

"Safety as a Value"

July 25, 2017

State of Colorado Division of Reclamation, Mining & Safety 1313 Sherman Street, Room 215 Denver, Colorado 80203-2273

Attn: Rob Zuber

Re: Field Well Water Analysis; King I & King II 2nd Quarter 2017

Mr. Zuber:

Please find enclosed a copy of quarterly water analysis reports for the 2nd quarter of 2017 for the following water monitoring locations:

- Wiltse Well
- #1 Up-gradient Monitoring Well
- #2 Down-gradient Monitoring Well
- Hay Gulch Irrigation Ditch, Down-gradient
- Hay Gulch Irrigation Ditch, Up-gradient
- MW-1-MI, MW-1-A, MW-1-C
- MW-3-MI, MW-3-A, MW-3-C
- MW-4-MI, MW-4-A, MW-4-C
- MW-HGA-4

Please call Tom Bird at (970) 385-4528 x 6503 if you have any questions or comments.

Sincerely

Tom Bird Manager, Coal Services GCC Energy, LLC



75 Suttle Street Durango, CO 81303 970.247.4220 Phone 970.247.4227 Fax www.greenanalytical.com

19 July 2017

Tom Bird GCC Energy, LLC 6473 CR 120 Hesperus, CO 81326 RE: GCC GW & SW Baseline

Enclosed are the results of analyses for samples received by the laboratory on 06/28/17 16:34. If you need any further assistance, please feel free to contact me.

Sincerely,

Dellie Zufett

Debbie Zufelt Reports Manager

All accredited analytes contained in this report are denoted by an asterisk (\*). For a complete list of accredited analytes please do not hesitate to contact us via any of the contact information contained in this report. All of our certifications can be viewed at http://greenanalytical.com/certifications/

Green Analytical Laboratories is NELAP accredited through the Texas Commission on Environmental Quality. Accreditation applies to drinking water and non-potable water matrices for trace metals and a variety of inorganic parameters. Green Analytical Laboratories is also accredited through the Colorado Department of Public Health and Environment and EPA region 8 for trace metals, Cyanide, Fluoride, Nitrate, and Nitrite in drinking water.

Our affiliate laboratory, Cardinal Laboratories, is also NELAP accredited through the Texas Commission on Environmental Quality for a variety of organic constituents in drinking water, non-potable water and solid matrices. Cardinal is also accredited for regulated VOCs, TTHM, and HAA-5 in drinking water through the Colorado Department of Public Health and Environment and EPA region 8.



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GCC Energy, LLC	Project: GCC GW &	& SW Baseline
6473 CR 120	Project Name / Number: [none]	Reported:
Hesperus CO, 81326	Project Manager: Tom Bird	07/19/17 15:10

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Well #1 Upgradient	1706292-01	Water	06/28/17 13:40	06/28/17 16:34
Hay Gulch Ditch Downgradient	1706292-02	Water	06/28/17 11:45	06/28/17 16:34
Hay Gulch Ditch Upgradient	1706292-03	Water	06/28/17 14:05	06/28/17 16:34

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Debbie Zufelt, Reports Manager

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GCC Energy, LLC	Project: GCC GW & SW Baseline	
6473 CR 120	Project Name / Number: [none]	Reported:
Hesperus CO, 81326	Project Manager: Tom Bird	07/19/17 15:10

Oil and Grease (HEM) analysis via 1664 had low recoveries for LCS and LCS duplicate for this batch. Because the method is destructive to the sample, re-analysis is not possible. Typically initial QC is checked before any samples are processed to ensure sample is not analyzed until all QC criteria have been met. Due to a laboratory error, these samples were processed before verifying all QC checks and the data has the possibility of being low biased.

Several clients had routine projects in this batch and all sample results were typical based on historical data.

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GCC Energy, LLC Project: GCC GW & S	SW Baseline
6473 CR 120 Project Name / Number: [none]	Reported:
Hesperus CO, 81326 Project Manager: Tom Bird	07/19/17 15:10

## Well #1 Upgradient

1706292-01 (Water)										
Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst	
General Chemistry										
Alkalinity, Bicarbonate as CaCO3*	585	10.0		mg/L	5	07/07/17	2320 B		JLM	
Alkalinity, Carbonate as CaCO3*	<10.0	10.0		mg/L	5	07/07/17	2320 B		JLM	
Alkalinity, Hydroxide as CaCO3*	<10.0	10.0		mg/L	5	07/07/17	2320 B		JLM	
Alkalinity, Total as CaCO3*	585	10.0		mg/L	5	07/07/17	2320 B		JLM	
Chloride*	4.32	1.00	0.143	mg/L	1	07/11/17	EPA300.0		JDA	
Fluoride*	0.362	0.100	0.0160	mg/L	1	07/11/17	EPA300.0		JDA	
Nitrate/Nitrite as N*	< 0.400	0.400	0.219	mg/L	20	07/12/17	EPA353.2		LLG	
pH*	7.74			pH Units	1	06/29/17	EPA150.1		CMS	
Total Dissolved Solids*	725	10.0		mg/L	1	07/03/17	EPA160.1		LLG	
Sulfate*	97.4	5.00	0.782	mg/L	5	07/12/17	EPA300.0		JDA	
Total Organic Carbon	5.82	0.500	0.201	mg/L	1	07/05/17	5310C		JDA	
Dissolved Metals by ICP										
Aluminum*	< 0.050	0.050	0.020	mg/L	1	07/07/17	EPA200.7		JDA	
Calcium*	54.0	0.100	0.036	mg/L	1	07/07/17	EPA200.7		JDA	
Hardness as CaCO3	277	0.662	0.195	mg/L	1	07/07/17	2340 B		JDA	
Iron*	1.34	0.050	0.014	mg/L	1	07/07/17	EPA200.7		JDA	
Magnesium*	34.6	0.100	0.026	mg/L	1	07/07/17	EPA200.7		JDA	
Potassium*	3.00	1.00	0.094	mg/L	1	07/07/17	EPA200.7		JDA	
Silica (Si02)	14.9	1.07	0.298	mg/L	1	07/07/17	Calculation		JDA	
Silicon	6.94	0.500	0.139	mg/L	1	07/07/17	EPA200.7		JDA	
Sodium*	189	1.00	0.087	mg/L	1	07/07/17	EPA200.7		JDA	
Dissolved Metals by ICPMS										
Arsenic*	< 0.0005	0.0005	0.00008	mg/L	1	07/14/17	EPA200.8		JDA	
Cadmium*	< 0.0001	0.0001	0.00009	mg/L	1	07/14/17	EPA200.8		JDA	
Copper*	0.0020	0.0001	0.00003	mg/L	1	07/14/17	EPA200.8		JDA	
Lead*	< 0.0005	0.0005	0.00002	mg/L	1	07/14/17	EPA200.8		JDA	
Manganese*	0.315	0.0005	0.0003	mg/L	1	07/14/17	EPA200.8		JDA	
Molybdenum*	< 0.0005	0.0005	0.00006	mg/L	1	07/14/17	EPA200.8		JDA	
Selenium*	< 0.0010	0.0010	0.0002	mg/L	1	07/14/17	EPA200.8		JDA	
Uranium	0.0001	0.0001	0.00001	mg/L	1	07/14/17	EPA200.8		JDA	
Zinc*	< 0.0020	0.0020	0.0009	mg/L	1	07/14/17	EPA200.8		JDA	

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Debbie Zufelt, Reports Manager



Laboratories							www.Gre	enAnalytica	ıl.com	
GCC Energy, LLC			Project: GCC	GW & SW	Baseline					
6473 CR 120	Proj	ect Name / N	umber: [none	e]				Reported:		
Hesperus CO, 81326		Project M	lanager: Tom	Bird				07/19/17 15:10		
			ll #1 Upgra )6292-01 (W							
Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst	
Dissolved Mercury by CVAA										
Aercury*	< 0.0002	0.0002	0.00009	mg/L	1	07/17/17	EPA245.1		LLG	
Cation/Anion Balance	.17									

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GCC Energy, LLC	Project: GCC GW & SW Baseline	
6473 CR 120	Project Name / Number: [none]	Reported:
Hesperus CO, 81326	Project Manager: Tom Bird	07/19/17 15:10

## Hay Gulch Ditch Downgradient

1706292-02 (Water)										
Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst	
General Chemistry										
Alkalinity, Bicarbonate as CaCO3*	47.0	10.0		mg/L	1	07/07/17	2320 B		JLM	
Alkalinity, Carbonate as CaCO3*	<10.0	10.0		mg/L	1	07/07/17	2320 B		JLM	
Alkalinity, Hydroxide as CaCO3*	<10.0	10.0		mg/L	1	07/07/17	2320 B		JLM	
Alkalinity, Total as CaCO3*	47.0	10.0		mg/L	1	07/07/17	2320 B		JLM	
Chloride*	<1.00	1.00	0.143	mg/L	1	07/11/17	EPA300.0		JDA	
Fluoride*	0.290	0.100	0.0160	mg/L	1	07/11/17	EPA300.0		JDA	
Nitrate/Nitrite as N*	< 0.020	0.020	0.011	mg/L	1	07/12/17	EPA353.2		LLG	
Oil & Grease (HEM)	< 5.00	5.00	0.763	mg/L	1	07/18/17	EPA1664 A	BS2	CMS	
pH*	7.98			pH Units	1	06/29/17	EPA150.1		CMS	
SAR	0.08			No Unit	1	07/13/17	Calculation		JDA	
Total Dissolved Solids*	65.0	10.0		mg/L	1	07/03/17	EPA160.1		LLG	
Total Suspended Solids*	3.00	2.00		mg/L	1	07/03/17	EPA160.2		LLG	
Sulfate*	11.3	1.00	0.156	mg/L	1	07/11/17	EPA300.0		JDA	
Total Organic Carbon	2.16	0.500	0.201	mg/L	1	07/05/17	5310C		JDA	
Dissolved Metals by ICP										
Aluminum*	< 0.050	0.050	0.020	mg/L	1	07/07/17	EPA200.7		JDA	
Calcium*	19.0	0.100	0.036	mg/L	1	07/07/17	EPA200.7		JDA	
Hardness as CaCO3	59.1	0.662	0.195	mg/L	1	07/07/17	2340 B		JDA	
Iron*	< 0.050	0.050	0.014	mg/L	1	07/07/17	EPA200.7		JDA	
Magnesium*	2.86	0.100	0.026	mg/L	1	07/07/17	EPA200.7		JDA	
Potassium*	<1.00	1.00	0.094	mg/L	1	07/07/17	EPA200.7		JDA	
Silica (Si02)	6.80	1.07	0.298	mg/L	1	07/07/17	Calculation		JDA	
Silicon	3.18	0.500	0.139	mg/L	1	07/07/17	EPA200.7		JDA	
Sodium*	1.49	1.00	0.087	mg/L	1	07/07/17	EPA200.7		JDA	

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GCC Energy, LLC	Project: GCC GW & SW Baseline	
6473 CR 120	Project Name / Number: [none]	Reported:
Hesperus CO, 81326	Project Manager: Tom Bird	07/19/17 15:10

## Hay Gulch Ditch Downgradient

1706292-02 (Water)										
Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst	
Dissolved Metals by ICPMS										
Arsenic*	0.0005	0.0005	0.00008	mg/L	1	07/14/17	EPA200.8		JDA	
Cadmium*	< 0.0001	0.0001	0.00009	mg/L	1	07/14/17	EPA200.8		JDA	
Copper*	0.0020	0.0001	0.00003	mg/L	1	07/14/17	EPA200.8		JDA	
Lead*	< 0.0005	0.0005	0.00002	mg/L	1	07/14/17	EPA200.8		JDA	
Manganese*	0.0009	0.0005	0.0003	mg/L	1	07/14/17	EPA200.8		JDA	
Molybdenum*	0.0009	0.0005	0.00006	mg/L	1	07/14/17	EPA200.8		JDA	
Selenium*	< 0.0010	0.0010	0.0002	mg/L	1	07/14/17	EPA200.8		JDA	
Uranium	0.0001	0.0001	0.00001	mg/L	1	07/14/17	EPA200.8		JDA	
Zinc*	< 0.0020	0.0020	0.0009	mg/L	1	07/14/17	EPA200.8		JDA	
Total Mercury by CVAA										
Mercury*	< 0.0002	0.0002	0.00005	mg/L	1	07/17/17	EPA245.1		LLG	
Cation/Anion Balance	1.67									

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GCC Energy, LLC	Project: GCC GW & SW Baseline	
OCC Ellergy, LLC	Floject. Occ Ow & Sw Baseline	
6473 CR 120	Project Name / Number: [none]	Reported:
Hesperus CO, 81326	Project Manager: Tom Bird	07/19/17 15:10

## Hay Gulch Ditch Upgradient

1706292-03 (Water)									
Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
General Chemistry									
Alkalinity, Bicarbonate as CaCO3*	55.0	10.0		mg/L	1	07/07/17	2320 B		JLM
Alkalinity, Carbonate as CaCO3*	<10.0	10.0		mg/L	1	07/07/17	2320 B		JLM
Alkalinity, Hydroxide as CaCO3*	<10.0	10.0		mg/L	1	07/07/17	2320 B		JLM
Alkalinity, Total as CaCO3*	55.0	10.0		mg/L	1	07/07/17	2320 B		JLM
Chloride*	1.76	1.00	0.143	mg/L	1	07/11/17	EPA300.0		JDA
Fluoride*	0.195	0.100	0.0160	mg/L	1	07/11/17	EPA300.0		JDA
Nitrate/Nitrite as N*	< 0.020	0.020	0.011	mg/L	1	07/12/17	EPA353.2		LLG
Oil & Grease (HEM)	< 5.00	5.00	0.763	mg/L	1	07/18/17	EPA1664 A	BS2	CMS
pH*	8.06			pH Units	1	06/29/17	EPA150.1		CMS
SAR	0.10			No Unit	1	07/13/17	Calculation		JDA
Total Dissolved Solids*	65.0	10.0		mg/L	1	07/03/17	EPA160.1		LLG
Total Suspended Solids*	63.5	2.00		mg/L	1	07/03/17	EPA160.2		LLG
Sulfate*	15.0	1.00	0.156	mg/L	1	07/11/17	EPA300.0		JDA
Total Organic Carbon	1.15	0.500	0.201	mg/L	1	07/05/17	5310C		JDA
Dissolved Metals by ICP									
Aluminum*	< 0.050	0.050	0.020	mg/L	1	07/07/17	EPA200.7		JDA
Calcium*	20.8	0.100	0.036	mg/L	1	07/07/17	EPA200.7		JDA
Hardness as CaCO3	69.2	0.662	0.195	mg/L	1	07/07/17	2340 B		JDA
Iron*	< 0.050	0.050	0.014	mg/L	1	07/07/17	EPA200.7		JDA
Magnesium*	4.21	0.100	0.026	mg/L	1	07/07/17	EPA200.7		JDA
Potassium*	<1.00	1.00	0.094	mg/L	1	07/07/17	EPA200.7		JDA
Silica (Si02)	7.71	1.07	0.298	mg/L	1	07/07/17	Calculation		JDA
Silicon	3.60	0.500	0.139	mg/L	1	07/07/17	EPA200.7		JDA
Sodium*	1.97	1.00	0.087	mg/L	1	07/07/17	EPA200.7		JDA

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Debbie Zufelt, Reports Manager

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GCC Energy, LLC	Project: GCC GW & SW Baseline	
6473 CR 120	Project Name / Number: [none]	Reported:
Hesperus CO, 81326	Project Manager: Tom Bird	07/19/17 15:10

## Hay Gulch Ditch Upgradient

		170	)6292-03 (W	ater)					
Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
Dissolved Metals by ICPMS									
Arsenic*	< 0.0005	0.0005	0.00008	mg/L	1	07/14/17	EPA200.8		JDA
Cadmium*	< 0.0001	0.0001	0.00009	mg/L	1	07/14/17	EPA200.8		JDA
Copper*	0.0013	0.0001	0.00003	mg/L	1	07/14/17	EPA200.8		JDA
Lead*	< 0.0005	0.0005	0.00002	mg/L	1	07/14/17	EPA200.8		JDA
Manganese*	0.0024	0.0005	0.0003	mg/L	1	07/14/17	EPA200.8		JDA
Molybdenum*	0.0009	0.0005	0.00006	mg/L	1	07/14/17	EPA200.8		JDA
Selenium*	< 0.0010	0.0010	0.0002	mg/L	1	07/14/17	EPA200.8		JDA
Uranium	0.0001	0.0001	0.00001	mg/L	1	07/14/17	EPA200.8		JDA
Zinc*	< 0.0020	0.0020	0.0009	mg/L	1	07/14/17	EPA200.8		JDA
Total Mercury by CVAA									
Mercury*	< 0.0002	0.0002	0.00005	mg/L	1	07/17/17	EPA245.1		LLG
Cation/Anion Balance	.3								

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GCC Energy, LLC	Project: GCC GW & SW Baseline	
6473 CR 120	Project Name / Number: [none]	Reported:
Hesperus CO, 81326	Project Manager: Tom Bird	07/19/17 15:10

# **General Chemistry - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
-	Result	Limit	Units	Level	Result	/0REC	Limits	KrD	Liinit	notes
Batch B706264 - General Prep - Wet Chem										
Duplicate (B706264-DUP2)		rce: 1706298-		ared & Ana	lyzed: 06/29	9/17			• •	
pH	7.74		pH Units		7.73			0.129	20	
Reference (B706264-SRM1)			Prep	ared & Ana	lyzed: 06/29	9/17				
pH	9.02		pH Units	9.08		99.3	97.8-102.2			
Batch B707006 - General Prep - Wet Chem										
Blank (B707006-BLK1)			Prep	ared & Ana	lyzed: 07/03	3/17				
Total Suspended Solids	ND	2.00	mg/L							
Duplicate (B707006-DUP1)	Sou	rce: 1706241-	01 Prep	ared & Ana	lyzed: 07/03	3/17				
Total Suspended Solids	1.00	2.00	mg/L		0.500			66.7	20	R
Deference (D707006 SDM1)			Drom	arad & Ana	lyzed: 07/03	2/17				
Reference (B707006-SRM1) Total Suspended Solids	94.0	2.00	mg/L	100	lyzed. 07/03	94.0	85-115			
•	51.0	2.00	mg/L	100		91.0	05 115			
Batch B707008 - General Prep - Wet Chem										
Blank (B707008-BLK1)			Prep	ared & Ana	lyzed: 07/03	3/17				
Total Dissolved Solids	ND	10.0	mg/L							
Duplicate (B707008-DUP1)	Sou	rce: 1706276-	01 Prep	ared & Ana	lyzed: 07/03	3/17				
Total Dissolved Solids	295	10.0	mg/L		320			8.13	20	
Reference (B707008-SRM1)			Prep	ared & Ana	lyzed: 07/03	3/17				
Total Dissolved Solids	535	10.0	mg/L	550	2	97.3	85-115			
Batch B707018 - General Prep - Wet Chem										
Blank (B707018-BLK1)			Pren	ared & Ana	lyzed: 07/05	5/17				
Total Organic Carbon	ND	0.500	mg/L		<u>1720a</u> . 0770.	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
L CS (D707019 DS1)			Dran	arad & Ana	lyzed: 07/05	5/17				
LCS (B707018-BS1) Total Organic Carbon	10.1	0.500	mg/L	10.0	iyzeu. 07/0.	101	85-115			
-			-							
LCS Dup (B707018-BSD1)	10.0	0.500		ared & Ana 10.0	lyzed: 07/05	5/17 100	85-115	0.995	20	
Total Organic Carbon	10.0	0.500	mg/L	10.0		100	85-115	0.995	20	
Batch B707049 - General Prep - Wet Chem										
Blank (B707049-BLK1)				ared & Ana	lyzed: 07/07	7/17				
Alkalinity, Total as CaCO3	ND	10.0	mg/L							
LCS (B707049-BS1)			Prep	ared & Ana	lyzed: 07/07	7/17				
Alkalinity, Total as CaCO3	103	10.0	mg/L	100		103	85-115			
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Delelie Zufett			amou	nt paid by clie whatsoever,	ent for analyse	s. All claim	for any claim ar s, including thos nless made in wr service.	se for neglige	ence and any ot	

Debbie Zufelt, Reports Manager



Laboratories								www.Gre	enAnalytica	ll.com
GCC Energy, LLC		P	roject: GCC	C GW & SV	V Baseline					
6473 CR 120	Pro	ject Name / Nu	mber: [nor	ne]					Report	ed:
Hesperus CO, 81326		Project Ma	nager: Tom	n Bird					07/19/17	15:10
	G	eneral Cher	nistry - ( (Continu	-	ontrol					
		Reporting	Continu	Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch B707049 - General Prep - Wet Cl	hem (Continued)	)								
LCS Dup (B707049-BSD1)			Prepa	ared & Ana	lyzed: 07/07	7/17				
Alkalinity, Total as CaCO3	104	10.0	mg/L	100		104	85-115	0.966	20	
Batch B707051 - General Prep - Wet Cl	hem									
Blank (B707051-BLK1)			Prep	ared: 07/07/	/17 Analyze	ed: 07/18/1	7			
Oil & Grease (HEM)	ND	5.00	mg/L							
LCS (B707051-BS1)			Prepa	ared: 07/07/	/17 Analyze	ed: 07/18/1	7			
Oil & Grease (HEM)	19.3	5.00	mg/L	40.0		48.3	85-115			BS
LCS Dup (B707051-BSD1)			Prepa	ared: 07/07/	/17 Analyze	ed: 07/18/1	7			
Oil & Grease (HEM)	29.3	5.00	mg/L	40.0		73.3	85-115	41.2	20	BS
Batch B707074 - General Prep - Wet Cl	hem									
Blank (B707074-BLK1)			Prepa	ared: 07/10/	/17 Analyze	ed: 07/11/1	7			
Chloride	ND	1.00	mg/L							
Fluoride	ND	0.100	mg/L							
Sulfate	ND	1.00	mg/L							
LCS (B707074-BS1)			Prepa	ared: 07/10/	/17 Analyze	ed: 07/11/1	7			
Chloride	23.7	1.00	mg/L	25.0		94.7	90-110			
Fluoride	2.47	0.100	mg/L	2.50		99.0	90-110			
Sulfate	23.5	1.00	mg/L	25.0		94.1	90-110			
LCS Dup (B707074-BSD1)			Prepa	ared: 07/10/	/17 Analyze	ed: 07/11/1	7			
Chloride	24.1	1.00	mg/L	25.0		96.3	90-110	1.65	20	
Fluoride	2.51	0.100	mg/L	2.50		101	90-110	1.60	20	
Sulfate	23.9	1.00	mg/L	25.0		95.7	90-110	1.69	20	
Batch B707091 - General Prep - Wet Cl	hem									
Blank (B707091-BLK1)			Prep	ared & Ana	lyzed: 07/12	2/17				
Nitrate/Nitrite as N	ND	0.020	mg/L							
LCS (B707091-BS1)			Prep	ared & Ana	lyzed: 07/12	2/17				
Nitrate/Nitrite as N	0.980	0.020	mg/L	1.00		98.0	90-110			
LCS Dup (B707091-BSD1)			Prepa	ared & Ana	lyzed: 07/12	2/17				
Nitrate/Nitrite as N	0.982	0.020	mg/L	1.00		98.2	90-110	0.234	20	

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Debbie Zufelt, Reports Manager



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GCC Energy, LLC	Project: GCC GW & SW Baseline	
6473 CR 120	Project Name / Number: [none]	Reported:
Hesperus CO, 81326	Project Manager: Tom Bird	07/19/17 15:10

#### **Dissolved Metals by ICP - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes		
Batch B707011 - Diss. 200.7/200.8												
Blank (B707011-BLK1)			Prep	ared: 07/03/	17 Analyze	ed: 07/07/17	7					
Aluminum	ND	0.050	mg/L									
Calcium	ND	0.100	mg/L									
Iron	ND	0.050	mg/L									
Magnesium	ND	0.100	mg/L									
Potassium	ND	1.00	mg/L									
Silicon	ND	0.500	mg/L									
Sodium	ND	1.00	mg/L									
LCS (B707011-BS1)	Prepared: 07/03/17 Analyzed: 07/07/17											
Aluminum	4.86	0.050	mg/L	5.00		97.2	85-115					
Calcium	4.84	0.100	mg/L	5.00		96.9	85-115					
Iron	4.86	0.050	mg/L	5.00		97.2	85-115					
Magnesium	24.6	0.100	mg/L	25.0		98.5	85-115					
Potassium	9.62	1.00	mg/L	10.0		96.2	85-115					
Silicon	4.62	0.500	mg/L	5.00		92.3	85-115					
Sodium	7.88	1.00	mg/L	8.10		97.3	85-115					
LCS Dup (B707011-BSD1)			Prep	ared: 07/03/	17 Analyze	ed: 07/07/17	7					
Aluminum	4.86	0.050	mg/L	5.00		97.2	85-115	0.0932	20			
Calcium	4.84	0.100	mg/L	5.00		96.7	85-115	0.146	20			
Iron	4.86	0.050	mg/L	5.00		97.2	85-115	0.0387	20			
Magnesium	24.6	0.100	mg/L	25.0		98.3	85-115	0.198	20			
Potassium	9.62	1.00	mg/L	10.0		96.2	85-115	0.0271	20			
Silicon	4.60	0.500	mg/L	5.00		92.0	85-115	0.326	20			
Sodium	7.85	1.00	mg/L	8.10		97.0	85-115	0.359	20			

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	Drainat: CCC CW & SW Daralina	
GCC Energy, LLC	Project: GCC GW & SW Baseline	
6473 CR 120	Project Name / Number: [none]	Reported:
Hesperus CO, 81326	Project Manager: Tom Bird	07/19/17 15:10

### **Dissolved Metals by ICPMS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B707085 - Diss. 200.7/200.8										
Blank (B707085-BLK1)			Prep	oared: 07/12/	17 Analyze	ed: 07/13/1	7			
Arsenic	ND	0.0005	mg/L							
Cadmium	ND	0.0001	mg/L							
Copper	ND	0.0001	mg/L							
Lead	ND	0.0005	mg/L							
Manganese	ND	0.0005	mg/L							
Molybdenum	ND	0.0005	mg/L							
Selenium	ND	0.0010	mg/L							
Uranium	ND	0.0001	mg/L							
Zinc	ND	0.0020	mg/L							
LCS (B707085-BS1)			Prep	oared: 07/12/	17 Analyze	ed: 07/13/1	7			
Arsenic	0.0544	0.0005	mg/L	0.0500		109	85-115			
Cadmium	0.0530	0.0001	mg/L	0.0500		106	85-115			
Copper	0.0504	0.0001	mg/L	0.0500		101	85-115			
Lead	0.0503	0.0005	mg/L	0.0500		101	85-115			
Manganese	0.0483	0.0005	mg/L	0.0500		96.6	85-115			
Molybdenum	0.0490	0.0005	mg/L	0.0500		98.1	85-115			
Selenium	0.262	0.0010	mg/L	0.250		105	85-115			
Uranium	0.0493	0.0001	mg/L	0.0500		98.7	85-115			
Zinc	0.0530	0.0020	mg/L	0.0500		106	85-115			
LCS Dup (B707085-BSD1)			Prep	oared: 07/12/	17 Analyze	ed: 07/13/1	7			
Arsenic	0.0524	0.0005	mg/L	0.0500		105	85-115	3.67	20	
Cadmium	0.0525	0.0001	mg/L	0.0500		105	85-115	0.964	20	
Copper	0.0519	0.0001	mg/L	0.0500		104	85-115	3.08	20	
Lead	0.0523	0.0005	mg/L	0.0500		105	85-115	3.89	20	
Manganese	0.0494	0.0005	mg/L	0.0500		98.8	85-115	2.28	20	
Molybdenum	0.0471	0.0005	mg/L	0.0500		94.2	85-115	4.05	20	
Selenium	0.256	0.0010	mg/L	0.250		102	85-115	2.44	20	
Uranium	0.0507	0.0001	mg/L	0.0500		101	85-115	2.76	20	
Zinc	0.0502	0.0020	mg/L	0.0500		100	85-115	5.51	20	

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Debbie Zufelt, Reports Manager



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GCC Energy, LLC	Project: GCC GW & SW Baseline	
6473 CR 120	Project Name / Number: [none]	Reported:
Hesperus CO, 81326	Project Manager: Tom Bird	07/19/17 15:10

## **Total Mercury by CVAA - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B707039 - EPA 245.1/7470										
Blank (B707039-BLK1)			Prep	oared: 07/06/	17 Analyza	ed: 07/17/1	7			
Mercury	ND	0.0002	mg/L							
LCS (B707039-BS1)			Prep	oared: 07/06/	17 Analyze	ed: 07/17/1	7			
Mercury	0.0021	0.0002	mg/L	0.00200		103	85-115			
LCS Dup (B707039-BSD1)			Prep	oared: 07/06/	17 Analyze	ed: 07/17/1	7			
Mercury	0.0021	0.0002	mg/L	0.00200		103	85-115	0.291	20	

#### **Dissolved Mercury by CVAA - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B707111 - EPA 245.1/7470										
Blank (B707111-BLK1)			Prep	oared: 07/13/	17 Analyze	ed: 07/17/17	7			
Mercury	ND	0.0002	mg/L							
LCS (B707111-BS1)			Prep	oared: 07/13/	17 Analyze	ed: 07/17/17	7			
Mercury	0.0021	0.0002	mg/L	0.00200		107	85-115			
LCS Dup (B707111-BSD1)			Prep	oared: 07/13/	17 Analyze	ed: 07/17/17	7			
Mercury	0.0021	0.0002	mg/L	0.00200		106	85-115	0.329	20	

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Debbie Zufelt, Reports Manager



Laboratories		www.GreenAnalytical.com
GCC Energy, LLC	Project: GCC GW & SW Baseline	
6473 CR 120	Project Name / Number: [none]	Reported:
Hesperus CO, 81326	Project Manager: Tom Bird	07/19/17 15:10

R2	Duplicate sample RPD exceeded the method control limit. One or more of the duplicates was less than 5X reporting limit so RPD requirements do not apply.
BS2	Laboratory control sample below laboratory acceptance criteria. Results for analyte potentially biased low. Will re-analyze to confirm result.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
	*Results reported on as received basis unless designated as dry.
RPD	Relative Percent Difference
LCS	Laboratory Control Sample (Blank Spike)
RL	Report Limit
MDL	Method Detection Limit

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Debbie Zufelt, Reports Manager

Laboratories	Fax: (97	Fax: (970) 247-4227 75 S	75 Suttle St Durango, CO 81303		
Company Name: 6(L F	ANAN ILLC		Bill to (if different):	ANALYSIS	SIS REQUEST
3	N PAR		P.O. #:		
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city: HESPMAS	State: (1)	Zip: 8326	Attn:		
e# (970)	0545457 mail: BARCOU.IV	3	Address:		
Additional Report To:	ethydroaco	logic.com	City:	ne	
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Sampler Name (Print): 1991	here a much a much an	WIETNVIMINA	Fax or Email:	B	
FOR LAB USE ONLY		Collected	Matrix (check one) # of containers	(	
Lab I.D.	Sample Name or Location	Date Time	GROUNDWATER SURFACEWATER WASTEWATER PRODUCEDWATER SOIL OTHER : No preservation (general) HNO <sub>3</sub> HCI H <sub>2</sub> SO <sub>4</sub> Other: Other:	Other: G(C GW G(C SN	
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\* Chain of Custody must be signed in "Reliquished By:" as an acceptance of services and all applicable charges.



75 Suttle Street Durango, CO 81303 970.247.4220 Phone 970.247.4227 Fax www.greenanalytical.com

29 June 2017

Tom Bird GCC Energy, LLC 6473 CR 120 Hesperus, CO 81326 RE: GCC GW Baseline

Enclosed are the results of analyses for samples received by the laboratory on 06/13/17 16:52. If you need any further assistance, please feel free to contact me.

Sincerely,

Dellie Zufett

Debbie Zufelt Reports Manager

All accredited analytes contained in this report are denoted by an asterisk (\*). For a complete list of accredited analytes please do not hesitate to contact us via any of the contact information contained in this report. All of our certifications can be viewed at http://greenanalytical.com/certifications/

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GCC Energy, LLC	Project: GCC GW Baseline	
6473 CR 120	Project Name / Number: GCC GW Baseline	Reported:
Hesperus CO, 81326	Project Manager: Tom Bird	06/29/17 11:13

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Well #2 Downgradient	1706126-01	Water	06/13/17 08:55	06/13/17 16:52
MW-HGA-4	1706126-02	Water	06/13/17 16:52	06/13/17 16:52
MW-HGA-99	1706126-03	Water	06/13/17 10:42	06/13/17 16:52
Wiltse Well	1706126-04	Water	06/13/17 14:15	06/13/17 16:52

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GCC Energy, LLC	Project: GCC GW Baseline	
6473 CR 120	Project Name / Number: GCC GW Baseline	Reported:
Hesperus CO, 81326	Project Manager: Tom Bird	06/29/17 11:13

## Well #2 Downgradient

1706126-01 (Water)										
Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst	
General Chemistry										
Alkalinity, Bicarbonate as CaCO3*	285	10.0		mg/L	5	06/20/17	2320 B		JLM	
Alkalinity, Carbonate as CaCO3*	<10.0	10.0		mg/L	5	06/20/17	2320 B		JLM	
Alkalinity, Hydroxide as CaCO3*	<10.0	10.0		mg/L	5	06/20/17	2320 B		JLM	
Alkalinity, Total as CaCO3*	285	10.0		mg/L	5	06/20/17	2320 B		JLM	
Chloride*	7.11	1.00	0.143	mg/L	1	06/21/17	EPA300.0		JDA	
Fluoride*	0.313	0.100	0.0160	mg/L	1	06/21/17	EPA300.0		JDA	
Nitrate/Nitrite as N*	< 0.020	0.020	0.011	mg/L	1	06/27/17	EPA353.2		LLG	
pH*	7.60			pH Units	1	06/14/17	EPA150.1		CMS	
Total Dissolved Solids*	415	10.0		mg/L	1	06/19/17	EPA160.1		LLG	
Sulfate*	75.2	5.00	0.782	mg/L	5	06/22/17	EPA300.0		JDA	
Total Organic Carbon	3.56	0.500	0.201	mg/L	1	06/19/17	5310C		JDA	
Dissolved Metals by ICP										
Aluminum*	< 0.050	0.050	0.020	mg/L	1	06/20/17	EPA200.7		JDA	
Calcium*	60.9	0.100	0.036	mg/L	1	06/20/17	EPA200.7		JDA	
Hardness as CaCO3	352	0.662	0.195	mg/L	1	06/20/17	2340 B		JDA	
Iron*	< 0.050	0.050	0.014	mg/L	1	06/20/17	EPA200.7		JDA	
Magnesium*	48.5	0.100	0.026	mg/L	1	06/20/17	EPA200.7		JDA	
Potassium*	2.22	1.00	0.094	mg/L	1	06/20/17	EPA200.7		JDA	
Silica (Si02)	15.5	1.07	0.298	mg/L	1	06/20/17	Calculation		JDA	
Silicon	7.23	0.500	0.139	mg/L	1	06/20/17	EPA200.7	M5	JDA	
Sodium*	16.1	1.00	0.087	mg/L	1	06/20/17	EPA200.7		JDA	
Dissolved Metals by ICPMS										
Arsenic*	0.0017	0.0005	0.00008	mg/L	1	06/22/17	EPA200.8		JDA	
Cadmium*	< 0.0001	0.0001	0.00009	mg/L	1	06/22/17	EPA200.8		JDA	
Copper*	0.0002	0.0001	0.00003	mg/L	1	06/22/17	EPA200.8		JDA	
Lead*	< 0.0005	0.0005	0.00002	mg/L	1	06/22/17	EPA200.8		JDA	
Manganese*	0.259	0.0005	0.0003	mg/L	1	06/22/17	EPA200.8		JDA	
Molybdenum*	0.0025	0.0005	0.00006	mg/L	1	06/22/17	EPA200.8		JDA	
Selenium*	< 0.0010	0.0010	0.0002	mg/L	1	06/22/17	EPA200.8		JDA	
Uranium	0.0008	0.0001	0.00001	mg/L	1	06/22/17	EPA200.8		JDA	
Zinc*	< 0.0020	0.0020	0.0009	mg/L	1	06/22/17	EPA200.8		JDA	

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Debbie Zufelt, Reports Manager



Laboratories							www.Gre	enAnalytica	ll.com	
GCC Energy, LLC			Project: GCC	GW Baselin	ne					
6473 CR 120	Proj	ect Name / N	Number: GCC	GW Baselin	ne			Report	ed:	
Hesperus CO, 81326		Project M	lanager: Tom	Bird				06/29/17 11:13		
		Well	#2 Downgr	adient						
		170	06126-01 (W	ater)						
Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst	
Dissolved Mercury by CVAA										
Mercury*	< 0.0002	0.0002	0.00009	mg/L	1	06/21/17	EPA245.1		LLG	
Cation/Anion Balance	2.01									

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Debbie Zufelt, Reports Manager

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GCC Energy, LLC	Project: GCC GW Baseline	
6473 CR 120	Project Name / Number: GCC GW Baseline	Reported:
Hesperus CO, 81326	Project Manager: Tom Bird	06/29/17 11:13

## MW-HGA-4

1706126-02 (Water)										
Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst	
General Chemistry										
Alkalinity, Bicarbonate as CaCO3*	415	10.0		mg/L	5	06/20/17	2320 B		JLM	
Alkalinity, Carbonate as CaCO3*	<10.0	10.0		mg/L	5	06/20/17	2320 B		JLM	
Alkalinity, Hydroxide as CaCO3*	<10.0	10.0		mg/L	5	06/20/17	2320 B		JLM	
Alkalinity, Total as CaCO3*	415	10.0		mg/L	5	06/20/17	2320 B		JLM	
Chloride*	7.95	1.00	0.143	mg/L	1	06/21/17	EPA300.0		JDA	
Fluoride*	0.506	0.100	0.0160	mg/L	1	06/21/17	EPA300.0		JDA	
Nitrate/Nitrite as N*	< 0.020	0.020	0.011	mg/L	1	06/27/17	EPA353.2		LLG	
pH*	7.31			pH Units	1	06/14/17	EPA150.1		CMS	
Total Dissolved Solids*	715	10.0		mg/L	1	06/19/17	EPA160.1		LLG	
Sulfate*	192	10.0	1.56	mg/L	10	06/22/17	EPA300.0		JDA	
Total Organic Carbon	4.35	0.500	0.201	mg/L	1	06/19/17	5310C		JDA	
Dissolved Metals by ICP										
Aluminum*	< 0.050	0.050	0.020	mg/L	1	06/20/17	EPA200.7		JDA	
Calcium*	121	0.100	0.036	mg/L	1	06/20/17	EPA200.7		JDA	
Hardness as CaCO3	616	0.662	0.195	mg/L	1	06/20/17	2340 B		JDA	
Iron*	7.32	0.050	0.014	mg/L	1	06/20/17	EPA200.7		JDA	
Magnesium*	76.6	0.100	0.026	mg/L	1	06/20/17	EPA200.7		JDA	
Potassium*	2.11	1.00	0.094	mg/L	1	06/20/17	EPA200.7		JDA	
Silica (Si02)	18.0	1.07	0.298	mg/L	1	06/20/17	Calculation		JDA	
Silicon	8.41	0.500	0.139	mg/L	1	06/20/17	EPA200.7		JDA	
Sodium*	28.6	1.00	0.087	mg/L	1	06/20/17	EPA200.7		JDA	
Dissolved Metals by ICPMS										
Arsenic*	0.0028	0.0005	0.00008	mg/L	1	06/22/17	EPA200.8		JDA	
Cadmium*	< 0.0001	0.0001	0.00009	mg/L	1	06/22/17	EPA200.8		JDA	
Copper*	0.0002	0.0001	0.00003	mg/L	1	06/22/17	EPA200.8		JDA	
Lead*	< 0.0005	0.0005	0.00002	mg/L	1	06/22/17	EPA200.8		JDA	
Manganese*	2.37	0.0005	0.0003	mg/L	1	06/22/17	EPA200.8		JDA	
Molybdenum*	0.0027	0.0005	0.00006	mg/L	1	06/22/17	EPA200.8		JDA	
Selenium*	< 0.0010	0.0010	0.0002	mg/L	1	06/22/17	EPA200.8		JDA	
Uranium	0.0004	0.0001	0.00001	mg/L	1	06/22/17	EPA200.8		JDA	
Zinc*	< 0.0020	0.0020	0.0009	mg/L	1	06/22/17	EPA200.8		JDA	

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Laboratories							www.Gre	enAnalytica	l.com
GCC Energy, LLC			Project: GCC	GW Baselin	ne				
6473 CR 120	Proj	ect Name / N	Number: GCC	GW Baselin	ne			Report	ed:
Hesperus CO, 81326	Project Manager: Tom Bird					06/29/17 11:13			
			MW-HGA	-4					
		170	06126-02 (W	ater)					
Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
Dissolved Mercury by CVAA									
Mercury*	< 0.0002	0.0002	0.00009	mg/L	1	06/21/17	EPA245.1		LLG
Cation/Anion Balance	5.13								

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GCC Energy, LLC	Project: GCC GW Baseline	
6473 CR 120	Project Name / Number: GCC GW Baseline	Reported:
Hesperus CO, 81326	Project Manager: Tom Bird	06/29/17 11:13

### MW-HGA-99

		17(	6126-03 (W	Vater)					
Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
General Chemistry									
Alkalinity, Bicarbonate as CaCO3*	445	10.0		mg/L	5	06/20/17	2320 B		JLM
Alkalinity, Carbonate as CaCO3*	<10.0	10.0		mg/L	5	06/20/17	2320 B		JLM
Alkalinity, Hydroxide as CaCO3*	<10.0	10.0		mg/L	5	06/20/17	2320 B		JLM
Alkalinity, Total as CaCO3*	445	10.0		mg/L	5	06/20/17	2320 B		JLM
Chloride*	8.45	1.00	0.143	mg/L	1	06/21/17	EPA300.0		JDA
Fluoride*	0.523	0.100	0.0160	mg/L	1	06/21/17	EPA300.0		JDA
Nitrate/Nitrite as N*	< 0.020	0.020	0.011	mg/L	1	06/27/17	EPA353.2		LLG
pH*	7.38			pH Units	1	06/14/17	EPA150.1		CMS
Total Dissolved Solids*	725	10.0		mg/L	1	06/19/17	EPA160.1		LLG
Sulfate*	196	10.0	1.56	mg/L	10	06/22/17	EPA300.0		JDA
Total Organic Carbon	4.28	0.500	0.201	mg/L	1	06/19/17	5310C		JDA
Dissolved Metals by ICP									
Aluminum*	< 0.050	0.050	0.020	mg/L	1	06/20/17	EPA200.7		JDA
Calcium*	121	0.100	0.036	mg/L	1	06/20/17	EPA200.7		JDA
Hardness as CaCO3	616	0.662	0.195	mg/L	1	06/20/17	2340 B		JDA
Iron*	7.21	0.050	0.014	mg/L	1	06/20/17	EPA200.7		JDA
Magnesium*	76.5	0.100	0.026	mg/L	1	06/20/17	EPA200.7		JDA
Potassium*	2.14	1.00	0.094	mg/L	1	06/20/17	EPA200.7		JDA
Silica (Si02)	18.0	1.07	0.298	mg/L	1	06/20/17	Calculation		JDA
Silicon	8.42	0.500	0.139	mg/L	1	06/20/17	EPA200.7		JDA
Sodium*	28.2	1.00	0.087	mg/L	1	06/20/17	EPA200.7		JDA
Dissolved Metals by ICPMS									
Arsenic*	0.0028	0.0005	0.00008	mg/L	1	06/22/17	EPA200.8		JDA
Cadmium*	< 0.0001	0.0001	0.00009	mg/L	1	06/22/17	EPA200.8		JDA
Copper*	0.0002	0.0001	0.00003	mg/L	1	06/22/17	EPA200.8		JDA
Lead*	< 0.0005	0.0005	0.00002	mg/L	1	06/22/17	EPA200.8		JDA
Manganese*	2.54	0.0005	0.0003	mg/L	1	06/22/17	EPA200.8		JDA
Molybdenum*	0.0027	0.0005	0.00006	mg/L	1	06/22/17	EPA200.8		JDA
Selenium*	< 0.0010	0.0010	0.0002	mg/L	1	06/22/17	EPA200.8		JDA
Uranium	0.0004	0.0001	0.00001	mg/L	1	06/22/17	EPA200.8		JDA
Zinc*	< 0.0020	0.0020	0.0009	mg/L	1	06/22/17	EPA200.8		JDA

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GCC Energy, LLC			Project: GCC	GW Baselin	ie					
6473 CR 120	Proj	ect Name / N	Number: GCC	GW Baselin	ne			Reported:		
Hesperus CO, 81326	Project Manager: Tom Bird							06/29/17 11:13		
		I	MW-HGA-	99						
		170	06126-03 (W	ater)						
Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst	
Dissolved Mercury by CVAA										
Mercury*	< 0.0002	0.0002	0.00009	mg/L	1	06/21/17	EPA245.1		LLG	
Cation/Anion Balance	2.32									

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Laboratories		www.GreenAnalytical.com
GCC Energy, LLC	Project: GCC GW Baseline	
6473 CR 120	Project Name / Number: GCC GW Baseline	Reported:
Hesperus CO, 81326	Project Manager: Tom Bird	06/29/17 11:13

### Wiltse Well

		170	6126-04 (W	/ater)					
Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
General Chemistry									
Alkalinity, Bicarbonate as CaCO3*	445	10.0		mg/L	5	06/20/17	2320 B		JLM
Alkalinity, Carbonate as CaCO3*	<10.0	10.0		mg/L	5	06/20/17	2320 B		JLM
Alkalinity, Hydroxide as CaCO3*	<10.0	10.0		mg/L	5	06/20/17	2320 B		JLM
Alkalinity, Total as CaCO3*	445	10.0		mg/L	5	06/20/17	2320 B		JLM
Chloride*	72.5	2.00	0.287	mg/L	2	06/21/17	EPA300.0		JDA
Fluoride*	0.332	0.200	0.0319	mg/L	2	06/21/17	EPA300.0		JDA
Nitrate/Nitrite as N*	1.07	0.020	0.011	mg/L	1	06/27/17	EPA353.2		LLG
pH*	7.46			pH Units	1	06/14/17	EPA150.1		CMS
Total Dissolved Solids*	1510	10.0		mg/L	1	06/19/17	EPA160.1		LLG
Sulfate*	702	20.0	3.13	mg/L	20	06/22/17	EPA300.0		JDA
Total Organic Carbon	3.54	0.500	0.201	mg/L	1	06/19/17	5310C		JDA
Dissolved Metals by ICP									
Aluminum*	< 0.100	0.100	0.040	mg/L	2	06/20/17	EPA200.7		JDA
Calcium*	211	0.200	0.072	mg/L	2	06/20/17	EPA200.7		JDA
Hardness as CaCO3	1060	1.32	0.390	mg/L	2	06/20/17	2340 B		JDA
Iron*	0.161	0.100	0.028	mg/L	2	06/20/17	EPA200.7		JDA
Magnesium*	129	0.200	0.051	mg/L	2	06/20/17	EPA200.7		JDA
Potassium*	4.79	2.00	0.189	mg/L	2	06/20/17	EPA200.7		JDA
Silica (Si02)	15.5	2.14	0.596	mg/L	2	06/20/17	Calculation		JDA
Silicon	7.22	1.00	0.279	mg/L	2	06/20/17	EPA200.7		JDA
Sodium*	87.5	2.00	0.174	mg/L	2	06/20/17	EPA200.7		JDA
Dissolved Metals by ICPMS									
Arsenic*	0.0006	0.0005	0.00008	mg/L	1	06/22/17	EPA200.8		JDA
Cadmium*	< 0.0001	0.0001	0.00009	mg/L	1	06/22/17	EPA200.8		JDA
Copper*	0.0019	0.0001	0.00003	mg/L	1	06/22/17	EPA200.8		JDA
Lead*	< 0.0005	0.0005	0.00002	mg/L	1	06/22/17	EPA200.8		JDA
Manganese*	0.797	0.0005	0.0003	mg/L	1	06/22/17	EPA200.8		JDA
Molybdenum*	0.0021	0.0005	0.00006	mg/L	1	06/22/17	EPA200.8		JDA
Selenium*	0.0019	0.0010	0.0002	mg/L	1	06/22/17	EPA200.8		JDA
Uranium	0.0021	0.0001	0.00001	mg/L	1	06/22/17	EPA200.8		JDA
Zinc*	0.0260	0.0020	0.0009	mg/L	1	06/22/17	EPA200.8		JDA

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GCC Energy, LLC			Project: GCC	GW Baselin	ne					
6473 CR 120	Proj	ect Name / N	Number: GCC	GW Baselin	ne			Reported:		
Hesperus CO, 81326		Project M	lanager: Tom	Bird				06/29/17	11:13	
			Wiltse We	11						
		170	06126-04 (W	ater)						
Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst	
Dissolved Mercury by CVAA										
Mercury*	< 0.0002	0.0002	0.00009	mg/L	1	06/21/17	EPA245.1		LLG	
Cation/Anion Balance	-1.02									

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Laboratories		www.GreenAnalytical.com
GCC Energy, LLC	Project: GCC GW Baseline	
6473 CR 120	Project Name / Number: GCC GW Baseline	Reported:
Hesperus CO, 81326	Project Manager: Tom Bird	06/29/17 11:13

## **General Chemistry - Quality Control**

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch B706108 - General Prep - Wet Chem										
Blank (B706108-BLK1)			Prep	ared & Ana	lyzed: 06/19	9/17				
Total Organic Carbon	ND	0.500	mg/L							
LCS (B706108-BS1)			Prep	ared & Ana	lyzed: 06/19	9/17				
Total Organic Carbon	10.0	0.500	mg/L	10.0		100	85-115			
LCS Dup (B706108-BSD1)			Prep	ared & Ana	lyzed: 06/19	9/17				
Total Organic Carbon	9.86	0.500	mg/L	10.0		98.6	85-115	1.41	20	
Batch B706117 - General Prep - Wet Chem										
Duplicate (B706117-DUP1)	Sou	ırce: 1706114-(	)1 Prep	ared & Ana	lyzed: 06/14	4/17				
pH	8.32		pH Units		8.29			0.361	20	
Reference (B706117-SRM1)			Prep	ared & Ana	lyzed: 06/14	4/17				
pH	9.02		pH Units	9.08		99.3	97.8-102.2			
Batch B706142 - General Prep - Wet Chem										
			Prep	ared & Ana	lyzed: 06/19	9/17				
Total Dissolved Solids	ND	10.0	mg/L							
Duplicate (B706142-DUP1)	Sou	rce: 1706114-0	01 Prep	ared & Ana	lyzed: 06/19	9/17				
Total Dissolved Solids	4770	10.0	mg/L		6410			29.3	20	R
<b>Reference (B706142-SRM1)</b>			Prep	ared & Ana	lyzed: 06/19	9/17				
Total Dissolved Solids	380	10.0	mg/L	390	-	97.4	85-115			
Batch B706159 - General Prep - Wet Chem										
			Prep	ared: 06/20/	/17 Analyz	ed: 06/21/1	17			
Chloride	ND	1.00	mg/L							
Fluoride	ND	0.100	mg/L							
Sulfate	ND	1.00	mg/L							
LCS (B706159-BS1)			Prep	ared: 06/20/	17 Analyz	ed: 06/21/1	17			
Chloride	24.1	1.00	mg/L	25.0		96.3	90-110			
Fluoride	2.51	0.100	mg/L	2.50		100	90-110			
Sulfate	23.7	1.00	mg/L	25.0		95.0	90-110			
LCS Dup (B706159-BSD1)			Prep	ared: 06/20/	'17 Analyz	ed: 06/21/1	17			
Chloride	24.4	1.00	mg/L	25.0		97.7	90-110	1.42	20	
Fluoride	2.53	0.100	mg/L	2.50		101	90-110	0.676	20	
Sulfate	24.2	1.00	mg/L	25.0		96.8	90-110	1.87	20	

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Laboratories								www.Gree	enAnalytica	l.com
GCC Energy, LLC		Pi	oject: GC	C GW Base	ine					
6473 CR 120	Pro	ject Name / Nu	mber: GC	C GW Basel	ine			Reported:		
Hesperus CO, 81326		Project Ma	nager: Ton	n Bird					06/29/17	11:13
	G	eneral Cher	nistry - (	Quality C	ontrol					
		(	Continu	ed)						
		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch B706166 - General Prep - Wet Chem										
Blank (B706166-BLK1)			Prep	ared & Ana	yzed: 06/20	0/17				
Alkalinity, Total as CaCO3	ND	10.0	mg/L							
LCS (B706166-BS1)			Prep	ared & Ana	yzed: 06/20	0/17				
Alkalinity, Total as CaCO3	105	10.0	mg/L	100		105	85-115			
LCS Dup (B706166-BSD1)			Prep	ared & Ana	yzed: 06/20	0/17				
Alkalinity, Total as CaCO3	110	10.0	mg/L	100		110	85-115	4.65	20	
Batch B706177 - General Prep - Wet Chem										
Blank (B706177-BLK1)			Prep	ared: 06/22/	17 Analyz	ed: 06/27/1	7			
Nitrate/Nitrite as N	ND	0.020	mg/L							
LCS (B706177-BS1)			Prep	ared: 06/22/	17 Analyz	ed: 06/27/1	7			
Nitrate/Nitrite as N	1.04	0.020	mg/L	1.00		104	90-110			
LCS Dup (B706177-BSD1)			Prep	ared: 06/22/	17 Analyz	ed: 06/27/1	7			
Nitrate/Nitrite as N	1.03	0.020	mg/L	1.00		103	90-110	0.155	20	

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Laboratories		www.GreenAnalytical.com
GCC Energy, LLC	Project: GCC GW Baseline	
6473 CR 120	Project Name / Number: GCC GW Baseline	Reported:
Hesperus CO, 81326	Project Manager: Tom Bird	06/29/17 11:13

### **Dissolved Metals by ICP - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B706153 - Diss. 200.7/200.8										
Blank (B706153-BLK1)			Prep	ared & Anal	yzed: 06/20	)/17				
Aluminum	ND	0.050	mg/L							
Calcium	ND	0.100	mg/L							
Iron	ND	0.050	mg/L							
Magnesium	ND	0.100	mg/L							
Potassium	ND	1.00	mg/L							
Silicon	ND	0.500	mg/L							
Sodium	ND	1.00	mg/L							
LCS (B706153-BS1)			Prep	ared & Anal	yzed: 06/20	0/17				
Aluminum	5.06	0.050	mg/L	5.00		101	85-115			
Calcium	5.13	0.100	mg/L	5.00		103	85-115			
Iron	5.12	0.050	mg/L	5.00		102	85-115			
Magnesium	26.0	0.100	mg/L	25.0		104	85-115			
Potassium	10.2	1.00	mg/L	10.0		102	85-115			
Silicon	4.91	0.500	mg/L	5.00		98.3	85-115			
Sodium	8.36	1.00	mg/L	8.10		103	85-115			
LCS Dup (B706153-BSD1)			Prep	ared & Anal	yzed: 06/20	0/17				
Aluminum	5.09	0.050	mg/L	5.00		102	85-115	0.668	20	
Calcium	5.16	0.100	mg/L	5.00		103	85-115	0.475	20	
Iron	5.16	0.050	mg/L	5.00		103	85-115	0.671	20	
Magnesium	26.0	0.100	mg/L	25.0		104	85-115	0.0458	20	
Potassium	10.1	1.00	mg/L	10.0		101	85-115	1.08	20	
Silicon	4.94	0.500	mg/L	5.00		98.8	85-115	0.462	20	
Sodium	8.37	1.00	mg/L	8.10		103	85-115	0.109	20	

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	Laboratories			www.GreenAnalytical.com
GCC	Energy, LLC	Project:	GCC GW Baseline	
6473	CR 120	Project Name / Number:	GCC GW Baseline	Reported:
Hesp	erus CO, 81326	Project Manager:	Tom Bird	06/29/17 11:13

### **Dissolved Metals by ICPMS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B706154 - Diss. 200.7/200.8										
Blank (B706154-BLK1)			Prep	ared: 06/20/	17 Analyze	ed: 06/22/17	7			
Arsenic	ND	0.0005	mg/L							
Cadmium	ND	0.0001	mg/L							
Copper	ND	0.0001	mg/L							
Lead	ND	0.0005	mg/L							
Manganese	ND	0.0005	mg/L							
Molybdenum	ND	0.0005	mg/L							
Selenium	ND	0.0010	mg/L							
Uranium	ND	0.0001	mg/L							
Zinc	ND	0.0020	mg/L							
LCS (B706154-BS1)			Prep	ared: 06/20/	17 Analyze	ed: 06/22/17	7			
Arsenic	0.0537	0.0005	mg/L	0.0500		107	85-115			
Cadmium	0.0530	0.0001	mg/L	0.0500		106	85-115			
Copper	0.0516	0.0001	mg/L	0.0500		103	85-115			
Lead	0.0498	0.0005	mg/L	0.0500		99.6	85-115			
Manganese	0.0523	0.0005	mg/L	0.0500		105	85-115			
Molybdenum	0.0512	0.0005	mg/L	0.0500		102	85-115			
Selenium	0.276	0.0010	mg/L	0.250		110	85-115			
Uranium	0.0493	0.0001	mg/L	0.0500		98.7	85-115			
Zinc	0.0545	0.0020	mg/L	0.0500		109	85-115			
LCS Dup (B706154-BSD1)			Prep	ared: 06/20/	17 Analyze	ed: 06/22/17	7			
Arsenic	0.0534	0.0005	mg/L	0.0500		107	85-115	0.696	20	
Cadmium	0.0498	0.0001	mg/L	0.0500		99.6	85-115	6.28	20	
Copper	0.0496	0.0001	mg/L	0.0500		99.2	85-115	4.03	20	
Lead	0.0508	0.0005	mg/L	0.0500		102	85-115	2.00	20	
Manganese	0.0494	0.0005	mg/L	0.0500		98.9	85-115	5.70	20	
Molybdenum	0.0490	0.0005	mg/L	0.0500		98.1	85-115	4.22	20	
Selenium	0.269	0.0010	mg/L	0.250		107	85-115	2.78	20	
Uranium	0.0495	0.0001	mg/L	0.0500		99.0	85-115	0.367	20	
Zinc	0.0530	0.0020	mg/L	0.0500		106	85-115	2.72	20	

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Laboratories		www.GreenAnalytical.com
GCC Energy, LLC	Project: GCC GW Baseline	
6473 CR 120	Project Name / Number: GCC GW Baseline	Reported:
Hesperus CO, 81326	Project Manager: Tom Bird	06/29/17 11:13

## **Dissolved Mercury by CVAA - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
-	Result	Liint	Onits	Level	Result	70KEC	Linits	KI D	Liiiit	Notes
Batch B706156 - EPA 245.1/7470										
Blank (B706156-BLK1)			Prep	ared: 06/20/1	7 Analyz	ed: 06/21/17	7			
Mercury	ND	0.0002	mg/L							
LCS (B706156-BS1)			Prep	ared: 06/20/1	7 Analyz	ed: 06/21/1'	7			
Mercury	0.0021	0.0002	mg/L	0.00200		106	85-115			
LCS Dup (B706156-BSD1)	Prepared: 06/20/17 Analyzed: 06/21/17									
Mercury	0.0021	0.0002	mg/L	0.00200		107	85-115	1.36	20	

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Laboratories		www.GreenAnalytical.com
GCC Energy, LLC	Project: GCC GW Baseline	
6473 CR 120	Project Name / Number: GCC GW Baseline	Reported:
Hesperus CO, 81326	Project Manager: Tom Bird	06/29/17 11:13

### **Notes and Definitions**

R1	Duplicate sample RPD exceeded laboratory acceptance criteria. Sample(s) may be difficult to homogenize.
M5	Sample was chosen for matrix spike. Spike recovery did not meet laboratory acceptance criteria, possible matrix interference in sample.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis *Results reported on as received basis unless designated as dry.
RPD	Relative Percent Difference
LCS	Laboratory Control Sample (Blank Spike)
RL	Report Limit
MDL	Method Detection Limit

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-		3-1 3.3 C ania K	-1 3.3 C 4 Onia	Temperature at r 3-1 3.3 C			(Circle One) FedEx - Kangaroo - Other:	Delivered By: (Circle One) Sampler - UPS - FedEx - Kan
with Sample water to recover any	with Sample			l By:	Received By:	Date: Time:		Relinquished By:
All metals bittles were tripte-missed	All netals b			1 Bv:	Received By:	Date: Time:		Kelinguished By:
Report to State? (Circle)	ADDITIONAL REMARKS:	l		d Bv:	Received By	Time: 652	1.	Why will be
se for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received lient, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder	se for negligence and any other cause wha lifent, its subsidiaries, affiliates or successon		the client for the analysi ruptions, loss of use, or )	nited to the amount paid by nout limitation, business inter	t or tort, shall be lir ages, including with	or any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including the be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by the above stated reasons or otherwise.	ve remedy fo nt shall GAL I upon any o	comple er suct
	X	2	×	7 1415	6/13/10		WI ITE WEL	- 07
	X	R		1	1((1))		-H6	0
	2 X	\$	×		6/13/1		- H6-4	-02
	L	q		2 6855	6/13/17	Downsradient	2 <sup>th</sup>	1706-126-01
	$H_2SO_4$ Other: Other: Other: GCC GV	SOIL OTHER : No preservation (general) HNO <sub>3</sub> HCI	GROUNDWATER SURFACEWATER WASTEWATER PRODUCEDWATER	Time	Date	or Location	Sample Name or Location	For Lab Use
	containers	k one) # of	Matrix (check one)	Collected				
			Fax or Email:		1	11andon Bec	nt): Jessicalum	Sampler Name (Print):
	rse		Phone #:		-	1, 1	onal):	Project Number(optional):
	- bi	Zip:	State:				al):	Project Name(optional):
	pe		City:	12.003	Are goola	LBECK @ resurchydre geologi.com	L.	Email: TBIRD & G.C. Com
			Address:				970 385 4526	Phone #: 9
			Attn:	81326	Zip: &	State: C6		city: Hegpery
			Company:				CR 120	Address: 6473
			P.O. #:			11	Tom	Project Contact Person:
ANALYSIS REQUEST	nt):	Bill to (if different):	I			her	onal): UCC Eng	Company Name(optional):
	service@greenanalytical.com or dzufelt@greenanalytical.com 75 Suttle St Durango, CO 81303	cal.com or dzufelt@ go, CO 81303	service@greenanalytical.com or dzufel 75 Suttle St Durango, CO 81303		(970) 247-4220 Fax: (970) 247-4227	Fax	Analytical _aboratories	A

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75 Suttle Street Durango, CO 81303 970.247.4220 Phone 970.247.4227 Fax www.greenanalytical.com

20 July 2017

Tom Bird GCC Energy, LLC 6473 CR 120 Hesperus, CO 81326 RE: GCC GW Baseline

Enclosed are the results of analyses for samples received by the laboratory on 06/07/17 15:23. If you need any further assistance, please feel free to contact me.

Sincerely,

Dellie Zufett

Debbie Zufelt Reports Manager

All accredited analytes contained in this report are denoted by an asterisk (\*). For a complete list of accredited analytes please do not hesitate to contact us via any of the contact information contained in this report. All of our certifications can be viewed at http://greenanalytical.com/certifications/

Green Analytical Laboratories is NELAP accredited through the Texas Commission on Environmental Quality. Accreditation applies to drinking water and non-potable water matrices for trace metals and a variety of inorganic parameters. Green Analytical Laboratories is also accredited through the Colorado Department of Public Health and Environment and EPA region 8 for trace metals, Cyanide, Fluoride, Nitrate, and Nitrite in drinking water.

Our affiliate laboratory, Cardinal Laboratories, is also NELAP accredited through the Texas Commission on Environmental Quality for a variety of organic constituents in drinking water, non-potable water and solid matrices. Cardinal is also accredited for regulated VOCs, TTHM, and HAA-5 in drinking water through the Colorado Department of Public Health and Environment and EPA region 8.



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GCC Energy, LLC	Project: GCC GW Baseline	
6473 CR 120	Project Name / Number: GCC GW Baseline	Reported:
Hesperus CO, 81326	Project Manager: Tom Bird	07/20/17 16:47

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1-MI	1706069-01	Water	06/07/17 08:02	06/07/17 15:23
MW-1-A	1706069-02	Water	06/07/17 08:48	06/07/17 15:23
MW-1-C	1706069-03	Water	06/07/17 09:33	06/07/17 15:23

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Laboratories		www.GreenAnalytical.com
GCC Energy, LLC	Project: GCC GW Baseline	
6473 CR 120	Project Name / Number: GCC GW Baseline	Reported:
Hesperus CO, 81326	Project Manager: Tom Bird	07/20/17 16:47

#### MW-1-MI

		170	6069-01 (W	/ater)					
Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
General Chemistry									
Alkalinity, Bicarbonate as CaCO3*	600	10.0		mg/L	5	06/20/17	2320 B		JLM
Alkalinity, Carbonate as CaCO3*	<10.0	10.0		mg/L	5	06/20/17	2320 B		JLM
Alkalinity, Hydroxide as CaCO3*	<10.0	10.0		mg/L	5	06/20/17	2320 B		JLM
Alkalinity, Total as CaCO3*	600	10.0		mg/L	5	06/20/17	2320 B		JLM
Chloride*	7.69	5.00	0.717	mg/L	5	06/16/17	EPA300.0		JDA
Fluoride*	1.14	0.500	0.0798	mg/L	5	06/16/17	EPA300.0		JDA
Nitrate/Nitrite as N*	0.103	0.020	0.011	mg/L	1	06/20/17	EPA353.2		LLG
pH*	8.14			pH Units	1	06/12/17	EPA150.1	H4	BDV
Total Dissolved Solids*	1520	10.0		mg/L	1	06/12/17	EPA160.1		LLG
Sulfate*	739	20.0	3.13	mg/L	20	06/19/17	EPA300.0		JDA
Total Organic Carbon	5.14	0.500	0.201	mg/L	1	06/19/17	5310C		JDA
Dissolved Metals by ICP									
Aluminum*	< 0.050	0.050	0.020	mg/L	1	06/15/17	EPA200.7		JDA
Calcium*	46.7	0.100	0.036	mg/L	1	06/15/17	EPA200.7		JDA
Hardness as CaCO3	231	0.662	0.195	mg/L	1	06/15/17	2340 B		JDA
Iron*	< 0.050	0.050	0.014	mg/L	1	06/15/17	EPA200.7		JDA
Magnesium*	27.9	0.100	0.026	mg/L	1	06/15/17	EPA200.7		JDA
Potassium*	2.55	1.00	0.094	mg/L	1	06/15/17	EPA200.7		JDA
Silica (Si02)	11.6	1.07	0.298	mg/L	1	06/15/17	Calculation		JDA
Silicon	5.44	0.500	0.139	mg/L	1	06/15/17	EPA200.7		JDA
Sodium*	470	1.00	0.087	mg/L	1	06/15/17	EPA200.7		JDA
Dissolved Metals by ICPMS									
Arsenic*	0.0029	0.0005	0.00008	mg/L	1	06/15/17	EPA200.8		JDA
Cadmium*	< 0.0001	0.0001	0.00009	mg/L	1	06/15/17	EPA200.8		JDA
Copper*	0.0067	0.0001	0.00003	mg/L	1	06/15/17	EPA200.8		JDA
Lead*	0.0010	0.0005	0.00002	mg/L	1	06/15/17	EPA200.8		JDA
Manganese*	0.0445	0.0005	0.0003	mg/L	1	06/15/17	EPA200.8		JDA
Molybdenum*	0.0796	0.0005	0.00006	mg/L	1	06/15/17	EPA200.8		JDA
Selenium*	0.0028	0.0010	0.0002	mg/L	1	06/15/17	EPA200.8		JDA
Uranium	0.0505	0.0001	0.00001	mg/L	1	06/15/17	EPA200.8		JDA
Zinc*	1.52	0.0020	0.0009	mg/L	1	06/15/17	EPA200.8		JDA

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GCC Energy, LLC			Project: GCC	GW Baselin	ne				
6473 CR 120	Proj	ect Name / N	Number: GCC	GW Baselin	ne			Report	ed:
Hesperus CO, 81326		Project M	lanager: Tom	Bird				07/20/17	16:47
			MW-1-M	Í					
		170	06069-01 (W	ater)					
Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
Dissolved Mercury by CVAA									
Mercury*	< 0.0002	0.0002	0.00009	mg/L	1	06/16/17	EPA245.1		BDV
Cation/Anion Balance	-4.79								

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GCC Energy, LLC	Project: GCC GW Baseline	
6473 CR 120	Project Name / Number: GCC GW Baseline	Reported:
Hesperus CO, 81326	Project Manager: Tom Bird	07/20/17 16:47

#### **MW-1-A**

		17(	)6069-02 (W	Vater)					
Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
General Chemistry									
Alkalinity, Bicarbonate as CaCO3*	375	10.0		mg/L	5	06/20/17	2320 B		JLM
Alkalinity, Carbonate as CaCO3*	<10.0	10.0		mg/L	5	06/20/17	2320 B		JLM
Alkalinity, Hydroxide as CaCO3*	<10.0	10.0		mg/L	5	06/20/17	2320 B		JLM
Alkalinity, Total as CaCO3*	375	10.0		mg/L	5	06/20/17	2320 B		JLM
Chloride*	2.75	2.00	0.287	mg/L	2	06/16/17	EPA300.0		JDA
Fluoride*	0.268	0.200	0.0319	mg/L	2	06/16/17	EPA300.0		JDA
Nitrate/Nitrite as N*	< 0.200	0.200	0.109	mg/L	10	06/20/17	EPA353.2		LLG
pH*	7.74			pH Units	1	06/12/17	EPA150.1	H4	BDV
Total Dissolved Solids*	975	10.0		mg/L	1	06/12/17	EPA160.1		LLG
Sulfate*	427	20.0	3.13	mg/L	20	06/19/17	EPA300.0		JDA
Total Organic Carbon	5.03	0.500	0.201	mg/L	1	06/19/17	5310C		JDA
Dissolved Metals by ICP									
Aluminum*	< 0.050	0.050	0.020	mg/L	1	06/15/17	EPA200.7		JDA
Calcium*	24.7	0.100	0.036	mg/L	1	06/15/17	EPA200.7		JDA
Hardness as CaCO3	124	0.662	0.195	mg/L	1	06/15/17	2340 B		JDA
Iron*	0.128	0.050	0.014	mg/L	1	06/15/17	EPA200.7		JDA
Magnesium*	15.1	0.100	0.026	mg/L	1	06/15/17	EPA200.7		JDA
Potassium*	1.98	1.00	0.094	mg/L	1	06/15/17	EPA200.7		JDA
Silica (Si02)	12.3	1.07	0.298	mg/L	1	06/15/17	Calculation		JDA
Silicon	5.74	0.500	0.139	mg/L	1	06/15/17	EPA200.7		JDA
Sodium*	324	1.00	0.087	mg/L	1	06/15/17	EPA200.7		JDA
Dissolved Metals by ICPMS									
Arsenic*	< 0.0005	0.0005	0.00008	mg/L	1	06/15/17	EPA200.8		JDA
Cadmium*	< 0.0001	0.0001	0.00009	mg/L	1	06/15/17	EPA200.8		JDA
Copper*	0.0043	0.0001	0.00003	mg/L	1	06/15/17	EPA200.8		JDA
Lead*	< 0.0005	0.0005	0.00002	mg/L	1	06/15/17	EPA200.8		JDA
Manganese*	0.0260	0.0005	0.0003	mg/L	1	06/15/17	EPA200.8		JDA
Molybdenum*	0.0007	0.0005	0.00006	mg/L	1	06/15/17	EPA200.8		JDA
Selenium*	< 0.0010	0.0010	0.0002	mg/L	1	06/15/17	EPA200.8		JDA
Uranium	0.0004	0.0001	0.00001	mg/L	1	06/15/17	EPA200.8		JDA
Zinc*	0.0270	0.0020	0.0009	mg/L	1	06/15/17	EPA200.8		JDA

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GCC Energy, LLC			Project: GCC	GW Baselin	ne				
6473 CR 120	Proj	ject Name / N	Number: GCC	GW Baselin	ne			Report	ed:
Hesperus CO, 81326		Project M	lanager: Tom	Bird				07/20/17	16:47
			MW-1-A						
		170	)6069-02 (W	ater)					
Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
Dissolved Mercury by CVAA									
Mercury*	< 0.0002	0.0002	0.00009	mg/L	1	06/16/17	EPA245.1		BDV
Cation/Anion Balance	.46								

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GCC Energy, LLC	Project: GCC GW Baseline	
6473 CR 120	Project Name / Number: GCC GW Baseline	Reported:
Hesperus CO, 81326	Project Manager: Tom Bird	07/20/17 16:47

#### MW-1-C

		170	6069-03 (W	/ater)					
Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
General Chemistry									
Alkalinity, Bicarbonate as CaCO3*	530	10.0		mg/L	5	06/20/17	2320 B		JLM
Alkalinity, Carbonate as CaCO3*	<10.0	10.0		mg/L	5	06/20/17	2320 B		JLM
Alkalinity, Hydroxide as CaCO3*	<10.0	10.0		mg/L	5	06/20/17	2320 B		JLM
Alkalinity, Total as CaCO3*	530	10.0		mg/L	5	06/20/17	2320 B		JLM
Chloride*	24.2	5.00	0.717	mg/L	5	06/16/17	EPA300.0		JDA
Fluoride*	1.59	0.500	0.0798	mg/L	5	06/16/17	EPA300.0		JDA
Nitrate/Nitrite as N*	<2.00	2.00	1.09	mg/L	100	06/20/17	EPA353.2		LLG
pH*	8.35			pH Units	1	06/12/17	EPA150.1	H4	BDV
Total Dissolved Solids*	2020	10.0		mg/L	1	06/12/17	EPA160.1		LLG
Sulfate*	1090	50.0	7.82	mg/L	50	06/19/17	EPA300.0		JDA
Total Organic Carbon	4.56	0.500	0.201	mg/L	1	06/19/17	5310C		JDA
Dissolved Metals by ICP									
Aluminum*	< 0.050	0.050	0.020	mg/L	1	06/15/17	EPA200.7		JDA
Calcium*	96.0	0.100	0.036	mg/L	1	06/15/17	EPA200.7		JDA
Hardness as CaCO3	498	0.662	0.195	mg/L	1	06/15/17	2340 B		JDA
Iron*	< 0.050	0.050	0.014	mg/L	1	06/15/17	EPA200.7		JDA
Magnesium*	62.8	0.100	0.026	mg/L	1	06/15/17	EPA200.7		JDA
Potassium*	11.4	1.00	0.094	mg/L	1	06/15/17	EPA200.7		JDA
Silica (Si02)	10.6	1.07	0.298	mg/L	1	06/15/17	Calculation		JDA
Silicon	4.94	0.500	0.139	mg/L	1	06/15/17	EPA200.7		JDA
Sodium*	506	1.00	0.087	mg/L	1	06/15/17	EPA200.7		JDA
Dissolved Metals by ICPMS									
Arsenic*	0.0029	0.0005	0.00008	mg/L	1	06/15/17	EPA200.8		JDA
Cadmium*	< 0.0001	0.0001	0.00009	mg/L	1	06/15/17	EPA200.8		JDA
Copper*	0.0088	0.0001	0.00003	mg/L	1	06/15/17	EPA200.8		JDA
Lead*	< 0.0005	0.0005	0.00002	mg/L	1	06/15/17	EPA200.8		JDA
Manganese*	0.0744	0.0005	0.0003	mg/L	1	06/15/17	EPA200.8		JDA
Molybdenum*	0.0164	0.0005	0.00006	mg/L	1	06/15/17	EPA200.8		JDA
Selenium*	0.0136	0.0010	0.0002	mg/L	1	06/15/17	EPA200.8		JDA
Uranium	0.0500	0.0001	0.00001	mg/L	1	06/15/17	EPA200.8		JDA
Zinc*	0.0293	0.0020	0.0009	mg/L	1	06/15/17	EPA200.8		JDA

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Debbie Zufelt, Reports Manager



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GCC Energy, LLC			Project: GCC	GW Baselin	ne				
6473 CR 120	Proj	ect Name / N	Number: GCC	GW Baselin	ne			Report	ed:
Hesperus CO, 81326		Project M	lanager: Tom	Bird				07/20/17	16:47
			MW-1-C						
		170	)6069-03 (W	ater)					
Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
Dissolved Mercury by CVAA									
Mercury*	< 0.0002	0.0002	0.00009	mg/L	1	06/16/17	EPA245.1		BDV
Cation/Anion Balance	-2.65								

Green Analytical Laboratories

Seldie Zufett

Debbie Zufelt, Reports Manager

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Laboratories		www.GreenAnalytical.com
GCC Energy, LLC	Project: GCC GW Baseline	
6473 CR 120	Project Name / Number: GCC GW Baseline	Reported:
Hesperus CO, 81326	Project Manager: Tom Bird	07/20/17 16:47

#### **General Chemistry - Quality Control**

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch B706077 - General Prep - Wet Chem										
Blank (B706077-BLK1)			Prepa	ared & Anal	lyzed: 06/12	2/17				
Total Dissolved Solids	ND	10.0	mg/L							
Duplicate (B706077-DUP1)	Sour	ce: 1706067-0	01 Prepa	ared & Anal	lyzed: 06/12	2/17				
Total Dissolved Solids	1210	10.0	mg/L		1230			1.65	20	
Reference (B706077-SRM1)			Prepa	ared & Anal	lyzed: 06/12	2/17				
Total Dissolved Solids	355	10.0	mg/L	390	-	91.0	85-115			
Batch B706088 - General Prep - Wet Chem										
Duplicate (B706088-DUP2)	Sour	ce: 1706071-0	01 Prepa	ared & Anal	lyzed: 06/12	2/17				
pH	8.35		pH Units		8.33			0.240	20	
<b>Reference (B706088-SRM1)</b>			Prepa	ared & Anal	lyzed: 06/12	2/17				
рН	9.11		pH Units	9.08	<u> </u>	100	97.8-102.2			
Batch B706108 - General Prep - Wet Chem										
Blank (B706108-BLK1)			Prepa	ared & Anal	lyzed: 06/1	9/17				
Total Organic Carbon	ND	0.500	mg/L							
LCS (B706108-BS1)			Prepa	ared & Anal	lyzed: 06/1	9/17				
Total Organic Carbon	10.0	0.500	mg/L	10.0	•	100	85-115			
LCS Dup (B706108-BSD1)			Prepa	ared & Anal	lvzed: 06/19	9/17				
Total Organic Carbon	9.86	0.500	mg/L	10.0	<u>1920a. 00/1</u>	98.6	85-115	1.41	20	
Batch B706121 - General Prep - Wet Chem										
Blank (B706121-BLK1)			Prepa	ared: 06/15/	/17 Analyz	ed: 06/16/1	17			
Chloride	ND	1.00	mg/L							
Fluoride	ND	0.100	mg/L							
Sulfate	ND	1.00	mg/L							
LCS (B706121-BS1)			Prepa	ared: 06/15/	17 Analyz	ed: 06/16/1	17			
Chloride	24.4	1.00	mg/L	25.0		97.6	90-110			
Fluoride	2.52	0.100	mg/L	2.50		101	90-110			
Sulfate	24.2	1.00	mg/L	25.0		96.9	90-110			
LCS Dup (B706121-BSD1)			Prepa	ared: 06/15/	/17 Analyz	ed: 06/16/1	17			
Chloride	23.8	1.00	mg/L	25.0		95.3	90-110	2.39	20	
Fluoride	2.48	0.100	mg/L	2.50		99.2	90-110	1.44	20	
	23.7	1.00	mg/L	25.0		94.8	90-110	2.16	20	

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Debbie Zufelt, Reports Manager



Laboratories		www.GreenAnalytica									
GCC Energy, LLC		Pr	oject: GC	C GW Base	line						
6473 CR 120	Project Name / Number: GCC GW Baseline Reported:										
Hesperus CO, 81326		Project Mar	nager: Ton	n Bird					07/20/17 16:47		
	G	eneral Cher	nistry - (	Quality C	ontrol						
		(	Continu	ed)							
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B706150 - General Prep - Wet C											
Blank (B706150-BLK1)	Prepared & Analyzed: 06/20/17										
Nitrate/Nitrite as N	ND	0.020	mg/L								
LCS (B706150-BS1)	Prepared & Analyzed: 06/20/17										
Nitrate/Nitrite as N	0.995	0.020	mg/L	1.00		99.5	90-110				
LCS Dup (B706150-BSD1)			Prep	ared & Ana	lyzed: 06/20	0/17					
Nitrate/Nitrite as N	0.996	0.020	mg/L	1.00		99.6	90-110	0.181	20		
Batch B706165 - General Prep - Wet C	hem										
Blank (B706165-BLK1)			Prep	ared & Ana	lyzed: 06/2	0/17					
Alkalinity, Total as CaCO3	ND	10.0	mg/L								
LCS (B706165-BS1)			Prep	ared & Ana	lyzed: 06/2	0/17					
Alkalinity, Total as CaCO3	110	10.0	mg/L	100		110	85-115				
LCS Dup (B706165-BSD1)			Prep	ared & Ana	lyzed: 06/20	0/17					
Alkalinity, Total as CaCO3	107	10.0	mg/L	100		107	85-115	2.76	20		

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Laboratories		www.GreenAnalytical.com
GCC Energy, LLC	Project: GCC GW Baseline	
6473 CR 120	Project Name / Number: GCC GW Baseline	Reported:
Hesperus CO, 81326	Project Manager: Tom Bird	07/20/17 16:47

## **Dissolved Metals by ICP - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B706102 - Diss. 200.7/200.8										
Blank (B706102-BLK1)			Prep	oared: 06/14/	17 Analyze	ed: 06/15/1'	7			
Aluminum	ND	0.050	mg/L							
Calcium	ND	0.100	mg/L							
Iron	ND	0.050	mg/L							
Magnesium	ND	0.100	mg/L							
Potassium	ND	1.00	mg/L							
Silicon	ND	0.500	mg/L							
Sodium	ND	1.00	mg/L							
LCS (B706102-BS1)			Prep	oared: 06/14/	17 Analyze	ed: 06/15/1	7			
Aluminum	5.14	0.050	mg/L	5.00		103	85-115			
Calcium	5.12	0.100	mg/L	5.00		102	85-115			
Iron	5.20	0.050	mg/L	5.00		104	85-115			
Magnesium	26.2	0.100	mg/L	25.0		105	85-115			
Potassium	9.95	1.00	mg/L	10.0		99.5	85-115			
Silicon	4.88	0.500	mg/L	5.00		97.6	85-115			
Sodium	8.53	1.00	mg/L	8.10		105	85-115			
LCS Dup (B706102-BSD1)	Prepared: 06/14/17 Analyzed: 06/15/17									
Aluminum	5.14	0.050	mg/L	5.00		103	85-115	0.0178	20	
Calcium	5.19	0.100	mg/L	5.00		104	85-115	1.39	20	
Iron	5.21	0.050	mg/L	5.00		104	85-115	0.108	20	
Magnesium	26.3	0.100	mg/L	25.0		105	85-115	0.513	20	
Potassium	10.0	1.00	mg/L	10.0		100	85-115	0.810	20	
Silicon	4.90	0.500	mg/L	5.00		98.1	85-115	0.502	20	
Sodium	8.58	1.00	mg/L	8.10		106	85-115	0.548	20	

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Laboratories		www.GreenAnalytical.com
GCC Energy, LLC	Project: GCC GW Baseline	
6473 CR 120	Project Name / Number: GCC GW Baseline	Reported:
Hesperus CO, 81326	Project Manager: Tom Bird	07/20/17 16:47

# **Dissolved Metals by ICPMS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B706103 - Diss. 200.7/200.8										
Blank (B706103-BLK1)			Prep	oared: 06/14/	17 Analyz	ed: 06/15/1	7			
Arsenic	ND	0.0005	mg/L							
Cadmium	ND	0.0001	mg/L							
Copper	ND	0.0001	mg/L							
Lead	ND	0.0005	mg/L							
Manganese	ND	0.0005	mg/L							
Molybdenum	ND	0.0005	mg/L							
Selenium	ND	0.0010	mg/L							
Uranium	ND	0.0001	mg/L							
Zinc	ND	0.0020	mg/L							
LCS (B706103-BS1)			Prep	oared: 06/14/	17 Analyzo	ed: 06/15/1	7			
Arsenic	0.0526	0.0005	mg/L	0.0500		105	85-115			
Cadmium	0.0531	0.0001	mg/L	0.0500		106	85-115			
Copper	0.0546	0.0001	mg/L	0.0500		109	85-115			
Lead	0.0490	0.0005	mg/L	0.0500		98.1	85-115			
Manganese	0.0529	0.0005	mg/L	0.0500		106	85-115			
Molybdenum	0.0503	0.0005	mg/L	0.0500		101	85-115			
Selenium	0.266	0.0010	mg/L	0.250		106	85-115			
Uranium	0.0479	0.0001	mg/L	0.0500		95.8	85-115			
Zinc	0.0536	0.0020	mg/L	0.0500		107	85-115			
LCS Dup (B706103-BSD1)			Prep	oared: 06/14/	17 Analyzo	ed: 06/15/1	7			
Arsenic	0.0515	0.0005	mg/L	0.0500		103	85-115	2.06	20	
Cadmium	0.0512	0.0001	mg/L	0.0500		102	85-115	3.55	20	
Copper	0.0538	0.0001	mg/L	0.0500		108	85-115	1.38	20	
Lead	0.0487	0.0005	mg/L	0.0500		97.3	85-115	0.734	20	
Manganese	0.0530	0.0005	mg/L	0.0500		106	85-115	0.143	20	
Molybdenum	0.0501	0.0005	mg/L	0.0500		100	85-115	0.467	20	
Selenium	0.263	0.0010	mg/L	0.250		105	85-115	0.995	20	
Uranium	0.0473	0.0001	mg/L	0.0500		94.7	85-115	1.19	20	
Zinc	0.0525	0.0020	mg/L	0.0500		105	85-115	2.01	20	

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Project:	GCC GW Baseline	
Project Name / Number:	GCC GW Baseline	Reported:
Project Manager:	Tom Bird	07/20/17 16:47
	Project Name / Number:	Project: GCC GW Baseline Project Name / Number: GCC GW Baseline Project Manager: Tom Bird

# **Dissolved Mercury by CVAA - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B706124 - EPA 245.1/7470										
Blank (B706124-BLK1)			Prep	ared: 06/15/1	7 Analyz	ed: 06/16/1	7			
Mercury	ND	0.0002	mg/L							
LCS (B706124-BS1)			Prep	ared: 06/15/1	7 Analyz	ed: 06/16/1	7			
Mercury	0.0019	0.0002	mg/L	0.00200		95.3	85-115			
LCS Dup (B706124-BSD1)			Prep	ared: 06/15/1	7 Analyz	ed: 06/16/1	7			
Mercury	0.0019	0.0002	mg/L	0.00200		95.2	85-115	0.158	20	

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Laboratories		www.GreenAnalytical.com
GCC Energy, LLC	Project: GCC GW Baseline	
6473 CR 120	Project Name / Number: GCC GW Baseline	Reported:
Hesperus CO, 81326	Project Manager: Tom Bird	07/20/17 16:47

## **Notes and Definitions**

H4	pH analysis perfomed more than 48 hours after sampling.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis *Results reported on as received basis unless designated as dry.
dry RPD	Sample results reported on a dry weight basis *Results reported on as received basis unless designated as dry. Relative Percent Difference
,	*Results reported on as received basis unless designated as dry.
RPD	*Results reported on as received basis unless designated as dry. Relative Percent Difference

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Debbie Zufelt, Reports Manager

Contact Person: The D. June May		Bill to (if different): ANALYSIS REQUEST
10m D	P.0. #:	
ess:	Company:	
Jesperns - or	<b>Zip:</b> 81326 Attn:	e
#: . 4.10 305 4538	Address:	in
Email: 1 DIRD @ GCC.com CBECK@ re	resource hydrog rolosic, City:	el
	State: Zip:	5
Project Number(optional):	Phone #:	В
Sampler Name (Print): Landon Beck	Email:	v
	Collected Matrix (check one)	# of containers
For Lab Use Sample Name or Location	ROUNDWATER JRFACEWATER ASTEWATER RODUCEDWATER DIL RINKING WATER	FHER :         preservation (general)         IO3         SO4         her:         her:         for CCC
AD6-069-01 MW-2-MT		
07	-	
-	6/7/17 0933 X	X V III
T.W-S-MW 10	X CON 21/2/9	
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Relinquished By: Date:	Received By:	Standard TAT Yes (no)
Relinquished By: Date: Time:	Received By:	-64 TOC arrived in glass 250 mc Hisoy presented workey powered into unpres.
Delivered Rv. (Circle One)		AVNOUT VOTA - JC
	Temperature at reciept: CHECKED BY:	

† GAL cannot always accept verbål changes. Please fax or email written change requests.
\* Chain of Custody must be signed in "Reliquished By:" as an acceptance of services and all applicable charges.

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75 Suttle Street Durango, CO 81303 970.247.4220 Phone 970.247.4227 Fax www.greenanalytical.com

20 July 2017

Tom Bird GCC Energy, LLC 6473 CR 120 Hesperus, CO 81326 RE: GCC GW Baseline

Enclosed are the results of analyses for samples received by the laboratory on 06/30/17 14:25. If you need any further assistance, please feel free to contact me.

Sincerely,

Dellie Zufett

Debbie Zufelt Reports Manager

All accredited analytes contained in this report are denoted by an asterisk (\*). For a complete list of accredited analytes please do not hesitate to contact us via any of the contact information contained in this report. All of our certifications can be viewed at http://greenanalytical.com/certifications/

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Our affiliate laboratory, Cardinal Laboratories, is also NELAP accredited through the Texas Commission on Environmental Quality for a variety of organic constituents in drinking water, non-potable water and solid matrices. Cardinal is also accredited for regulated VOCs, TTHM, and HAA-5 in drinking water through the Colorado Department of Public Health and Environment and EPA region 8.



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GCC Energy, LLC	Project: GCC GW Baseline	
6473 CR 120	Project Name / Number: [none]	Reported:
Hesperus CO, 81326	Project Manager: Tom Bird	07/20/17 16:05

## ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-4-A	1706322-01	Water	06/30/17 13:00	06/30/17 14:25
MW-3-A	1706322-02	Water	06/30/17 08:17	06/30/17 14:25
MW-3-C	1706322-03	Water	06/30/17 09:05	06/30/17 14:25
MW-3-M1	1706322-04	Water	06/30/17 07:50	06/30/17 14:25

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Laboratories		www.GreenAnalytical.com
GCC Energy, LLC	Project: GCC GW Baseline	
6473 CR 120	Project Name / Number: [none]	Reported:
Hesperus CO, 81326	Project Manager: Tom Bird	07/20/17 16:05

Changes were made to the COC per Landon Beck 07/20/17. Sample 1706-322-04 was listed on the COC as MW-3-. The sample ID should be MW-3-M1. The attached report reflects these changes.

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GCC Energy, LLC Project:	GCC GW Baseline
6473 CR 120 Project Name / Number:	[none] Reported:
Hesperus CO, 81326 Project Manager:	Tom Bird 07/20/17 16:05

# MW-4-A

		170	6322-01 (W	/ater)					
Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analys
General Chemistry									
Alkalinity, Bicarbonate as CaCO3*	560	10.0		mg/L	5	07/12/17	2320 B		JLM
Alkalinity, Carbonate as CaCO3*	<10.0	10.0		mg/L	5	07/12/17	2320 B		JLM
Alkalinity, Hydroxide as CaCO3*	<10.0	10.0		mg/L	5	07/12/17	2320 B		JLM
Alkalinity, Total as CaCO3*	560	10.0		mg/L	5	07/12/17	2320 B		JLM
Chloride*	9.66	4.00	0.573	mg/L	4	07/13/17	EPA300.0		JDA
Fluoride*	< 0.400	0.400	0.0638	mg/L	4	07/13/17	EPA300.0		JDA
Nitrate/Nitrite as N*	< 0.020	0.020	0.011	mg/L	1	07/13/17	EPA353.2		LLG
pH*	8.40			pH Units	1	07/06/17	EPA150.1	H4	CMS
Total Dissolved Solids*	1470	10.0		mg/L	1	07/06/17	EPA160.1		LLG
Sulfate*	588	20.0	3.13	mg/L	20	07/14/17	EPA300.0		JDA
Fotal Organic Carbon	11.7	5.00	2.01	mg/L	10	07/05/17	5310C		JDA
Dissolved Metals by ICP									
Aluminum*	< 0.050	0.050	0.020	mg/L	1	07/07/17	EPA200.7		JDA
Calcium*	2.43	0.100	0.036	mg/L	1	07/07/17	EPA200.7		JDA
lardness as CaCO3	9.85	0.662	0.195	mg/L	1	07/07/17	2340 B		JDA
ron*	< 0.050	0.050	0.014	mg/L	1	07/07/17	EPA200.7		JDA
Magnesium*	0.916	0.100	0.026	mg/L	1	07/07/17	EPA200.7		JDA
Potassium*	1.75	1.00	0.094	mg/L	1	07/07/17	EPA200.7		JDA
Silica (Si02)	10.6	1.07	0.298	mg/L	1	07/07/17	Calculation		JDA
Silicon	4.97	0.500	0.139	mg/L	1	07/07/17	EPA200.7		JDA
Sodium*	537	5.00	0.435	mg/L	5	07/07/17	EPA200.7		JDA
Dissolved Metals by ICPMS									
Arsenic*	< 0.0025	0.0025	0.0004	mg/L	5	07/14/17	EPA200.8		JDA
Cadmium*	< 0.0005	0.0005	0.0005	mg/L	5	07/14/17	EPA200.8		JDA
Copper*	0.0093	0.0005	0.0002	mg/L	5	07/14/17	EPA200.8		JDA
_ead*	< 0.0025	0.0025	0.0001	mg/L	5	07/14/17	EPA200.8		JDA
/langanese*	0.0063	0.0025	0.0014	mg/L	5	07/14/17	EPA200.8		JDA
Aolybdenum*	0.0275	0.0025	0.0003	mg/L	5	07/14/17	EPA200.8		JDA
Selenium*	< 0.0050	0.0050	0.0008	mg/L	5	07/14/17	EPA200.8		JDA
Uranium	< 0.0005	0.0005	0.00007	mg/L	5	07/14/17	EPA200.8		JDA
Zinc*	0.0319	0.0100	0.0045	mg/L	5	07/14/17	EPA200.8		JDA

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Debbie Zufelt, Reports Manager



Laboratories					www.GreenAnalytical.co					
GCC Energy, LLC			Project: GCC	GW Baselir	ne					
6473 CR 120	Proj	Project Name / Number: [none]							ed:	
Hesperus CO, 81326		Project Manager: Tom Bird							16:05	
		17	MW-4-A							
		170	06322-01 (W	ater)						
Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst	
Dissolved Mercury by CVAA										
Aercury*	< 0.0002	0.0002	0.00009	mg/L	1	07/17/17	EPA245.1		LLG	
Cation/Anion Balance	26									

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GCC Energy, LLC	Project: GCC GW Baseline	
6473 CR 120	Project Name / Number: [none]	Reported:
Hesperus CO, 81326	Project Manager: Tom Bird	07/20/17 16:05

# MW-3-A

1706322-02 (Water)											
Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst		
General Chemistry											
Alkalinity, Bicarbonate as CaCO3*	470	10.0		mg/L	5	07/12/17	2320 B		JLM		
Alkalinity, Carbonate as CaCO3*	<10.0	10.0		mg/L	5	07/12/17	2320 B		JLM		
Alkalinity, Hydroxide as CaCO3*	<10.0	10.0		mg/L	5	07/12/17	2320 B		JLM		
Alkalinity, Total as CaCO3*	470	10.0		mg/L	5	07/12/17	2320 B		JLM		
Chloride*	17.4	4.00	0.573	mg/L	4	07/13/17	EPA300.0		JDA		
Fluoride*	0.488	0.400	0.0638	mg/L	4	07/13/17	EPA300.0		JDA		
Nitrate/Nitrite as N*	< 0.100	0.100	0.055	mg/L	5	07/13/17	EPA353.2		LLG		
pH*	8.69			pH Units	1	07/06/17	EPA150.1	H4	CMS		
Total Dissolved Solids*	1670	10.0		mg/L	1	07/06/17	EPA160.1		LLG		
Sulfate*	802	25.0	3.91	mg/L	25	07/14/17	EPA300.0		JDA		
Total Organic Carbon	10.0	5.00	2.01	mg/L	10	07/05/17	5310C		JDA		
Dissolved Metals by ICP											
Aluminum*	< 0.050	0.050	0.020	mg/L	1	07/07/17	EPA200.7		JDA		
Calcium*	3.67	0.100	0.036	mg/L	1	07/07/17	EPA200.7		JDA		
Hardness as CaCO3	12.6	0.662	0.195	mg/L	1	07/07/17	2340 B		JDA		
Iron*	< 0.050	0.050	0.014	mg/L	1	07/07/17	EPA200.7		JDA		
Magnesium*	0.823	0.100	0.026	mg/L	1	07/07/17	EPA200.7		JDA		
Potassium*	2.02	1.00	0.094	mg/L	1	07/07/17	EPA200.7		JDA		
Silica (Si02)	10.9	1.07	0.298	mg/L	1	07/07/17	Calculation		JDA		
Silicon	5.10	0.500	0.139	mg/L	1	07/07/17	EPA200.7		JDA		
Sodium*	585	5.00	0.435	mg/L	5	07/07/17	EPA200.7		JDA		
Dissolved Metals by ICPMS											
Arsenic*	< 0.0025	0.0025	0.0004	mg/L	5	07/14/17	EPA200.8		JDA		
Cadmium*	< 0.0005	0.0005	0.0005	mg/L	5	07/14/17	EPA200.8		JDA		
Copper*	0.0081	0.0005	0.0002	mg/L	5	07/14/17	EPA200.8		JDA		
Lead*	< 0.0025	0.0025	0.0001	mg/L	5	07/14/17	EPA200.8		JDA		
Manganese*	0.0251	0.0025	0.0014	mg/L	5	07/14/17	EPA200.8		JDA		
Molybdenum*	0.0274	0.0025	0.0003	mg/L	5	07/14/17	EPA200.8		JDA		
Selenium*	< 0.0050	0.0050	0.0008	mg/L	5	07/14/17	EPA200.8		JDA		
Uranium	0.0040	0.0005	0.00007	mg/L	5	07/14/17	EPA200.8		JDA		
Zinc*	< 0.0100	0.0100	0.0045	mg/L	5	07/14/17	EPA200.8		JDA		

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Laboratories						www.GreenAnalytical.co					
GCC Energy, LLC			Project: GCC	GW Baselir	ne						
6473 CR 120	Proj	Project Name / Number: [none]							ed:		
Hesperus CO, 81326		Project Manager: Tom Bird							16:05		
			MW-3-A								
		17	)6322-02 (W	ater)							
Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst		
Dissolved Mercury by CVAA											
Aercury*	< 0.0002	0.0002	0.00009	mg/L	1	07/17/17	EPA245.1		LLG		
Cation/Anion Balance	-1.64										

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Project: GCC GW Baseline	
Project Name / Number: [none]	Reported:
Project Manager: Tom Bird	07/20/17 16:05
	Project Name / Number: [none]

# MW-3-C

		170	6322-03 (W	/ater)			1706322-03 (Water)											
Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analys									
General Chemistry																		
Alkalinity, Bicarbonate as CaCO3*	1480	10.0		mg/L	5	07/12/17	2320 B		JLM									
Alkalinity, Carbonate as CaCO3*	90.0	10.0		mg/L	5	07/12/17	2320 B		JLM									
Alkalinity, Hydroxide as CaCO3*	<10.0	10.0		mg/L	5	07/12/17	2320 B		JLM									
Alkalinity, Total as CaCO3*	1570	10.0		mg/L	5	07/12/17	2320 B		JLM									
Chloride*	330	10.0	1.43	mg/L	10	07/14/17	EPA300.0		JDA									
Fluoride*	4.94	0.500	0.0798	mg/L	5	07/13/17	EPA300.0		JDA									
Nitrate/Nitrite as N*	< 0.400	0.400	0.219	mg/L	20	07/13/17	EPA353.2		LLG									
pH*	8.48			pH Units	1	07/06/17	EPA150.1	H4	CMS									
Total Dissolved Solids*	2360	10.0		mg/L	1	07/06/17	EPA160.1		LLG									
Sulfate*	73.5	5.00	0.782	mg/L	5	07/13/17	EPA300.0		JDA									
Total Organic Carbon	58.5	5.00	2.01	mg/L	10	07/05/17	5310C		JDA									
Dissolved Metals by ICP																		
Aluminum*	< 0.100	0.100	0.040	mg/L	2	07/12/17	EPA200.7		JDA									
Calcium*	2.87	0.100	0.036	mg/L	1	07/07/17	EPA200.7		JDA									
Hardness as CaCO3	11.8	0.662	0.195	mg/L	1	07/07/17	2340 B		JDA									
Iron*	< 0.050	0.050	0.014	mg/L	1	07/07/17	EPA200.7		JDA									
Magnesium*	1.12	0.100	0.026	mg/L	1	07/07/17	EPA200.7		JDA									
Potassium*	3.24	1.00	0.094	mg/L	1	07/07/17	EPA200.7		JDA									
Silica (Si02)	8.86	1.07	0.298	mg/L	1	07/07/17	Calculation		JDA									
Silicon	4.14	0.500	0.139	mg/L	1	07/07/17	EPA200.7		JDA									
Sodium*	890	10.0	0.870	mg/L	10	07/07/17	EPA200.7		JDA									
Dissolved Metals by ICPMS																		
Arsenic*	0.0088	0.0050	0.0008	mg/L	10	07/14/17	EPA200.8		JDA									
Cadmium*	< 0.0010	0.0010	0.0009	mg/L	10	07/14/17	EPA200.8		JDA									
Copper*	0.0147	0.0010	0.0003	mg/L	10	07/14/17	EPA200.8		JDA									
Lead*	< 0.0050	0.0050	0.0002	mg/L	10	07/14/17	EPA200.8		JDA									
Manganese*	0.0188	0.0050	0.0027	mg/L	10	07/14/17	EPA200.8		JDA									
Molybdenum*	0.0291	0.0050	0.0006	mg/L	10	07/14/17	EPA200.8		JDA									
Selenium*	0.0121	0.0100	0.0015	mg/L	10	07/14/17	EPA200.8		JDA									
Uranium	0.0102	0.0010	0.0001	mg/L	10	07/14/17	EPA200.8		JDA									
Zinc*	< 0.0200	0.0200	0.0090	mg/L	10	07/14/17	EPA200.8		JDA									

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Laboratories							www.Gre	enAnalytica	d.com
GCC Energy, LLC			Project: GCC	GW Baselir	ne				
6473 CR 120	Proj	Project Name / Number: [none]							ed:
Hesperus CO, 81326		Project Manager: Tom Bird							16:05
			MW-3-C						
		170	06322-03 (W	ater)					
Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
Dissolved Mercury by CVAA									
Aercury*	< 0.0002	0.0002	0.00009	mg/L	1	07/17/17	EPA245.1		LLG
Cation/Anion Balance	-4.22								

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6473 CR 120 Project Name / Number: [none] Reporte	
Hesperus CO, 81326Project Manager: Tom Bird07/20/17 1	.05

### MW-3-M1

1706322-04 (Water)											
Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst		
General Chemistry											
Alkalinity, Bicarbonate as CaCO3*	555	10.0		mg/L	5	07/12/17	2320 B		JLM		
Alkalinity, Carbonate as CaCO3*	120	10.0		mg/L	5	07/12/17	2320 B		JLM		
Alkalinity, Hydroxide as CaCO3*	<10.0	10.0		mg/L	5	07/12/17	2320 B		JLM		
Alkalinity, Total as CaCO3*	675	10.0		mg/L	5	07/12/17	2320 B		JLM		
Chloride*	10.1	4.00	0.573	mg/L	4	07/13/17	EPA300.0		JDA		
Fluoride*	1.34	0.400	0.0638	mg/L	4	07/13/17	EPA300.0		JDA		
Nitrate/Nitrite as N*	< 0.020	0.020	0.011	mg/L	1	07/13/17	EPA353.2		LLG		
pH*	8.75			pH Units	1	07/06/17	EPA150.1	H4	CMS		
Total Dissolved Solids*	1120	10.0		mg/L	1	07/06/17	EPA160.1		LLG		
Sulfate*	241	10.0	1.56	mg/L	10	07/14/17	EPA300.0		JDA		
Total Organic Carbon	14.8	5.00	2.01	mg/L	10	07/05/17	5310C		JDA		
Dissolved Metals by ICP											
Aluminum*	0.102	0.100	0.040	mg/L	2	07/12/17	EPA200.7		JDA		
Calcium*	2.32	0.200	0.072	mg/L	2	07/12/17	EPA200.7		JDA		
Hardness as CaCO3	8.73	1.32	0.390	mg/L	2	07/12/17	2340 B		JDA		
Iron*	< 0.100	0.100	0.028	mg/L	2	07/12/17	EPA200.7		JDA		
Magnesium*	0.714	0.200	0.051	mg/L	2	07/12/17	EPA200.7		JDA		
Potassium*	2.21	2.00	0.189	mg/L	2	07/12/17	EPA200.7		JDA		
Silica (Si02)	8.18	2.14	0.596	mg/L	2	07/12/17	Calculation		JDA		
Silicon	3.82	1.00	0.279	mg/L	2	07/12/17	EPA200.7		JDA		
Sodium*	430	2.00	0.174	mg/L	2	07/12/17	EPA200.7		JDA		
Dissolved Metals by ICPMS											
Arsenic*	0.0167	0.0025	0.0004	mg/L	5	07/14/17	EPA200.8		JDA		
Cadmium*	< 0.0005	0.0005	0.0005	mg/L	5	07/14/17	EPA200.8		JDA		
Copper*	0.0058	0.0005	0.0002	mg/L	5	07/14/17	EPA200.8		JDA		
Lead*	< 0.0025	0.0025	0.0001	mg/L	5	07/14/17	EPA200.8		JDA		
Manganese*	0.0058	0.0025	0.0014	mg/L	5	07/14/17	EPA200.8		JDA		
Molybdenum*	0.0211	0.0025	0.0003	mg/L	5	07/14/17	EPA200.8		JDA		
Selenium*	< 0.0050	0.0050	0.0008	mg/L	5	07/14/17	EPA200.8		JDA		
Uranium	0.0084	0.0005	0.00007	mg/L	5	07/14/17	EPA200.8		JDA		
Zinc*	< 0.0100	0.0100	0.0045	mg/L	5	07/14/17	EPA200.8		JDA		

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Laboratories				www.GreenAnalytic						
GCC Energy, LLC			Project: GCC	GW Baselir	ne					
6473 CR 120	Proj	Project Name / Number: [none]							ed:	
Hesperus CO, 81326		Project Manager: Tom Bird							16:05	
			MW-3-M	1						
		17	)6322-04 (W	ater)						
Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst	
Dissolved Mercury by CVAA										
Aercury*	< 0.0002	0.0002	0.00009	mg/L	1	07/17/17	EPA245.1		LLG	
Cation/Anion Balance	.18									

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Laboratories		www.GreenAnalytical.com
GCC Energy, LLC	Project: GCC GW Baseline	
6473 CR 120	Project Name / Number: [none]	Reported:
Hesperus CO, 81326	Project Manager: Tom Bird	07/20/17 16:05

# **General Chemistry - Quality Control**

		Reporting		Spike	Source		%REC		RPD		
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes	
Batch B707018 - General Prep - Wet Chem											
Blank (B707018-BLK1)			Prepa	ared & Ana	lyzed: 07/05	5/17					
Total Organic Carbon	ND	0.500	mg/L								
LCS (B707018-BS1)			Prepa	ared & Ana	lyzed: 07/05	5/17					
Total Organic Carbon	10.1	0.500	mg/L	10.0		101	85-115				
LCS Dup (B707018-BSD1)			Prepa	ared & Ana	lyzed: 07/05	5/17					
Total Organic Carbon	10.0	0.500	mg/L	10.0		100	85-115	0.995	20		
Batch B707032 - General Prep - Wet Chem											
Blank (B707032-BLK1)			Prepa	ared & Ana	lyzed: 07/06	6/17					
Total Dissolved Solids	ND	10.0	mg/L								
Duplicate (B707032-DUP1)	Sour	ce: 1706322-	01 Prepa	ared & Ana	lyzed: 07/06	5/17					
Total Dissolved Solids	1470	10.0	mg/L		1470			0.00	20		
Reference (B707032-SRM1)	Prepared & Analyzed: 07/06/17										
Total Dissolved Solids	545	10.0	mg/L	550		99.1	85-115				
Batch B707045 - General Prep - Wet Chem											
Duplicate (B707045-DUP1)	Sour	ce: 1706323-	01 Prepa	ared & Ana	lyzed: 07/06	5/17					
pH	8.88		pH Units		8.85			0.338	20		
Reference (B707045-SRM1)			Prepa	ared & Ana	lyzed: 07/06	6/17					
pH	9.07		pH Units	9.08		99.9	97.8-102.2				
Batch B707071 - General Prep - Wet Chem											
Blank (B707071-BLK1)			Prepa	ared: 07/10/	/17 Analyze	ed: 07/12/1	17				
Alkalinity, Total as CaCO3	ND	10.0	mg/L								
LCS (B707071-BS1)			Prepa	ared: 07/10/	17 Analyzo	ed: 07/12/1	17				
Alkalinity, Total as CaCO3	104	10.0	mg/L	100		104	85-115				
LCS Dup (B707071-BSD1)			Prepa	ared: 07/10/	17 Analyz	ed: 07/12/1	17				
Alkalinity, Total as CaCO3	105	10.0	mg/L	100		105	85-115	0.957	20		
Batch B707089 - General Prep - Wet Chem											
Blank (B707089-BLK1)			Prepa	ared: 07/12/	17 Analyz	ed: 07/13/	17				
Chloride	ND	1.00	mg/L								
Fluoride	ND	0.100	mg/L								
Sulfate	ND	1.00	mg/L								
Green Analytical Laboratories			The r	esults in this 1	eport apply to	the samples	analyzed in acc	ordance with	h the chain of		
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Laboratories								www.Gree	enAnalytica	l.com
GCC Energy, LLC		Pı	oject: GC	C GW Basel	ine					
6473 CR 120	Proj	ect Name / Nu	mber: [noi	ne]					Reporte	ed:
Hesperus CO, 81326		Project Mar	nager: Ton	n Bird					07/20/17	16:05
	G	eneral Cher	nistry - ( Continu	•	ontrol					
			Continu	,						
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B707089 - General Prep - Wet	Chem (Continued)									
LCS (B707089-BS1)			Prep	ared: 07/12/	17 Analyz	ed: 07/13/1	7			
Chloride	24.2	1.00	mg/L	25.0		96.9	90-110			
Fluoride	2.50	0.100	mg/L	2.50		100	90-110			
Sulfate	23.9	1.00	mg/L	25.0		95.8	90-110			
LCS Dup (B707089-BSD1)			Prep	ared: 07/12/	17 Analyz	ed: 07/13/1	7			
Chloride	24.5	1.00	mg/L	25.0		98.0	90-110	1.04	20	
Fluoride	2.52	0.100	mg/L	2.50		101	90-110	0.915	20	
Sulfate	24.2	1.00	mg/L	25.0		96.8	90-110	1.07	20	
Batch B707092 - General Prep - Wet	Chem									
Blank (B707092-BLK1)			Prep	ared: 07/12/	17 Analyz	ed: 07/13/1	7			
Nitrate/Nitrite as N	ND	0.020	mg/L							
LCS (B707092-BS1)			Prep	ared: 07/12/	17 Analyz	ed: 07/13/1	7			
Nitrate/Nitrite as N	1.03	0.020	mg/L	1.00		103	90-110			
LCS Dup (B707092-BSD1)			Prep	ared: 07/12/	17 Analyz	ed: 07/13/1	7			
Nitrate/Nitrite as N	1.03	0.020	mg/L	1.00	•	103	90-110	0.0483	20	

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GCC Energy, LLC	Project: GCC GW Baseline	
6473 CR 120	Project Name / Number: [none]	Reported:
Hesperus CO, 81326	Project Manager: Tom Bird	07/20/17 16:05

# **Dissolved Metals by ICP - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B707011 - Diss. 200.7/200.8	Kesuit	Linit	Cinto	Level	Result	, utile	Linits		Linit	110103	
Blank (B707011-BLK1)			Pren	ared: 07/03/	17 Analyz	ad: 07/07/17	7				
Aluminum	ND	0.050		arcu. 07/03/		u. 07/07/1	/				
Calcium	ND	0.030	mg/L mg/L								
Iron	ND	0.100	mg/L								
Magnesium	ND	0.030	mg/L								
Potassium	ND	1.00	mg/L								
Silicon	ND	0.500	mg/L								
Sodium	ND	1.00	mg/L								
Sourium	ND	1.00	iiig/L								
LCS (B707011-BS1)	Prepared: 07/03/17 Analyzed: 07/07/17										
Aluminum	4.86	0.050	mg/L	5.00		97.2	85-115				
Calcium	4.84	0.100	mg/L	5.00		96.9	85-115				
Iron	4.86	0.050	mg/L	5.00		97.2	85-115				
Magnesium	24.6	0.100	mg/L	25.0		98.5	85-115				
Potassium	9.62	1.00	mg/L	10.0		96.2	85-115				
Silicon	4.62	0.500	mg/L	5.00		92.3	85-115				
Sodium	7.88	1.00	mg/L	8.10		97.3	85-115				
LCS Dup (B707011-BSD1)			Prep	ared: 07/03/	17 Analyze	ed: 07/07/17	7				
Aluminum	4.86	0.050	mg/L	5.00		97.2	85-115	0.0932	20		
Calcium	4.84	0.100	mg/L	5.00		96.7	85-115	0.146	20		
Iron	4.86	0.050	mg/L	5.00		97.2	85-115	0.0387	20		
Magnesium	24.6	0.100	mg/L	25.0		98.3	85-115	0.198	20		
Potassium	9.62	1.00	mg/L	10.0		96.2	85-115	0.0271	20		
Silicon	4.60	0.500	mg/L	5.00		92.0	85-115	0.326	20		
Sodium	7.85	1.00	mg/L	8.10		97.0	85-115	0.359	20		

#### Batch B707087 - Diss. 200.7/200.8

Blank (B707087-BLK1)			Prep	ared & Analyzed	1: 07/12/17		
Aluminum	ND	0.050	mg/L				
Calcium	ND	0.100	mg/L				
Iron	ND	0.050	mg/L				
Magnesium	ND	0.100	mg/L				
Potassium	ND	1.00	mg/L				
Silicon	ND	0.500	mg/L				
Sodium	ND	1.00	mg/L				
LCS (B707087-BS1)			Prep	ared & Analyzed	1: 07/12/17		
Aluminum	4.90	0.050	mg/L	5.00	98.1	85-115	
Calcium	5.02	0.100	mg/L	5.00	100	85-115	
Iron	5.01	0.050	mg/L	5.00	100	85-115	

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GCC Energy, LLC	Project: GCC GW Baseline	
6473 CR 120	Project Name / Number: [none]	Reported:
Hesperus CO, 81326	Project Manager: Tom Bird	07/20/17 16:05

#### Dissolved Metals by ICP - Quality Control (Continued)

		(	Continu	eu)						
		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch B707087 - Diss. 200.7/200.8 (Con	ntinued)									
LCS (B707087-BS1) (Continued)			Prep	ared & Anal	yzed: 07/12	2/17				
Magnesium	25.2	0.100	mg/L	25.0		101	85-115			
Potassium	9.69	1.00	mg/L	10.0		96.9	85-115			
Silicon	4.79	0.500	mg/L	5.00		95.7	85-115			
Sodium	8.60	1.00	mg/L	8.10		106	85-115			
LCS Dup (B707087-BSD1)			Prep	ared & Anal	yzed: 07/12	2/17				
Aluminum	4.90	0.050	mg/L	5.00		97.9	85-115	0.162	20	
Calcium	4.99	0.100	mg/L	5.00		99.7	85-115	0.646	20	
Iron	5.01	0.050	mg/L	5.00		100	85-115	0.125	20	
Magnesium	25.1	0.100	mg/L	25.0		100	85-115	0.481	20	
Potassium	9.67	1.00	mg/L	10.0		96.7	85-115	0.188	20	
Silicon	4.80	0.500	mg/L	5.00		96.0	85-115	0.286	20	
Sodium	8.60	1.00	mg/L	8.10		106	85-115	0.0274	20	

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Debbie Zufelt, Reports Manager

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GCC Energy, LLC	Project: GCC GW Baseline	
6473 CR 120	Project Name / Number: [none]	Reported:
Hesperus CO, 81326	Project Manager: Tom Bird	07/20/17 16:05

## **Dissolved Metals by ICPMS - Quality Control**

Analyte Batch B707085 - Diss. 200.7/200.8	Result		Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Datah D707005 Dian 300 7/300 0		Limit	Units	Level	RESUIT	/0KEU	LIIIIIIS	κrυ	LIIIII	INOLES
Satch B/0/085 - Diss. 200.//200.8										
3lank (B707085-BLK1)			Prep	ared: 07/12/	17 Analyze	ed: 07/13/1	7			
Arsenic	ND	0.0005	mg/L							
Cadmium	ND	0.0001	mg/L							
Copper	ND	0.0001	mg/L							
Lead	ND	0.0005	mg/L							
Manganese	ND	0.0005	mg/L							
Molybdenum	ND	0.0005	mg/L							
Selenium	ND	0.0010	mg/L							
Uranium	ND	0.0001	mg/L							
Zinc	ND	0.0020	mg/L							
LCS (B707085-BS1)			Prep	ared: 07/12/	17 Analyze	ed: 07/13/1	7			
Arsenic	0.0544	0.0005	mg/L	0.0500		109	85-115			
Cadmium	0.0530	0.0001	mg/L	0.0500		106	85-115			
Copper	0.0504	0.0001	mg/L	0.0500		101	85-115			
Lead	0.0503	0.0005	mg/L	0.0500		101	85-115			
Manganese	0.0483	0.0005	mg/L	0.0500		96.6	85-115			
Molybdenum	0.0490	0.0005	mg/L	0.0500		98.1	85-115			
Selenium	0.262	0.0010	mg/L	0.250		105	85-115			
Uranium	0.0493	0.0001	mg/L	0.0500		98.7	85-115			
Zinc	0.0530	0.0020	mg/L	0.0500		106	85-115			
LCS Dup (B707085-BSD1)			Prep	ared: 07/12/	17 Analyze	ed: 07/13/1	7			
Arsenic	0.0524	0.0005	mg/L	0.0500		105	85-115	3.67	20	
Cadmium	0.0525	0.0001	mg/L	0.0500		105	85-115	0.964	20	
Copper	0.0519	0.0001	mg/L	0.0500		104	85-115	3.08	20	
Lead	0.0523	0.0005	mg/L	0.0500		105	85-115	3.89	20	
Manganese	0.0494	0.0005	mg/L	0.0500		98.8	85-115	2.28	20	
Molybdenum	0.0471	0.0005	mg/L	0.0500		94.2	85-115	4.05	20	
Selenium	0.256	0.0010	mg/L	0.250		102	85-115	2.44	20	
Uranium	0.0507	0.0001	mg/L	0.0500		101	85-115	2.76	20	
Zinc	0.0502	0.0020	mg/L	0.0500		100	85-115	5.51	20	
Batch B707086 - Diss. 200.7/200.8										

Blank (B707086-BLK1)			Prepared: 07/12/17 Analyzed: 07/14/17
Arsenic	ND	0.0005	mg/L
Cadmium	ND	0.0001	mg/L
Copper	ND	0.0001	mg/L
Lead	ND	0.0005	mg/L
Manganese	ND	0.0005	mg/L
Molybdenum	ND	0.0005	mg/L

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Laboratories								www.Gre	enAnalytica	l.com			
GCC Energy, LLC		Pi	roject: GC	C GW Basel	ine								
6473 CR 120	Pro	ect Name / Nu	mber: [no	ne]					Reporte	d:			
Hesperus CO, 81326		Project Ma	nager: Ton	n Bird				07/20/17 16:05					
	Discol				te Canto	.1							
	DISSON	ved Metals	Continu		ty Contr	01							
		Reporting		Spike	Source		%REC		RPD				
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes			
Batch B707086 - Diss. 200.7/200.8 (Con	tinued)												
Blank (B707086-BLK1) (Continued)			Prep	oared: 07/12/	17 Analyz	ed: 07/14/1	7						
Selenium	ND	0.0010	mg/L										
Uranium	ND	0.0001	mg/L										
Zinc	ND	0.0020	mg/L										
LCS (B707086-BS1)	Prepared: 07/12/17 Analyzed: 07/14/17												
Arsenic	0.0483	0.0005	mg/L	0.0500		96.6	85-115						
Cadmium	0.0504	0.0001	mg/L	0.0500		101	85-115						
Copper	0.0499	0.0001	mg/L	0.0500		99.7	85-115						
Lead	0.0478	0.0005	mg/L	0.0500		95.6	85-115						
Manganese	0.0479	0.0005	mg/L	0.0500		95.7	85-115						
Molybdenum	0.0509	0.0005	mg/L	0.0500		102	85-115						
Selenium	0.254	0.0010	mg/L	0.250		102	85-115						
Uranium	0.0468	0.0001	mg/L	0.0500		93.7	85-115						
Zinc	0.0509	0.0020	mg/L	0.0500		102	85-115						
LCS Dup (B707086-BSD1)			Prep	oared: 07/12/	17 Analyzo	ed: 07/14/1	7						
Arsenic	0.0490	0.0005	mg/L	0.0500		98.0	85-115	1.46	20				
Cadmium	0.0506	0.0001	mg/L	0.0500		101	85-115	0.387	20				
Copper	0.0508	0.0001	mg/L	0.0500		102	85-115	1.90	20				
Lead	0.0480	0.0005	mg/L	0.0500		96.0	85-115	0.454	20				
Manganese	0.0489	0.0005	mg/L	0.0500		97.7	85-115	2.03	20				
Molybdenum	0.0521	0.0005	mg/L	0.0500		104	85-115	2.25	20				
Selenium	0.256	0.0010	mg/L	0.250		102	85-115	0.674	20				
Uranium	0.0465	0.0001	mg/L	0.0500		92.9	85-115	0.786	20				
Zinc	0.0511	0.0020	mg/L	0.0500		102	85-115	0.465	20				

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Debbie Zufelt, Reports Manager



Reported:
07/20/17 16:05

# **Dissolved Mercury by CVAA - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B707111 - EPA 245.1/7470										
Blank (B707111-BLK1)			Prep	ared: 07/13/	17 Analyz	ed: 07/17/1	7			
Mercury	ND	0.0002	mg/L							
LCS (B707111-BS1)			Prep	ared: 07/13/	17 Analyz	ed: 07/17/1	7			
Mercury	0.0021	0.0002	mg/L	0.00200		107	85-115			
LCS Dup (B707111-BSD1)			Prep	ared: 07/13/	17 Analyz	ed: 07/17/1	7			
Mercury	0.0021	0.0002	mg/L	0.00200		106	85-115	0.329	20	

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Laboratories		www.GreenAnalytical.com
GCC Energy, LLC	Project: GCC GW Baseline	
6473 CR 120	Project Name / Number: [none]	Reported:
Hesperus CO, 81326	Project Manager: Tom Bird	07/20/17 16:05

# **Notes and Definitions**

H4	pH analysis perfomed more than 48 hours after sampling.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
dry	Sample results reported on a dry weight basis *Results reported on as received basis unless designated as dry.
dry RPD	1 1 5 6
5	*Results reported on as received basis unless designated as dry.
RPD	*Results reported on as received basis unless designated as dry. Relative Percent Difference

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Debbie Zufelt, Reports Manager

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	to 5-day TAT	ANSN TUC				$\langle$		C3 MCFARLANS	MICHAEL
	Yes No	-				Received By:	d Time: 1425	Mafeularu	Refinquished By:
	Report to State? (Circle)	ADDITIONAL REMARKS:				Received By:	Date: 30-14	110	Relinquished By:
ceiver	nount paid by the client for the analyses. All cleams including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and receive business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder	of or negligence and any other cause of, its subsidiaries, affiliates or succe	ns including those fits incurred by clie	ant for the analyses. All claims ns, loss of use, or loss of profits		tort, shall be limited to the s, including without limitation of the second sec	m arising whether based in contract or or incidental or consequental damage a stated reasons or otherwise	PLEASE MOTE: SAL's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the by GAL within 30 days after completion. In no event shall GAL be liable for incidential or consequential damages, including without limitation, business interruptions, loss of by GAL, regardless of whether such claim is based upon any of the above stand reasons or otherwise.	PLEASE NOTE: GAL's liability an by GAL within 30 days after comp by GAL, regardless of whether su
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		HCI H <sub>2</sub> SO <sub>4</sub> Other: Other: GCL $E$	OTHER : No preservation (gene HNO <sub>3</sub>	SURFACEWATI WASTEWATER PRODUCEDWATI SOIL DRINKING WAT	GROUNDWATE	Date	Sample Name or Location	Sample Nam	ab
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				Company:	Co			3 C.P. 120	Address: UHT
				P.O. #:	P.C		III	IDM BIND	Contact Person:
	ANALYSIS REQUEST		Bill to (if different):	Bill to (			HHM, LLC	Applicable): 6((	Company Name(If Applicable):
20 of 20		ireenanalytical.com	or dzufelt@g 81303	service@greenanalytical.com or dzufett@greenanalytical.com 75 Suttle St Durango, CO 81303	service@g 75 Suttle	(970) 247-4220 Fax: (970) 247-4227	(9 Fax: (9	Analytical	A
EST	CHAIN-OF-CUSTODY AND ANALYSIS REQUEST	CHAIN-OF-CUS							GREEN

† GAL cannot always accept verbal changes. Please fax or email written change requests.
\* Chain of Custody must be signed in "Reliquished By:" as an acceptance of services and all applicable charges.

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75 Suttle Street Durango, CO 81303 970.247.4220 Phone 970.247.4227 Fax www.greenanalytical.com

18 July 2017

Tom Bird GCC Energy, LLC 6473 CR 120 Hesperus, CO 81326 RE: GCC GW Baseline

Enclosed are the results of analyses for samples received by the laboratory on 06/29/17 16:22. If you need any further assistance, please feel free to contact me.

Sincerely,

Dellie Zufett

Debbie Zufelt Reports Manager

All accredited analytes contained in this report are denoted by an asterisk (\*). For a complete list of accredited analytes please do not hesitate to contact us via any of the contact information contained in this report. All of our certifications can be viewed at http://greenanalytical.com/certifications/

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Our affiliate laboratory, Cardinal Laboratories, is also NELAP accredited through the Texas Commission on Environmental Quality for a variety of organic constituents in drinking water, non-potable water and solid matrices. Cardinal is also accredited for regulated VOCs, TTHM, and HAA-5 in drinking water through the Colorado Department of Public Health and Environment and EPA region 8.



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GCC Energy, LLC	Project: GCC GW Baseline	
6473 CR 120	Project Name / Number: GCC GW Baseline	Reported:
Hesperus CO, 81326	Project Manager: Tom Bird	07/18/17 08:58

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-4-C	1706304-01	Water	06/29/17 11:50	06/29/17 16:22

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Debbie Zufelt, Reports Manager

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GCC Energy, LLC	Project: GCC GW Baseline	
6473 CR 120	Project Name / Number: GCC GW Baseline	Reported:
Hesperus CO, 81326	Project Manager: Tom Bird	07/18/17 08:58

#### MW-4-C

		170	6304-01 (W	/ater)					
Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
General Chemistry									
Alkalinity, Bicarbonate as CaCO3*	2360	10.0		mg/L	10	07/12/17	2320 B		JLM
Alkalinity, Carbonate as CaCO3*	<10.0	10.0		mg/L	10	07/12/17	2320 B		JLM
Alkalinity, Hydroxide as CaCO3*	<10.0	10.0		mg/L	10	07/12/17	2320 B		JLM
Alkalinity, Total as CaCO3*	2360	10.0		mg/L	10	07/12/17	2320 B		JLM
Chloride*	550	20.0	2.87	mg/L	20	07/12/17	EPA300.0		JDA
Fluoride*	2.04	1.00	0.160	mg/L	10	07/11/17	EPA300.0		JDA
Nitrate/Nitrite as N*	< 0.500	0.500	0.273	mg/L	25	07/13/17	EPA353.2		LLG
pH*	7.77			pH Units	1	06/30/17	EPA150.1		CMS
Total Dissolved Solids*	4050	10.0		mg/L	1	07/05/17	EPA160.1		LLG
Sulfate*	487	10.0	1.56	mg/L	10	07/11/17	EPA300.0		JDA
Total Organic Carbon	6.42	0.500	0.201	mg/L	1	07/05/17	5310C		JDA
Dissolved Metals by ICP									
Aluminum*	< 0.050	0.050	0.020	mg/L	1	07/07/17	EPA200.7		JDA
Calcium*	13.7	0.100	0.036	mg/L	1	07/07/17	EPA200.7		JDA
Hardness as CaCO3	55.9	0.662	0.195	mg/L	1	07/07/17	2340 B		JDA
Iron*	< 0.050	0.050	0.014	mg/L	1	07/07/17	EPA200.7		JDA
Magnesium*	5.26	0.100	0.026	mg/L	1	07/07/17	EPA200.7		JDA
Potassium*	5.71	1.00	0.094	mg/L	1	07/07/17	EPA200.7		JDA
Silica (Si02)	12.6	1.07	0.298	mg/L	1	07/07/17	Calculation		JDA
Silicon	5.88	0.500	0.139	mg/L	1	07/07/17	EPA200.7		JDA
Sodium*	1510	10.0	0.870	mg/L	10	07/07/17	EPA200.7		JDA
Dissolved Metals by ICPMS									
Arsenic*	0.0119	0.0050	0.0008	mg/L	10	07/14/17	EPA200.8		JDA
Cadmium*	< 0.0010	0.0010	0.0009	mg/L	10	07/14/17	EPA200.8		JDA
Copper*	0.0243	0.0010	0.0003	mg/L	10	07/14/17	EPA200.8		JDA
Lead*	< 0.0050	0.0050	0.0002	mg/L	10	07/14/17	EPA200.8		JDA
Manganese*	0.0772	0.0050	0.0027	mg/L	10	07/14/17	EPA200.8		JDA
Molybdenum*	0.115	0.0050	0.0006	mg/L	10	07/14/17	EPA200.8		JDA
Selenium*	0.0231	0.0100	0.0015	mg/L	10	07/14/17	EPA200.8		JDA
Uranium	0.121	0.0010	0.0001	mg/L	10	07/14/17	EPA200.8		JDA
Zinc*	0.0265	0.0200	0.0090	mg/L	10	07/14/17	EPA200.8		JDA

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Debbie Zufelt, Reports Manager



Eaboratorito							www.Gre	eenAnalytica	ıl.com
GCC Energy, LLC			Project: GCC	GW Baselin	ne				
6473 CR 120	Proj	ect Name / N	Number: GCC	GW Baselin	ne			Report	ed:
Hesperus CO, 81326		Project M	lanager: Tom	Bird				07/18/17	08:58
			MW-4-C						
		170	)6304-01 (W	ater)					
Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
Dissolved Mercury by CVAA									
Mercury*	< 0.0002	0.0002	0.00009	mg/L	1	07/17/17	EPA245.1		LLG
Cation/Anion Balance	-4.28								

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Laboratories		www.GreenAnalytical.com
GCC Energy, LLC	Project: GCC GW Baseline	
6473 CR 120	Project Name / Number: GCC GW Baseline	Reported:
Hesperus CO, 81326	Project Manager: Tom Bird	07/18/17 08:58

# **General Chemistry - Quality Control**

Analyta	Repult	Reporting	Unite	Spike	Source	%PEC	%REC	רוקק	RPD Limit	Notes
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch B706281 - General Prep - Wet Chem										
Duplicate (B706281-DUP1)	Sour	ce: 1706313-	01 Prepa	ared & Anal	lyzed: 06/30	)/17				
pH	6.71		pH Units		6.64			1.05	20	
Reference (B706281-SRM1)			Prepa	ared & Anal	lyzed: 06/30	0/17				
pH	9.07		pH Units	9.08		99.9	97.8-102.2			
Batch B707018 - General Prep - Wet Chem										
Blank (B707018-BLK1)			Prepa	ured & Anal	lyzed: 07/05	5/17				
Total Organic Carbon	ND	0.500	mg/L		-					
LCS (B707018-BS1)			Prepa	ured & Anal	lyzed: 07/05	5/17				
Total Organic Carbon	10.1	0.500	mg/L	10.0		101	85-115			
LCS Dup (B707018-BSD1)			Pren	red & Anal	lyzed: 07/05	5/17				
Total Organic Carbon	10.0	0.500	mg/L	10.0	.,200.07700	100	85-115	0.995	20	
Batch B707025 - General Prep - Wet Chem										
Blank (B707025-BLK1)			Prepa	ured & Anal	lyzed: 07/05	5/17				
Total Dissolved Solids	ND	10.0	mg/L							
Duplicate (B707025-DUP1)	Sour	·ce: 1706304-	01 Prepa	ured & Anal	lyzed: 07/05	5/17				
Total Dissolved Solids	4060	10.0	mg/L		4050			0.247	20	
Reference (B707025-SRM1)			Prepa	red & Ana	lyzed: 07/05	5/17				
Total Dissolved Solids	535	10.0	mg/L	550		97.3	85-115			
Batch B707071 - General Prep - Wet Chem										
Blank (B707071-BLK1)			Prepa	ured: 07/10/	17 Analyze	ed: 07/12/1	7			
Alkalinity, Total as CaCO3	ND	10.0	mg/L							
LCS (B707071-BS1)			Prenz	ured: 07/10/	17 Analyze	-d· 07/12/1	7			
Alkalinity, Total as CaCO3	104	10.0	mg/L	100		104	85-115			
LCS Dup (B707071-BSD1)			Prene	ured: 07/10/	'17 Analyze	-d· 07/12/1	7			
Alkalinity, Total as CaCO3	105	10.0	mg/L	100		105	85-115	0.957	20	
Batch B707074 - General Prep - Wet Chem			U U							
Blank (B707074-BLK1)			Prepa	ured: 07/10/	17 Analyze	ed: 07/11/1	.7			
Chloride	ND	1.00	mg/L		y ·					
Fluoride	ND	0.100	mg/L							
Sulfate	ND	1.00	mg/L							
Green Analytical Laboratories			The <b>r</b>	esults in this r	enort apply to	the samples	analyzed in acc	ordance with	h the chain of	
VIEED ADALVICALLADORATORS			1101		-ron appij to	e sampies				

Dellie Zufett

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Debbie Zufelt, Reports Manager



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GCC Energy, LLC		Pi	oject: GC	C GW Basel	ine					
6473 CR 120	Proj	ect Name / Nu	mber: GC	C GW Basel	ine				Reporte	d:
Hesperus CO, 81326		Project Mar	nager: Ton	n Bird					07/18/17 (	)8:58
	Ge	eneral Cher	·	- •	ontrol					
		(	Continu	ed)						
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B707074 - General Prep - We	t Chem (Continued)									
LCS (B707074-BS1)	Prepared: 07/10/17 Analyzed: 07/11/17									
Chloride	23.7	1.00	mg/L	25.0		94.7	90-110			
Fluoride	2.47	0.100	mg/L	2.50		99.0	90-110			
Sulfate	23.5	1.00	mg/L	25.0		94.1	90-110			
LCS Dup (B707074-BSD1)	Prepared: 07/10/17 Analyzed: 07/11/17									
Chloride	24.1	1.00	mg/L	25.0		96.3	90-110	1.65	20	
Fluoride	2.51	0.100	mg/L	2.50		101	90-110	1.60	20	
Sulfate	23.9	1.00	mg/L	25.0		95.7	90-110	1.69	20	
Batch B707092 - General Prep - We	t Chem									
Blank (B707092-BLK1)			Prep	ared: 07/12/	17 Analyze	ed: 07/13/1	7			
Nitrate/Nitrite as N	ND	0.020	mg/L							
LCS (B707092-BS1)			Prep	ared: 07/12/	17 Analyze	ed: 07/13/1	7			
Nitrate/Nitrite as N	1.03	0.020	mg/L	1.00		103	90-110			
LCS Dup (B707092-BSD1)			Prep	ared: 07/12/	17 Analyze	ed: 07/13/1	7			
Nitrate/Nitrite as N	1.03	0.020	mg/L	1.00		103	90-110	0.0483	20	

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Laboratories		www.GreenAnalytical.com
GCC Energy, LLC	Project: GCC GW Baseline	
6473 CR 120	Project Name / Number: GCC GW Baseline	Reported:
Hesperus CO, 81326	Project Manager: Tom Bird	07/18/17 08:58

## **Dissolved Metals by ICP - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B707011 - Diss. 200.7/200.8	result	Emili	0	20,01	Teotar	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	2	14.2		1.0205
Blank (B707011-BLK1)			Prep	ared: 07/03/	17 Analyze	ed: 07/07/17	7			
Aluminum	ND	0.050	mg/L							
Calcium	ND	0.100	mg/L							
Iron	ND	0.050	mg/L							
Magnesium	ND	0.100	mg/L							
Potassium	ND	1.00	mg/L							
Silicon	ND	0.500	mg/L							
Sodium	ND	1.00	mg/L							
LCS (B707011-BS1)	Prepared: 07/03/17 Analyzed: 07/07/17									
Aluminum	4.86	0.050	mg/L	5.00		97.2	85-115			
Calcium	4.84	0.100	mg/L	5.00		96.9	85-115			
Iron	4.86	0.050	mg/L	5.00		97.2	85-115			
Magnesium	24.6	0.100	mg/L	25.0		98.5	85-115			
Potassium	9.62	1.00	mg/L	10.0		96.2	85-115			
Silicon	4.62	0.500	mg/L	5.00		92.3	85-115			
Sodium	7.88	1.00	mg/L	8.10		97.3	85-115			
LCS Dup (B707011-BSD1)			Prep	ared: 07/03/	17 Analyze	ed: 07/07/17	7			
Aluminum	4.86	0.050	mg/L	5.00		97.2	85-115	0.0932	20	
Calcium	4.84	0.100	mg/L	5.00		96.7	85-115	0.146	20	
Iron	4.86	0.050	mg/L	5.00		97.2	85-115	0.0387	20	
Magnesium	24.6	0.100	mg/L	25.0		98.3	85-115	0.198	20	
Potassium	9.62	1.00	mg/L	10.0		96.2	85-115	0.0271	20	
Silicon	4.60	0.500	mg/L	5.00		92.0	85-115	0.326	20	
Sodium	7.85	1.00	mg/L	8.10		97.0	85-115	0.359	20	

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Laboratories		www.GreenAnalytical.com
GCC Energy, LLC	Project: GCC GW Baseline	
6473 CR 120	Project Name / Number: GCC GW Baseline	Reported:
Hesperus CO, 81326	Project Manager: Tom Bird	07/18/17 08:58

## **Dissolved Metals by ICPMS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B707085 - Diss. 200.7/200.8										
Blank (B707085-BLK1)			Prep	ared: 07/12/	17 Analyze	ed: 07/13/1	7			
Arsenic	ND	0.0005	mg/L							
Cadmium	ND	0.0001	mg/L							
Copper	ND	0.0001	mg/L							
Lead	ND	0.0005	mg/L							
Manganese	ND	0.0005	mg/L							
Molybdenum	ND	0.0005	mg/L							
Selenium	ND	0.0010	mg/L							
Uranium	ND	0.0001	mg/L							
Zinc	ND	0.0020	mg/L							
LCS (B707085-BS1)			Prep	ared: 07/12/	17 Analyze	ed: 07/13/1	7			
Arsenic	0.0544	0.0005	mg/L	0.0500		109	85-115			
Cadmium	0.0530	0.0001	mg/L	0.0500		106	85-115			
Copper	0.0504	0.0001	mg/L	0.0500		101	85-115			
Lead	0.0503	0.0005	mg/L	0.0500		101	85-115			
Manganese	0.0483	0.0005	mg/L	0.0500		96.6	85-115			
Molybdenum	0.0490	0.0005	mg/L	0.0500		98.1	85-115			
Selenium	0.262	0.0010	mg/L	0.250		105	85-115			
Uranium	0.0493	0.0001	mg/L	0.0500		98.7	85-115			
Zinc	0.0530	0.0020	mg/L	0.0500		106	85-115			
LCS Dup (B707085-BSD1)			Prep	ared: 07/12/	17 Analyze	ed: 07/13/1	7			
Arsenic	0.0524	0.0005	mg/L	0.0500		105	85-115	3.67	20	
Cadmium	0.0525	0.0001	mg/L	0.0500		105	85-115	0.964	20	
Copper	0.0519	0.0001	mg/L	0.0500		104	85-115	3.08	20	
Lead	0.0523	0.0005	mg/L	0.0500		105	85-115	3.89	20	
Manganese	0.0494	0.0005	mg/L	0.0500		98.8	85-115	2.28	20	
Molybdenum	0.0471	0.0005	mg/L	0.0500		94.2	85-115	4.05	20	
Selenium	0.256	0.0010	mg/L	0.250		102	85-115	2.44	20	
Uranium	0.0507	0.0001	mg/L	0.0500		101	85-115	2.76	20	
Zinc	0.0502	0.0020	mg/L	0.0500		100	85-115	5.51	20	

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Project:	GCC GW Baseline	
Project Name / Number:	GCC GW Baseline	Reported:
Project Manager:	Tom Bird	07/18/17 08:58
	Project Name / Number:	Project: GCC GW Baseline Project Name / Number: GCC GW Baseline Project Manager: Tom Bird

## Dissolved Mercury by CVAA - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B707111 - EPA 245.1/7470										
Blank (B707111-BLK1)			Prep	ared: 07/13/1	17 Analyze	ed: 07/17/1	7			
Mercury	ND	0.0002	mg/L							
LCS (B707111-BS1)			Prep	ared: 07/13/1	17 Analyzo	ed: 07/17/1	7			
Mercury	0.0021	0.0002	mg/L	0.00200		107	85-115			
LCS Dup (B707111-BSD1)			Prep	ared: 07/13/1	17 Analyz	ed: 07/17/1	7			
Mercury	0.0021	0.0002	mg/L	0.00200		106	85-115	0.329	20	

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Laboratories		www.GreenAnalytical.com
GCC Energy, LLC	Project: GCC GW Baseline	
6473 CR 120	Project Name / Number: GCC GW Baseline	Reported:
Hesperus CO, 81326	Project Manager: Tom Bird	07/18/17 08:58

## **Notes and Definitions**

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis *Results reported on as received basis unless designated as dry.
RPD	Relative Percent Difference
1.00	

LCS Laboratory Control Sample (Blank Spike)

- RL Report Limit
- MDL Method Detection Limit

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Debbie Zufelt, Reports Manager

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Laboratories	Fax: (9	Fax: (970) 247-4227 75 S	75 Suttle St Durango, CO 81303	ANAI VCIC
Company Name: ALC B	AMN, UL		Bill to (if different):	): ANALYSIS REQUEST
Project Manager:	pild.		P.O. #:	
City: HSIMIS	State: (1)	Zip: 83240	Attn:	
Phone #: M-46-	4528 Email: TB440-60	C.CUM	Address:	
Additional Report To:	The Resulter Hall back	Naic-(NN	City:	
Project Name:		c	State: Zip:	n
Project Number:			Phone #:	eli
Sampler Name (Print):	sign what a michael	WANNAWA	Fax or Email:	)US
FOR LAB USE ONLY		Collected	Matrix (check one) # of co	# of containers
Lab I.D.	Sample Name or Location	Date Time	GROUNDWATER SURFACEWATER WASTEWATER PRODUCEDWATER SOIL OTHER : No preservation (general) HNO <sub>3</sub> HCI	H <sub>2</sub> SO <sub>4</sub> Other: Other: Other:
1706-304.01 MW-	4-0	mbd:11 E1/bam	×	×
by GAL, within 30 days after completion. In no event shall GAL be liable for in by GAL, negardness of whether such claim is based upon any of the above su Relinquished By:	by GAL within 30 days after completion. In no event shall GAL be liable for incidental or consequential damages, by GAL, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Relinquished BV: Date: UQ-17 May have be above for the above stated reasons or otherwise. Imme: UQ-17		or loss of protits incurred	ADDITTIONAL REMARKS: Report to State? (Circle) Yes No
Relinquished By: Michmer Gr	Charlense Date:	Received By:		PUGNTUC to 5-duy TAT
Relinquished By:	Date: Time:	Received By:		Do viot the for (Radium
Delivered By: (Circle One)	ne) Kanzaroo - Other:	Tempe D.7()	Temperature at reciept: The CHECKED BY:	

# **Project Information**

# GCC Energy, LLC

6473 CR 120 Hesperus, CO 81326 Laboratory PM: Debbie Zufelt Phone:(970) 385-4528 Fax:(970) 385-4638 King Coal 6/30/2017

Project Name:GCC GW BaselineInvoice To:GCC Energy, LLCProject Number:GCC GW BaselineInvoice Bid:GCC GW BaselineClient PM:Tom BirdInvoice Manager:Tom BirdComments:Tom BirdTom BirdTom Bird

Analysis	Comment			
Manganese Dissolved	by ICPMS			
Alkalinity, Carbonate				
Alkalinity, Hydroxide				
Alkalinity, Total				
Aluminum Dissolved b	y ICP			
Arsenic Dissolved by	CPMS			
Cadmium Dissolved b	y ICPMS			
Chloride by IC				
Copper Dissolved by I	CPMS			
Fluoride by IC				
Hardness, diss				
Iron Dissolved by ICP				
Alkalinity, Bicarbonat	e			
Zinc Dissolved by ICF	MS			
Mercury Dissolved by	CVAA			
Molybdenum Dissolve	d by ICPM			
Nitrate/Nitrite as N				
pН				
Potassium Dissolved b	y ICP			
Selenium Dissolved by	/ ICPMS			
Silica Dissolved by IC	P Package			
Sodium Dissolved by	CP			
Solids, Total Dissolved	l (TDS)			
Subcontract Analysis 1	TOC			
Sulfate by IC				
Uranium Dissolved by				
Lead Dissolved by ICI	MS			
lardness, diss subanaly	vses:			
Calcium Dissolved by	ICP			
Magnesium Dissolved	by ICP			
ilica Dissolved by ICP	Package subanalyses:			
Silicon Dissolved by I				



75 Suttle Street Durango, CO 81303 970.247.4220 Phone 970.247.4227 Fax www.greenanalytical.com

29 June 2017

Tom Bird GCC Energy, LLC 6473 CR 120 Hesperus, CO 81326 RE: GCC GW Baseline

Enclosed are the results of analyses for samples received by the laboratory on 06/16/17 12:04. If you need any further assistance, please feel free to contact me.

Sincerely,

Dellie Zufett

Debbie Zufelt Reports Manager

All accredited analytes contained in this report are denoted by an asterisk (\*). For a complete list of accredited analytes please do not hesitate to contact us via any of the contact information contained in this report. All of our certifications can be viewed at http://greenanalytical.com/certifications/

Green Analytical Laboratories is NELAP accredited through the Texas Commission on Environmental Quality. Accreditation applies to drinking water and non-potable water matrices for trace metals and a variety of inorganic parameters. Green Analytical Laboratories is also accredited through the Colorado Department of Public Health and Environment and EPA region 8 for trace metals, Cyanide, Fluoride, Nitrate, and Nitrite in drinking water.

Our affiliate laboratory, Cardinal Laboratories, is also NELAP accredited through the Texas Commission on Environmental Quality for a variety of organic constituents in drinking water, non-potable water and solid matrices. Cardinal is also accredited for regulated VOCs, TTHM, and HAA-5 in drinking water through the Colorado Department of Public Health and Environment and EPA region 8.



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GCC Energy, LLC	Project: GCC GW Baseline	
6473 CR 120	Project Name / Number: GCC GW Baseline	Reported:
Hesperus CO, 81326	Project Manager: Tom Bird	06/29/17 09:12

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-4-MI	1706159-01	Water	06/16/17 09:17	06/16/17 12:04

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Laboratories		www.GreenAnalytical.com
GCC Energy, LLC	Project: GCC GW Baseline	
6473 CR 120	Project Name / Number: GCC GW Baseline	Reported:
Hesperus CO, 81326	Project Manager: Tom Bird	06/29/17 09:12

# MW-4-MI

		170	)6159-01 (W	Vater)					
Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
General Chemistry									
Alkalinity, Bicarbonate as CaCO3*	825	10.0		mg/L	5	06/22/17	2320 B		JLM
Alkalinity, Carbonate as CaCO3*	90.0	10.0		mg/L	5	06/22/17	2320 B		JLM
Alkalinity, Hydroxide as CaCO3*	<10.0	10.0		mg/L	5	06/22/17	2320 B		JLM
Alkalinity, Total as CaCO3*	915	10.0		mg/L	5	06/22/17	2320 B		JLM
Chloride*	7.50	5.00	0.717	mg/L	5	06/27/17	EPA300.0	M5	JDA
Fluoride*	5.02	0.500	0.0798	mg/L	5	06/27/17	EPA300.0	M5	JDA
Nitrate/Nitrite as N*	< 0.020	0.020	0.011	mg/L	1	06/27/17	EPA353.2		LLG
pH*	8.59			pH Units	1	06/19/17	EPA150.1	H4	CMS
Total Dissolved Solids*	1170	10.0		mg/L	1	06/22/17	EPA160.1		LLG
Sulfate*	64.7	5.00	0.782	mg/L	5	06/27/17	EPA300.0	M5	JDA
Total Organic Carbon	6.49	0.500	0.201	mg/L	1	06/23/17	5310C		JDA
Dissolved Metals by ICP									
Aluminum*	< 0.100	0.100	0.040	mg/L	2	06/20/17	EPA200.7		JDA
Calcium*	2.32	0.200	0.072	mg/L	2	06/20/17	EPA200.7		JDA
Hardness as CaCO3	8.71	1.32	0.390	mg/L	2	06/20/17	2340 B		JDA
Iron*	< 0.100	0.100	0.028	mg/L	2	06/20/17	EPA200.7		JDA
Magnesium*	0.707	0.200	0.051	mg/L	2	06/20/17	EPA200.7		JDA
Potassium*	<2.00	2.00	0.189	mg/L	2	06/20/17	EPA200.7		JDA
Silica (Si02)	8.01	2.14	0.596	mg/L	2	06/20/17	Calculation		JDA
Silicon	3.75	1.00	0.279	mg/L	2	06/20/17	EPA200.7		JDA
Sodium*	458	2.00	0.174	mg/L	2	06/20/17	EPA200.7		JDA
Dissolved Metals by ICPMS									
Arsenic*	0.0220	0.0005	0.00008	mg/L	1	06/22/17	EPA200.8		JDA
Cadmium*	< 0.0001	0.0001	0.00009	mg/L	1	06/22/17	EPA200.8		JDA
Copper*	0.0058	0.0001	0.00003	mg/L	1	06/22/17	EPA200.8		JDA
Lead*	< 0.0005	0.0005	0.00002	mg/L	1	06/22/17	EPA200.8		JDA
Manganese*	0.0066	0.0005	0.0003	mg/L	1	06/22/17	EPA200.8		JDA
Molybdenum*	0.0160	0.0005	0.00006	mg/L	1	06/22/17	EPA200.8		JDA
Selenium*	0.0012	0.0010	0.0002	mg/L	1	06/22/17	EPA200.8		JDA
Uranium	0.0126	0.0001	0.00001	mg/L	1	06/22/17	EPA200.8		JDA
Zinc*	0.0697	0.0020	0.0009	mg/L	1	06/22/17	EPA200.8		JDA

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Debbie Zufelt, Reports Manager



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GCC Energy, LLC			Project: GCC	GW Baselin	ne				
6473 CR 120	Proj	ect Name / N	Number: GCC	GW Baselin	ne			Report	ed:
Hesperus CO, 81326		Project M	lanager: Tom	Bird				06/29/17	09:12
			MW-4-M	Í					
		170	06159-01 (W	ater)					
Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
Dissolved Mercury by CVAA									
Mercury*	< 0.0002	0.0002	0.00009	mg/L	1	06/21/17	EPA245.1		LLG
Cation/Anion Balance	.05								

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Debbie Zufelt, Reports Manager



Laboratories		www.GreenAnalytical.com
GCC Energy, LLC	Project: GCC GW Baseline	
6473 CR 120	Project Name / Number: GCC GW Baseline	Reported:
Hesperus CO, 81326	Project Manager: Tom Bird	06/29/17 09:12

# **General Chemistry - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B706145 - General Prep - Wet Chem									-	
Duplicate (B706145-DUP2)	Sou	rce: 1706161-(	98 Pren	ared & Anal	vzed: 06/19	9/17				
рН	7.98	1	pH Units		7.91	//1/		0.881	20	
-			Duran		d- 0C/10	)/17				
pH <b>B</b>	8.89		pH Units	ared & Anal 9.08	yzed: 06/19	97.9	97.8-102.2			
Batch B706171 - General Prep - Wet Chem	0.07		pri enus	7.00		)1.)	77.0-102.2			
Blank (B706171-BLK1)	110	10.0		ared: 06/21/	17 Analyze	ed: 06/22/1	7			
Total Dissolved Solids	ND	10.0	mg/L							
Duplicate (B706171-DUP1)	Sou	rce: 1706154-(	1 Prepa	ared: 06/21/	17 Analyze	ed: 06/22/1	7			
Total Dissolved Solids	645	10.0	mg/L		645			0.00	20	
Reference (B706171-SRM1)			Prepa	ared: 06/21/	17 Analyze	ed: 06/22/1	7			
Total Dissolved Solids	415	10.0	mg/L	390		106	85-115			
Batch B706181 - General Prep - Wet Chem										
Blank (B706181-BLK1)			Prepa	ared & Anal	yzed: 06/22	2/17				
Alkalinity, Total as CaCO3	ND	10.0	mg/L							
LCS (B706181-BS1)			Prepa	ared & Anal	yzed: 06/22	2/17				
Alkalinity, Total as CaCO3	106	10.0	mg/L	100	-	106	85-115			
LCS Dup (B706181-BSD1)			Pren	ared & Anal	vzed: 06/22	2/17				
Alkalinity, Total as CaCO3	105	10.0	mg/L	100		105	85-115	0.948	20	
Batch B706194 - General Prep - Wet Chem										
Blank (B706194-BLK1)			Prep	ared & Anal	vzed: 06/23	3/17				
Total Organic Carbon	ND	0.500	mg/L		<u> </u>					
LCS (B706194-BS1)			Dren	ared & Anal	vzed: 06/23	3/17				
Total Organic Carbon	9.67	0.500	mg/L	10.0	yzeu. 00/23	96.7	85-115			
LCS Dup (B706194-BSD1)			-	ared & Anal	vzed: 06/23					
Total Organic Carbon	9.60	0.500	mg/L	10.0	<i>j 20</i> <b>u</b> . 00/22	96.0	85-115	0.727	20	
Batch B706219 - General Prep - Wet Chem			-							
Blank (B706219-BLK1)			Pren	ared: 06/26/	17 Analyza	ed: 06/27/1	7			
Chloride	ND	1.00	mg/L		- · ·					
Fluoride	ND	0.100	mg/L							
Sulfate	ND	1.00	mg/L							

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Debbie Zufelt, Reports Manager



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GCC Energy, LLC		Pr	oject: GC	C GW Basel	ine						
6473 CR 120	Pro	Project Name / Number: GCC GW Baseline									
Hesperus CO, 81326	-	Project Mar	nager: Ton	n Bird					<b>Reported:</b> 06/29/17 09:12		
	G	eneral Cher (	nistry - ( Continu	•	ontrol						
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B706219 - General Prep - We											
LCS (B706219-BS1)			Prep	ared: 06/26/	17 Analyz	ed: 06/27/1	7				
Chloride	24.1	1.00	mg/L	25.0		96.6	90-110				
Fluoride	2.49	0.100	mg/L	2.50		99.4	90-110				
Sulfate	23.8	1.00	mg/L	25.0		95.1	90-110				
LCS Dup (B706219-BSD1)	Prepared: 06/26/17 Analyzed: 06/27/17										
Chloride	24.2	1.00	mg/L	25.0		97.0	90-110	0.409	20		
Fluoride	2.51	0.100	mg/L	2.50		100	90-110	0.801	20		
Sulfate	24.0	1.00	mg/L	25.0		96.2	90-110	1.10	20		
Batch B706233 - General Prep - Wo	et Chem										
Blank (B706233-BLK1)			Prep	ared & Anal	lyzed: 06/2'	7/17					
Nitrate/Nitrite as N	ND	0.020	mg/L								
LCS (B706233-BS1)			Prep	ared & Anal	lyzed: 06/2	7/17					
Nitrate/Nitrite as N	1.02	0.020	mg/L	1.00		102	90-110				
LCS Dup (B706233-BSD1)			Prep	ared & Anal	lyzed: 06/2'	7/17					
Nitrate/Nitrite as N	1.03	0.020	mg/L	1.00		103	90-110	0.302	20		

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6473 CR 120	Project Name / Number: GCC GW Baseline	Reported:
Hesperus CO, 81326	Project Manager: Tom Bird	06/29/17 09:12

## **Dissolved Metals by ICP - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B706153 - Diss. 200.7/200.8										
Blank (B706153-BLK1)			Prep	ared & Anal	lyzed: 06/20	)/17				
Aluminum	ND	0.050	mg/L							
Calcium	ND	0.100	mg/L							
Iron	ND	0.050	mg/L							
Magnesium	ND	0.100	mg/L							
Potassium	ND	1.00	mg/L							
Silicon	ND	0.500	mg/L							
Sodium	ND	1.00	mg/L							
LCS (B706153-BS1)			Prep	ared & Anal	lyzed: 06/20	0/17				
Aluminum	5.06	0.050	mg/L	5.00		101	85-115			
Calcium	5.13	0.100	mg/L	5.00		103	85-115			
Iron	5.12	0.050	mg/L	5.00		102	85-115			
Magnesium	26.0	0.100	mg/L	25.0		104	85-115			
Potassium	10.2	1.00	mg/L	10.0		102	85-115			
Silicon	4.91	0.500	mg/L	5.00		98.3	85-115			
Sodium	8.36	1.00	mg/L	8.10		103	85-115			
LCS Dup (B706153-BSD1)			Prep	ared & Anal	lyzed: 06/20	0/17				
Aluminum	5.09	0.050	mg/L	5.00		102	85-115	0.668	20	
Calcium	5.16	0.100	mg/L	5.00		103	85-115	0.475	20	
Iron	5.16	0.050	mg/L	5.00		103	85-115	0.671	20	
Magnesium	26.0	0.100	mg/L	25.0		104	85-115	0.0458	20	
Potassium	10.1	1.00	mg/L	10.0		101	85-115	1.08	20	
Silicon	4.94	0.500	mg/L	5.00		98.8	85-115	0.462	20	
Sodium	8.37	1.00	mg/L	8.10		103	85-115	0.109	20	

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Hesperus CO, 81326	Project Manager: Tom Bird	06/29/17 09:12		

## **Dissolved Metals by ICPMS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B706154 - Diss. 200.7/200.8										
Blank (B706154-BLK1)	Prepared: 06/20/17 Analyzed: 06/22/17									
Arsenic	ND	0.0005	mg/L							
Cadmium	ND	0.0001	mg/L							
Copper	ND	0.0001	mg/L							
Lead	ND	0.0005	mg/L							
Manganese	ND	0.0005	mg/L							
Molybdenum	ND	0.0005	mg/L							
Selenium	ND	0.0010	mg/L							
Uranium	ND	0.0001	mg/L							
Zinc	ND	0.0020	mg/L							
LCS (B706154-BS1)			Prep	ared: 06/20/	17 Analyzo	ed: 06/22/1	7			
Arsenic	0.0537	0.0005	mg/L	0.0500		107	85-115			
Cadmium	0.0530	0.0001	mg/L	0.0500		106	85-115			
Copper	0.0516	0.0001	mg/L	0.0500		103	85-115			
Lead	0.0498	0.0005	mg/L	0.0500		99.6	85-115			
Manganese	0.0523	0.0005	mg/L	0.0500		105	85-115			
Molybdenum	0.0512	0.0005	mg/L	0.0500		102	85-115			
Selenium	0.276	0.0010	mg/L	0.250		110	85-115			
Uranium	0.0493	0.0001	mg/L	0.0500		98.7	85-115			
Zinc	0.0545	0.0020	mg/L	0.0500		109	85-115			
LCS Dup (B706154-BSD1)			Prep	ared: 06/20/	17 Analyzo	ed: 06/22/1	7			
Arsenic	0.0534	0.0005	mg/L	0.0500		107	85-115	0.696	20	
Cadmium	0.0498	0.0001	mg/L	0.0500		99.6	85-115	6.28	20	
Copper	0.0496	0.0001	mg/L	0.0500		99.2	85-115	4.03	20	
Lead	0.0508	0.0005	mg/L	0.0500		102	85-115	2.00	20	
Manganese	0.0494	0.0005	mg/L	0.0500		98.9	85-115	5.70	20	
Molybdenum	0.0490	0.0005	mg/L	0.0500		98.1	85-115	4.22	20	
Selenium	0.269	0.0010	mg/L	0.250		107	85-115	2.78	20	
Uranium	0.0495	0.0001	mg/L	0.0500		99.0	85-115	0.367	20	
Zinc	0.0530	0.0020	mg/L	0.0500		106	85-115	2.72	20	

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Hesperus CO, 81326	Project Manager: Tom E	Bird	06/29/17 09:12		

# Dissolved Mercury by CVAA - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B706156 - EPA 245.1/7470										
Blank (B706156-BLK1)			Prep	oared: 06/20/1	17 Analyz	ed: 06/21/1	7			
Mercury	ND	0.0002	mg/L							
LCS (B706156-BS1)			Prep	oared: 06/20/1	17 Analyz	ed: 06/21/1	7			
Mercury	0.0021	0.0002	mg/L	0.00200		106	85-115			
LCS Dup (B706156-BSD1)	Prepared: 06/20/17 Analyzed: 06/21/17									
Mercury	0.0021	0.0002	mg/L	0.00200		107	85-115	1.36	20	

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Hesperus CO, 81326	Project Manager: Tom Bird	06/29/17 09:12

## **Notes and Definitions**

M5	Sample was chosen for matrix spike. Spike recovery did not meet laboratory acceptance criteria, possible matrix interference in sample.
H4	pH analysis perfomed more than 48 hours after sampling.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis *Results reported on as received basis unless designated as dry.
RPD	Relative Percent Difference
LCS	Laboratory Control Sample (Blank Spike)
RL MDL	Report Limit Method Detection Limit

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# **Project Information**

# GCC Energy, LLC

6473 CR 120 Hesperus, CO 81326 Laboratory PM: Debbie Zufelt

Phone:(970) 385-4528 Fax:(970) 385-4638 King Coal 6/16/2017

Project Name: Project Number: Client PM:	GCC GW Baseline GCC GW Baseline Tom Bird	Invoice To: Invoice Bid: Invoice Manager:	GCC Energy, LLC GCC GW Baseline Tom Bird	
Comments:				
Analysis	Comment			
Alkalinity, Bicarb	onate			
Alkalinity, Carbon	nate			
Alkalinity, Hydrox	xide			
Alkalinity, Total				
Aluminum Dissol	ved by ICP			
Arsenic Dissolved	by ICPMS			
Cadmium Dissolve	ed by ICPMS			
Chloride by IC				
Copper Dissolved	by ICPMS			
Fluoride by IC				
Hardness, diss				
Iron Dissolved by	ICP			
Lead Dissolved by	ICPMS			
Manganese Dissolv	ved by ICPMS			
Mercury Dissolved	by CVAA			
Molybdenum Disso	olved by ICPM			
Nitrate/Nitrite as N				
pH				
Potassium Dissolve	ed by ICP			
Selenium Dissolved	d by ICPMS			
Silica Dissolved by	ICP Package			
Sodium Dissolved I	by ICP			
Solids, Total Dissol	ved (TDS)			
Subcontract Analys	is 1 TOC			
Sulfate by IC				
Uranium Dissolved	by ICPMS			
Zinc Dissolved by I	CPMS			
ardness, diss suban				
Calcium Dissolved				
Magnesium Dissolv	ed by ICP			
lica Dissolved by IC	CP Package subanalyses:			