	C105-15-01	S16R000174	ICP-AES	7440-53-1	Europium	ug/mL	102	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Con 11-Liq-c	C105-15-01	S16R000174	ICP-AES	7439-89-6	Iron	ug/mL	99.6	<0.0200	<40.0	n/a	n/a	n/a	n/a	40.0	U	20160542
Con 11-Liq-c	C105-15-01	S16R000174	ICP-AES	7440-09-7	Potassium	ug/mL	99.0	<0.0220	<44.0	n/a	n/a	n/a	n/a	44.0	U	20160542
Con 11-Liq-c	C105-15-01	S16R000174	ICP-AES	7439-91-0	Lanthanum	ug/mL	99.4	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Con 11-Liq-c	C105-15-01	S16R000174	ICP-AES	7439-93-2	Lithium	ug/mL	101	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Con 11-Liq-c	C105-15-01	S16R000174	ICP-AES	7439-95-4	Magnesium	ug/mL	100	<9.00E-03	<18.0	n/a	n/a	n/a	n/a	18.0	U	20160542
Con 11-Liq-c	C105-15-01	S16R000174	ICP-AES	7439-96-5	Manganese	ug/mL	100	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Con 11-Liq-c	C105-15-01	S16R000174	ICP-AES	7439-98-7	Molybdenum	ug/mL	98.5	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20160542
Con 11-Liq-c	C105-15-01	S16R000174	ICP-AES	7440-23-5	Sodium	ug/mL	100	<0.0920	3.94E+04	n/a	n/a	n/a	n/a	184		20160542
Con 11-Liq-c	C105-15-01	S16R000174	ICP-AES	7440-00-8	Neodymium	ug/mL	102	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20160542
Con 11-Liq-c	C105-15-01	S16R000174	ICP-AES	7440-02-0	Nickel	ug/mL	99.6	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20160542
Con 11-Liq-c	C105-15-01	S16R000174	ICP-AES	7440-30-1	Niobium	ug/mL	102	<6.00E-03	<12.0	n/a	n/a	n/a	n/a	12.0	U	20160542
Con 11-Liq-c	C105-15-01	S16R000174	ICP-AES	7723-14-0	Phosphorus	ug/mL	98.2	<0.0130	354	n/a	n/a	n/a	n/a	26.0		20160542
Con 11-Liq-c	C105-15-01	S16R000174	ICP-AES	7439-92-1	Lead	ug/mL	101	<0.0130	<26.0	n/a	n/a	n/a	n/a	26.0	U	20160542
Con 11-Liq-c	C105-15-01	S16R000174	ICP-AES	7440-05-3	Palladium	ug/mL	102	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20160542
Con 11-Liq-c	C105-15-01	S16R000174	ICP-AES	7440-10-0	Praseodymium	ug/mL	101	<0.0260	<52.0	n/a	n/a	n/a	n/a	52.0	U	20160542
Con 11-Liq-c	C105-15-01	S16R000174	ICP-AES	7440-17-7	Rubidium	ug/mL	100	<0.0570	<114	n/a	n/a	n/a	n/a	114	U	20160542
Con 11-Liq-c	C105-15-01	S16R000174	ICP-AES	7440-16-6	Rhodium	ug/mL	100	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20160542
Con 11-Liq-c	C105-15-01	S16R000174	ICP-AES	7440-18-8	Ruthenium	ug/mL	98.8	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20160542
Con 11-Liq-c	C105-15-01	S16R000174	ICP-AES	7704-34-9	Sulfur	ug/mL	98.8	<0.0280	335	n/a	n/a	n/a	n/a	56.0	J	20160542
Con 11-Liq-c	C105-15-01	S16R000174	ICP-AES	7440-36-0	Antimony	ug/mL	97.4	<0.0180	<36.0	n/a	n/a	n/a	n/a	36.0	U	20160542
Con 11-Liq-c	C105-15-01	S16R000174	ICP-AES	7782-49-2	Selenium	ug/mL	99.1	<0.0300	<60.0	n/a	n/a	n/a	n/a	60.0	U	20160542
Con 11-Liq-c	C105-15-01	S16R000174	ICP-AES	7440-21-3	Silicon	ug/mL	100	0.0133	27.7	n/a	n/a	n/a	n/a	24.0	BJ	20160542
Con 11-Liq-c	C105-15-01	S16R000174	ICP-AES	7440-19-9	Samarium	ug/mL	99.9	<0.0170	<34.0	n/a	n/a	n/a	n/a	34.0	U	20160542
Con 11-Liq-c	C105-15-01	S16R000174	ICP-AES	7440-31-5	Tin	ug/mL	99.6	<8.00E-03	<16.0	n/a	n/a	n/a	n/a	16.0	U	20160542

Con 11-Liq-c	C105-15-01	S16R000174	ICP-AES	7440-24-6	Strontium	ug/mL	100	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20160542
Con 11-Liq-c	C105-15-01	S16R000174	ICP-AES	7440-25-7	Tantalum	ug/mL	103	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20160542
Con 11-Liq-c	C105-15-01	S16R000174	ICP-AES	13494-80-9	Tellurium	ug/mL	100	<9.00E-03	<18.0	n/a	n/a	n/a	n/a	18.0	U	20160542
Con 11-Liq-c	C105-15-01	S16R000174	ICP-AES	7440-29-1	Thorium	ug/mL	101	<0.0130	<26.0	n/a	n/a	n/a	n/a	26.0	U	20160542
Con 11-Liq-c	C105-15-01	S16R000174	ICP-AES	7440-32-6	Titanium	ug/mL	97.9	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20160542
Con 11-Liq-c	C105-15-01	S16R000174	ICP-AES	7440-28-0	Thallium	ug/mL	97.5	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20160542
Con 11-Liq-c	C105-15-01	S16R000174	ICP-AES	7440-61-1	Uranium	ug/mL	101	<0.0290	<58.0	n/a	n/a	n/a	n/a	58.0	U	20160542
Con 11-Liq-c	C105-15-01	S16R000174	ICP-AES	7440-62-2	Vanadium	ug/mL	98.9	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Con 11-Liq-c	C105-15-01	S16R000174	ICP-AES	7440-33-7	Tungsten	ug/mL	101	<0.0160	<32.0	n/a	n/a	n/a	n/a	32.0	U	20160542
Con 11-Liq-c	C105-15-01	S16R000174	ICP-AES	7440-65-5	Yttrium	ug/mL	100	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20160542
Con 11-Liq-c	C105-15-01	S16R000174	ICP-AES	7440-66-6	Zinc	ug/mL	99.6	<0.0320	<64.0	n/a	n/a	n/a	n/a	64.0	U	20160542
Con 11-Liq-c	C105-15-01	S16R000174	ICP-AES	7440-67-7	Zirconium	ug/mL	97.5	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Con 12-Liq-c	C105-15-01	S16R000175	ICP-AES	7440-22-4	Silver	ug/mL	99.9	<3.00E-03	<6.00	n/a	n/a	n/a	n/a	6.00	U	20160542
Con 12-Liq-c	C105-15-01	S16R000175	ICP-AES	7429-90-5	Aluminum	ug/mL	98.5	<0.0140	767	n/a	n/a	n/a	n/a	28.0		20160542
Con 12-Liq-c	C105-15-01	S16R000175	ICP-AES	7440-38-2	Arsenic	ug/mL	98.6	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20160542
Con 12-Liq-c	C105-15-01	S16R000175	ICP-AES	7440-42-8	Boron	ug/mL	97.9	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20160542
Con 12-Liq-c	C105-15-01	S16R000175	ICP-AES	7440-39-3	Barium	ug/mL	99.6	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Con 12-Liq-c	C105-15-01	S16R000175	ICP-AES	7440-41-7	Beryllium	ug/mL	100	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Con 12-Liq-c	C105-15-01	S16R000175	ICP-AES	7440-69-9	Bismuth	ug/mL	99.1	<0.0190	<38.0	n/a	n/a	n/a	n/a	38.0	U	20160542
Con 12-Liq-c	C105-15-01	S16R000175	ICP-AES	7440-70-2	Calcium	ug/mL	101	<0.120	<240	n/a	n/a	n/a	n/a	240	U	20160542
Con 12-Liq-c	C105-15-01	S16R000175	ICP-AES	7440-43-9	Cadmium	ug/mL	100	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Con 12-Liq-c	C105-15-01	S16R000175	ICP-AES	7440-45-1	Cerium	ug/mL	99.9	<0.0250	77.8	n/a	n/a	n/a	n/a	50.0	BJ	20160542
Con 12-Liq-c	C105-15-01	S16R000175	ICP-AES	7440-48-4	Cobalt	ug/mL	99.7	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Con 12-Liq-c	C105-15-01	S16R000175	ICP-AES	7440-47-3	Chromium	ug/mL	99.6	<2.00E-03	29.7	n/a	n/a	n/a	n/a	4.00	J	20160542
Con 12-Liq-c	C105-15-01	S16R000175	ICP-AES	7440-50-8	Copper	ug/mL	99.1	<2.00E-03	5.28	n/a	n/a	n/a	n/a	4.00	J	20160542
Con 12-Liq-c	C105-15-01	S16R000175	ICP-AES	7440-53-1	Europium	ug/mL	102	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Con 12-Liq-c	C105-15-01	S16R000175	ICP-AES	7439-89-6	Iron	ug/mL	99.6	<0.0200	<40.0	n/a	n/a	n/a	n/a	40.0	U	20160542
Con 12-Liq-c	C105-15-01	S16R000175	ICP-AES	7440-09-7	Potassium	ug/mL	99.0	<0.0220	<44.0	n/a	n/a	n/a	n/a	44.0	U	20160542
Con 12-Liq-c	C105-15-01	S16R000175	ICP-AES	7439-91-0	Lanthanum	ug/mL	99.4	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Con 12-Liq-c	C105-15-01	S16R000175	ICP-AES	7439-93-2	Lithium	ug/mL	101	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Con 12-Liq-c	C105-15-01	S16R000175	ICP-AES	7439-95-4	Magnesium	ug/mL	100	<9.00E-03	<18.0	n/a	n/a	n/a	n/a	18.0	U	20160542
Con 12-Liq-c	C105-15-01	S16R000175	ICP-AES	7439-96-5	Manganese	ug/mL	100	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Con 12-Liq-c	C105-15-01	S16R000175	ICP-AES	7439-98-7	Molybdenum	ug/mL	98.5	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20160542
Con 12-Liq-c	C105-15-01	S16R000175	ICP-AES	7440-23-5	Sodium	ug/mL	100	<0.0920	3.56E+04	n/a	n/a	n/a	n/a	184		20160542
Con 12-Liq-c	C105-15-01	S16R000175	ICP-AES	7440-00-8	Neodymium	ug/mL	102	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20160542
Con 12-Liq-c	C105-15-01	S16R000175	ICP-AES	7440-02-0	Nickel	ug/mL	99.6	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20160542
Con 12-Liq-c	C105-15-01	S16R000175	ICP-AES	7440-30-1	Niobium	ug/mL	102	<6.00E-03	<12.0	n/a	n/a	n/a	n/a	12.0	U	20160542
Con 12-Liq-c	C105-15-01	S16R000175	ICP-AES	7723-14-0	Phosphorus	ug/mL	98.2	<0.0130	478	n/a	n/a	n/a	n/a	26.0		20160542
Con 12-Liq-c	C105-15-01	S16R000175	ICP-AES	7439-92-1	Lead	ug/mL	101	<0.0130	<26.0	n/a	n/a	n/a	n/a	26.0	U	20160542
Con 12-Liq-c	C105-15-01	S16R000175	ICP-AES	7440-05-3	Palladium	ug/mL	102	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20160542
Con 12-Liq-c	C105-15-01	S16R000175	ICP-AES	7440-10-0	Praseodymium	ug/mL	101	<0.0260	<52.0	n/a	n/a	n/a	n/a	52.0	U	20160542
Con 12-Liq-c	C105-15-01	S16R000175	ICP-AES	7440-17-7	Rubidium	ug/mL	100	<0.0570	<114	n/a	n/a	n/a	n/a	114	U	20160542
Con 12-Liq-c	C105-15-01	S16R000175	ICP-AES	7440-16-6	Rhodium	ug/mL	100	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20160542
Con 12-Liq-c	C105-15-01	S16R000175	ICP-AES	7440-18-8	Ruthenium	ug/mL	98.8	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20160542
Con 12-Liq-c	C105-15-01	S16R000175	ICP-AES	7704-34-9	Sulfur	ug/mL	98.8	<0.0280	411	n/a	n/a	n/a	n/a	56.0	J	20160542
Con 12-Liq-c	C105-15-01	S16R000175	ICP-AES	7440-36-0	Antimony	ug/mL	97.4	<0.0180	<36.0	n/a	n/a	n/a	n/a	36.0	U	20160542
Con 12-Liq-c	C105-15-01	S16R000175	ICP-AES	7782-49-2	Selenium	ug/mL	99.1	<0.0300	<60.0	n/a	n/a	n/a	n/a	60.0	U	20160542
Con 12-Liq-c	C105-15-01	S16R000175	ICP-AES	7440-21-3	Silicon	ug/mL	100	0.0133	27.6	n/a	n/a	n/a	n/a	24.0	BJ	20160542
Con 12-Liq-c	C105-15-01	S16R000175	ICP-AES	7440-19-9	Samarium	ug/mL	99.9	<0.0170	<34.0	n/a	n/a	n/a	n/a	34.0	U	20160542
Con 12-Liq-c	C105-15-01	S16R000175	ICP-AES	7440-31-5	Tin	ug/mL	99.6	<8.00E-03	<16.0	n/a	n/a	n/a	n/a	16.0	U	20160542
Con 12-Liq-c	C105-15-01	S16R000175	ICP-AES	7440-24-6	Strontium	ug/mL	100	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20160542
Con 12-Liq-c	C105-15-01	S16R000175	ICP-AES	7440-25-7	Tantalum	ug/mL	103	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20160542
Con 12-Liq-c	C105-15-01	S16R000175	ICP-AES	13494-80-9	Tellurium	ug/mL	100	<9.00E-03	<18.0	n/a	n/a	n/a	n/a	18.0	U	20160542
Con 12-Liq-c	C105-15-01	S16R000175	ICP-AES	7440-29-1	Thorium	ug/mL	101	<0.0130	<26.0	n/a	n/a	n/a	n/a	26.0	U	20160542
Con 12-Liq-c	C105-15-01	S16R000175	ICP-AES	7440-32-6	Titanium	ug/mL	97.9	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20160542
Con 12-Liq-c	C105-15-01	S16R000175	ICP-AES	7440-28-0	Thallium	ug/mL	97.5	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20160542
Con 12-Liq-c	C105-15-01	S16R000175	ICP-AES	7440-61-1	Uranium	ug/mL	101	<0.0290	<58.0	n/a	n/a	n/a	n/a	58.0	U	20160542
Con 12-Liq-c	C105-15-01	S16R000175	ICP-AES	7440-62-2	Vanadium	ug/mL	98.9	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Con 12-Liq-c	C105-15-01	S16R000175	ICP-AES	7440-33-7	Tungsten	ug/mL	101	<0.0160	<32.0	n/a	n/a	n/a	n/a	32.0	U	20160542
Con 12-Liq-c	C105-15-01	S16R000175	ICP-AES	7440-65-5	Yttrium	ug/mL	100	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20160542
Con 12-Liq-c	C105-15-01	S16R000175	ICP-AES	7440-66-6	Zinc	ug/mL	99.6	<0.0320	<64.0	n/a	n/a	n/a	n/a	64.0	U	20160542
Con 12-Liq-c	C105-15-01	S16R000175	ICP-AES	7440-67-7	Zirconium	ug/mL	97.5	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Con 13-Liq-c	C105-15-02	S16R000176	ICP-AES	7440-22-4	Silver	ug/mL	101	<3.00E-03	<6.00	n/a	n/a	n/a	n/a	6.00	U	20160542
Con 13-Liq-c	C105-15-02	S16R000176	ICP-AES	7429-90-5	Aluminum	ug/mL	100	<0.0140	939	n/a	n/a	n/a	n/a	28.0		20160542
Con 13-Liq-c	C105-15-02	S16R000176	ICP-AES	7440-38-2	Arsenic	ug/mL	100	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20160542
Con 13-Liq-c	C105-15-02	S16R000176	ICP-AES	7440-42-8	Boron	ug/mL	99.5	<2.00E-03	4.98	n/a	n/a	n/a	n/a	4.00	BJ	20160542
Con 13-Liq-c	C105-15-02	S16R000176	ICP-AES	7440-39-3	Barium	ug/mL	102	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Con 13-Liq-c	C105-15-02	S16R000176	ICP-AES	7440-41-7	Beryllium	ug/mL	101	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Con 13-Liq-c	C105-15-02	S16R000176	ICP-AES	7440-69-9	Bismuth	ug/mL	102	<0.0190	<38.0	n/a	n/a	n/a	n/a	38.0	U	20160542
Con 13-Liq-c	C105-15-02	S16R000176	ICP-AES	7440-70-2	Calcium	ug/mL	101	<0.120	<240	n/a	n/a	n/a	n/a	240	U	20160542
Con 13-Liq-c	C105-15-02	S16R000176	ICP-AES	7440-43-9	Cadmium	ug/mL	101	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Con 13-Liq-c	C105-15-02	S16R000176	ICP-AES	7440-45-1	Cerium	ug/mL	96.2	<0.0250	<50.0	n/a	n/a	n/a	n/a	50.0	UY	20160542
Con 13-Liq-c	C105-15-02	S16R000176	ICP-AES	7440-48-4	Cobalt	ug/mL	101	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Con 13-Liq-c	C105-15-02	S16R000176	ICP-AES	7440-47-3	Chromium	ug/mL	101	<2.00E-03	34.0	n/a	n/a	n/a	n/a	4.00	J	20160542
Con 13-Liq-c	C105-15-02	S16R000176	ICP-AES	7440-50-8	Copper	ug/mL	101	<2.00E-03	4.12	n/a	n/a	n/a	n/a	4.00	J	20160542
Con 13-Liq-c	C105-15-02	S16R000176	ICP-AES	7440-53-1	Europium	ug/mL	97.9	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Con 13-Liq-c	C105-15-02	S16R000176	ICP-AES	7439-89-6	Iron	ug/mL	101	<0.0200	<40.0	n/a	n/a	n/a	n/a	40.0	U	20160542
Con 13-Liq-c	C105-15-02	S16R000176	ICP-AES	7440-09-7	Potassium	ug/mL	101	<0.0220	<44.0	n/a	n/a	n/a	n/a	44.0	U	20160542
Con 13-Liq-c	C105-15-02	S16R000176	ICP-AES	7439-91-0	Lanthanum	ug/mL	101	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Con 13-Liq-c	C105-15-02	S16R000176	ICP-AES	7439-93-2	Lithium	ug/mL	103	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Con 13-Liq-c	C105-15-02	S16R000176	ICP-AES	7439-95-4	Magnesium	ug/mL	101	<9.00E-03	<18.0	n/a	n/a	n/a	n/a	18.0	U	20160542
Con 13-Liq-c	C105-15-02	S16R000176	ICP-AES	7439-96-5	Manganese	ug/mL	101	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542

Con 13-Liq-c	C105-15-02	S16R000176	ICP-AES	7439-98-7	Molybdenum	ug/mL	99.9	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20160542
Con 13-Liq-c	C105-15-02	S16R000176	ICP-AES	7440-23-5	Sodium	ug/mL	101	<0.0920	2.98E+04	n/a	n/a	n/a	n/a	184		20160542
Con 13-Liq-c	C105-15-02	S16R000176	ICP-AES	7440-00-8	Neodymium	ug/mL	97.3	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20160542
Con 13-Liq-c	C105-15-02	S16R000176	ICP-AES	7440-02-0	Nickel	ug/mL	101	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20160542
Con 13-Liq-c	C105-15-02	S16R000176	ICP-AES	7440-30-1	Niobium	ug/mL	100	<6.00E-03	<12.0	n/a	n/a	n/a	n/a	12.0	U	20160542
Con 13-Liq-c	C105-15-02	S16R000176	ICP-AES	7723-14-0	Phosphorus	ug/mL	99.1	<0.0130	341	n/a	n/a	n/a	n/a	26.0		20160542
Con 13-Liq-c	C105-15-02	S16R000176	ICP-AES	7439-92-1	Lead	ug/mL	101	<0.0130	<26.0	n/a	n/a	n/a	n/a	26.0	U	20160542
Con 13-Liq-c	C105-15-02	S16R000176	ICP-AES	7440-05-3	Palladium	ug/mL	101	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20160542
Con 13-Liq-c	C105-15-02	S16R000176	ICP-AES	7440-10-0	Praseodymium	ug/mL	95.6	<0.0260	<52.0	n/a	n/a	n/a	n/a	52.0	UY	20160542
Con 13-Liq-c	C105-15-02	S16R000176	ICP-AES	7440-17-7	Rubidium	ug/mL	97.9	<0.0570	<114	n/a	n/a	n/a	n/a	114	U	20160542
Con 13-Liq-c	C105-15-02	S16R000176	ICP-AES	7440-16-6	Rhodium	ug/mL	99.9	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20160542
Con 13-Liq-c	C105-15-02	S16R000176	ICP-AES	7440-18-8	Ruthenium	ug/mL	98.2	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20160542
Con 13-Liq-c	C105-15-02	S16R000176	ICP-AES	7704-34-9	Sulfur	ug/mL	99.6	<0.0280	195	n/a	n/a	n/a	n/a	56.0	J	20160542
Con 13-Liq-c	C105-15-02	S16R000176	ICP-AES	7440-36-0	Antimony	ug/mL	99.7	<0.0180	<36.0	n/a	n/a	n/a	n/a	36.0	U	20160542
Con 13-Liq-c	C105-15-02	S16R000176	ICP-AES	7782-49-2	Selenium	ug/mL	101	<0.0300	<60.0	n/a	n/a	n/a	n/a	60.0	U	20160542
Con 13-Liq-c	C105-15-02	S16R000176	ICP-AES	7440-21-3	Silicon	ug/mL	103	<0.0120	31.0	n/a	n/a	n/a	n/a	24.0	J	20160542
Con 13-Liq-c	C105-15-02	S16R000176	ICP-AES	7440-19-9	Samarium	ug/mL	95.3	<0.0170	<34.0	n/a	n/a	n/a	n/a	34.0	UY	20160542
Con 13-Liq-c	C105-15-02	S16R000176	ICP-AES	7440-31-5	Tin	ug/mL	98.9	<8.00E-03	<16.0	n/a	n/a	n/a	n/a	16.0	U	20160542
Con 13-Liq-c	C105-15-02	S16R000176	ICP-AES	7440-24-6	Strontium	ug/mL	102	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20160542
Con 13-Liq-c	C105-15-02	S16R000176	ICP-AES	7440-25-7	Tantalum	ug/mL	103	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20160542
Con 13-Liq-c	C105-15-02	S16R000176	ICP-AES	13494-80-9	Tellurium	ug/mL	100	<9.00E-03	<18.0	n/a	n/a	n/a	n/a	18.0	U	20160542
Con 13-Liq-c	C105-15-02	S16R000176	ICP-AES	7440-29-1	Thorium	ug/mL	98.7	<0.0130	<26.0	n/a	n/a	n/a	n/a	26.0	U	20160542
Con 13-Liq-c	C105-15-02	S16R000176	ICP-AES	7440-32-6	Titanium	ug/mL	100	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20160542
Con 13-Liq-c	C105-15-02	S16R000176	ICP-AES	7440-28-0	Thallium	ug/mL	98.2	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20160542
Con 13-Liq-c	C105-15-02	S16R000176	ICP-AES	7440-61-1	Uranium	ug/mL	97.3	<0.0290	61.9	n/a	n/a	n/a	n/a	58.0	J	20160542
Con 13-Liq-c	C105-15-02	S16R000176	ICP-AES	7440-62-2	Vanadium	ug/mL	101	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Con 13-Liq-c	C105-15-02	S16R000176	ICP-AES	7440-33-7	Tungsten	ug/mL	99.9	<0.0160	<32.0	n/a	n/a	n/a	n/a	32.0	U	20160542
Con 13-Liq-c	C105-15-02	S16R000176	ICP-AES	7440-65-5	Yttrium	ug/mL	98.0	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20160542
Con 13-Liq-c	C105-15-02	S16R000176	ICP-AES	7440-66-6	Zinc	ug/mL	101	<0.0320	<64.0	n/a	n/a	n/a	n/a	64.0	U	20160542
Con 13-Liq-c	C105-15-02	S16R000176	ICP-AES	7440-67-7	Zirconium	ug/mL	99.3	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Con 14-Liq-c	C105-15-02	S16R000177	ICP-AES	7440-22-4	Silver	ug/mL	101	<3.00E-03	<6.00	n/a	n/a	n/a	n/a	6.00	U	20160542
Con 14-Liq-c	C105-15-02	S16R000177	ICP-AES	7429-90-5	Aluminum	ug/mL	100	<0.0140	437	n/a	n/a	n/a	n/a	28.0		20160542
Con 14-Liq-c	C105-15-02	S16R000177	ICP-AES	7440-38-2	Arsenic	ug/mL	100	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20160542
Con 14-Liq-c	C105-15-02	S16R000177	ICP-AES	7440-42-8	Boron	ug/mL	99.5	<2.00E-03	4.54	n/a	n/a	n/a	n/a	4.00	BJ	20160542
Con 14-Liq-c	C105-15-02	S16R000177	ICP-AES	7440-39-3	Barium	ug/mL	102	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Con 14-Liq-c	C105-15-02	S16R000177	ICP-AES	7440-41-7	Beryllium	ug/mL	101	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Con 14-Liq-c	C105-15-02	S16R000177	ICP-AES	7440-69-9	Bismuth	ug/mL	102	<0.0190	<38.0	n/a	n/a	n/a	n/a	38.0	U	20160542
Con 14-Liq-c	C105-15-02	S16R000177	ICP-AES	7440-70-2	Calcium	ug/mL	101	<0.120	<240	n/a	n/a	n/a	n/a	240	U	20160542
Con 14-Liq-c	C105-15-02	S16R000177	ICP-AES	7440-43-9	Cadmium	ug/mL	101	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Con 14-Liq-c	C105-15-02	S16R000177	ICP-AES	7440-45-1	Cerium	ug/mL	96.2	<0.0250	<50.0	n/a	n/a	n/a	n/a	50.0	UY	20160542
Con 14-Liq-c	C105-15-02	S16R000177	ICP-AES	7440-48-4	Cobalt	ug/mL	101	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Con 14-Liq-c	C105-15-02	S16R000177	ICP-AES	7440-47-3	Chromium	ug/mL	101	<2.00E-03	28.6	n/a	n/a	n/a	n/a	4.00	J	20160542
Con 14-Liq-c	C105-15-02	S16R000177	ICP-AES	7440-50-8	Copper	ug/mL	101	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20160542
Con 14-Liq-c	C105-15-02	S16R000177	ICP-AES	7440-53-1	Europium	ug/mL	97.9	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Con 14-Liq-c	C105-15-02	S16R000177	ICP-AES	7439-89-6	Iron	ug/mL	101	<0.0200	<40.0	n/a	n/a	n/a	n/a	40.0	U	20160542
Con 14-Liq-c	C105-15-02	S16R000177	ICP-AES	7440-09-7	Potassium	ug/mL	101	<0.0220	<44.0	n/a	n/a	n/a	n/a	44.0	U	20160542
Con 14-Liq-c	C105-15-02	S16R000177	ICP-AES	7439-91-0	Lanthanum	ug/mL	101	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Con 14-Liq-c	C105-15-02	S16R000177	ICP-AES	7439-93-2	Lithium	ug/mL	103	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Con 14-Liq-c	C105-15-02	S16R000177	ICP-AES	7439-95-4	Magnesium	ug/mL	101	<9.00E-03	<18.0	n/a	n/a	n/a	n/a	18.0	U	20160542
Con 14-Liq-c	C105-15-02	S16R000177	ICP-AES	7439-96-5	Manganese	ug/mL	101	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Con 14-Liq-c	C105-15-02	S16R000177	ICP-AES	7439-98-7	Molybdenum	ug/mL	99.9	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20160542
Con 14-Liq-c	C105-15-02	S16R000177	ICP-AES	7440-23-5	Sodium	ug/mL	101	<0.0920	2.57E+04	n/a	n/a	n/a	n/a	184		20160542
Con 14-Liq-c	C105-15-02	S16R000177	ICP-AES	7440-00-8	Neodymium	ug/mL	97.3	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20160542
Con 14-Liq-c	C105-15-02	S16R000177	ICP-AES	7440-02-0	Nickel	ug/mL	101	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20160542
Con 14-Liq-c	C105-15-02	S16R000177	ICP-AES	7440-30-1	Niobium	ug/mL	100	<6.00E-03	<12.0	n/a	n/a	n/a	n/a	12.0	U	20160542
Con 14-Liq-c	C105-15-02	S16R000177	ICP-AES	7723-14-0	Phosphorus	ug/mL	99.1	<0.0130	312	n/a	n/a	n/a	n/a	26.0		20160542
Con 14-Liq-c	C105-15-02	S16R000177	ICP-AES	7439-92-1	Lead	ug/mL	101	<0.0130	<26.0	n/a	n/a	n/a	n/a	26.0	U	20160542
Con 14-Liq-c	C105-15-02	S16R000177	ICP-AES	7440-05-3	Palladium	ug/mL	101	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20160542
Con 14-Liq-c	C105-15-02	S16R000177	ICP-AES	7440-10-0	Praseodymium	ug/mL	95.6	<0.0260	<52.0	n/a	n/a	n/a	n/a	52.0	UY	20160542
Con 14-Liq-c	C105-15-02	S16R000177	ICP-AES	7440-17-7	Rubidium	ug/mL	97.9	<0.0570	<114	n/a	n/a	n/a	n/a	114	U	20160542
Con 14-Liq-c	C105-15-02	S16R000177	ICP-AES	7440-16-6	Rhodium	ug/mL	99.9	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20160542
Con 14-Liq-c	C105-15-02	S16R000177	ICP-AES	7440-18-8	Ruthenium	ug/mL	98.2	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20160542
Con 14-Liq-c	C105-15-02	S16R000177	ICP-AES	7704-34-9	Sulfur	ug/mL	99.6	<0.0280	174	n/a	n/a	n/a	n/a	56.0	J	20160542
Con 14-Liq-c	C105-15-02	S16R000177	ICP-AES	7440-36-0	Antimony	ug/mL	99.7	<0.0180	<36.0	n/a	n/a	n/a	n/a	36.0	U	20160542
Con 14-Liq-c	C105-15-02	S16R000177	ICP-AES	7782-49-2	Selenium	ug/mL	101	<0.0300	<60.0	n/a	n/a	n/a	n/a	60.0	U	20160542
Con 14-Liq-c	C105-15-02	S16R000177	ICP-AES	7440-21-3	Silicon	ug/mL	103	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20160542
Con 14-Liq-c	C105-15-02	S16R000177	ICP-AES	7440-19-9	Samarium	ug/mL	95.3	<0.0170	<34.0	n/a	n/a	n/a	n/a	34.0	UY	20160542
Con 14-Liq-c	C105-15-02	S16R000177	ICP-AES	7440-31-5	Tin	ug/mL	98.9	<8.00E-03	<16.0	n/a	n/a	n/a	n/a	16.0	U	20160542
Con 14-Liq-c	C105-15-02	S16R000177	ICP-AES	7440-24-6	Strontium	ug/mL	102	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20160542
Con 14-Liq-c	C105-15-02	S16R000177	ICP-AES	7440-25-7	Tantalum	ug/mL	103	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20160542
Con 14-Liq-c	C105-15-02	S16R000177	ICP-AES	13494-80-9	Tellurium	ug/mL	100	<9.00E-03	<18.0	n/a	n/a	n/a	n/a	18.0	U	20160542
Con 14-Liq-c	C105-15-02	S16R000177	ICP-AES	7440-29-1	Thorium	ug/mL	98.7	<0.0130	<26.0	n/a	n/a	n/a	n/a	26.0	U	20160542
Con 14-Liq-c	C105-15-02	S16R000177	ICP-AES	7440-32-6	Titanium	ug/mL	100	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20160542
Con 14-Liq-c	C105-15-02	S16R000177	ICP-AES	7440-28-0	Thallium	ug/mL	98.2	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20160542
Con 14-Liq-c	C105-15-02	S16R000177	ICP-AES	7440-61-1	Uranium	ug/mL	97.3	<0.0290	<58.0	n/a	n/a	n/a	n/a	58.0	U	20160542
Con 14-Liq-c	C105-15-02	S16R000177	ICP-AES	7440-62-2	Vanadium	ug/mL	101	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Con 14-Liq-c	C105-15-02	S16R000177	ICP-AES	7440-33-7	Tungsten	ug/mL	99.9	<0.0160	<32.0	n/a	n/a	n/a	n/a	32.0	U	20160542
Con 14-Liq-c	C105-15-02	S16R000177	ICP-AES	7440-65-5	Yttrium	ug/mL	98.0	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20160542
Con 14-Liq-c	C105-15-02	S16R000177	ICP-AES	7440-66-6	Zinc	ug/mL	101	<0.0320	<64.0	n/a	n/a	n/a	n/a	64.0	U	20160542
Con 14-Liq-c	C105-15-02	S16R000177	ICP-AES	7440-67-7	Zirconium	ug/mL	99.3	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 1-Liq-a	C105-15-01	S15R000665	ICP-AES	7440-22-4	Silver	ug/mL	99.9	<3.00E-03	<6.00	<6.00	n/a	n/a	90.7	6.00	U	20152628
Cone 1-Liq-a	C105-15-01	S15R000665	ICP-AES	7429-90-5	Aluminum	ug/mL	98.5	<0.0140	<28.0	<28.0	n/a	n/a	97.8	28.0	U	20152628

Cone 1-Liq-a	C105-15-01	S15R000665	ICP-AES	7440-38-2	Arsenic	ug/mL	98.6	<0.0150	<30.0	<30.0	n/a	n/a	94.7	30.0	U	20152628
Cone 1-Liq-a	C105-15-01	S15R000665	ICP-AES	7440-42-8	Boron	ug/mL	97.9	<2.00E-03	<4.00	<4.00	n/a	n/a	97.0	4.00	U	20152628
Cone 1-Liq-a	C105-15-01	S15R000665	ICP-AES	7440-39-3	Barium	ug/mL	99.6	<1.00E-03	<2.00	<2.00	n/a	n/a	94.1	2.00	U	20152628
Cone 1-Liq-a	C105-15-01	S15R000665	ICP-AES	7440-41-7	Beryllium	ug/mL	100	<1.00E-03	<2.00	<2.00	n/a	n/a	95.1	2.00	U	20152628
Cone 1-Liq-a	C105-15-01	S15R000665	ICP-AES	7440-69-9	Bismuth	ug/mL	99.1	<0.0190	<38.0	<38.0	n/a	n/a	94.3	38.0	U	20152628
Cone 1-Liq-a	C105-15-01	S15R000665	ICP-AES	7440-70-2	Calcium	ug/mL	101	<0.120	<240	<240	n/a	n/a	98.2	240	U	20152628
Cone 1-Liq-a	C105-15-01	S15R000665	ICP-AES	7440-43-9	Cadmium	ug/mL	100	<1.00E-03	<2.00	<2.00	n/a	n/a	96.1	2.00	U	20152628
Cone 1-Liq-a	C105-15-01	S15R000665	ICP-AES	7440-45-1	Cerium	ug/mL	99.9	<0.0250	91.8	74.2	83.0	21.1	101	50.0	BJ	20152628
Cone 1-Liq-a	C105-15-01	S15R000665	ICP-AES	7440-48-4	Cobalt	ug/mL	99.7	<1.00E-03	<2.00	<2.00	n/a	n/a	94.6	2.00	U	20152628
Cone 1-Liq-a	C105-15-01	S15R000665	ICP-AES	7440-47-3	Chromium	ug/mL	99.6	<2.00E-03	30.1	31.6	30.9	4.83	94.7	4.00	J	20152628
Cone 1-Liq-a	C105-15-01	S15R000665	ICP-AES	7440-50-8	Copper	ug/mL	99.1	<2.00E-03	10.2	10.1	10.2	1.34	97.1	4.00	J	20152628
Cone 1-Liq-a	C105-15-01	S15R000665	ICP-AES	7440-53-1	Europium	ug/mL	102	<1.00E-03	<2.00	<2.00	n/a	n/a	96.6	2.00	U	20152628
Cone 1-Liq-a	C105-15-01	S15R000665	ICP-AES	7439-89-6	Iron	ug/mL	99.6	<0.0200	<40.0	<40.0	n/a	n/a	96.0	40.0	U	20152628
Cone 1-Liq-a	C105-15-01	S15R000665	ICP-AES	7440-09-7	Potassium	ug/mL	99.0	<0.0220	<44.0	<44.0	n/a	n/a	97.9	44.0	U	20152628
Cone 1-Liq-a	C105-15-01	S15R000665	ICP-AES	7439-91-0	Lanthanum	ug/mL	99.4	<1.00E-03	<2.00	<2.00	n/a	n/a	96.5	2.00	U	20152628
Cone 1-Liq-a	C105-15-01	S15R000665	ICP-AES	7439-93-2	Lithium	ug/mL	101	<1.00E-03	<2.00	<2.00	n/a	n/a	99.8	2.00	U	20152628
Cone 1-Liq-a	C105-15-01	S15R000665	ICP-AES	7439-95-4	Magnesium	ug/mL	100	<9.00E-03	<18.0	<18.0	n/a	n/a	97.6	18.0	U	20152628
Cone 1-Liq-a	C105-15-01	S15R000665	ICP-AES	7439-96-5	Manganese	ug/mL	100	<1.00E-03	<2.00	<2.00	n/a	n/a	96.9	2.00	U	20152628
Cone 1-Liq-a	C105-15-01	S15R000665	ICP-AES	7439-98-7	Molybdenum	ug/mL	98.5	<2.00E-03	<4.00	<4.00	n/a	n/a	96.8	4.00	U	20152628
Cone 1-Liq-a	C105-15-01	S15R000665	ICP-AES	7440-23-5	Sodium	ug/mL	100	<0.0920	1.21E+04	1.25E+04	1.23E+04	3.58	99.4	184		20152628
Cone 1-Liq-a	C105-15-01	S15R000665	ICP-AES	7440-00-8	Neodymium	ug/mL	102	<0.0150	<30.0	<30.0	n/a	n/a	102	30.0	U	20152628
Cone 1-Liq-a	C105-15-01	S15R000665	ICP-AES	7440-02-0	Nickel	ug/mL	99.6	<2.00E-03	<4.00	<4.00	n/a	n/a	92.7	4.00	U	20152628
Cone 1-Liq-a	C105-15-01	S15R000665	ICP-AES	7440-30-1	Niobium	ug/mL	102	<6.00E-03	<12.0	<12.0	n/a	n/a	104	12.0	U	20152628
Cone 1-Liq-a	C105-15-01	S15R000665	ICP-AES	7723-14-0	Phosphorus	ug/mL	98.2	<0.0130	324	337	331	4.20	95.9	26.0		20152628
Cone 1-Liq-a	C105-15-01	S15R000665	ICP-AES	7439-92-1	Lead	ug/mL	101	<0.0130	<26.0	<26.0	n/a	n/a	101	26.0	U	20152628
Cone 1-Liq-a	C105-15-01	S15R000665	ICP-AES	7440-05-3	Palladium	ug/mL	102	<0.0120	<24.0	<24.0	n/a	n/a	96.3	24.0	U	20152628
Cone 1-Liq-a	C105-15-01	S15R000665	ICP-AES	7440-10-0	Praseodymium	ug/mL	101	<0.0260	<52.0	<52.0	n/a	n/a	105	52.0	U	20152628
Cone 1-Liq-a	C105-15-01	S15R000665	ICP-AES	7440-17-7	Rubidium	ug/mL	100	<0.0570	<114	<114	n/a	n/a	96.8	114	U	20152628
Cone 1-Liq-a	C105-15-01	S15R000665	ICP-AES	7440-16-6	Rhodium	ug/mL	100	<0.0120	<24.0	<24.0	n/a	n/a	95.9	24.0	U	20152628
Cone 1-Liq-a	C105-15-01	S15R000665	ICP-AES	7440-18-8	Ruthenium	ug/mL	98.8	<5.00E-03	<10.0	<10.0	n/a	n/a	92.5	10.0	U	20152628
Cone 1-Liq-a	C105-15-01	S15R000665	ICP-AES	7704-34-9	Sulfur	ug/mL	98.8	<0.0280	325	326	326	0.324	96.0	56.0	J	20152628
Cone 1-Liq-a	C105-15-01	S15R000665	ICP-AES	7440-36-0	Antimony	ug/mL	97.4	<0.0180	<36.0	<36.0	n/a	n/a	110	36.0	U	20152628
Cone 1-Liq-a	C105-15-01	S15R000665	ICP-AES	7782-49-2	Selenium	ug/mL	99.1	<0.0300	<60.0	<60.0	n/a	n/a	95.8	60.0	U	20152628
Cone 1-Liq-a	C105-15-01	S15R000665	ICP-AES	7440-21-3	Silicon	ug/mL	100	0.0133	<24.0	<24.0	n/a	n/a	99.3	24.0	U	20152628
Cone 1-Liq-a	C105-15-01	S15R000665	ICP-AES	7440-19-9	Samarium	ug/mL	99.9	<0.0170	<34.0	36.6	n/a	n/a	101	34.0	U	20152628
Cone 1-Liq-a	C105-15-01	S15R000665	ICP-AES	7440-31-5	Tin	ug/mL	99.6	<8.00E-03	<16.0	<16.0	n/a	n/a	92.6	16.0	U	20152628
Cone 1-Liq-a	C105-15-01	S15R000665	ICP-AES	7440-24-6	Strontium	ug/mL	100	<2.00E-03	<4.00	<4.00	n/a	n/a	93.2	4.00	U	20152628
Cone 1-Liq-a	C105-15-01	S15R000665	ICP-AES	7440-25-7	Tantalum	ug/mL	103	<5.00E-03	<10.0	<10.0	n/a	n/a	97.2	10.0	U	20152628
Cone 1-Liq-a	C105-15-01	S15R000665	ICP-AES	13494-80-9	Tellurium	ug/mL	100	<9.00E-03	<18.0	<18.0	n/a	n/a	95.0	18.0	U	20152628
Cone 1-Liq-a	C105-15-01	S15R000665	ICP-AES	7440-29-1	Thorium	ug/mL	101	<0.0130	<26.0	<26.0	n/a	n/a	95.6	26.0	U	20152628
Cone 1-Liq-a	C105-15-01	S15R000665	ICP-AES	7440-32-6	Titanium	ug/mL	97.9	<2.00E-03	<4.00	<4.00	n/a	n/a	93.5	4.00	U	20152628
Cone 1-Liq-a	C105-15-01	S15R000665	ICP-AES	7440-28-0	Thallium	ug/mL	97.5	<0.0150	<30.0	<30.0	n/a	n/a	88.8	30.0	U	20152628
Cone 1-Liq-a	C105-15-01	S15R000665	ICP-AES	7440-61-1	Uranium	ug/mL	101	<0.0290	3.94E+03	4.13E+03	4.04E+03	4.70	101	58.0		20152628
Cone 1-Liq-a	C105-15-01	S15R000665	ICP-AES	7440-62-2	Vanadium	ug/mL	98.9	<1.00E-03	<2.00	<2.00	n/a	n/a	94.2	2.00	U	20152628
Cone 1-Liq-a	C105-15-01	S15R000665	ICP-AES	7440-33-7	Tungsten	ug/mL	101	<0.0160	<32.0	<32.0	n/a	n/a	99.0	32.0	U	20152628
Cone 1-Liq-a	C105-15-01	S15R000665	ICP-AES	7440-65-5	Yttrium	ug/mL	100	<2.00E-03	<4.00	<4.00	n/a	n/a	96.8	4.00	U	20152628
Cone 1-Liq-a	C105-15-01	S15R000665	ICP-AES	7440-66-6	Zinc	ug/mL	99.6	<0.0320	<64.0	<64.0	n/a	n/a	94.7	64.0	U	20152628
Cone 1-Liq-a	C105-15-01	S15R000665	ICP-AES	7440-67-7	Zirconium	ug/mL	97.5	<1.00E-03	13.0	13.6	13.3	4.30	93.4	2.00	J	20152628
Cone 1-Liq-a	C105-15-01	S16R000268	ICP-AES	7440-22-4	Silver	ug/mL	102	<3.00E-03	5.25	5.02	5.14	4.59	86.8	0.300		20152628
Cone 1-Liq-a	C105-15-01	S16R000268	ICP-AES	7429-90-5	Aluminum	ug/mL	102	<0.0140	6.95	6.76	6.86	2.74	93.6	1.40	J	20152628
Cone 1-Liq-a	C105-15-01	S16R000268	ICP-AES	7440-38-2	Arsenic	ug/mL	103	<0.0150	<1.50	<1.50	n/a	n/a	97.8	1.50	U	20152628
Cone 1-Liq-a	C105-15-01	S16R000268	ICP-AES	7440-42-8	Boron	ug/mL	101	<2.00E-03	0.516	0.572	0.544	10.3	90.4	0.200	J	20152628
Cone 1-Liq-a	C105-15-01	S16R000268	ICP-AES	7440-39-3	Barium	ug/mL	103	<1.00E-03	<0.100	<0.100	n/a	n/a	96.3	0.100	U	20152628
Cone 1-Liq-a	C105-15-01	S16R000268	ICP-AES	7440-41-7	Beryllium	ug/mL	101	<1.00E-03	<0.100	<0.100	n/a	n/a	91.9	0.100	U	20152628
Cone 1-Liq-a	C105-15-01	S16R000268	ICP-AES	7440-69-9	Bismuth	ug/mL	102	<0.0190	<1.90	<1.90	n/a	n/a	93.4	1.90	U	20152628
Cone 1-Liq-a	C105-15-01	S16R000268	ICP-AES	7440-70-2	Calcium	ug/mL	102	<0.120	<12.0	<12.0	n/a	n/a	95.0	12.0	U	20152628
Cone 1-Liq-a	C105-15-01	S16R000268	ICP-AES	7440-43-9	Cadmium	ug/mL	102	<1.00E-03	<0.100	<0.100	n/a	n/a	94.4	0.100	U	20152628
Cone 1-Liq-a	C105-15-01	S16R000268	ICP-AES	7440-45-1	Cerium	ug/mL	100	<0.0250	<2.50	<2.50	n/a	n/a	90.9	2.50	U	20152628
Cone 1-Liq-a	C105-15-01	S16R000268	ICP-AES	7440-48-4	Cobalt	ug/mL	104	<1.00E-03	<0.100	<0.100	n/a	n/a	96.3	0.100	U	20152628
Cone 1-Liq-a	C105-15-01	S16R000268	ICP-AES	7440-47-3	Chromium	ug/mL	102	<2.00E-03	30.6	29.7	30.2	2.86	92.4	0.200		20152628
Cone 1-Liq-a	C105-15-01	S16R000268	ICP-AES	7440-50-8	Copper	ug/mL	102	<2.00E-03	13.2	12.8	13.0	3.07	93.1	0.200		20152628
Cone 1-Liq-a	C105-15-01	S16R000268	ICP-AES	7440-53-1	Europium	ug/mL	104	<1.00E-03	<0.100	<0.100	n/a	n/a	93.3	0.100	U	20152628
Cone 1-Liq-a	C105-15-01	S16R000268	ICP-AES	7439-89-6	Iron	ug/mL	101	<0.0200	<2.00	<2.00	n/a	n/a	92.3	2.00	U	20152628
Cone 1-Liq-a	C105-15-01	S16R000268	ICP-AES	7440-09-7	Potassium	ug/mL	102	<0.0220	38.5	38.8	38.6	0.781	92.9	2.20		20152628
Cone 1-Liq-a	C105-15-01	S16R000268	ICP-AES	7439-91-0	Lanthanum	ug/mL	101	<1.00E-03	<0.100	<0.100	n/a	n/a	91.4	0.100	U	20152628
Cone 1-Liq-a	C105-15-01	S16R000268	ICP-AES	7439-93-2	Lithium	ug/mL	103	<1.00E-03	0.318	0.302	0.310	5.34	91.7	0.100	J	20152628
Cone 1-Liq-a	C105-15-01	S16R000268	ICP-AES	7439-95-4	Magnesium	ug/mL	101	<9.00E-03	<0.900	<0.900	n/a	n/a	92.5	0.900	U	20152628
Cone 1-Liq-a	C105-15-01	S16R000268	ICP-AES	7439-96-5	Manganese	ug/mL	103	<1.00E-03	<0.100	<0.100	n/a	n/a	92.5	0.100	U	20152628
Cone 1-Liq-a	C105-15-01	S16R000268	ICP-AES	7439-98-7	Molybdenum	ug/mL	96.7	<2.00E-03	1.65	1.59	1.62	3.21	93.8	0.200	J	20152628
Cone 1-Liq-a	C105-15-01	S16R000268	ICP-AES	7440-00-8	Neodymium	ug/mL	99.8	<0.0150	3.94	4.04	3.99	2.62	91.9	1.50	J	20152628
Cone 1-Liq-a	C105-15-01	S16R000268	ICP-AES	7440-02-0	Nickel	ug/mL	103	<2.00E-03	<0.200	<0.200	n/a	n/a	95.7	0.200	U	20152628
Cone 1-Liq-a	C105-15-01	S16R000268	ICP-AES	7440-30-1	Niobium	ug/mL	102	<6.00E-03	<0.600	<0.600	n/a	n/a	96.2	0.600	U	20152628
Cone 1-Liq-a	C105-15-01	S16R000268	ICP-AES	7723-14-0	Phosphorus	ug/mL	98.7	<0.0130	332	326	329	1.59	93.8	1.30		20152628
Cone 1-Liq-a	C105-15-01	S16R000268	ICP-AES	7439-92-1	Lead	ug/mL	102	<0.0130	<1.30	<1.30	n/a	n/a	95.0	1.30	U	20152628
Cone 1-Liq-a	C105-15-01	S16R000268	ICP-AES	7440-05-3	Palladium	ug/mL	105	<0.0120	6.16	6.83	6.50	10.3	93.8	1.20	J	20152628
Cone 1-Liq-a	C105-15-01	S16R000268	ICP-AES	7440-10-0	Praseodymium	ug/mL	99.6	<0.0260	<2.60	<2.60	n/a	n/a	87.9	2.60	U	20152628
Cone 1-Liq-a	C105-15-01	S16R000268	ICP-AES	7440-17-7	Rubidium	ug/mL	101	<0.0570	<5.70	<5.70	n/a	n/a	91.9	5.70	U	20152628
Cone 1-Liq-a	C105-15-01	S16R000268	ICP-AES	7440-16-6	Rhodium	ug/mL	104	<0.0120	<1.20	<1.20	n/a	n/a	94.0	1.20	U	20152628
Cone 1-Liq-a	C105-15-01	S16R000268	ICP-AES	7440-18-8	Ruthenium	ug/mL	108	<5.00E-03	<0.500	<0.500	n/a	n/a	90.8	0.500	U	20152628
Cone 1-Liq-a	C105-15-01	S16R000268	ICP-AES	7704-34-9	Sulfur	ug/mL	98.3	<0.0280	329	325	327	1.30	95.2	2.80		20152628
Cone 1-Liq-a	C105-15-01	S16R000268	ICP-AES	7440-36-0	Antimony	ug/mL	97.9	<0.0180	<1.80	<1.80	n/a	n/a	109	1.80	U	20152628
Cone 1-Liq-a	C105-15-01	S16R000268	ICP-AES	7782-49-2	Selenium	ug/mL	102	<0.0300	<3.00	<3.00	n/a	n/a	98.6	3.00	U	20152628

Cone 1-Liq-a	C105-15-01	S16R000268	ICP-AES	7440-21-3	Silicon	ug/mL	110	<0.0120	8.82	1.54	5.18	140	99.9	1.20	J	20152628
Cone 1-Liq-a	C105-15-01	S16R000268	ICP-AES	7440-19-9	Samarium	ug/mL	103	<0.0170	17.9	17.0	17.4	5.46	92.2	1.70		20152628
Cone 1-Liq-a	C105-15-01	S16R000268	ICP-AES	7440-31-5	Tin	ug/mL	100	<8.00E-03	<0.800	<0.800	n/a	n/a	93.7	0.800	U	20152628
Cone 1-Liq-a	C105-15-01	S16R000268	ICP-AES	7440-24-6	Strontium	ug/mL	103	<2.00E-03	<0.200	<0.200	n/a	n/a	95.1	0.200	U	20152628
Cone 1-Liq-a	C105-15-01	S16R000268	ICP-AES	7440-25-7	Tantalum	ug/mL	104	<5.00E-03	1.95	1.31	1.63	39.1	98.7	0.500	J	20152628
Cone 1-Liq-a	C105-15-01	S16R000268	ICP-AES	13494-80-9	Tellurium	ug/mL	103	<9.00E-03	<0.900	<0.900	n/a	n/a	98.8	0.900	U	20152628
Cone 1-Liq-a	C105-15-01	S16R000268	ICP-AES	7440-29-1	Thorium	ug/mL	102	<0.0130	<1.30	<1.30	n/a	n/a	83.2	1.30	U	20152628
Cone 1-Liq-a	C105-15-01	S16R000268	ICP-AES	7440-32-6	Titanium	ug/mL	99.1	<2.00E-03	<0.200	<0.200	n/a	n/a	91.4	0.200	U	20152628
Cone 1-Liq-a	C105-15-01	S16R000268	ICP-AES	7440-28-0	Thallium	ug/mL	107	<0.0150	<1.50	<1.50	n/a	n/a	93.9	1.50	U	20152628
Cone 1-Liq-a	C105-15-01	S16R000268	ICP-AES	7440-62-2	Vanadium	ug/mL	102	<1.00E-03	1.68	1.73	1.70	3.13	93.1	0.100		20152628
Cone 1-Liq-a	C105-15-01	S16R000268	ICP-AES	7440-33-7	Tungsten	ug/mL	104	<0.0160	13.8	13.2	13.5	4.64	96.2	1.60	J	20152628
Cone 1-Liq-a	C105-15-01	S16R000268	ICP-AES	7440-65-5	Yttrium	ug/mL	102	<2.00E-03	0.305	0.209	0.257	37.5	92.6	0.200	J	20152628
Cone 1-Liq-a	C105-15-01	S16R000268	ICP-AES	7440-66-6	Zinc	ug/mL	103	<0.0320	<3.20	<3.20	n/a	n/a	96.2	3.20	U	20152628
Cone 1-Liq-a	C105-15-01	S16R000268	ICP-AES	7440-67-7	Zirconium	ug/mL	98.1	<1.00E-03	12.0	11.7	11.8	2.96	90.9	0.100		20152628
Cone 1-Liq-a	C105-15-02	S15R000673	ICP-AES	7440-22-4	Silver	ug/mL	99.9	<3.00E-03	11.1	n/a	n/a	n/a	n/a	6.00	J	20152628
Cone 1-Liq-a	C105-15-02	S15R000673	ICP-AES	7429-90-5	Aluminum	ug/mL	98.5	<0.0140	<28.0	n/a	n/a	n/a	n/a	28.0	U	20152628
Cone 1-Liq-a	C105-15-02	S15R000673	ICP-AES	7440-38-2	Arsenic	ug/mL	98.6	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 1-Liq-a	C105-15-02	S15R000673	ICP-AES	7440-42-8	Boron	ug/mL	97.9	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 1-Liq-a	C105-15-02	S15R000673	ICP-AES	7440-39-3	Barium	ug/mL	99.6	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 1-Liq-a	C105-15-02	S15R000673	ICP-AES	7440-41-7	Beryllium	ug/mL	100	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 1-Liq-a	C105-15-02	S15R000673	ICP-AES	7440-69-9	Bismuth	ug/mL	99.1	<0.0190	<38.0	n/a	n/a	n/a	n/a	38.0	U	20152628
Cone 1-Liq-a	C105-15-02	S15R000673	ICP-AES	7440-70-2	Calcium	ug/mL	101	<0.120	<240	n/a	n/a	n/a	n/a	240	U	20152628
Cone 1-Liq-a	C105-15-02	S15R000673	ICP-AES	7440-43-9	Cadmium	ug/mL	100	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 1-Liq-a	C105-15-02	S15R000673	ICP-AES	7440-45-1	Cerium	ug/mL	99.9	<0.0250	73.6	n/a	n/a	n/a	n/a	50.0	BJ	20152628
Cone 1-Liq-a	C105-15-02	S15R000673	ICP-AES	7440-48-4	Cobalt	ug/mL	99.7	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 1-Liq-a	C105-15-02	S15R000673	ICP-AES	7440-47-3	Chromium	ug/mL	99.6	<2.00E-03	42.9	n/a	n/a	n/a	n/a	4.00		20152628
Cone 1-Liq-a	C105-15-02	S15R000673	ICP-AES	7440-50-8	Copper	ug/mL	99.1	<2.00E-03	52.6	n/a	n/a	n/a	n/a	4.00		20152628
Cone 1-Liq-a	C105-15-02	S15R000673	ICP-AES	7440-53-1	Europium	ug/mL	102	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 1-Liq-a	C105-15-02	S15R000673	ICP-AES	7439-89-6	Iron	ug/mL	99.6	<0.0200	<40.0	n/a	n/a	n/a	n/a	40.0	U	20152628
Cone 1-Liq-a	C105-15-02	S15R000673	ICP-AES	7440-09-7	Potassium	ug/mL	99.0	<0.0220	<44.0	n/a	n/a	n/a	n/a	44.0	U	20152628
Cone 1-Liq-a	C105-15-02	S15R000673	ICP-AES	7439-91-0	Lanthanum	ug/mL	99.4	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 1-Liq-a	C105-15-02	S15R000673	ICP-AES	7439-93-2	Lithium	ug/mL	101	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 1-Liq-a	C105-15-02	S15R000673	ICP-AES	7439-95-4	Magnesium	ug/mL	100	<9.00E-03	<18.0	n/a	n/a	n/a	n/a	18.0	U	20152628
Cone 1-Liq-a	C105-15-02	S15R000673	ICP-AES	7439-96-5	Manganese	ug/mL	100	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 1-Liq-a	C105-15-02	S15R000673	ICP-AES	7439-98-7	Molybdenum	ug/mL	98.5	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 1-Liq-a	C105-15-02	S15R000673	ICP-AES	7440-23-5	Sodium	ug/mL	100	<0.0920	2.19E+04	n/a	n/a	n/a	n/a	184		20152628
Cone 1-Liq-a	C105-15-02	S15R000673	ICP-AES	7440-00-8	Neodymium	ug/mL	102	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 1-Liq-a	C105-15-02	S15R000673	ICP-AES	7440-02-0	Nickel	ug/mL	99.6	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 1-Liq-a	C105-15-02	S15R000673	ICP-AES	7440-30-1	Niobium	ug/mL	102	<6.00E-03	<12.0	n/a	n/a	n/a	n/a	12.0	U	20152628
Cone 1-Liq-a	C105-15-02	S15R000673	ICP-AES	7723-14-0	Phosphorus	ug/mL	98.2	<0.0130	684	n/a	n/a	n/a	n/a	26.0		20152628
Cone 1-Liq-a	C105-15-02	S15R000673	ICP-AES	7439-92-1	Lead	ug/mL	101	<0.0130	<26.0	n/a	n/a	n/a	n/a	26.0	U	20152628
Cone 1-Liq-a	C105-15-02	S15R000673	ICP-AES	7440-05-3	Palladium	ug/mL	102	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20152628
Cone 1-Liq-a	C105-15-02	S15R000673	ICP-AES	7440-10-0	Praseodymium	ug/mL	101	<0.0260	<52.0	n/a	n/a	n/a	n/a	52.0	U	20152628
Cone 1-Liq-a	C105-15-02	S15R000673	ICP-AES	7440-17-7	Rubidium	ug/mL	100	<0.0570	<114	n/a	n/a	n/a	n/a	114	U	20152628
Cone 1-Liq-a	C105-15-02	S15R000673	ICP-AES	7440-16-6	Rhodium	ug/mL	100	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20152628
Cone 1-Liq-a	C105-15-02	S15R000673	ICP-AES	7440-18-8	Ruthenium	ug/mL	98.8	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20152628
Cone 1-Liq-a	C105-15-02	S15R000673	ICP-AES	7704-34-9	Sulfur	ug/mL	98.8	<0.0280	504	n/a	n/a	n/a	n/a	56.0	J	20152628
Cone 1-Liq-a	C105-15-02	S15R000673	ICP-AES	7440-36-0	Antimony	ug/mL	97.4	<0.0180	<36.0	n/a	n/a	n/a	n/a	36.0	U	20152628
Cone 1-Liq-a	C105-15-02	S15R000673	ICP-AES	7782-49-2	Selenium	ug/mL	99.1	<0.0300	<60.0	n/a	n/a	n/a	n/a	60.0	U	20152628
Cone 1-Liq-a	C105-15-02	S15R000673	ICP-AES	7440-21-3	Silicon	ug/mL	100	0.0133	25.5	n/a	n/a	n/a	n/a	24.0	BJ	20152628
Cone 1-Liq-a	C105-15-02	S15R000673	ICP-AES	7440-19-9	Samarium	ug/mL	99.9	<0.0170	42.4	n/a	n/a	n/a	n/a	34.0	J	20152628
Cone 1-Liq-a	C105-15-02	S15R000673	ICP-AES	7440-31-5	Tin	ug/mL	99.6	<8.00E-03	<16.0	n/a	n/a	n/a	n/a	16.0	U	20152628
Cone 1-Liq-a	C105-15-02	S15R000673	ICP-AES	7440-24-6	Strontium	ug/mL	100	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 1-Liq-a	C105-15-02	S15R000673	ICP-AES	7440-25-7	Tantalum	ug/mL	103	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20152628
Cone 1-Liq-a	C105-15-02	S15R000673	ICP-AES	13494-80-9	Tellurium	ug/mL	100	<9.00E-03	<18.0	n/a	n/a	n/a	n/a	18.0	U	20152628
Cone 1-Liq-a	C105-15-02	S15R000673	ICP-AES	7440-29-1	Thorium	ug/mL	101	<0.0130	<26.0	n/a	n/a	n/a	n/a	26.0	U	20152628
Cone 1-Liq-a	C105-15-02	S15R000673	ICP-AES	7440-32-6	Titanium	ug/mL	97.9	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 1-Liq-a	C105-15-02	S15R000673	ICP-AES	7440-28-0	Thallium	ug/mL	97.5	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 1-Liq-a	C105-15-02	S15R000673	ICP-AES	7440-61-1	Uranium	ug/mL	101	<0.0290	7.27E+03	n/a	n/a	n/a	n/a	58.0		20152628
Cone 1-Liq-a	C105-15-02	S15R000673	ICP-AES	7440-62-2	Vanadium	ug/mL	98.9	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 1-Liq-a	C105-15-02	S15R000673	ICP-AES	7440-33-7	Tungsten	ug/mL	101	<0.0160	<32.0	n/a	n/a	n/a	n/a	32.0	U	20152628
Cone 1-Liq-a	C105-15-02	S15R000673	ICP-AES	7440-65-5	Yttrium	ug/mL	100	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 1-Liq-a	C105-15-02	S15R000673	ICP-AES	7440-66-6	Zinc	ug/mL	99.6	<0.0320	<64.0	n/a	n/a	n/a	n/a	64.0	U	20152628
Cone 1-Liq-a	C105-15-02	S15R000673	ICP-AES	7440-67-7	Zirconium	ug/mL	97.5	<1.00E-03	23.8	n/a	n/a	n/a	n/a	2.00		20152628
Cone 1-Liq-a	C105-15-02	S16R000270	ICP-AES	7440-22-4	Silver	ug/mL	102	<3.00E-03	9.50	n/a	n/a	n/a	n/a	0.300		20152628
Cone 1-Liq-a	C105-15-02	S16R000270	ICP-AES	7429-90-5	Aluminum	ug/mL	102	<0.0140	<1.40	n/a	n/a	n/a	n/a	1.40	U	20152628
Cone 1-Liq-a	C105-15-02	S16R000270	ICP-AES	7440-38-2	Arsenic	ug/mL	103	<0.0150	<1.50	n/a	n/a	n/a	n/a	1.50	U	20152628
Cone 1-Liq-a	C105-15-02	S16R000270	ICP-AES	7440-42-8	Boron	ug/mL	101	<2.00E-03	0.631	n/a	n/a	n/a	n/a	0.200	J	20152628
Cone 1-Liq-a	C105-15-02	S16R000270	ICP-AES	7440-39-3	Barium	ug/mL	103	<1.00E-03	<0.100	n/a	n/a	n/a	n/a	0.100	U	20152628
Cone 1-Liq-a	C105-15-02	S16R000270	ICP-AES	7440-41-7	Beryllium	ug/mL	101	<1.00E-03	<0.100	n/a	n/a	n/a	n/a	0.100	U	20152628
Cone 1-Liq-a	C105-15-02	S16R000270	ICP-AES	7440-69-9	Bismuth	ug/mL	102	<0.0190	<1.90	n/a	n/a	n/a	n/a	1.90	U	20152628
Cone 1-Liq-a	C105-15-02	S16R000270	ICP-AES	7440-70-2	Calcium	ug/mL	102	<0.120	<12.0	n/a	n/a	n/a	n/a	12.0	U	20152628
Cone 1-Liq-a	C105-15-02	S16R000270	ICP-AES	7440-43-9	Cadmium	ug/mL	102	<1.00E-03	<0.100	n/a	n/a	n/a	n/a	0.100	U	20152628
Cone 1-Liq-a	C105-15-02	S16R000270	ICP-AES	7440-45-1	Cerium	ug/mL	100	<0.0250	<2.50	n/a	n/a	n/a	n/a	2.50	U	20152628
Cone 1-Liq-a	C105-15-02	S16R000270	ICP-AES	7440-48-4	Cobalt	ug/mL	104	<1.00E-03	<0.100	n/a	n/a	n/a	n/a	0.100	U	20152628
Cone 1-Liq-a	C105-15-02	S16R000270	ICP-AES	7440-47-3	Chromium	ug/mL	102	<2.00E-03	43.6	n/a	n/a	n/a	n/a	0.200		20152628
Cone 1-Liq-a	C105-15-02	S16R000270	ICP-AES	7440-50-8	Copper	ug/mL	102	<2.00E-03	60.7	n/a	n/a	n/a	n/a	0.200		20152628
Cone 1-Liq-a	C105-15-02	S16R000270	ICP-AES	7440-53-1	Europium	ug/mL	104	<1.00E-03	<0.100	n/a	n/a	n/a	n/a	0.100	U	20152628
Cone 1-Liq-a	C105-15-02	S16R000270	ICP-AES	7439-89-6	Iron	ug/mL	101	<0.0200	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 1-Liq-a	C105-15-02	S16R000270	ICP-AES	7440-09-7	Potassium	ug/mL	102	<0.0220	61.8	n/a	n/a	n/a	n/a	2.20		20152628
Cone 1-Liq-a	C105-15-02	S16R000270	ICP-AES	7439-91-0	Lanthanum	ug/mL	101	<1.00E-03	<0.100	n/a	n/a	n/a	n/a	0.100	U	20152628
Cone 1-Liq-a	C105-15-02	S16R000270	ICP-AES	7439-93-2	Lithium	ug/mL	103	<1.00E-03	0.575	n/a	n/a	n/a	n/a	0.100	J	20152628

Cone 1-Liq-a	C105-15-02	S16R000270	ICP-AES	7439-95-4	Magnesium	ug/mL	101	<9.00E-03	1.02	n/a	n/a	n/a	n/a	0.900	J	20152628
Cone 1-Liq-a	C105-15-02	S16R000270	ICP-AES	7439-96-5	Manganese	ug/mL	103	<1.00E-03	0.158	n/a	n/a	n/a	n/a	0.100	J	20152628
Cone 1-Liq-a	C105-15-02	S16R000270	ICP-AES	7439-98-7	Molybdenum	ug/mL	96.7	<2.00E-03	2.35	n/a	n/a	n/a	n/a	0.200		20152628
Cone 1-Liq-a	C105-15-02	S16R000270	ICP-AES	7440-00-8	Neodymium	ug/mL	99.8	<0.0150	7.52	n/a	n/a	n/a	n/a	1.50	J	20152628
Cone 1-Liq-a	C105-15-02	S16R000270	ICP-AES	7440-02-0	Nickel	ug/mL	103	<2.00E-03	<0.200	n/a	n/a	n/a	n/a	0.200	U	20152628
Cone 1-Liq-a	C105-15-02	S16R000270	ICP-AES	7440-30-1	Niobium	ug/mL	102	<6.00E-03	<0.600	n/a	n/a	n/a	n/a	0.600	U	20152628
Cone 1-Liq-a	C105-15-02	S16R000270	ICP-AES	7723-14-0	Phosphorus	ug/mL	98.7	<0.0130	695	n/a	n/a	n/a	n/a	1.30		20152628
Cone 1-Liq-a	C105-15-02	S16R000270	ICP-AES	7439-92-1	Lead	ug/mL	102	<0.0130	1.48	n/a	n/a	n/a	n/a	1.30	J	20152628
Cone 1-Liq-a	C105-15-02	S16R000270	ICP-AES	7440-05-3	Palladium	ug/mL	105	<0.0120	11.7	n/a	n/a	n/a	n/a	1.20	J	20152628
Cone 1-Liq-a	C105-15-02	S16R000270	ICP-AES	7440-10-0	Praseodymium	ug/mL	99.6	<0.0260	<2.60	n/a	n/a	n/a	n/a	2.60	U	20152628
Cone 1-Liq-a	C105-15-02	S16R000270	ICP-AES	7440-17-7	Rubidium	ug/mL	101	<0.0570	<5.70	n/a	n/a	n/a	n/a	5.70	U	20152628
Cone 1-Liq-a	C105-15-02	S16R000270	ICP-AES	7440-16-6	Rhodium	ug/mL	104	<0.0120	<1.20	n/a	n/a	n/a	n/a	1.20	U	20152628
Cone 1-Liq-a	C105-15-02	S16R000270	ICP-AES	7440-18-8	Ruthenium	ug/mL	108	<5.00E-03	<0.500	n/a	n/a	n/a	n/a	0.500	U	20152628
Cone 1-Liq-a	C105-15-02	S16R000270	ICP-AES	7704-34-9	Sulfur	ug/mL	98.3	<0.0280	511	n/a	n/a	n/a	n/a	2.80		20152628
Cone 1-Liq-a	C105-15-02	S16R000270	ICP-AES	7440-36-0	Antimony	ug/mL	97.9	<0.0180	<1.80	n/a	n/a	n/a	n/a	1.80	U	20152628
Cone 1-Liq-a	C105-15-02	S16R000270	ICP-AES	7782-49-2	Selenium	ug/mL	102	<0.0300	<3.00	n/a	n/a	n/a	n/a	3.00	U	20152628
Cone 1-Liq-a	C105-15-02	S16R000270	ICP-AES	7440-21-3	Silicon	ug/mL	110	<0.0120	2.41	n/a	n/a	n/a	n/a	1.20	J	20152628
Cone 1-Liq-a	C105-15-02	S16R000270	ICP-AES	7440-19-9	Samarium	ug/mL	103	<0.0170	30.7	n/a	n/a	n/a	n/a	1.70		20152628
Cone 1-Liq-a	C105-15-02	S16R000270	ICP-AES	7440-31-5	Tin	ug/mL	100	<8.00E-03	<0.800	n/a	n/a	n/a	n/a	0.800	U	20152628
Cone 1-Liq-a	C105-15-02	S16R000270	ICP-AES	7440-24-6	Strontium	ug/mL	103	<2.00E-03	<0.200	n/a	n/a	n/a	n/a	0.200	U	20152628
Cone 1-Liq-a	C105-15-02	S16R000270	ICP-AES	7440-25-7	Tantalum	ug/mL	104	<5.00E-03	3.29	n/a	n/a	n/a	n/a	0.500	J	20152628
Cone 1-Liq-a	C105-15-02	S16R000270	ICP-AES	13494-80-9	Tellurium	ug/mL	103	<9.00E-03	<0.900	n/a	n/a	n/a	n/a	0.900	U	20152628
Cone 1-Liq-a	C105-15-02	S16R000270	ICP-AES	7440-29-1	Thorium	ug/mL	102	<0.0130	<1.30	n/a	n/a	n/a	n/a	1.30	U	20152628
Cone 1-Liq-a	C105-15-02	S16R000270	ICP-AES	7440-32-6	Titanium	ug/mL	99.1	<2.00E-03	<0.200	n/a	n/a	n/a	n/a	0.200	U	20152628
Cone 1-Liq-a	C105-15-02	S16R000270	ICP-AES	7440-28-0	Thallium	ug/mL	107	<0.0150	<1.50	n/a	n/a	n/a	n/a	1.50	U	20152628
Cone 1-Liq-a	C105-15-02	S16R000270	ICP-AES	7440-62-2	Vanadium	ug/mL	102	<1.00E-03	2.90	n/a	n/a	n/a	n/a	0.100		20152628
Cone 1-Liq-a	C105-15-02	S16R000270	ICP-AES	7440-33-7	Tungsten	ug/mL	104	<0.0160	20.8	n/a	n/a	n/a	n/a	1.60		20152628
Cone 1-Liq-a	C105-15-02	S16R000270	ICP-AES	7440-65-5	Yttrium	ug/mL	102	<2.00E-03	0.712	n/a	n/a	n/a	n/a	0.200	J	20152628
Cone 1-Liq-a	C105-15-02	S16R000270	ICP-AES	7440-66-6	Zinc	ug/mL	103	<0.0320	<3.20	n/a	n/a	n/a	n/a	3.20	U	20152628
Cone 1-Liq-a	C105-15-02	S16R000270	ICP-AES	7440-67-7	Zirconium	ug/mL	98.1	<1.00E-03	22.2	n/a	n/a	n/a	n/a	0.100		20152628
Cone 1-Liq-a	C105-15-03	S15R000681	ICP-AES	7440-22-4	Silver	ug/mL	100	<3.00E-03	9.23	9.45	9.34	2.36	97.2	6.00	J	20152628
Cone 1-Liq-a	C105-15-03	S15R000681	ICP-AES	7429-90-5	Aluminum	ug/mL	98.9	<0.0140	<28.0	<28.0	n/a	n/a	103	28.0	U	20152628
Cone 1-Liq-a	C105-15-03	S15R000681	ICP-AES	7440-38-2	Arsenic	ug/mL	99.2	<0.0150	<30.0	<30.0	n/a	n/a	97.4	30.0	U	20152628
Cone 1-Liq-a	C105-15-03	S15R000681	ICP-AES	7440-42-8	Boron	ug/mL	95.2	<2.00E-03	<4.00	<4.00	n/a	n/a	95.6	4.00	U	20152628
Cone 1-Liq-a	C105-15-03	S15R000681	ICP-AES	7440-39-3	Barium	ug/mL	99.3	<1.00E-03	<2.00	<2.00	n/a	n/a	97.8	2.00	U	20152628
Cone 1-Liq-a	C105-15-03	S15R000681	ICP-AES	7440-41-7	Beryllium	ug/mL	98.8	<1.00E-03	<2.00	<2.00	n/a	n/a	98.4	2.00	U	20152628
Cone 1-Liq-a	C105-15-03	S15R000681	ICP-AES	7440-69-9	Bismuth	ug/mL	99.4	<0.0190	<38.0	<38.0	n/a	n/a	98.5	38.0	U	20152628
Cone 1-Liq-a	C105-15-03	S15R000681	ICP-AES	7440-70-2	Calcium	ug/mL	102	<0.120	<240	<240	n/a	n/a	98.2	240	U	20152628
Cone 1-Liq-a	C105-15-03	S15R000681	ICP-AES	7440-43-9	Cadmium	ug/mL	101	<1.00E-03	<2.00	<2.00	n/a	n/a	96.9	2.00	U	20152628
Cone 1-Liq-a	C105-15-03	S15R000681	ICP-AES	7440-45-1	Cerium	ug/mL	104	<0.0250	<50.0	<50.0	n/a	n/a	99.5	50.0	U	20152628
Cone 1-Liq-a	C105-15-03	S15R000681	ICP-AES	7440-48-4	Cobalt	ug/mL	100	<1.00E-03	<2.00	<2.00	n/a	n/a	98.2	2.00	U	20152628
Cone 1-Liq-a	C105-15-03	S15R000681	ICP-AES	7440-47-3	Chromium	ug/mL	98.6	<2.00E-03	76.1	76.5	76.3	0.518	97.6	4.00		20152628
Cone 1-Liq-a	C105-15-03	S15R000681	ICP-AES	7440-50-8	Copper	ug/mL	100	<2.00E-03	37.3	36.3	36.8	2.75	103	4.00	J	20152628
Cone 1-Liq-a	C105-15-03	S15R000681	ICP-AES	7440-53-1	Europium	ug/mL	103	<1.00E-03	<2.00	<2.00	n/a	n/a	96.7	2.00	U	20152628
Cone 1-Liq-a	C105-15-03	S15R000681	ICP-AES	7439-89-6	Iron	ug/mL	99.9	<0.0200	<40.0	<40.0	n/a	n/a	99.4	40.0	U	20152628
Cone 1-Liq-a	C105-15-03	S15R000681	ICP-AES	7440-09-7	Potassium	ug/mL	99.8	<0.0220	53.2	96.1	74.6	57.5	102	44.0	J	20152628
Cone 1-Liq-a	C105-15-03	S15R000681	ICP-AES	7439-91-0	Lanthanum	ug/mL	99.8	<1.00E-03	<2.00	<2.00	n/a	n/a	102	2.00	U	20152628
Cone 1-Liq-a	C105-15-03	S15R000681	ICP-AES	7439-93-2	Lithium	ug/mL	102	<1.00E-03	<2.00	<2.00	n/a	n/a	106	2.00	U	20152628
Cone 1-Liq-a	C105-15-03	S15R000681	ICP-AES	7439-95-4	Magnesium	ug/mL	99.3	<9.00E-03	<18.0	<18.0	n/a	n/a	101	18.0	U	20152628
Cone 1-Liq-a	C105-15-03	S15R000681	ICP-AES	7439-96-5	Manganese	ug/mL	101	<1.00E-03	<2.00	<2.00	n/a	n/a	99.9	2.00	U	20152628
Cone 1-Liq-a	C105-15-03	S15R000681	ICP-AES	7439-98-7	Molybdenum	ug/mL	92.1	<2.00E-03	4.18	4.36	4.27	4.39	94.8	4.00	J	20152628
Cone 1-Liq-a	C105-15-03	S15R000681	ICP-AES	7440-23-5	Sodium	ug/mL	102	<0.0920	2.05E+04	2.06E+04	2.06E+04	0.553	101	184		20152628
Cone 1-Liq-a	C105-15-03	S15R000681	ICP-AES	7440-00-8	Neodymium	ug/mL	101	<0.0150	<30.0	<30.0	n/a	n/a	98.8	30.0	U	20152628
Cone 1-Liq-a	C105-15-03	S15R000681	ICP-AES	7440-02-0	Nickel	ug/mL	98.4	<2.00E-03	<4.00	<4.00	n/a	n/a	95.5	4.00	U	20152628
Cone 1-Liq-a	C105-15-03	S15R000681	ICP-AES	7440-30-1	Niobium	ug/mL	99.2	<6.00E-03	<12.0	<12.0	n/a	n/a	97.1	12.0	U	20152628
Cone 1-Liq-a	C105-15-03	S15R000681	ICP-AES	7723-14-0	Phosphorus	ug/mL	94.7	<0.0130	662	657	659	0.805	94.5	26.0		20152628
Cone 1-Liq-a	C105-15-03	S15R000681	ICP-AES	7439-92-1	Lead	ug/mL	102	<0.0130	<26.0	<26.0	n/a	n/a	99.9	26.0	U	20152628
Cone 1-Liq-a	C105-15-03	S15R000681	ICP-AES	7440-05-3	Palladium	ug/mL	102	<0.0120	<24.0	<24.0	n/a	n/a	94.7	24.0	U	20152628
Cone 1-Liq-a	C105-15-03	S15R000681	ICP-AES	7440-10-0	Praseodymium	ug/mL	108	<0.0260	<52.0	<52.0	n/a	n/a	103	52.0	U	20152628
Cone 1-Liq-a	C105-15-03	S15R000681	ICP-AES	7440-17-7	Rubidium	ug/mL	101	<0.0570	<114	<114	n/a	n/a	95.9	114	U	20152628
Cone 1-Liq-a	C105-15-03	S15R000681	ICP-AES	7440-16-6	Rhodium	ug/mL	99.9	<0.0120	<24.0	<24.0	n/a	n/a	94.6	24.0	U	20152628
Cone 1-Liq-a	C105-15-03	S15R000681	ICP-AES	7440-18-8	Ruthenium	ug/mL	106	<5.00E-03	<10.0	<10.0	n/a	n/a	92.1	10.0	U	20152628
Cone 1-Liq-a	C105-15-03	S15R000681	ICP-AES	7704-34-9	Sulfur	ug/mL	93.5	<0.0280	644	633	638	1.70	94.7	56.0		20152628
Cone 1-Liq-a	C105-15-03	S15R000681	ICP-AES	7440-36-0	Antimony	ug/mL	91.9	<0.0180	<36.0	<36.0	n/a	n/a	109	36.0	U	20152628
Cone 1-Liq-a	C105-15-03	S15R000681	ICP-AES	7782-49-2	Selenium	ug/mL	98.7	<0.0300	<60.0	<60.0	n/a	n/a	98.3	60.0	U	20152628
Cone 1-Liq-a	C105-15-03	S15R000681	ICP-AES	7440-21-3	Silicon	ug/mL	94.9	0.0167	<24.0	<24.0	n/a	n/a	98.5	24.0	U	20152628
Cone 1-Liq-a	C105-15-03	S15R000681	ICP-AES	7440-19-9	Samarium	ug/mL	103	<0.0170	36.4	37.7	37.1	3.56	97.3	34.0	J	20152628
Cone 1-Liq-a	C105-15-03	S15R000681	ICP-AES	7440-31-5	Tin	ug/mL	96.9	<8.00E-03	<16.0	<16.0	n/a	n/a	90.6	16.0	UY	20152628
Cone 1-Liq-a	C105-15-03	S15R000681	ICP-AES	7440-24-6	Strontium	ug/mL	98.5	<2.00E-03	<4.00	<4.00	n/a	n/a	95.6	4.00	U	20152628
Cone 1-Liq-a	C105-15-03	S15R000681	ICP-AES	7440-25-7	Tantalum	ug/mL	100	<5.00E-03	<10.0	<10.0	n/a	n/a	96.1	10.0	U	20152628
Cone 1-Liq-a	C105-15-03	S15R000681	ICP-AES	13494-80-9	Tellurium	ug/mL	100	<9.00E-03	<18.0	<18.0	n/a	n/a	96.0	18.0	U	20152628
Cone 1-Liq-a	C105-15-03	S15R000681	ICP-AES	7440-29-1	Thorium	ug/mL	101	<0.0130	<26.0	<26.0	n/a	n/a	95.7	26.0	U	20152628
Cone 1-Liq-a	C105-15-03	S15R000681	ICP-AES	7440-32-6	Titanium	ug/mL	90.5	<2.00E-03	<4.00	<4.00	n/a	n/a	93.6	4.00	U	20152628
Cone 1-Liq-a	C105-15-03	S15R000681	ICP-AES	7440-28-0	Thallium	ug/mL	105	<0.0150	<30.0	<30.0	n/a	n/a	90.9	30.0	U	20152628
Cone 1-Liq-a	C105-15-03	S15R000681	ICP-AES	7440-61-1	Uranium	ug/mL	101	<0.0290	5.25E+03	5.24E+03	5.24E+03	0.205	98.0	58.0		20152628
Cone 1-Liq-a	C105-15-03	S15R000681	ICP-AES	7440-62-2	Vanadium	ug/mL	97.4	<1.00E-03	<2.00	<2.00	n/a	n/a	98.4	2.00	U	20152628
Cone 1-Liq-a	C105-15-03	S15R000681	ICP-AES	7440-33-7	Tungsten	ug/mL	99.6	<0.0160	<32.0	33.1	n/a	n/a	96.6	32.0	U	20152628
Cone 1-Liq-a	C105-15-03	S15R000681	ICP-AES	7440-65-5	Yttrium	ug/mL	102	<2.00E-03	<4.00	<4.00	n/a	n/a	96.6	4.00	U	20152628
Cone 1-Liq-a	C105-15-03	S15R000681	ICP-AES	7440-66-6	Zinc	ug/mL	99.5	<0.0320	<64.0	<64.0	n/a	n/a	97.4	64.0	U	20152628
Cone 1-Liq-a	C105-15-03	S15R000681	ICP-AES	7440-67-7	Zirconium	ug/mL	91.5	<1.00E-03	21.3	22.8	22.0	6.85	95.6	2.00		20152628
Cone 1-Liq-b	C105-15-02	S16R000168	ICP-AES	7440-22-4	Silver	ug/mL	101	<3.00E-03	<6.00	n/a	n/a	n/a	n/a	6.00	U	20160542
Cone 1-Liq-b	C105-15-02	S16R000168	ICP-AES	7429-90-5	Aluminum	ug/mL	100	<0.0140	1.60E+03	n/a	n/a	n/a	n/a	28.0		20160542

Cone 1-Liq-b	C105-15-02	S16R000168	ICP-AES	7440-38-2	Arsenic	ug/mL	100	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20160542
Cone 1-Liq-b	C105-15-02	S16R000168	ICP-AES	7440-42-8	Boron	ug/mL	99.5	<2.00E-03	8.30	n/a	n/a	n/a	n/a	4.00	BJ	20160542
Cone 1-Liq-b	C105-15-02	S16R000168	ICP-AES	7440-39-3	Barium	ug/mL	102	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 1-Liq-b	C105-15-02	S16R000168	ICP-AES	7440-41-7	Beryllium	ug/mL	101	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 1-Liq-b	C105-15-02	S16R000168	ICP-AES	7440-69-9	Bismuth	ug/mL	102	<0.0190	<38.0	n/a	n/a	n/a	n/a	38.0	U	20160542
Cone 1-Liq-b	C105-15-02	S16R000168	ICP-AES	7440-70-2	Calcium	ug/mL	101	<0.120	<240	n/a	n/a	n/a	n/a	240	U	20160542
Cone 1-Liq-b	C105-15-02	S16R000168	ICP-AES	7440-43-9	Cadmium	ug/mL	101	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 1-Liq-b	C105-15-02	S16R000168	ICP-AES	7440-45-1	Cerium	ug/mL	96.2	<0.0250	<50.0	n/a	n/a	n/a	n/a	50.0	UY	20160542
Cone 1-Liq-b	C105-15-02	S16R000168	ICP-AES	7440-48-4	Cobalt	ug/mL	101	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 1-Liq-b	C105-15-02	S16R000168	ICP-AES	7440-47-3	Chromium	ug/mL	101	<2.00E-03	31.4	n/a	n/a	n/a	n/a	4.00	J	20160542
Cone 1-Liq-b	C105-15-02	S16R000168	ICP-AES	7440-50-8	Copper	ug/mL	101	<2.00E-03	55.0	n/a	n/a	n/a	n/a	4.00		20160542
Cone 1-Liq-b	C105-15-02	S16R000168	ICP-AES	7440-53-1	Europium	ug/mL	97.9	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 1-Liq-b	C105-15-02	S16R000168	ICP-AES	7439-89-6	Iron	ug/mL	101	<0.0200	<40.0	n/a	n/a	n/a	n/a	40.0	U	20160542
Cone 1-Liq-b	C105-15-02	S16R000168	ICP-AES	7440-09-7	Potassium	ug/mL	101	<0.0220	<44.0	n/a	n/a	n/a	n/a	44.0	U	20160542
Cone 1-Liq-b	C105-15-02	S16R000168	ICP-AES	7439-91-0	Lanthanum	ug/mL	101	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 1-Liq-b	C105-15-02	S16R000168	ICP-AES	7439-93-2	Lithium	ug/mL	103	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 1-Liq-b	C105-15-02	S16R000168	ICP-AES	7439-95-4	Magnesium	ug/mL	101	<9.00E-03	<18.0	n/a	n/a	n/a	n/a	18.0	U	20160542
Cone 1-Liq-b	C105-15-02	S16R000168	ICP-AES	7439-96-5	Manganese	ug/mL	101	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 1-Liq-b	C105-15-02	S16R000168	ICP-AES	7439-98-7	Molybdenum	ug/mL	99.9	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20160542
Cone 1-Liq-b	C105-15-02	S16R000168	ICP-AES	7440-23-5	Sodium	ug/mL	101	<0.0920	7.42E+04	n/a	n/a	n/a	n/a	184		20160542
Cone 1-Liq-b	C105-15-02	S16R000168	ICP-AES	7440-00-8	Neodymium	ug/mL	97.3	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20160542
Cone 1-Liq-b	C105-15-02	S16R000168	ICP-AES	7440-02-0	Nickel	ug/mL	101	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20160542
Cone 1-Liq-b	C105-15-02	S16R000168	ICP-AES	7440-30-1	Niobium	ug/mL	100	<6.00E-03	<12.0	n/a	n/a	n/a	n/a	12.0	U	20160542
Cone 1-Liq-b	C105-15-02	S16R000168	ICP-AES	7723-14-0	Phosphorus	ug/mL	99.1	<0.0130	841	n/a	n/a	n/a	n/a	26.0		20160542
Cone 1-Liq-b	C105-15-02	S16R000168	ICP-AES	7439-92-1	Lead	ug/mL	101	<0.0130	<26.0	n/a	n/a	n/a	n/a	26.0	U	20160542
Cone 1-Liq-b	C105-15-02	S16R000168	ICP-AES	7440-05-3	Palladium	ug/mL	101	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20160542
Cone 1-Liq-b	C105-15-02	S16R000168	ICP-AES	7440-10-0	Praseodymium	ug/mL	95.6	<0.0260	<52.0	n/a	n/a	n/a	n/a	52.0	UY	20160542
Cone 1-Liq-b	C105-15-02	S16R000168	ICP-AES	7440-17-7	Rubidium	ug/mL	97.9	<0.0570	<114	n/a	n/a	n/a	n/a	114	U	20160542
Cone 1-Liq-b	C105-15-02	S16R000168	ICP-AES	7440-16-6	Rhodium	ug/mL	99.9	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20160542
Cone 1-Liq-b	C105-15-02	S16R000168	ICP-AES	7440-18-8	Ruthenium	ug/mL	98.2	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20160542
Cone 1-Liq-b	C105-15-02	S16R000168	ICP-AES	7704-34-9	Sulfur	ug/mL	99.6	<0.0280	509	n/a	n/a	n/a	n/a	56.0	J	20160542
Cone 1-Liq-b	C105-15-02	S16R000168	ICP-AES	7440-36-0	Antimony	ug/mL	99.7	<0.0180	<36.0	n/a	n/a	n/a	n/a	36.0	U	20160542
Cone 1-Liq-b	C105-15-02	S16R000168	ICP-AES	7782-49-2	Selenium	ug/mL	101	<0.0300	<60.0	n/a	n/a	n/a	n/a	60.0	U	20160542
Cone 1-Liq-b	C105-15-02	S16R000168	ICP-AES	7440-21-3	Silicon	ug/mL	103	<0.0120	53.6	n/a	n/a	n/a	n/a	24.0	J	20160542
Cone 1-Liq-b	C105-15-02	S16R000168	ICP-AES	7440-19-9	Samarium	ug/mL	95.3	<0.0170	<34.0	n/a	n/a	n/a	n/a	34.0	UY	20160542
Cone 1-Liq-b	C105-15-02	S16R000168	ICP-AES	7440-31-5	Tin	ug/mL	98.9	<8.00E-03	<16.0	n/a	n/a	n/a	n/a	16.0	U	20160542
Cone 1-Liq-b	C105-15-02	S16R000168	ICP-AES	7440-24-6	Strontium	ug/mL	102	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20160542
Cone 1-Liq-b	C105-15-02	S16R000168	ICP-AES	7440-25-7	Tantalum	ug/mL	103	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20160542
Cone 1-Liq-b	C105-15-02	S16R000168	ICP-AES	13494-80-9	Tellurium	ug/mL	100	<9.00E-03	<18.0	n/a	n/a	n/a	n/a	18.0	U	20160542
Cone 1-Liq-b	C105-15-02	S16R000168	ICP-AES	7440-29-1	Thorium	ug/mL	98.7	<0.0130	<26.0	n/a	n/a	n/a	n/a	26.0	U	20160542
Cone 1-Liq-b	C105-15-02	S16R000168	ICP-AES	7440-32-6	Titanium	ug/mL	100	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20160542
Cone 1-Liq-b	C105-15-02	S16R000168	ICP-AES	7440-28-0	Thallium	ug/mL	98.2	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20160542
Cone 1-Liq-b	C105-15-02	S16R000168	ICP-AES	7440-61-1	Uranium	ug/mL	97.3	<0.0290	116	n/a	n/a	n/a	n/a	58.0	J	20160542
Cone 1-Liq-b	C105-15-02	S16R000168	ICP-AES	7440-62-2	Vanadium	ug/mL	101	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 1-Liq-b	C105-15-02	S16R000168	ICP-AES	7440-33-7	Tungsten	ug/mL	99.9	<0.0160	<32.0	n/a	n/a	n/a	n/a	32.0	U	20160542
Cone 1-Liq-b	C105-15-02	S16R000168	ICP-AES	7440-65-5	Yttrium	ug/mL	98.0	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20160542
Cone 1-Liq-b	C105-15-02	S16R000168	ICP-AES	7440-66-6	Zinc	ug/mL	101	<0.0320	<64.0	n/a	n/a	n/a	n/a	64.0	U	20160542
Cone 1-Liq-b	C105-15-02	S16R000168	ICP-AES	7440-67-7	Zirconium	ug/mL	99.3	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 1-Liq-b	C105-15-03	S15R000687	ICP-AES	7440-22-4	Silver	ug/mL	100	<3.00E-03	<6.00	n/a	n/a	n/a	n/a	6.00	U	20152628
Cone 1-Liq-b	C105-15-03	S15R000687	ICP-AES	7429-90-5	Aluminum	ug/mL	98.9	<0.0140	<28.0	n/a	n/a	n/a	n/a	28.0	U	20152628
Cone 1-Liq-b	C105-15-03	S15R000687	ICP-AES	7440-38-2	Arsenic	ug/mL	99.2	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 1-Liq-b	C105-15-03	S15R000687	ICP-AES	7440-42-8	Boron	ug/mL	95.2	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 1-Liq-b	C105-15-03	S15R000687	ICP-AES	7440-39-3	Barium	ug/mL	99.3	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 1-Liq-b	C105-15-03	S15R000687	ICP-AES	7440-41-7	Beryllium	ug/mL	98.8	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 1-Liq-b	C105-15-03	S15R000687	ICP-AES	7440-69-9	Bismuth	ug/mL	99.4	<0.0190	<38.0	n/a	n/a	n/a	n/a	38.0	U	20152628
Cone 1-Liq-b	C105-15-03	S15R000687	ICP-AES	7440-70-2	Calcium	ug/mL	102	<0.120	<240	n/a	n/a	n/a	n/a	240	U	20152628
Cone 1-Liq-b	C105-15-03	S15R000687	ICP-AES	7440-43-9	Cadmium	ug/mL	101	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 1-Liq-b	C105-15-03	S15R000687	ICP-AES	7440-45-1	Cerium	ug/mL	104	<0.0250	<50.0	n/a	n/a	n/a	n/a	50.0	U	20152628
Cone 1-Liq-b	C105-15-03	S15R000687	ICP-AES	7440-48-4	Cobalt	ug/mL	100	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 1-Liq-b	C105-15-03	S15R000687	ICP-AES	7440-47-3	Chromium	ug/mL	98.6	<2.00E-03	6.08	n/a	n/a	n/a	n/a	4.00	J	20152628
Cone 1-Liq-b	C105-15-03	S15R000687	ICP-AES	7440-50-8	Copper	ug/mL	100	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 1-Liq-b	C105-15-03	S15R000687	ICP-AES	7440-53-1	Europium	ug/mL	103	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 1-Liq-b	C105-15-03	S15R000687	ICP-AES	7439-89-6	Iron	ug/mL	99.9	<0.0200	<40.0	n/a	n/a	n/a	n/a	40.0	U	20152628
Cone 1-Liq-b	C105-15-03	S15R000687	ICP-AES	7440-09-7	Potassium	ug/mL	99.8	<0.0220	<44.0	n/a	n/a	n/a	n/a	44.0	U	20152628
Cone 1-Liq-b	C105-15-03	S15R000687	ICP-AES	7439-91-0	Lanthanum	ug/mL	99.8	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 1-Liq-b	C105-15-03	S15R000687	ICP-AES	7439-93-2	Lithium	ug/mL	102	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 1-Liq-b	C105-15-03	S15R000687	ICP-AES	7439-95-4	Magnesium	ug/mL	99.3	<9.00E-03	<18.0	n/a	n/a	n/a	n/a	18.0	U	20152628
Cone 1-Liq-b	C105-15-03	S15R000687	ICP-AES	7439-96-5	Manganese	ug/mL	101	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 1-Liq-b	C105-15-03	S15R000687	ICP-AES	7439-98-7	Molybdenum	ug/mL	92.1	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 1-Liq-b	C105-15-03	S15R000687	ICP-AES	7440-23-5	Sodium	ug/mL	102	<0.0920	2.00E+03	n/a	n/a	n/a	n/a	184		20152628
Cone 1-Liq-b	C105-15-03	S15R000687	ICP-AES	7440-00-8	Neodymium	ug/mL	101	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 1-Liq-b	C105-15-03	S15R000687	ICP-AES	7440-02-0	Nickel	ug/mL	98.4	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 1-Liq-b	C105-15-03	S15R000687	ICP-AES	7440-30-1	Niobium	ug/mL	99.2	<6.00E-03	<12.0	n/a	n/a	n/a	n/a	12.0	U	20152628
Cone 1-Liq-b	C105-15-03	S15R000687	ICP-AES	7723-14-0	Phosphorus	ug/mL	94.7	<0.0130	55.7	n/a	n/a	n/a	n/a	26.0	J	20152628
Cone 1-Liq-b	C105-15-03	S15R000687	ICP-AES	7439-92-1	Lead	ug/mL	102	<0.0130	<26.0	n/a	n/a	n/a	n/a	26.0	U	20152628
Cone 1-Liq-b	C105-15-03	S15R000687	ICP-AES	7440-05-3	Palladium	ug/mL	102	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20152628
Cone 1-Liq-b	C105-15-03	S15R000687	ICP-AES	7440-10-0	Praseodymium	ug/mL	108	<0.0260	<52.0	n/a	n/a	n/a	n/a	52.0	U	20152628
Cone 1-Liq-b	C105-15-03	S15R000687	ICP-AES	7440-17-7	Rubidium	ug/mL	101	<0.0570	<114	n/a	n/a	n/a	n/a	114	U	20152628
Cone 1-Liq-b	C105-15-03	S15R000687	ICP-AES	7440-16-6	Rhodium	ug/mL	99.9	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20152628
Cone 1-Liq-b	C105-15-03	S15R000687	ICP-AES	7440-18-8	Ruthenium	ug/mL	106	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20152628
Cone 1-Liq-b	C105-15-03	S15R000687	ICP-AES	7704-34-9	Sulfur	ug/mL	93.5	<0.0280	<56.0	n/a	n/a	n/a	n/a	56.0	U	20152628
Cone 1-Liq-b	C105-15-03	S15R000687	ICP-AES	7440-36-0	Antimony	ug/mL	91.9	<0.0180	<36.0	n/a	n/a	n/a	n/a	36.0	U	20152628

Cone 1-Liq-b	C105-15-03	S15R000687	ICP-AES	7782-49-2	Selenium	ug/mL	98.7	<0.0300	<60.0	n/a	n/a	n/a	n/a	60.0	U	20152628
Cone 1-Liq-b	C105-15-03	S15R000687	ICP-AES	7440-21-3	Silicon	ug/mL	94.9	0.0167	<24.0	n/a	n/a	n/a	n/a	24.0	U	20152628
Cone 1-Liq-b	C105-15-03	S15R000687	ICP-AES	7440-19-9	Samarium	ug/mL	103	<0.0170	<34.0	n/a	n/a	n/a	n/a	34.0	U	20152628
Cone 1-Liq-b	C105-15-03	S15R000687	ICP-AES	7440-31-5	Tin	ug/mL	96.9	<8.00E-03	<16.0	n/a	n/a	n/a	n/a	16.0	UY	20152628
Cone 1-Liq-b	C105-15-03	S15R000687	ICP-AES	7440-24-6	Strontium	ug/mL	98.5	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 1-Liq-b	C105-15-03	S15R000687	ICP-AES	7440-25-7	Tantalum	ug/mL	100	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20152628
Cone 1-Liq-b	C105-15-03	S15R000687	ICP-AES	13494-80-9	Tellurium	ug/mL	100	<9.00E-03	<18.0	n/a	n/a	n/a	n/a	18.0	U	20152628
Cone 1-Liq-b	C105-15-03	S15R000687	ICP-AES	7440-29-1	Thorium	ug/mL	101	<0.0130	<26.0	n/a	n/a	n/a	n/a	26.0	U	20152628
Cone 1-Liq-b	C105-15-03	S15R000687	ICP-AES	7440-32-6	Titanium	ug/mL	90.5	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 1-Liq-b	C105-15-03	S15R000687	ICP-AES	7440-28-0	Thallium	ug/mL	105	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 1-Liq-b	C105-15-03	S15R000687	ICP-AES	7440-61-1	Uranium	ug/mL	101	<0.0290	373	n/a	n/a	n/a	n/a	58.0	J	20152628
Cone 1-Liq-b	C105-15-03	S15R000687	ICP-AES	7440-62-2	Vanadium	ug/mL	97.4	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 1-Liq-b	C105-15-03	S15R000687	ICP-AES	7440-33-7	Tungsten	ug/mL	99.6	<0.0160	<32.0	n/a	n/a	n/a	n/a	32.0	U	20152628
Cone 1-Liq-b	C105-15-03	S15R000687	ICP-AES	7440-65-5	Yttrium	ug/mL	102	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 1-Liq-b	C105-15-03	S15R000687	ICP-AES	7440-66-6	Zinc	ug/mL	99.5	<0.0320	<64.0	n/a	n/a	n/a	n/a	64.0	U	20152628
Cone 1-Liq-b	C105-15-03	S15R000687	ICP-AES	7440-67-7	Zirconium	ug/mL	91.5	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 11-Liq-a	C105-15-01	S16R000162	ICP-AES	7440-22-4	Silver	ug/mL	99.9	<3.00E-03	<6.00	n/a	n/a	n/a	n/a	6.00	U	20160542
Cone 11-Liq-a	C105-15-01	S16R000162	ICP-AES	7429-90-5	Aluminum	ug/mL	98.5	<0.0140	8.87E+03	n/a	n/a	n/a	n/a	28.0		20160542
Cone 11-Liq-a	C105-15-01	S16R000162	ICP-AES	7440-38-2	Arsenic	ug/mL	98.6	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20160542
Cone 11-Liq-a	C105-15-01	S16R000162	ICP-AES	7440-42-8	Boron	ug/mL	97.9	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20160542
Cone 11-Liq-a	C105-15-01	S16R000162	ICP-AES	7440-39-3	Barium	ug/mL	99.6	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 11-Liq-a	C105-15-01	S16R000162	ICP-AES	7440-41-7	Beryllium	ug/mL	100	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 11-Liq-a	C105-15-01	S16R000162	ICP-AES	7440-69-9	Bismuth	ug/mL	99.1	<0.0190	<38.0	n/a	n/a	n/a	n/a	38.0	U	20160542
Cone 11-Liq-a	C105-15-01	S16R000162	ICP-AES	7440-70-2	Calcium	ug/mL	101	<0.120	<240	n/a	n/a	n/a	n/a	240	U	20160542
Cone 11-Liq-a	C105-15-01	S16R000162	ICP-AES	7440-43-9	Cadmium	ug/mL	100	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 11-Liq-a	C105-15-01	S16R000162	ICP-AES	7440-45-1	Cerium	ug/mL	99.9	<0.0250	52.9	n/a	n/a	n/a	n/a	50.0	BJ	20160542
Cone 11-Liq-a	C105-15-01	S16R000162	ICP-AES	7440-48-4	Cobalt	ug/mL	99.7	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 11-Liq-a	C105-15-01	S16R000162	ICP-AES	7440-47-3	Chromium	ug/mL	99.6	<2.00E-03	68.5	n/a	n/a	n/a	n/a	4.00		20160542
Cone 11-Liq-a	C105-15-01	S16R000162	ICP-AES	7440-50-8	Copper	ug/mL	99.1	<2.00E-03	320	n/a	n/a	n/a	n/a	4.00		20160542
Cone 11-Liq-a	C105-15-01	S16R000162	ICP-AES	7440-53-1	Europium	ug/mL	102	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 11-Liq-a	C105-15-01	S16R000162	ICP-AES	7439-89-6	Iron	ug/mL	99.6	<0.0200	66.3	n/a	n/a	n/a	n/a	40.0	J	20160542
Cone 11-Liq-a	C105-15-01	S16R000162	ICP-AES	7440-09-7	Potassium	ug/mL	99.0	<0.0220	74.9	n/a	n/a	n/a	n/a	44.0	J	20160542
Cone 11-Liq-a	C105-15-01	S16R000162	ICP-AES	7439-91-0	Lanthanum	ug/mL	99.4	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 11-Liq-a	C105-15-01	S16R000162	ICP-AES	7439-93-2	Lithium	ug/mL	101	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 11-Liq-a	C105-15-01	S16R000162	ICP-AES	7439-95-4	Magnesium	ug/mL	100	<9.00E-03	<18.0	n/a	n/a	n/a	n/a	18.0	U	20160542
Cone 11-Liq-a	C105-15-01	S16R000162	ICP-AES	7439-96-5	Manganese	ug/mL	100	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 11-Liq-a	C105-15-01	S16R000162	ICP-AES	7439-98-7	Molybdenum	ug/mL	98.5	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20160542
Cone 11-Liq-a	C105-15-01	S16R000162	ICP-AES	7440-23-5	Sodium	ug/mL	100	<0.0920	2.43E+05	n/a	n/a	n/a	n/a	184		20160542
Cone 11-Liq-a	C105-15-01	S16R000162	ICP-AES	7440-00-8	Neodymium	ug/mL	102	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20160542
Cone 11-Liq-a	C105-15-01	S16R000162	ICP-AES	7440-02-0	Nickel	ug/mL	99.6	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20160542
Cone 11-Liq-a	C105-15-01	S16R000162	ICP-AES	7440-30-1	Niobium	ug/mL	102	<6.00E-03	<12.0	n/a	n/a	n/a	n/a	12.0	U	20160542
Cone 11-Liq-a	C105-15-01	S16R000162	ICP-AES	7723-14-0	Phosphorus	ug/mL	98.2	<0.0130	158	n/a	n/a	n/a	n/a	26.0	J	20160542
Cone 11-Liq-a	C105-15-01	S16R000162	ICP-AES	7439-92-1	Lead	ug/mL	101	<0.0130	62.5	n/a	n/a	n/a	n/a	26.0	J	20160542
Cone 11-Liq-a	C105-15-01	S16R000162	ICP-AES	7440-05-3	Palladium	ug/mL	102	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20160542
Cone 11-Liq-a	C105-15-01	S16R000162	ICP-AES	7440-10-0	Praseodymium	ug/mL	101	<0.0260	<52.0	n/a	n/a	n/a	n/a	52.0	U	20160542
Cone 11-Liq-a	C105-15-01	S16R000162	ICP-AES	7440-17-7	Rubidium	ug/mL	100	<0.0570	<114	n/a	n/a	n/a	n/a	114	U	20160542
Cone 11-Liq-a	C105-15-01	S16R000162	ICP-AES	7440-16-6	Rhodium	ug/mL	100	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20160542
Cone 11-Liq-a	C105-15-01	S16R000162	ICP-AES	7440-18-8	Ruthenium	ug/mL	98.8	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20160542
Cone 11-Liq-a	C105-15-01	S16R000162	ICP-AES	7704-34-9	Sulfur	ug/mL	98.8	<0.0280	138	n/a	n/a	n/a	n/a	56.0	J	20160542
Cone 11-Liq-a	C105-15-01	S16R000162	ICP-AES	7440-36-0	Antimony	ug/mL	97.4	<0.0180	<36.0	n/a	n/a	n/a	n/a	36.0	U	20160542
Cone 11-Liq-a	C105-15-01	S16R000162	ICP-AES	7782-49-2	Selenium	ug/mL	99.1	<0.0300	<60.0	n/a	n/a	n/a	n/a	60.0	U	20160542
Cone 11-Liq-a	C105-15-01	S16R000162	ICP-AES	7440-21-3	Silicon	ug/mL	100	0.0133	161	n/a	n/a	n/a	n/a	24.0	BJ	20160542
Cone 11-Liq-a	C105-15-01	S16R000162	ICP-AES	7440-19-9	Samarium	ug/mL	99.9	<0.0170	<34.0	n/a	n/a	n/a	n/a	34.0	U	20160542
Cone 11-Liq-a	C105-15-01	S16R000162	ICP-AES	7440-31-5	Tin	ug/mL	99.6	<8.00E-03	<16.0	n/a	n/a	n/a	n/a	16.0	U	20160542
Cone 11-Liq-a	C105-15-01	S16R000162	ICP-AES	7440-24-6	Strontium	ug/mL	100	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20160542
Cone 11-Liq-a	C105-15-01	S16R000162	ICP-AES	7440-25-7	Tantalum	ug/mL	103	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20160542
Cone 11-Liq-a	C105-15-01	S16R000162	ICP-AES	13494-80-9	Tellurium	ug/mL	100	<9.00E-03	<18.0	n/a	n/a	n/a	n/a	18.0	U	20160542
Cone 11-Liq-a	C105-15-01	S16R000162	ICP-AES	7440-29-1	Thorium	ug/mL	101	<0.0130	<26.0	n/a	n/a	n/a	n/a	26.0	U	20160542
Cone 11-Liq-a	C105-15-01	S16R000162	ICP-AES	7440-32-6	Titanium	ug/mL	97.9	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20160542
Cone 11-Liq-a	C105-15-01	S16R000162	ICP-AES	7440-28-0	Thallium	ug/mL	97.5	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20160542
Cone 11-Liq-a	C105-15-01	S16R000162	ICP-AES	7440-61-1	Uranium	ug/mL	101	<0.0290	<58.0	n/a	n/a	n/a	n/a	58.0	U	20160542
Cone 11-Liq-a	C105-15-01	S16R000162	ICP-AES	7440-62-2	Vanadium	ug/mL	98.9	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 11-Liq-a	C105-15-01	S16R000162	ICP-AES	7440-33-7	Tungsten	ug/mL	101	<0.0160	39.1	n/a	n/a	n/a	n/a	32.0	J	20160542
Cone 11-Liq-a	C105-15-01	S16R000162	ICP-AES	7440-65-5	Yttrium	ug/mL	100	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20160542
Cone 11-Liq-a	C105-15-01	S16R000162	ICP-AES	7440-66-6	Zinc	ug/mL	99.6	<0.0320	<64.0	n/a	n/a	n/a	n/a	64.0	U	20160542
Cone 11-Liq-a	C105-15-01	S16R000162	ICP-AES	7440-67-7	Zirconium	ug/mL	97.5	<1.00E-03	8.63	n/a	n/a	n/a	n/a	2.00	J	20160542
Cone 11-Liq-b	C105-15-01	S16R000164	ICP-AES	7440-22-4	Silver	ug/mL	99.9	<3.00E-03	<6.00	n/a	n/a	n/a	n/a	6.00	U	20160542
Cone 11-Liq-b	C105-15-01	S16R000164	ICP-AES	7429-90-5	Aluminum	ug/mL	98.5	<0.0140	1.65E+03	n/a	n/a	n/a	n/a	28.0		20160542
Cone 11-Liq-b	C105-15-01	S16R000164	ICP-AES	7440-38-2	Arsenic	ug/mL	98.6	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20160542
Cone 11-Liq-b	C105-15-01	S16R000164	ICP-AES	7440-42-8	Boron	ug/mL	97.9	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20160542
Cone 11-Liq-b	C105-15-01	S16R000164	ICP-AES	7440-39-3	Barium	ug/mL	99.6	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 11-Liq-b	C105-15-01	S16R000164	ICP-AES	7440-41-7	Beryllium	ug/mL	100	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 11-Liq-b	C105-15-01	S16R000164	ICP-AES	7440-69-9	Bismuth	ug/mL	99.1	<0.0190	<38.0	n/a	n/a	n/a	n/a	38.0	U	20160542
Cone 11-Liq-b	C105-15-01	S16R000164	ICP-AES	7440-70-2	Calcium	ug/mL	101	<0.120	<240	n/a	n/a	n/a	n/a	240	U	20160542
Cone 11-Liq-b	C105-15-01	S16R000164	ICP-AES	7440-43-9	Cadmium	ug/mL	100	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 11-Liq-b	C105-15-01	S16R000164	ICP-AES	7440-45-1	Cerium	ug/mL	99.9	<0.0250	80.6	n/a	n/a	n/a	n/a	50.0	BJ	20160542
Cone 11-Liq-b	C105-15-01	S16R000164	ICP-AES	7440-48-4	Cobalt	ug/mL	99.7	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 11-Liq-b	C105-15-01	S16R000164	ICP-AES	7440-47-3	Chromium	ug/mL	99.6	<2.00E-03	28.0	n/a	n/a	n/a	n/a	4.00	J	20160542
Cone 11-Liq-b	C105-15-01	S16R000164	ICP-AES	7440-50-8	Copper	ug/mL	99.1	<2.00E-03	28.9	n/a	n/a	n/a	n/a	4.00	J	20160542
Cone 11-Liq-b	C105-15-01	S16R000164	ICP-AES	7440-53-1	Europium	ug/mL	102	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 11-Liq-b	C105-15-01	S16R000164	ICP-AES	7439-89-6	Iron	ug/mL	99.6	<0.0200	<40.0	n/a	n/a	n/a	n/a	40.0	U	20160542
Cone 11-Liq-b	C105-15-01	S16R000164	ICP-AES	7440-09-7	Potassium	ug/mL	99.0	<0.0220	<44.0	n/a	n/a	n/a	n/a	44.0	U	20160542

Cone 11-Liq-b	C105-15-01	S16R000164	ICP-AES	7439-91-0	Lanthanum	ug/mL	99.4	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 11-Liq-b	C105-15-01	S16R000164	ICP-AES	7439-93-2	Lithium	ug/mL	101	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 11-Liq-b	C105-15-01	S16R000164	ICP-AES	7439-95-4	Magnesium	ug/mL	100	<9.00E-03	<18.0	n/a	n/a	n/a	n/a	18.0	U	20160542
Cone 11-Liq-b	C105-15-01	S16R000164	ICP-AES	7439-96-5	Manganese	ug/mL	100	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 11-Liq-b	C105-15-01	S16R000164	ICP-AES	7439-98-7	Molybdenum	ug/mL	98.5	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20160542
Cone 11-Liq-b	C105-15-01	S16R000164	ICP-AES	7440-23-5	Sodium	ug/mL	100	<0.0920	6.59E+04	n/a	n/a	n/a	n/a	184		20160542
Cone 11-Liq-b	C105-15-01	S16R000164	ICP-AES	7440-00-8	Neodymium	ug/mL	102	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20160542
Cone 11-Liq-b	C105-15-01	S16R000164	ICP-AES	7440-02-0	Nickel	ug/mL	99.6	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20160542
Cone 11-Liq-b	C105-15-01	S16R000164	ICP-AES	7440-30-1	Niobium	ug/mL	102	<6.00E-03	<12.0	n/a	n/a	n/a	n/a	12.0	U	20160542
Cone 11-Liq-b	C105-15-01	S16R000164	ICP-AES	7723-14-0	Phosphorus	ug/mL	98.2	<0.0130	622	n/a	n/a	n/a	n/a	26.0		20160542
Cone 11-Liq-b	C105-15-01	S16R000164	ICP-AES	7439-92-1	Lead	ug/mL	101	<0.0130	<26.0	n/a	n/a	n/a	n/a	26.0	U	20160542
Cone 11-Liq-b	C105-15-01	S16R000164	ICP-AES	7440-05-3	Palladium	ug/mL	102	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20160542
Cone 11-Liq-b	C105-15-01	S16R000164	ICP-AES	7440-10-0	Praseodymium	ug/mL	101	<0.0260	<52.0	n/a	n/a	n/a	n/a	52.0	U	20160542
Cone 11-Liq-b	C105-15-01	S16R000164	ICP-AES	7440-17-7	Rubidium	ug/mL	100	<0.0570	<114	n/a	n/a	n/a	n/a	114	U	20160542
Cone 11-Liq-b	C105-15-01	S16R000164	ICP-AES	7440-16-6	Rhodium	ug/mL	100	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20160542
Cone 11-Liq-b	C105-15-01	S16R000164	ICP-AES	7440-18-8	Ruthenium	ug/mL	98.8	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20160542
Cone 11-Liq-b	C105-15-01	S16R000164	ICP-AES	7704-34-9	Sulfur	ug/mL	98.8	<0.0280	426	n/a	n/a	n/a	n/a	56.0	J	20160542
Cone 11-Liq-b	C105-15-01	S16R000164	ICP-AES	7440-36-0	Antimony	ug/mL	97.4	<0.0180	<36.0	n/a	n/a	n/a	n/a	36.0	U	20160542
Cone 11-Liq-b	C105-15-01	S16R000164	ICP-AES	7782-49-2	Selenium	ug/mL	99.1	<0.0300	<60.0	n/a	n/a	n/a	n/a	60.0	U	20160542
Cone 11-Liq-b	C105-15-01	S16R000164	ICP-AES	7440-21-3	Silicon	ug/mL	100	0.0133	58.7	n/a	n/a	n/a	n/a	24.0	BJ	20160542
Cone 11-Liq-b	C105-15-01	S16R000164	ICP-AES	7440-19-9	Samarium	ug/mL	99.9	<0.0170	<34.0	n/a	n/a	n/a	n/a	34.0	U	20160542
Cone 11-Liq-b	C105-15-01	S16R000164	ICP-AES	7440-31-5	Tin	ug/mL	99.6	<8.00E-03	<16.0	n/a	n/a	n/a	n/a	16.0	U	20160542
Cone 11-Liq-b	C105-15-01	S16R000164	ICP-AES	7440-24-6	Strontium	ug/mL	100	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20160542
Cone 11-Liq-b	C105-15-01	S16R000164	ICP-AES	7440-25-7	Tantalum	ug/mL	103	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20160542
Cone 11-Liq-b	C105-15-01	S16R000164	ICP-AES	13494-80-9	Tellurium	ug/mL	100	<9.00E-03	<18.0	n/a	n/a	n/a	n/a	18.0	U	20160542
Cone 11-Liq-b	C105-15-01	S16R000164	ICP-AES	7440-29-1	Thorium	ug/mL	101	<0.0130	<26.0	n/a	n/a	n/a	n/a	26.0	U	20160542
Cone 11-Liq-b	C105-15-01	S16R000164	ICP-AES	7440-32-6	Titanium	ug/mL	97.9	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20160542
Cone 11-Liq-b	C105-15-01	S16R000164	ICP-AES	7440-28-0	Thallium	ug/mL	97.5	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20160542
Cone 11-Liq-b	C105-15-01	S16R000164	ICP-AES	7440-61-1	Uranium	ug/mL	101	<0.0290	81.7	n/a	n/a	n/a	n/a	58.0	J	20160542
Cone 11-Liq-b	C105-15-01	S16R000164	ICP-AES	7440-62-2	Vanadium	ug/mL	98.9	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 11-Liq-b	C105-15-01	S16R000164	ICP-AES	7440-33-7	Tungsten	ug/mL	101	<0.0160	<32.0	n/a	n/a	n/a	n/a	32.0	U	20160542
Cone 11-Liq-b	C105-15-01	S16R000164	ICP-AES	7440-65-5	Yttrium	ug/mL	100	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20160542
Cone 11-Liq-b	C105-15-01	S16R000164	ICP-AES	7440-66-6	Zinc	ug/mL	99.6	<0.0320	<64.0	n/a	n/a	n/a	n/a	64.0	U	20160542
Cone 11-Liq-b	C105-15-01	S16R000164	ICP-AES	7440-67-7	Zirconium	ug/mL	97.5	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 12-Liq-a	C105-15-01	S16R000163	ICP-AES	7440-22-4	Silver	ug/mL	99.9	<3.00E-03	<6.00	n/a	n/a	n/a	n/a	6.00	U	20160542
Cone 12-Liq-a	C105-15-01	S16R000163	ICP-AES	7429-90-5	Aluminum	ug/mL	98.5	<0.0140	8.60E+03	n/a	n/a	n/a	n/a	28.0		20160542
Cone 12-Liq-a	C105-15-01	S16R000163	ICP-AES	7440-38-2	Arsenic	ug/mL	98.6	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20160542
Cone 12-Liq-a	C105-15-01	S16R000163	ICP-AES	7440-42-8	Boron	ug/mL	97.9	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20160542
Cone 12-Liq-a	C105-15-01	S16R000163	ICP-AES	7440-39-3	Barium	ug/mL	99.6	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 12-Liq-a	C105-15-01	S16R000163	ICP-AES	7440-41-7	Beryllium	ug/mL	100	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 12-Liq-a	C105-15-01	S16R000163	ICP-AES	7440-69-9	Bismuth	ug/mL	99.1	<0.0190	<38.0	n/a	n/a	n/a	n/a	38.0	U	20160542
Cone 12-Liq-a	C105-15-01	S16R000163	ICP-AES	7440-70-2	Calcium	ug/mL	101	<0.120	<240	n/a	n/a	n/a	n/a	240	U	20160542
Cone 12-Liq-a	C105-15-01	S16R000163	ICP-AES	7440-43-9	Cadmium	ug/mL	100	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 12-Liq-a	C105-15-01	S16R000163	ICP-AES	7440-45-1	Cerium	ug/mL	99.9	<0.0250	68.9	n/a	n/a	n/a	n/a	50.0	BJ	20160542
Cone 12-Liq-a	C105-15-01	S16R000163	ICP-AES	7440-48-4	Cobalt	ug/mL	99.7	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 12-Liq-a	C105-15-01	S16R000163	ICP-AES	7440-47-3	Chromium	ug/mL	99.6	<2.00E-03	68.3	n/a	n/a	n/a	n/a	4.00		20160542
Cone 12-Liq-a	C105-15-01	S16R000163	ICP-AES	7440-50-8	Copper	ug/mL	99.1	<2.00E-03	339	n/a	n/a	n/a	n/a	4.00		20160542
Cone 12-Liq-a	C105-15-01	S16R000163	ICP-AES	7440-53-1	Europium	ug/mL	102	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 12-Liq-a	C105-15-01	S16R000163	ICP-AES	7439-89-6	Iron	ug/mL	99.6	<0.0200	67.5	n/a	n/a	n/a	n/a	40.0	J	20160542
Cone 12-Liq-a	C105-15-01	S16R000163	ICP-AES	7440-09-7	Potassium	ug/mL	99.0	<0.0220	68.5	n/a	n/a	n/a	n/a	44.0	J	20160542
Cone 12-Liq-a	C105-15-01	S16R000163	ICP-AES	7439-91-0	Lanthanum	ug/mL	99.4	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 12-Liq-a	C105-15-01	S16R000163	ICP-AES	7439-93-2	Lithium	ug/mL	101	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 12-Liq-a	C105-15-01	S16R000163	ICP-AES	7439-95-4	Magnesium	ug/mL	100	<9.00E-03	<18.0	n/a	n/a	n/a	n/a	18.0	U	20160542
Cone 12-Liq-a	C105-15-01	S16R000163	ICP-AES	7439-96-5	Manganese	ug/mL	100	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 12-Liq-a	C105-15-01	S16R000163	ICP-AES	7439-98-7	Molybdenum	ug/mL	98.5	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20160542
Cone 12-Liq-a	C105-15-01	S16R000163	ICP-AES	7440-23-5	Sodium	ug/mL	100	<0.0920	2.49E+05	n/a	n/a	n/a	n/a	184		20160542
Cone 12-Liq-a	C105-15-01	S16R000163	ICP-AES	7440-00-8	Neodymium	ug/mL	102	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20160542
Cone 12-Liq-a	C105-15-01	S16R000163	ICP-AES	7440-02-0	Nickel	ug/mL	99.6	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20160542
Cone 12-Liq-a	C105-15-01	S16R000163	ICP-AES	7440-30-1	Niobium	ug/mL	102	<6.00E-03	<12.0	n/a	n/a	n/a	n/a	12.0	U	20160542
Cone 12-Liq-a	C105-15-01	S16R000163	ICP-AES	7723-14-0	Phosphorus	ug/mL	98.2	<0.0130	188	n/a	n/a	n/a	n/a	26.0	J	20160542
Cone 12-Liq-a	C105-15-01	S16R000163	ICP-AES	7439-92-1	Lead	ug/mL	101	<0.0130	63.9	n/a	n/a	n/a	n/a	26.0	J	20160542
Cone 12-Liq-a	C105-15-01	S16R000163	ICP-AES	7440-05-3	Palladium	ug/mL	102	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20160542
Cone 12-Liq-a	C105-15-01	S16R000163	ICP-AES	7440-10-0	Praseodymium	ug/mL	101	<0.0260	<52.0	n/a	n/a	n/a	n/a	52.0	U	20160542
Cone 12-Liq-a	C105-15-01	S16R000163	ICP-AES	7440-17-7	Rubidium	ug/mL	100	<0.0570	<114	n/a	n/a	n/a	n/a	114	U	20160542
Cone 12-Liq-a	C105-15-01	S16R000163	ICP-AES	7440-16-6	Rhodium	ug/mL	100	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20160542
Cone 12-Liq-a	C105-15-01	S16R000163	ICP-AES	7440-18-8	Ruthenium	ug/mL	98.8	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20160542
Cone 12-Liq-a	C105-15-01	S16R000163	ICP-AES	7704-34-9	Sulfur	ug/mL	98.8	<0.0280	127	n/a	n/a	n/a	n/a	56.0	J	20160542
Cone 12-Liq-a	C105-15-01	S16R000163	ICP-AES	7440-36-0	Antimony	ug/mL	97.4	<0.0180	<36.0	n/a	n/a	n/a	n/a	36.0	U	20160542
Cone 12-Liq-a	C105-15-01	S16R000163	ICP-AES	7782-49-2	Selenium	ug/mL	99.1	<0.0300	<60.0	n/a	n/a	n/a	n/a	60.0	U	20160542
Cone 12-Liq-a	C105-15-01	S16R000163	ICP-AES	7440-21-3	Silicon	ug/mL	100	0.0133	139	n/a	n/a	n/a	n/a	24.0	BJ	20160542
Cone 12-Liq-a	C105-15-01	S16R000163	ICP-AES	7440-19-9	Samarium	ug/mL	99.9	<0.0170	<34.0	n/a	n/a	n/a	n/a	34.0	U	20160542
Cone 12-Liq-a	C105-15-01	S16R000163	ICP-AES	7440-31-5	Tin	ug/mL	99.6	<8.00E-03	<16.0	n/a	n/a	n/a	n/a	16.0	U	20160542
Cone 12-Liq-a	C105-15-01	S16R000163	ICP-AES	7440-24-6	Strontium	ug/mL	100	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20160542
Cone 12-Liq-a	C105-15-01	S16R000163	ICP-AES	7440-25-7	Tantalum	ug/mL	103	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20160542
Cone 12-Liq-a	C105-15-01	S16R000163	ICP-AES	13494-80-9	Tellurium	ug/mL	100	<9.00E-03	<18.0	n/a	n/a	n/a	n/a	18.0	U	20160542
Cone 12-Liq-a	C105-15-01	S16R000163	ICP-AES	7440-29-1	Thorium	ug/mL	101	<0.0130	<26.0	n/a	n/a	n/a	n/a	26.0	U	20160542
Cone 12-Liq-a	C105-15-01	S16R000163	ICP-AES	7440-32-6	Titanium	ug/mL	97.9	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20160542
Cone 12-Liq-a	C105-15-01	S16R000163	ICP-AES	7440-28-0	Thallium	ug/mL	97.5	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20160542
Cone 12-Liq-a	C105-15-01	S16R000163	ICP-AES	7440-61-1	Uranium	ug/mL	101	<0.0290	<58.0	n/a	n/a	n/a	n/a	58.0	U	20160542
Cone 12-Liq-a	C105-15-01	S16R000163	ICP-AES	7440-62-2	Vanadium	ug/mL	98.9	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 12-Liq-a	C105-15-01	S16R000163	ICP-AES	7440-33-7	Tungsten	ug/mL	101	<0.0160	36.6	n/a	n/a	n/a	n/a	32.0	J	20160542
Cone 12-Liq-a	C105-15-01	S16R000163	ICP-AES	7440-65-5	Yttrium	ug/mL	100	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20160542

Cone 12-Liq-a	C105-15-01	S16R000163	ICP-AES	7440-66-6	Zinc	ug/mL	99.6	<0.0320	<64.0	n/a	n/a	n/a	n/a	64.0	U	20160542
Cone 12-Liq-a	C105-15-01	S16R000163	ICP-AES	7440-67-7	Zirconium	ug/mL	97.5	<1.00E-03	10.9	n/a	n/a	n/a	n/a	2.00	J	20160542
Cone 12-Liq-b	C105-15-01	S16R000165	ICP-AES	7440-22-4	Silver	ug/mL	99.9	<3.00E-03	<6.00	n/a	n/a	n/a	n/a	6.00	U	20160542
Cone 12-Liq-b	C105-15-01	S16R000165	ICP-AES	7429-90-5	Aluminum	ug/mL	98.5	<0.0140	1.89E+03	n/a	n/a	n/a	n/a	28.0		20160542
Cone 12-Liq-b	C105-15-01	S16R000165	ICP-AES	7440-38-2	Arsenic	ug/mL	98.6	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20160542
Cone 12-Liq-b	C105-15-01	S16R000165	ICP-AES	7440-42-8	Boron	ug/mL	97.9	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20160542
Cone 12-Liq-b	C105-15-01	S16R000165	ICP-AES	7440-39-3	Barium	ug/mL	99.6	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 12-Liq-b	C105-15-01	S16R000165	ICP-AES	7440-41-7	Beryllium	ug/mL	100	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 12-Liq-b	C105-15-01	S16R000165	ICP-AES	7440-69-9	Bismuth	ug/mL	99.1	<0.0190	<38.0	n/a	n/a	n/a	n/a	38.0	U	20160542
Cone 12-Liq-b	C105-15-01	S16R000165	ICP-AES	7440-70-2	Calcium	ug/mL	101	<0.120	<240	n/a	n/a	n/a	n/a	240	U	20160542
Cone 12-Liq-b	C105-15-01	S16R000165	ICP-AES	7440-43-9	Cadmium	ug/mL	100	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 12-Liq-b	C105-15-01	S16R000165	ICP-AES	7440-45-1	Cerium	ug/mL	99.9	<0.0250	107	n/a	n/a	n/a	n/a	50.0	BJ	20160542
Cone 12-Liq-b	C105-15-01	S16R000165	ICP-AES	7440-48-4	Cobalt	ug/mL	99.7	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 12-Liq-b	C105-15-01	S16R000165	ICP-AES	7440-47-3	Chromium	ug/mL	99.6	<2.00E-03	31.3	n/a	n/a	n/a	n/a	4.00	J	20160542
Cone 12-Liq-b	C105-15-01	S16R000165	ICP-AES	7440-50-8	Copper	ug/mL	99.1	<2.00E-03	41.2	n/a	n/a	n/a	n/a	4.00		20160542
Cone 12-Liq-b	C105-15-01	S16R000165	ICP-AES	7440-53-1	Europium	ug/mL	102	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 12-Liq-b	C105-15-01	S16R000165	ICP-AES	7439-89-6	Iron	ug/mL	99.6	<0.0200	<40.0	n/a	n/a	n/a	n/a	40.0	U	20160542
Cone 12-Liq-b	C105-15-01	S16R000165	ICP-AES	7440-09-7	Potassium	ug/mL	99.0	<0.0220	<44.0	n/a	n/a	n/a	n/a	44.0	U	20160542
Cone 12-Liq-b	C105-15-01	S16R000165	ICP-AES	7439-91-0	Lanthanum	ug/mL	99.4	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 12-Liq-b	C105-15-01	S16R000165	ICP-AES	7439-93-2	Lithium	ug/mL	101	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 12-Liq-b	C105-15-01	S16R000165	ICP-AES	7439-95-4	Magnesium	ug/mL	100	<9.00E-03	<18.0	n/a	n/a	n/a	n/a	18.0	U	20160542
Cone 12-Liq-b	C105-15-01	S16R000165	ICP-AES	7439-96-5	Manganese	ug/mL	100	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 12-Liq-b	C105-15-01	S16R000165	ICP-AES	7439-98-7	Molybdenum	ug/mL	98.5	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20160542
Cone 12-Liq-b	C105-15-01	S16R000165	ICP-AES	7440-23-5	Sodium	ug/mL	100	<0.0920	6.81E+04	n/a	n/a	n/a	n/a	184		20160542
Cone 12-Liq-b	C105-15-01	S16R000165	ICP-AES	7440-00-8	Neodymium	ug/mL	102	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20160542
Cone 12-Liq-b	C105-15-01	S16R000165	ICP-AES	7440-02-0	Nickel	ug/mL	99.6	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20160542
Cone 12-Liq-b	C105-15-01	S16R000165	ICP-AES	7440-30-1	Niobium	ug/mL	102	<6.00E-03	<12.0	n/a	n/a	n/a	n/a	12.0	U	20160542
Cone 12-Liq-b	C105-15-01	S16R000165	ICP-AES	7723-14-0	Phosphorus	ug/mL	98.2	<0.0130	703	n/a	n/a	n/a	n/a	26.0		20160542
Cone 12-Liq-b	C105-15-01	S16R000165	ICP-AES	7439-92-1	Lead	ug/mL	101	<0.0130	<26.0	n/a	n/a	n/a	n/a	26.0	U	20160542
Cone 12-Liq-b	C105-15-01	S16R000165	ICP-AES	7440-05-3	Palladium	ug/mL	102	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20160542
Cone 12-Liq-b	C105-15-01	S16R000165	ICP-AES	7440-10-0	Praseodymium	ug/mL	101	<0.0260	<52.0	n/a	n/a	n/a	n/a	52.0	U	20160542
Cone 12-Liq-b	C105-15-01	S16R000165	ICP-AES	7440-17-7	Rubidium	ug/mL	100	<0.0570	<114	n/a	n/a	n/a	n/a	114	U	20160542
Cone 12-Liq-b	C105-15-01	S16R000165	ICP-AES	7440-16-6	Rhodium	ug/mL	100	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20160542
Cone 12-Liq-b	C105-15-01	S16R000165	ICP-AES	7440-18-8	Ruthenium	ug/mL	98.8	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20160542
Cone 12-Liq-b	C105-15-01	S16R000165	ICP-AES	7704-34-9	Sulfur	ug/mL	98.8	<0.0280	442	n/a	n/a	n/a	n/a	56.0	J	20160542
Cone 12-Liq-b	C105-15-01	S16R000165	ICP-AES	7440-36-0	Antimony	ug/mL	97.4	<0.0180	<36.0	n/a	n/a	n/a	n/a	36.0	U	20160542
Cone 12-Liq-b	C105-15-01	S16R000165	ICP-AES	7782-49-2	Selenium	ug/mL	99.1	<0.0300	<60.0	n/a	n/a	n/a	n/a	60.0	U	20160542
Cone 12-Liq-b	C105-15-01	S16R000165	ICP-AES	7440-21-3	Silicon	ug/mL	100	0.0133	71.5	n/a	n/a	n/a	n/a	24.0	BJ	20160542
Cone 12-Liq-b	C105-15-01	S16R000165	ICP-AES	7440-19-9	Samarium	ug/mL	99.9	<0.0170	<34.0	n/a	n/a	n/a	n/a	34.0	U	20160542
Cone 12-Liq-b	C105-15-01	S16R000165	ICP-AES	7440-31-5	Tin	ug/mL	99.6	<8.00E-03	<16.0	n/a	n/a	n/a	n/a	16.0	U	20160542
Cone 12-Liq-b	C105-15-01	S16R000165	ICP-AES	7440-24-6	Strontium	ug/mL	100	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20160542
Cone 12-Liq-b	C105-15-01	S16R000165	ICP-AES	7440-25-7	Tantalum	ug/mL	103	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20160542
Cone 12-Liq-b	C105-15-01	S16R000165	ICP-AES	13494-80-9	Tellurium	ug/mL	100	<9.00E-03	<18.0	n/a	n/a	n/a	n/a	18.0	U	20160542
Cone 12-Liq-b	C105-15-01	S16R000165	ICP-AES	7440-29-1	Thorium	ug/mL	101	<0.0130	<26.0	n/a	n/a	n/a	n/a	26.0	U	20160542
Cone 12-Liq-b	C105-15-01	S16R000165	ICP-AES	7440-32-6	Titanium	ug/mL	97.9	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20160542
Cone 12-Liq-b	C105-15-01	S16R000165	ICP-AES	7440-28-0	Thallium	ug/mL	97.5	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20160542
Cone 12-Liq-b	C105-15-01	S16R000165	ICP-AES	7440-61-1	Uranium	ug/mL	101	<0.0290	<58.0	n/a	n/a	n/a	n/a	58.0	U	20160542
Cone 12-Liq-b	C105-15-01	S16R000165	ICP-AES	7440-62-2	Vanadium	ug/mL	98.9	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 12-Liq-b	C105-15-01	S16R000165	ICP-AES	7440-33-7	Tungsten	ug/mL	101	<0.0160	<32.0	n/a	n/a	n/a	n/a	32.0	U	20160542
Cone 12-Liq-b	C105-15-01	S16R000165	ICP-AES	7440-65-5	Yttrium	ug/mL	100	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20160542
Cone 12-Liq-b	C105-15-01	S16R000165	ICP-AES	7440-66-6	Zinc	ug/mL	99.6	<0.0320	<64.0	n/a	n/a	n/a	n/a	64.0	U	20160542
Cone 12-Liq-b	C105-15-01	S16R000165	ICP-AES	7440-67-7	Zirconium	ug/mL	97.5	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 13-Liq-a	C105-15-02	S16R000166	ICP-AES	7440-22-4	Silver	ug/mL	101	<3.00E-03	<6.00	<6.00	n/a	n/a	90.4	6.00	U	20160542
Cone 13-Liq-a	C105-15-02	S16R000166	ICP-AES	7429-90-5	Aluminum	ug/mL	100	<0.0140	6.59E+03	6.47E+03	6.53E+03	1.83	100	28.0		20160542
Cone 13-Liq-a	C105-15-02	S16R000166	ICP-AES	7440-38-2	Arsenic	ug/mL	100	<0.0150	<30.0	<30.0	n/a	n/a	99.4	30.0	U	20160542
Cone 13-Liq-a	C105-15-02	S16R000166	ICP-AES	7440-42-8	Boron	ug/mL	99.5	<2.00E-03	5.22	4.28	4.75	19.9	95.9	4.00	BJ	20160542
Cone 13-Liq-a	C105-15-02	S16R000166	ICP-AES	7440-39-3	Barium	ug/mL	102	<1.00E-03	3.28	3.99	3.63	19.5	97.7	2.00	J	20160542
Cone 13-Liq-a	C105-15-02	S16R000166	ICP-AES	7440-41-7	Beryllium	ug/mL	101	<1.00E-03	<2.00	<2.00	n/a	n/a	95.8	2.00	U	20160542
Cone 13-Liq-a	C105-15-02	S16R000166	ICP-AES	7440-69-9	Bismuth	ug/mL	102	<0.0190	<38.0	<38.0	n/a	n/a	96.2	38.0	U	20160542
Cone 13-Liq-a	C105-15-02	S16R000166	ICP-AES	7440-70-2	Calcium	ug/mL	101	<0.120	<240	<240	n/a	n/a	95.5	240	U	20160542
Cone 13-Liq-a	C105-15-02	S16R000166	ICP-AES	7440-43-9	Cadmium	ug/mL	101	<1.00E-03	2.09	<2.00	n/a	n/a	95.9	2.00	J	20160542
Cone 13-Liq-a	C105-15-02	S16R000166	ICP-AES	7440-45-1	Cerium	ug/mL	96.2	<0.0250	<50.0	<50.0	n/a	n/a	90.0	50.0	UY	20160542
Cone 13-Liq-a	C105-15-02	S16R000166	ICP-AES	7440-48-4	Cobalt	ug/mL	101	<1.00E-03	<2.00	<2.00	n/a	n/a	97.6	2.00	U	20160542
Cone 13-Liq-a	C105-15-02	S16R000166	ICP-AES	7440-47-3	Chromium	ug/mL	101	<2.00E-03	63.4	63.4	63.4	0.106	97.3	4.00		20160542
Cone 13-Liq-a	C105-15-02	S16R000166	ICP-AES	7440-50-8	Copper	ug/mL	101	<2.00E-03	344	340	342	1.11	98.5	4.00		20160542
Cone 13-Liq-a	C105-15-02	S16R000166	ICP-AES	7440-53-1	Europium	ug/mL	97.9	<1.00E-03	<2.00	<2.00	n/a	n/a	93.5	2.00	U	20160542
Cone 13-Liq-a	C105-15-02	S16R000166	ICP-AES	7439-89-6	Iron	ug/mL	101	<0.0200	123	120	121	2.24	97.0	40.0	J	20160542
Cone 13-Liq-a	C105-15-02	S16R000166	ICP-AES	7440-09-7	Potassium	ug/mL	101	<0.0220	86.1	84.1	85.1	2.44	97.5	44.0	J	20160542
Cone 13-Liq-a	C105-15-02	S16R000166	ICP-AES	7439-91-0	Lanthanum	ug/mL	101	<1.00E-03	<2.00	<2.00	n/a	n/a	96.0	2.00	U	20160542
Cone 13-Liq-a	C105-15-02	S16R000166	ICP-AES	7439-93-2	Lithium	ug/mL	103	<1.00E-03	<2.00	<2.00	n/a	n/a	97.0	2.00	U	20160542
Cone 13-Liq-a	C105-15-02	S16R000166	ICP-AES	7439-95-4	Magnesium	ug/mL	101	<9.00E-03	<18.0	<18.0	n/a	n/a	97.0	18.0	U	20160542
Cone 13-Liq-a	C105-15-02	S16R000166	ICP-AES	7439-96-5	Manganese	ug/mL	101	<1.00E-03	49.3	49.2	49.2	0.176	96.7	2.00		20160542
Cone 13-Liq-a	C105-15-02	S16R000166	ICP-AES	7439-98-7	Molybdenum	ug/mL	99.9	<2.00E-03	<4.00	<4.00	n/a	n/a	95.7	4.00	U	20160542
Cone 13-Liq-a	C105-15-02	S16R000166	ICP-AES	7440-23-5	Sodium	ug/mL	101	<0.0920	2.35E+05	2.31E+05	2.33E+05	1.47	98.7	184		20160542
Cone 13-Liq-a	C105-15-02	S16R000166	ICP-AES	7440-00-8	Neodymium	ug/mL	97.3	<0.0150	<30.0	<30.0	n/a	n/a	91.6	30.0	U	20160542
Cone 13-Liq-a	C105-15-02	S16R000166	ICP-AES	7440-02-0	Nickel	ug/mL	101	<2.00E-03	<4.00	<4.00	n/a	n/a	97.8	4.00	U	20160542
Cone 13-Liq-a	C105-15-02	S16R000166	ICP-AES	7440-30-1	Niobium	ug/mL	100	<6.00E-03	<12.0	<12.0	n/a	n/a	95.8	12.0	U	20160542
Cone 13-Liq-a	C105-15-02	S16R000166	ICP-AES	7723-14-0	Phosphorus	ug/mL	99.1	<0.0130	168	168	168	0.0852	96.9	26.0	J	20160542
Cone 13-Liq-a	C105-15-02	S16R000166	ICP-AES	7439-92-1	Lead	ug/mL	101	<0.0130	48.0	49.4	48.7	2.91	96.5	26.0	J	20160542
Cone 13-Liq-a	C105-15-02	S16R000166	ICP-AES	7440-05-3	Palladium	ug/mL	101	<0.0120	<24.0	<24.0	n/a	n/a	94.4	24.0	U	20160542
Cone 13-Liq-a	C105-15-02	S16R000166	ICP-AES	7440-10-0	Praseodymium	ug/mL	95.6	<0.0260	<52.0	<52.0	n/a	n/a	88.3	52.0	UY	20160542
Cone 13-Liq-a	C105-15-02	S16R000166	ICP-AES	7440-17-7	Rubidium	ug/mL	97.9	<0.0570	<114	<114	n/a	n/a	93.1	114	U	20160542

Cone 13-Liq-a	C105-15-02	S16R000166	ICP-AES	7440-16-6	Rhodium	ug/mL	99.9	<0.0120	<24.0	<24.0	n/a	n/a	93.9	24.0	U	20160542
Cone 13-Liq-a	C105-15-02	S16R000166	ICP-AES	7440-18-8	Ruthenium	ug/mL	98.2	<5.00E-03	<10.0	<10.0	n/a	n/a	92.1	10.0	U	20160542
Cone 13-Liq-a	C105-15-02	S16R000166	ICP-AES	7704-34-9	Sulfur	ug/mL	99.6	<0.0280	155	155	155	0.577	99.3	56.0	J	20160542
Cone 13-Liq-a	C105-15-02	S16R000166	ICP-AES	7440-36-0	Antimony	ug/mL	99.7	<0.0180	<36.0	<36.0	n/a	n/a	110	36.0	U	20160542
Cone 13-Liq-a	C105-15-02	S16R000166	ICP-AES	7782-49-2	Selenium	ug/mL	101	<0.0300	<60.0	<60.0	n/a	n/a	98.8	60.0	U	20160542
Cone 13-Liq-a	C105-15-02	S16R000166	ICP-AES	7440-21-3	Silicon	ug/mL	103	<0.0120	120	106	113	13.0	107	24.0	J	20160542
Cone 13-Liq-a	C105-15-02	S16R000166	ICP-AES	7440-19-9	Samarium	ug/mL	95.3	<0.0170	<34.0	<34.0	n/a	n/a	90.1	34.0	UY	20160542
Cone 13-Liq-a	C105-15-02	S16R000166	ICP-AES	7440-31-5	Tin	ug/mL	98.9	<8.00E-03	<16.0	<16.0	n/a	n/a	93.5	16.0	U	20160542
Cone 13-Liq-a	C105-15-02	S16R000166	ICP-AES	7440-24-6	Strontium	ug/mL	102	<2.00E-03	<4.00	<4.00	n/a	n/a	97.4	4.00	U	20160542
Cone 13-Liq-a	C105-15-02	S16R000166	ICP-AES	7440-25-7	Tantalum	ug/mL	103	<5.00E-03	<10.0	<10.0	n/a	n/a	100	10.0	U	20160542
Cone 13-Liq-a	C105-15-02	S16R000166	ICP-AES	13494-80-9	Tellurium	ug/mL	100	<9.00E-03	<18.0	<18.0	n/a	n/a	97.9	18.0	U	20160542
Cone 13-Liq-a	C105-15-02	S16R000166	ICP-AES	7440-29-1	Thorium	ug/mL	98.7	<0.0130	<26.0	<26.0	n/a	n/a	93.1	26.0	U	20160542
Cone 13-Liq-a	C105-15-02	S16R000166	ICP-AES	7440-32-6	Titanium	ug/mL	100	<2.00E-03	<4.00	<4.00	n/a	n/a	97.3	4.00	U	20160542
Cone 13-Liq-a	C105-15-02	S16R000166	ICP-AES	7440-28-0	Thallium	ug/mL	98.2	<0.0150	<30.0	<30.0	n/a	n/a	91.0	30.0	U	20160542
Cone 13-Liq-a	C105-15-02	S16R000166	ICP-AES	7440-61-1	Uranium	ug/mL	97.3	<0.0290	<58.0	<58.0	n/a	n/a	93.3	58.0	U	20160542
Cone 13-Liq-a	C105-15-02	S16R000166	ICP-AES	7440-62-2	Vanadium	ug/mL	101	<1.00E-03	<2.00	<2.00	n/a	n/a	98.4	2.00	U	20160542
Cone 13-Liq-a	C105-15-02	S16R000166	ICP-AES	7440-33-7	Tungsten	ug/mL	99.9	<0.0160	<32.0	<32.0	n/a	n/a	95.8	32.0	U	20160542
Cone 13-Liq-a	C105-15-02	S16R000166	ICP-AES	7440-65-5	Yttrium	ug/mL	98.0	<2.00E-03	<4.00	<4.00	n/a	n/a	94.1	4.00	U	20160542
Cone 13-Liq-a	C105-15-02	S16R000166	ICP-AES	7440-66-6	Zinc	ug/mL	101	<0.0320	<64.0	<64.0	n/a	n/a	98.0	64.0	U	20160542
Cone 13-Liq-a	C105-15-02	S16R000166	ICP-AES	7440-67-7	Zirconium	ug/mL	99.3	<1.00E-03	5.86	5.66	5.76	3.35	95.5	2.00	J	20160542
Cone 14-Liq-a	C105-15-02	S16R000167	ICP-AES	7440-22-4	Silver	ug/mL	101	<3.00E-03	<6.00	n/a	n/a	n/a	n/a	6.00	U	20160542
Cone 14-Liq-a	C105-15-02	S16R000167	ICP-AES	7429-90-5	Aluminum	ug/mL	100	<0.0140	8.07E+03	n/a	n/a	n/a	n/a	28.0		20160542
Cone 14-Liq-a	C105-15-02	S16R000167	ICP-AES	7440-38-2	Arsenic	ug/mL	100	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20160542
Cone 14-Liq-a	C105-15-02	S16R000167	ICP-AES	7440-42-8	Boron	ug/mL	99.5	<2.00E-03	10.5	n/a	n/a	n/a	n/a	4.00	BJ	20160542
Cone 14-Liq-a	C105-15-02	S16R000167	ICP-AES	7440-39-3	Barium	ug/mL	102	<1.00E-03	6.09	n/a	n/a	n/a	n/a	2.00	J	20160542
Cone 14-Liq-a	C105-15-02	S16R000167	ICP-AES	7440-41-7	Beryllium	ug/mL	101	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 14-Liq-a	C105-15-02	S16R000167	ICP-AES	7440-69-9	Bismuth	ug/mL	102	<0.0190	<38.0	n/a	n/a	n/a	n/a	38.0	U	20160542
Cone 14-Liq-a	C105-15-02	S16R000167	ICP-AES	7440-70-2	Calcium	ug/mL	101	<0.120	<240	n/a	n/a	n/a	n/a	240	U	20160542
Cone 14-Liq-a	C105-15-02	S16R000167	ICP-AES	7440-43-9	Cadmium	ug/mL	101	<1.00E-03	2.54	n/a	n/a	n/a	n/a	2.00	J	20160542
Cone 14-Liq-a	C105-15-02	S16R000167	ICP-AES	7440-45-1	Cerium	ug/mL	96.2	<0.0250	<50.0	n/a	n/a	n/a	n/a	50.0	UY	20160542
Cone 14-Liq-a	C105-15-02	S16R000167	ICP-AES	7440-48-4	Cobalt	ug/mL	101	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 14-Liq-a	C105-15-02	S16R000167	ICP-AES	7440-47-3	Chromium	ug/mL	101	<2.00E-03	82.0	n/a	n/a	n/a	n/a	4.00		20160542
Cone 14-Liq-a	C105-15-02	S16R000167	ICP-AES	7440-50-8	Copper	ug/mL	101	<2.00E-03	509	n/a	n/a	n/a	n/a	4.00		20160542
Cone 14-Liq-a	C105-15-02	S16R000167	ICP-AES	7440-53-1	Europium	ug/mL	97.9	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 14-Liq-a	C105-15-02	S16R000167	ICP-AES	7439-89-6	Iron	ug/mL	101	<0.0200	227	n/a	n/a	n/a	n/a	40.0	J	20160542
Cone 14-Liq-a	C105-15-02	S16R000167	ICP-AES	7440-09-7	Potassium	ug/mL	101	<0.0220	90.3	n/a	n/a	n/a	n/a	44.0	J	20160542
Cone 14-Liq-a	C105-15-02	S16R000167	ICP-AES	7439-91-0	Lanthanum	ug/mL	101	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 14-Liq-a	C105-15-02	S16R000167	ICP-AES	7439-93-2	Lithium	ug/mL	103	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 14-Liq-a	C105-15-02	S16R000167	ICP-AES	7439-95-4	Magnesium	ug/mL	101	<9.00E-03	<18.0	n/a	n/a	n/a	n/a	18.0	U	20160542
Cone 14-Liq-a	C105-15-02	S16R000167	ICP-AES	7439-96-5	Manganese	ug/mL	101	<1.00E-03	128	n/a	n/a	n/a	n/a	2.00		20160542
Cone 14-Liq-a	C105-15-02	S16R000167	ICP-AES	7439-98-7	Molybdenum	ug/mL	99.9	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20160542
Cone 14-Liq-a	C105-15-02	S16R000167	ICP-AES	7440-23-5	Sodium	ug/mL	101	<0.0920	2.55E+05	n/a	n/a	n/a	n/a	184		20160542
Cone 14-Liq-a	C105-15-02	S16R000167	ICP-AES	7440-00-8	Neodymium	ug/mL	97.3	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20160542
Cone 14-Liq-a	C105-15-02	S16R000167	ICP-AES	7440-02-0	Nickel	ug/mL	101	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20160542
Cone 14-Liq-a	C105-15-02	S16R000167	ICP-AES	7440-30-1	Niobium	ug/mL	100	<6.00E-03	<12.0	n/a	n/a	n/a	n/a	12.0	U	20160542
Cone 14-Liq-a	C105-15-02	S16R000167	ICP-AES	7723-14-0	Phosphorus	ug/mL	99.1	<0.0130	245	n/a	n/a	n/a	n/a	26.0	J	20160542
Cone 14-Liq-a	C105-15-02	S16R000167	ICP-AES	7439-92-1	Lead	ug/mL	101	<0.0130	67.6	n/a	n/a	n/a	n/a	26.0	J	20160542
Cone 14-Liq-a	C105-15-02	S16R000167	ICP-AES	7440-05-3	Palladium	ug/mL	101	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20160542
Cone 14-Liq-a	C105-15-02	S16R000167	ICP-AES	7440-10-0	Praseodymium	ug/mL	95.6	<0.0260	<52.0	n/a	n/a	n/a	n/a	52.0	UY	20160542
Cone 14-Liq-a	C105-15-02	S16R000167	ICP-AES	7440-17-7	Rubidium	ug/mL	97.9	<0.0570	<114	n/a	n/a	n/a	n/a	114	U	20160542
Cone 14-Liq-a	C105-15-02	S16R000167	ICP-AES	7440-16-6	Rhodium	ug/mL	99.9	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20160542
Cone 14-Liq-a	C105-15-02	S16R000167	ICP-AES	7440-18-8	Ruthenium	ug/mL	98.2	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20160542
Cone 14-Liq-a	C105-15-02	S16R000167	ICP-AES	7704-34-9	Sulfur	ug/mL	99.6	<0.0280	168	n/a	n/a	n/a	n/a	56.0	J	20160542
Cone 14-Liq-a	C105-15-02	S16R000167	ICP-AES	7440-36-0	Antimony	ug/mL	99.7	<0.0180	<36.0	n/a	n/a	n/a	n/a	36.0	U	20160542
Cone 14-Liq-a	C105-15-02	S16R000167	ICP-AES	7782-49-2	Selenium	ug/mL	101	<0.0300	<60.0	n/a	n/a	n/a	n/a	60.0	U	20160542
Cone 14-Liq-a	C105-15-02	S16R000167	ICP-AES	7440-21-3	Silicon	ug/mL	103	<0.0120	123	n/a	n/a	n/a	n/a	24.0	J	20160542
Cone 14-Liq-a	C105-15-02	S16R000167	ICP-AES	7440-19-9	Samarium	ug/mL	95.3	<0.0170	<34.0	n/a	n/a	n/a	n/a	34.0	UY	20160542
Cone 14-Liq-a	C105-15-02	S16R000167	ICP-AES	7440-31-5	Tin	ug/mL	98.9	<8.00E-03	<16.0	n/a	n/a	n/a	n/a	16.0	U	20160542
Cone 14-Liq-a	C105-15-02	S16R000167	ICP-AES	7440-24-6	Strontium	ug/mL	102	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20160542
Cone 14-Liq-a	C105-15-02	S16R000167	ICP-AES	7440-25-7	Tantalum	ug/mL	103	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20160542
Cone 14-Liq-a	C105-15-02	S16R000167	ICP-AES	13494-80-9	Tellurium	ug/mL	100	<9.00E-03	<18.0	n/a	n/a	n/a	n/a	18.0	U	20160542
Cone 14-Liq-a	C105-15-02	S16R000167	ICP-AES	7440-29-1	Thorium	ug/mL	98.7	<0.0130	<26.0	n/a	n/a	n/a	n/a	26.0	U	20160542
Cone 14-Liq-a	C105-15-02	S16R000167	ICP-AES	7440-32-6	Titanium	ug/mL	100	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20160542
Cone 14-Liq-a	C105-15-02	S16R000167	ICP-AES	7440-28-0	Thallium	ug/mL	98.2	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20160542
Cone 14-Liq-a	C105-15-02	S16R000167	ICP-AES	7440-61-1	Uranium	ug/mL	97.3	<0.0290	<58.0	n/a	n/a	n/a	n/a	58.0	U	20160542
Cone 14-Liq-a	C105-15-02	S16R000167	ICP-AES	7440-62-2	Vanadium	ug/mL	101	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 14-Liq-a	C105-15-02	S16R000167	ICP-AES	7440-33-7	Tungsten	ug/mL	99.9	<0.0160	<32.0	n/a	n/a	n/a	n/a	32.0	U	20160542
Cone 14-Liq-a	C105-15-02	S16R000167	ICP-AES	7440-65-5	Yttrium	ug/mL	98.0	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20160542
Cone 14-Liq-a	C105-15-02	S16R000167	ICP-AES	7440-66-6	Zinc	ug/mL	101	<0.0320	<64.0	n/a	n/a	n/a	n/a	64.0	U	20160542
Cone 14-Liq-a	C105-15-02	S16R000167	ICP-AES	7440-67-7	Zirconium	ug/mL	99.3	<1.00E-03	7.09	n/a	n/a	n/a	n/a	2.00	J	20160542
Cone 14-Liq-b	C105-15-02	S16R000169	ICP-AES	7440-22-4	Silver	ug/mL	101	<3.00E-03	<6.00	n/a	n/a	n/a	n/a	6.00	U	20160542
Cone 14-Liq-b	C105-15-02	S16R000169	ICP-AES	7429-90-5	Aluminum	ug/mL	100	<0.0140	1.90E+03	n/a	n/a	n/a	n/a	28.0		20160542
Cone 14-Liq-b	C105-15-02	S16R000169	ICP-AES	7440-38-2	Arsenic	ug/mL	100	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20160542
Cone 14-Liq-b	C105-15-02	S16R000169	ICP-AES	7440-42-8	Boron	ug/mL	99.5	<2.00E-03	6.38	n/a	n/a	n/a	n/a	4.00	BJ	20160542
Cone 14-Liq-b	C105-15-02	S16R000169	ICP-AES	7440-39-3	Barium	ug/mL	102	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 14-Liq-b	C105-15-02	S16R000169	ICP-AES	7440-41-7	Beryllium	ug/mL	101	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 14-Liq-b	C105-15-02	S16R000169	ICP-AES	7440-69-9	Bismuth	ug/mL	102	<0.0190	<38.0	n/a	n/a	n/a	n/a	38.0	U	20160542
Cone 14-Liq-b	C105-15-02	S16R000169	ICP-AES	7440-70-2	Calcium	ug/mL	101	<0.120	<240	n/a	n/a	n/a	n/a	240	U	20160542
Cone 14-Liq-b	C105-15-02	S16R000169	ICP-AES	7440-43-9	Cadmium	ug/mL	101	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 14-Liq-b	C105-15-02	S16R000169	ICP-AES	7440-45-1	Cerium	ug/mL	96.2	<0.0250	<50.0	n/a	n/a	n/a	n/a	50.0	UY	20160542
Cone 14-Liq-b	C105-15-02	S16R000169	ICP-AES	7440-48-4	Cobalt	ug/mL	101	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 14-Liq-b	C105-15-02	S16R000169	ICP-AES	7440-47-3	Chromium	ug/mL	101	<2.00E-03	43.0	n/a	n/a	n/a	n/a	4.00		20160542

Cone 14-Liq-b	C105-15-02	S16R000169	ICP-AES	7440-50-8	Copper	ug/mL	101	<2.00E-03	103	n/a	n/a	n/a	n/a	4.00		20160542
Cone 14-Liq-b	C105-15-02	S16R000169	ICP-AES	7440-53-1	Europium	ug/mL	97.9	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 14-Liq-b	C105-15-02	S16R000169	ICP-AES	7439-89-6	Iron	ug/mL	101	<0.0200	<40.0	n/a	n/a	n/a	n/a	40.0	U	20160542
Cone 14-Liq-b	C105-15-02	S16R000169	ICP-AES	7440-09-7	Potassium	ug/mL	101	<0.0220	<44.0	n/a	n/a	n/a	n/a	44.0	U	20160542
Cone 14-Liq-b	C105-15-02	S16R000169	ICP-AES	7439-91-0	Lanthanum	ug/mL	101	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 14-Liq-b	C105-15-02	S16R000169	ICP-AES	7439-93-2	Lithium	ug/mL	103	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 14-Liq-b	C105-15-02	S16R000169	ICP-AES	7439-95-4	Magnesium	ug/mL	101	<9.00E-03	<18.0	n/a	n/a	n/a	n/a	18.0	U	20160542
Cone 14-Liq-b	C105-15-02	S16R000169	ICP-AES	7439-96-5	Manganese	ug/mL	101	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 14-Liq-b	C105-15-02	S16R000169	ICP-AES	7439-98-7	Molybdenum	ug/mL	99.9	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20160542
Cone 14-Liq-b	C105-15-02	S16R000169	ICP-AES	7440-23-5	Sodium	ug/mL	101	<0.0920	9.30E+04	n/a	n/a	n/a	n/a	184		20160542
Cone 14-Liq-b	C105-15-02	S16R000169	ICP-AES	7440-00-8	Neodymium	ug/mL	97.3	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20160542
Cone 14-Liq-b	C105-15-02	S16R000169	ICP-AES	7440-02-0	Nickel	ug/mL	101	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20160542
Cone 14-Liq-b	C105-15-02	S16R000169	ICP-AES	7440-30-1	Niobium	ug/mL	100	<6.00E-03	<12.0	n/a	n/a	n/a	n/a	12.0	U	20160542
Cone 14-Liq-b	C105-15-02	S16R000169	ICP-AES	7723-14-0	Phosphorus	ug/mL	99.1	<0.0130	1.13E+03	n/a	n/a	n/a	n/a	26.0		20160542
Cone 14-Liq-b	C105-15-02	S16R000169	ICP-AES	7439-92-1	Lead	ug/mL	101	<0.0130	<26.0	n/a	n/a	n/a	n/a	26.0	U	20160542
Cone 14-Liq-b	C105-15-02	S16R000169	ICP-AES	7440-05-3	Palladium	ug/mL	101	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20160542
Cone 14-Liq-b	C105-15-02	S16R000169	ICP-AES	7440-10-0	Praseodymium	ug/mL	95.6	<0.0260	<52.0	n/a	n/a	n/a	n/a	52.0	UY	20160542
Cone 14-Liq-b	C105-15-02	S16R000169	ICP-AES	7440-17-7	Rubidium	ug/mL	97.9	<0.0570	<114	n/a	n/a	n/a	n/a	114	U	20160542
Cone 14-Liq-b	C105-15-02	S16R000169	ICP-AES	7440-16-6	Rhodium	ug/mL	99.9	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20160542
Cone 14-Liq-b	C105-15-02	S16R000169	ICP-AES	7440-18-8	Ruthenium	ug/mL	98.2	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20160542
Cone 14-Liq-b	C105-15-02	S16R000169	ICP-AES	7704-34-9	Sulfur	ug/mL	99.6	<0.0280	609	n/a	n/a	n/a	n/a	56.0		20160542
Cone 14-Liq-b	C105-15-02	S16R000169	ICP-AES	7440-36-0	Antimony	ug/mL	99.7	<0.0180	<36.0	n/a	n/a	n/a	n/a	36.0	U	20160542
Cone 14-Liq-b	C105-15-02	S16R000169	ICP-AES	7782-49-2	Selenium	ug/mL	101	<0.0300	<60.0	n/a	n/a	n/a	n/a	60.0	U	20160542
Cone 14-Liq-b	C105-15-02	S16R000169	ICP-AES	7440-21-3	Silicon	ug/mL	103	<0.0120	49.2	n/a	n/a	n/a	n/a	24.0	J	20160542
Cone 14-Liq-b	C105-15-02	S16R000169	ICP-AES	7440-19-9	Samarium	ug/mL	95.3	<0.0170	<34.0	n/a	n/a	n/a	n/a	34.0	UY	20160542
Cone 14-Liq-b	C105-15-02	S16R000169	ICP-AES	7440-31-5	Tin	ug/mL	98.9	<8.00E-03	<16.0	n/a	n/a	n/a	n/a	16.0	U	20160542
Cone 14-Liq-b	C105-15-02	S16R000169	ICP-AES	7440-24-6	Strontium	ug/mL	102	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20160542
Cone 14-Liq-b	C105-15-02	S16R000169	ICP-AES	7440-25-7	Tantalum	ug/mL	103	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20160542
Cone 14-Liq-b	C105-15-02	S16R000169	ICP-AES	13494-80-9	Tellurium	ug/mL	100	<9.00E-03	<18.0	n/a	n/a	n/a	n/a	18.0	U	20160542
Cone 14-Liq-b	C105-15-02	S16R000169	ICP-AES	7440-29-1	Thorium	ug/mL	98.7	<0.0130	<26.0	n/a	n/a	n/a	n/a	26.0	U	20160542
Cone 14-Liq-b	C105-15-02	S16R000169	ICP-AES	7440-32-6	Titanium	ug/mL	100	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20160542
Cone 14-Liq-b	C105-15-02	S16R000169	ICP-AES	7440-28-0	Thallium	ug/mL	98.2	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20160542
Cone 14-Liq-b	C105-15-02	S16R000169	ICP-AES	7440-61-1	Uranium	ug/mL	97.3	<0.0290	112	n/a	n/a	n/a	n/a	58.0	J	20160542
Cone 14-Liq-b	C105-15-02	S16R000169	ICP-AES	7440-62-2	Vanadium	ug/mL	101	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 14-Liq-b	C105-15-02	S16R000169	ICP-AES	7440-33-7	Tungsten	ug/mL	99.9	<0.0160	<32.0	n/a	n/a	n/a	n/a	32.0	U	20160542
Cone 14-Liq-b	C105-15-02	S16R000169	ICP-AES	7440-65-5	Yttrium	ug/mL	98.0	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20160542
Cone 14-Liq-b	C105-15-02	S16R000169	ICP-AES	7440-66-6	Zinc	ug/mL	101	<0.0320	<64.0	n/a	n/a	n/a	n/a	64.0	U	20160542
Cone 14-Liq-b	C105-15-02	S16R000169	ICP-AES	7440-67-7	Zirconium	ug/mL	99.3	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20160542
Cone 2-Liq-a	C105-15-01	S15R000666	ICP-AES	7440-22-4	Silver	ug/mL	99.9	<3.00E-03	6.79	n/a	n/a	n/a	n/a	6.00	J	20152628
Cone 2-Liq-a	C105-15-01	S15R000666	ICP-AES	7429-90-5	Aluminum	ug/mL	98.5	<0.0140	<28.0	n/a	n/a	n/a	n/a	28.0	U	20152628
Cone 2-Liq-a	C105-15-01	S15R000666	ICP-AES	7440-38-2	Arsenic	ug/mL	98.6	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 2-Liq-a	C105-15-01	S15R000666	ICP-AES	7440-42-8	Boron	ug/mL	97.9	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 2-Liq-a	C105-15-01	S15R000666	ICP-AES	7440-39-3	Barium	ug/mL	99.6	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 2-Liq-a	C105-15-01	S15R000666	ICP-AES	7440-41-7	Beryllium	ug/mL	100	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 2-Liq-a	C105-15-01	S15R000666	ICP-AES	7440-69-9	Bismuth	ug/mL	99.1	<0.0190	<38.0	n/a	n/a	n/a	n/a	38.0	U	20152628
Cone 2-Liq-a	C105-15-01	S15R000666	ICP-AES	7440-70-2	Calcium	ug/mL	101	<0.120	<240	n/a	n/a	n/a	n/a	240	U	20152628
Cone 2-Liq-a	C105-15-01	S15R000666	ICP-AES	7440-43-9	Cadmium	ug/mL	100	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 2-Liq-a	C105-15-01	S15R000666	ICP-AES	7440-45-1	Cerium	ug/mL	99.9	<0.0250	96.5	n/a	n/a	n/a	n/a	50.0	BJ	20152628
Cone 2-Liq-a	C105-15-01	S15R000666	ICP-AES	7440-48-4	Cobalt	ug/mL	99.7	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 2-Liq-a	C105-15-01	S15R000666	ICP-AES	7440-47-3	Chromium	ug/mL	99.6	<2.00E-03	43.7	n/a	n/a	n/a	n/a	4.00		20152628
Cone 2-Liq-a	C105-15-01	S15R000666	ICP-AES	7440-50-8	Copper	ug/mL	99.1	<2.00E-03	17.5	n/a	n/a	n/a	n/a	4.00	J	20152628
Cone 2-Liq-a	C105-15-01	S15R000666	ICP-AES	7440-53-1	Europium	ug/mL	102	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 2-Liq-a	C105-15-01	S15R000666	ICP-AES	7439-89-6	Iron	ug/mL	99.6	<0.0200	<40.0	n/a	n/a	n/a	n/a	40.0	U	20152628
Cone 2-Liq-a	C105-15-01	S15R000666	ICP-AES	7440-09-7	Potassium	ug/mL	99.0	<0.0220	<44.0	n/a	n/a	n/a	n/a	44.0	U	20152628
Cone 2-Liq-a	C105-15-01	S15R000666	ICP-AES	7439-91-0	Lanthanum	ug/mL	99.4	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 2-Liq-a	C105-15-01	S15R000666	ICP-AES	7439-93-2	Lithium	ug/mL	101	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 2-Liq-a	C105-15-01	S15R000666	ICP-AES	7439-95-4	Magnesium	ug/mL	100	<9.00E-03	<18.0	n/a	n/a	n/a	n/a	18.0	U	20152628
Cone 2-Liq-a	C105-15-01	S15R000666	ICP-AES	7439-96-5	Manganese	ug/mL	100	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 2-Liq-a	C105-15-01	S15R000666	ICP-AES	7439-98-7	Molybdenum	ug/mL	98.5	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 2-Liq-a	C105-15-01	S15R000666	ICP-AES	7440-23-5	Sodium	ug/mL	100	<0.0920	1.77E+04	n/a	n/a	n/a	n/a	184		20152628
Cone 2-Liq-a	C105-15-01	S15R000666	ICP-AES	7440-00-8	Neodymium	ug/mL	102	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 2-Liq-a	C105-15-01	S15R000666	ICP-AES	7440-02-0	Nickel	ug/mL	99.6	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 2-Liq-a	C105-15-01	S15R000666	ICP-AES	7440-30-1	Niobium	ug/mL	102	<6.00E-03	<12.0	n/a	n/a	n/a	n/a	12.0	U	20152628
Cone 2-Liq-a	C105-15-01	S15R000666	ICP-AES	7723-14-0	Phosphorus	ug/mL	98.2	<0.0130	507	n/a	n/a	n/a	n/a	26.0		20152628
Cone 2-Liq-a	C105-15-01	S15R000666	ICP-AES	7439-92-1	Lead	ug/mL	101	<0.0130	<26.0	n/a	n/a	n/a	n/a	26.0	U	20152628
Cone 2-Liq-a	C105-15-01	S15R000666	ICP-AES	7440-05-3	Palladium	ug/mL	102	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20152628
Cone 2-Liq-a	C105-15-01	S15R000666	ICP-AES	7440-10-0	Praseodymium	ug/mL	101	<0.0260	<52.0	n/a	n/a	n/a	n/a	52.0	U	20152628
Cone 2-Liq-a	C105-15-01	S15R000666	ICP-AES	7440-17-7	Rubidium	ug/mL	100	<0.0570	<114	n/a	n/a	n/a	n/a	114	U	20152628
Cone 2-Liq-a	C105-15-01	S15R000666	ICP-AES	7440-16-6	Rhodium	ug/mL	100	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20152628
Cone 2-Liq-a	C105-15-01	S15R000666	ICP-AES	7440-18-8	Ruthenium	ug/mL	98.8	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20152628
Cone 2-Liq-a	C105-15-01	S15R000666	ICP-AES	7704-34-9	Sulfur	ug/mL	98.8	<0.0280	505	n/a	n/a	n/a	n/a	56.0	J	20152628
Cone 2-Liq-a	C105-15-01	S15R000666	ICP-AES	7440-36-0	Antimony	ug/mL	97.4	<0.0180	<36.0	n/a	n/a	n/a	n/a	36.0	U	20152628
Cone 2-Liq-a	C105-15-01	S15R000666	ICP-AES	7782-49-2	Selenium	ug/mL	99.1	<0.0300	<60.0	n/a	n/a	n/a	n/a	60.0	U	20152628
Cone 2-Liq-a	C105-15-01	S15R000666	ICP-AES	7440-21-3	Silicon	ug/mL	100	0.0133	<24.0	n/a	n/a	n/a	n/a	24.0	U	20152628
Cone 2-Liq-a	C105-15-01	S15R000666	ICP-AES	7440-19-9	Samarium	ug/mL	99.9	<0.0170	37.1	n/a	n/a	n/a	n/a	34.0	J	20152628
Cone 2-Liq-a	C105-15-01	S15R000666	ICP-AES	7440-31-5	Tin	ug/mL	99.6	<8.00E-03	<16.0	n/a	n/a	n/a	n/a	16.0	U	20152628
Cone 2-Liq-a	C105-15-01	S15R000666	ICP-AES	7440-24-6	Strontium	ug/mL	100	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 2-Liq-a	C105-15-01	S15R000666	ICP-AES	7440-25-7	Tantalum	ug/mL	103	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20152628
Cone 2-Liq-a	C105-15-01	S15R000666	ICP-AES	13494-80-9	Tellurium	ug/mL	100	<9.00E-03	<18.0	n/a	n/a	n/a	n/a	18.0	U	20152628
Cone 2-Liq-a	C105-15-01	S15R000666	ICP-AES	7440-29-1	Thorium	ug/mL	101	<0.0130	<26.0	n/a	n/a	n/a	n/a	26.0	U	20152628
Cone 2-Liq-a	C105-15-01	S15R000666	ICP-AES	7440-32-6	Titanium	ug/mL	97.9	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 2-Liq-a	C105-15-01	S15R000666	ICP-AES	7440-28-0	Thallium	ug/mL	97.5	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628

Cone 2-Liq-a	C105-15-01	S15R000666	ICP-AES	7440-61-1	Uranium	ug/mL	101	<0.0290	6.09E+03	n/a	n/a	n/a	n/a	58.0		20152628
Cone 2-Liq-a	C105-15-01	S15R000666	ICP-AES	7440-62-2	Vanadium	ug/mL	98.9	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 2-Liq-a	C105-15-01	S15R000666	ICP-AES	7440-33-7	Tungsten	ug/mL	101	<0.0160	<32.0	n/a	n/a	n/a	n/a	32.0	U	20152628
Cone 2-Liq-a	C105-15-01	S15R000666	ICP-AES	7440-65-5	Yttrium	ug/mL	100	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 2-Liq-a	C105-15-01	S15R000666	ICP-AES	7440-66-6	Zinc	ug/mL	99.6	<0.0320	<64.0	n/a	n/a	n/a	n/a	64.0	U	20152628
Cone 2-Liq-a	C105-15-01	S15R000666	ICP-AES	7440-67-7	Zirconium	ug/mL	97.5	<1.00E-03	19.3	n/a	n/a	n/a	n/a	2.00	J	20152628
Cone 2-Liq-a	C105-15-01	S16R000269	ICP-AES	7440-22-4	Silver	ug/mL	102	<3.00E-03	7.68	n/a	n/a	n/a	n/a	0.300		20152628
Cone 2-Liq-a	C105-15-01	S16R000269	ICP-AES	7429-90-5	Aluminum	ug/mL	102	<0.0140	<1.40	n/a	n/a	n/a	n/a	1.40	U	20152628
Cone 2-Liq-a	C105-15-01	S16R000269	ICP-AES	7440-38-2	Arsenic	ug/mL	103	<0.0150	<1.50	n/a	n/a	n/a	n/a	1.50	U	20152628
Cone 2-Liq-a	C105-15-01	S16R000269	ICP-AES	7440-42-8	Boron	ug/mL	101	<2.00E-03	0.709	n/a	n/a	n/a	n/a	0.200	J	20152628
Cone 2-Liq-a	C105-15-01	S16R000269	ICP-AES	7440-39-3	Barium	ug/mL	103	<1.00E-03	0.187	n/a	n/a	n/a	n/a	0.100	J	20152628
Cone 2-Liq-a	C105-15-01	S16R000269	ICP-AES	7440-41-7	Beryllium	ug/mL	101	<1.00E-03	<0.100	n/a	n/a	n/a	n/a	0.100	U	20152628
Cone 2-Liq-a	C105-15-01	S16R000269	ICP-AES	7440-69-9	Bismuth	ug/mL	102	<0.0190	<1.90	n/a	n/a	n/a	n/a	1.90	U	20152628
Cone 2-Liq-a	C105-15-01	S16R000269	ICP-AES	7440-70-2	Calcium	ug/mL	102	<0.120	<12.0	n/a	n/a	n/a	n/a	12.0	U	20152628
Cone 2-Liq-a	C105-15-01	S16R000269	ICP-AES	7440-43-9	Cadmium	ug/mL	102	<1.00E-03	<0.100	n/a	n/a	n/a	n/a	0.100	U	20152628
Cone 2-Liq-a	C105-15-01	S16R000269	ICP-AES	7440-45-1	Cerium	ug/mL	100	<0.0250	<2.50	n/a	n/a	n/a	n/a	2.50	U	20152628
Cone 2-Liq-a	C105-15-01	S16R000269	ICP-AES	7440-48-4	Cobalt	ug/mL	104	<1.00E-03	<0.100	n/a	n/a	n/a	n/a	0.100	U	20152628
Cone 2-Liq-a	C105-15-01	S16R000269	ICP-AES	7440-47-3	Chromium	ug/mL	102	<2.00E-03	43.9	n/a	n/a	n/a	n/a	0.200		20152628
Cone 2-Liq-a	C105-15-01	S16R000269	ICP-AES	7440-50-8	Copper	ug/mL	102	<2.00E-03	25.9	n/a	n/a	n/a	n/a	0.200		20152628
Cone 2-Liq-a	C105-15-01	S16R000269	ICP-AES	7440-53-1	Europium	ug/mL	104	<1.00E-03	<0.100	n/a	n/a	n/a	n/a	0.100	U	20152628
Cone 2-Liq-a	C105-15-01	S16R000269	ICP-AES	7439-89-6	Iron	ug/mL	101	<0.0200	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 2-Liq-a	C105-15-01	S16R000269	ICP-AES	7440-09-7	Potassium	ug/mL	102	<0.0220	58.1	n/a	n/a	n/a	n/a	2.20		20152628
Cone 2-Liq-a	C105-15-01	S16R000269	ICP-AES	7439-91-0	Lanthanum	ug/mL	101	<1.00E-03	<0.100	n/a	n/a	n/a	n/a	0.100	U	20152628
Cone 2-Liq-a	C105-15-01	S16R000269	ICP-AES	7439-93-2	Lithium	ug/mL	103	<1.00E-03	0.481	n/a	n/a	n/a	n/a	0.100	J	20152628
Cone 2-Liq-a	C105-15-01	S16R000269	ICP-AES	7439-95-4	Magnesium	ug/mL	101	<9.00E-03	<0.900	n/a	n/a	n/a	n/a	0.900	U	20152628
Cone 2-Liq-a	C105-15-01	S16R000269	ICP-AES	7439-96-5	Manganese	ug/mL	103	<1.00E-03	0.228	n/a	n/a	n/a	n/a	0.100	J	20152628
Cone 2-Liq-a	C105-15-01	S16R000269	ICP-AES	7439-98-7	Molybdenum	ug/mL	96.7	<2.00E-03	2.34	n/a	n/a	n/a	n/a	0.200		20152628
Cone 2-Liq-a	C105-15-01	S16R000269	ICP-AES	7440-00-8	Neodymium	ug/mL	99.8	<0.0150	6.06	n/a	n/a	n/a	n/a	1.50	J	20152628
Cone 2-Liq-a	C105-15-01	S16R000269	ICP-AES	7440-02-0	Nickel	ug/mL	103	<2.00E-03	<0.200	n/a	n/a	n/a	n/a	0.200	U	20152628
Cone 2-Liq-a	C105-15-01	S16R000269	ICP-AES	7440-30-1	Niobium	ug/mL	102	<6.00E-03	<0.600	n/a	n/a	n/a	n/a	0.600	U	20152628
Cone 2-Liq-a	C105-15-01	S16R000269	ICP-AES	7723-14-0	Phosphorus	ug/mL	98.7	<0.0130	512	n/a	n/a	n/a	n/a	1.30		20152628
Cone 2-Liq-a	C105-15-01	S16R000269	ICP-AES	7439-92-1	Lead	ug/mL	102	<0.0130	1.50	n/a	n/a	n/a	n/a	1.30	J	20152628
Cone 2-Liq-a	C105-15-01	S16R000269	ICP-AES	7440-05-3	Palladium	ug/mL	105	<0.0120	10.2	n/a	n/a	n/a	n/a	1.20	J	20152628
Cone 2-Liq-a	C105-15-01	S16R000269	ICP-AES	7440-10-0	Praseodymium	ug/mL	99.6	<0.0260	<2.60	n/a	n/a	n/a	n/a	2.60	U	20152628
Cone 2-Liq-a	C105-15-01	S16R000269	ICP-AES	7440-17-7	Rubidium	ug/mL	101	<0.0570	<5.70	n/a	n/a	n/a	n/a	5.70	U	20152628
Cone 2-Liq-a	C105-15-01	S16R000269	ICP-AES	7440-16-6	Rhodium	ug/mL	104	<0.0120	<1.20	n/a	n/a	n/a	n/a	1.20	U	20152628
Cone 2-Liq-a	C105-15-01	S16R000269	ICP-AES	7440-18-8	Ruthenium	ug/mL	108	<5.00E-03	<0.500	n/a	n/a	n/a	n/a	0.500	U	20152628
Cone 2-Liq-a	C105-15-01	S16R000269	ICP-AES	7704-34-9	Sulfur	ug/mL	98.3	<0.0280	515	n/a	n/a	n/a	n/a	2.80		20152628
Cone 2-Liq-a	C105-15-01	S16R000269	ICP-AES	7440-36-0	Antimony	ug/mL	97.9	<0.0180	<1.80	n/a	n/a	n/a	n/a	1.80	U	20152628
Cone 2-Liq-a	C105-15-01	S16R000269	ICP-AES	7782-49-2	Selenium	ug/mL	102	<0.0300	<3.00	n/a	n/a	n/a	n/a	3.00	U	20152628
Cone 2-Liq-a	C105-15-01	S16R000269	ICP-AES	7440-21-3	Silicon	ug/mL	110	<0.0120	2.37	n/a	n/a	n/a	n/a	1.20	J	20152628
Cone 2-Liq-a	C105-15-01	S16R000269	ICP-AES	7440-19-9	Samarium	ug/mL	103	<0.0170	26.0	n/a	n/a	n/a	n/a	1.70		20152628
Cone 2-Liq-a	C105-15-01	S16R000269	ICP-AES	7440-31-5	Tin	ug/mL	100	<8.00E-03	<0.800	n/a	n/a	n/a	n/a	0.800	U	20152628
Cone 2-Liq-a	C105-15-01	S16R000269	ICP-AES	7440-24-6	Strontium	ug/mL	103	<2.00E-03	<0.200	n/a	n/a	n/a	n/a	0.200	U	20152628
Cone 2-Liq-a	C105-15-01	S16R000269	ICP-AES	7440-25-7	Tantalum	ug/mL	104	<5.00E-03	3.06	n/a	n/a	n/a	n/a	0.500	J	20152628
Cone 2-Liq-a	C105-15-01	S16R000269	ICP-AES	13494-80-9	Tellurium	ug/mL	103	<9.00E-03	<0.900	n/a	n/a	n/a	n/a	0.900	U	20152628
Cone 2-Liq-a	C105-15-01	S16R000269	ICP-AES	7440-29-1	Thorium	ug/mL	102	<0.0130	<1.30	n/a	n/a	n/a	n/a	1.30	U	20152628
Cone 2-Liq-a	C105-15-01	S16R000269	ICP-AES	7440-32-6	Titanium	ug/mL	99.1	<2.00E-03	<0.200	n/a	n/a	n/a	n/a	0.200	U	20152628
Cone 2-Liq-a	C105-15-01	S16R000269	ICP-AES	7440-28-0	Thallium	ug/mL	107	<0.0150	<1.50	n/a	n/a	n/a	n/a	1.50	U	20152628
Cone 2-Liq-a	C105-15-01	S16R000269	ICP-AES	7440-62-2	Vanadium	ug/mL	102	<1.00E-03	2.55	n/a	n/a	n/a	n/a	0.100		20152628
Cone 2-Liq-a	C105-15-01	S16R000269	ICP-AES	7440-33-7	Tungsten	ug/mL	104	<0.0160	20.2	n/a	n/a	n/a	n/a	1.60		20152628
Cone 2-Liq-a	C105-15-01	S16R000269	ICP-AES	7440-65-5	Yttrium	ug/mL	102	<2.00E-03	0.386	n/a	n/a	n/a	n/a	0.200	J	20152628
Cone 2-Liq-a	C105-15-01	S16R000269	ICP-AES	7440-66-6	Zinc	ug/mL	103	<0.0320	<3.20	n/a	n/a	n/a	n/a	3.20	U	20152628
Cone 2-Liq-a	C105-15-01	S16R000269	ICP-AES	7440-67-7	Zirconium	ug/mL	98.1	<1.00E-03	18.4	n/a	n/a	n/a	n/a	0.100		20152628
Cone 2-Liq-a	C105-15-02	S15R000674	ICP-AES	7440-22-4	Silver	ug/mL	99.9	<3.00E-03	7.96	n/a	n/a	n/a	n/a	6.00	J	20152628
Cone 2-Liq-a	C105-15-02	S15R000674	ICP-AES	7429-90-5	Aluminum	ug/mL	98.5	<0.0140	<28.0	n/a	n/a	n/a	n/a	28.0	U	20152628
Cone 2-Liq-a	C105-15-02	S15R000674	ICP-AES	7440-38-2	Arsenic	ug/mL	98.6	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 2-Liq-a	C105-15-02	S15R000674	ICP-AES	7440-42-8	Boron	ug/mL	97.9	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 2-Liq-a	C105-15-02	S15R000674	ICP-AES	7440-39-3	Barium	ug/mL	99.6	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 2-Liq-a	C105-15-02	S15R000674	ICP-AES	7440-41-7	Beryllium	ug/mL	100	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 2-Liq-a	C105-15-02	S15R000674	ICP-AES	7440-69-9	Bismuth	ug/mL	99.1	<0.0190	<38.0	n/a	n/a	n/a	n/a	38.0	U	20152628
Cone 2-Liq-a	C105-15-02	S15R000674	ICP-AES	7440-70-2	Calcium	ug/mL	101	<0.120	<240	n/a	n/a	n/a	n/a	240	U	20152628
Cone 2-Liq-a	C105-15-02	S15R000674	ICP-AES	7440-43-9	Cadmium	ug/mL	100	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 2-Liq-a	C105-15-02	S15R000674	ICP-AES	7440-45-1	Cerium	ug/mL	99.9	<0.0250	106	n/a	n/a	n/a	n/a	50.0	BJ	20152628
Cone 2-Liq-a	C105-15-02	S15R000674	ICP-AES	7440-48-4	Cobalt	ug/mL	99.7	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 2-Liq-a	C105-15-02	S15R000674	ICP-AES	7440-47-3	Chromium	ug/mL	99.6	<2.00E-03	41.2	n/a	n/a	n/a	n/a	4.00		20152628
Cone 2-Liq-a	C105-15-02	S15R000674	ICP-AES	7440-50-8	Copper	ug/mL	99.1	<2.00E-03	46.0	n/a	n/a	n/a	n/a	4.00		20152628
Cone 2-Liq-a	C105-15-02	S15R000674	ICP-AES	7440-53-1	Europium	ug/mL	102	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 2-Liq-a	C105-15-02	S15R000674	ICP-AES	7439-89-6	Iron	ug/mL	99.6	<0.0200	<40.0	n/a	n/a	n/a	n/a	40.0	U	20152628
Cone 2-Liq-a	C105-15-02	S15R000674	ICP-AES	7440-09-7	Potassium	ug/mL	99.0	<0.0220	56.8	n/a	n/a	n/a	n/a	44.0	J	20152628
Cone 2-Liq-a	C105-15-02	S15R000674	ICP-AES	7439-91-0	Lanthanum	ug/mL	99.4	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 2-Liq-a	C105-15-02	S15R000674	ICP-AES	7439-93-2	Lithium	ug/mL	101	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 2-Liq-a	C105-15-02	S15R000674	ICP-AES	7439-95-4	Magnesium	ug/mL	100	<9.00E-03	<18.0	n/a	n/a	n/a	n/a	18.0	U	20152628
Cone 2-Liq-a	C105-15-02	S15R000674	ICP-AES	7439-96-5	Manganese	ug/mL	100	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 2-Liq-a	C105-15-02	S15R000674	ICP-AES	7439-98-7	Molybdenum	ug/mL	98.5	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 2-Liq-a	C105-15-02	S15R000674	ICP-AES	7440-23-5	Sodium	ug/mL	100	<0.0920	1.98E+04	n/a	n/a	n/a	n/a	184		20152628
Cone 2-Liq-a	C105-15-02	S15R000674	ICP-AES	7440-00-8	Neodymium	ug/mL	102	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 2-Liq-a	C105-15-02	S15R000674	ICP-AES	7440-02-0	Nickel	ug/mL	99.6	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 2-Liq-a	C105-15-02	S15R000674	ICP-AES	7440-30-1	Niobium	ug/mL	102	<6.00E-03	<12.0	n/a	n/a	n/a	n/a	12.0	U	20152628
Cone 2-Liq-a	C105-15-02	S15R000674	ICP-AES	7723-14-0	Phosphorus	ug/mL	98.2	<0.0130	679	n/a	n/a	n/a	n/a	26.0		20152628
Cone 2-Liq-a	C105-15-02	S15R000674	ICP-AES	7439-92-1	Lead	ug/mL	101	<0.0130	<26.0	n/a	n/a	n/a	n/a	26.0	U	20152628
Cone 2-Liq-a	C105-15-02	S15R000674	ICP-AES	7440-05-3	Palladium	ug/mL	102	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20152628

Cone 2-Liq-a	C105-15-02	S15R000674	ICP-AES	7440-10-0	Praseodymium	ug/mL	101	<0.0260	<52.0	n/a	n/a	n/a	n/a	52.0	U	20152628
Cone 2-Liq-a	C105-15-02	S15R000674	ICP-AES	7440-17-7	Rubidium	ug/mL	100	<0.0570	<114	n/a	n/a	n/a	n/a	114	U	20152628
Cone 2-Liq-a	C105-15-02	S15R000674	ICP-AES	7440-16-6	Rhodium	ug/mL	100	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20152628
Cone 2-Liq-a	C105-15-02	S15R000674	ICP-AES	7440-18-8	Ruthenium	ug/mL	98.8	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20152628
Cone 2-Liq-a	C105-15-02	S15R000674	ICP-AES	7704-34-9	Sulfur	ug/mL	98.8	<0.0280	483	n/a	n/a	n/a	n/a	56.0	J	20152628
Cone 2-Liq-a	C105-15-02	S15R000674	ICP-AES	7440-36-0	Antimony	ug/mL	97.4	<0.0180	<36.0	n/a	n/a	n/a	n/a	36.0	U	20152628
Cone 2-Liq-a	C105-15-02	S15R000674	ICP-AES	7782-49-2	Selenium	ug/mL	99.1	<0.0300	<60.0	n/a	n/a	n/a	n/a	60.0	U	20152628
Cone 2-Liq-a	C105-15-02	S15R000674	ICP-AES	7440-21-3	Silicon	ug/mL	100	0.0133	<24.0	n/a	n/a	n/a	n/a	24.0	U	20152628
Cone 2-Liq-a	C105-15-02	S15R000674	ICP-AES	7440-19-9	Samarium	ug/mL	99.9	<0.0170	36.2	n/a	n/a	n/a	n/a	34.0	J	20152628
Cone 2-Liq-a	C105-15-02	S15R000674	ICP-AES	7440-31-5	Tin	ug/mL	99.6	<8.00E-03	<16.0	n/a	n/a	n/a	n/a	16.0	U	20152628
Cone 2-Liq-a	C105-15-02	S15R000674	ICP-AES	7440-24-6	Strontium	ug/mL	100	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 2-Liq-a	C105-15-02	S15R000674	ICP-AES	7440-25-7	Tantalum	ug/mL	103	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20152628
Cone 2-Liq-a	C105-15-02	S15R000674	ICP-AES	13494-80-9	Tellurium	ug/mL	100	<9.00E-03	<18.0	n/a	n/a	n/a	n/a	18.0	U	20152628
Cone 2-Liq-a	C105-15-02	S15R000674	ICP-AES	7440-29-1	Thorium	ug/mL	101	<0.0130	<26.0	n/a	n/a	n/a	n/a	26.0	U	20152628
Cone 2-Liq-a	C105-15-02	S15R000674	ICP-AES	7440-32-6	Titanium	ug/mL	97.9	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 2-Liq-a	C105-15-02	S15R000674	ICP-AES	7440-28-0	Thallium	ug/mL	97.5	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 2-Liq-a	C105-15-02	S15R000674	ICP-AES	7440-61-1	Uranium	ug/mL	101	<0.0290	6.68E+03	n/a	n/a	n/a	n/a	58.0		20152628
Cone 2-Liq-a	C105-15-02	S15R000674	ICP-AES	7440-62-2	Vanadium	ug/mL	98.9	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 2-Liq-a	C105-15-02	S15R000674	ICP-AES	7440-33-7	Tungsten	ug/mL	101	<0.0160	<32.0	n/a	n/a	n/a	n/a	32.0	U	20152628
Cone 2-Liq-a	C105-15-02	S15R000674	ICP-AES	7440-65-5	Yttrium	ug/mL	100	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 2-Liq-a	C105-15-02	S15R000674	ICP-AES	7440-66-6	Zinc	ug/mL	99.6	<0.0320	<64.0	n/a	n/a	n/a	n/a	64.0	U	20152628
Cone 2-Liq-a	C105-15-02	S15R000674	ICP-AES	7440-67-7	Zirconium	ug/mL	97.5	<1.00E-03	21.5	n/a	n/a	n/a	n/a	2.00		20152628
Cone 2-Liq-a	C105-15-02	S16R000271	ICP-AES	7440-22-4	Silver	ug/mL	102	<3.00E-03	8.82	n/a	n/a	n/a	n/a	0.300		20152628
Cone 2-Liq-a	C105-15-02	S16R000271	ICP-AES	7429-90-5	Aluminum	ug/mL	102	<0.0140	5.47	n/a	n/a	n/a	n/a	1.40	J	20152628
Cone 2-Liq-a	C105-15-02	S16R000271	ICP-AES	7440-38-2	Arsenic	ug/mL	103	<0.0150	<1.50	n/a	n/a	n/a	n/a	1.50	U	20152628
Cone 2-Liq-a	C105-15-02	S16R000271	ICP-AES	7440-42-8	Boron	ug/mL	101	<2.00E-03	0.545	n/a	n/a	n/a	n/a	0.200	J	20152628
Cone 2-Liq-a	C105-15-02	S16R000271	ICP-AES	7440-39-3	Barium	ug/mL	103	<1.00E-03	0.132	n/a	n/a	n/a	n/a	0.100	J	20152628
Cone 2-Liq-a	C105-15-02	S16R000271	ICP-AES	7440-41-7	Beryllium	ug/mL	101	<1.00E-03	<0.100	n/a	n/a	n/a	n/a	0.100	U	20152628
Cone 2-Liq-a	C105-15-02	S16R000271	ICP-AES	7440-69-9	Bismuth	ug/mL	102	<0.0190	<1.90	n/a	n/a	n/a	n/a	1.90	U	20152628
Cone 2-Liq-a	C105-15-02	S16R000271	ICP-AES	7440-70-2	Calcium	ug/mL	102	<0.120	<12.0	n/a	n/a	n/a	n/a	12.0	U	20152628
Cone 2-Liq-a	C105-15-02	S16R000271	ICP-AES	7440-43-9	Cadmium	ug/mL	102	<1.00E-03	<0.100	n/a	n/a	n/a	n/a	0.100	U	20152628
Cone 2-Liq-a	C105-15-02	S16R000271	ICP-AES	7440-45-1	Cerium	ug/mL	100	<0.0250	<2.50	n/a	n/a	n/a	n/a	2.50	U	20152628
Cone 2-Liq-a	C105-15-02	S16R000271	ICP-AES	7440-48-4	Cobalt	ug/mL	104	<1.00E-03	<0.100	n/a	n/a	n/a	n/a	0.100	U	20152628
Cone 2-Liq-a	C105-15-02	S16R000271	ICP-AES	7440-47-3	Chromium	ug/mL	102	<2.00E-03	40.5	n/a	n/a	n/a	n/a	0.200		20152628
Cone 2-Liq-a	C105-15-02	S16R000271	ICP-AES	7440-50-8	Copper	ug/mL	102	<2.00E-03	52.6	n/a	n/a	n/a	n/a	0.200		20152628
Cone 2-Liq-a	C105-15-02	S16R000271	ICP-AES	7440-53-1	Europium	ug/mL	104	<1.00E-03	<0.100	n/a	n/a	n/a	n/a	0.100	U	20152628
Cone 2-Liq-a	C105-15-02	S16R000271	ICP-AES	7439-89-6	Iron	ug/mL	101	<0.0200	3.01	n/a	n/a	n/a	n/a	2.00	J	20152628
Cone 2-Liq-a	C105-15-02	S16R000271	ICP-AES	7440-09-7	Potassium	ug/mL	102	<0.0220	57.7	n/a	n/a	n/a	n/a	2.20		20152628
Cone 2-Liq-a	C105-15-02	S16R000271	ICP-AES	7439-91-0	Lanthanum	ug/mL	101	<1.00E-03	<0.100	n/a	n/a	n/a	n/a	0.100	U	20152628
Cone 2-Liq-a	C105-15-02	S16R000271	ICP-AES	7439-93-2	Lithium	ug/mL	103	<1.00E-03	0.517	n/a	n/a	n/a	n/a	0.100	J	20152628
Cone 2-Liq-a	C105-15-02	S16R000271	ICP-AES	7439-95-4	Magnesium	ug/mL	101	<9.00E-03	0.951	n/a	n/a	n/a	n/a	0.900	J	20152628
Cone 2-Liq-a	C105-15-02	S16R000271	ICP-AES	7439-96-5	Manganese	ug/mL	103	<1.00E-03	1.38	n/a	n/a	n/a	n/a	0.100		20152628
Cone 2-Liq-a	C105-15-02	S16R000271	ICP-AES	7439-98-7	Molybdenum	ug/mL	96.7	<2.00E-03	2.17	n/a	n/a	n/a	n/a	0.200		20152628
Cone 2-Liq-a	C105-15-02	S16R000271	ICP-AES	7440-00-8	Neodymium	ug/mL	99.8	<0.0150	6.66	n/a	n/a	n/a	n/a	1.50	J	20152628
Cone 2-Liq-a	C105-15-02	S16R000271	ICP-AES	7440-02-0	Nickel	ug/mL	103	<2.00E-03	0.249	n/a	n/a	n/a	n/a	0.200	J	20152628
Cone 2-Liq-a	C105-15-02	S16R000271	ICP-AES	7440-30-1	Niobium	ug/mL	102	<6.00E-03	<0.600	n/a	n/a	n/a	n/a	0.600	U	20152628
Cone 2-Liq-a	C105-15-02	S16R000271	ICP-AES	7723-14-0	Phosphorus	ug/mL	98.7	<0.0130	669	n/a	n/a	n/a	n/a	1.30		20152628
Cone 2-Liq-a	C105-15-02	S16R000271	ICP-AES	7439-92-1	Lead	ug/mL	102	<0.0130	1.72	n/a	n/a	n/a	n/a	1.30	J	20152628
Cone 2-Liq-a	C105-15-02	S16R000271	ICP-AES	7440-05-3	Palladium	ug/mL	105	<0.0120	10.5	n/a	n/a	n/a	n/a	1.20	J	20152628
Cone 2-Liq-a	C105-15-02	S16R000271	ICP-AES	7440-10-0	Praseodymium	ug/mL	99.6	<0.0260	<2.60	n/a	n/a	n/a	n/a	2.60	U	20152628
Cone 2-Liq-a	C105-15-02	S16R000271	ICP-AES	7440-17-7	Rubidium	ug/mL	101	<0.0570	<5.70	n/a	n/a	n/a	n/a	5.70	U	20152628
Cone 2-Liq-a	C105-15-02	S16R000271	ICP-AES	7440-16-6	Rhodium	ug/mL	104	<0.0120	1.28	n/a	n/a	n/a	n/a	1.20	J	20152628
Cone 2-Liq-a	C105-15-02	S16R000271	ICP-AES	7440-18-8	Ruthenium	ug/mL	108	<5.00E-03	<0.500	n/a	n/a	n/a	n/a	0.500	U	20152628
Cone 2-Liq-a	C105-15-02	S16R000271	ICP-AES	7704-34-9	Sulfur	ug/mL	98.3	<0.0280	476	n/a	n/a	n/a	n/a	2.80		20152628
Cone 2-Liq-a	C105-15-02	S16R000271	ICP-AES	7440-36-0	Antimony	ug/mL	97.9	<0.0180	<1.80	n/a	n/a	n/a	n/a	1.80	U	20152628
Cone 2-Liq-a	C105-15-02	S16R000271	ICP-AES	7782-49-2	Selenium	ug/mL	102	<0.0300	<3.00	n/a	n/a	n/a	n/a	3.00	U	20152628
Cone 2-Liq-a	C105-15-02	S16R000271	ICP-AES	7440-21-3	Silicon	ug/mL	110	<0.0120	7.87	n/a	n/a	n/a	n/a	1.20	J	20152628
Cone 2-Liq-a	C105-15-02	S16R000271	ICP-AES	7440-19-9	Samarium	ug/mL	103	<0.0170	27.3	n/a	n/a	n/a	n/a	1.70		20152628
Cone 2-Liq-a	C105-15-02	S16R000271	ICP-AES	7440-31-5	Tin	ug/mL	100	<8.00E-03	<0.800	n/a	n/a	n/a	n/a	0.800	U	20152628
Cone 2-Liq-a	C105-15-02	S16R000271	ICP-AES	7440-24-6	Strontium	ug/mL	103	<2.00E-03	<0.200	n/a	n/a	n/a	n/a	0.200	U	20152628
Cone 2-Liq-a	C105-15-02	S16R000271	ICP-AES	7440-25-7	Tantalum	ug/mL	104	<5.00E-03	2.56	n/a	n/a	n/a	n/a	0.500	J	20152628
Cone 2-Liq-a	C105-15-02	S16R000271	ICP-AES	13494-80-9	Tellurium	ug/mL	103	<9.00E-03	<0.900	n/a	n/a	n/a	n/a	0.900	U	20152628
Cone 2-Liq-a	C105-15-02	S16R000271	ICP-AES	7440-29-1	Thorium	ug/mL	102	<0.0130	<1.30	n/a	n/a	n/a	n/a	1.30	U	20152628
Cone 2-Liq-a	C105-15-02	S16R000271	ICP-AES	7440-32-6	Titanium	ug/mL	99.1	<2.00E-03	<0.200	n/a	n/a	n/a	n/a	0.200	U	20152628
Cone 2-Liq-a	C105-15-02	S16R000271	ICP-AES	7440-28-0	Thallium	ug/mL	107	<0.0150	<1.50	n/a	n/a	n/a	n/a	1.50	U	20152628
Cone 2-Liq-a	C105-15-02	S16R000271	ICP-AES	7440-62-2	Vanadium	ug/mL	102	<1.00E-03	2.63	n/a	n/a	n/a	n/a	0.100		20152628
Cone 2-Liq-a	C105-15-02	S16R000271	ICP-AES	7440-33-7	Tungsten	ug/mL	104	<0.0160	19.3	n/a	n/a	n/a	n/a	1.60		20152628
Cone 2-Liq-a	C105-15-02	S16R000271	ICP-AES	7440-65-5	Yttrium	ug/mL	102	<2.00E-03	0.538	n/a	n/a	n/a	n/a	0.200	J	20152628
Cone 2-Liq-a	C105-15-02	S16R000271	ICP-AES	7440-66-6	Zinc	ug/mL	103	<0.0320	<3.20	n/a	n/a	n/a	n/a	3.20	U	20152628
Cone 2-Liq-a	C105-15-02	S16R000271	ICP-AES	7440-67-7	Zirconium	ug/mL	98.1	<1.00E-03	19.7	n/a	n/a	n/a	n/a	0.100		20152628
Cone 2-Liq-a	C105-15-03	S15R000682	ICP-AES	7440-22-4	Silver	ug/mL	100	<3.00E-03	9.37	n/a	n/a	n/a	n/a	6.00	J	20152628
Cone 2-Liq-a	C105-15-03	S15R000682	ICP-AES	7429-90-5	Aluminum	ug/mL	98.9	<0.0140	<28.0	n/a	n/a	n/a	n/a	28.0	U	20152628
Cone 2-Liq-a	C105-15-03	S15R000682	ICP-AES	7440-38-2	Arsenic	ug/mL	99.2	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 2-Liq-a	C105-15-03	S15R000682	ICP-AES	7440-42-8	Boron	ug/mL	95.2	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 2-Liq-a	C105-15-03	S15R000682	ICP-AES	7440-39-3	Barium	ug/mL	99.3	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 2-Liq-a	C105-15-03	S15R000682	ICP-AES	7440-41-7	Beryllium	ug/mL	98.8	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 2-Liq-a	C105-15-03	S15R000682	ICP-AES	7440-69-9	Bismuth	ug/mL	99.4	<0.0190	<38.0	n/a	n/a	n/a	n/a	38.0	U	20152628
Cone 2-Liq-a	C105-15-03	S15R000682	ICP-AES	7440-70-2	Calcium	ug/mL	102	<0.120	<240	n/a	n/a	n/a	n/a	240	U	20152628
Cone 2-Liq-a	C105-15-03	S15R000682	ICP-AES	7440-43-9	Cadmium	ug/mL	101	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 2-Liq-a	C105-15-03	S15R000682	ICP-AES	7440-45-1	Cerium	ug/mL	104	<0.0250	<50.0	n/a	n/a	n/a	n/a	50.0	U	20152628
Cone 2-Liq-a	C105-15-03	S15R000682	ICP-AES	7440-48-4	Cobalt	ug/mL	100	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 2-Liq-a	C105-15-03	S15R000682	ICP-AES	7440-47-3	Chromium	ug/mL	98.6	<2.00E-03	65.3	n/a	n/a	n/a	n/a	4.00		20152628

Cone 2-Liq-a	C105-15-03	S15R000682	ICP-AES	7440-50-8	Copper	ug/mL	100	<2.00E-03	20.6	n/a	n/a	n/a	n/a	4.00	J	20152628
Cone 2-Liq-a	C105-15-03	S15R000682	ICP-AES	7440-53-1	Europium	ug/mL	103	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 2-Liq-a	C105-15-03	S15R000682	ICP-AES	7439-89-6	Iron	ug/mL	99.9	<0.0200	<40.0	n/a	n/a	n/a	n/a	40.0	U	20152628
Cone 2-Liq-a	C105-15-03	S15R000682	ICP-AES	7440-09-7	Potassium	ug/mL	99.8	<0.0220	<44.0	n/a	n/a	n/a	n/a	44.0	U	20152628
Cone 2-Liq-a	C105-15-03	S15R000682	ICP-AES	7439-91-0	Lanthanum	ug/mL	99.8	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 2-Liq-a	C105-15-03	S15R000682	ICP-AES	7439-93-2	Lithium	ug/mL	102	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 2-Liq-a	C105-15-03	S15R000682	ICP-AES	7439-95-4	Magnesium	ug/mL	99.3	<9.00E-03	<18.0	n/a	n/a	n/a	n/a	18.0	U	20152628
Cone 2-Liq-a	C105-15-03	S15R000682	ICP-AES	7439-96-5	Manganese	ug/mL	101	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 2-Liq-a	C105-15-03	S15R000682	ICP-AES	7439-98-7	Molybdenum	ug/mL	92.1	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 2-Liq-a	C105-15-03	S15R000682	ICP-AES	7440-23-5	Sodium	ug/mL	102	<0.0920	1.68E+04	n/a	n/a	n/a	n/a	184		20152628
Cone 2-Liq-a	C105-15-03	S15R000682	ICP-AES	7440-00-8	Neodymium	ug/mL	101	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 2-Liq-a	C105-15-03	S15R000682	ICP-AES	7440-02-0	Nickel	ug/mL	98.4	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 2-Liq-a	C105-15-03	S15R000682	ICP-AES	7440-30-1	Niobium	ug/mL	99.2	<6.00E-03	<12.0	n/a	n/a	n/a	n/a	12.0	U	20152628
Cone 2-Liq-a	C105-15-03	S15R000682	ICP-AES	7723-14-0	Phosphorus	ug/mL	94.7	<0.0130	528	n/a	n/a	n/a	n/a	26.0		20152628
Cone 2-Liq-a	C105-15-03	S15R000682	ICP-AES	7439-92-1	Lead	ug/mL	102	<0.0130	<26.0	n/a	n/a	n/a	n/a	26.0	U	20152628
Cone 2-Liq-a	C105-15-03	S15R000682	ICP-AES	7440-05-3	Palladium	ug/mL	102	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20152628
Cone 2-Liq-a	C105-15-03	S15R000682	ICP-AES	7440-10-0	Praseodymium	ug/mL	108	<0.0260	<52.0	n/a	n/a	n/a	n/a	52.0	U	20152628
Cone 2-Liq-a	C105-15-03	S15R000682	ICP-AES	7440-17-7	Rubidium	ug/mL	101	<0.0570	<114	n/a	n/a	n/a	n/a	114	U	20152628
Cone 2-Liq-a	C105-15-03	S15R000682	ICP-AES	7440-16-6	Rhodium	ug/mL	99.9	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20152628
Cone 2-Liq-a	C105-15-03	S15R000682	ICP-AES	7440-18-8	Ruthenium	ug/mL	106	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20152628
Cone 2-Liq-a	C105-15-03	S15R000682	ICP-AES	7704-34-9	Sulfur	ug/mL	93.5	<0.0280	510	n/a	n/a	n/a	n/a	56.0	J	20152628
Cone 2-Liq-a	C105-15-03	S15R000682	ICP-AES	7440-36-0	Antimony	ug/mL	91.9	<0.0180	<36.0	n/a	n/a	n/a	n/a	36.0	U	20152628
Cone 2-Liq-a	C105-15-03	S15R000682	ICP-AES	7782-49-2	Selenium	ug/mL	98.7	<0.0300	<60.0	n/a	n/a	n/a	n/a	60.0	U	20152628
Cone 2-Liq-a	C105-15-03	S15R000682	ICP-AES	7440-21-3	Silicon	ug/mL	94.9	0.0167	<24.0	n/a	n/a	n/a	n/a	24.0	U	20152628
Cone 2-Liq-a	C105-15-03	S15R000682	ICP-AES	7440-19-9	Samarium	ug/mL	103	<0.0170	<34.0	n/a	n/a	n/a	n/a	34.0	U	20152628
Cone 2-Liq-a	C105-15-03	S15R000682	ICP-AES	7440-31-5	Tin	ug/mL	96.9	<8.00E-03	<16.0	n/a	n/a	n/a	n/a	16.0	UY	20152628
Cone 2-Liq-a	C105-15-03	S15R000682	ICP-AES	7440-24-6	Strontium	ug/mL	98.5	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 2-Liq-a	C105-15-03	S15R000682	ICP-AES	7440-25-7	Tantalum	ug/mL	100	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20152628
Cone 2-Liq-a	C105-15-03	S15R000682	ICP-AES	13494-80-9	Tellurium	ug/mL	100	<9.00E-03	<18.0	n/a	n/a	n/a	n/a	18.0	U	20152628
Cone 2-Liq-a	C105-15-03	S15R000682	ICP-AES	7440-29-1	Thorium	ug/mL	101	<0.0130	<26.0	n/a	n/a	n/a	n/a	26.0	U	20152628
Cone 2-Liq-a	C105-15-03	S15R000682	ICP-AES	7440-32-6	Titanium	ug/mL	90.5	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 2-Liq-a	C105-15-03	S15R000682	ICP-AES	7440-28-0	Thallium	ug/mL	105	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 2-Liq-a	C105-15-03	S15R000682	ICP-AES	7440-61-1	Uranium	ug/mL	101	<0.0290	4.53E+03	n/a	n/a	n/a	n/a	58.0		20152628
Cone 2-Liq-a	C105-15-03	S15R000682	ICP-AES	7440-62-2	Vanadium	ug/mL	97.4	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 2-Liq-a	C105-15-03	S15R000682	ICP-AES	7440-33-7	Tungsten	ug/mL	99.6	<0.0160	<32.0	n/a	n/a	n/a	n/a	32.0	U	20152628
Cone 2-Liq-a	C105-15-03	S15R000682	ICP-AES	7440-65-5	Yttrium	ug/mL	102	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 2-Liq-a	C105-15-03	S15R000682	ICP-AES	7440-66-6	Zinc	ug/mL	99.5	<0.0320	<64.0	n/a	n/a	n/a	n/a	64.0	U	20152628
Cone 2-Liq-a	C105-15-03	S15R000682	ICP-AES	7440-67-7	Zirconium	ug/mL	91.5	<1.00E-03	17.5	n/a	n/a	n/a	n/a	2.00	J	20152628
Cone 2-Liq-b	C105-15-03	S15R000688	ICP-AES	7440-22-4	Silver	ug/mL	100	<3.00E-03	<6.00	n/a	n/a	n/a	n/a	6.00	U	20152628
Cone 2-Liq-b	C105-15-03	S15R000688	ICP-AES	7429-90-5	Aluminum	ug/mL	98.9	<0.0140	<28.0	n/a	n/a	n/a	n/a	28.0	U	20152628
Cone 2-Liq-b	C105-15-03	S15R000688	ICP-AES	7440-38-2	Arsenic	ug/mL	99.2	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 2-Liq-b	C105-15-03	S15R000688	ICP-AES	7440-42-8	Boron	ug/mL	95.2	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 2-Liq-b	C105-15-03	S15R000688	ICP-AES	7440-39-3	Barium	ug/mL	99.3	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 2-Liq-b	C105-15-03	S15R000688	ICP-AES	7440-41-7	Beryllium	ug/mL	98.8	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 2-Liq-b	C105-15-03	S15R000688	ICP-AES	7440-69-9	Bismuth	ug/mL	99.4	<0.0190	<38.0	n/a	n/a	n/a	n/a	38.0	U	20152628
Cone 2-Liq-b	C105-15-03	S15R000688	ICP-AES	7440-70-2	Calcium	ug/mL	102	<0.120	<240	n/a	n/a	n/a	n/a	240	U	20152628
Cone 2-Liq-b	C105-15-03	S15R000688	ICP-AES	7440-43-9	Cadmium	ug/mL	101	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 2-Liq-b	C105-15-03	S15R000688	ICP-AES	7440-45-1	Cerium	ug/mL	104	<0.0250	<50.0	n/a	n/a	n/a	n/a	50.0	U	20152628
Cone 2-Liq-b	C105-15-03	S15R000688	ICP-AES	7440-48-4	Cobalt	ug/mL	100	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 2-Liq-b	C105-15-03	S15R000688	ICP-AES	7440-47-3	Chromium	ug/mL	98.6	<2.00E-03	4.28	n/a	n/a	n/a	n/a	4.00	J	20152628
Cone 2-Liq-b	C105-15-03	S15R000688	ICP-AES	7440-50-8	Copper	ug/mL	100	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 2-Liq-b	C105-15-03	S15R000688	ICP-AES	7440-53-1	Europium	ug/mL	103	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 2-Liq-b	C105-15-03	S15R000688	ICP-AES	7439-89-6	Iron	ug/mL	99.9	<0.0200	<40.0	n/a	n/a	n/a	n/a	40.0	U	20152628
Cone 2-Liq-b	C105-15-03	S15R000688	ICP-AES	7440-09-7	Potassium	ug/mL	99.8	<0.0220	<44.0	n/a	n/a	n/a	n/a	44.0	U	20152628
Cone 2-Liq-b	C105-15-03	S15R000688	ICP-AES	7439-91-0	Lanthanum	ug/mL	99.8	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 2-Liq-b	C105-15-03	S15R000688	ICP-AES	7439-93-2	Lithium	ug/mL	102	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 2-Liq-b	C105-15-03	S15R000688	ICP-AES	7439-95-4	Magnesium	ug/mL	99.3	<9.00E-03	<18.0	n/a	n/a	n/a	n/a	18.0	U	20152628
Cone 2-Liq-b	C105-15-03	S15R000688	ICP-AES	7439-96-5	Manganese	ug/mL	101	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 2-Liq-b	C105-15-03	S15R000688	ICP-AES	7439-98-7	Molybdenum	ug/mL	92.1	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 2-Liq-b	C105-15-03	S15R000688	ICP-AES	7440-23-5	Sodium	ug/mL	102	<0.0920	1.83E+03	n/a	n/a	n/a	n/a	184	J	20152628
Cone 2-Liq-b	C105-15-03	S15R000688	ICP-AES	7440-00-8	Neodymium	ug/mL	101	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 2-Liq-b	C105-15-03	S15R000688	ICP-AES	7440-02-0	Nickel	ug/mL	98.4	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 2-Liq-b	C105-15-03	S15R000688	ICP-AES	7440-30-1	Niobium	ug/mL	99.2	<6.00E-03	<12.0	n/a	n/a	n/a	n/a	12.0	U	20152628
Cone 2-Liq-b	C105-15-03	S15R000688	ICP-AES	7723-14-0	Phosphorus	ug/mL	94.7	<0.0130	49.4	n/a	n/a	n/a	n/a	26.0	J	20152628
Cone 2-Liq-b	C105-15-03	S15R000688	ICP-AES	7439-92-1	Lead	ug/mL	102	<0.0130	<26.0	n/a	n/a	n/a	n/a	26.0	U	20152628
Cone 2-Liq-b	C105-15-03	S15R000688	ICP-AES	7440-05-3	Palladium	ug/mL	102	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20152628
Cone 2-Liq-b	C105-15-03	S15R000688	ICP-AES	7440-10-0	Praseodymium	ug/mL	108	<0.0260	<52.0	n/a	n/a	n/a	n/a	52.0	U	20152628
Cone 2-Liq-b	C105-15-03	S15R000688	ICP-AES	7440-17-7	Rubidium	ug/mL	101	<0.0570	<114	n/a	n/a	n/a	n/a	114	U	20152628
Cone 2-Liq-b	C105-15-03	S15R000688	ICP-AES	7440-16-6	Rhodium	ug/mL	99.9	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20152628
Cone 2-Liq-b	C105-15-03	S15R000688	ICP-AES	7440-18-8	Ruthenium	ug/mL	106	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20152628
Cone 2-Liq-b	C105-15-03	S15R000688	ICP-AES	7704-34-9	Sulfur	ug/mL	93.5	<0.0280	<56.0	n/a	n/a	n/a	n/a	56.0	U	20152628
Cone 2-Liq-b	C105-15-03	S15R000688	ICP-AES	7440-36-0	Antimony	ug/mL	91.9	<0.0180	<36.0	n/a	n/a	n/a	n/a	36.0	U	20152628
Cone 2-Liq-b	C105-15-03	S15R000688	ICP-AES	7782-49-2	Selenium	ug/mL	98.7	<0.0300	<60.0	n/a	n/a	n/a	n/a	60.0	U	20152628
Cone 2-Liq-b	C105-15-03	S15R000688	ICP-AES	7440-21-3	Silicon	ug/mL	94.9	0.0167	<24.0	n/a	n/a	n/a	n/a	24.0	U	20152628
Cone 2-Liq-b	C105-15-03	S15R000688	ICP-AES	7440-19-9	Samarium	ug/mL	103	<0.0170	<34.0	n/a	n/a	n/a	n/a	34.0	U	20152628
Cone 2-Liq-b	C105-15-03	S15R000688	ICP-AES	7440-31-5	Tin	ug/mL	96.9	<8.00E-03	<16.0	n/a	n/a	n/a	n/a	16.0	UY	20152628
Cone 2-Liq-b	C105-15-03	S15R000688	ICP-AES	7440-24-6	Strontium	ug/mL	98.5	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 2-Liq-b	C105-15-03	S15R000688	ICP-AES	7440-25-7	Tantalum	ug/mL	100	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20152628
Cone 2-Liq-b	C105-15-03	S15R000688	ICP-AES	13494-80-9	Tellurium	ug/mL	100	<9.00E-03	<18.0	n/a	n/a	n/a	n/a	18.0	U	20152628
Cone 2-Liq-b	C105-15-03	S15R000688	ICP-AES	7440-29-1	Thorium	ug/mL	101	<0.0130	<26.0	n/a	n/a	n/a	n/a	26.0	U	20152628
Cone 2-Liq-b	C105-15-03	S15R000688	ICP-AES	7440-32-6	Titanium	ug/mL	90.5	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 2-Liq-b	C105-15-03	S15R000688	ICP-AES	7440-28-0	Thallium	ug/mL	105	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628

Cone 2-Liq-b	C105-15-03	S15R000688	ICP-AES	7440-61-1	Uranium	ug/mL	101	<0.0290	675	n/a	n/a	n/a	n/a	58.0		20152628
Cone 2-Liq-b	C105-15-03	S15R000688	ICP-AES	7440-62-2	Vanadium	ug/mL	97.4	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 2-Liq-b	C105-15-03	S15R000688	ICP-AES	7440-33-7	Tungsten	ug/mL	99.6	<0.0160	<32.0	n/a	n/a	n/a	n/a	32.0	U	20152628
Cone 2-Liq-b	C105-15-03	S15R000688	ICP-AES	7440-65-5	Yttrium	ug/mL	102	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 2-Liq-b	C105-15-03	S15R000688	ICP-AES	7440-66-6	Zinc	ug/mL	99.5	<0.0320	<64.0	n/a	n/a	n/a	n/a	64.0	U	20152628
Cone 2-Liq-b	C105-15-03	S15R000688	ICP-AES	7440-67-7	Zirconium	ug/mL	91.5	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 3-Liq-a	C105-15-01	S15R000667	ICP-AES	7440-22-4	Silver	ug/mL	99.9	<3.00E-03	<6.00	n/a	n/a	n/a	n/a	6.00	U	20152628
Cone 3-Liq-a	C105-15-01	S15R000667	ICP-AES	7429-90-5	Aluminum	ug/mL	98.5	<0.0140	2.72E+03	n/a	n/a	n/a	n/a	28.0		20152628
Cone 3-Liq-a	C105-15-01	S15R000667	ICP-AES	7440-38-2	Arsenic	ug/mL	98.6	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 3-Liq-a	C105-15-01	S15R000667	ICP-AES	7440-42-8	Boron	ug/mL	97.9	<2.00E-03	9.67	n/a	n/a	n/a	n/a	4.00	J	20152628
Cone 3-Liq-a	C105-15-01	S15R000667	ICP-AES	7440-39-3	Barium	ug/mL	99.6	<1.00E-03	5.64	n/a	n/a	n/a	n/a	2.00	J	20152628
Cone 3-Liq-a	C105-15-01	S15R000667	ICP-AES	7440-41-7	Beryllium	ug/mL	100	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 3-Liq-a	C105-15-01	S15R000667	ICP-AES	7440-69-9	Bismuth	ug/mL	99.1	<0.0190	<38.0	n/a	n/a	n/a	n/a	38.0	U	20152628
Cone 3-Liq-a	C105-15-01	S15R000667	ICP-AES	7440-70-2	Calcium	ug/mL	101	<0.120	<240	n/a	n/a	n/a	n/a	240	U	20152628
Cone 3-Liq-a	C105-15-01	S15R000667	ICP-AES	7440-43-9	Cadmium	ug/mL	100	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 3-Liq-a	C105-15-01	S15R000667	ICP-AES	7440-45-1	Cerium	ug/mL	99.9	<0.0250	82.8	n/a	n/a	n/a	n/a	50.0	BJ	20152628
Cone 3-Liq-a	C105-15-01	S15R000667	ICP-AES	7440-48-4	Cobalt	ug/mL	99.7	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 3-Liq-a	C105-15-01	S15R000667	ICP-AES	7440-47-3	Chromium	ug/mL	99.6	<2.00E-03	42.3	n/a	n/a	n/a	n/a	4.00		20152628
Cone 3-Liq-a	C105-15-01	S15R000667	ICP-AES	7440-50-8	Copper	ug/mL	99.1	<2.00E-03	193	n/a	n/a	n/a	n/a	4.00		20152628
Cone 3-Liq-a	C105-15-01	S15R000667	ICP-AES	7440-53-1	Europium	ug/mL	102	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 3-Liq-a	C105-15-01	S15R000667	ICP-AES	7439-89-6	Iron	ug/mL	99.6	<0.0200	<40.0	n/a	n/a	n/a	n/a	40.0	U	20152628
Cone 3-Liq-a	C105-15-01	S15R000667	ICP-AES	7440-09-7	Potassium	ug/mL	99.0	<0.0220	61.3	n/a	n/a	n/a	n/a	44.0	J	20152628
Cone 3-Liq-a	C105-15-01	S15R000667	ICP-AES	7439-91-0	Lanthanum	ug/mL	99.4	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 3-Liq-a	C105-15-01	S15R000667	ICP-AES	7439-93-2	Lithium	ug/mL	101	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 3-Liq-a	C105-15-01	S15R000667	ICP-AES	7439-95-4	Magnesium	ug/mL	100	<9.00E-03	<18.0	n/a	n/a	n/a	n/a	18.0	U	20152628
Cone 3-Liq-a	C105-15-01	S15R000667	ICP-AES	7439-96-5	Manganese	ug/mL	100	<1.00E-03	42.4	n/a	n/a	n/a	n/a	2.00		20152628
Cone 3-Liq-a	C105-15-01	S15R000667	ICP-AES	7439-98-7	Molybdenum	ug/mL	98.5	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 3-Liq-a	C105-15-01	S15R000667	ICP-AES	7440-23-5	Sodium	ug/mL	100	<0.0920	4.25E+05	n/a	n/a	n/a	n/a	184		20152628
Cone 3-Liq-a	C105-15-01	S15R000667	ICP-AES	7440-00-8	Neodymium	ug/mL	102	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 3-Liq-a	C105-15-01	S15R000667	ICP-AES	7440-02-0	Nickel	ug/mL	99.6	<2.00E-03	5.57	n/a	n/a	n/a	n/a	4.00	J	20152628
Cone 3-Liq-a	C105-15-01	S15R000667	ICP-AES	7440-30-1	Niobium	ug/mL	102	<6.00E-03	<12.0	n/a	n/a	n/a	n/a	12.0	U	20152628
Cone 3-Liq-a	C105-15-01	S15R000667	ICP-AES	7723-14-0	Phosphorus	ug/mL	98.2	<0.0130	193	n/a	n/a	n/a	n/a	26.0	J	20152628
Cone 3-Liq-a	C105-15-01	S15R000667	ICP-AES	7439-92-1	Lead	ug/mL	101	<0.0130	35.4	n/a	n/a	n/a	n/a	26.0	J	20152628
Cone 3-Liq-a	C105-15-01	S15R000667	ICP-AES	7440-05-3	Palladium	ug/mL	102	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20152628
Cone 3-Liq-a	C105-15-01	S15R000667	ICP-AES	7440-10-0	Praseodymium	ug/mL	101	<0.0260	<52.0	n/a	n/a	n/a	n/a	52.0	U	20152628
Cone 3-Liq-a	C105-15-01	S15R000667	ICP-AES	7440-17-7	Rubidium	ug/mL	100	<0.0570	<114	n/a	n/a	n/a	n/a	114	U	20152628
Cone 3-Liq-a	C105-15-01	S15R000667	ICP-AES	7440-16-6	Rhodium	ug/mL	100	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20152628
Cone 3-Liq-a	C105-15-01	S15R000667	ICP-AES	7440-18-8	Ruthenium	ug/mL	98.8	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20152628
Cone 3-Liq-a	C105-15-01	S15R000667	ICP-AES	7704-34-9	Sulfur	ug/mL	98.8	<0.0280	<56.0	n/a	n/a	n/a	n/a	56.0	U	20152628
Cone 3-Liq-a	C105-15-01	S15R000667	ICP-AES	7440-36-0	Antimony	ug/mL	97.4	<0.0180	<36.0	n/a	n/a	n/a	n/a	36.0	U	20152628
Cone 3-Liq-a	C105-15-01	S15R000667	ICP-AES	7782-49-2	Selenium	ug/mL	99.1	<0.0300	<60.0	n/a	n/a	n/a	n/a	60.0	U	20152628
Cone 3-Liq-a	C105-15-01	S15R000667	ICP-AES	7440-21-3	Silicon	ug/mL	100	0.0133	282	n/a	n/a	n/a	n/a	24.0	B	20152628
Cone 3-Liq-a	C105-15-01	S15R000667	ICP-AES	7440-19-9	Samarium	ug/mL	99.9	<0.0170	<34.0	n/a	n/a	n/a	n/a	34.0	U	20152628
Cone 3-Liq-a	C105-15-01	S15R000667	ICP-AES	7440-31-5	Tin	ug/mL	99.6	<8.00E-03	<16.0	n/a	n/a	n/a	n/a	16.0	U	20152628
Cone 3-Liq-a	C105-15-01	S15R000667	ICP-AES	7440-24-6	Strontium	ug/mL	100	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 3-Liq-a	C105-15-01	S15R000667	ICP-AES	7440-25-7	Tantalum	ug/mL	103	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20152628
Cone 3-Liq-a	C105-15-01	S15R000667	ICP-AES	13494-80-9	Tellurium	ug/mL	100	<9.00E-03	<18.0	n/a	n/a	n/a	n/a	18.0	U	20152628
Cone 3-Liq-a	C105-15-01	S15R000667	ICP-AES	7440-29-1	Thorium	ug/mL	101	<0.0130	<26.0	n/a	n/a	n/a	n/a	26.0	U	20152628
Cone 3-Liq-a	C105-15-01	S15R000667	ICP-AES	7440-32-6	Titanium	ug/mL	97.9	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 3-Liq-a	C105-15-01	S15R000667	ICP-AES	7440-28-0	Thallium	ug/mL	97.5	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 3-Liq-a	C105-15-01	S15R000667	ICP-AES	7440-61-1	Uranium	ug/mL	101	<0.0290	<58.0	n/a	n/a	n/a	n/a	58.0	U	20152628
Cone 3-Liq-a	C105-15-01	S15R000667	ICP-AES	7440-62-2	Vanadium	ug/mL	98.9	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 3-Liq-a	C105-15-01	S15R000667	ICP-AES	7440-33-7	Tungsten	ug/mL	101	<0.0160	<32.0	n/a	n/a	n/a	n/a	32.0	U	20152628
Cone 3-Liq-a	C105-15-01	S15R000667	ICP-AES	7440-65-5	Yttrium	ug/mL	100	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 3-Liq-a	C105-15-01	S15R000667	ICP-AES	7440-66-6	Zinc	ug/mL	99.6	<0.0320	<64.0	n/a	n/a	n/a	n/a	64.0	U	20152628
Cone 3-Liq-a	C105-15-01	S15R000667	ICP-AES	7440-67-7	Zirconium	ug/mL	97.5	<1.00E-03	5.18	n/a	n/a	n/a	n/a	2.00	J	20152628
Cone 3-Liq-a	C105-15-02	S15R000675	ICP-AES	7440-22-4	Silver	ug/mL	99.9	<3.00E-03	<6.00	n/a	n/a	n/a	n/a	6.00	U	20152628
Cone 3-Liq-a	C105-15-02	S15R000675	ICP-AES	7429-90-5	Aluminum	ug/mL	98.5	<0.0140	2.01E+03	n/a	n/a	n/a	n/a	28.0		20152628
Cone 3-Liq-a	C105-15-02	S15R000675	ICP-AES	7440-38-2	Arsenic	ug/mL	98.6	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 3-Liq-a	C105-15-02	S15R000675	ICP-AES	7440-42-8	Boron	ug/mL	97.9	<2.00E-03	6.94	n/a	n/a	n/a	n/a	4.00	J	20152628
Cone 3-Liq-a	C105-15-02	S15R000675	ICP-AES	7440-39-3	Barium	ug/mL	99.6	<1.00E-03	8.07	n/a	n/a	n/a	n/a	2.00	J	20152628
Cone 3-Liq-a	C105-15-02	S15R000675	ICP-AES	7440-41-7	Beryllium	ug/mL	100	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 3-Liq-a	C105-15-02	S15R000675	ICP-AES	7440-69-9	Bismuth	ug/mL	99.1	<0.0190	<38.0	n/a	n/a	n/a	n/a	38.0	U	20152628
Cone 3-Liq-a	C105-15-02	S15R000675	ICP-AES	7440-70-2	Calcium	ug/mL	101	<0.120	<240	n/a	n/a	n/a	n/a	240	U	20152628
Cone 3-Liq-a	C105-15-02	S15R000675	ICP-AES	7440-43-9	Cadmium	ug/mL	100	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 3-Liq-a	C105-15-02	S15R000675	ICP-AES	7440-45-1	Cerium	ug/mL	99.9	<0.0250	120	n/a	n/a	n/a	n/a	50.0	BJ	20152628
Cone 3-Liq-a	C105-15-02	S15R000675	ICP-AES	7440-48-4	Cobalt	ug/mL	99.7	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 3-Liq-a	C105-15-02	S15R000675	ICP-AES	7440-47-3	Chromium	ug/mL	99.6	<2.00E-03	25.7	n/a	n/a	n/a	n/a	4.00	J	20152628
Cone 3-Liq-a	C105-15-02	S15R000675	ICP-AES	7440-50-8	Copper	ug/mL	99.1	<2.00E-03	145	n/a	n/a	n/a	n/a	4.00		20152628
Cone 3-Liq-a	C105-15-02	S15R000675	ICP-AES	7440-53-1	Europium	ug/mL	102	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 3-Liq-a	C105-15-02	S15R000675	ICP-AES	7439-89-6	Iron	ug/mL	99.6	<0.0200	<40.0	n/a	n/a	n/a	n/a	40.0	U	20152628
Cone 3-Liq-a	C105-15-02	S15R000675	ICP-AES	7440-09-7	Potassium	ug/mL	99.0	<0.0220	<44.0	n/a	n/a	n/a	n/a	44.0	U	20152628
Cone 3-Liq-a	C105-15-02	S15R000675	ICP-AES	7439-91-0	Lanthanum	ug/mL	99.4	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 3-Liq-a	C105-15-02	S15R000675	ICP-AES	7439-93-2	Lithium	ug/mL	101	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 3-Liq-a	C105-15-02	S15R000675	ICP-AES	7439-95-4	Magnesium	ug/mL	100	<9.00E-03	<18.0	n/a	n/a	n/a	n/a	18.0	U	20152628
Cone 3-Liq-a	C105-15-02	S15R000675	ICP-AES	7439-96-5	Manganese	ug/mL	100	<1.00E-03	28.6	n/a	n/a	n/a	n/a	2.00		20152628
Cone 3-Liq-a	C105-15-02	S15R000675	ICP-AES	7439-98-7	Molybdenum	ug/mL	98.5	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 3-Liq-a	C105-15-02	S15R000675	ICP-AES	7440-23-5	Sodium	ug/mL	100	<0.0920	4.35E+05	n/a	n/a	n/a	n/a	184		20152628
Cone 3-Liq-a	C105-15-02	S15R000675	ICP-AES	7440-00-8	Neodymium	ug/mL	102	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 3-Liq-a	C105-15-02	S15R000675	ICP-AES	7440-02-0	Nickel	ug/mL	99.6	<2.00E-03	7.37	n/a	n/a	n/a	n/a	4.00	J	20152628
Cone 3-Liq-a	C105-15-02	S15R000675	ICP-AES	7440-30-1	Niobium	ug/mL	102	<6.00E-03	<12.0	n/a	n/a	n/a	n/a	12.0	U	20152628
Cone 3-Liq-a	C105-15-02	S15R000675	ICP-AES	7723-14-0	Phosphorus	ug/mL	98.2	<0.0130	168	n/a	n/a	n/a	n/a	26.0	J	20152628

Cone 3-Liq-a	C105-15-02	S15R000675	ICP-AES	7439-92-1	Lead	ug/mL	101	<0.0130	29.5	n/a	n/a	n/a	n/a	26.0	J	20152628
Cone 3-Liq-a	C105-15-02	S15R000675	ICP-AES	7440-05-3	Palladium	ug/mL	102	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20152628
Cone 3-Liq-a	C105-15-02	S15R000675	ICP-AES	7440-10-0	Praseodymium	ug/mL	101	<0.0260	<52.0	n/a	n/a	n/a	n/a	52.0	U	20152628
Cone 3-Liq-a	C105-15-02	S15R000675	ICP-AES	7440-17-7	Rubidium	ug/mL	100	<0.0570	<114	n/a	n/a	n/a	n/a	114	U	20152628
Cone 3-Liq-a	C105-15-02	S15R000675	ICP-AES	7440-16-6	Rhodium	ug/mL	100	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20152628
Cone 3-Liq-a	C105-15-02	S15R000675	ICP-AES	7440-18-8	Ruthenium	ug/mL	98.8	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20152628
Cone 3-Liq-a	C105-15-02	S15R000675	ICP-AES	7704-34-9	Sulfur	ug/mL	98.8	<0.0280	<56.0	n/a	n/a	n/a	n/a	56.0	U	20152628
Cone 3-Liq-a	C105-15-02	S15R000675	ICP-AES	7440-36-0	Antimony	ug/mL	97.4	<0.0180	<36.0	n/a	n/a	n/a	n/a	36.0	U	20152628
Cone 3-Liq-a	C105-15-02	S15R000675	ICP-AES	7782-49-2	Selenium	ug/mL	99.1	<0.0300	<60.0	n/a	n/a	n/a	n/a	60.0	U	20152628
Cone 3-Liq-a	C105-15-02	S15R000675	ICP-AES	7440-21-3	Silicon	ug/mL	100	0.0133	178	n/a	n/a	n/a	n/a	24.0	BJ	20152628
Cone 3-Liq-a	C105-15-02	S15R000675	ICP-AES	7440-19-9	Samarium	ug/mL	99.9	<0.0170	<34.0	n/a	n/a	n/a	n/a	34.0	U	20152628
Cone 3-Liq-a	C105-15-02	S15R000675	ICP-AES	7440-31-5	Tin	ug/mL	99.6	<8.00E-03	<16.0	n/a	n/a	n/a	n/a	16.0	U	20152628
Cone 3-Liq-a	C105-15-02	S15R000675	ICP-AES	7440-24-6	Strontium	ug/mL	100	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 3-Liq-a	C105-15-02	S15R000675	ICP-AES	7440-25-7	Tantalum	ug/mL	103	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20152628
Cone 3-Liq-a	C105-15-02	S15R000675	ICP-AES	13494-80-9	Tellurium	ug/mL	100	<9.00E-03	<18.0	n/a	n/a	n/a	n/a	18.0	U	20152628
Cone 3-Liq-a	C105-15-02	S15R000675	ICP-AES	7440-29-1	Thorium	ug/mL	101	<0.0130	<26.0	n/a	n/a	n/a	n/a	26.0	U	20152628
Cone 3-Liq-a	C105-15-02	S15R000675	ICP-AES	7440-32-6	Titanium	ug/mL	97.9	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 3-Liq-a	C105-15-02	S15R000675	ICP-AES	7440-28-0	Thallium	ug/mL	97.5	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 3-Liq-a	C105-15-02	S15R000675	ICP-AES	7440-61-1	Uranium	ug/mL	101	<0.0290	<58.0	n/a	n/a	n/a	n/a	58.0	U	20152628
Cone 3-Liq-a	C105-15-02	S15R000675	ICP-AES	7440-62-2	Vanadium	ug/mL	98.9	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 3-Liq-a	C105-15-02	S15R000675	ICP-AES	7440-33-7	Tungsten	ug/mL	101	<0.0160	<32.0	n/a	n/a	n/a	n/a	32.0	U	20152628
Cone 3-Liq-a	C105-15-02	S15R000675	ICP-AES	7440-65-5	Yttrium	ug/mL	100	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 3-Liq-a	C105-15-02	S15R000675	ICP-AES	7440-66-6	Zinc	ug/mL	99.6	<0.0320	<64.0	n/a	n/a	n/a	n/a	64.0	U	20152628
Cone 3-Liq-a	C105-15-02	S15R000675	ICP-AES	7440-67-7	Zirconium	ug/mL	97.5	<1.00E-03	5.20	n/a	n/a	n/a	n/a	2.00	J	20152628
Cone 3-Liq-a	C105-15-03	S15R000683	ICP-AES	7440-22-4	Silver	ug/mL	100	<3.00E-03	<6.00	n/a	n/a	n/a	n/a	6.00	U	20152628
Cone 3-Liq-a	C105-15-03	S15R000683	ICP-AES	7429-90-5	Aluminum	ug/mL	98.9	<0.0140	4.05E+03	n/a	n/a	n/a	n/a	28.0		20152628
Cone 3-Liq-a	C105-15-03	S15R000683	ICP-AES	7440-38-2	Arsenic	ug/mL	99.2	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 3-Liq-a	C105-15-03	S15R000683	ICP-AES	7440-42-8	Boron	ug/mL	95.2	<2.00E-03	8.43	n/a	n/a	n/a	n/a	4.00	J	20152628
Cone 3-Liq-a	C105-15-03	S15R000683	ICP-AES	7440-39-3	Barium	ug/mL	99.3	<1.00E-03	11.9	n/a	n/a	n/a	n/a	2.00	J	20152628
Cone 3-Liq-a	C105-15-03	S15R000683	ICP-AES	7440-41-7	Beryllium	ug/mL	98.8	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 3-Liq-a	C105-15-03	S15R000683	ICP-AES	7440-69-9	Bismuth	ug/mL	99.4	<0.0190	<38.0	n/a	n/a	n/a	n/a	38.0	U	20152628
Cone 3-Liq-a	C105-15-03	S15R000683	ICP-AES	7440-70-2	Calcium	ug/mL	102	<0.120	<240	n/a	n/a	n/a	n/a	240	U	20152628
Cone 3-Liq-a	C105-15-03	S15R000683	ICP-AES	7440-43-9	Cadmium	ug/mL	101	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 3-Liq-a	C105-15-03	S15R000683	ICP-AES	7440-45-1	Cerium	ug/mL	104	<0.0250	<50.0	n/a	n/a	n/a	n/a	50.0	U	20152628
Cone 3-Liq-a	C105-15-03	S15R000683	ICP-AES	7440-48-4	Cobalt	ug/mL	100	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 3-Liq-a	C105-15-03	S15R000683	ICP-AES	7440-47-3	Chromium	ug/mL	98.6	<2.00E-03	48.1	n/a	n/a	n/a	n/a	4.00		20152628
Cone 3-Liq-a	C105-15-03	S15R000683	ICP-AES	7440-50-8	Copper	ug/mL	100	<2.00E-03	343	n/a	n/a	n/a	n/a	4.00		20152628
Cone 3-Liq-a	C105-15-03	S15R000683	ICP-AES	7440-53-1	Europium	ug/mL	103	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 3-Liq-a	C105-15-03	S15R000683	ICP-AES	7439-89-6	Iron	ug/mL	99.9	<0.0200	<40.0	n/a	n/a	n/a	n/a	40.0	U	20152628
Cone 3-Liq-a	C105-15-03	S15R000683	ICP-AES	7440-09-7	Potassium	ug/mL	99.8	<0.0220	<44.0	n/a	n/a	n/a	n/a	44.0	U	20152628
Cone 3-Liq-a	C105-15-03	S15R000683	ICP-AES	7439-91-0	Lanthanum	ug/mL	99.8	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 3-Liq-a	C105-15-03	S15R000683	ICP-AES	7439-93-2	Lithium	ug/mL	102	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 3-Liq-a	C105-15-03	S15R000683	ICP-AES	7439-95-4	Magnesium	ug/mL	99.3	<9.00E-03	<18.0	n/a	n/a	n/a	n/a	18.0	U	20152628
Cone 3-Liq-a	C105-15-03	S15R000683	ICP-AES	7439-96-5	Manganese	ug/mL	101	<1.00E-03	80.5	n/a	n/a	n/a	n/a	2.00		20152628
Cone 3-Liq-a	C105-15-03	S15R000683	ICP-AES	7439-98-7	Molybdenum	ug/mL	92.1	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 3-Liq-a	C105-15-03	S15R000683	ICP-AES	7440-23-5	Sodium	ug/mL	102	<0.0920	4.29E+05	n/a	n/a	n/a	n/a	184		20152628
Cone 3-Liq-a	C105-15-03	S15R000683	ICP-AES	7440-00-8	Neodymium	ug/mL	101	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 3-Liq-a	C105-15-03	S15R000683	ICP-AES	7440-02-0	Nickel	ug/mL	98.4	<2.00E-03	5.19	n/a	n/a	n/a	n/a	4.00	J	20152628
Cone 3-Liq-a	C105-15-03	S15R000683	ICP-AES	7440-30-1	Niobium	ug/mL	99.2	<6.00E-03	<12.0	n/a	n/a	n/a	n/a	12.0	U	20152628
Cone 3-Liq-a	C105-15-03	S15R000683	ICP-AES	7723-14-0	Phosphorus	ug/mL	94.7	<0.0130	232	n/a	n/a	n/a	n/a	26.0	J	20152628
Cone 3-Liq-a	C105-15-03	S15R000683	ICP-AES	7439-92-1	Lead	ug/mL	102	<0.0130	55.8	n/a	n/a	n/a	n/a	26.0	J	20152628
Cone 3-Liq-a	C105-15-03	S15R000683	ICP-AES	7440-05-3	Palladium	ug/mL	102	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20152628
Cone 3-Liq-a	C105-15-03	S15R000683	ICP-AES	7440-10-0	Praseodymium	ug/mL	108	<0.0260	<52.0	n/a	n/a	n/a	n/a	52.0	U	20152628
Cone 3-Liq-a	C105-15-03	S15R000683	ICP-AES	7440-17-7	Rubidium	ug/mL	101	<0.0570	<114	n/a	n/a	n/a	n/a	114	U	20152628
Cone 3-Liq-a	C105-15-03	S15R000683	ICP-AES	7440-16-6	Rhodium	ug/mL	99.9	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20152628
Cone 3-Liq-a	C105-15-03	S15R000683	ICP-AES	7440-18-8	Ruthenium	ug/mL	106	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20152628
Cone 3-Liq-a	C105-15-03	S15R000683	ICP-AES	7704-34-9	Sulfur	ug/mL	93.5	<0.0280	<56.0	n/a	n/a	n/a	n/a	56.0	U	20152628
Cone 3-Liq-a	C105-15-03	S15R000683	ICP-AES	7440-36-0	Antimony	ug/mL	91.9	<0.0180	<36.0	n/a	n/a	n/a	n/a	36.0	U	20152628
Cone 3-Liq-a	C105-15-03	S15R000683	ICP-AES	7782-49-2	Selenium	ug/mL	98.7	<0.0300	<60.0	n/a	n/a	n/a	n/a	60.0	U	20152628
Cone 3-Liq-a	C105-15-03	S15R000683	ICP-AES	7440-21-3	Silicon	ug/mL	94.9	0.0167	214	n/a	n/a	n/a	n/a	24.0	BJ	20152628
Cone 3-Liq-a	C105-15-03	S15R000683	ICP-AES	7440-19-9	Samarium	ug/mL	103	<0.0170	<34.0	n/a	n/a	n/a	n/a	34.0	U	20152628
Cone 3-Liq-a	C105-15-03	S15R000683	ICP-AES	7440-31-5	Tin	ug/mL	96.9	<8.00E-03	<16.0	n/a	n/a	n/a	n/a	16.0	UY	20152628
Cone 3-Liq-a	C105-15-03	S15R000683	ICP-AES	7440-24-6	Strontium	ug/mL	98.5	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 3-Liq-a	C105-15-03	S15R000683	ICP-AES	7440-25-7	Tantalum	ug/mL	100	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20152628
Cone 3-Liq-a	C105-15-03	S15R000683	ICP-AES	13494-80-9	Tellurium	ug/mL	100	<9.00E-03	<18.0	n/a	n/a	n/a	n/a	18.0	U	20152628
Cone 3-Liq-a	C105-15-03	S15R000683	ICP-AES	7440-29-1	Thorium	ug/mL	101	<0.0130	<26.0	n/a	n/a	n/a	n/a	26.0	U	20152628
Cone 3-Liq-a	C105-15-03	S15R000683	ICP-AES	7440-32-6	Titanium	ug/mL	90.5	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 3-Liq-a	C105-15-03	S15R000683	ICP-AES	7440-28-0	Thallium	ug/mL	105	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 3-Liq-a	C105-15-03	S15R000683	ICP-AES	7440-61-1	Uranium	ug/mL	101	<0.0290	<58.0	n/a	n/a	n/a	n/a	58.0	U	20152628
Cone 3-Liq-a	C105-15-03	S15R000683	ICP-AES	7440-62-2	Vanadium	ug/mL	97.4	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 3-Liq-a	C105-15-03	S15R000683	ICP-AES	7440-33-7	Tungsten	ug/mL	99.6	<0.0160	<32.0	n/a	n/a	n/a	n/a	32.0	U	20152628
Cone 3-Liq-a	C105-15-03	S15R000683	ICP-AES	7440-65-5	Yttrium	ug/mL	102	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 3-Liq-a	C105-15-03	S15R000683	ICP-AES	7440-66-6	Zinc	ug/mL	99.5	<0.0320	<64.0	n/a	n/a	n/a	n/a	64.0	U	20152628
Cone 3-Liq-a	C105-15-03	S15R000683	ICP-AES	7440-67-7	Zirconium	ug/mL	91.5	<1.00E-03	7.53	n/a	n/a	n/a	n/a	2.00	J	20152628
Cone 3-Liq-b	C105-15-03	S15R000689	ICP-AES	7440-22-4	Silver	ug/mL	100	<3.00E-03	<6.00	n/a	n/a	n/a	n/a	6.00	U	20152628
Cone 3-Liq-b	C105-15-03	S15R000689	ICP-AES	7429-90-5	Aluminum	ug/mL	98.9	<0.0140	5.40E+03	n/a	n/a	n/a	n/a	28.0		20152628
Cone 3-Liq-b	C105-15-03	S15R000689	ICP-AES	7440-38-2	Arsenic	ug/mL	99.2	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 3-Liq-b	C105-15-03	S15R000689	ICP-AES	7440-42-8	Boron	ug/mL	95.2	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 3-Liq-b	C105-15-03	S15R000689	ICP-AES	7440-39-3	Barium	ug/mL	99.3	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 3-Liq-b	C105-15-03	S15R000689	ICP-AES	7440-41-7	Beryllium	ug/mL	98.8	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 3-Liq-b	C105-15-03	S15R000689	ICP-AES	7440-69-9	Bismuth	ug/mL	99.4	<0.0190	<38.0	n/a	n/a	n/a	n/a	38.0	U	20152628
Cone 3-Liq-b	C105-15-03	S15R000689	ICP-AES	7440-70-2	Calcium	ug/mL	102	<0.120	<240	n/a	n/a	n/a	n/a	240	U	20152628

Cone 3-Liq-b	C105-15-03	S15R000689	ICP-AES	7440-43-9	Cadmium	ug/mL	101	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 3-Liq-b	C105-15-03	S15R000689	ICP-AES	7440-45-1	Cerium	ug/mL	104	<0.0250	<50.0	n/a	n/a	n/a	n/a	50.0	U	20152628
Cone 3-Liq-b	C105-15-03	S15R000689	ICP-AES	7440-48-4	Cobalt	ug/mL	100	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 3-Liq-b	C105-15-03	S15R000689	ICP-AES	7440-47-3	Chromium	ug/mL	98.6	<2.00E-03	56.8	n/a	n/a	n/a	n/a	4.00		20152628
Cone 3-Liq-b	C105-15-03	S15R000689	ICP-AES	7440-50-8	Copper	ug/mL	100	<2.00E-03	25.9	n/a	n/a	n/a	n/a	4.00	J	20152628
Cone 3-Liq-b	C105-15-03	S15R000689	ICP-AES	7440-53-1	Europium	ug/mL	103	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 3-Liq-b	C105-15-03	S15R000689	ICP-AES	7439-89-6	Iron	ug/mL	99.9	<0.0200	<40.0	n/a	n/a	n/a	n/a	40.0	U	20152628
Cone 3-Liq-b	C105-15-03	S15R000689	ICP-AES	7440-09-7	Potassium	ug/mL	99.8	<0.0220	<44.0	n/a	n/a	n/a	n/a	44.0	U	20152628
Cone 3-Liq-b	C105-15-03	S15R000689	ICP-AES	7439-91-0	Lanthanum	ug/mL	99.8	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 3-Liq-b	C105-15-03	S15R000689	ICP-AES	7439-93-2	Lithium	ug/mL	102	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 3-Liq-b	C105-15-03	S15R000689	ICP-AES	7439-95-4	Magnesium	ug/mL	99.3	<9.00E-03	<18.0	n/a	n/a	n/a	n/a	18.0	U	20152628
Cone 3-Liq-b	C105-15-03	S15R000689	ICP-AES	7439-96-5	Manganese	ug/mL	101	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 3-Liq-b	C105-15-03	S15R000689	ICP-AES	7439-98-7	Molybdenum	ug/mL	92.1	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 3-Liq-b	C105-15-03	S15R000689	ICP-AES	7440-23-5	Sodium	ug/mL	102	<0.0920	4.54E+04	n/a	n/a	n/a	n/a	184		20152628
Cone 3-Liq-b	C105-15-03	S15R000689	ICP-AES	7440-00-8	Neodymium	ug/mL	101	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 3-Liq-b	C105-15-03	S15R000689	ICP-AES	7440-02-0	Nickel	ug/mL	98.4	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 3-Liq-b	C105-15-03	S15R000689	ICP-AES	7440-30-1	Niobium	ug/mL	99.2	<6.00E-03	<12.0	n/a	n/a	n/a	n/a	12.0	U	20152628
Cone 3-Liq-b	C105-15-03	S15R000689	ICP-AES	7723-14-0	Phosphorus	ug/mL	94.7	<0.0130	533	n/a	n/a	n/a	n/a	26.0		20152628
Cone 3-Liq-b	C105-15-03	S15R000689	ICP-AES	7439-92-1	Lead	ug/mL	102	<0.0130	<26.0	n/a	n/a	n/a	n/a	26.0	U	20152628
Cone 3-Liq-b	C105-15-03	S15R000689	ICP-AES	7440-05-3	Palladium	ug/mL	102	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20152628
Cone 3-Liq-b	C105-15-03	S15R000689	ICP-AES	7440-10-0	Praseodymium	ug/mL	108	<0.0260	<52.0	n/a	n/a	n/a	n/a	52.0	U	20152628
Cone 3-Liq-b	C105-15-03	S15R000689	ICP-AES	7440-17-7	Rubidium	ug/mL	101	<0.0570	<114	n/a	n/a	n/a	n/a	114	U	20152628
Cone 3-Liq-b	C105-15-03	S15R000689	ICP-AES	7440-16-6	Rhodium	ug/mL	99.9	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20152628
Cone 3-Liq-b	C105-15-03	S15R000689	ICP-AES	7440-18-8	Ruthenium	ug/mL	106	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20152628
Cone 3-Liq-b	C105-15-03	S15R000689	ICP-AES	7704-34-9	Sulfur	ug/mL	93.5	<0.0280	404	n/a	n/a	n/a	n/a	56.0	J	20152628
Cone 3-Liq-b	C105-15-03	S15R000689	ICP-AES	7440-36-0	Antimony	ug/mL	91.9	<0.0180	<36.0	n/a	n/a	n/a	n/a	36.0	U	20152628
Cone 3-Liq-b	C105-15-03	S15R000689	ICP-AES	7782-49-2	Selenium	ug/mL	98.7	<0.0300	<60.0	n/a	n/a	n/a	n/a	60.0	U	20152628
Cone 3-Liq-b	C105-15-03	S15R000689	ICP-AES	7440-21-3	Silicon	ug/mL	94.9	0.0167	53.2	n/a	n/a	n/a	n/a	24.0	J	20152628
Cone 3-Liq-b	C105-15-03	S15R000689	ICP-AES	7440-19-9	Samarium	ug/mL	103	<0.0170	<34.0	n/a	n/a	n/a	n/a	34.0	U	20152628
Cone 3-Liq-b	C105-15-03	S15R000689	ICP-AES	7440-31-5	Tin	ug/mL	96.9	<8.00E-03	<16.0	n/a	n/a	n/a	n/a	16.0	UY	20152628
Cone 3-Liq-b	C105-15-03	S15R000689	ICP-AES	7440-24-6	Strontium	ug/mL	98.5	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 3-Liq-b	C105-15-03	S15R000689	ICP-AES	7440-25-7	Tantalum	ug/mL	100	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20152628
Cone 3-Liq-b	C105-15-03	S15R000689	ICP-AES	13494-80-9	Tellurium	ug/mL	100	<9.00E-03	<18.0	n/a	n/a	n/a	n/a	18.0	U	20152628
Cone 3-Liq-b	C105-15-03	S15R000689	ICP-AES	7440-29-1	Thorium	ug/mL	101	<0.0130	<26.0	n/a	n/a	n/a	n/a	26.0	U	20152628
Cone 3-Liq-b	C105-15-03	S15R000689	ICP-AES	7440-32-6	Titanium	ug/mL	90.5	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 3-Liq-b	C105-15-03	S15R000689	ICP-AES	7440-28-0	Thallium	ug/mL	105	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 3-Liq-b	C105-15-03	S15R000689	ICP-AES	7440-61-1	Uranium	ug/mL	101	<0.0290	<58.0	n/a	n/a	n/a	n/a	58.0	U	20152628
Cone 3-Liq-b	C105-15-03	S15R000689	ICP-AES	7440-62-2	Vanadium	ug/mL	97.4	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 3-Liq-b	C105-15-03	S15R000689	ICP-AES	7440-33-7	Tungsten	ug/mL	99.6	<0.0160	<32.0	n/a	n/a	n/a	n/a	32.0	U	20152628
Cone 3-Liq-b	C105-15-03	S15R000689	ICP-AES	7440-65-5	Yttrium	ug/mL	102	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 3-Liq-b	C105-15-03	S15R000689	ICP-AES	7440-66-6	Zinc	ug/mL	99.5	<0.0320	<64.0	n/a	n/a	n/a	n/a	64.0	U	20152628
Cone 3-Liq-b	C105-15-03	S15R000689	ICP-AES	7440-67-7	Zirconium	ug/mL	91.5	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 4-Liq-a	C105-15-01	S15R000668	ICP-AES	7440-22-4	Silver	ug/mL	99.9	<3.00E-03	<6.00	n/a	n/a	n/a	n/a	6.00	U	20152628
Cone 4-Liq-a	C105-15-01	S15R000668	ICP-AES	7429-90-5	Aluminum	ug/mL	98.5	<0.0140	3.32E+03	n/a	n/a	n/a	n/a	28.0		20152628
Cone 4-Liq-a	C105-15-01	S15R000668	ICP-AES	7440-38-2	Arsenic	ug/mL	98.6	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 4-Liq-a	C105-15-01	S15R000668	ICP-AES	7440-42-8	Boron	ug/mL	97.9	<2.00E-03	8.44	n/a	n/a	n/a	n/a	4.00	J	20152628
Cone 4-Liq-a	C105-15-01	S15R000668	ICP-AES	7440-39-3	Barium	ug/mL	99.6	<1.00E-03	6.95	n/a	n/a	n/a	n/a	2.00	J	20152628
Cone 4-Liq-a	C105-15-01	S15R000668	ICP-AES	7440-41-7	Beryllium	ug/mL	100	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 4-Liq-a	C105-15-01	S15R000668	ICP-AES	7440-69-9	Bismuth	ug/mL	99.1	<0.0190	<38.0	n/a	n/a	n/a	n/a	38.0	U	20152628
Cone 4-Liq-a	C105-15-01	S15R000668	ICP-AES	7440-70-2	Calcium	ug/mL	101	<0.120	<240	n/a	n/a	n/a	n/a	240	U	20152628
Cone 4-Liq-a	C105-15-01	S15R000668	ICP-AES	7440-43-9	Cadmium	ug/mL	100	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 4-Liq-a	C105-15-01	S15R000668	ICP-AES	7440-45-1	Cerium	ug/mL	99.9	<0.0250	90.9	n/a	n/a	n/a	n/a	50.0	BJ	20152628
Cone 4-Liq-a	C105-15-01	S15R000668	ICP-AES	7440-48-4	Cobalt	ug/mL	99.7	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 4-Liq-a	C105-15-01	S15R000668	ICP-AES	7440-47-3	Chromium	ug/mL	99.6	<2.00E-03	45.9	n/a	n/a	n/a	n/a	4.00		20152628
Cone 4-Liq-a	C105-15-01	S15R000668	ICP-AES	7440-50-8	Copper	ug/mL	99.1	<2.00E-03	231	n/a	n/a	n/a	n/a	4.00		20152628
Cone 4-Liq-a	C105-15-01	S15R000668	ICP-AES	7440-53-1	Europium	ug/mL	102	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 4-Liq-a	C105-15-01	S15R000668	ICP-AES	7439-89-6	Iron	ug/mL	99.6	<0.0200	<40.0	n/a	n/a	n/a	n/a	40.0	U	20152628
Cone 4-Liq-a	C105-15-01	S15R000668	ICP-AES	7440-09-7	Potassium	ug/mL	99.0	<0.0220	63.8	n/a	n/a	n/a	n/a	44.0	J	20152628
Cone 4-Liq-a	C105-15-01	S15R000668	ICP-AES	7439-91-0	Lanthanum	ug/mL	99.4	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 4-Liq-a	C105-15-01	S15R000668	ICP-AES	7439-93-2	Lithium	ug/mL	101	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 4-Liq-a	C105-15-01	S15R000668	ICP-AES	7439-95-4	Magnesium	ug/mL	100	<9.00E-03	<18.0	n/a	n/a	n/a	n/a	18.0	U	20152628
Cone 4-Liq-a	C105-15-01	S15R000668	ICP-AES	7439-96-5	Manganese	ug/mL	100	<1.00E-03	33.6	n/a	n/a	n/a	n/a	2.00		20152628
Cone 4-Liq-a	C105-15-01	S15R000668	ICP-AES	7439-98-7	Molybdenum	ug/mL	98.5	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 4-Liq-a	C105-15-01	S15R000668	ICP-AES	7440-23-5	Sodium	ug/mL	100	<0.0920	4.17E+05	n/a	n/a	n/a	n/a	184		20152628
Cone 4-Liq-a	C105-15-01	S15R000668	ICP-AES	7440-00-8	Neodymium	ug/mL	102	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 4-Liq-a	C105-15-01	S15R000668	ICP-AES	7440-02-0	Nickel	ug/mL	99.6	<2.00E-03	5.54	n/a	n/a	n/a	n/a	4.00	J	20152628
Cone 4-Liq-a	C105-15-01	S15R000668	ICP-AES	7440-30-1	Niobium	ug/mL	102	<6.00E-03	<12.0	n/a	n/a	n/a	n/a	12.0	U	20152628
Cone 4-Liq-a	C105-15-01	S15R000668	ICP-AES	7723-14-0	Phosphorus	ug/mL	98.2	<0.0130	224	n/a	n/a	n/a	n/a	26.0	J	20152628
Cone 4-Liq-a	C105-15-01	S15R000668	ICP-AES	7439-92-1	Lead	ug/mL	101	<0.0130	46.9	n/a	n/a	n/a	n/a	26.0	J	20152628
Cone 4-Liq-a	C105-15-01	S15R000668	ICP-AES	7440-05-3	Palladium	ug/mL	102	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20152628
Cone 4-Liq-a	C105-15-01	S15R000668	ICP-AES	7440-10-0	Praseodymium	ug/mL	101	<0.0260	<52.0	n/a	n/a	n/a	n/a	52.0	U	20152628
Cone 4-Liq-a	C105-15-01	S15R000668	ICP-AES	7440-17-7	Rubidium	ug/mL	100	<0.0570	<114	n/a	n/a	n/a	n/a	114	U	20152628
Cone 4-Liq-a	C105-15-01	S15R000668	ICP-AES	7440-16-6	Rhodium	ug/mL	100	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20152628
Cone 4-Liq-a	C105-15-01	S15R000668	ICP-AES	7440-18-8	Ruthenium	ug/mL	98.8	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20152628
Cone 4-Liq-a	C105-15-01	S15R000668	ICP-AES	7704-34-9	Sulfur	ug/mL	98.8	<0.0280	<56.0	n/a	n/a	n/a	n/a	56.0	U	20152628
Cone 4-Liq-a	C105-15-01	S15R000668	ICP-AES	7440-36-0	Antimony	ug/mL	97.4	<0.0180	<36.0	n/a	n/a	n/a	n/a	36.0	U	20152628
Cone 4-Liq-a	C105-15-01	S15R000668	ICP-AES	7782-49-2	Selenium	ug/mL	99.1	<0.0300	<60.0	n/a	n/a	n/a	n/a	60.0	U	20152628
Cone 4-Liq-a	C105-15-01	S15R000668	ICP-AES	7440-21-3	Silicon	ug/mL	100	0.0133	180	n/a	n/a	n/a	n/a	24.0	BJ	20152628
Cone 4-Liq-a	C105-15-01	S15R000668	ICP-AES	7440-19-9	Samarium	ug/mL	99.9	<0.0170	<34.0	n/a	n/a	n/a	n/a	34.0	U	20152628
Cone 4-Liq-a	C105-15-01	S15R000668	ICP-AES	7440-31-5	Tin	ug/mL	99.6	<8.00E-03	<16.0	n/a	n/a	n/a	n/a	16.0	U	20152628
Cone 4-Liq-a	C105-15-01	S15R000668	ICP-AES	7440-24-6	Strontium	ug/mL	100	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 4-Liq-a	C105-15-01	S15R000668	ICP-AES	7440-25-7	Tantalum	ug/mL	103	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20152628

Cone 4-Liq-a	C105-15-01	S15R000668	ICP-AES	13494-80-9	Tellurium	ug/mL	100	<9.00E-03	<18.0	n/a	n/a	n/a	n/a	18.0	U	20152628
Cone 4-Liq-a	C105-15-01	S15R000668	ICP-AES	7440-29-1	Thorium	ug/mL	101	<0.0130	<26.0	n/a	n/a	n/a	n/a	26.0	U	20152628
Cone 4-Liq-a	C105-15-01	S15R000668	ICP-AES	7440-32-6	Titanium	ug/mL	97.9	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 4-Liq-a	C105-15-01	S15R000668	ICP-AES	7440-28-0	Thallium	ug/mL	97.5	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 4-Liq-a	C105-15-01	S15R000668	ICP-AES	7440-61-1	Uranium	ug/mL	101	<0.0290	<58.0	n/a	n/a	n/a	n/a	58.0	U	20152628
Cone 4-Liq-a	C105-15-01	S15R000668	ICP-AES	7440-62-2	Vanadium	ug/mL	98.9	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 4-Liq-a	C105-15-01	S15R000668	ICP-AES	7440-33-7	Tungsten	ug/mL	101	<0.0160	<32.0	n/a	n/a	n/a	n/a	32.0	U	20152628
Cone 4-Liq-a	C105-15-01	S15R000668	ICP-AES	7440-65-5	Yttrium	ug/mL	100	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 4-Liq-a	C105-15-01	S15R000668	ICP-AES	7440-66-6	Zinc	ug/mL	99.6	<0.0320	<64.0	n/a	n/a	n/a	n/a	64.0	U	20152628
Cone 4-Liq-a	C105-15-01	S15R000668	ICP-AES	7440-67-7	Zirconium	ug/mL	97.5	<1.00E-03	5.56	n/a	n/a	n/a	n/a	2.00	J	20152628
Cone 4-Liq-a	C105-15-02	S15R000676	ICP-AES	7440-22-4	Silver	ug/mL	99.9	<3.00E-03	<6.00	n/a	n/a	n/a	n/a	6.00	U	20152628
Cone 4-Liq-a	C105-15-02	S15R000676	ICP-AES	7429-90-5	Aluminum	ug/mL	98.5	<0.0140	2.32E+03	n/a	n/a	n/a	n/a	28.0		20152628
Cone 4-Liq-a	C105-15-02	S15R000676	ICP-AES	7440-38-2	Arsenic	ug/mL	98.6	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 4-Liq-a	C105-15-02	S15R000676	ICP-AES	7440-42-8	Boron	ug/mL	97.9	<2.00E-03	5.86	n/a	n/a	n/a	n/a	4.00	J	20152628
Cone 4-Liq-a	C105-15-02	S15R000676	ICP-AES	7440-39-3	Barium	ug/mL	99.6	<1.00E-03	6.56	n/a	n/a	n/a	n/a	2.00	J	20152628
Cone 4-Liq-a	C105-15-02	S15R000676	ICP-AES	7440-41-7	Beryllium	ug/mL	100	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 4-Liq-a	C105-15-02	S15R000676	ICP-AES	7440-69-9	Bismuth	ug/mL	99.1	<0.0190	<38.0	n/a	n/a	n/a	n/a	38.0	U	20152628
Cone 4-Liq-a	C105-15-02	S15R000676	ICP-AES	7440-70-2	Calcium	ug/mL	101	<0.120	<240	n/a	n/a	n/a	n/a	240	U	20152628
Cone 4-Liq-a	C105-15-02	S15R000676	ICP-AES	7440-43-9	Cadmium	ug/mL	100	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 4-Liq-a	C105-15-02	S15R000676	ICP-AES	7440-45-1	Cerium	ug/mL	99.9	<0.0250	81.6	n/a	n/a	n/a	n/a	50.0	BJ	20152628
Cone 4-Liq-a	C105-15-02	S15R000676	ICP-AES	7440-48-4	Cobalt	ug/mL	99.7	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 4-Liq-a	C105-15-02	S15R000676	ICP-AES	7440-47-3	Chromium	ug/mL	99.6	<2.00E-03	27.8	n/a	n/a	n/a	n/a	4.00	J	20152628
Cone 4-Liq-a	C105-15-02	S15R000676	ICP-AES	7440-50-8	Copper	ug/mL	99.1	<2.00E-03	166	n/a	n/a	n/a	n/a	4.00		20152628
Cone 4-Liq-a	C105-15-02	S15R000676	ICP-AES	7440-53-1	Europium	ug/mL	102	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 4-Liq-a	C105-15-02	S15R000676	ICP-AES	7439-89-6	Iron	ug/mL	99.6	<0.0200	<40.0	n/a	n/a	n/a	n/a	40.0	U	20152628
Cone 4-Liq-a	C105-15-02	S15R000676	ICP-AES	7440-09-7	Potassium	ug/mL	99.0	<0.0220	58.5	n/a	n/a	n/a	n/a	44.0	J	20152628
Cone 4-Liq-a	C105-15-02	S15R000676	ICP-AES	7439-91-0	Lanthanum	ug/mL	99.4	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 4-Liq-a	C105-15-02	S15R000676	ICP-AES	7439-93-2	Lithium	ug/mL	101	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 4-Liq-a	C105-15-02	S15R000676	ICP-AES	7439-95-4	Magnesium	ug/mL	100	<9.00E-03	<18.0	n/a	n/a	n/a	n/a	18.0	U	20152628
Cone 4-Liq-a	C105-15-02	S15R000676	ICP-AES	7439-96-5	Manganese	ug/mL	100	<1.00E-03	17.5	n/a	n/a	n/a	n/a	2.00	J	20152628
Cone 4-Liq-a	C105-15-02	S15R000676	ICP-AES	7439-98-7	Molybdenum	ug/mL	98.5	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 4-Liq-a	C105-15-02	S15R000676	ICP-AES	7440-23-5	Sodium	ug/mL	100	<0.0920	4.11E+05	n/a	n/a	n/a	n/a	184		20152628
Cone 4-Liq-a	C105-15-02	S15R000676	ICP-AES	7440-00-8	Neodymium	ug/mL	102	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 4-Liq-a	C105-15-02	S15R000676	ICP-AES	7440-02-0	Nickel	ug/mL	99.6	<2.00E-03	4.75	n/a	n/a	n/a	n/a	4.00	J	20152628
Cone 4-Liq-a	C105-15-02	S15R000676	ICP-AES	7440-30-1	Niobium	ug/mL	102	<6.00E-03	<12.0	n/a	n/a	n/a	n/a	12.0	U	20152628
Cone 4-Liq-a	C105-15-02	S15R000676	ICP-AES	7723-14-0	Phosphorus	ug/mL	98.2	<0.0130	184	n/a	n/a	n/a	n/a	26.0	J	20152628
Cone 4-Liq-a	C105-15-02	S15R000676	ICP-AES	7439-92-1	Lead	ug/mL	101	<0.0130	36.4	n/a	n/a	n/a	n/a	26.0	J	20152628
Cone 4-Liq-a	C105-15-02	S15R000676	ICP-AES	7440-05-3	Palladium	ug/mL	102	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20152628
Cone 4-Liq-a	C105-15-02	S15R000676	ICP-AES	7440-10-0	Praseodymium	ug/mL	101	<0.0260	<52.0	n/a	n/a	n/a	n/a	52.0	U	20152628
Cone 4-Liq-a	C105-15-02	S15R000676	ICP-AES	7440-17-7	Rubidium	ug/mL	100	<0.0570	<114	n/a	n/a	n/a	n/a	114	U	20152628
Cone 4-Liq-a	C105-15-02	S15R000676	ICP-AES	7440-16-6	Rhodium	ug/mL	100	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20152628
Cone 4-Liq-a	C105-15-02	S15R000676	ICP-AES	7440-18-8	Ruthenium	ug/mL	98.8	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20152628
Cone 4-Liq-a	C105-15-02	S15R000676	ICP-AES	7704-34-9	Sulfur	ug/mL	98.8	<0.0280	<56.0	n/a	n/a	n/a	n/a	56.0	U	20152628
Cone 4-Liq-a	C105-15-02	S15R000676	ICP-AES	7440-36-0	Antimony	ug/mL	97.4	<0.0180	<36.0	n/a	n/a	n/a	n/a	36.0	U	20152628
Cone 4-Liq-a	C105-15-02	S15R000676	ICP-AES	7782-49-2	Selenium	ug/mL	99.1	<0.0300	<60.0	n/a	n/a	n/a	n/a	60.0	U	20152628
Cone 4-Liq-a	C105-15-02	S15R000676	ICP-AES	7440-21-3	Silicon	ug/mL	100	0.0133	160	n/a	n/a	n/a	n/a	24.0	BJ	20152628
Cone 4-Liq-a	C105-15-02	S15R000676	ICP-AES	7440-19-9	Samarium	ug/mL	99.9	<0.0170	<34.0	n/a	n/a	n/a	n/a	34.0	U	20152628
Cone 4-Liq-a	C105-15-02	S15R000676	ICP-AES	7440-31-5	Tin	ug/mL	99.6	<8.00E-03	<16.0	n/a	n/a	n/a	n/a	16.0	U	20152628
Cone 4-Liq-a	C105-15-02	S15R000676	ICP-AES	7440-24-6	Strontium	ug/mL	100	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 4-Liq-a	C105-15-02	S15R000676	ICP-AES	7440-25-7	Tantalum	ug/mL	103	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20152628
Cone 4-Liq-a	C105-15-02	S15R000676	ICP-AES	13494-80-9	Tellurium	ug/mL	100	<9.00E-03	<18.0	n/a	n/a	n/a	n/a	18.0	U	20152628
Cone 4-Liq-a	C105-15-02	S15R000676	ICP-AES	7440-29-1	Thorium	ug/mL	101	<0.0130	<26.0	n/a	n/a	n/a	n/a	26.0	U	20152628
Cone 4-Liq-a	C105-15-02	S15R000676	ICP-AES	7440-32-6	Titanium	ug/mL	97.9	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 4-Liq-a	C105-15-02	S15R000676	ICP-AES	7440-28-0	Thallium	ug/mL	97.5	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 4-Liq-a	C105-15-02	S15R000676	ICP-AES	7440-61-1	Uranium	ug/mL	101	<0.0290	<58.0	n/a	n/a	n/a	n/a	58.0	U	20152628
Cone 4-Liq-a	C105-15-02	S15R000676	ICP-AES	7440-62-2	Vanadium	ug/mL	98.9	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 4-Liq-a	C105-15-02	S15R000676	ICP-AES	7440-33-7	Tungsten	ug/mL	101	<0.0160	<32.0	n/a	n/a	n/a	n/a	32.0	U	20152628
Cone 4-Liq-a	C105-15-02	S15R000676	ICP-AES	7440-65-5	Yttrium	ug/mL	100	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 4-Liq-a	C105-15-02	S15R000676	ICP-AES	7440-66-6	Zinc	ug/mL	99.6	<0.0320	<64.0	n/a	n/a	n/a	n/a	64.0	U	20152628
Cone 4-Liq-a	C105-15-02	S15R000676	ICP-AES	7440-67-7	Zirconium	ug/mL	97.5	<1.00E-03	5.80	n/a	n/a	n/a	n/a	2.00	J	20152628
Cone 4-Liq-a	C105-15-03	S15R000684	ICP-AES	7440-22-4	Silver	ug/mL	100	<3.00E-03	7.27	n/a	n/a	n/a	n/a	6.00	J	20152628
Cone 4-Liq-a	C105-15-03	S15R000684	ICP-AES	7429-90-5	Aluminum	ug/mL	98.9	<0.0140	1.57E+03	n/a	n/a	n/a	n/a	28.0		20152628
Cone 4-Liq-a	C105-15-03	S15R000684	ICP-AES	7440-38-2	Arsenic	ug/mL	99.2	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 4-Liq-a	C105-15-03	S15R000684	ICP-AES	7440-42-8	Boron	ug/mL	95.2	<2.00E-03	8.70	n/a	n/a	n/a	n/a	4.00	J	20152628
Cone 4-Liq-a	C105-15-03	S15R000684	ICP-AES	7440-39-3	Barium	ug/mL	99.3	<1.00E-03	16.5	n/a	n/a	n/a	n/a	2.00	J	20152628
Cone 4-Liq-a	C105-15-03	S15R000684	ICP-AES	7440-41-7	Beryllium	ug/mL	98.8	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 4-Liq-a	C105-15-03	S15R000684	ICP-AES	7440-69-9	Bismuth	ug/mL	99.4	<0.0190	<38.0	n/a	n/a	n/a	n/a	38.0	U	20152628
Cone 4-Liq-a	C105-15-03	S15R000684	ICP-AES	7440-70-2	Calcium	ug/mL	102	<0.120	<240	n/a	n/a	n/a	n/a	240	U	20152628
Cone 4-Liq-a	C105-15-03	S15R000684	ICP-AES	7440-43-9	Cadmium	ug/mL	101	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 4-Liq-a	C105-15-03	S15R000684	ICP-AES	7440-45-1	Cerium	ug/mL	104	<0.0250	<50.0	n/a	n/a	n/a	n/a	50.0	U	20152628
Cone 4-Liq-a	C105-15-03	S15R000684	ICP-AES	7440-48-4	Cobalt	ug/mL	100	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 4-Liq-a	C105-15-03	S15R000684	ICP-AES	7440-47-3	Chromium	ug/mL	98.6	<2.00E-03	27.5	n/a	n/a	n/a	n/a	4.00	J	20152628
Cone 4-Liq-a	C105-15-03	S15R000684	ICP-AES	7440-50-8	Copper	ug/mL	100	<2.00E-03	162	n/a	n/a	n/a	n/a	4.00		20152628
Cone 4-Liq-a	C105-15-03	S15R000684	ICP-AES	7440-53-1	Europium	ug/mL	103	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 4-Liq-a	C105-15-03	S15R000684	ICP-AES	7439-89-6	Iron	ug/mL	99.9	<0.0200	79.7	n/a	n/a	n/a	n/a	40.0	J	20152628
Cone 4-Liq-a	C105-15-03	S15R000684	ICP-AES	7440-09-7	Potassium	ug/mL	99.8	<0.0220	61.5	n/a	n/a	n/a	n/a	44.0	J	20152628
Cone 4-Liq-a	C105-15-03	S15R000684	ICP-AES	7439-91-0	Lanthanum	ug/mL	99.8	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 4-Liq-a	C105-15-03	S15R000684	ICP-AES	7439-93-2	Lithium	ug/mL	102	<1.00E-03	2.74	n/a	n/a	n/a	n/a	2.00	J	20152628
Cone 4-Liq-a	C105-15-03	S15R000684	ICP-AES	7439-95-4	Magnesium	ug/mL	99.3	<9.00E-03	<18.0	n/a	n/a	n/a	n/a	18.0	U	20152628
Cone 4-Liq-a	C105-15-03	S15R000684	ICP-AES	7439-96-5	Manganese	ug/mL	101	<1.00E-03	173	n/a	n/a	n/a	n/a	2.00		20152628
Cone 4-Liq-a	C105-15-03	S15R000684	ICP-AES	7439-98-7	Molybdenum	ug/mL	92.1	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 4-Liq-a	C105-15-03	S15R000684	ICP-AES	7440-23-5	Sodium	ug/mL	102	<0.0920	4.44E+05	n/a	n/a	n/a	n/a	184		20152628

Cone 4-Liq-a	C105-15-03	S15R000684	ICP-AES	7440-00-8	Neodymium	ug/mL	101	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 4-Liq-a	C105-15-03	S15R000684	ICP-AES	7440-02-0	Nickel	ug/mL	98.4	<2.00E-03	13.4	n/a	n/a	n/a	n/a	4.00	J	20152628
Cone 4-Liq-a	C105-15-03	S15R000684	ICP-AES	7440-30-1	Niobium	ug/mL	99.2	<6.00E-03	<12.0	n/a	n/a	n/a	n/a	12.0	U	20152628
Cone 4-Liq-a	C105-15-03	S15R000684	ICP-AES	7723-14-0	Phosphorus	ug/mL	94.7	<0.0130	131	n/a	n/a	n/a	n/a	26.0	J	20152628
Cone 4-Liq-a	C105-15-03	S15R000684	ICP-AES	7439-92-1	Lead	ug/mL	102	<0.0130	<26.0	n/a	n/a	n/a	n/a	26.0	U	20152628
Cone 4-Liq-a	C105-15-03	S15R000684	ICP-AES	7440-05-3	Palladium	ug/mL	102	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20152628
Cone 4-Liq-a	C105-15-03	S15R000684	ICP-AES	7440-10-0	Praseodymium	ug/mL	108	<0.0260	<52.0	n/a	n/a	n/a	n/a	52.0	U	20152628
Cone 4-Liq-a	C105-15-03	S15R000684	ICP-AES	7440-17-7	Rubidium	ug/mL	101	<0.0570	<114	n/a	n/a	n/a	n/a	114	U	20152628
Cone 4-Liq-a	C105-15-03	S15R000684	ICP-AES	7440-16-6	Rhodium	ug/mL	99.9	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20152628
Cone 4-Liq-a	C105-15-03	S15R000684	ICP-AES	7440-18-8	Ruthenium	ug/mL	106	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20152628
Cone 4-Liq-a	C105-15-03	S15R000684	ICP-AES	7704-34-9	Sulfur	ug/mL	93.5	<0.0280	<56.0	n/a	n/a	n/a	n/a	56.0	U	20152628
Cone 4-Liq-a	C105-15-03	S15R000684	ICP-AES	7440-36-0	Antimony	ug/mL	91.9	<0.0180	<36.0	n/a	n/a	n/a	n/a	36.0	U	20152628
Cone 4-Liq-a	C105-15-03	S15R000684	ICP-AES	7782-49-2	Selenium	ug/mL	98.7	<0.0300	<60.0	n/a	n/a	n/a	n/a	60.0	U	20152628
Cone 4-Liq-a	C105-15-03	S15R000684	ICP-AES	7440-21-3	Silicon	ug/mL	94.9	0.0167	217	n/a	n/a	n/a	n/a	24.0	BJ	20152628
Cone 4-Liq-a	C105-15-03	S15R000684	ICP-AES	7440-19-9	Samarium	ug/mL	103	<0.0170	<34.0	n/a	n/a	n/a	n/a	34.0	U	20152628
Cone 4-Liq-a	C105-15-03	S15R000684	ICP-AES	7440-31-5	Tin	ug/mL	96.9	<8.00E-03	<16.0	n/a	n/a	n/a	n/a	16.0	UY	20152628
Cone 4-Liq-a	C105-15-03	S15R000684	ICP-AES	7440-24-6	Strontium	ug/mL	98.5	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 4-Liq-a	C105-15-03	S15R000684	ICP-AES	7440-25-7	Tantalum	ug/mL	100	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20152628
Cone 4-Liq-a	C105-15-03	S15R000684	ICP-AES	13494-80-9	Tellurium	ug/mL	100	<9.00E-03	<18.0	n/a	n/a	n/a	n/a	18.0	U	20152628
Cone 4-Liq-a	C105-15-03	S15R000684	ICP-AES	7440-29-1	Thorium	ug/mL	101	<0.0130	<26.0	n/a	n/a	n/a	n/a	26.0	U	20152628
Cone 4-Liq-a	C105-15-03	S15R000684	ICP-AES	7440-32-6	Titanium	ug/mL	90.5	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 4-Liq-a	C105-15-03	S15R000684	ICP-AES	7440-28-0	Thallium	ug/mL	105	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 4-Liq-a	C105-15-03	S15R000684	ICP-AES	7440-61-1	Uranium	ug/mL	101	<0.0290	<58.0	n/a	n/a	n/a	n/a	58.0	U	20152628
Cone 4-Liq-a	C105-15-03	S15R000684	ICP-AES	7440-62-2	Vanadium	ug/mL	97.4	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 4-Liq-a	C105-15-03	S15R000684	ICP-AES	7440-33-7	Tungsten	ug/mL	99.6	<0.0160	<32.0	n/a	n/a	n/a	n/a	32.0	U	20152628
Cone 4-Liq-a	C105-15-03	S15R000684	ICP-AES	7440-65-5	Yttrium	ug/mL	102	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 4-Liq-a	C105-15-03	S15R000684	ICP-AES	7440-66-6	Zinc	ug/mL	99.5	<0.0320	<64.0	n/a	n/a	n/a	n/a	64.0	U	20152628
Cone 4-Liq-a	C105-15-03	S15R000684	ICP-AES	7440-67-7	Zirconium	ug/mL	91.5	<1.00E-03	6.78	n/a	n/a	n/a	n/a	2.00	J	20152628
Cone 4-Liq-b	C105-15-03	S15R000690	ICP-AES	7440-22-4	Silver	ug/mL	100	<3.00E-03	<6.00	n/a	n/a	n/a	n/a	6.00	U	20152628
Cone 4-Liq-b	C105-15-03	S15R000690	ICP-AES	7429-90-5	Aluminum	ug/mL	98.9	<0.0140	1.68E+03	n/a	n/a	n/a	n/a	28.0		20152628
Cone 4-Liq-b	C105-15-03	S15R000690	ICP-AES	7440-38-2	Arsenic	ug/mL	99.2	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 4-Liq-b	C105-15-03	S15R000690	ICP-AES	7440-42-8	Boron	ug/mL	95.2	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 4-Liq-b	C105-15-03	S15R000690	ICP-AES	7440-39-3	Barium	ug/mL	99.3	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 4-Liq-b	C105-15-03	S15R000690	ICP-AES	7440-41-7	Beryllium	ug/mL	98.8	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 4-Liq-b	C105-15-03	S15R000690	ICP-AES	7440-69-9	Bismuth	ug/mL	99.4	<0.0190	<38.0	n/a	n/a	n/a	n/a	38.0	U	20152628
Cone 4-Liq-b	C105-15-03	S15R000690	ICP-AES	7440-70-2	Calcium	ug/mL	102	<0.120	<240	n/a	n/a	n/a	n/a	240	U	20152628
Cone 4-Liq-b	C105-15-03	S15R000690	ICP-AES	7440-43-9	Cadmium	ug/mL	101	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 4-Liq-b	C105-15-03	S15R000690	ICP-AES	7440-45-1	Cerium	ug/mL	104	<0.0250	<50.0	n/a	n/a	n/a	n/a	50.0	U	20152628
Cone 4-Liq-b	C105-15-03	S15R000690	ICP-AES	7440-48-4	Cobalt	ug/mL	100	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 4-Liq-b	C105-15-03	S15R000690	ICP-AES	7440-47-3	Chromium	ug/mL	98.6	<2.00E-03	39.5	n/a	n/a	n/a	n/a	4.00	J	20152628
Cone 4-Liq-b	C105-15-03	S15R000690	ICP-AES	7440-50-8	Copper	ug/mL	100	<2.00E-03	100	n/a	n/a	n/a	n/a	4.00		20152628
Cone 4-Liq-b	C105-15-03	S15R000690	ICP-AES	7440-53-1	Europium	ug/mL	103	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 4-Liq-b	C105-15-03	S15R000690	ICP-AES	7439-89-6	Iron	ug/mL	99.9	<0.0200	169	n/a	n/a	n/a	n/a	40.0	J	20152628
Cone 4-Liq-b	C105-15-03	S15R000690	ICP-AES	7440-09-7	Potassium	ug/mL	99.8	<0.0220	<44.0	n/a	n/a	n/a	n/a	44.0	U	20152628
Cone 4-Liq-b	C105-15-03	S15R000690	ICP-AES	7439-91-0	Lanthanum	ug/mL	99.8	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 4-Liq-b	C105-15-03	S15R000690	ICP-AES	7439-93-2	Lithium	ug/mL	102	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 4-Liq-b	C105-15-03	S15R000690	ICP-AES	7439-95-4	Magnesium	ug/mL	99.3	<9.00E-03	<18.0	n/a	n/a	n/a	n/a	18.0	U	20152628
Cone 4-Liq-b	C105-15-03	S15R000690	ICP-AES	7439-96-5	Manganese	ug/mL	101	<1.00E-03	329	n/a	n/a	n/a	n/a	2.00		20152628
Cone 4-Liq-b	C105-15-03	S15R000690	ICP-AES	7439-98-7	Molybdenum	ug/mL	92.1	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 4-Liq-b	C105-15-03	S15R000690	ICP-AES	7440-23-5	Sodium	ug/mL	102	<0.0920	2.41E+04	n/a	n/a	n/a	n/a	184		20152628
Cone 4-Liq-b	C105-15-03	S15R000690	ICP-AES	7440-00-8	Neodymium	ug/mL	101	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 4-Liq-b	C105-15-03	S15R000690	ICP-AES	7440-02-0	Nickel	ug/mL	98.4	<2.00E-03	22.9	n/a	n/a	n/a	n/a	4.00	J	20152628
Cone 4-Liq-b	C105-15-03	S15R000690	ICP-AES	7440-30-1	Niobium	ug/mL	99.2	<6.00E-03	<12.0	n/a	n/a	n/a	n/a	12.0	U	20152628
Cone 4-Liq-b	C105-15-03	S15R000690	ICP-AES	7723-14-0	Phosphorus	ug/mL	94.7	<0.0130	59.6	n/a	n/a	n/a	n/a	26.0	J	20152628
Cone 4-Liq-b	C105-15-03	S15R000690	ICP-AES	7439-92-1	Lead	ug/mL	102	<0.0130	<26.0	n/a	n/a	n/a	n/a	26.0	U	20152628
Cone 4-Liq-b	C105-15-03	S15R000690	ICP-AES	7440-05-3	Palladium	ug/mL	102	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20152628
Cone 4-Liq-b	C105-15-03	S15R000690	ICP-AES	7440-10-0	Praseodymium	ug/mL	108	<0.0260	<52.0	n/a	n/a	n/a	n/a	52.0	U	20152628
Cone 4-Liq-b	C105-15-03	S15R000690	ICP-AES	7440-17-7	Rubidium	ug/mL	101	<0.0570	<114	n/a	n/a	n/a	n/a	114	U	20152628
Cone 4-Liq-b	C105-15-03	S15R000690	ICP-AES	7440-16-6	Rhodium	ug/mL	99.9	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20152628
Cone 4-Liq-b	C105-15-03	S15R000690	ICP-AES	7440-18-8	Ruthenium	ug/mL	106	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20152628
Cone 4-Liq-b	C105-15-03	S15R000690	ICP-AES	7704-34-9	Sulfur	ug/mL	93.5	<0.0280	242	n/a	n/a	n/a	n/a	56.0	J	20152628
Cone 4-Liq-b	C105-15-03	S15R000690	ICP-AES	7440-36-0	Antimony	ug/mL	91.9	<0.0180	<36.0	n/a	n/a	n/a	n/a	36.0	U	20152628
Cone 4-Liq-b	C105-15-03	S15R000690	ICP-AES	7782-49-2	Selenium	ug/mL	98.7	<0.0300	<60.0	n/a	n/a	n/a	n/a	60.0	U	20152628
Cone 4-Liq-b	C105-15-03	S15R000690	ICP-AES	7440-21-3	Silicon	ug/mL	94.9	0.0167	<24.0	n/a	n/a	n/a	n/a	24.0	U	20152628
Cone 4-Liq-b	C105-15-03	S15R000690	ICP-AES	7440-19-9	Samarium	ug/mL	103	<0.0170	<34.0	n/a	n/a	n/a	n/a	34.0	U	20152628
Cone 4-Liq-b	C105-15-03	S15R000690	ICP-AES	7440-31-5	Tin	ug/mL	96.9	<8.00E-03	<16.0	n/a	n/a	n/a	n/a	16.0	UY	20152628
Cone 4-Liq-b	C105-15-03	S15R000690	ICP-AES	7440-24-6	Strontium	ug/mL	98.5	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 4-Liq-b	C105-15-03	S15R000690	ICP-AES	7440-25-7	Tantalum	ug/mL	100	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20152628
Cone 4-Liq-b	C105-15-03	S15R000690	ICP-AES	13494-80-9	Tellurium	ug/mL	100	<9.00E-03	<18.0	n/a	n/a	n/a	n/a	18.0	U	20152628
Cone 4-Liq-b	C105-15-03	S15R000690	ICP-AES	7440-29-1	Thorium	ug/mL	101	<0.0130	<26.0	n/a	n/a	n/a	n/a	26.0	U	20152628
Cone 4-Liq-b	C105-15-03	S15R000690	ICP-AES	7440-32-6	Titanium	ug/mL	90.5	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 4-Liq-b	C105-15-03	S15R000690	ICP-AES	7440-28-0	Thallium	ug/mL	105	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 4-Liq-b	C105-15-03	S15R000690	ICP-AES	7440-61-1	Uranium	ug/mL	101	<0.0290	1.81E+03	n/a	n/a	n/a	n/a	58.0		20152628
Cone 4-Liq-b	C105-15-03	S15R000690	ICP-AES	7440-62-2	Vanadium	ug/mL	97.4	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 4-Liq-b	C105-15-03	S15R000690	ICP-AES	7440-33-7	Tungsten	ug/mL	99.6	<0.0160	<32.0	n/a	n/a	n/a	n/a	32.0	U	20152628
Cone 4-Liq-b	C105-15-03	S15R000690	ICP-AES	7440-65-5	Yttrium	ug/mL	102	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 4-Liq-b	C105-15-03	S15R000690	ICP-AES	7440-66-6	Zinc	ug/mL	99.5	<0.0320	<64.0	n/a	n/a	n/a	n/a	64.0	U	20152628
Cone 4-Liq-b	C105-15-03	S15R000690	ICP-AES	7440-67-7	Zirconium	ug/mL	91.5	<1.00E-03	25.5	n/a	n/a	n/a	n/a	2.00		20152628
Cone 5-Liq-a	C105-15-03	S15R000685	ICP-AES	7440-22-4	Silver	ug/mL	100	<3.00E-03	<6.00	n/a	n/a	n/a	n/a	6.00	U	20152628
Cone 5-Liq-a	C105-15-03	S15R000685	ICP-AES	7429-90-5	Aluminum	ug/mL	98.9	<0.0140	4.85E+03	n/a	n/a	n/a	n/a	28.0		20152628
Cone 5-Liq-a	C105-15-03	S15R000685	ICP-AES	7440-38-2	Arsenic	ug/mL	99.2	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 5-Liq-a	C105-15-03	S15R000685	ICP-AES	7440-42-8	Boron	ug/mL	95.2	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628

Cone 5-Liq-a	C105-15-03	S15R000685	ICP-AES	7440-39-3	Barium	ug/mL	99.3	<1.00E-03	4.41	n/a	n/a	n/a	n/a	2.00	J	20152628
Cone 5-Liq-a	C105-15-03	S15R000685	ICP-AES	7440-41-7	Beryllium	ug/mL	98.8	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 5-Liq-a	C105-15-03	S15R000685	ICP-AES	7440-69-9	Bismuth	ug/mL	99.4	<0.0190	<38.0	n/a	n/a	n/a	n/a	38.0	U	20152628
Cone 5-Liq-a	C105-15-03	S15R000685	ICP-AES	7440-70-2	Calcium	ug/mL	102	<0.120	874	n/a	n/a	n/a	n/a	240	J	20152628
Cone 5-Liq-a	C105-15-03	S15R000685	ICP-AES	7440-43-9	Cadmium	ug/mL	101	<1.00E-03	11.6	n/a	n/a	n/a	n/a	2.00	J	20152628
Cone 5-Liq-a	C105-15-03	S15R000685	ICP-AES	7440-45-1	Cerium	ug/mL	104	<0.0250	64.3	n/a	n/a	n/a	n/a	50.0	J	20152628
Cone 5-Liq-a	C105-15-03	S15R000685	ICP-AES	7440-48-4	Cobalt	ug/mL	100	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 5-Liq-a	C105-15-03	S15R000685	ICP-AES	7440-47-3	Chromium	ug/mL	98.6	<2.00E-03	195	n/a	n/a	n/a	n/a	4.00		20152628
Cone 5-Liq-a	C105-15-03	S15R000685	ICP-AES	7440-50-8	Copper	ug/mL	100	<2.00E-03	1.02E+03	n/a	n/a	n/a	n/a	4.00		20152628
Cone 5-Liq-a	C105-15-03	S15R000685	ICP-AES	7440-53-1	Europium	ug/mL	103	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 5-Liq-a	C105-15-03	S15R000685	ICP-AES	7439-89-6	Iron	ug/mL	99.9	<0.0200	1.45E+03	n/a	n/a	n/a	n/a	40.0		20152628
Cone 5-Liq-a	C105-15-03	S15R000685	ICP-AES	7440-09-7	Potassium	ug/mL	99.8	<0.0220	91.8	n/a	n/a	n/a	n/a	44.0	J	20152628
Cone 5-Liq-a	C105-15-03	S15R000685	ICP-AES	7439-91-0	Lanthanum	ug/mL	99.8	<1.00E-03	16.1	n/a	n/a	n/a	n/a	2.00	J	20152628
Cone 5-Liq-a	C105-15-03	S15R000685	ICP-AES	7439-93-2	Lithium	ug/mL	102	<1.00E-03	2.81	n/a	n/a	n/a	n/a	2.00	J	20152628
Cone 5-Liq-a	C105-15-03	S15R000685	ICP-AES	7439-95-4	Magnesium	ug/mL	99.3	<9.00E-03	101	n/a	n/a	n/a	n/a	18.0	J	20152628
Cone 5-Liq-a	C105-15-03	S15R000685	ICP-AES	7439-96-5	Manganese	ug/mL	101	<1.00E-03	1.93E+03	n/a	n/a	n/a	n/a	2.00		20152628
Cone 5-Liq-a	C105-15-03	S15R000685	ICP-AES	7439-98-7	Molybdenum	ug/mL	92.1	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 5-Liq-a	C105-15-03	S15R000685	ICP-AES	7440-23-5	Sodium	ug/mL	102	<0.0920	2.19E+04	n/a	n/a	n/a	n/a	184		20152628
Cone 5-Liq-a	C105-15-03	S15R000685	ICP-AES	7440-00-8	Neodymium	ug/mL	101	<0.0150	63.8	n/a	n/a	n/a	n/a	30.0	J	20152628
Cone 5-Liq-a	C105-15-03	S15R000685	ICP-AES	7440-02-0	Nickel	ug/mL	98.4	<2.00E-03	176	n/a	n/a	n/a	n/a	4.00		20152628
Cone 5-Liq-a	C105-15-03	S15R000685	ICP-AES	7440-30-1	Niobium	ug/mL	99.2	<6.00E-03	<12.0	n/a	n/a	n/a	n/a	12.0	U	20152628
Cone 5-Liq-a	C105-15-03	S15R000685	ICP-AES	7723-14-0	Phosphorus	ug/mL	94.7	<0.0130	668	n/a	n/a	n/a	n/a	26.0		20152628
Cone 5-Liq-a	C105-15-03	S15R000685	ICP-AES	7439-92-1	Lead	ug/mL	102	<0.0130	154	n/a	n/a	n/a	n/a	26.0	J	20152628
Cone 5-Liq-a	C105-15-03	S15R000685	ICP-AES	7440-05-3	Palladium	ug/mL	102	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20152628
Cone 5-Liq-a	C105-15-03	S15R000685	ICP-AES	7440-10-0	Praseodymium	ug/mL	108	<0.0260	<52.0	n/a	n/a	n/a	n/a	52.0	U	20152628
Cone 5-Liq-a	C105-15-03	S15R000685	ICP-AES	7440-17-7	Rubidium	ug/mL	101	<0.0570	<114	n/a	n/a	n/a	n/a	114	U	20152628
Cone 5-Liq-a	C105-15-03	S15R000685	ICP-AES	7440-16-6	Rhodium	ug/mL	99.9	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20152628
Cone 5-Liq-a	C105-15-03	S15R000685	ICP-AES	7440-18-8	Ruthenium	ug/mL	106	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20152628
Cone 5-Liq-a	C105-15-03	S15R000685	ICP-AES	7704-34-9	Sulfur	ug/mL	93.5	<0.0280	555	n/a	n/a	n/a	n/a	56.0	J	20152628
Cone 5-Liq-a	C105-15-03	S15R000685	ICP-AES	7440-36-0	Antimony	ug/mL	91.9	<0.0180	<36.0	n/a	n/a	n/a	n/a	36.0	U	20152628
Cone 5-Liq-a	C105-15-03	S15R000685	ICP-AES	7782-49-2	Selenium	ug/mL	98.7	<0.0300	<60.0	n/a	n/a	n/a	n/a	60.0	U	20152628
Cone 5-Liq-a	C105-15-03	S15R000685	ICP-AES	7440-21-3	Silicon	ug/mL	94.9	0.0167	570	n/a	n/a	n/a	n/a	24.0		20152628
Cone 5-Liq-a	C105-15-03	S15R000685	ICP-AES	7440-19-9	Samarium	ug/mL	103	<0.0170	49.5	n/a	n/a	n/a	n/a	34.0	J	20152628
Cone 5-Liq-a	C105-15-03	S15R000685	ICP-AES	7440-31-5	Tin	ug/mL	96.9	<8.00E-03	<16.0	n/a	n/a	n/a	n/a	16.0	UY	20152628
Cone 5-Liq-a	C105-15-03	S15R000685	ICP-AES	7440-24-6	Strontium	ug/mL	98.5	<2.00E-03	22.6	n/a	n/a	n/a	n/a	4.00	J	20152628
Cone 5-Liq-a	C105-15-03	S15R000685	ICP-AES	7440-25-7	Tantalum	ug/mL	100	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20152628
Cone 5-Liq-a	C105-15-03	S15R000685	ICP-AES	13494-80-9	Tellurium	ug/mL	100	<9.00E-03	<18.0	n/a	n/a	n/a	n/a	18.0	U	20152628
Cone 5-Liq-a	C105-15-03	S15R000685	ICP-AES	7440-29-1	Thorium	ug/mL	101	<0.0130	44.2	n/a	n/a	n/a	n/a	26.0	J	20152628
Cone 5-Liq-a	C105-15-03	S15R000685	ICP-AES	7440-32-6	Titanium	ug/mL	90.5	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 5-Liq-a	C105-15-03	S15R000685	ICP-AES	7440-28-0	Thallium	ug/mL	105	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 5-Liq-a	C105-15-03	S15R000685	ICP-AES	7440-61-1	Uranium	ug/mL	101	<0.0290	2.94E+03	n/a	n/a	n/a	n/a	58.0		20152628
Cone 5-Liq-a	C105-15-03	S15R000685	ICP-AES	7440-62-2	Vanadium	ug/mL	97.4	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 5-Liq-a	C105-15-03	S15R000685	ICP-AES	7440-33-7	Tungsten	ug/mL	99.6	<0.0160	<32.0	n/a	n/a	n/a	n/a	32.0	U	20152628
Cone 5-Liq-a	C105-15-03	S15R000685	ICP-AES	7440-65-5	Yttrium	ug/mL	102	<2.00E-03	16.3	n/a	n/a	n/a	n/a	4.00	J	20152628
Cone 5-Liq-a	C105-15-03	S15R000685	ICP-AES	7440-66-6	Zinc	ug/mL	99.5	<0.0320	<64.0	n/a	n/a	n/a	n/a	64.0	U	20152628
Cone 5-Liq-a	C105-15-03	S15R000685	ICP-AES	7440-67-7	Zirconium	ug/mL	91.5	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 5-Liq-b	C105-15-03	S15R000691	ICP-AES	7440-22-4	Silver	ug/mL	100	<3.00E-03	<6.00	n/a	n/a	n/a	n/a	6.00	U	20152628
Cone 5-Liq-b	C105-15-03	S15R000691	ICP-AES	7429-90-5	Aluminum	ug/mL	98.9	<0.0140	132	n/a	n/a	n/a	n/a	28.0	J	20152628
Cone 5-Liq-b	C105-15-03	S15R000691	ICP-AES	7440-38-2	Arsenic	ug/mL	99.2	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 5-Liq-b	C105-15-03	S15R000691	ICP-AES	7440-42-8	Boron	ug/mL	95.2	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 5-Liq-b	C105-15-03	S15R000691	ICP-AES	7440-39-3	Barium	ug/mL	99.3	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 5-Liq-b	C105-15-03	S15R000691	ICP-AES	7440-41-7	Beryllium	ug/mL	98.8	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 5-Liq-b	C105-15-03	S15R000691	ICP-AES	7440-69-9	Bismuth	ug/mL	99.4	<0.0190	<38.0	n/a	n/a	n/a	n/a	38.0	U	20152628
Cone 5-Liq-b	C105-15-03	S15R000691	ICP-AES	7440-70-2	Calcium	ug/mL	102	<0.120	<240	n/a	n/a	n/a	n/a	240	U	20152628
Cone 5-Liq-b	C105-15-03	S15R000691	ICP-AES	7440-43-9	Cadmium	ug/mL	101	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 5-Liq-b	C105-15-03	S15R000691	ICP-AES	7440-45-1	Cerium	ug/mL	104	<0.0250	<50.0	n/a	n/a	n/a	n/a	50.0	U	20152628
Cone 5-Liq-b	C105-15-03	S15R000691	ICP-AES	7440-48-4	Cobalt	ug/mL	100	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 5-Liq-b	C105-15-03	S15R000691	ICP-AES	7440-47-3	Chromium	ug/mL	98.6	<2.00E-03	4.93	n/a	n/a	n/a	n/a	4.00	J	20152628
Cone 5-Liq-b	C105-15-03	S15R000691	ICP-AES	7440-50-8	Copper	ug/mL	100	<2.00E-03	53.3	n/a	n/a	n/a	n/a	4.00		20152628
Cone 5-Liq-b	C105-15-03	S15R000691	ICP-AES	7440-53-1	Europium	ug/mL	103	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 5-Liq-b	C105-15-03	S15R000691	ICP-AES	7439-89-6	Iron	ug/mL	99.9	<0.0200	<40.0	n/a	n/a	n/a	n/a	40.0	U	20152628
Cone 5-Liq-b	C105-15-03	S15R000691	ICP-AES	7440-09-7	Potassium	ug/mL	99.8	<0.0220	<44.0	n/a	n/a	n/a	n/a	44.0	U	20152628
Cone 5-Liq-b	C105-15-03	S15R000691	ICP-AES	7439-91-0	Lanthanum	ug/mL	99.8	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 5-Liq-b	C105-15-03	S15R000691	ICP-AES	7439-93-2	Lithium	ug/mL	102	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 5-Liq-b	C105-15-03	S15R000691	ICP-AES	7439-95-4	Magnesium	ug/mL	99.3	<9.00E-03	<18.0	n/a	n/a	n/a	n/a	18.0	U	20152628
Cone 5-Liq-b	C105-15-03	S15R000691	ICP-AES	7439-96-5	Manganese	ug/mL	101	<1.00E-03	40.9	n/a	n/a	n/a	n/a	2.00		20152628
Cone 5-Liq-b	C105-15-03	S15R000691	ICP-AES	7439-98-7	Molybdenum	ug/mL	92.1	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 5-Liq-b	C105-15-03	S15R000691	ICP-AES	7440-23-5	Sodium	ug/mL	102	<0.0920	257	n/a	n/a	n/a	n/a	184	J	20152628
Cone 5-Liq-b	C105-15-03	S15R000691	ICP-AES	7440-00-8	Neodymium	ug/mL	101	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 5-Liq-b	C105-15-03	S15R000691	ICP-AES	7440-02-0	Nickel	ug/mL	98.4	<2.00E-03	5.63	n/a	n/a	n/a	n/a	4.00	J	20152628
Cone 5-Liq-b	C105-15-03	S15R000691	ICP-AES	7440-30-1	Niobium	ug/mL	99.2	<6.00E-03	<12.0	n/a	n/a	n/a	n/a	12.0	U	20152628
Cone 5-Liq-b	C105-15-03	S15R000691	ICP-AES	7723-14-0	Phosphorus	ug/mL	94.7	<0.0130	<26.0	n/a	n/a	n/a	n/a	26.0	U	20152628
Cone 5-Liq-b	C105-15-03	S15R000691	ICP-AES	7439-92-1	Lead	ug/mL	102	<0.0130	<26.0	n/a	n/a	n/a	n/a	26.0	U	20152628
Cone 5-Liq-b	C105-15-03	S15R000691	ICP-AES	7440-05-3	Palladium	ug/mL	102	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20152628
Cone 5-Liq-b	C105-15-03	S15R000691	ICP-AES	7440-10-0	Praseodymium	ug/mL	108	<0.0260	<52.0	n/a	n/a	n/a	n/a	52.0	U	20152628
Cone 5-Liq-b	C105-15-03	S15R000691	ICP-AES	7440-17-7	Rubidium	ug/mL	101	<0.0570	<114	n/a	n/a	n/a	n/a	114	U	20152628
Cone 5-Liq-b	C105-15-03	S15R000691	ICP-AES	7440-16-6	Rhodium	ug/mL	99.9	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20152628
Cone 5-Liq-b	C105-15-03	S15R000691	ICP-AES	7440-18-8	Ruthenium	ug/mL	106	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20152628
Cone 5-Liq-b	C105-15-03	S15R000691	ICP-AES	7704-34-9	Sulfur	ug/mL	93.5	<0.0280	<56.0	n/a	n/a	n/a	n/a	56.0	U	20152628
Cone 5-Liq-b	C105-15-03	S15R000691	ICP-AES	7440-36-0	Antimony	ug/mL	91.9	<0.0180	<36.0	n/a	n/a	n/a	n/a	36.0	U	20152628
Cone 5-Liq-b	C105-15-03	S15R000691	ICP-AES	7782-49-2	Selenium	ug/mL	98.7	<0.0300	<60.0	n/a	n/a	n/a	n/a	60.0	U	20152628
Cone 5-Liq-b	C105-15-03	S15R000691	ICP-AES	7440-21-3	Silicon	ug/mL	94.9	0.0167	<24.0	n/a	n/a	n/a	n/a	24.0	U	20152628

Cone 5-Liq-b	C105-15-03	S15R000691	ICP-AES	7440-19-9	Samarium	ug/mL	103	<0.0170	<34.0	n/a	n/a	n/a	n/a	34.0	U	20152628
Cone 5-Liq-b	C105-15-03	S15R000691	ICP-AES	7440-31-5	Tin	ug/mL	96.9	<8.00E-03	<16.0	n/a	n/a	n/a	n/a	16.0	UY	20152628
Cone 5-Liq-b	C105-15-03	S15R000691	ICP-AES	7440-24-6	Strontium	ug/mL	98.5	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 5-Liq-b	C105-15-03	S15R000691	ICP-AES	7440-25-7	Tantalum	ug/mL	100	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20152628
Cone 5-Liq-b	C105-15-03	S15R000691	ICP-AES	13494-80-9	Tellurium	ug/mL	100	<9.00E-03	<18.0	n/a	n/a	n/a	n/a	18.0	U	20152628
Cone 5-Liq-b	C105-15-03	S15R000691	ICP-AES	7440-29-1	Thorium	ug/mL	101	<0.0130	<26.0	n/a	n/a	n/a	n/a	26.0	U	20152628
Cone 5-Liq-b	C105-15-03	S15R000691	ICP-AES	7440-32-6	Titanium	ug/mL	90.5	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 5-Liq-b	C105-15-03	S15R000691	ICP-AES	7440-28-0	Thallium	ug/mL	105	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 5-Liq-b	C105-15-03	S15R000691	ICP-AES	7440-61-1	Uranium	ug/mL	101	<0.0290	<58.0	n/a	n/a	n/a	n/a	58.0	U	20152628
Cone 5-Liq-b	C105-15-03	S15R000691	ICP-AES	7440-62-2	Vanadium	ug/mL	97.4	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 5-Liq-b	C105-15-03	S15R000691	ICP-AES	7440-33-7	Tungsten	ug/mL	99.6	<0.0160	<32.0	n/a	n/a	n/a	n/a	32.0	U	20152628
Cone 5-Liq-b	C105-15-03	S15R000691	ICP-AES	7440-65-5	Yttrium	ug/mL	102	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 5-Liq-b	C105-15-03	S15R000691	ICP-AES	7440-66-6	Zinc	ug/mL	99.5	<0.0320	<64.0	n/a	n/a	n/a	n/a	64.0	U	20152628
Cone 5-Liq-b	C105-15-03	S15R000691	ICP-AES	7440-67-7	Zirconium	ug/mL	91.5	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 6-Liq-a	C105-15-03	S15R000686	ICP-AES	7440-22-4	Silver	ug/mL	100	<3.00E-03	<6.00	n/a	n/a	n/a	n/a	6.00	U	20152628
Cone 6-Liq-a	C105-15-03	S15R000686	ICP-AES	7429-90-5	Aluminum	ug/mL	98.9	<0.0140	4.65E+03	n/a	n/a	n/a	n/a	28.0		20152628
Cone 6-Liq-a	C105-15-03	S15R000686	ICP-AES	7440-38-2	Arsenic	ug/mL	99.2	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 6-Liq-a	C105-15-03	S15R000686	ICP-AES	7440-42-8	Boron	ug/mL	95.2	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 6-Liq-a	C105-15-03	S15R000686	ICP-AES	7440-39-3	Barium	ug/mL	99.3	<1.00E-03	4.59	n/a	n/a	n/a	n/a	2.00	J	20152628
Cone 6-Liq-a	C105-15-03	S15R000686	ICP-AES	7440-41-7	Beryllium	ug/mL	98.8	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 6-Liq-a	C105-15-03	S15R000686	ICP-AES	7440-69-9	Bismuth	ug/mL	99.4	<0.0190	<38.0	n/a	n/a	n/a	n/a	38.0	U	20152628
Cone 6-Liq-a	C105-15-03	S15R000686	ICP-AES	7440-70-2	Calcium	ug/mL	102	<0.120	793	n/a	n/a	n/a	n/a	240	J	20152628
Cone 6-Liq-a	C105-15-03	S15R000686	ICP-AES	7440-43-9	Cadmium	ug/mL	101	<1.00E-03	11.5	n/a	n/a	n/a	n/a	2.00	J	20152628
Cone 6-Liq-a	C105-15-03	S15R000686	ICP-AES	7440-45-1	Cerium	ug/mL	104	<0.0250	64.0	n/a	n/a	n/a	n/a	50.0	J	20152628
Cone 6-Liq-a	C105-15-03	S15R000686	ICP-AES	7440-48-4	Cobalt	ug/mL	100	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 6-Liq-a	C105-15-03	S15R000686	ICP-AES	7440-47-3	Chromium	ug/mL	98.6	<2.00E-03	185	n/a	n/a	n/a	n/a	4.00		20152628
Cone 6-Liq-a	C105-15-03	S15R000686	ICP-AES	7440-50-8	Copper	ug/mL	100	<2.00E-03	508	n/a	n/a	n/a	n/a	4.00		20152628
Cone 6-Liq-a	C105-15-03	S15R000686	ICP-AES	7440-53-1	Europium	ug/mL	103	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 6-Liq-a	C105-15-03	S15R000686	ICP-AES	7439-89-6	Iron	ug/mL	99.9	<0.0200	1.37E+03	n/a	n/a	n/a	n/a	40.0		20152628
Cone 6-Liq-a	C105-15-03	S15R000686	ICP-AES	7440-09-7	Potassium	ug/mL	99.8	<0.0220	108	n/a	n/a	n/a	n/a	44.0	J	20152628
Cone 6-Liq-a	C105-15-03	S15R000686	ICP-AES	7439-91-0	Lanthanum	ug/mL	99.8	<1.00E-03	16.7	n/a	n/a	n/a	n/a	2.00	J	20152628
Cone 6-Liq-a	C105-15-03	S15R000686	ICP-AES	7439-93-2	Lithium	ug/mL	102	<1.00E-03	3.00	n/a	n/a	n/a	n/a	2.00	J	20152628
Cone 6-Liq-a	C105-15-03	S15R000686	ICP-AES	7439-95-4	Magnesium	ug/mL	99.3	<9.00E-03	96.6	n/a	n/a	n/a	n/a	18.0	J	20152628
Cone 6-Liq-a	C105-15-03	S15R000686	ICP-AES	7439-96-5	Manganese	ug/mL	101	<1.00E-03	1.92E+03	n/a	n/a	n/a	n/a	2.00		20152628
Cone 6-Liq-a	C105-15-03	S15R000686	ICP-AES	7439-98-7	Molybdenum	ug/mL	92.1	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 6-Liq-a	C105-15-03	S15R000686	ICP-AES	7440-23-5	Sodium	ug/mL	102	<0.0920	2.43E+04	n/a	n/a	n/a	n/a	184		20152628
Cone 6-Liq-a	C105-15-03	S15R000686	ICP-AES	7440-00-8	Neodymium	ug/mL	101	<0.0150	60.6	n/a	n/a	n/a	n/a	30.0	J	20152628
Cone 6-Liq-a	C105-15-03	S15R000686	ICP-AES	7440-02-0	Nickel	ug/mL	98.4	<2.00E-03	170	n/a	n/a	n/a	n/a	4.00		20152628
Cone 6-Liq-a	C105-15-03	S15R000686	ICP-AES	7440-30-1	Niobium	ug/mL	99.2	<6.00E-03	<12.0	n/a	n/a	n/a	n/a	12.0	U	20152628
Cone 6-Liq-a	C105-15-03	S15R000686	ICP-AES	7723-14-0	Phosphorus	ug/mL	94.7	<0.0130	658	n/a	n/a	n/a	n/a	26.0		20152628
Cone 6-Liq-a	C105-15-03	S15R000686	ICP-AES	7439-92-1	Lead	ug/mL	102	<0.0130	143	n/a	n/a	n/a	n/a	26.0	J	20152628
Cone 6-Liq-a	C105-15-03	S15R000686	ICP-AES	7440-05-3	Palladium	ug/mL	102	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20152628
Cone 6-Liq-a	C105-15-03	S15R000686	ICP-AES	7440-10-0	Praseodymium	ug/mL	108	<0.0260	<52.0	n/a	n/a	n/a	n/a	52.0	U	20152628
Cone 6-Liq-a	C105-15-03	S15R000686	ICP-AES	7440-17-7	Rubidium	ug/mL	101	<0.0570	<114	n/a	n/a	n/a	n/a	114	U	20152628
Cone 6-Liq-a	C105-15-03	S15R000686	ICP-AES	7440-16-6	Rhodium	ug/mL	99.9	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20152628
Cone 6-Liq-a	C105-15-03	S15R000686	ICP-AES	7440-18-8	Ruthenium	ug/mL	106	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20152628
Cone 6-Liq-a	C105-15-03	S15R000686	ICP-AES	7704-34-9	Sulfur	ug/mL	93.5	<0.0280	530	n/a	n/a	n/a	n/a	56.0	J	20152628
Cone 6-Liq-a	C105-15-03	S15R000686	ICP-AES	7440-36-0	Antimony	ug/mL	91.9	<0.0180	<36.0	n/a	n/a	n/a	n/a	36.0	U	20152628
Cone 6-Liq-a	C105-15-03	S15R000686	ICP-AES	7782-49-2	Selenium	ug/mL	98.7	<0.0300	<60.0	n/a	n/a	n/a	n/a	60.0	U	20152628
Cone 6-Liq-a	C105-15-03	S15R000686	ICP-AES	7440-21-3	Silicon	ug/mL	94.9	0.0167	564	n/a	n/a	n/a	n/a	24.0		20152628
Cone 6-Liq-a	C105-15-03	S15R000686	ICP-AES	7440-19-9	Samarium	ug/mL	103	<0.0170	49.9	n/a	n/a	n/a	n/a	34.0	J	20152628
Cone 6-Liq-a	C105-15-03	S15R000686	ICP-AES	7440-31-5	Tin	ug/mL	96.9	<8.00E-03	<16.0	n/a	n/a	n/a	n/a	16.0	UY	20152628
Cone 6-Liq-a	C105-15-03	S15R000686	ICP-AES	7440-24-6	Strontium	ug/mL	98.5	<2.00E-03	22.8	n/a	n/a	n/a	n/a	4.00	J	20152628
Cone 6-Liq-a	C105-15-03	S15R000686	ICP-AES	7440-25-7	Tantalum	ug/mL	100	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20152628
Cone 6-Liq-a	C105-15-03	S15R000686	ICP-AES	13494-80-9	Tellurium	ug/mL	100	<9.00E-03	<18.0	n/a	n/a	n/a	n/a	18.0	U	20152628
Cone 6-Liq-a	C105-15-03	S15R000686	ICP-AES	7440-29-1	Thorium	ug/mL	101	<0.0130	31.2	n/a	n/a	n/a	n/a	26.0	J	20152628
Cone 6-Liq-a	C105-15-03	S15R000686	ICP-AES	7440-32-6	Titanium	ug/mL	90.5	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 6-Liq-a	C105-15-03	S15R000686	ICP-AES	7440-28-0	Thallium	ug/mL	105	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 6-Liq-a	C105-15-03	S15R000686	ICP-AES	7440-61-1	Uranium	ug/mL	101	<0.0290	3.47E+03	n/a	n/a	n/a	n/a	58.0		20152628
Cone 6-Liq-a	C105-15-03	S15R000686	ICP-AES	7440-62-2	Vanadium	ug/mL	97.4	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 6-Liq-a	C105-15-03	S15R000686	ICP-AES	7440-33-7	Tungsten	ug/mL	99.6	<0.0160	<32.0	n/a	n/a	n/a	n/a	32.0	U	20152628
Cone 6-Liq-a	C105-15-03	S15R000686	ICP-AES	7440-65-5	Yttrium	ug/mL	102	<2.00E-03	14.6	n/a	n/a	n/a	n/a	4.00	J	20152628
Cone 6-Liq-a	C105-15-03	S15R000686	ICP-AES	7440-66-6	Zinc	ug/mL	99.5	<0.0320	<64.0	n/a	n/a	n/a	n/a	64.0	U	20152628
Cone 6-Liq-a	C105-15-03	S15R000686	ICP-AES	7440-67-7	Zirconium	ug/mL	91.5	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 6-Liq-b	C105-15-03	S15R000692	ICP-AES	7440-22-4	Silver	ug/mL	100	<3.00E-03	<6.00	n/a	n/a	n/a	n/a	6.00	U	20152628
Cone 6-Liq-b	C105-15-03	S15R000692	ICP-AES	7429-90-5	Aluminum	ug/mL	98.9	<0.0140	2.70E+03	n/a	n/a	n/a	n/a	28.0		20152628
Cone 6-Liq-b	C105-15-03	S15R000692	ICP-AES	7440-38-2	Arsenic	ug/mL	99.2	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 6-Liq-b	C105-15-03	S15R000692	ICP-AES	7440-42-8	Boron	ug/mL	95.2	<2.00E-03	7.23	n/a	n/a	n/a	n/a	4.00	J	20152628
Cone 6-Liq-b	C105-15-03	S15R000692	ICP-AES	7440-39-3	Barium	ug/mL	99.3	<1.00E-03	6.81	n/a	n/a	n/a	n/a	2.00	J	20152628
Cone 6-Liq-b	C105-15-03	S15R000692	ICP-AES	7440-41-7	Beryllium	ug/mL	98.8	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 6-Liq-b	C105-15-03	S15R000692	ICP-AES	7440-69-9	Bismuth	ug/mL	99.4	<0.0190	<38.0	n/a	n/a	n/a	n/a	38.0	U	20152628
Cone 6-Liq-b	C105-15-03	S15R000692	ICP-AES	7440-70-2	Calcium	ug/mL	102	<0.120	<240	n/a	n/a	n/a	n/a	240	U	20152628
Cone 6-Liq-b	C105-15-03	S15R000692	ICP-AES	7440-43-9	Cadmium	ug/mL	101	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 6-Liq-b	C105-15-03	S15R000692	ICP-AES	7440-45-1	Cerium	ug/mL	104	<0.0250	<50.0	n/a	n/a	n/a	n/a	50.0	U	20152628
Cone 6-Liq-b	C105-15-03	S15R000692	ICP-AES	7440-48-4	Cobalt	ug/mL	100	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 6-Liq-b	C105-15-03	S15R000692	ICP-AES	7440-47-3	Chromium	ug/mL	98.6	<2.00E-03	4.36	n/a	n/a	n/a	n/a	4.00	J	20152628
Cone 6-Liq-b	C105-15-03	S15R000692	ICP-AES	7440-50-8	Copper	ug/mL	100	<2.00E-03	13.4	n/a	n/a	n/a	n/a	4.00	J	20152628
Cone 6-Liq-b	C105-15-03	S15R000692	ICP-AES	7440-53-1	Europium	ug/mL	103	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 6-Liq-b	C105-15-03	S15R000692	ICP-AES	7439-89-6	Iron	ug/mL	99.9	<0.0200	<40.0	n/a	n/a	n/a	n/a	40.0	U	20152628
Cone 6-Liq-b	C105-15-03	S15R000692	ICP-AES	7440-09-7	Potassium	ug/mL	99.8	<0.0220	<44.0	n/a	n/a	n/a	n/a	44.0	U	20152628
Cone 6-Liq-b	C105-15-03	S15R000692	ICP-AES	7439-91-0	Lanthanum	ug/mL	99.8	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 6-Liq-b	C105-15-03	S15R000692	ICP-AES	7439-93-2	Lithium	ug/mL	102	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628

Cone 6-Liq-b	C105-15-03	S15R000692	ICP-AES	7439-95-4	Magnesium	ug/mL	99.3	<9.00E-03	<18.0	n/a	n/a	n/a	n/a	18.0	U	20152628
Cone 6-Liq-b	C105-15-03	S15R000692	ICP-AES	7439-96-5	Manganese	ug/mL	101	<1.00E-03	8.57	n/a	n/a	n/a	n/a	2.00	J	20152628
Cone 6-Liq-b	C105-15-03	S15R000692	ICP-AES	7439-98-7	Molybdenum	ug/mL	92.1	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 6-Liq-b	C105-15-03	S15R000692	ICP-AES	7440-23-5	Sodium	ug/mL	102	<0.0920	4.39E+05	n/a	n/a	n/a	n/a	184		20152628
Cone 6-Liq-b	C105-15-03	S15R000692	ICP-AES	7440-00-8	Neodymium	ug/mL	101	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 6-Liq-b	C105-15-03	S15R000692	ICP-AES	7440-02-0	Nickel	ug/mL	98.4	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 6-Liq-b	C105-15-03	S15R000692	ICP-AES	7440-30-1	Niobium	ug/mL	99.2	<6.00E-03	<12.0	n/a	n/a	n/a	n/a	12.0	U	20152628
Cone 6-Liq-b	C105-15-03	S15R000692	ICP-AES	7723-14-0	Phosphorus	ug/mL	94.7	<0.0130	86.1	n/a	n/a	n/a	n/a	26.0	J	20152628
Cone 6-Liq-b	C105-15-03	S15R000692	ICP-AES	7439-92-1	Lead	ug/mL	102	<0.0130	<26.0	n/a	n/a	n/a	n/a	26.0	U	20152628
Cone 6-Liq-b	C105-15-03	S15R000692	ICP-AES	7440-05-3	Palladium	ug/mL	102	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20152628
Cone 6-Liq-b	C105-15-03	S15R000692	ICP-AES	7440-10-0	Praseodymium	ug/mL	108	<0.0260	<52.0	n/a	n/a	n/a	n/a	52.0	U	20152628
Cone 6-Liq-b	C105-15-03	S15R000692	ICP-AES	7440-17-7	Rubidium	ug/mL	101	<0.0570	<114	n/a	n/a	n/a	n/a	114	U	20152628
Cone 6-Liq-b	C105-15-03	S15R000692	ICP-AES	7440-16-6	Rhodium	ug/mL	99.9	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20152628
Cone 6-Liq-b	C105-15-03	S15R000692	ICP-AES	7440-18-8	Ruthenium	ug/mL	106	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20152628
Cone 6-Liq-b	C105-15-03	S15R000692	ICP-AES	7704-34-9	Sulfur	ug/mL	93.5	<0.0280	<56.0	n/a	n/a	n/a	n/a	56.0	U	20152628
Cone 6-Liq-b	C105-15-03	S15R000692	ICP-AES	7440-36-0	Antimony	ug/mL	91.9	<0.0180	<36.0	n/a	n/a	n/a	n/a	36.0	U	20152628
Cone 6-Liq-b	C105-15-03	S15R000692	ICP-AES	7782-49-2	Selenium	ug/mL	98.7	<0.0300	<60.0	n/a	n/a	n/a	n/a	60.0	U	20152628
Cone 6-Liq-b	C105-15-03	S15R000692	ICP-AES	7440-21-3	Silicon	ug/mL	94.9	0.0167	196	n/a	n/a	n/a	n/a	24.0	J	20152628
Cone 6-Liq-b	C105-15-03	S15R000692	ICP-AES	7440-19-9	Samarium	ug/mL	103	<0.0170	<34.0	n/a	n/a	n/a	n/a	34.0	U	20152628
Cone 6-Liq-b	C105-15-03	S15R000692	ICP-AES	7440-31-5	Tin	ug/mL	96.9	<8.00E-03	<16.0	n/a	n/a	n/a	n/a	16.0	UY	20152628
Cone 6-Liq-b	C105-15-03	S15R000692	ICP-AES	7440-24-6	Strontium	ug/mL	98.5	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 6-Liq-b	C105-15-03	S15R000692	ICP-AES	7440-25-7	Tantalum	ug/mL	100	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20152628
Cone 6-Liq-b	C105-15-03	S15R000692	ICP-AES	13494-80-9	Tellurium	ug/mL	100	<9.00E-03	<18.0	n/a	n/a	n/a	n/a	18.0	U	20152628
Cone 6-Liq-b	C105-15-03	S15R000692	ICP-AES	7440-29-1	Thorium	ug/mL	101	<0.0130	<26.0	n/a	n/a	n/a	n/a	26.0	U	20152628
Cone 6-Liq-b	C105-15-03	S15R000692	ICP-AES	7440-32-6	Titanium	ug/mL	90.5	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 6-Liq-b	C105-15-03	S15R000692	ICP-AES	7440-28-0	Thallium	ug/mL	105	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 6-Liq-b	C105-15-03	S15R000692	ICP-AES	7440-61-1	Uranium	ug/mL	101	<0.0290	<58.0	n/a	n/a	n/a	n/a	58.0	U	20152628
Cone 6-Liq-b	C105-15-03	S15R000692	ICP-AES	7440-62-2	Vanadium	ug/mL	97.4	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 6-Liq-b	C105-15-03	S15R000692	ICP-AES	7440-33-7	Tungsten	ug/mL	99.6	<0.0160	<32.0	n/a	n/a	n/a	n/a	32.0	U	20152628
Cone 6-Liq-b	C105-15-03	S15R000692	ICP-AES	7440-65-5	Yttrium	ug/mL	102	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 6-Liq-b	C105-15-03	S15R000692	ICP-AES	7440-66-6	Zinc	ug/mL	99.5	<0.0320	<64.0	n/a	n/a	n/a	n/a	64.0	U	20152628
Cone 6-Liq-b	C105-15-03	S15R000692	ICP-AES	7440-67-7	Zirconium	ug/mL	91.5	<1.00E-03	26.0	n/a	n/a	n/a	n/a	2.00		20152628
Cone 7-Liq-a	C105-15-03	S15R000699	ICP-AES	7440-22-4	Silver	ug/mL	100	<3.00E-03	<6.00	n/a	n/a	n/a	n/a	6.00	U	20152628
Cone 7-Liq-a	C105-15-03	S15R000699	ICP-AES	7429-90-5	Aluminum	ug/mL	98.9	<0.0140	2.73E+03	n/a	n/a	n/a	n/a	28.0		20152628
Cone 7-Liq-a	C105-15-03	S15R000699	ICP-AES	7440-38-2	Arsenic	ug/mL	99.2	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 7-Liq-a	C105-15-03	S15R000699	ICP-AES	7440-42-8	Boron	ug/mL	95.2	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 7-Liq-a	C105-15-03	S15R000699	ICP-AES	7440-39-3	Barium	ug/mL	99.3	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 7-Liq-a	C105-15-03	S15R000699	ICP-AES	7440-41-7	Beryllium	ug/mL	98.8	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 7-Liq-a	C105-15-03	S15R000699	ICP-AES	7440-69-9	Bismuth	ug/mL	99.4	<0.0190	<38.0	n/a	n/a	n/a	n/a	38.0	U	20152628
Cone 7-Liq-a	C105-15-03	S15R000699	ICP-AES	7440-70-2	Calcium	ug/mL	102	<0.120	<240	n/a	n/a	n/a	n/a	240	U	20152628
Cone 7-Liq-a	C105-15-03	S15R000699	ICP-AES	7440-43-9	Cadmium	ug/mL	101	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 7-Liq-a	C105-15-03	S15R000699	ICP-AES	7440-45-1	Cerium	ug/mL	104	<0.0250	<50.0	n/a	n/a	n/a	n/a	50.0	U	20152628
Cone 7-Liq-a	C105-15-03	S15R000699	ICP-AES	7440-48-4	Cobalt	ug/mL	100	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 7-Liq-a	C105-15-03	S15R000699	ICP-AES	7440-47-3	Chromium	ug/mL	98.6	<2.00E-03	142	n/a	n/a	n/a	n/a	4.00		20152628
Cone 7-Liq-a	C105-15-03	S15R000699	ICP-AES	7440-50-8	Copper	ug/mL	100	<2.00E-03	334	n/a	n/a	n/a	n/a	4.00		20152628
Cone 7-Liq-a	C105-15-03	S15R000699	ICP-AES	7440-53-1	Europium	ug/mL	103	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 7-Liq-a	C105-15-03	S15R000699	ICP-AES	7439-89-6	Iron	ug/mL	99.9	<0.0200	824	n/a	n/a	n/a	n/a	40.0		20152628
Cone 7-Liq-a	C105-15-03	S15R000699	ICP-AES	7440-09-7	Potassium	ug/mL	99.8	<0.0220	59.7	n/a	n/a	n/a	n/a	44.0	J	20152628
Cone 7-Liq-a	C105-15-03	S15R000699	ICP-AES	7439-91-0	Lanthanum	ug/mL	99.8	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 7-Liq-a	C105-15-03	S15R000699	ICP-AES	7439-93-2	Lithium	ug/mL	102	<1.00E-03	2.79	n/a	n/a	n/a	n/a	2.00	J	20152628
Cone 7-Liq-a	C105-15-03	S15R000699	ICP-AES	7439-95-4	Magnesium	ug/mL	99.3	<9.00E-03	54.0	n/a	n/a	n/a	n/a	18.0	J	20152628
Cone 7-Liq-a	C105-15-03	S15R000699	ICP-AES	7439-96-5	Manganese	ug/mL	101	<1.00E-03	662	n/a	n/a	n/a	n/a	2.00		20152628
Cone 7-Liq-a	C105-15-03	S15R000699	ICP-AES	7439-98-7	Molybdenum	ug/mL	92.1	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 7-Liq-a	C105-15-03	S15R000699	ICP-AES	7440-23-5	Sodium	ug/mL	102	<0.0920	2.29E+04	n/a	n/a	n/a	n/a	184		20152628
Cone 7-Liq-a	C105-15-03	S15R000699	ICP-AES	7440-00-8	Neodymium	ug/mL	101	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 7-Liq-a	C105-15-03	S15R000699	ICP-AES	7440-02-0	Nickel	ug/mL	98.4	<2.00E-03	11.2	n/a	n/a	n/a	n/a	4.00	J	20152628
Cone 7-Liq-a	C105-15-03	S15R000699	ICP-AES	7440-30-1	Niobium	ug/mL	99.2	<6.00E-03	<12.0	n/a	n/a	n/a	n/a	12.0	U	20152628
Cone 7-Liq-a	C105-15-03	S15R000699	ICP-AES	7723-14-0	Phosphorus	ug/mL	94.7	<0.0130	90.4	n/a	n/a	n/a	n/a	26.0	J	20152628
Cone 7-Liq-a	C105-15-03	S15R000699	ICP-AES	7439-92-1	Lead	ug/mL	102	<0.0130	<26.0	n/a	n/a	n/a	n/a	26.0	U	20152628
Cone 7-Liq-a	C105-15-03	S15R000699	ICP-AES	7440-05-3	Palladium	ug/mL	102	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20152628
Cone 7-Liq-a	C105-15-03	S15R000699	ICP-AES	7440-10-0	Praseodymium	ug/mL	108	<0.0260	<52.0	n/a	n/a	n/a	n/a	52.0	U	20152628
Cone 7-Liq-a	C105-15-03	S15R000699	ICP-AES	7440-17-7	Rubidium	ug/mL	101	<0.0570	<114	n/a	n/a	n/a	n/a	114	U	20152628
Cone 7-Liq-a	C105-15-03	S15R000699	ICP-AES	7440-16-6	Rhodium	ug/mL	99.9	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20152628
Cone 7-Liq-a	C105-15-03	S15R000699	ICP-AES	7440-18-8	Ruthenium	ug/mL	106	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20152628
Cone 7-Liq-a	C105-15-03	S15R000699	ICP-AES	7704-34-9	Sulfur	ug/mL	93.5	<0.0280	560	n/a	n/a	n/a	n/a	56.0		20152628
Cone 7-Liq-a	C105-15-03	S15R000699	ICP-AES	7440-36-0	Antimony	ug/mL	91.9	<0.0180	<36.0	n/a	n/a	n/a	n/a	36.0	U	20152628
Cone 7-Liq-a	C105-15-03	S15R000699	ICP-AES	7782-49-2	Selenium	ug/mL	98.7	<0.0300	<60.0	n/a	n/a	n/a	n/a	60.0	U	20152628
Cone 7-Liq-a	C105-15-03	S15R000699	ICP-AES	7440-21-3	Silicon	ug/mL	94.9	0.0167	211	n/a	n/a	n/a	n/a	24.0	J	20152628
Cone 7-Liq-a	C105-15-03	S15R000699	ICP-AES	7440-19-9	Samarium	ug/mL	103	<0.0170	<34.0	n/a	n/a	n/a	n/a	34.0	U	20152628
Cone 7-Liq-a	C105-15-03	S15R000699	ICP-AES	7440-31-5	Tin	ug/mL	96.9	<8.00E-03	<16.0	n/a	n/a	n/a	n/a	16.0	UY	20152628
Cone 7-Liq-a	C105-15-03	S15R000699	ICP-AES	7440-24-6	Strontium	ug/mL	98.5	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 7-Liq-a	C105-15-03	S15R000699	ICP-AES	7440-25-7	Tantalum	ug/mL	100	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20152628
Cone 7-Liq-a	C105-15-03	S15R000699	ICP-AES	13494-80-9	Tellurium	ug/mL	100	<9.00E-03	<18.0	n/a	n/a	n/a	n/a	18.0	U	20152628
Cone 7-Liq-a	C105-15-03	S15R000699	ICP-AES	7440-29-1	Thorium	ug/mL	101	<0.0130	<26.0	n/a	n/a	n/a	n/a	26.0	U	20152628
Cone 7-Liq-a	C105-15-03	S15R000699	ICP-AES	7440-32-6	Titanium	ug/mL	90.5	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 7-Liq-a	C105-15-03	S15R000699	ICP-AES	7440-28-0	Thallium	ug/mL	105	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 7-Liq-a	C105-15-03	S15R000699	ICP-AES	7440-61-1	Uranium	ug/mL	101	<0.0290	199	n/a	n/a	n/a	n/a	58.0	J	20152628
Cone 7-Liq-a	C105-15-03	S15R000699	ICP-AES	7440-62-2	Vanadium	ug/mL	97.4	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 7-Liq-a	C105-15-03	S15R000699	ICP-AES	7440-33-7	Tungsten	ug/mL	99.6	<0.0160	<32.0	n/a	n/a	n/a	n/a	32.0	U	20152628
Cone 7-Liq-a	C105-15-03	S15R000699	ICP-AES	7440-65-5	Yttrium	ug/mL	102	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 7-Liq-a	C105-15-03	S15R000699	ICP-AES	7440-66-6	Zinc	ug/mL	99.5	<0.0320	<64.0	n/a	n/a	n/a	n/a	64.0	U	20152628
Cone 7-Liq-a	C105-15-03	S15R000699	ICP-AES	7440-67-7	Zirconium	ug/mL	91.5	<1.00E-03	48.0	n/a	n/a	n/a	n/a	2.00		20152628

Cone 7-Liq-b	C105-15-03	S15R000701	ICP-AES	7440-22-4	Silver	ug/mL	100	<3.00E-03	<6.00	n/a	n/a	n/a	n/a	6.00	U	20152628
Cone 7-Liq-b	C105-15-03	S15R000701	ICP-AES	7429-90-5	Aluminum	ug/mL	98.9	<0.0140	151	n/a	n/a	n/a	n/a	28.0	J	20152628
Cone 7-Liq-b	C105-15-03	S15R000701	ICP-AES	7440-38-2	Arsenic	ug/mL	99.2	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 7-Liq-b	C105-15-03	S15R000701	ICP-AES	7440-42-8	Boron	ug/mL	95.2	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 7-Liq-b	C105-15-03	S15R000701	ICP-AES	7440-39-3	Barium	ug/mL	99.3	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 7-Liq-b	C105-15-03	S15R000701	ICP-AES	7440-41-7	Beryllium	ug/mL	98.8	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 7-Liq-b	C105-15-03	S15R000701	ICP-AES	7440-69-9	Bismuth	ug/mL	99.4	<0.0190	<38.0	n/a	n/a	n/a	n/a	38.0	U	20152628
Cone 7-Liq-b	C105-15-03	S15R000701	ICP-AES	7440-70-2	Calcium	ug/mL	102	<0.120	<240	n/a	n/a	n/a	n/a	240	U	20152628
Cone 7-Liq-b	C105-15-03	S15R000701	ICP-AES	7440-43-9	Cadmium	ug/mL	101	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 7-Liq-b	C105-15-03	S15R000701	ICP-AES	7440-45-1	Cerium	ug/mL	104	<0.0250	<50.0	n/a	n/a	n/a	n/a	50.0	U	20152628
Cone 7-Liq-b	C105-15-03	S15R000701	ICP-AES	7440-48-4	Cobalt	ug/mL	100	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 7-Liq-b	C105-15-03	S15R000701	ICP-AES	7440-47-3	Chromium	ug/mL	98.6	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 7-Liq-b	C105-15-03	S15R000701	ICP-AES	7440-50-8	Copper	ug/mL	100	<2.00E-03	116	n/a	n/a	n/a	n/a	4.00		20152628
Cone 7-Liq-b	C105-15-03	S15R000701	ICP-AES	7440-53-1	Europium	ug/mL	103	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 7-Liq-b	C105-15-03	S15R000701	ICP-AES	7439-89-6	Iron	ug/mL	99.9	<0.0200	<40.0	n/a	n/a	n/a	n/a	40.0	U	20152628
Cone 7-Liq-b	C105-15-03	S15R000701	ICP-AES	7440-09-7	Potassium	ug/mL	99.8	<0.0220	<44.0	n/a	n/a	n/a	n/a	44.0	U	20152628
Cone 7-Liq-b	C105-15-03	S15R000701	ICP-AES	7439-91-0	Lanthanum	ug/mL	99.8	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 7-Liq-b	C105-15-03	S15R000701	ICP-AES	7439-93-2	Lithium	ug/mL	102	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	UY	20152628
Cone 7-Liq-b	C105-15-03	S15R000701	ICP-AES	7439-95-4	Magnesium	ug/mL	99.3	<9.00E-03	<18.0	n/a	n/a	n/a	n/a	18.0	U	20152628
Cone 7-Liq-b	C105-15-03	S15R000701	ICP-AES	7439-96-5	Manganese	ug/mL	101	<1.00E-03	44.6	n/a	n/a	n/a	n/a	2.00		20152628
Cone 7-Liq-b	C105-15-03	S15R000701	ICP-AES	7439-98-7	Molybdenum	ug/mL	92.1	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 7-Liq-b	C105-15-03	S15R000701	ICP-AES	7440-23-5	Sodium	ug/mL	102	<0.0920	445	n/a	n/a	n/a	n/a	184	JY	20152628
Cone 7-Liq-b	C105-15-03	S15R000701	ICP-AES	7440-00-8	Neodymium	ug/mL	101	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 7-Liq-b	C105-15-03	S15R000701	ICP-AES	7440-02-0	Nickel	ug/mL	98.4	<2.00E-03	5.74	n/a	n/a	n/a	n/a	4.00	J	20152628
Cone 7-Liq-b	C105-15-03	S15R000701	ICP-AES	7440-30-1	Niobium	ug/mL	99.2	<6.00E-03	<12.0	n/a	n/a	n/a	n/a	12.0	U	20152628
Cone 7-Liq-b	C105-15-03	S15R000701	ICP-AES	7723-14-0	Phosphorus	ug/mL	94.7	<0.0130	<26.0	n/a	n/a	n/a	n/a	26.0	U	20152628
Cone 7-Liq-b	C105-15-03	S15R000701	ICP-AES	7439-92-1	Lead	ug/mL	102	<0.0130	<26.0	n/a	n/a	n/a	n/a	26.0	U	20152628
Cone 7-Liq-b	C105-15-03	S15R000701	ICP-AES	7440-05-3	Palladium	ug/mL	102	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20152628
Cone 7-Liq-b	C105-15-03	S15R000701	ICP-AES	7440-10-0	Praseodymium	ug/mL	108	<0.0260	<52.0	n/a	n/a	n/a	n/a	52.0	U	20152628
Cone 7-Liq-b	C105-15-03	S15R000701	ICP-AES	7440-17-7	Rubidium	ug/mL	101	<0.0570	<114	n/a	n/a	n/a	n/a	114	U	20152628
Cone 7-Liq-b	C105-15-03	S15R000701	ICP-AES	7440-16-6	Rhodium	ug/mL	99.9	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20152628
Cone 7-Liq-b	C105-15-03	S15R000701	ICP-AES	7440-18-8	Ruthenium	ug/mL	106	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20152628
Cone 7-Liq-b	C105-15-03	S15R000701	ICP-AES	7704-34-9	Sulfur	ug/mL	93.5	<0.0280	<56.0	n/a	n/a	n/a	n/a	56.0	U	20152628
Cone 7-Liq-b	C105-15-03	S15R000701	ICP-AES	7440-36-0	Antimony	ug/mL	91.9	<0.0180	<36.0	n/a	n/a	n/a	n/a	36.0	U	20152628
Cone 7-Liq-b	C105-15-03	S15R000701	ICP-AES	7782-49-2	Selenium	ug/mL	98.7	<0.0300	<60.0	n/a	n/a	n/a	n/a	60.0	U	20152628
Cone 7-Liq-b	C105-15-03	S15R000701	ICP-AES	7440-21-3	Silicon	ug/mL	94.9	0.0167	51.0	n/a	n/a	n/a	n/a	24.0	J	20152628
Cone 7-Liq-b	C105-15-03	S15R000701	ICP-AES	7440-19-9	Samarium	ug/mL	103	<0.0170	<34.0	n/a	n/a	n/a	n/a	34.0	U	20152628
Cone 7-Liq-b	C105-15-03	S15R000701	ICP-AES	7440-31-5	Tin	ug/mL	96.9	<8.00E-03	<16.0	n/a	n/a	n/a	n/a	16.0	UY	20152628
Cone 7-Liq-b	C105-15-03	S15R000701	ICP-AES	7440-24-6	Strontium	ug/mL	98.5	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 7-Liq-b	C105-15-03	S15R000701	ICP-AES	7440-25-7	Tantalum	ug/mL	100	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20152628
Cone 7-Liq-b	C105-15-03	S15R000701	ICP-AES	13494-80-9	Tellurium	ug/mL	100	<9.00E-03	<18.0	n/a	n/a	n/a	n/a	18.0	U	20152628
Cone 7-Liq-b	C105-15-03	S15R000701	ICP-AES	7440-29-1	Thorium	ug/mL	101	<0.0130	<26.0	n/a	n/a	n/a	n/a	26.0	U	20152628
Cone 7-Liq-b	C105-15-03	S15R000701	ICP-AES	7440-32-6	Titanium	ug/mL	90.5	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 7-Liq-b	C105-15-03	S15R000701	ICP-AES	7440-28-0	Thallium	ug/mL	105	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 7-Liq-b	C105-15-03	S15R000701	ICP-AES	7440-61-1	Uranium	ug/mL	101	<0.0290	<58.0	n/a	n/a	n/a	n/a	58.0	U	20152628
Cone 7-Liq-b	C105-15-03	S15R000701	ICP-AES	7440-62-2	Vanadium	ug/mL	97.4	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 7-Liq-b	C105-15-03	S15R000701	ICP-AES	7440-33-7	Tungsten	ug/mL	99.6	<0.0160	<32.0	n/a	n/a	n/a	n/a	32.0	U	20152628
Cone 7-Liq-b	C105-15-03	S15R000701	ICP-AES	7440-65-5	Yttrium	ug/mL	102	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 7-Liq-b	C105-15-03	S15R000701	ICP-AES	7440-66-6	Zinc	ug/mL	99.5	<0.0320	<64.0	n/a	n/a	n/a	n/a	64.0	U	20152628
Cone 7-Liq-b	C105-15-03	S15R000701	ICP-AES	7440-67-7	Zirconium	ug/mL	91.5	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 8-Liq-a	C105-15-03	S15R000700	ICP-AES	7440-22-4	Silver	ug/mL	100	<3.00E-03	<6.00	n/a	n/a	n/a	n/a	6.00	U	20152628
Cone 8-Liq-a	C105-15-03	S15R000700	ICP-AES	7429-90-5	Aluminum	ug/mL	98.9	<0.0140	3.19E+03	n/a	n/a	n/a	n/a	28.0		20152628
Cone 8-Liq-a	C105-15-03	S15R000700	ICP-AES	7440-38-2	Arsenic	ug/mL	99.2	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 8-Liq-a	C105-15-03	S15R000700	ICP-AES	7440-42-8	Boron	ug/mL	95.2	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 8-Liq-a	C105-15-03	S15R000700	ICP-AES	7440-39-3	Barium	ug/mL	99.3	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 8-Liq-a	C105-15-03	S15R000700	ICP-AES	7440-41-7	Beryllium	ug/mL	98.8	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 8-Liq-a	C105-15-03	S15R000700	ICP-AES	7440-69-9	Bismuth	ug/mL	99.4	<0.0190	<38.0	n/a	n/a	n/a	n/a	38.0	U	20152628
Cone 8-Liq-a	C105-15-03	S15R000700	ICP-AES	7440-70-2	Calcium	ug/mL	102	<0.120	<240	n/a	n/a	n/a	n/a	240	U	20152628
Cone 8-Liq-a	C105-15-03	S15R000700	ICP-AES	7440-43-9	Cadmium	ug/mL	101	<1.00E-03	3.61	n/a	n/a	n/a	n/a	2.00	J	20152628
Cone 8-Liq-a	C105-15-03	S15R000700	ICP-AES	7440-45-1	Cerium	ug/mL	104	<0.0250	<50.0	n/a	n/a	n/a	n/a	50.0	U	20152628
Cone 8-Liq-a	C105-15-03	S15R000700	ICP-AES	7440-48-4	Cobalt	ug/mL	100	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 8-Liq-a	C105-15-03	S15R000700	ICP-AES	7440-47-3	Chromium	ug/mL	98.6	<2.00E-03	159	n/a	n/a	n/a	n/a	4.00		20152628
Cone 8-Liq-a	C105-15-03	S15R000700	ICP-AES	7440-50-8	Copper	ug/mL	100	<2.00E-03	143	n/a	n/a	n/a	n/a	4.00		20152628
Cone 8-Liq-a	C105-15-03	S15R000700	ICP-AES	7440-53-1	Europium	ug/mL	103	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 8-Liq-a	C105-15-03	S15R000700	ICP-AES	7439-89-6	Iron	ug/mL	99.9	<0.0200	1.08E+03	n/a	n/a	n/a	n/a	40.0		20152628
Cone 8-Liq-a	C105-15-03	S15R000700	ICP-AES	7440-09-7	Potassium	ug/mL	99.8	<0.0220	<44.0	n/a	n/a	n/a	n/a	44.0	U	20152628
Cone 8-Liq-a	C105-15-03	S15R000700	ICP-AES	7439-91-0	Lanthanum	ug/mL	99.8	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 8-Liq-a	C105-15-03	S15R000700	ICP-AES	7439-93-2	Lithium	ug/mL	102	<1.00E-03	2.89	n/a	n/a	n/a	n/a	2.00	J	20152628
Cone 8-Liq-a	C105-15-03	S15R000700	ICP-AES	7439-95-4	Magnesium	ug/mL	99.3	<9.00E-03	70.0	n/a	n/a	n/a	n/a	18.0	J	20152628
Cone 8-Liq-a	C105-15-03	S15R000700	ICP-AES	7439-96-5	Manganese	ug/mL	101	<1.00E-03	1.11E+03	n/a	n/a	n/a	n/a	2.00		20152628
Cone 8-Liq-a	C105-15-03	S15R000700	ICP-AES	7439-98-7	Molybdenum	ug/mL	92.1	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 8-Liq-a	C105-15-03	S15R000700	ICP-AES	7440-23-5	Sodium	ug/mL	102	<0.0920	2.09E+04	n/a	n/a	n/a	n/a	184		20152628
Cone 8-Liq-a	C105-15-03	S15R000700	ICP-AES	7440-00-8	Neodymium	ug/mL	101	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 8-Liq-a	C105-15-03	S15R000700	ICP-AES	7440-02-0	Nickel	ug/mL	98.4	<2.00E-03	33.5	n/a	n/a	n/a	n/a	4.00	J	20152628
Cone 8-Liq-a	C105-15-03	S15R000700	ICP-AES	7440-30-1	Niobium	ug/mL	99.2	<6.00E-03	<12.0	n/a	n/a	n/a	n/a	12.0	U	20152628
Cone 8-Liq-a	C105-15-03	S15R000700	ICP-AES	7723-14-0	Phosphorus	ug/mL	94.7	<0.0130	175	n/a	n/a	n/a	n/a	26.0	J	20152628
Cone 8-Liq-a	C105-15-03	S15R000700	ICP-AES	7439-92-1	Lead	ug/mL	102	<0.0130	<26.0	n/a	n/a	n/a	n/a	26.0	U	20152628
Cone 8-Liq-a	C105-15-03	S15R000700	ICP-AES	7440-05-3	Palladium	ug/mL	102	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20152628
Cone 8-Liq-a	C105-15-03	S15R000700	ICP-AES	7440-10-0	Praseodymium	ug/mL	108	<0.0260	<52.0	n/a	n/a	n/a	n/a	52.0	U	20152628
Cone 8-Liq-a	C105-15-03	S15R000700	ICP-AES	7440-17-7	Rubidium	ug/mL	101	<0.0570	<114	n/a	n/a	n/a	n/a	114	U	20152628
Cone 8-Liq-a	C105-15-03	S15R000700	ICP-AES	7440-16-6	Rhodium	ug/mL	99.9	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20152628
Cone 8-Liq-a	C105-15-03	S15R000700	ICP-AES	7440-18-8	Ruthenium	ug/mL	106	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20152628

Cone 8-Liq-a	C105-15-03	S15R000700	ICP-AES	7704-34-9	Sulfur	ug/mL	93.5	<0.0280	583	n/a	n/a	n/a	n/a	56.0		20152628
Cone 8-Liq-a	C105-15-03	S15R000700	ICP-AES	7440-36-0	Antimony	ug/mL	91.9	<0.0180	<36.0	n/a	n/a	n/a	n/a	36.0	U	20152628
Cone 8-Liq-a	C105-15-03	S15R000700	ICP-AES	7782-49-2	Selenium	ug/mL	98.7	<0.0300	<60.0	n/a	n/a	n/a	n/a	60.0	U	20152628
Cone 8-Liq-a	C105-15-03	S15R000700	ICP-AES	7440-21-3	Silicon	ug/mL	94.9	0.0167	341	n/a	n/a	n/a	n/a	24.0		20152628
Cone 8-Liq-a	C105-15-03	S15R000700	ICP-AES	7440-19-9	Samarium	ug/mL	103	<0.0170	<34.0	n/a	n/a	n/a	n/a	34.0	U	20152628
Cone 8-Liq-a	C105-15-03	S15R000700	ICP-AES	7440-31-5	Tin	ug/mL	96.9	<8.00E-03	<16.0	n/a	n/a	n/a	n/a	16.0	UY	20152628
Cone 8-Liq-a	C105-15-03	S15R000700	ICP-AES	7440-24-6	Strontium	ug/mL	98.5	<2.00E-03	8.06	n/a	n/a	n/a	n/a	4.00	J	20152628
Cone 8-Liq-a	C105-15-03	S15R000700	ICP-AES	7440-25-7	Tantalum	ug/mL	100	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20152628
Cone 8-Liq-a	C105-15-03	S15R000700	ICP-AES	13494-80-9	Tellurium	ug/mL	100	<9.00E-03	<18.0	n/a	n/a	n/a	n/a	18.0	U	20152628
Cone 8-Liq-a	C105-15-03	S15R000700	ICP-AES	7440-29-1	Thorium	ug/mL	101	<0.0130	<26.0	n/a	n/a	n/a	n/a	26.0	U	20152628
Cone 8-Liq-a	C105-15-03	S15R000700	ICP-AES	7440-32-6	Titanium	ug/mL	90.5	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 8-Liq-a	C105-15-03	S15R000700	ICP-AES	7440-28-0	Thallium	ug/mL	105	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 8-Liq-a	C105-15-03	S15R000700	ICP-AES	7440-61-1	Uranium	ug/mL	101	<0.0290	222	n/a	n/a	n/a	n/a	58.0	J	20152628
Cone 8-Liq-a	C105-15-03	S15R000700	ICP-AES	7440-62-2	Vanadium	ug/mL	97.4	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 8-Liq-a	C105-15-03	S15R000700	ICP-AES	7440-33-7	Tungsten	ug/mL	99.6	<0.0160	34.3	n/a	n/a	n/a	n/a	32.0	J	20152628
Cone 8-Liq-a	C105-15-03	S15R000700	ICP-AES	7440-65-5	Yttrium	ug/mL	102	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 8-Liq-a	C105-15-03	S15R000700	ICP-AES	7440-66-6	Zinc	ug/mL	99.5	<0.0320	<64.0	n/a	n/a	n/a	n/a	64.0	U	20152628
Cone 8-Liq-a	C105-15-03	S15R000700	ICP-AES	7440-67-7	Zirconium	ug/mL	91.5	<1.00E-03	40.8	n/a	n/a	n/a	n/a	2.00		20152628
Cone 8-Liq-b	C105-15-03	S15R000702	ICP-AES	7440-22-4	Silver	ug/mL	100	<3.00E-03	<6.00	n/a	n/a	n/a	n/a	6.00	U	20152628
Cone 8-Liq-b	C105-15-03	S15R000702	ICP-AES	7429-90-5	Aluminum	ug/mL	98.9	<0.0140	5.42E+03	n/a	n/a	n/a	n/a	28.0		20152628
Cone 8-Liq-b	C105-15-03	S15R000702	ICP-AES	7440-38-2	Arsenic	ug/mL	99.2	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 8-Liq-b	C105-15-03	S15R000702	ICP-AES	7440-42-8	Boron	ug/mL	95.2	<2.00E-03	5.24	n/a	n/a	n/a	n/a	4.00	J	20152628
Cone 8-Liq-b	C105-15-03	S15R000702	ICP-AES	7440-39-3	Barium	ug/mL	99.3	<1.00E-03	7.88	n/a	n/a	n/a	n/a	2.00	J	20152628
Cone 8-Liq-b	C105-15-03	S15R000702	ICP-AES	7440-41-7	Beryllium	ug/mL	98.8	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 8-Liq-b	C105-15-03	S15R000702	ICP-AES	7440-69-9	Bismuth	ug/mL	99.4	<0.0190	<38.0	n/a	n/a	n/a	n/a	38.0	U	20152628
Cone 8-Liq-b	C105-15-03	S15R000702	ICP-AES	7440-70-2	Calcium	ug/mL	102	<0.120	<240	n/a	n/a	n/a	n/a	240	U	20152628
Cone 8-Liq-b	C105-15-03	S15R000702	ICP-AES	7440-43-9	Cadmium	ug/mL	101	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 8-Liq-b	C105-15-03	S15R000702	ICP-AES	7440-45-1	Cerium	ug/mL	104	<0.0250	<50.0	n/a	n/a	n/a	n/a	50.0	U	20152628
Cone 8-Liq-b	C105-15-03	S15R000702	ICP-AES	7440-48-4	Cobalt	ug/mL	100	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 8-Liq-b	C105-15-03	S15R000702	ICP-AES	7440-47-3	Chromium	ug/mL	98.6	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 8-Liq-b	C105-15-03	S15R000702	ICP-AES	7440-50-8	Copper	ug/mL	100	<2.00E-03	498	n/a	n/a	n/a	n/a	4.00		20152628
Cone 8-Liq-b	C105-15-03	S15R000702	ICP-AES	7440-53-1	Europium	ug/mL	103	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 8-Liq-b	C105-15-03	S15R000702	ICP-AES	7439-89-6	Iron	ug/mL	99.9	<0.0200	<40.0	n/a	n/a	n/a	n/a	40.0	U	20152628
Cone 8-Liq-b	C105-15-03	S15R000702	ICP-AES	7440-09-7	Potassium	ug/mL	99.8	<0.0220	<44.0	n/a	n/a	n/a	n/a	44.0	U	20152628
Cone 8-Liq-b	C105-15-03	S15R000702	ICP-AES	7439-91-0	Lanthanum	ug/mL	99.8	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 8-Liq-b	C105-15-03	S15R000702	ICP-AES	7439-93-2	Lithium	ug/mL	102	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	UY	20152628
Cone 8-Liq-b	C105-15-03	S15R000702	ICP-AES	7439-95-4	Magnesium	ug/mL	99.3	<9.00E-03	<18.0	n/a	n/a	n/a	n/a	18.0	U	20152628
Cone 8-Liq-b	C105-15-03	S15R000702	ICP-AES	7439-96-5	Manganese	ug/mL	101	<1.00E-03	13.0	n/a	n/a	n/a	n/a	2.00	J	20152628
Cone 8-Liq-b	C105-15-03	S15R000702	ICP-AES	7439-98-7	Molybdenum	ug/mL	92.1	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 8-Liq-b	C105-15-03	S15R000702	ICP-AES	7440-23-5	Sodium	ug/mL	102	<0.0920	4.06E+05	n/a	n/a	n/a	n/a	184	Y	20152628
Cone 8-Liq-b	C105-15-03	S15R000702	ICP-AES	7440-00-8	Neodymium	ug/mL	101	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 8-Liq-b	C105-15-03	S15R000702	ICP-AES	7440-02-0	Nickel	ug/mL	98.4	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 8-Liq-b	C105-15-03	S15R000702	ICP-AES	7440-30-1	Niobium	ug/mL	99.2	<6.00E-03	<12.0	n/a	n/a	n/a	n/a	12.0	U	20152628
Cone 8-Liq-b	C105-15-03	S15R000702	ICP-AES	7723-14-0	Phosphorus	ug/mL	94.7	<0.0130	315	n/a	n/a	n/a	n/a	26.0		20152628
Cone 8-Liq-b	C105-15-03	S15R000702	ICP-AES	7439-92-1	Lead	ug/mL	102	<0.0130	121	n/a	n/a	n/a	n/a	26.0	J	20152628
Cone 8-Liq-b	C105-15-03	S15R000702	ICP-AES	7440-05-3	Palladium	ug/mL	102	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20152628
Cone 8-Liq-b	C105-15-03	S15R000702	ICP-AES	7440-10-0	Praseodymium	ug/mL	108	<0.0260	<52.0	n/a	n/a	n/a	n/a	52.0	U	20152628
Cone 8-Liq-b	C105-15-03	S15R000702	ICP-AES	7440-17-7	Rubidium	ug/mL	101	<0.0570	<114	n/a	n/a	n/a	n/a	114	U	20152628
Cone 8-Liq-b	C105-15-03	S15R000702	ICP-AES	7440-16-6	Rhodium	ug/mL	99.9	<0.0120	<24.0	n/a	n/a	n/a	n/a	24.0	U	20152628
Cone 8-Liq-b	C105-15-03	S15R000702	ICP-AES	7440-18-8	Ruthenium	ug/mL	106	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20152628
Cone 8-Liq-b	C105-15-03	S15R000702	ICP-AES	7704-34-9	Sulfur	ug/mL	93.5	<0.0280	<56.0	n/a	n/a	n/a	n/a	56.0	U	20152628
Cone 8-Liq-b	C105-15-03	S15R000702	ICP-AES	7440-36-0	Antimony	ug/mL	91.9	<0.0180	<36.0	n/a	n/a	n/a	n/a	36.0	U	20152628
Cone 8-Liq-b	C105-15-03	S15R000702	ICP-AES	7782-49-2	Selenium	ug/mL	98.7	<0.0300	<60.0	n/a	n/a	n/a	n/a	60.0	U	20152628
Cone 8-Liq-b	C105-15-03	S15R000702	ICP-AES	7440-21-3	Silicon	ug/mL	94.9	0.0167	278	n/a	n/a	n/a	n/a	24.0		20152628
Cone 8-Liq-b	C105-15-03	S15R000702	ICP-AES	7440-19-9	Samarium	ug/mL	103	<0.0170	<34.0	n/a	n/a	n/a	n/a	34.0	U	20152628
Cone 8-Liq-b	C105-15-03	S15R000702	ICP-AES	7440-31-5	Tin	ug/mL	96.9	<8.00E-03	<16.0	n/a	n/a	n/a	n/a	16.0	UY	20152628
Cone 8-Liq-b	C105-15-03	S15R000702	ICP-AES	7440-24-6	Strontium	ug/mL	98.5	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 8-Liq-b	C105-15-03	S15R000702	ICP-AES	7440-25-7	Tantalum	ug/mL	100	<5.00E-03	<10.0	n/a	n/a	n/a	n/a	10.0	U	20152628
Cone 8-Liq-b	C105-15-03	S15R000702	ICP-AES	13494-80-9	Tellurium	ug/mL	100	<9.00E-03	<18.0	n/a	n/a	n/a	n/a	18.0	U	20152628
Cone 8-Liq-b	C105-15-03	S15R000702	ICP-AES	7440-29-1	Thorium	ug/mL	101	<0.0130	<26.0	n/a	n/a	n/a	n/a	26.0	U	20152628
Cone 8-Liq-b	C105-15-03	S15R000702	ICP-AES	7440-32-6	Titanium	ug/mL	90.5	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 8-Liq-b	C105-15-03	S15R000702	ICP-AES	7440-28-0	Thallium	ug/mL	105	<0.0150	<30.0	n/a	n/a	n/a	n/a	30.0	U	20152628
Cone 8-Liq-b	C105-15-03	S15R000702	ICP-AES	7440-61-1	Uranium	ug/mL	101	<0.0290	<58.0	n/a	n/a	n/a	n/a	58.0	U	20152628
Cone 8-Liq-b	C105-15-03	S15R000702	ICP-AES	7440-62-2	Vanadium	ug/mL	97.4	<1.00E-03	<2.00	n/a	n/a	n/a	n/a	2.00	U	20152628
Cone 8-Liq-b	C105-15-03	S15R000702	ICP-AES	7440-33-7	Tungsten	ug/mL	99.6	<0.0160	<32.0	n/a	n/a	n/a	n/a	32.0	U	20152628
Cone 8-Liq-b	C105-15-03	S15R000702	ICP-AES	7440-65-5	Yttrium	ug/mL	102	<2.00E-03	<4.00	n/a	n/a	n/a	n/a	4.00	U	20152628
Cone 8-Liq-b	C105-15-03	S15R000702	ICP-AES	7440-66-6	Zinc	ug/mL	99.5	<0.0320	<64.0	n/a	n/a	n/a	n/a	64.0	U	20152628
Cone 8-Liq-b	C105-15-03	S15R000702	ICP-AES	7440-67-7	Zirconium	ug/mL	91.5	<1.00E-03	5.62	n/a	n/a	n/a	n/a	2.00	J	20152628
Con 11-Liq-c	C105-15-01	S16R000174	OH- by Pot. Titration	HYDROXIDE	Hydroxide	ug/mL	103	<9.22	1.20E+04	n/a	n/a	n/a	n/a	1.11E+03		20160542
Con 12-Liq-c	C105-15-01	S16R000175	OH- by Pot. Titration	HYDROXIDE	Hydroxide	ug/mL	103	<9.22	7.70E+03	7.67E+03	7.68E+03	0.417	99.6	553		20160542
Con 13-Liq-c	C105-15-02	S16R000176	OH- by Pot. Titration	HYDROXIDE	Hydroxide	ug/mL	103	<9.22	4.52E+03	4.82E+03	4.67E+03	6.49	n/a	553	J	20160542
Con 14-Liq-c	C105-15-02	S16R000177	OH- by Pot. Titration	HYDROXIDE	Hydroxide	ug/mL	103	<9.22	4.28E+03	n/a	n/a	n/a	n/a	277		20160542
Cone 1-Liq-a	C105-15-01	S15R000665	OH- by Pot. Titration	HYDROXIDE	Hydroxide	ug/mL	93.8	<9.22	653	n/a	n/a	n/a	n/a	27.7		20152628
Cone 1-Liq-a	C105-15-02	S15R000673	OH- by Pot. Titration	HYDROXIDE	Hydroxide	ug/mL	103	<9.22	3.38E+03	n/a	n/a	n/a	n/a	277		20152628
Cone 1-Liq-a	C105-15-03	S15R000681	OH- by Pot. Titration	HYDROXIDE	Hydroxide	ug/mL	103	<9.22	3.33E+03	n/a	n/a	n/a	n/a	277		20152628
Cone 1-Liq-b	C105-15-02	S16R000168	OH- by Pot. Titration	HYDROXIDE	Hydroxide	ug/mL	103	<9.22	2.97E+04	n/a	n/a	n/a	n/a	1.11E+03		20160542
Cone 1-Liq-b	C105-15-03	S15R000687	OH- by Pot. Titration	HYDROXIDE	Hydroxide	ug/mL	103	<9.22	1.12E+03	n/a	n/a	n/a	n/a	277	J	20152628
Cone 11-Liq-a	C105-15-01	S16R000162	OH- by Pot. Titration	HYDROXIDE	Hydroxide	ug/mL	103	<9.22	1.56E+05	n/a	n/a	n/a	n/a	1.11E+03		20160542
Cone 11-Liq-b	C105-15-01	S16R000164	OH- by Pot. Titration	HYDROXIDE	Hydroxide	ug/mL	103	<9.22	3.06E+04	n/a	n/a	n/a	n/a	1.11E+03		20160542
Cone 12-Liq-a	C105-15-01	S16R000163	OH- by Pot. Titration	HYDROXIDE	Hydroxide	ug/mL	103	<9.22	1.55E+05	n/a	n/a	n/a	n/a	1.11E+03		20160542
Cone 12-Liq-b	C105-15-01	S16R000165	OH- by Pot. Titration	HYDROXIDE	Hydroxide	ug/mL	103	<9.22	3.35E+04	n/a	n/a	n/a	n/a	1.11E+03		20160542
Cone 13-Liq-a	C105-15-02	S16R000166	OH- by Pot. Titration	HYDROXIDE	Hydroxide	ug/mL	103	<9.22	1.54E+05	n/a	n/a	n/a	n/a	1.11E+03		20160542

Cone 14-Liq-a	C105-15-02	S16R000167	OH- by Pot. Titration		HYDROXIDE	Hydroxide	ug/mL	103	<9.22	1.58E+05	n/a	n/a	n/a	n/a	1.11E+03		20160542
Cone 14-Liq-b	C105-15-02	S16R000169	OH- by Pot. Titration		HYDROXIDE	Hydroxide	ug/mL	103	<9.22	3.77E+04	n/a	n/a	n/a	n/a	1.11E+03		20160542
Cone 2-Liq-a	C105-15-01	S15R000666	OH- by Pot. Titration		HYDROXIDE	Hydroxide	ug/mL	103	<9.22	1.23E+03	n/a	n/a	n/a	n/a	277	J	20152628
Cone 2-Liq-a	C105-15-02	S15R000674	OH- by Pot. Titration		HYDROXIDE	Hydroxide	ug/mL	103	<9.22	3.42E+03	n/a	n/a	n/a	n/a	277		20152628
Cone 2-Liq-a	C105-15-03	S15R000682	OH- by Pot. Titration		HYDROXIDE	Hydroxide	ug/mL	103	<9.22	3.61E+03	n/a	n/a	n/a	n/a	277		20152628
Cone 2-Liq-b	C105-15-03	S15R000688	OH- by Pot. Titration		HYDROXIDE	Hydroxide	ug/mL	103	<9.22	1.24E+03	n/a	n/a	n/a	n/a	277	J	20152628
Cone 3-Liq-a	C105-15-01	S15R000667	OH- by Pot. Titration		HYDROXIDE	Hydroxide	ug/mL	98.0	<9.22	2.73E+05	2.79E+05	2.76E+05	2.25	97.5	1.11E+03		20152628
Cone 3-Liq-a	C105-15-02	S15R000675	OH- by Pot. Titration		HYDROXIDE	Hydroxide	ug/mL	98.0	<9.22	3.07E+05	n/a	n/a	n/a	n/a	1.11E+03		20152628
Cone 3-Liq-a	C105-15-03	S15R000683	OH- by Pot. Titration		HYDROXIDE	Hydroxide	ug/mL	93.8	<9.22	3.01E+05	2.78E+05	2.89E+05	8.04	84.5	1.11E+03		20152628
Cone 3-Liq-b	C105-15-03	S15R000689	OH- by Pot. Titration		HYDROXIDE	Hydroxide	ug/mL	103	<9.22	1.43E+04	n/a	n/a	n/a	n/a	277		20152628
Cone 4-Liq-a	C105-15-01	S15R000668	OH- by Pot. Titration		HYDROXIDE	Hydroxide	ug/mL	93.8	<9.22	3.07E+05	n/a	n/a	n/a	n/a	1.11E+03		20152628
Cone 4-Liq-a	C105-15-02	S15R000676	OH- by Pot. Titration		HYDROXIDE	Hydroxide	ug/mL	93.8	<9.22	3.08E+05	n/a	n/a	n/a	n/a	1.11E+03		20152628
Cone 4-Liq-a	C105-15-03	S15R000684	OH- by Pot. Titration		HYDROXIDE	Hydroxide	ug/mL	93.8	<9.22	3.03E+05	n/a	n/a	n/a	n/a	1.11E+03		20152628
Cone 6-Liq-b	C105-15-03	S15R000692	OH- by Pot. Titration		HYDROXIDE	Hydroxide	ug/mL	98.0	<9.22	2.99E+05	n/a	n/a	n/a	n/a	1.11E+03		20152628
Cone 8-Liq-b	C105-15-03	S15R000702	OH- by Pot. Titration		HYDROXIDE	Hydroxide	ug/mL	98.0	<9.22	3.26E+05	n/a	n/a	n/a	n/a	1.11E+03		20152628
Con 11-Liq-c	C105-15-01	S16R000174	pH of Liquids		PH	pH	unitless	n/a	n/a	>13	>13	n/a	n/a	n/a	0.0100	E	20160542
Con 12-Liq-c	C105-15-01	S16R000175	pH of Liquids		PH	pH	unitless	n/a	n/a	>13	n/a	n/a	n/a	n/a	0.0100	E	20160542
Con 13-Liq-c	C105-15-02	S16R000176	pH of Liquids		PH	pH	unitless	n/a	n/a	>13	n/a	n/a	n/a	n/a	0.0100	E	20160542
Con 14-Liq-c	C105-15-02	S16R000177	pH of Liquids		PH	pH	unitless	n/a	n/a	>13	n/a	n/a	n/a	n/a	0.0100	E	20160542
Cone 1-Liq-a	C105-15-01	S15R000665	pH of Liquids		PH	pH	unitless	n/a	n/a	9.94	9.96	9.95	0.201	n/a	0.0100		20152628
Cone 1-Liq-a	C105-15-02	S15R000673	pH of Liquids		PH	pH	unitless	n/a	n/a	9.84	n/a	n/a	n/a	n/a	0.0100		20152628
Cone 1-Liq-a	C105-15-03	S15R000681	pH of Liquids		PH	pH	unitless	n/a	n/a	9.89	n/a	n/a	n/a	n/a	0.0100		20152628
Cone 1-Liq-b	C105-15-03	S15R000687	pH of Liquids		PH	pH	unitless	n/a	n/a	9.95	n/a	n/a	n/a	n/a	0.0100		20152628
Cone 2-Liq-a	C105-15-01	S15R000666	pH of Liquids		PH	pH	unitless	n/a	n/a	9.90	n/a	n/a	n/a	n/a	0.0100		20152628
Cone 2-Liq-a	C105-15-02	S15R000674	pH of Liquids		PH	pH	unitless	n/a	n/a	9.86	n/a	n/a	n/a	n/a	0.0100		20152628
Cone 2-Liq-a	C105-15-03	S15R000682	pH of Liquids		PH	pH	unitless	n/a	n/a	9.91	n/a	n/a	n/a	n/a	0.0100		20152628
Cone 2-Liq-b	C105-15-03	S15R000688	pH of Liquids		PH	pH	unitless	n/a	n/a	9.81	n/a	n/a	n/a	n/a	0.0100		20152628
Cone 3-Liq-a	C105-15-01	S15R000667	pH of Liquids		PH	pH	unitless	n/a	n/a	9.77	n/a	n/a	n/a	n/a	0.0100		20152628
Cone 3-Liq-a	C105-15-02	S15R000675	pH of Liquids		PH	pH	unitless	n/a	n/a	9.94	n/a	n/a	n/a	n/a	0.0100		20152628
Cone 3-Liq-a	C105-15-03	S15R000683	pH of Liquids		PH	pH	unitless	n/a	n/a	10.9	n/a	n/a	n/a	n/a	0.0100		20152628
Cone 3-Liq-b	C105-15-03	S15R000689	pH of Liquids		PH	pH	unitless	n/a	n/a	>13	>13	n/a	n/a	n/a	0.0100	E	20152628
Cone 4-Liq-a	C105-15-01	S15R000668	pH of Liquids		PH	pH	unitless	n/a	n/a	10.2	n/a	n/a	n/a	n/a	0.0100		20152628
Cone 4-Liq-a	C105-15-02	S15R000676	pH of Liquids		PH	pH	unitless	n/a	n/a	10.6	n/a	n/a	n/a	n/a	0.0100		20152628
Cone 4-Liq-a	C105-15-03	S15R000684	pH of Liquids		PH	pH	unitless	n/a	n/a	11.0	n/a	n/a	n/a	n/a	0.0100		20152628
Cone 4-Liq-b	C105-15-03	S15R000690	pH of Liquids		PH	pH	unitless	n/a	n/a	7.92	n/a	n/a	n/a	n/a	0.0100		20152628
Cone 5-Liq-a	C105-15-03	S15R000685	pH of Liquids		PH	pH	unitless	n/a	n/a	0.270	n/a	n/a	n/a	n/a	0.0100	E	20152628
Cone 5-Liq-b	C105-15-03	S15R000691	pH of Liquids		PH	pH	unitless	n/a	n/a	2.56	n/a	n/a	n/a	n/a	0.0100		20152628
Cone 6-Liq-a	C105-15-03	S15R000686	pH of Liquids		PH	pH	unitless	n/a	n/a	0.290	n/a	n/a	n/a	n/a	0.0100	E	20152628
Cone 6-Liq-b	C105-15-03	S15R000692	pH of Liquids		PH	pH	unitless	n/a	n/a	10.9	n/a	n/a	n/a	n/a	0.0100		20152628
Cone 7-Liq-a	C105-15-03	S15R000699	pH of Liquids		PH	pH	unitless	n/a	n/a	5.34	5.34	5.34	0.0	n/a	0.0100		20152628
Cone 7-Liq-b	C105-15-03	S15R000701	pH of Liquids		PH	pH	unitless	n/a	n/a	7.20	n/a	n/a	n/a	n/a	0.0100		20152628
Cone 8-Liq-a	C105-15-03	S15R000700	pH of Liquids		PH	pH	unitless	n/a	n/a	3.83	n/a	n/a	n/a	n/a	0.0100		20152628
Cone 8-Liq-b	C105-15-03	S15R000702	pH of Liquids		PH	pH	unitless	n/a	n/a	11.2	n/a	n/a	n/a	n/a	0.0100		20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	120-82-1	1,2,4-Trichlorobenzene	ug/L	98.3	<1.38E+05	<1.38E+05	<1.38E+05	n/a	n/a	n/a	1.38E+05	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	95-50-1	1,2-Dichlorobenzene	ug/L	97.8	<1.35E+05	<1.35E+05	<1.35E+05	n/a	n/a	n/a	1.35E+05	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	106-46-7	1,4-Dichlorobenzene	ug/L	97.7	<1.36E+05	<1.36E+05	<1.36E+05	n/a	n/a	n/a	1.36E+05	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	71-36-3	1-Butanol	ug/L	91.2	<5.55E+05	<5.55E+05	<5.55E+05	n/a	n/a	n/a	5.55E+05	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	108-60-1	2,2-oxybis(1-Chloropro	ug/L	99.8	<1.40E+05	<1.40E+05	<1.40E+05	n/a	n/a	n/a	1.40E+05	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	95-95-4	2,4,5-Trichlorophenol	ug/L	99.8	<1.37E+05	<1.37E+05	<1.37E+05	n/a	n/a	n/a	1.37E+05	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	88-06-2	2,4,6-Trichlorophenol	ug/L	101	<1.33E+05	<1.33E+05	<1.33E+05	n/a	n/a	n/a	1.33E+05	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	120-83-2	2,4-Dichlorophenol	ug/L	102	<1.32E+05	<1.32E+05	<1.32E+05	n/a	n/a	n/a	1.32E+05	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	105-67-9	2,4-Dimethylphenol	ug/L	101	<6.88E+04	<6.88E+04	<6.88E+04	n/a	n/a	n/a	6.88E+04	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	51-28-5	2,4-Dinitrophenol	ug/L	89.5	<4.51E+04	<4.51E+04	<4.51E+04	n/a	n/a	n/a	4.51E+04	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	121-14-2	2,4-Dinitrotoluene	ug/L	102	<7.29E+04	<7.29E+04	<7.29E+04	n/a	n/a	n/a	7.29E+04	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	128-37-0	BHT	ug/L	99.6	<6.17E+04	<6.17E+04	<6.17E+04	n/a	n/a	n/a	6.17E+04	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	606-20-2	2,6-Dinitrotoluene	ug/L	101	<9.24E+04	<9.24E+04	<9.24E+04	n/a	n/a	n/a	9.24E+04	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	111-76-2	2-Butoxyethanol	ug/L	101	<2.81E+05	<2.81E+05	<2.81E+05	n/a	n/a	n/a	2.81E+05	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	91-58-7	2-Chloronaphthalene	ug/L	101	<1.40E+05	<1.40E+05	<1.40E+05	n/a	n/a	n/a	1.40E+05	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	95-57-8	2-Chlorophenol	ug/L	98.8	<1.18E+05	<1.18E+05	<1.18E+05	n/a	n/a	n/a	1.18E+05	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	110-80-5	2-Ethoxyethanol	ug/L	94.3	<1.86E+05	<1.86E+05	<1.86E+05	n/a	n/a	n/a	1.86E+05	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	91-57-6	2-Methylnaphthalene	ug/L	99.8	<1.41E+05	<1.41E+05	<1.41E+05	n/a	n/a	n/a	1.41E+05	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	95-48-7	2-Methylphenol	ug/L	105	<1.26E+05	<1.26E+05	<1.26E+05	n/a	n/a	n/a	1.26E+05	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	88-74-4	2-Nitroaniline	ug/L	106	<1.00E+05	<1.00E+05	<1.00E+05	n/a	n/a	n/a	1.00E+05	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	88-75-5	2-Nitrophenol	ug/L	103	<1.26E+05	<1.26E+05	<1.26E+05	n/a	n/a	n/a	1.26E+05	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	108-39-4M	Cresol (m & p)	ug/L	102	<1.12E+05	<1.12E+05	<1.12E+05	n/a	n/a	n/a	1.12E+05	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	99-09-2	3-Nitroaniline	ug/L	98.0	<1.21E+05	<1.21E+05	<1.21E+05	n/a	n/a	n/a	1.21E+05	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	534-52-1	4,6-Dinitro-o-cresol	ug/L	95.5	<2.99E+04	<2.99E+04	<2.99E+04	n/a	n/a	n/a	2.99E+04	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	101-55-3	4-Bromophenylphenyl e	ug/L	101	<8.34E+04	<8.34E+04	<8.34E+04	n/a	n/a	n/a	8.34E+04	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	59-50-7	4-Chloro-3-methylphenc	ug/L	103	<1.27E+05	<1.27E+05	<1.27E+05	n/a	n/a	n/a	1.27E+05	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	106-47-8	4-Chloroaniline	ug/L	99.3	<1.38E+05	<1.38E+05	<1.38E+05	n/a	n/a	n/a	1.38E+05	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	7005-72-3	4-Chlorophenylphenyl e	ug/L	100	<1.15E+05	<1.15E+05	<1.15E+05	n/a	n/a	n/a	1.15E+05	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	106-44-5	4-Methylphenol	ug/L	n/a	0.0	0.0	0.0	0.0	n/a	n/a	n/a	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	100-01-6	4-Nitroaniline	ug/L	97.8	<1.08E+05	<1.08E+05	<1.08E+05	n/a	n/a	n/a	1.08E+05	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	100-02-7	4-Nitrophenol	ug/L	90.9	<7.33E+04	<7.33E+04	<7.33E+04	n/a	n/a	n/a	7.33E+04	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	83-32-9	Acenaphthene	ug/L	98.2	<1.30E+05	<1.30E+05	<1.30E+05	n/a	n/a	n/a	1.30E+05	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	208-96-8	Acenaphthylene	ug/L	99.0	<1.50E+05	<1.50E+05	<1.50E+05	n/a	n/a	n/a	1.50E+05	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	120-12-7	Anthracene	ug/L	99.5	<6.20E+04	<6.20E+04	<6.20E+04	n/a	n/a	n/a	6.20E+04	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	56-55-3	Benzo(a)anthracene	ug/L	99.8	<5.64E+04	<5.64E+04	<5.64E+04	n/a	n/a	n/a	5.64E+04	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	50-32-8	Benzo(a)pyrene	ug/L	102	<5.42E+04	<5.42E+04	<5.42E+04	n/a	n/a	n/a	5.42E+04	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	205-99-2	Benzo(b)fluoranthene	ug/L	105	<6.22E+04	<6.22E+04	<6.22E+04	n/a	n/a	n/a	6.22E+04	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	191-24-2	Benzo(ghi)perylene	ug/L	89.5	<5.30E+04	<5.30E+04	<5.30E+04	n/a	n/a	n/a	5.30E+04	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	207-08-9	Benzo(k)fluoranthene	ug/L	105	<6.02E+04	<6.02E+04	<6.02E+04	n/a	n/a	n/a	6.02E+04	U	20152628

Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	85-68-7	Butylbenzylphthalate	ug/L	104	<4.64E+04	<4.64E+04	<4.64E+04	n/a	n/a	n/a	4.64E+04	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	218-01-9	Chrysene	ug/L	108	<6.49E+04	<6.49E+04	<6.49E+04	n/a	n/a	n/a	6.49E+04	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	108-94-1	Cyclohexanone	ug/L	102	<1.30E+05	<1.30E+05	<1.30E+05	n/a	n/a	n/a	1.30E+05	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	84-74-2	Di-n-butylphthalate	ug/L	108	<3.76E+04	<3.76E+04	<3.76E+04	n/a	n/a	n/a	3.76E+04	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	117-84-0	Di-n-octylphthalate	ug/L	109	<4.66E+04	<4.66E+04	<4.66E+04	n/a	n/a	n/a	4.66E+04	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	53-70-3	Dibenz[a,h]anthracene	ug/L	88.9	<4.53E+04	<4.53E+04	<4.53E+04	n/a	n/a	n/a	4.53E+04	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	132-64-9	Dibenzofuran	ug/L	98.0	<1.19E+05	<1.19E+05	<1.19E+05	n/a	n/a	n/a	1.19E+05	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	84-66-2	Diethylphthalate	ug/L	103	<7.21E+04	<7.21E+04	<7.21E+04	n/a	n/a	n/a	7.21E+04	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	131-11-3	Dimethyl phthalate	ug/L	102	<8.45E+04	<8.45E+04	<8.45E+04	n/a	n/a	n/a	8.45E+04	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	122-39-4	Diphenylamine	ug/L	99.2	<7.73E+04	<7.73E+04	<7.73E+04	n/a	n/a	n/a	7.73E+04	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	206-44-0	Fluoranthene	ug/L	101	<4.06E+04	<4.06E+04	<4.06E+04	n/a	n/a	n/a	4.06E+04	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	86-73-7	Fluorene	ug/L	98.8	<1.27E+05	<1.27E+05	<1.27E+05	n/a	n/a	n/a	1.27E+05	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	118-74-1	Hexachlorobenzene	ug/L	103	<1.08E+05	<1.08E+05	<1.08E+05	n/a	n/a	n/a	1.08E+05	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	87-68-3	Hexachlorobutadiene	ug/L	100	<1.50E+05	<1.50E+05	<1.50E+05	n/a	n/a	n/a	1.50E+05	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	77-47-4	Hexachlorocyclopentadi	ug/L	94.0	<2.62E+04	<2.62E+04	<2.62E+04	n/a	n/a	n/a	2.62E+04	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	67-72-1	Hexachloroethane	ug/L	98.8	<1.40E+05	<1.40E+05	<1.40E+05	n/a	n/a	n/a	1.40E+05	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	193-39-5	Indeno(1,2,3-cd)pyrene	ug/L	89.9	<2.62E+04	<2.62E+04	<2.62E+04	n/a	n/a	n/a	2.62E+04	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	78-83-1	Isobutanol	ug/L	90.6	<2.16E+05	<2.16E+05	<2.16E+05	n/a	n/a	n/a	2.16E+05	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	78-59-1	Isophorone	ug/L	104	<1.35E+05	<1.35E+05	<1.35E+05	n/a	n/a	n/a	1.35E+05	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	1319-77-3	Total Methylphenols	ug/L	n/a	0.0	0.0	0.0	0.0	0.0	n/a	n/a	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	62-75-9	N-Nitrosodimethylamin	ug/L	98.8	<1.24E+05	<1.24E+05	<1.24E+05	n/a	n/a	n/a	1.24E+05	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	621-64-7	N-Nitroso-di-n-dipropyl	ug/L	103	<1.36E+05	<1.36E+05	<1.36E+05	n/a	n/a	n/a	1.36E+05	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	59-89-2	N-Nitrosomorpholine	ug/L	101	<1.09E+05	<1.09E+05	<1.09E+05	n/a	n/a	n/a	1.09E+05	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	91-20-3	Naphthalene	ug/L	98.8	<1.23E+05	<1.23E+05	<1.23E+05	n/a	n/a	n/a	1.23E+05	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	98-95-3	Nitrobenzene	ug/L	101	<1.22E+05	<1.22E+05	<1.22E+05	n/a	n/a	n/a	1.22E+05	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	87-86-5	Pentachlorophenol	ug/L	90.8	<5.70E+04	<5.70E+04	<5.70E+04	n/a	n/a	n/a	5.70E+04	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	85-01-8	Phenanthrene	ug/L	98.6	<5.93E+04	<5.93E+04	<5.93E+04	n/a	n/a	n/a	5.93E+04	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	108-95-2	Phenol	ug/L	100	<1.21E+05	<1.21E+05	<1.21E+05	n/a	n/a	n/a	1.21E+05	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	129-00-0	Pyrene	ug/L	102	<3.81E+04	<3.81E+04	<3.81E+04	n/a	n/a	n/a	3.81E+04	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	110-86-1	Pyridine	ug/L	98.2	<1.46E+05	<1.46E+05	<1.46E+05	n/a	n/a	n/a	1.46E+05	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	126-73-8	Tributyl phosphate	ug/L	109	<5.13E+04	<5.13E+04	<5.13E+04	n/a	n/a	n/a	5.13E+04	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	111-91-1	Bis(2-Chloroethoxy)met	ug/L	100	<1.34E+05	<1.34E+05	<1.34E+05	n/a	n/a	n/a	1.34E+05	U	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	117-81-7	Bis(2-ethylhexyl) phthal	ug/L	104	<4.40E+04	1.16E+05	<4.40E+04	n/a	n/a	n/a	4.40E+04	J	20152628
Cone 9-Liq-Cor	C105-15-03	S16R000179	SVOA 222S LIQUID	O	111-44-4	Bis(2-chloroethyl) ether	ug/L	99.1	<1.30E+05	<1.30E+05	<1.30E+05	n/a	n/a	n/a	1.30E+05	U	20152628
Con 11-Liq-c	C105-15-01	S16R000174	TIC/TOC by Acid Persulfate		TIC	Total inorganic carbon	ug/mL	97.3	<7.00	4.37E+03	n/a	n/a	n/a	n/a	70.0		20160542
Con 11-Liq-c	C105-15-01	S16R000174	TIC/TOC by Acid Persulfate		TOC	Total organic carbon	ug/mL	92.7	<20.0	769	n/a	n/a	n/a	n/a	200	J	20160542
Con 12-Liq-c	C105-15-01	S16R000175	TIC/TOC by Acid Persulfate		TIC	Total inorganic carbon	ug/mL	97.3	<7.00	4.78E+03	n/a	n/a	n/a	n/a	35.0		20160542
Con 12-Liq-c	C105-15-01	S16R000175	TIC/TOC by Acid Persulfate		TOC	Total organic carbon	ug/mL	92.7	<20.0	723	n/a	n/a	n/a	n/a	100		20160542
Con 13-Liq-c	C105-15-02	S16R000176	TIC/TOC by Acid Persulfate		TIC	Total inorganic carbon	ug/mL	97.3	<7.00	4.77E+03	4.87E+03	4.82E+03	2.07	100	35.0		20160542
Con 13-Liq-c	C105-15-02	S16R000176	TIC/TOC by Acid Persulfate		TOC	Total organic carbon	ug/mL	92.7	<20.0	167	426	296	87.4	90.4	100	J	20160542
Con 14-Liq-c	C105-15-02	S16R000177	TIC/TOC by Acid Persulfate		TIC	Total inorganic carbon	ug/mL	97.3	<7.00	4.13E+03	n/a	n/a	n/a	n/a	35.0		20160542
Con 14-Liq-c	C105-15-02	S16R000177	TIC/TOC by Acid Persulfate		TOC	Total organic carbon	ug/mL	92.7	<20.0	326	n/a	n/a	n/a	n/a	100	J	20160542
Cone 1-Liq-a	C105-15-01	S15R000665	TIC/TOC by Acid Persulfate		TIC	Total inorganic carbon	ug/mL	98.1	<7.00	2.79E+03	2.79E+03	2.79E+03	0.0	96.1	70.0		20152628
Cone 1-Liq-a	C105-15-01	S15R000665	TIC/TOC by Acid Persulfate		TOC	Total organic carbon	ug/mL	92.9	<20.0	222	327	274	38.3	79.0	200	J	20152628
Cone 1-Liq-a	C105-15-02	S15R000673	TIC/TOC by Acid Persulfate		TIC	Total inorganic carbon	ug/mL	98.1	<7.00	5.47E+03	n/a	n/a	n/a	n/a	35.0		20152628
Cone 1-Liq-a	C105-15-02	S15R000673	TIC/TOC by Acid Persulfate		TOC	Total organic carbon	ug/mL	92.9	<20.0	292	n/a	n/a	n/a	n/a	100	J	20152628
Cone 1-Liq-a	C105-15-03	S15R000681	TIC/TOC by Acid Persulfate		TIC	Total inorganic carbon	ug/mL	97.3	<7.00	3.74E+03	n/a	n/a	n/a	n/a	35.0		20152628
Cone 1-Liq-a	C105-15-03	S15R000681	TIC/TOC by Acid Persulfate		TOC	Total organic carbon	ug/mL	92.7	<20.0	348	n/a	n/a	n/a	n/a	100	J	20152628
Cone 1-Liq-b	C105-15-03	S15R000687	TIC/TOC by Acid Persulfate		TIC	Total inorganic carbon	ug/mL	94.8	<7.00	379	n/a	n/a	n/a	n/a	14.0		20152628
Cone 1-Liq-b	C105-15-03	S15R000687	TIC/TOC by Acid Persulfate		TOC	Total organic carbon	ug/mL	91.5	<20.0	41.4	n/a	n/a	n/a	n/a	40.0	J	20152628
Cone 11-Liq-a	C105-15-01	S16R000162	TIC/TOC by Acid Persulfate		TIC	Total inorganic carbon	ug/mL	97.0	<7.00	1.10E+03	n/a	n/a	n/a	n/a	14.0		20160542
Cone 11-Liq-a	C105-15-01	S16R000162	TIC/TOC by Acid Persulfate		TOC	Total organic carbon	ug/mL	92.1	<20.0	66.2	n/a	n/a	n/a	n/a	40.0	J	20160542
Cone 12-Liq-a	C105-15-01	S16R000163	TIC/TOC by Acid Persulfate		TIC	Total inorganic carbon	ug/mL	97.0	<7.00	881	n/a	n/a	n/a	n/a	14.0		20160542
Cone 12-Liq-a	C105-15-01	S16R000163	TIC/TOC by Acid Persulfate		TOC	Total organic carbon	ug/mL	92.1	<20.0	68.6	n/a	n/a	n/a	n/a	40.0	J	20160542
Cone 13-Liq-a	C105-15-02	S16R000166	TIC/TOC by Acid Persulfate		TIC	Total inorganic carbon	ug/mL	97.0	<7.00	1.32E+03	n/a	n/a	n/a	n/a	14.0		20160542
Cone 13-Liq-a	C105-15-02	S16R000166	TIC/TOC by Acid Persulfate		TOC	Total organic carbon	ug/mL	92.1	<20.0	53.8	n/a	n/a	n/a	n/a	40.0	J	20160542
Cone 14-Liq-a	C105-15-02	S16R000167	TIC/TOC by Acid Persulfate		TIC	Total inorganic carbon	ug/mL	97.0	<7.00	1.36E+03	n/a	n/a	n/a	n/a	14.0		20160542
Cone 14-Liq-a	C105-15-02	S16R000167	TIC/TOC by Acid Persulfate		TOC	Total organic carbon	ug/mL	92.1	<20.0	78.8	n/a	n/a	n/a	n/a	40.0	J	20160542
Cone 2-Liq-a	C105-15-01	S15R000666	TIC/TOC by Acid Persulfate		TIC	Total inorganic carbon	ug/mL	98.1	<7.00	4.00E+03	n/a	n/a	n/a	n/a	70.0		20152628
Cone 2-Liq-a	C105-15-01	S15R000666	TIC/TOC by Acid Persulfate		TOC	Total organic carbon	ug/mL	92.9	<20.0	<200	n/a	n/a	n/a	n/a	200	U	20152628
Cone 2-Liq-a	C105-15-02	S15R000674	TIC/TOC by Acid Persulfate		TIC	Total inorganic carbon	ug/mL	98.1	<7.00	4.88E+03	n/a	n/a	n/a	n/a	35.0		20152628
Cone 2-Liq-a	C105-15-02	S15R000674	TIC/TOC by Acid Persulfate		TOC	Total organic carbon	ug/mL	92.9	<20.0	221	n/a	n/a	n/a	n/a	100	J	20152628
Cone 2-Liq-a	C105-15-03	S15R000682	TIC/TOC by Acid Persulfate		TIC	Total inorganic carbon	ug/mL	95.4	<7.00	3.34E+03	n/a	n/a	n/a	n/a	35.0		20152628
Cone 2-Liq-a	C105-15-03	S15R000682	TIC/TOC by Acid Persulfate		TOC	Total organic carbon	ug/mL	91.5	<20.0	478	n/a	n/a	n/a	n/a	100	J	20152628
Cone 2-Liq-b	C105-15-03	S15R000688	TIC/TOC by Acid Persulfate		TIC	Total inorganic carbon	ug/mL	94.8	<7.00	383	380	382	0.786	94.7	14.0		20152628
Cone 2-Liq-b	C105-15-03	S15R000688	TIC/TOC by Acid Persulfate		TOC	Total organic carbon	ug/mL	91.5	<20.0	43.6	50.4	47.0	14.5	91.0	40.0	J	20152628
Cone 3-Liq-a	C105-15-01	S15R000667	TIC/TOC by Acid Persulfate		TIC	Total inorganic carbon	ug/mL	98.1	<7.00	181	n/a	n/a	n/a	n/a	70.0	J	20152628
Cone 3-Liq-a	C105-15-01	S15R000667	TIC/TOC by Acid Persulfate		TOC	Total organic carbon	ug/mL	92.9	<20.0	<200	n/a	n/a	n/a	n/a	200	U	20152628
Cone 3-Liq-a	C105-15-02	S15R000675	TIC/TOC by Acid Persulfate		TIC	Total inorganic carbon	ug/mL	95.4	<7.00	139	n/a	n/a	n/a	n/a	35.0	J	20152628
Cone 3-Liq-a	C105-15-02	S15R000675	TIC/TOC by Acid Persulfate		TOC	Total organic carbon	ug/mL	91.5	<20.0	<100	n/a	n/a	n/a	n/a	100	U	20152628
Cone 3-Liq-a	C105-15-03	S15R000683	TIC/TOC by Acid Persulfate		TIC	Total inorganic carbon	ug/mL	94.4	<7.00	122	n/a	n/a	n/a	n/a	14.0		20152628
Cone 3-Liq-a	C105-15-03	S15R000683	TIC/TOC by Acid Persulfate		TOC	Total organic carbon	ug/mL	90.6	<20.0	51.4	n/a	n/a	n/a	n/a	40.0	J	20152628
Cone 3-Liq-b	C105-15-03	S15R000689	TIC/TOC by Acid Persulfate		TIC	Total inorganic carbon	ug/mL	94.8	<7.00	3.26E+03	n/a	n/a	n/a	n/a	14.0		20152628
Cone 3-Liq-b	C105-15-03	S15R000689	TIC/TOC by Acid Persulfate		TOC	Total organic carbon	ug/mL	91.5	<20.0	406	n/a	n/a	n/a	n/a	40.0		20152628
Cone 4-Liq-a	C105-15-01	S15R000668	TIC/TOC by Acid Persulfate		TIC	Total inorganic carbon	ug/mL	98.1	<7.00	151	n/a	n/a	n/a	n/a	14.0		20152628
Cone 4-Liq-a	C105-15-01	S15R000668	TIC/TOC by Acid Persulfate		TOC	Total organic carbon	ug/mL	92.9	<20.0	55.4	n/a	n/a	n/a	n/a	40.0	J	20152628
Cone 4-Liq-a	C105-15-02	S15R000676	TIC/TOC by Acid Persulfate		TIC	Total inorganic carbon	ug/mL	95.4	<7.00	121	121	121	0.0	95.5	14.0		20152628
Cone 4-Liq-a	C105-15-02	S15R000676	TIC/TOC by Acid Persulfate		TOC	Total organic carbon	ug/mL	91.5	<20.0	<40.0	<40.0	n/a	n/a	94.0	40.0	U	20152628
Cone 4-Liq-a	C105-15-03	S15R000684	TIC/TOC by Acid Persulfate		TIC	Total inorganic carbon	ug/mL	94.4	<7.00	98.4	101	99.7	2.61	89.5	14.0		20152628
Cone 4-Liq-a	C105-15-03	S15R000684	TIC/TOC by Acid Persulfate		TOC	Total organic carbon	ug/mL	90.6	<20.0	<40.0	41.0	n/a	n/a	85.8	40.0	U	20152628
Cone 4-Liq-b	C105-15-03	S15R000690	TIC/TOC by Acid Persulfate		TIC	Total inorganic carbon	ug/mL	94.8	<7.00	457	n/a	n/a	n/a	n/a	14.0		20152628
Cone 4-Liq-b	C105-15-03	S15R000690	TIC/TOC by Acid Persulfate		TOC	Total organic carbon	ug/mL	91.5	<20.0	2.88E+03	n/a	n/a	n/a	n/a	40.0		20152628

Cone 5-Liq-a	C105-15-03	S15R000685	TIC/TOC by Acid Persulfate	TIC	Total inorganic carbon	ug/mL	94.4	<7.00	<14.0	n/a	n/a	n/a	n/a	14.0	U	20152628
Cone 5-Liq-a	C105-15-03	S15R000685	TIC/TOC by Acid Persulfate	TOC	Total organic carbon	ug/mL	90.6	<20.0	341	n/a	n/a	n/a	n/a	40.0		20152628
Cone 5-Liq-b	C105-15-03	S15R000691	TIC/TOC by Acid Persulfate	TIC	Total inorganic carbon	ug/mL	94.8	<7.00	<14.0	n/a	n/a	n/a	n/a	14.0	U	20152628
Cone 5-Liq-b	C105-15-03	S15R000691	TIC/TOC by Acid Persulfate	TOC	Total organic carbon	ug/mL	91.5	<20.0	<40.0	n/a	n/a	n/a	n/a	40.0	U	20152628
Cone 6-Liq-a	C105-15-03	S15R000686	TIC/TOC by Acid Persulfate	TIC	Total inorganic carbon	ug/mL	94.4	<7.00	<14.0	n/a	n/a	n/a	n/a	14.0	U	20152628
Cone 6-Liq-a	C105-15-03	S15R000686	TIC/TOC by Acid Persulfate	TOC	Total organic carbon	ug/mL	90.6	<20.0	301	n/a	n/a	n/a	n/a	40.0		20152628
Cone 6-Liq-b	C105-15-03	S15R000692	TIC/TOC by Acid Persulfate	TIC	Total inorganic carbon	ug/mL	97.0	<7.00	79.0	79.6	79.3	0.757	97.0	14.0		20152628
Cone 6-Liq-b	C105-15-03	S15R000692	TIC/TOC by Acid Persulfate	TOC	Total organic carbon	ug/mL	92.1	<20.0	<40.0	<40.0	n/a	n/a	91.2	40.0	U	20152628
Cone 7-Liq-a	C105-15-03	S15R000699	TIC/TOC by Acid Persulfate	TIC	Total inorganic carbon	ug/mL	97.0	<7.00	<14.0	n/a	n/a	n/a	n/a	14.0	U	20152628
Cone 7-Liq-a	C105-15-03	S15R000699	TIC/TOC by Acid Persulfate	TOC	Total organic carbon	ug/mL	92.1	<20.0	5.17E+03	n/a	n/a	n/a	n/a	40.0		20152628
Cone 7-Liq-b	C105-15-03	S15R000701	TIC/TOC by Acid Persulfate	TIC	Total inorganic carbon	ug/mL	97.0	<7.00	<14.0	n/a	n/a	n/a	n/a	14.0	U	20152628
Cone 7-Liq-b	C105-15-03	S15R000701	TIC/TOC by Acid Persulfate	TOC	Total organic carbon	ug/mL	92.1	<20.0	272	n/a	n/a	n/a	n/a	40.0		20152628
Cone 8-Liq-a	C105-15-03	S15R000700	TIC/TOC by Acid Persulfate	TIC	Total inorganic carbon	ug/mL	97.0	<7.00	<14.0	n/a	n/a	n/a	n/a	14.0	U	20152628
Cone 8-Liq-a	C105-15-03	S15R000700	TIC/TOC by Acid Persulfate	TOC	Total organic carbon	ug/mL	92.1	<20.0	3.39E+03	n/a	n/a	n/a	n/a	40.0		20152628
Cone 8-Liq-b	C105-15-03	S15R000702	TIC/TOC by Acid Persulfate	TIC	Total inorganic carbon	ug/mL	97.0	<7.00	53.2	n/a	n/a	n/a	n/a	7.00		20152628
Cone 8-Liq-b	C105-15-03	S15R000702	TIC/TOC by Acid Persulfate	TOC	Total organic carbon	ug/mL	92.1	<20.0	<40.0	n/a	n/a	n/a	n/a	40.0	U	20152628

APPENDIX C.

TANK 241-C-105 DISSOLUTION PHASE 2 STUDY

X-RAY DIFFRACTION REPORT

(11 pages, including cover page)

C-105 Analysis Summary

X-ray diffractometry (XRD) samples were prepared for samples S16R000170, S16R000171, S16R000172, and S16000173 as described in the Sample Preparation section below. In general, the phase content was unique for each sample (see Table 1). The crystalline content of each data set tended to be very weak in spite of long measurement times (800 minutes per pattern – see Figure 1). The powder deposits for each sample were equivalent, however the strength of the patterns varied by a factor of approximately two. For most of the patterns, several weak diffraction peaks were observed that could not be uniquely associated with a crystalline phase. Further details for each data set are presented in the following sections.

Table 1. Phase identification summary results.

	S16R000170	S16R000171	S16R000172	S16R000173
Gibbsite				
Hematite				t
Thermonatrite		t	M	M
Quartz		t		
Natrite			M	
Natrophosphate				t
Natroxalate				t
Unidentified Peaks	13	4	6	1

M – Major
t - trace

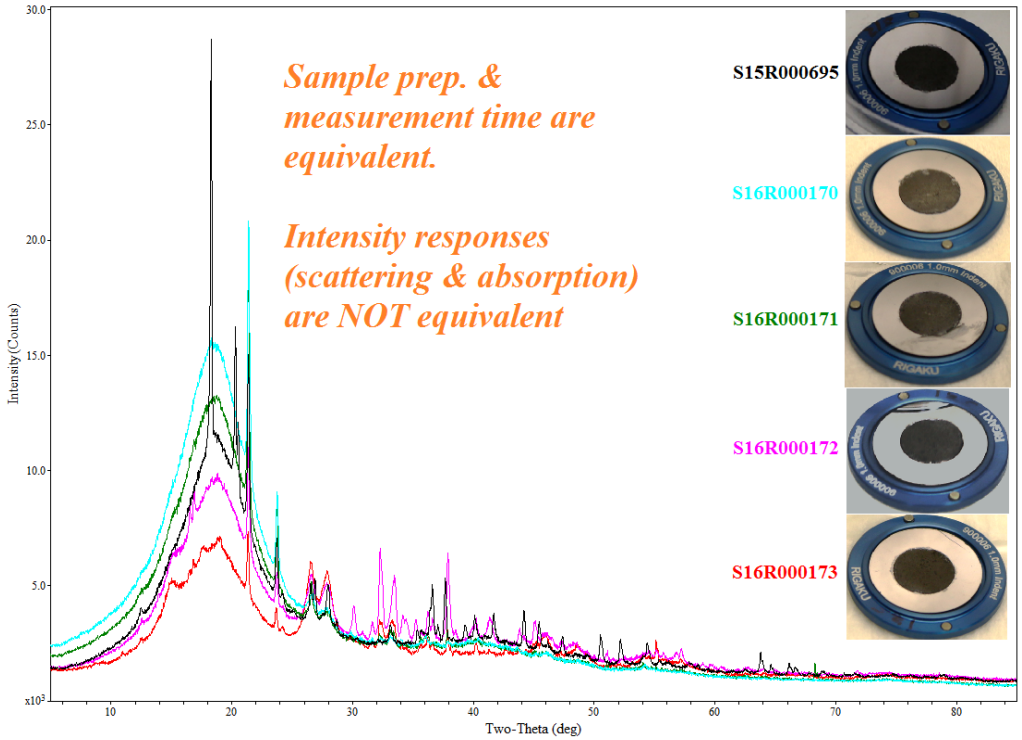


Figure 1. Raw diffraction data for all of the samples analyzed in this report are shown (unscaled).

S16R000170 Analysis

Many unsuccessful attempts to associate a crystalline phase with the weak diffraction peaks in the data from S16R000170 were made (see Figure 2). However, no crystalline phases were found to be a good match for the observed data. For the sake of reference, a phase pure pattern of petroleum jelly was overlaid with the sample data. The petroleum jelly data were scaled up to make comparison of the two patterns clearer.

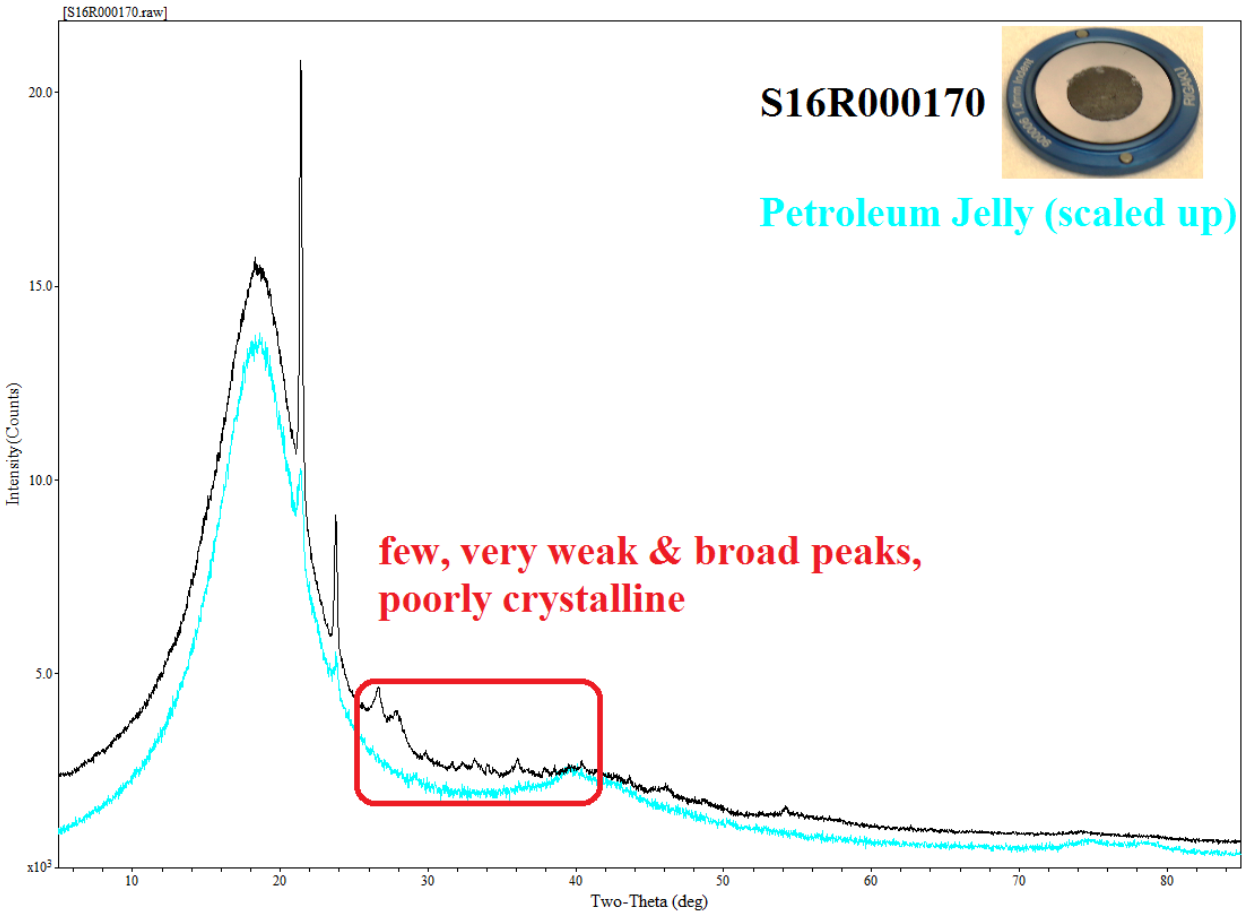


Figure 2. Trace levels of crystalline phase content are indicated in this figure.

S16R000171 Analysis

Trace levels of quartz and thermonatrite were identified in the data from S16R000171 (see Figure 3 and Table 2). As with the previous sample, the crystalline content of the sample material yielded a very weak diffraction signature.

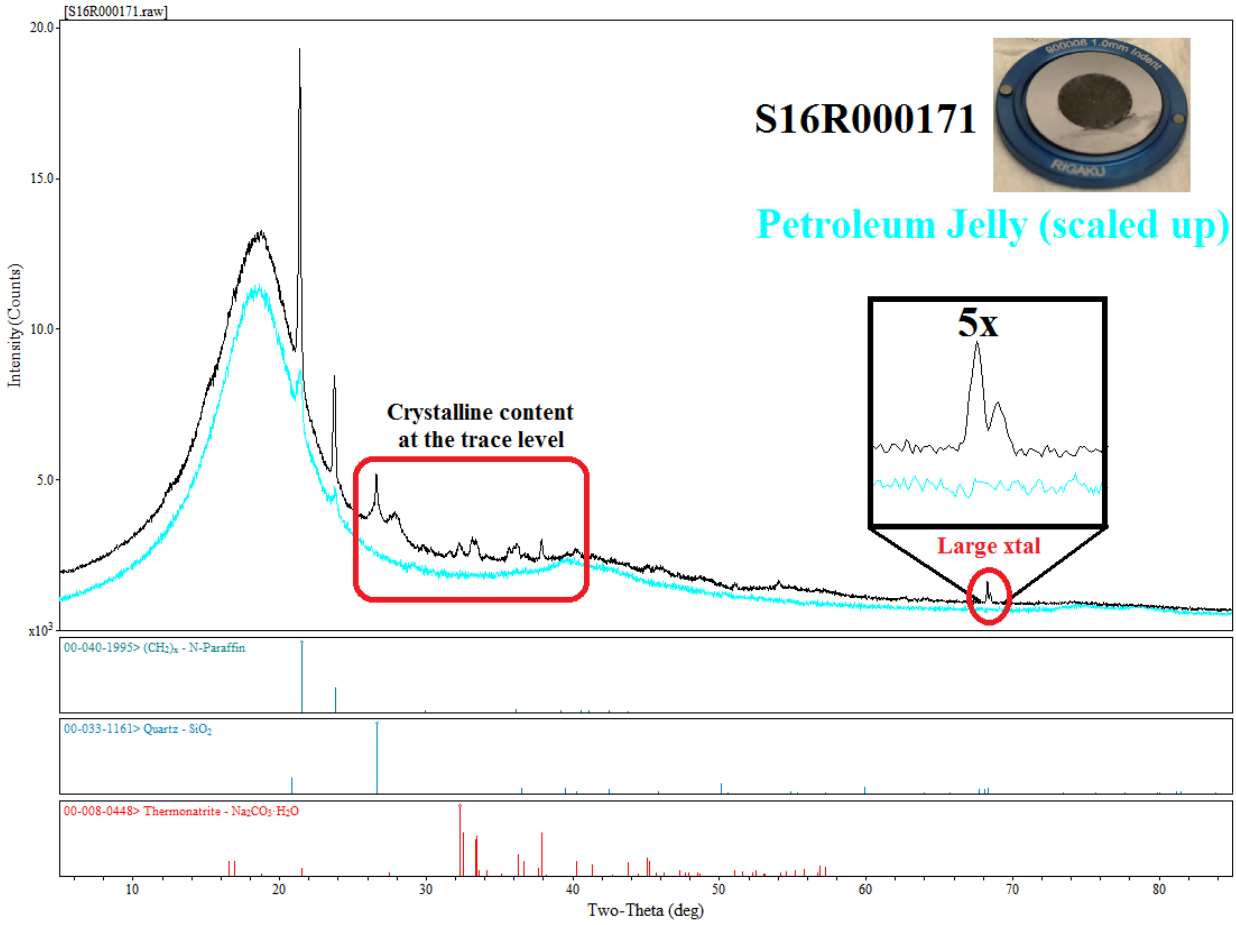


Figure 3. Phase content for S16R000171 is shown.

Table 2. Phase match results for S16R000171.

2-Theta	d(Å)	Height	Height%	Phase ID	d(Å)	I%	(h k l)	2-Theta	Delta
16.553	5.3511	373	3.4	Thermonatrite	5.35	20	(2 0 0)	16.556	0.003
16.876	5.2493	426	3.9	Thermonatrite	5.24	20	(0 1 0)	16.907	0.030
18.924	4.6856	358	3.3	Thermonatrite	4.72	2	(1 1 0)	18.785	-0.139
21.420	4.1451	10852	100	(CH2)x	4.133	100	(1 1 0)	21.483	0.063
23.762	3.7415	3597	33.1	(CH2)x	3.728	35	(2 0 0)	23.849	0.088
26.641	3.3433	1903	17.5	Quartz	3.342	100	(1 0 1)	26.652	0.011
27.920	3.193	991	9.1	Unidentified					
29.819	2.9938	235	2.2	(CH2)x	2.981	2	(2 1 0)	29.950	0.131
30.357	2.942	193	1.8	Unidentified					
31.621	2.8272	180	1.7	Unidentified					
32.262	2.7725	485	4.5	Thermonatrite	2.768	100	(2 0 2)	32.316	0.054
33.201	2.6962	715	6.6	Thermonatrite	2.684	50	(3 1 1)	33.356	0.156
35.682	2.5142	400	3.7	Unidentified					
36.278	2.4743	534	4.9	Thermonatrite	2.475	30	(4 0 1)	36.267	-0.011
36.739	2.4443	212	2	Thermonatrite	2.448	20	(2 1 2)	36.681	-0.058
37.901	2.3719	687	6.3	Thermonatrite	2.372	60	(1 2 1)	37.900	-0.001
39.660	2.2707	303	2.8	Quartz	2.282	8	(1 0 2)	39.456	-0.204
40.361	2.2329	405	3.7	Quartz	2.237	4	(1 1 1)	40.283	-0.078
40.819	2.2089	352	3.2	(CH2)x	2.222	3	(3 1 0)	40.567	-0.252
41.478	2.1753	294	2.7	Thermonatrite	2.181	16	(3 1 2)	41.364	-0.113
42.644	2.1185	259	2.4	Thermonatrite	2.114	1	(3 2 0)	42.739	0.094
43.742	2.0678	156	1.4	(CH2)x	2.067	1	(2 2 0)	43.760	0.018
45.144	2.0068	211	1.9	Thermonatrite	2.004	20	(1 2 2)	45.210	0.066
45.725	1.9826	221	2	Thermonatrite	1.985	4	(5 1 0)	45.667	-0.058
45.778	1.9805	191	1.8	Quartz	1.9792	4	(2 0 1)	45.809	0.031
48.679	1.869	174	1.6	Thermonatrite	1.869	2	(2 1 3)	48.679	0.000
53.137	1.7222	154	1.4	Thermonatrite	1.722	2	(6 0 1)	53.144	0.008
54.099	1.6938	418	3.9	Thermonatrite	1.6926	4	(5 1 2)	54.142	0.043
54.980	1.6688	239	2.2	Quartz	1.6719	4	(2 0 2)	54.868	-0.111
55.143	1.6642	273	2.5	Thermonatrite	1.6639	8	(2 3 0)	55.155	0.012
55.702	1.6488	224	2.1	Thermonatrite	1.6466	9	(1 2 3)	55.784	0.082
56.681	1.6227	225	2.1	Thermonatrite	1.6226	5	(4 2 2)	56.683	0.003
57.237	1.6082	212	2	Quartz	1.6082	1	(2 1 0)	57.238	0.001
68.321	1.3718	729	6.7	Quartz	1.3718	8	(3 0 1)	68.322	0.001
75.543	1.2576	95	0.9	Quartz	1.2558	2	(3 0 2)	75.670	0.127

S16R000172 Analysis

Hydrate and anhydrous forms of sodium carbonate were identified in the diffraction data (see Figure 4 & Table 3). It is likely that sample processing conditions (namely heating and repeated exposure to ethyl alcohol) may have partially transformed the hydrated form into the anhydrous form.

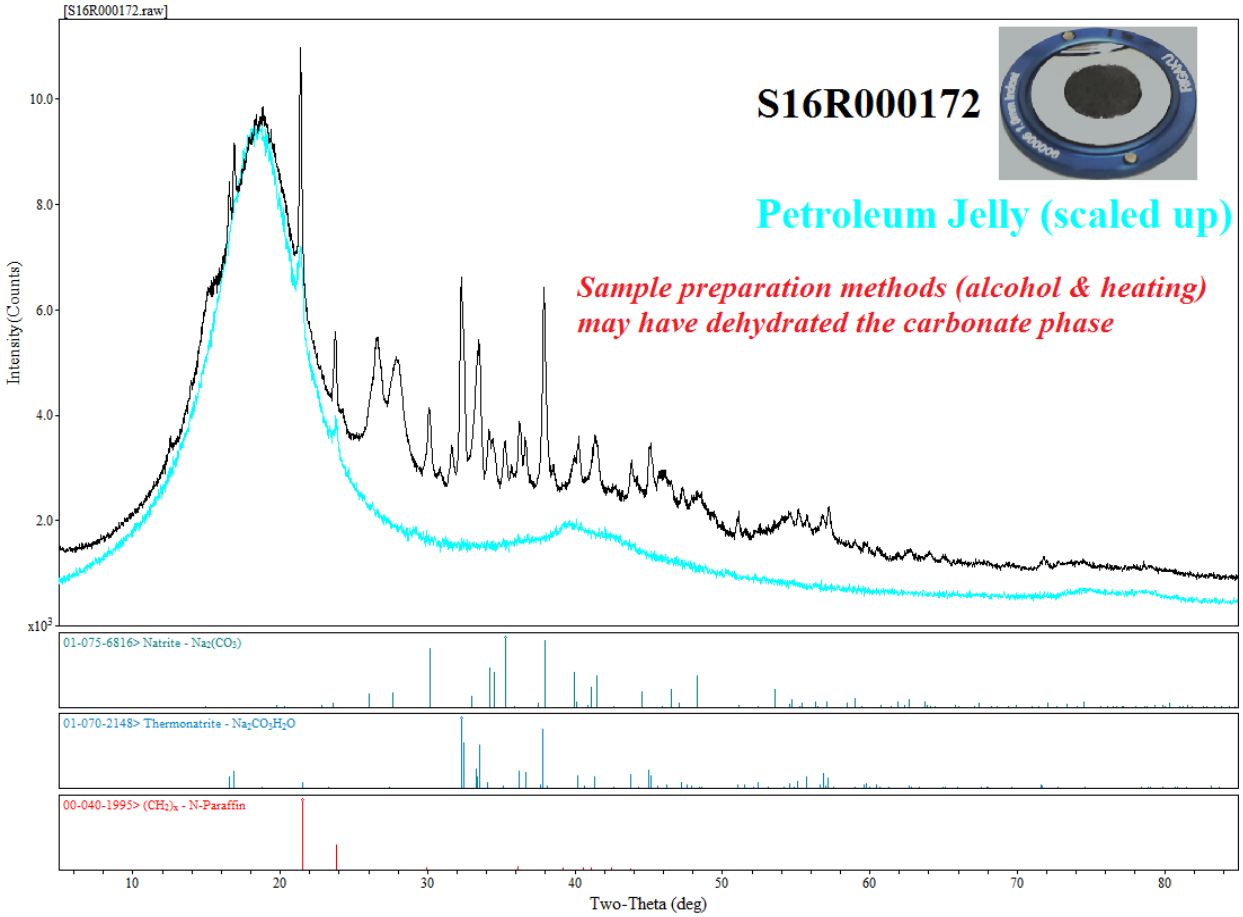


Figure 4. Phase content results for S16R000172 are shown.

Table 3. Phase content results for S16R000172.

2-Theta	d(Å)	Height	Height%	Phase ID	d(Å)	I%	(h k l)	2-Theta	Delta
12.579	7.0316	429	9.4	Unidentified					
15.117	5.8559	679	14.8	Natrite	5.9274	0.1	(0 0 1)	14.934	-0.183
16.545	5.3537	678	14.8	Thermonatrite	5.362	16.5	(0 2 0)	16.519	-0.026
16.920	5.236	1250	27.3	Thermonatrite	5.259	24.3	(0 0 1)	16.845	-0.075
21.420	4.145	4582	100	(CH2)x	4.133	100	(1 1 0)	21.483	0.063
23.779	3.7388	1469	32.1	(CH2)x	3.728	35	(2 0 0)	23.849	0.070
26.580	3.3508	2375	51.8	Unidentified					
28.060	3.1774	2141	46.7	Unidentified					
30.159	2.9608	1411	30.8	Natrite	2.9637	81.5	(0 0 2)	30.129	-0.030
30.896	2.8919	338	7.4	Unidentified					
31.680	2.822	768	16.8	Unidentified					
32.340	2.766	3987	87	Thermonatrite	2.7712	100	(2 2 0)	32.278	-0.062
33.501	2.6728	2816	61.4	Thermonatrite	2.6699	60.9	(2 1 1)	33.538	0.037
34.200	2.6197	1114	24.3	Natrite	2.6185	54.6	(0 2 0)	34.216	0.016
35.299	2.5406	927	20.2	Natrite	2.5441	100	(3 1 0)	35.249	-0.050
36.280	2.4741	1284	28	Thermonatrite	2.477	23.7	(1 4 0)	36.236	-0.044
36.679	2.4481	908	19.8	Thermonatrite	2.4516	22.8	(2 2 1)	36.625	-0.054
37.940	2.3696	3850	84	Natrite	2.3663	93.7	(1 1 2)	37.996	0.056
38.580	2.3318	503	11	Unidentified					
39.923	2.2564	600	13.1	Natrite	2.255	48.5	(2 0 2)	39.948	0.025
40.298	2.2362	1068	23.3	Thermonatrite	2.2409	17.6	(1 4 1)	40.211	-0.087
41.380	2.1802	1126	24.6	Thermonatrite	2.183	15.9	(2 3 1)	41.326	-0.054
42.798	2.1112	242	5.3	Thermonatrite	2.1182	2	(0 3 2)	42.651	-0.148
43.880	2.0616	805	17.6	Thermonatrite	2.0648	18.7	(2 4 0)	43.810	-0.070
45.159	2.0061	1225	26.7	Thermonatrite	2.005	18.3	(2 1 2)	45.187	0.028
45.878	1.9764	783	17.1	Natrite	1.9758	0.1	(0 0 3)	45.892	0.015
46.541	1.9498	657	14.3	Natrite	1.9499	24.8	(-2 0 3)	46.538	-0.003

2-Theta	d(Å)	Height	Height%	Phase ID	d(Å)	I%	(h k l)	2-Theta	Delta
47.32	1.9194	606	13.2	Thermonatrite	1.9219	8.4	(2 4 1)	47.255	-0.065
48.40	1.8791	616	13.4	Thermonatrite	1.8773	1	(0 4 2)	48.451	0.049
51.12	1.7854	525	11.4	Natrite	1.785	2.3	(3 1 2)	51.132	0.013
51.58	1.7706	221	4.8	Thermonatrite	1.7724	5	(2 3 2)	51.520	-0.057
52.50	1.7416	349	7.6	Thermonatrite	1.743	8	(3 3 1)	52.454	-0.046
53.56	1.7096	504	11	Natrite	1.7087	24.1	(-3 1 3)	53.590	0.030
54.06	1.6949	621	13.5	Thermonatrite	1.6923	1.3	(0 6 1)	54.154	0.092
54.66	1.6778	705	15.4	Natrite	1.6767	9.6	(-5 1 1)	54.698	0.038
55.18	1.6632	799	17.4	Natrite	1.6617	0.7	(-1 3 1)	55.233	0.053
55.76	1.6472	715	15.6	Thermonatrite	1.6483	16	(3 1 2)	55.721	-0.040
56.78	1.6201	753	16.4	Thermonatrite	1.6185	20.6	(4 0 0)	56.840	0.059
57.24	1.6081	906	19.8	Thermonatrite	1.6098	13.8	(1 5 2)	57.174	-0.066
59.02	1.5638	338	7.4	Natrite	1.5637	12.3	(-2 2 3)	59.024	0.003
59.74	1.5467	283	6.2	Thermonatrite	1.5469	6.7	(4 0 1)	59.730	-0.010
60.74	1.5237	203	4.4	Natrite	1.5237	1.6	(5 1 1)	60.736	0.000
61.96	1.4964	143	3.1	Natrite	1.4971	7.3	(3 3 0)	61.934	-0.029
62.82	1.4781	225	4.9	Thermonatrite	1.4785	1.6	(2 5 2)	62.797	-0.023
64.06	1.4524	196	4.3	Natrite	1.4515	1.3	(-1 1 4)	64.104	0.042
65.18	1.4302	153	3.3	Thermonatrite	1.4309	1.6	(1 4 3)	65.139	-0.038
71.80	1.3136	218	4.8	Thermonatrite	1.3148	3.6	(0 0 4)	71.731	-0.072
72.88	1.2969	163	3.6	Thermonatrite	1.2969	0.4	(1 7 2)	72.876	-0.002
73.68	1.2847	161	3.5	Thermonatrite	1.286	0.3	(4 3 2)	73.592	-0.092
74.50	1.2726	233	5.1	Natrite	1.272	7.2	(6 2 0)	74.538	0.037
76.78	1.2405	132	2.9	Natrite	1.2412	0.3	(-2 4 1)	76.723	-0.052
78.62	1.2159	235	5.1	Thermonatrite	1.2154	0.9	(3 7 1)	78.659	0.037
79.06	1.2102	172	3.7	Thermonatrite	1.2103	1.3	(2 1 4)	79.053	-0.007
81.78	1.1767	96	2.1	Natrite	1.1759	1	(5 3 1)	81.851	0.066

S16R000173 Analysis

Thermonatrite was the primary phase identified in the diffraction data from this sample (see Figure 5 and Table 4). Three additional phases were identified at the trace level (natrophosphate, hematite, and natroxalate). It is interesting to note that the amorphous signature of the petroleum jelly adherent layer is significantly suppressed in this data set. Correspondingly, it is interesting to compare a scaled version of the petroleum jelly pattern with the sample data. On doing so, it becomes evident that this pattern appears to include an additional amorphous component that also tends to suppress the adherent signature. This could potentially be due to an amorphous uranium-bearing phase but this is speculative.

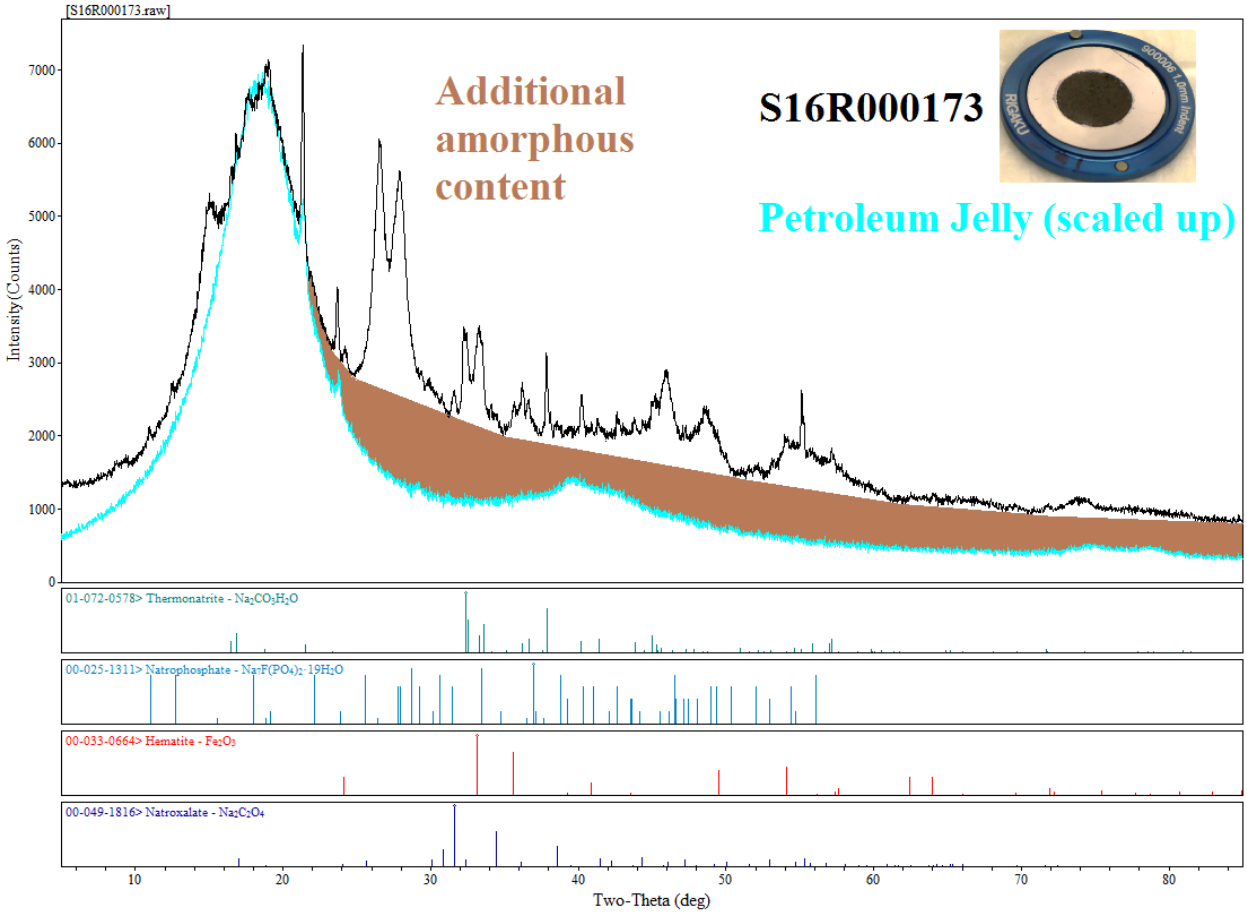


Figure 5. Phase content results for S16R000173 are shown.

Table 4. Phase content results for S16R000173.

2-Theta	d(Å)	Height	Height%	Phase ID	d(Å)	I%	(h k l)	2-Theta	Delta
11.037	8.0101	177	5.1	Natrophosphate	8.02	80	(2 2 2)	11.023	-0.014
12.483	7.085	292	8.3	Natrophosphate	6.95	80	(4 0 0)	12.727	0.243
15.038	5.8865	954	27.2	Unidentified					
16.824	5.2654	487	13.9	Thermonatrite	5.254	32.2	(0 1 0)	16.861	0.037
17.737	4.9964	384	11	Natrophosphate	4.92	90	(4 4 0)	18.015	0.278
19.060	4.6526	458	13.1	Natrophosphate	4.63	20	(4 4 2)	19.154	0.094
21.381	4.1524	2805	80.1	Thermonatrite	4.1284	13.1	(2 0 1)	21.507	0.126
23.721	3.7479	915	26.1	Thermonatrite	3.756	0.1	(2 1 0)	23.669	-0.052
24.258	3.6661	266	7.6	Hematite	3.684	30	(0 1 2)	24.138	-0.120
26.541	3.3557	3501	100	Natrophosphate	3.37	10	(6 4 4)	26.426	-0.114
27.920	3.193	3200	91.4	Natrophosphate	3.19	60	(6 6 2)	27.947	0.027
29.981	2.978	474	13.5	Natroxalate	2.967	10	(-2 0 1)	30.095	0.114
30.816	2.8992	293	8.4	Natroxalate	2.898	27	(3 1 0)	30.829	0.014
31.639	2.8256	388	11.1	Natroxalate	2.826	100	(-1 1 1)	31.635	-0.004
32.300	2.7693	1287	36.8	Thermonatrite	2.7659	100	(2 0 2)	32.341	0.041
33.320	2.6869	1348	38.5	Thermonatrite	2.6898	27.3	(4 0 0)	33.283	-0.037
34.262	2.6151	201	5.8	Thermonatrite	2.627	3.3	(0 2 0)	34.102	-0.160
35.682	2.5142	418	11.9	Hematite	2.519	70	(1 1 0)	35.612	-0.070
36.240	2.4768	706	20.2	Thermonatrite	2.4796	14.4	(4 0 1)	36.198	-0.042
36.737	2.4444	367	10.5	Thermonatrite	2.4475	21.7	(2 1 2)	36.689	-0.047
37.880	2.3732	1176	33.6	Thermonatrite	2.373	72.5	(1 2 1)	37.884	0.003
38.620	2.3294	279	8	Natroxalate	2.334	33	(4 1 0)	38.541	-0.079
39.384	2.286	229	6.5	Hematite	2.292	3	(0 0 6)	39.276	-0.107
40.223	2.2402	707	20.2	Thermonatrite	2.2424	19.3	(4 1 1)	40.182	-0.041
41.397	2.1793	418	11.9	Thermonatrite	2.1808	22.9	(3 1 2)	41.368	-0.029
42.741	2.1139	476	13.6	Thermonatrite	2.1182	1.2	(3 2 0)	42.651	-0.090
43.800	2.0652	539	15.4	Thermonatrite	2.0642	16.5	(4 0 2)	43.823	0.022
44.400	2.0387	515	14.7	Thermonatrite	2.0372	3.5	(0 2 2)	44.435	0.035

2-Theta	d(Å)	Height	Height%	Phase ID	d(Å)	I%	(h k l)	2-Theta	Delta
45.201	2.0044	891	25.5	Thermonatrite	2.0015	13.7	(1 2 2)	45.270	0.070
45.999	1.9714	1263	36.1	Natroxalate	1.968	6	(-2 2 1)	46.085	0.085
47.318	1.9195	556	15.9	Thermonatrite	1.9212	6.5	(4 1 2)	47.273	-0.044
48.680	1.869	877	25	Thermonatrite	1.8666	2.4	(2 1 3)	48.746	0.067
49.341	1.8455	568	16.2	Natrophosphate	1.845	60	(14,4,4)	49.354	0.014
52.200	1.7509	220	6.3	Thermonatrite	1.7513	3.9	(0 3 0)	52.187	-0.013
53.126	1.7226	321	9.2	Thermonatrite	1.7253	4	(6 0 1)	53.034	-0.092
54.200	1.6909	646	18.4	Hematite	1.6941	45	(1 1 6)	54.090	-0.110
55.160	1.6638	1300	37.1	Thermonatrite	1.6651	6.5	(5 2 0)	55.113	-0.047
55.758	1.6473	528	15.1	Natroxalate	1.649	5	(6 1 0)	55.696	-0.062
57.181	1.6097	569	16.3	Thermonatrite	1.6105	22.3	(5 2 1)	57.147	-0.034
57.901	1.5913	379	10.8	Thermonatrite	1.5897	0.6	(2 2 3)	57.966	0.065
58.281	1.5819	256	7.3	Natroxalate	1.587	3	(-6 0 1)	58.074	-0.206
58.997	1.5644	186	5.3	Natroxalate	1.564	2	(0 3 1)	59.012	0.015
59.760	1.5462	194	5.5	Thermonatrite	1.5451	5.9	(2 0 4)	59.808	0.049
60.614	1.5265	125	3.6	Thermonatrite	1.5285	4.3	(3 3 1)	60.524	-0.089
62.562	1.4835	107	3	Natroxalate	1.484	2	(-4 0 2)	62.539	-0.022
64.194	1.4497	131	3.7	Natroxalate	1.448	3	(6 2 0)	64.278	0.083
64.943	1.4348	135	3.9	Thermonatrite	1.4362	3.6	(7 1 1)	64.870	-0.073
65.601	1.422	122	3.5	Natroxalate	1.4275	4	(1 2 2)	65.314	-0.286
71.877	1.3124	129	3.7	Hematite	1.3115	10	(1,0,10)	71.937	0.060
73.520	1.2871	200	5.7	Thermonatrite	1.2834	0.5	(3 2 4)	73.768	0.248
74.558	1.2717	217	6.2	Thermonatrite	1.2699	0.9	(3 3 3)	74.689	0.131
76.098	1.2498	161	4.6	Thermonatrite	1.2517	0.9	(5 3 2)	75.964	-0.134
77.099	1.2361	133	3.8	Thermonatrite	1.2332	0.1	(3 4 0)	77.313	0.214
77.942	1.2248	159	4.6	Thermonatrite	1.2258	1.8	(7 2 2)	77.865	-0.077
78.697	1.2149	133	3.8	Hematite	1.2141	2	(2 2 3)	78.760	0.063
79.862	1.2001	99	2.8	Thermonatrite	1.1985	1.3	(6 0 4)	79.988	0.125

Sample Preparation

Sample powders were prepared as described in the enumerated sequence below (See Figure 6).

Figure 6. Each caption of this image shows a different stage in the drying process.

Post ethyl alcohol grind waxy sheen on the surface of black material, white crust forms near top of mortar.

Additional heating, sheen level moved down in the mortar, crust line propagates downward.

Still more heating, waxy sheen is gone, black material becomes lighter in color, flat - no waxy sheen. Deposit material was dry ground to flourlike consistency.

1. The original sample materials were vacuum filtered in accord with methods described in ATS-LT-161-104, "SEM Sample Preparation Procedure."
2. Sample material was transferred to a mortar and subsequently wet-ground using ethyl alcohol as the grinding medium.
3. Due to the wet nature of the original sample materials, the ground materials were heated to promote drying in a timelier manner. The mortar was typically placed in a metal lid (as indicated in the figure above) with the lid being placed on a hot plate. The hot plate was typically set at its lowest temperature setting. A wet paper towel was placed under the mortar both to help conduct heat to the mortar and also to moderate the temperature of the mortar somewhat.
4. The dried residual material was subsequently dry-ground to yield a powder with flour-like consistency.
5. A ½" diameter hole punch was used on low adhesive tape to create a substrate mask. The mask was applied to a single crystal silicon substrate with the hole in the mask centered on substrate.
6. Petroleum jelly was applied to the unmasked portion of the substrate and then screeded using a glass slide to generate a uniformly thick layer of petroleum jelly on the unmasked portion of the substrate.
7. The substrates were then heated to melt the petroleum jelly, thereby leveling the top surface. Subsequently the substrates were removed from the hot plate and allowed to cool to room temperature (solidifying the petroleum jelly).
8. A prepared substrate was placed inside a weigh boat and inclined against the edge of the boat in preparation for powder deposition.
9. Sample powder was removed from the mortar and sprinkled across the top portion of the unmasked region of the sample substrate. The sample was gentle tapped which caused the powder material to tumble across the petroleum jelly adherent layer.

10. After a uniform coating of loose powder was applied, the substrate was turned on edge and tapped to remove loose sample material.
11. Subsequently, the surface of the sample was visually inspected to ensure that a uniform powder layer existed across the unmasked region of the sample. Additional powder was added to regions that were not initially uniformly coated, and the loose powder was removed iteratively until a uniform powder deposit was achieved.
12. The tape/masking material was removed.
13. The coated substrate (silicon support) was installed in an aluminum sample cup. The thickness of the silicon support and the sample cup well depth were matched to ensure that the sample material was located in the measurement plane of the instrument.
14. The sample cup with sample-coated substrate was then installed in the Miniflex II.
15. Clean-up was subsequently performed, including sample materials, mortar and pestle, and waste disposal.

Data Acquisition

The measurement conditions used to acquire each data set are specified in Table 5.

Table 5. The instrument settings used to generate each data set are indicated for each sample.

Angle Range	5-85 deg.
Step Size	0.02 deg.
Scan Type	Continuous
Scan Speed	0.1 deg/min
Sample Spin	off
Divergence Slit	standard

Data Processing

In general, each of the data sets were initially processed using the same methodology. However, due to significant differences in the crystalline content of each pattern, the analysis methods were modified to address the detail of each data set. Typically, a background curve was manually specified for each data set but the data were not background subtracted. The initial search typically considered all subfiles of the International Centre for Diffraction Data (ICDD) database with no data filters applied to the search process. Typically in the second round, the minerals subfile was searched and a chemistry filter was added using EDS chemistry from each sample. In subsequent rounds, other subfiles were searched, and in several instances expected phases were manually added to the pattern model.

Reference

ATS-LT-161-104, “SEM Sample Preparation Procedure,” Washington River Protection Solutions LLC, Richland, Washington.

APPENDIX D.

TANK 241-C-105 DISSOLUTION PHASE 2 STUDY

POLARIZED LIGHT MICROSCOPY REPORT

(7 pages, including cover page)

The dissolution project on the Tank 241-C-105 (C-105) sample included a series of different treatments that were intended to identify the most effective way of dissolving the remaining solids in the waste tank (WRPS-1404813, Rev. 3). In Phase 2 of the project, samples were treated with 19M sodium hydroxide and water. This report describes the polarized light microscopy (PLM) results for the residual centrifuged solids from the Phase 2 samples. Analyses were performed April 27, 2016. L. Dinh was the primary technician for preparing the PLM samples and S. Boling, M. LaMothe, and Dr. D. Herting were the scientists performing the microscopic analysis.

C-105 solids were previously analyzed in 2015 (LAB-RPT-1500011) to determine the composition of the untreated solids. Based on the solid phase characterization (SPC) results (i.e., PLM, scanning electron microscopy/energy dispersive spectroscopy [SEM/EDS], and X-ray diffraction [XRD]), the untreated solids were found to contain the following phases: $NaAl(CO_3)(OH)_2$ (dawsonite), $Na_3(HCO_3)CO_3$ (trona), $Na_4(UO_2)(CO_3)_3$ (cejkaite), and minor amounts of Fe/Mn-bearing particulates. There were trace amounts of $Na_7(PO_4)_2F\cdot 19(H_2O)$ (natrophosphate) and Na_3FSO_4 (sodium fluoride sulfate). Black particulate, as shown below in Figure 1 circled in black, dominated the samples and coated most large particles. This black phase was the major phase, and is either organic or iron-containing (or both).

Phase 2 testing consisted of treating each of four C-105 samples with 19M sodium hydroxide (19M NaOH) for 7 days. Then the samples were diluted with water, mixed, and centrifuged. After decanting the diluted (approximately 9M NaOH) supernatant liquid, the centrifuged solids were washed twice with water, and mix/centrifuge/decant steps were performed after each water wash. Samples for SPC were taken from the residual centrifuged solids.

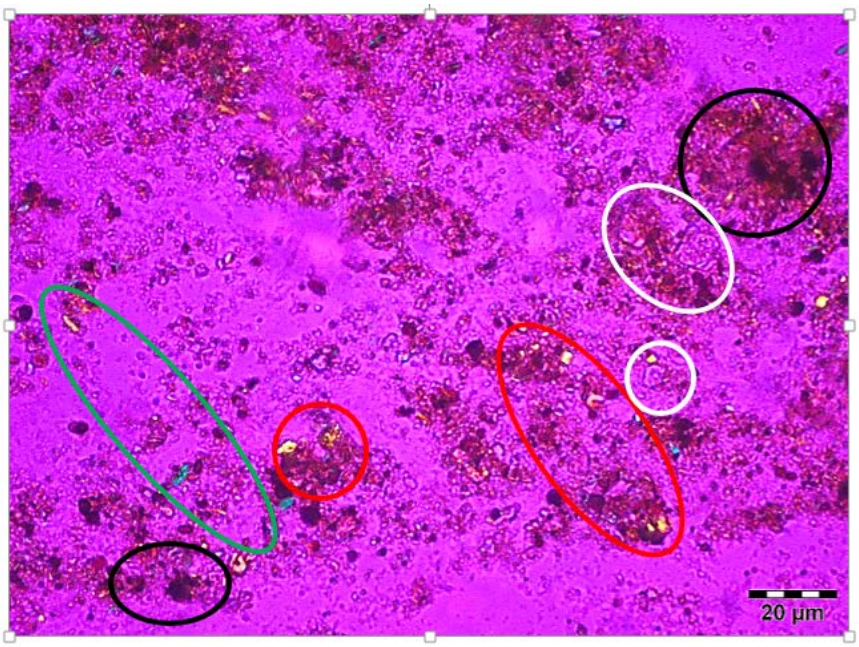


Figure 1. Overview photo taken with crossed polars and red I compensator in place. Black circles = iron/submicron particles (major), green circles = rods (trace), white circles = isotropic crystals (trace), and the red circles = yellow/blue crystals (minor).

S16R000170 – The color of the material in the sample vial was a dull brown with no mother liquor present. The sample was a thick solid that stuck to the pipette and was very tacky.

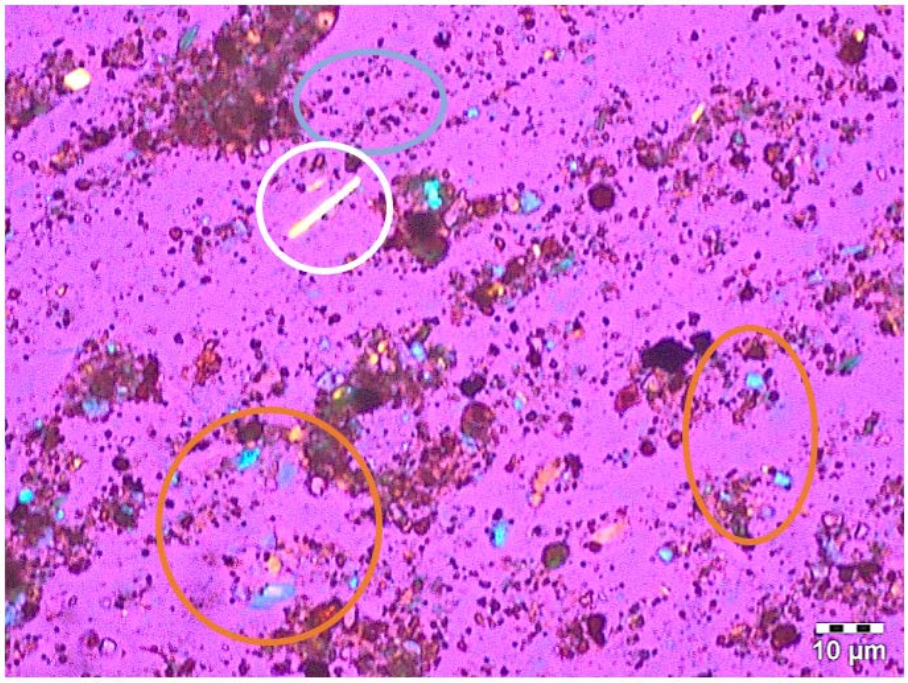


Figure 2. Sample S16R000170 with crossed polars and red I compensator in place. White circle = suspect uranium. Orange circles = blue/orange shards that were prevalent. Blue circle = black / sub-micron particles that were dominant in all samples.

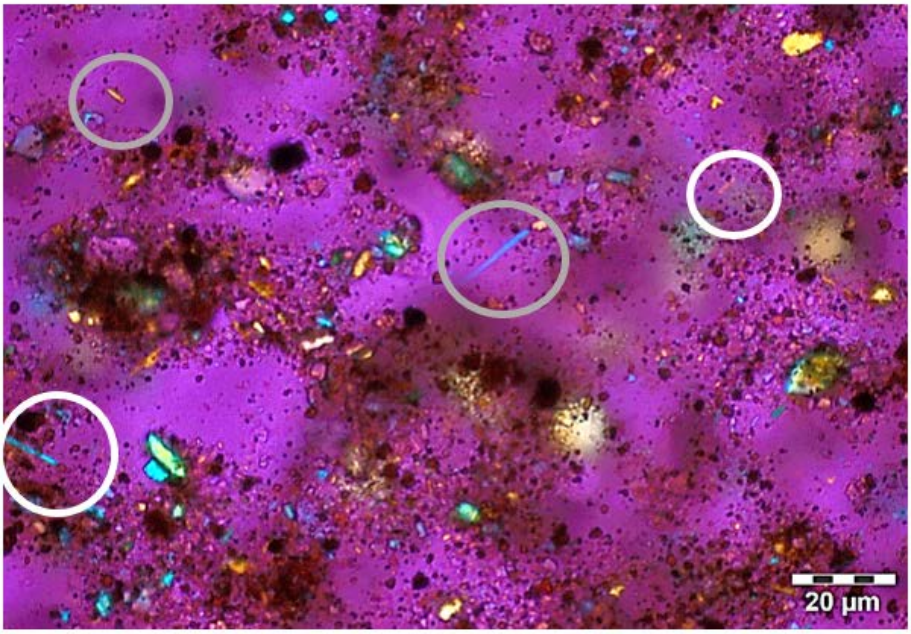


Figure 3. S16R000170 with crossed polars and red I compensator in place. This photo shows two different needle type crystals in the sample. The white / grey circles show different colors when pointing the same direction. White circle = suspect uranium.

Adding water to this particular sample seemed to dissolve most of the needles. Some crystals re-formed differently and were "banded" in a way not previously observed. There were also orange isotropic crystals in rod shapes signifying the possibility of a uranium-containing component. Remaining crystals were also very weakly birefringent.

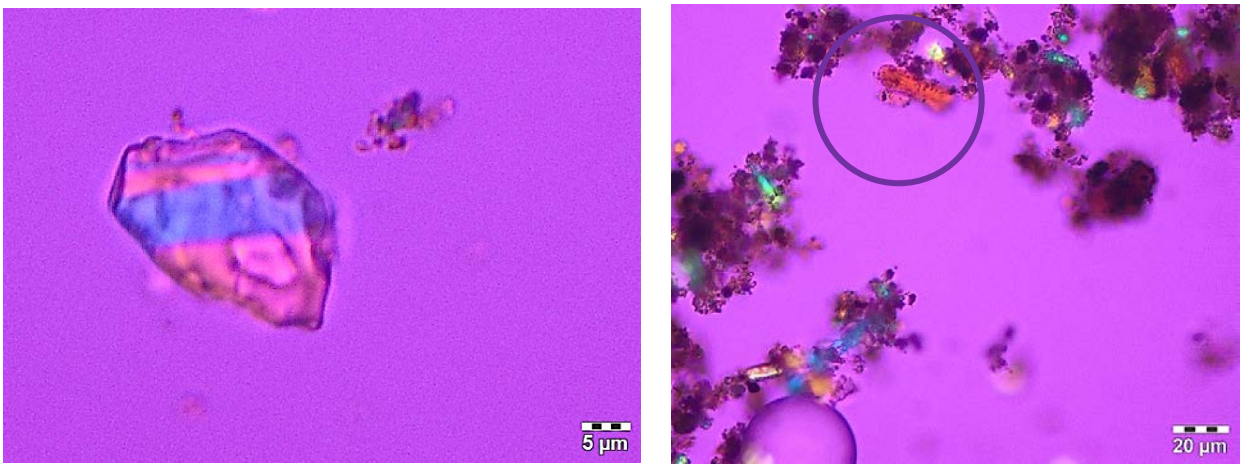


Figure 4. (Left) Crossed polars and the red I compensator in place shows a banded crystal. (Right) Crossed polars and the red I compensator in place. Purple circle = unknown

S16R000171 – this sample was dark brown in color, solid, and had a shiny surface indicating there was more liquid present than in S16R000170. Treatment of this sample duplicated that of the S16R000170 sample above. The sample appeared to contain a few more rod-shaped crystals but other than that it resembled the previous sample very closely.

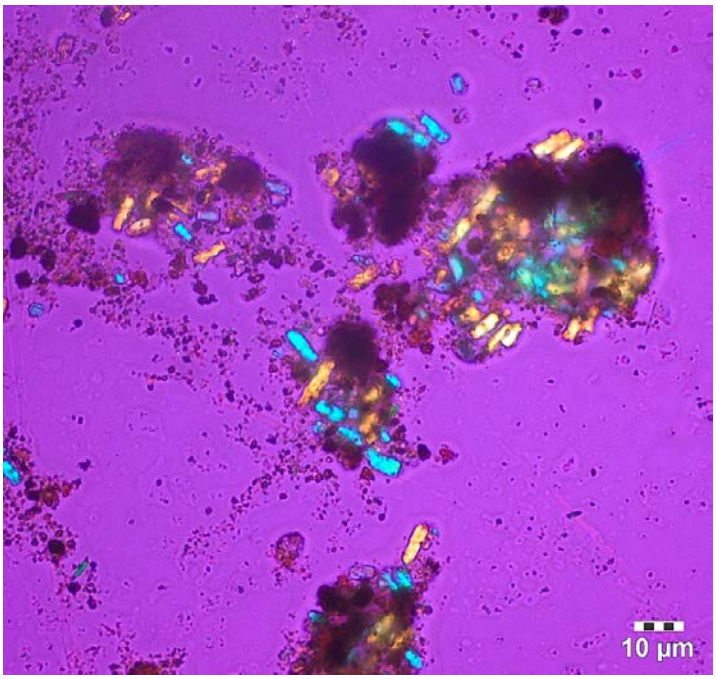


Figure 5. S16R000171 with crossed polars and the red I compensator in place. Morphology of the blue/orange rods is consistent with the sodium uranium oxide phase observed by SEM/EDS.

S16R000172 – This sample was very liquid compared to S16R000170 and S16R000171. To preserve the sample separation, the liquid layer was first mounted on a slide and analyzed to determine what solids were suspended in the liquid. Figure 6 below shows the black sub-micron particulate, common in all the samples thus far; there were rods, spherical agglomerates, and shards of blue/yellow crystals that all went unidentified.

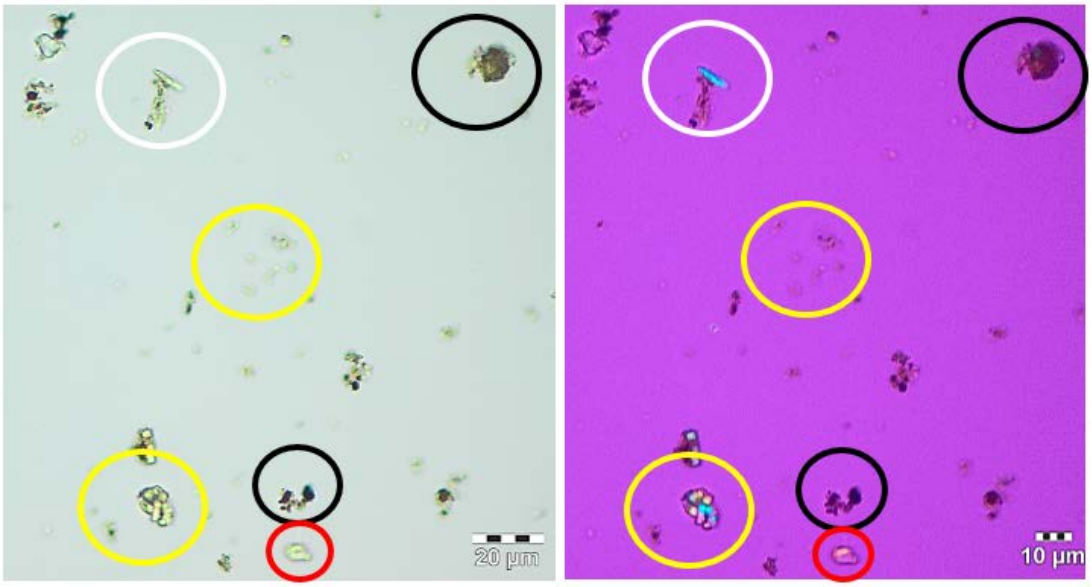


Figure 6. S16R000172 liquid layer. Same photo with (right) and without (left) the red I compensator. Unknown spherical agglomerate (yellow circles), carbonate or uranium containing rod (white circle), submicron particulate (black circle), and blue/yellow shards (red circle) are present.

Figure 7. Needles in S16R000172 with opposite coloring orientated in the same direction. The blue one has unidentified characteristics, and the yellow one has properties that indicate a carbonate or uranium phase.

S16R000173 – This sample was also very liquid with a dark brown color and sludge-like consistency.

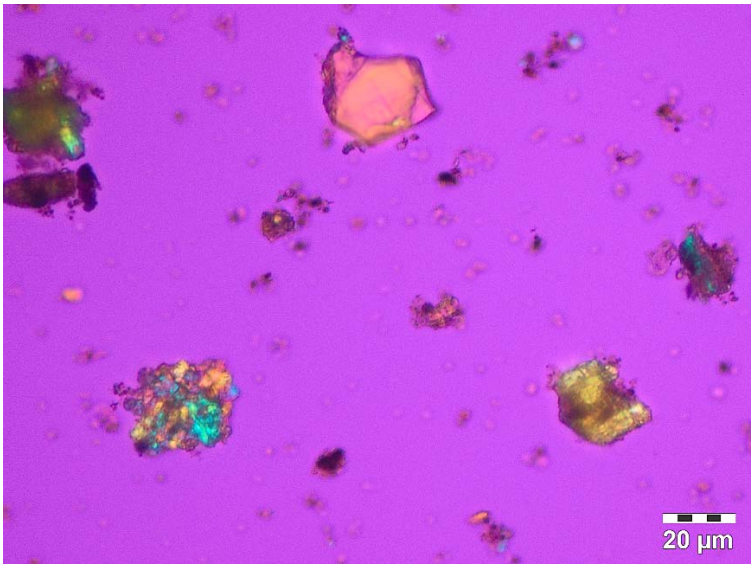


Figure 8. S16R000173 liquid layer mount. Crossed polars with the red I compensator in place. Yellow shards, multifaceted crystal, and black sub-micron particulate are present in this photo.

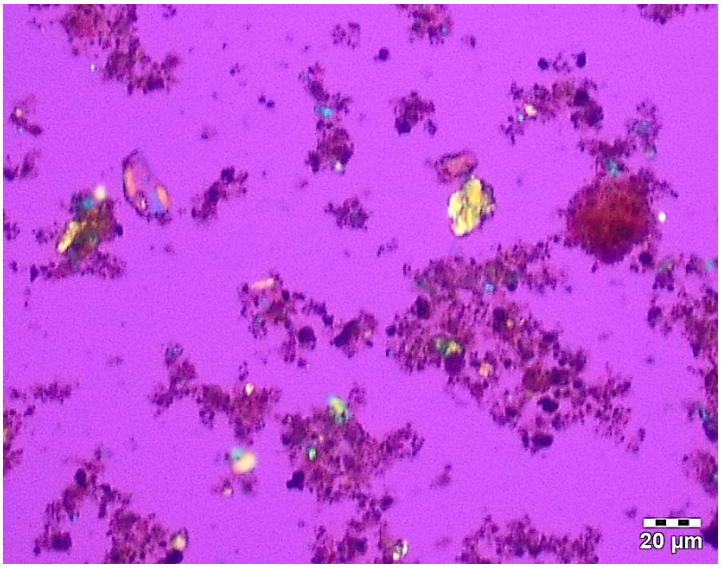


Figure 9. S16R000173 mixed layers mount. Crossed polars with the red I compensator in place. Yellow shards and black sub-micron particulate are present in this photo.

References

LAB-RPT-1500011, 2015, "Solid Phase Characterization of Tank 241-C-105 Grab Samples," Rev. 0, Washington River Protection Solutions LLC, Richland, Washington.

WRPS-1404813, 2015, "Test Plan for Solids Dissolution on Tank 241-C-105 Samples," Rev. 3, (internal letter from H. K. Meznarich to D. W. Hendrickson, December 9), Washington River Protection Solutions LLC, Richland, Washington.

APPENDIX E.

C-105 DISSOLUTION PHASE 2 STUDY

SCANNING ELECTRON MICROSCOPY-ENERGY DISPERSIVE SPECTROMETRY REPORT

(12 pages, including cover page)

C-105 Phase 2 Solids Scanning Electron Microscopy / Energy Dispersive Spectrometry (SEM/EDS) Report

Sample S16R000170-1: Spot scan on rod-like sheet. Chemistry is consistent with trona [$Na_3(HCO_3)(CO_3)\cdot 2H_2O$] or natroxalate ($Na_2C_2O_4$).

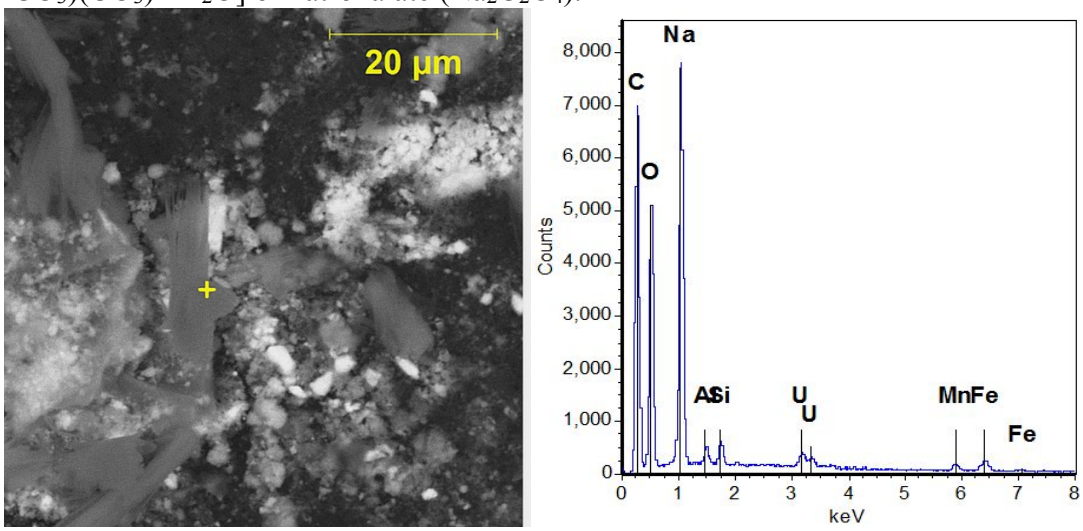


Figure 1. S16R000170 1a/1b (Centrifuged Solids of 105C-15-01) by Scanning Electron Microscopy and Energy Dispersive Spectrometry; Spot-Scan.

Sample S16R000170-2: Same picture as **sample 170-1**; spot scan on light particulate, which is mainly clarkeite [$Na(UO_2)(O)(OH)*H_2O$] with a variety of other metals present.

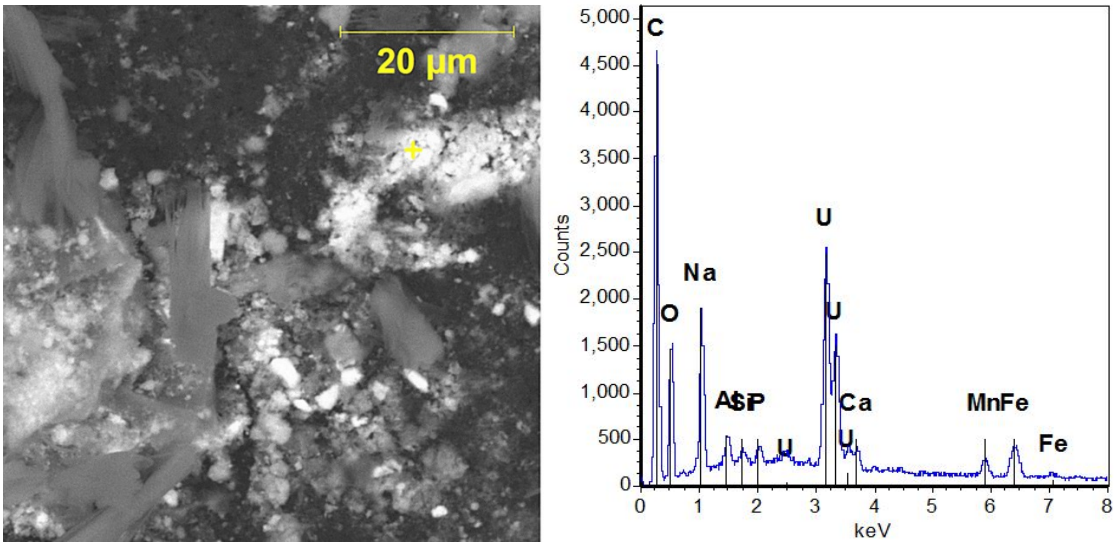


Figure 2. S16R000170 2a/2b (Centrifuged Solids of 105C-15-01) by Scanning Electron Microscopy and Energy Dispersive Spectrometry; Spot-Scan.

Sample S16R000170-3: Area scan. Variety of metals that include the following minerals: light particulate is clarkeite [$Na(UO_2)(O)(OH)*H_2O$], also, possible gibbsite [$Al(OH)_3$], boehmite [Al(O)OH], hematite (Fe_2O_3) and/or bixbyite [$(Fe,Mn)_2O_3$], trona [$Na_3(HCO_3)(CO_3)\cdot 2H_2O$], natroxalate ($Na_2C_2O_4$), or other oxides are present. Minor amounts of other elements are present.

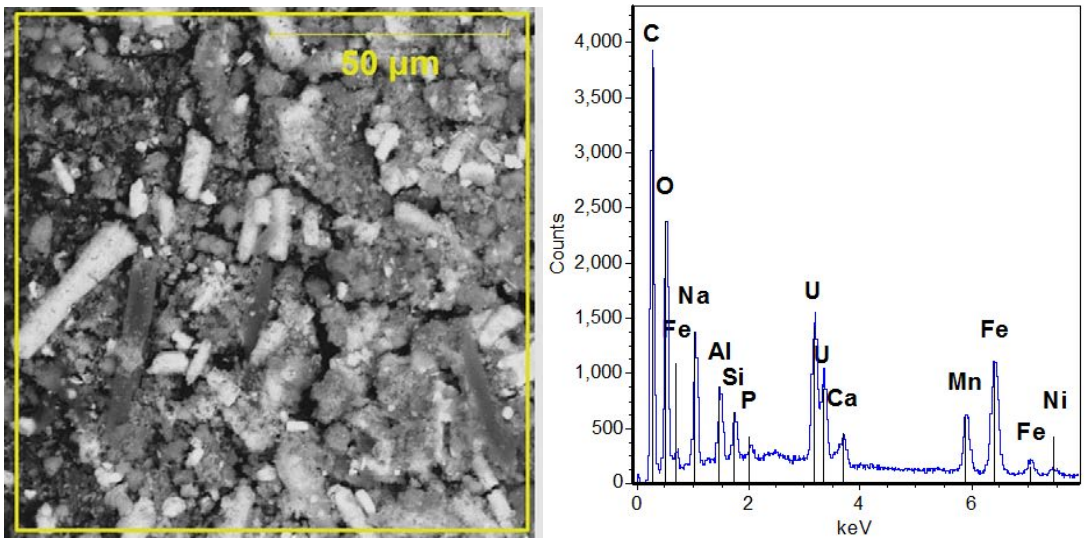


Figure 3. S16R000170 - 3a/3b (Centrifuged Solids of 105C-15-01) by Scanning Electron Microscopy and Energy Dispersive Spectrometry; Area-Scan.

Sample S16R000170-4: Dark, round object left of point scan is trona or natroxalate. Scanned spot is hematite/bixbyite with possible gibbsite/boehmite. A variety of other metals are present in low intensity. The presence of nickel and chromium indicates the possibility of stainless steel.

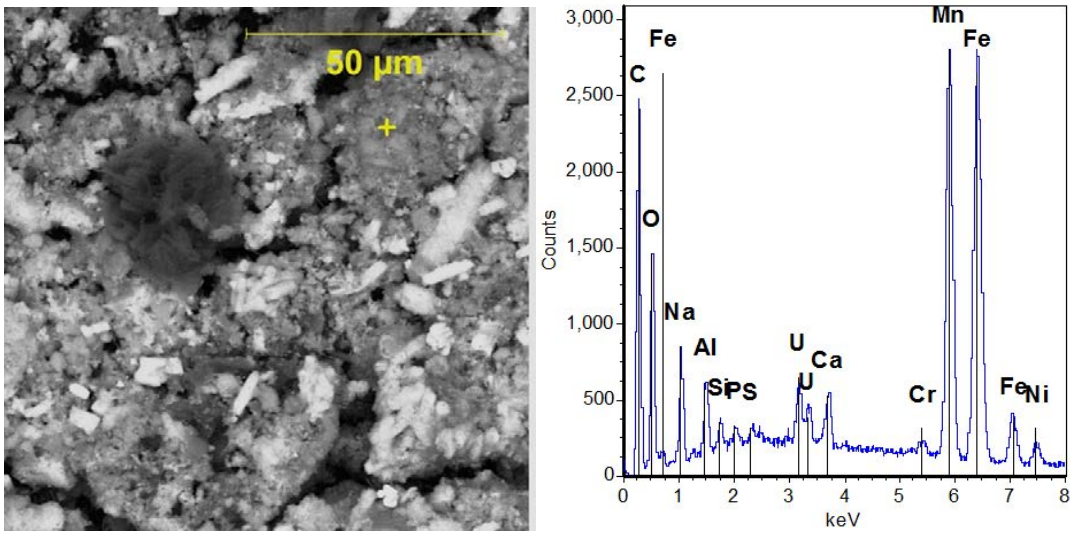


Figure 4. S16R000170 - 4a/4b (Centrifuged Solids of 105C-15-01) by Scanning Electron Microscopy and Energy Dispersive Spectrometry; Spot-Scan.

Sample S16R000170-5: Spot scan of a unique particle, with a chemistry consistent with iodargyrite (AgI), was found along with clarkeite.

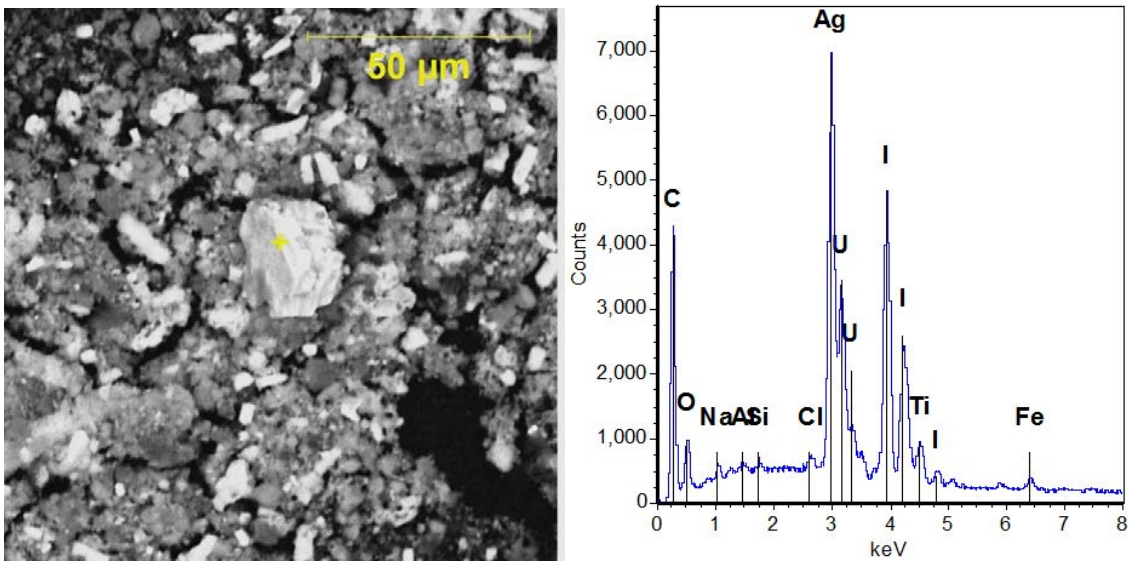


Figure 5. S16R000170 - 5a/5b (Centrifuged Solids of 105C-15-01) by Scanning Electron Microscopy and Energy Dispersive Spectrometry; Spot-Scan.

Sample S16R000170-6: Spot scan of a particle with a chemistry consistent with cancrinite [$Na_6Ca_2Al_6Si_6O_{24}(CO_3)_2$*$2H_2O$].

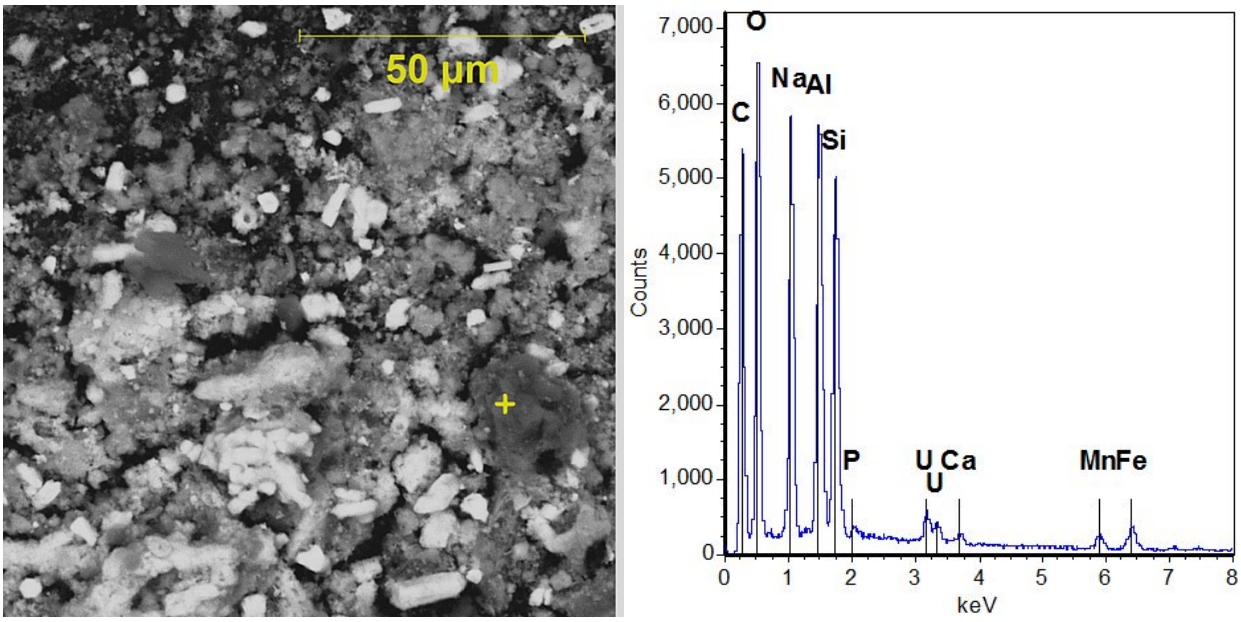


Figure 6. S16R000170 - 6a/6b (Centrifuged Solids of 105C-15-01) by Scanning Electron Microscopy and Energy Dispersive Spectrometry; Spot-Scan.

Sample S16R000170-7: Same picture as **sample 170-6**; spot scan on particle with a chemistry consistent with mainly hematite/bixbyite.

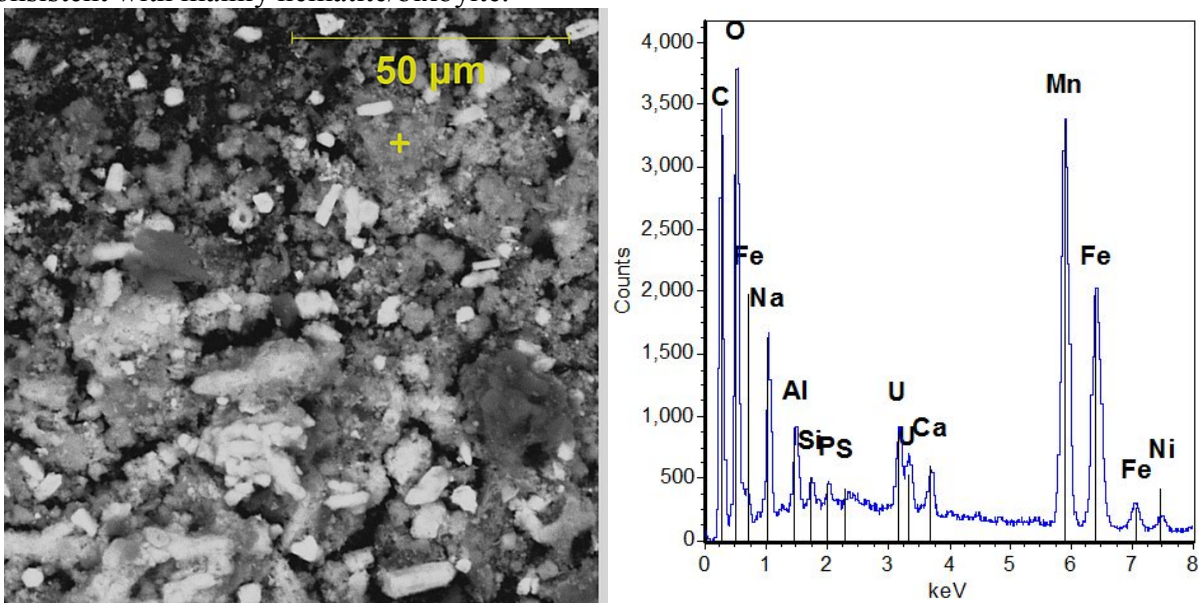


Figure 7. S16R000170 - 7a/7b (Centrifuged Solids of 105C-15-01) by Scanning Electron Microscopy and Energy Dispersive Spectrometry; Spot-Scan.

Sample S16R000171-1: Spot scan of a light box-work particle with a chemistry consistent with mainly clarkeite.

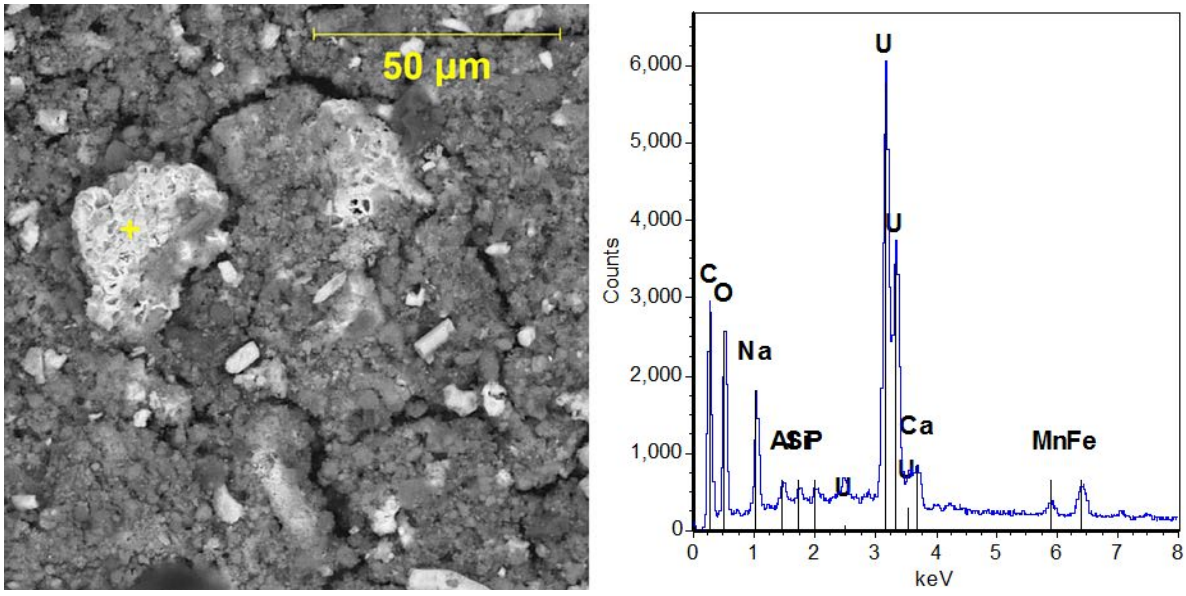


Figure 8. S16R000171 - 1a/1b (Centrifuged Solids of 105C-15-01) by Scanning Electron Microscopy and Energy Dispersive Spectrometry; Spot-Scan.

Sample S16R000171-2: Same picture as **sample 171-1**; spot scan on particle with a chemistry consistent with mainly hematite/bixbyite.

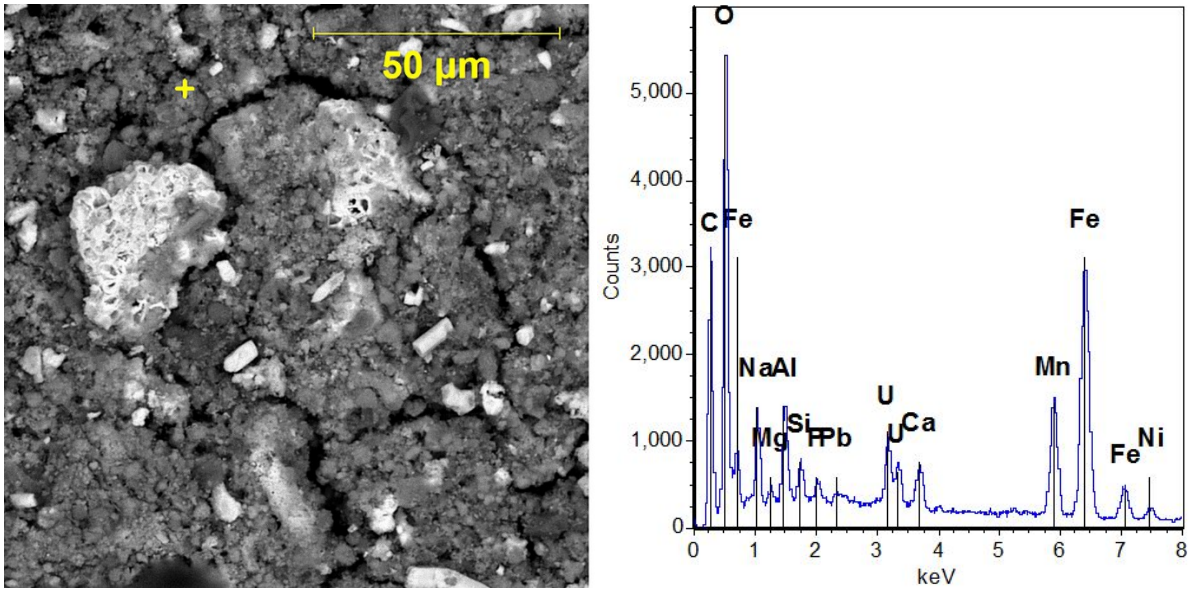


Figure 9. S16R000171 - 2a/2b (Centrifuged Solids of 105C-15-01) by Scanning Electron Microscopy and Energy Dispersive Spectrometry; Spot-Scan.

Sample S16R000171-3: Area scan. Variety of metals that include the following minerals: light particulate is clarkeite [$Na(UO_2)(O)(OH)*H_2O$]; also, possible gibbsite [$Al(OH)_3$], boehmite [Al(O)OH], hematite (Fe_2O_3) and/or bixbyite [$(Fe,Mn)_2O_3$], trona [$Na_3(HCO_3)(CO_3)\cdot 2H_2O$], natroxalate ($Na_2C_2O_4$), or other oxides. Minor amounts of other elements are present.

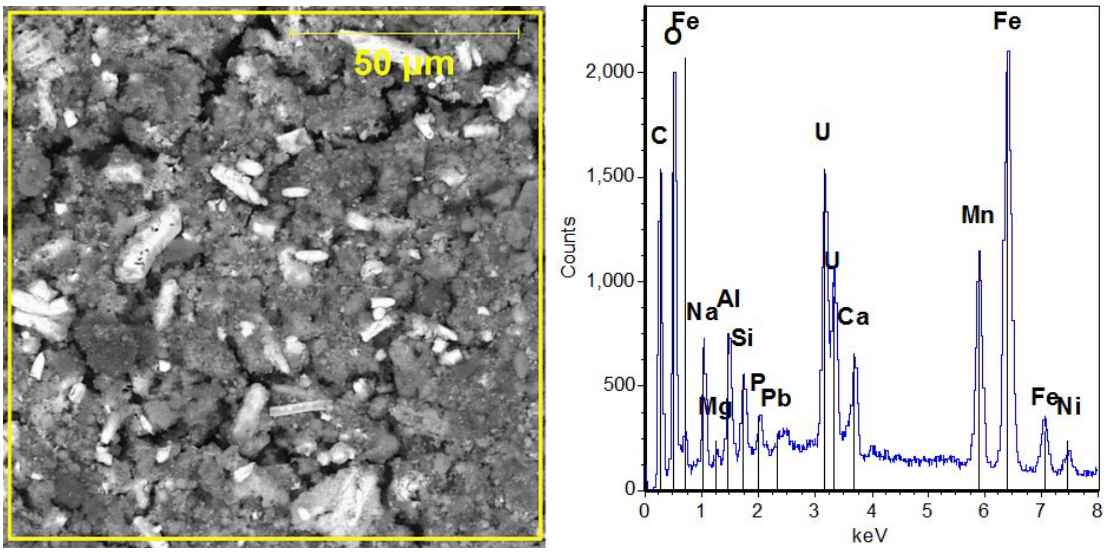


Figure 10. S16R000171 - 3a/3b (Centrifuged Solids of 105C-15-01) by Scanning Electron Microscopy and Energy Dispersive Spectrometry; Area-Scan.

Sample S16R000171-4: Area scan of light particle with a chemistry consistent with mainly clarkeite.

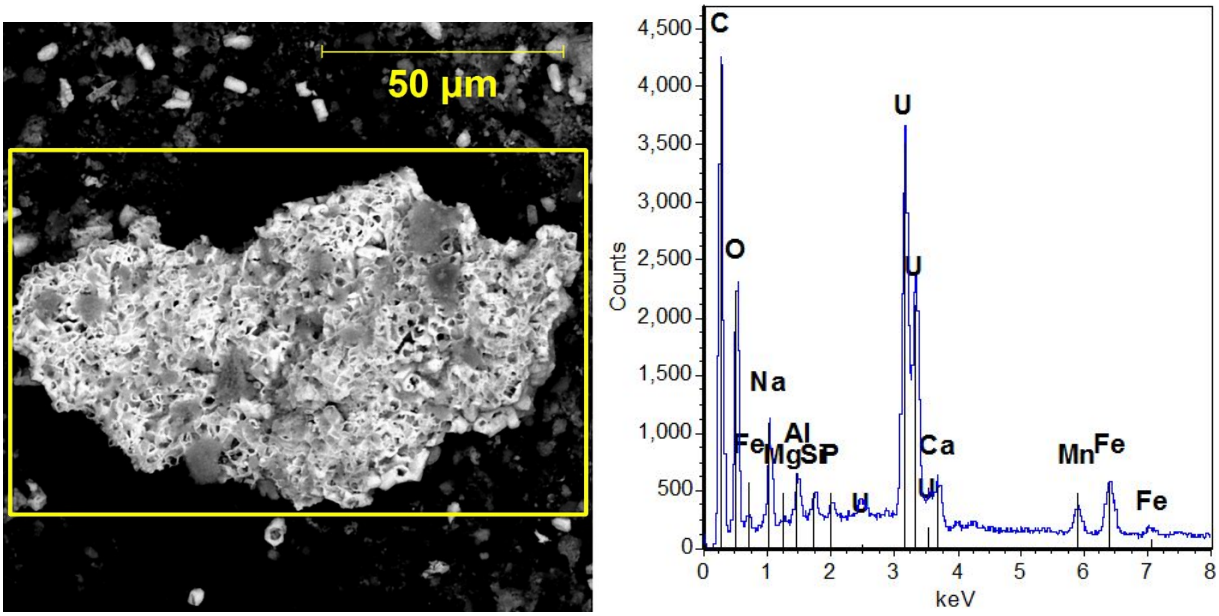


Figure 11. S16R000171 - 4a/4b (Centrifuged Solids of 105C-15-01) by Scanning Electron Microscopy and Energy Dispersive Spectrometry; Area-Scan.

Sample S16R000171-5: Area scan. Variety of metals that include the minerals listed in **sample S16R000170-3 (Figure 3).**

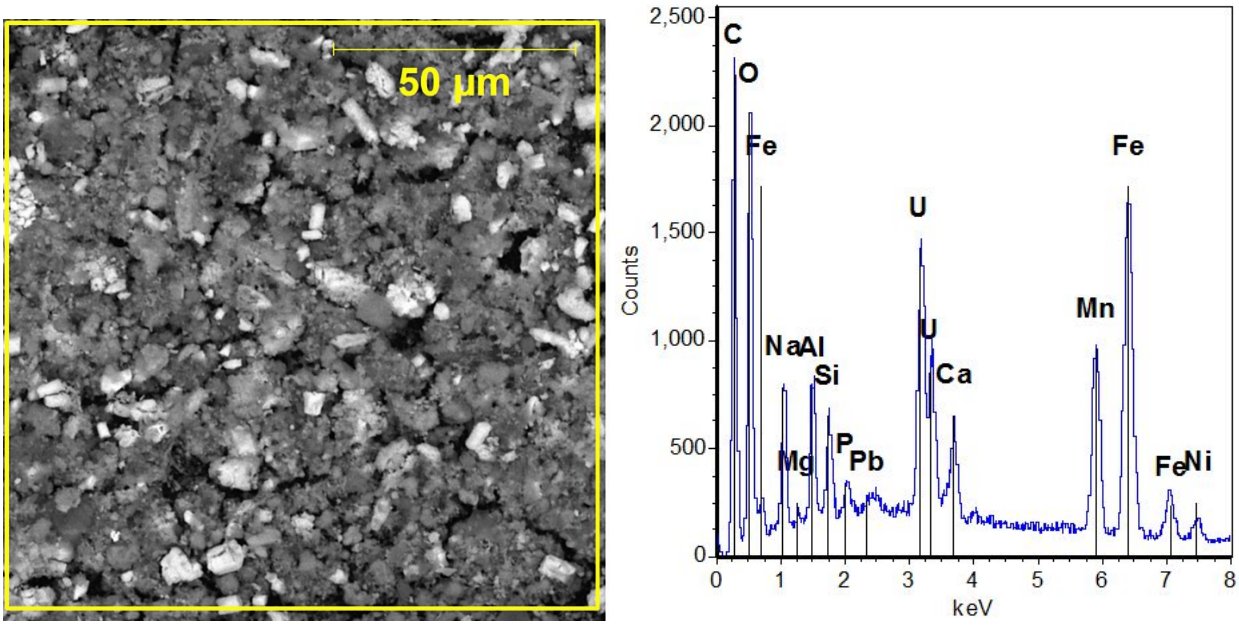


Figure 12. S16R000171 - 5a/5b (Centrifuged Solids of 105C-15-01) by Scanning Electron Microscopy and Energy Dispersive Spectrometry; Area-Scan.

Sample S16R000172-1: Area scan. Variety of metals that include the minerals listed in **sample S16R000170-3 (Figure 3).**

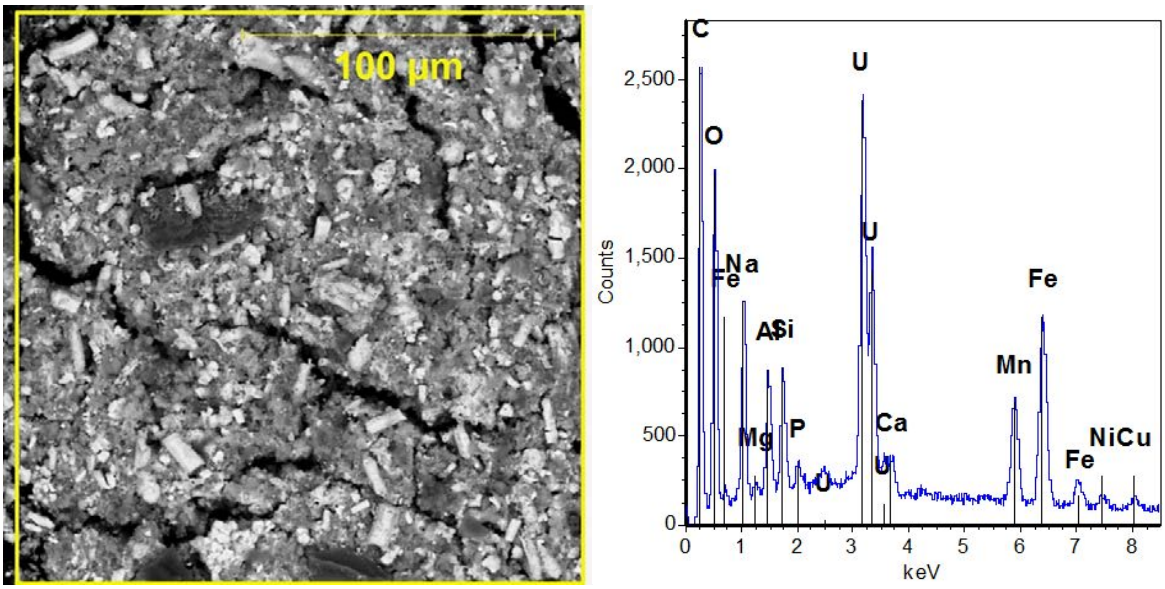


Figure 13. S16R000172 - 1a/1b (Centrifuged Solids of 105C-15-02) by Scanning Electron Microscopy and Energy Dispersive Spectrometry; Area-Scan.

Sample S16R000172-2: Area scan. Light particle with chemistry consistent with mainly clarkeite, the dark particle on the left with chemistry consistent with mainly silica (SiO_2), and the lighter colored particle located on the lower right with chemistry consistent with mainly hematite/bixbyite.

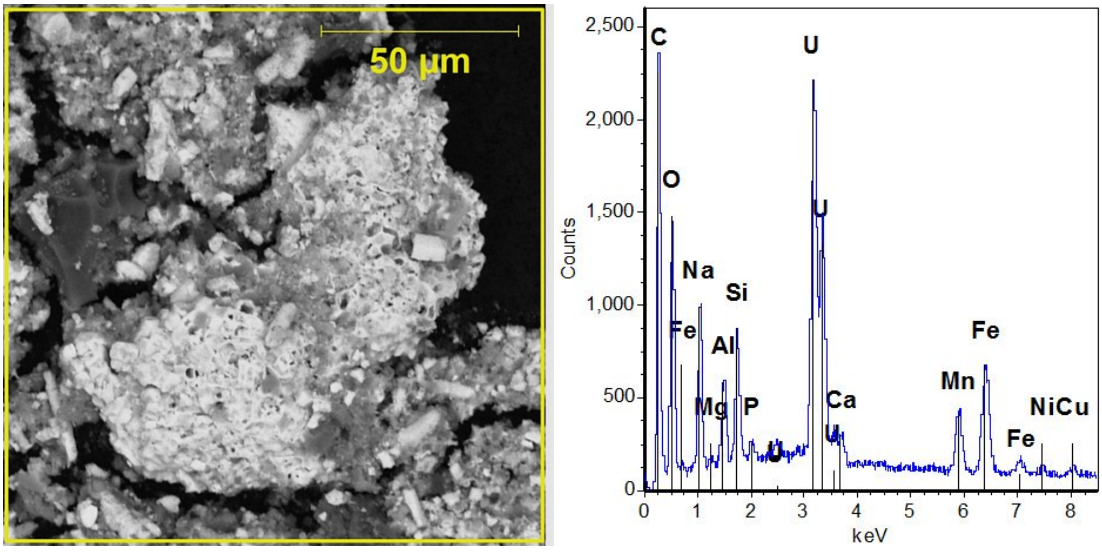


Figure 14. S16R000172 - 2a/2b (Centrifuged Solids of 105C-15-02) by Scanning Electron Microscopy and Energy Dispersive Spectrometry; Area-Scan.

Sample S16R000172-3: Spot scan of a particle with chemistry consistent with mainly gibbsite or boehmite.

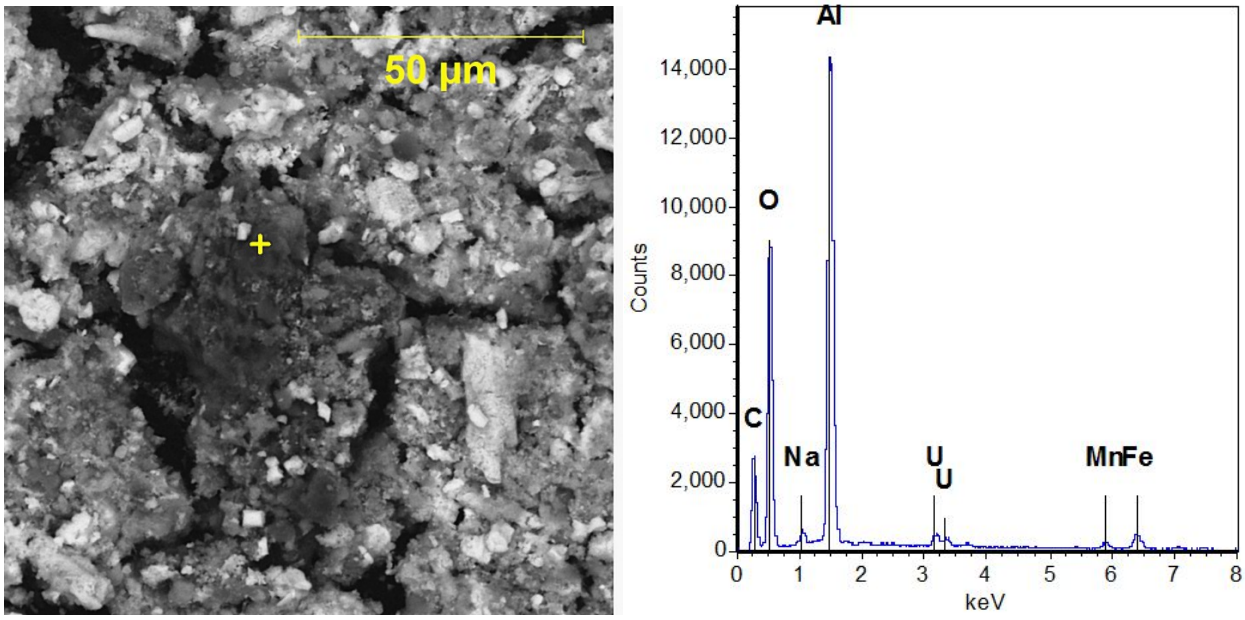


Figure 15. S16R000172 - 3a/3b (Centrifuged Solids of 105C-15-02) by Scanning Electron Microscopy and Energy Dispersive Spectrometry; Spot-Scan.

Sample S16R000172-4: Spot scan of a light particulate that shows the box-work type of morphology and with chemistry consistent with mainly clarkeite.

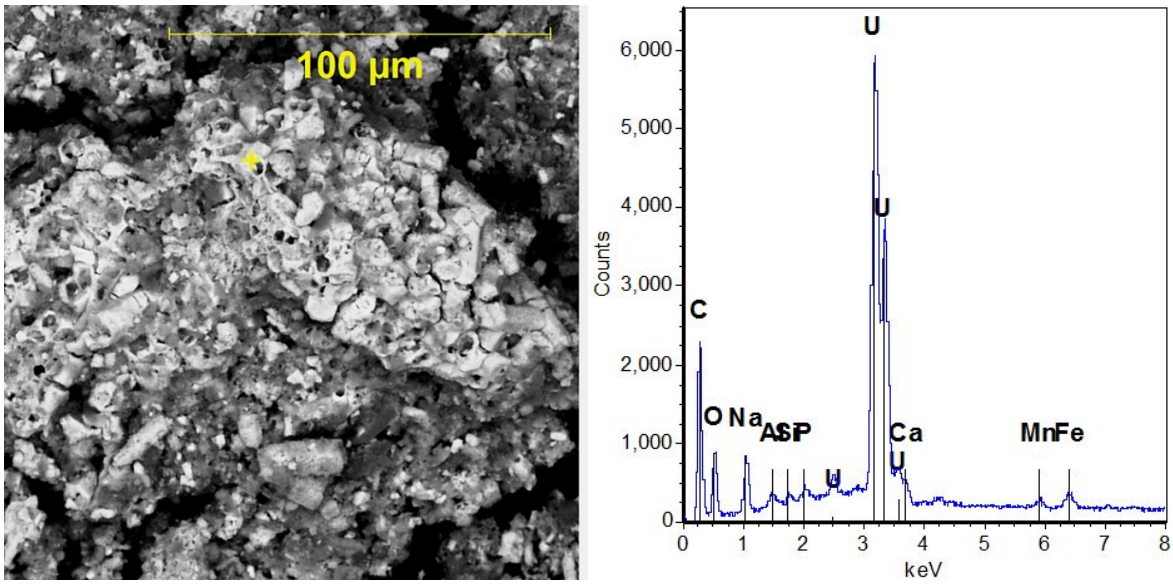


Figure 16. S16R000172 - 4a/4b (Centrifuged Solids of 105C-15-02) by Scanning Electron Microscopy and Energy Dispersive Spectrometry; Spot-Scan.

Sample S16R000173-1: Area scan. Variety of metals that include the minerals listed in **sample S16R000170-3 (Figure 3).**

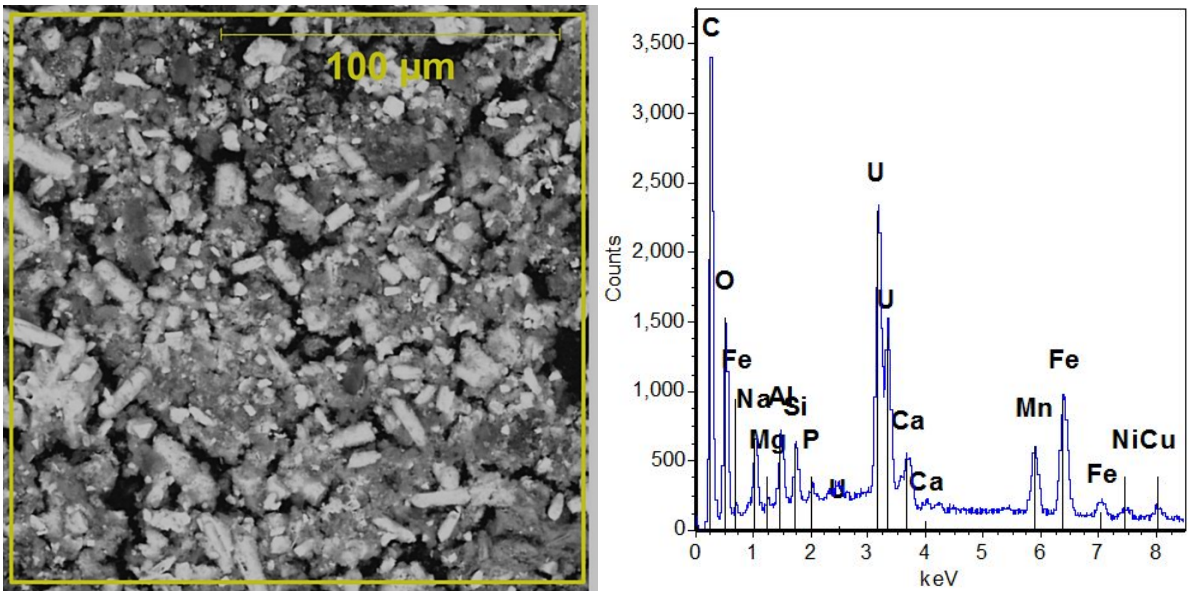


Figure 17. S16R000173 - 1a/1b (Centrifuged Solids of 105C-15-02) by Scanning Electron Microscopy and Energy Dispersive Spectrometry; Area-Scan.

Sample S16R000173-2: Spot scan of a light columnar-like particle with chemistry consistent with mainly clarkeite.

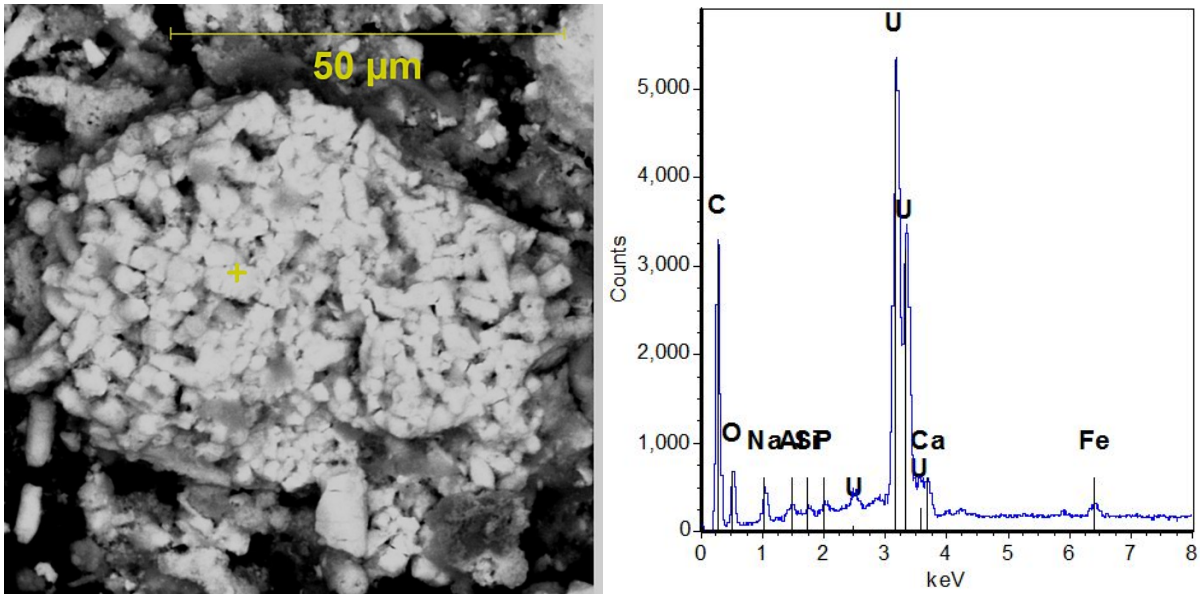


Figure 18. S16R000173 - 2a/2b (Centrifuged Solids of 105C-15-02) by Scanning Electron Microscopy and Energy Dispersive Spectrometry; Spot-Scan.

Sample S16R000173-3: Area scan. Variety of metals that include the minerals listed in **sample S16R000170-3 (Figure 3).**

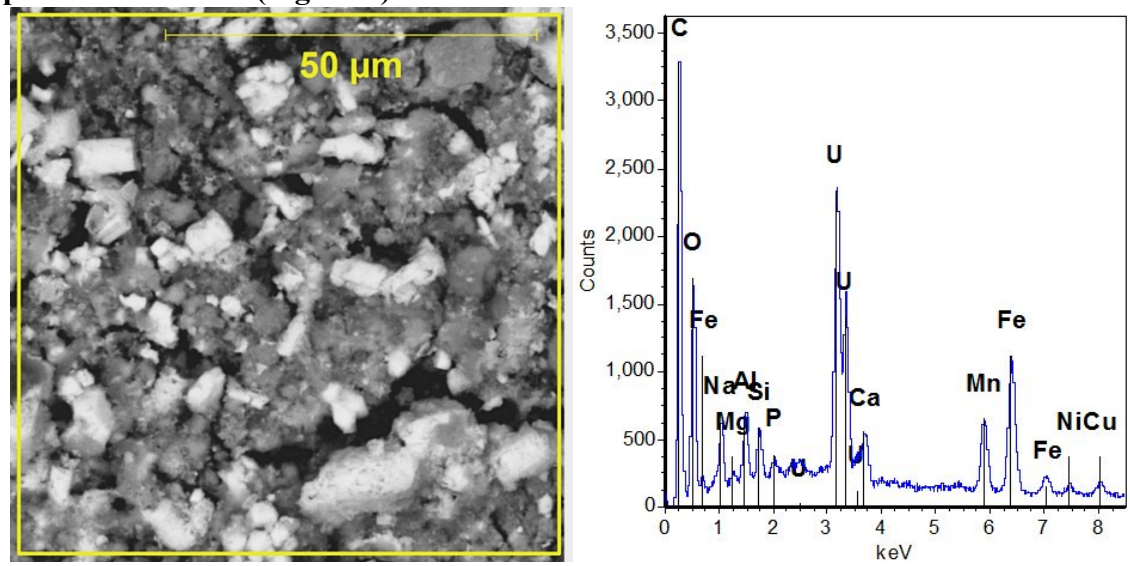


Figure 19. S16R000173 - 3a/3b (Centrifuged Solids of 105C-15-02) by Scanning Electron Microscopy and Energy Dispersive Spectrometry; Area-Scan.

Sample S16R000173-4: Spot scan of particle that is mainly silica, probably quartz (SiO_2). Dark particle located on the upper right of center is mainly gibbsite, boehmite, and silica. The dark particle located on the upper left is mainly gibbsite or boehmite.

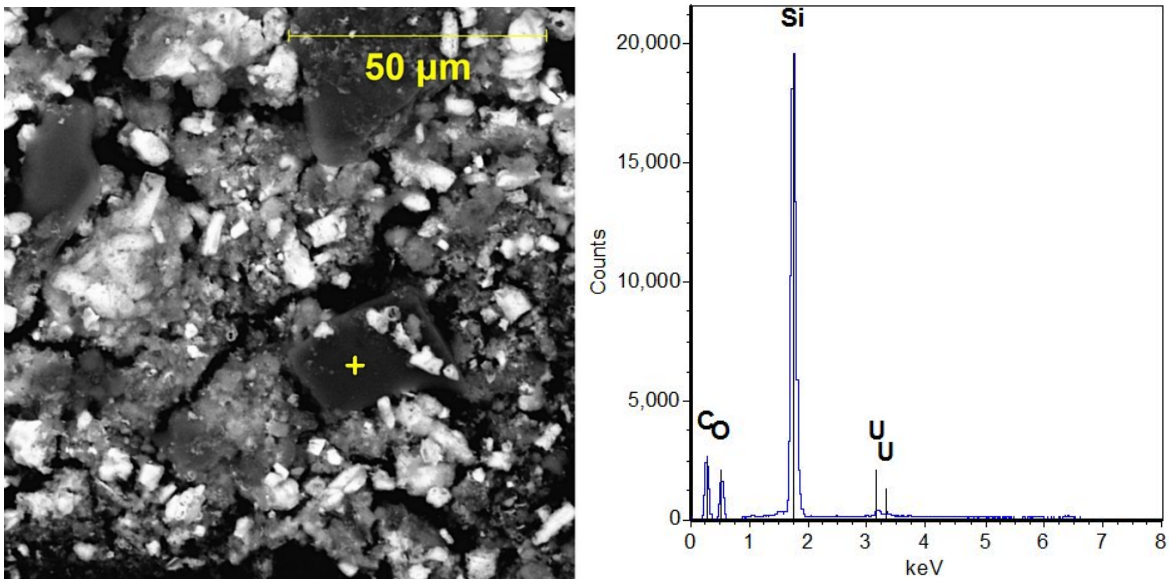


Figure 20. S16R000173 - 4a/4b (Centrifuged Solids of 105C-15-02) by Scanning Electron Microscopy and Energy Dispersive Spectrometry; Spot-Scan.

SUMMARY

The samples were carbon coated. Most particles were ≤25 µm. Samples S16R000170 to S16R000173 were prepared by filtering the sample and gluing the particles to carbon planchets. Carbonate/oxalate was present in samples S16R000170 to S16R000173.

All samples contained the same components. The light particulate is clarkeite. Gibbsite or boehmite, hematite, bixbyite, trona, natroxalate, silica, sodium aluminate, and cancrinite are present throughout the samples. There are differing intensities of various elements within the sample. Iodargyrite was a unique particle that was present. High carbon content was noted and may be due to an organic coating.

Calculation Checklist

Calculation Title/Subject:	Workbook associated with RPP-RPT-59700, Final Report of Tank 241-C-105 Dissolution, Phase 2 Study
Scope of Review:	Entire set of workbooks attached to report in SPF.
Engineer/Analyst	Huei Meznarich Date: 9/28/16
Organization Manager	Gary Cooke Date: 9/28/16

Yes	No*	NA*		
[x]	[ ]	[ ]	a.	The objective/purpose of the calculation is clearly stated and the problem is completely defined by the purpose statement.
[x]	[ ]	[ ]	b.	Analytical and technical approaches and results are reasonable and appropriate.
[x]	[ ]	[ ]	c.	Input data are adequately described, referenced to their source, and checked for consistency with original source information.
[x]	[ ]	[ ]	d.	Necessary assumptions are reasonable, explicitly stated, and supported. Assumptions requiring verification prior to use are clearly stated and identified/tracked using TBD/HOLD numbers.
[x]	[ ]	[ ]	e.	For both qualitative and quantitative data, uncertainties are recognized and discussed and the data is presented in a manner to minimize design interpretations.
[x]	[ ]	[ ]	f.	Mathematical derivations were checked, including dimensional consistency of results.
[x]	[ ]	[ ]	g.	Calculations are sufficiently detailed such that a technically qualified person can understand the analysis without requiring outside information.
[ ]	[ ]	[x]	h.	Hand and MathCAD® calculations were verified, including review that correct input data are used, formulae correctly interpret intended expressions, correct units are used, and results are reasonable and appropriate. **No Hand or MathCAD calculations were used.**
[ ]	[ ]	[x]	i.	Software applications used are identified by the program name and version/release number as required by Attachment A (Section 7, Use of Computer Software). **The only software used was the Hanford site standard of Microsoft Excel.**
[x]	[ ]	[ ]	j.	Software input data is identified and/or attached/included, the input data is correct, and consistent with the calculation document.
[ ]	[ ]	[x]	k.	Software output is consistent with the input and with the results reported in the calculation document. **These workbooks are not software.**
[ ]	[ ]	[x]	l.	Software verification and validation are addressed adequately in accordance with TFC-BSM-IRM_HS-C-01. Software verification documentation, (typically the Software Management Plan or Test Report), is included in the calculation document, or a reference is provided as required by Attachment A (Section 7, Use of Computer Software). **These workbooks are not software.**
[x]	[ ]	[ ]	m.	Software verification show that software produces correct solution for the encoded mathematical model within defined limits for each parameter employed and the software is used within its limits.
[x]	[ ]	[ ]	n.	The encoded mathematical model (method), produces a valid solution to the physical problem associated with the particular application (i.e., the methodology used is applicable to the problem being solved).
[ ]	[ ]	[x]	o.	Multiple-Use spreadsheets used in the calculation are identified, verified, and documented in accordance with TFC-ENG-DESIGN-C-32. Reference to the corresponding Software Management Plan or Spreadsheet Verification Form (for legacy spreadsheets) is included in calculation as required by Attachment A (Section 7, Use of Computer Software). **These workbooks are single use spreadsheets.**
[x]	[ ]	[ ]	p.	Single-Use spreadsheets used in the calculation are identified, verified, and documented as part of the calculation or other technical document as prescribed in TFC-ENG-DESIGN-C-10.
[x]	[ ]	[ ]	q.	Data or results presented in tables and graphs have been checked against original source.
[x]	[ ]	[ ]	r.	The number of significant digits is appropriate and consistent.
[x]	[ ]	[ ]	s.	Limits/criteria/guidelines applied to the analysis results are appropriate and referenced. Limits/criteria/guidelines were checked against references.
[x]	[ ]	[ ]	t.	Conclusions are consistent with analytical results and applicable limits.

* If less than the entire calculation was checked, the scope of the check should be discussed. If any blocks are checked "No" or "NA", an explanation must be provided here or attached.

[x]	[ ]	[ ]	u.	Results and conclusions address all points in the purpose.
[x]	[ ]	[ ]	v.	Referenced documents are retrievable or otherwise available and the version or revision of each reference is cited.
[x]	[ ]	[ ]	w.	The calculation was prepared in accordance with Attachment A, "Calculation Format and Preparation Instructions," of TFC-ENG-DESIGN-C-10.
[x]	[ ]	[ ]	x.	Impacts on requirements have been assessed and change documentation initiated to incorporate revisions to affected documents, as appropriate.
[x]	[ ]	[ ]	y.	All checker comments have been dispositioned.
[x]	[ ]	[ ]	z.	The design media matches the calculations.

Doug Kraft 9/28/16

Checker (printed name and signature) Date

* If less than the entire calculation was checked, the scope of the check should be discussed. If any blocks are checked "No" or "NA", an explanation must be provided here or attached.

RPP-RPT-59700 Workbook Review Write Up

Testing methodology:

A copy of the workbook is made. Each worksheet's used range is copied one column to the right of the source data. All formulae are removed from the review data. Each formula is then recreated in the review data by use of either the developer's equation write up or Documentation worksheet. 100% of equations are tested. Conditional Formatting is used by the reviewer to easily distinguish discrepancies in the data.

Any worksheet ending in "_XXX" (reviewer initials) is a worksheet created by the reviewer for the purpose of testing.

Any cell shaded red or green, in the review spreadsheet, is either called out below, per spreadsheet, or is an acceptable value that Excel has shaded within the confines of Conditional Formatting in regards to rounding, floating point arithmetic issues or numbers formatted as text.

Conditional Formatting used –

A1 = Source Data

B1 = Review Data

=(ABS(A1-B1))/A1>=0.05

This shows differences, green cell shaded, in the review data that are 5% or more off the source

=B1<>A1

This shows differences, red cell shaded, in the review data when a cell does not equal its source

=IFERROR(B1<>A1, "TRUE")

This highlights, red cell shaded, Excel errors in the review data at its source

=AND(NOT(ISBLANK(A1)), B1=A1, ISBLANK(B1))

This shows differences, red cell shaded, in the review data on formulas that equal null or zero at its source

Structure –

Comment Process:

Review comments are sent to the developer. Developer responses are added to this document and tested. If necessary, further comments are added and sent back to the developer for response. All developer responses are tested and are considered accomplished if no further comment is added.

Black text = review comment

Red text = developer response

Blue text = Further review comment or validation of developer response.

Worksheet Sample_Prep

Cells B9:B12. These are pointing to the wrong Cone value from Data_Input. Fixed.

Cells T28 and T32 do not take into account the duplicate density value from the DSR. Fixed.

Cell T36 should be a density value of 1.1. Fixed.

Cell T38 should be a density value of 1.055. Fixed.

Worksheet OH

Cells D10, D11 and D15 do not take into account the duplicate OH value from the DSR. This has far reaching effects throughout the workbook. Fixed.

Worksheet %W

Cells C11, C12 and C16 do not take into account the duplicate Percent water from the DSR. Fixed.

Worksheet IC_Treatment& Grnt

Rows 6 and 10 do not take into account the duplicate analyte values from the DSR. Fixed.

Worksheet TIC-TOC

Cells C35 and C36. You have hardcoded values that do not match what is in the DSR. This has many follow on effects. Fixed.

Cells K49:K60. Should this calculation be reversed? From [column I minus column J] to [J – I]. This calculation is labeled correctly.

Solids parent –total IC-Dissolu

Cell G3. You show a value of 296.5 whereas the DSR shows an average value of 297. Used worksheet calculated average instead of the DSR average. Insignificant difference.

Cell J3. You show a value of 9525 whereas the DSR shows an average value of 9520. Used worksheet calculated average instead of the DSR average. Insignificant difference.

Cell L3. You show a value of 8545 whereas the DSR shows an average value of 8540. Used worksheet calculated average instead of the DSR average. Insignificant difference.

Cell M3. You show a value of 11250 whereas the DSR shows an average value of 11200. Used worksheet calculated average instead of the DSR average. Insignificant difference.

Total_ICP-solu & par solids-use

Cell K9. It appears that the Sulfur value may have been inadvertently deleted from the DSR. Fixed.

Cells N43 and O43. You used your calculated average instead of the average in the DSR. Used worksheet calculated average instead of the DSR average. Insignificant difference.

Cells V46 and W46. You included the na value in row 42 instead of the actual value in row 43 for the mean and standard deviation calculations. Fixed.

Parent Solids – Comparison

Cell O16 is pointing to 'Total_ICP-solu & par solids-use cell V40' instead of V41. Fixed.

Cell O17 is pointing to 'Total_ICP-solu & par solids-use cell V41' instead of V42. Fixed.

Cells O27:O29 are affected by the above. Fixed.

INFORMATION CLEARANCE REVIEW AND RELEASE APPROVAL

Part I: Background Information

Title: Final Report of Tank-241-C-105 Dissolution, the Phase 2 Study

Publish to OSTI? ☑ Yes ☐ No

Information Category:
☐ Abstract ☐ Journal Article ☐ Summary
☐ Internet ☐ Visual Aid ☐ Software
☐ Full Paper ☑ Report ☐ Other

Trademark/Copyright "Right to Use" Information or Permission Documentation	Yes ☐	NA ☑

Document Number: RPP-RPT-59700 Revision 0 Date: November 2016

Author: Meznarich, Huei K

Part II: External/Public Presentation Information

Conference Name:

Sponsoring Organization(s): WRPS

Date of Conference: Conference Location:

Will Material be Handed Out? ☐ Yes ☑ No Will Information be Published? ☐ Yes ☑ No *(If Yes, attach copy of Conference format instructions/guidance.)*

Part III: WRPS Document Originator Checklist

Description	*Yes*	*N/A*	*Print/Sign/Date*
Information Product meets requirements in TFC-BSM-AD-C-01?	☐	☑	
Document Release Criteria in TFC-ENG-DESIGN-C-25 completed? (Attach checklist)	☐	☑	
If product contains pictures, safety review completed?	☐	☑	

Part IV: WRPS Internal Review

Function	*Organization*	*Date*	*Print Name/Signature/Date*
Subject Matter Expert	WRPS	12/31/2016	Meznarich, Huei K IDMS Data File att.
Responsible Manager	WRPS	11/03/2016	Cooke, Gary A IDMS Data File att.
Other:			

Part V: IRM Clearance Services Review

Description	*Yes*	*No*	*Print Name/Signature*
Document Contains Classified Information?	☐	☒	If Answer is "Yes," ADC Approval Required Print Name/Signature/Date
Document Contains Information Restricted by DOE Operational Security Guidelines?	☐	☒	Reviewer Signature: Print Name/Signature/Date
Document is Subject to Release Restrictions? *If the answer is "Yes," please mark category at right and describe limitation or responsible organization below:*	☐	☒	Document contains: ☐ Applied Technology ☐ Protected CRADA ☐ Personal/Private ☐ Export Controlled ☐ Proprietary ☐ Procurement – Sensitive ☐ Patentable Info. ☐ OUO ☐ Predecisional Info. ☐ UCNI ☐ Restricted by Operational Security Guidelines ☐ Other (Specify)
Additional Comments from Information Clearance Specialist Review?	☐	☒	Information Clearance Specialist Approval APPROVED By Janis Aardal at 8:47 am, Jan 12, 2017 Print Name/Signature/Date

When IRM Clearance Review is Complete – Return to WRPS Originator for Final Signature Routing (Part VI)

INFORMATION CLEARANCE REVIEW AND RELEASE APPROVAL

Part VI: Final Review and Approvals

Description	*Approved for Release*		*Print Name/Signature*	
	Yes	*N/A*		
WRPS External Affairs	☒	☐	IDMS Data File att.	McKenna, Mark
WRPS Office of Chief Counsel	☒	☐	IDMS Data File att.	Roden, Mari L
DOE – ORP Public Affairs/Communications	☒	☐	IDMS Data File att.	Marshall, Richard A
Other: ORP SME	☒	☐	IDMS Data File att.	Rambo, Jeffery J
Other: DOE OCC	☒	☐	IDMS Data File att.	O'Hagen, Michael D

Comments Required for WRPS-Indicate Purpose of Document:

Make available for external readers.

APPROVED
By Janis Aardal at 8:49 am, Jan 12, 2017

Approved for Public Release;
Further Dissemination Unlimited

Information Release Station

Was/Is Information Product Approved for Release? ☒ Yes ☐ No

If Yes, what is the Level of Releaser? ☑ Public/Unrestricted ☐ Other (Specify) _____

Date Information Product Stamped/Marked for Release: 01/12/2016

Was/Is Information Product Transferred to OSTI? ☒ Yes ☐ No

Forward Copies of Completed Form to WRPS Originator

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        Meznarich for public release. (Already released in SPF) Thank you, Janis
        Aardal Information Clearance</comments>
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        Study Performer: Rambo, Jeffery (h0013305) Approved Reviewer's
        Comments Date: 12/29/2016 07:00 AM Step Name: RPP-RPT-59700 Final
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