

June 05, 2014

Program Manager  
Duke Energy  
13339 Hagers Ferry Road  
Bldg. 7405 MG30A2  
Huntersville, NC 28078

RE: Project: BUCK - REs. WELLS J14060100  
Pace Project No.: 92203034

Dear Program Manager:

Enclosed are the analytical results for sample(s) received by the laboratory on May 28, 2014. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

Analyses were performed at the Pace Analytical Services location indicated on the sample analyte page for analysis unless otherwise footnoted.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kevin Herring  
kevin.herring@pacelabs.com  
HORIZON Database Administrator

Enclosures

cc: Jennifer Danforth, Duke Energy  
Zach Hall, Duke Energy  
Rodney Wike, Duke Energy



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: BUCK - Res. WELLS J14060100

Pace Project No.: 92203034

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### Ormond Beach Certification IDs

8 East Tower Circle, Ormond Beach, FL 32174  
Alabama Certification #: 41320  
Arizona Certification #: AZ0735  
Colorado Certification: FL NELAC Reciprocity  
Connecticut Certification #: PH-0216  
Delaware Certification: FL NELAC Reciprocity  
Florida Certification #: E83079  
Georgia Certification #: 955  
Guam Certification: FL NELAC Reciprocity  
Hawaii Certification: FL NELAC Reciprocity  
Illinois Certification #: 200068  
Indiana Certification: FL NELAC Reciprocity  
Kansas Certification #: E-10383  
Kentucky Certification #: 90050  
Louisiana Certification #: FL NELAC Reciprocity  
Louisiana Environmental Certificate #: 05007  
Maine Certification #: FL01264  
Maryland Certification: #346  
Massachusetts Certification #: M-FL1264  
Michigan Certification #: 9911

Mississippi Certification: FL NELAC Reciprocity  
Montana Certification #: Cert 0074  
Nebraska Certification: NE-OS-28-14  
Nevada Certification: FL NELAC Reciprocity  
New Hampshire Certification #: 2958  
New Jersey Certification #: FL765  
New York Certification #: 11608  
North Carolina Environmental Certificate #: 667  
North Carolina Certification #: 12710  
Pennsylvania Certification #: 68-00547  
Puerto Rico Certification #: FL01264  
South Carolina Certification: #96042001  
Tennessee Certification #: TN02974  
Texas Certification: FL NELAC Reciprocity  
US Virgin Islands Certification: FL NELAC Reciprocity  
Virginia Environmental Certification #: 460165  
Washington Certification #: C955  
West Virginia Certification #: 9962C  
Wisconsin Certification #: 399079670  
Wyoming (EPA Region 8): FL NELAC Reciprocity

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### Charlotte Certification IDs

9800 Kincey Ave. Ste 100, Huntersville, NC 28078  
North Carolina Drinking Water Certification #: 37706  
North Carolina Field Services Certification #: 5342  
North Carolina Wastewater Certification #: 12  
South Carolina Certification #: 99006001

Florida/NELAP Certification #: E87627  
Kentucky UST Certification #: 84  
West Virginia Certification #: 357  
Virginia/VELAP Certification #: 460221

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### Asheville Certification IDs

2225 Riverside Dr., Asheville, NC 28804  
Florida/NELAP Certification #: E87648  
Massachusetts Certification #: M-NC030  
North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40  
South Carolina Certification #: 99030001  
West Virginia Certification #: 356  
Virginia/VELAP Certification #: 460222

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## REPORT OF LABORATORY ANALYSIS

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### SAMPLE ANALYTE COUNT

Project: BUCK - RES. WELLS J14060100

Pace Project No.: 92203034

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory		
92203034001	SURFACE WATER 1	EPA 200.7	CRT	10	PASI-O		
		EPA 200.7	CRT	10	PASI-O		
		EPA 200.8	DRS, HEA	9	PASI-O		
		EPA 200.8	DRS, HEA	9	PASI-O		
		EPA 245.1	CRT	1	PASI-O		
		EPA 245.1	CRT	1	PASI-O		
		SM 2320B	MDW	1	PASI-A		
		SM 2540C	WRC	1	PASI-A		
		EPA 300.0	JNZ	3	PASI-O		
		SM 3500-Cr D	DMN	1	PASI-A		
		EPA 353.2	DMN	3	PASI-A		
		EPA 365.1	JDA	1	PASI-A		
		SM 5310B	SAE	1	PASI-A		
		92203034002	SURFACE WATER 2	EPA 200.7	CRT	10	PASI-O
				EPA 200.7	CRT	10	PASI-O
EPA 200.8	DRS, HEA			9	PASI-O		
EPA 200.8	DRS, HEA			9	PASI-O		
EPA 245.1	CRT			1	PASI-O		
EPA 245.1	CRT			1	PASI-O		
SM 2320B	MDW			1	PASI-A		
SM 2540C	WRC			1	PASI-A		
EPA 300.0	JNZ			3	PASI-O		
SM 3500-Cr D	DMN			1	PASI-A		
EPA 353.2	DMN			3	PASI-A		
EPA 365.1	JDA			1	PASI-A		
SM 5310B	SAE			1	PASI-A		
92203034003	RESIDENT WELL 1			EPA 200.7	CRT	10	PASI-O
				EPA 200.7	CRT	10	PASI-O
		EPA 200.8	DRS, HEA	9	PASI-O		
		EPA 200.8	DRS, HEA	9	PASI-O		
		EPA 245.1	CRT	1	PASI-O		
		EPA 245.1	CRT	1	PASI-O		
		SM 2320B	MDW	1	PASI-A		
		SM 2540C	WRC	1	PASI-A		
		EPA 300.0	JNZ	3	PASI-O		
		SM 3500-Cr D	DMN	1	PASI-A		
		EPA 353.2	DMN	3	PASI-A		

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### SAMPLE ANALYTE COUNT

Project: BUCK - REs. WELLS J14060100

Pace Project No.: 92203034

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92203034004	RESIDENT WELL 2	EPA 365.1	JDA	1	PASI-A
		SM 5310B	SAE	1	PASI-A
		EPA 200.7	CRT	10	PASI-O
		EPA 200.7	CRT	10	PASI-O
		EPA 200.8	DRS, HEA	9	PASI-O
		EPA 200.8	DRS, HEA	9	PASI-O
		EPA 245.1	CRT	1	PASI-O
		EPA 245.1	CRT	1	PASI-O
		SM 2320B	MDW	1	PASI-A
		SM 2540C	WRC	1	PASI-A
		EPA 300.0	JNZ	3	PASI-O
		SM 3500-Cr D	DMN	1	PASI-A
		EPA 353.2	DMN	3	PASI-A
		EPA 365.1	JDA	1	PASI-A
92203034005	RESIDENT WELL 3	SM 5310B	SAE	1	PASI-A
		EPA 200.7	CRT	10	PASI-O
		EPA 200.7	CRT	10	PASI-O
		EPA 200.8	DRS, HEA	9	PASI-O
		EPA 200.8	DRS, HEA	9	PASI-O
		EPA 245.1	CRT	1	PASI-O
		EPA 245.1	CRT	1	PASI-O
		SM 2320B	MDW	1	PASI-A
		SM 2540C	WRC	1	PASI-A
		EPA 300.0	JNZ	3	PASI-O
		SM 3500-Cr D	DMN	1	PASI-A
		EPA 353.2	DMN	3	PASI-A
		EPA 365.1	JDA	1	PASI-A
		SM 5310B	SAE	1	PASI-A
92203034006	RESIDENT WELL 4	EPA 200.7	CRT	10	PASI-O
		EPA 200.7	CRT	10	PASI-O
		EPA 200.8	DRS, HEA	9	PASI-O
		EPA 200.8	DRS, HEA	9	PASI-O
		EPA 245.1	CRT	1	PASI-O
		EPA 245.1	CRT	1	PASI-O
		SM 2320B	MDW	1	PASI-A
		SM 2540C	WRC	1	PASI-A
		EPA 300.0	JNZ	3	PASI-O

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### SAMPLE ANALYTE COUNT

Project: BUCK - RES. WELLS J14060100  
Pace Project No.: 92203034

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92203034007	RESIDENT WELL 5	SM 3500-Cr D	DMN	1	PASI-A
		EPA 353.2	DMN	3	PASI-A
		EPA 365.1	JDA	1	PASI-A
		SM 5310B	SAE	1	PASI-A
		EPA 200.7	CRT	10	PASI-O
		EPA 200.7	CRT	10	PASI-O
		EPA 200.8	DRS, HEA	9	PASI-O
		EPA 200.8	DRS, HEA	9	PASI-O
		EPA 245.1	CRT	1	PASI-O
		EPA 245.1	CRT	1	PASI-O
		SM 2320B	MDW	1	PASI-A
		SM 2540C	WRC	1	PASI-A
		EPA 300.0	JNZ	3	PASI-O
		SM 3500-Cr D	DMN	1	PASI-A
92203034008	RESIDENT WELL 6	EPA 353.2	DMN	3	PASI-A
		EPA 365.1	JDA	1	PASI-A
		SM 5310B	SAE	1	PASI-A
		EPA 200.7	CRT	10	PASI-O
		EPA 200.7	CRT	10	PASI-O
		EPA 200.8	DRS, HEA	9	PASI-O
		EPA 200.8	DRS, HEA	9	PASI-O
		EPA 245.1	CRT	1	PASI-O
		EPA 245.1	CRT	1	PASI-O
		SM 2320B	MDW	1	PASI-A
		SM 2540C	WRC	1	PASI-A
		EPA 300.0	JNZ	3	PASI-O
		SM 3500-Cr D	DMN	1	PASI-A
		92203034009	RESIDENT WELL 7	EPA 353.2	DMN
EPA 365.1	JDA			1	PASI-A
SM 5310B	SAE			1	PASI-A
EPA 200.7	CRT			10	PASI-O
EPA 200.7	CRT			10	PASI-O
EPA 200.8	DRS, HEA			9	PASI-O
EPA 200.8	DRS, HEA			9	PASI-O
EPA 245.1	CRT			1	PASI-O
EPA 245.1	CRT			1	PASI-O
SM 2320B	MDW			1	PASI-A

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**SAMPLE ANALYTE COUNT**

Project: BUCK - REs. WELLS J14060100  
Pace Project No.: 92203034

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 2540C	WRC	1	PASI-A
		EPA 300.0	JNZ	3	PASI-O
		SM 3500-Cr D	DMN	1	PASI-A
		EPA 353.2	DMN	3	PASI-A
		EPA 365.1	JDA	1	PASI-A
		SM 5310B	SAE	1	PASI-A

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### SUMMARY OF DETECTION

Project: BUCK - RES. WELLS J14060100  
 Pace Project No.: 92203034

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92203034001</b>	<b>SURFACE WATER 1</b>					
	Collected By	CJF			05/30/14 08:27	
	Collected Date	05/27/14			05/30/14 08:27	
	Field pH	7.1	Std. Units	0.10	05/30/14 08:27	
	Field Temperature	22.1	deg C	0.50	05/30/14 08:27	
	Appearance	CLEAR			05/30/14 08:27	
	Field Specific Conductance	205	umhos/cm	1.0	05/30/14 08:27	
	Oxygen, Dissolved	3.5	mg/L		05/30/14 08:27	
	REDOX	-22	mV		05/30/14 08:27	
	Turbidity	2.0	NTU	1.0	05/30/14 08:27	
EPA 200.7	Aluminum	658	ug/L	100	05/30/14 09:18	
EPA 200.7	Barium	166	ug/L	10.0	05/30/14 09:18	
EPA 200.7	Calcium	13200	ug/L	500	05/30/14 09:18	
EPA 200.7	Iron	3220	ug/L	50.0	05/30/14 09:18	
EPA 200.7	Magnesium	6960	ug/L	500	05/30/14 09:18	
EPA 200.7	Manganese	4660	ug/L	10.0	05/30/14 09:18	M1
EPA 200.7	Potassium	3830	ug/L	1000	05/30/14 09:18	
EPA 200.7	Sodium	8650	ug/L	1000	05/30/14 09:18	
EPA 200.7	Barium, Dissolved	150	ug/L	10.0	05/30/14 11:41	
EPA 200.7	Calcium, Dissolved	12900	ug/L	500	05/30/14 11:41	
EPA 200.7	Iron, Dissolved	899	ug/L	50.0	05/30/14 11:41	
EPA 200.7	Magnesium, Dissolved	6830	ug/L	500	05/30/14 11:41	
EPA 200.7	Manganese, Dissolved	4420	ug/L	10.0	05/30/14 11:41	
EPA 200.7	Potassium, Dissolved	3710	ug/L	1000	05/30/14 11:41	
EPA 200.7	Sodium, Dissolved	8670	ug/L	1000	05/30/14 11:41	
EPA 200.8	Copper	1.1	ug/L	1.0	05/30/14 07:59	
SM 2320B	Alkalinity, Total as CaCO3	73.7	mg/L	5.0	05/29/14 10:58	
SM 2540C	Total Dissolved Solids	118	mg/L	25.0	05/28/14 15:53	
EPA 300.0	Chloride	8.2	mg/L	5.0	05/31/14 16:15	
EPA 300.0	Fluoride	0.18	mg/L	0.050	05/31/14 16:15	
EPA 300.0	Sulfate	7.3	mg/L	5.0	05/31/14 16:15	
EPA 353.2	Nitrogen, Nitrate	0.081	mg/L	0.020	05/28/14 18:57	
EPA 353.2	Nitrogen, NO2 plus NO3	0.081	mg/L	0.020	05/28/14 18:57	
SM 5310B	Total Organic Carbon	5.2	mg/L	1.0	05/29/14 16:41	
<b>92203034002</b>	<b>SURFACE WATER 2</b>					
	Collected By	CJF			05/30/14 08:26	
	Collected Date	05/27/14			05/30/14 08:26	
	Field pH	7.6	Std. Units	0.10	05/30/14 08:26	
	Field Temperature	27.9	deg C	0.50	05/30/14 08:26	
	Appearance	CLEAR			05/30/14 08:26	
	Field Specific Conductance	69	umhos/cm	1.0	05/30/14 08:26	
	Oxygen, Dissolved	5.9	mg/L		05/30/14 08:26	
	REDOX	102	mV		05/30/14 08:26	
	Turbidity	13	NTU	1.0	05/30/14 08:26	
EPA 200.7	Aluminum	137	ug/L	100	05/30/14 09:29	
EPA 200.7	Barium	64.7	ug/L	10.0	05/30/14 09:29	
EPA 200.7	Calcium	5340	ug/L	500	05/30/14 09:29	
EPA 200.7	Iron	2890	ug/L	50.0	05/30/14 09:29	

### REPORT OF LABORATORY ANALYSIS

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### SUMMARY OF DETECTION

Project: BUCK - RES. WELLS J14060100

Pace Project No.: 92203034

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92203034002</b>	<b>SURFACE WATER 2</b>					
EPA 200.7	Magnesium	3160	ug/L	500	05/30/14 09:29	
EPA 200.7	Manganese	2180	ug/L	10.0	05/30/14 09:29	
EPA 200.7	Potassium	8940	ug/L	1000	05/30/14 09:29	
EPA 200.7	Sodium	1740	ug/L	1000	05/30/14 09:29	
EPA 200.7	Barium, Dissolved	12.1	ug/L	10.0	05/30/14 11:52	
EPA 200.7	Calcium, Dissolved	4120	ug/L	500	05/30/14 11:52	
EPA 200.7	Iron, Dissolved	1350	ug/L	50.0	05/30/14 11:52	
EPA 200.7	Magnesium, Dissolved	3020	ug/L	500	05/30/14 11:52	
EPA 200.7	Manganese, Dissolved	178	ug/L	10.0	05/30/14 11:52	
EPA 200.7	Potassium, Dissolved	9140	ug/L	1000	05/30/14 11:52	
EPA 200.7	Sodium, Dissolved	1820	ug/L	1000	05/30/14 11:52	
EPA 200.8	Copper	1.3	ug/L	1.0	05/30/14 08:01	
SM 2320B	Alkalinity, Total as CaCO3	21.7	mg/L	5.0	05/29/14 11:32	
SM 2540C	Total Dissolved Solids	73.0	mg/L	25.0	05/28/14 15:54	
EPA 300.0	Chloride	5.9	mg/L	5.0	05/31/14 16:36	
EPA 300.0	Fluoride	0.17	mg/L	0.050	05/31/14 16:36	
EPA 365.1	Phosphorus	0.091	mg/L	0.050	05/30/14 11:32	
SM 5310B	Total Organic Carbon	9.2	mg/L	1.0	05/29/14 16:54	
<b>92203034003</b>	<b>RESIDENT WELL 1</b>					
	Collected By	CJF			05/30/14 08:26	
	Collected Date	05/27/14			05/30/14 08:26	
	Field pH	6.5	Std. Units	0.10	05/30/14 08:26	
	Field Temperature	22.0	deg C	0.50	05/30/14 08:26	
	Appearance	CLEAR			05/30/14 08:26	
	Field Specific Conductance	64	umhos/cm	1.0	05/30/14 08:26	
	Oxygen, Dissolved	5.0	mg/L		05/30/14 08:26	
	REDOX	148	mV		05/30/14 08:26	
	Turbidity	0.0	NTU	1.0	05/30/14 08:26	
EPA 200.7	Barium	13.9	ug/L	10.0	05/30/14 09:33	
EPA 200.7	Calcium	7260	ug/L	500	05/30/14 09:33	
EPA 200.7	Magnesium	2680	ug/L	500	05/30/14 09:33	
EPA 200.7	Potassium	1280	ug/L	1000	05/30/14 09:33	
EPA 200.7	Sodium	6580	ug/L	1000	05/30/14 09:33	
EPA 200.7	Barium, Dissolved	13.6	ug/L	10.0	05/30/14 11:56	
EPA 200.7	Calcium, Dissolved	7180	ug/L	500	05/30/14 11:56	
EPA 200.7	Magnesium, Dissolved	2650	ug/L	500	05/30/14 11:56	
EPA 200.7	Potassium, Dissolved	1260	ug/L	1000	05/30/14 11:56	
EPA 200.7	Sodium, Dissolved	6290	ug/L	1000	05/30/14 11:56	
EPA 200.8	Copper	5.6	ug/L	1.0	05/30/14 08:12	
EPA 200.8	Zinc	136	ug/L	5.0	05/30/14 08:12	
EPA 200.8	Copper, Dissolved	6.1	ug/L	1.0	05/30/14 08:45	
EPA 200.8	Zinc, Dissolved	162	ug/L	5.0	05/30/14 08:45	
SM 2320B	Alkalinity, Total as CaCO3	36.2	mg/L	5.0	05/29/14 11:41	
SM 2540C	Total Dissolved Solids	116	mg/L	25.0	05/28/14 15:55	
EPA 300.0	Fluoride	0.18	mg/L	0.050	05/31/14 16:58	
EPA 353.2	Nitrogen, Nitrate	1.3	mg/L	0.020	05/28/14 19:04	
EPA 353.2	Nitrogen, NO2 plus NO3	1.3	mg/L	0.020	05/28/14 19:04	

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### SUMMARY OF DETECTION

Project: BUCK - RES. WELLS J14060100  
Pace Project No.: 92203034

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92203034003</b>	<b>RESIDENT WELL 1</b>					
EPA 365.1	Phosphorus	0.093	mg/L	0.050	05/30/14 11:33	
SM 5310B	Total Organic Carbon	1.4	mg/L	1.0	05/29/14 17:06	
<b>92203034004</b>	<b>RESIDENT WELL 2</b>					
	Collected By	CJF			05/30/14 08:24	
	Collected Date	05/27/14			05/30/14 08:24	
	Field pH	6.3	Std. Units	0.10	05/30/14 08:24	
	Field Temperature	17.3	deg C	0.50	05/30/14 08:24	
	Appearance	CLEAR			05/30/14 08:24	
	Field Specific Conductance	153	umhos/cm	1.0	05/30/14 08:24	
	Oxygen, Dissolved	4.9	mg/L		05/30/14 08:24	
	REDOX	183	mV		05/30/14 08:24	
	Turbidity	0.0	NTU	1.0	05/30/14 08:24	
EPA 200.7	Barium	17.9	ug/L	10.0	05/30/14 09:37	
EPA 200.7	Calcium	15400	ug/L	500	05/30/14 09:37	
EPA 200.7	Magnesium	6440	ug/L	500	05/30/14 09:37	
EPA 200.7	Potassium	1640	ug/L	1000	05/30/14 09:37	
EPA 200.7	Sodium	7880	ug/L	1000	05/30/14 09:37	
EPA 200.7	Barium, Dissolved	19.2	ug/L	10.0	05/30/14 11:59	
EPA 200.7	Calcium, Dissolved	16800	ug/L	500	05/30/14 11:59	
EPA 200.7	Magnesium, Dissolved	7030	ug/L	500	05/30/14 11:59	
EPA 200.7	Potassium, Dissolved	1780	ug/L	1000	05/30/14 11:59	
EPA 200.7	Sodium, Dissolved	8490	ug/L	1000	05/30/14 11:59	
EPA 200.8	Copper	13.1	ug/L	1.0	05/30/14 08:15	
EPA 200.8	Zinc	41.0	ug/L	5.0	05/30/14 08:15	
EPA 200.8	Copper, Dissolved	13.3	ug/L	1.0	05/30/14 08:52	
EPA 200.8	Zinc, Dissolved	40.7	ug/L	5.0	05/30/14 08:52	
SM 2320B	Alkalinity, Total as CaCO3	60.8	mg/L	5.0	05/29/14 11:51	
SM 2540C	Total Dissolved Solids	152	mg/L	25.0	05/28/14 15:55	
EPA 300.0	Chloride	5.0	mg/L	5.0	05/31/14 17:19	
EPA 300.0	Fluoride	0.16	mg/L	0.050	05/31/14 17:19	
EPA 353.2	Nitrogen, Nitrate	3.9	mg/L	0.020	05/28/14 19:06	
EPA 353.2	Nitrogen, NO2 plus NO3	3.9	mg/L	0.020	05/28/14 19:06	
EPA 365.1	Phosphorus	0.11	mg/L	0.050	05/30/14 11:33	
SM 5310B	Total Organic Carbon	2.9	mg/L	1.0	05/29/14 17:43	
<b>92203034005</b>	<b>RESIDENT WELL 3</b>					
	Collected By	CJF			05/30/14 08:23	
	Collected Date	05/27/14			05/30/14 08:23	
	Field pH	6.3	Std. Units	0.10	05/30/14 08:23	
	Field Temperature	17.6	deg C	0.50	05/30/14 08:23	
	Appearance	CLEAR			05/30/14 08:23	
	Field Specific Conductance	133	umhos/cm	1.0	05/30/14 08:23	
	Oxygen, Dissolved	3.3	mg/L		05/30/14 08:23	
	REDOX	186	mV		05/30/14 08:23	
	Turbidity	0.0	NTU	1.0	05/30/14 08:23	
EPA 200.7	Barium	18.4	ug/L	10.0	05/30/14 09:40	
EPA 200.7	Calcium	13900	ug/L	500	05/30/14 09:40	

### REPORT OF LABORATORY ANALYSIS

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### SUMMARY OF DETECTION

Project: BUCK - RES. WELLS J14060100

Pace Project No.: 92203034

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92203034005</b>	<b>RESIDENT WELL 3</b>					
EPA 200.7	Magnesium	4870	ug/L	500	05/30/14 09:40	
EPA 200.7	Potassium	2070	ug/L	1000	05/30/14 09:40	
EPA 200.7	Sodium	7010	ug/L	1000	05/30/14 09:40	
EPA 200.7	Barium, Dissolved	18.8	ug/L	10.0	05/30/14 12:03	
EPA 200.7	Calcium, Dissolved	13600	ug/L	500	05/30/14 12:03	
EPA 200.7	Magnesium, Dissolved	4870	ug/L	500	05/30/14 12:03	
EPA 200.7	Potassium, Dissolved	2020	ug/L	1000	05/30/14 12:03	
EPA 200.7	Sodium, Dissolved	7020	ug/L	1000	05/30/14 12:03	
EPA 200.8	Copper	3.9	ug/L	1.0	05/30/14 08:17	
EPA 200.8	Zinc	1400	ug/L	5.0	05/30/14 08:17	
EPA 200.8	Copper, Dissolved	4.3	ug/L	1.0	05/30/14 08:54	
EPA 200.8	Zinc, Dissolved	1460	ug/L	5.0	05/30/14 08:54	
SM 2320B	Alkalinity, Total as CaCO3	54.4	mg/L	5.0	05/29/14 12:02	
SM 2540C	Total Dissolved Solids	111	mg/L	25.0	05/28/14 15:55	
EPA 300.0	Fluoride	0.16	mg/L	0.050	05/31/14 17:41	
EPA 353.2	Nitrogen, Nitrate	2.8	mg/L	0.020	05/28/14 19:07	
EPA 353.2	Nitrogen, NO2 plus NO3	2.8	mg/L	0.020	05/28/14 19:07	
EPA 365.1	Phosphorus	0.084	mg/L	0.050	05/30/14 11:34	
SM 5310B	Total Organic Carbon	2.3	mg/L	1.0	05/29/14 17:55	
<b>92203034006</b>	<b>RESIDENT WELL 4</b>					
	Collected By	CJF			05/30/14 08:22	
	Collected Date	05/27/14			05/30/14 08:22	
	Field pH	6.8	Std. Units	0.10	05/30/14 08:22	
	Field Temperature	16.9	deg C	0.50	05/30/14 08:22	
	Appearance	CLEAR			05/30/14 08:22	
	Field Specific Conductance	193	umhos/cm	1.0	05/30/14 08:22	
	Oxygen, Dissolved	1.3	mg/L		05/30/14 08:22	
	REDOX	165	mV		05/30/14 08:22	
	Turbidity	0.0	NTU	1.0	05/30/14 08:22	
EPA 200.7	Aluminum	150	ug/L	100	05/30/14 09:56	
EPA 200.7	Barium	37.8	ug/L	10.0	05/30/14 09:56	
EPA 200.7	Calcium	20000	ug/L	500	05/30/14 09:56	
EPA 200.7	Iron	274	ug/L	50.0	05/30/14 09:56	
EPA 200.7	Magnesium	5370	ug/L	500	05/30/14 09:56	
EPA 200.7	Potassium	3050	ug/L	1000	05/30/14 09:56	
EPA 200.7	Sodium	13700	ug/L	1000	05/30/14 09:56	
EPA 200.7	Barium, Dissolved	37.5	ug/L	10.0	05/30/14 12:07	
EPA 200.7	Calcium, Dissolved	20100	ug/L	500	05/30/14 12:07	
EPA 200.7	Magnesium, Dissolved	5340	ug/L	500	05/30/14 12:07	
EPA 200.7	Potassium, Dissolved	3030	ug/L	1000	05/30/14 12:07	
EPA 200.7	Sodium, Dissolved	13600	ug/L	1000	05/30/14 12:07	
EPA 200.8	Copper	1.5	ug/L	1.0	05/30/14 08:19	
EPA 200.8	Zinc	12.0	ug/L	5.0	05/30/14 08:19	
EPA 200.8	Copper, Dissolved	1.3	ug/L	1.0	05/30/14 08:57	
EPA 200.8	Zinc, Dissolved	10.6	ug/L	5.0	05/30/14 08:57	
SM 2320B	Alkalinity, Total as CaCO3	80.6	mg/L	5.0	05/29/14 12:13	
SM 2540C	Total Dissolved Solids	195	mg/L	25.0	05/28/14 15:55	

### REPORT OF LABORATORY ANALYSIS

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### SUMMARY OF DETECTION

Project: BUCK - RES. WELLS J14060100  
 Pace Project No.: 92203034

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92203034006</b>	<b>RESIDENT WELL 4</b>					
EPA 300.0	Chloride	9.3	mg/L	5.0	05/31/14 18:02	
EPA 300.0	Fluoride	0.27	mg/L	0.050	05/31/14 18:02	
EPA 353.2	Nitrogen, Nitrate	1.2	mg/L	0.020	05/28/14 19:10	
EPA 353.2	Nitrogen, NO2 plus NO3	1.2	mg/L	0.020	05/28/14 19:10	
EPA 365.1	Phosphorus	0.065	mg/L	0.050	05/30/14 11:36	
SM 5310B	Total Organic Carbon	2.3	mg/L	1.0	05/29/14 18:10	
<b>92203034007</b>	<b>RESIDENT WELL 5</b>					
	Collected By	CJF			05/30/14 08:21	
	Collected Date	05/27/14			05/30/14 08:21	
	Field pH	6.1	Std. Units	0.10	05/30/14 08:21	
	Field Temperature	19.4	deg C	0.50	05/30/14 08:21	
	Appearance	CLEAR			05/30/14 08:21	
	Field Specific Conductance	145	umhos/cm	1.0	05/30/14 08:21	
	Oxygen, Dissolved	5.0	mg/L		05/30/14 08:21	
	REDOX	141	mV		05/30/14 08:21	
	Turbidity	0.0	NTU	1.0	05/30/14 08:21	
EPA 200.7	Barium	77.8	ug/L	10.0	05/30/14 09:59	
EPA 200.7	Calcium	11300	ug/L	500	05/30/14 09:59	
EPA 200.7	Iron	75.3	ug/L	50.0	05/30/14 09:59	
EPA 200.7	Magnesium	2930	ug/L	500	05/30/14 09:59	
EPA 200.7	Potassium	1560	ug/L	1000	05/30/14 09:59	
EPA 200.7	Sodium	12200	ug/L	1000	05/30/14 09:59	
EPA 200.7	Barium, Dissolved	77.6	ug/L	10.0	05/30/14 12:11	
EPA 200.7	Calcium, Dissolved	11700	ug/L	500	05/30/14 12:11	
EPA 200.7	Iron, Dissolved	59.2	ug/L	50.0	05/30/14 12:11	
EPA 200.7	Magnesium, Dissolved	2970	ug/L	500	05/30/14 12:11	
EPA 200.7	Potassium, Dissolved	1530	ug/L	1000	05/30/14 12:11	
EPA 200.7	Sodium, Dissolved	12100	ug/L	1000	05/30/14 12:11	
EPA 200.8	Cadmium	1.5	ug/L	1.0	05/30/14 08:26	
EPA 200.8	Copper	15.6	ug/L	1.0	05/30/14 08:26	
EPA 200.8	Zinc	564	ug/L	5.0	05/30/14 08:26	
EPA 200.8	Cadmium, Dissolved	2.1	ug/L	1.0	05/30/14 08:59	
EPA 200.8	Copper, Dissolved	22.8	ug/L	1.0	05/30/14 08:59	
EPA 200.8	Zinc, Dissolved	782	ug/L	5.0	05/30/14 08:59	
SM 2320B	Alkalinity, Total as CaCO3	27.4	mg/L	5.0	05/29/14 12:25	
SM 2540C	Total Dissolved Solids	202	mg/L	25.0	05/28/14 15:56	
EPA 300.0	Chloride	11.8	mg/L	5.0	05/31/14 18:23	
EPA 300.0	Fluoride	0.16	mg/L	0.050	05/31/14 18:23	
EPA 353.2	Nitrogen, Nitrate	6.2	mg/L	0.060	05/28/14 19:15	M1
EPA 353.2	Nitrogen, NO2 plus NO3	6.2	mg/L	0.060	05/28/14 19:15	M1
EPA 365.1	Phosphorus	0.071	mg/L	0.050	05/30/14 11:37	
SM 5310B	Total Organic Carbon	2.0	mg/L	1.0	05/29/14 18:20	
<b>92203034008</b>	<b>RESIDENT WELL 6</b>					
	Collected By	CJF			05/30/14 08:21	
	Collected Date	05/27/14			05/30/14 08:21	
	Field pH	6.5	Std. Units	0.10	05/30/14 08:21	

### REPORT OF LABORATORY ANALYSIS

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### SUMMARY OF DETECTION

Project: BUCK - RES. WELLS J14060100

Pace Project No.: 92203034

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92203034008</b>	<b>RESIDENT WELL 6</b>					
	Field Temperature	17.5	deg C	0.50	05/30/14 08:21	
	Appearance	CLEAR			05/30/14 08:21	
	Field Specific Conductance	91	umhos/cm	1.0	05/30/14 08:21	
	Oxygen, Dissolved	5.4	mg/L		05/30/14 08:21	
	REDOX	166	mV		05/30/14 08:21	
	Turbidity	0.0	NTU	1.0	05/30/14 08:21	
EPA 200.7	Barium	26.4	ug/L	10.0	05/30/14 10:03	
EPA 200.7	Calcium	8110	ug/L	500	05/30/14 10:03	
EPA 200.7	Magnesium	2560	ug/L	500	05/30/14 10:03	
EPA 200.7	Potassium	1680	ug/L	1000	05/30/14 10:03	
EPA 200.7	Sodium	8630	ug/L	1000	05/30/14 10:03	
EPA 200.7	Barium, Dissolved	26.2	ug/L	10.0	05/30/14 12:15	
EPA 200.7	Calcium, Dissolved	8160	ug/L	500	05/30/14 12:15	
EPA 200.7	Magnesium, Dissolved	2520	ug/L	500	05/30/14 12:15	
EPA 200.7	Potassium, Dissolved	1680	ug/L	1000	05/30/14 12:15	
EPA 200.7	Sodium, Dissolved	8690	ug/L	1000	05/30/14 12:15	
EPA 200.8	Chromium	1.7	ug/L	1.0	05/30/14 08:28	
EPA 200.8	Copper	2.1	ug/L	1.0	05/30/14 08:28	
EPA 200.8	Zinc	124	ug/L	5.0	05/30/14 08:28	
EPA 200.8	Chromium, Dissolved	1.7	ug/L	1.0	05/30/14 09:01	
EPA 200.8	Copper, Dissolved	2.5	ug/L	1.0	05/30/14 09:01	
EPA 200.8	Zinc, Dissolved	480	ug/L	5.0	05/30/14 09:01	
SM 2320B	Alkalinity, Total as CaCO3	33.1	mg/L	5.0	05/29/14 12:35	
SM 2540C	Total Dissolved Solids	154	mg/L	25.0	05/28/14 15:57	
EPA 300.0	Fluoride	0.18	mg/L	0.050	05/31/14 18:45	
EPA 353.2	Nitrogen, Nitrate	3.1	mg/L	0.020	05/28/14 18:42	H1
EPA 353.2	Nitrogen, NO2 plus NO3	3.1	mg/L	0.020	05/28/14 18:42	H1
EPA 365.1	Phosphorus	0.086	mg/L	0.050	05/30/14 11:37	
SM 5310B	Total Organic Carbon	1.3	mg/L	1.0	05/29/14 18:31	
<b>92203034009</b>	<b>RESIDENT WELL 7</b>					
	Collected By	CJF			05/30/14 08:20	
	Collected Date	05/27/14			05/30/14 08:20	
	Field pH	6.7	Std. Units	0.10	05/30/14 08:20	
	Field Temperature	17.4	deg C	0.50	05/30/14 08:20	
	Appearance	CLEAR			05/30/14 08:20	
	Field Specific Conductance	7.1	umhos/cm	1.0	05/30/14 08:20	
	Oxygen, Dissolved	6.0	mg/L		05/30/14 08:20	
	REDOX	184	mV		05/30/14 08:20	
	Turbidity	0.0	NTU	1.0	05/30/14 08:20	
EPA 200.7	Barium	30.7	ug/L	10.0	05/30/14 10:07	
EPA 200.7	Calcium	6340	ug/L	500	05/30/14 10:07	
EPA 200.7	Magnesium	3970	ug/L	500	05/30/14 10:07	
EPA 200.7	Potassium	1690	ug/L	1000	05/30/14 10:07	
EPA 200.7	Sodium	5020	ug/L	1000	05/30/14 10:07	
EPA 200.7	Barium, Dissolved	30.0	ug/L	10.0	05/30/14 12:30	
EPA 200.7	Calcium, Dissolved	6410	ug/L	500	05/30/14 12:30	
EPA 200.7	Magnesium, Dissolved	3940	ug/L	500	05/30/14 12:30	

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## SUMMARY OF DETECTION

Project: BUCK - RES. WELLS J14060100

Pace Project No.: 92203034

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92203034009</b>	<b>RESIDENT WELL 7</b>					
EPA 200.7	Potassium, Dissolved	1680	ug/L	1000	05/30/14 12:30	
EPA 200.7	Sodium, Dissolved	4940	ug/L	1000	05/30/14 12:30	
EPA 200.8	Chromium	2.8	ug/L	1.0	05/30/14 08:30	
EPA 200.8	Chromium, Dissolved	2.7	ug/L	1.0	05/30/14 09:03	
SM 2320B	Alkalinity, Total as CaCO <sub>3</sub>	36.4	mg/L	5.0	05/29/14 12:46	
SM 2540C	Total Dissolved Solids	89.0	mg/L	25.0	05/28/14 15:57	
EPA 300.0	Fluoride	0.18	mg/L	0.050	05/31/14 19:06	
EPA 353.2	Nitrogen, Nitrate	1.0	mg/L	0.020	05/28/14 18:51	
EPA 353.2	Nitrogen, NO <sub>2</sub> plus NO <sub>3</sub>	1.0	mg/L	0.020	05/28/14 18:51	
EPA 365.1	Phosphorus	0.097	mg/L	0.050	05/30/14 11:38	
SM 5310B	Total Organic Carbon	9.9	mg/L	1.0	05/29/14 18:58	

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: BUCK - REs. WELLS J14060100

Pace Project No.: 92203034

---

**Method:** EPA 200.7

**Description:** 200.7 MET ICP

**Client:** Duke Energy

**Date:** June 05, 2014

**General Information:**

9 samples were analyzed for EPA 200.7. All samples were received in acceptable condition with any exceptions noted below.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 200.7 with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MPRP/18738

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92203034001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 914937)
- Manganese

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: BUCK - REs. WELLS J14060100

Pace Project No.: 92203034

---

**Method:** EPA 200.7

**Description:** 200.7 MET ICP, Dissolved

**Client:** Duke Energy

**Date:** June 05, 2014

**General Information:**

9 samples were analyzed for EPA 200.7. All samples were received in acceptable condition with any exceptions noted below.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 200.7 with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: BUCK - REs. WELLS J14060100

Pace Project No.: 92203034

---

**Method:** EPA 200.8

**Description:** 200.8 MET ICPMS

**Client:** Duke Energy

**Date:** June 05, 2014

**General Information:**

9 samples were analyzed for EPA 200.8. All samples were received in acceptable condition with any exceptions noted below.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 200.8 with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Internal Standards:**

All internal standards were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

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## PROJECT NARRATIVE

Project: BUCK - REs. WELLS J14060100

Pace Project No.: 92203034

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**Method:** EPA 200.8

**Description:** 200.8 MET ICPMS, Dissolved

**Client:** Duke Energy

**Date:** June 05, 2014

**General Information:**

9 samples were analyzed for EPA 200.8. All samples were received in acceptable condition with any exceptions noted below.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 200.8 with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Internal Standards:**

All internal standards were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: BUCK - REs. WELLS J14060100

Pace Project No.: 92203034

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**Method:** EPA 245.1

**Description:** 245.1 Mercury

**Client:** Duke Energy

**Date:** June 05, 2014

**General Information:**

9 samples were analyzed for EPA 245.1. All samples were received in acceptable condition with any exceptions noted below.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 245.1 with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

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## PROJECT NARRATIVE

Project: BUCK - RES. WELLS J14060100  
Pace Project No.: 92203034

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**Method:** EPA 245.1  
**Description:** 245.1 Mercury, Dissolved  
**Client:** Duke Energy  
**Date:** June 05, 2014

**General Information:**

9 samples were analyzed for EPA 245.1. All samples were received in acceptable condition with any exceptions noted below.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 245.1 with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: BUCK - REs. WELLS J14060100

Pace Project No.: 92203034

---

**Method:** SM 2320B

**Description:** 2320B Alkalinity

**Client:** Duke Energy

**Date:** June 05, 2014

**General Information:**

9 samples were analyzed for SM 2320B. All samples were received in acceptable condition with any exceptions noted below.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

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## PROJECT NARRATIVE

Project: BUCK - REs. WELLS J14060100

Pace Project No.: 92203034

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**Method:** SM 2540C

**Description:** 2540C Total Dissolved Solids

**Client:** Duke Energy

**Date:** June 05, 2014

**General Information:**

9 samples were analyzed for SM 2540C. All samples were received in acceptable condition with any exceptions noted below.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: BUCK - REs. WELLS J14060100

Pace Project No.: 92203034

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**Method:** EPA 300.0

**Description:** 300.0 IC Anions 28 Days

**Client:** Duke Energy

**Date:** June 05, 2014

**General Information:**

9 samples were analyzed for EPA 300.0. All samples were received in acceptable condition with any exceptions noted below.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: BUCK - REs. WELLS J14060100

Pace Project No.: 92203034

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**Method:** SM 3500-Cr D

**Description:** Chromium, Hexavalent

**Client:** Duke Energy

**Date:** June 05, 2014

**General Information:**

9 samples were analyzed for SM 3500-Cr D. All samples were received in acceptable condition with any exceptions noted below.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: BUCK - REs. WELLS J14060100  
Pace Project No.: 92203034

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**Method:** EPA 353.2  
**Description:** 353.2 Nitrogen, NO2/NO3 unpres  
**Client:** Duke Energy  
**Date:** June 05, 2014

### General Information:

9 samples were analyzed for EPA 353.2. All samples were received in acceptable condition with any exceptions noted below.

### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

- H1: Analysis conducted outside the EPA method holding time.
- RESIDENT WELL 6 (Lab ID: 92203034008)

### Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

### Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

### Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/19125

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92203034007,92203034008

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1208373)
  - Nitrogen, NO2 plus NO3
  - Nitrogen, Nitrate
- MSD (Lab ID: 1208374)
  - Nitrogen, NO2 plus NO3
  - Nitrogen, Nitrate

### Additional Comments:

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## PROJECT NARRATIVE

Project: BUCK - REs. WELLS J14060100  
Pace Project No.: 92203034

---

**Method:** EPA 365.1  
**Description:** 365.1 Phosphorus, Total  
**Client:** Duke Energy  
**Date:** June 05, 2014

**General Information:**

9 samples were analyzed for EPA 365.1. All samples were received in acceptable condition with any exceptions noted below.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/19137

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92201466001,92202530001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MSD (Lab ID: 1209517)
- Phosphorus

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: BUCK - REs. WELLS J14060100

Pace Project No.: 92203034

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**Method:** SM 5310B

**Description:** 5310B TOC

**Client:** Duke Energy

**Date:** June 05, 2014

**General Information:**

9 samples were analyzed for SM 5310B. All samples were received in acceptable condition with any exceptions noted below.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

This data package has been reviewed for quality and completeness and is approved for release.

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: BUCK - Res. WELLS J14060100  
Pace Project No.: 92203034

**Sample: SURFACE WATER 1**      **Lab ID: 92203034001**      Collected: 05/27/14 00:00      Received: 05/28/14 10:00      Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
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**Field Data**

Analytical Method:

Collected By	<b>CJF</b>			1		05/30/14 08:27		
Collected Date	<b>05/27/14</b>			1		05/30/14 08:27		
Field pH	<b>7.1</b> Std. Units		0.10	1		05/30/14 08:27		
Field Temperature	<b>22.1</b> deg C		0.50	1		05/30/14 08:27		
Appearance	<b>CLEAR</b>			1		05/30/14 08:27		
Field Specific Conductance	<b>205</b> umhos/cm		1.0	1		05/30/14 08:27		
Oxygen, Dissolved	<b>3.5</b> mg/L			1		05/30/14 08:27	7782-44-7	
REDOX	<b>-22</b> mV			1		05/30/14 08:27		
Turbidity	<b>2.0</b> NTU		1.0	1		05/30/14 08:27		

**200.7 MET ICP**

Analytical Method: EPA 200.7 Preparation Method: EPA 200.7

Aluminum	<b>658</b> ug/L		100	1	05/29/14 18:21	05/30/14 09:18	7429-90-5	
Barium	<b>166</b> ug/L		10.0	1	05/29/14 18:21	05/30/14 09:18	7440-39-3	
Boron	ND ug/L		50.0	1	05/29/14 18:21	05/30/14 09:18	7440-42-8	
Calcium	<b>13200</b> ug/L		500	1	05/29/14 18:21	05/30/14 09:18	7440-70-2	
Iron	<b>3220</b> ug/L		50.0	1	05/29/14 18:21	05/30/14 09:18	7439-89-6	
Magnesium	<b>6960</b> ug/L		500	1	05/29/14 18:21	05/30/14 09:18	7439-95-4	
Manganese	<b>4660</b> ug/L		10.0	1	05/29/14 18:21	05/30/14 09:18	7439-96-5	M1
Nickel	ND ug/L		5.0	1	05/29/14 18:21	05/30/14 09:18	7440-02-0	
Potassium	<b>3830</b> ug/L		1000	1	05/29/14 18:21	05/30/14 09:18	7440-09-7	
Sodium	<b>8650</b> ug/L		1000	1	05/29/14 18:21	05/30/14 09:18	7440-23-5	

**200.7 MET ICP, Dissolved**

Analytical Method: EPA 200.7 Preparation Method: EPA 200.7

Aluminum, Dissolved	ND ug/L		100	1	05/29/14 18:21	05/30/14 11:41	7429-90-5	
Barium, Dissolved	<b>150</b> ug/L		10.0	1	05/29/14 18:21	05/30/14 11:41	7440-39-3	
Boron, Dissolved	ND ug/L		50.0	1	05/29/14 18:21	05/30/14 11:41	7440-42-8	
Calcium, Dissolved	<b>12900</b> ug/L		500	1	05/29/14 18:21	05/30/14 11:41	7440-70-2	
Iron, Dissolved	<b>899</b> ug/L		50.0	1	05/29/14 18:21	05/30/14 11:41	7439-89-6	
Magnesium, Dissolved	<b>6830</b> ug/L		500	1	05/29/14 18:21	05/30/14 11:41	7439-95-4	
Manganese, Dissolved	<b>4420</b> ug/L		10.0	1	05/29/14 18:21	05/30/14 11:41	7439-96-5	
Nickel, Dissolved	ND ug/L		5.0	1	05/29/14 18:21	05/30/14 11:41	7440-02-0	
Potassium, Dissolved	<b>3710</b> ug/L		1000	1	05/29/14 18:21	05/30/14 11:41	7440-09-7	
Sodium, Dissolved	<b>8670</b> ug/L		1000	1	05/29/14 18:21	05/30/14 11:41	7440-23-5	

**200.8 MET ICPMS**

Analytical Method: EPA 200.8 Preparation Method: EPA 200.8

Antimony	ND ug/L		1.0	1	05/29/14 18:21	06/03/14 14:21	7440-36-0	
Arsenic	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 07:59	7440-38-2	
Cadmium	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 07:59	7440-43-9	
Chromium	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 07:59	7440-47-3	
Copper	<b>1.1</b> ug/L		1.0	1	05/29/14 18:21	05/30/14 07:59	7440-50-8	
Lead	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 07:59	7439-92-1	
Selenium	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 07:59	7782-49-2	
Thallium	ND ug/L		1.0	1	05/29/14 18:21	06/03/14 14:21	7440-28-0	
Zinc	ND ug/L		5.0	1	05/29/14 18:21	05/30/14 07:59	7440-66-6	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: BUCK - Res. WELLS J14060100

Pace Project No.: 92203034

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>Sample: SURFACE WATER 1      Lab ID: 92203034001      Collected: 05/27/14 00:00      Received: 05/28/14 10:00      Matrix: Water</b>								
<b>200.8 MET ICPMS, Dissolved</b> Analytical Method: EPA 200.8      Preparation Method: EPA 200.8								
Antimony, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	06/03/14 13:39	7440-36-0	
Arsenic, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:37	7440-38-2	
Cadmium, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:37	7440-43-9	
Chromium, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:37	7440-47-3	
Copper, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:37	7440-50-8	
Lead, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:37	7439-92-1	
Selenium, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:37	7782-49-2	
Thallium, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	06/03/14 13:39	7440-28-0	
Zinc, Dissolved	ND ug/L		5.0	1	05/29/14 18:21	05/30/14 08:37	7440-66-6	
<b>245.1 Mercury</b> Analytical Method: EPA 245.1      Preparation Method: EPA 245.1								
Mercury	ND ug/L		0.20	1	06/03/14 05:20	06/03/14 11:34	7439-97-6	
<b>245.1 Mercury, Dissolved</b> Analytical Method: EPA 245.1      Preparation Method: EPA 245.1								
Mercury, Dissolved	ND ug/L		0.20	1	06/03/14 05:20	06/03/14 11:02	7439-97-6	
<b>2320B Alkalinity</b> Analytical Method: SM 2320B								
Alkalinity, Total as CaCO3	<b>73.7</b> mg/L		5.0	1		05/29/14 10:58		
<b>2540C Total Dissolved Solids</b> Analytical Method: SM 2540C								
Total Dissolved Solids	<b>118</b> mg/L		25.0	1		05/28/14 15:53		
<b>300.0 IC Anions 28 Days</b> Analytical Method: EPA 300.0								
Chloride	<b>8.2</b> mg/L		5.0	1		05/31/14 16:15	16887-00-6	
Fluoride	<b>0.18</b> mg/L		0.050	1		05/31/14 16:15	16984-48-8	
Sulfate	<b>7.3</b> mg/L		5.0	1		05/31/14 16:15	14808-79-8	
<b>Chromium, Hexavalent</b> Analytical Method: SM 3500-Cr D								
Chromium, Hexavalent	ND mg/L		0.010	1		05/27/14 21:47	18540-29-9	
<b>353.2 Nitrogen, NO2/NO3 unpres</b> Analytical Method: EPA 353.2								
Nitrogen, Nitrate	<b>0.081</b> mg/L		0.020	1		05/28/14 18:57		
Nitrogen, Nitrite	ND mg/L		0.020	1		05/28/14 18:57		
Nitrogen, NO2 plus NO3	<b>0.081</b> mg/L		0.020	1		05/28/14 18:57		
<b>365.1 Phosphorus, Total</b> Analytical Method: EPA 365.1								
Phosphorus	ND mg/L		0.050	1		05/30/14 11:30	7723-14-0	
<b>5310B TOC</b> Analytical Method: SM 5310B								
Total Organic Carbon	<b>5.2</b> mg/L		1.0	1		05/29/14 16:41	7440-44-0	

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## ANALYTICAL RESULTS

Project: BUCK - Res. WELLS J14060100

Pace Project No.: 92203034

Sample: SURFACE WATER 2	Lab ID: 92203034002	Collected: 05/27/14 00:00	Received: 05/28/14 10:00	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>								
Analytical Method:								
Collected By	CJF			1		05/30/14 08:26		
Collected Date	05/27/14			1		05/30/14 08:26		
Field pH	7.6	Std. Units	0.10	1		05/30/14 08:26		
Field Temperature	27.9	deg C	0.50	1		05/30/14 08:26		
Appearance	CLEAR			1		05/30/14 08:26		
Field Specific Conductance	69	umhos/cm	1.0	1		05/30/14 08:26		
Oxygen, Dissolved	5.9	mg/L		1		05/30/14 08:26	7782-44-7	
REDOX	102	mV		1		05/30/14 08:26		
Turbidity	13	NTU	1.0	1		05/30/14 08:26		
<b>200.7 MET ICP</b>								
Analytical Method: EPA 200.7 Preparation Method: EPA 200.7								
Aluminum	137	ug/L	100	1	05/29/14 18:21	05/30/14 09:29	7429-90-5	
Barium	64.7	ug/L	10.0	1	05/29/14 18:21	05/30/14 09:29	7440-39-3	
Boron	ND	ug/L	50.0	1	05/29/14 18:21	05/30/14 09:29	7440-42-8	
Calcium	5340	ug/L	500	1	05/29/14 18:21	05/30/14 09:29	7440-70-2	
Iron	2890	ug/L	50.0	1	05/29/14 18:21	05/30/14 09:29	7439-89-6	
Magnesium	3160	ug/L	500	1	05/29/14 18:21	05/30/14 09:29	7439-95-4	
Manganese	2180	ug/L	10.0	1	05/29/14 18:21	05/30/14 09:29	7439-96-5	
Nickel	ND	ug/L	5.0	1	05/29/14 18:21	05/30/14 09:29	7440-02-0	
Potassium	8940	ug/L	1000	1	05/29/14 18:21	05/30/14 09:29	7440-09-7	
Sodium	1740	ug/L	1000	1	05/29/14 18:21	05/30/14 09:29	7440-23-5	
<b>200.7 MET ICP, Dissolved</b>								
Analytical Method: EPA 200.7 Preparation Method: EPA 200.7								
Aluminum, Dissolved	ND	ug/L	100	1	05/29/14 18:21	05/30/14 11:52	7429-90-5	
Barium, Dissolved	12.1	ug/L	10.0	1	05/29/14 18:21	05/30/14 11:52	7440-39-3	
Boron, Dissolved	ND	ug/L	50.0	1	05/29/14 18:21	05/30/14 11:52	7440-42-8	
Calcium, Dissolved	4120	ug/L	500	1	05/29/14 18:21	05/30/14 11:52	7440-70-2	
Iron, Dissolved	1350	ug/L	50.0	1	05/29/14 18:21	05/30/14 11:52	7439-89-6	
Magnesium, Dissolved	3020	ug/L	500	1	05/29/14 18:21	05/30/14 11:52	7439-95-4	
Manganese, Dissolved	178	ug/L	10.0	1	05/29/14 18:21	05/30/14 11:52	7439-96-5	
Nickel, Dissolved	ND	ug/L	5.0	1	05/29/14 18:21	05/30/14 11:52	7440-02-0	
Potassium, Dissolved	9140	ug/L	1000	1	05/29/14 18:21	05/30/14 11:52	7440-09-7	
Sodium, Dissolved	1820	ug/L	1000	1	05/29/14 18:21	05/30/14 11:52	7440-23-5	
<b>200.8 MET ICPMS</b>								
Analytical Method: EPA 200.8 Preparation Method: EPA 200.8								
Antimony	ND	ug/L	1.0	1	05/29/14 18:21	06/03/14 14:24	7440-36-0	
Arsenic	ND	ug/L	1.0	1	05/29/14 18:21	05/30/14 08:01	7440-38-2	
Cadmium	ND	ug/L	1.0	1	05/29/14 18:21	05/30/14 08:01	7440-43-9	
Chromium	ND	ug/L	1.0	1	05/29/14 18:21	05/30/14 08:01	7440-47-3	
Copper	1.3	ug/L	1.0	1	05/29/14 18:21	05/30/14 08:01	7440-50-8	
Lead	ND	ug/L	1.0	1	05/29/14 18:21	05/30/14 08:01	7439-92-1	
Selenium	ND	ug/L	1.0	1	05/29/14 18:21	05/30/14 08:01	7782-49-2	
Thallium	ND	ug/L	1.0	1	05/29/14 18:21	06/03/14 14:24	7440-28-0	
Zinc	ND	ug/L	5.0	1	05/29/14 18:21	05/30/14 08:01	7440-66-6	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: BUCK - Res. WELLS J14060100

Pace Project No.: 92203034

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>Sample: SURFACE WATER 2</b>		<b>Lab ID: 92203034002</b>		Collected: 05/27/14 00:00	Received: 05/28/14 10:00	Matrix: Water		
<b>200.8 MET ICPMS, Dissolved</b>		Analytical Method: EPA 200.8 Preparation Method: EPA 200.8						
Antimony, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	06/03/14 13:47	7440-36-0	
Arsenic, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 09:17	7440-38-2	
Cadmium, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 09:17	7440-43-9	
Chromium, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 09:17	7440-47-3	
Copper, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 09:17	7440-50-8	
Lead, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 09:17	7439-92-1	
Selenium, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 09:17	7782-49-2	
Thallium, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	06/03/14 13:47	7440-28-0	
Zinc, Dissolved	ND ug/L		5.0	1	05/29/14 18:21	05/30/14 09:17	7440-66-6	
<b>245.1 Mercury</b>		Analytical Method: EPA 245.1 Preparation Method: EPA 245.1						
Mercury	ND ug/L		0.20	1	06/03/14 05:20	06/03/14 11:36	7439-97-6	
<b>245.1 Mercury, Dissolved</b>		Analytical Method: EPA 245.1 Preparation Method: EPA 245.1						
Mercury, Dissolved	ND ug/L		0.20	1	06/03/14 05:20	06/03/14 11:04	7439-97-6	
<b>2320B Alkalinity</b>		Analytical Method: SM 2320B						
Alkalinity, Total as CaCO <sub>3</sub>	21.7 mg/L		5.0	1		05/29/14 11:32		
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C						
Total Dissolved Solids	73.0 mg/L		25.0	1		05/28/14 15:54		
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0						
Chloride	5.9 mg/L		5.0	1		05/31/14 16:36	16887-00-6	
Fluoride	0.17 mg/L		0.050	1		05/31/14 16:36	16984-48-8	
Sulfate	ND mg/L		5.0	1		05/31/14 16:36	14808-79-8	
<b>Chromium, Hexavalent</b>		Analytical Method: SM 3500-Cr D						
Chromium, Hexavalent	ND mg/L		0.010	1		05/27/14 21:48	18540-29-9	
<b>353.2 Nitrogen, NO<sub>2</sub>/NO<sub>3</sub> unpres</b>		Analytical Method: EPA 353.2						
Nitrogen, Nitrate	ND mg/L		0.020	1		05/28/14 18:58		
Nitrogen, Nitrite	ND mg/L		0.020	1		05/28/14 18:58		
Nitrogen, NO <sub>2</sub> plus NO <sub>3</sub>	ND mg/L		0.020	1		05/28/14 18:58		
<b>365.1 Phosphorus, Total</b>		Analytical Method: EPA 365.1						
Phosphorus	0.091 mg/L		0.050	1		05/30/14 11:32	7723-14-0	
<b>5310B TOC</b>		Analytical Method: SM 5310B						
Total Organic Carbon	9.2 mg/L		1.0	1		05/29/14 16:54	7440-44-0	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: BUCK - Res. WELLS J14060100

Pace Project No.: 92203034

**Sample: RESIDENT WELL 1**      **Lab ID: 92203034003**      Collected: 05/27/14 00:00      Received: 05/28/14 10:00      Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
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**Field Data**

Analytical Method:

Collected By	<b>CJF</b>			1		05/30/14 08:26		
Collected Date	<b>05/27/14</b>			1		05/30/14 08:26		
Field pH	<b>6.5</b> Std. Units		0.10	1		05/30/14 08:26		
Field Temperature	<b>22.0</b> deg C		0.50	1		05/30/14 08:26		
Appearance	<b>CLEAR</b>			1		05/30/14 08:26		
Field Specific Conductance	<b>64</b> umhos/cm		1.0	1		05/30/14 08:26		
Oxygen, Dissolved	<b>5.0</b> mg/L			1		05/30/14 08:26	7782-44-7	
REDOX	<b>148</b> mV			1		05/30/14 08:26		
Turbidity	<b>0.0</b> NTU		1.0	1		05/30/14 08:26		

**200.7 MET ICP**

Analytical Method: EPA 200.7      Preparation Method: EPA 200.7

Aluminum	ND ug/L		100	1	05/29/14 18:21	05/30/14 09:33	7429-90-5	
Barium	<b>13.9</b> ug/L		10.0	1	05/29/14 18:21	05/30/14 09:33	7440-39-3	
Boron	ND ug/L		50.0	1	05/29/14 18:21	05/30/14 09:33	7440-42-8	
Calcium	<b>7260</b> ug/L		500	1	05/29/14 18:21	05/30/14 09:33	7440-70-2	
Iron	ND ug/L		50.0	1	05/29/14 18:21	05/30/14 09:33	7439-89-6	
Magnesium	<b>2680</b> ug/L		500	1	05/29/14 18:21	05/30/14 09:33	7439-95-4	
Manganese	ND ug/L		10.0	1	05/29/14 18:21	05/30/14 09:33	7439-96-5	
Nickel	ND ug/L		5.0	1	05/29/14 18:21	05/30/14 09:33	7440-02-0	
Potassium	<b>1280</b> ug/L		1000	1	05/29/14 18:21	05/30/14 09:33	7440-09-7	
Sodium	<b>6580</b> ug/L		1000	1	05/29/14 18:21	05/30/14 09:33	7440-23-5	

**200.7 MET ICP, Dissolved**

Analytical Method: EPA 200.7      Preparation Method: EPA 200.7

Aluminum, Dissolved	ND ug/L		100	1	05/29/14 18:21	05/30/14 11:56	7429-90-5	
Barium, Dissolved	<b>13.6</b> ug/L		10.0	1	05/29/14 18:21	05/30/14 11:56	7440-39-3	
Boron, Dissolved	ND ug/L		50.0	1	05/29/14 18:21	05/30/14 11:56	7440-42-8	
Calcium, Dissolved	<b>7180</b> ug/L		500	1	05/29/14 18:21	05/30/14 11:56	7440-70-2	
Iron, Dissolved	ND ug/L		50.0	1	05/29/14 18:21	05/30/14 11:56	7439-89-6	
Magnesium, Dissolved	<b>2650</b> ug/L		500	1	05/29/14 18:21	05/30/14 11:56	7439-95-4	
Manganese, Dissolved	ND ug/L		10.0	1	05/29/14 18:21	05/30/14 11:56	7439-96-5	
Nickel, Dissolved	ND ug/L		5.0	1	05/29/14 18:21	05/30/14 11:56	7440-02-0	
Potassium, Dissolved	<b>1260</b> ug/L		1000	1	05/29/14 18:21	05/30/14 11:56	7440-09-7	
Sodium, Dissolved	<b>6290</b> ug/L		1000	1	05/29/14 18:21	05/30/14 11:56	7440-23-5	

**200.8 MET ICPMS**

Analytical Method: EPA 200.8      Preparation Method: EPA 200.8

Antimony	ND ug/L		1.0	1	05/29/14 18:21	06/03/14 14:26	7440-36-0	
Arsenic	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:12	7440-38-2	
Cadmium	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:12	7440-43-9	
Chromium	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:12	7440-47-3	
Copper	<b>5.6</b> ug/L		1.0	1	05/29/14 18:21	05/30/14 08:12	7440-50-8	
Lead	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:12	7439-92-1	
Selenium	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:12	7782-49-2	
Thallium	ND ug/L		1.0	1	05/29/14 18:21	06/03/14 14:26	7440-28-0	
Zinc	<b>136</b> ug/L		5.0	1	05/29/14 18:21	05/30/14 08:12	7440-66-6	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: BUCK - Res. WELLS J14060100

Pace Project No.: 92203034

<b>Sample: RESIDENT WELL 1</b>		<b>Lab ID: 92203034003</b>	Collected: 05/27/14 00:00	Received: 05/28/14 10:00	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>200.8 MET ICPMS, Dissolved</b>		Analytical Method: EPA 200.8 Preparation Method: EPA 200.8						
Antimony, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	06/03/14 13:49	7440-36-0	
Arsenic, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:45	7440-38-2	
Cadmium, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:45	7440-43-9	
Chromium, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:45	7440-47-3	
Copper, Dissolved	<b>6.1</b> ug/L		1.0	1	05/29/14 18:21	05/30/14 08:45	7440-50-8	
Lead, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:45	7439-92-1	
Selenium, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:45	7782-49-2	
Thallium, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	06/03/14 13:49	7440-28-0	
Zinc, Dissolved	<b>162</b> ug/L		5.0	1	05/29/14 18:21	05/30/14 08:45	7440-66-6	
<b>245.1 Mercury</b>		Analytical Method: EPA 245.1 Preparation Method: EPA 245.1						
Mercury	ND ug/L		0.20	1	06/03/14 05:20	06/03/14 11:39	7439-97-6	
<b>245.1 Mercury, Dissolved</b>		Analytical Method: EPA 245.1 Preparation Method: EPA 245.1						
Mercury, Dissolved	ND ug/L		0.20	1	06/03/14 05:20	06/03/14 11:06	7439-97-6	
<b>2320B Alkalinity</b>		Analytical Method: SM 2320B						
Alkalinity, Total as CaCO <sub>3</sub>	<b>36.2</b> mg/L		5.0	1		05/29/14 11:41		
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C						
Total Dissolved Solids	<b>116</b> mg/L		25.0	1		05/28/14 15:55		
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0						
Chloride	ND mg/L		5.0	1		05/31/14 16:58	16887-00-6	
Fluoride	<b>0.18</b> mg/L		0.050	1		05/31/14 16:58	16984-48-8	
Sulfate	ND mg/L		5.0	1		05/31/14 16:58	14808-79-8	
<b>Chromium, Hexavalent</b>		Analytical Method: SM 3500-Cr D						
Chromium, Hexavalent	ND mg/L		0.010	1		05/27/14 21:52	18540-29-9	
<b>353.2 Nitrogen, NO<sub>2</sub>/NO<sub>3</sub> unpres</b>		Analytical Method: EPA 353.2						
Nitrogen, Nitrate	<b>1.3</b> mg/L		0.020	1		05/28/14 19:04		
Nitrogen, Nitrite	ND mg/L		0.020	1		05/28/14 19:04		
Nitrogen, NO <sub>2</sub> plus NO <sub>3</sub>	<b>1.3</b> mg/L		0.020	1		05/28/14 19:04		
<b>365.1 Phosphorus, Total</b>		Analytical Method: EPA 365.1						
Phosphorus	<b>0.093</b> mg/L		0.050	1		05/30/14 11:33	7723-14-0	
<b>5310B TOC</b>		Analytical Method: SM 5310B						
Total Organic Carbon	<b>1.4</b> mg/L		1.0	1		05/29/14 17:06	7440-44-0	

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## ANALYTICAL RESULTS

Project: BUCK - Res. WELLS J14060100  
Pace Project No.: 92203034

**Sample: RESIDENT WELL 2**      **Lab ID: 92203034004**      Collected: 05/27/14 00:00      Received: 05/28/14 10:00      Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
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**Field Data**

Analytical Method:

Collected By	<b>CJF</b>			1		05/30/14 08:24		
Collected Date	<b>05/27/14</b>			1		05/30/14 08:24		
Field pH	<b>6.3</b> Std. Units		0.10	1		05/30/14 08:24		
Field Temperature	<b>17.3</b> deg C		0.50	1		05/30/14 08:24		
Appearance	<b>CLEAR</b>			1		05/30/14 08:24		
Field Specific Conductance	<b>153</b> umhos/cm		1.0	1		05/30/14 08:24		
Oxygen, Dissolved	<b>4.9</b> mg/L			1		05/30/14 08:24	7782-44-7	
REDOX	<b>183</b> mV			1		05/30/14 08:24		
Turbidity	<b>0.0</b> NTU		1.0	1		05/30/14 08:24		

**200.7 MET ICP**

Analytical Method: EPA 200.7      Preparation Method: EPA 200.7

Aluminum	ND ug/L		100	1	05/29/14 18:21	05/30/14 09:37	7429-90-5	
Barium	<b>17.9</b> ug/L		10.0	1	05/29/14 18:21	05/30/14 09:37	7440-39-3	
Boron	ND ug/L		50.0	1	05/29/14 18:21	05/30/14 09:37	7440-42-8	
Calcium	<b>15400</b> ug/L		500	1	05/29/14 18:21	05/30/14 09:37	7440-70-2	
Iron	ND ug/L		50.0	1	05/29/14 18:21	05/30/14 09:37	7439-89-6	
Magnesium	<b>6440</b> ug/L		500	1	05/29/14 18:21	05/30/14 09:37	7439-95-4	
Manganese	ND ug/L		10.0	1	05/29/14 18:21	05/30/14 09:37	7439-96-5	
Nickel	ND ug/L		5.0	1	05/29/14 18:21	05/30/14 09:37	7440-02-0	
Potassium	<b>1640</b> ug/L		1000	1	05/29/14 18:21	05/30/14 09:37	7440-09-7	
Sodium	<b>7880</b> ug/L		1000	1	05/29/14 18:21	05/30/14 09:37	7440-23-5	

**200.7 MET ICP, Dissolved**

Analytical Method: EPA 200.7      Preparation Method: EPA 200.7

Aluminum, Dissolved	ND ug/L		100	1	05/29/14 18:21	05/30/14 11:59	7429-90-5	
Barium, Dissolved	<b>19.2</b> ug/L		10.0	1	05/29/14 18:21	05/30/14 11:59	7440-39-3	
Boron, Dissolved	ND ug/L		50.0	1	05/29/14 18:21	05/30/14 11:59	7440-42-8	
Calcium, Dissolved	<b>16800</b> ug/L		500	1	05/29/14 18:21	05/30/14 11:59	7440-70-2	
Iron, Dissolved	ND ug/L		50.0	1	05/29/14 18:21	05/30/14 11:59	7439-89-6	
Magnesium, Dissolved	<b>7030</b> ug/L		500	1	05/29/14 18:21	05/30/14 11:59	7439-95-4	
Manganese, Dissolved	ND ug/L		10.0	1	05/29/14 18:21	05/30/14 11:59	7439-96-5	
Nickel, Dissolved	ND ug/L		5.0	1	05/29/14 18:21	05/30/14 11:59	7440-02-0	
Potassium, Dissolved	<b>1780</b> ug/L		1000	1	05/29/14 18:21	05/30/14 11:59	7440-09-7	
Sodium, Dissolved	<b>8490</b> ug/L		1000	1	05/29/14 18:21	05/30/14 11:59	7440-23-5	

**200.8 MET ICPMS**

Analytical Method: EPA 200.8      Preparation Method: EPA 200.8

Antimony	ND ug/L		1.0	1	05/29/14 18:21	06/03/14 14:29	7440-36-0	
Arsenic	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:15	7440-38-2	
Cadmium	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:15	7440-43-9	
Chromium	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:15	7440-47-3	
Copper	<b>13.1</b> ug/L		1.0	1	05/29/14 18:21	05/30/14 08:15	7440-50-8	
Lead	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:15	7439-92-1	
Selenium	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:15	7782-49-2	
Thallium	ND ug/L		1.0	1	05/29/14 18:21	06/03/14 14:29	7440-28-0	
Zinc	<b>41.0</b> ug/L		5.0	1	05/29/14 18:21	05/30/14 08:15	7440-66-6	

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## ANALYTICAL RESULTS

Project: BUCK - Res. WELLS J14060100  
Pace Project No.: 92203034

<b>Sample: RESIDENT WELL 2</b>		<b>Lab ID: 92203034004</b>	Collected: 05/27/14 00:00	Received: 05/28/14 10:00	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>200.8 MET ICPMS, Dissolved</b>		Analytical Method: EPA 200.8 Preparation Method: EPA 200.8						
Antimony, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	06/03/14 13:52	7440-36-0	
Arsenic, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:52	7440-38-2	
Cadmium, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:52	7440-43-9	
Chromium, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:52	7440-47-3	
Copper, Dissolved	<b>13.3</b> ug/L		1.0	1	05/29/14 18:21	05/30/14 08:52	7440-50-8	
Lead, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:52	7439-92-1	
Selenium, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:52	7782-49-2	
Thallium, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	06/03/14 13:52	7440-28-0	
Zinc, Dissolved	<b>40.7</b> ug/L		5.0	1	05/29/14 18:21	05/30/14 08:52	7440-66-6	
<b>245.1 Mercury</b>		Analytical Method: EPA 245.1 Preparation Method: EPA 245.1						
Mercury	ND ug/L		0.20	1	06/03/14 05:20	06/03/14 12:05	7439-97-6	
<b>245.1 Mercury, Dissolved</b>		Analytical Method: EPA 245.1 Preparation Method: EPA 245.1						
Mercury, Dissolved	ND ug/L		0.20	1	06/03/14 05:20	06/03/14 11:13	7439-97-6	
<b>2320B Alkalinity</b>		Analytical Method: SM 2320B						
Alkalinity, Total as CaCO <sub>3</sub>	<b>60.8</b> mg/L		5.0	1		05/29/14 11:51		
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C						
Total Dissolved Solids	<b>152</b> mg/L		25.0	1		05/28/14 15:55		
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0						
Chloride	<b>5.0</b> mg/L		5.0	1		05/31/14 17:19	16887-00-6	
Fluoride	<b>0.16</b> mg/L		0.050	1		05/31/14 17:19	16984-48-8	
Sulfate	ND mg/L		5.0	1		05/31/14 17:19	14808-79-8	
<b>Chromium, Hexavalent</b>		Analytical Method: SM 3500-Cr D						
Chromium, Hexavalent	ND mg/L		0.010	1		05/27/14 21:48	18540-29-9	
<b>353.2 Nitrogen, NO<sub>2</sub>/NO<sub>3</sub> unpres</b>		Analytical Method: EPA 353.2						
Nitrogen, Nitrate	<b>3.9</b> mg/L		0.020	1		05/28/14 19:06		
Nitrogen, Nitrite	ND mg/L		0.020	1		05/28/14 19:06		
Nitrogen, NO <sub>2</sub> plus NO <sub>3</sub>	<b>3.9</b> mg/L		0.020	1		05/28/14 19:06		
<b>365.1 Phosphorus, Total</b>		Analytical Method: EPA 365.1						
Phosphorus	<b>0.11</b> mg/L		0.050	1		05/30/14 11:33	7723-14-0	
<b>5310B TOC</b>		Analytical Method: SM 5310B						
Total Organic Carbon	<b>2.9</b> mg/L		1.0	1		05/29/14 17:43	7440-44-0	

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## ANALYTICAL RESULTS

Project: BUCK - Res. WELLS J14060100

Pace Project No.: 92203034

**Sample: RESIDENT WELL 3**      **Lab ID: 92203034005**      Collected: 05/27/14 00:00      Received: 05/28/14 10:00      Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
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**Field Data**

Analytical Method:

Collected By	<b>CJF</b>			1		05/30/14 08:23		
Collected Date	<b>05/27/14</b>			1		05/30/14 08:23		
Field pH	<b>6.3</b> Std. Units		0.10	1		05/30/14 08:23		
Field Temperature	<b>17.6</b> deg C		0.50	1		05/30/14 08:23		
Appearance	<b>CLEAR</b>			1		05/30/14 08:23		
Field Specific Conductance	<b>133</b> umhos/cm		1.0	1		05/30/14 08:23		
Oxygen, Dissolved	<b>3.3</b> mg/L			1		05/30/14 08:23	7782-44-7	
REDOX	<b>186</b> mV			1		05/30/14 08:23		
Turbidity	<b>0.0</b> NTU		1.0	1		05/30/14 08:23		

**200.7 MET ICP**

Analytical Method: EPA 200.7      Preparation Method: EPA 200.7

Aluminum	ND ug/L		100	1	05/29/14 18:21	05/30/14 09:40	7429-90-5	
Barium	<b>18.4</b> ug/L		10.0	1	05/29/14 18:21	05/30/14 09:40	7440-39-3	
Boron	ND ug/L		50.0	1	05/29/14 18:21	05/30/14 09:40	7440-42-8	
Calcium	<b>13900</b> ug/L		500	1	05/29/14 18:21	05/30/14 09:40	7440-70-2	
Iron	ND ug/L		50.0	1	05/29/14 18:21	05/30/14 09:40	7439-89-6	
Magnesium	<b>4870</b> ug/L		500	1	05/29/14 18:21	05/30/14 09:40	7439-95-4	
Manganese	ND ug/L		10.0	1	05/29/14 18:21	05/30/14 09:40	7439-96-5	
Nickel	ND ug/L		5.0	1	05/29/14 18:21	05/30/14 09:40	7440-02-0	
Potassium	<b>2070</b> ug/L		1000	1	05/29/14 18:21	05/30/14 09:40	7440-09-7	
Sodium	<b>7010</b> ug/L		1000	1	05/29/14 18:21	05/30/14 09:40	7440-23-5	

**200.7 MET ICP, Dissolved**

Analytical Method: EPA 200.7      Preparation Method: EPA 200.7

Aluminum, Dissolved	ND ug/L		100	1	05/29/14 18:21	05/30/14 12:03	7429-90-5	
Barium, Dissolved	<b>18.8</b> ug/L		10.0	1	05/29/14 18:21	05/30/14 12:03	7440-39-3	
Boron, Dissolved	ND ug/L		50.0	1	05/29/14 18:21	05/30/14 12:03	7440-42-8	
Calcium, Dissolved	<b>13600</b> ug/L		500	1	05/29/14 18:21	05/30/14 12:03	7440-70-2	
Iron, Dissolved	ND ug/L		50.0	1	05/29/14 18:21	05/30/14 12:03	7439-89-6	
Magnesium, Dissolved	<b>4870</b> ug/L		500	1	05/29/14 18:21	05/30/14 12:03	7439-95-4	
Manganese, Dissolved	ND ug/L		10.0	1	05/29/14 18:21	05/30/14 12:03	7439-96-5	
Nickel, Dissolved	ND ug/L		5.0	1	05/29/14 18:21	05/30/14 12:03	7440-02-0	
Potassium, Dissolved	<b>2020</b> ug/L		1000	1	05/29/14 18:21	05/30/14 12:03	7440-09-7	
Sodium, Dissolved	<b>7020</b> ug/L		1000	1	05/29/14 18:21	05/30/14 12:03	7440-23-5	

**200.8 MET ICPMS**

Analytical Method: EPA 200.8      Preparation Method: EPA 200.8

Antimony	ND ug/L		1.0	1	05/29/14 18:21	06/03/14 14:31	7440-36-0	
Arsenic	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:17	7440-38-2	
Cadmium	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:17	7440-43-9	
Chromium	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:17	7440-47-3	
Copper	<b>3.9</b> ug/L		1.0	1	05/29/14 18:21	05/30/14 08:17	7440-50-8	
Lead	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:17	7439-92-1	
Selenium	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:17	7782-49-2	
Thallium	ND ug/L		1.0	1	05/29/14 18:21	06/03/14 14:31	7440-28-0	
Zinc	<b>1400</b> ug/L		5.0	1	05/29/14 18:21	05/30/14 08:17	7440-66-6	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: BUCK - Res. WELLS J14060100

Pace Project No.: 92203034

<b>Sample: RESIDENT WELL 3</b>		<b>Lab ID: 92203034005</b>	Collected: 05/27/14 00:00	Received: 05/28/14 10:00	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>200.8 MET ICPMS, Dissolved</b>		Analytical Method: EPA 200.8 Preparation Method: EPA 200.8						
Antimony, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	06/03/14 13:54	7440-36-0	
Arsenic, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:54	7440-38-2	
Cadmium, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:54	7440-43-9	
Chromium, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:54	7440-47-3	
Copper, Dissolved	<b>4.3</b> ug/L		1.0	1	05/29/14 18:21	05/30/14 08:54	7440-50-8	
Lead, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:54	7439-92-1	
Selenium, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:54	7782-49-2	
Thallium, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	06/03/14 13:54	7440-28-0	
Zinc, Dissolved	<b>1460</b> ug/L		5.0	1	05/29/14 18:21	05/30/14 08:54	7440-66-6	
<b>245.1 Mercury</b>		Analytical Method: EPA 245.1 Preparation Method: EPA 245.1						
Mercury	ND ug/L		0.20	1	06/03/14 05:20	06/03/14 12:07	7439-97-6	
<b>245.1 Mercury, Dissolved</b>		Analytical Method: EPA 245.1 Preparation Method: EPA 245.1						
Mercury, Dissolved	ND ug/L		0.20	1	06/03/14 05:20	06/03/14 11:15	7439-97-6	
<b>2320B Alkalinity</b>		Analytical Method: SM 2320B						
Alkalinity, Total as CaCO <sub>3</sub>	<b>54.4</b> mg/L		5.0	1		05/29/14 12:02		
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C						
Total Dissolved Solids	<b>111</b> mg/L		25.0	1		05/28/14 15:55		
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0						
Chloride	ND mg/L		5.0	1		05/31/14 17:41	16887-00-6	
Fluoride	<b>0.16</b> mg/L		0.050	1		05/31/14 17:41	16984-48-8	
Sulfate	ND mg/L		5.0	1		05/31/14 17:41	14808-79-8	
<b>Chromium, Hexavalent</b>		Analytical Method: SM 3500-Cr D						
Chromium, Hexavalent	ND mg/L		0.010	1		05/27/14 21:48	18540-29-9	
<b>353.2 Nitrogen, NO<sub>2</sub>/NO<sub>3</sub> unpres</b>		Analytical Method: EPA 353.2						
Nitrogen, Nitrate	<b>2.8</b> mg/L		0.020	1		05/28/14 19:07		
Nitrogen, Nitrite	ND mg/L		0.020	1		05/28/14 19:07		
Nitrogen, NO <sub>2</sub> plus NO <sub>3</sub>	<b>2.8</b> mg/L		0.020	1		05/28/14 19:07		
<b>365.1 Phosphorus, Total</b>		Analytical Method: EPA 365.1						
Phosphorus	<b>0.084</b> mg/L		0.050	1		05/30/14 11:34	7723-14-0	
<b>5310B TOC</b>		Analytical Method: SM 5310B						
Total Organic Carbon	<b>2.3</b> mg/L		1.0	1		05/29/14 17:55	7440-44-0	

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## ANALYTICAL RESULTS

Project: BUCK - Res. WELLS J14060100

Pace Project No.: 92203034

Sample: <b>RESIDENT WELL 4</b>	Lab ID: <b>92203034006</b>	Collected: 05/27/14 00:00	Received: 05/28/14 10:00	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>								
Analytical Method:								
Collected By	<b>CJF</b>			1		05/30/14 08:22		
Collected Date	<b>05/27/14</b>			1		05/30/14 08:22		
Field pH	<b>6.8</b> Std. Units		0.10	1		05/30/14 08:22		
Field Temperature	<b>16.9</b> deg C		0.50	1		05/30/14 08:22		
Appearance	<b>CLEAR</b>			1		05/30/14 08:22		
Field Specific Conductance	<b>193</b> umhos/cm		1.0	1		05/30/14 08:22		
Oxygen, Dissolved	<b>1.3</b> mg/L			1		05/30/14 08:22	7782-44-7	
REDOX	<b>165</b> mV			1		05/30/14 08:22		
Turbidity	<b>0.0</b> NTU		1.0	1		05/30/14 08:22		
<b>200.7 MET ICP</b>								
Analytical Method: EPA 200.7 Preparation Method: EPA 200.7								
Aluminum	<b>150</b> ug/L		100	1	05/29/14 18:21	05/30/14 09:56	7429-90-5	
Barium	<b>37.8</b> ug/L		10.0	1	05/29/14 18:21	05/30/14 09:56	7440-39-3	
Boron	ND ug/L		50.0	1	05/29/14 18:21	05/30/14 09:56	7440-42-8	
Calcium	<b>20000</b> ug/L		500	1	05/29/14 18:21	05/30/14 09:56	7440-70-2	
Iron	<b>274</b> ug/L		50.0	1	05/29/14 18:21	05/30/14 09:56	7439-89-6	
Magnesium	<b>5370</b> ug/L		500	1	05/29/14 18:21	05/30/14 09:56	7439-95-4	
Manganese	ND ug/L		10.0	1	05/29/14 18:21	05/30/14 09:56	7439-96-5	
Nickel	ND ug/L		5.0	1	05/29/14 18:21	05/30/14 09:56	7440-02-0	
Potassium	<b>3050</b> ug/L		1000	1	05/29/14 18:21	05/30/14 09:56	7440-09-7	
Sodium	<b>13700</b> ug/L		1000	1	05/29/14 18:21	05/30/14 09:56	7440-23-5	
<b>200.7 MET ICP, Dissolved</b>								
Analytical Method: EPA 200.7 Preparation Method: EPA 200.7								
Aluminum, Dissolved	ND ug/L		100	1	05/29/14 18:21	05/30/14 12:07	7429-90-5	
Barium, Dissolved	<b>37.5</b> ug/L		10.0	1	05/29/14 18:21	05/30/14 12:07	7440-39-3	
Boron, Dissolved	ND ug/L		50.0	1	05/29/14 18:21	05/30/14 12:07	7440-42-8	
Calcium, Dissolved	<b>20100</b> ug/L		500	1	05/29/14 18:21	05/30/14 12:07	7440-70-2	
Iron, Dissolved	ND ug/L		50.0	1	05/29/14 18:21	05/30/14 12:07	7439-89-6	
Magnesium, Dissolved	<b>5340</b> ug/L		500	1	05/29/14 18:21	05/30/14 12:07	7439-95-4	
Manganese, Dissolved	ND ug/L		10.0	1	05/29/14 18:21	05/30/14 12:07	7439-96-5	
Nickel, Dissolved	ND ug/L		5.0	1	05/29/14 18:21	05/30/14 12:07	7440-02-0	
Potassium, Dissolved	<b>3030</b> ug/L		1000	1	05/29/14 18:21	05/30/14 12:07	7440-09-7	
Sodium, Dissolved	<b>13600</b> ug/L		1000	1	05/29/14 18:21	05/30/14 12:07	7440-23-5	
<b>200.8 MET ICPMS</b>								
Analytical Method: EPA 200.8 Preparation Method: EPA 200.8								
Antimony	ND ug/L		1.0	1	05/29/14 18:21	06/03/14 14:34	7440-36-0	
Arsenic	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:19	7440-38-2	
Cadmium	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:19	7440-43-9	
Chromium	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:19	7440-47-3	
Copper	<b>1.5</b> ug/L		1.0	1	05/29/14 18:21	05/30/14 08:19	7440-50-8	
Lead	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:19	7439-92-1	
Selenium	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:19	7782-49-2	
Thallium	ND ug/L		1.0	1	05/29/14 18:21	06/03/14 14:34	7440-28-0	
Zinc	<b>12.0</b> ug/L		5.0	1	05/29/14 18:21	05/30/14 08:19	7440-66-6	

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## ANALYTICAL RESULTS

Project: BUCK - Res. WELLS J14060100

Pace Project No.: 92203034

Sample: RESIDENT WELL 4	Lab ID: 92203034006	Collected: 05/27/14 00:00	Received: 05/28/14 10:00	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>200.8 MET ICPMS, Dissolved</b>	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Antimony, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	06/03/14 13:57	7440-36-0	
Arsenic, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:57	7440-38-2	
Cadmium, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:57	7440-43-9	
Chromium, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:57	7440-47-3	
Copper, Dissolved	1.3 ug/L		1.0	1	05/29/14 18:21	05/30/14 08:57	7440-50-8	
Lead, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:57	7439-92-1	
Selenium, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:57	7782-49-2	
Thallium, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	06/03/14 13:57	7440-28-0	
Zinc, Dissolved	10.6 ug/L		5.0	1	05/29/14 18:21	05/30/14 08:57	7440-66-6	
<b>245.1 Mercury</b>	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury	ND ug/L		0.20	1	06/03/14 05:20	06/03/14 12:09	7439-97-6	
<b>245.1 Mercury, Dissolved</b>	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	06/03/14 05:20	06/03/14 11:17	7439-97-6	
<b>2320B Alkalinity</b>	Analytical Method: SM 2320B							
Alkalinity, Total as CaCO3	80.6 mg/L		5.0	1		05/29/14 12:13		
<b>2540C Total Dissolved Solids</b>	Analytical Method: SM 2540C							
Total Dissolved Solids	195 mg/L		25.0	1		05/28/14 15:55		
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0							
Chloride	9.3 mg/L		5.0	1		05/31/14 18:02	16887-00-6	
Fluoride	0.27 mg/L		0.050	1		05/31/14 18:02	16984-48-8	
Sulfate	ND mg/L		5.0	1		05/31/14 18:02	14808-79-8	
<b>Chromium, Hexavalent</b>	Analytical Method: SM 3500-Cr D							
Chromium, Hexavalent	ND mg/L		0.010	1		05/27/14 21:52	18540-29-9	
<b>353.2 Nitrogen, NO2/NO3 unpres</b>	Analytical Method: EPA 353.2							
Nitrogen, Nitrate	1.2 mg/L		0.020	1		05/28/14 19:10		
Nitrogen, Nitrite	ND mg/L		0.020	1		05/28/14 19:10		
Nitrogen, NO2 plus NO3	1.2 mg/L		0.020	1		05/28/14 19:10		
<b>365.1 Phosphorus, Total</b>	Analytical Method: EPA 365.1							
Phosphorus	0.065 mg/L		0.050	1		05/30/14 11:36	7723-14-0	
<b>5310B TOC</b>	Analytical Method: SM 5310B							
Total Organic Carbon	2.3 mg/L		1.0	1		05/29/14 18:10	7440-44-0	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: BUCK - Res. WELLS J14060100

Sample Project No.: 92203034

**Sample: RESIDENT WELL 5**      **Lab ID: 92203034007**      Collected: 05/27/14 00:00      Received: 05/28/14 10:00      Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
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**Field Data**

Analytical Method:

Collected By	<b>CJF</b>			1		05/30/14 08:21		
Collected Date	<b>05/27/14</b>			1		05/30/14 08:21		
Field pH	<b>6.1</b> Std. Units		0.10	1		05/30/14 08:21		
Field Temperature	<b>19.4</b> deg C		0.50	1		05/30/14 08:21		
Appearance	<b>CLEAR</b>			1		05/30/14 08:21		
Field Specific Conductance	<b>145</b> umhos/cm		1.0	1		05/30/14 08:21		
Oxygen, Dissolved	<b>5.0</b> mg/L			1		05/30/14 08:21	7782-44-7	
REDOX	<b>141</b> mV			1		05/30/14 08:21		
Turbidity	<b>0.0</b> NTU		1.0	1		05/30/14 08:21		

**200.7 MET ICP**

Analytical Method: EPA 200.7 Preparation Method: EPA 200.7

Aluminum	ND ug/L		100	1	05/29/14 18:21	05/30/14 09:59	7429-90-5	
Barium	<b>77.8</b> ug/L		10.0	1	05/29/14 18:21	05/30/14 09:59	7440-39-3	
Boron	ND ug/L		50.0	1	05/29/14 18:21	05/30/14 09:59	7440-42-8	
Calcium	<b>11300</b> ug/L		500	1	05/29/14 18:21	05/30/14 09:59	7440-70-2	
Iron	<b>75.3</b> ug/L		50.0	1	05/29/14 18:21	05/30/14 09:59	7439-89-6	
Magnesium	<b>2930</b> ug/L		500	1	05/29/14 18:21	05/30/14 09:59	7439-95-4	
Manganese	ND ug/L		10.0	1	05/29/14 18:21	05/30/14 09:59	7439-96-5	
Nickel	ND ug/L		5.0	1	05/29/14 18:21	05/30/14 09:59	7440-02-0	
Potassium	<b>1560</b> ug/L		1000	1	05/29/14 18:21	05/30/14 09:59	7440-09-7	
Sodium	<b>12200</b> ug/L		1000	1	05/29/14 18:21	05/30/14 09:59	7440-23-5	

**200.7 MET ICP, Dissolved**

Analytical Method: EPA 200.7 Preparation Method: EPA 200.7

Aluminum, Dissolved	ND ug/L		100	1	05/29/14 18:21	05/30/14 12:11	7429-90-5	
Barium, Dissolved	<b>77.6</b> ug/L		10.0	1	05/29/14 18:21	05/30/14 12:11	7440-39-3	
Boron, Dissolved	ND ug/L		50.0	1	05/29/14 18:21	05/30/14 12:11	7440-42-8	
Calcium, Dissolved	<b>11700</b> ug/L		500	1	05/29/14 18:21	05/30/14 12:11	7440-70-2	
Iron, Dissolved	<b>59.2</b> ug/L		50.0	1	05/29/14 18:21	05/30/14 12:11	7439-89-6	
Magnesium, Dissolved	<b>2970</b> ug/L		500	1	05/29/14 18:21	05/30/14 12:11	7439-95-4	
Manganese, Dissolved	ND ug/L		10.0	1	05/29/14 18:21	05/30/14 12:11	7439-96-5	
Nickel, Dissolved	ND ug/L		5.0	1	05/29/14 18:21	05/30/14 12:11	7440-02-0	
Potassium, Dissolved	<b>1530</b> ug/L		1000	1	05/29/14 18:21	05/30/14 12:11	7440-09-7	
Sodium, Dissolved	<b>12100</b> ug/L		1000	1	05/29/14 18:21	05/30/14 12:11	7440-23-5	

**200.8 MET ICPMS**

Analytical Method: EPA 200.8 Preparation Method: EPA 200.8

Antimony	ND ug/L		1.0	1	05/29/14 18:21	06/03/14 14:36	7440-36-0	
Arsenic	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:26	7440-38-2	
Cadmium	<b>1.5</b> ug/L		1.0	1	05/29/14 18:21	05/30/14 08:26	7440-43-9	
Chromium	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:26	7440-47-3	
Copper	<b>15.6</b> ug/L		1.0	1	05/29/14 18:21	05/30/14 08:26	7440-50-8	
Lead	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:26	7439-92-1	
Selenium	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:26	7782-49-2	
Thallium	ND ug/L		1.0	1	05/29/14 18:21	06/03/14 14:36	7440-28-0	
Zinc	<b>564</b> ug/L		5.0	1	05/29/14 18:21	05/30/14 08:26	7440-66-6	

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## ANALYTICAL RESULTS

Project: BUCK - Res. WELLS J14060100

Pace Project No.: 92203034

<b>Sample: RESIDENT WELL 5</b>		<b>Lab ID: 92203034007</b>	Collected: 05/27/14 00:00	Received: 05/28/14 10:00	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>200.8 MET ICPMS, Dissolved</b>		Analytical Method: EPA 200.8 Preparation Method: EPA 200.8						
Antimony, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	06/03/14 13:59	7440-36-0	
Arsenic, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:59	7440-38-2	
Cadmium, Dissolved	2.1 ug/L		1.0	1	05/29/14 18:21	05/30/14 08:59	7440-43-9	
Chromium, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:59	7440-47-3	
Copper, Dissolved	22.8 ug/L		1.0	1	05/29/14 18:21	05/30/14 08:59	7440-50-8	
Lead, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:59	7439-92-1	
Selenium, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:59	7782-49-2	
Thallium, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	06/03/14 13:59	7440-28-0	
Zinc, Dissolved	782 ug/L		5.0	1	05/29/14 18:21	05/30/14 08:59	7440-66-6	
<b>245.1 Mercury</b>		Analytical Method: EPA 245.1 Preparation Method: EPA 245.1						
Mercury	ND ug/L		0.20	1	06/03/14 05:20	06/03/14 12:12	7439-97-6	
<b>245.1 Mercury, Dissolved</b>		Analytical Method: EPA 245.1 Preparation Method: EPA 245.1						
Mercury, Dissolved	ND ug/L		0.20	1	06/03/14 05:20	06/03/14 11:24	7439-97-6	
<b>2320B Alkalinity</b>		Analytical Method: SM 2320B						
Alkalinity, Total as CaCO3	27.4 mg/L		5.0	1		05/29/14 12:25		
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C						
Total Dissolved Solids	202 mg/L		25.0	1		05/28/14 15:56		
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0						
Chloride	11.8 mg/L		5.0	1		05/31/14 18:23	16887-00-6	
Fluoride	0.16 mg/L		0.050	1		05/31/14 18:23	16984-48-8	
Sulfate	ND mg/L		5.0	1		05/31/14 18:23	14808-79-8	
<b>Chromium, Hexavalent</b>		Analytical Method: SM 3500-Cr D						
Chromium, Hexavalent	ND mg/L		0.010	1		05/27/14 21:46	18540-29-9	
<b>353.2 Nitrogen, NO2/NO3 unpres</b>		Analytical Method: EPA 353.2						
Nitrogen, Nitrate	6.2 mg/L		0.060	3		05/28/14 19:15		M1
Nitrogen, Nitrite	ND mg/L		0.060	3		05/28/14 19:15		
Nitrogen, NO2 plus NO3	6.2 mg/L		0.060	3		05/28/14 19:15		M1
<b>365.1 Phosphorus, Total</b>		Analytical Method: EPA 365.1						
Phosphorus	0.071 mg/L		0.050	1		05/30/14 11:37	7723-14-0	
<b>5310B TOC</b>		Analytical Method: SM 5310B						
Total Organic Carbon	2.0 mg/L		1.0	1		05/29/14 18:20	7440-44-0	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: BUCK - RES. WELLS J14060100

Pace Project No.: 92203034

Sample: <b>RESIDENT WELL 6</b>	Lab ID: <b>92203034008</b>	Collected: 05/27/14 00:00	Received: 05/28/14 10:00	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>								
Analytical Method:								
Collected By	<b>CJF</b>			1		05/30/14 08:21		
Collected Date	<b>05/27/14</b>			1		05/30/14 08:21		
Field pH	<b>6.5</b> Std. Units		0.10	1		05/30/14 08:21		
Field Temperature	<b>17.5</b> deg C		0.50	1		05/30/14 08:21		
Appearance	<b>CLEAR</b>			1		05/30/14 08:21		
Field Specific Conductance	<b>91</b> umhos/cm		1.0	1		05/30/14 08:21		
Oxygen, Dissolved	<b>5.4</b> mg/L			1		05/30/14 08:21	7782-44-7	
REDOX	<b>166</b> mV			1		05/30/14 08:21		
Turbidity	<b>0.0</b> NTU		1.0	1		05/30/14 08:21		
<b>200.7 MET ICP</b>								
Analytical Method: EPA 200.7 Preparation Method: EPA 200.7								
Aluminum	ND ug/L		100	1	05/29/14 18:21	05/30/14 10:03	7429-90-5	
Barium	<b>26.4</b> ug/L		10.0	1	05/29/14 18:21	05/30/14 10:03	7440-39-3	
Boron	ND ug/L		50.0	1	05/29/14 18:21	05/30/14 10:03	7440-42-8	
Calcium	<b>8110</b> ug/L		500	1	05/29/14 18:21	05/30/14 10:03	7440-70-2	
Iron	ND ug/L		50.0	1	05/29/14 18:21	05/30/14 10:03	7439-89-6	
Magnesium	<b>2560</b> ug/L		500	1	05/29/14 18:21	05/30/14 10:03	7439-95-4	
Manganese	ND ug/L		10.0	1	05/29/14 18:21	05/30/14 10:03	7439-96-5	
Nickel	ND ug/L		5.0	1	05/29/14 18:21	05/30/14 10:03	7440-02-0	
Potassium	<b>1680</b> ug/L		1000	1	05/29/14 18:21	05/30/14 10:03	7440-09-7	
Sodium	<b>8630</b> ug/L		1000	1	05/29/14 18:21	05/30/14 10:03	7440-23-5	
<b>200.7 MET ICP, Dissolved</b>								
Analytical Method: EPA 200.7 Preparation Method: EPA 200.7								
Aluminum, Dissolved	ND ug/L		100	1	05/29/14 18:21	05/30/14 12:15	7429-90-5	
Barium, Dissolved	<b>26.2</b> ug/L		10.0	1	05/29/14 18:21	05/30/14 12:15	7440-39-3	
Boron, Dissolved	ND ug/L		50.0	1	05/29/14 18:21	05/30/14 12:15	7440-42-8	
Calcium, Dissolved	<b>8160</b> ug/L		500	1	05/29/14 18:21	05/30/14 12:15	7440-70-2	
Iron, Dissolved	ND ug/L		50.0	1	05/29/14 18:21	05/30/14 12:15	7439-89-6	
Magnesium, Dissolved	<b>2520</b> ug/L		500	1	05/29/14 18:21	05/30/14 12:15	7439-95-4	
Manganese, Dissolved	ND ug/L		10.0	1	05/29/14 18:21	05/30/14 12:15	7439-96-5	
Nickel, Dissolved	ND ug/L		5.0	1	05/29/14 18:21	05/30/14 12:15	7440-02-0	
Potassium, Dissolved	<b>1680</b> ug/L		1000	1	05/29/14 18:21	05/30/14 12:15	7440-09-7	
Sodium, Dissolved	<b>8690</b> ug/L		1000	1	05/29/14 18:21	05/30/14 12:15	7440-23-5	
<b>200.8 MET ICPMS</b>								
Analytical Method: EPA 200.8 Preparation Method: EPA 200.8								
Antimony	ND ug/L		1.0	1	05/29/14 18:21	06/03/14 14:38	7440-36-0	
Arsenic	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:28	7440-38-2	
Cadmium	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:28	7440-43-9	
Chromium	<b>1.7</b> ug/L		1.0	1	05/29/14 18:21	05/30/14 08:28	7440-47-3	
Copper	<b>2.1</b> ug/L		1.0	1	05/29/14 18:21	05/30/14 08:28	7440-50-8	
Lead	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:28	7439-92-1	
Selenium	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:28	7782-49-2	
Thallium	ND ug/L		1.0	1	05/29/14 18:21	06/03/14 14:38	7440-28-0	
Zinc	<b>124</b> ug/L		5.0	1	05/29/14 18:21	05/30/14 08:28	7440-66-6	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: BUCK - Res. WELLS J14060100  
Pace Project No.: 92203034

<b>Sample: RESIDENT WELL 6</b>		<b>Lab ID: 92203034008</b>	Collected: 05/27/14 00:00	Received: 05/28/14 10:00	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>200.8 MET ICPMS, Dissolved</b>		Analytical Method: EPA 200.8 Preparation Method: EPA 200.8						
Antimony, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	06/03/14 14:02	7440-36-0	
Arsenic, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 09:01	7440-38-2	
Cadmium, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 09:01	7440-43-9	
Chromium, Dissolved	1.7 ug/L		1.0	1	05/29/14 18:21	05/30/14 09:01	7440-47-3	
Copper, Dissolved	2.5 ug/L		1.0	1	05/29/14 18:21	05/30/14 09:01	7440-50-8	
Lead, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 09:01	7439-92-1	
Selenium, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 09:01	7782-49-2	
Thallium, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	06/03/14 14:02	7440-28-0	
Zinc, Dissolved	480 ug/L		5.0	1	05/29/14 18:21	05/30/14 09:01	7440-66-6	
<b>245.1 Mercury</b>		Analytical Method: EPA 245.1 Preparation Method: EPA 245.1						
Mercury	ND ug/L		0.20	1	06/03/14 05:20	06/03/14 12:14	7439-97-6	
<b>245.1 Mercury, Dissolved</b>		Analytical Method: EPA 245.1 Preparation Method: EPA 245.1						
Mercury, Dissolved	ND ug/L		0.20	1	06/03/14 05:20	06/03/14 11:26	7439-97-6	
<b>2320B Alkalinity</b>		Analytical Method: SM 2320B						
Alkalinity, Total as CaCO3	33.1 mg/L		5.0	1		05/29/14 12:35		
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C						
Total Dissolved Solids	154 mg/L		25.0	1		05/28/14 15:57		
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0						
Chloride	ND mg/L		5.0	1		05/31/14 18:45	16887-00-6	
Fluoride	0.18 mg/L		0.050	1		05/31/14 18:45	16984-48-8	
Sulfate	ND mg/L		5.0	1		05/31/14 18:45	14808-79-8	
<b>Chromium, Hexavalent</b>		Analytical Method: SM 3500-Cr D						
Chromium, Hexavalent	ND mg/L		0.010	1		05/27/14 21:47	18540-29-9	
<b>353.2 Nitrogen, NO2/NO3 unpres</b>		Analytical Method: EPA 353.2						
Nitrogen, Nitrate	3.1 mg/L		0.020	1		05/28/14 18:42		H1
Nitrogen, Nitrite	ND mg/L		0.020	1		05/28/14 18:42		H1
Nitrogen, NO2 plus NO3	3.1 mg/L		0.020	1		05/28/14 18:42		H1
<b>365.1 Phosphorus, Total</b>		Analytical Method: EPA 365.1						
Phosphorus	0.086 mg/L		0.050	1		05/30/14 11:37	7723-14-0	
<b>5310B TOC</b>		Analytical Method: SM 5310B						
Total Organic Carbon	1.3 mg/L		1.0	1		05/29/14 18:31	7440-44-0	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: BUCK - Res. WELLS J14060100

Pace Project No.: 92203034

**Sample: RESIDENT WELL 7**      **Lab ID: 92203034009**      Collected: 05/27/14 00:00      Received: 05/28/14 10:00      Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
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**Field Data**

Analytical Method:

Collected By	<b>CJF</b>			1		05/30/14 08:20		
Collected Date	<b>05/27/14</b>			1		05/30/14 08:20		
Field pH	<b>6.7</b> Std. Units		0.10	1		05/30/14 08:20		
Field Temperature	<b>17.4</b> deg C		0.50	1		05/30/14 08:20		
Appearance	<b>CLEAR</b>			1		05/30/14 08:20		
Field Specific Conductance	<b>7.1</b> umhos/cm		1.0	1		05/30/14 08:20		
Oxygen, Dissolved	<b>6.0</b> mg/L			1		05/30/14 08:20	7782-44-7	
REDOX	<b>184</b> mV			1		05/30/14 08:20		
Turbidity	<b>0.0</b> NTU		1.0	1		05/30/14 08:20		

**200.7 MET ICP**

Analytical Method: EPA 200.7      Preparation Method: EPA 200.7

Aluminum	ND ug/L		100	1	05/29/14 18:21	05/30/14 10:07	7429-90-5	
Barium	<b>30.7</b> ug/L		10.0	1	05/29/14 18:21	05/30/14 10:07	7440-39-3	
Boron	ND ug/L		50.0	1	05/29/14 18:21	05/30/14 10:07	7440-42-8	
Calcium	<b>6340</b> ug/L		500	1	05/29/14 18:21	05/30/14 10:07	7440-70-2	
Iron	ND ug/L		50.0	1	05/29/14 18:21	05/30/14 10:07	7439-89-6	
Magnesium	<b>3970</b> ug/L		500	1	05/29/14 18:21	05/30/14 10:07	7439-95-4	
Manganese	ND ug/L		10.0	1	05/29/14 18:21	05/30/14 10:07	7439-96-5	
Nickel	ND ug/L		5.0	1	05/29/14 18:21	05/30/14 10:07	7440-02-0	
Potassium	<b>1690</b> ug/L		1000	1	05/29/14 18:21	05/30/14 10:07	7440-09-7	
Sodium	<b>5020</b> ug/L		1000	1	05/29/14 18:21	05/30/14 10:07	7440-23-5	

**200.7 MET ICP, Dissolved**

Analytical Method: EPA 200.7      Preparation Method: EPA 200.7

Aluminum, Dissolved	ND ug/L		100	1	05/29/14 18:21	05/30/14 12:30	7429-90-5	
Barium, Dissolved	<b>30.0</b> ug/L		10.0	1	05/29/14 18:21	05/30/14 12:30	7440-39-3	
Boron, Dissolved	ND ug/L		50.0	1	05/29/14 18:21	05/30/14 12:30	7440-42-8	
Calcium, Dissolved	<b>6410</b> ug/L		500	1	05/29/14 18:21	05/30/14 12:30	7440-70-2	
Iron, Dissolved	ND ug/L		50.0	1	05/29/14 18:21	05/30/14 12:30	7439-89-6	
Magnesium, Dissolved	<b>3940</b> ug/L		500	1	05/29/14 18:21	05/30/14 12:30	7439-95-4	
Manganese, Dissolved	ND ug/L		10.0	1	05/29/14 18:21	05/30/14 12:30	7439-96-5	
Nickel, Dissolved	ND ug/L		5.0	1	05/29/14 18:21	05/30/14 12:30	7440-02-0	
Potassium, Dissolved	<b>1680</b> ug/L		1000	1	05/29/14 18:21	05/30/14 12:30	7440-09-7	
Sodium, Dissolved	<b>4940</b> ug/L		1000	1	05/29/14 18:21	05/30/14 12:30	7440-23-5	

**200.8 MET ICPMS**

Analytical Method: EPA 200.8      Preparation Method: EPA 200.8

Antimony	ND ug/L		1.0	1	05/29/14 18:21	06/03/14 14:46	7440-36-0	
Arsenic	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:30	7440-38-2	
Cadmium	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:30	7440-43-9	
Chromium	<b>2.8</b> ug/L		1.0	1	05/29/14 18:21	05/30/14 08:30	7440-47-3	
Copper	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:30	7440-50-8	
Lead	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:30	7439-92-1	
Selenium	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 08:30	7782-49-2	
Thallium	ND ug/L		1.0	1	05/29/14 18:21	06/03/14 14:46	7440-28-0	
Zinc	ND ug/L		5.0	1	05/29/14 18:21	05/30/14 08:30	7440-66-6	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: BUCK - Res. WELLS J14060100  
Pace Project No.: 92203034

<b>Sample: RESIDENT WELL 7</b>		<b>Lab ID: 92203034009</b>	Collected: 05/27/14 00:00	Received: 05/28/14 10:00	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>200.8 MET ICPMS, Dissolved</b>		Analytical Method: EPA 200.8 Preparation Method: EPA 200.8						
Antimony, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	06/03/14 14:04	7440-36-0	
Arsenic, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 09:03	7440-38-2	
Cadmium, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 09:03	7440-43-9	
Chromium, Dissolved	<b>2.7</b> ug/L		1.0	1	05/29/14 18:21	05/30/14 09:03	7440-47-3	
Copper, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 09:03	7440-50-8	
Lead, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 09:03	7439-92-1	
Selenium, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	05/30/14 09:03	7782-49-2	
Thallium, Dissolved	ND ug/L		1.0	1	05/29/14 18:21	06/03/14 14:04	7440-28-0	
Zinc, Dissolved	ND ug/L		5.0	1	05/29/14 18:21	05/30/14 09:03	7440-66-6	
<b>245.1 Mercury</b>		Analytical Method: EPA 245.1 Preparation Method: EPA 245.1						
Mercury	ND ug/L		0.20	1	06/03/14 05:20	06/03/14 12:16	7439-97-6	
<b>245.1 Mercury, Dissolved</b>		Analytical Method: EPA 245.1 Preparation Method: EPA 245.1						
Mercury, Dissolved	ND ug/L		0.20	1	06/03/14 05:20	06/03/14 11:28	7439-97-6	
<b>2320B Alkalinity</b>		Analytical Method: SM 2320B						
Alkalinity, Total as CaCO3	<b>36.4</b> mg/L		5.0	1		05/29/14 12:46		
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C						
Total Dissolved Solids	<b>89.0</b> mg/L		25.0	1		05/28/14 15:57		
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0						
Chloride	ND mg/L		5.0	1		05/31/14 19:06	16887-00-6	
Fluoride	<b>0.18</b> mg/L		0.050	1		05/31/14 19:06	16984-48-8	
Sulfate	ND mg/L		5.0	1		05/31/14 19:06	14808-79-8	
<b>Chromium, Hexavalent</b>		Analytical Method: SM 3500-Cr D						
Chromium, Hexavalent	ND mg/L		0.010	1		05/27/14 21:52	18540-29-9	
<b>353.2 Nitrogen, NO2/NO3 unpres</b>		Analytical Method: EPA 353.2						
Nitrogen, Nitrate	<b>1.0</b> mg/L		0.020	1		05/28/14 18:51		
Nitrogen, Nitrite	ND mg/L		0.020	1		05/28/14 18:51		
Nitrogen, NO2 plus NO3	<b>1.0</b> mg/L		0.020	1		05/28/14 18:51		
<b>365.1 Phosphorus, Total</b>		Analytical Method: EPA 365.1						
Phosphorus	<b>0.097</b> mg/L		0.050	1		05/30/14 11:38	7723-14-0	
<b>5310B TOC</b>		Analytical Method: SM 5310B						
Total Organic Carbon	<b>9.9</b> mg/L		1.0	1		05/29/14 18:58	7440-44-0	

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### QUALITY CONTROL DATA

Project: BUCK - REs. WELLS J14060100

Pace Project No.: 92203034

QC Batch: MERP/4682 Analysis Method: EPA 245.1  
 QC Batch Method: EPA 245.1 Analysis Description: 245.1 Mercury  
 Associated Lab Samples: 92203034001, 92203034002, 92203034003, 92203034004, 92203034005, 92203034006, 92203034007, 92203034008, 92203034009

METHOD BLANK: 917966 Matrix: Water  
 Associated Lab Samples: 92203034001, 92203034002, 92203034003, 92203034004, 92203034005, 92203034006, 92203034007, 92203034008, 92203034009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	0.20	06/03/14 11:30	

LABORATORY CONTROL SAMPLE: 917967

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	2	2.1	104	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 917970 917971

Parameter	Units	92202836003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Mercury	ug/L	ND	2	2	2.0	2.1	101	104	70-130	2	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 918100 918101

Parameter	Units	92203034003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Mercury	ug/L	ND	2	2	2.1	2.1	104	104	70-130	1	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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### QUALITY CONTROL DATA

Project: BUCK - Res. WELLS J14060100

Pace Project No.: 92203034

QC Batch: MPRP/18738 Analysis Method: EPA 200.7  
 QC Batch Method: EPA 200.7 Analysis Description: 200.7 MET  
 Associated Lab Samples: 92203034001, 92203034002, 92203034003, 92203034004, 92203034005, 92203034006, 92203034007, 92203034008, 92203034009

METHOD BLANK: 914935 Matrix: Water  
 Associated Lab Samples: 92203034001, 92203034002, 92203034003, 92203034004, 92203034005, 92203034006, 92203034007, 92203034008, 92203034009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Aluminum	ug/L	ND	100	05/30/14 09:11	
Barium	ug/L	ND	10.0	05/30/14 09:11	
Boron	ug/L	ND	50.0	05/30/14 09:11	
Calcium	ug/L	ND	500	05/30/14 09:11	
Iron	ug/L	ND	50.0	05/30/14 09:11	
Magnesium	ug/L	ND	500	05/30/14 09:11	
Manganese	ug/L	ND	10.0	05/30/14 09:11	
Nickel	ug/L	ND	5.0	05/30/14 09:11	
Potassium	ug/L	ND	1000	05/30/14 09:11	
Sodium	ug/L	ND	1000	05/30/14 09:11	

LABORATORY CONTROL SAMPLE: 914936

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	2500	2530	101	85-115	
Barium	ug/L	250	260	104	85-115	
Boron	ug/L	2500	2530	101	85-115	
Calcium	ug/L	12500	13000	104	85-115	
Iron	ug/L	2500	2620	105	85-115	
Magnesium	ug/L	12500	12600	101	85-115	
Manganese	ug/L	250	258	103	85-115	
Nickel	ug/L	250	264	105	85-115	
Potassium	ug/L	12500	12800	102	85-115	
Sodium	ug/L	12500	12900	103	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 914937 914938

Parameter	Units	92203034001		MS		MSD		MS		MSD		% Rec Limits	RPD	Qual
		Result	Conc.	Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec					
Aluminum	ug/L	658	2500	2500	2500	3530	3570	115	117	70-130	1			
Barium	ug/L	166	250	250	250	428	428	105	105	70-130	0			
Boron	ug/L	ND	2500	2500	2500	2570	2560	101	100	70-130	.7			
Calcium	ug/L	13200	12500	12500	12500	26300	26300	105	105	70-130	.2			
Iron	ug/L	3220	2500	2500	2500	5850	5860	105	106	70-130	.1			
Magnesium	ug/L	6960	12500	12500	12500	19800	19700	103	102	70-130	.5			
Manganese	ug/L	4660	250	250	250	4830	4840	68	75	70-130	.4	M1		
Nickel	ug/L	ND	250	250	250	263	258	105	103	70-130	2			

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### QUALITY CONTROL DATA

Project: BUCK - REs. WELLS J14060100

Pace Project No.: 92203034

		914937			914938							
Parameter	Units	92203034001	MS	MSD	MS	MSD	MS	MSD	% Rec	Limits	RPD	Qual
		Result	Spike	Spike	Result	Result	% Rec	% Rec				
Potassium	ug/L	3830	12500	12500	16700	16700	103	103	70-130			.06
Sodium	ug/L	8650	12500	12500	21600	21600	104	103	70-130			.3

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### QUALITY CONTROL DATA

Project: BUCK - REs. WELLS J14060100

Pace Project No.: 92203034

QC Batch: MPRP/18740 Analysis Method: EPA 200.7  
 QC Batch Method: EPA 200.7 Analysis Description: 200.7 MET Dissolved  
 Associated Lab Samples: 92203034001, 92203034002, 92203034003, 92203034004, 92203034005, 92203034006, 92203034007, 92203034008, 92203034009

METHOD BLANK: 914945 Matrix: Water  
 Associated Lab Samples: 92203034001, 92203034002, 92203034003, 92203034004, 92203034005, 92203034006, 92203034007, 92203034008, 92203034009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Aluminum, Dissolved	ug/L	ND	100	05/30/14 11:22	
Barium, Dissolved	ug/L	ND	10.0	05/30/14 11:22	
Boron, Dissolved	ug/L	ND	50.0	05/30/14 11:22	
Calcium, Dissolved	ug/L	ND	500	05/30/14 11:22	
Iron, Dissolved	ug/L	ND	50.0	05/30/14 11:22	
Magnesium, Dissolved	ug/L	ND	500	05/30/14 11:22	
Manganese, Dissolved	ug/L	ND	10.0	05/30/14 11:22	
Nickel, Dissolved	ug/L	ND	5.0	05/30/14 11:22	
Potassium, Dissolved	ug/L	ND	1000	05/30/14 11:22	
Sodium, Dissolved	ug/L	ND	1000	05/30/14 11:22	

LABORATORY CONTROL SAMPLE: 914946

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum, Dissolved	ug/L	2500	2540	102	85-115	
Barium, Dissolved	ug/L	250	260	104	85-115	
Boron, Dissolved	ug/L	2500	2510	100	85-115	
Calcium, Dissolved	ug/L	12500	13200	106	85-115	
Iron, Dissolved	ug/L	2500	2630	105	85-115	
Magnesium, Dissolved	ug/L	12500	12800	103	85-115	
Manganese, Dissolved	ug/L	250	260	104	85-115	
Nickel, Dissolved	ug/L	250	263	105	85-115	
Potassium, Dissolved	ug/L	12500	12800	102	85-115	
Sodium, Dissolved	ug/L	12500	12900	103	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 914947 914948

Parameter	Units	92203034001		MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
		Result	Conc.	Spike Conc.	Spike Conc.	Result	Result					
Aluminum, Dissolved	ug/L	ND	2500	2500	2500	2650	2680	104	105	70-130	1	
Barium, Dissolved	ug/L	150	250	250	250	421	427	109	111	70-130	1	
Boron, Dissolved	ug/L	ND	2500	2500	2500	2530	2560	100	101	70-130	1	
Calcium, Dissolved	ug/L	12900	12500	12500	12500	26800	27300	111	115	70-130	2	
Iron, Dissolved	ug/L	899	2500	2500	2500	3600	3660	108	111	70-130	2	
Magnesium, Dissolved	ug/L	6830	12500	12500	12500	20200	20400	107	109	70-130	.7	
Manganese, Dissolved	ug/L	4420	250	250	250	4630	4720	87	123	70-130	2	
Nickel, Dissolved	ug/L	ND	250	250	250	261	261	104	104	70-130	0	

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### QUALITY CONTROL DATA

Project: BUCK - RES. WELLS J14060100

Pace Project No.: 92203034

Parameter	92203034001			MATRIX SPIKE & MATRIX SPIKE DUPLICATE:								
	Units	Result	MS Spike Conc.	MSD Spike Conc.	914947		914948		MS % Rec	MSD % Rec	% Rec Limits	RPD
Potassium, Dissolved	ug/L	3710	12500	12500	16900	17200	106	108	70-130		1	
Sodium, Dissolved	ug/L	8670	12500	12500	22100	22300	108	109	70-130		.7	

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### QUALITY CONTROL DATA

Project: BUCK - Res. WELLS J14060100

Pace Project No.: 92203034

QC Batch: MPRP/18739 Analysis Method: EPA 200.8  
 QC Batch Method: EPA 200.8 Analysis Description: 200.8 MET  
 Associated Lab Samples: 92203034001, 92203034002, 92203034003, 92203034004, 92203034005, 92203034006, 92203034007, 92203034008, 92203034009

METHOD BLANK: 914940 Matrix: Water  
 Associated Lab Samples: 92203034001, 92203034002, 92203034003, 92203034004, 92203034005, 92203034006, 92203034007, 92203034008, 92203034009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Antimony	ug/L	ND	1.0	06/03/14 14:06	
Arsenic	ug/L	ND	1.0	05/30/14 07:55	
Cadmium	ug/L	ND	1.0	05/30/14 07:55	
Chromium	ug/L	ND	1.0	05/30/14 07:55	
Copper	ug/L	ND	1.0	05/30/14 07:55	
Lead	ug/L	ND	1.0	05/30/14 07:55	
Selenium	ug/L	ND	1.0	05/30/14 07:55	
Thallium	ug/L	ND	1.0	06/03/14 14:06	
Zinc	ug/L	ND	5.0	05/30/14 07:55	

LABORATORY CONTROL SAMPLE: 914941

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	50	51.6	103	85-115	
Arsenic	ug/L	50	49.7	99	85-115	
Cadmium	ug/L	5	4.7	94	85-115	
Chromium	ug/L	50	47.9	96	85-115	
Copper	ug/L	50	49.7	99	85-115	
Lead	ug/L	50	47.4	95	85-115	
Selenium	ug/L	50	51.5	103	85-115	
Thallium	ug/L	50	47.6	95	85-115	
Zinc	ug/L	250	253	101	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 915179 915180

Parameter	Units	92203034002 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
			Spike Conc.	MS Result	MSD Result	MSD Spike Conc.					
Antimony	ug/L	ND	50	50	50.2	49.8	100	100	70-130	.7	
Arsenic	ug/L	ND	50	50	48.4	49.3	96	98	70-130	2	
Cadmium	ug/L	ND	5	5	4.8	4.8	95	95	70-130	.5	
Chromium	ug/L	ND	50	50	48.6	49.4	97	98	70-130	2	
Copper	ug/L	1.3	50	50	50.0	51.3	97	100	70-130	3	
Lead	ug/L	ND	50	50	48.1	48.2	96	96	70-130	.2	
Selenium	ug/L	ND	50	50	49.0	48.5	98	97	70-130	1	
Thallium	ug/L	ND	50	50	48.1	48.6	96	97	70-130	1	
Zinc	ug/L	ND	250	250	248	252	98	99	70-130	2	

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### QUALITY CONTROL DATA

Project: BUCK - REs. WELLS J14060100

Pace Project No.: 92203034

QC Batch: MPRP/18741 Analysis Method: EPA 200.8  
 QC Batch Method: EPA 200.8 Analysis Description: 200.8 MET Dissolved  
 Associated Lab Samples: 92203034001, 92203034002, 92203034003, 92203034004, 92203034005, 92203034006, 92203034007, 92203034008, 92203034009

METHOD BLANK: 914949 Matrix: Water  
 Associated Lab Samples: 92203034001, 92203034002, 92203034003, 92203034004, 92203034005, 92203034006, 92203034007, 92203034008, 92203034009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Antimony, Dissolved	ug/L	ND	1.0	06/03/14 13:29	
Arsenic, Dissolved	ug/L	ND	1.0	05/30/14 08:32	
Cadmium, Dissolved	ug/L	ND	1.0	05/30/14 08:32	
Chromium, Dissolved	ug/L	ND	1.0	05/30/14 08:32	
Copper, Dissolved	ug/L	ND	1.0	05/30/14 08:32	
Lead, Dissolved	ug/L	ND	1.0	05/30/14 08:32	
Selenium, Dissolved	ug/L	ND	1.0	05/30/14 08:32	
Thallium, Dissolved	ug/L	ND	1.0	06/03/14 13:29	
Zinc, Dissolved	ug/L	ND	5.0	05/30/14 08:32	

LABORATORY CONTROL SAMPLE: 914950

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony, Dissolved	ug/L	50	52.5	105	85-115	
Arsenic, Dissolved	ug/L	50	49.5	99	85-115	
Cadmium, Dissolved	ug/L	5	4.8	96	85-115	
Chromium, Dissolved	ug/L	50	48.5	97	85-115	
Copper, Dissolved	ug/L	50	49.5	99	85-115	
Lead, Dissolved	ug/L	50	47.2	94	85-115	
Selenium, Dissolved	ug/L	50	51.1	102	85-115	
Thallium, Dissolved	ug/L	50	46.9	94	85-115	
Zinc, Dissolved	ug/L	250	253	101	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 915185 915186

Parameter	Units	92203034002 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
			Spike Conc.	MS Spike Conc.	MSD Spike Conc.	MS Result					
Antimony, Dissolved	ug/L	ND	50	50	51.8	51.6	103	103	70-130	.4	
Arsenic, Dissolved	ug/L	ND	50	50	49.3	49.8	98	99	70-130	1	
Cadmium, Dissolved	ug/L	ND	5	5	4.7	4.7	94	93	70-130	.6	
Chromium, Dissolved	ug/L	ND	50	50	48.1	48.2	96	96	70-130	.2	
Copper, Dissolved	ug/L	1.3	50	50	49.5	49.8	98	99	70-130	.6	
Lead, Dissolved	ug/L	ND	50	50	47.3	47.9	94	96	70-130	1	
Selenium, Dissolved	ug/L	ND	50	50	49.7	49.3	99	98	70-130	.8	
Thallium, Dissolved	ug/L	ND	50	50	48.0	48.0	96	96	70-130	.08	
Zinc, Dissolved	ug/L	ND	250	250	250	251	99	100	70-130	.7	

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### QUALITY CONTROL DATA

Project: BUCK - REs. WELLS J14060100

Pace Project No.: 92203034

QC Batch: WET/31255

Analysis Method: SM 2320B

QC Batch Method: SM 2320B

Analysis Description: 2320B Alkalinity

Associated Lab Samples: 92203034001, 92203034002, 92203034003, 92203034004, 92203034005, 92203034006, 92203034007, 92203034008, 92203034009

METHOD BLANK: 1208682

Matrix: Water

Associated Lab Samples: 92203034001, 92203034002, 92203034003, 92203034004, 92203034005, 92203034006, 92203034007, 92203034008, 92203034009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	05/29/14 10:39	

LABORATORY CONTROL SAMPLE: 1208683

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	49.6	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1208684 1208685

Parameter	Units	92203034001		MS		MSD		MS		MSD		% Rec Limits	RPD	Qual
		Result	Conc.	Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec					
Alkalinity, Total as CaCO3	mg/L	73.7	50	50	119	119	90	90	75-125	0				

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### QUALITY CONTROL DATA

Project: BUCK - REs. WELLS J14060100

Pace Project No.: 92203034

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QC Batch:	WET/31242	Analysis Method:	SM 2540C
QC Batch Method:	SM 2540C	Analysis Description:	2540C Total Dissolved Solids
Associated Lab Samples:	92203034001, 92203034002, 92203034003, 92203034004, 92203034005, 92203034006, 92203034007, 92203034008, 92203034009		

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METHOD BLANK:	1208184	Matrix:	Water
Associated Lab Samples:	92203034001, 92203034002, 92203034003, 92203034004, 92203034005, 92203034006, 92203034007, 92203034008, 92203034009		

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	05/28/14 15:52	

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LABORATORY CONTROL SAMPLE: 1208185

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	250	266	106	80-120	

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SAMPLE DUPLICATE: 1208186

Parameter	Units	92203034001 Result	Dup Result	RPD	Qualifiers
Total Dissolved Solids	mg/L	118	119	1	

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### QUALITY CONTROL DATA

Project: BUCK - REs. WELLS J14060100

Pace Project No.: 92203034

QC Batch: WETA/36325 Analysis Method: EPA 300.0  
 QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions  
 Associated Lab Samples: 92203034001, 92203034002, 92203034003, 92203034004, 92203034005, 92203034006, 92203034007, 92203034008, 92203034009

METHOD BLANK: 916352 Matrix: Water  
 Associated Lab Samples:

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	5.0	05/30/14 18:51	
Fluoride	mg/L	ND	0.050	05/30/14 18:51	F5
Sulfate	mg/L	ND	5.0	05/30/14 18:51	

LABORATORY CONTROL SAMPLE: 916353

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	47.5	95	90-110	
Fluoride	mg/L	5	5.1	101	90-110	
Sulfate	mg/L	50	47.6	95	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 916354 916355

Parameter	Units	35139994001		MS	MSD	MS	MSD	MS	MSD	% Rec	RPD	Qual
		Result	Conc.	Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec	Limits		
Chloride	mg/L	17.4	50	50	62.7	62.8	91	91	90-110	.2		
Fluoride	mg/L	0.45	5	5	5.9	6.0	110	111	90-110	.8	M1	
Sulfate	mg/L	16.8	50	50	70.0	70.0	106	106	90-110	.05		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 916356 916357

Parameter	Units	92203034009		MS	MSD	MS	MSD	MS	MSD	% Rec	RPD	Qual
		Result	Conc.	Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec	Limits		
Chloride	mg/L	ND	50	50	48.7	48.7	92	92	90-110	.03		
Fluoride	mg/L	0.18	5	5	5.2	5.2	101	101	90-110	.2		
Sulfate	mg/L	ND	50	50	48.2	48.1	92	92	90-110	.2		

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### QUALITY CONTROL DATA

Project: BUCK - REs. WELLS J14060100

Pace Project No.: 92203034

QC Batch: WETA/19124 Analysis Method: SM 3500-Cr D  
 QC Batch Method: SM 3500-Cr D Analysis Description: Chromium, Hexavalent by 3500  
 Associated Lab Samples: 92203034001, 92203034002, 92203034003, 92203034004, 92203034005, 92203034006, 92203034007, 92203034008, 92203034009

METHOD BLANK: 1208266 Matrix: Water  
 Associated Lab Samples: 92203034001, 92203034002, 92203034003, 92203034004, 92203034005, 92203034006, 92203034007, 92203034008, 92203034009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Hexavalent	mg/L	ND	0.010	05/27/14 21:43	

LABORATORY CONTROL SAMPLE: 1208267

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	.25	0.25	98	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1208268 1208269

Parameter	Units	92203034007		MSD		MS		MSD		% Rec Limits	RPD	Qual
		Result	MS Spike Conc.	Spike Conc.	Result	MS Result	MSD Result	% Rec	% Rec			
Chromium, Hexavalent	mg/L	ND	.25	.25	0.23	0.23	92	93	75-125	1		

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### QUALITY CONTROL DATA

Project: BUCK - Res. WELLS J14060100

Pace Project No.: 92203034

QC Batch: WETA/19125 Analysis Method: EPA 353.2  
 QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, Unpres.  
 Associated Lab Samples: 92203034001, 92203034002, 92203034003, 92203034004, 92203034005, 92203034006, 92203034007, 92203034008, 92203034009

METHOD BLANK: 1208371 Matrix: Water  
 Associated Lab Samples: 92203034001, 92203034002, 92203034003, 92203034004, 92203034005, 92203034006, 92203034007, 92203034008, 92203034009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	ND	0.020	05/28/14 18:32	
Nitrogen, Nitrite	mg/L	ND	0.020	05/28/14 18:32	
Nitrogen, NO2 plus NO3	mg/L	ND	0.020	05/28/14 18:32	

LABORATORY CONTROL SAMPLE: 1208372

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	2.5	2.5	100	90-110	
Nitrogen, Nitrite	mg/L	1	1.0	102	90-110	
Nitrogen, NO2 plus NO3	mg/L	2.5	2.5	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1208373 1208374

Parameter	Units	92203034007		MSD		MS		MSD		% Rec Limits	RPD	Qual
		Result	Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec				
Nitrogen, Nitrate	mg/L	6.2	2.5	2.5	8.1	8.1	78	77	90-110	0	M1	
Nitrogen, Nitrite	mg/L	ND	1	1	1.1	1.1	108	108	90-110	0		
Nitrogen, NO2 plus NO3	mg/L	6.2	2.5	2.5	8.1	8.1	78	77	90-110	0	M1	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1208375 1208376

Parameter	Units	92203034008		MSD		MS		MSD		% Rec Limits	RPD	Qual
		Result	Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec				
Nitrogen, Nitrate	mg/L	3.1	2.5	2.5	5.6	5.8	99	107	90-110	4	H1	
Nitrogen, Nitrite	mg/L	ND	1	1	1.0	1.0	103	103	90-110	0	H1	
Nitrogen, NO2 plus NO3	mg/L	3.1	2.5	2.5	5.6	5.8	99	107	90-110	4	H1	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA

Project: BUCK - REs. WELLS J14060100

Pace Project No.: 92203034

QC Batch: WETA/19137

Analysis Method: EPA 365.1

QC Batch Method: EPA 365.1

Analysis Description: 365.1 Phosphorus, Total

Associated Lab Samples: 92203034001, 92203034002, 92203034003, 92203034004, 92203034005, 92203034006, 92203034007, 92203034008, 92203034009

METHOD BLANK: 1209512

Matrix: Water

Associated Lab Samples: 92203034001, 92203034002, 92203034003, 92203034004, 92203034005, 92203034006, 92203034007, 92203034008, 92203034009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Phosphorus	mg/L	ND	0.050	05/30/14 11:23	

LABORATORY CONTROL SAMPLE: 1209513

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phosphorus	mg/L	2.5	2.5	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1209514 1209515

Parameter	Units	92202530001 Result	MS		MSD		MS		MSD		% Rec Limits	RPD	Qual
			Spike Conc.	MS Result	MSD Spike Conc.	MSD Result	% Rec	% Rec					
Phosphorus	mg/L	0.88	2.5	3.5	2.5	3.5	104	103	90-110	1			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1209516 1209517

Parameter	Units	92201466001 Result	MS		MSD		MS		MSD		% Rec Limits	RPD	Qual
			Spike Conc.	MS Result	MSD Spike Conc.	MSD Result	% Rec	% Rec					
Phosphorus	mg/L	14.7	2.5	17.3	2.5	16.5	103	73	90-110	4	M1		

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### REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA

Project: BUCK - REs. WELLS J14060100

Pace Project No.: 92203034

QC Batch: WETA/19131 Analysis Method: SM 5310B  
 QC Batch Method: SM 5310B Analysis Description: 5310B TOC  
 Associated Lab Samples: 92203034001, 92203034002, 92203034003, 92203034004, 92203034005, 92203034006, 92203034007, 92203034008, 92203034009

METHOD BLANK: 1208794 Matrix: Water  
 Associated Lab Samples: 92203034001, 92203034002, 92203034003, 92203034004, 92203034005, 92203034006, 92203034007, 92203034008, 92203034009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Organic Carbon	mg/L	ND	1.0	05/29/14 15:21	

LABORATORY CONTROL SAMPLE: 1208795

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	25	25.5	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1208796 1208797

Parameter	Units	92202496001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Total Organic Carbon	mg/L	4.4	25	25	31.1	30.8	107	106	75-125	1	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1208798 1208799

Parameter	Units	92203034008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Total Organic Carbon	mg/L	1.3	25	25	25.4	25.3	96	96	75-125	1	

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## QUALIFIERS

Project: BUCK - REs. WELLS J14060100

Pace Project No.: 92203034

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### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Acid preservation may not be appropriate for 2-Chloroethylvinyl ether, Styrene, and Vinyl chloride.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### LABORATORIES

PASI-A Pace Analytical Services - Asheville

PASI-C Pace Analytical Services - Charlotte

PASI-O Pace Analytical Services - Ormond Beach

### ANALYTE QUALIFIERS

F5 The recovery of the analyte in the CRDL standard (also known as the reporting limit verification) did not meet the acceptance criteria.

H1 Analysis conducted outside the EPA method holding time.

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

## REPORT OF LABORATORY ANALYSIS

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**QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: BUCK - Res. WELLS J14060100  
Pace Project No.: 92203034

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92203034001	SURFACE WATER 1		FLD/		
92203034002	SURFACE WATER 2		FLD/		
92203034003	RESIDENT WELL 1		FLD/		
92203034004	RESIDENT WELL 2		FLD/		
92203034005	RESIDENT WELL 3		FLD/		
92203034006	RESIDENT WELL 4		FLD/		
92203034007	RESIDENT WELL 5		FLD/		
92203034008	RESIDENT WELL 6		FLD/		
92203034009	RESIDENT WELL 7		FLD/		
92203034001	SURFACE WATER 1	EPA 200.7	MPRP/18738	EPA 200.7	ICP/11567
92203034002	SURFACE WATER 2	EPA 200.7	MPRP/18738	EPA 200.7	ICP/11567
92203034003	RESIDENT WELL 1	EPA 200.7	MPRP/18738	EPA 200.7	ICP/11567
92203034004	RESIDENT WELL 2	EPA 200.7	MPRP/18738	EPA 200.7	ICP/11567
92203034005	RESIDENT WELL 3	EPA 200.7	MPRP/18738	EPA 200.7	ICP/11567
92203034006	RESIDENT WELL 4	EPA 200.7	MPRP/18738	EPA 200.7	ICP/11567
92203034007	RESIDENT WELL 5	EPA 200.7	MPRP/18738	EPA 200.7	ICP/11567
92203034008	RESIDENT WELL 6	EPA 200.7	MPRP/18738	EPA 200.7	ICP/11567
92203034009	RESIDENT WELL 7	EPA 200.7	MPRP/18738	EPA 200.7	ICP/11567
92203034001	SURFACE WATER 1	EPA 200.7	MPRP/18740	EPA 200.7	ICP/11570
92203034002	SURFACE WATER 2	EPA 200.7	MPRP/18740	EPA 200.7	ICP/11570
92203034003	RESIDENT WELL 1	EPA 200.7	MPRP/18740	EPA 200.7	ICP/11570
92203034004	RESIDENT WELL 2	EPA 200.7	MPRP/18740	EPA 200.7	ICP/11570
92203034005	RESIDENT WELL 3	EPA 200.7	MPRP/18740	EPA 200.7	ICP/11570
92203034006	RESIDENT WELL 4	EPA 200.7	MPRP/18740	EPA 200.7	ICP/11570
92203034007	RESIDENT WELL 5	EPA 200.7	MPRP/18740	EPA 200.7	ICP/11570
92203034008	RESIDENT WELL 6	EPA 200.7	MPRP/18740	EPA 200.7	ICP/11570
92203034009	RESIDENT WELL 7	EPA 200.7	MPRP/18740	EPA 200.7	ICP/11570
92203034001	SURFACE WATER 1	EPA 200.8	MPRP/18739	EPA 200.8	ICPM/7577
92203034002	SURFACE WATER 2	EPA 200.8	MPRP/18739	EPA 200.8	ICPM/7577
92203034003	RESIDENT WELL 1	EPA 200.8	MPRP/18739	EPA 200.8	ICPM/7577
92203034004	RESIDENT WELL 2	EPA 200.8	MPRP/18739	EPA 200.8	ICPM/7577
92203034005	RESIDENT WELL 3	EPA 200.8	MPRP/18739	EPA 200.8	ICPM/7577
92203034006	RESIDENT WELL 4	EPA 200.8	MPRP/18739	EPA 200.8	ICPM/7577
92203034007	RESIDENT WELL 5	EPA 200.8	MPRP/18739	EPA 200.8	ICPM/7577
92203034008	RESIDENT WELL 6	EPA 200.8	MPRP/18739	EPA 200.8	ICPM/7577
92203034009	RESIDENT WELL 7	EPA 200.8	MPRP/18739	EPA 200.8	ICPM/7577
92203034001	SURFACE WATER 1	EPA 200.8	MPRP/18741	EPA 200.8	ICPM/7576
92203034002	SURFACE WATER 2	EPA 200.8	MPRP/18741	EPA 200.8	ICPM/7576
92203034003	RESIDENT WELL 1	EPA 200.8	MPRP/18741	EPA 200.8	ICPM/7576
92203034004	RESIDENT WELL 2	EPA 200.8	MPRP/18741	EPA 200.8	ICPM/7576
92203034005	RESIDENT WELL 3	EPA 200.8	MPRP/18741	EPA 200.8	ICPM/7576
92203034006	RESIDENT WELL 4	EPA 200.8	MPRP/18741	EPA 200.8	ICPM/7576
92203034007	RESIDENT WELL 5	EPA 200.8	MPRP/18741	EPA 200.8	ICPM/7576
92203034008	RESIDENT WELL 6	EPA 200.8	MPRP/18741	EPA 200.8	ICPM/7576
92203034009	RESIDENT WELL 7	EPA 200.8	MPRP/18741	EPA 200.8	ICPM/7576
92203034001	SURFACE WATER 1	EPA 245.1	MERP/4682	EPA 245.1	MERC/4679

**REPORT OF LABORATORY ANALYSIS**

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: BUCK - Res. WELLS J14060100

Pace Project No.: 92203034

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92203034002	SURFACE WATER 2	EPA 245.1	MERP/4682	EPA 245.1	MERC/4679
92203034003	RESIDENT WELL 1	EPA 245.1	MERP/4682	EPA 245.1	MERC/4679
92203034004	RESIDENT WELL 2	EPA 245.1	MERP/4682	EPA 245.1	MERC/4679
92203034005	RESIDENT WELL 3	EPA 245.1	MERP/4682	EPA 245.1	MERC/4679
92203034006	RESIDENT WELL 4	EPA 245.1	MERP/4682	EPA 245.1	MERC/4679
92203034007	RESIDENT WELL 5	EPA 245.1	MERP/4682	EPA 245.1	MERC/4679
92203034008	RESIDENT WELL 6	EPA 245.1	MERP/4682	EPA 245.1	MERC/4679
92203034009	RESIDENT WELL 7	EPA 245.1	MERP/4682	EPA 245.1	MERC/4679
92203034001	SURFACE WATER 1	EPA 245.1	MERP/4683	EPA 245.1	MERC/4677
92203034002	SURFACE WATER 2	EPA 245.1	MERP/4683	EPA 245.1	MERC/4677
92203034003	RESIDENT WELL 1	EPA 245.1	MERP/4683	EPA 245.1	MERC/4677
92203034004	RESIDENT WELL 2	EPA 245.1	MERP/4683	EPA 245.1	MERC/4677
92203034005	RESIDENT WELL 3	EPA 245.1	MERP/4683	EPA 245.1	MERC/4677
92203034006	RESIDENT WELL 4	EPA 245.1	MERP/4683	EPA 245.1	MERC/4677
92203034007	RESIDENT WELL 5	EPA 245.1	MERP/4683	EPA 245.1	MERC/4677
92203034008	RESIDENT WELL 6	EPA 245.1	MERP/4683	EPA 245.1	MERC/4677
92203034009	RESIDENT WELL 7	EPA 245.1	MERP/4683	EPA 245.1	MERC/4677
92203034001	SURFACE WATER 1	SM 2320B	WET/31255		
92203034002	SURFACE WATER 2	SM 2320B	WET/31255		
92203034003	RESIDENT WELL 1	SM 2320B	WET/31255		
92203034004	RESIDENT WELL 2	SM 2320B	WET/31255		
92203034005	RESIDENT WELL 3	SM 2320B	WET/31255		
92203034006	RESIDENT WELL 4	SM 2320B	WET/31255		
92203034007	RESIDENT WELL 5	SM 2320B	WET/31255		
92203034008	RESIDENT WELL 6	SM 2320B	WET/31255		
92203034009	RESIDENT WELL 7	SM 2320B	WET/31255		
92203034001	SURFACE WATER 1	SM 2540C	WET/31242		
92203034002	SURFACE WATER 2	SM 2540C	WET/31242		
92203034003	RESIDENT WELL 1	SM 2540C	WET/31242		
92203034004	RESIDENT WELL 2	SM 2540C	WET/31242		
92203034005	RESIDENT WELL 3	SM 2540C	WET/31242		
92203034006	RESIDENT WELL 4	SM 2540C	WET/31242		
92203034007	RESIDENT WELL 5	SM 2540C	WET/31242		
92203034008	RESIDENT WELL 6	SM 2540C	WET/31242		
92203034009	RESIDENT WELL 7	SM 2540C	WET/31242		
92203034001	SURFACE WATER 1	EPA 300.0	WETA/36325		
92203034002	SURFACE WATER 2	EPA 300.0	WETA/36325		
92203034003	RESIDENT WELL 1	EPA 300.0	WETA/36325		
92203034004	RESIDENT WELL 2	EPA 300.0	WETA/36325		
92203034005	RESIDENT WELL 3	EPA 300.0	WETA/36325		
92203034006	RESIDENT WELL 4	EPA 300.0	WETA/36325		
92203034007	RESIDENT WELL 5	EPA 300.0	WETA/36325		
92203034008	RESIDENT WELL 6	EPA 300.0	WETA/36325		
92203034009	RESIDENT WELL 7	EPA 300.0	WETA/36325		
92203034001	SURFACE WATER 1	SM 3500-Cr D	WETA/19124		
92203034002	SURFACE WATER 2	SM 3500-Cr D	WETA/19124		

### REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: BUCK - RES. WELLS J14060100  
Pace Project No.: 92203034

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92203034003	RESIDENT WELL 1	SM 3500-Cr D	WETA/19124		
92203034004	RESIDENT WELL 2	SM 3500-Cr D	WETA/19124		
92203034005	RESIDENT WELL 3	SM 3500-Cr D	WETA/19124		
92203034006	RESIDENT WELL 4	SM 3500-Cr D	WETA/19124		
92203034007	RESIDENT WELL 5	SM 3500-Cr D	WETA/19124		
92203034008	RESIDENT WELL 6	SM 3500-Cr D	WETA/19124		
92203034009	RESIDENT WELL 7	SM 3500-Cr D	WETA/19124		
92203034001	SURFACE WATER 1	EPA 353.2	WETA/19125		
92203034002	SURFACE WATER 2	EPA 353.2	WETA/19125		
92203034003	RESIDENT WELL 1	EPA 353.2	WETA/19125		
92203034004	RESIDENT WELL 2	EPA 353.2	WETA/19125		
92203034005	RESIDENT WELL 3	EPA 353.2	WETA/19125		
92203034006	RESIDENT WELL 4	EPA 353.2	WETA/19125		
92203034007	RESIDENT WELL 5	EPA 353.2	WETA/19125		
92203034008	RESIDENT WELL 6	EPA 353.2	WETA/19125		
92203034009	RESIDENT WELL 7	EPA 353.2	WETA/19125		
92203034001	SURFACE WATER 1	EPA 365.1	WETA/19137		
92203034002	SURFACE WATER 2	EPA 365.1	WETA/19137		
92203034003	RESIDENT WELL 1	EPA 365.1	WETA/19137		
92203034004	RESIDENT WELL 2	EPA 365.1	WETA/19137		
92203034005	RESIDENT WELL 3	EPA 365.1	WETA/19137		
92203034006	RESIDENT WELL 4	EPA 365.1	WETA/19137		
92203034007	RESIDENT WELL 5	EPA 365.1	WETA/19137		
92203034008	RESIDENT WELL 6	EPA 365.1	WETA/19137		
92203034009	RESIDENT WELL 7	EPA 365.1	WETA/19137		
92203034001	SURFACE WATER 1	SM 5310B	WETA/19131		
92203034002	SURFACE WATER 2	SM 5310B	WETA/19131		
92203034003	RESIDENT WELL 1	SM 5310B	WETA/19131		
92203034004	RESIDENT WELL 2	SM 5310B	WETA/19131		
92203034005	RESIDENT WELL 3	SM 5310B	WETA/19131		
92203034006	RESIDENT WELL 4	SM 5310B	WETA/19131		
92203034007	RESIDENT WELL 5	SM 5310B	WETA/19131		
92203034008	RESIDENT WELL 6	SM 5310B	WETA/19131		
92203034009	RESIDENT WELL 7	SM 5310B	WETA/19131		

### REPORT OF LABORATORY ANALYSIS

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Sample Condition Upon Receipt (SCUR)

Document Number:  
F-CHR-CS-003-rev.14

Issuing Authority:  
Pace Huntersville Quality Office

Client Name: Duke Energy

Courier:  Fed Ex  UPS  USPS  Client  Commercial  Pace Other \_\_\_\_\_

Custody Seal on Cooler/Box Present:  yes  no    Seals intact:  yes  no

Packing Material:  Bubble Wrap  Bubble Bags  None  Other \_\_\_\_\_

Thermometer Used: IR Gun T1102 **(T1401)**    Type of Ice: **(Wet)** Blue None     Samples on ice, cooling process has begun

Temp Correction Factor    T1102: No Correction    T1301: No Correction

Corrected Cooler Temp.: 1.7 °C  
Temp should be above freezing to 6°C

Biological Tissue is Frozen: Yes No **(N/A)**

Date and Initials of person examining contents: 05/28/14

Comments:

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix:		
All containers needing preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Samples checked for dechlorination:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	14.
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	15.
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution:

Field Data Required?    Y / N

Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Comments/ Resolution: \_\_\_\_\_

SCURF Review:	<u>ICAH</u>	Date:	<u>5/28/14</u>
SRF Review:	<u>ICAH</u>	Date:	<u>5/29/14</u>

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office ( i.e out of hold, incorrect preservative, out of temp, incorrect containers)

**WO#: 92203034**

92203034

