



June 25, 2014

Mr. Bruce Wanstall
Field Operations Project Manager
State & Private Contaminated Sites Program
Department of Environmental Conservation
PO Box 111800/410 Willoughby Avenue, Suite 302
Juneau, AK 99801

RE: June 2014 Groundwater Sampling at Gas N Go Fuel Station

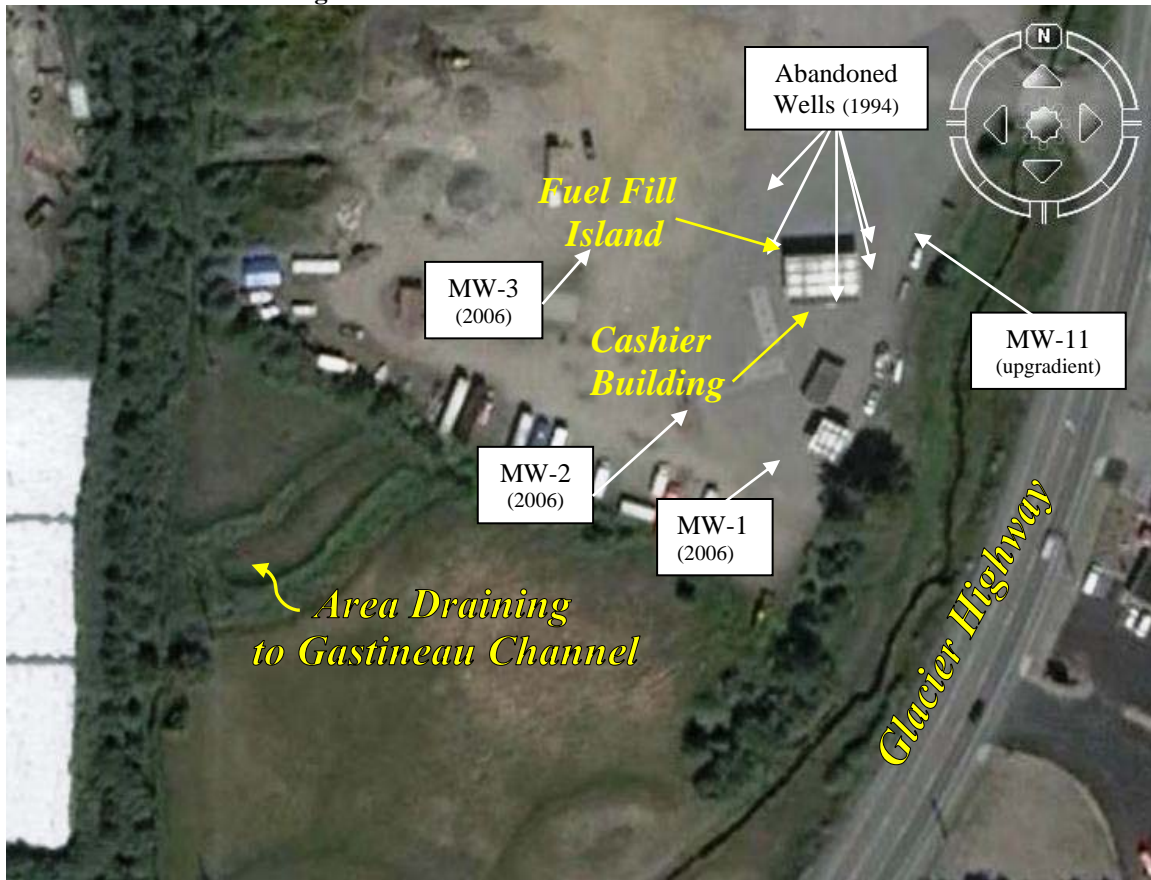
Dear Mr. Wanstall:

As part of the long term sampling plan for Gas N Go Fuel Station, groundwater samples were collected at four monitoring wells on June 17, 2011.

Monitoring Well Locations

Figure 1 shows locations for the four wells sampled during this event (MW-1, MW-2, MW-3, and MW-11).

Figure 1. Well Locations at Gas N Go Fuel Station





Sampling Procedure

Samples were collected by Carson Dorn staff at MW-1, MW-2, MW-3, and MW-11 on June 17. Each well was purged of at least three well volumes using a low-flow peristaltic pump and then allowed to recharge to the static water level prior to sampling. Using the same pump, samples for the most volatile organic compounds were collected first. One duplicate sample was also collected for a total of five samples.

Sampling Results

Samples were submitted to Test America Labs in Anchorage, AK, and were analyzed for gasoline and diesel range hydrocarbons (GRO and DRO) and benzene, toluene, ethylbenzene, and xylenes (BTEX). Table 1 compares the current round of sampling with results from past sampling events. The data is also compared to the ADEC Table C standards for groundwater cleanup, found in regulations 18 AAC 75. Sample results in bold exceed the cleanup standard.

Table 1. Gas N Go Groundwater Well Sampling August 2006- June 2014									
Summary of Results in mg/L									
Well No.	Well Depth	Depth to Water	Sample Date	Gasoline Range Organics	Diesel Range Organics	B	T	E	X
MW-1	10.5'	7.8'	8/16/06	0.435	0.402	0.0145	0.0009	0.0070	0.0236
			8/17/07	ns	ND	ND	ND	0.0012	ND
			11/19/07	u	u	u	u	u	u
		8.6'	7/10/08	ND	ND	ND	ND	ND	ND
		8.14'	5/25/11	ND	ND	ND	ND	ND	ND
		8.25'	6/17/14	ND	ND	ND	ND	ND	ND
MW-2	10.5'	9.0'	8/16/06	ND	0.105	ND	ND	ND	ND
			8/17/07	ns	0.471	0.0111	ND	0.0075	0.0178
			11/19/07	0.798	0.354	0.0020	0.0032	0.0291	0.0910
		7.4'	7/8/08	ND	0.249	0.0014	ND	ND	ND
		6.8'	5/25/11	ND	0.11	0.0011	ND	ND	ND
		8.0'	6/17/14	ND	ND	0.0015	ND	ND	ND
MW-3	10.4'	8.3'	8/16/06	9.780	1.690	0.0067	0.0051	0.0290	1.3300
			8/17/07	ns	0.906	ND	ND	0.0430	0.0542
			11/19/07	3.090	0.801	0.0059	0.0015	0.0375	0.0877
		6.95'	7/10/08	4.500	1.660	0.0092	0.0026	0.0837	0.1530
		6.96'	5/25/11	3.5	1.15	0.00915	0.00375	0.105	0.4217
		6.85'	6/17/14	0.12	1.8	0.010	ND	0.0087	0.016
MW-11	11.7'		8/16/06	ns	ns	ns	ns	ns	ns
		9.6'	8/17/07	ns	ND	ND	ND	0.0035	0.0036
			11/19/07	ND	ND	ND	ND	0.0011	0.0033
		8.7'	7/8/08	ND	ND	ND	ND	0.0011	0.0033
		8.78'	5/25/11	ND	ND	ND	ND	ND	ND
		8.25'	6/17/14	ND	ND	ND	ND	ND	ND
<i>Cleanup Limits:</i>				2.2	1.5	0.005	1.0	0.7	10.0

B=benzene, T=toluene, E=Ethylene, X=xylenes, ND= not detected, ns=no sample collected, u=unproductive well

All depths are feet below ground surface.



Samples were collected for GRO, DRO, and BTEX at MW-1, MW-2, MW-3, and MW-11. Parameters were either non-detect or met cleanup standards in all samples except MW-3, located directly west of the fuel fill island. DRO in MW-3 was measured at 1.8 mg/l, slightly above the groundwater cleanup level of 1.5 mg/l and benzene was measured at a concentration of 0.001 mg/l, close to twice the groundwater cleanup level of 0.0050 mg/l.

Monitoring Well Sampling Plan

Sampling results from 2006, 2007, 2008, 2011, and 2014 indicate that groundwater levels for GRO, DRO and BTEX are generally decreasing or stable at MW-3 (GRO decreased from 3.5 mg/L in 2011 to 0.12 mg/L in 2014 while DRO increased slightly from 1.15 mg/L in 2011 to 1.8 mg/L in 2014) and are stable and satisfactory at MW-1, MW-2, and MW-11.

In accordance with the long-term monitoring plan for this site, one set of samples will be collected at the four wells on a three-year interval until cleanup standards have been consistently met at all wells. The next round of samples is scheduled to be collected in 2017.

Please don't hesitate to contact me at 586-4447 if you have any questions.

Sincerely,

A handwritten signature in blue ink that reads "Jolene Cox". The signature is written in a cursive, flowing style.

Jolene Cox
Environmental Professional

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Anchorage

2000 West International Airport Road

Suite A10

Anchorage, AK 99502-1119

Tel: (907)563-9200

TestAmerica Job ID: 230-169-1

Client Project/Site: Gas N Go

For:

Carson Dorn, Inc

712 West 12th Street

Juneau, Alaska 99801

Attn: Jolene Cox



Authorized for release by:

6/23/2014 5:52:43 PM

Johanna Dreher, Project Manager I

(907)563-9200

johanna.dreher@testamericainc.com

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Carson Dorn, Inc
Project/Site: Gas N Go

TestAmerica Job ID: 230-169-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Carson Dorn, Inc
Project/Site: Gas N Go

TestAmerica Job ID: 230-169-1

Job ID: 230-169-1

Laboratory: TestAmerica Anchorage

Narrative

**Job Narrative
230-169-1**

Comments

No additional comments.

Receipt

The samples were received on 6/18/2014 4:43 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.0° C.

GC/MS VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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Detection Summary

Client: Carson Dorn, Inc
Project/Site: Gas N Go

TestAmerica Job ID: 230-169-1

Client Sample ID: MW-1

Lab Sample ID: 230-169-1

No Detections.

Client Sample ID: MW-2

Lab Sample ID: 230-169-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.5		0.50		ug/L	1		8260B	Total/NA

Client Sample ID: MW-3

Lab Sample ID: 230-169-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	9.9		0.50		ug/L	1		8260B	Total/NA
Ethylbenzene	7.0		1.0		ug/L	1		8260B	Total/NA
Xylenes, Total	12		1.0		ug/L	1		8260B	Total/NA
m,p-Xylene	12		2.0		ug/L	1		8260B	Total/NA
Gasoline Range Organics (GRO) -C6-C10	100		50		ug/L	1		AK101	Total/NA
C25-C36	0.47		0.40		mg/L	1		AK102 & 103	Total/NA

Client Sample ID: MW-11

Lab Sample ID: 230-169-4

No Detections.

Client Sample ID: MW-D

Lab Sample ID: 230-169-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	10		0.50		ug/L	1		8260B	Total/NA
Ethylbenzene	8.7		1.0		ug/L	1		8260B	Total/NA
Xylenes, Total	16		1.0		ug/L	1		8260B	Total/NA
m,p-Xylene	16		2.0		ug/L	1		8260B	Total/NA
Gasoline Range Organics (GRO) -C6-C10	120		50		ug/L	1		AK101	Total/NA
C10-C25	1.8		0.40		mg/L	1		AK102 & 103	Total/NA
C25-C36	3.0		0.40		mg/L	1		AK102 & 103	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Anchorage

Client Sample Results

Client: Carson Dorn, Inc
Project/Site: Gas N Go

TestAmerica Job ID: 230-169-1

Client Sample ID: MW-1
Date Collected: 06/17/14 09:17
Date Received: 06/18/14 16:43

Lab Sample ID: 230-169-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50		ug/L			06/21/14 23:08	1
Ethylbenzene	ND		1.0		ug/L			06/21/14 23:08	1
Toluene	ND		1.0		ug/L			06/21/14 23:08	1
Xylenes, Total	ND		1.0		ug/L			06/21/14 23:08	1
o-Xylene	ND		1.0		ug/L			06/21/14 23:08	1
m,p-Xylene	ND		2.0		ug/L			06/21/14 23:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		57.8 - 139					06/21/14 23:08	1
Dibromofluoromethane (Surr)	110		35.8 - 145					06/21/14 23:08	1
Toluene-d8 (Surr)	100		38.6 - 147					06/21/14 23:08	1
Trifluorotoluene (Surr)								06/21/14 23:08	1

Method: AK101 - Alaska - Gasoline Range Organics (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		50		ug/L			06/21/14 23:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		80 - 120					06/21/14 23:08	1
Dibromofluoromethane (Surr)	110		72.7 - 135					06/21/14 23:08	1
Toluene-d8 (Surr)	100		72.4 - 121					06/21/14 23:08	1
Trifluorotoluene (Surr)								06/21/14 23:08	1

Method: AK102 & 103 - Alaska - Diesel Range Organics & Residual Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C25	ND		0.38		mg/L		06/21/14 12:24	06/21/14 15:49	1
C25-C36	ND		0.38		mg/L		06/21/14 12:24	06/21/14 15:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	87		50 - 150				06/21/14 12:24	06/21/14 15:49	1
n-Triacontane (Surr)	81		50 - 150				06/21/14 12:24	06/21/14 15:49	1

Client Sample ID: MW-2

Date Collected: 06/17/14 08:37
Date Received: 06/18/14 16:43

Lab Sample ID: 230-169-2
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.5		0.50		ug/L			06/21/14 23:40	1
Ethylbenzene	ND		1.0		ug/L			06/21/14 23:40	1
Toluene	ND		1.0		ug/L			06/21/14 23:40	1
Xylenes, Total	ND		1.0		ug/L			06/21/14 23:40	1
o-Xylene	ND		1.0		ug/L			06/21/14 23:40	1
m,p-Xylene	ND		2.0		ug/L			06/21/14 23:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		57.8 - 139					06/21/14 23:40	1
Dibromofluoromethane (Surr)	109		35.8 - 145					06/21/14 23:40	1
Toluene-d8 (Surr)	102		38.6 - 147					06/21/14 23:40	1
Trifluorotoluene (Surr)								06/21/14 23:40	1

TestAmerica Anchorage

Client Sample Results

Client: Carson Dorn, Inc
Project/Site: Gas N Go

TestAmerica Job ID: 230-169-1

Client Sample ID: MW-2

Lab Sample ID: 230-169-2

Date Collected: 06/17/14 08:37

Matrix: Water

Date Received: 06/18/14 16:43

Method: AK101 - Alaska - Gasoline Range Organics (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		50		ug/L			06/21/14 23:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		80 - 120					06/21/14 23:40	1
Dibromofluoromethane (Surr)	109		72.7 - 135					06/21/14 23:40	1
Toluene-d8 (Surr)	102		72.4 - 121					06/21/14 23:40	1
Trifluorotoluene (Surr)								06/21/14 23:40	1

Method: AK102 & 103 - Alaska - Diesel Range Organics & Residual Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C25	ND		0.38		mg/L		06/21/14 12:24	06/22/14 05:44	1
C25-C36	ND		0.38		mg/L		06/21/14 12:24	06/22/14 05:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	90		50 - 150				06/21/14 12:24	06/22/14 05:44	1
n-Triacontane (Surr)	83		50 - 150				06/21/14 12:24	06/22/14 05:44	1

Client Sample ID: MW-3

Lab Sample ID: 230-169-3

Date Collected: 06/17/14 14:20

Matrix: Water

Date Received: 06/18/14 16:43

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	9.9		0.50		ug/L			06/22/14 00:12	1
Ethylbenzene	7.0		1.0		ug/L			06/22/14 00:12	1
Toluene	ND		1.0		ug/L			06/22/14 00:12	1
Xylenes, Total	12		1.0		ug/L			06/22/14 00:12	1
o-Xylene	ND		1.0		ug/L			06/22/14 00:12	1
m,p-Xylene	12		2.0		ug/L			06/22/14 00:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		57.8 - 139					06/22/14 00:12	1
Dibromofluoromethane (Surr)	110		35.8 - 145					06/22/14 00:12	1
Toluene-d8 (Surr)	104		38.6 - 147					06/22/14 00:12	1
Trifluorotoluene (Surr)								06/22/14 00:12	1

Method: AK101 - Alaska - Gasoline Range Organics (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	100		50		ug/L			06/22/14 00:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		80 - 120					06/22/14 00:12	1
Dibromofluoromethane (Surr)	110		72.7 - 135					06/22/14 00:12	1
Toluene-d8 (Surr)	104		72.4 - 121					06/22/14 00:12	1
Trifluorotoluene (Surr)								06/22/14 00:12	1

Method: AK102 & 103 - Alaska - Diesel Range Organics & Residual Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C25	ND		0.40		mg/L		06/21/14 12:24	06/22/14 06:16	1
C25-C36	0.47		0.40		mg/L		06/21/14 12:24	06/22/14 06:16	1

TestAmerica Anchorage

Client Sample Results

Client: Carson Dorn, Inc
Project/Site: Gas N Go

TestAmerica Job ID: 230-169-1

Client Sample ID: MW-3

Lab Sample ID: 230-169-3

Date Collected: 06/17/14 14:20

Matrix: Water

Date Received: 06/18/14 16:43

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	90		50 - 150	06/21/14 12:24	06/22/14 06:16	1
n-Triacontane (Surr)	81		50 - 150	06/21/14 12:24	06/22/14 06:16	1

Client Sample ID: MW-11

Lab Sample ID: 230-169-4

Date Collected: 06/17/14 10:55

Matrix: Water

Date Received: 06/18/14 16:43

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50		ug/L			06/22/14 00:44	1
Ethylbenzene	ND		1.0		ug/L			06/22/14 00:44	1
Toluene	ND		1.0		ug/L			06/22/14 00:44	1
Xylenes, Total	ND		1.0		ug/L			06/22/14 00:44	1
o-Xylene	ND		1.0		ug/L			06/22/14 00:44	1
m,p-Xylene	ND		2.0		ug/L			06/22/14 00:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		57.8 - 139		06/22/14 00:44	1
Dibromofluoromethane (Surr)	109		35.8 - 145		06/22/14 00:44	1
Toluene-d8 (Surr)	101		38.6 - 147		06/22/14 00:44	1
Trifluorotoluene (Surr)					06/22/14 00:44	1

Method: AK101 - Alaska - Gasoline Range Organics (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		50		ug/L			06/22/14 00:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		80 - 120		06/22/14 00:44	1
Dibromofluoromethane (Surr)	109		72.7 - 135		06/22/14 00:44	1
Toluene-d8 (Surr)	101		72.4 - 121		06/22/14 00:44	1
Trifluorotoluene (Surr)					06/22/14 00:44	1

Method: AK102 & 103 - Alaska - Diesel Range Organics & Residual Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C25	ND		0.40		mg/L		06/21/14 12:24	06/21/14 18:27	1
C25-C36	ND		0.40		mg/L		06/21/14 12:24	06/21/14 18:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	94		50 - 150	06/21/14 12:24	06/21/14 18:27	1
n-Triacontane (Surr)	87		50 - 150	06/21/14 12:24	06/21/14 18:27	1

Client Sample ID: MW-D

Lab Sample ID: 230-169-5

Date Collected: 06/17/14 14:30

Matrix: Water

Date Received: 06/18/14 16:43

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	10		0.50		ug/L			06/22/14 01:16	1
Ethylbenzene	8.7		1.0		ug/L			06/22/14 01:16	1
Toluene	ND		1.0		ug/L			06/22/14 01:16	1
Xylenes, Total	16		1.0		ug/L			06/22/14 01:16	1

TestAmerica Anchorage

Client Sample Results

Client: Carson Dorn, Inc
Project/Site: Gas N Go

TestAmerica Job ID: 230-169-1

Client Sample ID: MW-D

Lab Sample ID: 230-169-5

Date Collected: 06/17/14 14:30

Matrix: Water

Date Received: 06/18/14 16:43

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		1.0		ug/L			06/22/14 01:16	1
m,p-Xylene	16		2.0		ug/L			06/22/14 01:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		57.8 - 139					06/22/14 01:16	1
Dibromofluoromethane (Surr)	109		35.8 - 145					06/22/14 01:16	1
Toluene-d8 (Surr)	103		38.6 - 147					06/22/14 01:16	1
Trifluorotoluene (Surr)								06/22/14 01:16	1

Method: AK101 - Alaska - Gasoline Range Organics (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	120		50		ug/L			06/22/14 01:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		80 - 120					06/22/14 01:16	1
Dibromofluoromethane (Surr)	109		72.7 - 135					06/22/14 01:16	1
Toluene-d8 (Surr)	103		72.4 - 121					06/22/14 01:16	1
Trifluorotoluene (Surr)								06/22/14 01:16	1

Method: AK102 & 103 - Alaska - Diesel Range Organics & Residual Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C25	1.8		0.40		mg/L		06/21/14 12:24	06/21/14 19:00	1
C25-C36	3.0		0.40		mg/L		06/21/14 12:24	06/21/14 19:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	85		50 - 150				06/21/14 12:24	06/21/14 19:00	1
n-Triacontane (Surr)	81		50 - 150				06/21/14 12:24	06/21/14 19:00	1

Surrogate Summary

Client: Carson Dorn, Inc
Project/Site: Gas N Go

TestAmerica Job ID: 230-169-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		BFB (57.8-139)	DBFM (35.8-145)	TOL (38.6-147)	TFT
230-169-1	MW-1	100	110	100	
230-169-2	MW-2	100	109	102	
230-169-3	MW-3	103	110	104	
230-169-4	MW-11	103	109	101	
230-169-5	MW-D	104	109	103	
LCS 230-667/2-A	Lab Control Sample	104	111	106	105
LCS 230-669/1003	Lab Control Sample	104	102	100	111
LCSD 230-667/3-A	Lab Control Sample Dup	105	113	104	105
LCSD 230-669/4	Lab Control Sample Dup	105	104	101	110
MB 230-667/1-A	Method Blank	103	111	105	102
MB 230-669/7	Method Blank	101	106	100	

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)
TFT = Trifluorotoluene (Surr)

Method: AK101 - Alaska - Gasoline Range Organics (GC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		BFB (80-120)	DBFM (72.7-135)	TOL (72.4-121)	TFT
230-169-1	MW-1	100	110	100	
230-169-2	MW-2	100	109	102	
230-169-3	MW-3	103	110	104	
230-169-4	MW-11	103	109	101	
230-169-5	MW-D	104	109	103	
LCS 230-668/1005	Lab Control Sample	100	109	100	104
LCSD 230-668/6	Lab Control Sample Dup	101	107	98	104
MB 230-668/7	Method Blank	101	106	100	

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)
TFT = Trifluorotoluene (Surr)

Method: AK102 & 103 - Alaska - Diesel Range Organics & Residual Range Organics (GC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1COD (50-150)	acotane (†) (50-150)
230-169-1	MW-1	87	81
230-169-1 DU	MW-1	91	82
230-169-2	MW-2	90	83
230-169-3	MW-3	90	81
230-169-4	MW-11	94	87

TestAmerica Anchorage

Surrogate Summary

Client: Carson Dorn, Inc
Project/Site: Gas N Go

TestAmerica Job ID: 230-169-1

Method: AK102 & 103 - Alaska - Diesel Range Organics & Residual Range Organics (GC)

(Continued)

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	1COD (50-150)	antane (t (50-150)
230-169-5	MW-D	85	81
LCS 230-666/2-A	Lab Control Sample	81	79
LCSD 230-666/3-A	Lab Control Sample Dup	88	86
MB 230-666/1-A	Method Blank	95	81

Surrogate Legend

1COD = 1-Chlorooctadecane

n-Triacontane (Surr) = n-Triacontane (Surr)

QC Sample Results

Client: Carson Dorn, Inc
Project/Site: Gas N Go

TestAmerica Job ID: 230-169-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 230-667/1-A

Matrix: Water

Analysis Batch: 669

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 667

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		17		ug/L		06/21/14 12:42	06/22/14 04:26	1
Ethylbenzene	ND		33		ug/L		06/21/14 12:42	06/22/14 04:26	1
Toluene	ND		33		ug/L		06/21/14 12:42	06/22/14 04:26	1
Xylenes, Total	ND		33		ug/L		06/21/14 12:42	06/22/14 04:26	1
o-Xylene	ND		33		ug/L		06/21/14 12:42	06/22/14 04:26	1
m,p-Xylene	ND		67		ug/L		06/21/14 12:42	06/22/14 04:26	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		57.8 - 139	06/21/14 12:42	06/22/14 04:26	1
Dibromofluoromethane (Surr)	111		35.8 - 145	06/21/14 12:42	06/22/14 04:26	1
Toluene-d8 (Surr)	105		38.6 - 147	06/21/14 12:42	06/22/14 04:26	1
Trifluorotoluene (Surr)	102			06/21/14 12:42	06/22/14 04:26	1

Lab Sample ID: LCS 230-667/2-A

Matrix: Water

Analysis Batch: 669

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 667

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	800	865		ug/L		108	73.8 - 128
Ethylbenzene	800	847		ug/L		106	78 - 130
Toluene	800	881		ug/L		110	75.6 - 124
Xylenes, Total	2400	2530		ug/L		105	70 - 130
o-Xylene	800	836		ug/L		105	75.1 - 137
m,p-Xylene	1600	1690		ug/L		106	76 - 137

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		57.8 - 139
Dibromofluoromethane (Surr)	111		35.8 - 145
Toluene-d8 (Surr)	106		38.6 - 147
Trifluorotoluene (Surr)	105		

Lab Sample ID: LCSD 230-667/3-A

Matrix: Water

Analysis Batch: 669

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 667

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	800	829		ug/L		104	73.8 - 128	4	20
Ethylbenzene	800	848		ug/L		106	78 - 130	0	20
Toluene	800	855		ug/L		107	75.6 - 124	3	20
Xylenes, Total	2400	2510		ug/L		105	70 - 130	1	20
o-Xylene	800	830		ug/L		104	75.1 - 137	1	20
m,p-Xylene	1600	1680		ug/L		105	76 - 137	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	105		57.8 - 139
Dibromofluoromethane (Surr)	113		35.8 - 145
Toluene-d8 (Surr)	104		38.6 - 147

TestAmerica Anchorage

QC Sample Results

Client: Carson Dorn, Inc
Project/Site: Gas N Go

TestAmerica Job ID: 230-169-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 230-667/3-A

Matrix: Water

Analysis Batch: 669

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 667

<i>Surrogate</i>	<i>%Recovery</i>	<i>LCSD Qualifier</i>	<i>LCSD Limits</i>
<i>Trifluorotoluene (Surr)</i>	105		

Lab Sample ID: MB 230-669/7

Matrix: Water

Analysis Batch: 669

Client Sample ID: Method Blank

Prep Type: Total/NA

<i>Analyte</i>	<i>MB Result</i>	<i>MB Qualifier</i>	<i>RL</i>	<i>MDL</i>	<i>Unit</i>	<i>D</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Benzene	ND		0.50		ug/L			06/21/14 16:59	1
Ethylbenzene	ND		1.0		ug/L			06/21/14 16:59	1
Toluene	ND		1.0		ug/L			06/21/14 16:59	1
Xylenes, Total	ND		1.0		ug/L			06/21/14 16:59	1
o-Xylene	ND		1.0		ug/L			06/21/14 16:59	1
m,p-Xylene	ND		2.0		ug/L			06/21/14 16:59	1

<i>Surrogate</i>	<i>%Recovery</i>	<i>MB Qualifier</i>	<i>MB Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>4-Bromofluorobenzene (Surr)</i>	101		57.8 - 139		06/21/14 16:59	1
<i>Dibromofluoromethane (Surr)</i>	106		35.8 - 145		06/21/14 16:59	1
<i>Toluene-d8 (Surr)</i>	100		38.6 - 147		06/21/14 16:59	1
<i>Trifluorotoluene (Surr)</i>					06/21/14 16:59	1

Lab Sample ID: LCS 230-669/1003

Matrix: Water

Analysis Batch: 669

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

<i>Analyte</i>	<i>Spike Added</i>	<i>LCS Result</i>	<i>LCS Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec. Limits</i>
Benzene	20.0	21.9		ug/L		109	73.8 - 128
Ethylbenzene	20.0	22.1		ug/L		110	78 - 130
Toluene	20.0	21.4		ug/L		107	75.6 - 124
Xylenes, Total	60.0	64.7		ug/L		108	70 - 130
o-Xylene	20.0	21.4		ug/L		107	75.1 - 137
m,p-Xylene	40.0	43.3		ug/L		108	76 - 137

<i>Surrogate</i>	<i>%Recovery</i>	<i>LCS Qualifier</i>	<i>LCS Limits</i>
<i>4-Bromofluorobenzene (Surr)</i>	104		57.8 - 139
<i>Dibromofluoromethane (Surr)</i>	102		35.8 - 145
<i>Toluene-d8 (Surr)</i>	100		38.6 - 147
<i>Trifluorotoluene (Surr)</i>	111		

Lab Sample ID: LCSD 230-669/4

Matrix: Water

Analysis Batch: 669

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

<i>Analyte</i>	<i>Spike Added</i>	<i>LCSD Result</i>	<i>LCSD Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec. Limits</i>	<i>RPD</i>	<i>RPD Limit</i>
Benzene	20.0	21.3		ug/L		106	73.8 - 128	3	20
Ethylbenzene	20.0	21.6		ug/L		108	78 - 130	2	20
Toluene	20.0	21.5		ug/L		107	75.6 - 124	0	20
Xylenes, Total	60.0	63.4		ug/L		106	70 - 130	2	20

TestAmerica Anchorage

QC Sample Results

Client: Carson Dorn, Inc
Project/Site: Gas N Go

TestAmerica Job ID: 230-169-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 230-669/4

Matrix: Water

Analysis Batch: 669

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
o-Xylene	20.0	20.9		ug/L		105	75.1 - 137	2	20
m,p-Xylene	40.0	42.5		ug/L		106	76 - 137	2	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	105		57.8 - 139
Dibromofluoromethane (Surr)	104		35.8 - 145
Toluene-d8 (Surr)	101		38.6 - 147
Trifluorotoluene (Surr)	110		

Method: AK101 - Alaska - Gasoline Range Organics (GC/MS)

Lab Sample ID: MB 230-668/7

Matrix: Water

Analysis Batch: 668

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		50		ug/L			06/21/14 16:59	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		80 - 120		06/21/14 16:59	1
Dibromofluoromethane (Surr)	106		72.7 - 135		06/21/14 16:59	1
Toluene-d8 (Surr)	100		72.4 - 121		06/21/14 16:59	1
Trifluorotoluene (Surr)					06/21/14 16:59	1

Lab Sample ID: LCS 230-668/1005

Matrix: Water

Analysis Batch: 668

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10	500	539		ug/L		108	60 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		80 - 120
Dibromofluoromethane (Surr)	109		72.7 - 135
Toluene-d8 (Surr)	100		72.4 - 121
Trifluorotoluene (Surr)	104		

Lab Sample ID: LCSD 230-668/6

Matrix: Water

Analysis Batch: 668

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10	500	533		ug/L		107	60 - 120	1	20

TestAmerica Anchorage

QC Sample Results

Client: Carson Dorn, Inc
Project/Site: Gas N Go

TestAmerica Job ID: 230-169-1

Method: AK101 - Alaska - Gasoline Range Organics (GC/MS) (Continued)

Lab Sample ID: LCSD 230-668/6

Matrix: Water

Analysis Batch: 668

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	101		80 - 120
Dibromofluoromethane (Surr)	107		72.7 - 135
Toluene-d8 (Surr)	98		72.4 - 121
Trifluorotoluene (Surr)	104		

Method: AK102 & 103 - Alaska - Diesel Range Organics & Residual Range Organics (GC)

Lab Sample ID: MB 230-666/1-A

Matrix: Water

Analysis Batch: 664

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 666

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
C10-C25	ND		0.50		mg/L		06/21/14 12:24	06/21/14 15:17	1
C25-C36	ND		0.50		mg/L		06/21/14 12:24	06/21/14 15:17	1

Surrogate	MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1-Chlorooctadecane	95		50 - 150	06/21/14 12:24	06/21/14 15:17	1
n-Triacontane (Surr)	81		50 - 150	06/21/14 12:24	06/21/14 15:17	1

Lab Sample ID: LCS 230-666/2-A

Matrix: Water

Analysis Batch: 664

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 666

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
							RPD	Limit
C10-C25	10.1	8.02		mg/L		79	75 - 125	
C25-C36	10.3	7.93		mg/L		77	60 - 120	

Surrogate	LCS		Limits
	%Recovery	Qualifier	
1-Chlorooctadecane	81		50 - 150
n-Triacontane (Surr)	79		50 - 150

Lab Sample ID: LCSD 230-666/3-A

Matrix: Water

Analysis Batch: 664

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 666

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits		RPD	
							RPD	Limit	RPD	Limit
C10-C25	10.1	8.58		mg/L		85	75 - 125	7	20	
C25-C36	10.3	8.46		mg/L		82	60 - 120	6	20	

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
1-Chlorooctadecane	88		50 - 150
n-Triacontane (Surr)	86		50 - 150

TestAmerica Anchorage

QC Sample Results

Client: Carson Dorn, Inc
Project/Site: Gas N Go

TestAmerica Job ID: 230-169-1

Method: AK102 & 103 - Alaska - Diesel Range Organics & Residual Range Organics (GC) (Continued)

Lab Sample ID: 230-169-1 DU

Matrix: Water

Analysis Batch: 665

Client Sample ID: MW-1

Prep Type: Total/NA

Prep Batch: 666

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
C10-C25	ND		ND		mg/L		10	20
C25-C36	ND		ND		mg/L		8	20
Surrogate	DU	DU						
	%Recovery	Qualifier	Limits					
1-Chlorooctadecane	91		50 - 150					
n-Triacontane (Surr)	82		50 - 150					

QC Association Summary

Client: Carson Dorn, Inc
Project/Site: Gas N Go

TestAmerica Job ID: 230-169-1

GC/MS VOA

Prep Batch: 667

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 230-667/2-A	Lab Control Sample	Total/NA	Water	5035	
LCSD 230-667/3-A	Lab Control Sample Dup	Total/NA	Water	5035	
MB 230-667/1-A	Method Blank	Total/NA	Water	5035	

Analysis Batch: 668

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
230-169-1	MW-1	Total/NA	Water	AK101	
230-169-2	MW-2	Total/NA	Water	AK101	
230-169-3	MW-3	Total/NA	Water	AK101	
230-169-4	MW-11	Total/NA	Water	AK101	
230-169-5	MW-D	Total/NA	Water	AK101	
LCS 230-668/1005	Lab Control Sample	Total/NA	Water	AK101	
LCSD 230-668/6	Lab Control Sample Dup	Total/NA	Water	AK101	
MB 230-668/7	Method Blank	Total/NA	Water	AK101	

Analysis Batch: 669

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
230-169-1	MW-1	Total/NA	Water	8260B	
230-169-2	MW-2	Total/NA	Water	8260B	
230-169-3	MW-3	Total/NA	Water	8260B	
230-169-4	MW-11	Total/NA	Water	8260B	
230-169-5	MW-D	Total/NA	Water	8260B	
LCS 230-667/2-A	Lab Control Sample	Total/NA	Water	8260B	667
LCS 230-669/1003	Lab Control Sample	Total/NA	Water	8260B	
LCSD 230-667/3-A	Lab Control Sample Dup	Total/NA	Water	8260B	667
LCSD 230-669/4	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 230-667/1-A	Method Blank	Total/NA	Water	8260B	667
MB 230-669/7	Method Blank	Total/NA	Water	8260B	

GC Semi VOA

Analysis Batch: 664

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
230-169-2	MW-2	Total/NA	Water	AK102 & 103	666
230-169-3	MW-3	Total/NA	Water	AK102 & 103	666
LCS 230-666/2-A	Lab Control Sample	Total/NA	Water	AK102 & 103	666
LCSD 230-666/3-A	Lab Control Sample Dup	Total/NA	Water	AK102 & 103	666
MB 230-666/1-A	Method Blank	Total/NA	Water	AK102 & 103	666

Analysis Batch: 665

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
230-169-1	MW-1	Total/NA	Water	AK102 & 103	666
230-169-1 DU	MW-1	Total/NA	Water	AK102 & 103	666
230-169-4	MW-11	Total/NA	Water	AK102 & 103	666
230-169-5	MW-D	Total/NA	Water	AK102 & 103	666

Prep Batch: 666

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
230-169-1	MW-1	Total/NA	Water	3510C	
230-169-1 DU	MW-1	Total/NA	Water	3510C	

TestAmerica Anchorage

QC Association Summary

Client: Carson Dorn, Inc
Project/Site: Gas N Go

TestAmerica Job ID: 230-169-1

GC Semi VOA (Continued)

Prep Batch: 666 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
230-169-2	MW-2	Total/NA	Water	3510C	
230-169-3	MW-3	Total/NA	Water	3510C	
230-169-4	MW-11	Total/NA	Water	3510C	
230-169-5	MW-D	Total/NA	Water	3510C	
LCS 230-666/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 230-666/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 230-666/1-A	Method Blank	Total/NA	Water	3510C	

Lab Chronicle

Client: Carson Dorn, Inc
Project/Site: Gas N Go

TestAmerica Job ID: 230-169-1

Client Sample ID: MW-1

Date Collected: 06/17/14 09:17

Date Received: 06/18/14 16:43

Lab Sample ID: 230-169-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	669	06/21/14 23:08	ASD	TAL ANC
Total/NA	Analysis	AK101		1	668	06/21/14 23:08	ASD	TAL ANC
Total/NA	Prep	3510C			666	06/21/14 12:24	KDC	TAL ANC
Total/NA	Analysis	AK102 & 103		1	665	06/21/14 15:49	KDC	TAL ANC

Client Sample ID: MW-2

Date Collected: 06/17/14 08:37

Date Received: 06/18/14 16:43

Lab Sample ID: 230-169-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	669	06/21/14 23:40	ASD	TAL ANC
Total/NA	Analysis	AK101		1	668	06/21/14 23:40	ASD	TAL ANC
Total/NA	Prep	3510C			666	06/21/14 12:24	KDC	TAL ANC
Total/NA	Analysis	AK102 & 103		1	664	06/22/14 05:44	KDC	TAL ANC

Client Sample ID: MW-3

Date Collected: 06/17/14 14:20

Date Received: 06/18/14 16:43

Lab Sample ID: 230-169-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	669	06/22/14 00:12	ASD	TAL ANC
Total/NA	Analysis	AK101		1	668	06/22/14 00:12	ASD	TAL ANC
Total/NA	Prep	3510C			666	06/21/14 12:24	KDC	TAL ANC
Total/NA	Analysis	AK102 & 103		1	664	06/22/14 06:16	KDC	TAL ANC

Client Sample ID: MW-11

Date Collected: 06/17/14 10:55

Date Received: 06/18/14 16:43

Lab Sample ID: 230-169-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	669	06/22/14 00:44	ASD	TAL ANC
Total/NA	Analysis	AK101		1	668	06/22/14 00:44	ASD	TAL ANC
Total/NA	Prep	3510C			666	06/21/14 12:24	KDC	TAL ANC
Total/NA	Analysis	AK102 & 103		1	665	06/21/14 18:27	KDC	TAL ANC

Client Sample ID: MW-D

Date Collected: 06/17/14 14:30

Date Received: 06/18/14 16:43

Lab Sample ID: 230-169-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	669	06/22/14 01:16	ASD	TAL ANC
Total/NA	Analysis	AK101		1	668	06/22/14 01:16	ASD	TAL ANC

TestAmerica Anchorage

Lab Chronicle

Client: Carson Dorn, Inc
Project/Site: Gas N Go

TestAmerica Job ID: 230-169-1

Client Sample ID: MW-D

Lab Sample ID: 230-169-5

Date Collected: 06/17/14 14:30

Matrix: Water

Date Received: 06/18/14 16:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			666	06/21/14 12:24	KDC	TAL ANC
Total/NA	Analysis	AK102 & 103		1	665	06/21/14 19:00	KDC	TAL ANC

Laboratory References:

TAL ANC = TestAmerica Anchorage, 2000 West International Airport Road, Suite A10, Anchorage, AK 99502-1119, TEL (907)563-9200

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Certification Summary

Client: Carson Dorn, Inc
Project/Site: Gas N Go

TestAmerica Job ID: 230-169-1

Laboratory: TestAmerica Anchorage

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	AK00975	06-30-14

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Method Summary

Client: Carson Dorn, Inc
Project/Site: Gas N Go

TestAmerica Job ID: 230-169-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL ANC
AK101	Alaska - Gasoline Range Organics (GC/MS)	ADEC	TAL ANC
AK102 & 103	Alaska - Diesel Range Organics & Residual Range Organics (GC)	ADEC	TAL ANC

Protocol References:

ADEC = Alaska Department of Environmental Conservation

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL ANC = TestAmerica Anchorage, 2000 West International Airport Road, Suite A10, Anchorage, AK 99502-1119, TEL (907)563-9200



Sample Summary

Client: Carson Dorn, Inc
Project/Site: Gas N Go

TestAmerica Job ID: 230-169-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
230-169-1	MW-1	Water	06/17/14 09:17	06/18/14 16:43
230-169-2	MW-2	Water	06/17/14 08:37	06/18/14 16:43
230-169-3	MW-3	Water	06/17/14 14:20	06/18/14 16:43
230-169-4	MW-11	Water	06/17/14 10:55	06/18/14 16:43
230-169-5	MW-D	Water	06/17/14 14:30	06/18/14 16:43

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TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



230-169 Chain of Custody

WA 98011-8244
 WA 99206-5302
 OR 97008-7145
 AK 99502-1119

425-420-9200 FAX 420-9210
 509-924-9200 FAX 924-9290
 503-906-9200 FAX 906-9210
 907-563-9200 FAX 563-9210

AP 6/19/14

Work Order #: **149-05 230-169**

CHAIN OF CUSTODY REPORT

INVOICE TO:
FRANK & COMPANY.COM
JCOX RD
 P.O. NUMBER:

CLIENT: **CARSON FORTY, INC**
 REPORT TO: **712 W 12th St.**
 ADDRESS: **JUNEAU**
 PHONE: **580.4447** FAX:
 PROJECT NAME: **GKS N G10**
 PROJECT NUMBER:

TURNAROUND REQUEST

in Business Days *

Organic & Inorganic Analyses
 Petroleum Hydrocarbon Analyses

7 5 4 3 2 1 <1
 4 3 2 1 <1

STD. 37D. OTHER Specify:

CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	PRESERVATIVE		REQUESTED ANALYSES																
		HCL	H2O2	1	2	3	4	5	6	7	8	9	10							
1. MW-1	6.17.18 9:17	X	X																	
2. MW-2	8:37	X	X																	
3. MW-3	11:20	X	X																	
4. MW-11	10:55	X	X																	
5. MW-D	14:30	X	X																	
6.																				
7.																				
8.																				
9.																				
10.																				

* Turnaround Requests less than standard may incur Rush Charges.

MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID
W	5	3-40 mL	01
	1	150 mL	02
	1		03
	1		04
	1		05

RELEASED BY: **J. COX** FIRM: **CSE** DATE: **6.18.14** TIME: **07:20**
 PRINT NAME: **JOHN COX** FIRM: **CSE** DATE: **6/18/14** TIME: **16:43**
 RECEIVED BY: **Andrew P. C.** FIRM: **TA-HK** DATE: **6/18/14** TIME: **16:43**
 PRINT NAME: **Andrew P. C.** FIRM: **TA-HK** DATE: **6/18/14** TIME: **16:43**


ADDITIONAL REMARKS:

TEMP: **2.0** PAGE **2** OF **2**





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TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
654443

17.14


230-169

Custody Seal
DATE 
SIGNATURE 

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
654443

Login Sample Receipt Checklist

Client: Carson Dorn, Inc

Job Number: 230-169-1

Login Number: 169

List Source: TestAmerica Anchorage

List Number: 1

Creator: Pilch, Andrew C

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.0 C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Laboratory Data Review Checklist

Completed by:	Jolene M Cox		
Title:	Environmental Professional	Date:	June 25, 2014
CS Report Name:	Gas N Go Leaking Underground Storage Tank Site	Report Date:	Jun 23, 2014
Consultant Firm:	Carson Dorn, Inc.		
Laboratory Name:	TestAmerica	Laboratory Report Number:	230-169-1
ADEC File Number:		ADEC RecKey Number:	

1. Laboratory

a. Did an ADEC CS approved laboratory receive and perform all of the submitted sample analyses?

Yes No NA (Please explain.) Comments:

b. If the samples were transferred to another "network" laboratory or sub-contracted to an alternate laboratory, was the laboratory performing the analyses ADEC CS approved?

Yes No NA (Please explain) Comments:

2. Chain of Custody (COC)

a. COC information completed, signed, and dated (including released/received by)?

Yes No NA (Please explain) Comments:

b. Correct analyses requested?

Yes No NA (Please explain) Comments:

3. Laboratory Sample Receipt Documentation

a. Sample/cooler temperature documented and within range at receipt ($4^{\circ} \pm 2^{\circ} \text{C}$)?

Yes No NA (Please explain) Comments:

b. Sample preservation acceptable - acidified waters, Methanol preserved VOC soil (GRO, BTEX, Volatile Chlorinated Solvents, etc.)?

Yes No NA (Please explain) Comments:

c. Sample condition documented - broken, leaking (Methanol), zero headspace (VOC vials)?

Yes No NA (Please explain) Comments:

d. If there were any discrepancies, were they documented? - For example, incorrect sample containers/preservation, sample temperature outside of acceptance range, insufficient or missing samples, etc.?

Yes No NA (Please explain) Comments:

e. Data quality or usability affected? (Please explain)

Comments:

4. Case Narrative

a. Present and understandable?

Yes No NA (Please explain) Comments:

b. Discrepancies, errors or QC failures identified by the lab?

Yes No NA (Please explain) Comments:

c. Were all corrective actions documented?

Yes No NA (Please explain) Comments:

d. What is the effect on data quality/usability according to the case narrative?

Comments:

5. Samples Results

a. Correct analyses performed/reported as requested on COC?

Yes No NA (Please explain)

Comments:

b. All applicable holding times met?

Yes No NA (Please explain)

Comments:

c. All soils reported on a dry weight basis?

Yes No NA (Please explain)

Comments:

d. Are the reported PQLs less than the Cleanup Level or the minimum required detection level for the project?

Yes No NA (Please explain)

Comments:

e. Data quality or usability affected? (Please explain)

Comments:

6. QC Samples

a. Method Blank

i. One method blank reported per matrix, analysis and 20 samples?

Yes No NA (Please explain)

Comments:

ii. All method blank results less than PQL?

Yes No NA (Please explain)

Comments:

iii. If above PQL, what samples are affected?

Comments:

iv. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?

Yes No NA (Please explain) Comments:

v. Data quality or usability affected? (Please explain)

Comments:

b. Laboratory Control Sample/Duplicate (LCS/LCSD)

i. Organics - One LCS/LCSD reported per matrix, analysis and 20 samples? (LCS/LCSD required per AK methods, LCS required per SW846)

Yes No NA (Please explain) Comments:

ii. Metals/Inorganics - One LCS and one sample duplicate reported per matrix, analysis and 20 samples?

Yes No NA (Please explain) Comments:

iii. Accuracy - All percent recoveries (%R) reported and within method or laboratory limits? And project specified DQOs, if applicable. (AK Petroleum methods: AK101 60%-120%, AK102 75%-125%, AK103 60%-120%; all other analyses see the laboratory QC pages)

Yes No NA (Please explain) Comments:

iv. Precision - All relative percent differences (RPD) reported and less than method or laboratory limits? And project specified DQOs, if applicable. RPD reported from LCS/LCSD, MS/DMSD, and or sample/sample duplicate. (AK Petroleum methods 20%; all other analyses see the laboratory QC pages)

Yes No NA (Please explain) Comments:

v. If %R or RPD is outside of acceptable limits, what samples are affected?

Comments:

vi. Do the affected samples(s) have data flags? If so, are the data flags clearly defined?

Yes No NA (Please explain) Comments:

vii. Data quality or usability affected? (Please explain)

Comments:

c. Surrogates - Organics Only

i. Are surrogate recoveries reported for organic analyses - field, QC and laboratory samples?

Yes No NA (Please explain) Comments:

ii. Accuracy - All percent recoveries (%R) reported and within method or laboratory limits? And project specified DQOs, if applicable. (AK Petroleum methods 50-150 %R; all other analyses see the laboratory report pages)

Yes No NA (Please explain) Comments:

iii. Do the sample results with failed surrogate recoveries have data flags? If so, are the data flags clearly defined?

Yes No NA (Please explain) Comments:

iv. Data quality or usability affected? (Use the comment box to explain.)

Comments:

d. Trip Blank - Volatile analyses only (GRO, BTEX, Volatile Chlorinated Solvents, etc.): Water and Soil

i. One trip blank reported per matrix, analysis and for each cooler containing volatile samples? (If not, enter explanation below.)

Yes No NA (Please explain.) Comments:

ii. Is the cooler used to transport the trip blank and VOA samples clearly indicated on the COC? (If not, a comment explaining why must be entered below)

Yes No NA (Please explain.) Comments:

iii. All results less than PQL?

Yes No NA (Please explain.)

Comments:

iv. If above PQL, what samples are affected?

Comments:

v. Data quality or usability affected? (Please explain.)

Comments:

e. Field Duplicate

i. One field duplicate submitted per matrix, analysis and 10 project samples?

Yes No NA (Please explain.)

Comments:

ii. Submitted blind to lab?

Yes No NA (Please explain.)

Comments:

iii. Precision - All relative percent differences (RPD) less than specified DQOs?
(Recommended: 30% water, 50% soil)

$$RPD (\%) = \frac{\text{Absolute Value of: } (R_1 - R_2)}{((R_1 + R_2)/2)} \times 100$$

Where R_1 = Sample Concentration

R_2 = Field Duplicate Concentration

Yes No NA (Please explain.)

Comments:

The RPD for DRO for Sample MW-3 and MW-D was 127%. The data has been reported as the maximum detection of 1.8 mg/L DRO for the duplicate pair.

iv. Data quality or usability affected? (Use the comment box to explain why or why not.)

Yes No NA (Please explain.)

Comments:

f. Decontamination or Equipment Blank (if applicable)

Yes No NA (Please explain)

Comments:

i. All results less than PQL?

Yes No NA (Please explain)

Comments:

ii. If above PQL, what samples are affected?

Comments:

iii. Data quality or usability affected? (Please explain.)

Comments:

7. Other Data Flags/Qualifiers (ACOE, AFCEE, Lab Specific, etc.)

a. Defined and appropriate?

Yes No NA (Please explain)

Comments:

Reset Form